

## Protection and Control Relay

# 620 SERIES

### IEC 61850 ED2 Model Implementation Conformance Statement (MICS) for 620 SERIES



**ABB**

## Table of Contents

<b>1</b>	<b>About this manual.....</b>	<b>14</b>
1.1	Read it first! .....	14
1.2	Document information.....	14
1.3	Safety Information.....	14
<b>2</b>	<b>Abbreviations and Definitions.....</b>	<b>15</b>
2.1	Abbreviations.....	15
2.2	Definitions.....	15
<b>3</b>	<b>References .....</b>	<b>16</b>
<b>4</b>	<b>Introduction.....</b>	<b>16</b>
<b>5</b>	<b>Logical Nodes List.....</b>	<b>17</b>
<b>6</b>	<b>Logical Node Extensions.....</b>	<b>31</b>
6.1	New Logical Nodes.....	31
6.1.1	LN: LINF1 Name: LINF (ED2).....	31
6.1.2	LN: LDEV1 Name: LDEV (ED2).....	31
6.1.3	LN: GSELPRT1 Name: LPRT (ED2).....	33
6.1.4	LN: MMSLPRT1 Name: LPRT (ED2).....	34
6.1.5	LN: CVPSOF1 Name: PSOF (ED2).....	35
6.1.6	LN: CCSPVC1 Name: SPVC (ED2).....	36
6.1.7	LN: SEQSPVC1 Name: SPVC (ED2) .....	36
6.1.8	LN: MDSOPT1 Name: SOPT (ED2) .....	37
6.1.9	LN: MDSOPT2 Name: SOPT (ED2) .....	38
6.1.10	LN: LDPRRLRC1 Name: RLRC (ED2).....	39
6.1.11	LN: QVV1RQRC1 Name: RQRC (ED2).....	39
6.1.12	LN: QVV2RQRC1 Name: RQRC (ED2).....	40
6.1.13	LN: QVV3RQRC1 Name: RQRC (ED2).....	41
6.1.14	LN: QVU1RQRC1 Name: RQRC (ED2).....	41
6.1.15	LN: QVU2RQRC1 Name: RQRC (ED2).....	42
6.1.16	LN: QVU3RQRC1 Name: RQRC (ED2).....	42
6.1.17	LN: FLTRFRC1 Name: RFRC (ED2) .....	42
6.1.18	LN: EFPADM1 Name: PADM (ED2) .....	46
6.1.19	LN: EFPADM2 Name: PADM (ED2) .....	47
6.1.20	LN: EFPADM3 Name: PADM (ED2) .....	49
6.1.21	LN: HZCCASPVC1 Name: SPVC (ED2).....	50
6.1.22	LN: HZCCBSPVC1 Name: SPVC (ED2).....	50
6.1.23	LN: HZCCCSPVC1 Name: SPVC (ED2).....	51
6.1.24	LN: CCSPVC2 Name: SPVC (ED2).....	51
6.1.25	LN: CTSRCTF1 Name: RCTF (ED2) .....	52
6.1.26	LN: MBSLPRT1 Name: LPRT (ED2) .....	52
6.1.27	LN: MBSLPRT2 Name: LPRT (ED2) .....	54
6.1.28	LN: MBSLPRT3 Name: LPRT (ED2) .....	55
6.1.29	LN: MBSLPRT4 Name: LPRT (ED2) .....	57
6.1.30	LN: MBSLPRT5 Name: LPRT (ED2) .....	58

6.1.31	LN: I3CLPRT1 Name: LPRT (ED2) .....	60
6.1.32	LN: I3CLPRT2 Name: LPRT (ED2) .....	61
6.1.33	LN: DNPLPRT1 Name: LPRT (ED2).....	62
6.1.34	LN: DNPLPRT2 Name: LPRT (ED2).....	65
6.1.35	LN: DNPLPRT3 Name: LPRT (ED2).....	67
6.1.36	LN: DNPLPRT4 Name: LPRT (ED2).....	69
6.1.37	LN: DNPLPRT5 Name: LPRT (ED2).....	72
6.1.38	LN: FLO1RFRC1 Name: RFRC (ED2).....	74
6.1.39	LN: OLATCC1 Name: ATCC (ED2) .....	75
6.2	Extented Logical Nodes .....	78
6.2.1	LN: LLN0 Name: LLN0 (ED2).....	78
6.2.2	LN: GSAL1 Name: GSAL (ED2).....	79
6.2.3	LN: IHMI1 Name: IHMI (ED2).....	80
6.2.4	LN: XGGIO100 Name: GGIO (ED2) .....	80
6.2.5	LN: LEDGGIO1 Name: GGIO (ED2).....	80
6.2.6	LN: GNRLLTMS1 Name: LTMS (ED2) .....	83
6.2.7	LN: GNRLLTIM1 Name: LTIM (ED2) .....	84
6.2.8	LN: PHLPTOC1 Name: PTOC (ED2).....	84
6.2.9	LN: PHHPTOC1 Name: PTOC (ED2) .....	85
6.2.10	LN: PHHPTOC2 Name: PTOC (ED2) .....	86
6.2.11	LN: PHIPTOC1 Name: PTOC (ED2).....	87
6.2.12	LN: DPHLPTOC1 Name: PTOC (ED2) .....	87
6.2.13	LN: DPHLRDIR1 Name: RDIR (ED2) .....	88
6.2.14	LN: DPHHPTOC1 Name: PTOC (ED2).....	89
6.2.15	LN: DPHHRDIR1 Name: RDIR (ED2) .....	90
6.2.16	LN: EFLPTOC1 Name: PTOC (ED2) .....	90
6.2.17	LN: EFHPTOC1 Name: PTOC (ED2) .....	91
6.2.18	LN: DEFLPTOC1 Name: PTOC (ED2) .....	92
6.2.19	LN: DEFRLRDIR1 Name: RDIR (ED2) .....	93
6.2.20	LN: DEFHPTOC1 Name: PTOC (ED2) .....	94
6.2.21	LN: DEFHRDIR1 Name: RDIR (ED2) .....	95
6.2.22	LN: ROVPTOV1 Name: PTOV (ED2) .....	95
6.2.23	LN: ROVPTOV2 Name: PTOV (ED2) .....	96
6.2.24	LN: ROVPTOV3 Name: PTOV (ED2) .....	97
6.2.25	LN: PHPTUV1 Name: PTUV (ED2) .....	97
6.2.26	LN: PHPTUV2 Name: PTUV (ED2) .....	98
6.2.27	LN: PHPTUV3 Name: PTUV (ED2) .....	99
6.2.28	LN: PHPTOV1 Name: PTOV (ED2) .....	100
6.2.29	LN: PHPTOV2 Name: PTOV (ED2) .....	101
6.2.30	LN: PHPTOV3 Name: PTOV (ED2) .....	102
6.2.31	LN: PSPTUV1 Name: PTUV (ED2) .....	102
6.2.32	LN: PSPTUV2 Name: PTUV (ED2) .....	103
6.2.33	LN: NSPTOV1 Name: PTOV (ED2) .....	104
6.2.34	LN: NSPTOV2 Name: PTOV (ED2) .....	104
6.2.35	LN: FRPTRC1 Name: PTRC (ED2) .....	105
6.2.36	LN: FRPTOF1 Name: PTOF (ED2).....	105
6.2.37	LN: FRPTUF1 Name: PTUF (ED2).....	105

6.2.38	LN: FRPFRC1 Name: PFRC (ED2) .....	106
6.2.39	LN: FRPTRC2 Name: PTRC (ED2) .....	106
6.2.40	LN: FRPTOF2 Name: PTOF (ED2).....	106
6.2.41	LN: FRPTUF2 Name: PTUF (ED2).....	107
6.2.42	LN: FRPFRC2 Name: PFRC (ED2) .....	107
6.2.43	LN: FRPTRC3 Name: PTRC (ED2) .....	107
6.2.44	LN: FRPTOF3 Name: PTOF (ED2).....	108
6.2.45	LN: FRPTUF3 Name: PTUF (ED2).....	108
6.2.46	LN: FRPFRC3 Name: PFRC (ED2) .....	108
6.2.47	LN: CCBRBRF1 Name: RBRF (ED2) .....	108
6.2.48	LN: CCBRBRF2 Name: RBRF (ED2) .....	109
6.2.49	LN: CCBRBRF3 Name: RBRF (ED2) .....	110
6.2.50	LN: TRPPTRC1 Name: PTRC (ED2).....	111
6.2.51	LN: TRPPTRC2 Name: PTRC (ED2).....	112
6.2.52	LN: TRPPTRC3 Name: PTRC (ED2).....	113
6.2.53	LN: TRPPTRC4 Name: PTRC (ED2).....	113
6.2.54	LN: LEDPTRC1 Name: PTRC (ED2) .....	114
6.2.55	LN: MAPGAPC1 Name: GACP (ED2) .....	114
6.2.56	LN: MAPGAPC2 Name: GACP (ED2) .....	115
6.2.57	LN: MAPGAPC3 Name: GACP (ED2) .....	115
6.2.58	LN: MAPGAPC4 Name: GACP (ED2) .....	116
6.2.59	LN: MAPGAPC5 Name: GACP (ED2) .....	117
6.2.60	LN: MAPGAPC6 Name: GACP (ED2) .....	117
6.2.61	LN: MAPGAPC7 Name: GACP (ED2) .....	118
6.2.62	LN: MAPGAPC8 Name: GACP (ED2) .....	119
6.2.63	LN: MAPGAPC9 Name: GACP (ED2) .....	119
6.2.64	LN: MAPGAPC10 Name: GACP (ED2).....	120
6.2.65	LN: MAPGAPC11 Name: GACP (ED2).....	121
6.2.66	LN: MAPGAPC12 Name: GACP (ED2).....	121
6.2.67	LN: MAPGAPC13 Name: GACP (ED2).....	122
6.2.68	LN: MAPGAPC14 Name: GACP (ED2).....	123
6.2.69	LN: MAPGAPC15 Name: GACP (ED2).....	123
6.2.70	LN: MAPGAPC16 Name: GACP (ED2).....	124
6.2.71	LN: MAPGAPC17 Name: GACP (ED2).....	125
6.2.72	LN: MAPGAPC18 Name: GACP (ED2).....	125
6.2.73	LN: SSCBR1 Name: SCBR (ED2) .....	126
6.2.74	LN: SPH1SCBR1 Name: SCBR (ED2) .....	129
6.2.75	LN: SPH2SCBR1 Name: SCBR (ED2) .....	129
6.2.76	LN: SPH3SCBR1 Name: SCBR (ED2) .....	129
6.2.77	LN: SSIMG1 Name: SIMG (ED2).....	129
6.2.78	LN: SSOPM1 Name: SOPM (ED2).....	130
6.2.79	LN: SSCBR2 Name: SCBR (ED2) .....	130
6.2.80	LN: SPH1SCBR2 Name: SCBR (ED2) .....	133
6.2.81	LN: SPH2SCBR2 Name: SCBR (ED2) .....	133
6.2.82	LN: SPH3SCBR2 Name: SCBR (ED2) .....	134
6.2.83	LN: SSIMG2 Name: SIMG (ED2).....	134
6.2.84	LN: SSOPM2 Name: SOPM (ED2).....	134
6.2.85	LN: SSCBR3 Name: SCBR (ED2) .....	135

6.2.86	LN: SPH1SCBR3 Name: SCBR (ED2) .....	138
6.2.87	LN: SPH2SCBR3 Name: SCBR (ED2) .....	138
6.2.88	LN: SPH3SCBR3 Name: SCBR (ED2) .....	138
6.2.89	LN: SSIMG3 Name: SIMG (ED2).....	138
6.2.90	LN: SSOPM3 Name: SOPM (ED2).....	139
6.2.91	LN: TCSSCBR1 Name: SCBR (ED2) .....	139
6.2.92	LN: TCSSCBR2 Name: SCBR (ED2) .....	139
6.2.93	LN: CMMXU1 Name: MMXU (ED2).....	140
6.2.94	LN: PEMMXU1 Name: MMXU (ED2).....	140
6.2.95	LN: PEMMTR1 Name: MMTR (ED2) .....	141
6.2.96	LN: FMMXU1 Name: MMXU (ED2) .....	141
6.2.97	LN: CMHAI1 Name: MHAI (ED2).....	141
6.2.98	LN: VMHAI1 Name: MHAI (ED2).....	142
6.2.99	LN: PH1QVVR1 Name: QVVR (ED2) .....	143
6.2.100	LN: PH2QVVR1 Name: QVVR (ED2) .....	146
6.2.101	LN: PH3QVVR1 Name: QVVR (ED2) .....	146
6.2.102	LN: VSQVUB1 Name: QVUB (ED2) .....	146
6.2.103	LN: TPGAPC1 Name: GAPC (ED2).....	147
6.2.104	LN: TPGAPC2 Name: GAPC (ED2).....	147
6.2.105	LN: TPGAPC3 Name: GAPC (ED2).....	148
6.2.106	LN: TPGAPC4 Name: GAPC (ED2).....	148
6.2.107	LN: TPSGAPC1 Name: GAPC (ED2) .....	148
6.2.108	LN: TPSGAPC2 Name: GAPC (ED2) .....	148
6.2.109	LN: TPMGAPC1 Name: GAPC (ED2).....	149
6.2.110	LN: TPMGAPC2 Name: GAPC (ED2) .....	149
6.2.111	LN: PTGAPC1 Name: GAPC (ED2).....	149
6.2.112	LN: PTGAPC2 Name: GAPC (ED2).....	150
6.2.113	LN: TOFGAPC1 Name: GAPC (ED2) .....	150
6.2.114	LN: TOFGAPC2 Name: GAPC (ED2) .....	151
6.2.115	LN: TOFGAPC3 Name: GAPC (ED2) .....	152
6.2.116	LN: TOFGAPC4 Name: GAPC (ED2) .....	152
6.2.117	LN: TONGAPC1 Name: GAPC (ED2) .....	153
6.2.118	LN: TONGAPC2 Name: GAPC (ED2).....	154
6.2.119	LN: TONGAPC3 Name: GAPC (ED2) .....	155
6.2.120	LN: TONGAPC4 Name: GAPC (ED2) .....	155
6.2.121	LN: SRGAPC1 Name: GAPC (ED2) .....	156
6.2.122	LN: SRGAPC2 Name: GAPC (ED2) .....	157
6.2.123	LN: SRGAPC3 Name: GAPC (ED2) .....	158
6.2.124	LN: SRGAPC4 Name: GAPC (ED2) .....	159
6.2.125	LN: MVI4GAPC1 Name: GAPC (ED2).....	159
6.2.126	LN: MVI4GAPC2 Name: GAPC (ED2) .....	160
6.2.127	LN: MVI4GAPC3 Name: GAPC (ED2) .....	160
6.2.128	LN: MVI4GAPC4 Name: GAPC (ED2) .....	160
6.2.129	LN: SCA4GAPC1 Name: GAPC (ED2) .....	161
6.2.130	LN: SCA4GAPC2 Name: GAPC (ED2) .....	161
6.2.131	LN: SCA4GAPC3 Name: GAPC (ED2) .....	162
6.2.132	LN: SCA4GAPC4 Name: GAPC (ED2) .....	163
6.2.133	LN: SPCGAPC1 Name: GAPC (ED2).....	163

6.2.134	LN: SPCGAPC2 Name: GAPC (ED2).....	165
6.2.135	LN: SPCGAPC3 Name: GAPC (ED2).....	166
6.2.136	LN: SPCRGAPC1 Name: GAPC (ED2) .....	167
6.2.137	LN: SPCLGAPC1 Name: GAPC (ED2).....	168
6.2.138	LN: UDFCNT1 Name: FCNT (ED2) .....	169
6.2.139	LN: UDFCNT2 Name: FCNT (ED2) .....	169
6.2.140	LN: UDFCNT3 Name: FCNT (ED2) .....	170
6.2.141	LN: UDFCNT4 Name: FCNT (ED2) .....	170
6.2.142	LN: UDFCNT5 Name: FCNT (ED2) .....	171
6.2.143	LN: UDFCNT6 Name: FCNT (ED2) .....	171
6.2.144	LN: UDFCNT7 Name: FCNT (ED2) .....	172
6.2.145	LN: UDFCNT8 Name: FCNT (ED2) .....	172
6.2.146	LN: UDFCNT9 Name: FCNT (ED2) .....	173
6.2.147	LN: UDFCNT10 Name: FCNT (ED2) .....	173
6.2.148	LN: UDFCNT11 Name: FCNT (ED2) .....	174
6.2.149	LN: UDFCNT12 Name: FCNT (ED2) .....	174
6.2.150	LN: DPHLPTOC2 Name: PTOC (ED2) .....	174
6.2.151	LN: DPHLRDIR2 Name: RDIR (ED2) .....	175
6.2.152	LN: DPHHPTOC2 Name: PTOC (ED2).....	176
6.2.153	LN: DPHHRDIR2 Name: RDIR (ED2).....	177
6.2.154	LN: PHPVOC1 Name: PVOC (ED2) .....	178
6.2.155	LN: PHPVOC2 Name: PVOC (ED2) .....	179
6.2.156	LN: EFLPTOC2 Name: PTOC (ED2) .....	180
6.2.157	LN: EFIPTOC1 Name: PTOC (ED2).....	181
6.2.158	LN: DEFLPTOC2 Name: PTOC (ED2) .....	181
6.2.159	LN: DEFLRDIR2 Name: RDIR (ED2).....	182
6.2.160	LN: DEFLPTOC3 Name: PTOC (ED2) .....	183
6.2.161	LN: DEFLRDIR3 Name: RDIR (ED2).....	184
6.2.162	LN: WPSDE1 Name: PSDE (ED2) .....	185
6.2.163	LN: WRDIR1 Name: RDIR (ED2) .....	186
6.2.164	LN: WPSDE2 Name: PSDE (ED2) .....	186
6.2.165	LN: WRDIR2 Name: RDIR (ED2) .....	187
6.2.166	LN: WPSDE3 Name: PSDE (ED2) .....	187
6.2.167	LN: WRDIR3 Name: RDIR (ED2) .....	188
6.2.168	LN: MFADPSDE1 Name: PSDE (ED2).....	189
6.2.169	LN: MFADRDIR1 Name: RDIR (ED2).....	190
6.2.170	LN: INTRPTEF1 Name: PTEF (ED2).....	190
6.2.171	LN: HAEFPTOC1 Name: PTOC (ED2) .....	191
6.2.172	LN: NSPTOC1 Name: PTOC (ED2).....	191
6.2.173	LN: NSPTOC2 Name: PTOC (ED2).....	192
6.2.174	LN: PDNSPTOC1 Name: PTOC (ED2).....	193
6.2.175	LN: FRPTRC4 Name: PTRC (ED2) .....	193
6.2.176	LN: FRPTOF4 Name: PTOF (ED2).....	194
6.2.177	LN: FRPTUF4 Name: PTUF (ED2).....	194
6.2.178	LN: FRPFRC4 Name: PFRC (ED2) .....	194
6.2.179	LN: FRPTRC5 Name: PTRC (ED2) .....	195
6.2.180	LN: FRPTOF5 Name: PTOF (ED2).....	195
6.2.181	LN: FRPTUF5 Name: PTUF (ED2).....	195

6.2.182	LN: FRPFRC5 Name: PFRC (ED2) .....	196
6.2.183	LN: FRPTRC6 Name: PTRC (ED2) .....	196
6.2.184	LN: FRPTOF6 Name: PTOF (ED2).....	196
6.2.185	LN: FRPTUF6 Name: PTUF (ED2).....	197
6.2.186	LN: FRPFRC6 Name: PFRC (ED2) .....	197
6.2.187	LN: T1PTTR1 Name: PTTR (ED2) .....	197
6.2.188	LN: PHPTUC1 Name: PTUC (ED2).....	198
6.2.189	LN: INRPHAR1 Name: PHAR (ED2) .....	199
6.2.190	LN: LSHDPTRC1 Name: PTRC (ED2) .....	199
6.2.191	LN: LSHDPTOF1 Name: PTOF (ED2).....	200
6.2.192	LN: LSHDPTRC2 Name: PTRC (ED2) .....	200
6.2.193	LN: LSHDPTOF2 Name: PTOF (ED2).....	201
6.2.194	LN: LSHDPTRC3 Name: PTRC (ED2) .....	201
6.2.195	LN: LSHDPTOF3 Name: PTOF (ED2) .....	202
6.2.196	LN: LSHDPTRC4 Name: PTRC (ED2) .....	202
6.2.197	LN: LSHDPTOF4 Name: PTOF (ED2).....	202
6.2.198	LN: LSHDPTRC5 Name: PTRC (ED2) .....	203
6.2.199	LN: LSHDPTOF5 Name: PTOF (ED2) .....	203
6.2.200	LN: LSHDPTRC6 Name: PTRC (ED2) .....	204
6.2.201	LN: LSHDPTOF6 Name: PTOF (ED2).....	204
6.2.202	LN: UPCALH1 Name: CALH (ED2) .....	204
6.2.203	LN: UPCALH2 Name: CALH (ED2) .....	205
6.2.204	LN: UPCALH3 Name: CALH (ED2) .....	205
6.2.205	LN: PH3HPTOC1 Name: PTOC (ED2) .....	205
6.2.206	LN: PH3HPTOC2 Name: PTOC (ED2) .....	206
6.2.207	LN: PH3LPTOC1 Name: PTOC (ED2).....	207
6.2.208	LN: PH3LPTOC2 Name: PTOC (ED2).....	208
6.2.209	LN: PH3IPTOC1 Name: PTOC (ED2).....	209
6.2.210	LN: DPH3HPTOC1 Name: PTOC (ED2).....	209
6.2.211	LN: DPH3HRDIR1 Name: RDIR (ED2).....	210
6.2.212	LN: DPH3HPTOC2 Name: PTOC (ED2).....	211
6.2.213	LN: DPH3HRDIR2 Name: RDIR (ED2).....	211
6.2.214	LN: DPH3LPTOC1 Name: PTOC (ED2) .....	212
6.2.215	LN: DPH3LRDIR1 Name: RDIR (ED2) .....	213
6.2.216	LN: DPH3LPTOC2 Name: PTOC (ED2) .....	213
6.2.217	LN: DPH3LRDIR2 Name: RDIR (ED2) .....	214
6.2.218	LN: DARREC1 Name: RREC (ED2) .....	215
6.2.219	LN: DARREC2 Name: RREC (ED2) .....	219
6.2.220	LN: RESCMMXU1 Name: MMXU (ED2).....	224
6.2.221	LN: PHAPTV1 Name: PTUV (ED2) .....	224
6.2.222	LN: PHAPTOV1 Name: PTOV (ED2).....	225
6.2.223	LN: HIAPDIF1 Name: PDIF (ED2) .....	226
6.2.224	LN: HIBPDIR1 Name: PDIF (ED2) .....	226
6.2.225	LN: HICPDIF1 Name: PDIF (ED2) .....	227
6.2.226	LN: SECRSYN1 Name: RSYN (ED2) .....	227
6.2.227	LN: VAMMMXU2 Name: MMXU (ED2).....	229
6.2.228	LN: RESVMMXU1 Name: MMXU (ED2).....	229
6.2.229	LN: MNSPTOC1 Name: PTOC (ED2).....	229

6.2.230	LN: MNSPTOC2 Name: PTOC (ED2).....	230
6.2.231	LN: LOFLPTUC1 Name: PTUC (ED2) .....	231
6.2.232	LN: LOFLPTUC2 Name: PTUC (ED2) .....	232
6.2.233	LN: JAMPTOC1 Name: PTOC (ED2) .....	232
6.2.234	LN: STTPMSS1 Name: PMSS (ED2) .....	233
6.2.235	LN: STTPMRI1 Name: PMRI (ED2).....	233
6.2.236	LN: PREVPTOC1 Name: PTOC (ED2) .....	234
6.2.237	LN: MPTTR1 Name: PTTR (ED2).....	235
6.2.238	LN: MRE1PTOC1 Name: PTOC (ED2).....	236
6.2.239	LN: MRE2PTOC1 Name: PTOC (ED2).....	236
6.2.240	LN: ESMGAPC1 Name: GACP (ED2) .....	236
6.2.241	LN: MLPDIF1 Name: PDIF (ED2) .....	237
6.2.242	LN: MHZPDIF1 Name: PDIF (ED2) .....	238
6.2.243	LN: HREFPDIF1 Name: PDIF (ED2) .....	239
6.2.244	LN: CMMXU2 Name: MMXU (ED2) .....	239
6.2.245	LN: PHLPTOC2 Name: PTOC (ED2).....	240
6.2.246	LN: PHIPTOC2 Name: PTOC (ED2).....	240
6.2.247	LN: EFHPTOC2 Name: PTOC (ED2) .....	241
6.2.248	LN: OEPVPH1 Name: PVPH (ED2).....	242
6.2.249	LN: OEPVPH2 Name: PVPH (ED2).....	243
6.2.250	LN: T2PTTR1 Name: PTTR (ED2) .....	244
6.2.251	LN: PHPTUC2 Name: PTUC (ED2) .....	245
6.2.252	LN: TR2LPDIF1 Name: PDIF (ED2) .....	245
6.2.253	LN: TR2H2PHAR1 Name: PHAR (ED2) .....	247
6.2.254	LN: TR2H5PHAR1 Name: PHAR (ED2) .....	247
6.2.255	LN: TR2HPDIF1 Name: PDIF (ED2).....	248
6.2.256	LN: LREFPDIF1 Name: PDIF (ED2).....	248
6.2.257	LN: LREFPDIF2 Name: PDIF (ED2).....	248
6.2.258	LN: HREFPDIF2 Name: PDIF (ED2) .....	249
6.2.259	LN: DPPDUP1 Name: PDUP (ED2).....	250
6.2.260	LN: DPMMXU1 Name: MMXU (ED2).....	250
6.2.261	LN: DPPDUP2 Name: PDUP (ED2).....	250
6.2.262	LN: DPMMXU2 Name: MMXU (ED2).....	251
6.2.263	LN: DPPDOP1 Name: PDOP (ED2) .....	251
6.2.264	LN: DOPMMXU1 Name: MMXU (ED2).....	252
6.2.265	LN: DPPDOP2 Name: PDOP (ED2) .....	252
6.2.266	LN: DOPMMXU2 Name: MMXU (ED2).....	253
6.2.267	LN: DPPDOP3 Name: PDOP (ED2) .....	253
6.2.268	LN: DOPMMXU3 Name: MMXU (ED2) .....	253
6.2.269	LN: TPOSYLTC1 Name: YLTC (ED2) .....	254
6.2.270	LN: RESCMMXU2 Name: MMXU (ED2).....	254
6.2.271	LN: VAMMXU3 Name: MMXU (ED2).....	255
6.2.272	LN: IL1TCTR1 Name: TCTR (ED2) .....	255
6.2.273	LN: RESTCTR1 Name: TCTR (ED2) .....	255
6.2.274	LN: XGGIO120 Name: GGIO (ED2) .....	256
6.2.275	LN: UL1TVTR1 Name: TVTR (ED2) .....	257
6.2.276	LN: RESTVTR1 Name: TVTR (ED2) .....	257
6.2.277	LN: VMMXU1 Name: MMXU (ED2) .....	258

6.2.278	LN: UL1TVTR2 Name: TVTR (ED2) .....	258
6.2.279	LN: XAGGIO130 Name: GGIO (ED2) .....	259
6.2.280	LN: XSGGIO130 Name: GGIO (ED2) .....	259
6.2.281	LN: IL1TCTR2 Name: TCTR (ED2) .....	259
6.2.282	LN: XAGGIO120 Name: GGIO (ED2) .....	260
6.2.283	LN: XAGGIO115 Name: GGIO (ED2) .....	260
6.2.284	LN: RESTCTR2 Name: TCTR (ED2) .....	260
6.2.285	LN: UL1TVTR3 Name: TVTR (ED2) .....	261
6.2.286	LN: XGGIO110 Name: GGIO (ED2) .....	261
6.2.287	LN: XBGGIO115 Name: GGIO (ED2) .....	263
6.2.288	LN: XGGIO105 Name: GGIO (ED2) .....	264
6.2.289	LN: XHBGGIO105 Name: GGIO (ED2) .....	265
6.2.290	LN: XRGGIO110 Name: GGIO (ED2) .....	266
6.2.291	LN: XRGGIO105 Name: GGIO (ED2) .....	268
6.2.292	LN: XBRGGIO130 Name: GGIO (ED2) .....	270
6.2.293	LN: XGGIO90 Name: GGIO (ED2) .....	271
6.2.294	LN: SERLCCH1 Name: LCCH (ED2) .....	271
6.2.295	LN: SERLCCH2 Name: LCCH (ED2) .....	272
6.2.296	LN: RCHLCCH1 Name: LCCH (ED2) .....	272
6.2.297	LN: SCHLCCH1 Name: LCCH (ED2) .....	273
6.2.298	LN: SCHLCCH2 Name: LCCH (ED2) .....	273
6.2.299	LN: SCHLCCH3 Name: LCCH (ED2) .....	273
6.2.300	LN: PHIZ1 Name: PHIZ (ED2) .....	273
6.2.301	LN: ARCSARC11 Name: SARC (ED2) .....	274
6.2.302	LN: ARCPTRC11 Name: PTRC (ED2) .....	274
6.2.303	LN: ARCSARC21 Name: SARC (ED2) .....	274
6.2.304	LN: ARCPTRC21 Name: PTRC (ED2) .....	275
6.2.305	LN: ARCSARC31 Name: SARC (ED2) .....	275
6.2.306	LN: ARCPTRC31 Name: PTRC (ED2) .....	275
6.2.307	LN: SCEFRRFLO1 Name: RFLO (ED2) .....	275
6.2.308	LN: COL1PTOC1 Name: PTOC (ED2) .....	277
6.2.309	LN: COL2PTOC1 Name: PTOC (ED2) .....	278
6.2.310	LN: COLPTUC1 Name: PTUC (ED2) .....	278
6.2.311	LN: CUB1PTOC1 Name: PTOC (ED2) .....	278
6.2.312	LN: CUB2PTOC1 Name: PTOC (ED2) .....	280
6.2.313	LN: SRC1PTOC1 Name: PTOC (ED2) .....	280
6.2.314	LN: SRC2PTOC1 Name: PTOC (ED2) .....	281
6.2.315	LN: DQPTUV1 Name: PTUV (ED2) .....	281
6.2.316	LN: DQPDOP1 Name: PDOP (ED2) .....	281
6.2.317	LN: DQPTUV2 Name: PTUV (ED2) .....	282
6.2.318	LN: DQPDOP2 Name: PDOP (ED2) .....	282
6.2.319	LN: LVRTPTUV1 Name: PTUV (ED2) .....	282
6.2.320	LN: LVRTPTUV2 Name: PTUV (ED2) .....	284
6.2.321	LN: LVRTPTUV3 Name: PTUV (ED2) .....	286
6.2.322	LN: VVSPPAM1 Name: PPAM (ED2) .....	288
6.2.323	LN: UEXPDIS1 Name: PDIS (ED2) .....	288
6.2.324	LN: UEXMMXU1 Name: MMXU (ED2) .....	289
6.2.325	LN: UEXPDIS2 Name: PDIS (ED2) .....	289

6.2.326	LN: UEXMMXU2 Name: MMXU (ED2) .....	290
6.2.327	LN: LLN0 Name: LLN0 (ED2) .....	290
6.2.328	LN: CBCSWI1 Name: CSWI (ED2) .....	291
6.2.329	LN: CBXCBR1 Name: XCBR (ED2) .....	292
6.2.330	LN: CBCSWI2 Name: CSWI (ED2) .....	292
6.2.331	LN: CBXCBR2 Name: XCBR (ED2) .....	292
6.2.332	LN: CBCSWI3 Name: CSWI (ED2) .....	293
6.2.333	LN: CBXCBR3 Name: XCBR (ED2) .....	293
6.2.334	LN: DCCILO1 Name: CILO (ED2) .....	294
6.2.335	LN: DCCSWI1 Name: CSWI (ED2) .....	294
6.2.336	LN: DCXSWI1 Name: XSWI (ED2) .....	294
6.2.337	LN: DCCILO2 Name: CILO (ED2) .....	295
6.2.338	LN: DCCSWI2 Name: CSWI (ED2) .....	295
6.2.339	LN: DCXSWI2 Name: XSWI (ED2) .....	295
6.2.340	LN: DCCILO3 Name: CILO (ED2) .....	296
6.2.341	LN: DCCSWI3 Name: CSWI (ED2) .....	296
6.2.342	LN: DCXSWI3 Name: XSWI (ED2) .....	296
6.2.343	LN: DCCILO4 Name: CILO (ED2) .....	297
6.2.344	LN: DCCSWI4 Name: CSWI (ED2) .....	297
6.2.345	LN: DCXSWI4 Name: XSWI (ED2) .....	297
6.2.346	LN: DCSXSWI1 Name: XSWI (ED2) .....	298
6.2.347	LN: DCSCSWI1 Name: CSWI (ED2) .....	298
6.2.348	LN: DCSXSWI2 Name: XSWI (ED2) .....	298
6.2.349	LN: DCSCSWI2 Name: CSWI (ED2) .....	298
6.2.350	LN: DCSXSWI3 Name: XSWI (ED2) .....	299
6.2.351	LN: DCSCSWI3 Name: CSWI (ED2) .....	299
6.2.352	LN: DCSXSWI4 Name: XSWI (ED2) .....	299
6.2.353	LN: DCSCSWI4 Name: CSWI (ED2) .....	299
6.2.354	LN: ESCILO1 Name: CILO (ED2) .....	300
6.2.355	LN: ESCSWI1 Name: CSWI (ED2) .....	300
6.2.356	LN: ESXSWI1 Name: XSWI (ED2) .....	300
6.2.357	LN: ESCILO2 Name: CILO (ED2) .....	301
6.2.358	LN: ESCSWI2 Name: CSWI (ED2) .....	301
6.2.359	LN: ESXSWI2 Name: XSWI (ED2) .....	301
6.2.360	LN: ESCILO3 Name: CILO (ED2) .....	302
6.2.361	LN: ESCSWI3 Name: CSWI (ED2) .....	302
6.2.362	LN: ESXSWI3 Name: XSWI (ED2) .....	302
6.2.363	LN: ESSXSWI1 Name: XSWI (ED2) .....	303
6.2.364	LN: ESSCSWI1 Name: CSWI (ED2) .....	303
6.2.365	LN: ESSXSWI2 Name: XSWI (ED2) .....	303
6.2.366	LN: ESSCSWI2 Name: CSWI (ED2) .....	303
6.2.367	LN: ESSXSWI3 Name: XSWI (ED2) .....	304
6.2.368	LN: ESSCSWI3 Name: CSWI (ED2) .....	304
6.2.369	LN: RDRE1 Name: RDRE (ED2) .....	304
6.2.370	LN: RBDR1 Name: RBDR (ED2) .....	305
6.2.371	LN: RADR1 Name: RADR (ED2) .....	305
7	Common Data Class Extensions.....	306

7.1	New common data classes .....	306
7.2	Extented data classes ED1 .....	306
<b>8</b>	<b>Enum type extensions.....</b>	<b>306</b>
8.1	New Enum types.....	306
8.1.1	ABBIED600_Rev1_CtlModelKind_StatusDirect .....	306
8.1.2	ABBIED600_Rev1_OpModSG .....	306
8.1.3	ABBIED600_Rev1_CpySG .....	306
8.1.4	ABBIED600_Rev1_CtlModelKind_Status .....	306
8.1.5	ABBIED600_Rev1_SetSvMaxDI.....	307
8.1.6	ABBIED600_Rev1_BlkMod .....	307
8.1.7	ABBIED600_Rev1_HzSet .....	307
8.1.8	ABBIED600_Rev1_PhRotSet.....	307
8.1.9	ABBIED600_Rev1_PhOrdSet .....	307
8.1.10	ABBIED600_Rev1_DmdAvMod .....	307
8.1.11	ABBIED600_Rev1_dmdltrv .....	307
8.1.12	ABBIED600_Rev1_ModRemCtl .....	308
8.1.13	ABBIED600_Rev4_Languages .....	308
8.1.14	ABBIED600_Rev4_LanguageFiles.....	309
8.1.15	ABBIED600_Rev1_FormatTime .....	310
8.1.16	ABBIED600_Rev1_FormatDate .....	310
8.1.17	ABBIED600_Rev1_NamingConvention .....	310
8.1.18	ABBIED600_Rev3_DefaultView .....	310
8.1.19	ABBIED600_Rev1_WhmiMod .....	310
8.1.20	ABBIED600_Rev1_SLDSymbolFormat .....	310
8.1.21	ABBIED600_Rev1_InUseMod.....	311
8.1.22	ABBIED600_Rev1_SetVsb .....	311
8.1.23	ABBIED600_Rev8_AuthAcs.....	311
8.1.24	ABBIED600_Rev1_AuthAcsLev .....	311
8.1.25	ABBIED600_Rev1_AlmLedSt.....	312
8.1.26	ABBIED600_Rev2_LedMode .....	312
8.1.27	ABBIED600_Rev2_LedColor.....	312
8.1.28	ABBIED600_Rev5_SyncSrc.....	312
8.1.29	ABBIED600_Rev3_TmSrc .....	312
8.1.30	ABBIED600_Rev1_PTPTmSrc.....	313
8.1.31	ABBIED600_Rev1_PTPClkAcc .....	313
8.1.32	ABBIED600_Rev1_PTPAnnMod .....	314
8.1.33	ABBIED600_Rev2_StrPhSel.....	314
8.1.34	ABBIED600_Rev2_MeasMod .....	314
8.1.35	ABBIED600_Rev2_TestProKind.....	314
8.1.36	ABBIED600_Rev1_AResSigSel .....	317
8.1.37	ABBIED600_Rev1_OpModEF .....	317
8.1.38	ABBIED600_Rev1_VResSigSel .....	318
8.1.39	ABBIED600_Rev2_VSel .....	318
8.1.40	ABBIED600_Rev1_TypTmRs.....	318
8.1.41	ABBIED600_Rev1_OpModProHz.....	318
8.1.42	ABBIED600_Rev1_buTripMode .....	318
8.1.43	ABBIED600_Rev1_StrLtcMod.....	318

8.1.44	ABBIED600_Rev1_TrOutMod.....	319
8.1.45	ABBIED600_Rev1_OpModComp.....	319
8.1.46	ABBIED600_Rev3_TestSpvnKind .....	319
8.1.47	ABBIED600_Rev1_TrvClcMod.....	321
8.1.48	ABBIED600_Rev1_DirMod2.....	321
8.1.49	ABBIED600_Rev1_DefHzSel .....	321
8.1.50	ABBIED600_Rev1_DmdWinMod.....	321
8.1.51	ABBIED600_Rev2_PhSv .....	321
8.1.52	ABBIED600_Rev1_OpModPh.....	321
8.1.53	ABBIED600_Rev2_VVaTyp .....	321
8.1.54	ABBIED600_Rev1_TrqModPQ.....	322
8.1.55	ABBIED600_Rev1_ObsPerSel.....	322
8.1.56	ABBIED600_Rev1_TestOthKind .....	322
8.1.57	ABBIED600_Rev2_CtlMod.....	322
8.1.58	ABBIED600_Rev2_OpModTEF.....	323
8.1.59	ABBIED600_Rev1_OpQtySel.....	323
8.1.60	ABBIED600_Rev1_AutoManMod.....	323
8.1.61	ABBIED600_Rev1_RecOp .....	323
8.1.62	ABBIED600_Rev1_TermPrio .....	323
8.1.63	ABBIED600_Rev1_ProCrdMod.....	323
8.1.64	ABBIED600_Rev1_AutoIniCnd .....	323
8.1.65	ABBIED600_Rev3_TestCtlKind.....	324
8.1.66	ABBIED600_Rev1_OpModSC .....	325
8.1.67	ABBIED600_Rev1_OpModCtrl.....	325
8.1.68	ABBIED600_Rev1_EnergSt .....	325
8.1.69	ABBIED600_Rev1_OpModStUp.....	325
8.1.70	ABBIED600_Rev1_EnvTmpMod .....	326
8.1.71	ABBIED600_Rev1_CTConnTyp .....	326
8.1.72	ABBIED600_Rev1_VPhSel .....	326
8.1.73	ABBIED600_Rev2_Wnd1Typ .....	326
8.1.74	ABBIED600_Rev2_Wnd2Typ .....	326
8.1.75	ABBIED600_Rev1_ClkNum .....	326
8.1.76	ABBIED600_Rev3_ZroAEIm .....	327
8.1.77	ABBIED600_Rev1_WndSel .....	327
8.1.78	ABBIED600_Rev1_PwrMeasMod .....	327
8.1.79	ABBIED600_Rev1_BCMod .....	328
8.1.80	ABBIED600_Rev1_ARtgSec .....	328
8.1.81	ABBIED600_Rev2_ConnType .....	328
8.1.82	ABBIED600_Rev1_AnInpType .....	328
8.1.83	ABBIED600_Rev1_SenInMod .....	328
8.1.84	ABBIED600_Rev1_FibMod .....	328
8.1.85	ABBIED600_Rev1_SerMod .....	329
8.1.86	ABBIED600_Rev1_BaudRate .....	329
8.1.87	ABBIED600_Rev2_EthPortMod .....	329
8.1.88	ABBIED600_Rev1_PHIZMod .....	329
8.1.89	ABBIED600_Rev1_OpModArc .....	329
8.1.90	ABBIED600_Rev1_EFAlg .....	329
8.1.91	ABBIED600_Rev1_EFAlgASel.....	330

---

8.1.92	ABBIED600_Rev4_TestProRlKind .....	330
8.1.93	ABBIED600_Rev1_PhVMeas.....	331
8.1.94	ABBIED600_Rev1_CubAlmMod.....	331
8.1.95	ABBIED600_Rev1_FuLoc.....	331
8.1.96	ABBIED600_Rev1_VCrtSel.....	331
8.1.97	ABBIED600_Rev1_ZMeasMod .....	331
8.1.98	ABBIED600_Rev3_OpModSetATCC .....	332
8.1.99	ABBIED600_Rev1_ManBlkType .....	332
8.1.100	ABBIED600_Rev1_TimerOn .....	332
8.1.101	ABBIED600_Rev1_OpModATCC .....	332
8.1.102	ABBIED600_Rev1_AlmReas.....	332
8.1.103	ABBIED600_Rev1_FlwFlt.....	333
8.1.104	ABBIED600_Rev1_ParUnits .....	333
8.1.105	ABBIED600_Rev3_CmdRsp .....	333
8.1.106	ABBIED600_Rev3_LocKeyHMI .....	334
8.1.107	ABBIED600_Rev1_LocRemMod .....	334
8.1.108	ABBIED600_Rev1_StaLevSet .....	334
8.1.109	ABBIED600_Rev1_EStoRte .....	334
8.1.110	ABBIED600_Rev1_EStoMod .....	335
8.1.111	ABBIED600_Rev4_RadrChNum .....	335
8.2	Extented Enum types .....	336
8.2.1	ABBIED600_Rev1_HealthKind.....	336
8.2.2	ABBIED600_Rev1_PhaseFaultDirectionKind .....	336
8.2.3	ABBIED600_Rev1_CurveCharKind .....	336
8.2.4	ABBIED600_Rev20_TstOutKind .....	339
8.2.5	ABBIED600_Rev1_PolarizingQuantityKind.....	345
8.2.6	ABBIED600_Rev2_cmdQual.....	345
8.2.7	ABBIED600_Rev32_ProFcn.....	345
8.2.8	ABBIED600_Rev2_AutoReclosingKind .....	350
8.2.9	ABBIED600_Rev1_LiveDeadModeKind .....	351
8.2.10	ABBIED600_Rev1_I3CCls2Frame .....	351
8.2.11	ABBIED600_Rev2_FaultLoopKind .....	351
9	Control Block Extensions.....	352

# 1 About this manual

## 1.1 Read it first!

Before attempting any operation with IED from 620 series, read carefully the IED documentation first.

This document is addressed to anyone who needs to interact with 620 series and its IEC 61850 features in more detail.

## 1.2 Document information

### Revision History

Revision	Date	Note
A	28 Aug 2015	620 series v2.1

### Applicability

This manual is applicable to all 620 series Protection and Control IED versions mentioned in document Revision History above or newer versions if document update is not required.

## 1.3 Safety Information

There are safety warnings and notes in the following text. They are in a different format to distinguish them from normal text.

### Safety warning

The safety warnings should always be observed. Non-observance can result in death, personal injury or substantial damages to property. Guarantee claims might not be accepted when safety warnings are not respected. They look like below:



**Do not make any changes to the 620 SERIES configurations unless you are familiar with the 620 SERIES and its configuration tool. This might result in disoperation and loss of warranty.**

### Note

A note contains additional information worth noting in the specific context, and looks like below:



The selection of this control mode requires caution, because operations are allowed both from the HMI and remotely.

## 2 Abbreviations and Definitions

### 2.1 Abbreviations

FTP	File Transfer Protocol
GOOSE	Generic Object Oriented Substation Event
GPS	Global Positioning System
GSE	Generic Substation Event
GSSE	Generic Substation Status Event
HMI	Human Machine Interface
IED	Intelligent Electronic Device
LED	Light Emitting Diode
MAC	Media Access Control
MICS	Model Implementation Conformance Statement
MMS	Manufacturing Message Specification
M/O	Mandatory/Optional
N	No
PICS	Protocol Implementation Conformance Statement
PIXIT	Protocol Implementation eXtra Information for Testing
SCADA	Supervision, Control and Data Acquisition
SLD	Single Line Diagram
XML	eXtensible Markup Language
Y	Yes

### 2.2 Definitions

Operational State	the unit is active and it is protecting and controlling the switchgear.
Stand-alone	the unit is not connected to a SCADA system.

## 3 References

Ref	Document id	Rev	Document title
[1]	61850-8-1 First edition 2004-05		Communication networks and systems in substations Part 8-1: Specific communication service mapping (SCSM) – Mappings to MMS (ISO/IEC 9506 Part 1 and Part 2) and to ISO/IEC 8802-3
[2]	61850-10 First edition 2005-05		Communication networks and systems in substations – Part 10: Conformance testing
[3]	IEC61850-7-2 First edition 2003-05		Communication networks and systems in substations – Part 7-2: Basic communication structure for substation and feeder equipment – Abstract communication service interface (ACSI)
[4]	IEC61850-6 First edition 2004-03		Communication networks and systems in substations - Part 6: Configuration description language for communica- tion in electrical substations related to IEDs
[5]	IEC61850-7-3 First edition 2003-05		Communication networks and systems in substations – Part 7-3: Basic communication structure for substation and feeder equipment – Common data classes
[6]	IEC61850-7-4 First Edition 2003-05		Communication networks and systems in substations – Part 7-4:

## 4 Introduction

This document specifies the model implementation conformance statement (MICS) of the IEC 61850 communication for 620 SERIES.

Together with the PICS and the PIXIT the MICS forms the basis for a conformance test according to IEC 61850-10.

In this document all Logical Nodes with additional Data Objects are listed with intended use for extensions. In these cases dataNs refers to this document. Also Data Objects with different namespace as standard CDC describes are listed. In these cases cdcNs data attribute refers to this document. Extended data classes' new Data Attributes are introduced.

## 5 Logical Nodes List

<b>L:System logical nodes</b>		
LLN0	LD0.LLN0	Protection LLN0
	CTRL.LLN0	Control LLN0
	DR.LLN0	DR LLN0
	MU01.LLN0	Std conformance
LPHD	LD0.LPHD1	Physical device
	CTRL.LPHD1	Std conformance
	DR.LPHD1	Physical device information
	MU01.LPHD1	Std conformance
LINF	LD0.LINF1	Customer information
LDEV	LD0.LDEV1	Device
LPRT	LD0.GSELPRT1	GSELPRT1,GSE
	LD0.MMSLPRT1	61850-8-1 MMS
	LD0.MBSLPRT1	Modbus
	LD0.MBSLPRT2	Modbus
	LD0.MBSLPRT3	Modbus
	LD0.MBSLPRT4	Modbus
	LD0.MBSLPRT5	Modbus
	LD0.I3CLPRT1	IEC60870-5-103
	LD0.I3CLPRT2	IEC60870-5-103
	LD0.DNPLPRT1	DNP 3.0
	LD0.DNPLPRT2	DNP 3.0
	LD0.DNPLPRT3	DNP 3.0
	LD0.DNPLPRT4	DNP 3.0
	LD0.DNPLPRT5	DNP 3.0
LTMS (ED2)	LD0.GNRLLTMS1	GNRLLTMS1,TSYNC(1)
LTMM (ED1)	LD0.GNRLLTMM1	GNRLLTMS1,TSYNC(1)
LTIM	LD0.GNRLLTIM1	GNRLLTIM1
LCCH	LD0.SERLCCH1	Serial Port 1 Supervision
	LD0.SERLCCH2	Serial Port 2 Supervision
	LD0.RCHLCCH1	Redundant Ethernet
	LD0.SCHLCCH1	X1/X16 port Ethernet channel
	LD0.SCHLCCH2	X2 port Ethernet channel
	LD0.SCHLCCH3	X3 port Ethernet channel
LSVS (ED2)	LD0.SMVLVS1	SMVRCV1
LSVM (ED1)	LD0.SMVL SVM1	SMVRCV1
<b>A:Logical nodes for automatic control</b>		
ATCC	LD0.OLATCC1	OLATCC1,90V(1),COLTC(1)
<b>C:Logical nodes for control</b>		
CALH	LD0.UPCALH1	UPCALH1
	LD0.UPCALH2	UPCALH2

	LD0.UPCALH3	UPCALH3
CILO	CTRL.CBCILO1	CBXCBR1,I<->O CB(1)
	CTRL.CBCILO2	CBXCBR2,I<->O CB(2)
	CTRL.CBCILO3	CBXCBR3,I<->O CB(3)
	CTRL.DCCILO1	DCXSWI1,I<->O DCC(1)
	CTRL.DCCILO2	DCXSWI2,I<->O DCC(2)
	CTRL.DCCILO3	DCXSWI3,I<->O DCC(3)
	CTRL.DCCILO4	DCXSWI4,I<->O DCC(4)
	CTRL.ESCILO1	ESXSWI1,I<->O ESC(1)
	CTRL.ESCILO2	ESXSWI2,I<->O ESC(2)
	CTRL.ESCILO3	ESXSWI3,I<->O ESC(3)
CSWI	CTRL.CBCSWI1	CBXCBR1,I<->O CB(1)
	CTRL.CBCSWI2	CBXCBR2,I<->O CB(2)
	CTRL.CBCSWI3	CBXCBR3,I<->O CB(3)
	CTRL.DCCSWI1	DCXSWI1,I<->O DCC(1)
	CTRL.DCCSWI2	DCXSWI2,I<->O DCC(2)
	CTRL.DCCSWI3	DCXSWI3,I<->O DCC(3)
	CTRL.DCCSWI4	DCXSWI4,I<->O DCC(4)
	CTRL.DCSCSWI1	DCSXSWI1,I<->O DC(1)
	CTRL.DCSCSWI2	DCSXSWI2,I<->O DC(2)
	CTRL.DCSCSWI3	DCSXSWI3,I<->O DC(3)
	CTRL.DCSCSWI4	DCSXSWI4,I<->O DC(4)
	CTRL.ESSCSWI1	ESXSWI1,I<->O ESC(1)
	CTRL.ESSCSWI2	ESXSWI2,I<->O ESC(2)
	CTRL.ESSCSWI3	ESXSWI3,I<->O ESC(3)
	CTRL.ESSCSWI1	ESSXSWI1,I<->O ES(1)
	CTRL.ESSCSWI2	ESSXSWI2,I<->O ES(2)
	CTRL.ESSCSWI3	ESSXSWI3,I<->O ES(3)
<b>F:Logical nodes for functional blocks</b>		
FCNT	LD0.UDFCNT1	UDFCNT1,UDCNT(1)
	LD0.UDFCNT2	UDFCNT2,UDCNT(2)
	LD0.UDFCNT3	UDFCNT3,UDCNT(3)
	LD0.UDFCNT4	UDFCNT4,UDCNT(4)
	LD0.UDFCNT5	UDFCNT5,UDCNT(5)
	LD0.UDFCNT6	UDFCNT6,UDCNT(6)
	LD0.UDFCNT7	UDFCNT7,UDCNT(7)
	LD0.UDFCNT8	UDFCNT8,UDCNT(8)
	LD0.UDFCNT9	UDFCNT9,UDCNT(9)
	LD0.UDFCNT10	UDFCNT10,UDCNT(10)
	LD0.UDFCNT11	UDFCNT11,UDCNT(11)
	LD0.UDFCNT12	UDFCNT12,UDCNT(12)
<b>G:Logical Nodes for generic references</b>		

GSAL	LD0.GSAL1	Security application
GGIO	LD0.XGGIO100	X100 (PSM)
	LD0.LEDGGIO1	Programmable LEDs
	LD0.FKEYGGIO1	FKEYGGIO1,FKEY(1)
	LD0.XGGIO120	X120 (AIM)
	LD0.XAGGIO130	X130 (AIM)
	LD0.XSGGIO130	X130 (SIM)
	LD0.XAGGIO120	X120 (AIM2),(X120 (AIM2))
	LD0.XAGGIO115	X115 (AIM3)
	LD0.XGGIO110	X110 (BIO)
	LD0.XBGGIO115	X115 (BIO)
	LD0.XGGIO105	X105 (BIO)
	LD0.XHBGGIO105	X105 (BIO-H)
	LD0.XRGGIO110	X110 (RTD)
	LD0.XRGGIO105	X105 (RTD)
	LD0.XBRGGIO130	X130 (BIO+RTD)
	LD0.XGGIO90	X000 (COM)
GAPC	LD0.MAPGAPC1	MAPGAPC1,MAP(1)
	LD0.MAPGAPC2	MAPGAPC2,MAP(2)
	LD0.MAPGAPC3	MAPGAPC3,MAP(3)
	LD0.MAPGAPC4	MAPGAPC4,MAP(4)
	LD0.MAPGAPC5	MAPGAPC5,MAP(5)
	LD0.MAPGAPC6	MAPGAPC6,MAP(6)
	LD0.MAPGAPC7	MAPGAPC7,MAP(7)
	LD0.MAPGAPC8	MAPGAPC8,MAP(8)
	LD0.MAPGAPC9	MAPGAPC9,MAP(9)
	LD0.MAPGAPC10	MAPGAPC10,MAP(10)
	LD0.MAPGAPC11	MAPGAPC11,MAP(11)
	LD0.MAPGAPC12	MAPGAPC12,MAP(12)
	LD0.MAPGAPC13	MAPGAPC13,MAP(13)
	LD0.MAPGAPC14	MAPGAPC14,MAP(14)
	LD0.MAPGAPC15	MAPGAPC15,MAP(15)
	LD0.MAPGAPC16	MAPGAPC16,MAP(16)
	LD0.MAPGAPC17	MAPGAPC17,MAP(17)
	LD0.MAPGAPC18	MAPGAPC18,MAP(18)
	LD0.TPGAPC1	TPGAPC1,TP(1)
	LD0.TPGAPC2	TPGAPC2,TP(2)
	LD0.TPGAPC3	TPGAPC3,TP(3)
	LD0.TPGAPC4	TPGAPC4,TP(4)
	LD0.TPSGAPC1	TPSGAPC1,TPS(1)
	LD0.TPSGAPC2	TPSGAPC2,TPS(2)
	LD0.TPMGAPC1	TPMGAPC1,TPM(1)

	LD0.TPMGAPC2	TPMGAPC2, TPM(2)
	LD0.PTGAPC1	PTGAPC1, PT(1)
	LD0.PTGAPC2	PTGAPC2, PT(2)
	LD0.TOFGAPC1	TOFGAPC1, TOF(1)
	LD0.TOFGAPC2	TOFGAPC2, TOF(2)
	LD0.TOFGAPC3	TOFGAPC3, TOF(3)
	LD0.TOFGAPC4	TOFGAPC4, TOF(4)
	LD0.TONGAPC1	TONGAPC1, TON(1)
	LD0.TONGAPC2	TONGAPC2, TON(2)
	LD0.TONGAPC3	TONGAPC3, TON(3)
	LD0.TONGAPC4	TONGAPC4, TON(4)
	LD0.SRGAPC1	SRGAPC1, SR(1)
	LD0.SRGAPC2	SRGAPC2, SR(2)
	LD0.SRGAPC3	SRGAPC3, SR(3)
	LD0.SRGAPC4	SRGAPC4, SR(4)
	LD0.MVGAPC1	MVGAPC1, MV(1)
	LD0.MVGAPC2	MVGAPC2, MV(2)
	LD0.MVGAPC3	MVGAPC3, MV(3)
	LD0.MVGAPC4	MVGAPC4, MV(4)
	LD0.MVI4GAPC1	MVI4GAPC1, MVI4(1)
	LD0.MVI4GAPC2	MVI4GAPC2, MVI4(2)
	LD0.MVI4GAPC3	MVI4GAPC3, MVI4(3)
	LD0.MVI4GAPC4	MVI4GAPC4, MVI4(4)
	LD0.SCA4GAPC1	SCA4GAPC1, SCA4(1)
	LD0.SCA4GAPC2	SCA4GAPC2, SCA4(2)
	LD0.SCA4GAPC3	SCA4GAPC3, SCA4(3)
	LD0.SCA4GAPC4	SCA4GAPC4, SCA4(4)
	LD0.SPCGAPC1	SPCGAPC1, SPC(1)
	LD0.SPCGAPC2	SPCGAPC2, SPC(2)
	LD0.SPCGAPC3	SPCGAPC3, SPC(3)
	LD0.SPCRGAPC1	SPCRGAPC1, SPCR(1)
	LD0.SPCLGAPC1	SPCLGAPC1, SPCL(1)
	LD0.ESMGAPC1	ESMGAPC1, ESTART(1)
<b>I:Logical Nodes for archiving</b>		
IHMI	LD0.IHMI1	Device
<b>M:Logical Nodes for metering and measurement</b>		
MMXU	LD0.CMMXU1	CMMXU1,3I(1)
	LD0.CAVMMXU1	CMMXU1,3I(1)
	LD0.CMAMMXU1	CMMXU1,3I(1)
	LD0.CMIMMXU1	CMMXU1,3I(1)
	LD0.PEMMXU1	PEMMXU1,P,E(1)
	LD0.PEAVMMXU1	PEMMXU1,P,E(1)

	LD0.PEMAMMXU1	PEMMXU1,P,E(1)
	LD0.PEMIMMMXU1	PEMMXU1,P,E(1)
	LD0.FMMXU1	FMMXU1,f(1)
	LD0.WMMXU1	WPWDE1,32N(1),Po>->(1)
	LD0.WMMXU2	WPWDE2,32N(2),Po>->(2)
	LD0.WMMXU3	WPWDE3,32N(3),Po>->(3)
	LD0.RESCMMXU1	RESCMMXU1,In(1),Io(1)
	LD0.RCAVMMXU1	RESCMMXU1,In(1),Io(1)
	LD0.RCMAMMXU1	RESCMMXU1,In(1),Io(1)
	LD0.RCMIMMMXU1	RESCMMXU1,In(1),Io(1)
	LD0.VAMMXU2	VAMMXU2,V_A(2),U_A(2)
	LD0.VAAVMMXU2	VAAVMMXU2
	LD0.RESVMMXU1	RESVMMXU1,Vn(1),Uo(1)
	LD0.RVAVMMXU1	RESVMMXU1,Vn(1),Uo(1)
	LD0.RVMAMMXU1	RESVMMXU1,Vn(1),Uo(1)
	LD0.RVMIMMMXU1	RESVMMXU1,Vn(1),Uo(1)
	LD0.CMMXU2	CMMXU2,3I(2)
	LD0.CAVMMXU2	CMMXU2,3I(2)
	LD0.CMAMMXU2	CMMXU2,3I(2)
	LD0.CMIMMMXU2	CMMXU2,3I(2)
	LD0.DPMMXU1	DUPPDPR1,32U(1),P<(1)
	LD0.DPMMXU2	DUPPDPR2,32U(2),P<(2)
	LD0.DOPMMXU1	DOPPDPR1,32R/32O(1),P>/Q>(1)
	LD0.DOPMMXU2	DOPPDPR2,32R/32O(2),P>/Q>(2)
	LD0.DOPMMXU3	DOPPDPR3,32R/32O(3),P>/Q>(3)
	LD0.RESCMMXU2	RESCMMXU2,In(2),Io(2)
	LD0.RCAVMMXU2	RESCMMXU2,In(2),Io(2)
	LD0.RCMAMMXU2	RESCMMXU2,In(2),Io(2)
	LD0.RCMIMMMXU2	RESCMMXU2,In(2),Io(2)
	LD0.VAMMXU3	VAMMXU3,V_A(3),U_A(3)
	LD0.VAAVMMXU3	VAAVMMXU3
	LD0.VMMXU1	VMMXU1,3V(1),3U(1)
	LD0.VAVMMXU1	VMMXU1,3V(1),3U(1)
	LD0.DQMMXU1	DQPTUV1,32Q,27(1),Q>->,3U<(1)
	LD0.DQMMXU2	DQPTUV2,32Q,27(2),Q>->,3U<(2)
	LD0.UEXMMXU1	UEXPDIS1,40(1),X<(1)
	LD0.UEXMMXU2	UEXPDIS2,40(2),X<(2)
MSQI	LD0.CSMSQI1	CSMSQI1,I1,I2,I0(1)
	LD0.CSMSQI2	CSMSQI2,I1,I2,I0(B)(1)
	LD0.VSMSQI1	VSMSQI1,V1,V2,V0(1),U1,U2,U0(1)
MMTR	LD0.PEMMTR1	PEMMXU1,P,E(1)
MHAI	LD0.CMHA1	CMHA1,PQM3I(1)

	LD0.VMHAI1	VMHAI1,PQM3V(1),PQM3U(1)
	LD0.HAEFMHAI1	HAEFPTOC1,51NHA(1),Io>HA(1)
<b>P:Logical Nodes for protection functions</b>		
PTOC	LD0.PHLPTOC1	PHLPTOC1,51P-1(1),3I>(1)
	LD0.PHHPTOC1	PHHPTOC1,51P-2(1),3I>>(1)
	LD0.PHHPTOC2	PHHPTOC2,51P-2(2),3I>>(2)
	LD0.PHIPTOC1	PHIPTOC1,50P/51P(1),3I>>>(1)
	LD0.DPHLPTOC1	DPHLPDOC1,67-1(1),3I>->(1)
	LD0.DPHHPTOC1	DPHHPDOC1,67-2(1),3I>>->(1)
	LD0.EFLPTOC1	EFLPTOC1,51N-1(1),Io>(1)
	LD0.EFHPTOC1	EFHPTOC1,51N-2(1),Io>>(1)
	LD0.DEFLPTOC1	DEFLPDEF1,67N-1(1),Io>->(1)
	LD0.DEFHPTOC1	DEFHPDEF1,67N-2(1),Io>>->(1)
	LD0.DPHLPTOC2	DPHLPDOC2,67-1(2),3I>->(2)
	LD0.DPHHPTOC2	DPHHPDOC2,67-2(2),3I>>->(2)
	LD0.EFLPTOC2	EFLPTOC2,51N-1(2),Io>(2)
	LD0.EFIPTOC1	EFIPTOC1,50N/51N(1),Io>>>(1)
	LD0.DEFLPTOC2	DEFLPDEF2,67N-1(2),Io>->(2)
	LD0.DEFLPTOC3	DEFLPDEF3,67N-1(3),Io>->(3)
	LD0.HAEFPTOC1	HAEFPTOC1,51NHA(1),Io>HA(1)
	LD0.NSPTOC1	NSPTOC1,46(1),I2>(1)
	LD0.NSPTOC2	NSPTOC2,46(2),I2>(2)
	LD0.PDNSPTOC1	PDNSPTOC1,46PD(1),I2/I1>(1)
	LD0.PH3HPTOC1	PH3HPTOC1,51P-2_3(1),3I_3>>(1)
	LD0.PH3HPTOC2	PH3HPTOC2,51P-2_3(2),3I_3>>(2)
	LD0.PH3LPTOC1	PH3LPTOC1,51P-1_3(1),3I_3>(1)
	LD0.PH3LPTOC2	PH3LPTOC2,51P-1_3(2),3I_3>(2)
	LD0.PH3IPTOC1	PH3IPTOC1,50P/51P_3(1),3I_3>>>(1)
	LD0.DPH3HPTOC1	DPH3HPDOC1,67-2_3(1),3I_3>>->(1)
	LD0.DPH3HPTOC2	DPH3HPDOC2,67-2_3(2),3I_3>>->(2)
	LD0.DPH3LPTOC1	DPH3LPDOC1,67-1_3(1),3I_3>->(1)
	LD0.DPH3LPTOC2	DPH3LPDOC2,67-1_3(2),3I_3>->(2)
	LD0.MNSPTOC1	MNSPTOC1,46M(1),I2>M(1)
	LD0.MNSPTOC2	MNSPTOC2,46M(2),I2>M(2)
	LD0.JAMPTOC1	JAMPTOC1,51LR(1),Ist>(1)
	LD0.PREVPTOC1	PREVPTOC1,46R(1),I2>>(1)
	LD0.MRE1PTOC1	MREFPTOC1,64R(1),Io>R(1)
	LD0.MRE2PTOC1	MREFPTOC1,64R(1),Io>R(1)
	LD0.PHLPTOC2	PHLPTOC2,51P-1(2),3I>(2)
	LD0.PHIPTOC2	PHIPTOC2,50P/51P(2),3I>>>(2)
	LD0.EFHPTOC2	EFHPTOC2,51N-2(2),Io>>(2)
	LD0.COL1PTOC1	COLPTOC1,51C/37(1),3I>3I<(1)

	LD0.COL2PTOC1	COLPTOC1,51C/37(1),3I>3I<(1)
	LD0.CUB1PTOC1	CUBPTOC1,51NC-1(1),dI>C(1)
	LD0.CUB2PTOC1	CUBPTOC1,51NC-1(1),dI>C(1)
	LD0.SRC1PTOC1	SRCPTOC1,55TD(1),TD>(1)
	LD0.SRC2PTOC1	SRCPTOC1,55TD(1),TD>(1)
PTOV	LD0.ROVPTOV1	ROVPTOV1,59G(1),Uo>(1)
	LD0.ROVPTOV2	ROVPTOV2,59G(2),Uo>(2)
	LD0.ROVPTOV3	ROVPTOV3,59G(3),Uo>(3)
	LD0.PHPTOV1	PHPTOV1,59(1),3U>(1)
	LD0.PHPTOV2	PHPTOV2,59(2),3U>(2)
	LD0.PHPTOV3	PHPTOV3,59(3),3U>(3)
	LD0.NSPTOV1	NSPTOV1,47O-(1),U2>(1)
	LD0.NSPTOV2	NSPTOV2,47O-(2),U2>(2)
	LD0.PHAPTOV1	PHAPTOV1,59_A(1),U_A>(1)
PTUV	LD0.PHPTUV1	PHPTUV1,27(1),3U<(1)
	LD0.PHPTUV2	PHPTUV2,27(2),3U<(2)
	LD0.PHPTUV3	PHPTUV3,27(3),3U<(3)
	LD0.PSPTUV1	PSPTUV1,47U+(1),U1<(1)
	LD0.PSPTUV2	PSPTUV2,47U+(2),U1<(2)
	LD0.PHAPTV1	PHAPTV1,27_A(1),U_A<(1)
	LD0.DQPTUV1	DQPTUV1,32Q,27(1),Q>->,3U<(1)
	LD0.DQPTUV2	DQPTUV2,32Q,27(2),Q>->,3U<(2)
	LD0.LVRTPTUV1	LVRTPTUV1,27RT(1),U<RT(1)< td>
	LD0.LVRTPTUV2	LVRTPTUV2,27RT(2),U<RT(2)< td>
	LD0.LVRTPTUV3	LVRTPTUV3,27RT(3),U<RT(3)< td>
PTRC	LD0.FRPTRC1	FRPFRQ1,81(1),f>/f<,df/dt(1)
	LD0.FRPTRC2	FRPFRQ2,81(2),f>/f<,df/dt(2)
	LD0.FRPTRC3	FRPFRQ3,81(3),f>/f<,df/dt(3)
	LD0.TRPPTRC1	TRPPTRC1,94/86(1),Master Trip(1)
	LD0.TRPPTRC2	TRPPTRC2,94/86(2),Master Trip(2)
	LD0.TRPPTRC3	TRPPTRC3,94/86(3),Master Trip(3)
	LD0.TRPPTRC4	TRPPTRC4,94/86(4),Master Trip(4)
	LD0.LEDPTRC1	Global conditioning
	LD0.FRPTRC4	FRPFRQ4,81(4),f>/f<,df/dt(4)
	LD0.FRPTRC5	FRPFRQ5,81(5),f>/f<,df/dt(5)
	LD0.FRPTRC6	FRPFRQ6,81(6),f>/f<,df/dt(6)
	LD0.LSHDPTRC1	LSHDPFRQ1,81LSH(1),UFLS/R(1)
	LD0.LSHDPTRC2	LSHDPFRQ2,81LSH(2),UFLS/R(2)
	LD0.LSHDPTRC3	LSHDPFRQ3,81LSH(3),UFLS/R(3)
	LD0.LSHDPTRC4	LSHDPFRQ4,81LSH(4),UFLS/R(4)
	LD0.LSHDPTRC5	LSHDPFRQ5,81LSH(5),UFLS/R(5)
	LD0.LSHDPTRC6	LSHDPFRQ6,(LSHDPFRQ6),UFLS/R(6)

	LD0.MPTRC1	MPDIF1,87M/G(1),3dl>M/G(1)
	LD0.TR2PTRC1	TR2PTDF1,87T(1),3dl>T(1)
	LD0.ARCPTRC11	ARCSARC1,50L/50NL(1),ARC(1)
	LD0.ARCPTRC21	ARCSARC2,50L/50NL(2),ARC(2)
	LD0.ARCPTRC31	ARCSARC3,50L/50NL(3),ARC(3)
PTOF	LD0.FRPTOF1	FRPFRQ1,81(1),f>/f<,df/dt(1)
	LD0.FRPTOF2	FRPFRQ2,81(2),f>/f<,df/dt(2)
	LD0.FRPTOF3	FRPFRQ3,81(3),f>/f<,df/dt(3)
	LD0.FRPTOF4	FRPFRQ4,81(4),f>/f<,df/dt(4)
	LD0.FRPTOF5	FRPFRQ5,81(5),f>/f<,df/dt(5)
	LD0.FRPTOF6	FRPFRQ6,81(6),f>/f<,df/dt(6)
	LD0.LSHDPTOF1	LSDPFRQ1,81LSH(1),UFLS/R(1)
	LD0.LSHDPTOF2	LSDPFRQ2,81LSH(2),UFLS/R(2)
	LD0.LSHDPTOF3	LSDPFRQ3,81LSH(3),UFLS/R(3)
	LD0.LSHDPTOF4	LSDPFRQ4,81LSH(4),UFLS/R(4)
	LD0.LSHDPTOF5	LSDPFRQ5,81LSH(5),UFLS/R(5)
	LD0.LSHDPTOF6	LSDPFRQ6,(LSDPFRQ6),UFLS/R(6)
PTUF	LD0.FRPTUF1	FRPFRQ1,81(1),f>/f<,df/dt(1)
	LD0.FRPTUF2	FRPFRQ2,81(2),f>/f<,df/dt(2)
	LD0.FRPTUF3	FRPFRQ3,81(3),f>/f<,df/dt(3)
	LD0.FRPTUF4	FRPFRQ4,81(4),f>/f<,df/dt(4)
	LD0.FRPTUF5	FRPFRQ5,81(5),f>/f<,df/dt(5)
	LD0.FRPTUF6	FRPFRQ6,81(6),f>/f<,df/dt(6)
	LD0.LSHDPTUF1	LSDPFRQ1,81LSH(1),UFLS/R(1)
	LD0.LSHDPTUF2	LSDPFRQ2,81LSH(2),UFLS/R(2)
	LD0.LSHDPTUF3	LSDPFRQ3,81LSH(3),UFLS/R(3)
	LD0.LSHDPTUF4	LSDPFRQ4,81LSH(4),UFLS/R(4)
	LD0.LSHDPTUF5	LSDPFRQ5,81LSH(5),UFLS/R(5)
	LD0.LSHDPTUF6	LSDPFRQ6,(LSDPFRQ6),UFLS/R(6)
PFRC	LD0.FRPFRC1	FRPFRQ1,81(1),f>/f<,df/dt(1)
	LD0.FRPFRC2	FRPFRQ2,81(2),f>/f<,df/dt(2)
	LD0.FRPFRC3	FRPFRQ3,81(3),f>/f<,df/dt(3)
	LD0.FRPFRC4	FRPFRQ4,81(4),f>/f<,df/dt(4)
	LD0.FRPFRC5	FRPFRQ5,81(5),f>/f<,df/dt(5)
	LD0.FRPFRC6	FRPFRQ6,81(6),f>/f<,df/dt(6)
	LD0.LSHDPFRC1	LSDPFRQ1,81LSH(1),UFLS/R(1)
	LD0.LSHDPFRC2	LSDPFRQ2,81LSH(2),UFLS/R(2)
	LD0.LSHDPFRC3	LSDPFRQ3,81LSH(3),UFLS/R(3)
	LD0.LSHDPFRC4	LSDPFRQ4,81LSH(4),UFLS/R(4)
	LD0.LSHDPFRC5	LSDPFRQ5,81LSH(5),UFLS/R(5)
	LD0.LSHDPFRC6	LSDPFRQ6,(LSDPFRQ6),UFLS/R(6)
PSOF	LD0.CVPSOF1	CVPSOF1,SOTF/21/50(1),CVPSOF(1)

PVOC	LD0.PHPVOC1	PHPVOC1,51V(1),3I(U)>(1)
	LD0.PHPVOC2	PHPVOC2,51V(2),3I(U)>(2)
PADM	LD0.EFPADM1	EFPADM1,21YN(1),Yo>->(1)
	LD0.EFPADM2	EFPADM2,21YN(2),Yo>->(2)
	LD0.EFPADM3	EFPADM3,21YN(3),Yo>->(3)
PSDE	LD0.WPSDE1	WPWDE1,32N(1),Po>->(1)
	LD0.WPSDE2	WPWDE2,32N(2),Po>->(2)
	LD0.WPSDE3	WPWDE3,32N(3),Po>->(3)
	LD0.MFADPSDE1	MFADPSDE1,67YN(1),Io>->Y(1)
PTEF	LD0INTRPTEF1	INTRPTEF1,67NIEF(1),Io>->IEF(1)
PTTR	LD0.T1PTTR1	T1PTTR1,49F(1),3Ith>F(1)
	LD0.MPTTR1	MPTTR1,49M(1),3Ith>M(1)
	LD0.T2PTTR1	T2PTTR1,49T/G/C(1),3Ith>T/G/C(1)
PTUC	LD0.PHPTUC1	PHPTUC1,37(1),3I<(1)
	LD0.LOFLPTUC1	LOFLPTUC1,37(1),3I<(1)
	LD0.LOFLPTUC2	LOFLPTUC2,37(2),3I<(2)
	LD0.PHPTUC2	PHPTUC2,37(2),3I<(2)
	LD0.COLPTUC1	COLPTOC1,51C/37(1),3I>3I<(1)
PHAR	LD0.INRPHAR1	INRPHAR1,68(1),3I2f>(1)
	LD0.TR2H2PHAR1	TR2PTDF1,87T(1),3dl>T(1)
	LD0.TR2H5PHAR1	TR2PTDF1,87T(1),3dl>T(1)
	LD0.LREFPHAR1	LREFPNDF1,87NL(1),dloLo>(1)
	LD0.LREFPHAR2	LREFPNDF2,87NL(2),dloLo>(2)
PDIF	LD0.HIAPDIF1	HIAPDIF1,87A(1),dHi_A>(1)
	LD0.HIBPDIF1	HIBPDIF1,87B(1),dHi_B>(1)
	LD0.HICPDIF1	HICPDIF1,87C(1),dHi_C>(1)
	LD0.MHPDIF1	MPDIF1,87M/G(1),3dl>M/G(1)
	LD0.MLPDIF1	MPDIF1,87M/G(1),3dl>M/G(1)
	LD0.MHZPDIF1	MHZPDIF1,87MH(1),3dlHi>M(1)
	LD0.HREFPDIF1	HREFPDIF1,87NH(1),dloHi>(1)
	LD0.TR2LPDIF1	TR2PTDF1,87T(1),3dl>T(1)
	LD0.TR2HPDIF1	TR2PTDF1,87T(1),3dl>T(1)
	LD0.LREFPDIF1	LREFPNDF1,87NL(1),dloLo>(1)
	LD0.LREFPDIF2	LREFPNDF2,87NL(2),dloLo>(2)
	LD0.HREFPDIF2	HREFPDIF2,87NH(2),dloHi>(2)
PMSS	LD0.STTPMSS1	STTPMSU1,49,66,48,51LR(1),ls2t n<(1)
PMRI	LD0.STTPMRI1	STTPMSU1,49,66,48,51LR(1),ls2t n<(1)
PVPH	LD0.OEPVPH1	OEPVPH1,24(1),U/f>(1)
	LD0.OEPVPH2	OEPVPH2,24(2),U/f>(2)
PDUP	LD0.DPPDUP1	DUPPDPR1,32U(1),P<(1)
	LD0.DPPDUP2	DUPPDPR2,32U(2),P<(2)
PDOP	LD0.DPPDOP1	DOPPDPR1,32R/32O(1),P>/Q>(1)

	LD0.DPPDOP2	DOPPDPR2,32R/32O(2),P>/Q>(2)
	LD0.DPPDOP3	DOPPDPR3,32R/32O(3),P>/Q>(3)
	LD0.DQPDOP1	DQPTUV1,32Q,27(1),Q>->,3U<(1)
	LD0.DQPDOP2	DQPTUV2,32Q,27(2),Q>->,3U<(2)
PHIZ	LD0.PHIZ1	PHIZ1,HIZ(1),HIF(1)
PIOC	LD0.ARCPLOC11	ARCSARC1,50L/50NL(1),ARC(1)
	LD0.ARCPLOC12	ARCSARC1,50L/50NL(1),ARC(1)
	LD0.ARCPLOC21	ARCSARC2,50L/50NL(2),ARC(2)
	LD0.ARCPLOC22	ARCSARC2,50L/50NL(2),ARC(2)
	LD0.ARCPLOC31	ARCSARC3,50L/50NL(3),ARC(3)
	LD0.ARCPLOC32	ARCSARC3,50L/50NL(3),ARC(3)
PPAM	LD0.VVSPPAM1	VVSPPAM1,78V(1),VS(1)
PDIS	LD0.UEXPDIS1	UEXPDIS1,40(1),X<(1)
	LD0.UEXPDIS2	UEXPDIS2,40(2),X<(2)
<b>Q:Logical nodes for power quality events</b>		
QVVR	LD0.PH1QVVR1	PHQVVR1,PQM(1),PQM(1)
	LD0.PH2QVVR1	PHQVVR1,PQM(1),PQM(1)
	LD0.PH3QVVR1	PHQVVR1,PQM(1),PQM(1)
QVUB	LD0.VSQVUB1	VSQVUB1,PQVUB(1),PQUUB(1)
<b>R:Logical nodes for protection related functions</b>		
RDIR	LD0.DPHLRDIR1	DPHLPDOC1,67-1(1),3I>->(1)
	LD0.DPHHRDIR1	DPHHPDOC1,67-2(1),3I>>->(1)
	LD0.DEFLRDIR1	DEFLPDEF1,67N-1(1),Io>->(1)
	LD0.DEFHRDIR1	DEFHPDEF1,67N-2(1),Io>>->(1)
	LD0.DPHLRDIR2	DPHLPDOC2,67-1(2),3I>->(2)
	LD0.DPHHRDIR2	DPHHPDOC2,67-2(2),3I>>->(2)
	LD0.DEFLRDIR2	DEFLPDEF2,67N-1(2),Io>->(2)
	LD0.DEFLRDIR3	DEFLPDEF3,67N-1(3),Io>->(3)
	LD0.WRDIR1	WPWDE1,32N(1),Po>->(1)
	LD0.WRDIR2	WPWDE2,32N(2),Po>->(2)
	LD0.WRDIR3	WPWDE3,32N(3),Po>->(3)
	LD0.MFADRDIR1	MFADRDIR1
	LD0.DPH3HRDIR1	DPH3HPDOC1,67-2_3(1),3I_3>>->(1)
	LD0.DPH3HRDIR2	DPH3HPDOC2,67-2_3(2),3I_3>>->(2)
	LD0.DPH3LRDIR1	DPH3LPDOC1,67-1_3(1),3I_3>->(1)
	LD0.DPH3LRDIR2	DPH3LPDOC2,67-1_3(2),3I_3>->(2)
RBRF	LD0.CCBRBRF1	CCBRBRF1,51BF/51NBF(1),3I>/Io>BF(1)
	LD0.CCBRBRF2	CCBRBRF2,51BF/51NBF(2),3I>/Io>BF(2)
	LD0.CCBRBRF3	CCBRBRF3,51BF/51NBF(3),3I>/Io>BF(3)
RLRC	LD0.LDPRRLRC1	LDPRRLRC1
RQRC	LD0.QVV1RQRC1	PHQVVR1,PQM(1),PQM(1)
	LD0.QVV2RQRC1	PHQVVR1,PQM(1),PQM(1)

	LD0.QVV3RQRC1	PHQVVR1,PQMV(1),PQMU(1)
	LD0.QVU1RQRC1	VSQVUB1,PQVUB(1),PQUUB(1)
	LD0.QVU2RQRC1	VSQVUB1,PQVUB(1),PQUUB(1)
	LD0.QVU3RQRC1	VSQVUB1,PQVUB(1),PQUUB(1)
RFRC	LD0.FLTRFRC1	FLTRFRC1,FaultRec1
	LD0.FLO1RFRC1	SCEFRFL01,21FL(1),FLOC(1)
RREC	LD0.DARREC1	DARREC1,79(1),O->I(1)
	LD0.DARREC2	DARREC2,79(2),O->I(2)
RSYN	LD0.SECRSYN1	SECRSYN1,25(1),SYNC(1)
RCTF	LD0.CTSRCTF1	CTSRCTF1,MCS 3I,I2(1)
RFLO	LD0.SCEFRFL01	SCEFRFL01,21FL(1),FLOC(1)
RDRE	DR.RDRE1	Disturbance recorder
RBDR	DR.RBDR1	Binary ch 1
	DR.RBDR2	Binary ch 2
	DR.RBDR3	Binary ch 3
	DR.RBDR4	Binary ch 4
	DR.RBDR5	Binary ch 5
	DR.RBDR6	Binary ch 6
	DR.RBDR7	Binary ch 7
	DR.RBDR8	Binary ch 8
	DR.RBDR9	Binary ch 9
	DR.RBDR10	Binary ch 10
	DR.RBDR11	Binary ch 11
	DR.RBDR12	Binary ch 12
	DR.RBDR13	Binary ch 13
	DR.RBDR14	Binary ch 14
	DR.RBDR15	Binary ch 15
	DR.RBDR16	Binary ch 16
	DR.RBDR17	Binary ch 17
	DR.RBDR18	Binary ch 18
	DR.RBDR19	Binary ch 19
	DR.RBDR20	Binary ch 20
	DR.RBDR21	Binary ch 21
	DR.RBDR22	Binary ch 22
	DR.RBDR23	Binary ch 23
	DR.RBDR24	Binary ch 24
	DR.RBDR25	Binary ch 25
	DR.RBDR26	Binary ch 26
	DR.RBDR27	Binary ch 27
	DR.RBDR28	Binary ch 28
	DR.RBDR29	Binary ch 29
	DR.RBDR30	Binary ch 30

	DR.RBDR31	Binary ch 31
	DR.RBDR32	Binary ch 32
	DR.RBDR33	Binary ch 33
	DR.RBDR34	Binary ch 34
	DR.RBDR35	Binary ch 35
	DR.RBDR36	Binary ch 36
	DR.RBDR37	Binary ch 37
	DR.RBDR38	Binary ch 38
	DR.RBDR39	Binary ch 39
	DR.RBDR40	Binary ch 40
	DR.RBDR41	Binary ch 41
	DR.RBDR42	Binary ch 42
	DR.RBDR43	Binary ch 43
	DR.RBDR44	Binary ch 44
	DR.RBDR45	Binary ch 45
	DR.RBDR46	Binary ch 46
	DR.RBDR47	Binary ch 47
	DR.RBDR48	Binary ch 48
	DR.RBDR49	Binary ch 49
	DR.RBDR50	Binary ch 50
	DR.RBDR51	Binary ch 51
	DR.RBDR52	Binary ch 52
	DR.RBDR53	Binary ch 53
	DR.RBDR54	Binary ch 54
	DR.RBDR55	Binary ch 55
	DR.RBDR56	Binary ch 56
	DR.RBDR57	Binary ch 57
	DR.RBDR58	Binary ch 58
	DR.RBDR59	Binary ch 59
	DR.RBDR60	Binary ch 60
	DR.RBDR61	Binary ch 61
	DR.RBDR62	Binary ch 62
	DR.RBDR63	Binary ch 63
	DR.RBDR64	Binary ch 64
RADR	DR.RADR1	Analog ch 1
	DR.RADR2	Analog ch 2
	DR.RADR3	Analog ch 3
	DR.RADR4	Analog ch 4
	DR.RADR5	Analog ch 5
	DR.RADR6	Analog ch 6
	DR.RADR7	Analog ch 7
	DR.RADR8	Analog ch 8

	DR.RADR9	Analog ch 9
	DR.RADR10	Analog ch 10
	DR.RADR11	Analog ch 11
	DR.RADR12	Analog ch 12
<b>S:Logical nodes for supervision and monitoring</b>		
SCBR	LD0.SSCBR1	SSCBR1,CBCM(1)
	LD0.SPH1SCBR1	SPH1SCBR1
	LD0.SPH2SCBR1	SPH2SCBR1
	LD0.SPH3SCBR1	SPH3SCBR1
	LD0.SSCBR2	SSCBR2,CBCM(2)
	LD0.SPH1SCBR2	SPH1SCBR2
	LD0.SPH2SCBR2	SPH2SCBR2
	LD0.SPH3SCBR2	SPH3SCBR2
	LD0.SSCBR3	SSCBR3,CBCM(3)
	LD0.SPH1SCBR3	SPH1SCBR3
	LD0.SPH2SCBR3	SPH2SCBR3
	LD0.SPH3SCBR3	SPH3SCBR3
	LD0.TCSSCBR1	TCSSCBR1,TCM(1),TCS(1)
	LD0.TCSSCBR2	TCSSCBR2,TCM(2),TCS(2)
SIMG	LD0.SSIMG1	SSIMG1
	LD0.SSIMG2	SSIMG2
	LD0.SSIMG3	SSIMG3
SOPM	LD0.SSOPM1	SSOPM1
	LD0.SSOPM2	SSOPM2
	LD0.SSOPM3	SSOPM3
SPVC	LD0.CCSPVC1	CCSPVC1,MCS 3I(1)
	LD0.SEQSPVC1	SEQSPVC1,60(1),FUSEF(1)
	LD0.HZCCASPVC1	HZCCASPVC1,MCS I_A(1)
	LD0.HZCCBSPVC1	HZCCBSPVC1,MCS I_B(1)
	LD0.HZCCCSPVC1	HZCCCSPVC1,MCS I_C(1)
	LD0.CCSPVC2	CCSPVC2,MCS 3I(2)
SOPT	LD0.MDOPT1	MDOPT1,OPTM(1),OPTS(1)
	LD0.MDOPT2	MDOPT2,OPTM(2),OPTS(2)
SARC	LD0.ARCSARC11	ARCSARC1,50L/50NL(1),ARC(1)
	LD0.ARCSARC21	ARCSARC2,50L/50NL(2),ARC(2)
	LD0.ARCSARC31	ARCSARC3,50L/50NL(3),ARC(3)
<b>T:Logical nodes for instrument transformers and sensors</b>		
TCTR	LD0.IL1TCTR1	Current (3I,CT)
	LD0.IL2TCTR1	Current (3I,CT)
	LD0.IL3TCTR1	Current (3I,CT)
	LD0.RESTCTR1	Current (Io,CT)

