



Test Report				Date of issue: 19.11.2015																																																					
				Type: M3JM 160MLA 4 Product Code: 3GJM162410-_DL Protection type: Ex d I Mb Cert. No.: LCIE 11 ATEX 3087X / IECEx LCI 09.0008X																																																					
Rating:		<table border="1"> <thead> <tr> <th></th> <th>V</th> <th>Hz</th> <th>kW</th> <th>r/min</th> <th>A</th> <th>cos φ</th> <th>Duty</th> </tr> </thead> <tbody> <tr> <td>3-Motor</td> <td>690</td> <td>Y 50</td> <td>11,0</td> <td>1477</td> <td>12,2</td> <td>0,82</td> <td>S1</td> </tr> <tr> <td>Insul.cl.F</td> <td>400</td> <td>D 50</td> <td>11,0</td> <td>1477</td> <td>21,1</td> <td>0,82</td> <td>S1</td> </tr> <tr> <td>IP66</td> <td>415</td> <td>D 50</td> <td>11,0</td> <td>1479</td> <td>20,5</td> <td>0,81</td> <td>S1</td> </tr> <tr> <td>Eff class IE3</td> <td>440</td> <td>D 60</td> <td>11,0</td> <td>1778</td> <td>18,9</td> <td>0,83</td> <td>S1</td> </tr> <tr> <td></td> <td>460</td> <td>D 60</td> <td>11,0</td> <td>1777</td> <td>18,2</td> <td>0,82</td> <td>S1</td> </tr> </tbody> </table> 50Hz: IE3-91,4%(100%)-91,8%(75%)-91,1%(50%) 60Hz: IE3-92,4%(100%)									V	Hz	kW	r/min	A	cos φ	Duty	3-Motor	690	Y 50	11,0	1477	12,2	0,82	S1	Insul.cl.F	400	D 50	11,0	1477	21,1	0,82	S1	IP66	415	D 50	11,0	1479	20,5	0,81	S1	Eff class IE3	440	D 60	11,0	1778	18,9	0,83	S1		460	D 60	11,0	1777	18,2	0,82	S1
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Resistance		Ambient: 21 °C Line U ₁ - V ₁ 0,45510 Ω U ₁ - W ₁ 0,45480 Ω V ₁ - W ₁ 0,45550 Ω				Insulation resistance at 68 °C 2000 MΩ 1000 V		Overload Torque 160% 15s																																																	
		High-voltage test winding 1900 V 60 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		400,1 D	50	8,34	0,35		1498	0,06																																																	
Locked rotor test		78,5 D	50	20,5	0,93		0	0,33																																																	
Thermal test (100% load)	71,0	400,6 D	50	21,1	12,0	11,0	1477	0,82	92,0																																																
Partial load points:																																																									
~75% load	53,3	400,7 D	50	16,8	8,93	8,25	1484	0,77	92,4																																																
~50% load	35,5	400,9 D	50	13,0	6,00	5,50	1490	0,67	91,7																																																
~25% load	17,7	401,5 D	50	10,1	3,14	2,75	1495	0,45	87,5																																																
Temperature rise at rated load.		<table border="1"> <thead> <tr> <th></th> <th>[°C]</th> <th>[K]</th> <th>Method</th> </tr> </thead> <tbody> <tr> <td>Stator winding :</td> <td></td> <td>38</td> <td>1</td> </tr> <tr> <td>Frame :</td> <td></td> <td>20</td> <td>2</td> </tr> <tr> <td>Bearing D-end :</td> <td></td> <td>23</td> <td>2</td> </tr> <tr> <td>Rotor:</td> <td></td> <td>51</td> <td>3</td> </tr> <tr> <td>Ambient Temperature :</td> <td>25</td> <td></td> <td>2</td> </tr> </tbody> </table>					[°C]	[K]	Method	Stator winding :		38	1	Frame :		20	2	Bearing D-end :		23	2	Rotor:		51	3	Ambient Temperature :	25		2	Measurement method 1 Resistance 2 Thermocouples 3 Thermometer																											
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These tests have been carried out on motor no. 3G1P141700173, on date 2014-06-03 which is identical in 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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Tested by Asea Brown Boveri, S.A., Fabrica Motores , 08192 Sant Quirze del Valles , Spain						Telephone +34 93 728 85 00 Telefax +34 93 728 85 33																																																			

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