



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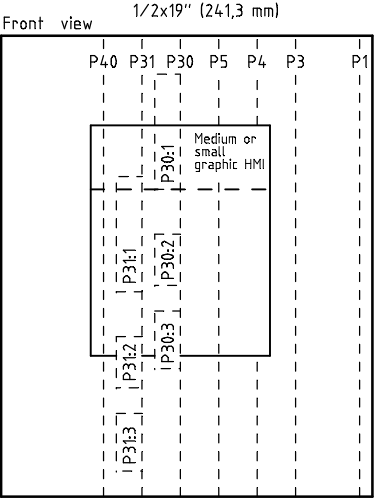
Used abbreviations

Abbreviation	Description
NUM	Numeric processing module
PSM	Power supply module
ADM	Analog digital conversion module
TRM	Transformer input module
OEM	Optical ethernet module
SLM	Serial communication module
RS485	Galvanic RS485 communication module
LDCM	Line data communication module
IRIG-B	IRIG-B time synchronization module
GTM	GPS time module
GSM	GPS time synchronization module
BIM	Binary input module
BOM	Binary output module
SOM	Static output module
IOM	Binary in/out module
MIM	mA input module
CBM	Combined backplane module
HMI	Human machine interface

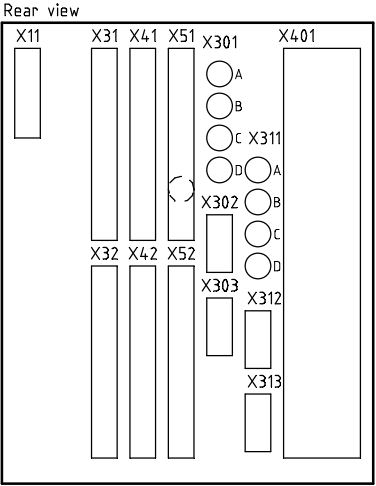
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	Appr. PSTP/ TPLA Patrik Nyback 2010-02-18			2
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	 ABB AB			Sheet 1



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Designations for 1/2x19" casing with 1 TRM slot



6U (266,7 mm)



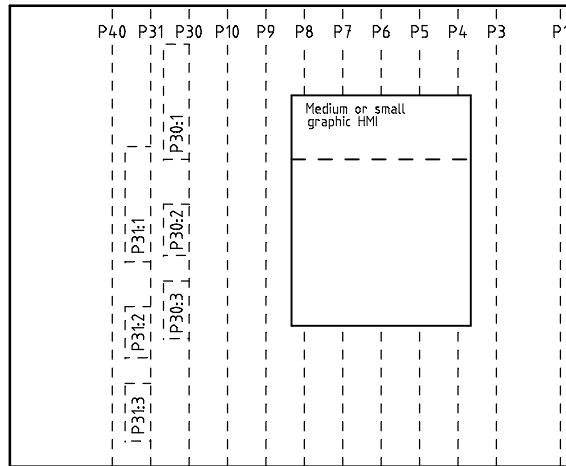
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				Resp. dept	PSTP/ TPLA			Document number	Lang.	Rev.
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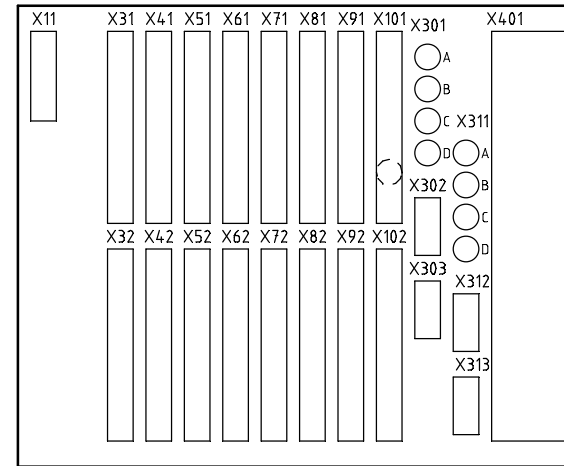
Designations for 3/4x19" casing with 1 TRM slot

Front view 3/4x19" (362 mm)



6U (266,7 mm)

