



| Type Test Report | | | | Date of issue: 2011.12.28 | | | | | | | |
|--|-------------|-----------|--------------|--|---------|----------------|-----------|--|------------------|------|--|
| Customer: | | | | Serial No.: 3GE081610T0228 | | | | | | | |
| | | | | Type: M3AA 112MB 2 Product Code: 3GAA111312-DE | | | | | | | |
| Customer ref.: | | | | | | | | | | | |
| Rating: | | | | V | Hz | kW | r/min | A | cos φ | Duty | |
| 3~Motor | | | | 690 | Y 50 | 4,0 | 2885 | 4,30 | 0,88 | S1 | |
| Insul.cl.F | | | | 400 | D 50 | 4,0 | 2885 | 7,60 | 0,88 | S1 | |
| IP55 | | | | 460 | D 60 | 4,0 | 3490 | 6,20 | 0,91 | S1 | |
| Eff class IE2 | | | | 50Hz : IE2 - 86,1(100%) - 87,0(75%) - 88,0(50%) 60Hz : IE2 - 87,6(100%) | | | | | | | |
| Resistance | | | | Insulation resistance at 22 °C | | | | Overload | | | |
| Line Ambient: 19,0 °C | | | | R > 2000 Mohm 1000 V | | | | Current 150 % 120s Torque 160 % 15s Speed 120 % 120s | | | |
| U ₁ - V ₁ | | | | 2,41100 Ω | | | | | | | |
| U ₁ - W ₁ | | | | 2,41200 Ω | | | | | | | |
| V ₁ - W ₁ | | | | 2,41300 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 D | 50 | 1,97 | 0,18 | | 3000 | 0,13 | | | |
| Locked rotor test | | 67 D | 50 | 7,5 | 0,51 | | 0 | 0,58 | | | |
| Thermal test (100% load) | 13,2 | 400 D | 50 | 7,1 | 4,63 | 4,00 | 2884 | 0,93 | 86,30 | | |
| Partial load points: | | | | | | | | | | | |
| ~75% load | 9,8 | 400 D | 50 | 5,4 | 3,42 | 3,00 | 2914 | 0,91 | 87,80 | | |
| ~50% load | 6,5 | 400 D | 50 | 3,7 | 2,28 | 2,00 | 2941 | 0,87 | 87,70 | | |
| ~25% load | 3,2 | 400 D | 50 | 2,4 | 1,19 | 1,00 | 2972 | 0,70 | 83,90 | | |
| Temperature rise at rated load. | | | | °C | K | Method | | Measurement method | | | |
| Stator winding : | | | | 60,8 | 3 | | | 1 Resistance | | | |
| Frame : | | | | 29,0 | 3 | | | 2 Thermometer | | | |
| Bearing D-end : | | | | 40,0 | 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 | | | 16.5.2008 | | | | | |
| 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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