



| Type Test Report | | | | Date of issue: 4.11.2015 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---------------------------------------------------|--------------|--------------------------------------------------------|--------------------|-------|-------|----|----|-------|---|-------|------|-----|------|------|-----|------|------|----|-----|------|------|-----|------|------|----|-----|------|------|------|------|------|----|
| Customer: | | | | Serial No.: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Customer ref.: | | | | Type: M3AA 132 S 6 Product Code: 3GAA133100-DE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rating: | | <table border="1"> <thead> <tr> <th>V</th> <th>Hz</th> <th>kW</th> <th>r/min</th> <th>A</th> <th>η [%]</th> <th>Duty</th> </tr> </thead> <tbody> <tr> <td>690</td> <td>Y 50</td> <td>3,00</td> <td>960</td> <td>4,46</td> <td>0,65</td> <td>S1</td> </tr> <tr> <td>400</td> <td>D 50</td> <td>3,00</td> <td>960</td> <td>7,69</td> <td>0,65</td> <td>S1</td> </tr> <tr> <td>460</td> <td>D 60</td> <td>3,00</td> <td>1161</td> <td>6,84</td> <td>0,67</td> <td>S1</td> </tr> </tbody> </table> | | | | | | | V | Hz | kW | r/min | A | η [%] | Duty | 690 | Y 50 | 3,00 | 960 | 4,46 | 0,65 | S1 | 400 | D 50 | 3,00 | 960 | 7,69 | 0,65 | S1 | 460 | D 60 | 3,00 | 1161 | 6,84 | 0,67 | S1 |
| V | Hz | kW | r/min | A | η [%] | Duty | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 690 | Y 50 | 3,00 | 960 | 4,46 | 0,65 | S1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 400 | D 50 | 3,00 | 960 | 7,69 | 0,65 | S1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 460 | D 60 | 3,00 | 1161 | 6,84 | 0,67 | S1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eff class IE2 | | 50Hz : IE2 - 83,3%(100%) - 82,9%(75%) - 80,5%(50%) 60Hz : IE1 - 85,4%(100%) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Resistance Line | | Ambient: 19,0 °C | | Insulation resistance at 18 °C | | Overload | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U ₁ - V ₁ | | 3,02100 Ω | | R > 2000 Mohm | | 1000 V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U ₁ - W ₁ | | 3,00900 Ω | | | | Current 150 % 120s | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| V ₁ - W ₁ | | 3,01300 Ω | | | | Torque 160 % 15s | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | 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 φ | η [%] | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No load test | | 400 D | 50 | 5,1 | 0,28 | | 1000 | 0,08 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Locked rotor test | | 118 D | 50 | 7,8 | 0,62 | | 0 | 0,39 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thermal test (100% load) | 29,8 | 400 D | 50 | 7,6 | 3,68 | 3,00 | 961 | 0,69 | 81,60 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Partial load points: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ~75% load | 22,1 | 400 D | 50 | 6,4 | 2,74 | 2,25 | 973 | 0,61 | 82,00 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ~50% load | 14,6 | 400 D | 50 | 5,5 | 1,88 | 1,50 | 983 | 0,49 | 79,80 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ~25% load | 7,2 | 400 D | 50 | 4,9 | 1,07 | 0,75 | 992 | 0,31 | 70,40 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Temperature rise at rated load. | | [°C] | | [K] | Method | | Measurement method | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stator winding : | | | | 48,0 | 3 | | 1 Resistance | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Frame : | | | | 21,0 | 3 | | 2 Thermometer | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bearing D-end : | | | | 38,6 | 3 | | 3 Thermocouples | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ambient Temperature : | | 25 | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>These tests have been carried out on motor no. 3GE080813T3006, on date 2008-04-14 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 | | | | | Date of test | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Computer print-out valid without signature.