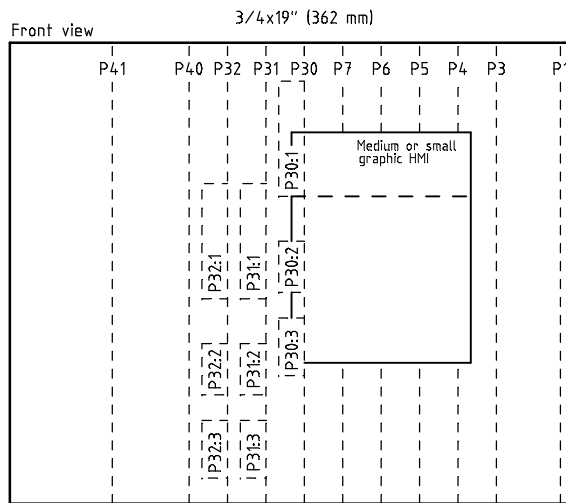
Rear view



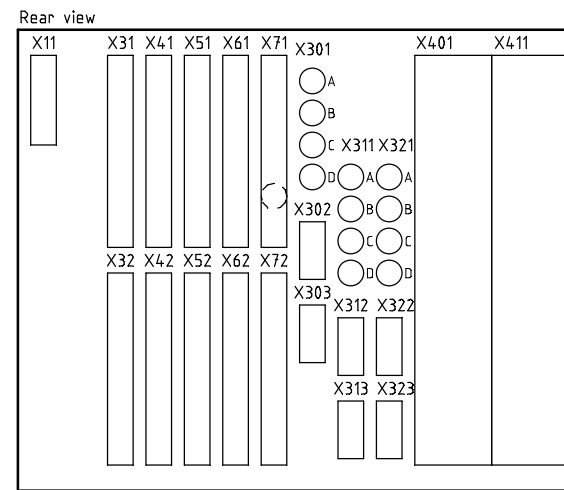
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Designations for 3/4x19" casing with 2 TRM slots



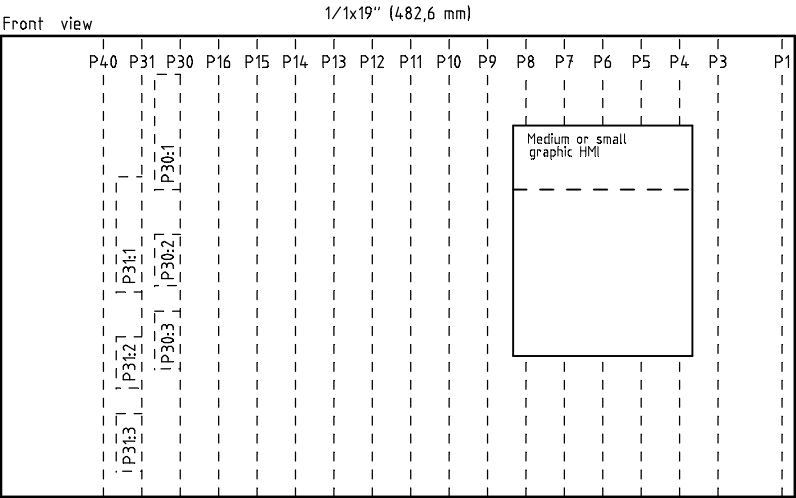
6U (266,7 mm)



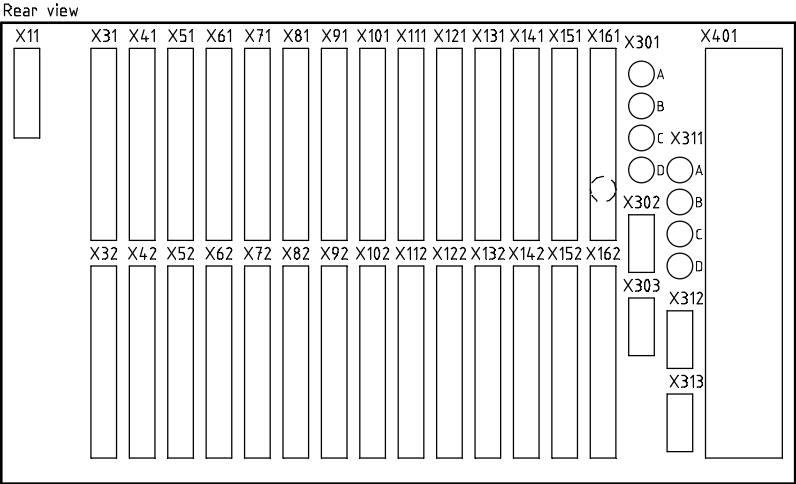
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Designations for 1/1x19" casing with 1 TRM slot



