



| Test Report | | | | Date of issue: 19.11.2015 | | | | | |
|---|----------------|-----------|--------------------------------|---|----------------------------|----------------|--------------------------|-------|-------|
| | | | | Type: M3JM 180MLA 2 | | | | | |
| | | | | Product Code: 3GJP181410-_DL | | | | | |
| | | | | Protection type: Ex d I Mb | | | | | |
| | | | | Cert. No.: LCIE 11 ATEX 3088X / IECEx LCI 09.0009X | | | | | |
| Rating: | | | | | | | | | |
| | V | Hz | kW | r/min | A | cos φ | Duty | | |
| 3-Motor | 690 | Y 50 | 22,0 | 2956 | 21,8 | 0,90 | S1 | | |
| Insul.cl.F | 400 | D 50 | 22,0 | 2956 | 37,7 | 0,90 | S1 | | |
| IP66 | 415 | D 50 | 22,0 | 2959 | 36,7 | 0,89 | S1 | | |
| Eff class IE3 | 440 | D 60 | 22,0 | 3557 | 34,1 | 0,90 | S1 | | |
| | 460 | D 60 | 22,0 | 3560 | 33,0 | 0,89 | S1 | | |
| 50Hz: IE3-92,7%(100%)-93,1%(75%)-92,7%(50%) 60Hz: IE3-91,7%(100%) | | | | | | | | | |
| Resistance | | | Insulation resistance at 82 °C | | | Overload | | | |
| Line | Ambient: 26 °C | 2000 MΩ | | 1000 V | Torque 160% 15s | | | | |
| U ₁ - V ₁ | 0,21410 Ω | | | | | | | | |
| U ₁ - W ₁ | 0,21400 Ω | | | | | | | | |
| V ₁ - W ₁ | 0,21330 Ω | | | | | | | | |
| | | | High-voltage test winding | | | 1900 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 | | 400,4 D | 50 | 10,4 | 0,49 | | 2998 | 0,07 | |
| Locked rotor test | | 65,8 D | 50 | 38,0 | 1,86 | | 0 | 0,43 | |
| Thermal test (100% load) | 71,2 | 400,1 D | 50 | 37,7 | 23,5 | 22,0 | 2956 | 0,90 | 93,7 |
| Partial load points: | | | | | | | | | |
| ~75% load | 53,4 | 402,5 D | 50 | 28,8 | 17,5 | 16,5 | 2968 | 0,88 | 94,1 |
| ~50% load | 35,5 | 400,6 D | 50 | 20,8 | 11,7 | 11,0 | 2979 | 0,82 | 93,7 |
| ~25% load | 17,8 | 400,8 D | 50 | 14,0 | 6,06 | 5,50 | 2989 | 0,63 | 90,8 |
| Temperature rise at rated load. | | [°C] | | [K] | Method | | Measurement method | | |
| Stator winding : | | 54 | | 54 | 1 | | 1 Resistance | | |
| Frame : | | 24 | | 24 | 2 | | 2 Thermocouples | | |
| Bearing D-end : | | 24 | | 24 | 2 | | 3 Thermometer | | |
| Rotor : | | 68 | | 68 | 3 | | | | |
| Ambient Temperature : | | 25 | | 25 | 2 | | | | |
| <p>These tests have been carried out on motor no. 3G1P141700177, on date 2014-06-13 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 | | | | | | | | | |
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Computer print-out valid without signature.