	LD0.IL1TCTR2	Current (3IB,CT)
	LD0.IL2TCTR2	Current (3IB,CT)
	LD0.IL3TCTR2	Current (3IB,CT)
	LD0.RESTCTR2	Current (IoB,CT)
	MU01.I01ATCTR1	Std conformance
	MU01.I01BTCTR2	Std conformance
	MU01.I01CTCTR3	Std conformance
	MU01.I01NTCTR4	Std conformance
TVTR	LD0.UL1TVTR1	Voltage (3U,VT)
	LD0.UL2TVTR1	Voltage (3U,VT)
	LD0.UL3TVTR1	Voltage (3U,VT)
	LD0.RESTVTR1	Voltage (Uo,VT)
	LD0.UL1TVTR2	Voltage (3UB,VT)
	LD0.UL2TVTR2	Voltage (3UB,VT)
	LD0.UL3TVTR2	Voltage (3UB,VT)
	LD0.UL1TVTR3	Voltage (3UC,VT)
	LD0.UL2TVTR3	Voltage (3UC,VT)
	LD0.UL3TVTR3	Voltage (3UC,VT)
	MU01.U01ATVTR1	Std conformance
	MU01.U01BTVTR2	Std conformance
	MU01.U01CTVTR3	Std conformance
	MU01.U01NTVTR4	Std conformance
<b>X:Logical Nodes for switchgear</b>		
XCBR	CTRL.CBXCBR1	CBXCBR1,I<->O CB(1)
	CTRL.CBXCBR2	CBXCBR2,I<->O CB(2)
	CTRL.CBXCBR3	CBXCBR3,I<->O CB(3)
XSWI	CTRL.DCXSWI1	DCXSWI1,I<->O DCC(1)
	CTRL.DCXSWI2	DCXSWI2,I<->O DCC(2)
	CTRL.DCXSWI3	DCXSWI3,I<->O DCC(3)
	CTRL.DCXSWI4	DCXSWI4,I<->O DCC(4)
	CTRL.DCSXSWI1	DCSXSWI1,I<->O DC(1)
	CTRL.DCSXSWI2	DCSXSWI2,I<->O DC(2)
	CTRL.DCSXSWI3	DCSXSWI3,I<->O DC(3)
	CTRL.DCSXSWI4	DCSXSWI4,I<->O DC(4)
	CTRL.ESXSWI1	ESXSWI1,I<->O ESC(1)
	CTRL.ESXSWI2	ESXSWI2,I<->O ESC(2)
	CTRL.ESXSWI3	ESXSWI3,I<->O ESC(3)
	CTRL.ESSXSWI1	ESSXSWI1,I<->O ES(1)
	CTRL.ESSXSWI2	ESSXSWI2,I<->O ES(2)
	CTRL.ESSXSWI3	ESSXSWI3,I<->O ES(3)
<b>Y:Logical nodes for power transformers</b>		
YLTC	LD0.TPOSYLTC1	TPOSYLTC1,84M(1),TPOSM(1)

<b>Z:Logical nodes for further power system equipment</b>		
ZLIN	LD0.SCEF1ZLIN1	SCEFRFL01,21FL(1),FLOC(1)
	LD0.SCEF2ZLIN1	SCEFRFL01,21FL(1),FLOC(1)
	LD0.SCEF3ZLIN1	SCEFRFL01,21FL(1),FLOC(1)

## 6 Logical Node Extensions

### 6.1 New Logical Nodes

#### 6.1.1 LN: LINF1 Name: LINF (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	AB-BIED600_Rev5_LPL_LD0_LINF_ED2_e	Name plate	E	IEC 61850-7-4:2007
BayNam	ABBIED600_Rev3_VSG_2_20_e	Name of the bay	E	ABBIED600:2014
CfgNam	ABBIED600_Rev2_VSG_1_20_e	IED configuration name	E	ABBIED600:2014
DevRev	ABBIED600_Rev2_VSG_1_64_e	Product version number	E	ABBIED600:2014
CstNam	ABBIED600_Rev1_VSG_2_64_e	Name of the customer	E	ABBIED600:2014
CstStNam	ABBIED600_Rev1_VSG_2_64_e	Name of the state	E	ABBIED600:2014
CstStreNam	ABBIED600_Rev1_VSG_2_64_e	Name of the street	E	ABBIED600:2014
CstHouNum	ABBIED600_Rev1_VSG_2_64_e	Number of the house	E	ABBIED600:2014
CstZip	ABBIED600_Rev3_VSG_2_20_e	ZIP/Postal code	E	ABBIED600:2014
CstCityNam	ABBIED600_Rev1_VSG_2_64_e	City/Province	E	ABBIED600:2014
CstCntyNam	ABBIED600_Rev1_VSG_2_64_e	Name of the country	E	ABBIED600:2014
CardNam	AB-BIED600_Rev8_DPL_eeprom_2_ED2_e	Card information	E	ABBIED600:2014
TestStald	ABBIED600_Rev1_LPL_VSS_dU_20_e	Testing	E	ABBIED600:2014
Hwld	ABBIED600_Rev1_LPL_VSS_1_20_e	HW module	E	ABBIED600:2014

#### 6.1.2 LN: LDEV1 Name: LDEV (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	AB-BIED600_Rev2_LPL_LD0_LDEV_ED2_e	Name plate	E	IEC 61850-7-4:2007
IPAddr	ABBIED600_Rev3_VSG_2_20_e	IP address for rear port(s)	E	ABBIED600:2014
IPAddrSub-Ntw	ABBIED600_Rev3_VSG_2_20_e	Subnet mask for rear port(s)	E	ABBIED600:2014
IPAddrGtw	ABBIED600_Rev3_VSG_2_20_e	Default gateway for rear port(s)	E	ABBIED600:2014

IPAddrFr	ABBIED600_Rev2_VSG_1_20_e	IP address for front port (fixed)	E	ABBIED600:2014
Mac1	ABBIED600_Rev2_VSG_1_20_e	Mac address for rear port(s)	E	ABBIED600:2014
Mac2	ABBIED600_Rev2_VSG_1_20_e	Mac address for front port	E	ABBIED600:2014
SwrNum	ABBIED600_Rev1_LPL_VSS_1_20	SW		
OrdrNum	ABBIED600_Rev1_LPL_VSS_1_20	Order number		
WrmStrDet	ABBIED600_Rev1_SPS	Warm start detected		
WacTrgDet	ABBIED600_Rev1_SPS	Watchdog reset detected		
DevWrn	ABBIED600_Rev7_ENS_warning	Warning		
DevFail	ABBIED600_Rev11_ENS_error	Internal Fault		
StLstOv	ABBIED600_Rev1_SPS_e	Status overflow	E	ABBIED600:2014
MeasLstOv	ABBIED600_Rev1_SPS_e	Meas overflow	E	ABBIED600:2014
ChgAckCnt	ABBIED600_Rev1_INS_retain_e	Number of composition changes	E	ABBIED600:2014
ChgFlg	ABBIED600_Rev2_INC_control_int_e	Composition has changed	E	ABBIED600:2014,status-only,direct-with-normal-security
WrmStrCmd	ABBIED600_Rev2_SPC_control_e	Reset device	E	ABBIED600:2014,status-only,direct-with-normal-security
FailTest	ABBIED600_Rev2_SPC_control_e	Internal fault test	E	ABBIED600:2014,status-only,direct-with-normal-security
BlkMod	ABBIED600_Rev2_ENG_SP_BlkMod_e	Global blocking mode selection	E	ABBIED600:2014
HzSetSel	ABBIED600_Rev2_ENG_SP_HzSet_e	Rated frequency	E	ABBIED600:2014
PhRotSet	ABBIED600_Rev2_ENG_SP_PhRotSet_e	Phase rotation order	E	ABBIED600:2014
DiVThres	ABBIED600_Rev1_ING_SP_e	Threshold voltage	E	ABBIED600:2014
DiOscThres	ABBIED600_Rev1_ING_SP_1_e	Input osc. level	E	ABBIED600:2014
DiOscHys	ABBIED600_Rev1_ING_SP_1_e	Input osc. hyst	E	ABBIED600:2014
SetSeld	ABBIED600_Rev1_SPS_e	Settings reservation	E	ABBIED600:2014
SetChg	ABBIED600_Rev1_SPS_e	Settings change	E	ABBIED600:2014
PhOrdMod	ABBIED600_Rev2_ENG_SP_PhOrdSet_e	Phase connection order	E	ABBIED600:2014,order code dependent
ACrvSatPnt	ABBIED600_Rev1_ASG_SP_f_e	Overcurrent IDMT saturation point	E	ABBIED600:2014
AD-mdAvMod	AB-BIED600_Rev2_ENG_SP_DmdAvMod_e	A demand Av mode	E	ABBIED600:2014

MtrDmdltrv	ABBIED600_Rev2_ENG_SP_dmdltrv_e	Demand interval	E	ABBIED600:2014
HzAdpEna	ABBIED600_Rev1_SPG_SP_e	Frequency adaptivity	E	ABBIED600:2014
ModRemCtl	ABBIED600_Rev2_ENG_SP_ModRemCtrl_e	Authority for remote activation of test mode	E	ABBIED600:2014
LangSel	ABBIED600_Rev5_ENG_SP_Languages_e	Language selection	E	ABBIED600:2014
Contr	ABBIED600_Rev1_ING_SP_1_e	Contrast selection	E	ABBIED600:2014
NumFrm	ABBIED600_Rev1_ING_SP_1_e	NUMf	E	ABBIED600:2014
LgtLivTm	ABBIED600_Rev1_ING_SP_1_e	Backlight timeout	E	ABBIED600:2014
TmFrm	ABBIED600_Rev2_ENG_SP_FormatTime_e	Time format	E	ABBIED600:2014
DateFrm	ABBIED600_Rev2_ENG_SP_FormatDate_e	Date format	E	ABBIED600:2014
NamConvn	ABBIED600_Rev2_ENG_SP_NamingConvention_e	FB naming convention	E	ABBIED600:2014
DftVw	ABBIED600_Rev4_ENG_SP_DefaultView_e	Default view	E	ABBIED600:2014
AcsMod	ABBIED600_Rev2_ENG_SP_WhmiMod_e	Web HMI mode	E	ABBIED600:2014
ConnExpTm	ABBIED600_Rev1_ING_SP_1_e	Web HMI timeout	E	ABBIED600:2014
EvtLstClr	ABBIED600_Rev2_SPC_control_e	Event clear	E	ABBIED600:2014, status-only, direct-with-normal-security
SLDSym-Frm	ABBIED600_Rev2_ENG_SP_SLDSymbolFormat_e	SLD symbol format	E	ABBIED600:2014
ScrDITms	ABBIED600_Rev1_ING_SP_1_e	Autoscroll delay	E	ABBIED600:2014
ClsDIMod	ABBIED600_Rev2_ENG_SP_InUse_e	CB close delay mode	E	ABBIED600:2014
ClsDITms	ABBIED600_Rev1_ING_SP_1_e	CB close delay	E	ABBIED600:2014
SetVsb	ABBIED600_Rev2_ENG_SP_SetVsb_e	Setting visibility	E	ABBIED600:2014

**6.1.3 LN: GSELPRT1 Name: LPRT (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	AB-BIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
FrRxCnt	ABBIED600_Rev1_INS	Received msgs		
FrTxCnt	ABBIED600_Rev1_INS	Transmitted Messages		
RxStCnt	ABBIED600_Rev1_INS	Received State Changes		
RxSeqCnt	ABBIED600_Rev1_INS	Received Sequence Number		

RxTestCnt	ABBIED600_Rev1_INS	Received frames with Test bit		
StWrnCnt	ABBIED600_Rev1_INS	State warnings		
SeqWrnCnt	ABBIED600_Rev1_INS	Sequence warnings		
RxTmOutCnt	ABBIED600_Rev1_INS	Receiver Timeouts		
ConfErrCnt	ABBIED600_Rev1_INS	Received ConfRev mismatches		
NdsComCnt	ABBIED600_Rev1_INS	Received frames with NeedsCommissioning bit		
DSErrCnt	ABBIED600_Rev1_INS	Errors in received dataset		
Alm	ABBIED600_Rev1_SPS_e	Alarm	E	IEC 61850-7-4:2007
CntRs	ABBIED600_Rev2_SPC_control_e	Goose counters reset	E	ABBIED600:2014,status-only,direct-with-normal-security

#### 6.1.4 LN: MMSLPRT1 Name: LPRT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev3_LPL_mms_e	Name plate	E	IEC 61850-7-4:2007
SucConn	ABBIED600_Rev1_INS	Successful Connections		
FailConn	ABBIED600_Rev1_INS	Failed Connections		
ConcCnt	ABBIED600_Rev1_INS	Concludes		
TxAbtCnt	ABBIED600_Rev1_INS	Sent Aborts		
RxAbtCnt	ABBIED600_Rev1_INS	Received Aborts		
TxRejCnt	ABBIED600_Rev1_INS	Sent Rejects		
RxRqCnt	ABBIED600_Rev1_INS	Received Request		
FailRqCnt	ABBIED600_Rev1_INS	Failed Requests		
SucReaCnt	ABBIED600_Rev1_INS	Successful Reads		
FailReaCnt	ABBIED600_Rev1_INS	Failed Reads		
SucWrCnt	ABBIED600_Rev1_INS	Successful Writes		
FailWrCnt	ABBIED600_Rev1_INS	Failed Writes		
InfRpCnt	ABBIED600_Rev1_INS	Information Reports		
ActConnCnt	ABBIED600_Rev1_INS	Active Connections		
UnitMod	ABBIED600_Rev2_ENG_SP_Unit-Mod	Unit mode		
SetCnfMod	ABBIED600_Rev2_SPC_technical	Setting group editing mode		status-only,direct-with-normal-security
CntRs	ABBIED600_Rev2_SPC_control	Communication status		status-only,direct-with-normal-security
StdConf1	ABBIED600_Rev1_SPG_SP	Standard conformance		

StdConf2	ABBIED600_Rev1_SPG_SP	Standard conformance		
ChLiv	ABBIED600_Rev1_SPS_e	MMS Communication status	E	IEC 61850-7-4:2007
CliIP1	ABBIED600_Rev1_LPL_VSS_1_20	Client 1 IP address		
CliIP2	ABBIED600_Rev1_LPL_VSS_1_20	Client 2 IP address		
CliIP3	ABBIED600_Rev1_LPL_VSS_1_20	Client 3 IP address		
CliIP4	ABBIED600_Rev1_LPL_VSS_1_20	Client 4 IP address		
CliIP5	ABBIED600_Rev1_LPL_VSS_1_20	Client 5 IP address		

### 6.1.5 LN: CVPSOF1 Name: PSOF (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD_e	Mode	E	IEC 61850-7-4:2007, status-only, direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
Blk	ABBIED600_Rev1_SPS_simple_e	Block signal for all binary outputs	E	IEC 61850-7-4:2007
InCBCIsCmd	ABBIED600_Rev1_SPS_simple	External enabling of SOTF by CB close command		
InStr	ABBIED600_Rev1_SPS_simple	Start from function to be accelerated by SOTF		
InDIstr	ABBIED600_Rev1_SPS_simple	Start from function to be accelerated with delay by SOTF		
TrFltSt	ABBIED600_Rev1_SPS_simple	Trip fault state		
DeaLinValA	ABBIED600_Rev3_ASG_SP_i	Dead line value, current. Used also in auto activation logic		
DeaLinVal	ABBIED600_Rev3_ASG_SP_i_e	Dead line value, voltage. Used also in auto activation logic	E	IEC 61850-7-4:2007
OpModSOF	ABBIED600_Rev2_ENG_SP_OpModSOF	Mode of operation of SOTF Function		
AVDetTmms	ABBIED600_Rev1_ING_SP	Time delay for voltage and current based detection		
AutoIniMod	ABBIED600_Rev3_ENG_SP_AutoIniMod	Automatic switch onto fault initialization		
RsDITmms	ABBIED600_Rev1_ING_SP_e	SOTF detection period after initialization	E	IEC 61850-7-4:2007
DeaLinTmms	ABBIED600_Rev1_ING_SP	Delay time for activation of dead line detection		

OpDITmms	ABBIED600_Rev1_ING_SP_e	Delay for the delayed start input	E	IEC 61850-7-4:2007
TestPro	ABBIED600_Rev2_ENC_TestPro	Test control for outputs		status-only,direct-with-normal-security

### 6.1.6 LN: CCSPVC1 Name: SPVC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
Blk	ABBIED600_Rev1_SPS_simple_e	Block signal for all binary outputs	E	IEC 61850-7-4:2007
StrVal	ABBIED600_Rev3_ASG_SP_i_e	Minimum operate current differential level	E	IEC 61850-7-4:2007
MaxOpA	ABBIED600_Rev3_ASG_SP_i	Block of the function at high phase current		
FailACirc	ABBIED600_Rev1_ACT_simple	Detection of current circuit failure		
SigFailAlm	ABBIED600_Rev1_SPS	Alarm		
TestSpvn	ABBIED600_Rev3_ENC_TestSpvn	Test control for outputs		status-only,direct-with-normal-security
DifAClc	ABBIED600_Rev3_WYE_res_simple_i_e	IDIFF	E	IEC 61850-7-4:2007

### 6.1.7 LN: SEQSPVC1 Name: SPVC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
Blk	ABBIED600_Rev1_SPS_simple_e	Block signal for all binary outputs	E	IEC 61850-7-4:2007
Str	ABBIED600_Rev1_ACD_simple_e	General start of function	E	IEC 61850-7-4:2007
Str3Ph	ABBIED600_Rev1_ACD_simple	Three-phase start of function		
InPosClis	ABBIED600_Rev1_SPS	Active when circuit breaker is closed		
InDCPosOpn	ABBIED600_Rev1_SPS	Active when line disconnector is open		
InMCBPsOpn	ABBIED600_Rev1_SPS	Active when external MCB opens protected Volt. circuit		

BlkValA	ABBIED600_Rev3_ASG_SP_i_e	Minimum operate level of phase current for delta calculation	E	IEC 61850-7-4:2007
NgSeqLevA	ABBIED600_Rev3_ASG_SP_i	Operate level of neg seq undercurrent element		
ChgRteA	ABBIED600_Rev3_ASG_SP_i	Operate level of change in phase current		
ChgRteEna	ABBIED600_Rev1_SPG_SP	Enabling operation of change based function		
ChgRteV	ABBIED600_Rev3_ASG_SP_i	Operate level of change in phase voltage		
EnaSealln	ABBIED600_Rev1_SPG_SP	Enabling seal in functionality		
BlkValV	ABBIED600_Rev3_ASG_SP_i_e	Minimum operate level of phase voltage for delta calculation	E	IEC 61850-7-4:2007
SeallnV	ABBIED600_Rev3_ASG_SP_i	Operate level of seal-in phase voltage		
NgSeqLevV	ABBIED600_Rev3_ASG_SP_i	Operate level of neg seq overvoltage element		
TestSpvn	ABBIED600_Rev3_ENC_TestSpvn	SEQSPVC1		status-only,direct-with-normal-security
DeaLinValA	ABBIED600_Rev3_ASG_SP_i	Operate level for open phase current detection		

### 6.1.8 LN: MDSOPT1 Name: SOPT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
Blk	ABBIED600_Rev1_SPS_simple_e	Block signal for all binary outputs	E	IEC 61850-7-4:2007
OpTmh	ABBIED600_Rev1_INS_e	OPR_TIME	E	IEC 61850-7-4:2007
OpTmRs	ABBIED600_Rev2_SPC_control	MDSOPT1 operation		status-only,direct-with-normal-security
OpTmWrn	ABBIED600_Rev1_SPS_e	Operation time warning	E	IEC 61850-7-4:2007
OpTmAlm	ABBIED600_Rev1_SPS_e	Operation time alarm	E	IEC 61850-7-4:2007
TmOp	ABBIED600_Rev1_SPS	Indicates that operation time is running		
OpWrnTmh	ABBIED600_Rev1_ING_SP_1_e	Warning value for operation time supervision	E	IEC 61850-7-4:2007

OpAlmTmh	ABBIED600_Rev1_ING_SP_1_e	Alarm value for operation time supervision	E	IEC 61850-7-4:2007
IniOpTmh	ABBIED600_Rev1_ING_SP_1	Initial value for operation time supervision		
OpActTmh	ABBIED600_Rev1_ING_SP_1	Time of day when alarm and warning will occur		
OpActMod	AB-BIED600_Rev2_ENG_SP_TmrAlmMod	Operating time mode for warning and alarm		
TstOutCmd	ABBIED600_Rev20_ENC_TstOut	Test control for outputs		status-only,direct-with-normal-security

### 6.1.9 LN: MDSOPT2 Name: SOPT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
Blk	ABBIED600_Rev1_SPS_simple_e	Block signal for all binary outputs	E	IEC 61850-7-4:2007
OpTmh	ABBIED600_Rev1_INS_e	OPR_TIME	E	IEC 61850-7-4:2007
OpTmRs	ABBIED600_Rev2_SPC_control	MDSOPT2 operation		status-only,direct-with-normal-security
OpTmWrn	ABBIED600_Rev1_SPS_e	Operation time warning	E	IEC 61850-7-4:2007
OpTmAlm	ABBIED600_Rev1_SPS_e	Operation time alarm	E	IEC 61850-7-4:2007
TmOp	ABBIED600_Rev1_SPS	Indicates that operation time is running		
OpWrnTmh	ABBIED600_Rev1_ING_SP_1_e	Warning value for operation time supervision	E	IEC 61850-7-4:2007
OpAlmTmh	ABBIED600_Rev1_ING_SP_1_e	Alarm value for operation time supervision	E	IEC 61850-7-4:2007
IniOpTmh	ABBIED600_Rev1_ING_SP_1	Initial value for operation time supervision		
OpActTmh	ABBIED600_Rev1_ING_SP_1	Time of day when alarm and warning will occur		
OpActMod	AB-BIED600_Rev2_ENG_SP_TmrAlmMod	Operating time mode for warning and alarm		
TstOutCmd	ABBIED600_Rev20_ENC_TstOut	Test control for outputs		status-only,direct-with-normal-security

**6.1.10 LN: LDPLRLC1 Name: RLRC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
RcdRs	ABBIED600_Rev2_SPC_control	Reset load profile rec.		status-only,direct-with-normal-security
QtySel1	ABBIED600_Rev3_ENG_SP_QtySel	Quantity selection 1		
QtySel2	ABBIED600_Rev3_ENG_SP_QtySel	Quantity selection 2		
QtySel3	ABBIED600_Rev3_ENG_SP_QtySel	Quantity selection 3		
QtySel4	ABBIED600_Rev3_ENG_SP_QtySel	Quantity selection 4		
QtySel5	ABBIED600_Rev3_ENG_SP_QtySel	Quantity selection 5		
QtySel6	ABBIED600_Rev3_ENG_SP_QtySel	Quantity selection 6		
QtySel7	ABBIED600_Rev3_ENG_SP_QtySel	Quantity selection 7		
QtySel8	ABBIED600_Rev3_ENG_SP_QtySel	Quantity selection 8		
QtySel9	ABBIED600_Rev3_ENG_SP_QtySel	Quantity selection 9		
QtySel10	ABBIED600_Rev3_ENG_SP_QtySel	Quantity selection 10		
QtySel11	ABBIED600_Rev3_ENG_SP_QtySel	Quantity selection 11		
QtySel12	ABBIED600_Rev3_ENG_SP_QtySel	Quantity selection 12		
MemUsed	ABBIED600_Rev1_INS_e	Rec. memory used	E	IEC 61850-7-4:2007
MemWrn	ABBIED600_Rev1_SPS_simple	Memory warning		
MemAlm	ABBIED600_Rev1_SPS_simple	Memory alarm		
MemWrnLev	ABBIED600_Rev1_ING_SP_1	Mem. warning level		
MemAlmLev	ABBIED600_Rev1_ING_SP_1	Mem. alarm level		

**6.1.11 LN: QVV1RQRC1 Name: RQRC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On_e	Mode	E	IEC 61850-7-4:2007,status-only

Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
VVaTyp	AB-BIED600_Rev3_ENS_VVaTyp_e	Voltage variation type	E	ABBIED600:2014
VVaPhsA	ABBIED600_Rev3_MV_simple_i_e	VVa Magn phase A of the newest completed event	E	ABBIED600:2014
VVaPhsB	ABBIED600_Rev3_MV_simple_i_e	VVa Magn phase B of the newest completed event	E	ABBIED600:2014
VVaPhsC	ABBIED600_Rev3_MV_simple_i_e	VVa Magn phase C of the newest completed event	E	ABBIED600:2014
VVaTmPhsA	ABBIED600_Rev3_MV_simple_i_e	VVa Phase A Dur of the newest completed event	E	ABBIED600:2014
VVaTmPhsB	ABBIED600_Rev3_MV_simple_i_e	VVa Phase B Dur of the newest completed event	E	ABBIED600:2014
VVaTmPhsC	ABBIED600_Rev3_MV_simple_i_e	VVa Phase C Dur of the newest completed event	E	ABBIED600:2014
APreVaPhsA	ABBIED600_Rev3_MV_simple_i_e	I_A preceding Va start of the newest completed event	E	ABBIED600:2014
APreVaPhsB	ABBIED600_Rev3_MV_simple_i_e	I_B preceding Va start of the newest completed event	E	ABBIED600:2014
APreVaPhsC	ABBIED600_Rev3_MV_simple_i_e	I_C preceding Va start of the newest completed event	E	ABBIED600:2014

### 6.1.12 LN: QVV2RQRC1 Name: RQRC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On_e	Mode	E	IEC 61850-7-4:2007, status-only
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
VVaTyp	AB-BIED600_Rev3_ENS_VVaTyp_e	Voltage variation type	E	ABBIED600:2014
VVaPhsA	ABBIED600_Rev3_MV_simple_i_e	VVa Magn phase A of the second newest completed event	E	ABBIED600:2014
VVaPhsB	ABBIED600_Rev3_MV_simple_i_e	VVa Magn phase B of the second newest completed event	E	ABBIED600:2014
VVaPhsC	ABBIED600_Rev3_MV_simple_i_e	VVa Magn phase C of the second newest completed event	E	ABBIED600:2014
VVaTmPhsA	ABBIED600_Rev3_MV_simple_i_e	VVa Phase A Dur of the second newest completed event	E	ABBIED600:2014
VVaTmPhsB	ABBIED600_Rev3_MV_simple_i_e	VVa Phase B Dur of the second newest completed event	E	ABBIED600:2014

VVaTmPhsC	ABBIED600_Rev3_MV_simple_i_e	VVa Phase C Dur of the second newest completed event	E	ABBIED600:2014
APreVaPhsA	ABBIED600_Rev3_MV_simple_i_e	I_A preceding Va start of the 2nd newest completed event	E	ABBIED600:2014
APreVaPhsB	ABBIED600_Rev3_MV_simple_i_e	I_B preceding Va start of the 2nd newest completed event	E	ABBIED600:2014
APreVaPhsC	ABBIED600_Rev3_MV_simple_i_e	I_C preceding Va start of the 2nd newest completed event	E	ABBIED600:2014

#### 6.1.13 LN: QVV3RQRC1 Name: RQRC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On_e	Mode	E	IEC 61850-7-4:2007,status-only
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
VVaTyp	AB-BIED600_Rev3_ENS_VVaTyp_e	Voltage variation type	E	ABBIED600:2014
VVaPhsA	ABBIED600_Rev3_MV_simple_i_e	VVa Magn phase A of the third newest completed event	E	ABBIED600:2014
VVaPhsB	ABBIED600_Rev3_MV_simple_i_e	VVa Magn phase B of the third newest completed event	E	ABBIED600:2014
VVaPhsC	ABBIED600_Rev3_MV_simple_i_e	VVa Magn phase C of the third newest completed event	E	ABBIED600:2014
VVaTmPhsA	ABBIED600_Rev3_MV_simple_i_e	VVa Phase A Dur of the third newest completed event	E	ABBIED600:2014
VVaTmPhsB	ABBIED600_Rev3_MV_simple_i_e	VVa Phase B Dur of the third newest completed event	E	ABBIED600:2014
VVaTmPhsC	ABBIED600_Rev3_MV_simple_i_e	VVa Phase C Dur of the third newest completed event	E	ABBIED600:2014
APreVaPhsA	ABBIED600_Rev3_MV_simple_i_e	I_A preceding Va start of the 3rd newest completed event	E	ABBIED600:2014
APreVaPhsB	ABBIED600_Rev3_MV_simple_i_e	I_B preceding Va start of the 3rd newest completed event	E	ABBIED600:2014
APreVaPhsC	ABBIED600_Rev3_MV_simple_i_e	I_C preceding Va start of the 3rd newest completed event	E	ABBIED600:2014

#### 6.1.14 LN: QVU1RQRC1 Name: RQRC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On_e	Mode	E	IEC 61850-7-4:2007,status-only

Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name Plate	E	IEC 61850-7-4:2007
MaxVVA	ABBIED600_Rev3_MV_simple_i_e	Maximum unbalance deviation value	E	IEC 61850-7-4:2007
VVaTm	ABBIED600_Rev3_MV_simple_i_e	Duration of newest high mean unbalance voltage alarm	E	IEC 61850-7-4:2007

### 6.1.15 LN: QVU2RQRC1 Name: RQRC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On_e	Mode	E	IEC 61850-7-4:2007,status-only
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name Plate	E	IEC 61850-7-4:2007
MaxVVA	ABBIED600_Rev3_MV_simple_i_e	Maximum unbalance deviation value	E	IEC 61850-7-4:2007
VVaTm	ABBIED600_Rev3_MV_simple_i_e	Duration of second newest high mean unbalance Volt alarm	E	IEC 61850-7-4:2007

### 6.1.16 LN: QVU3RQRC1 Name: RQRC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On_e	Mode	E	IEC 61850-7-4:2007,status-only
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name Plate	E	IEC 61850-7-4:2007
MaxVVA	ABBIED600_Rev3_MV_simple_i_e	Maximum unbalance deviation value	E	IEC 61850-7-4:2007
VVaTm	ABBIED600_Rev3_MV_simple_i_e	Duration of third newest high mean unbalance Volt alarm	E	IEC 61850-7-4:2007

### 6.1.17 LN: FLTRFRC1 Name: RFRC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
Hz	ABBIED600_Rev3_MV_simple_i_e	Frequency	E	IEC 61850-7-4:2007
FltPtR	ABBIED600_Rev3_MV_simple_i	Fault resistance		
FltDiskm	ABBIED600_Rev3_MV_simple_i_e	Distance to fault measured in pu	E	IEC 61850-7-4:2007
OpCnt	ABBIED600_Rev1_INS_e	time	E	IEC 61850-7-4:2007
Blk	ABBIED600_Rev1_SPS_simple_e	Block signal for all binary outputs	E	IEC 61850-7-4:2007
InOp	ABBIED600_Rev1_SPS	Operate input for triggering		

InStr	ABBIED600_Rev1_SPS	Start input for triggering		
RcdRs	ABBIED600_Rev2_SPC_control	Reset fault records		status-only,direct-with-normal-security
SelRow	ABBIED600_Rev2_INC_all_rights	Select recording		status-only,direct-with-normal-security
TrgSet	AB-BIED600_Rev2_ENG_SP_TrSet	Triggering mode		
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod	A measurement mode		
ProFcn	ABBIED600_Rev26_ENS_ProFcn	Protection function		
StrDur	ABBIED600_Rev3_MV_2	Maximum start duration of all stages during the fault		
StrOpTm	ABBIED600_Rev3_MV_simple_i	Operate time		
ActSetGr	ABBIED600_Rev1_INC_simple_int	Active setting group		status-only
ShotPntr	ABBIED600_Rev1_INS_d	Shot pointer		
Max50DifAA	ABBIED600_Rev3_MV_simple_i	Maximum differential current phase A		
Max50DifAB	ABBIED600_Rev3_MV_simple_i	Maximum differential current phase B		
Max50DifAC	ABBIED600_Rev3_MV_simple_i	Maximum differential current phase C		
Max50RstAA	ABBIED600_Rev3_MV_simple_i	Maximum bias current phase A		
Max50RstAB	ABBIED600_Rev3_MV_simple_i	Maximum bias current phase B		
Max50RstAC	ABBIED600_Rev3_MV_simple_i	Maximum bias current phase C		
DifAPhsA	ABBIED600_Rev3_MV_simple_i	Differential current phase A		
DifAPhsB	ABBIED600_Rev3_MV_simple_i	Differential current phase B		
DifAPhsC	ABBIED600_Rev3_MV_simple_i	Differential current phase C		
RstAPhsA	ABBIED600_Rev3_MV_simple_i	Bias current phase A		
RstAPhsB	ABBIED600_Rev3_MV_simple_i	Bias current phase B		
RstAPhsC	ABBIED600_Rev3_MV_simple_i	Bias current phase C		
DifARes	ABBIED600_Rev3_MV_simple_i	Differential current residual		
RstARes	ABBIED600_Rev3_MV_simple_i	Bias current residual		
Max50APhsA1	ABBIED600_Rev3_MV_simple_i	Maximum phase A current		
Max50APhsB1	ABBIED600_Rev3_MV_simple_i	Maximum phase B current		
Max50APhsC1	ABBIED600_Rev3_MV_simple_i	Maximum phase C current		
Max50ARes1	ABBIED600_Rev3_MV_simple_i	Maximum residual current		

APhsA1	ABBIED600_Rev3_MV_simple_i	Phase A current		
APhsB1	ABBIED600_Rev3_MV_simple_i	Phase B current		
APhsC1	ABBIED600_Rev3_MV_simple_i	Phase C current		
ARes1	ABBIED600_Rev3_MV_simple_i	Residual current		
AResClc1	ABBIED600_Rev3_MV_simple_i	Calculated residual current		
APsSeq1	ABBIED600_Rev3_MV_simple_i	Positive sequence current		
ANgSeq1	ABBIED600_Rev3_MV_simple_i	Negative sequence current		
Max50APhsA2	ABBIED600_Rev3_MV_simple_i	Maximum phase A current (b)		
Max50APhsB2	ABBIED600_Rev3_MV_simple_i	Maximum phase B current (b)		
Max50APhsC2	ABBIED600_Rev3_MV_simple_i	Maximum phase C current (b)		
Max50ARes2	ABBIED600_Rev3_MV_simple_i	Maximum residual current (b)		
APhsA2	ABBIED600_Rev3_MV_simple_i	Phase A current (b)		
APhsB2	ABBIED600_Rev3_MV_simple_i	Phase B current (b)		
APhsC2	ABBIED600_Rev3_MV_simple_i	Phase C current (b)		
ARes2	ABBIED600_Rev3_MV_simple_i	Residual current (b)		
AResClc2	ABBIED600_Rev3_MV_simple_i	Calculated residual current (b)		
APsSeq2	ABBIED600_Rev3_MV_simple_i	Positive sequence current (b)		
ANgSeq2	ABBIED600_Rev3_MV_simple_i	Negative sequence current (b)		
Max50APhsA3	ABBIED600_Rev3_MV_simple_i	Maximum phase A current (c)		
Max50APhsB3	ABBIED600_Rev3_MV_simple_i	Maximum phase B current (c)		
Max50APhsC3	ABBIED600_Rev3_MV_simple_i	Maximum phase C current (c)		
Max50ARes3	ABBIED600_Rev3_MV_simple_i	Maximum residual current (c)		
APhsA3	ABBIED600_Rev3_MV_simple_i	Phase A current (c)		
APhsB3	ABBIED600_Rev3_MV_simple_i	Phase B current (c)		
APhsC3	ABBIED600_Rev3_MV_simple_i	Phase C current (c)		
ARes3	ABBIED600_Rev3_MV_simple_i	Residual current (c)		
AResClc3	ABBIED600_Rev3_MV_simple_i	Calculated residual current (c)		
APsSeq3	ABBIED600_Rev3_MV_simple_i	Positive sequence current (c)		
ANgSeq3	ABBIED600_Rev3_MV_simple_i	Negative sequence current (c)		
PhVPhsA1	ABBIED600_Rev3_MV_simple_i	Phase A voltage		

PhVPhsB1	ABBIED600_Rev3_MV_simple_i	Phase B voltage		
PhVPhsC1	ABBIED600_Rev3_MV_simple_i	Phase C voltage		
PPVPhsAB1	ABBIED600_Rev3_MV_simple_i	Phase A to phase B voltage		
PPVPhsBC1	ABBIED600_Rev3_MV_simple_i	Phase B to phase C voltage		
PPVPhsCA1	ABBIED600_Rev3_MV_simple_i	Phase C to phase A voltage		
VRes1	ABBIED600_Rev3_MV_simple_i	Residual voltage		
VZro1	ABBIED600_Rev3_MV_simple_i	Zero sequence voltage		
VPsSeq1	ABBIED600_Rev3_MV_simple_i	Positive sequence voltage		
VNgSeq1	ABBIED600_Rev3_MV_simple_i	Negative sequence voltage		
PhVPhsA2	ABBIED600_Rev3_MV_simple_i	Phase A voltage (b)		
PhVPhsB2	ABBIED600_Rev3_MV_simple_i	Phase B voltage (b)		
PhVPhsC2	ABBIED600_Rev3_MV_simple_i	Phase C voltage (b)		
PPVPhsAB2	ABBIED600_Rev3_MV_simple_i	Phase A to phase B voltage (b)		
PPVPhsBC2	ABBIED600_Rev3_MV_simple_i	Phase B to phase C voltage (b)		
PPVPhsCA2	ABBIED600_Rev3_MV_simple_i	Phase C to phase A voltage (b)		
VRes2	ABBIED600_Rev3_MV_simple_i	Residual voltage (b)		
VZro2	ABBIED600_Rev3_MV_simple_i	Zero sequence voltage (b)		
VPsSeq2	ABBIED600_Rev3_MV_simple_i	Positive sequence voltage (b)		
VNgSeq2	ABBIED600_Rev3_MV_simple_i	Negative sequence voltage (b)		
MaxTmpRI	ABBIED600_Rev3_MV_simple_i	PTTR thermal level		
AMaxNgPs	ABBIED600_Rev3_MV_simple_i	PDNSPTOC1 rat. I2/I1		
DifANAngVN1	ABBIED600_Rev3_MV_simple_i	Angle residual voltage - residual current		
DifAAAngVBC1	ABBIED600_Rev3_MV_simple_i	Angle phase B to phase C voltage - phase A current		
DifABA AngVCA1	ABBIED600_Rev3_MV_simple_i	Angle phase C to phase A voltage - phase B current		
DifACAngVAB1	ABBIED600_Rev3_MV_simple_i	Angle phase A to phase B voltage - phase C current		
DifANAngVN2	ABBIED600_Rev3_MV_simple_i	Angle residual voltage - residual current (b)		
DifAAAngVBC2	ABBIED600_Rev3_MV_simple_i	Angle phase B to phase C voltage - phase A current (b)		

DifABAngVCA2	ABBIED600_Rev3_MV_simple_i	Angle phase C to phase A voltage - phase B current (b)		
DifACAngVAB2	ABBIED600_Rev3_MV_simple_i	Angle phase A to phase B voltage - phase C current (b)		
HzRteChg	ABBIED600_Rev3_MV_simple_i	Frequency gradient		
CondNeut	ABBIED600_Rev3_MV_simple_i	Conductance Yo		
SusNeut	ABBIED600_Rev3_MV_simple_i	Susceptance Yo		
PPLoopRis	ABBIED600_Rev3_MV_simple_i	Fault loop resistance		
PPLoopReact	ABBIED600_Rev3_MV_simple_i	Fault loop reactance		
InCBlr	ABBIED600_Rev1_SPS	Breaker open status		
CBClIrTm	ABBIED600_Rev3_MV_simple_i	Breaker clear time		

### 6.1.18 LN: EFPADM1 Name: PADM (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
Blk	ABBIED600_Rev1_SPS_simple_e	Block signal for all binary outputs	E	IEC 61850-7-4:2007
Str	ABBIED600_Rev1_ACD_simple_e	Start	E	IEC 61850-7-4:2007
Op	ABBIED600_Rev1_ACT_simple_e	Operate	E	IEC 61850-7-4:2007
VStr	ABBIED600_Rev3_ASG_SG_i_e	Voltage Start Value	E	IEC 61850-7-4:2007
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate Delay Time	E	IEC 61850-7-4:2007
StrDur	ABBIED600_Rev3_MV_2	Ratio of start time / operate time		
TstOutCmd	ABBIED600_Rev20_ENC_TstOut	Test control for outputs		status-only,direct-with-normal-security
DirMod	ABBIED600_Rev3_ENG_SG_DirMod_e	Directional Mode	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_1_e	Reset Delay Time	E	IEC 61850-7-4:2007
OpModAdm	ABBIED600_Rev2_ENG_SG_OpModAdm	Operation mode		
BlkValA	ABBIED600_Rev3_ASG_SP_i_e	Minimum operating current	E	IEC 61850-7-4:2007
BlkValV	ABBIED600_Rev3_ASG_SP_i_e	Minimum operating voltage	E	IEC 61850-7-4:2007
CondTiltAng	ABBIED600_Rev3_ASG_SG_i	Conductance tilt angle		

CondFwd	ABBIED600_Rev3_ASG_SG_i	Conductance forward		
CondRv	ABBIED600_Rev3_ASG_SG_i	Conductance reverse		
SusTiltAng	ABBIED600_Rev3_ASG_SG_i	Susceptance tilt angle		
SusFwd	ABBIED600_Rev3_ASG_SG_i	Susceptance forward		
SusRv	ABBIED600_Rev3_ASG_SG_i	Susceptance reverse		
CirclRd	ABBIED600_Rev3_ASG_SG_i	Circle radius		
CirclCond	ABBIED600_Rev3_ASG_SG_i	Circle conductance		
CirclSus	ABBIED600_Rev3_ASG_SG_i	Circle susceptance		
RevPol	ABBIED600_Rev1_SPG_SP	Rotate polarizing quantity		
Cond	ABBIED600_Rev3_MV_simple_i	Measured neutral conductance		
Sus	ABBIED600_Rev3_MV_simple_i	Measured neutral susceptance		
TrgSt	ABBIED600_Rev1_SPS	Signal indicating function triggering		
AResSigSel	AB-BIED600_Rev2_ENG_SP_AResSigSel	Selection for used Io signal		
VResSigSel	AB-BIED600_Rev2_ENG_SP_VResSigSel	Selection for used Uo signal		
AdmClcMod	ABBIED600_Rev2_ENG_SP_Ad-mClcMod	Admittance calculation mode		

### 6.1.19 LN: EFPADM2 Name: PADM (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
Blk	ABBIED600_Rev1_SPS_simple_e	Block signal for all binary outputs	E	IEC 61850-7-4:2007
Str	ABBIED600_Rev1_ACD_simple_e	Start	E	IEC 61850-7-4:2007
Op	ABBIED600_Rev1_ACT_simple_e	Operate	E	IEC 61850-7-4:2007
VStr	ABBIED600_Rev3_ASG_SG_i_e	Voltage Start Value	E	IEC 61850-7-4:2007
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate Delay Time	E	IEC 61850-7-4:2007

StrDur	ABBIED600_Rev3_MV_2	Ratio of start time / operate time		
TstOutCmd	ABBIED600_Rev20_ENC_TstOut	Test control for outputs		status-only,direct-with-normal-security
DirMod	ABBIED600_Rev3_ENG_SG_DirMod_e	Directional Mode	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_1_e	Reset Delay Time	E	IEC 61850-7-4:2007
OpModAdm	ABBIED600_Rev2_ENG_SG_Op-ModAdm	Operation mode		
BlkValA	ABBIED600_Rev3_ASG_SP_i_e	Minimum operating current	E	IEC 61850-7-4:2007
BlkValV	ABBIED600_Rev3_ASG_SP_i_e	Minimum operating voltage	E	IEC 61850-7-4:2007
CondTiltAng	ABBIED600_Rev3_ASG_SG_i	Conductance tilt angle		
CondFwd	ABBIED600_Rev3_ASG_SG_i	Conductance forward		
CondRv	ABBIED600_Rev3_ASG_SG_i	Conductance reverse		
SusTiltAng	ABBIED600_Rev3_ASG_SG_i	Susceptance tilt angle		
SusFwd	ABBIED600_Rev3_ASG_SG_i	Susceptance forward		
SusRv	ABBIED600_Rev3_ASG_SG_i	Susceptance reverse		
CirclRd	ABBIED600_Rev3_ASG_SG_i	Circle radius		
CirclCond	ABBIED600_Rev3_ASG_SG_i	Circle conductance		
CirclSus	ABBIED600_Rev3_ASG_SG_i	Circle susceptance		
RevPol	ABBIED600_Rev1_SPG_SP	Rotate polarizing quantity		
Cond	ABBIED600_Rev3_MV_simple_i	Measured neutral conductance		
Sus	ABBIED600_Rev3_MV_simple_i	Measured neutral susceptance		
TrgSt	ABBIED600_Rev1_SPS	Signal indicating function triggering		
AResSigSel	AB-BIED600_Rev2_ENG_SP_AResSigSel	Selection for used Io signal		
VResSigSel	AB-BIED600_Rev2_ENG_SP_VResSigSel	Selection for used Uo signal		
AdmClcMod	ABBIED600_Rev2_ENG_SP_Ad- mClcMod	Admittance calculation mode		

**6.1.20 LN: EFPADM3 Name: PADM (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
Blk	ABBIED600_Rev1_SPS_simple_e	Block signal for all binary outputs	E	IEC 61850-7-4:2007
Str	ABBIED600_Rev1_ACD_simple_e	Start	E	IEC 61850-7-4:2007
Op	ABBIED600_Rev1_ACT_simple_e	Operate	E	IEC 61850-7-4:2007
VStr	ABBIED600_Rev3_ASG_SG_i_e	Voltage Start Value	E	IEC 61850-7-4:2007
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate Delay Time	E	IEC 61850-7-4:2007
StrDur	ABBIED600_Rev3_MV_2	Ratio of start time / operate time		
TstOutCmd	ABBIED600_Rev20_ENC_TstOut	Test control for outputs		status-only,direct-with-normal-security
DirMod	ABBIED600_Rev3_ENG_SG_DirMod_e	Directional Mode	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_1_e	Reset Delay Time	E	IEC 61850-7-4:2007
OpModAdm	ABBIED600_Rev2_ENG_SG_OpModAdm	Operation mode		
BlkValA	ABBIED600_Rev3_ASG_SP_i_e	Minimum operating current	E	IEC 61850-7-4:2007
BlkValV	ABBIED600_Rev3_ASG_SP_i_e	Minimum operating voltage	E	IEC 61850-7-4:2007
CondTiltAng	ABBIED600_Rev3_ASG_SG_i	Conductance tilt angle		
CondFwd	ABBIED600_Rev3_ASG_SG_i	Conductance forward		
CondRv	ABBIED600_Rev3_ASG_SG_i	Conductance reverse		
SusTiltAng	ABBIED600_Rev3_ASG_SG_i	Susceptance tilt angle		
SusFwd	ABBIED600_Rev3_ASG_SG_i	Susceptance forward		
SusRv	ABBIED600_Rev3_ASG_SG_i	Susceptance reverse		
CirclRd	ABBIED600_Rev3_ASG_SG_i	Circle radius		
CirclCond	ABBIED600_Rev3_ASG_SG_i	Circle conductance		
CirclSus	ABBIED600_Rev3_ASG_SG_i	Circle susceptance		

RevPol	ABBIED600_Rev1_SPG_SP	Rotate polarizing quantity		
Cond	ABBIED600_Rev3_MV_simple_i	Measured neutral conductance		
Sus	ABBIED600_Rev3_MV_simple_i	Measured neutral susceptance		
TrgSt	ABBIED600_Rev1_SPS	Signal indicating function triggering		
AResSigSel	AB-BIED600_Rev2_ENG_SP_AResSigSel	Selection for used Io signal		
VResSigSel	AB-BIED600_Rev2_ENG_SP_VResSigSel	Selection for used Uo signal		
AdmClcMod	ABBIED600_Rev2_ENG_SP_Ad- mClcMod	Admittance calculation mode		

**6.1.21 LN: HZCCASPVC1 Name: SPVC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
Blk	ABBIED600_Rev1_SPS_simple_e	Block signal for all binary outputs	E	IEC 61850-7-4:2007
Alm	ABBIED600_Rev1_SPS_e	Alarm output	E	IEC 61850-7-4:2007
StrVal	ABBIED600_Rev3_ASG_SG_i_e	Start value	E	IEC 61850-7-4:2007
AlmTmms	ABBIED600_Rev1_ING_SG	Alarm delay time		
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset Delay Time	E	IEC 61850-7-4:2007
TstOutCmd	ABBIED600_Rev20_ENC_TstOut	Test control for outputs		status-only,direct-with-normal-security
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas- Mod	Selects used measurement mode		
AlmOutMod	ABBIED600_Rev2_ENG_SP_TrOut- Mod	Select the operation mode for alarm output		
LORs	ABBIED600_Rev2_SPC_control	Reset lockout alarm		status-only,direct-with-normal-security

**6.1.22 LN: HZCCBSPVC1 Name: SPVC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007

Blk	ABBIED600_Rev1_SPS_simple_e	Block signal for all binary outputs	E	IEC 61850-7-4:2007
Alm	ABBIED600_Rev1_SPS_e	Alarm output	E	IEC 61850-7-4:2007
StrVal	ABBIED600_Rev3_ASG_SG_i_e	Start value	E	IEC 61850-7-4:2007
AlmTmms	ABBIED600_Rev1_ING_SG	Alarm delay time		
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset Delay Time	E	IEC 61850-7-4:2007
TstOutCmd	ABBIED600_Rev20_ENC_TstOut	Test control for outputs		status-only,direct-with-normal-security
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod	Selects used measurement mode		
AlmOutMod	ABBIED600_Rev2_ENG_SP_TrOut-Mod	Select the operation mode for alarm output		
LORs	ABBIED600_Rev2_SPC_control	Reset lockout alarm		status-only,direct-with-normal-security

**6.1.23 LN: HZCCCSPVC1 Name: SPVC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
Blk	ABBIED600_Rev1_SPS_simple_e	Block signal for all binary outputs	E	IEC 61850-7-4:2007
Alm	ABBIED600_Rev1_SPS_e	Alarm output	E	IEC 61850-7-4:2007
StrVal	ABBIED600_Rev3_ASG_SG_i_e	Start value	E	IEC 61850-7-4:2007
AlmTmms	ABBIED600_Rev1_ING_SG	Alarm delay time		
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset Delay Time	E	IEC 61850-7-4:2007
TstOutCmd	ABBIED600_Rev20_ENC_TstOut	Test control for outputs		status-only,direct-with-normal-security
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod	Selects used measurement mode		
AlmOutMod	ABBIED600_Rev2_ENG_SP_TrOut-Mod	Select the operation mode for alarm output		
LORs	ABBIED600_Rev2_SPC_control	Reset lockout alarm		status-only,direct-with-normal-security

**6.1.24 LN: CCSPVC2 Name: SPVC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007

Blk	ABBIED600_Rev1_SPS_simple_e	Block signal for all binary outputs	E	IEC 61850-7-4:2007
StrVal	ABBIED600_Rev3_ASG_SP_i_e	Minimum operate current differential level	E	IEC 61850-7-4:2007
MaxOpA	ABBIED600_Rev3_ASG_SP_i	Block of the function at high phase current		
FailACirc	ABBIED600_Rev1_ACT_simple	Detection of current circuit failure		
SigFailAlm	ABBIED600_Rev1_SPS	Alarm		
TestSpvn	ABBIED600_Rev3_ENC_TestSpvn_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
DifAClc	ABBIED600_Rev3_WYE_res_simple_i_e	IDIFF	E	IEC 61850-7-4:2007

#### 6.1.25 LN: CTSRCTF1 Name: RCTF (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
Blk	ABBIED600_Rev1_SPS_simple_e	Block signal for all binary outputs	E	IEC 61850-7-4:2007
Alm	ABBIED600_Rev1_SPS_e	Alarm output	E	IEC 61850-7-4:2007
Op	ABBIED600_Rev1_ACT_simple_e	CT secondary failure	E	IEC 61850-7-4:2007
OpGrp1	ABBIED600_Rev1_ACT_simple	CT secondary failure in group 1		
OpGrp2	ABBIED600_Rev1_ACT_simple	CT secondary failure in group 2		
OpGrp3	ABBIED600_Rev1_ACT_simple	CT secondary failure in group 3		
BlkInSt	ABBIED600_Rev1_ACT_simple	Function blocked internally		
TstOutCmd	ABBIED600_Rev20_ENC_TstOut	Test control for outputs		status-only,direct-with-normal-security
BlkValA	ABBIED600_Rev3_ASG_SP_i_e	Minimum operate current	E	IEC 61850-7-4:2007
MaxOpA	ABBIED600_Rev3_ASG_SP_i	Maximum phase current		
MaxNgSeqA	ABBIED600_Rev3_ASG_SP_i	Maximum I2 current in healthy sets		

#### 6.1.26 LN: MBSLPRT1 Name: LPRT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD_e	Mode	E	IEC 61850-7-4:2007, status-only, direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev7_LPL_MBS_ED2_e	Name plate	E	IEC 61850-7-4:2007
BufBkOff	ABBIED600_Rev1_ING_SP_1	Event buffer backoff value		
TCPPort	ABBIED600_Rev1_ING_SP_1	TCP listening port		
MapSel	ABBIED600_Rev1_ING_SP_1	Mapping selection		
UnitAddr	ABBIED600_Rev1_ING_SP_1	Slave Address		
StrFrDI	ABBIED600_Rev1_ING_SP_1	Response start delay for serial clients		
EndFrDI	ABBIED600_Rev1_ING_SP_1	Message end delay for serial client		
FrRxCnt	ABBIED600_Rev1_INS	Number of received frames		
ChkErrCnt	ABBIED600_Rev1_INS	Number of checksum errors		
FrTxCnt	ABBIED600_Rev1_INS	Number of transmitted frames		
TxExcpCnt1	ABBIED600_Rev1_INS	Number of transmitted exception responses 01 and 02		
TxExcpCnt2	ABBIED600_Rev1_INS	Number of transmitted exception responses 03		
ChLiv	ABBIED600_Rev1_SPS_e	Communication status (True = OK, False = Not connected)	E	IEC 61850-7-4:2007
CommIntnOv	ABBIED600_Rev1_SPS	Internal Overflow indication		
ConnRejSck	ABBIED600_Rev1_INS	Connection rejected due to no socket available		
ConnRejRg	ABBIED600_Rev1_INS	Connection rejected due to unregistered client		
CtlPwd1	ABBIED600_Rev3_VSG_2_20	Control Struct Password 1		
CtlPwd2	ABBIED600_Rev3_VSG_2_20	Control Struct Password 2		
CtlPwd3	ABBIED600_Rev3_VSG_2_20	Control Struct Password 3		
CtlPwd4	ABBIED600_Rev3_VSG_2_20	Control Struct Password 4		
CtlPwd5	ABBIED600_Rev3_VSG_2_20	Control Struct Password 5		

CtlPwd6	ABBIED600_Rev3_VSG_2_20	Control Struct Password 6		
CtlPwd7	ABBIED600_Rev3_VSG_2_20	Control Struct Password 7		
CtlPwd8	ABBIED600_Rev3_VSG_2_20	Control Struct Password 8		
CommPort	AB-BIED600_Rev3_ENG_SP_CommPort_ED2	Port selection		
LnkMod	ABBIED600_Rev2_ENG_SP_LnkMod	Link mode		
MBWrAuth	ABBIED600_Rev2_ENG_SP_MBWrAuth	Write authority		
EvtIdSel	ABBIED600_Rev2_ENG_SP_MBSEventID	Event ID selection		
EvtBufMod	ABBIED600_Rev2_ENG_SP_MBEvetBufMod	Event buffering mode		
CRCOrdr	ABBIED600_Rev2_ENG_SP_CRCOrd	CRC order		
TmFrm	ABBIED600_Rev2_ENG_SP_MBSTimeFormat	Time format		
CliIP	ABBIED600_Rev3_VSG_2_20	Client IP address		
SerPty	ABBIED600_Rev2_ENG_SP_SerPty	Serial parity		
CntRs	ABBIED600_Rev2_SPC_control	Diagnostic counters		status-only,direct-with-normal-security

### 6.1.27 LN: MBSLPRT2 Name: LPRT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev7_LPL_MBS_ED2_e	Name plate	E	IEC 61850-7-4:2007
BufBkOff	ABBIED600_Rev1_ING_SP_1	Event buffer backoff value		
TCPPort	ABBIED600_Rev1_ING_SP_1	TCP listening port		
MapSel	ABBIED600_Rev1_ING_SP_1	Mapping selection		
UnitAddr	ABBIED600_Rev1_ING_SP_1	Slave Address		
StrFrDI	ABBIED600_Rev1_ING_SP_1	Response start delay for serial clients		
EndFrDI	ABBIED600_Rev1_ING_SP_1	Message end delay for serial client		
FrRxCnt	ABBIED600_Rev1_INS	Number of received frames		
ChkErrCnt	ABBIED600_Rev1_INS	Number of checksum errors		
FrTxCnt	ABBIED600_Rev1_INS	Number of transmitted frames		
TxExcpCnt1	ABBIED600_Rev1_INS	Number of transmitted exception responses 01 and 02		

TxExcpCnt2	ABBIED600_Rev1_INS	Number of transmitted exception responses 03		
ChLiv	ABBIED600_Rev1_SPS_e	Communication status (True = OK, False = Not connected)	E	IEC 61850-7-4:2007
CommInt-nOv	ABBIED600_Rev1_SPS	Internal Overflow indication		
ConnRejSck	ABBIED600_Rev1_INS	Connection rejected due to no socket available		
ConnRejRg	ABBIED600_Rev1_INS	Connection rejected due to unregistered client		
CtlPwd1	ABBIED600_Rev3_VSG_2_20	Control Struct Password 1		
CtlPwd2	ABBIED600_Rev3_VSG_2_20	Control Struct Password 2		
CtlPwd3	ABBIED600_Rev3_VSG_2_20	Control Struct Password 3		
CtlPwd4	ABBIED600_Rev3_VSG_2_20	Control Struct Password 4		
CtlPwd5	ABBIED600_Rev3_VSG_2_20	Control Struct Password 5		
CtlPwd6	ABBIED600_Rev3_VSG_2_20	Control Struct Password 6		
CtlPwd7	ABBIED600_Rev3_VSG_2_20	Control Struct Password 7		
CtlPwd8	ABBIED600_Rev3_VSG_2_20	Control Struct Password 8		
CommPort	AB-BIED600_Rev3_ENG_SP_CommPort_ED2	Port selection		
LnkMod	ABBIED600_Rev2_ENG_SP_LnkMod	Link mode		
MBWrAuth	ABBIED600_Rev2_ENG_SP_MBWrAuth	Write authority		
EvtIdSel	ABBIED600_Rev2_ENG_SP_MBSEventID	Event ID selection		
EvtBufMod	ABBIED600_Rev2_ENG_SP_MBEvtBufMod	Event buffering mode		
CRCOrdr	ABBIED600_Rev2_ENG_SP_CRCOrd	CRC order		
TmFrm	ABBIED600_Rev2_ENG_SP_MBSTimeFormat	Time format		
CliIP	ABBIED600_Rev3_VSG_2_20	Client IP address		
SerPty	ABBIED600_Rev2_ENG_SP_SerPty	Serial parity		
CntRs	ABBIED600_Rev2_SPC_control	Diagnostic counters reset		status-only,direct-with-normal-security

**6.1.28 LN: MBSLPRT3 Name: LPRT (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD_e	Mode	E	IEC 61850-7-4:2007, status-only, direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev7_LPL_MBS_ED2_e	Name plate	E	IEC 61850-7-4:2007
BufBkOff	ABBIED600_Rev1_ING_SP_1	Event buffer backoff value		
TCPPort	ABBIED600_Rev1_ING_SP_1	TCP listening port		
MapSel	ABBIED600_Rev1_ING_SP_1	Mapping selection		
UnitAddr	ABBIED600_Rev1_ING_SP_1	Slave Address		
StrFrDI	ABBIED600_Rev1_ING_SP_1	Response start delay for serial clients		
EndFrDI	ABBIED600_Rev1_ING_SP_1	Message end delay for serial client		
FrRxCnt	ABBIED600_Rev1_INS	Number of received frames		
ChkErrCnt	ABBIED600_Rev1_INS	Number of checksum errors		
FrTxCnt	ABBIED600_Rev1_INS	Number of transmitted frames		
TxExcpCnt1	ABBIED600_Rev1_INS	Number of transmitted exception responses 01 and 02		
TxExcpCnt2	ABBIED600_Rev1_INS	Number of transmitted exception responses 03		
ChLiv	ABBIED600_Rev1_SPS_e	Communication status (True = OK, False = Not connected)	E	IEC 61850-7-4:2007
CommIntnOv	ABBIED600_Rev1_SPS	Internal Overflow indication		
ConnRejSck	ABBIED600_Rev1_INS	Connection rejected due to no socket available		
ConnRejRg	ABBIED600_Rev1_INS	Connection rejected due to unregistered client		
CtlPwd1	ABBIED600_Rev3_VSG_2_20	Control Struct Password 1		
CtlPwd2	ABBIED600_Rev3_VSG_2_20	Control Struct Password 2		
CtlPwd3	ABBIED600_Rev3_VSG_2_20	Control Struct Password 3		
CtlPwd4	ABBIED600_Rev3_VSG_2_20	Control Struct Password 4		
CtlPwd5	ABBIED600_Rev3_VSG_2_20	Control Struct Password 5		

CtlPwd6	ABBIED600_Rev3_VSG_2_20	Control Struct Password 6		
CtlPwd7	ABBIED600_Rev3_VSG_2_20	Control Struct Password 7		
CtlPwd8	ABBIED600_Rev3_VSG_2_20	Control Struct Password 8		
CommPort	AB-BIED600_Rev3_ENG_SP_CommPort_ED2	Port selection		
LnkMod	ABBIED600_Rev2_ENG_SP_LnkMod	Link mode		
MBWrAuth	ABBIED600_Rev2_ENG_SP_MBWrAuth	Write authority		
EvtIdSel	ABBIED600_Rev2_ENG_SP_MBSEventID	Event ID selection		
EvtBufMod	ABBIED600_Rev2_ENG_SP_MBEvetBufMod	Event buffering mode		
CRCOrdr	ABBIED600_Rev2_ENG_SP_CRCOrd	CRC order		
TmFrm	ABBIED600_Rev2_ENG_SP_MBSTimeFormat	Time format		
CliIP	ABBIED600_Rev3_VSG_2_20	Client IP address		
SerPty	ABBIED600_Rev2_ENG_SP_SerPty	Serial parity		
CntRs	ABBIED600_Rev2_SPC_control	Diagnostic counters reset		status-only,direct-with-normal-security

### 6.1.29 LN: MBSLPRT4 Name: LPRT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev7_LPL_MBS_ED2_e	Name plate	E	IEC 61850-7-4:2007
BufBkOff	ABBIED600_Rev1_ING_SP_1	Event buffer backoff value		
TCPPort	ABBIED600_Rev1_ING_SP_1	TCP listening port		
MapSel	ABBIED600_Rev1_ING_SP_1	Mapping selection		
UnitAddr	ABBIED600_Rev1_ING_SP_1	Slave Address		
StrFrDI	ABBIED600_Rev1_ING_SP_1	Response start delay for serial clients		
EndFrDI	ABBIED600_Rev1_ING_SP_1	Message end delay for serial client		
FrRxCnt	ABBIED600_Rev1_INS	Number of received frames		
ChkErrCnt	ABBIED600_Rev1_INS	Number of checksum errors		
FrTxCnt	ABBIED600_Rev1_INS	Number of transmitted frames		
TxExcpCnt1	ABBIED600_Rev1_INS	Number of transmitted exception responses 01 and 02		

TxExcpCnt2	ABBIED600_Rev1_INS	Number of transmitted exception responses 03		
ChLiv	ABBIED600_Rev1_SPS_e	Communication status (True = OK, False = Not connected)	E	IEC 61850-7-4:2007
CommInt-nOv	ABBIED600_Rev1_SPS	Internal Overflow indication		
ConnRejSck	ABBIED600_Rev1_INS	Connection rejected due to no socket available		
ConnRejRg	ABBIED600_Rev1_INS	Connection rejected due to unregistered client		
CtlPwd1	ABBIED600_Rev3_VSG_2_20	Control Struct Password 1		
CtlPwd2	ABBIED600_Rev3_VSG_2_20	Control Struct Password 2		
CtlPwd3	ABBIED600_Rev3_VSG_2_20	Control Struct Password 3		
CtlPwd4	ABBIED600_Rev3_VSG_2_20	Control Struct Password 4		
CtlPwd5	ABBIED600_Rev3_VSG_2_20	Control Struct Password 5		
CtlPwd6	ABBIED600_Rev3_VSG_2_20	Control Struct Password 6		
CtlPwd7	ABBIED600_Rev3_VSG_2_20	Control Struct Password 7		
CtlPwd8	ABBIED600_Rev3_VSG_2_20	Control Struct Password 8		
CommPort	AB-BIED600_Rev3_ENG_SP_CommPort_ED2	Port selection		
LnkMod	ABBIED600_Rev2_ENG_SP_LnkMod	Link mode		
MBWrAuth	ABBIED600_Rev2_ENG_SP_MBWrAuth	Write authority		
EvtIdSel	ABBIED600_Rev2_ENG_SP_MBSEventID	Event ID selection		
EvtBufMod	ABBIED600_Rev2_ENG_SP_MBEvtBufMod	Event buffering mode		
CRCOrdr	ABBIED600_Rev2_ENG_SP_CRCOrd	CRC order		
TmFrm	ABBIED600_Rev2_ENG_SP_MBSTimeFormat	Time format		
CliIP	ABBIED600_Rev3_VSG_2_20	Client IP address		
SerPty	ABBIED600_Rev2_ENG_SP_SerPty	Serial parity		
CntRs	ABBIED600_Rev2_SPC_control	Diagnostic counters reset		status-only,direct-with-normal-security

**6.1.30 LN: MBSLPRT5 Name: LPRT (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD_e	Mode	E	IEC 61850-7-4:2007, status-only, direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev7_LPL_MBS_ED2_e	Name plate	E	IEC 61850-7-4:2007
BufBkOff	ABBIED600_Rev1_ING_SP_1	Event buffer backoff value		
TCPPort	ABBIED600_Rev1_ING_SP_1	TCP listening port		
MapSel	ABBIED600_Rev1_ING_SP_1	Mapping selection		
UnitAddr	ABBIED600_Rev1_ING_SP_1	Slave Address		
StrFrDI	ABBIED600_Rev1_ING_SP_1	Response start delay for serial clients		
EndFrDI	ABBIED600_Rev1_ING_SP_1	Message end delay for serial client		
FrRxCnt	ABBIED600_Rev1_INS	Number of received frames		
ChkErrCnt	ABBIED600_Rev1_INS	Number of checksum errors		
FrTxCnt	ABBIED600_Rev1_INS	Number of transmitted frames		
TxExcpCnt1	ABBIED600_Rev1_INS	Number of transmitted exception responses 01 and 02		
TxExcpCnt2	ABBIED600_Rev1_INS	Number of transmitted exception responses 03		
ChLiv	ABBIED600_Rev1_SPS_e	Communication status (True = OK, False = Not connected)	E	IEC 61850-7-4:2007
CommIntnOv	ABBIED600_Rev1_SPS	Internal Overflow indication		
ConnRejSck	ABBIED600_Rev1_INS	Connection rejected due to no socket available		
ConnRejRg	ABBIED600_Rev1_INS	Connection rejected due to unregistered client		
CtlPwd1	ABBIED600_Rev3_VSG_2_20	Control Struct Password 1		
CtlPwd2	ABBIED600_Rev3_VSG_2_20	Control Struct Password 2		
CtlPwd3	ABBIED600_Rev3_VSG_2_20	Control Struct Password 3		
CtlPwd4	ABBIED600_Rev3_VSG_2_20	Control Struct Password 4		
CtlPwd5	ABBIED600_Rev3_VSG_2_20	Control Struct Password 5		

CtlPwd6	ABBIED600_Rev3_VSG_2_20	Control Struct Password 6		
CtlPwd7	ABBIED600_Rev3_VSG_2_20	Control Struct Password 7		
CtlPwd8	ABBIED600_Rev3_VSG_2_20	Control Struct Password 8		
CommPort	AB-BIED600_Rev3_ENG_SP_CommPort_ED2	Port selection		
LnkMod	ABBIED600_Rev2_ENG_SP_LnkMod	Link mode		
MBWrAuth	ABBIED600_Rev2_ENG_SP_MBWrAuth	Write authority		
EvtIdSel	ABBIED600_Rev2_ENG_SP_MBSEventID	Event ID selection		
EvtBufMod	ABBIED600_Rev2_ENG_SP_MBEvetBufMod	Event buffering mode		
CRCOrdr	ABBIED600_Rev2_ENG_SP_CRCOrd	CRC order		
TmFrm	ABBIED600_Rev2_ENG_SP_MBSTimeFormat	Time format		
ClilP	ABBIED600_Rev3_VSG_2_20	Client IP address		
SerPty	ABBIED600_Rev2_ENG_SP_SerPty	Serial parity		
CntRs	ABBIED600_Rev2_SPC_control	Diagnostic counters reset		status-only,direct-with-normal-security

### 6.1.31 LN: I3CLPRT1 Name: LPRT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
CommInt-nOv	ABBIED600_Rev1_SPS	Internal Overflow		
CommPort	AB-BIED600_Rev3_ENG_SP_CommPort_ED2	Serial port		
UnitAddr	ABBIED600_Rev1_ING_SP_1	Address		
MapSel	ABBIED600_Rev1_ING_SP_1	Mapping select		order code dependent
StrFrDI	ABBIED600_Rev1_ING_SP_1	Start delay		
EndFrDI	ABBIED600_Rev1_ING_SP_1	End delay		
Cla2Tms	ABBIED600_Rev1_ING_SP_1	Class 2 interval		
Cla2Fr1	AB-BIED600_Rev2_ENG_SP_I3CCls2Frame	Class2 Frame 1 in use		
Cla2Fr2	AB-BIED600_Rev2_ENG_SP_I3CCls2Frame	Class2 Frame 2 in use		
Cla2Fr3	AB-BIED600_Rev2_ENG_SP_I3CCls2Frame	Class2 Frame 3 in use		
Cla2Fr4	AB-BIED600_Rev2_ENG_SP_I3CCls2Frame	Class2 Frame 4 in use		

UsrFcnTyp	ABBIED600_Rev1_ING_SP_1	Function Type for User Class2 Frame		
UsrInfNum	ABBIED600_Rev1_ING_SP_1	Information Number for User Class2 Frame		
Cla1OvInd	ABBIED600_Rev2_ENG_SP_I3COvInd	Class1 Buffer Overflow Indication		
Cla1FcnTyp	ABBIED600_Rev1_ING_SP_1	Function Type for Class1 Buffer Overflow Indication		
Cla1InfNum	ABBIED600_Rev1_ING_SP_1	Information Number for Class1 Buffer Overflow Indication		
Cla1OvBkOf	ABBIED600_Rev1_ING_SP_1	Backoff Range for Class1 Buffer Overflow Indication		
GIOpt	ABBIED600_Rev2_ENG_SP_I3CGIOpt	Optimize GI traffic		
DevFcnTyp	ABBIED600_Rev1_ING_SP_1	Device Function Type		
FrRxCnt	ABBIED600_Rev1_INS	Received frames		
ChkErrCnt	ABBIED600_Rev1_INS	Checksum errors		
FrTxCnt	ABBIED600_Rev1_INS	Transmitted frames		
ChLiv	ABBIED600_Rev1_SPS_e	Status	E	IEC 61850-7-4:2007
Cla1Prio	ABBIED600_Rev2_ENG_SP_I3CC1Prio	Class 1 Priority		
RcdEnaMod	ABBIED600_Rev1_SPG_SP	Disturbance Recorder Enabled		
BlkMon	ABBIED600_Rev2_ENG_SP_I3CBlkMon	Blocking of Monitoring Direction		
EnCntFrz	ABBIED600_Rev2_SPC_control	Energy Counter Freeze		status-only,direct-with-normal-security
CntRs	ABBIED600_Rev2_SPC_control	Diagnostic counters reset		status-only,direct-with-normal-security

### 6.1.32 LN: I3CLPRT2 Name: LPRT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
CommInt-nOv	ABBIED600_Rev1_SPS	Internal Overflow		
CommPort	AB-BIED600_Rev3_ENG_SP_CommPort_ED2	Serial port		
UnitAddr	ABBIED600_Rev1_ING_SP_1	Address		
MapSel	ABBIED600_Rev1_ING_SP_1	Mapping select		order code dependent

StrFrDI	ABBIED600_Rev1_ING_SP_1	Start delay		
EndFrDI	ABBIED600_Rev1_ING_SP_1	End delay		
Cla2Tms	ABBIED600_Rev1_ING_SP_1	Class 2 interval		
Cla2Fr1	AB-BIED600_Rev2_ENG_SP_I3CCls2Frame	Class2 Frame 1 in use		
Cla2Fr2	AB-BIED600_Rev2_ENG_SP_I3CCls2Frame	Class2 Frame 2 in use		
Cla2Fr3	AB-BIED600_Rev2_ENG_SP_I3CCls2Frame	Class2 Frame 3 in use		
Cla2Fr4	AB-BIED600_Rev2_ENG_SP_I3CCls2Frame	Class2 Frame 4 in use		
UsrFcnTyp	ABBIED600_Rev1_ING_SP_1	Function Type for User Class2 Frame		
UsrInfNum	ABBIED600_Rev1_ING_SP_1	Information Number for User Class2 Frame		
Cla1OvInd	ABBIED600_Rev2_ENG_SP_I3COvInd	Class1 Buffer Overflow Indication		
Cla1FcnTyp	ABBIED600_Rev1_ING_SP_1	Function Type for Class1 Buffer Overflow Indication		
Cla1InfNum	ABBIED600_Rev1_ING_SP_1	Information Number for Class1 Buffer Overflow Indication		
Cla1OvBkOf	ABBIED600_Rev1_ING_SP_1	Backoff Range for Class1 Buffer Overflow Indication		
GIOpt	ABBIED600_Rev2_ENG_SP_I3CGIOpt	Optimize GI traffic		
DevFcnTyp	ABBIED600_Rev1_ING_SP_1	Device Function Type		
FrRxCnt	ABBIED600_Rev1_INS	Received frames		
ChkErrCnt	ABBIED600_Rev1_INS	Checksum errors		
FrTxCnt	ABBIED600_Rev1_INS	Transmitted frames		
ChLiv	ABBIED600_Rev1_SPS_e	Status	E	IEC 61850-7-4:2007
Cla1Prio	ABBIED600_Rev2_ENG_SP_I3CC1Prio	Class 1 Priority		
RcdEnaMod	ABBIED600_Rev1_SPG_SP	Disturbance Recorder Enabled		
BlkMon	ABBIED600_Rev2_ENG_SP_I3CBlkMon	Blocking of Monitoring Direction		
EnCntFrz	ABBIED600_Rev2_SPC_control	Energy Counter Freeze		status-only,direct-with-normal-security
CntRs	ABBIED600_Rev2_SPC_control	Diagnostic counters reset		status-only,direct-with-normal-security

**6.1.33 LN: DNPLPRT1 Name: LPRT (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
CommPort	AB-BIED600_Rev3_ENG_SP_CommPort_ED2	Port selection		
UnitAddr	ABBIED600_Rev1_ING_SP_1	Unit address		
MstrAddr	ABBIED600_Rev1_ING_SP_1	Master address		
MapSel	ABBIED600_Rev1_ING_SP_1	Mapping selection		
SynIntvTmm	ABBIED600_Rev1_ING_SP_1	Need time interval		
TmFrm	ABBIED600_Rev2_ENG_SP_MBSTimeFormat	Time format		
CROBSelTms	ABBIED600_Rev1_ING_SP_1	CROB select timeout		
LnkCnf	ABBIED600_Rev2_ENG_SP_DataLinkConfirm	Data link confirm		
LnkCnfTmms	ABBIED600_Rev1_ING_SP_1	Data link confirm TO		
LnkReLim	ABBIED600_Rev1_ING_SP_1	Data link retries		
RxTxDITmms	ABBIED600_Rev1_ING_SP_1	Data link Rx to Tx delay		
CharDI	ABBIED600_Rev1_ING_SP_1	Data link inter char delay		
ApLayCnf	ABBIED600_Rev2_ENG_SP_Enable	App layer confirm		
ApICnfTmms	ABBIED600_Rev1_ING_SP_1	App confirm TO		
ApLayFrg	ABBIED600_Rev1_ING_SP_1	App layer fragment		
URMod	ABBIED600_Rev2_ENG_SP_Enable	UR mode		
URRe	ABBIED600_Rev1_ING_SP_1	UR retries		
URReTmms	ABBIED600_Rev1_ING_SP_1	UR TO		
UROfTm	ABBIED600_Rev4_ING_SP_Unit	UR offline interval		
URCla1	ABBIED600_Rev1_ING_SP_1	UR Class 1 Min events		
URCla1Tmms	ABBIED600_Rev1_ING_SP_1	UR Class 1 TO		
URCla2	ABBIED600_Rev1_ING_SP_1	UR Class 2 Min events		
URCla2Tmms	ABBIED600_Rev1_ING_SP_1	UR Class 2 TO		

URClA3	ABBIED600_Rev1_ING_SP_1	UR Class 3 Min events		
URClA3Tmms	ABBIED600_Rev1_ING_SP_1	UR Class 3 TO		
URLgcyMod	ABBIED600_Rev2_ENG_SP_Enable	Legacy master UR		
SBOLgcyMod	ABBIED600_Rev2_ENG_SP_Enable	Legacy master SBO		
DftVa1	AB-BIED600_Rev1_ENG_SP_DNPDefVari01	Default Var Obj 01		
DftVa2	AB-BIED600_Rev1_ENG_SP_DNPDefVari02	Default Var Obj 02		
DftVa3	AB-BIED600_Rev1_ENG_SP_DNPDefVari03	Default Var Obj 03		
DftVa4	AB-BIED600_Rev1_ENG_SP_DNPDefVari04	Default Var Obj 04		
DftVa20	AB-BIED600_Rev1_ENG_SP_DNPDefVari20	Default Var Obj 20		
DftVa21	AB-BIED600_Rev2_ENG_SP_DNPDefVari21	Default Var Obj 21		
DftVa22	AB-BIED600_Rev1_ENG_SP_DNPDefVari22	Default Var Obj 22		
DftVa23	AB-BIED600_Rev1_ENG_SP_DNPDefVari23	Default Var Obj 23		
DftVa30	AB-BIED600_Rev1_ENG_SP_DNPDefVari30	Default Var Obj 30		
DftVa32	AB-BIED600_Rev1_ENG_SP_DNPDefVari32	Default Var Obj 32		
DftVa40	AB-BIED600_Rev1_ENG_SP_DNPDefVari40	Default Var Obj 40		
DftVa42	AB-BIED600_Rev1_ENG_SP_DNPDefVari42	Default Var Obj 42		
VldAddr	ABBIED600_Rev2_ENG_SP_Enable	Validate Master Addr		
SelfAddr	ABBIED600_Rev2_ENG_SP_Enable	Self Address Support		
ChLivTms	ABBIED600_Rev1_ING_SP_1_e	Link keep-alive TO	E	IEC 61850-7-4:2007
TCPAuth	ABBIED600_Rev1_ENG_SP_TCPAuth	TCP control authority		
TCPPort	ABBIED600_Rev1_ING_SP_1	TCP port		
ChLiv	ABBIED600_Rev1_SPS_e	Status	E	IEC 61850-7-4:2007
CommIntnOv	ABBIED600_Rev1_SPS	Internal Overflow		
IntnOvCnt	ABBIED600_Rev1_INS	Internal Overflow Counter		
FrRxCnt	ABBIED600_Rev1_INS	Received frames		

FrTxCnt	ABBIED600_Rev1_INS	Transmitted frames		
LnkErrCnt	ABBIED600_Rev1_INS	Link errors		
PhyErrCnt	ABBIED600_Rev1_INS	Physical errors		
TranErrCnt	ABBIED600_Rev1_INS	Transport errors		
MapErrCnt	ABBIED600_Rev1_INS	Mapping errors		
CliIP	ABBIED600_Rev3_VSG_2_20	Client IP address		
CntRs	ABBIED600_Rev2_SPC_control	Diagnostic counters reset		status-only,direct-with-normal-security

#### 6.1.34 LN: DNPLPRT2 Name: LPRT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
CommPort	AB-BIED600_Rev3_ENG_SP_CommPort_ED2	Port selection		
UnitAddr	ABBIED600_Rev1_ING_SP_1	Unit address		
MstrAddr	ABBIED600_Rev1_ING_SP_1	Master address		
MapSel	ABBIED600_Rev1_ING_SP_1	Mapping selection		
SynIntvTmm	ABBIED600_Rev1_ING_SP_1	Need time interval		
TmFrm	ABBIED600_Rev2_ENG_SP_MBSTimeFormat	Time format		
CROBSelTms	ABBIED600_Rev1_ING_SP_1	CROB select timeout		
LnkCnf	ABBIED600_Rev2_ENG_SP_DataLinkConfirm	Data link confirm		
LnkCnfTmms	ABBIED600_Rev1_ING_SP_1	Data link confirm TO		
LnkReLim	ABBIED600_Rev1_ING_SP_1	Data link retries		
RxTxDITmms	ABBIED600_Rev1_ING_SP_1	Data link Rx to Tx delay		
CharDI	ABBIED600_Rev1_ING_SP_1	Data link inter char delay		
ApLayCnf	ABBIED600_Rev2_ENG_SP_Enable	App layer confirm		
ApCnfTmms	ABBIED600_Rev1_ING_SP_1	App confirm TO		

ApILayFrg	ABBIED600_Rev1_ING_SP_1	App layer fragment		
URMod	ABBIED600_Rev2_ENG_SP_Enable	UR mode		
URRe	ABBIED600_Rev1_ING_SP_1	UR retries		
URReTmms	ABBIED600_Rev1_ING_SP_1	UR TO		
UROfTm	ABBIED600_Rev4_ING_SP_Unit	UR offline interval		
URCla1	ABBIED600_Rev1_ING_SP_1	UR Class 1 Min events		
URCla1Tmms	ABBIED600_Rev1_ING_SP_1	UR Class 1 TO		
URCla2	ABBIED600_Rev1_ING_SP_1	UR Class 2 Min events		
URCla2Tmms	ABBIED600_Rev1_ING_SP_1	UR Class 2 TO		
URCla3	ABBIED600_Rev1_ING_SP_1	UR Class 3 Min events		
URCla3Tmms	ABBIED600_Rev1_ING_SP_1	UR Class 3 TO		
URLgcyMod	ABBIED600_Rev2_ENG_SP_Enable	Legacy master UR		
SBOLgcyMod	ABBIED600_Rev2_ENG_SP_Enable	Legacy master SBO		
DftVa1	AB-BIED600_Rev1_ENG_SP_DNPDefVari01	Default Var Obj 01		
DftVa2	AB-BIED600_Rev1_ENG_SP_DNPDefVari02	Default Var Obj 02		
DftVa3	AB-BIED600_Rev1_ENG_SP_DNPDefVari03	Default Var Obj 03		
DftVa4	AB-BIED600_Rev1_ENG_SP_DNPDefVari04	Default Var Obj 04		
DftVa20	AB-BIED600_Rev1_ENG_SP_DNPDefVari20	Default Var Obj 20		
DftVa21	AB-BIED600_Rev2_ENG_SP_DNPDefVari21	Default Var Obj 21		
DftVa22	AB-BIED600_Rev1_ENG_SP_DNPDefVari22	Default Var Obj 22		
DftVa23	AB-BIED600_Rev1_ENG_SP_DNPDefVari23	Default Var Obj 23		
DftVa30	AB-BIED600_Rev1_ENG_SP_DNPDefVari30	Default Var Obj 30		
DftVa32	AB-BIED600_Rev1_ENG_SP_DNPDefVari32	Default Var Obj 32		
DftVa40	AB-BIED600_Rev1_ENG_SP_DNPDefVari40	Default Var Obj 40		
DftVa42	AB-BIED600_Rev1_ENG_SP_DNPDefVari42	Default Var Obj 42		
VldAddr	ABBIED600_Rev2_ENG_SP_Enable	Validate Master Addr		

SelfAddr	ABBIED600_Rev2_ENG_SP_Enable	Self Address Support		
ChLivTms	ABBIED600_Rev1_ING_SP_1_e	Link keep-alive TO	E	IEC 61850-7-4:2007
TCPAuth	ABBIED600_Rev1_ENG_SP_TCPAuth	TCP control authority		
TCPPort	ABBIED600_Rev1_ING_SP_1	TCP port		
ChLiv	ABBIED600_Rev1_SPS_e	Status	E	IEC 61850-7-4:2007
FrRxCnt	ABBIED600_Rev1_INS	Received frames		
FrTxCnt	ABBIED600_Rev1_INS	Transmitted frames		
LnkErrCnt	ABBIED600_Rev1_INS	Link errors		
PhyErrCnt	ABBIED600_Rev1_INS	Physical errors		
TranErrCnt	ABBIED600_Rev1_INS	Transport errors		
MapErrCnt	ABBIED600_Rev1_INS	Mapping errors		
CliIP	ABBIED600_Rev3_VSG_2_20	Client IP address		
CntRs	ABBIED600_Rev2_SPC_control	Diagnostic counters reset		status-only,direct-with-normal-security

### 6.1.35 LN: DNPLPRT3 Name: LPRT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
CommPort	ABBIED600_Rev3_ENG_SP_CommPort_ED2	Port selection		
UnitAddr	ABBIED600_Rev1_ING_SP_1	Unit address		
MstrAddr	ABBIED600_Rev1_ING_SP_1	Master address		
MapSel	ABBIED600_Rev1_ING_SP_1	Mapping selection		
SynIntvTmm	ABBIED600_Rev1_ING_SP_1	Need time interval		
TmFrm	ABBIED600_Rev2_ENG_SP_MBSTimeFormat	Time format		
CROBSelTms	ABBIED600_Rev1_ING_SP_1	CROB select timeout		
LnkCnf	ABBIED600_Rev2_ENG_SP_DataLinkConfirm	Data link confirm		

LnkCnfTmms	ABBIED600_Rev1_ING_SP_1	Data link confirm TO		
LnkReLim	ABBIED600_Rev1_ING_SP_1	Data link retries		
RxTxDTmms	ABBIED600_Rev1_ING_SP_1	Data link Rx to Tx delay		
CharDI	ABBIED600_Rev1_ING_SP_1	Data link inter char delay		
ApLayCnf	ABBIED600_Rev2_ENG_SP_Enable	App layer confirm		
ApCnfTmms	ABBIED600_Rev1_ING_SP_1	App confirm TO		
ApLayFrg	ABBIED600_Rev1_ING_SP_1	App layer fragment		
URMod	ABBIED600_Rev2_ENG_SP_Enable	UR mode		
URRe	ABBIED600_Rev1_ING_SP_1	UR retries		
URReTmms	ABBIED600_Rev1_ING_SP_1	UR TO		
UROfTm	ABBIED600_Rev4_ING_SP_Unit	UR offline interval		
URCla1	ABBIED600_Rev1_ING_SP_1	UR Class 1 Min events		
URCla1Tmms	ABBIED600_Rev1_ING_SP_1	UR Class 1 TO		
URCla2	ABBIED600_Rev1_ING_SP_1	UR Class 2 Min events		
URCla2Tmms	ABBIED600_Rev1_ING_SP_1	UR Class 2 TO		
URCla3	ABBIED600_Rev1_ING_SP_1	UR Class 3 Min events		
URCla3Tmms	ABBIED600_Rev1_ING_SP_1	UR Class 3 TO		
URLgcyMod	ABBIED600_Rev2_ENG_SP_Enable	Legacy master UR		
SBOLgcyMod	ABBIED600_Rev2_ENG_SP_Enable	Legacy master SBO		
DftVa1	AB-BIED600_Rev1_ENG_SP_DNPDefVari01	Default Var Obj 01		
DftVa2	AB-BIED600_Rev1_ENG_SP_DNPDefVari02	Default Var Obj 02		
DftVa3	AB-BIED600_Rev1_ENG_SP_DNPDefVari03	Default Var Obj 03		
DftVa4	AB-BIED600_Rev1_ENG_SP_DNPDefVari04	Default Var Obj 04		
DftVa20	AB-BIED600_Rev1_ENG_SP_DNPDefVari20	Default Var Obj 20		
DftVa21	AB-BIED600_Rev2_ENG_SP_DNPDefVari21	Default Var Obj 21		
DftVa22	AB-BIED600_Rev1_ENG_SP_DNPDefVari22	Default Var Obj 22		

