



| Test Report  |             |           |       | Date of issue: 4.6.2014                               |         |                |          |                                  |       |                  |    |
|--|-------------|-----------|-------|---|---------|----------------|----------|----------------------------------|-------|------------------|----|
|  |             |           |       | Serial No.: 3GF10043909                               |         |                |          |                                  |       |                  |    |
|  |             |           |       | Type: M3JP 280SMC 6 IMV1/IM3011                       |         |                |          |                                  |       |                  |    |
|  |             |           |       | Product Code: 3GJP283230-BDG                          |         |                |          |                                  |       |                  |    |
|  |             |           |       | Protection type: Ex d IIB T4 Gb                       |         |                |          |                                  |       |                  |    |
|  |             |           |       | Cert. No.: LCIE 11 ATEX 3089X /<br>IECEx LCI 04.0006X |         |                |          |                                  |       |                  |    |
| Rating:  |             |           |       | V   | Hz      | kW             | r/min    | A                                | cos φ | Duty             |    |
| 3~Motor  |             |           |       | 400   | D       | 50             | 75       | 990                              | 136   | 0,84             | S1 |
| Insul.cl.F   |             |           |       | 415   | D       | 50             | 75       | 991                              | 133   | 0,83             | S1 |
| IP55   |             |           |       | 690   | Y       | 50             | 75       | 990                              | 79    | 0,84             | S1 |
| Eff class IE2  |             |           |       | 400 V 50Hz : IE2 - 94.2(100%) - 94.5(75%) - 94,1(50%) |         |                |          |                                  |       |                  |    |
| Resistance Line  |             |           |       | Ambient: 21,5 °C                                      |         |                |          | Insulation resistance at 54,0 °C |       | Overload         |    |
| U <sub>1</sub> - V <sub>1</sub>  |             |           |       | 0,04006 Ω   |         |                |          | 2400 MΩ                          |       | 1000 V           |    |
| U <sub>1</sub> - W <sub>1</sub>  |             |           |       | 0,04007 Ω   |         |                |          |                                  |       | Torque 160% 15s  |    |
| V <sub>1</sub> - W <sub>1</sub>  |             |           |       | 0,04009 Ω   |         |                |          |                                  |       |                  |    |
|  |             |           |       |   |         |                |          | High-voltage test winding        |       | 1900 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   |             | 400,1 D   | 50    | 42,4  | 1,53    |                | 1000     | 0,05                             |       |                  |    |
| Locked rotor test  |             | 86,4 D    | 50    | 136,0   | 6,49    |                | 0        | 0,35                             |       |                  |    |
| Thermal test (100% load)   | 723,5       | 400,1 D   | 50    | 137,4   | 80,2    | 75,0           | 988      | 0,84                             | 93,5  |                  |    |
| Partial load points:   |             |           |       |   |         |                |          |                                  |       |                  |    |
| ~75% load  | 541,8       | 400,1 D   | 50    | 105,3   | 59,8    | 56,3           | 992      | 0,82                             | 94,1  |                  |    |
| ~50% load  | 360,1       | 400,1 D   | 50    | 76,6  | 39,9    | 37,5           | 994      | 0,75                             | 93,9  |                  |    |
| ~25% load  | 180,0       | 400,0 D   | 50    | 53,1  | 20,5    | 18,8           | 997      | 0,56                             | 91,4  |                  |    |
| Temperature rise at rated load.  |             |           |       | [°C]  | [K]     | Method         |          | Measurement method               |       |                  |    |
| Stator winding :   |             |           |       |   | 76,1    | 1              |          | 1 Resistance                     |       |                  |    |
| Frame :  |             |           |       |   | 54,7    | 2              |          | 2 Thermometer                    |       |                  |    |
| Bearing D-end :  |             |           |       |   | 54,9    | 2              |          | 3 Thermocouples                  |       |                  |    |
| Ambient Temperature :  |             |           |       | 25,0  |         | 2              |          |                                  |       |                  |    |
| Manufactured and tested in accordance with rules of IEC 60034-1 and IEC 60034-2-1.<br>PLL determined from residual loss. |             |           |       |   |         |                |          |                                  |       |                  |    |
| On behalf of customer  |             |           |       |   |         |                |          |                                  |       |                  |    |
| On behalf of manufacturer  |             |           |       | Date of test  |         | 15.10.2010     |          |                                  |       |                  |    |
| Tested by ABB Oy, Motors and Generators, Vaasa, Finland  |             |           |       |   |         |                |          | Telephone                        |       | +358 10 2211     |    |
|  |             |           |       |   |         |                |          | Telefax                          |       | +358 10 22 47372 |    |

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