6U (266,7 mm)



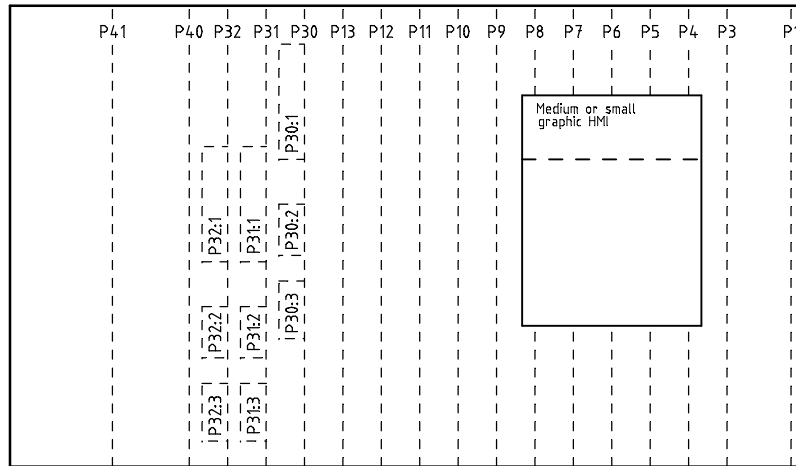
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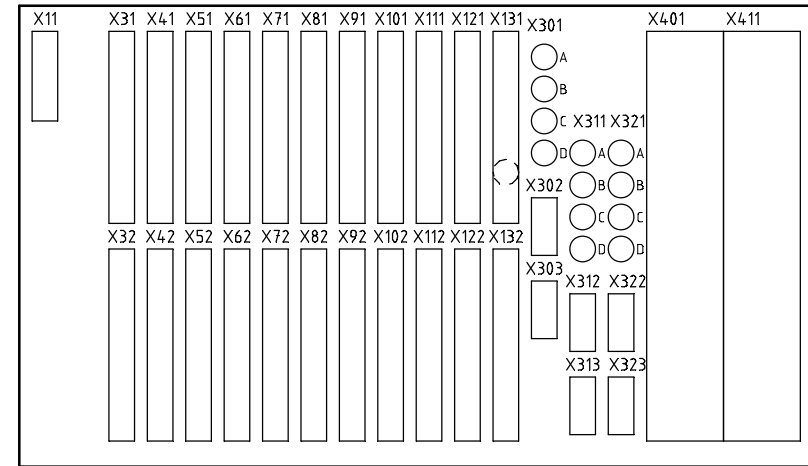
Designations for 1/1x19" casing with 2 TRM slots



Front view
1/1x19" (482,6 mm)



6U (266,7 mm)