DftVa23	AB-BIED600_Rev1_ENG_SP_DNPDefVari23	Default Var Obj 23		
DftVa30	AB-BIED600_Rev1_ENG_SP_DNPDefVari30	Default Var Obj 30		
DftVa32	AB-BIED600_Rev1_ENG_SP_DNPDefVari32	Default Var Obj 32		
DftVa40	AB-BIED600_Rev1_ENG_SP_DNPDefVari40	Default Var Obj 40		
DftVa42	AB-BIED600_Rev1_ENG_SP_DNPDefVari42	Default Var Obj 42		
VldAddr	ABBIED600_Rev2_ENG_SP_Enable	Validate Master Addr		
SelfAddr	ABBIED600_Rev2_ENG_SP_Enable	Self Address Support		
ChLivTms	ABBIED600_Rev1_ING_SP_1_e	Link keep-alive TO	E	IEC 61850-7-4:2007
TCPAuth	ABBIED600_Rev1_ENG_SP_TCPAuth	TCP control authority		
TCPPort	ABBIED600_Rev1_ING_SP_1	TCP port		
ChLiv	ABBIED600_Rev1_SPS_e	Status	E	IEC 61850-7-4:2007
FrRxCnt	ABBIED600_Rev1_INS	Received frames		
FrTxCnt	ABBIED600_Rev1_INS	Transmitted frames		
LnkErrCnt	ABBIED600_Rev1_INS	Link errors		
PhyErrCnt	ABBIED600_Rev1_INS	Physical errors		
TranErrCnt	ABBIED600_Rev1_INS	Transport errors		
MapErrCnt	ABBIED600_Rev1_INS	Mapping errors		
CliIP	ABBIED600_Rev3_VSG_2_20	Client IP address		
CntRs	ABBIED600_Rev2_SPC_control	Diagnostic counters reset		status-only,direct-with-normal-security

### 6.1.36 LN: DNPLPRT4 Name: LPRT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD_e	Mode	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
CommPort	AB-BIED600_Rev3_ENG_SP_CommPort_ED2	Port selection		
UnitAddr	ABBIED600_Rev1_ING_SP_1	Unit address		

MstrAddr	ABBIED600_Rev1_ING_SP_1	Master address		
MapSel	ABBIED600_Rev1_ING_SP_1	Mapping selection		
SynIntvTmm	ABBIED600_Rev1_ING_SP_1	Need time interval		
TmFrm	ABBIED600_Rev2_ENG_SP_MBSTimeFormat	Time format		
CROBSelTms	ABBIED600_Rev1_ING_SP_1	CROB select timeout		
LnkCnf	ABBIED600_Rev2_ENG_SP_DataLinkConfirm	Data link confirm		
LnkCnfTmms	ABBIED600_Rev1_ING_SP_1	Data link confirm TO		
LnkReLim	ABBIED600_Rev1_ING_SP_1	Data link retries		
RxTxDITmms	ABBIED600_Rev1_ING_SP_1	Data link Rx to Tx delay		
CharDI	ABBIED600_Rev1_ING_SP_1	Data link inter char delay		
ApILayCnf	ABBIED600_Rev2_ENG_SP_Enable	App layer confirm		
ApICnfTmms	ABBIED600_Rev1_ING_SP_1	App confirm TO		
ApILayFrg	ABBIED600_Rev1_ING_SP_1	App layer fragment		
URMod	ABBIED600_Rev2_ENG_SP_Enable	UR mode		
URRe	ABBIED600_Rev1_ING_SP_1	UR retries		
URReTmms	ABBIED600_Rev1_ING_SP_1	UR TO		
UROfTm	ABBIED600_Rev4_ING_SP_Unit	UR offline interval		
URCla1	ABBIED600_Rev1_ING_SP_1	UR Class 1 Min events		
URCla1Tmms	ABBIED600_Rev1_ING_SP_1	UR Class 1 TO		
URCla2	ABBIED600_Rev1_ING_SP_1	UR Class 2 Min events		
URCla2Tmms	ABBIED600_Rev1_ING_SP_1	UR Class 2 TO		
URCla3	ABBIED600_Rev1_ING_SP_1	UR Class 3 Min events		
URCla3Tmms	ABBIED600_Rev1_ING_SP_1	UR Class 3 TO		
URLgcyMod	ABBIED600_Rev2_ENG_SP_Enable	Legacy master UR		
SBOLgcyMod	ABBIED600_Rev2_ENG_SP_Enable	Legacy master SBO		
DftVa1	AB-BIED600_Rev1_ENG_SP_DNPDefVari01	Default Var Obj 01		

DftVa2	AB-BIED600_Rev1_ENG_SP_DNPDefVari02	Default Var Obj 02		
DftVa3	AB-BIED600_Rev1_ENG_SP_DNPDefVari03	Default Var Obj 03		
DftVa4	AB-BIED600_Rev1_ENG_SP_DNPDefVari04	Default Var Obj 04		
DftVa20	AB-BIED600_Rev1_ENG_SP_DNPDefVari20	Default Var Obj 20		
DftVa21	AB-BIED600_Rev2_ENG_SP_DNPDefVari21	Default Var Obj 21		
DftVa22	AB-BIED600_Rev1_ENG_SP_DNPDefVari22	Default Var Obj 22		
DftVa23	AB-BIED600_Rev1_ENG_SP_DNPDefVari23	Default Var Obj 23		
DftVa30	AB-BIED600_Rev1_ENG_SP_DNPDefVari30	Default Var Obj 30		
DftVa32	AB-BIED600_Rev1_ENG_SP_DNPDefVari32	Default Var Obj 32		
DftVa40	AB-BIED600_Rev1_ENG_SP_DNPDefVari40	Default Var Obj 40		
DftVa42	AB-BIED600_Rev1_ENG_SP_DNPDefVari42	Default Var Obj 42		
VldAddr	ABBIED600_Rev2_ENG_SP_Enable	Validate Master Addr		
SelfAddr	ABBIED600_Rev2_ENG_SP_Enable	Self Address Support		
ChLivTms	ABBIED600_Rev1_ING_SP_1_e	Link keep-alive TO	E	IEC 61850-7-4:2007
TCPAuth	ABBIED600_Rev1_ENG_SP_TCPAuth	TCP control authority		
TCPPort	ABBIED600_Rev1_ING_SP_1	TCP port		
ChLiv	ABBIED600_Rev1_SPS_e	Status	E	IEC 61850-7-4:2007
FrRxCnt	ABBIED600_Rev1_INS	Received frames		
FrTxCnt	ABBIED600_Rev1_INS	Transmitted frames		
LnkErrCnt	ABBIED600_Rev1_INS	Link errors		
PhyErrCnt	ABBIED600_Rev1_INS	Physical errors		
TranErrCnt	ABBIED600_Rev1_INS	Transport errors		
MapErrCnt	ABBIED600_Rev1_INS	Mapping errors		
CliIP	ABBIED600_Rev3_VSG_2_20	Client IP address		
CntRs	ABBIED600_Rev2_SPC_control	Diagnostic counters reset		status-only,direct-with-normal-security

## 6.1.37 LN: DNPLPRT5 Name: LPRT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD_e	Mode	E	IEC 61850-7-4:2007, status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
CommPort	AB-BIED600_Rev3_ENG_SP_CommPort_ED2	Port selection		
UnitAddr	ABBIED600_Rev1_ING_SP_1	Unit address		
MstrAddr	ABBIED600_Rev1_ING_SP_1	Master address		
MapSel	ABBIED600_Rev1_ING_SP_1	Mapping selection		
SynIntvTmm	ABBIED600_Rev1_ING_SP_1	Need time interval		
TmFrm	ABBIED600_Rev2_ENG_SP_MBSTimeFormat	Time format		
CROBSelTms	ABBIED600_Rev1_ING_SP_1	CROB select timeout		
LnkCnf	ABBIED600_Rev2_ENG_SP_DataLinkConfirm	Data link confirm		
LnkCnfTmms	ABBIED600_Rev1_ING_SP_1	Data link confirm TO		
LnkReLim	ABBIED600_Rev1_ING_SP_1	Data link retries		
RxTxDITmms	ABBIED600_Rev1_ING_SP_1	Data link Rx to Tx delay		
CharDI	ABBIED600_Rev1_ING_SP_1	Data link inter char delay		
ApLayCnf	ABBIED600_Rev2_ENG_SP_Enable	App layer confirm		
ApICnfTmms	ABBIED600_Rev1_ING_SP_1	App confirm TO		
ApLayFrg	ABBIED600_Rev1_ING_SP_1	App layer fragment		
URMod	ABBIED600_Rev2_ENG_SP_Enable	UR mode		
URRe	ABBIED600_Rev1_ING_SP_1	UR retries		
URReTmms	ABBIED600_Rev1_ING_SP_1	UR TO		
UROfTm	ABBIED600_Rev4_ING_SP_Unit	UR offline interval		
URCla1	ABBIED600_Rev1_ING_SP_1	UR Class 1 Min events		
URCla1Tmms	ABBIED600_Rev1_ING_SP_1	UR Class 1 TO		
URCla2	ABBIED600_Rev1_ING_SP_1	UR Class 2 Min events		

URClia2Tmms	ABBIED600_Rev1_ING_SP_1	UR Class 2 TO		
URClia3	ABBIED600_Rev1_ING_SP_1	UR Class 3 Min events		
URClia3Tmms	ABBIED600_Rev1_ING_SP_1	UR Class 3 TO		
URLgcyMod	ABBIED600_Rev2_ENG_SP_Enable	Legacy master UR		
SBOLgcyMod	ABBIED600_Rev2_ENG_SP_Enable	Legacy master SBO		
DftVa1	AB-BIED600_Rev1_ENG_SP_DNPDefVari01	Default Var Obj 01		
DftVa2	AB-BIED600_Rev1_ENG_SP_DNPDefVari02	Default Var Obj 02		
DftVa3	AB-BIED600_Rev1_ENG_SP_DNPDefVari03	Default Var Obj 03		
DftVa4	AB-BIED600_Rev1_ENG_SP_DNPDefVari04	Default Var Obj 04		
DftVa20	AB-BIED600_Rev1_ENG_SP_DNPDefVari20	Default Var Obj 20		
DftVa21	AB-BIED600_Rev2_ENG_SP_DNPDefVari21	Default Var Obj 21		
DftVa22	AB-BIED600_Rev1_ENG_SP_DNPDefVari22	Default Var Obj 22		
DftVa23	AB-BIED600_Rev1_ENG_SP_DNPDefVari23	Default Var Obj 23		
DftVa30	AB-BIED600_Rev1_ENG_SP_DNPDefVari30	Default Var Obj 30		
DftVa32	AB-BIED600_Rev1_ENG_SP_DNPDefVari32	Default Var Obj 32		
DftVa40	AB-BIED600_Rev1_ENG_SP_DNPDefVari40	Default Var Obj 40		
DftVa42	AB-BIED600_Rev1_ENG_SP_DNPDefVari42	Default Var Obj 42		
VldAddr	ABBIED600_Rev2_ENG_SP_Enable	Validate Master Addr		
SelfAddr	ABBIED600_Rev2_ENG_SP_Enable	Self Address Support		
ChLivTms	ABBIED600_Rev1_ING_SP_1_e	Link keep-alive TO	E	IEC 61850-7-4:2007
TCPAuth	ABBIED600_Rev1_ENG_SP_TCPAuth	TCP control authority		
TCPPort	ABBIED600_Rev1_ING_SP_1	TCP port		
ChLiv	ABBIED600_Rev1_SPS_e	Status	E	IEC 61850-7-4:2007
FrRxCnt	ABBIED600_Rev1_INS	Received frames		
FrTxCnt	ABBIED600_Rev1_INS	Transmitted frames		
LnkErrCnt	ABBIED600_Rev1_INS	Link errors		

PhyErrCnt	ABBIED600_Rev1_INS	Physical errors		
TranErrCnt	ABBIED600_Rev1_INS	Transport errors		
MapErrCnt	ABBIED600_Rev1_INS	Mapping errors		
CliIPAddr	ABBIED600_Rev3_VSG_2_20	Client IP address		
CntRs	ABBIED600_Rev2_SPC_control	Diagnostic counters reset		status-only,direct-with-normal-security

### 6.1.38 LN: FLO1RFRC1 Name: RFRC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On_e	Mode	E	IEC 61850-7-4:2007,status-only
Beh	ABBIED600_Rev2_ENS_beh_e	Behaviour	E	IEC 61850-7-4:2007
NamPlt	ABBIED600_Rev1_LPL_InNs_1_e	Name plate	E	IEC 61850-7-4:2007
FltLoop	ABBIED600_Rev5_ENS_Flt-Loop_e	Fault loop	E	IEC 61850-7-4:2007
FltDiskm	ABBIED600_Rev3_MV_simple_i_e	Fault distance	E	IEC 61850-7-4:2007
FltPtR	ABBIED600_Rev3_MV_simple_i_e	Fault point resistance	E	ABBIED600:2014
FltDisQ	ABBIED600_Rev1_INS_e	Fault distance quality	E	ABBIED600:2014
FltR	ABBIED600_Rev3_MV_simple_i_e	Fault loop resistance	E	ABBIED600:2014
FltX	ABBIED600_Rev3_MV_simple_i_e	Fault loop reactance	E	ABBIED600:2014
PhReact	ABBIED600_Rev3_MV_simple_i_e	Fault phase reactance	E	ABBIED600:2014
RatFltALod	ABBIED600_Rev3_MV_simple_i_e	Fault to load current ratio	E	ABBIED600:2014
EqDisLod	ABBIED600_Rev3_MV_simple_i_e	Estimated equivalent load distance	E	ABBIED600:2014
PhGndCapac	ABBIED600_Rev3_MV_simple_i_e	Estimated PE capacitive reactance of the line	E	ABBIED600:2014
APreFltPhA	ABBIED600_Rev3_CMV_S_1_e	A Pre Flt Phs A	E	ABBIED600:2014
APreFltPhB	ABBIED600_Rev3_CMV_S_1_e	A Pre Flt Phs B	E	ABBIED600:2014
APreFltPhC	ABBIED600_Rev3_CMV_S_1_e	A Pre Flt Phs C	E	ABBIED600:2014
VPreFltPhA	ABBIED600_Rev3_CMV_S_1_e	V Pre Flt Phs A	E	ABBIED600:2014
VPreFltPhB	ABBIED600_Rev3_CMV_S_1_e	V Pre Flt Phs B	E	ABBIED600:2014
VPreFltPhC	ABBIED600_Rev3_CMV_S_1_e	V Pre Flt Phs C	E	ABBIED600:2014
AFltPhA	ABBIED600_Rev3_CMV_S_1_e	A Flt Phs A	E	ABBIED600:2014
AFltPhB	ABBIED600_Rev3_CMV_S_1_e	A Flt Phs B	E	ABBIED600:2014
AFltPhC	ABBIED600_Rev3_CMV_S_1_e	A Flt Phs C	E	ABBIED600:2014
VFltPhA	ABBIED600_Rev3_CMV_S_1_e	V Flt Phs A	E	ABBIED600:2014
VFltPhB	ABBIED600_Rev3_CMV_S_1_e	V Flt Phs B	E	ABBIED600:2014
VFltPhC	ABBIED600_Rev3_CMV_S_1_e	V Flt Phs C	E	ABBIED600:2014

**6.1.39 LN: OLATCC1 Name: ATCC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Operation		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
NamPlt	ABBIED600_Rev2_LPL_InNs_Ed2	Name plate		
Loc	ABBIED600_Rev1_SPS	Local operation		
OpCntRs	ABBIED600_Rev1_INC_simple_int	Resetable operation counter		status-only
TapChg	ABBIED600_Rev4_BSC_control	Change Tap Position (stop, lower, higher)		status-only,direct-with-normal-security
ParOp	ABBIED600_Rev2_SPC_control	Parallel/Independent operation		status-only,direct-with-normal-security
LTCBlk	ABBIED600_Rev1_SPC_simple	Block (Inhibit) control output of LTC		status-only
VRed	ABBIED600_Rev1_SPC_simple	Voltage reduction step 1		status-only
CtlV	ABBIED600_Rev3_MV_simple_i	Control voltage		
LodA	ABBIED600_Rev3_MV_simple_i	Load current (total transformer secondary current)		
CircA	ABBIED600_Rev3_MV_simple_i	Circulating current		
Auto	ABBIED600_Rev2_SPC_control	Automatic/Manual operation		status-only,direct-with-normal-security
BndCtr	ABBIED600_Rev3_ASG_SG_i	Band center voltage		
BndWid	ABBIED600_Rev3_ASG_SP_i	Band width voltage		
CtlIDITmms	ABBIED600_Rev1_ING_SG	Control intentional time delay 1		
CtlID2Tmms	ABBIED600_Rev1_ING_SG_e	Control intentional time delay 2	E	ABBIED600:2014
LDCR	ABBIED600_Rev3_ASG_SG_i	Line drop voltage due to line resistance component		
LDCX	ABBIED600_Rev3_ASG_SG_i	Line drop voltage due to line reactance component		
RnbkRV	ABBIED600_Rev3_ASG_SP_i	Runback raise voltage		
LimLodA	ABBIED600_Rev3_ASG_SP_i	Limit load current (LTC Block Load current)		
TmDIChr	ABBIED600_Rev1_SPG_SP	Time delay linear or inverse characteristics		
VRedVal	ABBIED600_Rev3_ASG_SG_i	Reduction of band centre (percent)		

		when voltage step is active		
TapBlkR	ABBIED600_Rev1_ING_SP_1	Tap position of Load tap changer where automatic Raise commands are blocked		
TapBlkL	ABBIED600_Rev1_ING_SP_1	Tap position of Load tap changer where automatic Lower commands are blocked		
BlkVLo	ABBIED600_Rev3_ASG_SP_i	Control voltage below which auto Raise commands are blocked		
EndPosR	ABBIED600_Rev1_SPS	Block raise		
EndPosL	ABBIED600_Rev1_SPS	Block lower		
ParTrfMod	ABBIED600_Rev2_ENG_SG_Par-TrfMod_e	Auto parallel mode	E	ABBIED600:2014
TapOpErr	ABBIED600_Rev1_SPS	Alarm		
TapOpR	ABBIED600_Rev1_SPS	Raise command for own transformer		
TapOpL	ABBIED600_Rev1_SPS	Lower command for own transformer		
LTCBlkAHi	ABBIED600_Rev1_SPS	Block load current		
LTCBlkVLo	ABBIED600_Rev1_SPS	Block under voltage		
Blk	ABBIED600_Rev1_SPS	External block status		
ErrPar	ABBIED600_Rev1_SPS	Parallel failure		
VolSpt	ABBIED600_Rev4_APP_control_e	Voltage setpoint	E	IEC 61850-7-4:2007,status-only,direct-with-normal-security
LodPhAng	ABBIED600_Rev3_ASG_SG_i_e	Load phase angle	E	ABBIED600:2014
StabFact	ABBIED600_Rev3_ASG_SG_i_e	Stability	E	ABBIED600:2014
VCtlOpMod	ABBIED600_Rev4_ENG_SP_OpMod-SetATCC_e	Operation mode	E	ABBIED600:2014
LTCPlsTmms	ABBIED600_Rev1_ING_SP_e	Output pulse	E	ABBIED600:2014
ManBlkTyp	AB-BIED600_Rev2_ENG_SP_ManBlkType_e	Manual blocking type	E	ABBIED600:2014
LimCircA	ABBIED600_Rev3_ASG_SP_i_e	Circulating current limit	E	ABBIED600:2014
LimLDC	ABBIED600_Rev3_ASG_SP_i_e	Line Drop Compensation limit	E	ABBIED600:2014
LDCEna	ABBIED600_Rev1_SPG_SP_e	Line Drop Compensation enable	E	ABBIED600:2014
RPFailw	ABBIED600_Rev1_SPG_SP_e	Reverse power flow allwd	E	ABBIED600:2014

OpTmhMax	ABBIED600_Rev1_ING_SP_1_e	Max operations in 1h	E	ABBIED600:2014
CmdErrTms	ABBIED600_Rev1_ING_SP_1_e	Command error delay	E	ABBIED600:2014
FllwDITms	ABBIED600_Rev1_ING_SP_1_e	Follower delay	E	ABBIED600:2014
AlmEna	ABBIED600_Rev1_SPG_SP_e	Alarms enabled	E	ABBIED600:2014
CntRs	ABBIED600_Rev2_SPC_control_e	Counter reset	E	ABBIED600:2014,status-only,direct-with-normal-security
TapOpFllw1	ABBIED600_Rev1_INS_e	Change follower 1 tap position command from master (stop, lower, higher)	E	ABBIED600:2014
TapOpFllw2	ABBIED600_Rev1_INS_e	Change follower 2 tap position command from master (stop, lower, higher)	E	ABBIED600:2014
TapOpFllw3	ABBIED600_Rev1_INS_e	Change follower 3 tap position command from master (stop, lower, higher)	E	ABBIED600:2014
LodAVec	ABBIED600_Rev3_CMV_S_1_e	Transmitted current phasor	E	ABBIED600:2014
VMeas	ABBIED600_Rev3_MV_simple_i_e	Voltage, average filtered	E	ABBIED600:2014
AngVAPhA	ABBIED600_Rev3_MV_simple_i_e	Angle U_A-I_A	E	ABBIED600:2014
CtlDIOn	ABBIED600_Rev2_ENS_TimerOn_e	Timer status	E	ABBIED600:2014
CtlOpModSt	ABBIED600_Rev2_ENS_OpModATCC_e	Acting oper mode	E	ABBIED600:2014
CtlVDif	ABBIED600_Rev3_MV_simple_i_e	Voltage difference	E	ABBIED600:2014
ClcLDC	ABBIED600_Rev3_MV_simple_i_e	Calculated Line Drop Compensation	E	ABBIED600:2014
BlkSt	ABBIED600_Rev1_INS_e	Block status	E	ABBIED600:2014
LTCRnbk	ABBIED600_Rev1_SPS_e	Block runback raise voltage	E	ABBIED600:2014
CircAHiBlk	ABBIED600_Rev1_SPS_e	Block circulating current	E	ABBIED600:2014
AlmReas	ABBIED600_Rev2_ENS_AlarmReas_e	Alarm reason	E	ABBIED600:2014
FllwFlt	ABBIED600_Rev2_ENS_FllwFlt_e	Failed followers	E	ABBIED600:2014
NumParUnit	ABBIED600_Rev2_ENS_ParUnits_e	Parallel units in MCC	E	ABBIED600:2014
Trf1TapPos	ABBIED600_Rev1_INS_e	Trafo 1 tap position	E	ABBIED600:2014
Trf2TapPos	ABBIED600_Rev1_INS_e	Trafo 2 tap position	E	ABBIED600:2014
Trf3TapPos	ABBIED600_Rev1_INS_e	Trafo 3 tap position	E	ABBIED600:2014
TapChgFllw	ABBIED600_Rev1_INS_e	Change follower tap position (stop, lower, higher)	E	ABBIED600:2014
InConSt	ABBIED600_Rev1_SPS_e	Connection status	E	ABBIED600:2014

InLTCOp	ABBIED600_Rev1_SPS_e	Tap Changer Operating	E	ABBIED600:2014
Trf1A	ABBIED600_Rev3_CMV_S_1_e	Received current from transformer 1	E	ABBIED600:2014
Trf2A	ABBIED600_Rev3_CMV_S_1_e	Received current from transformer 2	E	ABBIED600:2014
Trf3A	ABBIED600_Rev3_CMV_S_1_e	Received current from transformer 3	E	ABBIED600:2014
ParTrfNum	ABBIED600_Rev1_ING_SP_1_e	Parallel trafos	E	ABBIED600:2014
TestCtl	ABBIED600_Rev3_ENC_TestCtl_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
OpTmhNum	ABBIED600_Rev1_INS_e	Controls per last 1h	E	ABBIED600:2014
TapChgR	ABBIED600_Rev1_SPS_e	RAISE_LOCAL	E	ABBIED600:2014
TapChgL	ABBIED600_Rev1_SPS_e	LOWER_LOCAL	E	ABBIED600:2014
CtlIDSt	ABBIED600_Rev1_SPS_e	Timer on	E	ABBIED600:2014
InAuto	ABBIED600_Rev1_SPS_e	Input auto operation	E	ABBIED600:2014
InParOp	ABBIED600_Rev1_SPS_e	Input parallel operation	E	ABBIED600:2014

## 6.2 Extented Logical Nodes

### 6.2.1 LN: LLN0 Name: LLN0 (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On-TestBlock	Test mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Health	ABBIED600_Rev4_ENS_health	Health		
NamPlt	ABBIED600_Rev8_LPL_LD0_LNN0_ED2	Name plate		
IndLEDRs	ABBIED600_Rev2_SPC_indications_e	Indications and LEDs	E	ABBIED600:2014,status-only,direct-with-normal-security
ProgLEDRs	ABBIED600_Rev2_SPC_indications_e	Programmable LEDs	E	ABBIED600:2014,status-only,direct-with-normal-security
MeasStatRs	ABBIED600_Rev2_SPC_control_e	Reset minimum and maximum demands	E	ABBIED600:2014,status-only,direct-with-normal-security
PQRs	ABBIED600_Rev2_SPC_control_e	Reset all power quality data	E	ABBIED600:2014,status-only,direct-with-normal-security
OpMod-SetGr	ABBIED600_Rev2_ENG_SP_Op-ModSG_e	Operation mode for setting group change	E	ABBIED600:2014
ActSetGr	ABBIED600_Rev2_INC_control_int_e	Active setting group	E	ABBIED600:2014,status-only,direct-with-normal-security

Act1SetGr	ABBIED600_Rev1_SPC_simple_e	Active setting group 1	E	ABBIED600:2014,status-only
Act2SetGr	ABBIED600_Rev1_SPC_simple_e	Active setting group 2	E	ABBIED600:2014,status-only
Act3SetGr	ABBIED600_Rev1_SPC_simple_e	Active setting group 3	E	ABBIED600:2014,status-only
Act4SetGr	ABBIED600_Rev1_SPC_simple_e	Active setting group 4	E	ABBIED600:2014,status-only
Act5SetGr	ABBIED600_Rev1_SPC_simple_e	Active setting group 5	E	ABBIED600:2014,status-only
Act6SetGr	ABBIED600_Rev1_SPC_simple_e	Active setting group 6	E	ABBIED600:2014,status-only
LgcSelSetGr	ABBIED600_Rev1_SPC_simple_e	Logic selection for setting group	E	ABBIED600:2014,status-only
SetSvMaxDI	AB-BIED600_Rev1_ENG_SP_SetSvMaxDI_e	SMV Max Delay	E	ABBIED600:2014,order code dependent
SvMaxDI	ABBIED600_Rev3_MV_simple_i_e	Max Delay	E	ABBIED600:2014,order code dependent
SvAvDI	ABBIED600_Rev3_MV_simple_i_e	Average delay	E	ABBIED600:2014,order code dependent
FcnSt	ABBIED600_Rev1_VSG_2_e	Configuration information	E	ABBIED600:2014
ParChgCnt	ABBIED600_Rev1_INS_retain_e	Number of setting changes	E	ABBIED600:2014

### 6.2.2 LN: GSAL1 Name: GSAL (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
OpCntRs	ABBIED600_Rev1_INC_simple_int	Resetable Security Violations counter		status-only
NumCntRs	ABBIED600_Rev1_INS	Number of counter resets		
AuthFail	ABBIED600_Rev1_SEC	Authorization failures detected		
AcsCtlFail	ABBIED600_Rev1_SEC	Access control failures detected		
SvcViol	ABBIED600_Rev1_SEC	Service privilege violations		
Ina	ABBIED600_Rev1_SEC	Inactive associations		
AuthRem	ABBIED600_Rev3_SPG_SP_authority_ED2_e	Remote authorization	E	AB-BIED600:2014
AuthAcsVw	ABBIED600_Rev10_ENS_AuthAcs_e	Viewer access	E	REx620:2015
AuthAcsOpr	ABBIED600_Rev10_ENS_AuthAcs_e	Operator access	E	REx620:2015
AuthAcsEng	ABBIED600_Rev10_ENS_AuthAcs_e	Engineer access	E	REx620:2015
AuthAcsAdm	ABBIED600_Rev10_ENS_AuthAcs_e	Administrator access	E	REx620:2015
AuthAcsLev	ABBIED600_Rev2_ENG_SP_AuthAcsLev_e	Logging level	E	REx620:2015

RemUpdEna	ABBIED600_Rev1_SPG_SP_Acces-sAdmW_e	Remote Update Enable	E	AB-BIED600:2014
AuthRemAdm	ABBIED600_Rev1_VSG_2_64_e	Remote authorization (administrator)	E	AB-BIED600:2014
AuthRemEng	ABBIED600_Rev1_VSG_2_64_e	Remote authorization (engineer)	E	AB-BIED600:2014
AuthRemOpr	ABBIED600_Rev1_VSG_2_64_e	Remote authorization (operator)	E	AB-BIED600:2014
AuthRemVw	ABBIED600_Rev1_VSG_2_64_e	Remote authorization (viewer)	E	AB-BIED600:2014

### 6.2.3 LN: IHMI1 Name: IHMI (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
CardNam	ABBIED600_Rev8_DPL_eeprom_2_ED2_e	Card information	E	ABBIED600:2014
TestStald	ABBIED600_Rev1_LPL_VSS_dU_20_e	Testing	E	ABBIED600:2014
HwId	ABBIED600_Rev1_LPL_VSS_1_20_e	HW module	E	ABBIED600:2014

### 6.2.4 LN: XGGIO100 Name: GGIO (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_OnOff_No-Blk	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
SPCSO1	ABBIED600_Rev2_SPC_control	X100-Output 1		status-only,direct-with-normal-security
SPCSO2	ABBIED600_Rev2_SPC_control	X100-Output 2		status-only,direct-with-normal-security
SPCSO3	ABBIED600_Rev2_SPC_control	X100-Output 3		status-only,direct-with-normal-security
SPCSO4	ABBIED600_Rev2_SPC_control	X100-Output 4		status-only,direct-with-normal-security
SPCSO5	ABBIED600_Rev2_SPC_control	X100-Output 5		status-only,direct-with-normal-security
SPCSO6	ABBIED600_Rev2_SPC_control	X100-Output 6		status-only,direct-with-normal-security
CardNam	AB-BIED600_Rev8_DPL_eeprom_2_ED2_e	Card information	E	ABBIED600:2014
HwId	ABBIED600_Rev1_LPL_VSS_1_20_e	HW module	E	ABBIED600:2014
TestStald	ABBIED600_Rev1_LPL_VSS_dU_20_e	Testing	E	ABBIED600:2014

### 6.2.5 LN: LEDGGIO1 Name: GGIO (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Alm1	ABBIED600_Rev1_SPS_simple	Alarm input for LED 1		

Alm2	ABBIED600_Rev1_SPS_simple	Alarm input for LED 2		
Alm3	ABBIED600_Rev1_SPS_simple	Alarm input for LED 3		
Alm4	ABBIED600_Rev1_SPS_simple	Alarm input for LED 4		
Alm5	ABBIED600_Rev1_SPS_simple	Alarm input for LED 5		
Alm6	ABBIED600_Rev1_SPS_simple	Alarm input for LED 6		
Alm7	ABBIED600_Rev1_SPS_simple	Alarm input for LED 7		
Alm8	ABBIED600_Rev1_SPS_simple	Alarm input for LED 8		
Alm9	ABBIED600_Rev1_SPS_simple	Alarm input for LED 9		
Alm10	ABBIED600_Rev1_SPS_simple	Alarm input for LED 10		
Alm11	ABBIED600_Rev1_SPS_simple	Alarm input for LED 11		
Ind1	ABBIED600_Rev1_SPS_simple	Ok input for LED 1		
Ind2	ABBIED600_Rev1_SPS_simple	Ok input for LED 2		
Ind3	ABBIED600_Rev1_SPS_simple	Ok input for LED 3		
Ind4	ABBIED600_Rev1_SPS_simple	Ok input for LED 4		
Ind5	ABBIED600_Rev1_SPS_simple	Ok input for LED 5		
Ind6	ABBIED600_Rev1_SPS_simple	Ok input for LED 6		
Ind7	ABBIED600_Rev1_SPS_simple	Ok input for LED 7		
Ind8	ABBIED600_Rev1_SPS_simple	Ok input for LED 8		
Ind9	ABBIED600_Rev1_SPS_simple	Ok input for LED 9		
Ind10	ABBIED600_Rev1_SPS_simple	Ok input for LED 10		
Ind11	ABBIED600_Rev1_SPS_simple	Ok input for LED 11		
LEDSt1	ABBIED600_Rev4_ENC_control_led_e	LED 1	E	ABBIED600:2014,status-only,direct-with-normal-security
LEDSt2	ABBIED600_Rev4_ENC_control_led_e	LED 2	E	ABBIED600:2014,status-only,direct-with-normal-security
LEDSt3	ABBIED600_Rev4_ENC_control_led_e	LED 3	E	ABBIED600:2014,status-only,direct-with-normal-security

LEDSt4	ABBIED600_Rev4_ENC_control_led_e	LED 4	E	ABBIED600:2014,status-only,direct-with-normal-security
LEDSt5	ABBIED600_Rev4_ENC_control_led_e	LED 5	E	ABBIED600:2014,status-only,direct-with-normal-security
LEDSt6	ABBIED600_Rev4_ENC_control_led_e	LED 6	E	ABBIED600:2014,status-only,direct-with-normal-security
LEDSt7	ABBIED600_Rev4_ENC_control_led_e	LED 7	E	ABBIED600:2014,status-only,direct-with-normal-security
LEDSt8	ABBIED600_Rev4_ENC_control_led_e	LED 8	E	ABBIED600:2014,status-only,direct-with-normal-security
LEDSt9	ABBIED600_Rev4_ENC_control_led_e	LED 9	E	ABBIED600:2014,status-only,direct-with-normal-security
LEDSt10	ABBIED600_Rev4_ENC_control_led_e	LED 10	E	ABBIED600:2014,status-only,direct-with-normal-security
LEDSt11	ABBIED600_Rev4_ENC_control_led_e	LED 11	E	ABBIED600:2014,status-only,direct-with-normal-security
LEDSeq1	ABBIED600_Rev3_ENG_SP_Led_Mode_e	Alarm mode	E	ABBIED600:2014
LEDSeq2	ABBIED600_Rev3_ENG_SP_Led_Mode_e	Alarm mode	E	ABBIED600:2014
LEDSeq3	ABBIED600_Rev3_ENG_SP_Led_Mode_e	Alarm mode	E	ABBIED600:2014
LEDSeq4	ABBIED600_Rev3_ENG_SP_Led_Mode_e	Alarm mode	E	ABBIED600:2014
LEDSeq5	ABBIED600_Rev3_ENG_SP_Led_Mode_e	Alarm mode	E	ABBIED600:2014
LEDSeq6	ABBIED600_Rev3_ENG_SP_Led_Mode_e	Alarm mode	E	ABBIED600:2014
LEDSeq7	ABBIED600_Rev3_ENG_SP_Led_Mode_e	Alarm mode	E	ABBIED600:2014
LEDSeq8	ABBIED600_Rev3_ENG_SP_Led_Mode_e	Alarm mode	E	ABBIED600:2014
LEDSeq9	ABBIED600_Rev3_ENG_SP_Led_Mode_e	Alarm mode	E	ABBIED600:2014
LEDSeq10	ABBIED600_Rev3_ENG_SP_Led_Mode_e	Alarm mode	E	ABBIED600:2014
LEDSeq11	ABBIED600_Rev3_ENG_SP_Led_Mode_e	Alarm mode	E	ABBIED600:2014
InRsLED1	ABBIED600_Rev1_SPS_simple_e	Reset input for LED 1	E	ABBIED600:2014
InRsLED2	ABBIED600_Rev1_SPS_simple_e	Reset input for LED 2	E	ABBIED600:2014
InRsLED3	ABBIED600_Rev1_SPS_simple_e	Reset input for LED 3	E	ABBIED600:2014
InRsLED4	ABBIED600_Rev1_SPS_simple_e	Reset input for LED 4	E	ABBIED600:2014
InRsLED5	ABBIED600_Rev1_SPS_simple_e	Reset input for LED 5	E	ABBIED600:2014

InRsLED6	ABBIED600_Rev1_SPS_simple_e	Reset input for LED 6	E	ABBIED600:2014
InRsLED7	ABBIED600_Rev1_SPS_simple_e	Reset input for LED 7	E	ABBIED600:2014
InRsLED8	ABBIED600_Rev1_SPS_simple_e	Reset input for LED 8	E	ABBIED600:2014
InRsLED9	ABBIED600_Rev1_SPS_simple_e	Reset input for LED 9	E	ABBIED600:2014
InRsLED10	ABBIED600_Rev1_SPS_simple_e	Reset input for LED 10	E	ABBIED600:2014
InRsLED11	ABBIED600_Rev1_SPS_simple_e	Reset input for LED 11	E	ABBIED600:2014
AlmColr	ABBIED600_Rev3_ENG_SP_Led-Color_e	Alarm colour	E	ABBIED600:2014

### 6.2.6 LN: GNRLLTMS1 Name: LTMS (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
TmAcc	ABBIED600_Rev1_INS	Number of significant bits in the Fraction Of Second in the time accuracy part of the time stamp.		
TmSrc	ABBIED600_Rev1_LPL_VSS_1_64	Current time source		
TmSyn	ABBIED600_Rev1_ENS_TmSyn	Time synchronized according to IEC 61850-9-2		order code dependent
TmChSt1	ABBIED600_Rev1_SPS	Time channel status (up/down)		
TmSrcSel1	AB-BIED600_Rev6_ENG_SP_SyncSrc_e	Time source setting ("1588" in case the time source is a IEEE 1588 source or dotted IP-address)	E	ABBIED600:2014
TmSrcSt	ABBIED600_Rev4_ENS_TmSrc_e	Current time source	E	ABBIED600:2014
DomId	ABBIED600_Rev1_ING_SP_1_e	The domain is identified by an integer, the domainNumber, in the range of 0 to 255.	E	ABBIED600:2014,order code dependent
Alm	ABBIED600_Rev1_SPS_e	Alarm	E	IEC 61850-7-4:2007
Wrn	ABBIED600_Rev1_SPS_e	Warning	E	IEC 61850-7-4:2007
PTPTmSrc	ABBIED600_Rev2_ENS_PTPTmSrc_e	GrandMaster timeSource enum according to PTPv2	E	ABBIED600:2014,order code dependent
PTPClkAcc	AB-BIED600_Rev2_ENS_PTPClkAcc_e	Grandmaster clockAccuracy enum according to PTPv2	E	ABBIED600:2014,order code dependent
LocClkAcc	ABBIED600_Rev1_INS_e	Local clock accuracy (master + IED synch accuracy)[us]	E	ABBIED600:2014,order code dependent

MaxDevAcc	ABBIED600_Rev1_INS_e	Maximum deviation of the Local synch accuracy [us]	E	ABBIED600:2014,order code dependent
PTPPrio1	ABBIED600_Rev1_ING_SP_1_e	PTP priority 1, in the range of 0 to 255.	E	ABBIED600:2014,order code dependent
PTPPrio2	ABBIED600_Rev1_ING_SP_1_e	PTP priority 2, in the range of 0 to 255.	E	ABBIED600:2014,order code dependent
MstrId	ABBIED600_Rev2_VSG_1_20_e	Grandmaster Identity octet string according to PTPv2	E	ABBIED600:2014,order code dependent
IPAd-drSNTP1	ABBIED600_Rev3_VSG_2_20_e	IP address for SNTP primary server	E	ABBIED600:2014
IPAd-drSNTP2	ABBIED600_Rev3_VSG_2_20_e	IP address for SNTP secondary server	E	ABBIED600:2014
PTPAnc-Mod	AB-BIED600_Rev1_ENG_SP_PTPAnc-Mod_e	PTP Announce Mode	E	ABBIED600:2014,order code dependent

### 6.2.7 LN: GNRLLTIM1 Name: LTIM (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
TmDT	ABBIED600_Rev1_SPS	Indicating if DST is in effect		
TmOfsTmm	ABBIED600_Rev1_ING_SP_1	Offset of local time from UTC in minutes		
TmUseDT	ABBIED600_Rev1_SPG_SP	DST in use setting		
TmChgDT	ABBIED600_Rev2_TSG_SP_set-Cal	Local time of next change to daylight saving time		
TmChgST	ABBIED600_Rev2_TSG_SP_set-Cal	Local time of next change to standard time		
TmSys	ABBIED600_Rev3_VSG_2_20_e	System time	E	AB-BIED600:2014
DateSys	ABBIED600_Rev3_VSG_2_20_e	System date	E	AB-BIED600:2014
TmOfsDT	ABBIED600_Rev1_ING_SP_1_e	Daylight saving time offset	E	AB-BIED600:2014

### 6.2.8 LN: PHLPTOC1 Name: PTOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmACrv	ABBIED600_Rev2_CURVE SG	Operating Curve Type		

StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv	Type of Reset Curve		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
InEnaMult	ABBIED600_Rev1_SPS_e	Enable signal for current multiplier	E	ABBIED600:2014
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Measuring mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.9 LN: PHHPTOC1 Name: PTOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmACrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv	Type of Reset Curve		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		

InEnaMult	ABBIED600_Rev1_SPS_e	Enable signal for current multiplier	E	ABBIED600:2014
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Measuring mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.10 LN: PHHPTOC2 Name: PTOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmACrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SP_TypRsCrv	Type of Reset Curve		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
InEnaMult	ABBIED600_Rev1_SPS_e	Enable signal for current multiplier	E	ABBIED600:2014
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Measuring mode	E	ABBIED600:2014

TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
-----------	------------------------------	--------------------------	---	--

**6.2.11 LN: PHIPTOC1 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
InEnaMult	ABBIED600_Rev1_SPS_e	Enable signal for current multiplier	E	ABBIED600:2014
NumPh	ABBIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.12 LN: DPHLPTOC1 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmACrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		

OpDIT-mms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv	Type of Reset Curve		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
DirMod	ABBIED600_Rev3_ENG_SG_DirMod	Directional Mode		
InEnaMult	ABBIED600_Rev1_SPS_e	Enable signal for current multiplier	E	ABBIED600:2014
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
AMeas-Mod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Measuring mode	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
AllwNonDir	ABBIED600_Rev1_SPG_SP_e	Allows prot activation as non-dir when dir info is invalid	E	ABBIED600:2014
NonDir	ABBIED600_Rev1_SPS_e	Forces protection to non-directional	E	ABBIED600:2014

### 6.2.13 LN: DPHLRDIR1 Name: RDIR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Dir	AB-BIED600_Rev1_ACD_threephase	Direction		
ChrAng	ABBIED600_Rev3_ASG_SG_i	Characteristic angle		
MinFwdAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in forward direction		
MinRvAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in reverse direction		
MaxFwdAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in forward direction		
MaxRvAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in reverse direction		
BlkValA	ABBIED600_Rev3_ASG_SP_i	Min operate current		
BlkValV	ABBIED600_Rev3_ASG_SP_i	Min operate voltage		
PolQty	AB-BIED600_Rev3_ENG_SG_PolQty	Polarising Quantity		
VMemTmms	ABBIED600_Rev1_ING_SG_e	Voltage memory time	E	AB-BIED600:2014

Op-ChrAngPhsA	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase A	E	AB-BIED600:2014
Op-ChrAngPhsB	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase B	E	AB-BIED600:2014
Op-ChrAngPhsC	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase C	E	AB-BIED600:2014
VMemUsedSt	ABBIED600_Rev1_SPS_e	Voltage memory in use status	E	AB-BIED600:2014

### 6.2.14 LN: DPHHPTOC1 Name: PTOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_Of-fOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmACrv	ABBIED600_Rev2_CURVE SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDIT-mms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv	Selection of reset curve type		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
DirMod	ABBIED600_Rev3_ENG_SG_DirMod	Directional Mode		
InEnaMult	ABBIED600_Rev1_SPS_e	Enables current multiplier	E	ABBIED600:2014
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
AMeas-Mod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Selects used measurement mode	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
AllwNonDir	ABBIED600_Rev1_SPG_SP_e	Allows prot activation as non-dir when dir info is invalid	E	ABBIED600:2014

NonDir	ABBIED600_Rev1_SPS_e	Forces protection to non-directional	E	ABBIED600:2014
--------	----------------------	--------------------------------------	---	----------------

### 6.2.15 LN: DPHHRDIR1 Name: RDIR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Dir	AB-BIED600_Rev1_ACD_threephase	DIR		
ChrAng	ABBIED600_Rev3_ASG_SG_i	Characteristic angle		
MinFwdAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in forward direction		
MinRvAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in reverse direction		
MaxFwdAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in forward direction		
MaxRvAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in reverse direction		
BlkValA	ABBIED600_Rev3_ASG_SP_i	Min operate current		
BlkValV	ABBIED600_Rev3_ASG_SP_i	Min operate voltage		
PolQty	AB-BIED600_Rev3_ENG_SG_PolQty	Polarizing quantity		
VMemTmms	ABBIED600_Rev1_ING_SG_e	Voltage memory time	E	AB-BIED600:2014
Op-ChrAngPhsA	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase A	E	AB-BIED600:2014
Op-ChrAngPhsB	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase B	E	AB-BIED600:2014
Op-ChrAngPhsC	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase C	E	AB-BIED600:2014
VMemUsedSt	ABBIED600_Rev1_SPS_e	Voltage memory in use status	E	AB-BIED600:2014

### 6.2.16 LN: EFLPTOC1 Name: PTOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
TmACrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		

TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	ABBIED600_Rev3_ENG_SG_TypRsCrv	Type of Reset Curve		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
AMeasMod	ABBIED600_Rev3_ENG_SP_MeasMod_e	Measurement mode selection	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for operate current level	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
InEnaMult	ABBIED600_Rev1_SPS_e	Enable current multiplier	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
AResSigSel	ABBIED600_Rev2_ENG_SP_AResSigSel_e	Selection for used Io signal	E	ABBIED600:2014

### 6.2.17 LN: EFHPTOC1 Name: PTOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
TmACrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	ABBIED600_Rev3_ENG_SG_TypRsCrv	Type of Reset Curve		

RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
AMeasMod	ABBIED600_Rev3_ENG_SP_MeasMod_e	Measurement mode selection	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for operate current level	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
InEnaMult	ABBIED600_Rev1_SPS_e	Enable current multiplier	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
AResSigSel	ABBIED600_Rev2_ENG_SP_AResSigSel_e	Selection for used Io signal	E	ABBIED600:2014

### 6.2.18 LN: DEFLPTOC1 Name: PTOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
TmACrv	ABBIED600_Rev2_CURVE_SG	Curve parameter E		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	ABBIED600_Rev3_ENG_SG_TypRsCrv	Selection of reset curve type		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
DirMod	ABBIED600_Rev3_ENG_SG_DirMod	Directional Mode		
VStr	ABBIED600_Rev3_ASG_SG_i_e	Voltage start value	E	IEC 61850-7-4:2007
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014

AllwNonDir	ABBIED600_Rev1_SPG_SP_e	Allows prot activation as non-dir when dir info is invalid	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Selects used measurement mode	E	ABBIED600:2014
InEnaMult	ABBIED600_Rev1_SPS_e	Enables current multiplier	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
EnaVLim	ABBIED600_Rev1_SPG_SG_e	Enable voltage limit	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
AResSigSel	AB-BIED600_Rev2_ENG_SP_AResSigSel_e	Selection for used lo signal	E	ABBIED600:2014

### 6.2.19 LN: DEFLRDIR1 Name: RDIR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Dir	ABBIED600_Rev1_ACD_simple	Direction		
ChrAng	ABBIED600_Rev3_ASG_SG_i	Characteristic angle		
MinFwdAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in forward direction		
MinRvAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in reverse direction		
MaxFwdAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in forward direction		
MaxRvAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in reverse direction		
BlkValA	ABBIED600_Rev3_ASG_SP_i	Minimum operating current		
BlkValV	ABBIED600_Rev3_ASG_SP_i	Minimum operating voltage		
PolQty	ABBIED600_Rev1_ENG_SP_PolQty	Polarizing quantity		
InRcaCtl	ABBIED600_Rev1_SPS_e	Relay characteristic angle control	E	AB-BIED600:2014
OpModEF	ABBIED600_Rev2_ENG_SG_Op-ModEF_e	Operation criteria	E	AB-BIED600:2014
CorAng	ABBIED600_Rev3_ASG_SP_i_e	Correction angle	E	AB-BIED600:2014
RevPol	ABBIED600_Rev1_SPG_SP_e	Rotate polarizing quantity	E	AB-BIED600:2014
OpAEF	ABBIED600_Rev3_MV_simple_i_e	Operating current for EF protection	E	AB-BIED600:2014

OpPolAng	ABBIED600_Rev3_MV_simple_i_e	Angle between operating and polarizing quantity	E	AB-BIED600:2014
OpChrAng	ABBIED600_Rev3_MV_simple_i_e	Angle between operating angle and characteristic angle	E	AB-BIED600:2014
VResSigSel	AB-BIED600_Rev2_ENG_SP_VResSigSel_e	Selection for used Uo signal	E	AB-BIED600:2014

### 6.2.20 LN: DEFHPTOC1 Name: PTOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
TmACrv	ABBIED600_Rev2_CURVE SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING SG	Operate Delay Time		
TypRsCrv	ABBIED600_Rev3_ENG SG_TypRsCrv	Selection of reset curve type		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
DirMod	ABBIED600_Rev3_ENG SG_DirMod	Directional Mode		
VStr	ABBIED600_Rev3_ASG SG_i_e	Voltage start value	E	IEC 61850-7-4:2007
StrValMult	ABBIED600_Rev3_ASG SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
AllwNonDir	ABBIED600_Rev1_SPG SP_e	Allows prot activation as non-dir when dir info is invalid	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG SP_Meas-Mod_e	Selects used measurement mode	E	ABBIED600:2014
InEnaMult	ABBIED600_Rev1_SPS_e	Enables current multiplier	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014

EnaVLim	ABBIED600_Rev1_SPG_SG_e	Enable voltage limit	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
AResSigSel	AB-BIED600_Rev2_ENG_SP_AResSigSel_e	Selection for used lo signal	E	ABBIED600:2014

### 6.2.21 LN: DEFHRDIR1 Name: RDIR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Dir	ABBIED600_Rev1_ACD_simple	Direction		
ChrAng	ABBIED600_Rev3_ASG_SG_i	Characteristic angle		
MinFwdAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in forward direction		
MinRvAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in reverse direction		
MaxFwdAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in forward direction		
MaxRvAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in reverse direction		
BlkValA	ABBIED600_Rev3_ASG_SP_i	Minimum operating current		
BlkValV	ABBIED600_Rev3_ASG_SP_i	Minimum operating voltage		
PolQty	ABBIED600_Rev1_ENG_SP_PolQty	Polarizing quantity		
InRcaCtl	ABBIED600_Rev1_SPS_e	Relay characteristic angle control	E	AB-BIED600:2014
OpModEF	ABBIED600_Rev2_ENG_SG_OpModEF_e	Operation criteria	E	AB-BIED600:2014
CorAng	ABBIED600_Rev3_ASG_SP_i_e	Correction angle	E	AB-BIED600:2014
RevPol	ABBIED600_Rev1_SPG_SP_e	Rotate polarizing quantity	E	AB-BIED600:2014
OpAEF	ABBIED600_Rev3_MV_simple_i_e	Operating current for EF protection	E	AB-BIED600:2014
OpPolAng	ABBIED600_Rev3_MV_simple_i_e	Angle between operating and polarizing quantity	E	AB-BIED600:2014
OpChrAng	ABBIED600_Rev3_MV_simple_i_e	Angle between operating angle and characteristic angle	E	AB-BIED600:2014
VResSigSel	AB-BIED600_Rev2_ENG_SP_VResSigSel_e	Selection for used Uo signal	E	AB-BIED600:2014

### 6.2.22 LN: ROVPTOV1 Name: PTOV (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Residual Over Voltage start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
VResSigSel	AB-BIED600_Rev2_ENG_SP_VResSigSel_e	Selection for used Uo signal	E	ABBIED600:2014

### 6.2.23 LN: ROVPTOV2 Name: PTOV (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Residual Over Voltage start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

VResSigSel	AB-BIED600_Rev2_ENG_SP_VResSigSel_e	Selection for used Uo signal	E	ABBIED600:2014
------------	-------------------------------------	------------------------------	---	----------------

**6.2.24 LN: ROVPTOV3 Name: PTOV (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Residual Over Voltage start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
VResSigSel	AB-BIED600_Rev2_ENG_SP_VResSigSel_e	Selection for used Uo signal	E	ABBIED600:2014

**6.2.25 LN: PHPTUV1 Name: PTUV (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmVCrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		

OpDIT-mms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv_e	Type of Reset Curve	E	IEC 61850-7-4:2007
BlkVal	ABBIED600_Rev3_ASG_SP_i_e	Voltage block value	E	IEC 61850-7-4:2007
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
CrvSatRI	ABBIED600_Rev1_ASG_SP_f_e	Tuning parameter to avoid curve discontinuities	E	ABBIED600:2014
VSel	ABBIED600_Rev3_ENG_SP_VSel_e	Parameter to select phase or phase-to-phase voltages	E	ABBIED600:2014
EnaBlkVal	ABBIED600_Rev1_SPG_SP_e	Enable block value	E	ABBIED600:2014
HysRI	ABBIED600_Rev3_ASG_SP_i_e	Relative hysteresis for operation	E	ABBIED600:2014
TypTmRs	AB-BIED600_Rev2_ENG_SG_TypTmRs_e	Type of time reset	E	ABBIED600:2014

### 6.2.26 LN: PHPTUV2 Name: PTUV (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_Of-fOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmVCrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDIT-mms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv_e	Type of Reset Curve	E	IEC 61850-7-4:2007

BlkVal	ABBIED600_Rev3_ASG_SP_i_e	Voltage block value	E	IEC 61850-7-4:2007
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
CrvSatRI	ABBIED600_Rev1_ASG_SP_f_e	Tuning parameter to avoid curve discontinuities	E	ABBIED600:2014
VSel	ABBIED600_Rev3_ENG_SP_VSel_e	Parameter to select phase or phase-to-phase voltages	E	ABBIED600:2014
EnaBlkVal	ABBIED600_Rev1_SPG_SP_e	Enable block value	E	ABBIED600:2014
HysRI	ABBIED600_Rev3_ASG_SP_i_e	Relative hysteresis for operation	E	ABBIED600:2014
TypTmRs	AB-BIED600_Rev2_ENG_SG_TypTmRs_e	Type of time reset	E	ABBIED600:2014

### 6.2.27 LN: PHPTUV3 Name: PTUV (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_Of-fOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmVCrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDIT-mms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv_e	Type of Reset Curve	E	IEC 61850-7-4:2007
BlkVal	ABBIED600_Rev3_ASG_SP_i_e	Voltage block value	E	IEC 61850-7-4:2007
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014

StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
CrSatRI	ABBIED600_Rev1_ASG_SP_f_e	Tuning parameter to avoid curve discontinuities	E	ABBIED600:2014
VSel	ABBIED600_Rev3_ENG_SP_VSel_e	Parameter to select phase or phase-to-phase voltages	E	ABBIED600:2014
EnaBlkVal	ABBIED600_Rev1_SPG_SP_e	Enable block value	E	ABBIED600:2014
HysRI	ABBIED600_Rev3_ASG_SP_i_e	Relative hysteresis for operation	E	ABBIED600:2014
TypTmRs	AB-BIED600_Rev2_ENG_SG_TypTmRs_e	Type of time reset	E	ABBIED600:2014

### 6.2.28 LN: PHPTOV1 Name: PTOV (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmVCrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDIT-mms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv_e	Type of Reset Curve	E	IEC 61850-7-4:2007
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

CrSatRI	ABBIED600_Rev1_ASG_SP_f_e	Tuning parameter to avoid curve discontinuities	E	ABBIED600:2014
VSel	ABBIED600_Rev3_ENG_SP_VSel_e	Parameter to select phase or phase-to-phase voltages	E	ABBIED600:2014
HysRI	ABBIED600_Rev3_ASG_SP_i_e	Relative hysteresis for operation	E	ABBIED600:2014
TypTmRs	AB-BIED600_Rev2_ENG_SG_TypTmRs_e	Type of time reset	E	ABBIED600:2014

### 6.2.29 LN: PHPTOV2 Name: PTOV (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmVCrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDIT-mms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv_e	Type of Reset Curve	E	IEC 61850-7-4:2007
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
CrSatRI	ABBIED600_Rev1_ASG_SP_f_e	Tuning parameter to avoid curve discontinuities	E	ABBIED600:2014
VSel	ABBIED600_Rev3_ENG_SP_VSel_e	Parameter to select phase or phase-to-phase voltages	E	ABBIED600:2014
HysRI	ABBIED600_Rev3_ASG_SP_i_e	Relative hysteresis for operation	E	ABBIED600:2014

TypTmRs	AB-BIED600_Rev2_ENG_SG_TypTmRs_e	Type of time reset	E	ABBIED600:2014
---------	----------------------------------	--------------------	---	----------------

### 6.2.30 LN: PHPTOV3 Name: PTOV (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmVCrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDIT-mms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv_e	Type of Reset Curve	E	IEC 61850-7-4:2007
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
CrSatRI	ABBIED600_Rev1_ASG_SP_f_e	Tuning parameter to avoid curve discontinuities	E	ABBIED600:2014
VSel	ABBIED600_Rev3_ENG_SP_VSel_e	Parameter to select phase or phase-to-phase voltages	E	ABBIED600:2014
HysRI	ABBIED600_Rev3_ASG_SP_i_e	Relative hysteresis for operation	E	ABBIED600:2014
TypTmRs	AB-BIED600_Rev2_ENG_SG_TypTmRs_e	Type of time reset	E	ABBIED600:2014

### 6.2.31 LN: PSPTUV1 Name: PTUV (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security

Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
BlkVal	ABBIED600_Rev3_ASG_SG_i_e	Voltage block value	E	IEC 61850-7-4:2007
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
EnaBlkVal	ABBIED600_Rev1_SPG_SG_e	Enable block value	E	ABBIED600:2014
HysRI	ABBIED600_Rev3_ASG_SP_i_e	Relative hysteresis for operation	E	ABBIED600:2014

### 6.2.32 LN: PSPTUV2 Name: PTUV (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
BlkVal	ABBIED600_Rev3_ASG_SG_i_e	Voltage block value	E	IEC 61850-7-4:2007
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
EnaBlkVal	ABBIED600_Rev1_SPG_SG_e	Enable block value	E	ABBIED600:2014

HysRI	ABBIED600_Rev3_ASG_SP_i_e	Relative hysteresis for operation	E	ABBIED600:2014
-------	---------------------------	-----------------------------------	---	----------------

### 6.2.33 LN: NSPTOV1 Name: PTOV (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.34 LN: NSPTOV2 Name: PTOV (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.35 LN: FRPTRC1 Name: PTRC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Op	ABBIED600_Rev1_ACT_simple	Operate		
Str	ABBIED600_Rev1_ACD_simple	Start		
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
OpMod-ProHz	ABBIED600_Rev2_ENG_SG_OpMod-ProHz_e	Operation mode	E	ABBIED600:2014

**6.2.36 LN: FRPTOF1 Name: PTOF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start, overfrequency		
Op	ABBIED600_Rev1_ACT_simple	Operate, overfrequency		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time, overfrequency	E	AB-BIED600:2014

**6.2.37 LN: FRPTUF1 Name: PTUF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start, underfrequency		
Op	ABBIED600_Rev1_ACT_simple	Operate, underfrequency		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time, underfrequency	E	AB-BIED600:2014

### 6.2.38 LN: FRPFRC1 Name: PFRC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start, frequency gradient		
Op	ABBIED600_Rev1_ACT_simple	Operate, frequency gradient		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value df/dt		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time, frequency gradient	E	AB-BIED600:2014

### 6.2.39 LN: FRPTRC2 Name: PTRC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Op	ABBIED600_Rev1_ACT_simple	Operate		
Str	ABBIED600_Rev1_ACD_simple	Start		
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
OpMod-ProHz	ABBIED600_Rev2_ENG_SG_OpMod-ProHz_e	Operation mode	E	ABBIED600:2014

### 6.2.40 LN: FRPTOF2 Name: PTOF (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start, overfrequency		
Op	ABBIED600_Rev1_ACT_simple	Operate, overfrequency		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time, overfrequency	E	AB-BIED600:2014

### 6.2.41 LN: FRPTUF2 Name: PTUF (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start, underfrequency		
Op	ABBIED600_Rev1_ACT_simple	Operate, underfrequency		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time, underfrequency	E	AB-BIED600:2014

### 6.2.42 LN: FRPFRC2 Name: PFRC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start, frequency gradient		
Op	ABBIED600_Rev1_ACT_simple	Operate, frequency gradient		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value df/dt		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time, frequency gradient	E	AB-BIED600:2014

### 6.2.43 LN: FRPTRC3 Name: PTRC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Op	ABBIED600_Rev1_ACT_simple	Operate		
Str	ABBIED600_Rev1_ACD_simple	Start		
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
OpMod-ProHz	ABBIED600_Rev2_ENG_SG_OpMod-ProHz_e	Operation mode	E	ABBIED600:2014

**6.2.44 LN: FRPTOF3 Name: PTOF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start, overfrequency		
Op	ABBIED600_Rev1_ACT_simple	Operate, overfrequency		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time, overfrequency	E	AB-BIED600:2014

**6.2.45 LN: FRPTUF3 Name: PTUF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start, underfrequency		
Op	ABBIED600_Rev1_ACT_simple	Operate, underfrequency		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time, underfrequency	E	AB-BIED600:2014

**6.2.46 LN: FRPFRC3 Name: PFRC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start, frequency gradient		
Op	ABBIED600_Rev1_ACT_simple	Operate, frequency gradient		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value df/dt		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time, frequency gradient	E	AB-BIED600:2014

**6.2.47 LN: CCBRBRF1 Name: RBRF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev2_ENC_Mod_Of-fOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Delayed CB failure alarm		
OpEx	ABBIED600_Rev1_ACT_simple	Breaker failure trip (external trip)		
OpIn	ABBIED600_Rev1_ACT_simple	Operate, retrip (internal trip)		
FailMod	ABBIED600_Rev2_ENG_SP_FailMod	Breaker Failure Detection Mode (current, breaker status, both, other)		
FailTmms	ABBIED600_Rev1_ING_SP	Breaker Failure Time Delay for bus bar trip		
TPTTrTmms	ABBIED600_Rev1_ING_SP_e	Three Pole Retrip Time Delay	E	IEC 61850-7-4:2007
DetValA	ABBIED600_Rev3_ASG_SP_i	Current Detector Value		
ReTrMod	ABBIED600_Rev2_ENG_SP_ReTrMod	Retrip Mode		
TrPlsTmms	ABBIED600_Rev1_ING_SP_e	Trip pulse time	E	IEC 61850-7-4:2007
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Det-ValARes	ABBIED600_Rev3_ASG_SP_i_e	Current Detector Value for residual current	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Measurement mode selection (current): 2= DFT; 3= Peak-to-Peak	E	ABBIED600:2014
CBAlm-Tmms	ABBIED600_Rev1_ING_SP_e	Circuit breaker faulty alarm delay	E	ABBIED600:2014
OpExMod	ABBIED600_Rev2_ENG_SP_buTrip-Mode_e	Select type of backup trip logic	E	ABBIED600:2014
InStr	ABBIED600_Rev1_SPS_e	CBFP start command	E	ABBIED600:2014
InPosClis	ABBIED600_Rev1_SPS_e	CB in closed position	E	ABBIED600:2014
InCBFlt	ABBIED600_Rev1_SPS_e	CB faulty and unable to trip	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrLtcMod	ABBIED600_Rev2_ENG_SP_StrLtcMod_e	Start reset delayed or immediately	E	ABBIED600:2014

**6.2.48 LN: CCBRBRF2 Name: RBRF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev2_ENC_Mod_Of-fOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Delayed CB failure alarm		
OpEx	ABBIED600_Rev1_ACT_simple	Breaker failure trip (external trip)		
Opln	ABBIED600_Rev1_ACT_simple	Operate, retrip (internal trip)		
FailMod	ABBIED600_Rev2_ENG_SP_FailMod	Breaker Failure Detection Mode (current, breaker status, both, other)		
FailTmms	ABBIED600_Rev1_ING_SP	Breaker Failure Time Delay for bus bar trip		
TPTTrTmms	ABBIED600_Rev1_ING_SP	Three Pole Retrip Time Delay		
DetValA	ABBIED600_Rev3_ASG_SP_i	Current Detector Value		
ReTrMod	ABBIED600_Rev2_ENG_SP_ReTrMod	Retrip Mode		
TrPlsTmms	ABBIED600_Rev1_ING_SP_e	Trip pulse time	E	IEC 61850-7-4:2007
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Det-ValARes	ABBIED600_Rev3_ASG_SP_i_e	Current Detector Value for residual current	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Measurement mode selection (current): 2= DFT; 3= Peak-to-Peak	E	ABBIED600:2014
CBAlm-Tmms	ABBIED600_Rev1_ING_SP_e	Circuit breaker faulty alarm delay	E	ABBIED600:2014
OpExMod	ABBIED600_Rev2_ENG_SP_buTrip-Mode_e	Select type of backup trip logic	E	ABBIED600:2014
InStr	ABBIED600_Rev1_SPS_e	CBFP start command	E	ABBIED600:2014
InPosClis	ABBIED600_Rev1_SPS_e	CB in closed position	E	ABBIED600:2014
InCBFlt	ABBIED600_Rev1_SPS_e	CB faulty and unable to trip	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrLtcMod	ABBIED600_Rev2_ENG_SP_StrLtcMod_e	Start reset delayed or immediately	E	ABBIED600:2014

**6.2.49 LN: CCBRBRF3 Name: RBRF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev2_ENC_Mod_Of-fOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Delayed CB failure alarm		
OpEx	ABBIED600_Rev1_ACT_simple	Breaker failure trip (external trip)		
OpIn	ABBIED600_Rev1_ACT_simple	Operate, retrip (internal trip)		
FailMod	ABBIED600_Rev2_ENG_SP_FailMod	Breaker Failure Detection Mode (current, breaker status, both, other)		
FailTmms	ABBIED600_Rev1_ING_SP	Breaker Failure Time Delay for bus bar trip		
TPTTrTmms	ABBIED600_Rev1_ING_SP	Three Pole Retrip Time Delay		
DetValA	ABBIED600_Rev3_ASG_SP_i	Current Detector Value		
ReTrMod	ABBIED600_Rev2_ENG_SP_ReTrMod	Retrip Mode		
TrPlsTmms	ABBIED600_Rev1_ING_SP_e	Trip pulse time	E	IEC 61850-7-4:2007
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Det-ValARes	ABBIED600_Rev3_ASG_SP_i_e	Current Detector Value for residual current	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Measurement mode selection (current): 2= DFT; 3= Peak-to-Peak	E	ABBIED600:2014
CBAlm-Tmms	ABBIED600_Rev1_ING_SP_e	Circuit breaker faulty alarm delay	E	ABBIED600:2014
OpExMod	ABBIED600_Rev2_ENG_SP_buTrip-Mode_e	Select type of backup trip logic	E	ABBIED600:2014
InStr	ABBIED600_Rev1_SPS_e	CBFP start command	E	ABBIED600:2014
InPosClis	ABBIED600_Rev1_SPS_e	CB in closed position	E	ABBIED600:2014
InCBFlt	ABBIED600_Rev1_SPS_e	CB faulty and unable to trip	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrLtcMod	AB-BIED600_Rev2_ENG_SP_StrLtcMod_e	Start reset delayed or immediately	E	ABBIED600:2014

**6.2.50 LN: TRPPTRC1 Name: PTRC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	BLOCK		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Tr	ABBIED600_Rev1_ACT_simple_dU	General trip output signal		
Op	ABBIED600_Rev1_ACT_simple_dU	Operate input signal		
TrPlsTmms	ABBIED600_Rev1_ING_SP_1	Minimum duration of trip output signal		
TrOutMod	AB-BIED600_Rev2_ENG_SP_TrOut-Mod_e	Trip output mode	E	ABBIED600:2014
LORs	ABBIED600_Rev2_SPC_indications_e	RST_LKOUT	E	ABBIED600:2014,status-only,direct-with-normal-security
TrRs	ABBIED600_Rev2_SPC_indications_e	Reset latched trip	E	ABBIED600:2014,status-only,direct-with-normal-security
ClsLO	ABBIED600_Rev1_SPS_e	Circuit breaker lock-out output (set until reset)	E	ABBIED600:2014

### 6.2.51 LN: TRPPTRC2 Name: PTRC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	BLOCK		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Tr	ABBIED600_Rev1_ACT_simple_dU	General trip output signal		
Op	ABBIED600_Rev1_ACT_simple_dU	Operate input signal		
TrPlsTmms	ABBIED600_Rev1_ING_SP_1	Minimum duration of trip output signal		
TrOutMod	AB-BIED600_Rev2_ENG_SP_TrOut-Mod_e	Trip output mode	E	ABBIED600:2014
LORs	ABBIED600_Rev2_SPC_indications_e	RST_LKOUT	E	ABBIED600:2014,status-only,direct-with-normal-security
TrRs	ABBIED600_Rev2_SPC_indications_e	Reset latched trip	E	ABBIED600:2014,status-only,direct-with-normal-security
ClsLO	ABBIED600_Rev1_SPS_e	Circuit breaker lock-out output (set until reset)	E	ABBIED600:2014

**6.2.52 LN: TRPPTRC3 Name: PTRC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Tr	ABBIED600_Rev1_ACT_simple_dU	General trip output signal		
Op	ABBIED600_Rev1_ACT_simple_dU	Operate input signal		
TrPlsTmms	ABBIED600_Rev1_ING_SP_1	Minimum duration of trip output signal		
TrOutMod	AB-BIED600_Rev2_ENG_SP_TrOut-Mod_e	Trip output mode	E	ABBIED600:2014
LORs	ABBIED600_Rev2_SPC_indications_e	RST_LKOUT	E	ABBIED600:2014,status-only,direct-with-normal-security
TrRs	ABBIED600_Rev2_SPC_indications_e	Reset latched trip	E	ABBIED600:2014,status-only,direct-with-normal-security
ClsLO	ABBIED600_Rev1_SPS_e	Circuit breaker lock-out output (set until reset)	E	ABBIED600:2014

**6.2.53 LN: TRPPTRC4 Name: PTRC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Tr	ABBIED600_Rev1_ACT_simple_dU	General trip output signal		
Op	ABBIED600_Rev1_ACT_simple_dU	Operate input signal		
TrPlsTmms	ABBIED600_Rev1_ING_SP_1	Minimum duration of trip output signal		
TrOutMod	AB-BIED600_Rev2_ENG_SP_TrOut-Mod_e	Trip output mode	E	ABBIED600:2014
LORs	ABBIED600_Rev2_SPC_indications_e	RST_LKOUT	E	ABBIED600:2014,status-only,direct-with-normal-security
TrRs	ABBIED600_Rev2_SPC_indications_e	Reset latched trip	E	ABBIED600:2014,status-only,direct-with-normal-security

ClsLO	ABBIED600_Rev1_SPS_e	Circuit breaker lock-out output (set until reset)	E	ABBIED600:2014
-------	----------------------	---	---	----------------

#### 6.2.54 LN: LEDPTRC1 Name: PTRC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Op	ABBIED600_Rev1_ACT_full	Operate		
Str	ABBIED600_Rev1_ACD_full	Start		
InRs	ABBIED600_Rev1_SPS_simple_e	Reset	E	ABBIED600:2014
InOp	ABBIED600_Rev1_SPS_dU_e	Input operate	E	ABBIED600:2014
InStr	ABBIED600_Rev1_SPS_dU_e	Input start	E	ABBIED600:2014

#### 6.2.55 LN: MAPGAPC1 Name: GACP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate delay time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset delay time	E	IEC 61850-7-4:2007
AnIn	ABBIED600_Rev3_MV_2_e	Analogue input	E	IEC 61850-7-4:2007
OpModCom	ABBIED600_Rev2_ENG_SP_OpModComp_e	Operation mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
HysAbs	ABBIED600_Rev3_ASG_SP_i_e	Absolute hysteresis for operation	E	ABBIED600:2014
StrValAdd	ABBIED600_Rev3_ASG_SG_i_e	Start value Add	E	ABBIED600:2014
InEnaAdd	ABBIED600_Rev1_SPS_e	Enable start with added start value	E	ABBIED600:2014

**6.2.56 LN: MAPGAPC2 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate delay time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset delay time	E	IEC 61850-7-4:2007
AnIn	ABBIED600_Rev3_MV_2_e	Analogue input	E	IEC 61850-7-4:2007
OpModCom	ABBIED600_Rev2_ENG_SP_OperationModeComp_e	Operation mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
HysAbs	ABBIED600_Rev3_ASG_SP_i_e	Absolute hysteresis for operation	E	ABBIED600:2014
StrValAdd	ABBIED600_Rev3_ASG_SG_i_e	Start value Add	E	ABBIED600:2014
InEnaAdd	ABBIED600_Rev1_SPS_e	Enable start with added start value	E	ABBIED600:2014

**6.2.57 LN: MAPGAPC3 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate delay time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset delay time	E	IEC 61850-7-4:2007

AnIn	ABBIED600_Rev3_MV_2_e	Analogue input	E	IEC 61850-7-4:2007
OpModCom	ABBIED600_Rev2_ENG_SP_Op-ModComp_e	Operation mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
HysAbs	ABBIED600_Rev3_ASG_SP_i_e	Absolute hysteresis for operation	E	ABBIED600:2014
StrValAdd	ABBIED600_Rev3_ASG_SG_i_e	Start value Add	E	ABBIED600:2014
InEnaAdd	ABBIED600_Rev1_SPS_e	Enable start with added start value	E	ABBIED600:2014

### 6.2.58 LN: MAPGAPC4 Name: GACP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_Of-fOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate delay time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset delay time	E	IEC 61850-7-4:2007
AnIn	ABBIED600_Rev3_MV_2_e	Analogue input	E	IEC 61850-7-4:2007
OpModCom	ABBIED600_Rev2_ENG_SP_Op-ModComp_e	Operation mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
HysAbs	ABBIED600_Rev3_ASG_SP_i_e	Absolute hysteresis for operation	E	ABBIED600:2014
StrValAdd	ABBIED600_Rev3_ASG_SG_i_e	Start value Add	E	ABBIED600:2014
InEnaAdd	ABBIED600_Rev1_SPS_e	Enable start with added start value	E	ABBIED600:2014

**6.2.59 LN: MAPGAPC5 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate delay time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset delay time	E	IEC 61850-7-4:2007
AnIn	ABBIED600_Rev3_MV_2_e	Analogue input	E	IEC 61850-7-4:2007
OpModCom	ABBIED600_Rev2_ENG_SP_OperationModeComp_e	Operation mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
HysAbs	ABBIED600_Rev3_ASG_SP_i_e	Absolute hysteresis for operation	E	ABBIED600:2014
StrValAdd	ABBIED600_Rev3_ASG_SG_i_e	Start value Add	E	ABBIED600:2014
InEnaAdd	ABBIED600_Rev1_SPS_e	Enable start with added start value	E	ABBIED600:2014

**6.2.60 LN: MAPGAPC6 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate delay time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset delay time	E	IEC 61850-7-4:2007

AnIn	ABBIED600_Rev3_MV_2_e	Analogue input	E	IEC 61850-7-4:2007
OpModCom	ABBIED600_Rev2_ENG_SP_Op-ModComp_e	Operation mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
HysAbs	ABBIED600_Rev3_ASG_SP_i_e	Absolute hysteresis for operation	E	ABBIED600:2014
StrValAdd	ABBIED600_Rev3_ASG_SG_i_e	Start value Add	E	ABBIED600:2014
InEnaAdd	ABBIED600_Rev1_SPS_e	Enable start with added start value	E	ABBIED600:2014

### 6.2.61 LN: MAPGAPC7 Name: GACP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate delay time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset delay time	E	IEC 61850-7-4:2007
AnIn	ABBIED600_Rev3_MV_2_e	Analogue input	E	IEC 61850-7-4:2007
OpModCom	ABBIED600_Rev2_ENG_SP_Op-ModComp_e	Operation mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
HysAbs	ABBIED600_Rev3_ASG_SP_i_e	Absolute hysteresis for operation	E	ABBIED600:2014
StrValAdd	ABBIED600_Rev3_ASG_SG_i_e	Start value Add	E	ABBIED600:2014
InEnaAdd	ABBIED600_Rev1_SPS_e	Enable start with added start value	E	ABBIED600:2014

**6.2.62 LN: MAPGAPC8 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate delay time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset delay time	E	IEC 61850-7-4:2007
AnIn	ABBIED600_Rev3_MV_2_e	Analogue input	E	IEC 61850-7-4:2007
OpModCom	ABBIED600_Rev2_ENG_SP_OperationModeComp_e	Operation mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
HysAbs	ABBIED600_Rev3_ASG_SP_i_e	Absolute hysteresis for operation	E	ABBIED600:2014
StrValAdd	ABBIED600_Rev3_ASG_SG_i_e	Start value Add	E	ABBIED600:2014
InEnaAdd	ABBIED600_Rev1_SPS_e	Enable start with added start value	E	ABBIED600:2014

**6.2.63 LN: MAPGAPC9 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate delay time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset delay time	E	IEC 61850-7-4:2007

AnIn	ABBIED600_Rev3_MV_2_e	Analogue input	E	IEC 61850-7-4:2007
OpModCom	ABBIED600_Rev2_ENG_SP_Op-ModComp_e	Operation mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
HysAbs	ABBIED600_Rev3_ASG_SP_i_e	Absolute hysteresis for operation	E	ABBIED600:2014
StrValAdd	ABBIED600_Rev3_ASG_SG_i_e	Start value Add	E	ABBIED600:2014
InEnaAdd	ABBIED600_Rev1_SPS_e	Enable start with added start value	E	ABBIED600:2014

#### 6.2.64 LN: MAPGAPC10 Name: GAPP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_Of-fOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate delay time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset delay time	E	IEC 61850-7-4:2007
AnIn	ABBIED600_Rev3_MV_2_e	Analogue input	E	IEC 61850-7-4:2007
OpModCom	ABBIED600_Rev2_ENG_SP_Op-ModComp_e	Operation mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
HysAbs	ABBIED600_Rev3_ASG_SP_i_e	Absolute hysteresis for operation	E	ABBIED600:2014
StrValAdd	ABBIED600_Rev3_ASG_SG_i_e	Start value Add	E	ABBIED600:2014
InEnaAdd	ABBIED600_Rev1_SPS_e	Enable start with added start value	E	ABBIED600:2014

**6.2.65 LN: MAPGAPC11 Name: GAPC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate delay time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset delay time	E	IEC 61850-7-4:2007
AnIn	ABBIED600_Rev3_MV_2_e	Analogue input	E	IEC 61850-7-4:2007
OpModCom	ABBIED600_Rev2_ENG_SP_OperationModeComp_e	Operation mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
HysAbs	ABBIED600_Rev3_ASG_SP_i_e	Absolute hysteresis for operation	E	ABBIED600:2014
StrValAdd	ABBIED600_Rev3_ASG_SG_i_e	Start value Add	E	ABBIED600:2014
InEnaAdd	ABBIED600_Rev1_SPS_e	Enable start with added start value	E	ABBIED600:2014

**6.2.66 LN: MAPGAPC12 Name: GAPC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate delay time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset delay time	E	IEC 61850-7-4:2007

AnIn	ABBIED600_Rev3_MV_2_e	Analogue input	E	IEC 61850-7-4:2007
OpModCom	ABBIED600_Rev2_ENG_SP_Op-ModComp_e	Operation mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
HysAbs	ABBIED600_Rev3_ASG_SP_i_e	Absolute hysteresis for operation	E	ABBIED600:2014
StrValAdd	ABBIED600_Rev3_ASG_SG_i_e	Start value Add	E	ABBIED600:2014
InEnaAdd	ABBIED600_Rev1_SPS_e	Enable start with added start value	E	ABBIED600:2014

### 6.2.67 LN: MAPGAPC13 Name: GAPP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate delay time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset delay time	E	IEC 61850-7-4:2007
AnIn	ABBIED600_Rev3_MV_2_e	Analogue input	E	IEC 61850-7-4:2007
OpModCom	ABBIED600_Rev2_ENG_SP_Op-ModComp_e	Operation mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
HysAbs	ABBIED600_Rev3_ASG_SP_i_e	Absolute hysteresis for operation	E	ABBIED600:2014
StrValAdd	ABBIED600_Rev3_ASG_SG_i_e	Start value Add	E	ABBIED600:2014
InEnaAdd	ABBIED600_Rev1_SPS_e	Enable start with added start value	E	ABBIED600:2014

**6.2.68 LN: MAPGAPC14 Name: GAPC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate delay time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset delay time	E	IEC 61850-7-4:2007
AnIn	ABBIED600_Rev3_MV_2_e	Analogue input	E	IEC 61850-7-4:2007
OpModCom	ABBIED600_Rev2_ENG_SP_OperationModeComp_e	Operation mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
HysAbs	ABBIED600_Rev3_ASG_SP_i_e	Absolute hysteresis for operation	E	ABBIED600:2014
StrValAdd	ABBIED600_Rev3_ASG_SG_i_e	Start value Add	E	ABBIED600:2014
InEnaAdd	ABBIED600_Rev1_SPS_e	Enable start with added start value	E	ABBIED600:2014

**6.2.69 LN: MAPGAPC15 Name: GAPC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate delay time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset delay time	E	IEC 61850-7-4:2007

AnIn	ABBIED600_Rev3_MV_2_e	Analogue input	E	IEC 61850-7-4:2007
OpModCom	ABBIED600_Rev2_ENG_SP_Op-ModComp_e	Operation mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
HysAbs	ABBIED600_Rev3_ASG_SP_i_e	Absolute hysteresis for operation	E	ABBIED600:2014
StrValAdd	ABBIED600_Rev3_ASG_SG_i_e	Start value Add	E	ABBIED600:2014
InEnaAdd	ABBIED600_Rev1_SPS_e	Enable start with added start value	E	ABBIED600:2014

### 6.2.70 LN: MAPGAPC16 Name: GAPP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_Of-fOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate delay time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset delay time	E	IEC 61850-7-4:2007
AnIn	ABBIED600_Rev3_MV_2_e	Analogue input	E	IEC 61850-7-4:2007
OpModCom	ABBIED600_Rev2_ENG_SP_Op-ModComp_e	Operation mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
HysAbs	ABBIED600_Rev3_ASG_SP_i_e	Absolute hysteresis for operation	E	ABBIED600:2014
StrValAdd	ABBIED600_Rev3_ASG_SG_i_e	Start value Add	E	ABBIED600:2014
InEnaAdd	ABBIED600_Rev1_SPS_e	Enable start with added start value	E	ABBIED600:2014

**6.2.71 LN: MAPGAPC17 Name: GAPC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate delay time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset delay time	E	IEC 61850-7-4:2007
AnIn	ABBIED600_Rev3_MV_2_e	Analogue input	E	IEC 61850-7-4:2007
OpModCom	ABBIED600_Rev2_ENG_SP_OperationModeComp_e	Operation mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
HysAbs	ABBIED600_Rev3_ASG_SP_i_e	Absolute hysteresis for operation	E	ABBIED600:2014
StrValAdd	ABBIED600_Rev3_ASG_SG_i_e	Start value Add	E	ABBIED600:2014
InEnaAdd	ABBIED600_Rev1_SPS_e	Enable start with added start value	E	ABBIED600:2014

**6.2.72 LN: MAPGAPC18 Name: GAPC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate delay time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_e	Reset delay time	E	IEC 61850-7-4:2007

AnIn	ABBIED600_Rev3_MV_2_e	Analogue input	E	IEC 61850-7-4:2007
OpModCom	ABBIED600_Rev2_ENG_SP_Op-ModComp_e	Operation mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
HysAbs	ABBIED600_Rev3_ASG_SP_i_e	Absolute hysteresis for operation	E	ABBIED600:2014
StrValAdd	ABBIED600_Rev3_ASG_SG_i_e	Start value Add	E	ABBIED600:2014
InEnaAdd	ABBIED600_Rev1_SPS_e	Enable start with added start value	E	ABBIED600:2014

### 6.2.73 LN: SSCBR1 Name: SCBR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mod		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
ColOpn	ABBIED600_Rev1_SPS_simple	Open command of trip coil		
OpCntAlm	ABBIED600_Rev1_SPS	Number of CB operations exceeds alarm limit		
OpTmOpn	ABBIED600_Rev3_MV_simple_i	Travel time of the CB during opening operation		
OpTmCls	ABBIED600_Rev3_MV_simple_i	Travel time of the CB during closing operation		
OpTmAlm	ABBIED600_Rev1_SPS_simple	Switch operating time exceeded		
OpAlmNum	ABBIED600_Rev1_ING_SP_1	Setting of alarm for number of CB operations.		
OpCntRs	ABBIED600_Rev1_INC_simple_int	Number of CB operation cycle		status-only
InPosOpn	ABBIED600_Rev1_SPS_e	POSOPEN	E	ABBIED600:2014
InPosCls	ABBIED600_Rev1_SPS_e	POSCLOSE	E	ABBIED600:2014
ColCls	ABBIED600_Rev1_SPS_simple_e	Close command status	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_e	CB position is open	E	ABBIED600:2014
PosLvd	ABBIED600_Rev1_SPS_e	INVALIDPOS	E	ABBIED600:2014

PosCls	ABBIED600_Rev1_SPS_e	CB position is closed	E	ABBIED600:2014
OpnAlm	ABBIED600_Rev1_SPS_e	CB open travel time exceeded set value	E	ABBIED600:2014
ClsAlm	ABBIED600_Rev1_SPS_e	CB close travel time exceeded set value	E	ABBIED600:2014
OpCntLO	ABBIED600_Rev1_SPS_e	Number of CB operations exceeds lockout limit	E	ABBIED600:2014
LonTmAlm	ABBIED600_Rev1_SPS_e	CB 'not operated for long time' alarm	E	ABBIED600:2014
APwrAlm	ABBIED600_Rev1_SPS_e	Accumulated currents power (lyt),exceeded alarm limit	E	ABBIED600:2014
APwrLO	ABBIED600_Rev1_SPS_e	Accumulated currents power (lyt),exceeded lockout limit	E	ABBIED600:2014
RmnNumOpAlm	ABBIED600_Rev1_SPS_e	Remaining life of CB exceeded alarm limit	E	ABBIED600:2014
OpnAlmTmms	ABBIED600_Rev1_ING_SP_1_e	Setting of alarm level for open travel time in ms	E	ABBIED600:2014
CorOpnTmms	ABBIED600_Rev1_ING_SP_1_e	Correction factor for open travel time in ms	E	ABBIED600:2014
ClsAlmTmms	ABBIED600_Rev1_ING_SP_1_e	Setting of alarm level for close travel time in ms	E	ABBIED600:2014
CorClsTmms	ABBIED600_Rev1_ING_SP_1_e	Correction factor for CB close travel time in ms	E	ABBIED600:2014
CorDifTmms	ABBIED600_Rev1_ING_SP_1_e	Corr. factor for time dif in aux. and main contacts open time	E	ABBIED600:2014
OpLONum	ABBIED600_Rev1_ING_SP_1_e	Setting to block operation when number of operation is more.	E	ABBIED600:2014
OpNumRtg	ABBIED600_Rev1_ING_SP_1_e	Number of operations possible at rated current	E	ABBIED600:2014
NumOpAlmLev	ABBIED600_Rev1_ING_SP_1_e	Alarm level for CB remaining life	E	ABBIED600:2014
OpNumFlt	ABBIED600_Rev1_ING_SP_1_e	Number of operations possible at rated fault current	E	ABBIED600:2014

CntIniVal	ABBIED600_Rev1_ING_SP_1_e	The operation numbers counter initialization value	E	ABBIED600:2014
InaAlmTmd	ABBIED600_Rev1_ING_SP_1_e	Alarm limit value of the inactive days counter	E	ABBIED600:2014
IniInaTmd	ABBIED600_Rev1_ING_SP_1_e	Initial value of the inactive days counter	E	ABBIED600:2014
InaAlmTmh	ABBIED600_Rev1_ING_SP_1_e	Alarm time of the inactive days counter in hours	E	ABBIED600:2014
InaTmdCnt	ABBIED600_Rev1_INS_e	The number of days CB has been inactive	E	ABBIED600:2014
RsAccmAPwr	ABBIED600_Rev2_SPC_control_e	Reset accumulation energy	E	ABBIED600:2014,status-only,direct-with-normal-security
RsCBWear	ABBIED600_Rev2_SPC_control_e	Reset input for CB remaining life and operation counter	E	ABBIED600:2014,status-only,direct-with-normal-security
RsTrvTm	ABBIED600_Rev2_SPC_control_e	SSCBR1 travel t	E	ABBIED600:2014,status-only,direct-with-normal-security
TestSpvn	ABBIED600_Rev3_ENC_TestSpvn_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
TrvClcMod	AB-BIED600_Rev2_ENG_SP_TrvClcMod_e	Travel time calculation mode	E	ABBIED600:2014
DirCff	ABBIED600_Rev1_ASG_SP_f_e	Directional coefficient for CB life calculation	E	ABBIED600:2014
IniRm-nNumOp	ABBIED600_Rev1_ASG_SP_f_e	Initial value for the CB remaining life estimates	E	ABBIED600:2014
Al-mAccmAPwr	ABBIED600_Rev3_ASG_SP_i_e	Setting of alarm level for accumulated currents power, lyt	E	ABBIED600:2014
AccmStopA	ABBIED600_Rev3_ASG_SP_i_e	Setting of the RMS current below which engy acm stops	E	ABBIED600:2014
LOAccmAPwr	ABBIED600_Rev3_ASG_SP_i_e	Setting of lockout level for accumulated currents power, lyt	E	ABBIED600:2014
AExpn	ABBIED600_Rev1_ASG_SP_f_e	Current exponent setting for energy calculation	E	ABBIED600:2014

