



| Test Report | | | | Date of issue: 28.8.2013 | | | | | |
|--|-------------|---|----------------------------------|-----------------------------------|---------|--------------------------|--------------------|-------|-------|
| Customer: ABB OY | | | | Serial No.: 3GF11094428 | | | | | |
| Customer ref.: 4207932 | | | | Order No.: 599608-3 | | | | | |
| | | | | Type: M3GP 160MLD 2 IMB3/IM1001 | | | | | |
| | | | | Product Code: 3GGP161440-ADD | | | | | |
| | | | | Protection type: Ex nA II C T3 Gc | | | | | |
| | | | | Cert. No.: LCIE 13 ATEX 1034 X | | | | | |
| | | | | IECEx LCIE 13.0047X | | | | | |
| Rating: | | | | | | | | | |
| | V | Hz | kW | r/min | A | cos φ | Duty | | |
| 3-Motor | 690 | Y 50 | 22 | 2929 | 22,4 | 0,90 | S1 | | |
| Insul.cl.F | 400 | D 50 | 22 | 2929 | 38,6 | 0,90 | S1 | | |
| IP55 | 415 | D 50 | 22 | 2935 | 37,7 | 0,89 | S1 | | |
| Eff class IE1 | | 50Hz : IE1 - 91.2(100%) - 91.6(75%) - 91.0(50%) | | | | | | | |
| Resistance | | | Insulation resistance at 46,5 °C | | | | | | |
| Line | | | 11000 MΩ 1000 V | | | | | | |
| Ambient: 21,5 °C | | | | | | | | | |
| U ₁ - V ₁ | | | 0,20940 Ω | | | | | | |
| U ₁ - W ₁ | | | 0,20970 Ω | | | | | | |
| V ₁ - W ₁ | | | 0,20990 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 | | 399,9 D | 50 | 10,2 | 0,70 | | 1498 | 0,10 | |
| Locked rotor test | | 71,3 D | 50 | 38,7 | 2,04 | | 0 | 0,43 | |
| Thermal test (100% load) | 71,7 | 400,1 D | 50 | 38,7 | 24,1 | 22,0 | 2932 | 0,90 | 91,2 |
| Partial load points: | | | | | | | | | |
| ~75% load | 53,8 | 400,0 D | 50 | 29,5 | 18,0 | 16,5 | 2954 | 0,88 | 91,9 |
| ~50% load | 35,8 | 400,0 D | 50 | 21,2 | 12,0 | 11,0 | 2970 | 0,82 | 91,4 |
| ~25% load | 17,8 | 400,0 D | 50 | 14,2 | 6,29 | 5,50 | 2986 | 0,64 | 87,5 |
| Temperature rise at rated load. | | [°C] | | [K] | Method | | Measurement method | | |
| Stator winding : | | | | 68,6 | 1 | | 1 Resistance | | |
| Frame : | | | | 23,1 | 2 | | 2 Thermometer | | |
| Bearing D-end : | | | | 29,5 | 2 | | 3 Thermocouples | | |
| Rotor : | | | | 102,8 | 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 | | 14.12.2011 | | | | | |
| Tested by ABB Oy, Motors and Generators, Vaasa, Finland | | | | | | Telephone +358 10 2211 | | | |
| | | | | | | Telefax +358 10 22 47372 | | | |

Computer print-out valid without signature.