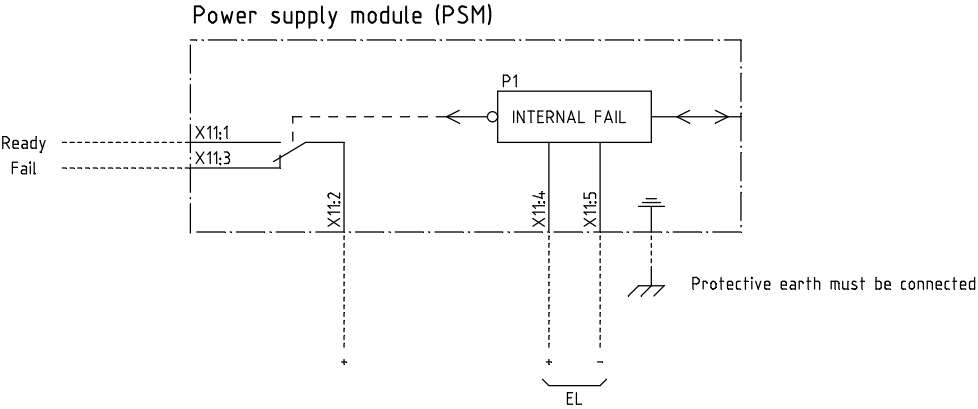
Rear view



Customer draw no		Prep.	PSTP/	TPLA	Agneta Rydh	2009-06-03	Connection Diagram 670 series Ver.1.2, IEC symbols		Cont. sh/ No of sh
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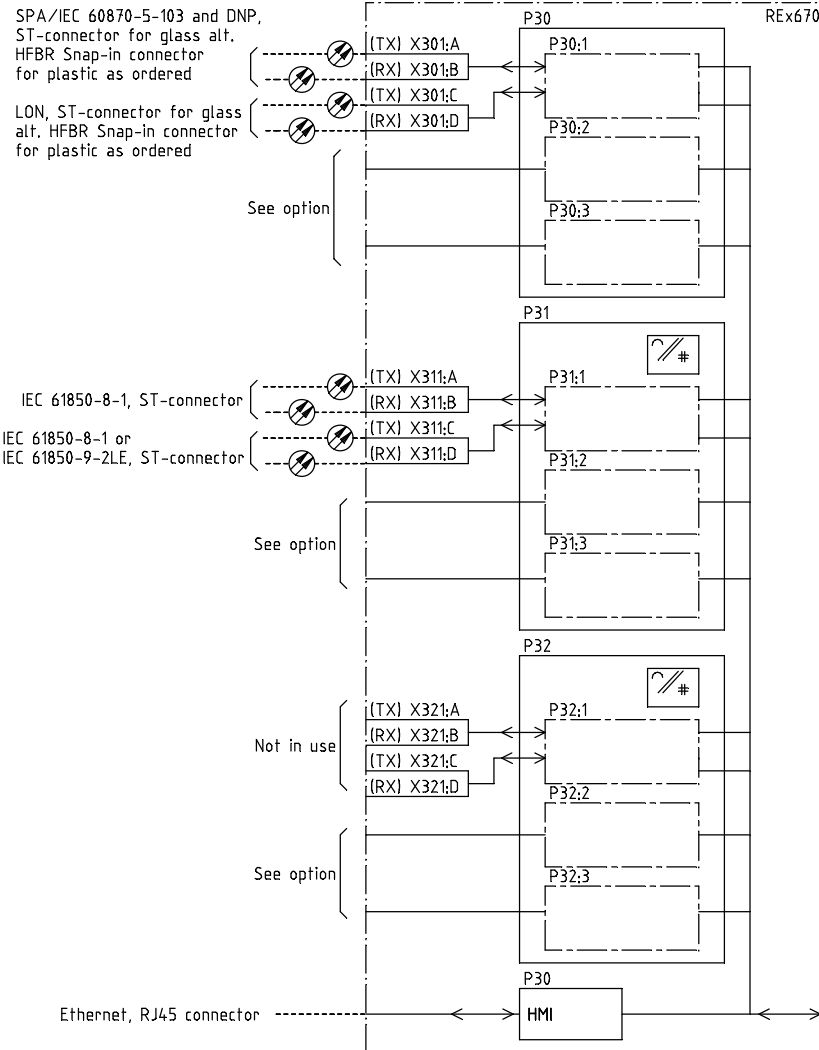
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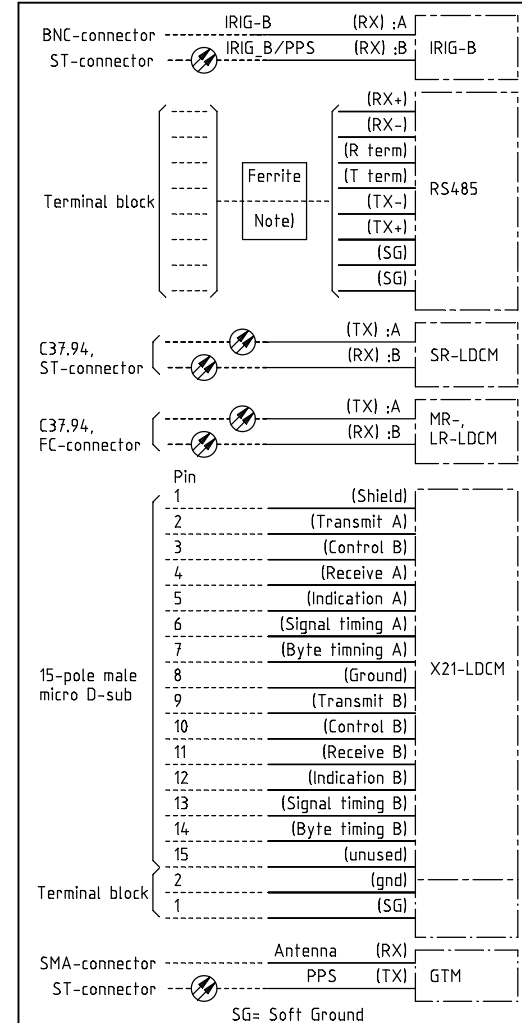
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IED with basic functionality and communication interfaces



