



| Test Report | | | | Date of issue: 4.6.2014 | | | | | |
|--|------------------|--------------|-------|--|---------|------------------------|----------|--------------------------|-------|
| | | | | Serial No.: 3GF11094431 | | | | | |
| | | | | Order No.: 599608-2 | | | | | |
| | | | | Type: M3JP 160MLB 2 IMB3/IM1001 | | | | | |
| | | | | Product Code: 3GJP161420-ADH222 | | | | | |
| | | | | Protection type: Ex d IIB T4 Gb | | | | | |
| | | | | Cert. No.: LCIE 11 ATEX 3087X / IECEx LCI 09.0008X | | | | | |
| Rating: | | | | | | | | | |
| | V | Hz | kW | r/min | A | cos φ | Duty | | |
| 3~Motor | 690 | Y 50 | 15 | 2929 | 15,5 | 0,89 | S1 | | |
| Insul.cl.F | 400 | D 50 | 15 | 2929 | 26,6 | 0,89 | S1 | | |
| IP55 | 415 | D 50 | 15 | 2935 | 26,5 | 0,86 | S1 | | |
| Eff class IE2 50Hz : IE2 - 91.2(100%) - 91.9(75%) - 91.4(50%) | | | | | | | | | |
| Resistance | | | | Insulation resistance at 31,5 °C | | | Overload | | |
| Line | Ambient: 17,5 °C | | | 47000 MΩ 1000 V | | Torque 160 % 15s | | | |
| U ₁ - V ₁ | 0,32560 Ω | | | | | | | | |
| U ₁ - W ₁ | 0,32580 Ω | | | | | | | | |
| V ₁ - W ₁ | 0,32590 Ω | | | | | | | | |
| | | | | High-voltage test winding 2900 V | | 1 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 | | 400,1 D | 50 | 8,75 | 0,58 | | 2998 | 0,10 | |
| Locked rotor test | | 72,2 D | 50 | 26,6 | 1,40 | | 0 | 0,42 | |
| Thermal test (100% load) | 48,9 | 399,9 D | 50 | 27,1 | 16,6 | 15,0 | 2933 | 0,88 | 90,6 |
| Partial load points: | | | | | | | | | |
| ~75% load | 36,7 | 400,0 D | 50 | 21,0 | 12,4 | 11,3 | 2954 | 0,85 | 91,1 |
| ~50% load | 24,4 | 400,0 D | 50 | 15,5 | 8,31 | 7,50 | 2969 | 0,77 | 90,2 |
| ~25% load | 12,2 | 400,0 D | 50 | 11,0 | 4,39 | 3,75 | 2986 | 0,58 | 85,3 |
| Temperature rise at rated load. | | | | °C | [K] | Method | | Measurement method | |
| Stator winding : | | | | 58,8 | 1 | 1 Resistance | | | |
| Frame : | | | | 22,0 | 2 | 2 Thermometer | | | |
| Bearing D-end : | | | | 27,9 | 2 | 3 Thermocouples | | | |
| Rotor: | | | | 78,2 | 3 | | | | |
| Ambient Temperature : | | | | 25,0 | 2 | | | | |
| 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 | | 13.12.2011 | | | | | |
| Tested by ABB Oy, Motors and Generators, Vaasa, Finland | | | | | | Telephone +358 10 2211 | | Telefax +358 10 22 47372 | |

Computer print-out valid without signature.