AOpRtg	ABBIED600_Rev3_ASG_SP_i_e	Rated operating current of the breaker	E	ABBIED600:2014
AFltRtg	ABBIED600_Rev3_ASG_SP_i_e	Rated fault current of the breaker	E	ABBIED600:2014
IniAccmAPwr	ABBIED600_Rev3_ASG_SP_i_e	Initial value for accumulation energy (lyt)	E	ABBIED600:2014

**6.2.74 LN: SPH1SCBR1 Name: SCBR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
ColOpn	ABBIED600_Rev1_SPS_simple	Open command of trip coil		
RmnNumOp	ABBIED600_Rev1_INS_d_e	CB Remaining life phase A	E	AB-BIED600:2014
AccmAPwr	ABBIED600_Rev3_MV_simple_i_e	Accumulated currents power (lyt), phase A	E	AB-BIED600:2014

**6.2.75 LN: SPH2SCBR1 Name: SCBR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
ColOpn	ABBIED600_Rev1_SPS_simple	Open command of trip coil		
RmnNumOp	ABBIED600_Rev1_INS_d_e	CB Remaining life phase B	E	AB-BIED600:2014
AccmAPwr	ABBIED600_Rev3_MV_simple_i_e	Accumulated currents power (lyt), phase B	E	AB-BIED600:2014

**6.2.76 LN: SPH3SCBR1 Name: SCBR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
ColOpn	ABBIED600_Rev1_SPS_simple	Open command of trip coil		
RmnNumOp	ABBIED600_Rev1_INS_d_e	CB Remaining life phase C	E	AB-BIED600:2014
AccmAPwr	ABBIED600_Rev3_MV_simple_i_e	Accumulated currents power (lyt), phase C	E	AB-BIED600:2014

**6.2.77 LN: SSIMG1 Name: SIMG (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
InsAlm	ABBIED600_Rev1_SPS	Pressure below alarm level		
InsBlk	ABBIED600_Rev1_SPS	Pressure below lockout level		
PresAlm	ABBIED600_Rev1_SPS	Binary pressure input for alarm		
PresBlk	ABBIED600_Rev1_SPS_e	Binary pressure input for lockout indication	E	AB-BIED600:2014
InsAlmTmms	ABBIED600_Rev1_ING_SP_1_e	Time delay for gas pressure alarm.	E	AB-BIED600:2014
InsBlkTmms	ABBIED600_Rev1_ING_SP_e	Time delay for gas pressure lock-out.	E	AB-BIED600:2014

### 6.2.78 LN: SSOPM1 Name: SOPM (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
SprChaAlm	ABBIED600_Rev1_SPS_e	Spring charging time has crossed the set value	E	ABBIED600:2014
SprChaStr	ABBIED600_Rev1_SPS_e	CB spring charging started input	E	ABBIED600:2014
SprChaStop	ABBIED600_Rev1_SPS_e	CB spring charged input	E	ABBIED600:2014
SprChaTmms	ABBIED600_Rev1_ING_SP_e	Setting of alarm for spring charging time of CB in ms.	E	ABBIED600:2014
TmsSprCha	ABBIED600_Rev3_MV_simple_i_e	The charging time of the CB spring	E	ABBIED600:2014
RsSprChaTm	ABBIED600_Rev2_SPC_control_e	SSCBR1 spr.charge t	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.79 LN: SSCBR2 Name: SCBR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mod		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
ColOpn	ABBIED600_Rev1_SPS_simple	Open command of trip coil		
OpCntAlm	ABBIED600_Rev1_SPS	Number of CB operations exceeds alarm limit		

OpTmOpn	ABBIED600_Rev3_MV_simple_i	Travel time of the CB during opening operation		
OpTmCls	ABBIED600_Rev3_MV_simple_i	Travel time of the CB during closing operation		
OpTmAlm	ABBIED600_Rev1_SPS_simple	Switch operating time exceeded		
OpAlmNum	ABBIED600_Rev1_ING_SP_1	Setting of alarm for number of CB operations.		
OpCntRs	ABBIED600_Rev1_INC_simple_int	Number of CB operation cycle		status-only
InPosOpn	ABBIED600_Rev1_SPS_e	POSOPEN	E	ABBIED600:2014
InPosCls	ABBIED600_Rev1_SPS_e	POSCLOSE	E	ABBIED600:2014
ClcCls	ABBIED600_Rev1_SPS_simple_e	Close command status	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_e	CB position is open	E	ABBIED600:2014
PosLvd	ABBIED600_Rev1_SPS_e	INVALIDPOS	E	ABBIED600:2014
PosCls	ABBIED600_Rev1_SPS_e	CB position is closed	E	ABBIED600:2014
OpnAlm	ABBIED600_Rev1_SPS_e	CB open travel time exceeded set value	E	ABBIED600:2014
ClsAlm	ABBIED600_Rev1_SPS_e	CB close travel time exceeded set value	E	ABBIED600:2014
OpCntLO	ABBIED600_Rev1_SPS_e	Number of CB operations exceeds lockout limit	E	ABBIED600:2014
LonTmAlm	ABBIED600_Rev1_SPS_e	CB 'not operated for long time' alarm	E	ABBIED600:2014
APwrAlm	ABBIED600_Rev1_SPS_e	Accumulated currents power (Iyt),exceeded alarm limit	E	ABBIED600:2014
APwrLO	ABBIED600_Rev1_SPS_e	Accumulated currents power (Iyt),exceeded lockout limit	E	ABBIED600:2014
RmnNumO-pAlm	ABBIED600_Rev1_SPS_e	Remaining life of CB exceeded alarm limit	E	ABBIED600:2014
OpnAlmTmms	ABBIED600_Rev1_ING_SP_1_e	Setting of alarm level for open travel time in ms	E	ABBIED600:2014
CorOpnTmms	ABBIED600_Rev1_ING_SP_1_e	Correction factor for open travel time in ms	E	ABBIED600:2014

ClsAlmTmms	ABBIED600_Rev1_ING_SP_1_e	Setting of alarm level for close travel time in ms	E	ABBIED600:2014
CorClsTmms	ABBIED600_Rev1_ING_SP_1_e	Correction factor for CB close travel time in ms	E	ABBIED600:2014
CorDifTmms	ABBIED600_Rev1_ING_SP_1_e	Corr. factor for time dif in aux. and main contacts open time	E	ABBIED600:2014
OpLONum	ABBIED600_Rev1_ING_SP_1_e	Setting to block operation when number of operation is more.	E	ABBIED600:2014
OpNumRtg	ABBIED600_Rev1_ING_SP_1_e	Number of operations possible at rated current	E	ABBIED600:2014
NumOpAlm-Lev	ABBIED600_Rev1_ING_SP_1_e	Alarm level for CB remaining life	E	ABBIED600:2014
OpNumFlt	ABBIED600_Rev1_ING_SP_1_e	Number of operations possible at rated fault current	E	ABBIED600:2014
CntIniVal	ABBIED600_Rev1_ING_SP_1_e	The operation numbers counter initialization value	E	ABBIED600:2014
InaAlmTmd	ABBIED600_Rev1_ING_SP_1_e	Alarm limit value of the inactive days counter	E	ABBIED600:2014
IniInaTmd	ABBIED600_Rev1_ING_SP_1_e	Initial value of the inactive days counter	E	ABBIED600:2014
InaAlmTmh	ABBIED600_Rev1_ING_SP_1_e	Alarm time of the inactive days counter in hours	E	ABBIED600:2014
InaTmdCnt	ABBIED600_Rev1_INS_e	The number of days CB has been inactive	E	ABBIED600:2014
RsAccmAPwr	ABBIED600_Rev2_SPC_control_e	Reset accumulation energy	E	ABBIED600:2014,status-only,direct-with-normal-security
RsCBWear	ABBIED600_Rev2_SPC_control_e	Reset input for CB remaining life and operation counter	E	ABBIED600:2014,status-only,direct-with-normal-security
RsTrvTm	ABBIED600_Rev2_SPC_control_e	SSCBR2 travel t	E	ABBIED600:2014,status-only,direct-with-normal-security
TestSpvn	ABBIED600_Rev3_ENC_TestSpvn_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
TrvClcMod	AB-BIED600_Rev2_ENG_SP_TrvClcMod_e	Travel time calculation mode	E	ABBIED600:2014

DirCff	ABBIED600_Rev1_ASG_SP_f_e	Directional coefficient for CB life calculation	E	ABBIED600:2014
IniRm-nNumOp	ABBIED600_Rev1_ASG_SP_f_e	Initial value for the CB remaining life estimates	E	ABBIED600:2014
Al-mAccmAPwr	ABBIED600_Rev3_ASG_SP_i_e	Setting of alarm level for accumulated currents power, lyt	E	ABBIED600:2014
AccmStopA	ABBIED600_Rev3_ASG_SP_i_e	Setting of the RMS current below which engy acm stops	E	ABBIED600:2014
LOAccmAPwr	ABBIED600_Rev3_ASG_SP_i_e	Setting of lockout level for accumulated currents power, lyt	E	ABBIED600:2014
AExpn	ABBIED600_Rev1_ASG_SP_f_e	Current exponent setting for energy calculation	E	ABBIED600:2014
AOpRtg	ABBIED600_Rev3_ASG_SP_i_e	Rated operating current of the breaker	E	ABBIED600:2014
AFltRtg	ABBIED600_Rev3_ASG_SP_i_e	Rated fault current of the breaker	E	ABBIED600:2014
IniAccmAPwr	ABBIED600_Rev3_ASG_SP_i_e	Initial value for accumulation energy (lyt)	E	ABBIED600:2014

### 6.2.80 LN: SPH1SCBR2 Name: SCBR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
ColOpn	ABBIED600_Rev1_SPS_simple	Open command of trip coil		
RmnNumOp	ABBIED600_Rev1_INS_d_e	CB Remaining life phase A	E	AB-BIED600:2014
AccmAPwr	ABBIED600_Rev3_MV_simple_i_e	Accumulated currents power (lyt), phase A	E	AB-BIED600:2014

### 6.2.81 LN: SPH2SCBR2 Name: SCBR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
ColOpn	ABBIED600_Rev1_SPS_simple	Open command of trip coil		

RmnNumOp	ABBIED600_Rev1_INS_d_e	CB Remaining life phase B	E	AB-BIED600:2014
AccmAPwr	ABBIED600_Rev3_MV_simple_i_e	Accumulated currents power (lyt), phase B	E	AB-BIED600:2014

#### 6.2.82 LN: SPH3SCBR2 Name: SCBR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
ColOpn	ABBIED600_Rev1_SPS_simple	Open command of trip coil		
RmnNumOp	ABBIED600_Rev1_INS_d_e	CB Remaining life phase C	E	AB-BIED600:2014
AccmAPwr	ABBIED600_Rev3_MV_simple_i_e	Accumulated currents power (lyt), phase C	E	AB-BIED600:2014

#### 6.2.83 LN: SSIMG2 Name: SIMG (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
InsAlm	ABBIED600_Rev1_SPS	Pressure below alarm level		
InsBlk	ABBIED600_Rev1_SPS	Pressure below lockout level		
PresAlm	ABBIED600_Rev1_SPS	Binary pressure input for alarm		
PresBlk	ABBIED600_Rev1_SPS_e	Binary pressure input for lockout indication	E	AB-BIED600:2014
InsAlmTmms	ABBIED600_Rev1_ING_SP_1_e	Time delay for gas pressure alarm.	E	AB-BIED600:2014
InsBlkTmms	ABBIED600_Rev1_ING_SP_e	Time delay for gas pressure lock-out.	E	AB-BIED600:2014

#### 6.2.84 LN: SSOPM2 Name: SOPM (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
SprChaAlm	ABBIED600_Rev1_SPS_e	Spring charging time has crossed the set value	E	ABBIED600:2014
SprChaStr	ABBIED600_Rev1_SPS_e	CB spring charging started input	E	ABBIED600:2014
SprChaStop	ABBIED600_Rev1_SPS_e	CB spring charged input	E	ABBIED600:2014

SprChaTmms	ABBIED600_Rev1_ING_SP_e	Setting of alarm for spring charging time of CB in ms.	E	ABBIED600:2014
TmsSprCha	ABBIED600_Rev3_MV_simple_i_e	The charging time of the CB spring	E	ABBIED600:2014
RsSprChaTm	ABBIED600_Rev2_SPC_control_e	SSCBR2 spr.charge t	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.85 LN: SSCBR3 Name: SCBR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mod		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
ColOpn	ABBIED600_Rev1_SPS_simple	Open command of trip coil		
OpCntAlm	ABBIED600_Rev1_SPS	Number of CB operations exceeds alarm limit		
OpTmOpn	ABBIED600_Rev3_MV_simple_i	Travel time of the CB during opening operation		
OpTmCls	ABBIED600_Rev3_MV_simple_i	Travel time of the CB during closing operation		
OpTmAlm	ABBIED600_Rev1_SPS_simple	Switch operating time exceeded		
OpAlmNum	ABBIED600_Rev1_ING_SP_1	Setting of alarm for number of CB operations.		
OpCntRs	ABBIED600_Rev1_INC_simple_int	Number of CB operation cycle		status-only
InPosOpn	ABBIED600_Rev1_SPS_e	POSOPEN	E	ABBIED600:2014
InPosCls	ABBIED600_Rev1_SPS_e	POSCLOSE	E	ABBIED600:2014
ColCls	ABBIED600_Rev1_SPS_simple_e	Close command status	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_e	CB position is open	E	ABBIED600:2014
PosLvd	ABBIED600_Rev1_SPS_e	INVALIDPOS	E	ABBIED600:2014
PosCls	ABBIED600_Rev1_SPS_e	CB position is closed	E	ABBIED600:2014
OpnAlm	ABBIED600_Rev1_SPS_e	CB open travel time exceeded set value	E	ABBIED600:2014
ClsAlm	ABBIED600_Rev1_SPS_e	CB close travel time exceeded set value	E	ABBIED600:2014

OpCntLO	ABBIED600_Rev1_SPS_e	Number of CB operations exceeds lockout limit	E	ABBIED600:2014
LonTmAlm	ABBIED600_Rev1_SPS_e	CB 'not operated for long time' alarm	E	ABBIED600:2014
APwrAlm	ABBIED600_Rev1_SPS_e	Accumulated currents power (Iyt),exceeded alarm limit	E	ABBIED600:2014
APwrLO	ABBIED600_Rev1_SPS_e	Accumulated currents power (Iyt),exceeded lockout limit	E	ABBIED600:2014
RmnNumOpAlm	ABBIED600_Rev1_SPS_e	Remaining life of CB exceeded alarm limit	E	ABBIED600:2014
OpnAlmTmms	ABBIED600_Rev1_ING_SP_1_e	Setting of alarm level for open travel time in ms	E	ABBIED600:2014
CorOpnTmms	ABBIED600_Rev1_ING_SP_1_e	Correction factor for open travel time in ms	E	ABBIED600:2014
ClsAlmTmms	ABBIED600_Rev1_ING_SP_1_e	Setting of alarm level for close travel time in ms	E	ABBIED600:2014
CorClsTmms	ABBIED600_Rev1_ING_SP_1_e	Correction factor for CB close travel time in ms	E	ABBIED600:2014
CorDifTmms	ABBIED600_Rev1_ING_SP_1_e	Corr. factor for time dif in aux. and main contacts open time	E	ABBIED600:2014
OpLONum	ABBIED600_Rev1_ING_SP_1_e	Setting to block operation when number of operation is more.	E	ABBIED600:2014
OpNumRtg	ABBIED600_Rev1_ING_SP_1_e	Number of operations possible at rated current	E	ABBIED600:2014
NumOpAlmLev	ABBIED600_Rev1_ING_SP_1_e	Alarm level for CB remaining life	E	ABBIED600:2014
OpNumFlt	ABBIED600_Rev1_ING_SP_1_e	Number of operations possible at rated fault current	E	ABBIED600:2014
CntInival	ABBIED600_Rev1_ING_SP_1_e	The operation numbers counter initialization value	E	ABBIED600:2014
InaAlmTmd	ABBIED600_Rev1_ING_SP_1_e	Alarm limit value of the inactive days counter	E	ABBIED600:2014

IniInaTmd	ABBIED600_Rev1_ING_SP_1_e	Initial value of the inactive days counter	E	ABBIED600:2014
InaAlmTmh	ABBIED600_Rev1_ING_SP_1_e	Alarm time of the inactive days counter in hours	E	ABBIED600:2014
InaTmdCnt	ABBIED600_Rev1_INS_e	The number of days CB has been inactive	E	ABBIED600:2014
RsAccmAPwr	ABBIED600_Rev2_SPC_control_e	Reset accumulation energy	E	ABBIED600:2014,status-only,direct-with-normal-security
RsCBWear	ABBIED600_Rev2_SPC_control_e	Reset input for CB remaining life and operation counter	E	ABBIED600:2014,status-only,direct-with-normal-security
RsTrvTm	ABBIED600_Rev2_SPC_control_e	SSCBR3 travel t	E	ABBIED600:2014,status-only,direct-with-normal-security
TestSpvn	ABBIED600_Rev3_ENC_TestSpvn_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
TrvClcMod	AB-BIED600_Rev2_ENG_SP_TrvClcMod_e	Travel time calculation mode	E	ABBIED600:2014
DirCff	ABBIED600_Rev1_ASG_SP_f_e	Directional coefficient for CB life calculation	E	ABBIED600:2014
IniRmnNumOp	ABBIED600_Rev1_ASG_SP_f_e	Initial value for the CB remaining life estimates	E	ABBIED600:2014
AlmAccmAPwr	ABBIED600_Rev3_ASG_SP_i_e	Setting of alarm level for accumulated currents power, lyt	E	ABBIED600:2014
AccmStopA	ABBIED600_Rev3_ASG_SP_i_e	Setting of the RMS current below which engy acm stops	E	ABBIED600:2014
LOAccmAPwr	ABBIED600_Rev3_ASG_SP_i_e	Setting of lockout level for accumulated currents power, lyt	E	ABBIED600:2014
AExpn	ABBIED600_Rev1_ASG_SP_f_e	Current exponent setting for energy calculation	E	ABBIED600:2014
AOpRtg	ABBIED600_Rev3_ASG_SP_i_e	Rated operating current of the breaker	E	ABBIED600:2014
AFltRtg	ABBIED600_Rev3_ASG_SP_i_e	Rated fault current of the breaker	E	ABBIED600:2014
IniAccmAPwr	ABBIED600_Rev3_ASG_SP_i_e	Initial value for accumulation energy (lyt)	E	ABBIED600:2014

**6.2.86 LN: SPH1SCBR3 Name: SCBR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
ColOpn	ABBIED600_Rev1_SPS_simple	Open command of trip coil		
RmnNumOp	ABBIED600_Rev1_INS_d_e	CB Remaining life phase A	E	AB-BIED600:2014
AccmAPwr	ABBIED600_Rev3_MV_simple_i_e	Accumulated currents power (lyt), phase A	E	AB-BIED600:2014

**6.2.87 LN: SPH2SCBR3 Name: SCBR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
ColOpn	ABBIED600_Rev1_SPS_simple	Open command of trip coil		
RmnNumOp	ABBIED600_Rev1_INS_d_e	CB Remaining life phase B	E	AB-BIED600:2014
AccmAPwr	ABBIED600_Rev3_MV_simple_i_e	Accumulated currents power (lyt), phase B	E	AB-BIED600:2014

**6.2.88 LN: SPH3SCBR3 Name: SCBR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
ColOpn	ABBIED600_Rev1_SPS_simple	Open command of trip coil		
RmnNumOp	ABBIED600_Rev1_INS_d_e	CB Remaining life phase C	E	AB-BIED600:2014
AccmAPwr	ABBIED600_Rev3_MV_simple_i_e	Accumulated currents power (lyt), phase C	E	AB-BIED600:2014

**6.2.89 LN: SSIMG3 Name: SIMG (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
InsAlm	ABBIED600_Rev1_SPS	Pressure below alarm level		
InsBlk	ABBIED600_Rev1_SPS	Pressure below lockout level		
PresAlm	ABBIED600_Rev1_SPS	Binary pressure input for alarm		
PresBlk	ABBIED600_Rev1_SPS_e	Binary pressure input for lockout indication	E	AB-BIED600:2014

InsAlmTmms	ABBIED600_Rev1_ING_SP_1_e	Time delay for gas pressure alarm.	E	AB-BIED600:2014
InsBlkTmms	ABBIED600_Rev1_ING_SP_e	Time delay for gas pressure lock-out.	E	AB-BIED600:2014

**6.2.90 LN: SSOPM3 Name: SOPM (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
SprChaAlm	ABBIED600_Rev1_SPS_e	Spring charging time has crossed the set value	E	ABBIED600:2014
SprChaStr	ABBIED600_Rev1_SPS_e	CB spring charging started input	E	ABBIED600:2014
SprChaStop	ABBIED600_Rev1_SPS_e	CB spring charged input	E	ABBIED600:2014
SprChaTmms	ABBIED600_Rev1_ING_SP_e	Setting of alarm for spring charging time of CB in ms.	E	ABBIED600:2014
TmsSprCha	ABBIED600_Rev3_MV_simple_i_e	The charging time of the CB spring	E	ABBIED600:2014
RsSprChaTm	ABBIED600_Rev2_SPC_control_e	SSCBR3 spr.charge t	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.91 LN: TCSSCBR1 Name: SCBR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
OpDITmms	ABBIED600_Rev1_ING_SP_1_e	Operate Delay Time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_1_e	Reset Delay Time	E	IEC 61850-7-4:2007
CircAlm	ABBIED600_Rev1_SPS_e	Alarm	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
ColOpn	ABBIED600_Rev1_SPS_simple	Open command of trip coil		

**6.2.92 LN: TCSSCBR2 Name: SCBR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
OpDITmms	ABBIED600_Rev1_ING_SP_1_e	Operate Delay Time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_1_e	Reset Delay Time	E	IEC 61850-7-4:2007
CircAlm	ABBIED600_Rev1_SPS_e	Alarm	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
ColOpn	ABBIED600_Rev1_SPS_simple	Open command of trip coil		

### 6.2.93 LN: CMMXU1 Name: MMXU (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Operation		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
A	ABBIED600_Rev3_WYE_threephase_full_i	Phase currents		
AMeas-Mod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Selects used measurement mode	E	ABBIED600:2014
NumPh	ABBIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required by limit supervision	E	ABBIED600:2014
HiAlm	ABBIED600_Rev1_SPS_e	High alarm	E	ABBIED600:2014
HiWrn	ABBIED600_Rev1_SPS_e	High warning	E	ABBIED600:2014
LoWrn	ABBIED600_Rev1_SPS_e	Low warning	E	ABBIED600:2014
LoAlm	ABBIED600_Rev1_SPS_e	Low alarm	E	ABBIED600:2014
RcdRs	ABBIED600_Rev2_SPC_control_e	CMMXU1 demands	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.94 LN: PEMMXU1 Name: MMXU (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
TotW	ABBIED600_Rev4_MV_3	Total Active Power (Total P)		

TotVAr	ABBIED600_Rev4_MV_3	Total Reactive Power (Total Q)		
TotVA	ABBIED600_Rev4_MV_3	Total Apparent Power (Total S)		
TotPF	ABBIED600_Rev4_MV_4	Average Power factor (Total PF)		
WhDir	ABBIED600_Rev2_ENG_SP_Dir-Mod2_e	Active power Dir	E	ABBIED600:2014
VArhDir	ABBIED600_Rev2_ENG_SP_Dir-Mod2_e	Reactive power Dir	E	ABBIED600:2014
RcdRs	ABBIED600_Rev2_SPC_control_e	PEMMXU1 demands	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.95 LN: PEMMTR1 Name: MMTR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
SupWh	ABBIED600_Rev4_BCR_2	EA_RV_ACM		
SupVArh	ABBIED600_Rev4_BCR_2	ER_RV_ACM		
DmdWh	ABBIED600_Rev4_BCR_2	EA_FWD_ACM		
DmdVArh	ABBIED600_Rev4_BCR_2	ER_FWD_ACM		
IniDmdWh	AB-BIED600_Rev1_ING_SP_1_e	Preset Initial value for forward active energy	E	ABBIED600:2014
IniSupWh	AB-BIED600_Rev1_ING_SP_1_e	Preset Initial value for reverse active energy	E	ABBIED600:2014
IniDmdVArh	AB-BIED600_Rev1_ING_SP_1_e	Preset Initial value for forward reactive energy	E	ABBIED600:2014
IniSupVArh	AB-BIED600_Rev1_ING_SP_1_e	Preset Initial value for reverse reactive energy	E	ABBIED600:2014
SupDmdRs	ABBIED600_Rev2_SPC_control_e	Reset of accumulated energy readings	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.96 LN: FMMXU1 Name: MMXU (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Operation		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Hz	ABBIED600_Rev4_MV_5	Frequency		
DefHzSel	AB-BIED600_Rev1_ENG_SP_DefHzSel_e	Default frequency selection	E	ABBIED600:2014

### 6.2.97 LN: CMHAI1 Name: MHAI (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Operation		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Hz	ABBIED600_Rev3_MV_simple_i	Fundamental frequency		
TddA	ABBIED600_Rev3_WYE_threephase_simple_i	Current Total Demand Distortion per IEEE 519		
NomA	ABBIED600_Rev3_ASG_SP_i	Normalising demand current used in IEEE 519 TDD calculation		
Alm	ABBIED600_Rev1_SPS	Alarm		
TddAVal	ABBIED600_Rev3_ASG_SP_i_e	TddA Alarm setting - value entered in %	E	ABBIED600:2014
RcdRs	ABBIED600_Rev2_SPC_control_e	CMHAI1 max.demands	E	ABBIED600:2014,status-only,direct-with-normal-security
Dmdltrv	ABBIED600_Rev2_ENG_SP_dmdltrv_e	Time interval for demand calculation	E	ABBIED600:2014
DmdTddA	ABBIED600_Rev3_WYE_threephase_simple_i_e	Current Total Demand Distortion	E	ABBIED600:2014
MaxDmdTddA	ABBIED600_Rev3_WYE_threephase_simple_i_e	Maximum current total demand distortion	E	ABBIED600:2014
DmdWinMod	AB-BIED600_Rev2_ENG_SP_DmdWinMod_e	Demand calculation window	E	ABBIED600:2014

### 6.2.98 LN: VMHAI1 Name: Mhai (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Operation		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Hz	ABBIED600_Rev3_MV_simple_i	Fundamental frequency		
ThdPhV	ABBIED600_Rev3_WYE_threephase_simple_i	Voltage Total Harmonic Distortion per IEEE 519		

ThdVVal	ABBIED600_Rev3_ASG_SP_i	ThdPhV / ThdPPV alarm Setting – value entered in %		
Alm	ABBIED600_Rev1_SPS	Alarm		
RcdRs	ABBIED600_Rev2_SPC_control_e	VMHAI1 max.demands	E	ABBIED600:2014,status-only,direct-with-normal-security
Dmdltrv	ABBIED600_Rev2_ENG_SP_dmdltrv_e	Time interval for demand calculation	E	ABBIED600:2014
DmdThdPhV	ABBIED600_Rev3_WYE_threephase_simple_i_e	Voltage Total Harmonic Distortion	E	ABBIED600:2014
MaxDmdThdV	ABBIED600_Rev3_WYE_threephase_simple_i_e	Maximum voltage total harmonic distortion	E	ABBIED600:2014
DmdWinMod	AB-BIED600_Rev2_ENG_SP_DmdWinMod_e	Demand calculation window	E	ABBIED600:2014

### 6.2.99 LN: PH1QVVR1 Name: QVVR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
VarStr	ABBIED600_Rev1_SPS	Start Phase A (Voltage Variation Event in progress)		
DipStr	ABBIED600_Rev1_SPS	Start (Voltage Dip Event in progress)		
SwlStr	ABBIED600_Rev1_SPS	Start (Voltage Swell Event in progress)		
IntrStr	ABBIED600_Rev1_SPS	Start (Voltage Interruption Event in progress)		
VarEnd	ABBIED600_Rev1_SPS	Event finished but not Reset		
VVa	ABBIED600_Rev3_MV_simple_i	Voltage Variation Magnitude of the last completed event		
VVaTm	ABBIED600_Rev3_MV_simple_i	Voltage Variation Duration of the last completed event		
OpCntRs	ABBIED600_Rev2_INC_control_int	Resettable operation counter		status-only,direct-with-normal-security

DipStrVal	ABBIED600_Rev3_ASG_SG_i	Voltage Dip Set Point 1		
DipStr2Val	ABBIED600_Rev3_ASG_SG_i_e	Voltage Dip Set Point 2	E	ABBIED600:2014
DipStr3Val	ABBIED600_Rev3_ASG_SG_i_e	Voltage Dip Set Point 3	E	ABBIED600:2014
SwlStrVal	ABBIED600_Rev3_ASG_SG_i	Voltage Swell Set Point 1		
SwlStr2Val	ABBIED600_Rev3_ASG_SG_i_e	Voltage Swell Set Point 2	E	ABBIED600:2014
SwlStr3Val	ABBIED600_Rev3_ASG_SG_i_e	Voltage Swell Set Point 3	E	ABBIED600:2014
IntrStrVal	ABBIED600_Rev3_ASG_SG_i	Voltage Interruption Set Point		
RefV	ABBIED600_Rev3_ASG_SG_i_e	Reference supply voltage in %	E	IEC 61850-7-4:2007
Dip1Cyc	ABBIED600_Rev3_ASG_SG_i_e	Voltage variation dip duration 1	E	ABBIED600:2014
Dip2Cyc	ABBIED600_Rev3_ASG_SG_i_e	Voltage variation dip duration 2	E	ABBIED600:2014
Dip3Tmms	ABBIED600_Rev1_ING_SG_e	Voltage variation dip duration 3	E	ABBIED600:2014
Swl1Cyc	ABBIED600_Rev3_ASG_SG_i_e	Voltage variation swell duration 1	E	ABBIED600:2014
Swl2Cyc	ABBIED600_Rev3_ASG_SG_i_e	Voltage variation swell duration 2	E	ABBIED600:2014
Swl3Tmms	ABBIED600_Rev1_ING_SG_e	Voltage variation swell duration 3	E	ABBIED600:2014
Intr1Cyc	ABBIED600_Rev3_ASG_SG_i_e	Voltage variation interruption duration 1	E	ABBIED600:2014
Intr2Cyc	ABBIED600_Rev3_ASG_SG_i_e	Voltage variation interruption duration 2	E	ABBIED600:2014
Intr3Tmms	ABBIED600_Rev1_ING_SG_e	Voltage variation interruption duration 3	E	ABBIED600:2014
MaxDurTmms	ABBIED600_Rev1_ING_SG_e	Maximum voltage variation duration	E	ABBIED600:2014
SwlOp	ABBIED600_Rev1_SPS_e	Voltage Event Swell detected	E	ABBIED600:2014
DipOp	ABBIED600_Rev1_SPS_e	Voltage Event Dip detected	E	ABBIED600:2014
IntrOp	ABBIED600_Rev1_SPS_e	Voltage Event Interruption detected	E	ABBIED600:2014
APreVa	ABBIED600_Rev3_MV_simple_i_e	Current magnitude Ph A preceding variation	E	ABBIED600:2014

SwlInstCnt	ABBIED600_Rev1_INS_e	Instantaneous swell operation counter	E	ABBIED600:2014
SwlMomCnt	ABBIED600_Rev1_INS_e	Momentary swell operation counter	E	ABBIED600:2014
SwlTmpCnt	ABBIED600_Rev1_INS_e	Temporary swell operation counter	E	ABBIED600:2014
SwlMaxCnt	ABBIED600_Rev1_INS_e	Maximum duration swell operation counter	E	ABBIED600:2014
DipInstCnt	ABBIED600_Rev1_INS_e	Instantaneous dip operation counter	E	ABBIED600:2014
DipTmpCnt	ABBIED600_Rev1_INS_e	Temporary dip operation counter	E	ABBIED600:2014
DipMomCnt	ABBIED600_Rev1_INS_e	Momentary dip operation counter	E	ABBIED600:2014
DipMaxCnt	ABBIED600_Rev1_INS_e	Maximum duration dip operation counter	E	ABBIED600:2014
IntrMomCnt	ABBIED600_Rev1_INS_e	Momentary interruption operation counter	E	ABBIED600:2014
IntrTmpCnt	ABBIED600_Rev1_INS_e	Temporary interruption operation counter	E	ABBIED600:2014
IntrSstCnt	ABBIED600_Rev1_INS_e	Sustained interruption operation counter	E	ABBIED600:2014
IntrMaxCnt	ABBIED600_Rev1_INS_e	Maximum duration interruption operation counter	E	ABBIED600:2014
CntRs	ABBIED600_Rev2_SPC_control_e	Counters reset	E	ABBIED600:2014,status-only,direct-with-normal-security
PhSpvn	ABBIED600_Rev2_ENG_SP_PhSv_e	Monitored phase	E	ABBIED600:2014
OpModPh	ABBIED600_Rev2_ENG_SP_Op-ModPh_e	Phase mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
VVaEna	AB-BIED600_Rev3_ENG_SP_VVaTyp_e	Variation enable	E	ABBIED600:2014
VaOp	ABBIED600_Rev1_SPS_e	Voltage Event detected	E	ABBIED600:2014
VaStrGen	ABBIED600_Rev1_SPS_e	Start (Voltage Variation Event in progress)	E	ABBIED600:2014
VVaTyp	ABBIED600_Rev3_ENS_VVaTyp_e	Voltage variation type	E	ABBIED600:2014

RcdRs	ABBIED600_Rev2_SPC_control_e	Recorded data re-set	E	ABBIED600:2014,status-only,direct-with-normal-security
-------	------------------------------	----------------------	---	--

**6.2.100 LN: PH2QVVR1 Name: QVVR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
VarStr	ABBIED600_Rev1_SPS	Start Phase B (Voltage Variation Event in progress)		
VVa	ABBIED600_Rev3_MV_simple_i	Voltage Variation Magnitude of the last completed event		
VVaTm	ABBIED600_Rev3_MV_simple_i	Voltage Variation Duration of the last completed event		
APreVa	ABBIED600_Rev3_MV_simple_i_e	Current magnitude Phase B preceding variation	E	AB-BIED600:2014

**6.2.101 LN: PH3QVVR1 Name: QVVR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
VarStr	ABBIED600_Rev1_SPS	Start Phase C (Voltage Variation Event in progress)		
VVa	ABBIED600_Rev3_MV_simple_i	Voltage Variation Magnitude of the last completed event		
VVaTm	ABBIED600_Rev3_MV_simple_i	Voltage Variation Duration of the last completed event		
APreVa	ABBIED600_Rev3_MV_simple_i_e	Current magnitude Ph C preceding variation	E	AB-BIED600:2014

**6.2.102 LN: VSQVUB1 Name: QVUB (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
VarStr	ABBIED600_Rev1_SPS	Start of the event		
MaxVVA	ABBIED600_Rev3_MV_simple_i	Maximum unbalance deviation value		
UnbDetMth	ABBIED600_Rev1_ENG_SP_UnbDetMth	Unbalance detection method		
StrVal	ABBIED600_Rev3_ASG_SP_i	Voltage unbalance start value		

TrgModPQ	ABBIED600_Rev2_ENG_SP_TrgModPQ_e	Observation period triggering mode	E	ABBIED600:2014
ObsPerSel	ABBIED600_Rev2_ENG_SP_ObsPerSel_e	Observation period duration	E	ABBIED600:2014
ObsPerUsr	ABBIED600_Rev1_ING_SP_1_e	User defined observation period	E	ABBIED600:2014
HiPctVUnb	ABBIED600_Rev1_SPS_e	Status percentile unbalance exceeds the limit	E	ABBIED600:2014
ObsPerAct	ABBIED600_Rev1_SPS_e	Observation period for statistical calculation active	E	ABBIED600:2014
PctUnbVal	ABBIED600_Rev3_MV_simple_i_e	Percentile value of voltage unbalance in an observation	E	ABBIED600:2014
VUnb3sMn	ABBIED600_Rev3_MV_simple_i_e	Non sliding 3 second mean value of voltage unbalance	E	ABBIED600:2014
VUnb10mMn	ABBIED600_Rev3_MV_simple_i_e	Sliding 10 minutes mean value of voltage unbalance	E	ABBIED600:2014
PctUnb	ABBIED600_Rev3_ASG_SP_i_e	Percentile Index	E	ABBIED600:2014
ObsPerStr	ABBIED600_Rev1_SPS_simple_e	Observation Start	E	ABBIED600:2014
ObsPerEnd	ABBIED600_Rev1_SPS_simple_e	Observation End	E	ABBIED600:2014
TestOth	ABBIED600_Rev1_ENC_TestOth_e	Test Outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
TrgObsPer	ABBIED600_Rev2_SPC_control_e	Trigger for observation period	E	ABBIED600:2014,status-only,direct-with-normal-security
RcdRs	ABBIED600_Rev2_SPC_control_e	Recorded data reset	E	ABBIED600:2014,status-only,direct-with-normal-security
PerStrDate	ABBIED600_Rev2_TSG_SP_set-Cal_e	Observation start time	E	ABBIED600:2014

### 6.2.103 LN: TPGAPC1 Name: GACP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	IN1		
Ind2	ABBIED600_Rev1_SPS	IN2		
SPCSO1	ABBIED600_Rev1_SPC_simple	Q1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Q2		status-only
PlsTmms	ABBIED600_Rev1_ING_SP_1_e	Minimum pulse time	E	ABBIED600:2014

### 6.2.104 LN: TPGAPC2 Name: GACP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	IN1		
Ind2	ABBIED600_Rev1_SPS	IN2		
SPCSO1	ABBIED600_Rev1_SPC_simple	Q1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Q2		status-only
PlsTmms	ABBIED600_Rev1_ING_SP_1_e	Minimum pulse time	E	ABBIED600:2014

**6.2.105 LN: TPGAPC3 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	IN1		
Ind2	ABBIED600_Rev1_SPS	IN2		
SPCSO1	ABBIED600_Rev1_SPC_simple	Q1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Q2		status-only
PlsTmms	ABBIED600_Rev1_ING_SP_1_e	Minimum pulse time	E	ABBIED600:2014

**6.2.106 LN: TPGAPC4 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	IN1		
Ind2	ABBIED600_Rev1_SPS	IN2		
SPCSO1	ABBIED600_Rev1_SPC_simple	Q1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Q2		status-only
PlsTmms	ABBIED600_Rev1_ING_SP_1_e	Minimum pulse time	E	ABBIED600:2014

**6.2.107 LN: TPSGAPC1 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	IN1		
Ind2	ABBIED600_Rev1_SPS	IN2		
SPCSO1	ABBIED600_Rev1_SPC_simple	Q1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Q2		status-only
PlsTms	ABBIED600_Rev1_ING_SP_1_e	Minimum pulse time	E	ABBIED600:2014

**6.2.108 LN: TPSGAPC2 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	IN1		

Ind2	ABBIED600_Rev1_SPS	IN2		
SPCSO1	ABBIED600_Rev1_SPC_simple	Q1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Q2		status-only
PlsTms	ABBIED600_Rev1_ING_SP_1_e	Minimum pulse time	E	ABBIED600:2014

**6.2.109 LN: TPMGAPC1 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	IN1		
Ind2	ABBIED600_Rev1_SPS	IN2		
SPCSO1	ABBIED600_Rev1_SPC_simple	Q1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Q2		status-only
PlsTmm	ABBIED600_Rev1_ING_SP_1_e	Minimum pulse time	E	ABBIED600:2014

**6.2.110 LN: TPMGAPC2 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	IN1		
Ind2	ABBIED600_Rev1_SPS	IN2		
SPCSO1	ABBIED600_Rev1_SPC_simple	Q1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Q2		status-only
PlsTmm	ABBIED600_Rev1_ING_SP_1_e	Minimum pulse time	E	ABBIED600:2014

**6.2.111 LN: PTGAPC1 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	Input 1		
Ind2	ABBIED600_Rev1_SPS	Input 2		
Ind3	ABBIED600_Rev1_SPS	Input 3		
Ind4	ABBIED600_Rev1_SPS	Input 4		
Ind5	ABBIED600_Rev1_SPS	Input 5		
Ind6	ABBIED600_Rev1_SPS	Input 6		
Ind7	ABBIED600_Rev1_SPS	Input 7		
Ind8	ABBIED600_Rev1_SPS	Input 8		
SPCSO1	ABBIED600_Rev1_SPC_simple	Output 1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Output 2		status-only
SPCSO3	ABBIED600_Rev1_SPC_simple	Output 3		status-only
SPCSO4	ABBIED600_Rev1_SPC_simple	Output 4		status-only
SPCSO5	ABBIED600_Rev1_SPC_simple	Output 5		status-only
SPCSO6	ABBIED600_Rev1_SPC_simple	Output 6		status-only

SPCSO7	ABBIED600_Rev1_SPC_simple	Output 7		status-only
SPCSO8	ABBIED600_Rev1_SPC_simple	Output 8		status-only
PlsTmms1	ABBIED600_Rev1_ING_SP_e	Pulse time 1	E	ABBIED600:2014
PlsTmms2	ABBIED600_Rev1_ING_SP_e	Pulse time 2	E	ABBIED600:2014
PlsTmms3	ABBIED600_Rev1_ING_SP_e	Pulse time 3	E	ABBIED600:2014
PlsTmms4	ABBIED600_Rev1_ING_SP_e	Pulse time 4	E	ABBIED600:2014
PlsTmms5	ABBIED600_Rev1_ING_SP_e	Pulse time 5	E	ABBIED600:2014
PlsTmms6	ABBIED600_Rev1_ING_SP_e	Pulse time 6	E	ABBIED600:2014
PlsTmms7	ABBIED600_Rev1_ING_SP_e	Pulse time 7	E	ABBIED600:2014
PlsTmms8	ABBIED600_Rev1_ING_SP_e	Pulse time 8	E	ABBIED600:2014

### 6.2.112 LN: PTGAPC2 Name: GACP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	Input 1		
Ind2	ABBIED600_Rev1_SPS	Input 2		
Ind3	ABBIED600_Rev1_SPS	Input 3		
Ind4	ABBIED600_Rev1_SPS	Input 4		
Ind5	ABBIED600_Rev1_SPS	Input 5		
Ind6	ABBIED600_Rev1_SPS	Input 6		
Ind7	ABBIED600_Rev1_SPS	Input 7		
Ind8	ABBIED600_Rev1_SPS	Input 8		
SPCSO1	ABBIED600_Rev1_SPC_simple	Output 1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Output 2		status-only
SPCSO3	ABBIED600_Rev1_SPC_simple	Output 3		status-only
SPCSO4	ABBIED600_Rev1_SPC_simple	Output 4		status-only
SPCSO5	ABBIED600_Rev1_SPC_simple	Output 5		status-only
SPCSO6	ABBIED600_Rev1_SPC_simple	Output 6		status-only
SPCSO7	ABBIED600_Rev1_SPC_simple	Output 7		status-only
SPCSO8	ABBIED600_Rev1_SPC_simple	Output 8		status-only
PlsTmms1	ABBIED600_Rev1_ING_SP_e	Pulse time 1	E	ABBIED600:2014
PlsTmms2	ABBIED600_Rev1_ING_SP_e	Pulse time 2	E	ABBIED600:2014
PlsTmms3	ABBIED600_Rev1_ING_SP_e	Pulse time 3	E	ABBIED600:2014
PlsTmms4	ABBIED600_Rev1_ING_SP_e	Pulse time 4	E	ABBIED600:2014
PlsTmms5	ABBIED600_Rev1_ING_SP_e	Pulse time 5	E	ABBIED600:2014
PlsTmms6	ABBIED600_Rev1_ING_SP_e	Pulse time 6	E	ABBIED600:2014
PlsTmms7	ABBIED600_Rev1_ING_SP_e	Pulse time 7	E	ABBIED600:2014
PlsTmms8	ABBIED600_Rev1_ING_SP_e	Pulse time 8	E	ABBIED600:2014

### 6.2.113 LN: TOFGAPC1 Name: GACP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only

Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	Input 1		
Ind2	ABBIED600_Rev1_SPS	Input 2		
Ind3	ABBIED600_Rev1_SPS	Input 3		
Ind4	ABBIED600_Rev1_SPS	Input 4		
Ind5	ABBIED600_Rev1_SPS	Input 5		
Ind6	ABBIED600_Rev1_SPS	Input 6		
Ind7	ABBIED600_Rev1_SPS	Input 7		
Ind8	ABBIED600_Rev1_SPS	Input 8		
SPCSO1	ABBIED600_Rev1_SPC_simple	Output 1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Output 2		status-only
SPCSO3	ABBIED600_Rev1_SPC_simple	Output 3		status-only
SPCSO4	ABBIED600_Rev1_SPC_simple	Output 4		status-only
SPCSO5	ABBIED600_Rev1_SPC_simple	Output 5		status-only
SPCSO6	ABBIED600_Rev1_SPC_simple	Output 6		status-only
SPCSO7	ABBIED600_Rev1_SPC_simple	Output 7		status-only
SPCSO8	ABBIED600_Rev1_SPC_simple	Output 8		status-only
OffDITmms1	ABBIED600_Rev1_ING_SP_e	Off delay time 1	E	ABBIED600:2014
OffDITmms2	ABBIED600_Rev1_ING_SP_e	Off delay time 2	E	ABBIED600:2014
OffDITmms3	ABBIED600_Rev1_ING_SP_e	Off delay time 3	E	ABBIED600:2014
OffDITmms4	ABBIED600_Rev1_ING_SP_e	Off delay time 4	E	ABBIED600:2014
OffDITmms5	ABBIED600_Rev1_ING_SP_e	Off delay time 5	E	ABBIED600:2014
OffDITmms6	ABBIED600_Rev1_ING_SP_e	Off delay time 6	E	ABBIED600:2014
OffDITmms7	ABBIED600_Rev1_ING_SP_e	Off delay time 7	E	ABBIED600:2014
OffDITmms8	ABBIED600_Rev1_ING_SP_e	Off delay time 8	E	ABBIED600:2014

### 6.2.114 LN: TOFGAPC2 Name: GAPC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	Input 1		
Ind2	ABBIED600_Rev1_SPS	Input 2		
Ind3	ABBIED600_Rev1_SPS	Input 3		
Ind4	ABBIED600_Rev1_SPS	Input 4		
Ind5	ABBIED600_Rev1_SPS	Input 5		
Ind6	ABBIED600_Rev1_SPS	Input 6		
Ind7	ABBIED600_Rev1_SPS	Input 7		
Ind8	ABBIED600_Rev1_SPS	Input 8		
SPCSO1	ABBIED600_Rev1_SPC_simple	Output 1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Output 2		status-only
SPCSO3	ABBIED600_Rev1_SPC_simple	Output 3		status-only
SPCSO4	ABBIED600_Rev1_SPC_simple	Output 4		status-only
SPCSO5	ABBIED600_Rev1_SPC_simple	Output 5		status-only

SPCSO6	ABBIED600_Rev1_SPC_simple	Output 6		status-only
SPCSO7	ABBIED600_Rev1_SPC_simple	Output 7		status-only
SPCSO8	ABBIED600_Rev1_SPC_simple	Output 8		status-only
OffDITmms1	ABBIED600_Rev1_ING_SP_e	Off delay time 1	E	ABBIED600:2014
OffDITmms2	ABBIED600_Rev1_ING_SP_e	Off delay time 2	E	ABBIED600:2014
OffDITmms3	ABBIED600_Rev1_ING_SP_e	Off delay time 3	E	ABBIED600:2014
OffDITmms4	ABBIED600_Rev1_ING_SP_e	Off delay time 4	E	ABBIED600:2014
OffDITmms5	ABBIED600_Rev1_ING_SP_e	Off delay time 5	E	ABBIED600:2014
OffDITmms6	ABBIED600_Rev1_ING_SP_e	Off delay time 6	E	ABBIED600:2014
OffDITmms7	ABBIED600_Rev1_ING_SP_e	Off delay time 7	E	ABBIED600:2014
OffDITmms8	ABBIED600_Rev1_ING_SP_e	Off delay time 8	E	ABBIED600:2014

### 6.2.115 LN: TOFGAPC3 Name: GAPC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	Input 1		
Ind2	ABBIED600_Rev1_SPS	Input 2		
Ind3	ABBIED600_Rev1_SPS	Input 3		
Ind4	ABBIED600_Rev1_SPS	Input 4		
Ind5	ABBIED600_Rev1_SPS	Input 5		
Ind6	ABBIED600_Rev1_SPS	Input 6		
Ind7	ABBIED600_Rev1_SPS	Input 7		
Ind8	ABBIED600_Rev1_SPS	Input 8		
SPCSO1	ABBIED600_Rev1_SPC_simple	Output 1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Output 2		status-only
SPCSO3	ABBIED600_Rev1_SPC_simple	Output 3		status-only
SPCSO4	ABBIED600_Rev1_SPC_simple	Output 4		status-only
SPCSO5	ABBIED600_Rev1_SPC_simple	Output 5		status-only
SPCSO6	ABBIED600_Rev1_SPC_simple	Output 6		status-only
SPCSO7	ABBIED600_Rev1_SPC_simple	Output 7		status-only
SPCSO8	ABBIED600_Rev1_SPC_simple	Output 8		status-only
OffDITmms1	ABBIED600_Rev1_ING_SP_e	Off delay time 1	E	ABBIED600:2014
OffDITmms2	ABBIED600_Rev1_ING_SP_e	Off delay time 2	E	ABBIED600:2014
OffDITmms3	ABBIED600_Rev1_ING_SP_e	Off delay time 3	E	ABBIED600:2014
OffDITmms4	ABBIED600_Rev1_ING_SP_e	Off delay time 4	E	ABBIED600:2014
OffDITmms5	ABBIED600_Rev1_ING_SP_e	Off delay time 5	E	ABBIED600:2014
OffDITmms6	ABBIED600_Rev1_ING_SP_e	Off delay time 6	E	ABBIED600:2014
OffDITmms7	ABBIED600_Rev1_ING_SP_e	Off delay time 7	E	ABBIED600:2014
OffDITmms8	ABBIED600_Rev1_ING_SP_e	Off delay time 8	E	ABBIED600:2014

### 6.2.116 LN: TOFGAPC4 Name: GAPC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	Input 1		
Ind2	ABBIED600_Rev1_SPS	Input 2		
Ind3	ABBIED600_Rev1_SPS	Input 3		
Ind4	ABBIED600_Rev1_SPS	Input 4		
Ind5	ABBIED600_Rev1_SPS	Input 5		
Ind6	ABBIED600_Rev1_SPS	Input 6		
Ind7	ABBIED600_Rev1_SPS	Input 7		
Ind8	ABBIED600_Rev1_SPS	Input 8		
SPCSO1	ABBIED600_Rev1_SPC_simple	Output 1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Output 2		status-only
SPCSO3	ABBIED600_Rev1_SPC_simple	Output 3		status-only
SPCSO4	ABBIED600_Rev1_SPC_simple	Output 4		status-only
SPCSO5	ABBIED600_Rev1_SPC_simple	Output 5		status-only
SPCSO6	ABBIED600_Rev1_SPC_simple	Output 6		status-only
SPCSO7	ABBIED600_Rev1_SPC_simple	Output 7		status-only
SPCSO8	ABBIED600_Rev1_SPC_simple	Output 8		status-only
OffDITmms1	ABBIED600_Rev1_ING_SP_e	Off delay time 1	E	ABBIED600:2014
OffDITmms2	ABBIED600_Rev1_ING_SP_e	Off delay time 2	E	ABBIED600:2014
OffDITmms3	ABBIED600_Rev1_ING_SP_e	Off delay time 3	E	ABBIED600:2014
OffDITmms4	ABBIED600_Rev1_ING_SP_e	Off delay time 4	E	ABBIED600:2014
OffDITmms5	ABBIED600_Rev1_ING_SP_e	Off delay time 5	E	ABBIED600:2014
OffDITmms6	ABBIED600_Rev1_ING_SP_e	Off delay time 6	E	ABBIED600:2014
OffDITmms7	ABBIED600_Rev1_ING_SP_e	Off delay time 7	E	ABBIED600:2014
OffDITmms8	ABBIED600_Rev1_ING_SP_e	Off delay time 8	E	ABBIED600:2014

### 6.2.117 LN: TONGAPC1 Name: GACP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	IN1		
Ind2	ABBIED600_Rev1_SPS	IN2		
Ind3	ABBIED600_Rev1_SPS	IN3		
Ind4	ABBIED600_Rev1_SPS	IN4		
Ind5	ABBIED600_Rev1_SPS	IN5		
Ind6	ABBIED600_Rev1_SPS	IN6		
Ind7	ABBIED600_Rev1_SPS	IN7		
Ind8	ABBIED600_Rev1_SPS	IN8		
SPCSO1	ABBIED600_Rev1_SPC_simple	Q1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Q2		status-only
SPCSO3	ABBIED600_Rev1_SPC_simple	Q3		status-only
SPCSO4	ABBIED600_Rev1_SPC_simple	Q4		status-only

SPCSO5	ABBIED600_Rev1_SPC_simple	Q5		status-only
SPCSO6	ABBIED600_Rev1_SPC_simple	Q6		status-only
SPCSO7	ABBIED600_Rev1_SPC_simple	Q7		status-only
SPCSO8	ABBIED600_Rev1_SPC_simple	Q8		status-only
OnDITmms1	ABBIED600_Rev1_ING_SP_e	On delay time 1	E	ABBIED600:2014
OnDITmms2	ABBIED600_Rev1_ING_SP_e	On delay time 2	E	ABBIED600:2014
OnDITmms3	ABBIED600_Rev1_ING_SP_e	On delay time 3	E	ABBIED600:2014
OnDITmms4	ABBIED600_Rev1_ING_SP_e	On delay time 4	E	ABBIED600:2014
OnDITmms5	ABBIED600_Rev1_ING_SP_e	On delay time 5	E	ABBIED600:2014
OnDITmms6	ABBIED600_Rev1_ING_SP_e	On delay time 6	E	ABBIED600:2014
OnDITmms7	ABBIED600_Rev1_ING_SP_e	On delay time 7	E	ABBIED600:2014
OnDITmms8	ABBIED600_Rev1_ING_SP_e	On delay time 8	E	ABBIED600:2014

### 6.2.118 LN: TONGAPC2 Name: GACP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	IN1		
Ind2	ABBIED600_Rev1_SPS	IN2		
Ind3	ABBIED600_Rev1_SPS	IN3		
Ind4	ABBIED600_Rev1_SPS	IN4		
Ind5	ABBIED600_Rev1_SPS	IN5		
Ind6	ABBIED600_Rev1_SPS	IN6		
Ind7	ABBIED600_Rev1_SPS	IN7		
Ind8	ABBIED600_Rev1_SPS	IN8		
SPCSO1	ABBIED600_Rev1_SPC_simple	Q1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Q2		status-only
SPCSO3	ABBIED600_Rev1_SPC_simple	Q3		status-only
SPCSO4	ABBIED600_Rev1_SPC_simple	Q4		status-only
SPCSO5	ABBIED600_Rev1_SPC_simple	Q5		status-only
SPCSO6	ABBIED600_Rev1_SPC_simple	Q6		status-only
SPCSO7	ABBIED600_Rev1_SPC_simple	Q7		status-only
SPCSO8	ABBIED600_Rev1_SPC_simple	Q8		status-only
OnDITmms1	ABBIED600_Rev1_ING_SP_e	On delay time 1	E	ABBIED600:2014
OnDITmms2	ABBIED600_Rev1_ING_SP_e	On delay time 2	E	ABBIED600:2014
OnDITmms3	ABBIED600_Rev1_ING_SP_e	On delay time 3	E	ABBIED600:2014
OnDITmms4	ABBIED600_Rev1_ING_SP_e	On delay time 4	E	ABBIED600:2014
OnDITmms5	ABBIED600_Rev1_ING_SP_e	On delay time 5	E	ABBIED600:2014
OnDITmms6	ABBIED600_Rev1_ING_SP_e	On delay time 6	E	ABBIED600:2014
OnDITmms7	ABBIED600_Rev1_ING_SP_e	On delay time 7	E	ABBIED600:2014
OnDITmms8	ABBIED600_Rev1_ING_SP_e	On delay time 8	E	ABBIED600:2014

**6.2.119 LN: TONGAPC3 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	IN1		
Ind2	ABBIED600_Rev1_SPS	IN2		
Ind3	ABBIED600_Rev1_SPS	IN3		
Ind4	ABBIED600_Rev1_SPS	IN4		
Ind5	ABBIED600_Rev1_SPS	IN5		
Ind6	ABBIED600_Rev1_SPS	IN6		
Ind7	ABBIED600_Rev1_SPS	IN7		
Ind8	ABBIED600_Rev1_SPS	IN8		
SPCSO1	ABBIED600_Rev1_SPC_simple	Q1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Q2		status-only
SPCSO3	ABBIED600_Rev1_SPC_simple	Q3		status-only
SPCSO4	ABBIED600_Rev1_SPC_simple	Q4		status-only
SPCSO5	ABBIED600_Rev1_SPC_simple	Q5		status-only
SPCSO6	ABBIED600_Rev1_SPC_simple	Q6		status-only
SPCSO7	ABBIED600_Rev1_SPC_simple	Q7		status-only
SPCSO8	ABBIED600_Rev1_SPC_simple	Q8		status-only
OnDITmms1	ABBIED600_Rev1_ING_SP_e	On delay time 1	E	ABBIED600:2014
OnDITmms2	ABBIED600_Rev1_ING_SP_e	On delay time 2	E	ABBIED600:2014
OnDITmms3	ABBIED600_Rev1_ING_SP_e	On delay time 3	E	ABBIED600:2014
OnDITmms4	ABBIED600_Rev1_ING_SP_e	On delay time 4	E	ABBIED600:2014
OnDITmms5	ABBIED600_Rev1_ING_SP_e	On delay time 5	E	ABBIED600:2014
OnDITmms6	ABBIED600_Rev1_ING_SP_e	On delay time 6	E	ABBIED600:2014
OnDITmms7	ABBIED600_Rev1_ING_SP_e	On delay time 7	E	ABBIED600:2014
OnDITmms8	ABBIED600_Rev1_ING_SP_e	On delay time 8	E	ABBIED600:2014

**6.2.120 LN: TONGAPC4 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	IN1		
Ind2	ABBIED600_Rev1_SPS	IN2		
Ind3	ABBIED600_Rev1_SPS	IN3		
Ind4	ABBIED600_Rev1_SPS	IN4		
Ind5	ABBIED600_Rev1_SPS	IN5		
Ind6	ABBIED600_Rev1_SPS	IN6		
Ind7	ABBIED600_Rev1_SPS	IN7		
Ind8	ABBIED600_Rev1_SPS	IN8		
SPCSO1	ABBIED600_Rev1_SPC_simple	Q1		status-only

SPCSO2	ABBIED600_Rev1_SPC_simple	Q2		status-only
SPCSO3	ABBIED600_Rev1_SPC_simple	Q3		status-only
SPCSO4	ABBIED600_Rev1_SPC_simple	Q4		status-only
SPCSO5	ABBIED600_Rev1_SPC_simple	Q5		status-only
SPCSO6	ABBIED600_Rev1_SPC_simple	Q6		status-only
SPCSO7	ABBIED600_Rev1_SPC_simple	Q7		status-only
SPCSO8	ABBIED600_Rev1_SPC_simple	Q8		status-only
OnDITmms1	ABBIED600_Rev1_ING_SP_e	On delay time 1	E	ABBIED600:2014
OnDITmms2	ABBIED600_Rev1_ING_SP_e	On delay time 2	E	ABBIED600:2014
OnDITmms3	ABBIED600_Rev1_ING_SP_e	On delay time 3	E	ABBIED600:2014
OnDITmms4	ABBIED600_Rev1_ING_SP_e	On delay time 4	E	ABBIED600:2014
OnDITmms5	ABBIED600_Rev1_ING_SP_e	On delay time 5	E	ABBIED600:2014
OnDITmms6	ABBIED600_Rev1_ING_SP_e	On delay time 6	E	ABBIED600:2014
OnDITmms7	ABBIED600_Rev1_ING_SP_e	On delay time 7	E	ABBIED600:2014
OnDITmms8	ABBIED600_Rev1_ING_SP_e	On delay time 8	E	ABBIED600:2014

### 6.2.121 LN: SRGAPC1 Name: GACP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	S1		
Ind2	ABBIED600_Rev1_SPS	S2		
Ind3	ABBIED600_Rev1_SPS	S3		
Ind4	ABBIED600_Rev1_SPS	S4		
Ind5	ABBIED600_Rev1_SPS	S5		
Ind6	ABBIED600_Rev1_SPS	S6		
Ind7	ABBIED600_Rev1_SPS	S7		
Ind8	ABBIED600_Rev1_SPS	S8		
SPCSO1	ABBIED600_Rev1_SPC_simple	Q1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Q2		status-only
SPCSO3	ABBIED600_Rev1_SPC_simple	Q3		status-only
SPCSO4	ABBIED600_Rev1_SPC_simple	Q4		status-only
SPCSO5	ABBIED600_Rev1_SPC_simple	Q5		status-only
SPCSO6	ABBIED600_Rev1_SPC_simple	Q6		status-only
SPCSO7	ABBIED600_Rev1_SPC_simple	Q7		status-only
SPCSO8	ABBIED600_Rev1_SPC_simple	Q8		status-only
Rs1	ABBIED600_Rev2_SPC_control_e	R1	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs2	ABBIED600_Rev2_SPC_control_e	R2	E	ABBIED600:2014,status-only,direct-with-normal-security

Rs3	ABBIED600_Rev2_SPC_control_e	R3	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs4	ABBIED600_Rev2_SPC_control_e	R4	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs5	ABBIED600_Rev2_SPC_control_e	R5	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs6	ABBIED600_Rev2_SPC_control_e	R6	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs7	ABBIED600_Rev2_SPC_control_e	R7	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs8	ABBIED600_Rev2_SPC_control_e	R8	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.122 LN: SRGAPC2 Name: GAPC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	S1		
Ind2	ABBIED600_Rev1_SPS	S2		
Ind3	ABBIED600_Rev1_SPS	S3		
Ind4	ABBIED600_Rev1_SPS	S4		
Ind5	ABBIED600_Rev1_SPS	S5		
Ind6	ABBIED600_Rev1_SPS	S6		
Ind7	ABBIED600_Rev1_SPS	S7		
Ind8	ABBIED600_Rev1_SPS	S8		
SPCSO1	ABBIED600_Rev1_SPC_simple	Q1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Q2		status-only
SPCSO3	ABBIED600_Rev1_SPC_simple	Q3		status-only
SPCSO4	ABBIED600_Rev1_SPC_simple	Q4		status-only
SPCSO5	ABBIED600_Rev1_SPC_simple	Q5		status-only
SPCSO6	ABBIED600_Rev1_SPC_simple	Q6		status-only
SPCSO7	ABBIED600_Rev1_SPC_simple	Q7		status-only
SPCSO8	ABBIED600_Rev1_SPC_simple	Q8		status-only
Rs1	ABBIED600_Rev2_SPC_control_e	R1	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs2	ABBIED600_Rev2_SPC_control_e	R2	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs3	ABBIED600_Rev2_SPC_control_e	R3	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs4	ABBIED600_Rev2_SPC_control_e	R4	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs5	ABBIED600_Rev2_SPC_control_e	R5	E	ABBIED600:2014,status-only,direct-with-normal-security

Rs6	ABBIED600_Rev2_SPC_control_e	R6	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs7	ABBIED600_Rev2_SPC_control_e	R7	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs8	ABBIED600_Rev2_SPC_control_e	R8	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.123 LN: SRGAPC3 Name: GACP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	S1		
Ind2	ABBIED600_Rev1_SPS	S2		
Ind3	ABBIED600_Rev1_SPS	S3		
Ind4	ABBIED600_Rev1_SPS	S4		
Ind5	ABBIED600_Rev1_SPS	S5		
Ind6	ABBIED600_Rev1_SPS	S6		
Ind7	ABBIED600_Rev1_SPS	S7		
Ind8	ABBIED600_Rev1_SPS	S8		
SPCSO1	ABBIED600_Rev1_SPC_simple	Q1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Q2		status-only
SPCSO3	ABBIED600_Rev1_SPC_simple	Q3		status-only
SPCSO4	ABBIED600_Rev1_SPC_simple	Q4		status-only
SPCSO5	ABBIED600_Rev1_SPC_simple	Q5		status-only
SPCSO6	ABBIED600_Rev1_SPC_simple	Q6		status-only
SPCSO7	ABBIED600_Rev1_SPC_simple	Q7		status-only
SPCSO8	ABBIED600_Rev1_SPC_simple	Q8		status-only
Rs1	ABBIED600_Rev2_SPC_control_e	R1	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs2	ABBIED600_Rev2_SPC_control_e	R2	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs3	ABBIED600_Rev2_SPC_control_e	R3	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs4	ABBIED600_Rev2_SPC_control_e	R4	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs5	ABBIED600_Rev2_SPC_control_e	R5	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs6	ABBIED600_Rev2_SPC_control_e	R6	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs7	ABBIED600_Rev2_SPC_control_e	R7	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs8	ABBIED600_Rev2_SPC_control_e	R8	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.124 LN: SRGAPC4 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	S1		
Ind2	ABBIED600_Rev1_SPS	S2		
Ind3	ABBIED600_Rev1_SPS	S3		
Ind4	ABBIED600_Rev1_SPS	S4		
Ind5	ABBIED600_Rev1_SPS	S5		
Ind6	ABBIED600_Rev1_SPS	S6		
Ind7	ABBIED600_Rev1_SPS	S7		
Ind8	ABBIED600_Rev1_SPS	S8		
SPCSO1	ABBIED600_Rev1_SPC_simple	Q1		status-only
SPCSO2	ABBIED600_Rev1_SPC_simple	Q2		status-only
SPCSO3	ABBIED600_Rev1_SPC_simple	Q3		status-only
SPCSO4	ABBIED600_Rev1_SPC_simple	Q4		status-only
SPCSO5	ABBIED600_Rev1_SPC_simple	Q5		status-only
SPCSO6	ABBIED600_Rev1_SPC_simple	Q6		status-only
SPCSO7	ABBIED600_Rev1_SPC_simple	Q7		status-only
SPCSO8	ABBIED600_Rev1_SPC_simple	Q8		status-only
Rs1	ABBIED600_Rev2_SPC_control_e	R1	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs2	ABBIED600_Rev2_SPC_control_e	R2	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs3	ABBIED600_Rev2_SPC_control_e	R3	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs4	ABBIED600_Rev2_SPC_control_e	R4	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs5	ABBIED600_Rev2_SPC_control_e	R5	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs6	ABBIED600_Rev2_SPC_control_e	R6	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs7	ABBIED600_Rev2_SPC_control_e	R7	E	ABBIED600:2014,status-only,direct-with-normal-security
Rs8	ABBIED600_Rev2_SPC_control_e	R8	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.125 LN: MVI4GAPC1 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
ISCSO1	ABBIED600_Rev1_INC_simple_int	Integer output value 1		status-only
ISCSO2	ABBIED600_Rev1_INC_simple_int	Integer output value 2		status-only

ISCSO3	ABBIED600_Rev1_INC_simple_int	Integer output value 3		status-only
ISCSO4	ABBIED600_Rev1_INC_simple_int	Integer output value 4		status-only
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
IntIn1	ABBIED600_Rev1_INS_e	Integer input value 1	E	IEC 61850-7-4:2007
IntIn2	ABBIED600_Rev1_INS_e	Integer input value 2	E	IEC 61850-7-4:2007
IntIn3	ABBIED600_Rev1_INS_e	Integer input value 3	E	IEC 61850-7-4:2007
IntIn4	ABBIED600_Rev1_INS_e	Integer input value 4	E	IEC 61850-7-4:2007

### 6.2.126 LN: MVI4GAPC2 Name: GPC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
ISCSO1	ABBIED600_Rev1_INC_simple_int	Integer output value 1		status-only
ISCSO2	ABBIED600_Rev1_INC_simple_int	Integer output value 2		status-only
ISCSO3	ABBIED600_Rev1_INC_simple_int	Integer output value 3		status-only
ISCSO4	ABBIED600_Rev1_INC_simple_int	Integer output value 4		status-only
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
IntIn1	ABBIED600_Rev1_INS_e	Integer input value 1	E	IEC 61850-7-4:2007
IntIn2	ABBIED600_Rev1_INS_e	Integer input value 2	E	IEC 61850-7-4:2007
IntIn3	ABBIED600_Rev1_INS_e	Integer input value 3	E	IEC 61850-7-4:2007
IntIn4	ABBIED600_Rev1_INS_e	Integer input value 4	E	IEC 61850-7-4:2007

### 6.2.127 LN: MVI4GAPC3 Name: GPC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
ISCSO1	ABBIED600_Rev1_INC_simple_int	Integer output value 1		status-only
ISCSO2	ABBIED600_Rev1_INC_simple_int	Integer output value 2		status-only
ISCSO3	ABBIED600_Rev1_INC_simple_int	Integer output value 3		status-only
ISCSO4	ABBIED600_Rev1_INC_simple_int	Integer output value 4		status-only
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
IntIn1	ABBIED600_Rev1_INS_e	Integer input value 1	E	IEC 61850-7-4:2007
IntIn2	ABBIED600_Rev1_INS_e	Integer input value 2	E	IEC 61850-7-4:2007
IntIn3	ABBIED600_Rev1_INS_e	Integer input value 3	E	IEC 61850-7-4:2007
IntIn4	ABBIED600_Rev1_INS_e	Integer input value 4	E	IEC 61850-7-4:2007

### 6.2.128 LN: MVI4GAPC4 Name: GPC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		

ISCSO1	ABBIED600_Rev1_INC_simple_int	Integer output value 1		status-only
ISCSO2	ABBIED600_Rev1_INC_simple_int	Integer output value 2		status-only
ISCSO3	ABBIED600_Rev1_INC_simple_int	Integer output value 3		status-only
ISCSO4	ABBIED600_Rev1_INC_simple_int	Integer output value 4		status-only
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
IntIn1	ABBIED600_Rev1_INS_e	Integer input value 1	E	IEC 61850-7-4:2007
IntIn2	ABBIED600_Rev1_INS_e	Integer input value 2	E	IEC 61850-7-4:2007
IntIn3	ABBIED600_Rev1_INS_e	Integer input value 3	E	IEC 61850-7-4:2007
IntIn4	ABBIED600_Rev1_INS_e	Integer input value 4	E	IEC 61850-7-4:2007

### 6.2.129 LN: SCA4GAPC1 Name: GAPP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
AnIn1	ABBIED600_Rev3_MV_2_e	Analog input 1	E	IEC 61850-7-4:2007
AnIn2	ABBIED600_Rev3_MV_2_e	Analog input 2	E	IEC 61850-7-4:2007
AnIn3	ABBIED600_Rev3_MV_2_e	Analog input 3	E	IEC 61850-7-4:2007
AnIn4	ABBIED600_Rev3_MV_2_e	Analog input 4	E	IEC 61850-7-4:2007
AnValOut1	ABBIED600_Rev3_MV_2_e	Analog value 1 after scaling	E	ABBIED600:2014
AnValOut2	ABBIED600_Rev3_MV_2_e	Analog value 2 after scaling	E	ABBIED600:2014
AnValOut3	ABBIED600_Rev3_MV_2_e	Analog value 3 after scaling	E	ABBIED600:2014
AnValOut4	ABBIED600_Rev3_MV_2_e	Analog value 4 after scaling	E	ABBIED600:2014
ScaleAnIn1	ABBIED600_Rev3_ASG_SP_i_e	Scale ratio for analog input value 1	E	ABBIED600:2014
ScaleAnIn2	ABBIED600_Rev3_ASG_SP_i_e	Scale ratio for analog input value 2	E	ABBIED600:2014
ScaleAnIn3	ABBIED600_Rev3_ASG_SP_i_e	Scale ratio for analog input value 3	E	ABBIED600:2014
ScaleAnIn4	ABBIED600_Rev3_ASG_SP_i_e	Scale ratio for analog input value 4	E	ABBIED600:2014

### 6.2.130 LN: SCA4GAPC2 Name: GAPP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		

Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
AnIn1	ABBIED600_Rev3_MV_2_e	Analog input 1	E	IEC 61850-7-4:2007
AnIn2	ABBIED600_Rev3_MV_2_e	Analog input 2	E	IEC 61850-7-4:2007
AnIn3	ABBIED600_Rev3_MV_2_e	Analog input 3	E	IEC 61850-7-4:2007
AnIn4	ABBIED600_Rev3_MV_2_e	Analog input 4	E	IEC 61850-7-4:2007
AnValOut1	ABBIED600_Rev3_MV_2_e	Analog value 1 after scaling	E	ABBIED600:2014
AnValOut2	ABBIED600_Rev3_MV_2_e	Analog value 2 after scaling	E	ABBIED600:2014
AnValOut3	ABBIED600_Rev3_MV_2_e	Analog value 3 after scaling	E	ABBIED600:2014
AnValOut4	ABBIED600_Rev3_MV_2_e	Analog value 4 after scaling	E	ABBIED600:2014
ScaleAnIn1	ABBIED600_Rev3_ASG_SP_i_e	Scale ratio for analog input value 1	E	ABBIED600:2014
ScaleAnIn2	ABBIED600_Rev3_ASG_SP_i_e	Scale ratio for analog input value 2	E	ABBIED600:2014
ScaleAnIn3	ABBIED600_Rev3_ASG_SP_i_e	Scale ratio for analog input value 3	E	ABBIED600:2014
ScaleAnIn4	ABBIED600_Rev3_ASG_SP_i_e	Scale ratio for analog input value 4	E	ABBIED600:2014

### 6.2.131 LN: SCA4GAPC3 Name: GPC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
AnIn1	ABBIED600_Rev3_MV_2_e	Analog input 1	E	IEC 61850-7-4:2007
AnIn2	ABBIED600_Rev3_MV_2_e	Analog input 2	E	IEC 61850-7-4:2007
AnIn3	ABBIED600_Rev3_MV_2_e	Analog input 3	E	IEC 61850-7-4:2007
AnIn4	ABBIED600_Rev3_MV_2_e	Analog input 4	E	IEC 61850-7-4:2007
AnValOut1	ABBIED600_Rev3_MV_2_e	Analog value 1 after scaling	E	ABBIED600:2014
AnValOut2	ABBIED600_Rev3_MV_2_e	Analog value 2 after scaling	E	ABBIED600:2014
AnValOut3	ABBIED600_Rev3_MV_2_e	Analog value 3 after scaling	E	ABBIED600:2014
AnValOut4	ABBIED600_Rev3_MV_2_e	Analog value 4 after scaling	E	ABBIED600:2014
ScaleAnIn1	ABBIED600_Rev3_ASG_SP_i_e	Scale ratio for analog input value 1	E	ABBIED600:2014
ScaleAnIn2	ABBIED600_Rev3_ASG_SP_i_e	Scale ratio for analog input value 2	E	ABBIED600:2014

ScaleAnIn3	ABBIED600_Rev3_ASG_SP_i_e	Scale ratio for analog input value 3	E	ABBIED600:2014
ScaleAnIn4	ABBIED600_Rev3_ASG_SP_i_e	Scale ratio for analog input value 4	E	ABBIED600:2014

### 6.2.132 LN: SCA4GAPC4 Name: GPC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
AnIn1	ABBIED600_Rev3_MV_2_e	Analog input 1	E	IEC 61850-7-4:2007
AnIn2	ABBIED600_Rev3_MV_2_e	Analog input 2	E	IEC 61850-7-4:2007
AnIn3	ABBIED600_Rev3_MV_2_e	Analog input 3	E	IEC 61850-7-4:2007
AnIn4	ABBIED600_Rev3_MV_2_e	Analog input 4	E	IEC 61850-7-4:2007
AnValOut1	ABBIED600_Rev3_MV_2_e	Analog value 1 after scaling	E	ABBIED600:2014
AnValOut2	ABBIED600_Rev3_MV_2_e	Analog value 2 after scaling	E	ABBIED600:2014
AnValOut3	ABBIED600_Rev3_MV_2_e	Analog value 3 after scaling	E	ABBIED600:2014
AnValOut4	ABBIED600_Rev3_MV_2_e	Analog value 4 after scaling	E	ABBIED600:2014
ScaleAnIn1	ABBIED600_Rev3_ASG_SP_i_e	Scale ratio for analog input value 1	E	ABBIED600:2014
ScaleAnIn2	ABBIED600_Rev3_ASG_SP_i_e	Scale ratio for analog input value 2	E	ABBIED600:2014
ScaleAnIn3	ABBIED600_Rev3_ASG_SP_i_e	Scale ratio for analog input value 3	E	ABBIED600:2014
ScaleAnIn4	ABBIED600_Rev3_ASG_SP_i_e	Scale ratio for analog input value 4	E	ABBIED600:2014

### 6.2.133 LN: SPCGAPC1 Name: GPC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Ind1	ABBIED600_Rev1_SPS	IN1		
Ind2	ABBIED600_Rev1_SPS	IN2		
Ind3	ABBIED600_Rev1_SPS	IN3		
Ind4	ABBIED600_Rev1_SPS	IN4		
Ind5	ABBIED600_Rev1_SPS	IN5		

Ind6	ABBIED600_Rev1_SPS	IN6		
Ind7	ABBIED600_Rev1_SPS	IN7		
Ind8	ABBIED600_Rev1_SPS	IN8		
Ind9	ABBIED600_Rev1_SPS	IN9		
Ind10	ABBIED600_Rev1_SPS	IN10		
Ind11	ABBIED600_Rev1_SPS	IN11		
Ind12	ABBIED600_Rev1_SPS	IN12		
Ind13	ABBIED600_Rev1_SPS	IN13		
Ind14	ABBIED600_Rev1_SPS	IN14		
Ind15	ABBIED600_Rev1_SPS	IN15		
Ind16	ABBIED600_Rev1_SPS	IN16		
SPCSO1	ABBIED600_Rev6_SPC_pulse	Output 1		status-only,direct-with-normal-security
SPCSO2	ABBIED600_Rev6_SPC_pulse	Output 2		status-only,direct-with-normal-security
SPCSO3	ABBIED600_Rev6_SPC_pulse	Output 3		status-only,direct-with-normal-security
SPCSO4	ABBIED600_Rev6_SPC_pulse	Output 4		status-only,direct-with-normal-security
SPCSO5	ABBIED600_Rev6_SPC_pulse	Output 5		status-only,direct-with-normal-security
SPCSO6	ABBIED600_Rev6_SPC_pulse	Output 6		status-only,direct-with-normal-security
SPCSO7	ABBIED600_Rev6_SPC_pulse	Output 7		status-only,direct-with-normal-security
SPCSO8	ABBIED600_Rev6_SPC_pulse	Output 8		status-only,direct-with-normal-security
SPCSO9	ABBIED600_Rev6_SPC_pulse	Output 9		status-only,direct-with-normal-security
SPCSO10	ABBIED600_Rev6_SPC_pulse	Output 10		status-only,direct-with-normal-security
SPCSO11	ABBIED600_Rev6_SPC_pulse	Output 11		status-only,direct-with-normal-security
SPCSO12	ABBIED600_Rev6_SPC_pulse	Output 12		status-only,direct-with-normal-security
SPCSO13	ABBIED600_Rev6_SPC_pulse	Output 13		status-only,direct-with-normal-security
SPCSO14	ABBIED600_Rev6_SPC_pulse	Output 14		status-only,direct-with-normal-security
SPCSO15	ABBIED600_Rev6_SPC_pulse	Output 15		status-only,direct-with-normal-security
SPCSO16	ABBIED600_Rev6_SPC_pulse	Output 16		status-only,direct-with-normal-security
LocRemRst	ABBIED600_Rev1_SPG_SP_e	Loc Rem restriction	E	ABBIED600:2014

**6.2.134 LN: SPCGAPC2 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Ind1	ABBIED600_Rev1_SPS	IN1		
Ind2	ABBIED600_Rev1_SPS	IN2		
Ind3	ABBIED600_Rev1_SPS	IN3		
Ind4	ABBIED600_Rev1_SPS	IN4		
Ind5	ABBIED600_Rev1_SPS	IN5		
Ind6	ABBIED600_Rev1_SPS	IN6		
Ind7	ABBIED600_Rev1_SPS	IN7		
Ind8	ABBIED600_Rev1_SPS	IN8		
Ind9	ABBIED600_Rev1_SPS	IN9		
Ind10	ABBIED600_Rev1_SPS	IN10		
Ind11	ABBIED600_Rev1_SPS	IN11		
Ind12	ABBIED600_Rev1_SPS	IN12		
Ind13	ABBIED600_Rev1_SPS	IN13		
Ind14	ABBIED600_Rev1_SPS	IN14		
Ind15	ABBIED600_Rev1_SPS	IN15		
Ind16	ABBIED600_Rev1_SPS	IN16		
SPCSO1	ABBIED600_Rev6_SPC_pulse	Output 1		status-only,direct-with-normal-security
SPCSO2	ABBIED600_Rev6_SPC_pulse	Output 2		status-only,direct-with-normal-security
SPCSO3	ABBIED600_Rev6_SPC_pulse	Output 3		status-only,direct-with-normal-security
SPCSO4	ABBIED600_Rev6_SPC_pulse	Output 4		status-only,direct-with-normal-security
SPCSO5	ABBIED600_Rev6_SPC_pulse	Output 5		status-only,direct-with-normal-security
SPCSO6	ABBIED600_Rev6_SPC_pulse	Output 6		status-only,direct-with-normal-security
SPCSO7	ABBIED600_Rev6_SPC_pulse	Output 7		status-only,direct-with-normal-security
SPCSO8	ABBIED600_Rev6_SPC_pulse	Output 8		status-only,direct-with-normal-security
SPCSO9	ABBIED600_Rev6_SPC_pulse	Output 9		status-only,direct-with-normal-security
SPCSO10	ABBIED600_Rev6_SPC_pulse	Output 10		status-only,direct-with-normal-security
SPCSO11	ABBIED600_Rev6_SPC_pulse	Output 11		status-only,direct-with-normal-security

SPCSO12	ABBIED600_Rev6_SPC_pulse	Output 12		status-only,direct-with-normal-security
SPCSO13	ABBIED600_Rev6_SPC_pulse	Output 13		status-only,direct-with-normal-security
SPCSO14	ABBIED600_Rev6_SPC_pulse	Output 14		status-only,direct-with-normal-security
SPCSO15	ABBIED600_Rev6_SPC_pulse	Output 15		status-only,direct-with-normal-security
SPCSO16	ABBIED600_Rev6_SPC_pulse	Output 16		status-only,direct-with-normal-security
LocRemRst	ABBIED600_Rev1_SPG_SP_e	Loc Rem restriction	E	ABBIED600:2014

### 6.2.135 LN: SPCGAPC3 Name: GACP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Ind1	ABBIED600_Rev1_SPS	IN1		
Ind2	ABBIED600_Rev1_SPS	IN2		
Ind3	ABBIED600_Rev1_SPS	IN3		
Ind4	ABBIED600_Rev1_SPS	IN4		
Ind5	ABBIED600_Rev1_SPS	IN5		
Ind6	ABBIED600_Rev1_SPS	IN6		
Ind7	ABBIED600_Rev1_SPS	IN7		
Ind8	ABBIED600_Rev1_SPS	IN8		
Ind9	ABBIED600_Rev1_SPS	IN9		
Ind10	ABBIED600_Rev1_SPS	IN10		
Ind11	ABBIED600_Rev1_SPS	IN11		
Ind12	ABBIED600_Rev1_SPS	IN12		
Ind13	ABBIED600_Rev1_SPS	IN13		
Ind14	ABBIED600_Rev1_SPS	IN14		
Ind15	ABBIED600_Rev1_SPS	IN15		
Ind16	ABBIED600_Rev1_SPS	IN16		
SPCSO1	ABBIED600_Rev6_SPC_pulse	Output 1		status-only,direct-with-normal-security
SPCSO2	ABBIED600_Rev6_SPC_pulse	Output 2		status-only,direct-with-normal-security
SPCSO3	ABBIED600_Rev6_SPC_pulse	Output 3		status-only,direct-with-normal-security
SPCSO4	ABBIED600_Rev6_SPC_pulse	Output 4		status-only,direct-with-normal-security
SPCSO5	ABBIED600_Rev6_SPC_pulse	Output 5		status-only,direct-with-normal-security

SPCSO6	ABBIED600_Rev6_SPC_pulse	Output 6		status-only,direct-with-normal-security
SPCSO7	ABBIED600_Rev6_SPC_pulse	Output 7		status-only,direct-with-normal-security
SPCSO8	ABBIED600_Rev6_SPC_pulse	Output 8		status-only,direct-with-normal-security
SPCSO9	ABBIED600_Rev6_SPC_pulse	Output 9		status-only,direct-with-normal-security
SPCSO10	ABBIED600_Rev6_SPC_pulse	Output 10		status-only,direct-with-normal-security
SPCSO11	ABBIED600_Rev6_SPC_pulse	Output 11		status-only,direct-with-normal-security
SPCSO12	ABBIED600_Rev6_SPC_pulse	Output 12		status-only,direct-with-normal-security
SPCSO13	ABBIED600_Rev6_SPC_pulse	Output 13		status-only,direct-with-normal-security
SPCSO14	ABBIED600_Rev6_SPC_pulse	Output 14		status-only,direct-with-normal-security
SPCSO15	ABBIED600_Rev6_SPC_pulse	Output 15		status-only,direct-with-normal-security
SPCSO16	ABBIED600_Rev6_SPC_pulse	Output 16		status-only,direct-with-normal-security
LocRemRst	ABBIED600_Rev1_SPG_SP_e	Loc Rem restriction	E	ABBIED600:2014

**6.2.136 LN: SPCRGAPC1 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
SPCSO1	ABBIED600_Rev6_SPC_pulse	Output 1		status-only,direct-with-normal-security
SPCSO2	ABBIED600_Rev6_SPC_pulse	Output 2		status-only,direct-with-normal-security
SPCSO3	ABBIED600_Rev6_SPC_pulse	Output 3		status-only,direct-with-normal-security
SPCSO4	ABBIED600_Rev6_SPC_pulse	Output 4		status-only,direct-with-normal-security
SPCSO5	ABBIED600_Rev6_SPC_pulse	Output 5		status-only,direct-with-normal-security
SPCSO6	ABBIED600_Rev6_SPC_pulse	Output 6		status-only,direct-with-normal-security
SPCSO7	ABBIED600_Rev6_SPC_pulse	Output 7		status-only,direct-with-normal-security
SPCSO8	ABBIED600_Rev6_SPC_pulse	Output 8		status-only,direct-with-normal-security

SPCSO9	ABBIED600_Rev6_SPC_pulse	Output 9		status-only,direct-with-normal-security
SPCSO10	ABBIED600_Rev6_SPC_pulse	Output 10		status-only,direct-with-normal-security
SPCSO11	ABBIED600_Rev6_SPC_pulse	Output 11		status-only,direct-with-normal-security
SPCSO12	ABBIED600_Rev6_SPC_pulse	Output 12		status-only,direct-with-normal-security
SPCSO13	ABBIED600_Rev6_SPC_pulse	Output 13		status-only,direct-with-normal-security
SPCSO14	ABBIED600_Rev6_SPC_pulse	Output 14		status-only,direct-with-normal-security
SPCSO15	ABBIED600_Rev6_SPC_pulse	Output 15		status-only,direct-with-normal-security
SPCSO16	ABBIED600_Rev6_SPC_pulse	Output 16		status-only,direct-with-normal-security
LocRemRst	ABBIED600_Rev1_SPG_SP_e	Loc Rem restriction	E	ABBIED600:2014