Option



Slot	Module	Terminal
P30	NUM	-
P30:1	SLM	X301
P30:2	LDCM	X302
	IRIG-B	
	RS485	
P30:3	LDCM	X303
	RS485	
P31	ADM1	-
P31:1	OEM	X311
P31:2	LDCM	X312
	RS485	
	GTM	
P31:3	LDCM	X313
	RS485	
	GTM	
P32	ADM2	-
P32:1	Not in use	Not in use
P32:2	LDCM	X322
	RS485	
	GTM	
P32:3	LDCM	X323
	RS485	
	GTM	

NOTE !

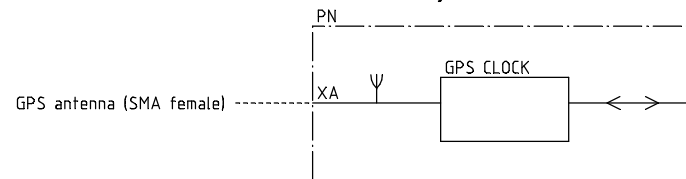
Always refer to ABB product configurator to determine valid HW configuration.

Note) RS485 input/output should be provided with a ferrite.
All conductors using one common ferrite.



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GPS time synchronization module (GSM)

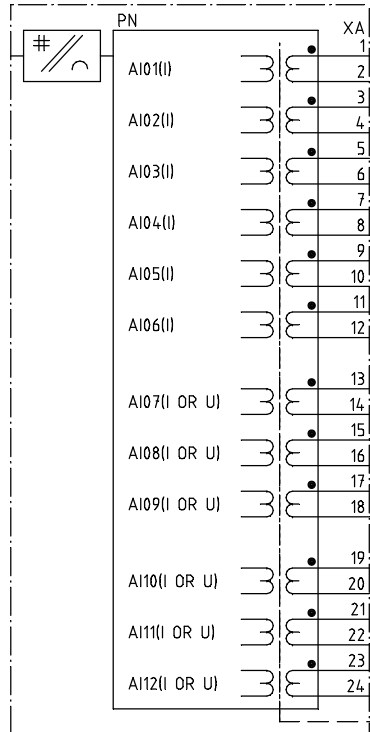


Type of CBM	PN=	XA=
1/2x19" casing with 1 TRM slot	P5	X51
3/4x19" casing with 1 TRM slot	P10	X101
3/4x19" casing with 2 TRM slots	P7	X71
1/1x19" casing with 1 TRM slot	P16	X161
1/1x19" casing with 2 TRM slots	P13	X131

Customer drw no		Prep.	PSTP/	TPLA	Agneta Rydh	2009-06-03	Connection Diagram 670 series Ver.1.2, IEC symbols				Cont. sh/ No of sh	
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Transformer input module (TRM)



PN= P40	PN= P41	Designation corresponding to Transformer input module																	
XA= X401:	XA= X411:	CT/VT input designation	Current/voltage configuration																
			6I	6I	6I+6U	6I+6U	3I+3I+6U	7I+5U	7I+5U	6I+1I+5U	3IM+4I+5U	3IM+4I+5U	3I+4I+5U	9I+3U	9I+3U	5I+4I+3U	12I	12I	
1, 2	1, 2	AI01	1A	5A	1A	5A	5A	1A	5A	5A	1AM *)	5AM *)	5A	1A	5A	1A	1A	5A	
3, 4	3, 4	AI02	1A	5A	1A	5A	5A	1A	5A	5A	1AM *)	5AM *)	5A	1A	5A	1A	1A	5A	
5, 6	5, 6	AI03	1A	5A	1A	5A	5A	1A	5A	5A	1AM *)	5AM *)	5A	1A	5A	1A	1A	5A	
7, 8	7, 8	AI04	1A	5A	1A	5A	1A	1A	5A	5A	1A	5A	1A	1A	5A	1A	1A	5A	
9, 10	9, 10	AI05	1A	5A	1A	5A	1A	1A	5A	5A	1A	5A	1A	1A	5A	1A	1A	5A	
11, 12	11, 12	AI06	1A	5A	1A	5A	1A	1A	5A	5A	1A	5A	1A	1A	5A	5A	1A	5A	
13, 14	13, 14	AI07	–	–	110–220V	110–220V	110–220V	1A	5A	1A	1A	5A	1A	1A	5A	5A	1A	5A	
15, 16	15, 16	AI08	–	–	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	1A	5A	5A	1A	5A	
17, 18	17, 18	AI09	–	–	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	1A	5A	5A	1A	5A	
19, 20	19, 20	AI10	–	–	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	1A	5A	
21, 22	21, 22	AI11	–	–	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	1A	5A	
23, 24	23, 24	AI12	–	–	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	110–220V	1A	5A	

