



| Test Report | | | | Date of issue: 25.5.2015 | | | | | | |
|---|-------------|---|------|---|------------|------------------------------|--------------------|----------------------------|-------|-------|
| Customer: | | | | Serial No.: | | | | | | |
| Customer ref.: | | | | Order No.: | | | | | | |
| | | | | Type: M3JP 180MLA 2 | | | | | | |
| | | | | Product Code: 3GJP181410-ADK | | | | | | |
| | | | | Protection type: Ex d IIB T4 Gb | | | | | | |
| | | | | Cert. No.: LCIE 11 ATEX 3087 X / IECEx LCI 09.0008X | | | | | | |
| Rating: | | | | | | | | | | |
| | | V | Hz | kW | r/min | A | cos φ | Duty | | |
| 3-Motor | | 690 | Y 50 | 22,0 | 2957 | 21,7 | 0,91 | S1 | | |
| Insul.cl.F | | 400 | D 50 | 22,0 | 2957 | 37,4 | 0,91 | S1 | | |
| IP55 | | 660 | Y 50 | 22,0 | 2952 | 22,9 | 0,91 | S1 | | |
| | | 380 | D 50 | 22,0 | 2952 | 39,5 | 0,91 | S1 | | |
| | | 415 | D 50 | 22,0 | 2961 | 36,0 | 0,91 | S1 | | |
| Eff class IE3 | | 460 | D 60 | 22,0 | 3563 | 32,5 | 0,91 | S1 | | |
| | | 50Hz : IE3-93,2(100%)-93,9(75%)-93,8(50%) | | | | | | | | |
| | | 60Hz : IE3-92,9(100%) | | | | | | | | |
| Resistance | | | | Insulation resistance at 22 °C | | | Overload | | | |
| Line | | Ambient: 21,9 °C | | R > 2000 Mohm 1000 V | | | Current 150 % 120s | | | |
| U ₁ - V ₁ | | 0,18800 Ω | | | | | Torque 160 % 15s | | | |
| U ₁ - W ₁ | | 0,18680 Ω | | | | | Speed 120 % 120s | | | |
| V ₁ - W ₁ | | 0,18660 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 | | 401 | D | 50 | 9,4 | 0,41 | | 3000 | 0,06 | |
| Locked rotor test | | 65 | D | 50 | 39,2 | 1,69 | | 0 | 0,38 | |
| Thermal test (100% load) | 71,1 | 400 | D | 50 | 37,3 | 23,44 | 22,00 | 2957 | 0,91 | 93,85 |
| Partial load points: | | | | | | | | | | |
| ~75% load | 78,6 | 400 | D | 50 | 28,1 | 17,16 | 16,20 | 1969 | 0,88 | 94,41 |
| ~50% load | 34,9 | 400 | D | 50 | 20,2 | 11,54 | 10,88 | 2980 | 0,83 | 94,27 |
| ~25% load | 17,2 | 400 | D | 50 | 13,2 | 5,86 | 5,38 | 2991 | 0,64 | 91,82 |
| Temperature rise at rated load. | | | | °C | [K] | Method | | Measurement method | | |
| Stator winding : | | | | 43,0 | 1 | | | 1 Resistance | | |
| Frame : | | | | 22,5 | 2 | | | 2 Thermometer | | |
| Bearing D-end : | | | | 24,3 | 2 | | | 3 Thermocouples | | |
| Ambient Temperature : | | | | 22 | 2 | | | | | |
| <p>These tests have been carried out on motor no. 3GV1110796867001, on date 2011-09-30 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 ABB AB, LV Motors, 721 70 Västerås, Sweden | | | | | | Telephone +46 (0)21 32 90 00 | | Telefax +46 (0)21 32 90 22 | | |

Computer print-out valid without signature.