**6.2.137 LN: SPCLGAPC1 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
SPCSO1	ABBIED600_Rev6_SPC_pulse	Output 1		status-only,direct-with-normal-security
SPCSO2	ABBIED600_Rev6_SPC_pulse	Output 2		status-only,direct-with-normal-security
SPCSO3	ABBIED600_Rev6_SPC_pulse	Output 3		status-only,direct-with-normal-security
SPCSO4	ABBIED600_Rev6_SPC_pulse	Output 4		status-only,direct-with-normal-security
SPCSO5	ABBIED600_Rev6_SPC_pulse	Output 5		status-only,direct-with-normal-security
SPCSO6	ABBIED600_Rev6_SPC_pulse	Output 6		status-only,direct-with-normal-security
SPCSO7	ABBIED600_Rev6_SPC_pulse	Output 7		status-only,direct-with-normal-security
SPCSO8	ABBIED600_Rev6_SPC_pulse	Output 8		status-only,direct-with-normal-security
SPCSO9	ABBIED600_Rev6_SPC_pulse	Output 9		status-only,direct-with-normal-security
SPCSO10	ABBIED600_Rev6_SPC_pulse	Output 10		status-only,direct-with-normal-security
SPCSO11	ABBIED600_Rev6_SPC_pulse	Output 11		status-only,direct-with-normal-security

SPCSO12	ABBIED600_Rev6_SPC_pulse	Output 12		status-only,direct-with-normal-security
SPCSO13	ABBIED600_Rev6_SPC_pulse	Output 13		status-only,direct-with-normal-security
SPCSO14	ABBIED600_Rev6_SPC_pulse	Output 14		status-only,direct-with-normal-security
SPCSO15	ABBIED600_Rev6_SPC_pulse	Output 15		status-only,direct-with-normal-security
SPCSO16	ABBIED600_Rev6_SPC_pulse	Output 16		status-only,direct-with-normal-security
LocRemRst	ABBIED600_Rev1_SPG_SP_e	Loc Rem restriction	E	ABBIED600:2014

### 6.2.138 LN: UDFCNT1 Name: FCNT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
InUpCnt	ABBIED600_Rev1_SPS_e	Input for up counting	E	ABBIED600:2014
InDnCnt	ABBIED600_Rev1_SPS_e	Input for down counting	E	ABBIED600:2014
CntLodVal	ABBIED600_Rev1_ING_SP_1_e	Preset counter value	E	ABBIED600:2014
CntVal	ABBIED600_Rev2_BCR_1	Output of counter value		
UpCntSt	ABBIED600_Rev1_SPS_e	Status output of up counting	E	ABBIED600:2014
DnCntSt	ABBIED600_Rev1_SPS_e	Status output of down counting	E	ABBIED600:2014
CntRs	ABBIED600_Rev2_SPC_control_e	Resets the counter value	E	ABBIED600:2014,status-only,direct-with-normal-security
LodCnt	ABBIED600_Rev2_SPC_control_e	Load the counter to preset value	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.139 LN: UDFCNT2 Name: FCNT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
InUpCnt	ABBIED600_Rev1_SPS_e	Input for up counting	E	ABBIED600:2014
InDnCnt	ABBIED600_Rev1_SPS_e	Input for down counting	E	ABBIED600:2014
CntLodVal	ABBIED600_Rev1_ING_SP_1_e	Preset counter value	E	ABBIED600:2014
CntVal	ABBIED600_Rev2_BCR_1	Output of counter value		

UpCntSt	ABBIED600_Rev1_SPS_e	Status output of up counting	E	ABBIED600:2014
DnCntSt	ABBIED600_Rev1_SPS_e	Status output of down counting	E	ABBIED600:2014
CntRs	ABBIED600_Rev2_SPC_control_e	Resets the counter value	E	ABBIED600:2014,status-only,direct-with-normal-security
LodCnt	ABBIED600_Rev2_SPC_control_e	Load the counter to preset value	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.140 LN: UDFCNT3 Name: FCNT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
InUpCnt	ABBIED600_Rev1_SPS_e	Input for up counting	E	ABBIED600:2014
InDnCnt	ABBIED600_Rev1_SPS_e	Input for down counting	E	ABBIED600:2014
CntLodVal	ABBIED600_Rev1_ING_SP_1_e	Preset counter value	E	ABBIED600:2014
CntVal	ABBIED600_Rev2_BCR_1	Output of counter value		
UpCntSt	ABBIED600_Rev1_SPS_e	Status output of up counting	E	ABBIED600:2014
DnCntSt	ABBIED600_Rev1_SPS_e	Status output of down counting	E	ABBIED600:2014
CntRs	ABBIED600_Rev2_SPC_control_e	Resets the counter value	E	ABBIED600:2014,status-only,direct-with-normal-security
LodCnt	ABBIED600_Rev2_SPC_control_e	Load the counter to preset value	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.141 LN: UDFCNT4 Name: FCNT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
InUpCnt	ABBIED600_Rev1_SPS_e	Input for up counting	E	ABBIED600:2014
InDnCnt	ABBIED600_Rev1_SPS_e	Input for down counting	E	ABBIED600:2014
CntLodVal	ABBIED600_Rev1_ING_SP_1_e	Preset counter value	E	ABBIED600:2014
CntVal	ABBIED600_Rev2_BCR_1	Output of counter value		
UpCntSt	ABBIED600_Rev1_SPS_e	Status output of up counting	E	ABBIED600:2014

DnCntSt	ABBIED600_Rev1_SPS_e	Status output of down counting	E	ABBIED600:2014
CntRs	ABBIED600_Rev2_SPC_control_e	Resets the counter value	E	ABBIED600:2014,status-only,direct-with-normal-security
LodCnt	ABBIED600_Rev2_SPC_control_e	Load the counter to preset value	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.142 LN: UDFCNT5 Name: FCNT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
InUpCnt	ABBIED600_Rev1_SPS_e	Input for up counting	E	ABBIED600:2014
InDnCnt	ABBIED600_Rev1_SPS_e	Input for down counting	E	ABBIED600:2014
CntLodVal	ABBIED600_Rev1_ING_SP_1_e	Preset counter value	E	ABBIED600:2014
CntVal	ABBIED600_Rev2_BCR_1	Output of counter value		
UpCntSt	ABBIED600_Rev1_SPS_e	Status output of up counting	E	ABBIED600:2014
DnCntSt	ABBIED600_Rev1_SPS_e	Status output of down counting	E	ABBIED600:2014
CntRs	ABBIED600_Rev2_SPC_control_e	Resets the counter value	E	ABBIED600:2014,status-only,direct-with-normal-security
LodCnt	ABBIED600_Rev2_SPC_control_e	Load the counter to preset value	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.143 LN: UDFCNT6 Name: FCNT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
InUpCnt	ABBIED600_Rev1_SPS_e	Input for up counting	E	ABBIED600:2014
InDnCnt	ABBIED600_Rev1_SPS_e	Input for down counting	E	ABBIED600:2014
CntLodVal	ABBIED600_Rev1_ING_SP_1_e	Preset counter value	E	ABBIED600:2014
CntVal	ABBIED600_Rev2_BCR_1	Output of counter value		
UpCntSt	ABBIED600_Rev1_SPS_e	Status output of up counting	E	ABBIED600:2014
DnCntSt	ABBIED600_Rev1_SPS_e	Status output of down counting	E	ABBIED600:2014

CntRs	ABBIED600_Rev2_SPC_control_e	Resets the counter value	E	ABBIED600:2014,status-only,direct-with-normal-security
LodCnt	ABBIED600_Rev2_SPC_control_e	Load the counter to preset value	E	ABBIED600:2014,status-only,direct-with-normal-security

#### 6.2.144 LN: UDFCNT7 Name: FCNT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
InUpCnt	ABBIED600_Rev1_SPS_e	Input for up counting	E	ABBIED600:2014
InDnCnt	ABBIED600_Rev1_SPS_e	Input for down counting	E	ABBIED600:2014
CntLodVal	ABBIED600_Rev1_ING_SP_1_e	Preset counter value	E	ABBIED600:2014
CntVal	ABBIED600_Rev2_BCR_1	Output of counter value		
UpCntSt	ABBIED600_Rev1_SPS_e	Status output of up counting	E	ABBIED600:2014
DnCntSt	ABBIED600_Rev1_SPS_e	Status output of down counting	E	ABBIED600:2014
CntRs	ABBIED600_Rev2_SPC_control_e	Resets the counter value	E	ABBIED600:2014,status-only,direct-with-normal-security
LodCnt	ABBIED600_Rev2_SPC_control_e	Load the counter to preset value	E	ABBIED600:2014,status-only,direct-with-normal-security

#### 6.2.145 LN: UDFCNT8 Name: FCNT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
InUpCnt	ABBIED600_Rev1_SPS_e	Input for up counting	E	ABBIED600:2014
InDnCnt	ABBIED600_Rev1_SPS_e	Input for down counting	E	ABBIED600:2014
CntLodVal	ABBIED600_Rev1_ING_SP_1_e	Preset counter value	E	ABBIED600:2014
CntVal	ABBIED600_Rev2_BCR_1	Output of counter value		
UpCntSt	ABBIED600_Rev1_SPS_e	Status output of up counting	E	ABBIED600:2014
DnCntSt	ABBIED600_Rev1_SPS_e	Status output of down counting	E	ABBIED600:2014
CntRs	ABBIED600_Rev2_SPC_control_e	Resets the counter value	E	ABBIED600:2014,status-only,direct-with-normal-security

LodCnt	ABBIED600_Rev2_SPC_control_e	Load the counter to preset value	E	ABBIED600:2014,status-only,direct-with-normal-security
--------	------------------------------	----------------------------------	---	--

### 6.2.146 LN: UDFCNT9 Name: FCNT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
InUpCnt	ABBIED600_Rev1_SPS_e	Input for up counting	E	ABBIED600:2014
InDnCnt	ABBIED600_Rev1_SPS_e	Input for down counting	E	ABBIED600:2014
CntLodVal	ABBIED600_Rev1_ING_SP_1_e	Preset counter value	E	ABBIED600:2014
CntVal	ABBIED600_Rev2_BCR_1	Output of counter value		
UpCntSt	ABBIED600_Rev1_SPS_e	Status output of up counting	E	ABBIED600:2014
DnCntSt	ABBIED600_Rev1_SPS_e	Status output of down counting	E	ABBIED600:2014
CntRs	ABBIED600_Rev2_SPC_control_e	Resets the counter value	E	ABBIED600:2014,status-only,direct-with-normal-security
LodCnt	ABBIED600_Rev2_SPC_control_e	Load the counter to preset value	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.147 LN: UDFCNT10 Name: FCNT (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
InUpCnt	ABBIED600_Rev1_SPS_e	Input for up counting	E	ABBIED600:2014
InDnCnt	ABBIED600_Rev1_SPS_e	Input for down counting	E	ABBIED600:2014
CntLodVal	ABBIED600_Rev1_ING_SP_1_e	Preset counter value	E	ABBIED600:2014
CntVal	ABBIED600_Rev2_BCR_1	Output of counter value		
UpCntSt	ABBIED600_Rev1_SPS_e	Status output of up counting	E	ABBIED600:2014
DnCntSt	ABBIED600_Rev1_SPS_e	Status output of down counting	E	ABBIED600:2014
CntRs	ABBIED600_Rev2_SPC_control_e	Resets the counter value	E	ABBIED600:2014,status-only,direct-with-normal-security
LodCnt	ABBIED600_Rev2_SPC_control_e	Load the counter to preset value	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.148 LN: UDPCNT11 Name: FCNT (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
InUpCnt	ABBIED600_Rev1_SPS_e	Input for up counting	E	ABBIED600:2014
InDnCnt	ABBIED600_Rev1_SPS_e	Input for down counting	E	ABBIED600:2014
CntLodVal	ABBIED600_Rev1_ING_SP_1_e	Preset counter value	E	ABBIED600:2014
CntVal	ABBIED600_Rev2_BCR_1	Output of counter value		
UpCntSt	ABBIED600_Rev1_SPS_e	Status output of up counting	E	ABBIED600:2014
DnCntSt	ABBIED600_Rev1_SPS_e	Status output of down counting	E	ABBIED600:2014
CntRs	ABBIED600_Rev2_SPC_control_e	Resets the counter value	E	ABBIED600:2014,status-only,direct-with-normal-security
LodCnt	ABBIED600_Rev2_SPC_control_e	Load the counter to preset value	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.149 LN: UDPCNT12 Name: FCNT (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
InUpCnt	ABBIED600_Rev1_SPS_e	Input for up counting	E	ABBIED600:2014
InDnCnt	ABBIED600_Rev1_SPS_e	Input for down counting	E	ABBIED600:2014
CntLodVal	ABBIED600_Rev1_ING_SP_1_e	Preset counter value	E	ABBIED600:2014
CntVal	ABBIED600_Rev2_BCR_1	Output of counter value		
UpCntSt	ABBIED600_Rev1_SPS_e	Status output of up counting	E	ABBIED600:2014
DnCntSt	ABBIED600_Rev1_SPS_e	Status output of down counting	E	ABBIED600:2014
CntRs	ABBIED600_Rev2_SPC_control_e	Resets the counter value	E	ABBIED600:2014,status-only,direct-with-normal-security
LodCnt	ABBIED600_Rev2_SPC_control_e	Load the counter to preset value	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.150 LN: DPHLPTOC2 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev2_ENC_Mod_Of-fOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmACrv	ABBIED600_Rev2_CURVE SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDIT-mms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv	Type of Reset Curve		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
DirMod	ABBIED600_Rev3_ENG_SG_DirMod	Directional Mode		
InEnaMult	ABBIED600_Rev1_SPS_e	Enable signal for current multiplier	E	ABBIED600:2014
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
AMeas-Mod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Measuring mode	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
AllwNonDir	ABBIED600_Rev1_SPG_SP_e	Allows prot activation as non-dir when dir info is invalid	E	ABBIED600:2014
NonDir	ABBIED600_Rev1_SPS_e	Forces protection to non-directional	E	ABBIED600:2014

### 6.2.151 LN: DPHLRDIR2 Name: RDIR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Dir	AB-BIED600_Rev1_ACD_threephase	Direction		
ChrAng	ABBIED600_Rev3_ASG_SG_i	Characteristic angle		

MinFwdAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in forward direction		
MinRvAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in reverse direction		
MaxFwdAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in forward direction		
MaxRvAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in reverse direction		
BlkValA	ABBIED600_Rev3_ASG_SP_i	Min operate current		
BlkValV	ABBIED600_Rev3_ASG_SP_i	Min operate voltage		
PolQty	AB-BIED600_Rev3_ENG_SG_PolQty	Polarising Quantity		
VMemTmms	ABBIED600_Rev1_ING_SG_e	Voltage memory time	E	AB-BIED600:2014
Op-ChrAngPhsA	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase A	E	AB-BIED600:2014
Op-ChrAngPhsB	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase B	E	AB-BIED600:2014
Op-ChrAngPhsC	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase C	E	AB-BIED600:2014
VMemUsedSt	ABBIED600_Rev1_SPS_e	Voltage memory in use status	E	AB-BIED600:2014

### 6.2.152 LN: DPHHPTOC2 Name: PTOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmACrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDIT-mms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv	Selection of reset curve type		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
DirMod	ABBIED600_Rev3_ENG_SG_DirMod	Directional Mode		
InEnaMult	ABBIED600_Rev1_SPS_e	Enables current multiplier	E	ABBIED600:2014

NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
AMeas-Mod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Selects used measurement mode	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
AllwNonDir	ABBIED600_Rev1_SPG_SP_e	Allows prot activation as non-dir when dir info is invalid	E	ABBIED600:2014
NonDir	ABBIED600_Rev1_SPS_e	Forces protection to non-directional	E	ABBIED600:2014

### 6.2.153 LN: DPHHRDIR2 Name: RDIR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Dir	AB-BIED600_Rev1_ACD_threephase	DIR		
ChrAng	ABBIED600_Rev3_ASG_SG_i	Characteristic angle		
MinFwdAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in forward direction		
MinRvAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in reverse direction		
MaxFwdAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in forward direction		
MaxRvAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in reverse direction		
BlkValA	ABBIED600_Rev3_ASG_SP_i	Min operate current		
BlkValV	ABBIED600_Rev3_ASG_SP_i	Min operate voltage		
PolQty	AB-BIED600_Rev3_ENG_SG_PolQty	Polarizing quantity		
VMemTmms	ABBIED600_Rev1_ING_SG_e	Voltage memory time	E	AB-BIED600:2014
Op-ChrAngPhsA	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase A	E	AB-BIED600:2014
Op-ChrAngPhsB	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase B	E	AB-BIED600:2014
Op-ChrAngPhsC	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase C	E	AB-BIED600:2014
VMemUsedSt	ABBIED600_Rev1_SPS_e	Voltage memory in use status	E	AB-BIED600:2014

**6.2.154 LN: PHPVOC1 Name: PVOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmACrv	ABBIED600_Rev2_CURVE SG	Operating Curve Type		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDIT-mms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	ABBIED600_Rev3_ENG_SG_TypRsCrv	Type of Reset Curve		
RsDIT-mms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
InEnaMult	ABBIED600_Rev1_SPS_e	Enable signal for current multiplier	E	ABBIED600:2014
InEnaLo-Lim	ABBIED600_Rev1_SPS_e	Enable signal for voltage dependent lower start value	E	ABBIED600:2014
AMeas-Mod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Measuring mode	E	ABBIED600:2014
CtlMod	ABBIED600_Rev3_ENG_SP_CtlMod_e	Control mode	E	ABBIED600:2014
NumPh	ABBIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
LoStrVal	ABBIED600_Rev3_ASG_SG_i_e	Lower start value based on voltage control	E	ABBIED600:2014
VHiLim	ABBIED600_Rev3_ASG_SG_i_e	Voltage high limit for voltage control	E	ABBIED600:2014
VLoLim	ABBIED600_Rev3_ASG_SG_i_e	Voltage low limit for voltage control	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014

EffStrVal	AB-BIED600_Rev3_WYE_threephase_simple_i_e	Calculated effective start value	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.155 LN: PHPVOC2 Name: PVOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmACrv	ABBIED600_Rev2_CURVE SG	Operating Curve Type		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDIT-mms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	ABBIED600_Rev3_ENG_SG_TypRsCrv	Type of Reset Curve		
RsDIT-mms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
InEnaMult	ABBIED600_Rev1_SPS_e	Enable signal for current multiplier	E	ABBIED600:2014
InEnaLo-Lim	ABBIED600_Rev1_SPS_e	Enable signal for voltage dependent lower start value	E	ABBIED600:2014
AMeas-Mod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Measuring mode	E	ABBIED600:2014
CtlMod	ABBIED600_Rev3_ENG_SP_CtlMod_e	Control mode	E	ABBIED600:2014
NumPh	ABBIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
LoStrVal	ABBIED600_Rev3_ASG_SG_i_e	Lower start value based on voltage control	E	ABBIED600:2014
VHiLim	ABBIED600_Rev3_ASG_SG_i_e	Voltage high limit for voltage control	E	ABBIED600:2014
VLoLim	ABBIED600_Rev3_ASG_SG_i_e	Voltage low limit for voltage control	E	ABBIED600:2014

StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
EffStrVal	ABBIED600_Rev3_WYE_threephase_simple_i_e	Calculated effective start value	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.156 LN: EFLPTOC2 Name: PTOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
TmACrv	ABBIED600_Rev2_CURVE SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	ABBIED600_Rev3_ENG_SG_TypRsCrv	Type of Reset Curve		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
AMeasMod	ABBIED600_Rev3_ENG_SP_MeasMod_e	Measurement mode selection	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for operate current level	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
InEnaMult	ABBIED600_Rev1_SPS_e	Enable current multiplier	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

AResSigSel	AB-BIED600_Rev2_ENG_SP_AResSigSel_e	Selection for used Io signal	E	ABBIED600:2014
------------	-------------------------------------	------------------------------	---	----------------

**6.2.157 LN: EFIPTOC1 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for operate current level	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
InEnaMult	ABBIED600_Rev1_SPS_e	Enable current multiplier	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
AResSigSel	AB-BIED600_Rev2_ENG_SP_AResSigSel_e	Selection for used Io signal	E	ABBIED600:2014

**6.2.158 LN: DEFLPTOC2 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
TmACrv	ABBIED600_Rev2_CURVE_SG	Curve parameter E		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		

MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	ABBIED600_Rev3_ENG_SG_TypRsCrv	Selection of reset curve type		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
DirMod	ABBIED600_Rev3_ENG_SG_DirMod	Directional Mode		
VStr	ABBIED600_Rev3_ASG_SG_i_e	Voltage start value	E	IEC 61850-7-4:2007
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
AllwNonDir	ABBIED600_Rev1_SPG_SP_e	Allows prot activation as non-dir when dir info is invalid	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Selects used measurement mode	E	ABBIED600:2014
InEnaMult	ABBIED600_Rev1_SPS_e	Enables current multiplier	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_simple_i_e	Ratio of start time / operate time	E	ABBIED600:2014
EnaVLim	ABBIED600_Rev1_SPG_SG_e	Enable voltage limit	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
AResSigSel	ABBIED600_Rev2_ENG_SP_AResSigSel_e	Selection for used lo signal	E	ABBIED600:2014

### 6.2.159 LN: DEFLRDIR2 Name: RDIR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Dir	ABBIED600_Rev1_ACD_simple	Direction		
ChrAng	ABBIED600_Rev3_ASG_SG_i	Characteristic angle		
MinFwdAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in forward direction		
MinRvAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in reverse direction		
MaxFwdAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in forward direction		
MaxRvAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in reverse direction		

BlkValA	ABBIED600_Rev3_ASG_SP_i	Minimum operating current		
BlkValV	ABBIED600_Rev3_ASG_SP_i	Minimum operating voltage		
PolQty	ABBIED600_Rev1_ENG_SP_PolQty	Polarizing quantity		
InRcaCtl	ABBIED600_Rev1_SPS_e	Relay characteristic angle control	E	AB-BIED600:2014
OpModEF	ABBIED600_Rev2_ENG_SG_Op-ModEF_e	Operation criteria	E	AB-BIED600:2014
CorAng	ABBIED600_Rev3_ASG_SP_i_e	Correction angle	E	AB-BIED600:2014
RevPol	ABBIED600_Rev1_SPG_SP_e	Rotate polarizing quantity	E	AB-BIED600:2014
OpAEF	ABBIED600_Rev3_MV_simple_i_e	Operating current for EF protection	E	AB-BIED600:2014
OpPolAng	ABBIED600_Rev3_MV_simple_i_e	Angle between operating and polarizing quantity	E	AB-BIED600:2014
OpChrAng	ABBIED600_Rev3_MV_simple_i_e	Angle between operating angle and characteristic angle	E	AB-BIED600:2014
VResSigSel	AB-BIED600_Rev2_ENG_SP_VResSigSel_e	Selection for used Uo signal	E	AB-BIED600:2014

### 6.2.160 LN: DEFLOTOC3 Name: PTOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
TmACrv	ABBIED600_Rev2_CURVE_SG	Curve parameter E		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	ABBIED600_Rev3_ENG_SG_TypRsCrv	Selection of reset curve type		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
DirMod	ABBIED600_Rev3_ENG_SG_DirMod	Directional Mode		
VStr	ABBIED600_Rev3_ASG_SG_i_e	Voltage start value	E	IEC 61850-7-4:2007

StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
AllwNonDir	ABBIED600_Rev1_SPG_SP_e	Allows prot activation as non-dir when dir info is invalid	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Selects used measurement mode	E	ABBIED600:2014
InEnaMult	ABBIED600_Rev1_SPS_e	Enables current multiplier	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
EnaVLim	ABBIED600_Rev1_SPG_SG_e	Enable voltage limit	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
AResSigSel	AB-BIED600_Rev2_ENG_SP_AResSigSel_e	Selection for used lo signal	E	ABBIED600:2014

### 6.2.161 LN: DEFLRDIR3 Name: RDIR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Dir	ABBIED600_Rev1_ACD_simple	Direction		
ChrAng	ABBIED600_Rev3_ASG_SG_i	Characteristic angle		
MinFwdAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in forward direction		
MinRvAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in reverse direction		
MaxFwdAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in forward direction		
MaxRvAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in reverse direction		
BlkValA	ABBIED600_Rev3_ASG_SP_i	Minimum operating current		
BlkValV	ABBIED600_Rev3_ASG_SP_i	Minimum operating voltage		
PolQty	ABBIED600_Rev1_ENG_SP_PolQty	Polarizing quantity		
InRcaCtl	ABBIED600_Rev1_SPS_e	Relay characteristic angle control	E	AB-BIED600:2014
OpModEF	ABBIED600_Rev2_ENG_SG_Op-ModEF_e	Operation criteria	E	AB-BIED600:2014
CorAng	ABBIED600_Rev3_ASG_SP_i_e	Correction angle	E	AB-BIED600:2014
RevPol	ABBIED600_Rev1_SPG_SP_e	Rotate polarizing quantity	E	AB-BIED600:2014

OpAEF	ABBIED600_Rev3_MV_simple_i_e	Operating current for EF protection	E	AB-BIED600:2014
OpPolAng	ABBIED600_Rev3_MV_simple_i_e	Angle between operating and polarizing quantity	E	AB-BIED600:2014
OpChrAng	ABBIED600_Rev3_MV_simple_i_e	Angle between operating angle and characteristic angle	E	AB-BIED600:2014
VResSigSel	AB-BIED600_Rev2_ENG_SP_VResSigSel_e	Selection for used Uo signal	E	AB-BIED600:2014

**6.2.162 LN: WPSDE1 Name: PSDE (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
GndStr	ABBIED600_Rev3_ASG_SG_i	Voltage start value		
GndOp	ABBIED600_Rev3_ASG_SG_i	Current start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate delay time		
DirMod	ABBIED600_Rev3_ENG_SG_DirMod	Directional mode		
StrVal	ABBIED600_Rev3_ASG_SG_i_e	Power start value	E	IEC 61850-7-4:2007
TmACrv	ABBIED600_Rev2_CURVE_SG_setCharact_e	Operating curve type	E	IEC 61850-7-4:2007
TmMult	ABBIED600_Rev3_ASG_SG_i_e	Time multiplier	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_1_e	Reset delay time	E	IEC 61850-7-4:2007
RefW	ABBIED600_Rev3_ASG_SG_i_e	Reference power	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_MeasMod_e	Measurement mode	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
AResSigSel	AB-BIED600_Rev2_ENG_SP_AResSigSel_e	Selection for used Io signal	E	ABBIED600:2014

**6.2.163 LN: WRDIR1 Name: RDIR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Dir	ABBIED600_Rev1_ACD_simple	Direction information		
ChrAng	ABBIED600_Rev3_ASG_SG_i	Characteristic angle		
BlkValA	ABBIED600_Rev3_ASG_SP_i	Min operate current		
BlkValV	ABBIED600_Rev3_ASG_SP_i	Min operate voltage		
CorAng	ABBIED600_Rev3_ASG_SP_i_e	Correction angle	E	AB-BIED600:2014
RevPol	ABBIED600_Rev1_SPG_SP_e	Pol reversal	E	AB-BIED600:2014
OpPolAng	ABBIED600_Rev3_MV_simple_i_e	Angle between operating and polarizing quantity	E	AB-BIED600:2014
OpChrAng	ABBIED600_Rev3_MV_simple_i_e	Angle between operating angle and characteristic angle	E	AB-BIED600:2014
InRcaCtl	ABBIED600_Rev1_SPS_e	Relay characteristic angle control	E	AB-BIED600:2014
VResSigSel	AB-BIED600_Rev2_ENG_SP_VResSigSel_e	Selection for polarization signal	E	AB-BIED600:2014

**6.2.164 LN: WPSDE2 Name: PSDE (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
GndStr	ABBIED600_Rev3_ASG_SG_i	Voltage start value		
GndOp	ABBIED600_Rev3_ASG_SG_i	Current start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate delay time		
DirMod	ABBIED600_Rev3_ENG_SG_DirMod	Directional mode		
StrVal	ABBIED600_Rev3_ASG_SG_i_e	Power start value	E	IEC 61850-7-4:2007
TmAcrv	ABBIED600_Rev2_CURVE_SG_setCharact_e	Operating curve type	E	IEC 61850-7-4:2007
TmMult	ABBIED600_Rev3_ASG_SG_i_e	Time multiplier	E	IEC 61850-7-4:2007

RsDITmms	ABBIED600_Rev1_ING_SP_1_e	Reset delay time	E	IEC 61850-7-4:2007
RefW	ABBIED600_Rev3_ASG_SG_i_e	Reference power	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_MeasMod_e	Measurement mode	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
AResSigSel	AB-BIED600_Rev2_ENG_SP_AResSigSel_e	Selection for used lo signal	E	ABBIED600:2014

### 6.2.165 LN: WRDIR2 Name: RDIR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Dir	ABBIED600_Rev1_ACD_simple	Direction information		
ChrAng	ABBIED600_Rev3_ASG_SG_i	Characteristic angle		
BlkValA	ABBIED600_Rev3_ASG_SP_i	Min operate current		
BlkValV	ABBIED600_Rev3_ASG_SP_i	Min operate voltage		
CorAng	ABBIED600_Rev3_ASG_SP_i_e	Correction angle	E	AB-BIED600:2014
RevPol	ABBIED600_Rev1_SPG_SP_e	Pol reversal	E	AB-BIED600:2014
OpPolAng	ABBIED600_Rev3_MV_simple_i_e	Angle between operating and polarizing quantity	E	AB-BIED600:2014
OpChrAng	ABBIED600_Rev3_MV_simple_i_e	Angle between operating angle and characteristic angle	E	AB-BIED600:2014
InRcaCtl	ABBIED600_Rev1_SPS_e	Relay characteristic angle control	E	AB-BIED600:2014
VResSigSel	AB-BIED600_Rev2_ENG_SP_VResSigSel_e	Selection for polarization signal	E	AB-BIED600:2014

### 6.2.166 LN: WPSDE3 Name: PSDE (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		

Op	ABBIED600_Rev1_ACT_simple	Operate		
GndStr	ABBIED600_Rev3_ASG_SG_i	Voltage start value		
GndOp	ABBIED600_Rev3_ASG_SG_i	Current start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate delay time		
DirMod	ABBIED600_Rev3_ENG_SG_DirMod	Directional mode		
StrVal	ABBIED600_Rev3_ASG_SG_i_e	Power start value	E	IEC 61850-7-4:2007
TmACrv	ABBIED600_Rev2_CURVE_SG_setCharact_e	Operating curve type	E	IEC 61850-7-4:2007
TmMult	ABBIED600_Rev3_ASG_SG_i_e	Time multiplier	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_1_e	Reset delay time	E	IEC 61850-7-4:2007
RefW	ABBIED600_Rev3_ASG_SG_i_e	Reference power	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_MeasMod_e	Measurement mode	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
AResSigSel	AB-BIED600_Rev2_ENG_SP_AResSigSel_e	Selection for used lo signal	E	ABBIED600:2014

### 6.2.167 LN: WRDIR3 Name: RDIR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Dir	ABBIED600_Rev1_ACD_simple	Direction information		
ChrAng	ABBIED600_Rev3_ASG_SG_i	Characteristic angle		
BlkValA	ABBIED600_Rev3_ASG_SP_i	Min operate current		
BlkValV	ABBIED600_Rev3_ASG_SP_i	Min operate voltage		
CorAng	ABBIED600_Rev3_ASG_SP_i_e	Correction angle	E	AB-BIED600:2014
RevPol	ABBIED600_Rev1_SPG_SP_e	Pol reversal	E	AB-BIED600:2014
OpPolAng	ABBIED600_Rev3_MV_simple_i_e	Angle between operating and polarizing quantity	E	AB-BIED600:2014
OpChrAng	ABBIED600_Rev3_MV_simple_i_e	Angle between operating angle and characteristic angle	E	AB-BIED600:2014

InRcaCtl	ABBIED600_Rev1_SPS_e	Relay characteristic angle control	E	AB-BIED600:2014
VResSigSel	AB-BIED600_Rev2_ENG_SP_VResSigSel_e	Selection for polarization signal	E	AB-BIED600:2014

### 6.2.168 LN: MFADPSDE1 Name: PSDE (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
GndStr	ABBIED600_Rev3_ASG_SG_i	Voltage start value		
StrDITmms	ABBIED600_Rev1_ING_SP_1	Start delay time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
DirMod	ABBIED600_Rev3_ENG_SG_DirMod	Directional Mode		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
RsDITmms	ABBIED600_Rev1_ING_SP_1_e	Reset Delay Time	E	IEC 61850-7-4:2007
ItmEFlnd	ABBIED600_Rev1_SPS_e	Intermittent earth-fault indication	E	ABBIED600:2014
InhEF	ABBIED600_Rev1_SPS_e	Block EF	E	ABBIED600:2014
PkInd	ABBIED600_Rev1_SPS_e	Current transient detection indication	E	ABBIED600:2014
TrgSt	ABBIED600_Rev1_SPS_simple_e	Signal indicating function triggering	E	ABBIED600:2014
PkCntLim	ABBIED600_Rev1_ING_SP_1_e	Min requirement for peak counter before start in IEF mode	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
OpModTEF	ABBIED600_Rev3_ENG_SP_Op-ModTEF_e	Operation mode for function	E	ABBIED600:2014
AResSigSel	AB-BIED600_Rev2_ENG_SP_AResSigSel_e	Selection for used Io signal	E	ABBIED600:2014
VResSigSel	AB-BIED600_Rev2_ENG_SP_VResSigSel_e	Selection for used Uo signal	E	ABBIED600:2014
GndOpRev	ABBIED600_Rev3_ASG_SP_i_e	Ground operate value in reverse direction	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014

**6.2.169 LN: MFADRDIR1 Name: RDIR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Dir	ABBIED600_Rev1_ACD_simple	Direction		
BlkValA	ABBIED600_Rev3_ASG_SG_i	Minimum operating current		
RevPol	ABBIED600_Rev1_SPG_SP_e	Rotate polarizing quantity	E	ABBIED600:2014
OpPolAng	ABBIED600_Rev3_MV_simple_i_e	Angle between polarizing and operating quantity	E	ABBIED600:2014
TiltAng	ABBIED600_Rev3_ASG_SG_i_e	Characteristic tilt angle	E	ABBIED600:2014
OpQtySel	AB-BIED600_Rev1_ENG_SP_OpQtySel_e	Operating quantity selection: resistive, amplitude	E	ABBIED600:2014
DirRs	ABBIED600_Rev1_SPC_simple_e	Direction calculation reset	E	ABBIED600:2014, status-only

**6.2.170 LN: INTRPTEF1 Name: PTEF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
GndStr	ABBIED600_Rev3_ASG_SG_i	Voltage start value		
DirMod	ABBIED600_Rev3_ENG_SG_DirMod	Directional Mode		
OpDITmms	ABBIED600_Rev1_ING_SG_e	Operate Delay Time	E	IEC 61850-7-4:2007
RsDITmms	ABBIED600_Rev1_ING_SP_1_e	Reset Delay Time	E	IEC 61850-7-4:2007
BlkValA	ABBIED600_Rev3_ASG_SP_i_e	Minimum operating current	E	IEC 61850-7-4:2007
InhEF	ABBIED600_Rev1_SPS_e	Block EF	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
PkCntLim	ABBIED600_Rev1_ING_SP_1_e	Min requirement for peak counter before start in IEF mode	E	ABBIED600:2014

TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
OpModTEF	ABBIED600_Rev3_ENG_SP_OpModTEF_e	Operation mode for function	E	ABBIED600:2014
VResSigSel	AB-BIED600_Rev2_ENG_SP_VResSigSel_e	Selection for used Uo signal	E	ABBIED600:2014

### 6.2.171 LN: HAEFPPTOC1 Name: PTOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
TmACrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SG	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv	Type of Reset Curve		
RsDITmms	ABBIED600_Rev1_ING_SP	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
EnaRef	ABBIED600_Rev1_SPG_SG_e	Enable reference	E	ABBIED600:2014
HRmsARef	ABBIED600_Rev3_WYE_res_simple_i_e	Reference current from other IEDs	E	ABBIED600:2014
BlkARef	ABBIED600_Rev1_SPS_e	Current comparison status indicator	E	ABBIED600:2014

### 6.2.172 LN: NSPTOC1 Name: PTOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
TmACrv	ABBIED600_Rev2_CURVE SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING SG	Operate Delay Time		
TypRsCrv	ABBIED600_Rev3_ENG SG_TypRsCrv	Type of Reset Curve		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
InEnaMult	ABBIED600_Rev1_SPS_e	Enable signal for current multiplier	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.173 LN: NSPTOC2 Name: PTOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
TmACrv	ABBIED600_Rev2_CURVE SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG SG_i	Time Dial Multiplier		

MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv	Type of Reset Curve		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
InEnaMult	ABBIED600_Rev1_SPS_e	Enable signal for current multiplier	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.174 LN: PDNSPTOC1 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
ImbNgA	ABBIED600_Rev3_MV_simple_i_e	Measured current ratio I2 / I1	E	IEC 61850-7-4:2007
MinPhA	ABBIED600_Rev3_ASG_SP_i_e	Minimum phase current	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.175 LN: FRPTRC4 Name: PTRC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Op	ABBIED600_Rev1_ACT_simple	Operate		
Str	ABBIED600_Rev1_ACD_simple	Start		
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
OpMod-ProHz	ABBIED600_Rev2_ENG_SG_OpMod-ProHz_e	Operation mode	E	ABBIED600:2014

#### 6.2.176 LN: FRPTOF4 Name: PTOF (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start, overfrequency		
Op	ABBIED600_Rev1_ACT_simple	Operate, overfrequency		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time, overfrequency	E	AB-BIED600:2014

#### 6.2.177 LN: FRPTUF4 Name: PTUF (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start, underfrequency		
Op	ABBIED600_Rev1_ACT_simple	Operate, underfrequency		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time, underfrequency	E	AB-BIED600:2014

#### 6.2.178 LN: FRPFRC4 Name: PFRC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start, frequency gradient		
Op	ABBIED600_Rev1_ACT_simple	Operate, frequency gradient		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value df/dt		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time, frequency gradient	E	AB-BIED600:2014

**6.2.179 LN: FRPTRC5 Name: PTRC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Op	ABBIED600_Rev1_ACT_simple	Operate		
Str	ABBIED600_Rev1_ACD_simple	Start		
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
OpMod-ProHz	ABBIED600_Rev2_ENG_SG_OpMod-ProHz_e	Operation mode	E	ABBIED600:2014

**6.2.180 LN: FRPTOF5 Name: PTOF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start, overfrequency		
Op	ABBIED600_Rev1_ACT_simple	Operate, overfrequency		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time, overfrequency	E	AB-BIED600:2014

**6.2.181 LN: FRPTUF5 Name: PTUF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start, underfrequency		
Op	ABBIED600_Rev1_ACT_simple	Operate, underfrequency		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time, underfrequency	E	AB-BIED600:2014

### 6.2.182 LN: FRPFRC5 Name: PFRC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start, frequency gradient		
Op	ABBIED600_Rev1_ACT_simple	Operate, frequency gradient		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value df/dt		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time, frequency gradient	E	AB-BIED600:2014

### 6.2.183 LN: FRPTRC6 Name: PTRC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Op	ABBIED600_Rev1_ACT_simple	Operate		
Str	ABBIED600_Rev1_ACD_simple	Start		
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
OpMod-ProHz	ABBIED600_Rev2_ENG_SG_OpMod-ProHz_e	Operation mode	E	ABBIED600:2014

### 6.2.184 LN: FRPTOF6 Name: PTOF (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start, overfrequency		
Op	ABBIED600_Rev1_ACT_simple	Operate, overfrequency		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time, overfrequency	E	AB-BIED600:2014

**6.2.185 LN: FRPTUF6 Name: PTUF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start, underfrequency		
Op	ABBIED600_Rev1_ACT_simple	Operate, underfrequency		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time, underfrequency	E	AB-BIED600:2014

**6.2.186 LN: FRPFRC6 Name: PFRC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start, frequency gradient		
Op	ABBIED600_Rev1_ACT_simple	Operate, frequency gradient		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value df/dt		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time, frequency gradient	E	AB-BIED600:2014

**6.2.187 LN: T1PTTR1 Name: PTTR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		

Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Tmp	ABBIED600_Rev3_MV_simple_i	TEMP		
TmpRI	ABBIED600_Rev3_MV_simple_i	TEMP_RL		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
AlmThm	ABBIED600_Rev1_SPS	Thermal Alarm		
TmpMax	ABBIED600_Rev3_ASG_SG_i	Operate level temperature		
ConsTms1	ABBIED600_Rev1_ING_SG	Time constant for thermal model		
AlmVal	ABBIED600_Rev3_ASG_SG_i	Alarm level temperature		
RsTmp	ABBIED600_Rev2_SPC_control_e	Reset temperature	E	ABBIED600:2014,status-only,direct-with-normal-security
InEnaMult	ABBIED600_Rev1_SPS_e	Enable multiplier for reference setting	E	ABBIED600:2014
BlkThm	ABBIED600_Rev1_SPS	Block reclose signal		
TmpUsed	ABBIED600_Rev3_MV_simple_i_e	The ambient temperature used in the calculation	E	ABBIED600:2014
TmpAmb	ABBIED600_Rev3_MV_simple_i_e	Ambient temperature	E	ABBIED600:2014
OpTm	ABBIED600_Rev3_INS_Unit_e	Estimated time to operate	E	ABBIED600:2014
BlkThmRsTm	ABBIED600_Rev3_INS_Unit_e	Estimated time to deactivate BLK_CLOSE	E	ABBIED600:2014
AMult	ABBIED600_Rev1_ING_SG_e	Current reference multiplier for thermal model	E	ABBIED600:2014
ARef	ABBIED600_Rev3_ASG_SG_i_e	Current reference for thermal model	E	ABBIED600:2014
EnvTmpSet	ABBIED600_Rev3_ASG_SG_i_e	Ambient temperature	E	ABBIED600:2014
IniTmp	ABBIED600_Rev3_ASG_SP_i_e	Temperature calculation initial value	E	ABBIED600:2014
RecTmpSet	ABBIED600_Rev3_ASG_SG_i_e	Temperature for reset of BLK_CLOSE after operate	E	ABBIED600:2014
TmpR	ABBIED600_Rev3_ASG_SG_i_e	Temperature rise	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.188 LN: PHPTUC1 Name: PTUC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security

Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Current setting/Start value high		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
BlkValA	ABBIED600_Rev3_ASG_SG_i	Current setting/Start value low		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
OpModPh	ABBIED600_Rev2_ENG_SP_Op-ModPh_e	Operation mode	E	ABBIED600:2014

**6.2.189 LN: INRPHAR1 Name: PHAR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
PhStr	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.190 LN: LSHDPTRC1 Name: PTRC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Op	ABBIED600_Rev1_ACT_simple	Operate		

Str	ABBIED600_Rev1_ACD_simple	Start		
OpDITmms	ABBIED600_Rev1_ING_SG	Time delay to restore		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
LodShdMod	ABBIED600_Rev2_ENG_SG_OpModProHz_e	Operation mode	E	ABBIED600:2014

#### 6.2.191 LN: LSHDPTOF1 Name: PTOF (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start of restore		
Op	ABBIED600_Rev1_ACT_simple	Restore the load		
StrVal	ABBIED600_Rev3_ASG_SG_i	Restore frequency		
ManRest	ABBIED600_Rev2_SPC_control_e	Manual restore command	E	ABBIED600:2014,status-only,direct-with-normal-security
RestMod	ABBIED600_Rev2_ENG_SG_Auto-ManMod_e	Restore mode	E	ABBIED600:2014
BlkRest	ABBIED600_Rev2_SPC_control_e	Cancel restore	E	ABBIED600:2014,status-only,direct-with-normal-security

#### 6.2.192 LN: LSHDPTRC2 Name: PTRC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Op	ABBIED600_Rev1_ACT_simple	Operate		
Str	ABBIED600_Rev1_ACD_simple	Start		
OpDITmms	ABBIED600_Rev1_ING_SG	Time delay to restore		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		

TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
LodShdMod	ABBIED600_Rev2_ENG_SG_Op-ModProHz_e	Operation mode	E	ABBIED600:2014

### 6.2.193 LN: LSHDPTOF2 Name: PTOF (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start of restore		
Op	ABBIED600_Rev1_ACT_simple	Restore the load		
StrVal	ABBIED600_Rev3_ASG_SG_i	Restore frequency		
ManRest	ABBIED600_Rev2_SPC_control_e	Manual restore command	E	ABBIED600:2014,status-only,direct-with-normal-security
RestMod	ABBIED600_Rev2_ENG_SG_Auto-ManMod_e	Restore mode	E	ABBIED600:2014
BlkRest	ABBIED600_Rev2_SPC_control_e	Cancel restore	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.194 LN: LSHDPTRC3 Name: PTRC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Op	ABBIED600_Rev1_ACT_simple	Operate		
Str	ABBIED600_Rev1_ACD_simple	Start		
OpDITmms	ABBIED600_Rev1_ING_SG	Time delay to restore		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
LodShdMod	ABBIED600_Rev2_ENG_SG_Op-ModProHz_e	Operation mode	E	ABBIED600:2014

**6.2.195 LN: LSHDPTOF3 Name: PTOF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start of restore		
Op	ABBIED600_Rev1_ACT_simple	Restore the load		
StrVal	ABBIED600_Rev3_ASG_SG_i	Restore frequency		
ManRest	ABBIED600_Rev2_SPC_control_e	Manual restore command	E	ABBIED600:2014,status-only,direct-with-normal-security
RestMod	ABBIED600_Rev2_ENG_SG_Auto-ManMod_e	Restore mode	E	ABBIED600:2014
BlkRest	ABBIED600_Rev2_SPC_control_e	Cancel restore	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.196 LN: LSHDPTRC4 Name: PTRC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Op	ABBIED600_Rev1_ACT_simple	Operate		
Str	ABBIED600_Rev1_ACD_simple	Start		
OpDITmms	ABBIED600_Rev1_ING_SG	Time delay to restore		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
LodShdMod	ABBIED600_Rev2_ENG_SG_Op-ModProHz_e	Operation mode	E	ABBIED600:2014

**6.2.197 LN: LSHDPTOF4 Name: PTOF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start of restore		
Op	ABBIED600_Rev1_ACT_simple	Restore the load		

StrVal	ABBIED600_Rev3_ASG_SG_i	Restore frequency		
ManRest	ABBIED600_Rev2_SPC_control_e	Manual restore command	E	ABBIED600:2014,status-only,direct-with-normal-security
RestMod	ABBIED600_Rev2_ENG_SG_Auto-ManMod_e	Restore mode	E	ABBIED600:2014
BlkRest	ABBIED600_Rev2_SPC_control_e	Cancel restore	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.198 LN: LSHDPTRC5 Name: PTRC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Op	ABBIED600_Rev1_ACT_simple	Operate		
Str	ABBIED600_Rev1_ACD_simple	Start		
OpDITmms	ABBIED600_Rev1_ING_SG	Time delay to restore		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
LodShdMod	ABBIED600_Rev2_ENG_SG_OpModProHz_e	Operation mode	E	ABBIED600:2014

**6.2.199 LN: LSHDPTOF5 Name: PTOF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start of restore		
Op	ABBIED600_Rev1_ACT_simple	Restore the load		
StrVal	ABBIED600_Rev3_ASG_SG_i	Restore frequency		
ManRest	ABBIED600_Rev2_SPC_control_e	Manual restore command	E	ABBIED600:2014,status-only,direct-with-normal-security
RestMod	ABBIED600_Rev2_ENG_SG_Auto-ManMod_e	Restore mode	E	ABBIED600:2014
BlkRest	ABBIED600_Rev2_SPC_control_e	Cancel restore	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.200 LN: LSHDPTRC6 Name: PTRC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Op	ABBIED600_Rev1_ACT_simple	Operate		
Str	ABBIED600_Rev1_ACD_simple	Start		
OpDITmms	ABBIED600_Rev1_ING_SG	Time delay to restore		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
LodShdMod	ABBIED600_Rev2_ENG_SG_OpModProHz_e	Operation mode	E	ABBIED600:2014

**6.2.201 LN: LSHDPTOF6 Name: PTOF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start of restore		
Op	ABBIED600_Rev1_ACT_simple	Restore the load		
StrVal	ABBIED600_Rev3_ASG_SG_i	Restore frequency		
ManRest	ABBIED600_Rev2_SPC_control_e	Manual restore command	E	ABBIED600:2014,status-only,direct-with-normal-security
RestMod	ABBIED600_Rev2_ENG_SG_Auto-ManMod_e	Restore mode	E	ABBIED600:2014
BlkRest	ABBIED600_Rev2_SPC_control_e	Cancel restore	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.202 LN: UPCALH1 Name: CALH (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
NamPlt	ABBIED600_Rev1_LPL_1	Name plate		
GrAlm	ABBIED600_Rev1_SPS	Operate		

ColOpn	ABBIED600_Rev1_SPS_e	CB_OPEN_CMD	E	IEC 61850-7-4:2007
AlmInhTmms	ABBIED600_Rev1_ING_SP_1_e	CB open hold de-lay	E	ABBIED600:2014
AlmPlsTmms	ABBIED600_Rev1_ING_SP_1_e	Operate pulse time	E	ABBIED600:2014
CBOnDIT-mms	ABBIED600_Rev1_ING_SP_1_e	Signal pwr on de-lay	E	ABBIED600:2014
TestOth	ABBIED600_Rev1_ENC_Tes-tOth_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.203 LN: UPCALH2 Name: CALH (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
NamPlt	ABBIED600_Rev1_LPL_1	Name plate		
GrAlm	ABBIED600_Rev1_SPS	Operate		
ColOpn	ABBIED600_Rev1_SPS_e	CB_OPEN_CMD	E	IEC 61850-7-4:2007
AlmInhTmms	ABBIED600_Rev1_ING_SP_1_e	CB open hold de-lay	E	ABBIED600:2014
AlmPlsTmms	ABBIED600_Rev1_ING_SP_1_e	Operate pulse time	E	ABBIED600:2014
CBOnDIT-mms	ABBIED600_Rev1_ING_SP_1_e	Signal pwr on de-lay	E	ABBIED600:2014
TestOth	ABBIED600_Rev1_ENC_Tes-tOth_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.204 LN: UPCALH3 Name: CALH (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
NamPlt	ABBIED600_Rev1_LPL_1	Name plate		
GrAlm	ABBIED600_Rev1_SPS	Operate		
ColOpn	ABBIED600_Rev1_SPS_e	CB_OPEN_CMD	E	IEC 61850-7-4:2007
AlmInhTmms	ABBIED600_Rev1_ING_SP_1_e	CB open hold de-lay	E	ABBIED600:2014
AlmPlsTmms	ABBIED600_Rev1_ING_SP_1_e	Operate pulse time	E	ABBIED600:2014
CBOnDIT-mms	ABBIED600_Rev1_ING_SP_1_e	Signal pwr on de-lay	E	ABBIED600:2014
TestOth	ABBIED600_Rev1_ENC_Tes-tOth_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.205 LN: PH3HPTOC1 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmACrv	ABBIED600_Rev2_CURVE SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING SG	Operate Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG SG_TypRsCrv	Type of Reset Curve		
RsDITmms	ABBIED600_Rev1_ING_SP	Reset Delay Time		
InEnaMult	ABBIED600_Rev1_SPS_e	Enable signal for current multiplier	E	ABBIED600:2014
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Measuring mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.206 LN: PH3HPTOC2 Name: PTOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmACrv	ABBIED600_Rev2_CURVE SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG SG_i	Start value		

TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv	Type of Reset Curve		
RsDITmms	ABBIED600_Rev1_ING_SP	Reset Delay Time		
InEnaMult	ABBIED600_Rev1_SPS_e	Enable signal for current multiplier	E	ABBIED600:2014
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Measuring mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.207 LN: PH3LPTOC1 Name: PTOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_Of-fOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmACrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv	Type of Reset Curve		
RsDITmms	ABBIED600_Rev1_ING_SP	Reset Delay Time		
InEnaMult	ABBIED600_Rev1_SPS_e	Enable signal for current multiplier	E	ABBIED600:2014

NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Measuring mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.208 LN: PH3LPTOC2 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmACrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv	Type of Reset Curve		
RsDITmms	ABBIED600_Rev1_ING_SP	Reset Delay Time		
InEnaMult	ABBIED600_Rev1_SPS_e	Enable signal for current multiplier	E	ABBIED600:2014
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Measuring mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.209 LN: PH3IPTOC1 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP	Reset Delay Time		
InEnaMult	ABBIED600_Rev1_SPS_e	Enable signal for current multiplier	E	ABBIED600:2014
NumPh	ABBIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.210 LN: DPH3HPTOC1 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmACrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOpTmms	ABBIED600_Rev1_ING_SP	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	ABBIED600_Rev3_ENG_SG_TypRsCrv	Selection of reset curve type		
RsDITmms	ABBIED600_Rev1_ING_SP	Reset Delay Time		
DirMod	ABBIED600_Rev3_ENG_SG_DirMod	Directional Mode		

Blk	ABBIED600_Rev1_SPS	Block signal for all binary outputs		
InEnaMult	ABBIED600_Rev1_SPS_e	Enables current multiplier	E	ABBIED600:2014
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Selects used measurement mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014, status-only, direct-with-normal-security
AllwNonDir	ABBIED600_Rev1_SPG_SP_e	Allows prot activation as non-dir when dir info is invalid	E	ABBIED600:2014
NonDir	ABBIED600_Rev1_SPS_e	Forces protection to non-directional	E	ABBIED600:2014

### 6.2.211 LN: DPH3HRDIR1 Name: RDIR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Dir	AB-BIED600_Rev1_ACD_threephase	DIR		
ChrAng	ABBIED600_Rev3_ASG_SG_i	Characteristic angle		
MinFwdAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in forward direction		
MinRvAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in reverse direction		
MaxFwdAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in forward direction		
MaxRvAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in reverse direction		
BlkValA	ABBIED600_Rev3_ASG_SP_i	Min operate current		
BlkValV	ABBIED600_Rev3_ASG_SP_i	Min operate voltage		
PolQty	AB-BIED600_Rev3_ENG_SG_PolQty	Polarizing quantity		
Op-ChrAngPhsA	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase A	E	AB-BIED600:2014
Op-ChrAngPhsB	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase B	E	AB-BIED600:2014
Op-ChrAngPhsC	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase C	E	AB-BIED600:2014

**6.2.212 LN: DPH3HPTOC2 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_On_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmACrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv	Selection of reset curve type		
RsDITmms	ABBIED600_Rev1_ING_SP	Reset Delay Time		
DirMod	ABBIED600_Rev3_ENG_SG_DirMod	Directional Mode		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
InEnaMult	ABBIED600_Rev1_SPS_e	Enables current multiplier	E	ABBIED600:2014
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Selects used measurement mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
AllwNonDir	ABBIED600_Rev1_SPG_SP_e	Allows prot activation as non-dir when dir info is invalid	E	ABBIED600:2014
NonDir	ABBIED600_Rev1_SPS_e	Forces protection to non-directional	E	ABBIED600:2014

**6.2.213 LN: DPH3HRDIR2 Name: RDIR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		

Dir	AB-BIED600_Rev1_ACD_threephase	DIR		
ChrAng	ABBIED600_Rev3_ASG_SG_i	Characteristic angle		
MinFwdAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in forward direction		
MinRvAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in reverse direction		
MaxFwdAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in forward direction		
MaxRvAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in reverse direction		
BlkValA	ABBIED600_Rev3_ASG_SP_i	Min operate current		
BlkValV	ABBIED600_Rev3_ASG_SP_i	Min operate voltage		
PolQty	AB-BIED600_Rev3_ENG_SG_PolQty	Polarizing quantity		
Op-ChrAngPhsA	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase A	E	AB-BIED600:2014
Op-ChrAngPhsB	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase B	E	AB-BIED600:2014
Op-ChrAngPhsC	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase C	E	AB-BIED600:2014

### 6.2.214 LN: DPH3LPTOC1 Name: PTOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmACrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv	Type of Reset Curve		
RsDITmms	ABBIED600_Rev1_ING_SP	Reset Delay Time		
DirMod	ABBIED600_Rev3_ENG_SG_DirMod	Directional Mode		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
InEnaMult	ABBIED600_Rev1_SPS_e	Enable signal for current multiplier	E	ABBIED600:2014

NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Measuring mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
AllwNonDir	ABBIED600_Rev1_SPG_SP_e	Allows prot activation as non-dir when dir info is invalid	E	ABBIED600:2014
NonDir	ABBIED600_Rev1_SPS_e	Forces protection to non-directional	E	ABBIED600:2014

**6.2.215 LN: DPH3LRDIR1 Name: RDIR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Dir	AB-BIED600_Rev1_ACD_threephase	Direction		
ChrAng	ABBIED600_Rev3_ASG_SG_i	Characteristic angle		
MinFwdAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in forward direction		
MinRvAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in reverse direction		
MaxFwdAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in forward direction		
MaxRvAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in reverse direction		
BlkValA	ABBIED600_Rev3_ASG_SP_i	Min operate current		
BlkValV	ABBIED600_Rev3_ASG_SP_i	Min operate voltage		
PolQty	AB-BIED600_Rev3_ENG_SG_PolQty	Polarising Quantity		
Op-ChrAngPhsA	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase A	E	AB-BIED600:2014
Op-ChrAngPhsB	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase B	E	AB-BIED600:2014
Op-ChrAngPhsC	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase C	E	AB-BIED600:2014

**6.2.216 LN: DPH3LPTOC2 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev2_ENC_Mod_Of-fOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmACrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG_SG_TypRsCrv	Type of Reset Curve		
RsDITmms	ABBIED600_Rev1_ING_SP	Reset Delay Time		
DirMod	ABBIED600_Rev3_ENG_SG_DirMod	Directional Mode		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
InEnaMult	ABBIED600_Rev1_SPS_e	Enable signal for current multiplier	E	ABBIED600:2014
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Measuring mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
AllwNonDir	ABBIED600_Rev1_SPG_SP_e	Allows prot activation as non-dir when dir info is invalid	E	ABBIED600:2014
NonDir	ABBIED600_Rev1_SPS_e	Forces protection to non-directional	E	ABBIED600:2014

### 6.2.217 LN: DPH3LRDIR2 Name: RDIR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Dir	AB-BIED600_Rev1_ACD_threephase	Direction		
ChrAng	ABBIED600_Rev3_ASG_SG_i	Characteristic angle		

MinFwdAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in forward direction		
MinRvAng	ABBIED600_Rev3_ASG_SG_i	Minimum phase angle in reverse direction		
MaxFwdAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in forward direction		
MaxRvAng	ABBIED600_Rev3_ASG_SG_i	Maximum phase angle in reverse direction		
BlkValA	ABBIED600_Rev3_ASG_SP_i	Min operate current		
BlkValV	ABBIED600_Rev3_ASG_SP_i	Min operate voltage		
PolQty	AB-BIED600_Rev3_ENG_SG_PolQty	Polarising Quantity		
Op-ChrAngPhsA	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase A	E	AB-BIED600:2014
Op-ChrAngPhsB	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase B	E	AB-BIED600:2014
Op-ChrAngPhsC	ABBIED600_Rev3_MV_simple_i_e	Calc angle difference phase C	E	AB-BIED600:2014

### 6.2.218 LN: DARREC1 Name: RREC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
OpCntRs	ABBIED600_Rev1_INC_simple_int_e	Resetable operation counter (all shots)	E	IEC 61850-7-4:2007,status-only
RecCyc	ABBIED600_Rev1_INS	Actual reclose cycle (number between 1 and UseCyc)		
OpClIs	ABBIED600_Rev1_ACT_threephase	Operate (close command to XCBR)		
AutoRecSt	ABBIED600_Rev3_ENS_AutoRecSt	Auto Reclosing Status		
Rec1Tmms1	ABBIED600_Rev1_ING_SP	First reclose time		
Rec1Tmms2	ABBIED600_Rev1_ING_SP	Second reclose time		
Rec1Tmms3	ABBIED600_Rev1_ING_SP	Third reclose time		
Rec1Tmms4	ABBIED600_Rev1_ING_SP	Fourth reclose time		
Rec1Tmms5	ABBIED600_Rev1_ING_SP	Fifth reclose time		
Rec1Tmms6	ABBIED600_Rev1_ING_SP	Sixth reclose time		
Rec1Tmms7	ABBIED600_Rev1_ING_SP	Seventh reclose time		
Rec3Tmms1	ABBIED600_Rev1_ING_SP	First reclose time		
Rec3Tmms2	ABBIED600_Rev1_ING_SP	Second reclose time		

Rec3Tmms3	ABBIED600_Rev1_ING_SP	Third reclose time		
Rec3Tmms4	ABBIED600_Rev1_ING_SP	Fourth reclose time		
Rec3Tmms5	ABBIED600_Rev1_ING_SP	Fifth reclose time		
Rec3Tmms6	ABBIED600_Rev1_ING_SP	Sixth reclose time		
Rec3Tmms7	ABBIED600_Rev1_ING_SP	Seventh reclose time		
RclTmms	ABBIED600_Rev1_ING_SP	Reclaim time		
OpOpn	AB-BIED600_Rev1_ACT_threephase_e	Operate (open command to XCBR)	E	IEC 61850-7-4:2007
BlkRec	ABBIED600_Rev2_SPC_control_e	Block reclose	E	ABBIED600:2014,status-only,direct-with-normal-security
RecCnt1	ABBIED600_Rev1_INS_e	Operation counter (1st shot)	E	ABBIED600:2014
RecCnt2	ABBIED600_Rev1_INS_e	Operation counter (2nd shot)	E	ABBIED600:2014
RecCnt3	ABBIED600_Rev1_INS_e	Operation counter (3rd shot)	E	ABBIED600:2014
RecCnt4	ABBIED600_Rev1_INS_e	Operation counter (4th shot)	E	ABBIED600:2014
RecCnt5	ABBIED600_Rev1_INS_e	Operation counter (5th shot)	E	ABBIED600:2014
AutoInI	ABBIED600_Rev1_ING_SP_1_e	Auto init	E	ABBIED600:2014
RecOp	ABBIED600_Rev2_ENG_SP_recOp_e	Reclosing operation	E	ABBIED600:2014
ManClsMod	ABBIED600_Rev1_SPG_SP_e	Manual close mode	E	ABBIED600:2014
WtClsTmms	ABBIED600_Rev1_ING_SP_e	Wait close time	E	ABBIED600:2014
MaxWtTmms	ABBIED600_Rev1_ING_SP_e	Max wait time	E	ABBIED600:2014
Max-BlkTmms	ABBIED600_Rev1_ING_SP_e	Max Thm block time	E	ABBIED600:2014
CutOutT-mms	ABBIED600_Rev1_ING_SP_e	Cut-out time	E	ABBIED600:2014
DsrTmms1	ABBIED600_Rev1_ING_SP_e	Dsr time shot 1	E	ABBIED600:2014
DsrTmms2	ABBIED600_Rev1_ING_SP_e	Dsr time shot 2	E	ABBIED600:2014
DsrTmms3	ABBIED600_Rev1_ING_SP_e	Dsr time shot 3	E	ABBIED600:2014
DsrTmms4	ABBIED600_Rev1_ING_SP_e	Dsr time shot 4	E	ABBIED600:2014
TermPrio	ABBIED600_Rev2_ENG_SP_term-Prio_e	Terminal priority	E	ABBIED600:2014
SynSet	ABBIED600_Rev1_ING_SP_1_e	Synchronisation set	E	ABBIED600:2014
AutoWtT-mms	ABBIED600_Rev1_ING_SP_e	Auto wait time	E	ABBIED600:2014
AutoLORs	ABBIED600_Rev1_SPG_SP_e	Auto lockout reset	E	ABBIED600:2014
ProCrdLim	ABBIED600_Rev1_ING_SP_1_e	Protection crd limit	E	ABBIED600:2014
ProCrdMod	ABBIED600_Rev2_ENG_SP_proCrd-Mod_e	Protection crd mode	E	ABBIED600:2014

AutoIniCnd	ABBIED600_Rev2_ENG_SP_autoIn-iCnd_e	Auto initiation cnd	E	ABBIED600:2014
TrLin	ABBIED600_Rev1_ING_SP_1_e	Tripping line	E	ABBIED600:2014
CtlLin	ABBIED600_Rev1_ING_SP_1_e	Control line	E	ABBIED600:2014
EnaShotJmp	ABBIED600_Rev1_SPG_SP_e	Enable shot jump	E	ABBIED600:2014
CBClsPosSt	ABBIED600_Rev1_SPG_SP_e	CB closed Pos status	E	ABBIED600:2014
Ena4DISOF	ABBIED600_Rev1_SPG_SP_e	Fourth delay in SOTF	E	ABBIED600:2014
IniSigCBB1	ABBIED600_Rev1_ING_SP_1_e	Init signals CBB1	E	ABBIED600:2014
IniSigCBB2	ABBIED600_Rev1_ING_SP_1_e	Init signals CBB2	E	ABBIED600:2014
IniSigCBB3	ABBIED600_Rev1_ING_SP_1_e	Init signals CBB3	E	ABBIED600:2014
IniSigCBB4	ABBIED600_Rev1_ING_SP_1_e	Init signals CBB4	E	ABBIED600:2014
IniSigCBB5	ABBIED600_Rev1_ING_SP_1_e	Init signals CBB5	E	ABBIED600:2014
IniSigCBB6	ABBIED600_Rev1_ING_SP_1_e	Init signals CBB6	E	ABBIED600:2014
IniSigCBB7	ABBIED600_Rev1_ING_SP_1_e	Init signals CBB7	E	ABBIED600:2014
BlkSigCBB1	ABBIED600_Rev1_ING_SP_1_e	Blk signals CBB1	E	ABBIED600:2014
BlkSigCBB2	ABBIED600_Rev1_ING_SP_1_e	Blk signals CBB2	E	ABBIED600:2014
BlkSigCBB3	ABBIED600_Rev1_ING_SP_1_e	Blk signals CBB3	E	ABBIED600:2014
BlkSigCBB4	ABBIED600_Rev1_ING_SP_1_e	Blk signals CBB4	E	ABBIED600:2014
BlkSigCBB5	ABBIED600_Rev1_ING_SP_1_e	Blk signals CBB5	E	ABBIED600:2014
BlkSigCBB6	ABBIED600_Rev1_ING_SP_1_e	Blk signals CBB6	E	ABBIED600:2014
BlkSigCBB7	ABBIED600_Rev1_ING_SP_1_e	Blk signals CBB7	E	ABBIED600:2014
ShotNum1	ABBIED600_Rev1_ING_SP_1_e	Shot number CBB1	E	ABBIED600:2014
ShotNum2	ABBIED600_Rev1_ING_SP_1_e	Shot number CBB2	E	ABBIED600:2014
ShotNum3	ABBIED600_Rev1_ING_SP_1_e	Shot number CBB3	E	ABBIED600:2014
ShotNum4	ABBIED600_Rev1_ING_SP_1_e	Shot number CBB4	E	ABBIED600:2014
ShotNum5	ABBIED600_Rev1_ING_SP_1_e	Shot number CBB5	E	ABBIED600:2014
ShotNum6	ABBIED600_Rev1_ING_SP_1_e	Shot number CBB6	E	ABBIED600:2014
ShotNum7	ABBIED600_Rev1_ING_SP_1_e	Shot number CBB7	E	ABBIED600:2014
Str2Tmms1	ABBIED600_Rev1_ING_SP_e	Str 2 delay shot 1	E	ABBIED600:2014
Str2Tmms2	ABBIED600_Rev1_ING_SP_e	Str 2 delay shot 2	E	ABBIED600:2014
Str2Tmms3	ABBIED600_Rev1_ING_SP_e	Str 2 delay shot 3	E	ABBIED600:2014
Str2Tmms4	ABBIED600_Rev1_ING_SP_e	Str 2 delay shot 4	E	ABBIED600:2014
Str3Tmms1	ABBIED600_Rev1_ING_SP_e	Str 3 delay shot 1	E	ABBIED600:2014
Str3Tmms2	ABBIED600_Rev1_ING_SP_e	Str 3 delay shot 2	E	ABBIED600:2014
Str3Tmms3	ABBIED600_Rev1_ING_SP_e	Str 3 delay shot 3	E	ABBIED600:2014
Str3Tmms4	ABBIED600_Rev1_ING_SP_e	Str 3 delay shot 4	E	ABBIED600:2014
Str4Tmms1	ABBIED600_Rev1_ING_SP_e	Str 4 delay shot 1	E	ABBIED600:2014
Str4Tmms2	ABBIED600_Rev1_ING_SP_e	Str 4 delay shot 2	E	ABBIED600:2014
Str4Tmms3	ABBIED600_Rev1_ING_SP_e	Str 4 delay shot 3	E	ABBIED600:2014
Str4Tmms4	ABBIED600_Rev1_ING_SP_e	Str 4 delay shot 4	E	ABBIED600:2014
FrqCntLim	ABBIED600_Rev1_ING_SP_1_e	Frq Op counter limit	E	ABBIED600:2014

FrqCntTmm	ABBIED600_Rev1_ING_SP_1_e	Frq Op counter time	E	ABBIED600:2014
FrqRcvTmm	ABBIED600_Rev1_ING_SP_1_e	Frq Op recovery time	E	ABBIED600:2014
PlsTmms	ABBIED600_Rev1_ING_SP_e	Close pulse time	E	ABBIED600:2014
MaxTrTmms	ABBIED600_Rev1_ING_SP_e	Max trip time	E	ABBIED600:2014
InInhRec	ABBIED600_Rev1_SPS_e	Inhibit reclose (status)	E	ABBIED600:2014
InBlkThm	ABBIED600_Rev1_SPS_e	Thermal block (status)	E	ABBIED600:2014
LO	ABBIED600_Rev1_SPS_e	Lockout status	E	ABBIED600:2014
RdyRec	ABBIED600_Rev1_SPS_e	Ready reclose status	E	ABBIED600:2014
ActRec	ABBIED600_Rev1_SPS_e	Active reclose status	E	ABBIED600:2014
SucRec	ABBIED600_Rev1_SPS_e	Successful reclose status	E	ABBIED600:2014
UnsRec	ABBIED600_Rev1_SPS_e	Unsuccessful reclose status	E	ABBIED600:2014
PrgRec	ABBIED600_Rev1_SPS_e	In progress status	E	ABBIED600:2014
UnsCBCIs	ABBIED600_Rev1_SPS_e	Unsuccessful CB closing status	E	ABBIED600:2014
WtMstr	ABBIED600_Rev1_SPS_e	Master signal to follower	E	ABBIED600:2014
PrgRec1	ABBIED600_Rev1_SPS_e	In progress 1st reclose	E	ABBIED600:2014
PrgRec2	ABBIED600_Rev1_SPS_e	In progress 2nd reclose	E	ABBIED600:2014
PrgRec3	ABBIED600_Rev1_SPS_e	In progress 3rd reclose	E	ABBIED600:2014
PrgRec4	ABBIED600_Rev1_SPS_e	In progress 4th reclose	E	ABBIED600:2014
PrgRec5	ABBIED600_Rev1_SPS_e	In progress 5th reclose	E	ABBIED600:2014
PrgDsr	ABBIED600_Rev1_SPS_e	Discrimination time in progress	E	ABBIED600:2014
PrgCutOut	ABBIED600_Rev1_SPS_e	Cutout time in progress	E	ABBIED600:2014
FrqOpCnt	ABBIED600_Rev1_INS_e	Frequent operation counter	E	ABBIED600:2014
FrqOpAlm	ABBIED600_Rev1_SPS_e	Frequent operation counter alarm	E	ABBIED600:2014
RecRs	ABBIED600_Rev2_SPC_control_e	DARREC1 reset	E	ABBIED600:2014,status-only,direct-with-normal-security
CntRs	ABBIED600_Rev2_SPC_control_e	DARREC1 counters	E	ABBIED600:2014,status-only,direct-with-normal-security

DsaCnt	ABBIED600_Rev2_SPC_control_e	Signal for counter disabling	E	ABBIED600:2014,status-only,direct-with-normal-security
RclTmStr	ABBIED600_Rev1_SPS_e	Reclaim time started	E	ABBIED600:2014
ProCrd	ABBIED600_Rev1_SPS_e	Protection coordination	E	ABBIED600:2014
CBManCIs	ABBIED600_Rev1_SPS_e	CB manually closed	E	ABBIED600:2014
AutoRecOn	ABBIED600_Rev1_SPS_e	AR switched On	E	ABBIED600:2014
ShotPntr	ABBIED600_Rev1_INS_e	Shot pointer value	E	ABBIED600:2014
InRecOn	ABBIED600_Rev1_SPS_e	AR on/off control signal status	E	ABBIED600:2014
InBlkRclTm	ABBIED600_Rev1_SPS_e	Block reclaim time	E	ABBIED600:2014
InCBPos	ABBIED600_Rev1_SPS_e	CB position input	E	ABBIED600:2014
InCBRdy	ABBIED600_Rev1_SPS_e	CB ready for re-closing	E	ABBIED600:2014
InSynChk	ABBIED600_Rev1_SPS_e	Synchro check fulfilled	E	ABBIED600:2014
InIncrPntr	ABBIED600_Rev1_SPS_e	Shot pointer increment by one	E	ABBIED600:2014
InIni1	ABBIED600_Rev1_SPS_e	No 1 operate signal	E	ABBIED600:2014
InIni2	ABBIED600_Rev1_SPS_e	No 2 operate signal	E	ABBIED600:2014
InIni3	ABBIED600_Rev1_SPS_e	No 3 operate signal	E	ABBIED600:2014
InIni4	ABBIED600_Rev1_SPS_e	No 4 operate signal	E	ABBIED600:2014
InIni5	ABBIED600_Rev1_SPS_e	No 5 operate signal	E	ABBIED600:2014
InIni6	ABBIED600_Rev1_SPS_e	No 6 operate signal	E	ABBIED600:2014
InDlIni2	ABBIED600_Rev1_SPS_e	No 2 start signal	E	ABBIED600:2014
InDlIni3	ABBIED600_Rev1_SPS_e	No 3 start signal	E	ABBIED600:2014
InDlIni4	ABBIED600_Rev1_SPS_e	No 4 start signal	E	ABBIED600:2014
RclTmEla	ABBIED600_Rev1_SPS_e	Reclaim time elapsed	E	ABBIED600:2014
InBlkRecTm	ABBIED600_Rev1_SPS_e	Blocks and resets dead time	E	ABBIED600:2014
SOF	ABBIED600_Rev1_SPS_e	Switch on the fault	E	ABBIED600:2014
TestCtl	ABBIED600_Rev3_ENC_TestCtl_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.219 LN: DARREC2 Name: RREC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
OpCntRs	ABBIED600_Rev1_INC_simple_int_e	Resetable operation counter (all shots)	E	IEC 61850-7-4:2007,status-only

RecCyc	ABBIED600_Rev1_INS	Actual reclose cycle (number between 1 and UseCyc)		
OpCls	ABBIED600_Rev1_ACT_threephase	Operate (close command to XCBR)		
AutoRecSt	ABBIED600_Rev3_ENS_AutoRecSt	Auto Reclosing Status		
Rec1Tmms1	ABBIED600_Rev1_ING_SP	First reclose time		
Rec1Tmms2	ABBIED600_Rev1_ING_SP	Second reclose time		
Rec1Tmms3	ABBIED600_Rev1_ING_SP	Third reclose time		
Rec1Tmms4	ABBIED600_Rev1_ING_SP	Fourth reclose time		
Rec1Tmms5	ABBIED600_Rev1_ING_SP	Fifth reclose time		
Rec1Tmms6	ABBIED600_Rev1_ING_SP	Sixth reclose time		
Rec1Tmms7	ABBIED600_Rev1_ING_SP	Seventh reclose time		
Rec3Tmms1	ABBIED600_Rev1_ING_SP	First reclose time		
Rec3Tmms2	ABBIED600_Rev1_ING_SP	Second reclose time		
Rec3Tmms3	ABBIED600_Rev1_ING_SP	Third reclose time		
Rec3Tmms4	ABBIED600_Rev1_ING_SP	Fourth reclose time		
Rec3Tmms5	ABBIED600_Rev1_ING_SP	Fifth reclose time		
Rec3Tmms6	ABBIED600_Rev1_ING_SP	Sixth reclose time		
Rec3Tmms7	ABBIED600_Rev1_ING_SP	Seventh reclose time		
RclTmms	ABBIED600_Rev1_ING_SP	Reclaim time		
OpOpn	AB-BIED600_Rev1_ACT_threephase_e	Operate (open command to XCBR)	E	IEC 61850-7-4:2007
BlkRec	ABBIED600_Rev2_SPC_control_e	Block reclose	E	ABBIED600:2014,status-only,direct-with-normal-security
RecCnt1	ABBIED600_Rev1_INS_e	Operation counter (1st shot)	E	ABBIED600:2014
RecCnt2	ABBIED600_Rev1_INS_e	Operation counter (2nd shot)	E	ABBIED600:2014
RecCnt3	ABBIED600_Rev1_INS_e	Operation counter (3rd shot)	E	ABBIED600:2014
RecCnt4	ABBIED600_Rev1_INS_e	Operation counter (4th shot)	E	ABBIED600:2014
RecCnt5	ABBIED600_Rev1_INS_e	Operation counter (5th shot)	E	ABBIED600:2014
AutoInI	ABBIED600_Rev1_ING_SP_1_e	Auto init	E	ABBIED600:2014
RecOp	ABBIED600_Rev2_ENG_SP_recOp_e	Reclosing operation	E	ABBIED600:2014
ManClsMod	ABBIED600_Rev1_SPG_SP_e	Manual close mode	E	ABBIED600:2014
WtClsTmms	ABBIED600_Rev1_ING_SP_e	Wait close time	E	ABBIED600:2014

MaxWtTmms	ABBIED600_Rev1_ING_SP_e	Max wait time	E	ABBIED600:2014
Max-BlkTmms	ABBIED600_Rev1_ING_SP_e	Max Thm block time	E	ABBIED600:2014
CutOutT-mms	ABBIED600_Rev1_ING_SP_e	Cut-out time	E	ABBIED600:2014
DsrTmms1	ABBIED600_Rev1_ING_SP_e	Dsr time shot 1	E	ABBIED600:2014
DsrTmms2	ABBIED600_Rev1_ING_SP_e	Dsr time shot 2	E	ABBIED600:2014
DsrTmms3	ABBIED600_Rev1_ING_SP_e	Dsr time shot 3	E	ABBIED600:2014
DsrTmms4	ABBIED600_Rev1_ING_SP_e	Dsr time shot 4	E	ABBIED600:2014
TermPrio	ABBIED600_Rev2_ENG_SP_term-Prio_e	Terminal priority	E	ABBIED600:2014
SynSet	ABBIED600_Rev1_ING_SP_1_e	Synchronisation set	E	ABBIED600:2014
AutoWtT-mms	ABBIED600_Rev1_ING_SP_e	Auto wait time	E	ABBIED600:2014
AutoLORs	ABBIED600_Rev1_SPG_SP_e	Auto lockout reset	E	ABBIED600:2014
ProCrdLim	ABBIED600_Rev1_ING_SP_1_e	Protection crd limit	E	ABBIED600:2014
ProCrdMod	ABBIED600_Rev2_ENG_SP_proCrd-Mod_e	Protection crd mode	E	ABBIED600:2014
AutoIniCnd	ABBIED600_Rev2_ENG_SP_autoIn-iCnd_e	Auto initiation cnd	E	ABBIED600:2014
TrLin	ABBIED600_Rev1_ING_SP_1_e	Tripping line	E	ABBIED600:2014
CtlLin	ABBIED600_Rev1_ING_SP_1_e	Control line	E	ABBIED600:2014
EnaShotJmp	ABBIED600_Rev1_SPG_SP_e	Enable shot jump	E	ABBIED600:2014
CBCIsPosSt	ABBIED600_Rev1_SPG_SP_e	CB closed Pos status	E	ABBIED600:2014
Ena4DISOF	ABBIED600_Rev1_SPG_SP_e	Fourth delay in SOTF	E	ABBIED600:2014
IniSigCBB1	ABBIED600_Rev1_ING_SP_1_e	Init signals CBB1	E	ABBIED600:2014
IniSigCBB2	ABBIED600_Rev1_ING_SP_1_e	Init signals CBB2	E	ABBIED600:2014
IniSigCBB3	ABBIED600_Rev1_ING_SP_1_e	Init signals CBB3	E	ABBIED600:2014
IniSigCBB4	ABBIED600_Rev1_ING_SP_1_e	Init signals CBB4	E	ABBIED600:2014
IniSigCBB5	ABBIED600_Rev1_ING_SP_1_e	Init signals CBB5	E	ABBIED600:2014
IniSigCBB6	ABBIED600_Rev1_ING_SP_1_e	Init signals CBB6	E	ABBIED600:2014
IniSigCBB7	ABBIED600_Rev1_ING_SP_1_e	Init signals CBB7	E	ABBIED600:2014
BlkSigCBB1	ABBIED600_Rev1_ING_SP_1_e	Blk signals CBB1	E	ABBIED600:2014
BlkSigCBB2	ABBIED600_Rev1_ING_SP_1_e	Blk signals CBB2	E	ABBIED600:2014
BlkSigCBB3	ABBIED600_Rev1_ING_SP_1_e	Blk signals CBB3	E	ABBIED600:2014
BlkSigCBB4	ABBIED600_Rev1_ING_SP_1_e	Blk signals CBB4	E	ABBIED600:2014
BlkSigCBB5	ABBIED600_Rev1_ING_SP_1_e	Blk signals CBB5	E	ABBIED600:2014
BlkSigCBB6	ABBIED600_Rev1_ING_SP_1_e	Blk signals CBB6	E	ABBIED600:2014
BlkSigCBB7	ABBIED600_Rev1_ING_SP_1_e	Blk signals CBB7	E	ABBIED600:2014
ShotNum1	ABBIED600_Rev1_ING_SP_1_e	Shot number CBB1	E	ABBIED600:2014
ShotNum2	ABBIED600_Rev1_ING_SP_1_e	Shot number CBB2	E	ABBIED600:2014
ShotNum3	ABBIED600_Rev1_ING_SP_1_e	Shot number CBB3	E	ABBIED600:2014
ShotNum4	ABBIED600_Rev1_ING_SP_1_e	Shot number CBB4	E	ABBIED600:2014

ShotNum5	ABBIED600_Rev1_ING_SP_1_e	Shot number CBB5	E	ABBIED600:2014
ShotNum6	ABBIED600_Rev1_ING_SP_1_e	Shot number CBB6	E	ABBIED600:2014
ShotNum7	ABBIED600_Rev1_ING_SP_1_e	Shot number CBB7	E	ABBIED600:2014
Str2Tmms1	ABBIED600_Rev1_ING_SP_e	Str 2 delay shot 1	E	ABBIED600:2014
Str2Tmms2	ABBIED600_Rev1_ING_SP_e	Str 2 delay shot 2	E	ABBIED600:2014
Str2Tmms3	ABBIED600_Rev1_ING_SP_e	Str 2 delay shot 3	E	ABBIED600:2014
Str2Tmms4	ABBIED600_Rev1_ING_SP_e	Str 2 delay shot 4	E	ABBIED600:2014
Str3Tmms1	ABBIED600_Rev1_ING_SP_e	Str 3 delay shot 1	E	ABBIED600:2014
Str3Tmms2	ABBIED600_Rev1_ING_SP_e	Str 3 delay shot 2	E	ABBIED600:2014
Str3Tmms3	ABBIED600_Rev1_ING_SP_e	Str 3 delay shot 3	E	ABBIED600:2014
Str3Tmms4	ABBIED600_Rev1_ING_SP_e	Str 3 delay shot 4	E	ABBIED600:2014
Str4Tmms1	ABBIED600_Rev1_ING_SP_e	Str 4 delay shot 1	E	ABBIED600:2014
Str4Tmms2	ABBIED600_Rev1_ING_SP_e	Str 4 delay shot 2	E	ABBIED600:2014
Str4Tmms3	ABBIED600_Rev1_ING_SP_e	Str 4 delay shot 3	E	ABBIED600:2014
Str4Tmms4	ABBIED600_Rev1_ING_SP_e	Str 4 delay shot 4	E	ABBIED600:2014
FrqCntLim	ABBIED600_Rev1_ING_SP_1_e	Frq Op counter limit	E	ABBIED600:2014
FrqCntTmm	ABBIED600_Rev1_ING_SP_1_e	Frq Op counter time	E	ABBIED600:2014
FrqRcvTmm	ABBIED600_Rev1_ING_SP_1_e	Frq Op recovery time	E	ABBIED600:2014
PlsTmms	ABBIED600_Rev1_ING_SP_e	Close pulse time	E	ABBIED600:2014
MaxTrTmms	ABBIED600_Rev1_ING_SP_e	Max trip time	E	ABBIED600:2014
InInhRec	ABBIED600_Rev1_SPS_e	Inhibit reclose (status)	E	ABBIED600:2014
InBlkThm	ABBIED600_Rev1_SPS_e	Thermal block (status)	E	ABBIED600:2014
LO	ABBIED600_Rev1_SPS_e	Lockout status	E	ABBIED600:2014
RdyRec	ABBIED600_Rev1_SPS_e	Ready reclose status	E	ABBIED600:2014
ActRec	ABBIED600_Rev1_SPS_e	Active reclose status	E	ABBIED600:2014
SucRec	ABBIED600_Rev1_SPS_e	Successful reclose status	E	ABBIED600:2014
UnsRec	ABBIED600_Rev1_SPS_e	Unsuccessful re-close status	E	ABBIED600:2014
PrgRec	ABBIED600_Rev1_SPS_e	In progress status	E	ABBIED600:2014
UnsCBCIs	ABBIED600_Rev1_SPS_e	Unsuccessful CB closing status	E	ABBIED600:2014
WtMstr	ABBIED600_Rev1_SPS_e	Master signal to follower	E	ABBIED600:2014
PrgRec1	ABBIED600_Rev1_SPS_e	In progress 1st re-close	E	ABBIED600:2014
PrgRec2	ABBIED600_Rev1_SPS_e	In progress 2nd re-close	E	ABBIED600:2014
PrgRec3	ABBIED600_Rev1_SPS_e	In progress 3rd re-close	E	ABBIED600:2014

PrgRec4	ABBIED600_Rev1_SPS_e	In progress 4th re-close	E	ABBIED600:2014
PrgRec5	ABBIED600_Rev1_SPS_e	In progress 5th re-close	E	ABBIED600:2014
PrgDsr	ABBIED600_Rev1_SPS_e	Discrimination time in progress	E	ABBIED600:2014
PrgCutOut	ABBIED600_Rev1_SPS_e	Cutout time in progress	E	ABBIED600:2014
FrqOpCnt	ABBIED600_Rev1_INS_e	Frequent operation counter	E	ABBIED600:2014
FrqOpAlm	ABBIED600_Rev1_SPS_e	Frequent operation counter alarm	E	ABBIED600:2014
RecRs	ABBIED600_Rev2_SPC_control_e	DARREC2 reset	E	ABBIED600:2014,status-only,direct-with-normal-security
CntRs	ABBIED600_Rev2_SPC_control_e	DARREC2 counters	E	ABBIED600:2014,status-only,direct-with-normal-security
DsaCnt	ABBIED600_Rev2_SPC_control_e	Signal for counter disabling	E	ABBIED600:2014,status-only,direct-with-normal-security
RclTmStr	ABBIED600_Rev1_SPS_e	Reclaim time started	E	ABBIED600:2014
ProCrd	ABBIED600_Rev1_SPS_e	Protection coordination	E	ABBIED600:2014
CBManCls	ABBIED600_Rev1_SPS_e	CB manually closed	E	ABBIED600:2014
AutoRecOn	ABBIED600_Rev1_SPS_e	AR switched On	E	ABBIED600:2014
ShotPntr	ABBIED600_Rev1_INS_e	Shot pointer value	E	ABBIED600:2014
InRecOn	ABBIED600_Rev1_SPS_e	AR on/off control signal status	E	ABBIED600:2014
InBlkRclTm	ABBIED600_Rev1_SPS_e	Block reclaim time	E	ABBIED600:2014
InCBPos	ABBIED600_Rev1_SPS_e	CB position input	E	ABBIED600:2014
InCBRdy	ABBIED600_Rev1_SPS_e	CB ready for re-closing	E	ABBIED600:2014
InSynChk	ABBIED600_Rev1_SPS_e	Synchro check fulfilled	E	ABBIED600:2014
InIncrPntr	ABBIED600_Rev1_SPS_e	Shot pointer increment by one	E	ABBIED600:2014
InIni1	ABBIED600_Rev1_SPS_e	No 1 operate signal	E	ABBIED600:2014
InIni2	ABBIED600_Rev1_SPS_e	No 2 operate signal	E	ABBIED600:2014
InIni3	ABBIED600_Rev1_SPS_e	No 3 operate signal	E	ABBIED600:2014
InIni4	ABBIED600_Rev1_SPS_e	No 4 operate signal	E	ABBIED600:2014
InIni5	ABBIED600_Rev1_SPS_e	No 5 operate signal	E	ABBIED600:2014
InIni6	ABBIED600_Rev1_SPS_e	No 6 operate signal	E	ABBIED600:2014
InDlIni2	ABBIED600_Rev1_SPS_e	No 2 start signal	E	ABBIED600:2014
InDlIni3	ABBIED600_Rev1_SPS_e	No 3 start signal	E	ABBIED600:2014
InDlIni4	ABBIED600_Rev1_SPS_e	No 4 start signal	E	ABBIED600:2014

