



| Type Test Report | | | | | Date of issue: 2012.03.19 | | | | | | |
|---|-------------|-----------|--------------|------------|---|----------------|----------|-----------|--------------------|------------------------------|------|
| Customer: | | | | | Serial No.: 3GE121111S5502 | | | | | | |
| | | | | | Type: M3AA 112 MB 2 HO | | | | | Product Code: 3GAA111102-_SE | |
| Customer ref.: | | | | | | | | | | | |
| Rating: | | | | | V | Hz | kW | r/min | A | cos φ | Duty |
| 3~Motor | | | | | 230 | D 50 | 5,50 | 2870 | 18,10 | 0,87 | S1 |
| Insul.cl.F | | | | | 400 | Y 50 | 5,50 | 2870 | 10,50 | 0,87 | S1 |
| IP55 | | | | | 460 | Y 60 | 5,50 | 3490 | 8,90 | 0,87 | S1 |
| Eff class IE1 | | | | | 50Hz : IE1 - 86,4(100%) - 88,2(75%) - 88(50%) | | | | | | |
| | | | | | 60Hz : IE1 - 88,2(100%) | | | | | | |
| Resistance | | | | | Insulation resistance at 25 °C | | | | | Overload | |
| Line | | | | | R > 2000 Mohm 1000 V | | | | | Current 150 % 120s | |
| U ₁ - V ₁ | | | | | Ambient: 15,1 °C | | | | | Torque 160 % 15s | |
| U ₁ - W ₁ | | | | | 1,61000 Ω | | | | | Speed 120 % 120s | |
| V ₁ - W ₁ | | | | | 1,61100 Ω | | | | | | |
| | | | | | 1,61200 Ω | | | | | | |
| | | | | | 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 Y | 50 | 3,8 | 0,26 | | 3000 | 0,10 | | | |
| Locked rotor test | | 71,9 Y | 50 | 10,2 | 0,80 | | 0 | 0,63 | | | |
| Thermal test (100% load) | 18,3 | 400 Y | 50 | 10,3 | 6,48 | 5,50 | 2871 | 0,90 | 84,90 | | |
| Partial load points: | | | | | | | | | | | |
| ~75% load | 13,6 | 400 Y | 50 | 8,0 | 4,77 | 4,13 | 2906 | 0,86 | 86,50 | | |
| ~50% load | 8,9 | 400 Y | 50 | 5,9 | 3,17 | 2,75 | 2941 | 0,77 | 86,70 | | |
| ~25% load | 4,4 | 400 Y | 50 | 4,4 | 1,68 | 1,38 | 2971 | 0,55 | 82,00 | | |
| Temperature rise at rated load. | | | | | °C | K | Method | | Measurement method | | |
| Stator winding : | | | | | 79,9 | 3 | | | 1 Resistance | | |
| Frame : | | | | | 35 | 3 | | | 2 Thermometer | | |
| Bearing D-end : | | | | | 42,1 | 3 | | | 3 Thermocouples | | |
| Ambient Temperature : | | | | | 25 | 3 | | | | | |
| 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 | | | | | | | | | | | |
| On behalf of manufacturer | | | Date of test | | | 15.3.2012 | | | | | |
| Tested by Asea Brown Boveri, S.A., Fabrica Motores , 08192 Sant Quirze del Valles , Spain | | | | | | | | Telephone | | +34 93 728 85 00 | |
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