- Indicates high polarity. Note that internal polarity can be adjusted by setting of analogue input CT neutral direction and or on SMAI pre-processing function blocks

*) Metering



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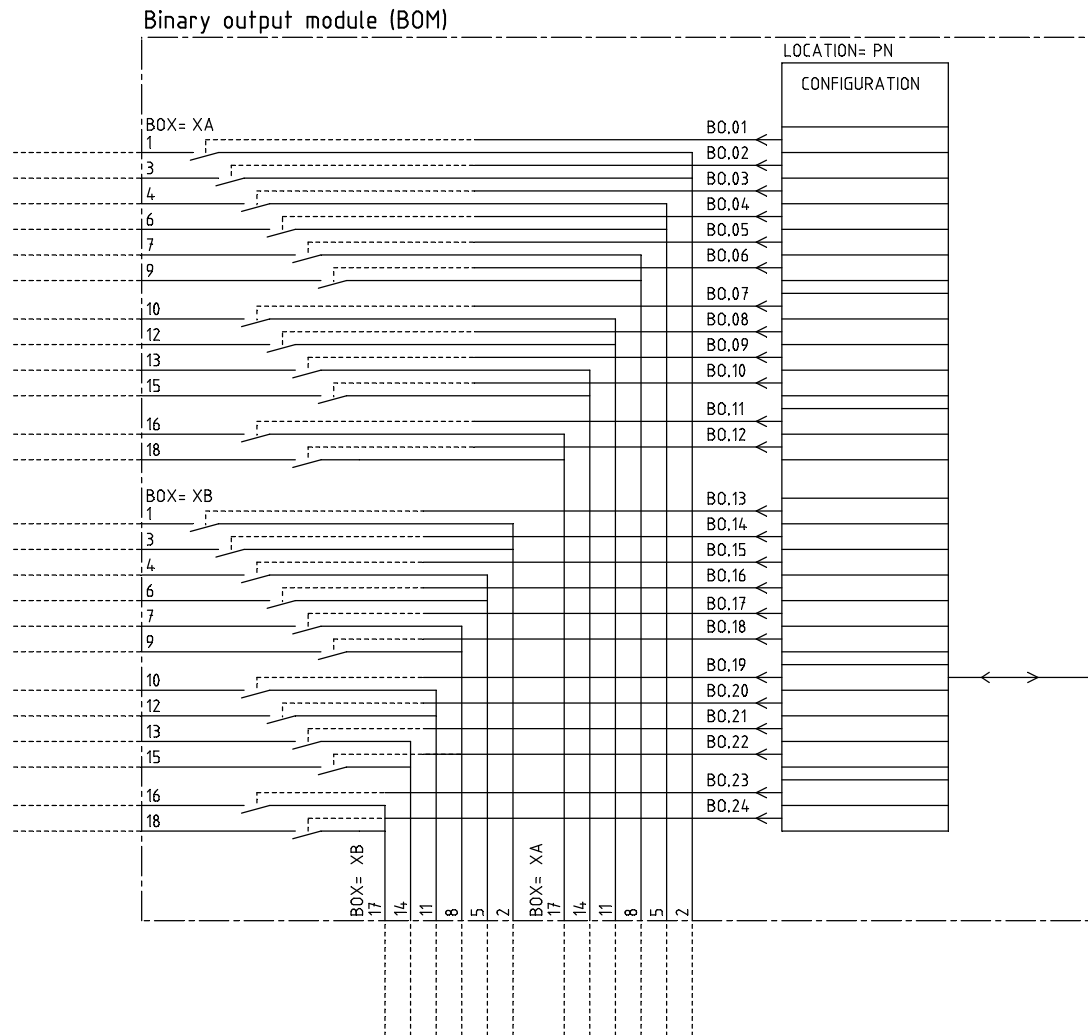
Binary input module (BIM)