RclTmEla	ABBIED600_Rev1_SPS_e	Reclaim time elapsed	E	ABBIED600:2014
InBlkRecTm	ABBIED600_Rev1_SPS_e	Blocks and resets dead time	E	ABBIED600:2014
SOF	ABBIED600_Rev1_SPS_e	Switch on the fault	E	ABBIED600:2014
TestCtl	ABBIED600_Rev3_ENC_TestCtl_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.220 LN: RESCMMXU1 Name: MMXU (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Operation		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
A	ABBIED600_Rev3_WYE_res_full_i	Residual current		
AMeas-Mod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Selects used measurement mode	E	ABBIED600:2014
HiAlm	ABBIED600_Rev1_SPS_e	High alarm	E	ABBIED600:2014
HiWrn	ABBIED600_Rev1_SPS_e	High warning	E	ABBIED600:2014
RcdRs	ABBIED600_Rev2_SPC_control_e	RESCMMXU1 demands	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.221 LN: PHAPTVU1 Name: PTUV (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
TmVCrv	ABBIED600_Rev2_CURVE SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDIT-mms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
TypRsCrv	ABBIED600_Rev3_ENG_SG_TypRsCrv_e	Type of Reset Curve	E	IEC 61850-7-4:2007
BlkVal	ABBIED600_Rev3_ASG_SP_i_e	Voltage block value	E	IEC 61850-7-4:2007

StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
CrSatRI	ABBIED600_Rev1_ASG_SP_f_e	Tuning parameter to avoid curve discontinuities	E	ABBIED600:2014
VSel	ABBIED600_Rev3_ENG_SP_VSel_e	Parameter to select phase or phase-to-phase voltages	E	ABBIED600:2014
EnaBlkVal	ABBIED600_Rev1_SPG_SP_e	Enable block value	E	ABBIED600:2014
HysRI	ABBIED600_Rev3_ASG_SP_i_e	Relative hysteresis for operation	E	ABBIED600:2014
TypTmRs	AB-BIED600_Rev2_ENG_SG_TypTmRs_e	Type of time reset	E	ABBIED600:2014

### 6.2.222 LN: PHAPTOV1 Name: PTOV (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
TmVCr	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDIT-mms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
TypRsCr	AB-BIED600_Rev3_ENG_SG_TypRsCr_e	Type of Reset Curve	E	IEC 61850-7-4:2007
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
CrSatRI	ABBIED600_Rev1_ASG_SP_f_e	Tuning parameter to avoid curve discontinuities	E	ABBIED600:2014
VSel	ABBIED600_Rev3_ENG_SP_VSel_e	Parameter to select phase or	E	ABBIED600:2014

		phase-to-phase voltages		
HysRI	ABBIED600_Rev3_ASG_SP_i_e	Relative hysteresis for operation	E	ABBIED600:2014
TypTmRs	AB-BIED600_Rev2_ENG_SG_TypTmRs_e	Type of time reset	E	ABBIED600:2014

### 6.2.223 LN: HIAPDIF1 Name: PDIF (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
LoSet	ABBIED600_Rev3_ASG_SG_i	Low operate value, percentage of the nominal current		
MinOp-Tmms	ABBIED600_Rev1_ING_SG	Minimum Operate Time		
RsDIT-mms	ABBIED600_Rev1_ING_SP	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TestPro	AB-BIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.224 LN: HIBPDIF1 Name: PDIF (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
LoSet	ABBIED600_Rev3_ASG_SG_i	Low operate value, percentage of the nominal current		
MinOp-Tmms	ABBIED600_Rev1_ING_SG	Minimum Operate Time		
RsDIT-mms	ABBIED600_Rev1_ING_SP	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014

TestPro	AB-BIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
---------	-------------------------------	--------------------------	---	--

**6.2.225 LN: HICPDIF1 Name: PDIF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
LoSet	ABBIED600_Rev3_ASG_SG_i	Low operate value, percentage of the nominal current		
MinOp-Tmms	ABBIED600_Rev1_ING_SG	Minimum Operate Time		
RsDIT-mms	ABBIED600_Rev1_ING_SP	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TestPro	AB-BIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.226 LN: SECRSYN1 Name: RSYN (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Rel	ABBIED600_Rev1_SPS	Release		
VInd	ABBIED600_Rev1_SPS	Voltage Difference Indicator		
AngInd	ABBIED600_Rev1_SPS	Angle Difference Indicator		
HzInd	ABBIED600_Rev1_SPS	Frequency difference Indicator		
SynPrg	ABBIED600_Rev1_SPC_simple	Synchronising in progress		status-only
DifVClc	ABBIED600_Rev3_MV_simple_i	Calculated Difference in Voltage		
DifHzClc	ABBIED600_Rev3_MV_simple_i	Calculated Difference in Frequency		
DifAngClc	ABBIED600_Rev3_MV_simple_i	Calculated Difference of Phase Angle		

DifV	ABBIED600_Rev3_ASG_SG_i	Difference Voltage		
DifHz	ABBIED600_Rev3_ASG_SG_i	Difference Frequency		
DifAng	ABBIED600_Rev3_ASG_SG_i	Difference Phase Angle		
LivDeaMod	AB-BIED600_Rev3_ENG_SG_LivDeaMod	Live Dead Mode		
DeaLinVal	ABBIED600_Rev3_ASG_SP_i	Dead Line Value		
LivLinVal	ABBIED600_Rev3_ASG_SP_i	Live Line Value		
DeaBusVal	ABBIED600_Rev3_ASG_SP_i	Dead Bus Value		
LivBusVal	ABBIED600_Rev3_ASG_SP_i	Live Bus Value		
PlsTmms	ABBIED600_Rev1_ING_SP_e	Close Pulse Time	E	ABBIED600:2014
CBTmms	ABBIED600_Rev1_ING_SP_e	Closing time of the breaker	E	IEC 61850-7-4:2007
FailCmd	ABBIED600_Rev1_SPS_e	CB closing request failed	E	ABBIED600:2014
FailSyn	ABBIED600_Rev1_SPS_e	CB closing failed	E	ABBIED600:2014
ClRsRq	ABBIED600_Rev1_SPS_e	External closing request	E	ABBIED600:2014
Byps	ABBIED600_Rev1_SPS_e	Request to bypass synchronism check and voltage check	E	ABBIED600:2014
LLDBlnd	ABBIED600_Rev1_SPS_e	Live Line, Dead Bus	E	ABBIED600:2014
LLLBlnd	ABBIED600_Rev1_SPS_e	Live Line, Live Bus	E	ABBIED600:2014
DLLBlnd	ABBIED600_Rev1_SPS_e	Dead Line, Live Bus	E	ABBIED600:2014
DLDBlnd	ABBIED600_Rev1_SPS_e	Dead Line, Dead Bus	E	ABBIED600:2014
OpModSC	ABBIED600_Rev2_ENG_SP_OpModSC_e	Synchrocheck mode	E	ABBIED600:2014
OpModCtl	ABBIED600_Rev2_ENG_SP_OpMod-Ctrl_e	Selection of synchro check command or Continuous control mode	E	ABBIED600:2014
EnSt	ABBIED600_Rev2_ENS_EnergSt_e	Energization state of Line and Bus	E	ABBIED600:2014
MaxVEn	ABBIED600_Rev3_ASG_SP_i_e	Maximum voltage for energizing	E	ABBIED600:2014
PhSht	ABBIED600_Rev3_ASG_SP_i_e	Correction of phase difference between measured U_BUS and U_LINE	E	ABBIED600:2014
EnTmms	ABBIED600_Rev1_ING_SP_e	Time delay for energizing check	E	ABBIED600:2014
MaxSynTmms	ABBIED600_Rev1_ING_SP_e	Maximum time to accept synchronizing	E	ABBIED600:2014
MinSynTmms	ABBIED600_Rev1_ING_SP_e	Minimum time to accept synchronizing	E	ABBIED600:2014

TestCtl	ABBIED600_Rev3_ENC_TestCtl_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
VSrcSw	ABBIED600_Rev1_SPG_SP_e	Voltage source switch	E	ABBIED600:2014

**6.2.227 LN: VAMMXU2 Name: MMXU (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
PPV	AB-BIED600_Rev1_DEL_onephaseAB_full_i	Single phase to phase AB voltages		
PhV	AB-BIED600_Rev1_WYE_onephaseA_full_i	Single phase to ground A voltage		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
VMeas-Mod	ABBIED600_Rev3_ENG_SP_MeasMod_e	Selects used measurement mode	E	ABBIED600:2014
HiAlm	ABBIED600_Rev1_SPS_e	High alarm	E	ABBIED600:2014
HiWrn	ABBIED600_Rev1_SPS_e	High warning	E	ABBIED600:2014
LoWrn	ABBIED600_Rev1_SPS_e	Low warning	E	ABBIED600:2014
LoAlm	ABBIED600_Rev1_SPS_e	Low alarm	E	ABBIED600:2014

**6.2.228 LN: RESVMMXU1 Name: MMXU (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Operation		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
PhV	ABBIED600_Rev3_WYE_res_full_i	Residual voltage		
VMeas-Mod	ABBIED600_Rev3_ENG_SP_MeasMod_e	Selects used measurement mode	E	ABBIED600:2014
HiAlm	ABBIED600_Rev1_SPS_e	High alarm	E	ABBIED600:2014
HiWrn	ABBIED600_Rev1_SPS_e	High warning	E	ABBIED600:2014
RcdRs	ABBIED600_Rev2_SPC_control_e	RESVMMXU1 demands	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.229 LN: MNSPTOC1 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		

Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
TmACrv	AB-BIED600_Rev2_CURVE SG_setCharact	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG SG_i	Machine time Mult		
MinOpTmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
Max-OpTmms	ABBIED600_Rev1_ING_SP	Maximum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrInh	ABBIED600_Rev1_SPS_e	Overheated machine reconnection blocking	E	IEC 61850-7-4:2007
ARef	ABBIED600_Rev3_ASG_SP_i_e	Rated current (Ir) of the machine (used only in the IDMT)	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
CITms	ABBIED600_Rev1_ING_SP_1_e	Cooling time	E	ABBIED600:2014
TmsRecEna	ABBIED600_Rev1_INS_e	Estimated time to reset of block restart	E	ABBIED600:2014

**6.2.230 LN: MNSPTOC2 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
TmACrv	AB-BIED600_Rev2_CURVE SG_setCharact	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG SG_i	Machine time Mult		

MinOpTmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
Max-OpTmms	ABBIED600_Rev1_ING_SP	Maximum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrInh	ABBIED600_Rev1_SPS_e	Overheated machine reconnection blocking	E	IEC 61850-7-4:2007
ARef	ABBIED600_Rev3_ASG_SP_i_e	Rated current (Ir) of the machine (used only in the IDMT)	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
CITms	ABBIED600_Rev1_ING_SP_1_e	Cooling time	E	ABBIED600:2014
TmsRecEna	ABBIED600_Rev1_INS_e	Estimated time to reset of block restart	E	ABBIED600:2014

### 6.2.231 LN: LOFLPTUC1 Name: PTUC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Current setting/Start value high		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
BlkValA	ABBIED600_Rev3_ASG_SG_i_e	Current setting/Start value low	E	IEC 61850-7-4:2007
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.232 LN: LOFLPTUC2 Name: PTUC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Current setting/Start value high		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
BlkValA	ABBIED600_Rev3_ASG_SG_i_e	Current setting/Start value low	E	IEC 61850-7-4:2007
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.233 LN: JAMPTOC1 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
StrVal	ABBIED600_Rev3_ASG_SP_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SP	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.234 LN: STTPMSS1 Name: PMSS (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	BLOCK		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Signal to show that motor startup is in progress		
Op	ABBIED600_Rev1_ACT_simple	Operate/trip signal for stalling protection.		
MotStr	ABBIED600_Rev3_ASG_SG_i	Current value to indicate starting of motor		
LockRotTms	ABBIED600_Rev1_ING_SG	Lock Rotor Time, permissible locked rotor time		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
OpMod-StUp	ABBIED600_Rev2_ENG_SP_OpModStUp_e	Motor start-up operation mode	E	ABBIED600:2014
StrOvDIT-mms	ABBIED600_Rev1_ING_SG_e	Time delay to check for completion of motor startup period	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_simple_i_e	Start time relative to the operate time for stall cond	E	ABBIED600:2014
EnaEmg-Str	ABBIED600_Rev1_SPS_e	Enable emergency start to disable lock of start motor	E	ABBIED600:2014
StlInd	ABBIED600_Rev1_SPS_e	Input signal for showing the motor is not stalling	E	ABBIED600:2014
BlkLOStr	ABBIED600_Rev1_SPS_e	Blocks lock out condition for restart of motor	E	ABBIED600:2014
InPosCls	ABBIED600_Rev1_SPS_e	Input showing the status of motor circuit breaker	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
MotStop	ABBIED600_Rev3_ASG_SP_i_e	Current limit to check for motor standstill condition	E	ABBIED600:2014

**6.2.235 LN: STTPMRI1 Name: PMRI (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only

Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Op	ABBIED600_Rev1_ACT_simple	Operate/trip signal for thermal stress.		
StrInh	ABBIED600_Rev1_SPS	Lock out condition for restart of motor.		
StrInhTmm	ABBIED600_Rev1_INS	Time left for restart when lockstart is enabled in minutes		
SetA	ABBIED600_Rev3_ASG_SG_i	Motor starting current		
SetTms	ABBIED600_Rev1_ING_SG	Motor starting time		
InhTmm	ABBIED600_Rev1_ING_SP_1	Time delay between consecutive startups		
StrUpCntRs	ABBIED600_Rev2_INC_control_int_e	Number of motor start-ups occurred	E	ABBIED600:2014,status-only,direct-with-normal-security
CntRedRte	ABBIED600_Rev3_ASG_SP_i_e	Start time counter reduction rate	E	ABBIED600:2014
EmgRedRte	ABBIED600_Rev3_ASG_SP_i_e	Start time reduction factor when emergency start is On	E	ABBIED600:2014
ThmStsPct	ABBIED600_Rev3_MV_simple_i_e	Thermal stress relative to set maximum thermal stress	E	ABBIED600:2014
TmsCum-StrUp	ABBIED600_Rev3_MV_simple_i_e	Cumulated start-up time in sec	E	ABBIED600:2014
TmsStrUp	ABBIED600_Rev3_MV_simple_i_e	Measured motor latest startup time in sec	E	ABBIED600:2014
CumLimTms	ABBIED600_Rev1_ING_SP_1_e	Cumulative time based restart inhibit limit	E	ABBIED600:2014
RsStrUpCnt	ABBIED600_Rev2_SPC_control_e	Reset number of motor start-ups counter	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.236 LN: PREVPTOC1 Name: PTOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	PREVPTOC1		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate time delay		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014

TstOutCmd	AB-BIED600_Rev20_ENC_TstOut_e	PREVPTOC1	E	ABBIED600:2014,status-only,direct-with-normal-security
-----------	-------------------------------	-----------	---	--

### 6.2.237 LN: MPTTR1 Name: PTTR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_Of-fOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
TmpRI	ABBIED600_Rev3_MV_simple_i	THERMLEV		
Op	ABBIED600_Rev1_ACT_simple	Operate		
AlmThm	ABBIED600_Rev1_SPS	Thermal Alarm		
ConsTms1	ABBIED600_Rev1_ING_SG	Time constant normal		
ConsTms2	ABBIED600_Rev1_ING_SG	Motor time constant during the start of motor		
ConsTms3	ABBIED600_Rev1_ING_SG	Motor time constant during the standstill condition of motor		
AlmVal	ABBIED600_Rev3_ASG_SG_i	Alarm thermal value		
BlkThm	ABBIED600_Rev1_SPS	Restart inhibited		
ARef	ABBIED600_Rev3_ASG_SP_i_e	Rated current (FLC) of the motor	E	ABBIED600:2014
RsTmp	ABBIED600_Rev2_SPC_control_e	MPTTR1 temperature	E	ABBIED600:2014,status-only,direct-with-normal-security
DropoutVal	ABBIED600_Rev3_ASG_SG_i	Restart thermal Val		
WghFact	ABBIED600_Rev3_ASG_SG_i_e	Weighting factor	E	ABBIED600:2014
OvlFact	ABBIED600_Rev3_ASG_SG_i_e	Overload factor (k)	E	ABBIED600:2014
NgSeqFact	ABBIED600_Rev3_ASG_SG_i_e	Heating effect factor for negative sequence current	E	ABBIED600:2014
EnvTmpSet	ABBIED600_Rev3_ASG_SG_i_e	Ambient temperature	E	ABBIED600:2014
IniTmp	ABBIED600_Rev3_ASG_SP_i_e	Initial thermal Val	E	ABBIED600:2014
EnvTmpMod	ABBIED600_Rev2_ENG_SG_EnvTmpMod_e	Mode of measuring ambient temperature	E	ABBIED600:2014
EnaEmgStr	ABBIED600_Rev1_SPS_e	Enable emergency start to disable lock of start motor	E	ABBIED600:2014
TmpUsed	ABBIED600_Rev3_MV_simple_i_e	The ambient temperature used in the calculation	E	ABBIED600:2014
TmpAmb	ABBIED600_Rev3_MV_simple_i_e	Ambient temperature	E	ABBIED600:2014

ThmLevStr	ABBIED600_Rev3_MV_simple_i_e	Thermal level at beginning of motor startup	E	ABBIED600:2014
ThmLevEnd	ABBIED600_Rev3_MV_simple_i_e	Thermal level at the end of motor startup situation	E	ABBIED600:2014
BlkThmRsTm	ABBIED600_Rev1_INS_e	Estimated time to reset of block restart	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	MPTTR1	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.238 LN: MRE1PTOC1 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behavior		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Alarm delay time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset delay time		
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.239 LN: MRE2PTOC1 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behavior		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate delay time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset delay time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014

**6.2.240 LN: ESMGAPC1 Name: GACP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		

Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Emergency start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Motor standstill A		
RqEmgStr	ABBIED600_Rev1_SPS_e	ST_EMERG_RQ	E	ABBIED600:2014
TstOutCmd	AB-BIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.241 LN: MLPDIF1 Name: PDIF (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Op	ABBIED600_Rev1_ACT_simple	Operate signal from low (stabilized) stage		
Blk	ABBIED600_Rev1_SPS_simple	Blocks operate outputs from biased stage		
DifAClc	AB-BIED600_Rev3_WYE_threephase_simple_i	Differential Current		
RstA	AB-BIED600_Rev3_WYE_threephase_simple_i	Restraint current		
LoSet	ABBIED600_Rev3_ASG_SG_i	Low operate value		
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
BlkIntnSt	ABBIED600_Rev1_ACT_threephase_e	Status from waveform blocking	E	ABBIED600:2014
SpeScn2	ABBIED600_Rev3_ASG_SG_i_e	Slope section 2	E	ABBIED600:2014
SpeScn3	ABBIED600_Rev3_ASG_SG_i_e	Slope section 3	E	ABBIED600:2014
AngLinAB	ABBIED600_Rev3_MV_simple_i_e	Current phase angle phase A to B, line side	E	ABBIED600:2014
AngLinBC	ABBIED600_Rev3_MV_simple_i_e	Current phase angle phase B to C, line side	E	ABBIED600:2014
AngLinCA	ABBIED600_Rev3_MV_simple_i_e	Current phase angle phase C to A, line side	E	ABBIED600:2014
AngNeutAB	ABBIED600_Rev3_MV_simple_i_e	Current phase angle phase A to B, neutral side	E	ABBIED600:2014

AngNeutBC	ABBIED600_Rev3_MV_simple_i_e	Current phase angle phase B to C, neutral side	E	ABBIED600:2014
AngNeutCA	ABBIED600_Rev3_MV_simple_i_e	Current phase angle phase C to A, neutral side	E	ABBIED600:2014
An-gLinNeutA	ABBIED600_Rev3_MV_simple_i_e	Current phs angle diff between line and neutral, phase A	E	ABBIED600:2014
An-gLinNeutB	ABBIED600_Rev3_MV_simple_i_e	Current phs angle diff between line and neutral, phase B	E	ABBIED600:2014
An-gLinNeutC	ABBIED600_Rev3_MV_simple_i_e	Current phs angle diff between line and neutral, phase C	E	ABBIED600:2014
EndScn1	ABBIED600_Rev3_ASG_SG_i_e	End section 1	E	ABBIED600:2014
EndScn2	ABBIED600_Rev3_ASG_SG_i_e	End section 2	E	ABBIED600:2014
CTConnTyp	AB-BIED600_Rev2_ENG_SP_CTConnTyp_e	CT connection type	E	ABBIED600:2014
EnaDCBias	ABBIED600_Rev1_SPG_SG_e	Setting for enabling DC bias	E	ABBIED600:2014
CTRatCor1	ABBIED600_Rev3_ASG_SP_i_e	CT ratio correction, line side	E	ABBIED600:2014
CTRatCor2	ABBIED600_Rev3_ASG_SP_i_e	CT ratio correction, neutral side	E	ABBIED600:2014

### 6.2.242 LN: MHPDIF1 Name: PDIF (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_Of-fOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
DifAClc	AB-BIED600_Rev3_WYE_threephase_simple_i	Differential current		
LoSet	ABBIED600_Rev3_ASG_SG_i	Low operate value, percentage of the nominal current		
MinOp-Tmms	ABBIED600_Rev1_ING_SG	Minimum operate time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset delay time		

StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

#### 6.2.243 LN: HREFPDIF1 Name: PDIF (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
LoSet	ABBIED600_Rev3_ASG_SG_i	Low operate value, percentage of the nominal current		
MinOp-Tmms	ABBIED600_Rev1_ING_SG	Minimum Operate Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

#### 6.2.244 LN: CMMXU2 Name: MMXU (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Operation		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
A	ABBIED600_Rev3_WYE_threephase_full_i	Phase currents		
AMeas-Mod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Selects used measurement mode	E	ABBIED600:2014
NumPh	ABBIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required by limit supervision	E	ABBIED600:2014
HiAlm	ABBIED600_Rev1_SPS_e	High alarm	E	ABBIED600:2014
HiWrn	ABBIED600_Rev1_SPS_e	High warning	E	ABBIED600:2014
LoWrn	ABBIED600_Rev1_SPS_e	Low warning	E	ABBIED600:2014
LoAlm	ABBIED600_Rev1_SPS_e	Low alarm	E	ABBIED600:2014

RcdRs	ABBIED600_Rev2_SPC_control_e	CMMXU2 demands	E	ABBIED600:2014,status-only,direct-with-normal-security
-------	------------------------------	----------------	---	--

**6.2.245 LN: PHLPTOC2 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
TmACrv	ABBIED600_Rev2_CURVE SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING SG	Operate Delay Time		
TypRsCrv	AB-BIED600_Rev3_ENG SG_TypRsCrv	Type of Reset Curve		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
InEnaMult	ABBIED600_Rev1_SPS_e	Enable signal for current multiplier	E	ABBIED600:2014
NumPh	AB-BIED600_Rev3_ENG SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
AMeasMod	ABBIED600_Rev3_ENG SP_Meas-Mod_e	Measuring mode	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.246 LN: PHIPTOC2 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		

Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
InEnaMult	ABBIED600_Rev1_SPS_e	Enable signal for current multiplier	E	ABBIED600:2014
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for scaling the start value	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.247 LN: EFHPTOC2 Name: PTOC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
TmACrv	ABBIED600_Rev2_CURVE_SG	Operating Curve Type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum Operate Time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TypRsCrv	ABBIED600_Rev3_ENG_SG_TypRsCrv	Type of Reset Curve		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
AMeasMod	ABBIED600_Rev3_ENG_SP_MeasMod_e	Measurement mode selection	E	ABBIED600:2014
StrValMult	ABBIED600_Rev3_ASG_SG_i_e	Multiplier for operate current level	E	ABBIED600:2014

StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
InEnaMult	ABBIED600_Rev1_SPS_e	Enable current multiplier	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
AResSigSel	AB-BIED600_Rev2_ENG_SP_AResSigSel_e	Selection for used lo signal	E	ABBIED600:2014

### 6.2.248 LN: OEPVPH1 Name: PVPH (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
VHzCrv	AB-BIED600_Rev2_CURVE SG_setCharacter	Operation curve type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate delay time		
RsDITmms	ABBIED600_Rev1_ING_SP	Reset delay time		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time multiplier		
MinOpTmms	ABBIED600_Rev1_ING_SP	Minimum operate time		
Max-OpTmms	ABBIED600_Rev1_ING_SP	Maximum operate time		
StrInh	ABBIED600_Rev1_SPS_e	Restart inhibited	E	IEC 61850-7-4:2007
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
CIAct	ABBIED600_Rev1_SPS_e	Cooling active signal	E	ABBIED600:2014
VHzRat	ABBIED600_Rev3_MV_simple_i_e	Relative voltage to frequency ratio	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Start duration	E	ABBIED600:2014
MaxVCont	ABBIED600_Rev3_ASG_SP_i_e	Maximum allowed continuous voltage	E	ABBIED600:2014
CITms	ABBIED600_Rev1_ING_SP_1_e	Cooling time in seconds	E	ABBIED600:2014
ConsDIT-mms	ABBIED600_Rev1_ING_SP_e	Constant delay parameter	E	ABBIED600:2014
XLeak	ABBIED600_Rev3_ASG_SP_i_e	Winding leakage reactance	E	ABBIED600:2014

VSel	ABBIED600_Rev3_ENG_SP_VSel_e	Voltage selection	E	ABBIED600:2014
VPhSel	ABBIED600_Rev2_ENG_SP_VPhSel_e	Voltage phase selection	E	ABBIED600:2014
TmsRecEna	ABBIED600_Rev1_INS_e	Estimated time to reset of block restart in seconds	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.249 LN: OEPVPH2 Name: PVPH (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
VHzCrv	AB-BIED600_Rev2_CURVE_SG_setCharacter	Operation curve type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate delay time		
RsDITmms	ABBIED600_Rev1_ING_SP	Reset delay time		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time multiplier		
MinOpTmms	ABBIED600_Rev1_ING_SP	Minimum operate time		
Max-OpTmms	ABBIED600_Rev1_ING_SP	Maximum operate time		
StrInh	ABBIED600_Rev1_SPS_e	Restart inhibited	E	IEC 61850-7-4:2007
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
CIAct	ABBIED600_Rev1_SPS_e	Cooling active signal	E	ABBIED600:2014
VHzRat	ABBIED600_Rev3_MV_simple_i_e	Relative voltage to frequency ratio	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Start duration	E	ABBIED600:2014
MaxVCont	ABBIED600_Rev3_ASG_SP_i_e	Maximum allowed continuous voltage	E	ABBIED600:2014
CITms	ABBIED600_Rev1_ING_SP_1_e	Cooling time in seconds	E	ABBIED600:2014
ConsDIT-mms	ABBIED600_Rev1_ING_SP_e	Constant delay parameter	E	ABBIED600:2014
XLeak	ABBIED600_Rev3_ASG_SP_i_e	Winding leakage reactance	E	ABBIED600:2014
VSel	ABBIED600_Rev3_ENG_SP_VSel_e	Voltage selection	E	ABBIED600:2014

VPhSel	ABBIED600_Rev2_ENG_SP_VPhSel_e	Voltage phase selection	E	ABBIED600:2014
TmsRecEna	ABBIED600_Rev1_INS_e	Estimated time to reset of block restart in seconds	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.250 LN: T2PTTR1 Name: PTTR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Tmp	ABBIED600_Rev3_MV_simple_i	TEMP		
TmpRI	ABBIED600_Rev3_MV_simple_i	TEMP_RL		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
AlmThm	ABBIED600_Rev1_SPS	Thermal Alarm		
TmpMax	ABBIED600_Rev3_ASG_SG_i	Max temperature		
ConsTms1	ABBIED600_Rev1_ING_SG	Short time constant for thermal model		
ConsTms2	ABBIED600_Rev1_ING_SG	Long time constant for thermal model		
AlmVal	ABBIED600_Rev3_ASG_SG_i	Alarm temperature		
RsTmp	ABBIED600_Rev2_SPC_control_e	Reset temperature	E	ABBIED600:2014,status-only,direct-with-normal-security
BlkThm	ABBIED600_Rev1_SPS	Block reclose signal		
TmpUsed	ABBIED600_Rev3_MV_simple_i_e	The ambient temperature used in the calculation	E	ABBIED600:2014
TmpAmb	ABBIED600_Rev3_MV_simple_i_e	Ambient temperature	E	ABBIED600:2014
ARef	ABBIED600_Rev3_ASG_SG_i_e	Current reference for thermal model	E	ABBIED600:2014
EnvTmpSet	ABBIED600_Rev3_ASG_SG_i_e	Ambient temperature	E	ABBIED600:2014
IniTmp	ABBIED600_Rev3_ASG_SP_i_e	Initial temperature	E	ABBIED600:2014
RecTmpSet	ABBIED600_Rev3_ASG_SG_i_e	Temperature for reset of BLK_CLOSE after operate	E	ABBIED600:2014
TmpR	ABBIED600_Rev3_ASG_SG_i_e	Temperature reference for thermal model	E	ABBIED600:2014

TstOutCmd	AB-BIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
WghFact	ABBIED600_Rev3_ASG_SG_i_e	Weighting factor of the short time constant	E	ABBIED600:2014
OpTmp	ABBIED600_Rev3_ASG_SG_i_e	Operate temperature, percent value	E	ABBIED600:2014
OpTm	ABBIED600_Rev3_INS_Unit_e	Estimated time to operate	E	ABBIED600:2014
BlkThmRsTm	ABBIED600_Rev3_INS_Unit_e	Estimated time to deactivate InhRec	E	ABBIED600:2014

**6.2.251 LN: PHPTUC2 Name: PTUC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_threephase	Start		
Op	ABBIED600_Rev1_ACT_threephase	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Current setting/Start value high		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
BlkValA	ABBIED600_Rev3_ASG_SG_i	Current setting/Start value low		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
OpModPh	ABBIED600_Rev2_ENG_SP_OpModPh_e	Operation mode	E	ABBIED600:2014

**6.2.252 LN: TR2LPDIF1 Name: PDIF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Op	ABBIED600_Rev1_ACT_simple	Operate signal from low (stabilized) stage		

DifAClc	ABBIED600_Rev3_WYE_threephase_simple_i	Differential Current		
RstA	ABBIED600_Rev3_WYE_threephase_simple_i	Biasing Current		
LoSet	ABBIED600_Rev3_ASG_SG_i	Low operate value		
RstMod	ABBIED600_Rev3_ENG_SG_RstMod	Restraint mode		
Blk	ABBIED600_Rev1_SPS_simple	Blocks operate outputs from biased stage		
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
SpeScn2	ABBIED600_Rev3_ASG_SG_i_e	Slope section 2	E	ABBIED600:2014
EndScn2	ABBIED600_Rev3_ASG_SG_i_e	End section 2	E	ABBIED600:2014
SpeScn3	ABBIED600_Rev3_ASG_SG_i_e	Slope section 3	E	ABBIED600:2014
CTConnTyp	AB-BIED600_Rev2_ENG_SP_CTConnTyp_e	CT connection type	E	ABBIED600:2014
Wnd1Typ	ABBIED600_Rev3_ENG_SP_Wnd1Typ_e	Winding 1 type	E	ABBIED600:2014
Wnd2Typ	ABBIED600_Rev3_ENG_SP_Wnd2Typ_e	Winding 2 type	E	ABBIED600:2014
ClkNum	ABBIED600_Rev2_ENG_SP_ClkNum_e	Phase shift	E	ABBIED600:2014
ZroAEIm	ABBIED600_Rev4_ENG_SP_ZroAEIm_e	Zro A elimination	E	ABBIED600:2014
MinWndTap	ABBIED600_Rev1_ING_SP_1_e	Min winding tap	E	ABBIED600:2014
Max-WndTap	ABBIED600_Rev1_ING_SP_1_e	Max winding tap	E	ABBIED600:2014
TapNom-LTC1	ABBIED600_Rev1_ING_SP_1_e	Tap nominal	E	ABBIED600:2014
TapWnd	ABBIED600_Rev2_ENG_SP_WndSel_e	Tapped winding	E	ABBIED600:2014
StepTap1	ABBIED600_Rev3_ASG_SP_i_e	Step of tap	E	ABBIED600:2014
HDBlk	ABBIED600_Rev1_SPG_SG_e	Harmonic deblock 2.	E	ABBIED600:2014
BlkWavSt	ABBIED600_Rev1_ACT_threephase_e	Status from waveform blocking	E	ABBIED600:2014
Blk2HSt	ABBIED600_Rev1_ACT_threephase_e	Status from 2nd harmonic restraint blocking	E	ABBIED600:2014
Blk5HSt	ABBIED600_Rev1_ACT_threephase_e	Status from 5th harmonic restraint blocking	E	ABBIED600:2014
ScyAComp	ABBIED600_Rev3_WYE_threephase_simple_i_e	Connection group compensated secondary current	E	ABBIED600:2014
PriAComp	ABBIED600_Rev3_WYE_threephase_simple_i_e	Connection group compensated primary current	E	ABBIED600:2014

AngPriAB	ABBIED600_Rev3_MV_simple_i_e	Curr ph angle A to B, winding 1	E	ABBIED600:2014
AngPriBC	ABBIED600_Rev3_MV_simple_i_e	Curr ph angle B to C, winding 1	E	ABBIED600:2014
AngPriCA	ABBIED600_Rev3_MV_simple_i_e	Curr ph angle C to A, winding 1	E	ABBIED600:2014
AngScyAB	ABBIED600_Rev3_MV_simple_i_e	Curr ph angle A to B, winding 2	E	ABBIED600:2014
AngScyBC	ABBIED600_Rev3_MV_simple_i_e	Curr ph angle B to C, winding 2	E	ABBIED600:2014
AngScyCA	ABBIED600_Rev3_MV_simple_i_e	Curr ph angle C to A, winding 2	E	ABBIED600:2014
AngPriScyA	ABBIED600_Rev3_MV_simple_i_e	Curr ph A winding 1 to 2 angle	E	ABBIED600:2014
AngPriScyB	ABBIED600_Rev3_MV_simple_i_e	Curr ph B winding 1 to 2 angle	E	ABBIED600:2014
AngPriScyC	ABBIED600_Rev3_MV_simple_i_e	Curr ph C winding 1 to 2 angle	E	ABBIED600:2014
CTRatCor1	ABBIED600_Rev3_ASG_SP_i_e	CT ratio correction, winding 1	E	ABBIED600:2014
CTRatCor2	ABBIED600_Rev3_ASG_SP_i_e	CT ratio correction, winding 2	E	ABBIED600:2014

### 6.2.253 LN: TR2H2PHAR1 Name: PHAR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_threephase	Start (active when restraint is needed)		
PhStr	ABBIED600_Rev3_ASG_SG_i	Start value 2.H		
AHRat	ABBIED600_Rev3_WYE_threephase_simple_i_e	2nd harm to fund ratio of diff curr	E	ABBIED600:2014

### 6.2.254 LN: TR2H5PHAR1 Name: PHAR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_threephase	Start (active when restraint is needed)		
PhStr	ABBIED600_Rev3_ASG_SG_i	Start value 5.H		
PhStop	ABBIED600_Rev3_ASG_SG_i	Stop value		
HDBlk	ABBIED600_Rev1_SPG_SG_e	Harmonic deblock 5.	E	ABBIED600:2014
AHRat	ABBIED600_Rev3_WYE_threephase_simple_i_e	5th harm to fund ratio of diff curr	E	ABBIED600:2014

**6.2.255 LN: TR2HPDIF1 Name: PDIF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Op	ABBIED600_Rev1_ACT_simple	Operate signal from high (instantaneous) stage		
HiSet	ABBIED600_Rev3_ASG_SG_i	High operate value		
Blk	ABBIED600_Rev1_SPS_simple	Blocks operate outputs from instantaneous stage		
EnaHiSet	ABBIED600_Rev1_SPG_SG_e	Enable high set	E	AB-BIED600:2014

**6.2.256 LN: LREFPDIF1 Name: PDIF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	LREFPNDF1		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
DifAClc	ABBIED600_Rev3_WYE_res_simple_i	ID_COSPHI		
RstA	ABBIED600_Rev3_WYE_res_simple_i	IB		
LoSet	ABBIED600_Rev3_ASG_SG_i	Operate value		
MinOp-Tmms	ABBIED600_Rev1_ING_SG	Minimum Operate Time		
RstMod	ABBIED600_Rev3_ENG_SG_RstMod	Restraint mode		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	LREFPNDF1	E	ABBIED600:2014,status-only,direct-with-normal-security
CTConnTyp	AB-BIED600_Rev2_ENG_SP_CTConnTyp_e	CT connection type	E	ABBIED600:2014
Blk2HSt	ABBIED600_Rev1_ACT_simple_e	2nd harmonic restraint	E	ABBIED600:2014

**6.2.257 LN: LREFPDIF2 Name: PDIF (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security

Beh	ABBIED600_Rev2_ENS_beh	LREFPNDF1		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
DifAClc	ABBIED600_Rev3_WYE_res_simple_i	ID_COSPHI		
RstA	ABBIED600_Rev3_WYE_res_simple_i	IB		
LoSet	ABBIED600_Rev3_ASG_SG_i	Operate value		
MinOp-Tmms	ABBIED600_Rev1_ING_SG	Minimum Operate Time		
RstMod	ABBIED600_Rev3_ENG_SG_RstMod	Restraint mode		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	LREFPNDF1	E	ABBIED600:2014,status-only,direct-with-normal-security
CTConnTyp	AB-BIED600_Rev2_ENG_SP_CTConnTyp_e	CT connection type	E	ABBIED600:2014
Blk2HSt	ABBIED600_Rev1_ACT_simple_e	2nd harmonic restraint	E	ABBIED600:2014

### 6.2.258 LN: HREFPDIF2 Name: PDIF (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
LoSet	ABBIED600_Rev3_ASG_SG_i	Low operate value, percentage of the nominal current		
MinOp-Tmms	ABBIED600_Rev1_ING_SG	Minimum Operate Time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
TstOutCmd	AB-BIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.259 LN: DPPDUP1 Name: PDUP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_time	Operate delay time		
RsDITmms	ABBIED600_Rev1_ING_SP	Reset delay time		
PwrMeas-Mod	ABBIED600_Rev3_ENG_SP_Pwr-MeasMod_e	Measurement mode for power calculation	E	ABBIED600:2014
RevPol	ABBIED600_Rev1_SPG_SP_e	Rotate polarizing quantity	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Start duration	E	ABBIED600:2014
InDsaSt	ABBIED600_Rev1_SPS_e	Signal to block the function during generator startup	E	ABBIED600:2014
DsaTmms	ABBIED600_Rev1_ING_SP_time_e	Additional wait time after CB closing	E	ABBIED600:2014

**6.2.260 LN: DPMMXU1 Name: MMXU (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
TotW	ABBIED600_Rev3_MV_simple_i	Total active power (Total P)		
TotVAr	ABBIED600_Rev3_MV_simple_i	Total reactive power (Total Q)		
TotVA	ABBIED600_Rev3_MV_simple_i	Total apparent power (Total S)		
TotPFAng	ABBIED600_Rev3_MV_simple_i_e	Angle between apparent power and active power	E	AB-BIED600:2014

**6.2.261 LN: DPPDUP2 Name: PDUP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		

Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_time	Operate delay time		
RsDITmms	ABBIED600_Rev1_ING_SP	Reset delay time		
PwrMeas-Mod	ABBIED600_Rev3_ENG_SP_Pwr-MeasMod_e	Measurement mode for power calculation	E	ABBIED600:2014
RevPol	ABBIED600_Rev1_SPG_SP_e	Rotate polarizing quantity	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Start duration	E	ABBIED600:2014
InDsaSt	ABBIED600_Rev1_SPS_e	Signal to block the function during generator startup	E	ABBIED600:2014
DsaTmms	ABBIED600_Rev1_ING_SP_time_e	Additional wait time after CB closing	E	ABBIED600:2014

### 6.2.262 LN: DPMMXU2 Name: MMXU (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
TotW	ABBIED600_Rev3_MV_simple_i	Total active power (Total P)		
TotVAr	ABBIED600_Rev3_MV_simple_i	Total reactive power (Total Q)		
TotVA	ABBIED600_Rev3_MV_simple_i	Total apparent power (Total S)		
TotPFAng	ABBIED600_Rev3_MV_simple_i_e	Angle between apparent power and active power	E	AB-BIED600:2014

### 6.2.263 LN: DPPDOP1 Name: PDOP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
DirMod	ABBIED600_Rev3_ENG_SG_DirMod	Directional mode		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		

OpDITmms	ABBIED600_Rev1_ING_SG_time	Operate delay time		
RsDITmms	ABBIED600_Rev1_ING_SP	Reset delay time		
PwrMeas-Mod	ABBIED600_Rev3_ENG_SP_Pwr-MeasMod_e	Measurement mode for power calculation	E	ABBIED600:2014
RevPol	ABBIED600_Rev1_SPG_SP_e	Rotate polarizing quantity	E	ABBIED600:2014
PwrAng	ABBIED600_Rev3_ASG_SG_i_e	Power angle	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014

### 6.2.264 LN: DOPMMXU1 Name: MMXU (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
TotW	ABBIED600_Rev3_MV_simple_i	Total active power (Total P)		
TotVAr	ABBIED600_Rev3_MV_simple_i	Total reactive power (Total Q)		
TotVA	ABBIED600_Rev3_MV_simple_i	Total apparent power (Total S)		
TotPFAng	ABBIED600_Rev3_MV_simple_i_e	Angle between apparent power and active power	E	AB-BIED600:2014

### 6.2.265 LN: DPPDOP2 Name: PDOP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
DirMod	ABBIED600_Rev3_ENG_SP_DirMod	Directional mode		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_time	Operate delay time		
RsDITmms	ABBIED600_Rev1_ING_SP	Reset delay time		
PwrMeas-Mod	ABBIED600_Rev3_ENG_SP_Pwr-MeasMod_e	Measurement mode for power calculation	E	ABBIED600:2014
RevPol	ABBIED600_Rev1_SPG_SP_e	Rotate polarizing quantity	E	ABBIED600:2014
PwrAng	ABBIED600_Rev3_ASG_SG_i_e	Power angle	E	ABBIED600:2014

TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014

### 6.2.266 LN: DOPMMXU2 Name: MMXU (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
TotW	ABBIED600_Rev3_MV_simple_i	Total active power (Total P)		
TotVar	ABBIED600_Rev3_MV_simple_i	Total reactive power (Total Q)		
TotVA	ABBIED600_Rev3_MV_simple_i	Total apparent power (Total S)		
TotPFAng	ABBIED600_Rev3_MV_simple_i_e	Angle between apparent power and active power	E	AB-BIED600:2014

### 6.2.267 LN: DPPDOP3 Name: PDOP (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
DirMod	ABBIED600_Rev3_ENG_SG_DirMod	Directional mode		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG_time	Operate delay time		
RsDITmms	ABBIED600_Rev1_ING_SP	Reset delay time		
PwrMeas-Mod	ABBIED600_Rev3_ENG_SP_Pwr-MeasMod_e	Measurement mode for power calculation	E	ABBIED600:2014
RevPol	ABBIED600_Rev1_SPG_SP_e	Rotate polarizing quantity	E	ABBIED600:2014
PwrAng	ABBIED600_Rev3_ASG_SG_i_e	Power angle	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014

### 6.2.268 LN: DOPMMXU3 Name: MMXU (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only

Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
TotW	ABBIED600_Rev3_MV_simple_i	Total active power (Total P)		
TotVar	ABBIED600_Rev3_MV_simple_i	Total reactive power (Total Q)		
TotVA	ABBIED600_Rev3_MV_simple_i	Total apparent power (Total S)		
TotPFAng	ABBIED600_Rev3_MV_simple_i_e	Angle between apparent power and active power	E	AB-BIED600:2014

### 6.2.269 LN: TPOSYLT1 Name: YLTC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_On-Off_NoBlk_FD	Operation		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
TapPos	ABBIED600_Rev1_ISC_simple	TAPPOS		status-only
EndPosR	ABBIED600_Rev1_SPS	End position raise or highest reached		
EndPosL	ABBIED600_Rev1_SPS	End position lower or lowest reached		
InBit1	ABBIED600_Rev1_SPS_e	BI0	E	ABBIED600:2014
InBit2	ABBIED600_Rev1_SPS_e	BI1	E	ABBIED600:2014
InBit3	ABBIED600_Rev1_SPS_e	BI2	E	ABBIED600:2014
InBit4	ABBIED600_Rev1_SPS_e	BI3	E	ABBIED600:2014
InBit5	ABBIED600_Rev1_SPS_e	BI4	E	ABBIED600:2014
InBit6	ABBIED600_Rev1_SPS_e	BI5	E	ABBIED600:2014
InBit7	ABBIED600_Rev1_SPS_e	SIGN_BIT	E	ABBIED600:2014
BinCdMod	ABBIED600_Rev2_ENG_SP_BCMOD_e	Operation mode selection	E	ABBIED600:2014

### 6.2.270 LN: RESCMMXU2 Name: MMXU (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Operation		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
A	ABBIED600_Rev3_WYE_res_full_i	Residual current		
AMeas-Mod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Selects used measurement mode	E	ABBIED600:2014
HiAlm	ABBIED600_Rev1_SPS_e	High alarm	E	ABBIED600:2014
HiWrn	ABBIED600_Rev1_SPS_e	High warning	E	ABBIED600:2014
RcdRs	ABBIED600_Rev2_SPC_control_e	RESCMMXU2 demands	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.271 LN: VAMMXU3 Name: MMXU (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
PPV	AB-BIED600_Rev1_DEL_onephaseAB_full_i	Single phase to phase AB voltages		
PhV	AB-BIED600_Rev1_WYE_onephaseA_full_i	Single phase to ground A voltage		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
VMeas-Mod	ABBIED600_Rev3_ENG_SP_MeasMod_e	Selects used measurement mode	E	ABBIED600:2014
HiAlm	ABBIED600_Rev1_SPS_e	High alarm	E	ABBIED600:2014
HiWrn	ABBIED600_Rev1_SPS_e	High warning	E	ABBIED600:2014
LoWrn	ABBIED600_Rev1_SPS_e	Low warning	E	ABBIED600:2014
LoAlm	ABBIED600_Rev1_SPS_e	Low alarm	E	ABBIED600:2014

### 6.2.272 LN: IL1TCTR1 Name: TCTR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Mode		
AmpSv	ABBIED600_Rev1_SAV_92_lite	Current (Sampled value) phase A		
ARtg	AB-BIED600_Rev3_ASG_SP_ARtg_VRtg	Primary rated current		
Cor	ABBIED600_Rev1_ASG_SP_f	Phase A Current phasor magnitude correction of an external current transformer		
AngCor	ABBIED600_Rev3_ASG_SP_i	Phase A Current phasor angle correction of an external current transformer		
Alm	ABBIED600_Rev1_SPS_e	Alarm	E	IEC 61850-7-4:2007
Wrn	ABBIED600_Rev1_SPS_e	Warning	E	IEC 61850-7-4:2007
ARtgScy	ABBIED600_Rev2_ENG_SP_ARtgSec_e	Secondary rated current	E	ABBIED600:2014
ARtgNom	ABBIED600_Rev1_ASG_SP_f_e	Network Nominal Current	E	ABBIED600:2014,order code dependent
VRtgScy-Rat	ABBIED600_Rev1_ASG_SP_f_e	Rated Secondary Value	E	ABBIED600:2014,order code dependent
RevPol	ABBIED600_Rev1_SPG_SP_e	Reverse polarity	E	ABBIED600:2014

### 6.2.273 LN: RESTCTR1 Name: TCTR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Mode		
AmpSv	ABBIED600_Rev1_SAV_92_lite	Current (Sampled value)		
ARtg	AB-BIED600_Rev3_ASG_SP_ARtg_VRtg	Primary rated current		
Cor	ABBIED600_Rev1_ASG_SP_f	Current phasor magnitude correction of an external current transformer		
AngCor	ABBIED600_Rev3_ASG_SP_i	Residual Current phasor angle correction of an external current transformer		
Alm	ABBIED600_Rev1_SPS_e	Alarm	E	IEC 61850-7-4:2007
Wrn	ABBIED600_Rev1_SPS_e	Warning	E	IEC 61850-7-4:2007
ARtgScy	ABBIED600_Rev2_ENG_SP_ARtgSec_e	Secondary rated current	E	AB-BIED600:2014
RevPol	ABBIED600_Rev1_SPG_SP_e	Reverse polarity	E	AB-BIED600:2014

### 6.2.274 LN: XGGIO120 Name: GGIO (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_OnOff_No-Blk	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	X120-Input 1		
Ind2	ABBIED600_Rev1_SPS	X120-Input 2		
Ind3	ABBIED600_Rev1_SPS	X120-Input 3		
Ind4	ABBIED600_Rev1_SPS	X120-Input 4		
Filtmms1	ABBIED600_Rev1_ING_SP_1_e	Input 1 filter time	E	ABBIED600:2014
Filtmms2	ABBIED600_Rev1_ING_SP_1_e	Input 2 filter time	E	ABBIED600:2014
Filtmms3	ABBIED600_Rev1_ING_SP_1_e	Input 3 filter time	E	ABBIED600:2014
Filtmms4	ABBIED600_Rev1_ING_SP_1_e	Input 4 filter time	E	ABBIED600:2014
DigInInv1	ABBIED600_Rev1_SPG_SP_e	Input 1 inversion	E	ABBIED600:2014
DigInInv2	ABBIED600_Rev1_SPG_SP_e	Input 2 inversion	E	ABBIED600:2014
DigInInv3	ABBIED600_Rev1_SPG_SP_e	Input 3 inversion	E	ABBIED600:2014
DigInInv4	ABBIED600_Rev1_SPG_SP_e	Input 4 inversion	E	ABBIED600:2014
CardNam	AB-BIED600_Rev8_DPL_eeprom_2_ED2_e	Card information	E	ABBIED600:2014

HwId	ABBIED600_Rev1_LPL_VSS_1_20_e	HW module	E	ABBIED600:2014
TestStald	ABBIED600_Rev1_LPL_VSS_dU_20_e	Testing	E	ABBIED600:2014

### 6.2.275 LN: UL1TVTR1 Name: TVTR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Mode		
VolSv	ABBIED600_Rev1_SAV_92_lite	Voltage (sampled value) phase A		
FuFail	ABBIED600_Rev1_SPS	TVTR fuse failure		
VRtg	ABBIED600_Rev3_ASG_SP_ARtg_VRtg	Primary rated voltage		
Rat	ABBIED600_Rev1_ASG_SP_f	Division ratio		
Cor	ABBIED600_Rev1_ASG_SP_f	Amplitude corr. A		
AngCor	ABBIED600_Rev3_ASG_SP_i	Angle corr. A		
Alm	ABBIED600_Rev1_SPS_e	Alarm	E	IEC 61850-7-4:2007
Wrn	ABBIED600_Rev1_SPS_e	Warning	E	IEC 61850-7-4:2007
VRtgScy	ABBIED600_Rev1_ASG_SP_f_e	Secondary rated voltage	E	ABBIED600:2014
VConnTyp	AB-BIED600_Rev3_ENG_SP_ConnType_e	VT connection	E	ABBIED600:2014
VInTyp	ABBIED600_Rev2_ENG_SP_AnIn-Type_e	Type of the voltage input	E	ABBIED600:2014

### 6.2.276 LN: RESTVTR1 Name: TVTR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Mode		
VolSv	ABBIED600_Rev1_SAV_92_lite	Voltage (sampled value)		
VRtg	AB-BIED600_Rev3_ASG_SP_ARtg_VRtg	Rated primary voltage		
Cor	ABBIED600_Rev1_ASG_SP_f	Voltage phasor magnitude correction of external voltage transformer		
AngCor	ABBIED600_Rev3_ASG_SP_i	Residual Voltage phasor angle correction of an external voltage transformer		
Alm	ABBIED600_Rev1_SPS_e	Alarm	E	IEC 61850-7-4:2007
Wrn	ABBIED600_Rev1_SPS_e	Warning	E	IEC 61850-7-4:2007
VRtgScy	ABBIED600_Rev1_ASG_SP_f_e	Rated secondary voltage	E	AB-BIED600:2014

**6.2.277 LN: VMMXU1 Name: MMXU (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Operation		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
PPV	AB-BIED600_Rev3_DEL_threephase_full_i	Phase to phase voltages		
PhV	ABBIED600_Rev3_WYE_4	Phase to ground voltages		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
VMeas-Mod	ABBIED600_Rev3_ENG_SP_Meas-Mod_e	Selects used measurement mode	E	ABBIED600:2014
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Num of phases	E	ABBIED600:2014
HiAlm	ABBIED600_Rev1_SPS_e	High alarm	E	ABBIED600:2014
HiWrn	ABBIED600_Rev1_SPS_e	High warning	E	ABBIED600:2014
LoWrn	ABBIED600_Rev1_SPS_e	Low warning	E	ABBIED600:2014
LoAlm	ABBIED600_Rev1_SPS_e	Low alarm	E	ABBIED600:2014

**6.2.278 LN: UL1TVTR2 Name: TVTR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Mode		
VolSv	ABBIED600_Rev1_SAV_92_lite	Voltage (sampled value) phase A		
FuFail	ABBIED600_Rev1_SPS	TVTR fuse failure		
VRtg	AB-BIED600_Rev3_ASG_SP_ARtg_VRtg	Primary rated voltage		
Rat	ABBIED600_Rev1_ASG_SP_f	Division ratio		order code dependent
Cor	ABBIED600_Rev1_ASG_SP_f	Phase A Voltage phasor magnitude correction of an external voltage transformer		
AngCor	ABBIED600_Rev3_ASG_SP_i	Angle corr. A		
Alm	ABBIED600_Rev1_SPS_e	Alarm	E	IEC 61850-7-4:2007
Wrn	ABBIED600_Rev1_SPS_e	Warning	E	IEC 61850-7-4:2007
VRtgScy	ABBIED600_Rev1_ASG_SP_f_e	Secondary rated voltage	E	AB-BIED600:2014
VConnTyp	AB-BIED600_Rev3_ENG_SP_ConnType_e	VT connection	E	AB-BIED600:2014
VInTyp	ABBIED600_Rev2_ENG_SP_AnIn-Type_e	Type of the voltage input	E	AB-BIED600:2014

**6.2.279 LN: XAGGIO130 Name: GGIO (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_OnOff_No-Blk	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Ind1	ABBIED600_Rev1_SPS	X130-Input 1		
Ind2	ABBIED600_Rev1_SPS	X130-Input 2		
Ind3	ABBIED600_Rev1_SPS	X130-Input 3		
Ind4	ABBIED600_Rev1_SPS	X130-Input 4		
Filtmms1	ABBIED600_Rev1_ING_SP_1_e	Input 1 filter time	E	ABBIED600:2014
Filtmms2	ABBIED600_Rev1_ING_SP_1_e	Input 2 filter time	E	ABBIED600:2014
Filtmms3	ABBIED600_Rev1_ING_SP_1_e	Input 3 filter time	E	ABBIED600:2014
Filtmms4	ABBIED600_Rev1_ING_SP_1_e	Input 4 filter time	E	ABBIED600:2014
DigInInv1	ABBIED600_Rev1_SPG_SP_e	Input 1 inversion	E	ABBIED600:2014
DigInInv2	ABBIED600_Rev1_SPG_SP_e	Input 2 inversion	E	ABBIED600:2014
DigInInv3	ABBIED600_Rev1_SPG_SP_e	Input 3 inversion	E	ABBIED600:2014
DigInInv4	ABBIED600_Rev1_SPG_SP_e	Input 4 inversion	E	ABBIED600:2014
CardNam	AB-BIED600_Rev8_DPL_eeprom_2_ED2_e	Card information	E	ABBIED600:2014
HwId	ABBIED600_Rev1_LPL_VSS_1_20_e	HW module	E	ABBIED600:2014
TestStald	ABBIED600_Rev1_LPL_VSS_dU_20_e	Testing	E	ABBIED600:2014

**6.2.280 LN: XSAGGIO130 Name: GGIO (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_OnOff_No-Blk	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
CardNam	AB-BIED600_Rev8_DPL_eeprom_2_ED2_e	Card information	E	ABBIED600:2014
HwId	ABBIED600_Rev1_LPL_VSS_1_20_e	HW module	E	ABBIED600:2014
TestStald	ABBIED600_Rev1_LPL_VSS_dU_20_e	Testing	E	ABBIED600:2014

**6.2.281 LN: IL1TCTR2 Name: TCTR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Mode		

AmpSv	ABBIED600_Rev1_SAV_92_lite	Current (Sampled value) phase A		
ARtg	AB-BIED600_Rev3_ASG_SP_ARtg_VRtg	Primary rated current		
Cor	ABBIED600_Rev1_ASG_SP_f	Phase A Current phasor magnitude correction of an external current transformer		
AngCor	ABBIED600_Rev3_ASG_SP_i	Phase A Current phasor angle correction of an external current transformer		
Alm	ABBIED600_Rev1_SPS_e	Alarm	E	IEC 61850-7-4:2007
Wrn	ABBIED600_Rev1_SPS_e	Warning	E	IEC 61850-7-4:2007
ARtgScy	ABBIED600_Rev2_ENG_SP_ARtgSec_e	Secondary current	E	ABBIED600:2014
ARtgNom	ABBIED600_Rev1_ASG_SP_f_e	Network Nominal Current	E	ABBIED600:2014,order code dependent
VRtgScy-Rat	ABBIED600_Rev1_ASG_SP_f_e	Rated Secondary Value	E	ABBIED600:2014,order code dependent
RevPol	ABBIED600_Rev1_SPG_SP_e	Reverse polarity	E	ABBIED600:2014

**6.2.282 LN: XAGGIO120 Name: GGIO (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_OnOff_No-Blk	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
NamPlt	ABBIED600_Rev1_LPL_1	Name plate		
CardNam	AB-BIED600_Rev8_DPL_eeprom_2_ED2_e	Card information	E	ABBIED600:2014
HwId	ABBIED600_Rev1_LPL_VSS_1_20_e	HW module	E	ABBIED600:2014
TestStald	ABBIED600_Rev1_LPL_VSS_dU_20_e	Testing	E	ABBIED600:2014

**6.2.283 LN: XAGGIO115 Name: GGIO (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_OnOff_No-Blk	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
CardNam	AB-BIED600_Rev8_DPL_eeprom_2_ED2_e	Card information	E	ABBIED600:2014
HwId	ABBIED600_Rev1_LPL_VSS_1_20_e	HW module	E	ABBIED600:2014
TestStald	ABBIED600_Rev1_LPL_VSS_dU_20_e	Testing	E	ABBIED600:2014

**6.2.284 LN: RESTCTR2 Name: TCTR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only

Beh	ABBIED600_Rev2_ENS_beh	Mode		
AmpSv	ABBIED600_Rev1_SAV_92_lite	Current (Sampled value)		
ARtg	AB-BIED600_Rev3_ASG_SP_ARtg_VRtg	Primary rated current		
Cor	ABBIED600_Rev1_ASG_SP_f	Current phasor magnitude correction of an external current transformer		
AngCor	ABBIED600_Rev3_ASG_SP_i	Residual Current phasor angle correction of an external current transformer		
Alm	ABBIED600_Rev1_SPS_e	Alarm	E	IEC 61850-7-4:2007
Wrn	ABBIED600_Rev1_SPS_e	Warning	E	IEC 61850-7-4:2007
ARtgScy	ABBIED600_Rev2_ENG_SP_ARtgSec_e	Secondary rated current	E	AB-BIED600:2014
RevPol	ABBIED600_Rev1_SPG_SP_e	Reverse polarity	E	AB-BIED600:2014

### 6.2.285 LN: UL1TVTR3 Name: TVTR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Mode		
VolSv	ABBIED600_Rev1_SAV_92_lite	Voltage (sampled value) phase A		
FuFail	ABBIED600_Rev1_SPS	TVTR fuse failure		
VRtg	AB-BIED600_Rev3_ASG_SP_ARtg_VRtg	Primary rated voltage		
Rat	ABBIED600_Rev1_ASG_SP_f	Division ratio		order code dependent
Cor	ABBIED600_Rev1_ASG_SP_f	Phase A Voltage phasor magnitude correction of an external voltage transformer		
AngCor	ABBIED600_Rev3_ASG_SP_i	Angle corr. A		
Alm	ABBIED600_Rev1_SPS_e	Alarm	E	IEC 61850-7-4:2007
Wrn	ABBIED600_Rev1_SPS_e	Warning	E	IEC 61850-7-4:2007
VRtgScy	ABBIED600_Rev1_ASG_SP_f_e	Secondary rated voltage	E	AB-BIED600:2014
VConnTyp	AB-BIED600_Rev3_ENG_SP_ConnType_e	VT connection	E	AB-BIED600:2014
VInTyp	ABBIED600_Rev2_ENG_SP_AnIn-Type_e	Type of the voltage input	E	AB-BIED600:2014

### 6.2.286 LN: XGGIO110 Name: GGIO (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev1_ENC_Mod_OnOff_No-Blk	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
SPCSO1	ABBIED600_Rev2_SPC_control	X110-Output 1		status-only,direct-with-normal-security
SPCSO2	ABBIED600_Rev2_SPC_control	X110-Output 2		status-only,direct-with-normal-security
SPCSO3	ABBIED600_Rev2_SPC_control	X110-Output 3		status-only,direct-with-normal-security
SPCSO4	ABBIED600_Rev2_SPC_control	X110-Output 4		status-only,direct-with-normal-security
Ind1	ABBIED600_Rev1_SPS	X110-Input 1		
Ind2	ABBIED600_Rev1_SPS	X110-Input 2		
Ind3	ABBIED600_Rev1_SPS	X110-Input 3		
Ind4	ABBIED600_Rev1_SPS	X110-Input 4		
Ind5	ABBIED600_Rev1_SPS	X110-Input 5		
Ind6	ABBIED600_Rev1_SPS	X110-Input 6		
Ind7	ABBIED600_Rev1_SPS	X110-Input 7		
Ind8	ABBIED600_Rev1_SPS	X110-Input 8		
Filtmms1	ABBIED600_Rev1_ING_SP_1_e	Input 1 filter time	E	ABBIED600:2014
Filtmms2	ABBIED600_Rev1_ING_SP_1_e	Input 2 filter time	E	ABBIED600:2014
Filtmms3	ABBIED600_Rev1_ING_SP_1_e	Input 3 filter time	E	ABBIED600:2014
Filtmms4	ABBIED600_Rev1_ING_SP_1_e	Input 4 filter time	E	ABBIED600:2014
Filtmms5	ABBIED600_Rev1_ING_SP_1_e	Input 5 filter time	E	ABBIED600:2014
Filtmms6	ABBIED600_Rev1_ING_SP_1_e	Input 6 filter time	E	ABBIED600:2014
Filtmms7	ABBIED600_Rev1_ING_SP_1_e	Input 7 filter time	E	ABBIED600:2014
Filtmms8	ABBIED600_Rev1_ING_SP_1_e	Input 8 filter time	E	ABBIED600:2014
DigInInv1	ABBIED600_Rev1_SPG_SP_e	Input 1 inversion	E	ABBIED600:2014
DigInInv2	ABBIED600_Rev1_SPG_SP_e	Input 2 inversion	E	ABBIED600:2014
DigInInv3	ABBIED600_Rev1_SPG_SP_e	Input 3 inversion	E	ABBIED600:2014
DigInInv4	ABBIED600_Rev1_SPG_SP_e	Input 4 inversion	E	ABBIED600:2014
DigInInv5	ABBIED600_Rev1_SPG_SP_e	Input 5 inversion	E	ABBIED600:2014
DigInInv6	ABBIED600_Rev1_SPG_SP_e	Input 6 inversion	E	ABBIED600:2014

DigInInv7	ABBIED600_Rev1_SPG_SP_e	Input 7 inversion	E	ABBIED600:2014
DigInInv8	ABBIED600_Rev1_SPG_SP_e	Input 8 inversion	E	ABBIED600:2014
CardNam	AB-BIED600_Rev8_DPL_eeprom_2_ED2_e	Card information	E	ABBIED600:2014
HwId	ABBIED600_Rev1_LPL_VSS_1_20_e	HW module	E	ABBIED600:2014
TestStald	ABBIED600_Rev1_LPL_VSS_dU_20_e	Testing	E	ABBIED600:2014

**6.2.287 LN: XBGGIO115 Name: GGIO (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_OnOff_No-Blk	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
SPCSO1	ABBIED600_Rev2_SPC_control	X115-Output 1		status-only,direct-with-normal-security
SPCSO2	ABBIED600_Rev2_SPC_control	X115-Output 2		status-only,direct-with-normal-security
SPCSO3	ABBIED600_Rev2_SPC_control	X115-Output 3		status-only,direct-with-normal-security
SPCSO4	ABBIED600_Rev2_SPC_control	X115-Output 4		status-only,direct-with-normal-security
Ind1	ABBIED600_Rev1_SPS	X115-Input 1		
Ind2	ABBIED600_Rev1_SPS	X115-Input 2		
Ind3	ABBIED600_Rev1_SPS	X115-Input 3		
Ind4	ABBIED600_Rev1_SPS	X115-Input 4		
Ind5	ABBIED600_Rev1_SPS	X115-Input 5		
Ind6	ABBIED600_Rev1_SPS	X115-Input 6		
Ind7	ABBIED600_Rev1_SPS	X115-Input 7		
Ind8	ABBIED600_Rev1_SPS	X115-Input 8		
Filtmms1	ABBIED600_Rev1_ING_SP_1_e	Input 1 filter time	E	ABBIED600:2014
Filtmms2	ABBIED600_Rev1_ING_SP_1_e	Input 2 filter time	E	ABBIED600:2014
Filtmms3	ABBIED600_Rev1_ING_SP_1_e	Input 3 filter time	E	ABBIED600:2014
Filtmms4	ABBIED600_Rev1_ING_SP_1_e	Input 4 filter time	E	ABBIED600:2014
Filtmms5	ABBIED600_Rev1_ING_SP_1_e	Input 5 filter time	E	ABBIED600:2014
Filtmms6	ABBIED600_Rev1_ING_SP_1_e	Input 6 filter time	E	ABBIED600:2014
Filtmms7	ABBIED600_Rev1_ING_SP_1_e	Input 7 filter time	E	ABBIED600:2014
Filtmms8	ABBIED600_Rev1_ING_SP_1_e	Input 8 filter time	E	ABBIED600:2014

DigInInv1	ABBIED600_Rev1_SPG_SP_e	Input 1 inversion	E	ABBIED600:2014
DigInInv2	ABBIED600_Rev1_SPG_SP_e	Input 2 inversion	E	ABBIED600:2014
DigInInv3	ABBIED600_Rev1_SPG_SP_e	Input 3 inversion	E	ABBIED600:2014
DigInInv4	ABBIED600_Rev1_SPG_SP_e	Input 4 inversion	E	ABBIED600:2014
DigInInv5	ABBIED600_Rev1_SPG_SP_e	Input 5 inversion	E	ABBIED600:2014
DigInInv6	ABBIED600_Rev1_SPG_SP_e	Input 6 inversion	E	ABBIED600:2014
DigInInv7	ABBIED600_Rev1_SPG_SP_e	Input 7 inversion	E	ABBIED600:2014
DigInInv8	ABBIED600_Rev1_SPG_SP_e	Input 8 inversion	E	ABBIED600:2014
CardNam	AB-BIED600_Rev8_DPL_eeprom_2_ED2_e	Card information	E	ABBIED600:2014
HwId	ABBIED600_Rev1_LPL_VSS_1_20_e	HW module	E	ABBIED600:2014
TestStald	ABBIED600_Rev1_LPL_VSS_dU_20_e	Testing	E	ABBIED600:2014

**6.2.288 LN: XGGIO105 Name: GGIO (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_OnOff_No-Blk	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
SPCSO1	ABBIED600_Rev2_SPC_control	X105-Output 1		status-only,direct-with-normal-security
SPCSO2	ABBIED600_Rev2_SPC_control	X105-Output 2		status-only,direct-with-normal-security
SPCSO3	ABBIED600_Rev2_SPC_control	X105-Output 3		status-only,direct-with-normal-security
SPCSO4	ABBIED600_Rev2_SPC_control	X105-Output 4		status-only,direct-with-normal-security
Ind1	ABBIED600_Rev1_SPS	X105-Input 1		
Ind2	ABBIED600_Rev1_SPS	X105-Input 2		
Ind3	ABBIED600_Rev1_SPS	X105-Input 3		
Ind4	ABBIED600_Rev1_SPS	X105-Input 4		
Ind5	ABBIED600_Rev1_SPS	X105-Input 5		
Ind6	ABBIED600_Rev1_SPS	X105-Input 6		
Ind7	ABBIED600_Rev1_SPS	X105-Input 7		
Ind8	ABBIED600_Rev1_SPS	X105-Input 8		
Filtmms1	ABBIED600_Rev1_ING_SP_1_e	Input 1 filter time	E	ABBIED600:2014
Filtmms2	ABBIED600_Rev1_ING_SP_1_e	Input 2 filter time	E	ABBIED600:2014

Filtmms3	ABBIED600_Rev1_ING_SP_1_e	Input 3 filter time	E	ABBIED600:2014
Filtmms4	ABBIED600_Rev1_ING_SP_1_e	Input 4 filter time	E	ABBIED600:2014
Filtmms5	ABBIED600_Rev1_ING_SP_1_e	Input 5 filter time	E	ABBIED600:2014
Filtmms6	ABBIED600_Rev1_ING_SP_1_e	Input 6 filter time	E	ABBIED600:2014
Filtmms7	ABBIED600_Rev1_ING_SP_1_e	Input 7 filter time	E	ABBIED600:2014
Filtmms8	ABBIED600_Rev1_ING_SP_1_e	Input 8 filter time	E	ABBIED600:2014
DigInInv1	ABBIED600_Rev1_SPG_SP_e	Input 1 inversion	E	ABBIED600:2014
DigInInv2	ABBIED600_Rev1_SPG_SP_e	Input 2 inversion	E	ABBIED600:2014
DigInInv3	ABBIED600_Rev1_SPG_SP_e	Input 3 inversion	E	ABBIED600:2014
DigInInv4	ABBIED600_Rev1_SPG_SP_e	Input 4 inversion	E	ABBIED600:2014
DigInInv5	ABBIED600_Rev1_SPG_SP_e	Input 5 inversion	E	ABBIED600:2014
DigInInv6	ABBIED600_Rev1_SPG_SP_e	Input 6 inversion	E	ABBIED600:2014
DigInInv7	ABBIED600_Rev1_SPG_SP_e	Input 7 inversion	E	ABBIED600:2014
DigInInv8	ABBIED600_Rev1_SPG_SP_e	Input 8 inversion	E	ABBIED600:2014
CardNam	AB-BIED600_Rev8_DPL_eeprom_2_ED2_e	Card information	E	ABBIED600:2014
HwId	ABBIED600_Rev1_LPL_VSS_1_20_e	HW module	E	ABBIED600:2014
TestStald	ABBIED600_Rev1_LPL_VSS_dU_20_e	Testing	E	ABBIED600:2014

**6.2.289 LN: XHBGGIO105 Name: GGIO (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_OnOff_No-Blk	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
SPCSO1	ABBIED600_Rev2_SPC_control	X105-Output 1		status-only,direct-with-normal-security
SPCSO2	ABBIED600_Rev2_SPC_control	X105-Output 2		status-only,direct-with-normal-security
SPCSO3	ABBIED600_Rev2_SPC_control	X105-Output 3		status-only,direct-with-normal-security
Ind1	ABBIED600_Rev1_SPS	X105-Input 1		
Ind2	ABBIED600_Rev1_SPS	X105-Input 2		
Ind3	ABBIED600_Rev1_SPS	X105-Input 3		

Ind4	ABBIED600_Rev1_SPS	X105-Input 4		
Ind5	ABBIED600_Rev1_SPS	X105-Input 5		
Ind6	ABBIED600_Rev1_SPS	X105-Input 6		
Ind7	ABBIED600_Rev1_SPS	X105-Input 7		
Ind8	ABBIED600_Rev1_SPS	X105-Input 8		
FilTmms1	ABBIED600_Rev1_ING_SP_1_e	Input 1 filter time	E	ABBIED600:2014
FilTmms2	ABBIED600_Rev1_ING_SP_1_e	Input 2 filter time	E	ABBIED600:2014
FilTmms3	ABBIED600_Rev1_ING_SP_1_e	Input 3 filter time	E	ABBIED600:2014
FilTmms4	ABBIED600_Rev1_ING_SP_1_e	Input 4 filter time	E	ABBIED600:2014
FilTmms5	ABBIED600_Rev1_ING_SP_1_e	Input 5 filter time	E	ABBIED600:2014
FilTmms6	ABBIED600_Rev1_ING_SP_1_e	Input 6 filter time	E	ABBIED600:2014
FilTmms7	ABBIED600_Rev1_ING_SP_1_e	Input 7 filter time	E	ABBIED600:2014
FilTmms8	ABBIED600_Rev1_ING_SP_1_e	Input 8 filter time	E	ABBIED600:2014
DigInInv1	ABBIED600_Rev1_SPG_SP_e	Input 1 inversion	E	ABBIED600:2014
DigInInv2	ABBIED600_Rev1_SPG_SP_e	Input 2 inversion	E	ABBIED600:2014
DigInInv3	ABBIED600_Rev1_SPG_SP_e	Input 3 inversion	E	ABBIED600:2014
DigInInv4	ABBIED600_Rev1_SPG_SP_e	Input 4 inversion	E	ABBIED600:2014
DigInInv5	ABBIED600_Rev1_SPG_SP_e	Input 5 inversion	E	ABBIED600:2014
DigInInv6	ABBIED600_Rev1_SPG_SP_e	Input 6 inversion	E	ABBIED600:2014
DigInInv7	ABBIED600_Rev1_SPG_SP_e	Input 7 inversion	E	ABBIED600:2014
DigInInv8	ABBIED600_Rev1_SPG_SP_e	Input 8 inversion	E	ABBIED600:2014
CardNam	AB-BIED600_Rev8_DPL_eeprom_2_ED2_e	Card information	E	ABBIED600:2014
HwId	ABBIED600_Rev1_LPL_VSS_1_20_e	HW module	E	ABBIED600:2014
TestStald	ABBIED600_Rev1_LPL_VSS_dU_20_e	Testing	E	ABBIED600:2014

**6.2.290 LN: XRGGIO110 Name: GGIO (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		

Health	ABBIED600_Rev4_ENS_health	Health		
AnIn1	ABBIED600_Rev6_MV_6	Analogue input 1		
AnIn2	ABBIED600_Rev6_MV_6	Analogue input 2		
AnIn3	ABBIED600_Rev6_MV_6	Analogue input 3		
AnIn4	ABBIED600_Rev6_MV_6	Analogue input 4		
AnIn5	ABBIED600_Rev6_MV_6	Analogue input 5		
AnIn6	ABBIED600_Rev6_MV_6	Analogue input 6		
AnIn7	ABBIED600_Rev6_MV_6	Analogue input 7		
AnIn8	ABBIED600_Rev6_MV_6	Analogue input 8		
Alm1	ABBIED600_Rev1_SPS	Alarm		
Wrn1	ABBIED600_Rev1_SPS	Warning		
InMinVal1	ABBIED600_Rev1_ASG_SP_f_e	Input minimum	E	ABBIED600:2014
InMinVal2	ABBIED600_Rev1_ASG_SP_f_e	Input minimum	E	ABBIED600:2014
InMinVal3	ABBIED600_Rev1_ASG_SP_f_e	Input minimum	E	ABBIED600:2014
InMinVal4	ABBIED600_Rev1_ASG_SP_f_e	Input minimum	E	ABBIED600:2014
InMinVal5	ABBIED600_Rev1_ASG_SP_f_e	Input minimum	E	ABBIED600:2014
InMinVal6	ABBIED600_Rev1_ASG_SP_f_e	Input minimum	E	ABBIED600:2014
InMinVal7	ABBIED600_Rev1_ASG_SP_f_e	Input minimum	E	ABBIED600:2014
InMinVal8	ABBIED600_Rev1_ASG_SP_f_e	Input minimum	E	ABBIED600:2014
InMaxVal1	ABBIED600_Rev1_ASG_SP_f_e	Input maximum	E	ABBIED600:2014
InMaxVal2	ABBIED600_Rev1_ASG_SP_f_e	Input maximum	E	ABBIED600:2014
InMaxVal3	ABBIED600_Rev1_ASG_SP_f_e	Input maximum	E	ABBIED600:2014
InMaxVal4	ABBIED600_Rev1_ASG_SP_f_e	Input maximum	E	ABBIED600:2014
InMaxVal5	ABBIED600_Rev1_ASG_SP_f_e	Input maximum	E	ABBIED600:2014
InMaxVal6	ABBIED600_Rev1_ASG_SP_f_e	Input maximum	E	ABBIED600:2014
InMaxVal7	ABBIED600_Rev1_ASG_SP_f_e	Input maximum	E	ABBIED600:2014

InMaxVal8	ABBIED600_Rev1_ASG_SP_f_e	Input maximum	E	ABBIED600:2014
InMod1	AB-BIED600_Rev2_ENG_SP_SenInMod_e	Input mode	E	ABBIED600:2014
InMod2	AB-BIED600_Rev2_ENG_SP_SenInMod_e	Input mode	E	ABBIED600:2014
InMod3	AB-BIED600_Rev2_ENG_SP_SenInMod_e	Input mode	E	ABBIED600:2014
InMod4	AB-BIED600_Rev2_ENG_SP_SenInMod_e	Input mode	E	ABBIED600:2014
InMod5	AB-BIED600_Rev2_ENG_SP_SenInMod_e	Input mode	E	ABBIED600:2014
InMod6	AB-BIED600_Rev2_ENG_SP_SenInMod_e	Input mode	E	ABBIED600:2014
InMod7	AB-BIED600_Rev2_ENG_SP_SenInMod_e	Input mode	E	ABBIED600:2014
InMod8	AB-BIED600_Rev2_ENG_SP_SenInMod_e	Input mode	E	ABBIED600:2014
CardNam	AB-BIED600_Rev8_DPL_eeprom_2_ED2_e	Card information	E	ABBIED600:2014
HwId	ABBIED600_Rev1_LPL_VSS_1_20_e	HW module	E	ABBIED600:2014
TestStald	ABBIED600_Rev1_LPL_VSS_dU_20_e	Testing	E	ABBIED600:2014

### 6.2.291 LN: XRGPIO105 Name: GGIO (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Health	ABBIED600_Rev4_ENS_health	Health		
AnIn1	ABBIED600_Rev6_MV_6	Analogue input 1		
AnIn2	ABBIED600_Rev6_MV_6	Analogue input 2		
AnIn3	ABBIED600_Rev6_MV_6	Analogue input 3		
AnIn4	ABBIED600_Rev6_MV_6	Analogue input 4		
AnIn5	ABBIED600_Rev6_MV_6	Analogue input 5		
AnIn6	ABBIED600_Rev6_MV_6	Analogue input 6		
AnIn7	ABBIED600_Rev6_MV_6	Analogue input 7		
AnIn8	ABBIED600_Rev6_MV_6	Analogue input 8		
Alm1	ABBIED600_Rev1_SPS	Alarm		
Wrn1	ABBIED600_Rev1_SPS	Warning		

InMinVal1	ABBIED600_Rev1_ASG_SP_f_e	Input minimum	E	ABBIED600:2014
InMinVal2	ABBIED600_Rev1_ASG_SP_f_e	Input minimum	E	ABBIED600:2014
InMinVal3	ABBIED600_Rev1_ASG_SP_f_e	Input minimum	E	ABBIED600:2014
InMinVal4	ABBIED600_Rev1_ASG_SP_f_e	Input minimum	E	ABBIED600:2014
InMinVal5	ABBIED600_Rev1_ASG_SP_f_e	Input minimum	E	ABBIED600:2014
InMinVal6	ABBIED600_Rev1_ASG_SP_f_e	Input minimum	E	ABBIED600:2014
InMinVal7	ABBIED600_Rev1_ASG_SP_f_e	Input minimum	E	ABBIED600:2014
InMinVal8	ABBIED600_Rev1_ASG_SP_f_e	Input minimum	E	ABBIED600:2014
InMaxVal1	ABBIED600_Rev1_ASG_SP_f_e	Input maximum	E	ABBIED600:2014
InMaxVal2	ABBIED600_Rev1_ASG_SP_f_e	Input maximum	E	ABBIED600:2014
InMaxVal3	ABBIED600_Rev1_ASG_SP_f_e	Input maximum	E	ABBIED600:2014
InMaxVal4	ABBIED600_Rev1_ASG_SP_f_e	Input maximum	E	ABBIED600:2014
InMaxVal5	ABBIED600_Rev1_ASG_SP_f_e	Input maximum	E	ABBIED600:2014
InMaxVal6	ABBIED600_Rev1_ASG_SP_f_e	Input maximum	E	ABBIED600:2014
InMaxVal7	ABBIED600_Rev1_ASG_SP_f_e	Input maximum	E	ABBIED600:2014
InMaxVal8	ABBIED600_Rev1_ASG_SP_f_e	Input maximum	E	ABBIED600:2014
InMod1	AB-BIED600_Rev2_ENG_SP_SenInMod_e	Input mode	E	ABBIED600:2014
InMod2	AB-BIED600_Rev2_ENG_SP_SenInMod_e	Input mode	E	ABBIED600:2014
InMod3	AB-BIED600_Rev2_ENG_SP_SenInMod_e	Input mode	E	ABBIED600:2014
InMod4	AB-BIED600_Rev2_ENG_SP_SenInMod_e	Input mode	E	ABBIED600:2014
InMod5	AB-BIED600_Rev2_ENG_SP_SenInMod_e	Input mode	E	ABBIED600:2014
InMod6	AB-BIED600_Rev2_ENG_SP_SenInMod_e	Input mode	E	ABBIED600:2014
InMod7	AB-BIED600_Rev2_ENG_SP_SenInMod_e	Input mode	E	ABBIED600:2014
InMod8	AB-BIED600_Rev2_ENG_SP_SenInMod_e	Input mode	E	ABBIED600:2014

CardNam	AB-BIED600_Rev8_DPL_eeprom_2_ED2_e	Card information	E	ABBIED600:2014
HwId	ABBIED600_Rev1_LPL_VSS_1_20_e	HW module	E	ABBIED600:2014
TestStald	ABBIED600_Rev1_LPL_VSS_dU_20_e	Testing	E	ABBIED600:2014

**6.2.292 LN: XBRGGIO130 Name: GGIO (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Health	ABBIED600_Rev4_ENS_health	Health		
AnIn1	ABBIED600_Rev6_MV_6	Analogue input 1		
AnIn2	ABBIED600_Rev6_MV_6	Analogue input 2		
AnIn3	ABBIED600_Rev6_MV_6	Analogue input 3		
SPCSO1	ABBIED600_Rev2_SPC_control	X130-Output 1		status-only,direct-with-normal-security
SPCSO2	ABBIED600_Rev2_SPC_control	X130-Output 2		status-only,direct-with-normal-security
SPCSO3	ABBIED600_Rev2_SPC_control	X130-Output 3		status-only,direct-with-normal-security
Alm1	ABBIED600_Rev1_SPS	Alarm		
Wrn1	ABBIED600_Rev1_SPS	Warning		
InMinVal1	ABBIED600_Rev1_ASG_SP_f_e	Input minimum	E	ABBIED600:2014
InMinVal2	ABBIED600_Rev1_ASG_SP_f_e	Input minimum	E	ABBIED600:2014
InMinVal3	ABBIED600_Rev1_ASG_SP_f_e	Input minimum	E	ABBIED600:2014
InMaxVal1	ABBIED600_Rev1_ASG_SP_f_e	Input maximum	E	ABBIED600:2014
InMaxVal2	ABBIED600_Rev1_ASG_SP_f_e	Input maximum	E	ABBIED600:2014
InMaxVal3	ABBIED600_Rev1_ASG_SP_f_e	Input maximum	E	ABBIED600:2014
InMod1	AB-BIED600_Rev2_ENG_SP_SenInMod_e	Input mode	E	ABBIED600:2014
InMod2	AB-BIED600_Rev2_ENG_SP_SenInMod_e	Input mode	E	ABBIED600:2014
InMod3	AB-BIED600_Rev2_ENG_SP_SenInMod_e	Input mode	E	ABBIED600:2014
CardNam	AB-BIED600_Rev8_DPL_eeprom_2_ED2_e	Card information	E	ABBIED600:2014
HwId	ABBIED600_Rev1_LPL_VSS_1_20_e	HW module	E	ABBIED600:2014
TestStald	ABBIED600_Rev1_LPL_VSS_dU_20_e	Testing	E	ABBIED600:2014

**6.2.293 LN: XGGIO90 Name: GGIO (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Beh	ABBIED600_Rev2_ENS_beh	X90 on/off		
CardNam	ABBIED600_Rev8_DPL_eeprom_2_ED2_e	Card information	E	ABBIED600:2014
HwId	ABBIED600_Rev1_LPL_VSS_1_20_e	HW module	E	ABBIED600:2014
TestStald	ABBIED600_Rev1_LPL_VSS_dU_20_e	Testing	E	ABBIED600:2014

**6.2.294 LN: SERLCCH1 Name: LCCH (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Beh	ABBIED600_Rev2_ENS_beh	SERLCCH1 on/off		
FibMod	AB-BIED600_Rev2_ENG_SP_FibMod_e	Fiber mode for COM1	E	ABBIED600:2014
SerMod	ABBIED600_Rev2_ENG_SP_SerMod_e	Serial mode for COM1	E	ABBIED600:2014
CTSDITmms	ABBIED600_Rev1_ING_SP_1_e	CTS delay for COM1	E	ABBIED600:2014
RTSDITmms	ABBIED600_Rev1_ING_SP_1_e	RTS delay for COM1	E	ABBIED600:2014
SerBaudRte	ABBIED600_Rev1_ENG_SP_BaudRate_e	Baudrate for COM1	E	ABBIED600:2014
CharRxCnt	ABBIED600_Rev1_INS_e	Number of characters received	E	ABBIED600:2014
FrRxCnt	ABBIED600_Rev1_INS_e	Number of successfully received link frames	E	ABBIED600:2014
RxErrCnt	ABBIED600_Rev1_INS_e	Number of discarded link frames	E	ABBIED600:2014
FrTxCnt	ABBIED600_Rev1_INS_e	Number of transmitted link frames	E	ABBIED600:2014
CDLosCnt	ABBIED600_Rev1_INS_e	CD lost	E	ABBIED600:2014
CollCnt	ABBIED600_Rev1_INS_e	Collision	E	ABBIED600:2014
CTSTmOut	ABBIED600_Rev1_INS_e	CTS timeout	E	ABBIED600:2014
TxTmOutCnt	ABBIED600_Rev1_INS_e	Transmission timeout	E	ABBIED600:2014
PtyErrCnt	ABBIED600_Rev1_INS_e	Number of parity errors	E	ABBIED600:2014
OvRunErr	ABBIED600_Rev1_INS_e	Number of overrun errors	E	ABBIED600:2014
FrErrCnt	ABBIED600_Rev1_INS_e	Framing errors	E	ABBIED600:2014
ChLiv	ABBIED600_Rev1_SPS_simple	Channel Live		
LnkLiv	ABBIED600_Rev1_SPS_simple_e	Link Live	E	ABBIED600:2014
CntRs	ABBIED600_Rev2_SPC_control_e	Reset Counters	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.295 LN: SERLCCH2 Name: LCCH (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Beh	ABBIED600_Rev2_ENS_beh	SERLCCH2 on/off		
FibMod	AB-BIED600_Rev2_ENG_SP_FibMod_e	Fiber mode for COM2	E	ABBIED600:2014
SerMod	ABBIED600_Rev2_ENG_SP_Ser-Mod_e	Serial mode for COM2	E	ABBIED600:2014
CTSDITmms	ABBIED600_Rev1_ING_SP_1_e	CTS delay for COM2	E	ABBIED600:2014
RTSDITmms	ABBIED600_Rev1_ING_SP_1_e	RTS delay for COM2	E	ABBIED600:2014
SerBaudRte	ABBIED600_Rev1_ENG_SP_BaudRate_e	Baudrate for COM2	E	ABBIED600:2014
CharRxCnt	ABBIED600_Rev1_INS_e	Number of characters received	E	ABBIED600:2014
FrRxCnt	ABBIED600_Rev1_INS_e	Number of successfully received link frames	E	ABBIED600:2014
RxErrCnt	ABBIED600_Rev1_INS_e	Number of discarded link frames	E	ABBIED600:2014
FrTxCnt	ABBIED600_Rev1_INS_e	Number of transmitted link frames	E	ABBIED600:2014
CDLosCnt	ABBIED600_Rev1_INS_e	CD lost	E	ABBIED600:2014
CollCnt	ABBIED600_Rev1_INS_e	Collision	E	ABBIED600:2014
CTSTmOut	ABBIED600_Rev1_INS_e	CTS timeout	E	ABBIED600:2014
TxTmOutCnt	ABBIED600_Rev1_INS_e	Transmission timeout	E	ABBIED600:2014
PtyErrCnt	ABBIED600_Rev1_INS_e	Number of parity errors	E	ABBIED600:2014
OvRunErr	ABBIED600_Rev1_INS_e	Number of overrun errors	E	ABBIED600:2014
FrErrCnt	ABBIED600_Rev1_INS_e	Framing errors	E	ABBIED600:2014
ChLiv	ABBIED600_Rev1_SPS_simple	Channel Live		
LnkLiv	ABBIED600_Rev1_SPS_simple_e	Link Live	E	ABBIED600:2014
CntRs	ABBIED600_Rev2_SPC_control_e	Reset Counters	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.296 LN: RCHLCCH1 Name: LCCH (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Beh	ABBIED600_Rev2_ENS_beh	Physical Channel behavior		
ChLiv	ABBIED600_Rev1_SPS	Physical channel status of port A		
RedChLiv	ABBIED600_Rev1_SPS	Physical channel status of port B		

