



Test Report				Date of issue: 23.11.2015																																																																																											
				Type: M3JM 315SMB 4																																																																																											
				Product Code: 3GJM312220-_DG																																																																																											
				Protection type: Ex d I Mb																																																																																											
				Cert. No.: LCIE 11 ATEX 3090X / IECEX LCI 04.0007X																																																																																											
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> <th colspan="2"></th> </tr> </thead> <tbody> <tr> <td>3~Motor</td> <td>690</td> <td>Y 50</td> <td>132</td> <td>1487</td> <td>134</td> <td>0,86</td> <td>S1</td> <td colspan="2"></td> </tr> <tr> <td>Insul.cl.F</td> <td>400</td> <td>D 50</td> <td>132</td> <td>1487</td> <td>232</td> <td>0,86</td> <td>S1</td> <td colspan="2"></td> </tr> <tr> <td>IP66</td> <td>415</td> <td>D 50</td> <td>132</td> <td>1488</td> <td>226</td> <td>0,85</td> <td>S1</td> <td colspan="2"></td> </tr> <tr> <td>Eff class IE2</td> <td colspan="9">50Hz: IE2 - 95,4%(100%) - 95,4%(75%) - 94,7%(50%)</td> </tr> </tbody> </table>											V	Hz	kW	r/min	A	cos φ	Duty			3~Motor	690	Y 50	132	1487	134	0,86	S1			Insul.cl.F	400	D 50	132	1487	232	0,86	S1			IP66	415	D 50	132	1488	226	0,85	S1			Eff class IE2	50Hz: IE2 - 95,4%(100%) - 95,4%(75%) - 94,7%(50%)																																												
	V	Hz	kW	r/min	A	cos φ	Duty																																																																																								
3~Motor	690	Y 50	132	1487	134	0,86	S1																																																																																								
Insul.cl.F	400	D 50	132	1487	232	0,86	S1																																																																																								
IP66	415	D 50	132	1488	226	0,85	S1																																																																																								
Eff class IE2	50Hz: IE2 - 95,4%(100%) - 95,4%(75%) - 94,7%(50%)																																																																																														
Resistance				Insulation resistance at 60 °C				Overload																																																																																							
Line Ambient: 21 °C				15000 MΩ 1000 V				Torque 160 % 15s																																																																																							
U <sub>1</sub> - V <sub>1</sub>				0,01680 Ω																																																																																											
U <sub>1</sub> - W <sub>1</sub>				0,01679 Ω																																																																																											
V <sub>1</sub> - W <sub>1</sub>				0,01678 Ω																																																																																											
				High-voltage test winding 2400 V				60 s																																																																																							
<table border="1"> <thead> <tr> <th rowspan="2">Test</th> <th rowspan="2">Torque [Nm]</th> <th colspan="2">Line</th> <th colspan="2">Input</th> <th colspan="2">Output</th> <th rowspan="2">cos φ</th> <th rowspan="2">η [%]</th> </tr> <tr> <th>U[V]</th> <th>f[Hz]</th> <th>I[A]</th> <th>P1 [kW]</th> <th>P2 [kW]</th> <th>η[r/min]</th> </tr> </thead> <tbody> <tr> <td>No load test</td> <td></td> <td>400,0</td> <td>D 50</td> <td>72,1</td> <td>2,19</td> <td></td> <td>1500</td> <td>0,04</td> <td></td> </tr> <tr> <td>Locked rotor test</td> <td></td> <td>73,9</td> <td>D 50</td> <td>232,0</td> <td>9,42</td> <td></td> <td>0</td> <td>0,32</td> <td></td> </tr> <tr> <td>Thermal test (100% load)</td> <td>847,7</td> <td>400,0</td> <td>D 50</td> <td>234,8</td> <td>138,3</td> <td>132,0</td> <td>1487</td> <td>0,85</td> <td>95,4</td> </tr> <tr> <td>Partial load points:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>~75% load</td> <td>631,0</td> <td>400,1</td> <td>D 50</td> <td>181,5</td> <td>103,5</td> <td>99,0</td> <td>1491</td> <td>0,82</td> <td>95,7</td> </tr> <tr> <td>~50% load</td> <td>427,5</td> <td>400,1</td> <td>D 50</td> <td>133,5</td> <td>69,2</td> <td>66,0</td> <td>1494</td> <td>0,75</td> <td>95,4</td> </tr> <tr> <td>~25% load</td> <td>215,0</td> <td>400,1</td> <td>D 50</td> <td>93,9</td> <td>35,5</td> <td>33,0</td> <td>1497</td> <td>0,55</td> <td>93,1</td> </tr> </tbody> </table>										Test	Torque [Nm]	Line		Input		Output		cos φ	η [%]	U[V]	f[Hz]	I[A]	P1 [kW]	P2 [kW]	η[r/min]	No load test		400,0	D 50	72,1	2,19		1500	0,04		Locked rotor test		73,9	D 50	232,0	9,42		0	0,32		Thermal test (100% load)	847,7	400,0	D 50	234,8	138,3	132,0	1487	0,85	95,4	Partial load points:										~75% load	631,0	400,1	D 50	181,5	103,5	99,0	1491	0,82	95,7	~50% load	427,5	400,1	D 50	133,5	69,2	66,0	1494	0,75	95,4	~25% load	215,0	400,1	D 50	93,9	35,5	33,0	1497	0,55	93,1
Test	Torque [Nm]	Line		Input		Output		cos φ	η [%]																																																																																						
		U[V]	f[Hz]	I[A]	P1 [kW]	P2 [kW]	η[r/min]																																																																																								
No load test		400,0	D 50	72,1	2,19		1500	0,04																																																																																							
Locked rotor test		73,9	D 50	232,0	9,42		0	0,32																																																																																							
Thermal test (100% load)	847,7	400,0	D 50	234,8	138,3	132,0	1487	0,85	95,4																																																																																						
Partial load points:																																																																																															
~75% load	631,0	400,1	D 50	181,5	103,5	99,0	1491	0,82	95,7																																																																																						
~50% load	427,5	400,1	D 50	133,5	69,2	66,0	1494	0,75	95,4																																																																																						
~25% load	215,0	400,1	D 50	93,9	35,5	33,0	1497	0,55	93,1																																																																																						
Temperature rise at rated load.				[°C]		[K]		Method		Measurement method																																																																																					
Stator winding :				62		1				1 Resistance																																																																																					
Frame :				27		2				2 Thermocouples																																																																																					
Bearing D-end :				46		2				3 Thermometer																																																																																					
Ambient Temperature :				25		2																																																																																									
<p>These tests have been carried out on motor no. 3GF10021467, on date 2010-04-20, which is identical in electrical design with the above.</p> <p>Manufactured and tested in accordance with rules of IEC 60034-1 and IEC 60034-2-1. PLL determined from residual loss.</p>																																																																																															
On behalf of customer																																																																																															
On behalf of manufacturer																																																																																															
Tested by ABB Oy, Motors and Generators, Vaasa, Finland						Telephone +358 10 2211 Telefax +358 10 22 47372																																																																																									

Computer print-out valid without signature.