



Test Report				Date of issue: 19.11.2015																																																																																					
				Type: M3JM 280SMC 6																																																																																					
				Product Code: 3GJM283230- DK																																																																																					
				Protection type: Ex d I Mb																																																																																					
				Cert. No.: LCIE 11 ATEX 3089 X / IECEx LCI 04.0006X																																																																																					
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>55</td> <td>990</td> <td>57,5</td> <td>0,85</td> <td>S1</td> </tr> <tr> <td>Insul.cl.F</td> <td>400</td> <td>D 50</td> <td>55</td> <td>990</td> <td>99,4</td> <td>0,85</td> <td>S1</td> </tr> <tr> <td>IP66</td> <td>660</td> <td>Y 50</td> <td>55</td> <td>989</td> <td>59,5</td> <td>0,86</td> <td>S1</td> </tr> <tr> <td></td> <td>380</td> <td>D 50</td> <td>55</td> <td>989</td> <td>103</td> <td>0,86</td> <td>S1</td> </tr> <tr> <td></td> <td>415</td> <td>D 50</td> <td>55</td> <td>991</td> <td>96,6</td> <td>0,84</td> <td>S1</td> </tr> <tr> <td></td> <td>460</td> <td>D 60</td> <td>55</td> <td>1190</td> <td>86,2</td> <td>0,85</td> <td>S1</td> </tr> <tr> <td>Eff class IE3</td> <td colspan="7">50Hz : IE3 - 95.0%(100%)-95.5%(75%)-95.3%(50%)</td> <td></td> </tr> <tr> <td></td> <td colspan="7">60Hz : IE3 - 95.3%(100%)</td> <td></td> </tr> </tbody> </table>											V	Hz	kW	r/min	A	cos φ	Duty	3-Motor	690	Y 50	55	990	57,5	0,85	S1	Insul.cl.F	400	D 50	55	990	99,4	0,85	S1	IP66	660	Y 50	55	989	59,5	0,86	S1		380	D 50	55	989	103	0,86	S1		415	D 50	55	991	96,6	0,84	S1		460	D 60	55	1190	86,2	0,85	S1	Eff class IE3	50Hz : IE3 - 95.0%(100%)-95.5%(75%)-95.3%(50%)									60Hz : IE3 - 95.3%(100%)													
	V	Hz	kW	r/min	A	cos φ	Duty																																																																																		
3-Motor	690	Y 50	55	990	57,5	0,85	S1																																																																																		
Insul.cl.F	400	D 50	55	990	99,4	0,85	S1																																																																																		
IP66	660	Y 50	55	989	59,5	0,86	S1																																																																																		
	380	D 50	55	989	103	0,86	S1																																																																																		
	415	D 50	55	991	96,6	0,84	S1																																																																																		
	460	D 60	55	1190	86,2	0,85	S1																																																																																		
Eff class IE3	50Hz : IE3 - 95.0%(100%)-95.5%(75%)-95.3%(50%)																																																																																								
	60Hz : IE3 - 95.3%(100%)																																																																																								
Resistance				Insulation resistance at 50 °C				Overload																																																																																	
Line Ambient: 22 °C				31000 MΩ 1000 V				Torque 160 % 15s																																																																																	
U ₁ - V ₁ 0,05214 Ω																																																																																									
U ₁ - W ₁ 0,05220 Ω																																																																																									
V ₁ - W ₁ 0,05217 Ω																																																																																									
				High-voltage test winding 2400 V				60 s																																																																																	
<table border="1"> <thead> <tr> <th>Test</th> <th>Torque [Nm]</th> <th>Line U[V]</th> <th>f[Hz]</th> <th>Input I[A]</th> <th>P1 [kW]</th> <th>Output P2 [kW]</th> <th>n[r/min]</th> <th>cos φ</th> <th>η [%]</th> </tr> </thead> <tbody> <tr> <td>No load test</td> <td></td> <td>400,0 D</td> <td>50</td> <td>35,1</td> <td>0,91</td> <td></td> <td>1000</td> <td>0,04</td> <td></td> </tr> <tr> <td>Locked rotor test</td> <td></td> <td>73,7 D</td> <td>50</td> <td>96,7</td> <td>3,74</td> <td></td> <td>0</td> <td>0,30</td> <td></td> </tr> <tr> <td>Thermal test (100% load)</td> <td>506,0</td> <td>400,0 D</td> <td>50</td> <td>99,4</td> <td>57,7</td> <td>55,0</td> <td>990</td> <td>0,84</td> <td>95,3</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>396,3</td> <td>400,1 D</td> <td>50</td> <td>77,5</td> <td>43,2</td> <td>41,3</td> <td>993</td> <td>0,80</td> <td>95,6</td> </tr> <tr> <td>~50% load</td> <td>263,8</td> <td>400,1 D</td> <td>50</td> <td>58,1</td> <td>28,8</td> <td>27,5</td> <td>996</td> <td>0,72</td> <td>95,3</td> </tr> <tr> <td>~25% load</td> <td>131,5</td> <td>400,0 D</td> <td>50</td> <td>42,7</td> <td>14,8</td> <td>13,8</td> <td>998</td> <td>0,50</td> <td>93,1</td> </tr> </tbody> </table>										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	35,1	0,91		1000	0,04		Locked rotor test		73,7 D	50	96,7	3,74		0	0,30		Thermal test (100% load)	506,0	400,0 D	50	99,4	57,7	55,0	990	0,84	95,3	Partial load points:										~75% load	396,3	400,1 D	50	77,5	43,2	41,3	993	0,80	95,6	~50% load	263,8	400,1 D	50	58,1	28,8	27,5	996	0,72	95,3	~25% load	131,5	400,0 D	50	42,7	14,8	13,8	998	0,50	93,1
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	35,1	0,91		1000	0,04																																																																																	
Locked rotor test		73,7 D	50	96,7	3,74		0	0,30																																																																																	
Thermal test (100% load)	506,0	400,0 D	50	99,4	57,7	55,0	990	0,84	95,3																																																																																
Partial load points:																																																																																									
~75% load	396,3	400,1 D	50	77,5	43,2	41,3	993	0,80	95,6																																																																																
~50% load	263,8	400,1 D	50	58,1	28,8	27,5	996	0,72	95,3																																																																																
~25% load	131,5	400,0 D	50	42,7	14,8	13,8	998	0,50	93,1																																																																																
Temperature rise at rated load.																																																																																									
				[°C]		[K]		Method																																																																																	
Stator winding :				37		1		1 Resistance																																																																																	
Frame :				22		2		2 Thermocouples																																																																																	
Bearing D-end :				30		2		3 Thermometer																																																																																	
Rotor:				47		3																																																																																			
Ambient Temperature :				25		2																																																																																			
<p>These tests have been carried out on motor no. 3GF10022328, on date 2010-04-26 which is identical in 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.