LnkLiv	ABBIED600_Rev1_SPS_e	Link status of port A	E	AB-BIED600:2014
RedLnkLiv	ABBIED600_Rev1_SPS_e	Link status of port B	E	AB-BIED600:2014
RedCfg	ABBIED600_Rev1_ENG_SP_ChRed-Kind_e	Redundant mode	E	REx620:2015

**6.2.297 LN: SCHLCCH1 Name: LCCH (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Beh	ABBIED600_Rev2_ENS_beh	Physical Channel behavior		
ChLiv	ABBIED600_Rev1_SPS	Physical channel status		
LnkLiv	ABBIED600_Rev1_SPS_e	Link status	E	AB-BIED600:2014
PortMod	ABBIED600_Rev4_ENG_SP_Eth-PortMod_e	Ethernet port mode	E	AB-BIED600:2014

**6.2.298 LN: SCHLCCH2 Name: LCCH (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Beh	ABBIED600_Rev2_ENS_beh	Physical Channel behavior		
ChLiv	ABBIED600_Rev1_SPS	Physical channel status		
LnkLiv	ABBIED600_Rev1_SPS_e	Link status	E	AB-BIED600:2014
PortMod	ABBIED600_Rev4_ENG_SP_Eth-PortMod_e	Ethernet port mode	E	AB-BIED600:2014

**6.2.299 LN: SCHLCCH3 Name: LCCH (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Beh	ABBIED600_Rev2_ENS_beh	Physical Channel behavior		
ChLiv	ABBIED600_Rev1_SPS	Physical channel status		
LnkLiv	ABBIED600_Rev1_SPS_e	Link status	E	AB-BIED600:2014
PortMod	ABBIED600_Rev4_ENG_SP_Eth-PortMod_e	Ethernet port mode	E	AB-BIED600:2014

**6.2.300 LN: PHIZ1 Name: PHIZ (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	PHIZ1		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		

Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
Pos	ABBIED600_Rev4_DPC_simple	Position		status-only
PosClIs	ABBIED600_Rev1_SPS_simple_e	Circuit Breaker Closed input	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_simple_e	Circuit Breaker Open input	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
SysTyp	ABBIED600_Rev2_ENG_SP_PHIZ-Mod_e	System Type	E	ABBIED600:2014
SecLev	ABBIED600_Rev1_ING_SG_e	Security Level	E	ABBIED600:2014

### 6.2.301 LN: ARCSARC11 Name: SARC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Beh		
FACntRs	ABBIED600_Rev2_INC_control_int	Fault arc counter		status-only,direct-with-normal-security
FADet	ABBIED600_Rev1_SPS	Fault arc detected		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
InRemFA	ABBIED600_Rev1_SPS_e	Remote Fault arc detected	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.302 LN: ARCPTRC11 Name: PTRC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Beh		
Op	ABBIED600_Rev1_ACT_simple	Operate		
OpModArc	ABBIED600_Rev2_ENG_SP_OpModArc_e	Operation mode	E	ABBIED600:2014
InOpMod	ABBIED600_Rev1_SPS_e	Operation mode input	E	ABBIED600:2014

### 6.2.303 LN: ARCSARC21 Name: SARC (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Beh		
FACntRs	ABBIED600_Rev2_INC_control_int	Fault arc counter		status-only,direct-with-normal-security

FADet	ABBIED600_Rev1_SPS	Fault arc detected		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
InRemFA	ABBIED600_Rev1_SPS_e	Remote Fault arc detected	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.304 LN: ARCPTRC21 Name: PTRC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Beh		
Op	ABBIED600_Rev1_ACT_simple	Operate		
OpModArc	ABBIED600_Rev2_ENG_SG_OpModArc_e	Operation mode	E	ABBIED600:2014
InOpMod	ABBIED600_Rev1_SPS_e	Operation mode input	E	ABBIED600:2014

**6.2.305 LN: ARCSARC31 Name: SARC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Beh		
FACntRs	ABBIED600_Rev2_INC_control_int	Fault arc counter		status-only,direct-with-normal-security
FADet	ABBIED600_Rev1_SPS	Fault arc detected		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
InRemFA	ABBIED600_Rev1_SPS_e	Remote Fault arc detected	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.306 LN: ARCPTRC31 Name: PTRC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Beh		
Op	ABBIED600_Rev1_ACT_simple	Operate		
OpModArc	ABBIED600_Rev2_ENG_SG_OpModArc_e	Operation mode	E	ABBIED600:2014
InOpMod	ABBIED600_Rev1_SPS_e	Operation mode input	E	ABBIED600:2014

**6.2.307 LN: SCEFRFLO1 Name: RFLO (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks

Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
FltZ	ABBIED600_Rev3_CMV_S_1	Fault loop impedance		
FltDiskm	ABBIED600_Rev3_MV_simple_i	Fault distance		
FltLoop	ABBIED600_Rev5_ENS_FltLoop	Fault loop		
RcdBlk	ABBIED600_Rev1_SPS_simple_e	Signal for blocking the triggering	E	ABBIED600:2014
Alm	ABBIED600_Rev1_SPS_e	Alarm	E	IEC 61850-7-4:2007
TrgSt	ABBIED600_Rev1_SPS_e	Triggered	E	ABBIED600:2014
FltPtR	ABBIED600_Rev3_MV_simple_i_e	Fault point resistance	E	ABBIED600:2014
FltR	ABBIED600_Rev3_MV_simple_i_e	Fault loop resistance	E	ABBIED600:2014
FltX	ABBIED600_Rev3_MV_simple_i_e	Fault loop reactance	E	ABBIED600:2014
PhReact	ABBIED600_Rev3_MV_simple_i_e	Fault phase reactance	E	ABBIED600:2014
RatFltALod	ABBIED600_Rev3_MV_simple_i_e	Fault to load current ratio	E	ABBIED600:2014
EqDisLod	ABBIED600_Rev3_MV_simple_i_e	Estimated equivalent load distance	E	ABBIED600:2014
PhGndCapac	ABBIED600_Rev3_MV_simple_i_e	Estimated PE capacitive reactance of the line	E	ABBIED600:2014
Trg	ABBIED600_Rev2_SPC_control_e	Triggering signal for distance calculation	E	ABBIED600:2014,status-only,direct-with-normal-security
TrgXC0F	ABBIED600_Rev2_SPC_control_e	Triggering signal for XC0F calculation	E	ABBIED600:2014,status-only,direct-with-normal-security
RcdRs	ABBIED600_Rev2_SPC_control_e	Recorded data reset	E	ABBIED600:2014,status-only,direct-with-normal-security
FltDisQ	ABBIED600_Rev1_INS_e	Fault distance quality	E	ABBIED600:2014
ZMaxLod	ABBIED600_Rev3_ASG_SG_i_e	Maximum load impedance	E	ABBIED600:2014
PhLeakRis	ABBIED600_Rev3_ASG_SG_i_e	Line PE leakage resistance	E	ABBIED600:2014
PhLinCapac	ABBIED600_Rev3_ASG_SG_i_e	Line PE capacitive reactance	E	ABBIED600:2014
EqLodDis	ABBIED600_Rev3_ASG_SG_i_e	Equivalent load distance	E	ABBIED600:2014
TrgMod	ABBIED600_Rev1_ENG_SP_Trigger_Mod_e	Trigger mode for distance calculation	E	IEC 61850-7-4:2007

HiLimSpt	ABBIED600_Rev3_ASG_SG_i	High alarm limit		
LoLimSpt	ABBIED600_Rev3_ASG_SG_i	Low alarm limit		
EFAlgSel	ABBIED600_Rev2_ENG_SP_EFAlg_e	PE-loop calculation algorithm	E	ABBIED600:2014
EFAlgASel	ABBIED600_Rev2_ENG_SP_EFAlgASel_e	Earth fault current model	E	ABBIED600:2014
EnaLodComp	ABBIED600_Rev1_SPG_SP_e	Enable load compensation	E	ABBIED600:2014
SimpMod	ABBIED600_Rev1_SPG_SP_e	Enable simple model	E	ABBIED600:2014
TestProRI	ABBIED600_Rev4_ENC_TestProRI_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
DisEstVa	ABBIED600_Rev3_ASG_SP_i_e	Allowed variation of short circuit distance estimate	E	ABBIED600:2014
PhVMeas	AB-BIED600_Rev2_ENG_SP_PhVMeas_e	Phase voltage measurement principle	E	ABBIED600:2014

**6.2.308 LN: COL1PTOC1 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time Dial Multiplier		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
PkIntgAPhA	ABBIED600_Rev3_MV_simple_i_e	Peak value of integrated current phase A	E	ABBIED600:2014
PkIntgAPhB	ABBIED600_Rev3_MV_simple_i_e	Peak value of integrated current phase B	E	ABBIED600:2014
PkIntgAPhC	ABBIED600_Rev3_MV_simple_i_e	Peak value of integrated current phase C	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.309 LN: COL2PTOC1 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDTmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	AB-BIED600:2014

**6.2.310 LN: COLPTUC1 Name: PTUC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDTmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
StrDur	ABBIED600_Rev3_MV_2_e	Ratio of start time / operate time	E	ABBIED600:2014
InhRec	ABBIED600_Rev1_SPS_e	Inhibit reclose (status)	E	ABBIED600:2014
EnaUnCur	ABBIED600_Rev1_SPG_SP_e	Enable under current functionality	E	ABBIED600:2014
ReclnhMod	AB-BIED600_Rev2_ENG_SP_TrOut-Mod_e	Reconnection inhibit mode	E	ABBIED600:2014
ReclnhTms	ABBIED600_Rev1_ING_SG_e	Reclose inhibit time	E	ABBIED600:2014
LORs	ABBIED600_Rev2_SPC_control_e	Reset lockout inhibit reconnection	E	ABBIED600:2014,status-only,direct-with-normal-security
InPosClis	ABBIED600_Rev1_SPS_e	Input showing the status of capacitor circuit breaker	E	ABBIED600:2014

**6.2.311 LN: CUB1PTOC1 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		

Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Alarm start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Alarm delay time		
FailCnt	ABBIED600_Rev2_INC_control_int_e	Total number of capacitor element failures	E	ABBIED600:2014,status-only,direct-with-normal-security
CntBr1PhsA	ABBIED600_Rev2_INC_control_int_e	Capacitor element failures in branch1 of phase A	E	ABBIED600:2014,status-only,direct-with-normal-security
CntBr2PhsA	ABBIED600_Rev2_INC_control_int_e	Capacitor element failures in branch2 of phase A	E	ABBIED600:2014,status-only,direct-with-normal-security
CntBr1PhsB	ABBIED600_Rev2_INC_control_int_e	Capacitor element failures in branch1 of phase B	E	ABBIED600:2014,status-only,direct-with-normal-security
CntBr2PhsB	ABBIED600_Rev2_INC_control_int_e	Capacitor element failures in branch2 of phase B	E	ABBIED600:2014,status-only,direct-with-normal-security
CntBr1PhsC	ABBIED600_Rev2_INC_control_int_e	Capacitor element failures in branch1 of phase C	E	ABBIED600:2014,status-only,direct-with-normal-security
CntBr2PhsC	ABBIED600_Rev2_INC_control_int_e	Capacitor element failures in branch2 of phase C	E	ABBIED600:2014,status-only,direct-with-normal-security
CntRs	ABBIED600_Rev2_SPC_control_e	Reset all counters	E	ABBIED600:2014,status-only,direct-with-normal-security
FailCntLim	ABBIED600_Rev1_ING_SG_e	Maximum permissible element failures	E	ABBIED600:2014
NatCom-pEna	ABBIED600_Rev1_SPG_SG_e	Enable natural unbalance compensation	E	ABBIED600:2014
RcdUnb	ABBIED600_Rev2_SPC_control_e	Record natural Unbalance current	E	ABBIED600:2014,status-only,direct-with-normal-security
CubAlmMod	ABBIED600_Rev2_ENG_SG_CubAlmMod_e	Alarm mode	E	ABBIED600:2014
FuLoc	ABBIED600_Rev2_ENG_SG_FuLoc_e	Capacitor bank fuse location	E	ABBIED600:2014
NatUnbCur	ABBIED600_Rev3_WYE_neut_simple_angle_i_e	Natural unbalance current	E	ABBIED600:2014

CompUn-bCur	ABBIED600_Rev3_WYE_neut_simple_angle_i_e	Compensated unbalance current	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.312 LN: CUB2PTOC1 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
TmACrv	ABBIED600_Rev2_CURVE_SG_setCharacter_SP_setParABCE	Operating curve type		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmMult	ABBIED600_Rev3_ASG_SG_i	Time dial multiplier		
MinOp-Tmms	ABBIED600_Rev1_ING_SP_1	Minimum operate time		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate delay time		
RsDITmms	ABBIED600_Rev1_ING_SP_1	Reset delay time		
StrDur	ABBIED600_Rev3_MV_simple_i_e	Ratio of start time / operate time	E	ABBIED600:2014

**6.2.313 LN: SRC1PTOC1 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start Value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
TunHNum	ABBIED600_Rev1_ING_SG_e	Tuning Harmonic Number	E	ABBIED600:2014
ResoA	ABBIED600_Rev3_WYE_threephase_simple_i_e	Resonance Current	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.314 LN: SRC2PTOC1 Name: PTOC (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behavior		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
InReso	ABBIED600_Rev1_SPS_simple_e	Input signal from higher frequency resonance branch	E	AB-BIED600:2014

**6.2.315 LN: DQPTUV1 Name: PTUV (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value for under voltage detection		
OpDITmms	ABBIED600_Rev1_ING_SG_time	Operate delay time		
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_simple_i_e	Ratio of start time / operate time	E	ABBIED600:2014

**6.2.316 LN: DQPDOP1 Name: PDOP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start power conditions		
Op	ABBIED600_Rev1_ACT_simple	Operate power conditions without delay		
StrVal	ABBIED600_Rev3_ASG_SP_i	Minimum reactive power needed for function to operate		
BlkValA	ABBIED600_Rev3_ASG_SP_i_e	Minimum positive sequence current	E	IEC 61850-7-4:2007

RevPol	ABBIED600_Rev1_SPG_SP_e	Reverse the definition of the positive reactive power direction	E	ABBIED600:2014
PwrSec-tRed	ABBIED600_Rev3_ASG_SP_i_e	Adjustable angle for power	E	ABBIED600:2014

**6.2.317 LN: DQPTUV2 Name: PTUV (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value for under voltage detection		
OpDITmms	ABBIED600_Rev1_ING_SG_time	Operate delay time		
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security
StrDur	ABBIED600_Rev3_MV_simple_i_e	Ratio of start time / operate time	E	ABBIED600:2014

**6.2.318 LN: DQPDOP2 Name: PDOP (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	AB-BIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Str	ABBIED600_Rev1_ACD_simple	Start power conditions		
Op	ABBIED600_Rev1_ACT_simple	Operate power conditions without delay		
StrVal	ABBIED600_Rev3_ASG_SP_i	Minimum reactive power needed for function to operate		
BlkValA	ABBIED600_Rev3_ASG_SP_i_e	Minimum positive sequence current	E	IEC 61850-7-4:2007
RevPol	ABBIED600_Rev1_SPG_SP_e	Reverse the definition of the positive reactive power direction	E	ABBIED600:2014
PwrSec-tRed	ABBIED600_Rev3_ASG_SP_i_e	Adjustable angle for power	E	ABBIED600:2014

**6.2.319 LN: LVRTPTUV1 Name: PTUV (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security

Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmVChr33	ABBIED600_Rev1_CSG_SP_10	Multiline curve characteristic definition		
NumPt	ABBIED600_Rev1_ING_SP_1_e	Coordinates used for defining LVRT curve	E	ABBIED600:2014
CrvPt0Tmms	ABBIED600_Rev1_ING_SP_1_e	1st time coordinate for defining LVRT curve	E	ABBIED600:2014
CrvPt1Tmms	ABBIED600_Rev1_ING_SP_1_e	2nd time coordinate for defining LVRT curve	E	ABBIED600:2014
CrvPt2Tmms	ABBIED600_Rev1_ING_SP_1_e	3rd time coordinate for defining LVRT curve	E	ABBIED600:2014
CrvPt3Tmms	ABBIED600_Rev1_ING_SP_1_e	4th time coordinate for defining LVRT curve	E	ABBIED600:2014
CrvPt4Tmms	ABBIED600_Rev1_ING_SP_1_e	5th time coordinate for defining LVRT curve	E	ABBIED600:2014
CrvPt5Tmms	ABBIED600_Rev1_ING_SP_1_e	6th time coordinate for defining LVRT curve	E	ABBIED600:2014
CrvPt6Tmms	ABBIED600_Rev1_ING_SP_1_e	7th time coordinate for defining LVRT curve	E	ABBIED600:2014
CrvPt7Tmms	ABBIED600_Rev1_ING_SP_1_e	8th time coordinate for defining LVRT curve	E	ABBIED600:2014
CrvPt8Tmms	ABBIED600_Rev1_ING_SP_1_e	9th time coordinate for defining LVRT curve	E	ABBIED600:2014
CrvPt9Tmms	ABBIED600_Rev1_ING_SP_1_e	10th time coordinate for defining LVRT curve	E	ABBIED600:2014
CrvPt0Ydir	ABBIED600_Rev3_ASG_SP_i_e	1st voltage coordinate for defining LVRT curve	E	ABBIED600:2014
CrvPt1Ydir	ABBIED600_Rev3_ASG_SP_i_e	2nd voltage coordinate for defining LVRT curve	E	ABBIED600:2014
CrvPt2Ydir	ABBIED600_Rev3_ASG_SP_i_e	3rd voltage coordinate for defining LVRT curve	E	ABBIED600:2014

CrPt3Ydir	ABBIED600_Rev3_ASG_SP_i_e	4th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
CrPt4Ydir	ABBIED600_Rev3_ASG_SP_i_e	5th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
CrPt5Ydir	ABBIED600_Rev3_ASG_SP_i_e	6th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
CrPt6Ydir	ABBIED600_Rev3_ASG_SP_i_e	7th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
CrPt7Ydir	ABBIED600_Rev3_ASG_SP_i_e	8th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
CrPt8Ydir	ABBIED600_Rev3_ASG_SP_i_e	9th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
CrPt9Ydir	ABBIED600_Rev3_ASG_SP_i_e	10th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
VCrtSel	AB-BIED600_Rev1_ENG_SP_VCrtSel_e	Voltage criteria selection	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.320 LN: LVRTPTUV2 Name: PTUV (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmVChr33	ABBIED600_Rev1_CSG_SP_10	Multiline curve characteristic definition		
NumPt	ABBIED600_Rev1_ING_SP_1_e	Coordinates used for defining LVRT curve	E	ABBIED600:2014
CrPt0Tmms	ABBIED600_Rev1_ING_SP_1_e	1st time coordinate for defining LVRT curve	E	ABBIED600:2014

Crvt1Tmms	ABBIED600_Rev1_ING_SP_1_e	2nd time coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt2Tmms	ABBIED600_Rev1_ING_SP_1_e	3rd time coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt3Tmms	ABBIED600_Rev1_ING_SP_1_e	4th time coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt4Tmms	ABBIED600_Rev1_ING_SP_1_e	5th time coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt5Tmms	ABBIED600_Rev1_ING_SP_1_e	6th time coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt6Tmms	ABBIED600_Rev1_ING_SP_1_e	7th time coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt7Tmms	ABBIED600_Rev1_ING_SP_1_e	8th time coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt8Tmms	ABBIED600_Rev1_ING_SP_1_e	9th time coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt9Tmms	ABBIED600_Rev1_ING_SP_1_e	10th time coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt0Ydir	ABBIED600_Rev3_ASG_SP_i_e	1st voltage coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt1Ydir	ABBIED600_Rev3_ASG_SP_i_e	2nd voltage coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt2Ydir	ABBIED600_Rev3_ASG_SP_i_e	3rd voltage coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt3Ydir	ABBIED600_Rev3_ASG_SP_i_e	4th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt4Ydir	ABBIED600_Rev3_ASG_SP_i_e	5th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt5Ydir	ABBIED600_Rev3_ASG_SP_i_e	6th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt6Ydir	ABBIED600_Rev3_ASG_SP_i_e	7th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt7Ydir	ABBIED600_Rev3_ASG_SP_i_e	8th voltage coordinate for defining LVRT curve	E	ABBIED600:2014

CrPt8Ydir	ABBIED600_Rev3_ASG_SP_i_e	9th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
CrPt9Ydir	ABBIED600_Rev3_ASG_SP_i_e	10th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
VCrtSel	AB-BIED600_Rev1_ENG_SP_VCrtSel_e	Voltage criteria selection	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.321 LN: LVRTPTUV3 Name: PTUV (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
TmVChr33	ABBIED600_Rev1_CSG_SP_10	Multiline curve characteristic definition		
NumPt	ABBIED600_Rev1_ING_SP_1_e	Coordinates used for defining LVRT curve	E	ABBIED600:2014
CrPt0Tmms	ABBIED600_Rev1_ING_SP_1_e	1st time coordinate for defining LVRT curve	E	ABBIED600:2014
CrPt1Tmms	ABBIED600_Rev1_ING_SP_1_e	2nd time coordinate for defining LVRT curve	E	ABBIED600:2014
CrPt2Tmms	ABBIED600_Rev1_ING_SP_1_e	3rd time coordinate for defining LVRT curve	E	ABBIED600:2014
CrPt3Tmms	ABBIED600_Rev1_ING_SP_1_e	4th time coordinate for defining LVRT curve	E	ABBIED600:2014
CrPt4Tmms	ABBIED600_Rev1_ING_SP_1_e	5th time coordinate for defining LVRT curve	E	ABBIED600:2014
CrPt5Tmms	ABBIED600_Rev1_ING_SP_1_e	6th time coordinate for defining LVRT curve	E	ABBIED600:2014

Crvt6Tmms	ABBIED600_Rev1_ING_SP_1_e	7th time coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt7Tmms	ABBIED600_Rev1_ING_SP_1_e	8th time coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt8Tmms	ABBIED600_Rev1_ING_SP_1_e	9th time coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt9Tmms	ABBIED600_Rev1_ING_SP_1_e	10th time coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt0Ydir	ABBIED600_Rev3_ASG_SP_i_e	1st voltage coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt1Ydir	ABBIED600_Rev3_ASG_SP_i_e	2nd voltage coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt2Ydir	ABBIED600_Rev3_ASG_SP_i_e	3rd voltage coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt3Ydir	ABBIED600_Rev3_ASG_SP_i_e	4th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt4Ydir	ABBIED600_Rev3_ASG_SP_i_e	5th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt5Ydir	ABBIED600_Rev3_ASG_SP_i_e	6th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt6Ydir	ABBIED600_Rev3_ASG_SP_i_e	7th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt7Ydir	ABBIED600_Rev3_ASG_SP_i_e	8th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt8Ydir	ABBIED600_Rev3_ASG_SP_i_e	9th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
Crvt9Ydir	ABBIED600_Rev3_ASG_SP_i_e	10th voltage coordinate for defining LVRT curve	E	ABBIED600:2014
NumPh	AB-BIED600_Rev3_ENG_SP_StrPhSel_e	Number of phases required for operate activation	E	ABBIED600:2014
VCrtSel	AB-BIED600_Rev1_ENG_SP_VCrtSel_e	Voltage criteria selection	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.322 LN: VVSPPAM1 Name: PPAM (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_Of-fOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS_simple	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start signal		
Op	ABBIED600_Rev1_ACT_simple	Operate signal for vector shift		
StrVal	ABBIED600_Rev3_ASG_SG_i	Start value		
BlkValV	ABBIED600_Rev3_ASG_SG_i_e	Block value (minimum operating voltage)	E	IEC 61850-7-4:2007
BlkIntnSt	ABBIED600_Rev1_ACT_simple_e	Protection function internally blocked	E	ABBIED600:2014
PhSpvn	AB-BIED600_Rev2_ENG_SP_PhSv_e	Monitored voltage phase	E	ABBIED600:2014
MaxV	ABBIED600_Rev3_ASG_SG_i_e	Voltage above which function is internally blocked	E	ABBIED600:2014
VShPhA	ABBIED600_Rev3_MV_simple_i_e	Vector shift for ph-earth voltage A or ph-ph voltage AB	E	ABBIED600:2014
VShPhB	ABBIED600_Rev3_MV_simple_i_e	Vector shift for ph-earth voltage B or ph-ph voltage BC	E	ABBIED600:2014
VShPhC	ABBIED600_Rev3_MV_simple_i_e	Vector shift for ph-earth voltage C or ph-ph voltage CA	E	ABBIED600:2014
VShPsSeq	ABBIED600_Rev3_MV_simple_i_e	Positive sequence voltage	E	ABBIED600:2014
TestPro	ABBIED600_Rev2_ENC_TestPro_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.323 LN: UEXPDIS1 Name: PDIS (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_Of-fOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		

PoRch	ABBIED600_Rev3_ASG_SG_i	Polar Reach is the Diameter of the Mho diagram		
Ofs	ABBIED600_Rev3_ASG_SG_i	Offset of the impedance Mho circle		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP	Reset Delay Time		
Dsp	ABBIED600_Rev3_ASG_SG_i_e	Displacement of the impedance Mho circle	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Start duration	E	ABBIED600:2014
ZMeasMod	ABBIED600_Rev2_ENG_SP_ZMeas-Mod_e	Measurement mode for impedance calculation	E	ABBIED600:2014
PhSelZCIC	AB-BIED600_Rev2_ENG_SP_VPhSel_e	Voltage phase selection	E	ABBIED600:2014
ExLosEna	ABBIED600_Rev1_SPG_SP_e	External loss detection enable/disable	E	ABBIED600:2014
VRv	ABBIED600_Rev1_SPG_SP_e	Rotate voltage signals	E	ABBIED600:2014
InExLos	ABBIED600_Rev1_SPS_e	Input for external excitation loss detection	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

### 6.2.324 LN: UEXMMXU1 Name: MMXU (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Z	ABBIED600_Rev3_WYE_4	Phase impedance		
ZPP	ABBIED600_Rev3_DEL_4_e	Phase to phase impedance	E	ABBIED600:2014
ZPs	ABBIED600_Rev3_CMV_S_1_e	Positive sequence impedance	E	ABBIED600:2014

### 6.2.325 LN: UEXPDIS2 Name: PDIS (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Blk	ABBIED600_Rev1_SPS	Block signal for all binary outputs		
Str	ABBIED600_Rev1_ACD_simple	Start		
Op	ABBIED600_Rev1_ACT_simple	Operate		

PoRch	ABBIED600_Rev3_ASG_SG_i	Polar Reach is the Diameter of the Mho diagram		
Ofs	ABBIED600_Rev3_ASG_SG_i	Offset of the impedance Mho circle		
OpDITmms	ABBIED600_Rev1_ING_SG	Operate Delay Time		
RsDITmms	ABBIED600_Rev1_ING_SP	Reset Delay Time		
Dsp	ABBIED600_Rev3_ASG_SG_i_e	Displacement of the impedance Mho circle	E	ABBIED600:2014
StrDur	ABBIED600_Rev3_MV_2_e	Start duration	E	ABBIED600:2014
ZMeasMod	ABBIED600_Rev2_ENG_SP_ZMeas-Mod_e	Measurement mode for impedance calculation	E	ABBIED600:2014
PhSelZCIC	AB-BIED600_Rev2_ENG_SP_VPhSel_e	Voltage phase selection	E	ABBIED600:2014
ExLosEna	ABBIED600_Rev1_SPG_SP_e	External loss detection enable/disable	E	ABBIED600:2014
VRv	ABBIED600_Rev1_SPG_SP_e	Rotate voltage signals	E	ABBIED600:2014
InExLos	ABBIED600_Rev1_SPS_e	Input for external excitation loss detection	E	ABBIED600:2014
TstOutCmd	ABBIED600_Rev20_ENC_TstOut_e	Test control for outputs	E	ABBIED600:2014,status-only,direct-with-normal-security

**6.2.326 LN: UEXMMXU2 Name: MMXU (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Z	ABBIED600_Rev3_WYE_4	Phase impedance		
ZPP	ABBIED600_Rev3_DEL_4_e	Phase to phase impedance	E	ABBIED600:2014
ZPs	ABBIED600_Rev3_CMV_S_1_e	Positive sequence impedance	E	ABBIED600:2014

**6.2.327 LN: LLN0 Name: LLN0 (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On-TestBlockOff	Control		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Control		
NamPlt	ABBIED600_Rev2_LPL_CTRLDR_LNN0	Control		
Loc	ABBIED600_Rev1_SPS_retain	Local / Remote		
LocKey	ABBIED600_Rev1_SPS_simple	Local operation		

LocSta	ABBIED600_Rev1_SPC_retain	Station opera-tion		status-only,direct-with-normal-security
GrRef	ABBIED600_Rev4_ORG_SP_1	GrRef		
MitLev	ABBIED600_Rev1_SPG_SP	Multiple levels		
CmdBlk	ABBIED600_Rev1_SPC_simple	Commands blocked		status-only
LocKeyHMI	ABBIED600_Rev3_ENS_LockKeyHMI_e	Control HMI	E	REx620:2015
LocKeyOff	ABBIED600_Rev1_SPS_simple_e	Control disable	E	REx620:2015
LocKeyLoc	ABBIED600_Rev1_SPS_simple_e	Control local	E	REx620:2015
LocKeyRem	ABBIED600_Rev1_SPS_simple_e	Control re-mote	E	REx620:2015
LocKeySta	ABBIED600_Rev1_SPS_simple_e	Control sta-tion	E	REx620:2015
LocKeyAll	ABBIED600_Rev1_SPS_simple_e	Control all	E	REx620:2015
LocRemMod	AB-BIED600_Rev1_ENG_SP_LocRemMod_e	Control mode	E	REx620:2015
StaLevSet	ABBIED600_Rev1_ENG_SP_StaLevSet_e	Station au-thority	E	REx620:2015

### 6.2.328 LN: CBCSWI1 Name: CSWI (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS	Local operation		
OpCntRs	ABBIED600_Rev2_INC_control_int	Operation counter		status-only,direct-with-normal-security
Pos	ABBIED600_Rev8_DPC_control	Switch, general		status-only,direct-with-normal-security,sbo-with-enhanced-security
OpOpn	ABBIED600_Rev1_ACT_simple	Switch, general		
OpCls	ABBIED600_Rev1_ACT_simple	Switch, general		
SelOpn	ABBIED600_Rev1_SPS	Selection open switch		
SelCls	ABBIED600_Rev1_SPS	Selection close switch		
PosDIT-mms	ABBIED600_Rev1_ING_SP_1_e	Event delay	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit opn	E	ABBIED600:2014
PosCls	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit cls	E	ABBIED600:2014
PosOk	ABBIED600_Rev1_SPS_simple_e	Position OK	E	ABBIED600:2014
AdpPls	ABBIED600_Rev1_SPG_SP_e	Adaptive pulse	E	ABBIED600:2014
OpnEna	ABBIED600_Rev1_SPS_e	OPEN_ENAD	E	ABBIED600:2014
ClEna	ABBIED600_Rev1_SPS_e	CLOSE_ENAD	E	ABBIED600:2014
InSynOk	ABBIED600_Rev1_SPS_e	SYNC OK	E	ABBIED600:2014

SynlIByps	ABBIED600_Rev1_SPS_e	SYNC_ITL_BYP	E	ABBIED600:2014
-----------	----------------------	--------------	---	----------------

### 6.2.329 LN: CBXCBR1 Name: XCBR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS_simple	Local operation		
EEName	ABBIED600_Rev4_DPL_EEName	External equipment name plate		
OpCnt	ABBIED600_Rev1_INS	Operation counter		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
BlkOpn	ABBIED600_Rev1_SPC_simple	Block opening		status-only
BlkCls	ABBIED600_Rev1_SPC_simple	Block closing		status-only
CBOpCap	ABBIED600_Rev2_ENS_CBOpCap	Circuit breaker operating capability		

### 6.2.330 LN: CBCSWI2 Name: CSWI (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_Of-fOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS	Local operation		
OpCntRs	ABBIED600_Rev2_INC_control_int	Operation counter		status-only,direct-with-normal-security
Pos	ABBIED600_Rev8_DPC_control	Switch, general		status-only,direct-with-normal-security,sbo-with-enhanced-security
OpOpn	ABBIED600_Rev1_ACT_simple	Switch, general		
OpCls	ABBIED600_Rev1_ACT_simple	Switch, general		
SelOpn	ABBIED600_Rev1_SPS	Selection open switch		
SelCls	ABBIED600_Rev1_SPS	Selection close switch		
PosDIT-mms	ABBIED600_Rev1_ING_SP_1_e	Event delay	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit opn	E	ABBIED600:2014
PosCls	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit cls	E	ABBIED600:2014
PosOk	ABBIED600_Rev1_SPS_simple_e	Position OK	E	ABBIED600:2014
AdpPls	ABBIED600_Rev1_SPG_SP_e	Adaptive pulse	E	ABBIED600:2014
OpnEna	ABBIED600_Rev1_SPS_e	OPEN_ENAD	E	ABBIED600:2014
ClsEna	ABBIED600_Rev1_SPS_e	CLOSE_ENAD	E	ABBIED600:2014
InSynOk	ABBIED600_Rev1_SPS_e	SYNC OK	E	ABBIED600:2014
SynlIByps	ABBIED600_Rev1_SPS_e	SYNC_ITL_BYP	E	ABBIED600:2014

### 6.2.331 LN: CBXCBR2 Name: XCBR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only

Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS_simple	Local operation		
EENName	ABBIED600_Rev4_DPL_EENName	External equipment name plate		
OpCnt	ABBIED600_Rev1_INS	Operation counter		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
BlkOpn	ABBIED600_Rev1_SPC_simple	Block opening		status-only
BlkCls	ABBIED600_Rev1_SPC_simple	Block closing		status-only
CBOpCap	ABBIED600_Rev2_ENS_CBOpCap	Circuit breaker operating capability		

### 6.2.332 LN: CBCSWI3 Name: CSWI (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS	Local operation		
OpCntRs	ABBIED600_Rev2_INC_control_int	Operation counter		status-only,direct-with-normal-security
Pos	ABBIED600_Rev8_DPC_control	Switch, general		status-only,direct-with-normal-security,sbo-with-enhanced-security
OpOpn	ABBIED600_Rev1_ACT_simple	Switch, general		
OpCls	ABBIED600_Rev1_ACT_simple	Switch, general		
SelOpn	ABBIED600_Rev1_SPS	Selection open switch		
SelCls	ABBIED600_Rev1_SPS	Selection close switch		
PosDIT-mms	ABBIED600_Rev1_ING_SP_1_e	Event delay	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit opn	E	ABBIED600:2014
PosCls	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit cls	E	ABBIED600:2014
PosOk	ABBIED600_Rev1_SPS_simple_e	Position OK	E	ABBIED600:2014
AdpPls	ABBIED600_Rev1_SPG_SP_e	Adaptive pulse	E	ABBIED600:2014
OpnEna	ABBIED600_Rev1_SPS_e	OPEN_ENAD	E	ABBIED600:2014
ClsEna	ABBIED600_Rev1_SPS_e	CLOSE_ENAD	E	ABBIED600:2014
InSynOk	ABBIED600_Rev1_SPS_e	SYNC OK	E	ABBIED600:2014
SynItlByps	ABBIED600_Rev1_SPS_e	SYNC_ITL_BYP	E	ABBIED600:2014

### 6.2.333 LN: CBXCBR3 Name: XCBR (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS_simple	Local operation		
EENName	ABBIED600_Rev4_DPL_EENName	External equipment name plate		
OpCnt	ABBIED600_Rev1_INS	Operation counter		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only

BlkOpn	ABBIED600_Rev1_SPC_simple	Block opening		status-only
BlkCls	ABBIED600_Rev1_SPC_simple	Block closing		status-only
CBOpCap	ABBIED600_Rev2_ENS_CBOpCap	Circuit breaker operating capability		

### 6.2.334 LN: DCCIL01 Name: CILO (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
EnaOpn	ABBIED600_Rev1_SPS	Enable Open		
EnaCls	ABBIED600_Rev1_SPS	Enable Close		
ItlByps	ABBIED600_Rev1_SPS_e	ITL_BYPASS	E	ABBIED600:2014

### 6.2.335 LN: DCCSWI1 Name: CSWI (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS	Local operation		
OpCntRs	ABBIED600_Rev2_INC_control_int	Operation counter		status-only,direct-with-normal-security
Pos	ABBIED600_Rev8_DPC_control	Switch, general		status-only,direct-with-normal-security,sbo-with-enhanced-security
OpOpn	ABBIED600_Rev1_ACT_simple	Switch, general		
OpCls	ABBIED600_Rev1_ACT_simple	Switch, general		
PosDIT-mms	ABBIED600_Rev1_ING_SP_1_e	Event delay	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit opn	E	ABBIED600:2014
PosCls	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit cls	E	ABBIED600:2014
PosOk	ABBIED600_Rev1_SPS_simple_e	Position OK	E	ABBIED600:2014
AdpPls	ABBIED600_Rev1_SPG_SP_e	Adaptive pulse	E	ABBIED600:2014
OpnEna	ABBIED600_Rev1_SPS_e	OPEN_ENAD	E	ABBIED600:2014
ClsEna	ABBIED600_Rev1_SPS_e	CLOSE_ENAD	E	ABBIED600:2014

### 6.2.336 LN: DCXSWI1 Name: XSWI (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS_simple	Local operation		
EEName	ABBIED600_Rev4_DPL_EENName	External equipment name plate		
OpCnt	ABBIED600_Rev1_INS	Operation counter		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
BlkOpn	ABBIED600_Rev1_SPC_simple	Block opening		status-only
BlkCls	ABBIED600_Rev1_SPC_simple	Block closing		status-only

SwTyp	ABBIED600_Rev1_ENS_SwTyp	Switch type		
SwOpCap	ABBIED600_Rev1_ENS_SwOpCap	Disconnector operating capability		

**6.2.337 LN: DCCIL02 Name: CILO (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
EnaOpn	ABBIED600_Rev1_SPS	Enable Open		
EnaCls	ABBIED600_Rev1_SPS	Enable Close		
ItlByps	ABBIED600_Rev1_SPS_e	ITL_BYPASS	E	ABBIED600:2014

**6.2.338 LN: DCCSWI2 Name: CSWI (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_Of-fOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS	Local operation		
OpCntRs	ABBIED600_Rev2_INC_control_int	Operation counter		status-only,direct-with-normal-security
Pos	ABBIED600_Rev8_DPC_control	Switch, general		status-only,direct-with-normal-security,sbo-with-enhanced-security
OpOpn	ABBIED600_Rev1_ACT_simple	Switch, general		
OpCls	ABBIED600_Rev1_ACT_simple	Switch, general		
PosDIT-mms	ABBIED600_Rev1_ING_SP_1_e	Event delay	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit opn	E	ABBIED600:2014
PosCls	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit cls	E	ABBIED600:2014
PosOk	ABBIED600_Rev1_SPS_simple_e	Position OK	E	ABBIED600:2014
AdpPls	ABBIED600_Rev1_SPG_SP_e	Adaptive pulse	E	ABBIED600:2014
OpnEna	ABBIED600_Rev1_SPS_e	OPEN_ENAD	E	ABBIED600:2014
ClsEna	ABBIED600_Rev1_SPS_e	CLOSE_ENAD	E	ABBIED600:2014

**6.2.339 LN: DCXSWI2 Name: XSWI (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS_simple	Local operation		
EEName	ABBIED600_Rev4_DPL_EEName	External equipment name plate		
OpCnt	ABBIED600_Rev1_INS	Operation counter		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
BlkOpn	ABBIED600_Rev1_SPC_simple	Block opening		status-only
BlkCls	ABBIED600_Rev1_SPC_simple	Block closing		status-only
SwTyp	ABBIED600_Rev1_ENS_SwTyp	Switch type		

SwOpCap	ABBIED600_Rev1_ENS_SwOpCap	Disconnector operating capability		
---------	----------------------------	-----------------------------------	--	--

### 6.2.340 LN: DCCIGO3 Name: CILO (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
EnaOpn	ABBIED600_Rev1_SPS	Enable Open		
EnaCls	ABBIED600_Rev1_SPS	Enable Close		
ItlByp	ABBIED600_Rev1_SPS_e	ITL_BYPASS	E	ABBIED600:2014

### 6.2.341 LN: DCCSWI3 Name: CSWI (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS	Local operation		
OpCntRs	ABBIED600_Rev2_INC_control_int	Operation counter		status-only,direct-with-normal-security
Pos	ABBIED600_Rev8_DPC_control	Switch, general		status-only,direct-with-normal-security,sbo-with-enhanced-security
OpOpn	ABBIED600_Rev1_ACT_simple	Switch, general		
OpCls	ABBIED600_Rev1_ACT_simple	Switch, general		
PosDIT-mms	ABBIED600_Rev1_ING_SP_1_e	Event delay	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit opn	E	ABBIED600:2014
PosCls	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit cls	E	ABBIED600:2014
PosOk	ABBIED600_Rev1_SPS_simple_e	Position OK	E	ABBIED600:2014
AdpPls	ABBIED600_Rev1_SPG_SP_e	Adaptive pulse	E	ABBIED600:2014
OpnEna	ABBIED600_Rev1_SPS_e	OPEN_ENAD	E	ABBIED600:2014
ClsEna	ABBIED600_Rev1_SPS_e	CLOSE_ENAD	E	ABBIED600:2014

### 6.2.342 LN: DCXSWI3 Name: XSWI (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS_simple	Local operation		
EEName	ABBIED600_Rev4_DPL_EEName	External equipment name plate		
OpCnt	ABBIED600_Rev1_INS	Operation counter		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
BlkOpn	ABBIED600_Rev1_SPC_simple	Block opening		status-only
BlkCls	ABBIED600_Rev1_SPC_simple	Block closing		status-only
SwTyp	ABBIED600_Rev1_ENS_SwTyp	Switch type		
SwOpCap	ABBIED600_Rev1_ENS_SwOpCap	Disconnector operating capability		

**6.2.343 LN: DCCIGO4 Name: CILO (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
EnaOpn	ABBIED600_Rev1_SPS	Enable Open		
EnaCls	ABBIED600_Rev1_SPS	Enable Close		
ItlByps	ABBIED600_Rev1_SPS_e	ITL_BYPASS	E	ABBIED600:2014

**6.2.344 LN: DCCSWI4 Name: CSWI (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS	Local operation		
OpCntRs	ABBIED600_Rev2_INC_control_int	Operation counter		status-only,direct-with-normal-security
Pos	ABBIED600_Rev8_DPC_control	Switch, general		status-only,direct-with-normal-security,sbo-with-enhanced-security
OpOpn	ABBIED600_Rev1_ACT_simple	Switch, general		
OpCls	ABBIED600_Rev1_ACT_simple	Switch, general		
PosDIT-mms	ABBIED600_Rev1_ING_SP_1_e	Event delay	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit opn	E	ABBIED600:2014
PosCls	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit cls	E	ABBIED600:2014
PosOk	ABBIED600_Rev1_SPS_simple_e	Position OK	E	ABBIED600:2014
AdpPls	ABBIED600_Rev1_SPG_SP_e	Adaptive pulse	E	ABBIED600:2014
OpnEna	ABBIED600_Rev1_SPS_e	OPEN_ENAD	E	ABBIED600:2014
ClsEna	ABBIED600_Rev1_SPS_e	CLOSE_ENAD	E	ABBIED600:2014

**6.2.345 LN: DCXSWI4 Name: XSWI (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS_simple	Local operation		
EEName	ABBIED600_Rev4_DPL_EENName	External equipment name plate		
OpCnt	ABBIED600_Rev1_INS	Operation counter		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
BlkOpn	ABBIED600_Rev1_SPC_simple	Block opening		status-only
BlkCls	ABBIED600_Rev1_SPC_simple	Block closing		status-only
SwTyp	ABBIED600_Rev1_ENS_SwTyp	Switch type		
SwOpCap	ABBIED600_Rev1_ENS_SwOpCap	Disconnector operating capability		

**6.2.346 LN: DCSXSWI1 Name: XSWI (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS_simple	Local operation		
EEName	ABBIED600_Rev4_DPL_EEName	External equipment name plate		
OpCnt	ABBIED600_Rev1_INS	Operation counter		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
BlkOpn	ABBIED600_Rev1_SPC_simple	Block opening		status-only
BlkCls	ABBIED600_Rev1_SPC_simple	Block closing		status-only
SwTyp	ABBIED600_Rev1_ENS_SwTyp	Switch type		
SwOpCap	ABBIED600_Rev1_ENS_SwOpCap	Disconnector operating capability		

**6.2.347 LN: DCSCSWI1 Name: CSWI (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
PosDITmms	ABBIED600_Rev1_ING_SP_1_e	Event delay	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit opn	E	ABBIED600:2014
PosCls	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit cls	E	ABBIED600:2014
PosOk	ABBIED600_Rev1_SPS_simple_e	Position OK	E	ABBIED600:2014

**6.2.348 LN: DCSXSWI2 Name: XSWI (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS_simple	Local operation		
EEName	ABBIED600_Rev4_DPL_EEName	External equipment name plate		
OpCnt	ABBIED600_Rev1_INS	Operation counter		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
BlkOpn	ABBIED600_Rev1_SPC_simple	Block opening		status-only
BlkCls	ABBIED600_Rev1_SPC_simple	Block closing		status-only
SwTyp	ABBIED600_Rev1_ENS_SwTyp	Switch type		
SwOpCap	ABBIED600_Rev1_ENS_SwOpCap	Disconnector operating capability		

**6.2.349 LN: DCSCSWI2 Name: CSWI (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
PosDITmms	ABBIED600_Rev1_ING_SP_1_e	Event delay	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit opn	E	ABBIED600:2014

PosCls	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit cls	E	ABBIED600:2014
PosOk	ABBIED600_Rev1_SPS_simple_e	Position OK	E	ABBIED600:2014

**6.2.350 LN: DCSXSWI3 Name: XSWI (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS_simple	Local operation		
EENName	ABBIED600_Rev4_DPL_EENName	External equipment name plate		
OpCnt	ABBIED600_Rev1_INS	Operation counter		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
BlkOpn	ABBIED600_Rev1_SPC_simple	Block opening		status-only
BlkCls	ABBIED600_Rev1_SPC_simple	Block closing		status-only
SwTyp	ABBIED600_Rev1_ENS_SwTyp	Switch type		
SwOpCap	ABBIED600_Rev1_ENS_SwOpCap	Disconnector operating capability		

**6.2.351 LN: DCSCSWI3 Name: CSWI (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
PosDITmms	ABBIED600_Rev1_ING_SP_1_e	Event delay	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit opn	E	ABBIED600:2014
PosCls	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit cls	E	ABBIED600:2014
PosOk	ABBIED600_Rev1_SPS_simple_e	Position OK	E	ABBIED600:2014

**6.2.352 LN: DCSXSWI4 Name: XSWI (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS_simple	Local operation		
EENName	ABBIED600_Rev4_DPL_EENName	External equipment name plate		
OpCnt	ABBIED600_Rev1_INS	Operation counter		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
BlkOpn	ABBIED600_Rev1_SPC_simple	Block opening		status-only
BlkCls	ABBIED600_Rev1_SPC_simple	Block closing		status-only
SwTyp	ABBIED600_Rev1_ENS_SwTyp	Switch type		
SwOpCap	ABBIED600_Rev1_ENS_SwOpCap	Disconnector operating capability		

**6.2.353 LN: DCSCSWI4 Name: CSWI (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		

Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
PosDITmms	ABBIED600_Rev1_ING_SP_1_e	Event delay	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit opn	E	ABBIED600:2014
PosCls	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit cls	E	ABBIED600:2014
PosOk	ABBIED600_Rev1_SPS_simple_e	Position OK	E	ABBIED600:2014

### 6.2.354 LN: ESCILO1 Name: CILO (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
EnaOpn	ABBIED600_Rev1_SPS	Enable Open		
EnaCls	ABBIED600_Rev1_SPS	Enable Close		
ItlByps	ABBIED600_Rev1_SPS_e	ITL_BYPASS	E	ABBIED600:2014

### 6.2.355 LN: ESCSWI1 Name: CSWI (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS	Local operation		
OpCntRs	ABBIED600_Rev2_INC_control_int	Operation counter		status-only,direct-with-normal-security
Pos	ABBIED600_Rev8_DPC_control	Switch, general		status-only,direct-with-normal-security,sbo-with-enhanced-security
OpOpn	ABBIED600_Rev1_ACT_simple	Switch, general		
OpCls	ABBIED600_Rev1_ACT_simple	Switch, general		
PosDITmms	ABBIED600_Rev1_ING_SP_1_e	Event delay	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit opn	E	ABBIED600:2014
PosCls	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit cls	E	ABBIED600:2014
PosOk	ABBIED600_Rev1_SPS_simple_e	Position OK	E	ABBIED600:2014
AdpPls	ABBIED600_Rev1_SPG_SP_e	Adaptive pulse	E	ABBIED600:2014
OpnEna	ABBIED600_Rev1_SPS_e	OPEN_ENAD	E	ABBIED600:2014
ClsEna	ABBIED600_Rev1_SPS_e	CLOSE_ENAD	E	ABBIED600:2014

### 6.2.356 LN: ESXSWI1 Name: XSWI (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS_simple	Local operation		
EEName	ABBIED600_Rev4_DPL_EEName	External equipment name plate		
OpCnt	ABBIED600_Rev1_INS	Operation counter		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only

BlkOpn	ABBIED600_Rev1_SPC_simple	Block opening		status-only
BlkCls	ABBIED600_Rev1_SPC_simple	Block closing		status-only
SwTyp	ABBIED600_Rev1_ENS_SwTyp	Switch type		
SwOpCap	ABBIED600_Rev1_ENS_SwOpCap	Disconnector operating capability		

### 6.2.357 LN: ESCILO2 Name: CILO (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
EnaOpn	ABBIED600_Rev1_SPS	Enable Open		
EnaCls	ABBIED600_Rev1_SPS	Enable Close		
ItlByps	ABBIED600_Rev1_SPS_e	ITL_BYPASS	E	ABBIED600:2014

### 6.2.358 LN: ESCSWI2 Name: CSWI (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS	Local operation		
OpCntRs	ABBIED600_Rev2_INC_control_int	Operation counter		status-only,direct-with-normal-security
Pos	ABBIED600_Rev8_DPC_control	Switch, general		status-only,direct-with-normal-security,sbo-with-enhanced-security
OpOpn	ABBIED600_Rev1_ACT_simple	Switch, general		
OpCls	ABBIED600_Rev1_ACT_simple	Switch, general		
PosDIT-mms	ABBIED600_Rev1_ING_SP_1_e	Event delay	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit opn	E	ABBIED600:2014
PosCls	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit cls	E	ABBIED600:2014
PosOk	ABBIED600_Rev1_SPS_simple_e	Position OK	E	ABBIED600:2014
AdpPls	ABBIED600_Rev1_SPG_SP_e	Adaptive pulse	E	ABBIED600:2014
OpnEna	ABBIED600_Rev1_SPS_e	OPEN_ENAD	E	ABBIED600:2014
ClsEna	ABBIED600_Rev1_SPS_e	CLOSE_ENAD	E	ABBIED600:2014

### 6.2.359 LN: ESXSWI2 Name: XSWI (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS_simple	Local operation		
EEName	ABBIED600_Rev4_DPL_EEName	External equipment name plate		
OpCnt	ABBIED600_Rev1_INS	Operation counter		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
BlkOpn	ABBIED600_Rev1_SPC_simple	Block opening		status-only

BlkCls	ABBIED600_Rev1_SPC_simple	Block closing		status-only
SwTyp	ABBIED600_Rev1_ENS_SwTyp	Switch type		
SwOpCap	ABBIED600_Rev1_ENS_SwOpCap	Disconnector operating capability		

### 6.2.360 LN: ESCILO3 Name: CILO (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
EnaOpn	ABBIED600_Rev1_SPS	Enable Open		
EnaCls	ABBIED600_Rev1_SPS	Enable Close		
ItlByps	ABBIED600_Rev1_SPS_e	ITL_BYPASS	E	ABBIED600:2014

### 6.2.361 LN: ESCSWI3 Name: CSWI (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev2_ENC_Mod_OffsetOn_FD	Mode		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS	Local operation		
OpCntRs	ABBIED600_Rev2_INC_control_int	Operation counter		status-only,direct-with-normal-security
Pos	ABBIED600_Rev8_DPC_control	Switch, general		status-only,direct-with-normal-security,sbo-with-enhanced-security
OpOpn	ABBIED600_Rev1_ACT_simple	Switch, general		
OpCls	ABBIED600_Rev1_ACT_simple	Switch, general		
PosDIT-mms	ABBIED600_Rev1_ING_SP_1_e	Event delay	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit opn	E	ABBIED600:2014
PosCls	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit cls	E	ABBIED600:2014
PosOk	ABBIED600_Rev1_SPS_simple_e	Position OK	E	ABBIED600:2014
AdpPls	ABBIED600_Rev1_SPG_SP_e	Adaptive pulse	E	ABBIED600:2014
OpnEna	ABBIED600_Rev1_SPS_e	OPEN_ENAD	E	ABBIED600:2014
ClsEna	ABBIED600_Rev1_SPS_e	CLOSE_ENAD	E	ABBIED600:2014

### 6.2.362 LN: ESXSWI3 Name: XSWI (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS_simple	Local operation		
EEName	ABBIED600_Rev4_DPL_EENName	External equipment name plate		
OpCnt	ABBIED600_Rev1_INS	Operation counter		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
BlkOpn	ABBIED600_Rev1_SPC_simple	Block opening		status-only
BlkCls	ABBIED600_Rev1_SPC_simple	Block closing		status-only

SwTyp	ABBIED600_Rev1_ENS_SwTyp	Switch type		
SwOpCap	ABBIED600_Rev1_ENS_SwOpCap	Disconnector operating capability		

**6.2.363 LN: ESSXSWI1 Name: XSWI (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS_simple	Local operation		
EEName	ABBIED600_Rev4_DPL_EENName	External equipment name plate		
OpCnt	ABBIED600_Rev1_INS	Operation counter		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
BlkOpn	ABBIED600_Rev1_SPC_simple	Block opening		status-only
BlkCls	ABBIED600_Rev1_SPC_simple	Block closing		status-only
SwTyp	ABBIED600_Rev1_ENS_SwTyp	Switch type		
SwOpCap	ABBIED600_Rev1_ENS_SwOpCap	Disconnector operating capability		

**6.2.364 LN: ESSCSWI1 Name: CSWI (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
PosDITmms	ABBIED600_Rev1_ING_SP_1_e	Event delay	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit opn	E	ABBIED600:2014
PosCls	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit cls	E	ABBIED600:2014
PosOk	ABBIED600_Rev1_SPS_simple_e	Position OK	E	ABBIED600:2014

**6.2.365 LN: ESSXSWI2 Name: XSWI (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS_simple	Local operation		
EEName	ABBIED600_Rev4_DPL_EENName	External equipment name plate		
OpCnt	ABBIED600_Rev1_INS	Operation counter		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
BlkOpn	ABBIED600_Rev1_SPC_simple	Block opening		status-only
BlkCls	ABBIED600_Rev1_SPC_simple	Block closing		status-only
SwTyp	ABBIED600_Rev1_ENS_SwTyp	Switch type		
SwOpCap	ABBIED600_Rev1_ENS_SwOpCap	Disconnector operating capability		

**6.2.366 LN: ESSCSWI2 Name: CSWI (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		

Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
PosDITmms	ABBIED600_Rev1_ING_SP_1_e	Event delay	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit opn	E	ABBIED600:2014
PosCls	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit cls	E	ABBIED600:2014
PosOk	ABBIED600_Rev1_SPS_simple_e	Position OK	E	ABBIED600:2014

### 6.2.367 LN: ESSXSWI3 Name: XSWI (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Loc	ABBIED600_Rev1_SPS_simple	Local operation		
EEName	ABBIED600_Rev4_DPL_EENName	External equipment name plate		
OpCnt	ABBIED600_Rev1_INS	Operation counter		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
BlkOpn	ABBIED600_Rev1_SPC_simple	Block opening		status-only
BlkCls	ABBIED600_Rev1_SPC_simple	Block closing		status-only
SwTyp	ABBIED600_Rev1_ENS_SwTyp	Switch type		
SwOpCap	ABBIED600_Rev1_ENS_SwOpCap	Disconnector operating capability		

### 6.2.368 LN: ESSCSWI3 Name: CSWI (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
Pos	ABBIED600_Rev4_DPC_simple	Switch position		status-only
PosDITmms	ABBIED600_Rev1_ING_SP_1_e	Event delay	E	ABBIED600:2014
PosOpn	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit opn	E	ABBIED600:2014
PosCls	ABBIED600_Rev1_SPS_simple_e	Pos 1-bit cls	E	ABBIED600:2014
PosOk	ABBIED600_Rev1_SPS_simple_e	Position OK	E	ABBIED600:2014

### 6.2.369 LN: RDRE1 Name: RDRE (ED2)

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On	Mode		status-only
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
RcdTrg	ABBIED600_Rev2_SPC_control	Trig recording		status-only,direct-with-normal-security
MemClr	ABBIED600_Rev2_SPC_control	Disturbance records		status-only,direct-with-normal-security
RcdMade	ABBIED600_Rev1_SPS_simple	Recording made		
FltNum	ABBIED600_Rev1_INS	Number of recordings		
RcdStr	ABBIED600_Rev1_SPS_simple	Recording started		
MemUsed	ABBIED600_Rev1_INS	Rec. memory used		

PerTrgTms	ABBIED600_Rev1_ING_SP_time	Periodic trig time		
ExclTmms	ABBIED600_Rev1_ING_SP_time	Exclusion time		
RcdMod	ABBIED600_Rev1_ENG_SP_RcdMod	Operation mode		
RcdDltInd	ABBIED600_Rev1_SPS_simple_e	Recording de-leted	E	ABBIED600:2014
RmnRcdCap	ABBIED600_Rev1_INS_e	Rem. amount of rec.	E	ABBIED600:2014
MemFullSt	ABBIED600_Rev1_SPS_simple_e	Memory full	E	ABBIED600:2014
OvWrRcdInd	ABBIED600_Rev1_SPS_simple_e	Overwrite of rec.	E	ABBIED600:2014
PreTrgLen	ABBIED600_Rev1_ING_SP_1_e	Pre-trg length	E	ABBIED600:2014
RcdLen	ABBIED600_Rev1_ING_SP_1_e	Record length	E	ABBIED600:2014
StoRteSel	ABBIED600_Rev2_ING_SP_ES-toRte_e	Storage rate	E	ABBIED600:2014
StoModPer	ABBIED600_Rev2_ENG_SP_ESto-Mod_e	Stor. mode periodic	E	ABBIED600:2014
StoModMan	ABBIED600_Rev2_ENG_SP_ESto-Mod_e	Stor. mode manual	E	ABBIED600:2014
PerTmRmn	ABBIED600_Rev1_INS_e	Time to trigger	E	ABBIED600:2014
PerTrgInd	ABBIED600_Rev1_SPS_simple_e	Periodic triggering	E	ABBIED600:2014
ManTrgInd	ABBIED600_Rev1_SPS_simple_e	Manual triggering	E	ABBIED600:2014

**6.2.370 LN: RBDR1 Name: RBDR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On-Off_NoBlk	Operation		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
ChTrg	ABBIED600_Rev1_SPS_simple	Channel trig-gered		
LevMod	ABBIED600_Rev2_ENG_SP_LevMod	Level trigger mode		
StoMod	ABBIED600_Rev2_ENG_SP_ESto-Mod_e	Storage mode	E	ABBIED600:2014
ExclTmRmn	ABBIED600_Rev1_INS_e	Exclusion time rem.	E	ABBIED600:2014
BinInSt	ABBIED600_Rev1_SPS_e	input	E	ABBIED600:2014

**6.2.371 LN: RADR1 Name: RADR (ED2)**

Attribute name	Attribute type	Explanation	M/O/E	Remarks
Mod	ABBIED600_Rev1_ENC_Mod_On-Off_NoBlk	Operation		status-only,direct-with-normal-security
Beh	ABBIED600_Rev2_ENS_beh	Behaviour		
ChTrg	ABBIED600_Rev1_SPS_simple	Channel trig-gered		

HiTrgLev	ABBIED600_Rev3_ASG_SP_i	High trigger level		
LoTrgLev	ABBIED600_Rev3_ASG_SP_i	Low trigger level		
ChSigSel	ABBIED600_Rev5_ENG_SP_RadrCh-Num_e	input	E	ABBIED600:2014
StoMod	ABBIED600_Rev2_ENG_SP_ESto-Mod_e	Storage mode	E	ABBIED600:2014
ExclTmRmn	ABBIED600_Rev1_INS_e	Exclusion time rem.	E	ABBIED600:2014

## 7 Common Data Class Extensions

### 7.1 New common data classes

None

### 7.2 Extended data classes ED1

## 8 Enum type extensions

### 8.1 New Enum types

#### 8.1.1 ABBIED600\_Rev1\_CtlModelKind\_StatusDirect

Value	Description	Remarks
0	status-only	
1	direct-with-normal-security	

#### 8.1.2 ABBIED600\_Rev1\_OpModSG

Value	Description	Remarks
0	Operator	SG operation mode, Operation mode for setting group change
1	Logic mode 1	SG operation mode, Operation mode for setting group change
2	Logic mode 2	SG operation mode, Operation mode for setting group change

#### 8.1.3 ABBIED600\_Rev1\_CpySG

Value	Description	Remarks
1	Cancel	Copy group 1, Copy setting group 1 values into selected group
2	Copy 1 into 2	Copy group 1, Copy setting group 1 values into selected group
3	Copy 1 into 3	Copy group 1, Copy setting group 1 values into selected group
4	Copy 1 into 4	Copy group 1, Copy setting group 1 values into selected group
5	Copy 1 into 5	Copy group 1, Copy setting group 1 values into selected group
6	Copy 1 into 6	Copy group 1, Copy setting group 1 values into selected group
99	Copy 1 into all	Copy group 1, Copy setting group 1 values into selected group

#### 8.1.4 ABBIED600\_Rev1\_CtlModelKind\_Status

Value	Description	Remarks
0	status-only	

### 8.1.5 ABBIED600\_Rev1\_SetSvMaxDI

Value	Description	Remarks
0	1.90 1.58 ms	SMV Max Delay,SMV Maximum allowed delay
1	3.15 2.62 ms	SMV Max Delay,SMV Maximum allowed delay
2	4.40 3.67 ms	SMV Max Delay,SMV Maximum allowed delay
3	5.65 4.71 ms	SMV Max Delay,SMV Maximum allowed delay
4	6.90 5.75 ms	SMV Max Delay,SMV Maximum allowed delay

### 8.1.6 ABBIED600\_Rev1\_BlkMod

Value	Description	Remarks
0	Use Global	Blocking mode,Behaviour for function BLOCK inputs
1	Freeze timer	Blocking mode,Behaviour for function BLOCK inputs
2	Block all	Blocking mode,Behaviour for function BLOCK inputs
3	Block OPERATE output	Blocking mode,Behaviour for function BLOCK inputs

### 8.1.7 ABBIED600\_Rev1\_HzSet

Value	Description	Remarks
1	50Hz	Rated frequency, Rated frequency of the network
2	60Hz	Rated frequency, Rated frequency of the network

### 8.1.8 ABBIED600\_Rev1\_PhRotSet

Value	Description	Remarks
1	ABC	Phase rotation,Phase rotation order
2	ACB	Phase rotation,Phase rotation order

### 8.1.9 ABBIED600\_Rev1\_PhOrdSet

Value	Description	Remarks
1	ABC	Phase order mode,Selection for phase connection order
2	BCA	Phase order mode,Selection for phase connection order
3	CAB	Phase order mode,Selection for phase connection order
4	ACB	Phase order mode,Selection for phase connection order
5	CBA	Phase order mode,Selection for phase connection order
6	BAC	Phase order mode,Selection for phase connection order

### 8.1.10 ABBIED600\_Rev1\_DmdAvMod

Value	Description	Remarks
1	Linear	A demand Av mode,Current demand calculation method
2	Logarithmic	A demand Av mode,Current demand calculation method

### 8.1.11 ABBIED600\_Rev1\_dmdltrv

Value	Description	Remarks
0	1 minute	Demand interval,Interval for demand calculation
1	5 minutes	Demand interval,Interval for demand calculation
2	10 minutes	Demand interval,Interval for demand calculation

3	15 minutes	Demand interval,Interval for demand calculation
4	30 minutes	Demand interval,Interval for demand calculation
5	60 minutes	Demand interval,Interval for demand calculation
6	180 minutes	Demand interval,Interval for demand calculation

### 8.1.12 ABBIED600\_Rev1\_ModRemCtl

Value	Description	Remarks
1	Off	Remote test mode,Authority for remote activation of test mode
2	Maintenance	Remote test mode,Authority for remote activation of test mode
3	All levels	Remote test mode,Authority for remote activation of test mode

### 8.1.13 ABBIED600\_Rev4\_Languages

Value	Description	Remarks
1	English (us,iec)	Language selection,Language selection
2	English (us,ansi)	Language selection,Language selection
3	Chinese (cn,iec)	Language selection,Language selection
4	German (de,iec)	Language selection,Language selection
5	Swedish (se,iec)	Language selection,Language selection
6	Spanish (es,iec)	Language selection,Language selection
7	Russian (ru,iec)	Language selection,Language selection
8	Polish (pl,iec)	Language selection,Language selection
9	Portuguese (br,iec)	Language selection,Language selection
10	Portuguese (pt,iec)	Language selection,Language selection
11	Italian (it,iec)	Language selection,Language selection
12	Finnish (fi,iec)	Language selection,Language selection
13	French (fr,iec)	Language selection,Language selection
14	Norwegian (no,iec)	Language selection,Language selection
15	Czech (cz,iec)	Language selection,Language selection
16	Arabic (sa,iec)	Language selection,Language selection
17	Farsi (ir,iec)	Language selection,Language selection
18	Korean (kr,iec)	Language selection,Language selection
19	Flam (nl,iec)	Language selection,Language selection
20	Danish (dk, iec)	Language selection,Language selection
21	Spanish (mx,ansi)	Language selection,Language selection
22	Portuguese (br,ansi)	Language selection,Language selection
23	Turkish (tr,iec)	Language selection,Language selection
24	Croatian (hr,iec)	Language selection,Language selection
25	Ukrainian (ua,iec)	Language selection,Language selection
26	Hungarian (hu,iec)	Language selection,Language selection
27	Language 1	Language selection,Language selection
28	Language 2	Language selection,Language selection
29	Language 3	Language selection,Language selection
30	Language 4	Language selection,Language selection

31	Language 5	Language selection,Language selection
32	Language 6	Language selection,Language selection
33	Language 7	Language selection,Language selection
34	Language 8	Language selection,Language selection
35	Language 9	Language selection,Language selection
36	Language 10	Language selection,Language selection

### 8.1.14 ABBIED600\_Rev4\_LanguageFiles

Value	Description	Remarks
1	en-US-IEC	Language files,Name of the language files
2	en-US-ANSI	Language files,Name of the language files
3	zh-CN-IEC	Language files,Name of the language files
4	de-DE-IEC	Language files,Name of the language files
5	sv-SE-IEC	Language files,Name of the language files
6	es-ES-IEC	Language files,Name of the language files
7	ru-RU-IEC	Language files,Name of the language files
8	pl-PL-IEC	Language files,Name of the language files
9	pt-BR-IEC	Language files,Name of the language files
10	pt-PT-IEC	Language files,Name of the language files
11	it-IT-IEC	Language files,Name of the language files
12	fi-FI-IEC	Language files,Name of the language files
13	fr-FR-IEC	Language files,Name of the language files
14	nb-NO-IEC	Language files,Name of the language files
15	cs-CZ-IEC	Language files,Name of the language files
16	ar-SA-IEC	Language files,Name of the language files
17	fa-IR-IEC	Language files,Name of the language files
18	ko-KR-IEC	Language files,Name of the language files
19	nl-NL-IEC	Language files,Name of the language files
20	da-DK-IEC	Language files,Name of the language files
21	es-MX-ANSI	Language files,Name of the language files
22	pt-BR-ANSI	Language files,Name of the language files
23	tr-TR-IEC	Language files,Name of the language files
24	hr-HR-IEC	Language files,Name of the language files
25	uk-UA-IEC	Language files,Name of the language files
26	hu-HU-IEC	Language files,Name of the language files
27	language1	Language files,Name of the language files
28	language2	Language files,Name of the language files
29	language3	Language files,Name of the language files
30	language4	Language files,Name of the language files
31	language5	Language files,Name of the language files
32	language6	Language files,Name of the language files
33	language7	Language files,Name of the language files
34	language8	Language files,Name of the language files

35	language9	Language files,Name of the language files
36	language10	Language files,Name of the language files

**8.1.15 ABBIED600\_Rev1\_FormatTime**

Value	Description	Remarks
1	24H:MM:SS:MS	Time format,Time format
2	12H:MM:SS:MS	Time format,Time format

**8.1.16 ABBIED600\_Rev1\_FormatDate**

Value	Description	Remarks
1	DD.MM.YYYY	Date format,Date format
2	DD/MM/YYYY	Date format,Date format
3	DD-MM-YYYY	Date format,Date format
4	MM.DD.YYYY	Date format,Date format
5	MM/DD/YYYY	Date format,Date format
6	YYYY-MM-DD	Date format,Date format
7	YYYY-DD-MM	Date format,Date format
8	YYYY/DD/MM	Date format,Date format

**8.1.17 ABBIED600\_Rev1\_NamingConvention**

Value	Description	Remarks
1	IEC61850	FB naming convention,FB naming convention used in IED
2	IEC60617	FB naming convention,FB naming convention used in IED
3	IEC-ANSI	FB naming convention,FB naming convention used in IED
4	ANSI-ANSI	FB naming convention,FB naming convention used in IED
5	CHINESE	FB naming convention,FB naming convention used in IED

**8.1.18 ABBIED600\_Rev3\_DefaultView**

Value	Description	Remarks
1	Measurements	Default view,LHMI default view
2	Main menu	Default view,LHMI default view
3	SLD	Default view,LHMI default view

**8.1.19 ABBIED600\_Rev1\_WhmiMod**

Value	Description	Remarks
1	Active read only	Web HMI mode,Web HMI functionality
2	Active	Web HMI mode,Web HMI functionality
3	Disabled	Web HMI mode,Web HMI functionality

**8.1.20 ABBIED600\_Rev1\_SLDSymbolFormat**

Value	Description	Remarks
1	IEC	SLD symbol format,Single Line Diagram symbol format
2	ANSI	SLD symbol format,Single Line Diagram symbol format

**8.1.21 ABBIED600\_Rev1\_InUseMod**

Value	Description	Remarks
1	In use	Close delay mode,Selection for using delayed LHMI close
2	Not in use	Close delay mode,Selection for using delayed LHMI close

**8.1.22 ABBIED600\_Rev1\_SetVsb**

Value	Description	Remarks
1	Basic	Setting visibility,Setting visibility for HMI
2	Advanced	Setting visibility,Setting visibility for HMI

**8.1.23 ABBIED600\_Rev8\_AuthAcs**

Value	Description	Remarks
0	No activity	Viewer access,Viewer authority actions
1	Configuration change	Viewer access,Viewer authority actions
2	Firmware change	Viewer access,Viewer authority actions
3	Firmware change fail	Viewer access,Viewer authority actions
4	Attached to retrofit test case	Viewer access,Viewer authority actions
5	Removed from retrofit test case	Viewer access,Viewer authority actions
10	Setting group remote	Viewer access,Viewer authority actions
11	Setting group local	Viewer access,Viewer authority actions
20	Control remote	Viewer access,Viewer authority actions
21	Control local	Viewer access,Viewer authority actions
22	Test on	Viewer access,Viewer authority actions
23	Test off	Viewer access,Viewer authority actions
24	Reset trips	Viewer access,Viewer authority actions
30	Setting commit	Viewer access,Viewer authority actions
33	Time change	Viewer access,Viewer authority actions
40	Audit log access	Viewer access,Viewer authority actions
41	Login	Viewer access,Viewer authority actions
42	Logout	Viewer access,Viewer authority actions
43	Logout timed	Viewer access,Viewer authority actions
50	Password change	Viewer access,Viewer authority actions
51	Password/id creation	Viewer access,Viewer authority actions
52	Password/id deletion	Viewer access,Viewer authority actions
60	Firmware reset	Viewer access,Viewer authority actions
61	Audit overflow	Viewer access,Viewer authority actions
70	Violation remote	Viewer access,Viewer authority actions
71	Violation local	Viewer access,Viewer authority actions

**8.1.24 ABBIED600\_Rev1\_AuthAcsLev**

Value	Description	Remarks
1	None	Authority logging,Authority logging level
2	Configuration change	Authority logging,Authority logging level

3	Setting group	Authority logging, Authority logging level
4	Setting group, control	Authority logging, Authority logging level
5	Settings edit	Authority logging, Authority logging level
6	All	Authority logging, Authority logging level

### 8.1.25 ABBIED600\_Rev1\_AlmLedSt

Value	Description	Remarks
0	None	Programmable LED 1, Status of programmable LED 1
1	Ok	Programmable LED 1, Status of programmable LED 1
2	Warning	Programmable LED 1, Status of programmable LED 1
3	Alarm	Programmable LED 1, Status of programmable LED 1

### 8.1.26 ABBIED600\_Rev2\_LedMode

Value	Description	Remarks
0	Follow-S	Alarm mode, Alarm mode for programmable LED 1
1	Follow-F	Alarm mode, Alarm mode for programmable LED 1
2	Latched-S	Alarm mode, Alarm mode for programmable LED 1
3	LatchedAck-F-S	Alarm mode, Alarm mode for programmable LED 1

### 8.1.27 ABBIED600\_Rev2\_LedColor

Value	Description	Remarks
1	Green	Alarm colour, Colour for the alarm state of the LED
2	Red	Alarm colour, Colour for the alarm state of the LED
3	Yellow	Alarm colour, Colour for the alarm state of the LED

### 8.1.28 ABBIED600\_Rev5\_SyncSrc

Value	Description	Remarks
0	None	Synch source, Time synchronization source
1	SNTP	Synch source, Time synchronization source
2	Modbus	Synch source, Time synchronization source
3	IEEE 1588	Synch source, Time synchronization source
5	IRIG-B	Synch source, Time synchronization source
8	Line differential	Synch source, Time synchronization source
9	DNP	Synch source, Time synchronization source
16	IEC60870-5-101	Synch source, Time synchronization source
17	IEC60870-5-103	Synch source, Time synchronization source
18	IEC60870-5-104	Synch source, Time synchronization source

### 8.1.29 ABBIED600\_Rev3\_TmSrc

Value	Description	Remarks
0	Not defined	Synch source, Current time source
1	SNTP primary	Synch source, Current time source
2	SNTP secondary	Synch source, Current time source

3	SNTP tertiary or further	Synch source, Current time source
4	IEEE 1588 master	Synch source, Current time source
5	IEEE 1588 slave	Synch source, Current time source
6	IEEE 1588 further	Synch source, Current time source
7	IRIG-B	Synch source, Current time source
8	DNP 3.0	Synch source, Current time source
9	Modbus	Synch source, Current time source
10	SPA	Synch source, Current time source
11	LON VATS	Synch source, Current time source
12	LON other	Synch source, Current time source
13	PPS	Synch source, Current time source
14	Minute pulse	Synch source, Current time source
15	local GPS	Synch source, Current time source
16	IEC60870-5-101	Synch source, Current time source
17	IEC60870-5-103	Synch source, Current time source
18	IEC60870-5-104	Synch source, Current time source
19	EXT	Synch source, Current time source
20	LHMI	Synch source, Current time source
21	Line differential	Synch source, Current time source
99	Free running, locally generated	Synch source, Current time source

### 8.1.30 ABBIED600\_Rev1\_PTPTmSrc

Value	Description	Remarks
1	Atomic clock	Grandmaster time Src, GrandMaster timeSource enum according to PTPv2
2	GPS	Grandmaster time Src, GrandMaster timeSource enum according to PTPv2
3	Terrestrial radio	Grandmaster time Src, GrandMaster timeSource enum according to PTPv2
4	PTP	Grandmaster time Src, GrandMaster timeSource enum according to PTPv2
5	NTP	Grandmaster time Src, GrandMaster timeSource enum according to PTPv2
6	Hand set	Grandmaster time Src, GrandMaster timeSource enum according to PTPv2
7	Other	Grandmaster time Src, GrandMaster timeSource enum according to PTPv2
8	Internal oscil.	Grandmaster time Src, GrandMaster timeSource enum according to PTPv2

### 8.1.31 ABBIED600\_Rev1\_PTPClkAcc

Value	Description	Remarks
1	25 ns	Grandmaster accuracy, Grandmaster clockAccuracy enum according to PTPv2
2	100 ns	Grandmaster accuracy, Grandmaster clockAccuracy enum according to PTPv2
3	250 ns	Grandmaster accuracy, Grandmaster clockAccuracy enum according to PTPv2
4	1 us	Grandmaster accuracy, Grandmaster clockAccuracy enum according to PTPv2
5	2.5 us	Grandmaster accuracy, Grandmaster clockAccuracy enum according to PTPv2
6	10 us	Grandmaster accuracy, Grandmaster clockAccuracy enum according to PTPv2
7	25 us	Grandmaster accuracy, Grandmaster clockAccuracy enum according to PTPv2
8	100 us	Grandmaster accuracy, Grandmaster clockAccuracy enum according to PTPv2
9	250 us	Grandmaster accuracy, Grandmaster clockAccuracy enum according to PTPv2

10	1 ms	Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2
11	2.5 ms	Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2
12	10 ms	Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2
13	25 ms	Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2
14	100 ms	Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2
15	250 ms	Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2
16	1 s	Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2
17	10 s	Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2
18	more than 10 s	Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2

### 8.1.32 ABBIED600\_Rev1\_PTPAnnMod

Value	Description	Remarks
1	Basic IEEE1588	PTP announce mode,PTP announce frame mode
2	Power Profile	PTP announce mode,PTP announce frame mode

### 8.1.33 ABBIED600\_Rev2\_StrPhSel

Value	Description	Remarks
1	1 out of 3	Num of start phases,Number of phases required for operate activation
2	2 out of 3	Num of start phases,Number of phases required for operate activation
3	3 out of 3	Num of start phases,Number of phases required for operate activation
4	Exactly 1 of 3	Num of start phases,Number of phases required for operate activation
5	Exactly 2 of 3	Num of start phases,Number of phases required for operate activation
6	Exactly 3 of 3	Num of start phases,Number of phases required for operate activation

### 8.1.34 ABBIED600\_Rev2\_MeasMod

Value	Description	Remarks
1	RMS	Measurement mode,Selects used measurement mode
2	DFT	Measurement mode,Selects used measurement mode
3	Peak-to-Peak	Measurement mode,Selects used measurement mode
4	P-to-P + backup	Measurement mode,Selects used measurement mode
5	Wide P-to-P	Measurement mode,Selects used measurement mode

### 8.1.35 ABBIED600\_Rev2\_TestProKind

Value	Description	Remarks
0	Reset	DPHLPDOC1,Test control for outputs
1	Activate START	DPHLPDOC1,Test control for outputs
2	Deactive START	DPHLPDOC1,Test control for outputs
3	Activate ST_A	DPHLPDOC1,Test control for outputs
4	Deactive ST_A	DPHLPDOC1,Test control for outputs
5	Activate ST_B	DPHLPDOC1,Test control for outputs
6	Deactive ST_B	DPHLPDOC1,Test control for outputs
7	Activate ST_C	DPHLPDOC1,Test control for outputs
8	Deactive ST_C	DPHLPDOC1,Test control for outputs

9	Activate OPERATE	DPHLPDOC1, Test control for outputs
10	Deactive OPERATE	DPHLPDOC1, Test control for outputs
11	Activate OPR_A	DPHLPDOC1, Test control for outputs
12	Deactive OPR_A	DPHLPDOC1, Test control for outputs
13	Activate OPR_B	DPHLPDOC1, Test control for outputs
14	Deactive OPR_B	DPHLPDOC1, Test control for outputs
15	Activate OPR_C	DPHLPDOC1, Test control for outputs
16	Deactive OPR_C	DPHLPDOC1, Test control for outputs
17	Activate ALARM	DPHLPDOC1, Test control for outputs
18	Deactive ALARM	DPHLPDOC1, Test control for outputs
19	Activate WARNING	DPHLPDOC1, Test control for outputs
20	Deactive WARNING	DPHLPDOC1, Test control for outputs
21	Activate BLK_CLOSE	DPHLPDOC1, Test control for outputs
22	Deactive BLK_CLOSE	DPHLPDOC1, Test control for outputs
23	Activate BLK_EF	DPHLPDOC1, Test control for outputs
24	Deactive BLK_EF	DPHLPDOC1, Test control for outputs
25	Activate ARC_FLT_DET	DPHLPDOC1, Test control for outputs
26	Deactive ARC_FLT_DET	DPHLPDOC1, Test control for outputs
27	Activate STR_LS_LOC	DPHLPDOC1, Test control for outputs
28	Deactive STR_LS_LOC	DPHLPDOC1, Test control for outputs
29	Activate STR_LS_Rem	DPHLPDOC1, Test control for outputs
30	Deactive STR_LS_Rem	DPHLPDOC1, Test control for outputs
31	Activate OPR_LS_LOC	DPHLPDOC1, Test control for outputs
32	Deactive OPR_LS_LOC	DPHLPDOC1, Test control for outputs
33	Activate OPR_LS_Rem	DPHLPDOC1, Test control for outputs
34	Deactive OPR_LS_Rem	DPHLPDOC1, Test control for outputs
35	Activate OPR_HS_LOC	DPHLPDOC1, Test control for outputs
36	Deactive OPR_HS_LOC	DPHLPDOC1, Test control for outputs
37	Activate OPR_HS_Rem	DPHLPDOC1, Test control for outputs
38	Deactive OPR_HS_Rem	DPHLPDOC1, Test control for outputs
39	Activate RSTD2H_LOC	DPHLPDOC1, Test control for outputs
40	Deactive RSTD2H_LOC	DPHLPDOC1, Test control for outputs
41	Activate RSTD2H_Rem	DPHLPDOC1, Test control for outputs
42	Deactive RSTD2H_Rem	DPHLPDOC1, Test control for outputs
43	Activate PROT_ACTIVE	DPHLPDOC1, Test control for outputs
44	Deactive PROT_ACTIVE	DPHLPDOC1, Test control for outputs
45	Activate RESTORE	DPHLPDOC1, Test control for outputs
46	Deactive RESTORE	DPHLPDOC1, Test control for outputs
47	Activate RELEASE	DPHLPDOC1, Test control for outputs
48	Deactive RELEASE	DPHLPDOC1, Test control for outputs
49	Activate OPR_IIT	DPHLPDOC1, Test control for outputs
50	Deactive OPR_IIT	DPHLPDOC1, Test control for outputs

51	Activate OPR_STALL	DPHLPDOC1, Test control for outputs
52	Deactive OPR_STALL	DPHLPDOC1, Test control for outputs
53	Activate MOT_START	DPHLPDOC1, Test control for outputs
54	Deactive MOT_START	DPHLPDOC1, Test control for outputs
55	Activate LOCK_START	DPHLPDOC1, Test control for outputs
56	Deactive LOCK_START	DPHLPDOC1, Test control for outputs
57	Activate BLK_RESTART	DPHLPDOC1, Test control for outputs
58	Deactive BLK_RESTART	DPHLPDOC1, Test control for outputs
59	Activate OPR_LS	DPHLPDOC1, Test control for outputs
60	Deactive OPR_LS	DPHLPDOC1, Test control for outputs
61	Activate OPR_HS	DPHLPDOC1, Test control for outputs
62	Deactive OPR_HS	DPHLPDOC1, Test control for outputs
63	Activate BLKD2H	DPHLPDOC1, Test control for outputs
64	Deactive BLKD2H	DPHLPDOC1, Test control for outputs
65	Activate BLKD5H	DPHLPDOC1, Test control for outputs
66	Deactive BLKD5H	DPHLPDOC1, Test control for outputs
67	Activate BLKDWAV	DPHLPDOC1, Test control for outputs
68	Deactive BLKDWAV	DPHLPDOC1, Test control for outputs
69	Activate OPR_UFRQ	DPHLPDOC1, Test control for outputs
70	Deactive OPR_UFRQ	DPHLPDOC1, Test control for outputs
71	Activate OPR_OFRQ	DPHLPDOC1, Test control for outputs
72	Deactive OPR_OFRQ	DPHLPDOC1, Test control for outputs
73	Activate OPR_FRG	DPHLPDOC1, Test control for outputs
74	Deactive OPR_FRG	DPHLPDOC1, Test control for outputs
75	Activate ST_UFRQ	DPHLPDOC1, Test control for outputs
76	Deactive ST_UFRQ	DPHLPDOC1, Test control for outputs
77	Activate ST_OFRQ	DPHLPDOC1, Test control for outputs
78	Deactive ST_OFRQ	DPHLPDOC1, Test control for outputs
79	Activate ST_FRG	DPHLPDOC1, Test control for outputs
80	Deactive ST_FRG	DPHLPDOC1, Test control for outputs
81	Activate ST_REST	DPHLPDOC1, Test control for outputs
82	Deactive ST_REST	DPHLPDOC1, Test control for outputs
83	Activate INT_BLKD	DPHLPDOC1, Test control for outputs
84	Deactive INT_BLKD	DPHLPDOC1, Test control for outputs
85	Activate COOL_ACTIVE	DPHLPDOC1, Test control for outputs
86	Deactive COOL_ACTIVE	DPHLPDOC1, Test control for outputs
87	Activate OPERATE_Z1	DPHLPDOC1, Test control for outputs
88	Deactive OPERATE_Z1	DPHLPDOC1, Test control for outputs
89	Activate OPERATE_Z2	DPHLPDOC1, Test control for outputs
90	Deactive OPERATE_Z2	DPHLPDOC1, Test control for outputs
91	Activate OPERATE_Z3	DPHLPDOC1, Test control for outputs
92	Deactive OPERATE_Z3	DPHLPDOC1, Test control for outputs

