



Type Test Report				Date of issue: 25.11.2016																																													
Customer:				Serial No.:																																													
Customer ref.:				Type: M3BP 160MLD 4 Product Code: 3GBP162440-ADG																																													
Rating:				<table border="1"> <thead> <tr> <th>V</th> <th>Hz</th> <th>kW</th> <th>r/min</th> <th>A</th> <th>cos j</th> <th>Duty</th> </tr> </thead> <tbody> <tr> <td>690</td> <td>Y 50</td> <td>22,0</td> <td>1466</td> <td>23,7</td> <td>0,86</td> <td>S1</td> </tr> <tr> <td>400</td> <td>D 50</td> <td>22,0</td> <td>1466</td> <td>40,8</td> <td>0,86</td> <td>S1</td> </tr> <tr> <td>415</td> <td>D 50</td> <td>22,0</td> <td>1467</td> <td>40,3</td> <td>0,84</td> <td>S1</td> </tr> <tr> <td>440</td> <td>D 60</td> <td>22,0</td> <td>1766</td> <td>36,7</td> <td>0,85</td> <td>S1</td> </tr> <tr> <td>460</td> <td>D 60</td> <td>22,0</td> <td>1770</td> <td>35,4</td> <td>0,84</td> <td>S1</td> </tr> </tbody> </table>				V	Hz	kW	r/min	A	cos j	Duty	690	Y 50	22,0	1466	23,7	0,86	S1	400	D 50	22,0	1466	40,8	0,86	S1	415	D 50	22,0	1467	40,3	0,84	S1	440	D 60	22,0	1766	36,7	0,85	S1	460	D 60	22,0	1770	35,4	0,84	S1
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3-Motor Insul.cl.F IP55 Eff class IE2				50Hz : IE2 - 91,6%(100%) - 92,4%(75%) - 92,5%(50%) 60Hz : IE2 - 92,4%(100%)																																													
Resistance Line U ₁ - V ₁ U ₁ - W ₁ V ₁ - W ₁				Ambient: 20,8 °C 0,23720 W 0,23630 W 0,23700 W																																													
Insulation resistance at R > 2000 Mohm				21,9 °C 1000 V																																													
Overload Current 150 % 120s Torque 160 % 15s Speed 120 % 120s				High-voltage test winding 2400 V 60 s																																													
Test	Torque [Nm]	Line U[V]	f[Hz]	Input I[A]	P1 [kW]	Output P2 [kW]	n[r/min]	cos j	h [%]																																								
No load test		400 D	50	13,0	0,57		1500	0,06																																									
Locked rotor test		85 D	50	39,7	1,85		0	0,32																																									
Thermal test (100% load)	143,4	400 D	50	40,8	24,13	22,00	1466	0,85	91,19																																								
Partial load points:																																																	
~75% load	108,6	400 D	50	31,9	18,23	16,78	1475	0,82	92,06																																								
~50% load	72,6	400 D	50	23,5	12,25	11,29	1484	0,75	92,18																																								
~25% load	37,0	400 D	50	16,7	6,46	5,79	1492	0,56	89,56																																								
Temperature rise at rated load.				<table border="1"> <thead> <tr> <th>[°C]</th> <th>[K]</th> <th>Method</th> </tr> </thead> <tbody> <tr> <td>Stator winding :</td> <td>71,7</td> <td>1</td> </tr> <tr> <td>Frame :</td> <td>50,1</td> <td>2</td> </tr> <tr> <td>Bearing D-end :</td> <td>43,2</td> <td>2</td> </tr> <tr> <td>Ambient Temperature :</td> <td>22</td> <td>2</td> </tr> </tbody> </table>			[°C]	[K]	Method	Stator winding :	71,7	1	Frame :	50,1	2	Bearing D-end :	43,2	2	Ambient Temperature :	22	2	Measurement method 1 Resistance 2 Thermometer 3 Thermocouples																											
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These tests have been carried out on motor no. 3GV1110812205001, on date 2012-02-01 which is identical in electrical design with the above.																																																	
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																																																	
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Date of test																																																	
Tested by ABB AB, LV Motors, 721 70 Västerås, Sweden																																																	
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