



Test Report				Date of issue: 4.6.2014					
				Serial No.: 3GF11094427					
				Order No.: 599608-1					
				Type: M3KP 160MLA 2 IMB3/IM1001					
				Product Code: 3GKP161410-ADH222					
				Protection type: Ex de IIB T4 Gb					
				Cert. No.: LCIE 11 ATEX 3087X / IECEx LCI 09.0008X					
Rating:									
	V	Hz	kW	r/min	A	cos φ	Duty		
3-Motor	690	Y 50	11	2931	11,4	0,89	S1		
Insul.cl.F	400	D 50	11	2931	19,7	0,89	S1		
IP55	415	D 50	11	2937	19,7	0,86	S1		
Eff class IE2		50Hz : IE2 - 90.1(100%) - 90.5(75%) - 89.6(50%)							
Resistance			Ambient: 20,0 °C		Insulation resistance at 41,5 °C		Overload		
Line			31000 MΩ		1000 V		Torque 160 % 15s		
U <sub>1</sub> - V <sub>1</sub>			0,50820 Ω						
U <sub>1</sub> - W <sub>1</sub>			0,50850 Ω						
V <sub>1</sub> - W <sub>1</sub>			0,50880 Ω						
				High-voltage test winding		2900 V 1 s			
Test	Torque [Nm]	Line U[V]	f[Hz]	Input I[A]	P1 [kW]	Output P2 [kW]	n[r/min]	cos φ	η [%]
No load test		400,0 D	50	6,40	0,53		2998	0,12	
Locked rotor test		78,1 D	50	19,7	1,09		0	0,41	
Thermal test ( 100% load )	35,8	400,0 D	50	20,3	12,3	11,0	2926	0,88	89,3
Partial load points:									
~75% load	26,8	400,1 D	50	15,7	9,21	8,25	2947	0,85	89,5
~50% load	17,8	400,0 D	50	11,6	6,23	5,50	2964	0,78	88,3
~25% load	9,1	400,1 D	50	8,18	3,34	2,75	2981	0,59	82,4
Temperature rise at rated load.				°C	K	Method		Measurement method	
Stator winding :				53,1	1	1		Resistance	
Frame :				20,2	2	2		Thermometer	
Bearing D-end :				36,0	2	3		Thermocouples	
Rotor :					3				
Ambient Temperature :				25,0	2				
Vibration:		D-end	↓ 0,65	→ 0,70	Starting current (I <sub>S</sub> / I <sub>N</sub> ) : 6,44				
		N-end	0,35	0,20	Locked rotor torque (T <sub>l</sub> / T <sub>N</sub> ) : 2,46				
		Axial	0,30		Breakdown torque (T <sub>b</sub> / T <sub>N</sub> ) : 3,38				
					Pull-up torque (T <sub>u</sub> / T <sub>N</sub> ) : 2,12				
Manufactured and tested in accordance with rules of IEC 60034-1 and IEC 60034-2-1.									
PLL determined from residual loss.									
On behalf of customer									
On behalf of manufacturer			Date of test		8.12.2011				
Tested by ABB Oy, Motors and Generators, Vaasa, Finland						Telephone +358 10 2211			
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