



| Type Test Report | | | | | Date of issue: 2011.12.28 | | | | | | |
|---|-------------|-----------|--------------|------------|---|----------------|----------|-----------|--------------------|------------------------------|------|
| Customer: | | | | | Serial No.: 3GE074513T0331 | | | | | | |
| | | | | | Type: M3AA 132SME 2 HO | | | | | Product Code: 3GAA131008-_SE | |
| Customer ref.: | | | | | | | | | | | |
| Rating: | | | | | V | Hz | kW | r/min | A | cos φ | Duty |
| 3~Motor | | | | | 230 | D 50 | 22,0 | 2890 | 71,70 | 0,85 | S1 |
| Insul.cl.F | | | | | 400 | Y 50 | 22,0 | 2890 | 41,40 | 0,85 | S1 |
| IP55 | | | | | 460 | Y 60 | 22,0 | 3495 | 35,00 | 0,86 | S1 |
| Eff class IE1 | | | | | 50Hz : IE1 - 90,2(100%) - 91,0(75%) - 90,9(50%) | | | | | | |
| | | | | | 60Hz : IE1 - 91,6(100%) | | | | | | |
| Resistance | | | | | Insulation resistance at 22 °C | | | | | Overload | |
| Line | | | | | R > 2000 Mohm 1000 V | | | | | Current 150 % 120s | |
| U ₁ - V ₁ | | | | | Ambient: 17,0 °C | | | | | Torque 160 % 15s | |
| U ₁ - W ₁ | | | | | 0,21900 Ω | | | | | Speed 120 % 120s | |
| V ₁ - W ₁ | | | | | 0,22000 Ω | | | | | | |
| | | | | | 0,21900 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 | 14,3 | 0,65 | | 3000 | 0,07 | | | |
| Locked rotor test | | 60 Y | 50 | 41,0 | 1,84 | | 0 | 0,43 | | | |
| Thermal test (100% load) | 72,7 | 400 Y | 50 | 40,2 | 24,53 | 22,00 | 2888 | 0,88 | 89,70 | | |
| Partial load points: | | | | | | | | | | | |
| ~75% load | 54,0 | 400 Y | 50 | 31,3 | 18,23 | 16,50 | 2916 | 0,84 | 90,50 | | |
| ~50% load | 35,6 | 400 Y | 50 | 23,3 | 12,15 | 11,00 | 2947 | 0,75 | 90,50 | | |
| ~25% load | 17,7 | 400 Y | 50 | 16,5 | 6,31 | 5,50 | 2970 | 0,55 | 87,10 | | |
| Temperature rise at rated load. | | | | | °C | K | Method | | Measurement method | | |
| Stator winding : | | | | | 91,7 | 3 | | | 1 Resistance | | |
| Frame : | | | | | 30,0 | 3 | | | 2 Thermometer | | |
| Bearing D-end : | | | | | 37,0 | 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 | | | 27.11.2007 | | | | | |
| 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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Computer print-out valid without signature.