



| Test Report  |             |           |                  | Date of issue: 4.6.2014                            |          |                                  |   |                  |       |  |
|--|-------------|-----------|------------------|--|----------|----------------------------------|---|------------------|-------|--|
|  |             |           |                  | Serial No.: 3GF11094423                            |          |                                  |   |                  |       |  |
|  |             |           |                  | Type: M3KP 200MLA 8 IMB3/IM1001                    |          |                                  |   |                  |       |  |
|  |             |           |                  | Product Code: 3GKP204410-ADG                       |          |                                  |   |                  |       |  |
|  |             |           |                  | Protection type: Ex de IIB T4 Gb                   |          |                                  |   |                  |       |  |
|  |             |           |                  | Cert. No.: LCIE 10 ATEX 3061X / IECEx LCI 04.0011X |          |                                  |   |                  |       |  |
| Rating:  |             |           |                  |  |          |                                  |   |                  |       |  |
|  | V           | Hz        |                  | kW   | r/min    | A                                | cos φ   | Duty             |       |  |
| 3~Motor  | 690         | Y         | 50               | 15   | 734      | 17,7                             | 0,79  | S1               |       |  |
| Insul.cl.F   | 400         | D         | 50               | 15   | 734      | 30,4                             | 0,79  | S1               |       |  |
| IP55   | 415         | D         | 50               | 15   | 735      | 30,1                             | 0,77  | S1               |       |  |
| Resistance   |             |           | Ambient: 11,5 °C |  |          | Insulation resistance at 42,0 °C |   | Overload         |       |  |
| Line   |             |           |                  |  |          | 5000 MΩ 1000 V                   |   | Torque 160 % 15s |       |  |
| U <sub>1</sub> - V <sub>1</sub>  |             |           | 0,47350 Ω        |  |          |                                  |   |                  |       |  |
| U <sub>1</sub> - W <sub>1</sub>  |             |           | 0,47360 Ω        |  |          |                                  |   |                  |       |  |
| V <sub>1</sub> - W <sub>1</sub>  |             |           | 0,47360 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   |             | 400,5 D   | 50               | 14,6   | 0,67     |                                  | 750   | 0,07             |       |  |
| Locked rotor test  |             | 88,5 D    | 50               | 30,4   | 1,86     |                                  | 0   | 0,40             |       |  |
| Thermal test (100% load)   | 195,2       | 400,0 D   | 50               | 30,6   | 16,8     | 15,0                             | 734   | 0,79             | 89,2  |  |
| Partial load points:   |             |           |                  |  |          |                                  |   |                  |       |  |
| ~75% load  | 146,4       | 400,2 D   | 50               | 24,6   | 12,5     | 11,3                             | 739   | 0,74             | 89,7  |  |
| ~50% load  | 97,2        | 400,1 D   | 50               | 19,6   | 8,45     | 7,50                             | 743   | 0,62             | 88,8  |  |
| ~25% load  | 48,2        | 400,2 D   | 50               | 15,8   | 4,50     | 3,75                             | 747   | 0,41             | 83,4  |  |
| Temperature rise at rated load.  |             | [°C]      |                  | [K]  | Method   |                                  | Measurement method  |                  |       |  |
| Stator winding :   |             |           |                  | 71,1   | 1        |                                  | 1 Resistance  |                  |       |  |
| Frame :  |             |           |                  | 49,1   | 2        |                                  | 2 Thermometer   |                  |       |  |
| Bearing D-end :  |             |           |                  | 53,9   | 2        |                                  | 3 Thermocouples   |                  |       |  |
| Ambient Temperature :  |             | 25,0      |                  |  | 2        |                                  |   |                  |       |  |
|  |             |           |                  |  |          |                                  | Starting current (I <sub>S</sub> / I <sub>N</sub> ) : 6,92    |                  |       |  |
|  |             |           |                  |  |          |                                  | Locked rotor torque (T <sub>L</sub> / T <sub>N</sub> ) : 2,22 |                  |       |  |
|  |             |           |                  |  |          |                                  | Breakdown torque (T <sub>b</sub> / T <sub>N</sub> ) : 3,08    |                  |       |  |
|  |             |           |                  |  |          |                                  | Pull-up torque (T <sub>u</sub> / T <sub>N</sub> ) : 1,99      |                  |       |  |
| 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     |  | 3.2.2012 |                                  |   |                  |       |  |
| Tested by ABB Oy, Motors and Generators, Vaasa, Finland  |             |           |                  |  |          |                                  | Telephone +358 10 2211<br>Telefax +358 10 22 47372            |                  |       |  |

Computer print-out valid without signature.