# Type Test Report

Date of issue: 4.11.2015

Serial No.:

Motor Type: M3AA 132 S 8

Product Code: 3GAA134100-ADE

Customer ref.:

Rating:

| | V | | Hz | kW | r/min | A | η [%] | Duty |
|---|---|---|---|---|---|---|---|---|
| 3~Motor | 690 | Y | 50 | 2,20 | 715 | 3,50 | 0,65 | S1 |
| Insul.cl.F | 400 | D | 50 | 2,20 | 715 | 6,20 | 0,65 | S1 |
| IP55 | 460 | D | 60 | 2,20 | 870 | 5,40 | 0,64 | S1 |

Eff class IE2

50Hz : IE2 - 77,7%(100%) - 79,2%(75%) - 77,6%(50%)

60Hz : IE1 - 79,0%(100%)

Resistance

Line Ambient: 25,5 °C

| | | |
|---|---|---|
| $U_1$ - $V_1$ | 4,9710 | Ω |
| $U_1$ - $W_1$ | 4,9570 | Ω |
| $V_1$ - $W_1$ | 4,9570 | Ω |

Insulation resistance at

R > 2000Mohm 1,0kV

Overload

| | | |
|---|---|---|
| Volts | 130 % | 60s |
| Amp | 160 % | 120s |
| rpm | 120 % | 120s |

High-voltage test winding 2400V 60s

| Test | Torque [Nm] | Line U[V] | | f[Hz] | Input I[A] | P1[kW] | Output P2[kW] | n[r/min] | cos ρ | η[%] |
|---|---|---|---|---|---|---|---|---|---|---|
| No load test | | 401 | D | 50 | 4,0 | 0,28 | | 750 | 0,10 | |
| Locked rotor test | | 124 | D | 50 | 6,2 | 0,60 | | | 0,45 | |
| Thermal test (100% load) | 29,3 | 400 | D | 50 | 6,3 | 2,90 | 2,20 | 717 | 0,67 | 75,84 |
| Partial load points: | | | | | | | | | | |
| ~75% load | 21,6 | 400 | D | 50 | 5,3 | 2,15 | 1,65 | 728 | 0,58 | 76,83 |
| ~50% load | 14,3 | 400 | D | 50 | 4,6 | 1,47 | 1,10 | 737 | 0,46 | 74,88 |
| ~25% load | | | | | | | | | | |

Temperature rise at rated load.

| | [°C] | [K] | Method |
|---|---|---|---|
| Stator winding+ : | | 65,0 | 1 |
| Frame : | 61,2 | | 2 |
| Bearing D-end : | 60,5 | | 2 |
| Ambient Temperature : | 23,3 | | 2 |
| Rotor Temperature : | 90,9 | | 2 |

Measurement method

1 Resistance

2 Thermometer

3 Thermocouples

These tests have been carried out on motor no. 3GE123213S1163007, on date 2013-07-09 which is identical in electrical design with the above.

Manufactured 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

Tested by ABB AB, LV Motors, 721 70 Västerås, Sweden

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