93	Activate OPERATE_Z4	DPHLPDOC1,Test control for outputs
94	Deactive OPERATE_Z4	DPHLPDOC1,Test control for outputs
95	Activate OPERATE_Z5	DPHLPDOC1,Test control for outputs
96	Deactive OPERATE_Z5	DPHLPDOC1,Test control for outputs
97	Activate START_Z1	DPHLPDOC1,Test control for outputs
98	Deactive START_Z1	DPHLPDOC1,Test control for outputs
99	Activate START_Z2	DPHLPDOC1,Test control for outputs
100	Deactive START_Z2	DPHLPDOC1,Test control for outputs
101	Activate START_Z3	DPHLPDOC1,Test control for outputs
102	Deactive START_Z3	DPHLPDOC1,Test control for outputs
103	Activate START_Z4	DPHLPDOC1,Test control for outputs
104	Deactive START_Z4	DPHLPDOC1,Test control for outputs
105	Activate START_Z5	DPHLPDOC1,Test control for outputs
106	Deactive START_Z5	DPHLPDOC1,Test control for outputs
107	Activate LODDSR_GFC	DPHLPDOC1,Test control for outputs
108	Deactive LODDSR_GFC	DPHLPDOC1,Test control for outputs
109	Activate START_GFC	DPHLPDOC1,Test control for outputs
110	Deactive START_GFC	DPHLPDOC1,Test control for outputs
111	Activate ST_ALARM	DPHLPDOC1,Test control for outputs
112	Deactive ST_ALARM	DPHLPDOC1,Test control for outputs
113	Activate OPR_OVLOD	DPHLPDOC1,Test control for outputs
114	Deactive OPR_OVLOD	DPHLPDOC1,Test control for outputs
115	Activate ST_OVLOD	DPHLPDOC1,Test control for outputs
116	Deactive ST_OVLOD	DPHLPDOC1,Test control for outputs
117	Activate OPR_UN_I	DPHLPDOC1,Test control for outputs
118	Deactive OPR_UN_I	DPHLPDOC1,Test control for outputs
119	Activate ST_UN_I	DPHLPDOC1,Test control for outputs
120	Deactive ST_UN_I	DPHLPDOC1,Test control for outputs
121	Activate INTR_EF	DPHLPDOC1,Test control for outputs
122	Deactive INTR_EF	DPHLPDOC1,Test control for outputs
123	Activate PEAK_IND	DPHLPDOC1,Test control for outputs
124	Deactive PEAK_IND	DPHLPDOC1,Test control for outputs

### 8.1.36 ABBIED600\_Rev1\_AResSigSel

Value	Description	Remarks
1	Measured Io	Io signal Sel,Selection for used Io signal
2	Calculated Io	Io signal Sel,Selection for used Io signal

### 8.1.37 ABBIED600\_Rev1\_OpModEF

Value	Description	Remarks
1	Phase angle	Operation mode,Operation criteria
2	IoSin	Operation mode,Operation criteria
3	IoCos	Operation mode,Operation criteria

4	Phase angle 80	Operation mode, Operation criteria
5	Phase angle 88	Operation mode, Operation criteria

### 8.1.38 ABBIED600\_Rev1\_VResSigSel

Value	Description	Remarks
1	Measured Uo	Uo signal Sel, Selection for used Uo signal
2	Calculated Uo	Uo signal Sel, Selection for used Uo signal

### 8.1.39 ABBIED600\_Rev2\_VSel

Value	Description	Remarks
1	phase-to-earth	Voltage selection, Parameter to select phase or phase-to-phase voltages
2	phase-to-phase	Voltage selection, Parameter to select phase or phase-to-phase voltages
3	pos sequence	Voltage selection, Parameter to select phase or phase-to-phase voltages

### 8.1.40 ABBIED600\_Rev1\_TypTmRs

Value	Description	Remarks
1	Freeze Op timer	Type of time reset, Selection of time reset
2	Decrease Op timer	Type of time reset, Selection of time reset

### 8.1.41 ABBIED600\_Rev1\_OpModProHz

Value	Description	Remarks
1	Freq<	Operation mode, Frequency protection operation mode selection
2	Freq>	Operation mode, Frequency protection operation mode selection
3	df/dt	Operation mode, Frequency protection operation mode selection
4	Freq< + df/dt	Operation mode, Frequency protection operation mode selection
5	Freq> + df/dt	Operation mode, Frequency protection operation mode selection
6	Freq< OR df/dt	Operation mode, Frequency protection operation mode selection
7	Freq> OR df/dt	Operation mode, Frequency protection operation mode selection
8	Freq< AND df/dt	Operation mode, Frequency protection operation mode selection
9	Freq> AND df/dt	Operation mode, Frequency protection operation mode selection
10	Freq< OR Freq>	Operation mode, Frequency protection operation mode selection

### 8.1.42 ABBIED600\_Rev1\_buTripMode

Value	Description	Remarks
1	2 out of 4	CB failure trip mode, Backup trip current check mode
2	1 out of 3	CB failure trip mode, Backup trip current check mode
3	1 out of 4	CB failure trip mode, Backup trip current check mode

### 8.1.43 ABBIED600\_Rev1\_StrLtcMod

Value	Description	Remarks
1	Rising edge	Start latching mode, Start reset delayed or immediately
2	Level sensitive	Start latching mode, Start reset delayed or immediately

**8.1.44 ABBIED600\_Rev1\_TrOutMod**

Value	Description	Remarks
1	Non-latched	Trip output mode,Select the operation mode for trip output
2	Latched	Trip output mode,Select the operation mode for trip output
3	Lockout	Trip output mode,Select the operation mode for trip output

**8.1.45 ABBIED600\_Rev1\_OpModComp**

Value	Description	Remarks
1	Over	Operation mode,Operation mode
2	Under	Operation mode,Operation mode

**8.1.46 ABBIED600\_Rev3\_TestSpvnKind**

Value	Description	Remarks
0	Reset	SSCBR1,Test control for outputs
1	Activate START	SSCBR1,Test control for outputs
2	Deactive START	SSCBR1,Test control for outputs
3	Activate OPERATE	SSCBR1,Test control for outputs
4	Deactive OPERATE	SSCBR1,Test control for outputs
5	Activate ALARM	SSCBR1,Test control for outputs
6	Deactive ALARM	SSCBR1,Test control for outputs
7	Activate WARNING	SSCBR1,Test control for outputs
8	Deactive WARNING	SSCBR1,Test control for outputs
9	Act. TRV_T_OP_ALM	SSCBR1,Test control for outputs
10	Deact. TRV_T_OP_ALM	SSCBR1,Test control for outputs
11	Act. TRV_T_CL_ALM	SSCBR1,Test control for outputs
12	Deact. TRV_T_CL_ALM	SSCBR1,Test control for outputs
13	Act. DIFTRVTOPALM	SSCBR1,Test control for outputs
14	Deact. DIFTRVTOPALM	SSCBR1,Test control for outputs
15	Act. DIFTRVTCLALM	SSCBR1,Test control for outputs
16	Deact. DIFTRVTCLALM	SSCBR1,Test control for outputs
17	Activate SPR_CHR_ALM	SSCBR1,Test control for outputs
18	Deactive SPR_CHR_ALM	SSCBR1,Test control for outputs
19	Activate OPR_ALM	SSCBR1,Test control for outputs
20	Deactive OPR_ALM	SSCBR1,Test control for outputs
21	Activate OPR_LO	SSCBR1,Test control for outputs
22	Deactive OPR_LO	SSCBR1,Test control for outputs
23	Activate IPOW_ALM	SSCBR1,Test control for outputs
24	Deactive IPOW_ALM	SSCBR1,Test control for outputs
25	Activate IPOW_LO	SSCBR1,Test control for outputs
26	Deactive IPOW_LO	SSCBR1,Test control for outputs
27	Activate CB_LIFE_ALM	SSCBR1,Test control for outputs
28	Deactive CB_LIFE_ALM	SSCBR1,Test control for outputs
29	Activate MON_ALM	SSCBR1,Test control for outputs

30	Deactive MON_ALM	SSCBR1,Test control for outputs
31	Activate PRES_ALM	SSCBR1,Test control for outputs
32	Deactive PRES_ALM	SSCBR1,Test control for outputs
33	Activate PRES_LO	SSCBR1,Test control for outputs
34	Deactive PRES_LO	SSCBR1,Test control for outputs
35	Activate OPENPOS	SSCBR1,Test control for outputs
36	Deactive OPENPOS	SSCBR1,Test control for outputs
37	Activate INVALIDPOS	SSCBR1,Test control for outputs
38	Deactive INVALIDPOS	SSCBR1,Test control for outputs
39	Activate CLOSEPOS	SSCBR1,Test control for outputs
40	Deactive CLOSEPOS	SSCBR1,Test control for outputs
41	Activate FAIL	SSCBR1,Test control for outputs
42	Deactive FAIL	SSCBR1,Test control for outputs
43	Activate FUSEF_3PH	SSCBR1,Test control for outputs
44	Deactive FUSEF_3PH	SSCBR1,Test control for outputs
45	Activate FUSEF_U	SSCBR1,Test control for outputs
46	Deactive FUSEF_U	SSCBR1,Test control for outputs
47	Activate FAIL_CTGRP1	SSCBR1,Test control for outputs
48	Deactive FAIL_CTGRP1	SSCBR1,Test control for outputs
49	Activate FAIL_CTGRP2	SSCBR1,Test control for outputs
50	Deactive FAIL_CTGRP2	SSCBR1,Test control for outputs
51	Activate FAIL_CTGRP3	SSCBR1,Test control for outputs
52	Deactive FAIL_CTGRP3	SSCBR1,Test control for outputs
53	Activate U_LIVE	SSCBR1,Test control for outputs
54	Deactive U_LIVE	SSCBR1,Test control for outputs
55	Activate U_DEAD	SSCBR1,Test control for outputs
56	Deactive U_DEAD	SSCBR1,Test control for outputs
57	Activate U_A_AB_LIVE	SSCBR1,Test control for outputs
58	Deactive U_A_AB_LIVE	SSCBR1,Test control for outputs
59	Activate U_B_BC_LIVE	SSCBR1,Test control for outputs
60	Deactive U_B_BC_LIVE	SSCBR1,Test control for outputs
61	Activate U_C_CA_LIVE	SSCBR1,Test control for outputs
62	Deactive U_C_CA_LIVE	SSCBR1,Test control for outputs
63	Activate U_A_AB_DEAD	SSCBR1,Test control for outputs
64	Deactive U_A_AB_DEAD	SSCBR1,Test control for outputs
65	Activate U_B_BC_DEAD	SSCBR1,Test control for outputs
66	Deactive U_B_BC_DEAD	SSCBR1,Test control for outputs
67	Activate U_C_CA_DEAD	SSCBR1,Test control for outputs
68	Deactive U_C_CA_DEAD	SSCBR1,Test control for outputs
69	Activate WARNING_AUX	SSCBR1,Test control for outputs
70	Deactive WARNING_AUX	SSCBR1,Test control for outputs
71	Activate WARNING_I	SSCBR1,Test control for outputs

72	Deactive WARNING_I	SSCBR1,Test control for outputs
----	--------------------	---------------------------------

#### 8.1.47 ABBIED600\_Rev1\_TrvClcMod

Value	Description	Remarks
1	From Cmd to Pos	Travel time Clc mode,Travel time calculation mode selection
2	From Pos to Pos	Travel time Clc mode,Travel time calculation mode selection

#### 8.1.48 ABBIED600\_Rev1\_DirMod2

Value	Description	Remarks
1	Forward	Active power Dir,Direction of active power flow: Forward, Reverse
2	Reverse	Active power Dir,Direction of active power flow: Forward, Reverse

#### 8.1.49 ABBIED600\_Rev1\_DefHzSel

Value	Description	Remarks
1	Nominal	Def frequency Sel,Default frequency selection
2	Zero	Def frequency Sel,Default frequency selection

#### 8.1.50 ABBIED600\_Rev1\_DmdWinMod

Value	Description	Remarks
1	Sliding	Demand window,Demand calculation window type
2	Non-sliding	Demand window,Demand calculation window type

#### 8.1.51 ABBIED600\_Rev2\_PhSv

Value	Description	Remarks
1	Ph A	Phase supervision,Monitored voltage phase
2	Ph B	Phase supervision,Monitored voltage phase
3	Ph A + B	Phase supervision,Monitored voltage phase
4	Ph C	Phase supervision,Monitored voltage phase
5	Ph A + C	Phase supervision,Monitored voltage phase
6	Ph B + C	Phase supervision,Monitored voltage phase
7	Ph A + B + C	Phase supervision,Monitored voltage phase
8	Pos sequence	Phase supervision,Monitored voltage phase

#### 8.1.52 ABBIED600\_Rev1\_OpModPh

Value	Description	Remarks
1	Three Phase	Phase mode,Three/Single phase mode
2	Single Phase	Phase mode,Three/Single phase mode

#### 8.1.53 ABBIED600\_Rev2\_VVaTyp

Value	Description	Remarks
0	No variation	Variation enable,Enable variation type
1	Swell	Variation enable,Enable variation type
2	Dip	Variation enable,Enable variation type
3	Swell + dip	Variation enable,Enable variation type

4	Interruption	Variation enable,Enable variation type
5	Swell + Int	Variation enable,Enable variation type
6	Dip + Int	Variation enable,Enable variation type
7	Swell+dip+Int	Variation enable,Enable variation type

#### 8.1.54 ABBIED600\_Rev1\_TrModPQ

Value	Description	Remarks
1	Single	Trigger mode,Specifies the observation period triggering mode
2	Periodic	Trigger mode,Specifies the observation period triggering mode
3	Continuous	Trigger mode,Specifies the observation period triggering mode

#### 8.1.55 ABBIED600\_Rev1\_ObsPerSel

Value	Description	Remarks
1	1 Hour	Obs period selection,Observation period for unbalance calculation
2	12 Hours	Obs period selection,Observation period for unbalance calculation
3	1 Day	Obs period selection,Observation period for unbalance calculation
4	7 Days	Obs period selection,Observation period for unbalance calculation
5	User defined	Obs period selection,Observation period for unbalance calculation

#### 8.1.56 ABBIED600\_Rev1\_TestOthKind

Value	Description	Remarks
0	Reset	VSQVUB1,Test control for outputs
1	Activate START	VSQVUB1,Test control for outputs
2	Deactive START	VSQVUB1,Test control for outputs
3	Activate OPERATE	VSQVUB1,Test control for outputs
4	Deactive OPERATE	VSQVUB1,Test control for outputs
5	Activate SWELLST	VSQVUB1,Test control for outputs
6	Deactive SWELLST	VSQVUB1,Test control for outputs
7	Activate DIPST	VSQVUB1,Test control for outputs
8	Deactive DIPST	VSQVUB1,Test control for outputs
9	Activate INTST	VSQVUB1,Test control for outputs
10	Deactive INTST	VSQVUB1,Test control for outputs
11	Activate MN_UNB_AL	VSQVUB1,Test control for outputs
12	Deactive MN_UNB_AL	VSQVUB1,Test control for outputs
13	Activate PCT_UNB_AL	VSQVUB1,Test control for outputs
14	Deactive PCT_UNB_AL	VSQVUB1,Test control for outputs
15	Activate OBS_PR_ACT	VSQVUB1,Test control for outputs
16	Deactive OBS_PR_ACT	VSQVUB1,Test control for outputs

#### 8.1.57 ABBIED600\_Rev2\_CtlMod

Value	Description	Remarks
1	Voltage control	Control mode,Type of control
2	Input control	Control mode,Type of control

3	Voltage and input Ctl	Control mode,Type of control
4	No Volt dependency	Control mode,Type of control

**8.1.58 ABBIED600\_Rev2\_OpModTEF**

Value	Description	Remarks
1	Intermittent EF	Operation mode,Operation criteria
2	Transient EF	Operation mode,Operation criteria
3	General EF	Operation mode,Operation criteria
4	Alarming EF	Operation mode,Operation criteria

**8.1.59 ABBIED600\_Rev1\_OpQtySel**

Value	Description	Remarks
1	Adaptive	Operating quantity,Operating quantity selection
2	Amplitude	Operating quantity,Operating quantity selection

**8.1.60 ABBIED600\_Rev1\_AutoManMod**

Value	Description	Remarks
1	Disabled	Restore mode,Mode of operation of restore functionality
2	Auto	Restore mode,Mode of operation of restore functionality
3	Manual	Restore mode,Mode of operation of restore functionality

**8.1.61 ABBIED600\_Rev1\_RecOp**

Value	Description	Remarks
1	Off	Reclosing operation,Reclosing operation (Off, External Ctl / On)
2	External Ctl	Reclosing operation,Reclosing operation (Off, External Ctl / On)
3	On	Reclosing operation,Reclosing operation (Off, External Ctl / On)

**8.1.62 ABBIED600\_Rev1\_TermPrio**

Value	Description	Remarks
1	None	Terminal priority,Terminal priority
2	Low (follower)	Terminal priority,Terminal priority
3	High (master)	Terminal priority,Terminal priority

**8.1.63 ABBIED600\_Rev1\_ProCrdMod**

Value	Description	Remarks
1	No condition	Protection crd mode,Protection coordination mode
2	AR inoperative	Protection crd mode,Protection coordination mode
3	CB close manual	Protection crd mode,Protection coordination mode
4	AR inop, CB man	Protection crd mode,Protection coordination mode
5	Always	Protection crd mode,Protection coordination mode

**8.1.64 ABBIED600\_Rev1\_AutoIniCnd**

Value	Description	Remarks
1	Not allowed	Auto initiation cnd,Auto initiation condition

2	When sync fails	Auto initiation cnd,Auto initiation condition
3	CB doesn't close	Auto initiation cnd,Auto initiation condition
4	Both	Auto initiation cnd,Auto initiation condition

### 8.1.65 ABBIED600\_Rev3\_TestCtlKind

Value	Description	Remarks
0	Reset	DARREC1,Test control for outputs
1	Activate START	DARREC1,Test control for outputs
2	Deactive START	DARREC1,Test control for outputs
3	Activate ALARM	DARREC1,Test control for outputs
4	Deactive ALARM	DARREC1,Test control for outputs
5	Activate OPEN_CB	DARREC1,Test control for outputs
6	Deactive OPEN_CB	DARREC1,Test control for outputs
7	Activate CLOSE_CB	DARREC1,Test control for outputs
8	Deactive CLOSE_CB	DARREC1,Test control for outputs
9	Activate CMD_WAIT	DARREC1,Test control for outputs
10	Deactive CMD_WAIT	DARREC1,Test control for outputs
11	Activate PROT_CRD	DARREC1,Test control for outputs
12	Deactive PROT_CRD	DARREC1,Test control for outputs
13	Activate INPRO	DARREC1,Test control for outputs
14	Deactive INPRO	DARREC1,Test control for outputs
15	Activate LOCKED	DARREC1,Test control for outputs
16	Deactive LOCKED	DARREC1,Test control for outputs
17	Activate UNSUC_RECL	DARREC1,Test control for outputs
18	Deactive UNSUC_RECL	DARREC1,Test control for outputs
19	Activate AR_ON	DARREC1,Test control for outputs
20	Deactive AR_ON	DARREC1,Test control for outputs
21	Activate READY	DARREC1,Test control for outputs
22	Deactive READY	DARREC1,Test control for outputs
23	Activate RAISE	DARREC1,Test control for outputs
24	Deactive RAISE	DARREC1,Test control for outputs
25	Activate LOWER	DARREC1,Test control for outputs
26	Deactive LOWER	DARREC1,Test control for outputs
27	Activate PAR_FAIL	DARREC1,Test control for outputs
28	Deactive PAR_FAIL	DARREC1,Test control for outputs
29	Activate SYNC_INPRO	DARREC1,Test control for outputs
30	Deactive SYNC_INPRO	DARREC1,Test control for outputs
31	Activate SYNC_OK	DARREC1,Test control for outputs
32	Deactive SYNC_OK	DARREC1,Test control for outputs
33	Activate CL_FAIL_AL	DARREC1,Test control for outputs
34	Deactive CL_FAIL_AL	DARREC1,Test control for outputs
35	Activate CMD_FAIL_AL	DARREC1,Test control for outputs
36	Deactive CMD_FAIL_AL	DARREC1,Test control for outputs

37	Activate LLDB	DARREC1,Test control for outputs
38	Deactive LLDB	DARREC1,Test control for outputs
39	Activate LLLB	DARREC1,Test control for outputs
40	Deactive LLLB	DARREC1,Test control for outputs
41	Activate DLLB	DARREC1,Test control for outputs
42	Deactive DLLB	DARREC1,Test control for outputs
43	Activate DLDB	DARREC1,Test control for outputs
44	Deactive DLDB	DARREC1,Test control for outputs
45	Activate ACTIVE	DARREC1,Test control for outputs
46	Deactive ACTIVE	DARREC1,Test control for outputs
47	Activate OPEN_CB1	DARREC1,Test control for outputs
48	Deactive OPEN_CB1	DARREC1,Test control for outputs
49	Activate CLOSE_CB1	DARREC1,Test control for outputs
50	Deactive CLOSE_CB1	DARREC1,Test control for outputs
51	Activate OPEN_CB2	DARREC1,Test control for outputs
52	Deactive OPEN_CB2	DARREC1,Test control for outputs
53	Activate CLOSE_CB2	DARREC1,Test control for outputs
54	Deactive CLOSE_CB2	DARREC1,Test control for outputs
55	Activate BLKD_AL	DARREC1,Test control for outputs
56	Deactive BLKD_AL	DARREC1,Test control for outputs

### 8.1.66 ABBIED600\_Rev1\_OpModSC

Value	Description	Remarks
1	Off	Synchro check mode,Synchro check operation mode
2	Synchronous	Synchro check mode,Synchro check operation mode
3	Asynchronous	Synchro check mode,Synchro check operation mode

### 8.1.67 ABBIED600\_Rev1\_OpModCtrl

Value	Description	Remarks
1	Continuous	Control mode,Selection of synchro check command or Continuous control mode
2	Command	Control mode,Selection of synchro check command or Continuous control mode

### 8.1.68 ABBIED600\_Rev1\_EnergSt

Value	Description	Remarks
0	Unknown	ENERG_STATE,Energization state of Line and Bus
1	Both Live	ENERG_STATE,Energization state of Line and Bus
2	Live L, Dead B	ENERG_STATE,Energization state of Line and Bus
3	Dead L, Live B	ENERG_STATE,Energization state of Line and Bus
4	Both Dead	ENERG_STATE,Energization state of Line and Bus

### 8.1.69 ABBIED600\_Rev1\_OpModStUp

Value	Description	Remarks
1	Init	Operation mode,Motor start-up operation mode

2	Ilt, CB	Operation mode,Motor start-up operation mode
3	Ilt + stall	Operation mode,Motor start-up operation mode
4	Ilt + stall, CB	Operation mode,Motor start-up operation mode

### 8.1.70 ABBIED600\_Rev1\_EnvTmpMod

Value	Description	Remarks
1	FLC Only	Env temperature mode,Mode of measuring ambient temperature
2	Use input	Env temperature mode,Mode of measuring ambient temperature
3	Set Amb Temp	Env temperature mode,Mode of measuring ambient temperature

### 8.1.71 ABBIED600\_Rev1\_CTCConnTyp

Value	Description	Remarks
1	Type 1	CT connection type,CT connection type. Determined by the directions of the connected current transformers
2	Type 2	CT connection type,CT connection type. Determined by the directions of the connected current transformers

### 8.1.72 ABBIED600\_Rev1\_VPhSel

Value	Description	Remarks
1	A or AB	Phase selection,Parameter for phase selection
2	B or BC	Phase selection,Parameter for phase selection
3	C or CA	Phase selection,Parameter for phase selection

### 8.1.73 ABBIED600\_Rev2\_Wnd1Typ

Value	Description	Remarks
1	Y	Winding 1 type,Connection of the HV side windings
2	YN	Winding 1 type,Connection of the HV side windings
3	D	Winding 1 type,Connection of the HV side windings
4	Z	Winding 1 type,Connection of the HV side windings
5	ZN	Winding 1 type,Connection of the HV side windings

### 8.1.74 ABBIED600\_Rev2\_Wnd2Typ

Value	Description	Remarks
1	y	Winding 2 type,Connection of the LV side windings
2	yn	Winding 2 type,Connection of the LV side windings
3	d	Winding 2 type,Connection of the LV side windings
4	z	Winding 2 type,Connection of the LV side windings
5	zn	Winding 2 type,Connection of the LV side windings

### 8.1.75 ABBIED600\_Rev1\_ClkNum

Value	Description	Remarks
0	Clk Num 0	Clock number,Setting the phase shift between HV and LV with clock number for connection group compensation (e.g. Dyn11 -> 11)

1	Clk Num 1	Clock number,Setting the phase shift between HV and LV with clock number for connection group compensation (e.g. Dyn11 -> 11)
2	Clk Num 2	Clock number,Setting the phase shift between HV and LV with clock number for connection group compensation (e.g. Dyn11 -> 11)
4	Clk Num 4	Clock number,Setting the phase shift between HV and LV with clock number for connection group compensation (e.g. Dyn11 -> 11)
5	Clk Num 5	Clock number,Setting the phase shift between HV and LV with clock number for connection group compensation (e.g. Dyn11 -> 11)
6	Clk Num 6	Clock number,Setting the phase shift between HV and LV with clock number for connection group compensation (e.g. Dyn11 -> 11)
7	Clk Num 7	Clock number,Setting the phase shift between HV and LV with clock number for connection group compensation (e.g. Dyn11 -> 11)
8	Clk Num 8	Clock number,Setting the phase shift between HV and LV with clock number for connection group compensation (e.g. Dyn11 -> 11)
10	Clk Num 10	Clock number,Setting the phase shift between HV and LV with clock number for connection group compensation (e.g. Dyn11 -> 11)
11	Clk Num 11	Clock number,Setting the phase shift between HV and LV with clock number for connection group compensation (e.g. Dyn11 -> 11)

### 8.1.76 ABBIED600\_Rev3\_ZroAEIm

Value	Description	Remarks
1	Not eliminated	Zro A elimination,Elimination of the zero-sequence current
2	Winding 1	Zro A elimination,Elimination of the zero-sequence current
3	Winding 2	Zro A elimination,Elimination of the zero-sequence current
4	Winding 1 and 2	Zro A elimination,Elimination of the zero-sequence current
5	Winding 3	Zro A elimination,Elimination of the zero-sequence current
6	Winding 1 and 3	Zro A elimination,Elimination of the zero-sequence current
7	Winding 2 and 3	Zro A elimination,Elimination of the zero-sequence current
8	Winding 1, 2, 3	Zro A elimination,Elimination of the zero-sequence current

### 8.1.77 ABBIED600\_Rev1\_WndSel

Value	Description	Remarks
1	Not in use	Tapped winding,The winding where the tap changer is connected to
2	Winding 1	Tapped winding,The winding where the tap changer is connected to
3	Winding 2	Tapped winding,The winding where the tap changer is connected to
4	Winding 3	Tapped winding,The winding where the tap changer is connected to

### 8.1.78 ABBIED600\_Rev1\_PwrMeasMod

Value	Description	Remarks
1	PhsA, PhsB, PhsC	Measurement mode,Selection of power calculation method
2	Arone	Measurement mode,Selection of power calculation method
3	Pos Seq	Measurement mode,Selection of power calculation method
4	PhsAB	Measurement mode,Selection of power calculation method
5	PhsBC	Measurement mode,Selection of power calculation method
6	PhsCA	Measurement mode,Selection of power calculation method
7	PhsA	Measurement mode,Selection of power calculation method

8	PhsB	Measurement mode,Selection of power calculation method
9	PhsC	Measurement mode,Selection of power calculation method

**8.1.79 ABBIED600\_Rev1\_BCMOD**

Value	Description	Remarks
1	NAT2INT	Operation mode,Operation mode selection
2	BCD2INT	Operation mode,Operation mode selection
3	GRAY2INT	Operation mode,Operation mode selection

**8.1.80 ABBIED600\_Rev1\_ARtgSec**

Value	Description	Remarks
1	0.2A	Secondary current,Rated secondary current
2	1A	Secondary current,Rated secondary current
3	5A	Secondary current,Rated secondary current

**8.1.81 ABBIED600\_Rev2\_ConnType**

Value	Description	Remarks
1	Wye	VT connection,Voltage transducer measurement connection
2	Delta	VT connection,Voltage transducer measurement connection
3	U12	VT connection,Voltage transducer measurement connection
4	UL1	VT connection,Voltage transducer measurement connection

**8.1.82 ABBIED600\_Rev1\_AnInpType**

Value	Description	Remarks
1	Voltage trafo	Voltage input type,Type of the voltage input
2	Current trafo	Voltage input type,Type of the voltage input
3	CVD sensor	Voltage input type,Type of the voltage input
4	Rogowski sensor	Voltage input type,Type of the voltage input

**8.1.83 ABBIED600\_Rev1\_SenInMod**

Value	Description	Remarks
1	Not in use	Input mode,Analogue input mode
2	Resistance	Input mode,Analogue input mode
5	0..20mA	Input mode,Analogue input mode
10	Pt100	Input mode,Analogue input mode
11	Pt250	Input mode,Analogue input mode
20	Ni100	Input mode,Analogue input mode
21	Ni120	Input mode,Analogue input mode
22	Ni250	Input mode,Analogue input mode
30	Cu10	Input mode,Analogue input mode

**8.1.84 ABBIED600\_Rev1\_FibMod**

Value	Description	Remarks
0	No fiber	Fiber mode,Fiber mode

2	Fiber optic	Fiber mode,Fiber mode
---	-------------	-----------------------

### 8.1.85 ABBIED600\_Rev1\_SerMod

Value	Description	Remarks
1	RS485 2Wire	Serial mode,Serial mode
2	RS485 4Wire	Serial mode,Serial mode
3	RS232 no handshake	Serial mode,Serial mode
4	RS232 with handshake	Serial mode,Serial mode

### 8.1.86 ABBIED600\_Rev1\_BaudRate

Value	Description	Remarks
1	300	Baudrate,Baudrate
2	600	Baudrate,Baudrate
3	1200	Baudrate,Baudrate
4	2400	Baudrate,Baudrate
5	4800	Baudrate,Baudrate
6	9600	Baudrate,Baudrate
7	19200	Baudrate,Baudrate
8	38400	Baudrate,Baudrate
9	57600	Baudrate,Baudrate
10	115200	Baudrate,Baudrate

### 8.1.87 ABBIED600\_Rev2\_EthPortMod

Value	Description	Remarks
0	Off	Port 1 mode,Ethernet port mode
1	On	Port 1 mode,Ethernet port mode

### 8.1.88 ABBIED600\_Rev1\_PHIZMod

Value	Description	Remarks
1	Grounded	System type,System Type
2	Ungrounded	System type,System Type

### 8.1.89 ABBIED600\_Rev1\_OpModArc

Value	Description	Remarks
1	Light+current	Operation mode,Operation mode
2	Light only	Operation mode,Operation mode
3	BI controlled	Operation mode,Operation mode

### 8.1.90 ABBIED600\_Rev1\_EFAlg

Value	Description	Remarks
1	Load compensation	EF algorithm Sel,Selection for PhE-loop calculation algorithm
2	Load modelling	EF algorithm Sel,Selection for PhE-loop calculation algorithm

**8.1.91 ABBIED600\_Rev1\_EFAlgASel**

Value	Description	Remarks
1	I0 based	EF algorithm Cur Sel,Selection for earth-fault current model
2	I2 based	EF algorithm Cur Sel,Selection for earth-fault current model

**8.1.92 ABBIED600\_Rev4\_TestProRKind**

Value	Description	Remarks
0	Reset	SCEFRFLO1,Test control for outputs
1	Activate OPERATE	SCEFRFLO1,Test control for outputs
2	Deactive OPERATE	SCEFRFLO1,Test control for outputs
3	Activate CB_FAULT_AL	SCEFRFLO1,Test control for outputs
4	Deactive CB_FAULT_AL	SCEFRFLO1,Test control for outputs
5	Activate TRBU	SCEFRFLO1,Test control for outputs
6	Deactive TRBU	SCEFRFLO1,Test control for outputs
7	Activate TRRET	SCEFRFLO1,Test control for outputs
8	Deactive TRRET	SCEFRFLO1,Test control for outputs
9	Activate BLK2H	SCEFRFLO1,Test control for outputs
10	Deactive BLK2H	SCEFRFLO1,Test control for outputs
11	Activate BLK2H_A	SCEFRFLO1,Test control for outputs
12	Deactive BLK2H_A	SCEFRFLO1,Test control for outputs
13	Activate BLK2H_B	SCEFRFLO1,Test control for outputs
14	Deactive BLK2H_B	SCEFRFLO1,Test control for outputs
15	Activate BLK2H_C	SCEFRFLO1,Test control for outputs
16	Deactive BLK2H_C	SCEFRFLO1,Test control for outputs
17	Activate TRIP	SCEFRFLO1,Test control for outputs
18	Deactive TRIP	SCEFRFLO1,Test control for outputs
19	Activate CL_LKOUT	SCEFRFLO1,Test control for outputs
20	Deactive CL_LKOUT	SCEFRFLO1,Test control for outputs
21	Activate OPR_Z_EXTN	SCEFRFLO1,Test control for outputs
22	Deactive OPR_Z_EXTN	SCEFRFLO1,Test control for outputs
23	Activate OPR_IRV	SCEFRFLO1,Test control for outputs
24	Deactive OPR_IRV	SCEFRFLO1,Test control for outputs
25	Activate OPR_WEI	SCEFRFLO1,Test control for outputs
26	Deactive OPR_WEI	SCEFRFLO1,Test control for outputs
27	Activate ECHO	SCEFRFLO1,Test control for outputs
28	Deactive ECHO	SCEFRFLO1,Test control for outputs
29	Activate CR	SCEFRFLO1,Test control for outputs
30	Deactive CR	SCEFRFLO1,Test control for outputs
31	Activate CS	SCEFRFLO1,Test control for outputs
32	Deactive CS	SCEFRFLO1,Test control for outputs
33	Activate CRL	SCEFRFLO1,Test control for outputs
34	Deactive CRL	SCEFRFLO1,Test control for outputs

35	Activate LCG	SCEFRFLO1,Test control for outputs
36	Deactive LCG	SCEFRFLO1,Test control for outputs
37	Activate OPR_LOSSLOAD	SCEFRFLO1,Test control for outputs
38	Deactive OPR_LOSSLOAD	SCEFRFLO1,Test control for outputs
39	Activate ALARM	SCEFRFLO1,Test control for outputs
40	Deactive ALARM	SCEFRFLO1,Test control for outputs
41	Activate CS_PRM	SCEFRFLO1,Test control for outputs
42	Deactive CS_PRM	SCEFRFLO1,Test control for outputs
43	Act. CS_BLOCKING	SCEFRFLO1,Test control for outputs
44	Deact. CS_BLOCKING	SCEFRFLO1,Test control for outputs
45	Act. CS_INTER_TR	SCEFRFLO1,Test control for outputs
46	Deact. CS_INTER_TR	SCEFRFLO1,Test control for outputs

### 8.1.93 ABBIED600\_Rev1\_PhVMeas

Value	Description	Remarks
1	Accurate	Phase voltage Meas,Phase voltage measurement principle
2	Ph-to-ph without Uo	Phase voltage Meas,Phase voltage measurement principle

### 8.1.94 ABBIED600\_Rev1\_CubAlmMod

Value	Description	Remarks
1	Normal	Alarm mode,Mode of operation for Alarm stage
2	Element counter	Alarm mode,Mode of operation for Alarm stage

### 8.1.95 ABBIED600\_Rev1\_FuLoc

Value	Description	Remarks
1	Internal	Fuse location,Location of capacitor fuse
2	External	Fuse location,Location of capacitor fuse

### 8.1.96 ABBIED600\_Rev1\_VCrtSel

Value	Description	Remarks
1	Highest Ph-to-E	Voltage selection,Parameter to select voltage for curve monitoring
2	Lowest Ph-to-E	Voltage selection,Parameter to select voltage for curve monitoring
3	Highest Ph-to-Ph	Voltage selection,Parameter to select voltage for curve monitoring
4	Lowest Ph-to-Ph	Voltage selection,Parameter to select voltage for curve monitoring
5	Positive Seq	Voltage selection,Parameter to select voltage for curve monitoring

### 8.1.97 ABBIED600\_Rev1\_ZMeasMod

Value	Description	Remarks
1	1Phase-to-earth	Impedance Meas mode,Select voltage and currents for impedance calculation
2	1Phase-to-phase	Impedance Meas mode,Select voltage and currents for impedance calculation
3	3Phase-to-earth	Impedance Meas mode,Select voltage and currents for impedance calculation
4	3Phase-to-phase	Impedance Meas mode,Select voltage and currents for impedance calculation
5	Pos sequence	Impedance Meas mode,Select voltage and currents for impedance calculation

**8.1.98 ABBIED600\_Rev3\_OpModSetATCC**

Value	Description	Remarks
1	Manual	Operation mode,The operation mode
2	Auto single	Operation mode,The operation mode
3	Auto parallel	Operation mode,The operation mode
4	Input control	Operation mode,The operation mode
5	Command	Operation mode,The operation mode

**8.1.99 ABBIED600\_Rev1\_ManBlkType**

Value	Description	Remarks
1	Custom disabled	Custom Man blocking,Customized manual blocking
2	OC	Custom Man blocking,Customized manual blocking
3	UV	Custom Man blocking,Customized manual blocking
4	OC, UV	Custom Man blocking,Customized manual blocking
5	EXT	Custom Man blocking,Customized manual blocking
6	OC, EXT	Custom Man blocking,Customized manual blocking
7	UV, EXT	Custom Man blocking,Customized manual blocking
8	OC, UV, EXT	Custom Man blocking,Customized manual blocking

**8.1.100 ABBIED600\_Rev1\_TimerOn**

Value	Description	Remarks
0	Timer off	TIMER_STS,Timer T1, T2 or fast lower timer active
1	Lower timer1 on	TIMER_STS,Timer T1, T2 or fast lower timer active
2	Raise timer1 on	TIMER_STS,Timer T1, T2 or fast lower timer active
3	Lower timer2 on	TIMER_STS,Timer T1, T2 or fast lower timer active
4	Raise timer2 on	TIMER_STS,Timer T1, T2 or fast lower timer active
5	Fast lower T on	TIMER_STS,Timer T1, T2 or fast lower timer active

**8.1.101 ABBIED600\_Rev1\_OpModATCC**

Value	Description	Remarks
0	Not in use	OPR_MODE_STS,The acting operation mode of the function block
1	Manual	OPR_MODE_STS,The acting operation mode of the function block
2	Auto single	OPR_MODE_STS,The acting operation mode of the function block
3	Auto master	OPR_MODE_STS,The acting operation mode of the function block
4	Auto follower	OPR_MODE_STS,The acting operation mode of the function block
5	MCC	OPR_MODE_STS,The acting operation mode of the function block
6	NRP	OPR_MODE_STS,The acting operation mode of the function block

**8.1.102 ABBIED600\_Rev1\_AlarmReas**

Value	Description	Remarks
0	No alarm	ALARM_REAS,Status and reason for alarm
1	Cmd error	ALARM_REAS,Status and reason for alarm
2	TCO error	ALARM_REAS,Status and reason for alarm

3	Cmd + TCO err	ALARM_REAS,Status and reason for alarm
4	Pump error	ALARM_REAS,Status and reason for alarm
5	Pump + cmd err	ALARM_REAS,Status and reason for alarm
6	Pump + TCO err	ALARM_REAS,Status and reason for alarm
7	Pmp+TCO+cmd err	ALARM_REAS,Status and reason for alarm

### 8.1.103 ABBIED600\_Rev1\_FlwFlt

Value	Description	Remarks
0	No failed followers	FAIL_FLLW,Failed followers
1	Follower 1	FAIL_FLLW,Failed followers
2	Follower 2	FAIL_FLLW,Failed followers
3	Followers 1+2	FAIL_FLLW,Failed followers
4	Follower 3	FAIL_FLLW,Failed followers
5	Followers 1+3	FAIL_FLLW,Failed followers
6	Followers 2+3	FAIL_FLLW,Failed followers
7	Followers 1+2+3	FAIL_FLLW,Failed followers

### 8.1.104 ABBIED600\_Rev1\_ParUnits

Value	Description	Remarks
0	No parall units	PAR_UNIT_MCC,Parallel units included in MCC calculation
1	Trafo 1	PAR_UNIT_MCC,Parallel units included in MCC calculation
2	Trafo 2	PAR_UNIT_MCC,Parallel units included in MCC calculation
3	Trafos 1 and 2	PAR_UNIT_MCC,Parallel units included in MCC calculation
4	Trafo 3	PAR_UNIT_MCC,Parallel units included in MCC calculation
5	Trafos 1 and 3	PAR_UNIT_MCC,Parallel units included in MCC calculation
6	Trafos 2 and 3	PAR_UNIT_MCC,Parallel units included in MCC calculation
7	Trafos 1+2+3	PAR_UNIT_MCC,Parallel units included in MCC calculation

### 8.1.105 ABBIED600\_Rev3\_CmdRsp

Value	Description	Remarks
0	No commands	Command response,Latest command response
1	Select open	Command response,Latest command response
2	Select close	Command response,Latest command response
3	Operate open	Command response,Latest command response
4	Operate close	Command response,Latest command response
5	Direct open	Command response,Latest command response
6	Direct close	Command response,Latest command response
7	Cancel	Command response,Latest command response
8	Position reached	Command response,Latest command response
9	Position timeout	Command response,Latest command response
10	Object status only	Command response,Latest command response
11	Object direct	Command response,Latest command response
12	Object select	Command response,Latest command response

13	RL local allowed	Command response,Latest command response
14	RL remote allowed	Command response,Latest command response
15	RL off	Command response,Latest command response
16	Function off	Command response,Latest command response
17	Function blocked	Command response,Latest command response
18	Command progress	Command response,Latest command response
19	Select timeout	Command response,Latest command response
20	Missing authority	Command response,Latest command response
21	Close not enabled	Command response,Latest command response
22	Open not enabled	Command response,Latest command response
23	Internal fault	Command response,Latest command response
24	Already close	Command response,Latest command response
25	Wrong client	Command response,Latest command response
26	RL station allowed	Command response,Latest command response
27	RL change	Command response,Latest command response
28	Abortion by trip	Command response,Latest command response

### 8.1.106 ABBIED600\_Rev3\_LockKeyHMI

Value	Description	Remarks
0	Off	LR state,LR state monitoring
1	Local	LR state,LR state monitoring
2	Remote	LR state,LR state monitoring
3	Station	LR state,LR state monitoring
4	L+R	LR state,LR state monitoring
5	L+S	LR state,LR state monitoring
6	L+S+R	LR state,LR state monitoring
7	S+R	LR state,LR state monitoring

### 8.1.107 ABBIED600\_Rev1\_LocRemMod

Value	Description	Remarks
1	LR key	LR control,LR control through LR key or binary input
2	Binary input	LR control,LR control through LR key or binary input

### 8.1.108 ABBIED600\_Rev1\_StaLevSet

Value	Description	Remarks
1	L,R	Station authority,Control command originator category usage
2	L,S,R	Station authority,Control command originator category usage
3	L,R,L+R	Station authority,Control command originator category usage
4	L,S,S+R,L+S,L+S+R	Station authority,Control command originator category usage

### 8.1.109 ABBIED600\_Rev1\_EStoRte

Value	Description	Remarks
8	8 samples / cycle	Storage rate,Storage rate for waveform recordings in samples per cycle

16	16 samples / cycle	Storage rate,Storage rate for waveform recordings in samples per cycle
32	32 samples / cycle	Storage rate,Storage rate for waveform recordings in samples per cycle

**8.1.110 ABBIED600\_Rev1\_EStoMod**

Value	Description	Remarks
0	Waveform	Stor. mode periodic,Storage mode selection (waveform / trend) for periodic trigger
1	Trend / cycle	Stor. mode periodic,Storage mode selection (waveform / trend) for periodic trigger

**8.1.111 ABBIED600\_Rev4\_RadrChNum**

Value	Description	Remarks
0	Disabled	Channel selection,Select a signal, which will be recorded by this channel
1	Io	Channel selection,Select a signal, which will be recorded by this channel
2	IL1	Channel selection,Select a signal, which will be recorded by this channel
3	IL2	Channel selection,Select a signal, which will be recorded by this channel
4	IL3	Channel selection,Select a signal, which will be recorded by this channel
5	IoB	Channel selection,Select a signal, which will be recorded by this channel
6	IL1B	Channel selection,Select a signal, which will be recorded by this channel
7	IL2B	Channel selection,Select a signal, which will be recorded by this channel
8	IL3B	Channel selection,Select a signal, which will be recorded by this channel
9	Uo	Channel selection,Select a signal, which will be recorded by this channel
10	U1	Channel selection,Select a signal, which will be recorded by this channel
11	U2	Channel selection,Select a signal, which will be recorded by this channel
12	U3	Channel selection,Select a signal, which will be recorded by this channel
13	UoB	Channel selection,Select a signal, which will be recorded by this channel
14	U1B	Channel selection,Select a signal, which will be recorded by this channel
15	U2B	Channel selection,Select a signal, which will be recorded by this channel
16	U3B	Channel selection,Select a signal, which will be recorded by this channel
17	Clo	Channel selection,Select a signal, which will be recorded by this channel
18	SI1	Channel selection,Select a signal, which will be recorded by this channel
19	SI2	Channel selection,Select a signal, which will be recorded by this channel
20	SU0	Channel selection,Select a signal, which will be recorded by this channel
21	SU1	Channel selection,Select a signal, which will be recorded by this channel
22	SU2	Channel selection,Select a signal, which will be recorded by this channel
23	CloB	Channel selection,Select a signal, which will be recorded by this channel
24	SI1B	Channel selection,Select a signal, which will be recorded by this channel
25	SI2B	Channel selection,Select a signal, which will be recorded by this channel
26	SU0B	Channel selection,Select a signal, which will be recorded by this channel
27	SU1B	Channel selection,Select a signal, which will be recorded by this channel
28	SU2B	Channel selection,Select a signal, which will be recorded by this channel
29	U12	Channel selection,Select a signal, which will be recorded by this channel
30	U23	Channel selection,Select a signal, which will be recorded by this channel
31	U31	Channel selection,Select a signal, which will be recorded by this channel
32	UL1	Channel selection,Select a signal, which will be recorded by this channel

33	UL2	Channel selection,Select a signal, which will be recorded by this channel
34	UL3	Channel selection,Select a signal, which will be recorded by this channel
35	U12B	Channel selection,Select a signal, which will be recorded by this channel
36	U23B	Channel selection,Select a signal, which will be recorded by this channel
37	U31B	Channel selection,Select a signal, which will be recorded by this channel
38	UL1B	Channel selection,Select a signal, which will be recorded by this channel
39	UL2B	Channel selection,Select a signal, which will be recorded by this channel
40	UL3B	Channel selection,Select a signal, which will be recorded by this channel
41	U1T	Channel selection,Select a signal, which will be recorded by this channel
42	U2T	Channel selection,Select a signal, which will be recorded by this channel
43	U3T	Channel selection,Select a signal, which will be recorded by this channel
44	PD	Channel selection,Select a signal, which will be recorded by this channel
45	IoC	Channel selection,Select a signal, which will be recorded by this channel
46	IL1C	Channel selection,Select a signal, which will be recorded by this channel
47	IL2C	Channel selection,Select a signal, which will be recorded by this channel
48	IL3C	Channel selection,Select a signal, which will be recorded by this channel
49	CloC	Channel selection,Select a signal, which will be recorded by this channel
50	SI1C	Channel selection,Select a signal, which will be recorded by this channel
51	SI2C	Channel selection,Select a signal, which will be recorded by this channel
52	U1C	Channel selection,Select a signal, which will be recorded by this channel
53	U1D	Channel selection,Select a signal, which will be recorded by this channel

## 8.2 Extented Enum types

### 8.2.1 ABBIED600\_Rev1\_HealthKind

Value	Description	Remarks
-2	Waiting	
-1	Test	
1	Ok	
2	Warning	
3	Alarm	

### 8.2.2 ABBIED600\_Rev1\_PhaseFaultDirectionKind

Value	Description	Remarks
-1	both	
0	unknown	
1	forward	
2	backward	

### 8.2.3 ABBIED600\_Rev1\_CurveCharKind

Value	Description	Remarks
1	ANSI Extremely Inverse	Operating curve type,Selection of time delay curve type,ANSI Ext. inv.
2	ANSI Very Inverse	Operating curve type,Selection of time delay curve type,ANSI Very inv.

3	ANSI Normal Inverse	Operating curve type,Selection of time delay curve type,ANSI Norm. inv.
4	ANSI Moderate Inverse	Operating curve type,Selection of time delay curve type,ANSI Mod. inv.
5	ANSI Definite Time	Operating curve type,Selection of time delay curve type,ANSI Def. Time
6	Long-Time Extremely Inverse	Operating curve type,Selection of time delay curve type,L.T.E. inv.
7	Long-Time Very Inverse	Operating curve type,Selection of time delay curve type,L.T.V. inv.
8	Long-Time Inverse	Operating curve type,Selection of time delay curve type,L.T. inv.
9	IEC Normal Inverse	Operating curve type,Selection of time delay curve type,IEC Norm. inv.
10	IEC Very Inverse	Operating curve type,Selection of time delay curve type,IEC Very inv.
11	IEC Inverse	Operating curve type,Selection of time delay curve type,IEC inv.
12	IEC Extremely Inverse	Operating curve type,Selection of time delay curve type,IEC Ext. inv.
13	IEC Short-Time Inverse	Operating curve type,Selection of time delay curve type,IEC S.T. inv.
14	IEC Long-Time Inverse	Operating curve type,Selection of time delay curve type,IEC L.T. inv.
15	IEC Definite Time	Operating curve type,Selection of time delay curve type,IEC Def. Time
16	Reserved	Operating curve type,Selection of time delay curve type
17	Polynom 1	Operating curve type,Selection of time delay curve type,Programmable
18	Polynom 2	Operating curve type,Selection of time delay curve type,RI type
19	Polynom 3	Operating curve type,Selection of time delay curve type,RD type
20	Polynom 4	Operating curve type,Selection of time delay curve type
21	Polynom 5	Operating curve type,Selection of time delay curve type
22	Polynom 6	Operating curve type,Selection of time delay curve type
23	Polynom 7	Operating curve type,Selection of time delay curve type
24	Polynom 8	Operating curve type,Selection of time delay curve type
25	Polynom 9	Operating curve type,Selection of time delay curve type
26	Polynom 10	Operating curve type,Selection of time delay curve type
27	Polynom 11	Operating curve type,Selection of time delay curve type
28	Polynom 12	Operating curve type,Selection of time delay curve type
29	Polynom 13	Operating curve type,Selection of time delay curve type
30	Polynom 14	Operating curve type,Selection of time delay curve type
31	Polynom 15	Operating curve type,Selection of time delay curve type
32	Polynom 16	Operating curve type,Selection of time delay curve type
33	Multiline 1	Operating curve type,Selection of time delay curve type
34	Multiline 2	Operating curve type,Selection of time delay curve type
35	Multiline 3	Operating curve type,Selection of time delay curve type
36	Multiline 4	Operating curve type,Selection of time delay curve type
37	Multiline 5	Operating curve type,Selection of time delay curve type
38	Multiline 6	Operating curve type,Selection of time delay curve type
39	Multiline 7	Operating curve type,Selection of time delay curve type
40	Multiline 8	Operating curve type,Selection of time delay curve type
41	Multiline 9	Operating curve type,Selection of time delay curve type
42	Multiline 10	Operating curve type,Selection of time delay curve type
43	Multiline 11	Operating curve type,Selection of time delay curve type
44	Multiline 12	Operating curve type,Selection of time delay curve type

45	Multiline 13	Operating curve type,Selection of time delay curve type
46	Multiline 14	Operating curve type,Selection of time delay curve type
47	Multiline 15	Operating curve type,Selection of time delay curve type
48	Multiline 16	Operating curve type,Selection of time delay curve type
-1	Recloser 1	Operating curve type,Selection of time delay curve type
-2	Recloser 2	Operating curve type,Selection of time delay curve type
-3	Recloser 3	Operating curve type,Selection of time delay curve type
-4	Recloser 4	Operating curve type,Selection of time delay curve type
-5	Recloser 5	Operating curve type,Selection of time delay curve type
-6	Recloser 6	Operating curve type,Selection of time delay curve type
-7	Recloser 7	Operating curve type,Selection of time delay curve type
-8	Recloser 8	Operating curve type,Selection of time delay curve type
-9	Recloser 8+	Operating curve type,Selection of time delay curve type
-10	Recloser 8*	Operating curve type,Selection of time delay curve type
-11	Recloser 9	Operating curve type,Selection of time delay curve type
-12	Recloser 11	Operating curve type,Selection of time delay curve type
-13	Recloser 13	Operating curve type,Selection of time delay curve type
-14	Recloser 14	Operating curve type,Selection of time delay curve type
-15	Recloser 15	Operating curve type,Selection of time delay curve type
-16	Recloser 16	Operating curve type,Selection of time delay curve type
-17	Recloser 17	Operating curve type,Selection of time delay curve type
-18	Recloser 18	Operating curve type,Selection of time delay curve type
-19	Recloser A	Operating curve type,Selection of time delay curve type
-20	Recloser B	Operating curve type,Selection of time delay curve type
-21	Recloser C	Operating curve type,Selection of time delay curve type
-22	Recloser D	Operating curve type,Selection of time delay curve type
-23	Recloser E	Operating curve type,Selection of time delay curve type
-24	Recloser F	Operating curve type,Selection of time delay curve type
-25	Recloser G	Operating curve type,Selection of time delay curve type
-26	Recloser H	Operating curve type,Selection of time delay curve type
-27	Recloser J	Operating curve type,Selection of time delay curve type
-28	Recloser Kg	Operating curve type,Selection of time delay curve type
-29	Recloser Kp	Operating curve type,Selection of time delay curve type
-30	Recloser L	Operating curve type,Selection of time delay curve type
-31	Recloser M	Operating curve type,Selection of time delay curve type
-32	Recloser N	Operating curve type,Selection of time delay curve type
-33	Recloser P	Operating curve type,Selection of time delay curve type
-34	Recloser R	Operating curve type,Selection of time delay curve type
-35	Recloser T	Operating curve type,Selection of time delay curve type
-36	Recloser V	Operating curve type,Selection of time delay curve type
-37	Recloser W	Operating curve type,Selection of time delay curve type
-38	Recloser Y	Operating curve type,Selection of time delay curve type

-39	Recloser Z	Operating curve type, Selection of time delay curve type
-----	------------	--

#### 8.2.4 ABBIED600\_Rev20\_TstOutKind

Value	Description	Remarks
0	Reset	PHLPTOC1, Test control for outputs
1	Activate START	PHLPTOC1, Test control for outputs
2	Deactive START	PHLPTOC1, Test control for outputs
3	Activate ST_A	PHLPTOC1, Test control for outputs
4	Deactive ST_A	PHLPTOC1, Test control for outputs
5	Activate ST_B	PHLPTOC1, Test control for outputs
6	Deactive ST_B	PHLPTOC1, Test control for outputs
7	Activate ST_C	PHLPTOC1, Test control for outputs
8	Deactive ST_C	PHLPTOC1, Test control for outputs
9	Activate OPERATE	PHLPTOC1, Test control for outputs
10	Deactive OPERATE	PHLPTOC1, Test control for outputs
11	Activate OPR_A	PHLPTOC1, Test control for outputs
12	Deactive OPR_A	PHLPTOC1, Test control for outputs
13	Activate OPR_B	PHLPTOC1, Test control for outputs
14	Deactive OPR_B	PHLPTOC1, Test control for outputs
15	Activate OPR_C	PHLPTOC1, Test control for outputs
16	Deactive OPR_C	PHLPTOC1, Test control for outputs
17	Activate ALARM	PHLPTOC1, Test control for outputs
18	Deactive ALARM	PHLPTOC1, Test control for outputs
19	Activate WARNING	PHLPTOC1, Test control for outputs
20	Deactive WARNING	PHLPTOC1, Test control for outputs
21	Activate BLK_CLOSE	PHLPTOC1, Test control for outputs
22	Deactive BLK_CLOSE	PHLPTOC1, Test control for outputs
23	reserved1	PHLPTOC1, Test control for outputs
24	reserved2	PHLPTOC1, Test control for outputs
25	Activate CB_FAULT_AL	PHLPTOC1, Test control for outputs
26	Deactive CB_FAULT_AL	PHLPTOC1, Test control for outputs
27	Activate TRBU	PHLPTOC1, Test control for outputs
28	Deactive TRBU	PHLPTOC1, Test control for outputs
29	Activate TRRET	PHLPTOC1, Test control for outputs
30	Deactive TRRET	PHLPTOC1, Test control for outputs
31	Activate BLK_EF	PHLPTOC1, Test control for outputs
32	Deactive BLK_EF	PHLPTOC1, Test control for outputs
33	Activate ARC_FLT_DET	PHLPTOC1, Test control for outputs
34	Deactive ARC_FLT_DET	PHLPTOC1, Test control for outputs
35	Activate BLK2H	PHLPTOC1, Test control for outputs
36	Deactive BLK2H	PHLPTOC1, Test control for outputs
37	Activate BLK2H_A	PHLPTOC1, Test control for outputs
38	Deactive BLK2H_A	PHLPTOC1, Test control for outputs

39	Activate BLK2H_B	PHLPTOC1,Test control for outputs
40	Deactive BLK2H_B	PHLPTOC1,Test control for outputs
41	Activate BLK2H_C	PHLPTOC1,Test control for outputs
42	Deactive BLK2H_C	PHLPTOC1,Test control for outputs
43	Activate TRIP	PHLPTOC1,Test control for outputs
44	Deactive TRIP	PHLPTOC1,Test control for outputs
45	Activate CL_LKOUT	PHLPTOC1,Test control for outputs
46	Deactive CL_LKOUT	PHLPTOC1,Test control for outputs
47	Activate OPEN_CB	PHLPTOC1,Test control for outputs
48	Deactive OPEN_CB	PHLPTOC1,Test control for outputs
49	Activate CLOSE_CB	PHLPTOC1,Test control for outputs
50	Deactive CLOSE_CB	PHLPTOC1,Test control for outputs
51	Activate CMD_WAIT	PHLPTOC1,Test control for outputs
52	Deactive CMD_WAIT	PHLPTOC1,Test control for outputs
53	Activate PROT_CRD	PHLPTOC1,Test control for outputs
54	Deactive PROT_CRD	PHLPTOC1,Test control for outputs
55	Activate INPRO	PHLPTOC1,Test control for outputs
56	Deactive INPRO	PHLPTOC1,Test control for outputs
57	Activate LOCKED	PHLPTOC1,Test control for outputs
58	Deactive LOCKED	PHLPTOC1,Test control for outputs
59	Activate UNSUC_RECL	PHLPTOC1,Test control for outputs
60	Deactive UNSUC_RECL	PHLPTOC1,Test control for outputs
61	Activate AR_ON	PHLPTOC1,Test control for outputs
62	Deactive AR_ON	PHLPTOC1,Test control for outputs
63	Act. TRV_T_OP_ALM	PHLPTOC1,Test control for outputs
64	Deact. TRV_T_OP_ALM	PHLPTOC1,Test control for outputs
65	Act. TRV_T_CL_ALM	PHLPTOC1,Test control for outputs
66	Deact. TRV_T_CL_ALM	PHLPTOC1,Test control for outputs
67	Act. DIFTRVTOPALM	PHLPTOC1,Test control for outputs
68	Deact. DIFTRVTOPALM	PHLPTOC1,Test control for outputs
69	Act. DIFTRVTCALM	PHLPTOC1,Test control for outputs
70	Deact. DIFTRVTCALM	PHLPTOC1,Test control for outputs
71	Activate SPR_CHR_ALM	PHLPTOC1,Test control for outputs
72	Deactive SPR_CHR_ALM	PHLPTOC1,Test control for outputs
73	Activate OPR_ALM	PHLPTOC1,Test control for outputs
74	Deactive OPR_ALM	PHLPTOC1,Test control for outputs
75	Activate OPR_LO	PHLPTOC1,Test control for outputs
76	Deactive OPR_LO	PHLPTOC1,Test control for outputs
77	Activate IPOW_ALM	PHLPTOC1,Test control for outputs
78	Deactive IPOW_ALM	PHLPTOC1,Test control for outputs
79	Activate IPOW_LO	PHLPTOC1,Test control for outputs
80	Deactive IPOW_LO	PHLPTOC1,Test control for outputs

81	Activate CB_LIFE_ALM	PHLPTOC1,Test control for outputs
82	Deactive CB_LIFE_ALM	PHLPTOC1,Test control for outputs
83	Activate MON_ALM	PHLPTOC1,Test control for outputs
84	Deactive MON_ALM	PHLPTOC1,Test control for outputs
85	Activate PRES_ALM	PHLPTOC1,Test control for outputs
86	Deactive PRES_ALM	PHLPTOC1,Test control for outputs
87	Activate PRES_LO	PHLPTOC1,Test control for outputs
88	Deactive PRES_LO	PHLPTOC1,Test control for outputs
89	Activate OPENPOS	PHLPTOC1,Test control for outputs
90	Deactive OPENPOS	PHLPTOC1,Test control for outputs
91	Activate INVALIDPOS	PHLPTOC1,Test control for outputs
92	Deactive INVALIDPOS	PHLPTOC1,Test control for outputs
93	Activate CLOSEPOS	PHLPTOC1,Test control for outputs
94	Deactive CLOSEPOS	PHLPTOC1,Test control for outputs
95	Activate STR_LS_LOC	PHLPTOC1,Test control for outputs
96	Deactive STR_LS_LOC	PHLPTOC1,Test control for outputs
97	Activate STR_LS_Rem	PHLPTOC1,Test control for outputs
98	Deactive STR_LS_Rem	PHLPTOC1,Test control for outputs
99	Activate OPR_LS_LOC	PHLPTOC1,Test control for outputs
100	Deactive OPR_LS_LOC	PHLPTOC1,Test control for outputs
101	Activate OPR_LS_Rem	PHLPTOC1,Test control for outputs
102	Deactive OPR_LS_Rem	PHLPTOC1,Test control for outputs
103	Activate OPR_HS_LOC	PHLPTOC1,Test control for outputs
104	Deactive OPR_HS_LOC	PHLPTOC1,Test control for outputs
105	Activate OPR_HS_Rem	PHLPTOC1,Test control for outputs
106	Deactive OPR_HS_Rem	PHLPTOC1,Test control for outputs
107	Activate RSTD2H_LOC	PHLPTOC1,Test control for outputs
108	Deactive RSTD2H_LOC	PHLPTOC1,Test control for outputs
109	Activate RSTD2H_Rem	PHLPTOC1,Test control for outputs
110	Deactive RSTD2H_Rem	PHLPTOC1,Test control for outputs
111	Activate PROT_ACTIVE	PHLPTOC1,Test control for outputs
112	Deactive PROT_ACTIVE	PHLPTOC1,Test control for outputs
113	Activate FAIL	PHLPTOC1,Test control for outputs
114	Deactive FAIL	PHLPTOC1,Test control for outputs
115	Activate RESTORE	PHLPTOC1,Test control for outputs
116	Deactive RESTORE	PHLPTOC1,Test control for outputs
117	Activate FUSEF_3PH	PHLPTOC1,Test control for outputs
118	Deactive FUSEF_3PH	PHLPTOC1,Test control for outputs
119	Activate FUSEF_U	PHLPTOC1,Test control for outputs
120	Deactive FUSEF_U	PHLPTOC1,Test control for outputs
121	Activate READY	PHLPTOC1,Test control for outputs
122	Deactive READY	PHLPTOC1,Test control for outputs

123	Activate RELEASE	PHLPTOC1,Test control for outputs
124	Deactive RELEASE	PHLPTOC1,Test control for outputs
125	Activate OPR_Z_EXTN	PHLPTOC1,Test control for outputs
126	Deactive OPR_Z_EXTN	PHLPTOC1,Test control for outputs
-1	Activate OPR_IIT	PHLPTOC1,Test control for outputs
-2	Deactive OPR_IIT	PHLPTOC1,Test control for outputs
-3	Activate OPR_STALL	PHLPTOC1,Test control for outputs
-4	Deactive OPR_STALL	PHLPTOC1,Test control for outputs
-5	Activate MOT_START	PHLPTOC1,Test control for outputs
-6	Deactive MOT_START	PHLPTOC1,Test control for outputs
-7	Activate LOCK_START	PHLPTOC1,Test control for outputs
-8	Deactive LOCK_START	PHLPTOC1,Test control for outputs
-9	Activate BLK_RESTART	PHLPTOC1,Test control for outputs
-10	Deactive BLK_RESTART	PHLPTOC1,Test control for outputs
-11	Activate OPR_LS	PHLPTOC1,Test control for outputs
-12	Deactive OPR_LS	PHLPTOC1,Test control for outputs
-13	Activate OPR_HS	PHLPTOC1,Test control for outputs
-14	Deactive OPR_HS	PHLPTOC1,Test control for outputs
-15	Activate BLKD2H	PHLPTOC1,Test control for outputs
-16	Deactive BLKD2H	PHLPTOC1,Test control for outputs
-17	Activate BLKD5H	PHLPTOC1,Test control for outputs
-18	Deactive BLKD5H	PHLPTOC1,Test control for outputs
-19	Activate BLKDWA	PHLPTOC1,Test control for outputs
-20	Deactive BLKDWA	PHLPTOC1,Test control for outputs
-21	Activate OPR_UFRQ	PHLPTOC1,Test control for outputs
-22	Deactive OPR_UFRQ	PHLPTOC1,Test control for outputs
-23	Activate OPR_OFRQ	PHLPTOC1,Test control for outputs
-24	Deactive OPR_OFRQ	PHLPTOC1,Test control for outputs
-25	Activate OPR_FRG	PHLPTOC1,Test control for outputs
-26	Deactive OPR_FRG	PHLPTOC1,Test control for outputs
-27	Activate ST_UFRQ	PHLPTOC1,Test control for outputs
-28	Deactive ST_UFRQ	PHLPTOC1,Test control for outputs
-29	Activate ST_OFRQ	PHLPTOC1,Test control for outputs
-30	Deactive ST_OFRQ	PHLPTOC1,Test control for outputs
-31	Activate ST_FRG	PHLPTOC1,Test control for outputs
-32	Deactive ST_FRG	PHLPTOC1,Test control for outputs
-33	Activate RAISE	PHLPTOC1,Test control for outputs
-34	Deactive RAISE	PHLPTOC1,Test control for outputs
-35	Activate LOWER	PHLPTOC1,Test control for outputs
-36	Deactive LOWER	PHLPTOC1,Test control for outputs
-37	Activate PAR_FAIL	PHLPTOC1,Test control for outputs
-38	Deactive PAR_FAIL	PHLPTOC1,Test control for outputs

-39	Activate SYNC_INPRO	PHLPTOC1,Test control for outputs
-40	Deactive SYNC_INPRO	PHLPTOC1,Test control for outputs
-41	Activate SYNC_OK	PHLPTOC1,Test control for outputs
-42	Deactive SYNC_OK	PHLPTOC1,Test control for outputs
-43	Activate CL_FAIL_AL	PHLPTOC1,Test control for outputs
-44	Deactive CL_FAIL_AL	PHLPTOC1,Test control for outputs
-45	Activate CMD_FAIL_AL	PHLPTOC1,Test control for outputs
-46	Deactive CMD_FAIL_AL	PHLPTOC1,Test control for outputs
-47	Activate LLDB	PHLPTOC1,Test control for outputs
-48	Deactive LLDB	PHLPTOC1,Test control for outputs
-49	Activate LLLB	PHLPTOC1,Test control for outputs
-50	Deactive LLLB	PHLPTOC1,Test control for outputs
-51	Activate DLLB	PHLPTOC1,Test control for outputs
-52	Deactive DLLB	PHLPTOC1,Test control for outputs
-53	Activate DLDB	PHLPTOC1,Test control for outputs
-54	Deactive DLDB	PHLPTOC1,Test control for outputs
-55	Activate ST_REST	PHLPTOC1,Test control for outputs
-56	Deactive ST_REST	PHLPTOC1,Test control for outputs
-57	Activate INT_BLKD	PHLPTOC1,Test control for outputs
-58	Deactive INT_BLKD	PHLPTOC1,Test control for outputs
-59	Activate SWELLST	PHLPTOC1,Test control for outputs
-60	Deactive SWELLST	PHLPTOC1,Test control for outputs
-61	Activate DIPST	PHLPTOC1,Test control for outputs
-62	Deactive DIPST	PHLPTOC1,Test control for outputs
-63	Activate INTST	PHLPTOC1,Test control for outputs
-64	Deactive INTST	PHLPTOC1,Test control for outputs
-65	Activate COOL_ACTIVE	PHLPTOC1,Test control for outputs
-66	Deactive COOL_ACTIVE	PHLPTOC1,Test control for outputs
-67	Activate MN_UNB_AL	PHLPTOC1,Test control for outputs
-68	Deactive MN_UNB_AL	PHLPTOC1,Test control for outputs
-69	Activate PCT_UNB_AL	PHLPTOC1,Test control for outputs
-70	Deactive PCT_UNB_AL	PHLPTOC1,Test control for outputs
-71	Activate FAIL_CTPRP1	PHLPTOC1,Test control for outputs
-72	Deactive FAIL_CTPRP1	PHLPTOC1,Test control for outputs
-73	Activate FAIL_CTPRP2	PHLPTOC1,Test control for outputs
-74	Deactive FAIL_CTPRP2	PHLPTOC1,Test control for outputs
-75	Activate FAIL_CTPRP3	PHLPTOC1,Test control for outputs
-76	Deactive FAIL_CTPRP3	PHLPTOC1,Test control for outputs
-77	Activate OBS_PR_ACT	PHLPTOC1,Test control for outputs
-78	Deactive OBS_PR_ACT	PHLPTOC1,Test control for outputs
-79	Activate OPERATE_Z1	PHLPTOC1,Test control for outputs
-80	Deactive OPERATE_Z1	PHLPTOC1,Test control for outputs

-81	Activate OPERATE_Z2	PHLPTOC1,Test control for outputs
-82	Deactive OPERATE_Z2	PHLPTOC1,Test control for outputs
-83	Activate OPERATE_Z3	PHLPTOC1,Test control for outputs
-84	Deactive OPERATE_Z3	PHLPTOC1,Test control for outputs
-85	Activate OPERATE_Z4	PHLPTOC1,Test control for outputs
-86	Deactive OPERATE_Z4	PHLPTOC1,Test control for outputs
-87	Activate OPERATE_Z5	PHLPTOC1,Test control for outputs
-88	Deactive OPERATE_Z5	PHLPTOC1,Test control for outputs
-89	Activate START_Z1	PHLPTOC1,Test control for outputs
-90	Deactive START_Z1	PHLPTOC1,Test control for outputs
-91	Activate START_Z2	PHLPTOC1,Test control for outputs
-92	Deactive START_Z2	PHLPTOC1,Test control for outputs
-93	Activate START_Z3	PHLPTOC1,Test control for outputs
-94	Deactive START_Z3	PHLPTOC1,Test control for outputs
-95	Activate START_Z4	PHLPTOC1,Test control for outputs
-96	Deactive START_Z4	PHLPTOC1,Test control for outputs
-97	Activate START_Z5	PHLPTOC1,Test control for outputs
-98	Deactive START_Z5	PHLPTOC1,Test control for outputs
-99	Activate LODDSR_GFC	PHLPTOC1,Test control for outputs
-100	Deactive LODDSR_GFC	PHLPTOC1,Test control for outputs
-101	Activate START_GFC	PHLPTOC1,Test control for outputs
-102	Deactive START_GFC	PHLPTOC1,Test control for outputs
-103	Activate ST_ALARM	PHLPTOC1,Test control for outputs
-104	Deactive ST_ALARM	PHLPTOC1,Test control for outputs
-105	Activate OPR_IRV	PHLPTOC1,Test control for outputs
-106	Deactive OPR_IRV	PHLPTOC1,Test control for outputs
-107	Activate OPR_WEI	PHLPTOC1,Test control for outputs
-108	Deactive OPR_WEI	PHLPTOC1,Test control for outputs
-109	Activate ECHO	PHLPTOC1,Test control for outputs
-110	Deactive ECHO	PHLPTOC1,Test control for outputs
-111	Activate CR	PHLPTOC1,Test control for outputs
-112	Deactive CR	PHLPTOC1,Test control for outputs
-113	Activate CS	PHLPTOC1,Test control for outputs
-114	Deactive CS	PHLPTOC1,Test control for outputs
-115	Activate CRL	PHLPTOC1,Test control for outputs
-116	Deactive CRL	PHLPTOC1,Test control for outputs
-117	Activate LCG	PHLPTOC1,Test control for outputs
-118	Deactive LCG	PHLPTOC1,Test control for outputs
-119	Activate OPR_OVLOD	PHLPTOC1,Test control for outputs
-120	Deactive OPR_OVLOD	PHLPTOC1,Test control for outputs
-121	Activate ST_OVLOD	PHLPTOC1,Test control for outputs
-122	Deactive ST_OVLOD	PHLPTOC1,Test control for outputs

-123	Activate OPR_UN_I	PHLPTOC1,Test control for outputs
-124	Deactive OPR_UN_I	PHLPTOC1,Test control for outputs
-125	Activate ST_UN_I	PHLPTOC1,Test control for outputs
-126	Deactive ST_UN_I	PHLPTOC1,Test control for outputs

### 8.2.5 ABBIED600\_Rev1\_PolarizingQuantityKind

Value	Description	Remarks
-1	Zro vol.OR cur.	Pol quantity,Reference quantity used to determine fault direction
1	None	Pol quantity,Reference quantity used to determine fault direction,Self pol
2	Zero Sequence Current	Pol quantity,Reference quantity used to determine fault direction,Zero seq. cur.
3	Zero Sequence Voltage	Pol quantity,Reference quantity used to determine fault direction,Zero seq. volt.
4	Negative Sequence Voltage	Pol quantity,Reference quantity used to determine fault direction,Neg. seq. volt.
5	Phase to Phase Voltages	Pol quantity,Reference quantity used to determine fault direction,Cross pol
6	Phase to Ground Voltages	Pol quantity,Reference quantity used to determine fault direction,Ph-to-gnd volt.
7	Positive sequence voltage	Pol quantity,Reference quantity used to determine fault direction,Pos. seq. volt.

### 8.2.6 ABBIED600\_Rev2\_cmdQual

Value	Description	Remarks
-1	Off	Operation mode,Operation mode for generic control point
0	pulse	Operation mode,Operation mode for generic control point,Pulsed
1	persistent	Operation mode,Operation mode for generic control point,Toggle/Persistent

### 8.2.7 ABBIED600\_Rev32\_ProFcn

Value	Description	Remarks
-127	PHAPTV1	Protection,Protection function
-126	PHCPTOV1	Protection,Protection function
-125	PHBPTOV1	Protection,Protection function
-124	PHAPTOV1	Protection,Protection function
-123	DPH3LPDOC2	Protection,Protection function
-122	DPH3LPDOC1	Protection,Protection function
-121	DPH3HPDOC2	Protection,Protection function
-120	DPH3HPDOC1	Protection,Protection function
-119	PH3LPTOC2	Protection,Protection function
-118	PH3LPTOC1	Protection,Protection function
-117	XDEFLPDEF2	Protection,Protection function
-116	XDEFLPDEF1	Protection,Protection function
-115	SDPHLPDOC2	Protection,Protection function
-114	SDPHLPDOC1	Protection,Protection function
-113	XNSPTOC2	Protection,Protection function

-112	XNSPTOC1	Protection,Protection function
-111	XEFIPTOC2	Protection,Protection function
-110	XEFHPTOC4	Protection,Protection function
-109	XEFHPTOC3	Protection,Protection function
-108	XEFLPTOC3	Protection,Protection function
-107	XEFLPTOC2	Protection,Protection function
-106	MAPGAPC16	Protection,Protection function
-105	MAPGAPC15	Protection,Protection function
-104	MAPGAPC14	Protection,Protection function
-103	MAPGAPC13	Protection,Protection function
-102	MAPGAPC12	Protection,Protection function
-101	MAPGAPC11	Protection,Protection function
-100	MAPGAPC10	Protection,Protection function
-99	MAPGAPC9	Protection,Protection function
-98	RESCPSCH1	Protection,Protection function
-96	SPHIPTOC1	Protection,Protection function
-93	SPHLPTOC2	Protection,Protection function
-92	SPHLPTOC1	Protection,Protection function
-89	SPHHPTOC2	Protection,Protection function
-88	SPHHPTOC1	Protection,Protection function
-87	SPHPTUV4	Protection,Protection function
-86	SPHPTUV3	Protection,Protection function
-85	SPHPTUV2	Protection,Protection function
-84	SPHPTUV1	Protection,Protection function
-83	SPHPTOV4	Protection,Protection function
-82	SPHPTOV3	Protection,Protection function
-81	SPHPTOV2	Protection,Protection function
-80	SPHPTOV1	Protection,Protection function
-79	PH3HPTOC2	Protection,Protection function
-78	PH3HPTOC1	Protection,Protection function
-77	PH3IPTOC1	Protection,Protection function
-76	MAPGAPC18	Protection,Protection function
-75	MAPGAPC17	Protection,Protection function
-74	DOPPDPR3	Protection,Protection function
-73	DOPPDPR2	Protection,Protection function
-72	DOPPDPR1	Protection,Protection function
-70	DUPPDPR2	Protection,Protection function
-69	DUPPDPR1	Protection,Protection function
-68	PHPVOC2	Protection,Protection function
-67	DQPTUV2	Protection,Protection function
-66	DQPTUV1	Protection,Protection function
-65	VVSPPAM1	Protection,Protection function

-64	PHPVOC1	Protection,Protection function
-63	H3EFPSEF1	Protection,Protection function
-62	SRCPTOC1	Protection,Protection function
-61	COLPTOC1	Protection,Protection function
-60	HCUBPTOC1	Protection,Protection function
-59	CUBPTOC1	Protection,Protection function
-58	UZPDIS1	Protection,Protection function
-57	FDEFLPDEF2	Protection,Protection function
-56	FDEFLPDEF1	Protection,Protection function
-54	FEFLPTOC1	Protection,Protection function
-53	FDPHLPDOC2	Protection,Protection function
-52	FDPHLPDOC1	Protection,Protection function
-50	FPHLPTOC1	Protection,Protection function
-47	MAP12GAPC8	Protection,Protection function
-46	MAP12GAPC7	Protection,Protection function
-45	MAP12GAPC6	Protection,Protection function
-44	MAP12GAPC5	Protection,Protection function
-43	MAP12GAPC4	Protection,Protection function
-42	MAP12GAPC3	Protection,Protection function
-41	MAP12GAPC2	Protection,Protection function
-40	MAP12GAPC1	Protection,Protection function
-39	UEXPDIS2	Protection,Protection function
-37	HAEFPTOC1	Protection,Protection function
-36	UEXPDIS1	Protection,Protection function
-35	WPWDE3	Protection,Protection function
-34	WPWDE2	Protection,Protection function
-33	WPWDE1	Protection,Protection function
-32	LSHDPFRQ8	Protection,Protection function
-31	LSHDPFRQ7	Protection,Protection function
-30	PHDSTPDIS1	Protection,Protection function
-29	TR3PTDF1	Protection,Protection function
-28	HICPDIF1	Protection,Protection function
-27	HIBPDIF1	Protection,Protection function
-26	HIAPDIF1	Protection,Protection function
-25	OEPVPH4	Protection,Protection function
-24	OEPVPH3	Protection,Protection function
-23	OEPVPH2	Protection,Protection function
-22	OEPVPH1	Protection,Protection function
-19	PSPTOV2	Protection,Protection function
-18	PSPTOV1	Protection,Protection function
-15	PREVPTOC1	Protection,Protection function
-13	PHPTUC3	Protection,Protection function

-12	PHPTUC2	Protection,Protection function
-11	PHPTUC1	Protection,Protection function
-10	LVRTPTUV1	Protection,Protection function
-9	PHIZ1	Protection,Protection function
-8	LVRTPTUV2	Protection,Protection function
-7	INTRPTEF1	Protection,Protection function
-6	LVRTPTUV3	Protection,Protection function
-5	STTPMSU1	Protection,Protection function
-4	MREFPTOC1	Protection,Protection function
-3	JAMPTOC1	Protection,Protection function
-2	PHCPTUV1	Protection,Protection function
-1	PHBPTUV1	Protection,Protection function
0	Unknown	Protection,Protection function
1	PHLPTOC1	Protection,Protection function
2	PHLPTOC2	Protection,Protection function
3	PHLPTOC3	Protection,Protection function
5	PHLPTOC1	Protection,Protection function
6	PHHPTOC1	Protection,Protection function
7	PHHPTOC2	Protection,Protection function
8	PHHPTOC3	Protection,Protection function
9	PHHPTOC4	Protection,Protection function
10	PHHPTOC5	Protection,Protection function
11	PHHPTOC6	Protection,Protection function
12	PHIPTOC1	Protection,Protection function
13	PHIPTOC2	Protection,Protection function
14	MFADPSDE1	Protection,Protection function
17	EFLPTOC1	Protection,Protection function
18	EFLPTOC2	Protection,Protection function
19	EFLPTOC3	Protection,Protection function
20	EFLPTOC4	Protection,Protection function
22	EFHPTOC1	Protection,Protection function
23	EFHPTOC2	Protection,Protection function
24	EFHPTOC3	Protection,Protection function
25	EFHPTOC4	Protection,Protection function
26	EFHPTOC5	Protection,Protection function
27	EFHPTOC6	Protection,Protection function
28	EFHPTOC7	Protection,Protection function
29	EFHPTOC8	Protection,Protection function
30	EFIPTOC1	Protection,Protection function
31	EFIPTOC2	Protection,Protection function
32	EFIPTOC3	Protection,Protection function
35	NSPTOC1	Protection,Protection function

36	NSPTOC2	Protection,Protection function
37	NSPTOC3	Protection,Protection function
38	NSPTOC4	Protection,Protection function
41	PDNSPTOC1	Protection,Protection function
44	T1PTTR1	Protection,Protection function
45	T1PTTR2	Protection,Protection function
46	T2PTTR1	Protection,Protection function
48	MPTTR1	Protection,Protection function
50	DEFLPDEF1	Protection,Protection function
51	DEFLPDEF2	Protection,Protection function
52	DEFLPDEF3	Protection,Protection function
53	DEFHPDEF1	Protection,Protection function
54	DEFHPDEF2	Protection,Protection function
56	EFPADM1	Protection,Protection function
57	EFPADM2	Protection,Protection function
58	EFPADM3	Protection,Protection function
59	FRPFRQ1	Protection,Protection function
60	FRPFRQ2	Protection,Protection function
61	FRPFRQ3	Protection,Protection function
62	FRPFRQ4	Protection,Protection function
63	FRPFRQ5	Protection,Protection function
64	FRPFRQ6	Protection,Protection function
65	LSHDPFRQ1	Protection,Protection function
66	LSHDPFRQ2	Protection,Protection function
67	LSHDPFRQ3	Protection,Protection function
68	LSHDPFRQ4	Protection,Protection function
69	LSHDPFRQ5	Protection,Protection function
70	LSHDPFRQ6	Protection,Protection function
71	DPHLPDOC1	Protection,Protection function
72	DPHLPDOC2	Protection,Protection function
74	DPHHPDOC1	Protection,Protection function
75	DPHHPDOC2	Protection,Protection function
77	MAPGAPC1	Protection,Protection function
78	MAPGAPC2	Protection,Protection function
79	MAPGAPC3	Protection,Protection function
80	MAPGAPC4	Protection,Protection function
81	MAPGAPC5	Protection,Protection function
82	MAPGAPC6	Protection,Protection function
83	MAPGAPC7	Protection,Protection function
84	MAPGAPC8	Protection,Protection function
85	MNSPTOC1	Protection,Protection function
86	MNSPTOC2	Protection,Protection function

88	LOFLPTUC1	Protection,Protection function
89	LOFLPTUC2	Protection,Protection function
90	TR2PTDF1	Protection,Protection function
91	LNPLDF1	Protection,Protection function
92	LREFPNDF1	Protection,Protection function
93	LREFPNDF2	Protection,Protection function
94	MPDIF1	Protection,Protection function
96	HREFPDIF1	Protection,Protection function
97	HREFPDIF2	Protection,Protection function
98	MHZPDIF1	Protection,Protection function
100	ROVPTOV1	Protection,Protection function
101	ROVPTOV2	Protection,Protection function
102	ROVPTOV3	Protection,Protection function
103	ROVPTOV4	Protection,Protection function
104	PHPTOV1	Protection,Protection function
105	PHPTOV2	Protection,Protection function
106	PHPTOV3	Protection,Protection function
107	PHPTOV4	Protection,Protection function
108	PHPTUV1	Protection,Protection function
109	PHPTUV2	Protection,Protection function
110	PHPTUV3	Protection,Protection function
111	PHPTUV4	Protection,Protection function
112	NSPTOV1	Protection,Protection function
113	NSPTOV2	Protection,Protection function
114	NSPTOV3	Protection,Protection function
115	NSPTOV4	Protection,Protection function
116	PSPTUV1	Protection,Protection function
117	PSPTUV2	Protection,Protection function
118	ARCSARC1	Protection,Protection function
119	ARCSARC2	Protection,Protection function
120	ARCSARC3	Protection,Protection function

### 8.2.8 ABBIED600\_Rev2\_AutoReclosingKind

Value	Description	Remarks
-1	Not defined	STATUS,AR status signal for IEC61850
1	Ready	STATUS,AR status signal for IEC61850
2	InProgress	STATUS,AR status signal for IEC61850
3	Successful	STATUS,AR status signal for IEC61850
4	WaitingForTrip	STATUS,AR status signal for IEC61850
5	TripFromProtection	STATUS,AR status signal for IEC61850
6	FaultDisappeared	STATUS,AR status signal for IEC61850
7	WaitToComplete	STATUS,AR status signal for IEC61850
8	CBclosed	STATUS,AR status signal for IEC61850

9	CycleUnsuccessful	STATUS,AR status signal for IEC61850
10	Unsuccessful	STATUS,AR status signal for IEC61850
11	Aborted	STATUS,AR status signal for IEC61850

### 8.2.9 ABBIED600\_Rev1\_LiveDeadModeKind

Value	Description	Remarks
-1	Off	Live dead mode,Energizing check mode
1	Dead Line, Dead Bus	Live dead mode,Energizing check mode,Both Dead
2	Live Line, Dead Bus	Live dead mode,Energizing check mode,Live L, Dead B
3	Dead Line, Live Bus	Live dead mode,Energizing check mode,Dead L, Live B
4	Dead Line, Dead Bus OR Live Line, Dead Bus	Live dead mode,Energizing check mode,Dead Bus, L Any
5	Dead Line, Dead Bus OR Dead Line, Live Bus	Live dead mode,Energizing check mode,Dead L, Bus Any
6	Live Line, Dead Bus OR Dead Line, Live Bus	Live dead mode,Energizing check mode,One Live, Dead
7	Dead Line, Dead Bus OR Live Line, Dead Bus OR Dead Line, Live Bus	Live dead mode,Energizing check mode,Not Both Live

### 8.2.10 ABBIED600\_Rev1\_I3CCIs2Frame

Value	Description	Remarks
-1	Not in use	Frame1InUse,Active Class2 Frame 1
0	User frame	Frame1InUse,Active Class2 Frame 1
1	Standard frame 1	Frame1InUse,Active Class2 Frame 1
2	Standard frame 2	Frame1InUse,Active Class2 Frame 1
3	Standard frame 3	Frame1InUse,Active Class2 Frame 1
4	Standard frame 4	Frame1InUse,Active Class2 Frame 1
5	Standard frame 5	Frame1InUse,Active Class2 Frame 1
6	Private frame 6	Frame1InUse,Active Class2 Frame 1
7	Private frame 7	Frame1InUse,Active Class2 Frame 1

### 8.2.11 ABBIED600\_Rev2\_FaultLoopKind

Value	Description	Remarks
-5	No fault	FAULT_LOOP,Fault impedance loop
-4	PhaseAtoBtoCtoGround	FAULT_LOOP,Fault impedance loop,ABCG Fault
-3	PhaseCtoAGround	FAULT_LOOP,Fault impedance loop,CAG Fault
-2	PhaseBtoCGround	FAULT_LOOP,Fault impedance loop,BCG Fault
-1	PhaseAtoBGround	FAULT_LOOP,Fault impedance loop,ABG Fault
1	PhaseAtoGround	FAULT_LOOP,Fault impedance loop,AG Fault
2	PhaseBtoGround	FAULT_LOOP,Fault impedance loop,BG Fault
3	PhaseCtoGround	FAULT_LOOP,Fault impedance loop,CG Fault
4	PhaseAtoB	FAULT_LOOP,Fault impedance loop,AB Fault

5	PhaseBtoC	FAULT_LOOP,Fault impedance loop,BC Fault
6	PhaseCtoA	FAULT_LOOP,Fault impedance loop,CA Fault
7	Others	FAULT_LOOP,Fault impedance loop,ABC Fault

## 9 Control Block Extensions

None



**ABB Oy**  
Distribution Automation  
P.O. Box 699  
FI-65101 Vaasa  
FINLAND  
Tel. +358 10 22 11  
Fax. +358 10 224 1094  
[www.abb.com/substationautomation](http://www.abb.com/substationautomation)