# Test Report

Date of issue: 10.6.2014

Serial No.: 3GF11071613

Type: M3GP 280SMA 8 IMB3/IM1001
Product Code: 3GGP284210-ADG
Protection type: Ex nA IIC T3 Gc
Cert. No.: LCIE 12 ATEX 1008X
IECEx LCI 07.0001X

Rating:

| | V | | Hz | kW | r/min | A | cos φ | Duty |
|---|---|---|---|---|---|---|---|---|
| 3~Motor | 400 | D | 50 | 37 | 741 | 74 | 0,78 | S1 |
| Insul.cl.F | 415 | D | 50 | 37 | 741 | 74 | 0,76 | S1 |
| IP55 | 690 | Y | 50 | 37 | 741 | 42,8 | 0,78 | S1 |
| Ambient temp. -20°C...+40°C | | | | | | | | |

400 V 50Hz : 92.7(100%) - 92.7(75%) - 91,6(50%)

Resistance
Line — Ambient: 23,0 ºC

| | |
|---|---|
| $U_1$ - $V_1$ | 0,11086 Ω |
| $U_1$ - $W_1$ | 0,11087 Ω |
| $V_1$ - $W_1$ | 0,11095 Ω |

Insulation resistance at 55,5 ºC
23000 MΩ 1000 V

Overload
Torque 160 % 15s

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 | | 400,0 | D | 50 | 30,4 | 1,04 | | 750 | 0,05 | |
| Locked rotor test | | 95,9 | D | 50 | 74,0 | 2,86 | | 0 | 0,23 | |
| Thermal test (100% load) | 476,9 | 400,1 | D | 50 | 73,0 | 39,8 | 37,0 | 742 | 0,79 | 93,0 |
| Partial load points: | | | | | | | | | | |
| ~75% load | 358,3 | 400,1 | D | 50 | 58,3 | 29,8 | 27,8 | 743 | 0,74 | 93,2 |
| ~50% load | 237,6 | 400,1 | D | 50 | 45,4 | 20,0 | 18,5 | 746 | 0,64 | 92,6 |
| ~25% load | 119,1 | 400,1 | D | 50 | 35,4 | 10,4 | 9,3 | 747 | 0,42 | 88,8 |

Temperature rise at rated load.

| | [°C] | [K] | Method |
|---|---|---|---|
| Stator winding : | | 53,9 | 1 |
| Frame : | | 22,2 | 2 |
| Bearing D-end : | | 34,1 | 2 |
| Ambient Temperature : | 25,0 | | 2 |

Measurement method
1 Resistance
2 Thermometer
3 Thermocouples

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 30.5.2011

Tested by ABB Oy, Motors and Generators, Vaasa, Finland

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