		LOCATION= PN	
		CONFIGURATION	
BIX=XA			
1		//	
2	Bl.01	//	
3		//	
4	Bl.02	//	
5		//	
6	Bl.03	//	
7		//	
8	Bl.04	//	
9		//	
10	Bl.05	//	
11		//	
12	Bl.06	//	
13		//	
14	Bl.07	//	
15		//	
16	Bl.08	//	
BIX=XB			
1		//	
2	Bl.09	//	
3		//	
4	Bl.10	//	
5		//	
6	Bl.11	//	
7		//	
8	Bl.12	//	
9		//	
10	Bl.13	//	
11		//	
12	Bl.14	//	
13		//	
14	Bl.15	//	
15		//	
16	Bl.16	//	

AUX.VOLT. RL (DC)	
24/30V	
48/60V	
110/125V	
220/250V	

Designations in correspondence to the location in the rack		
PN=	XA=	XB=
P3	X31	X32
P4	X41	X42
P5	X51	X52
P6	X61	X62
P7	X71	X72
P8	X81	X82
P9	X91	X92
P10	X101	X102
P11	X111	X112
P12	X121	X122
P13	X131	X132
P14	X141	X142
P15	X151	X152
P16	X161	X162

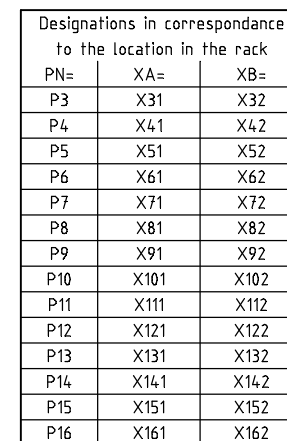
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Designations in correspondence to the location in the rack		
PN=	XA=	XB=
P3	X31	X32
P4	X41	X42
P5	X51	X52
P6	X61	X62
P7	X71	X72
P8	X81	X82
P9	X91	X92
P10	X101	X102
P11	X111	X112
P12	X121	X122
P13	X131	X132
P14	X141	X142
P15	X151	X152
P16	X161	X162

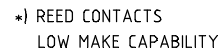
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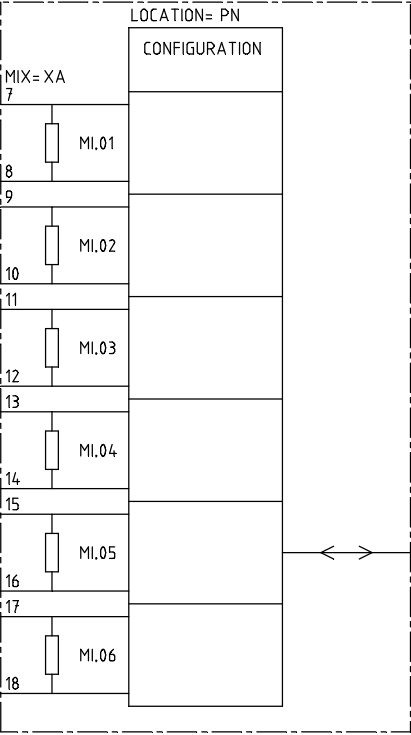
CONFIGURATION

Designations in correspondence to the location in the rack		
PN=	XA	XB=
P3	X31	X32
P4	X41	X42
P5	X51	X52
P6	X61	X62
P7	X71	X72
P8	X81	X82
P9	X91	X92
P10	X101	X102
P11	X111	X112
P12	X121	X122
P13	X131	X132
P14	X141	X142
P15	X151	X152
P16	X161	X162





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mA input module (MIM)



Designations in correspondance to the location in the rack	
PN=	XA=
P3	X31
P4	X41
P5	X51
P6	X61
P7	X71
P8	X81
P9	X91
P10	X101
P11	X111
P12	X121
P13	X131
P14	X141
P15	X151
P16	X161

Customer draw no		Prep.	PSTP/ TPLA	Agneta Rydh	2009-06-03	Connection Diagram 670 series Ver.1.2, IEC symbols			Cont. sh/
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