



| Test Report  |                |           |       | Date of issue: 16.3.2015                         |  |                  |                    |       |       |
|--|----------------|-----------|-------|--|--|------------------|--------------------|-------|-------|
| Customer:  |                |           |       | Serial No.:                                      |  |                  |                    |       |       |
| Customer ref.:   |                |           |       | Order No.:                                       |  |                  |                    |       |       |
|  |                |           |       | Type: M3KP 200MLA 4                              |  |                  |                    |       |       |
|  |                |           |       | Product Code: 3GKP202410-ADL                     |  |                  |                    |       |       |
|  |                |           |       | 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      | 30,0  | 1483   | 31,9   | 0,84             | S1                 |       |       |
| Insul.cl.F   | 400            | D 50      | 30,0  | 1483   | 54,8   | 0,84             | S1                 |       |       |
| IP55   | 415            | D 50      | 30,0  | 1485   | 53,6   | 0,83             | S1                 |       |       |
|  | 440            | D 60      | 30,0  | 1784   | 49,5   | 0,85             | S1                 |       |       |
| Eff class IE3  | 460            | D 60      | 30,0  | 1785   | 47,7   | 0,84             | S1                 |       |       |
| 50Hz: IE3-93,6%(100%)-93,8%(75%)-93,4%(50%)  |                |           |       |  |  |                  |                    |       |       |
| 60Hz: IE3-94,1%(100%)  |                |           |       |  |  |                  |                    |       |       |
| Resistance   |                |           |       | Insulation resistance at 85 °C                   |  | Overload         |                    |       |       |
| Line   | Ambient: 25 °C |           |       | 2000 MΩ 1000 V                                   |  | Torque 160% 15s  |                    |       |       |
| U <sub>1</sub> - V <sub>1</sub>  | 0,13170 Ω      |           |       |  |  | Speed 120% 120s  |                    |       |       |
| U <sub>1</sub> - W <sub>1</sub>  | 0,13160 Ω      |           |       |  |  | Current 150% 15s |                    |       |       |
| V <sub>1</sub> - W <sub>1</sub>  | 0,13180 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]   | η[r/min]           | cos φ | η [%] |
| No load test   |                | 400,0 D   | 50    | 19,1   | 0,73   |                  | 1498               | 0,05  |       |
| Locked rotor test  |                | 78,1 D    | 50    | 54,7   | 2,43   |                  | 0                  | 0,33  |       |
| Thermal test (100% load)   | 192,8          | 400,8 D   | 50    | 54,8   | 32,0   | 30,0             | 1483               | 0,84  | 93,7  |
| Partial load points:   |                |           |       |  |  |                  |                    |       |       |
| ~75% load  | 144,3          | 400,6 D   | 50    | 42,9   | 23,9   | 22,5             | 1488               | 0,81  | 94,0  |
| ~50% load  | 96,5           | 400,6 D   | 50    | 32,2   | 16,1   | 15,0             | 1492               | 0,72  | 93,5  |
| ~25% load  | 48,4           | 400,1 D   | 50    | 23,7   | 8,3  | 7,5              | 1497               | 0,51  | 90,2  |
| Temperature rise at rated load.  |                |           |       | °C   | [K]  | Method           | Measurement method |       |       |
| Stator winding :   |                |           |       | 52   | 1  |                  | 1 Resistance       |       |       |
| Frame :  |                |           |       | 27   | 2  |                  | 2 Thermocouples    |       |       |
| Bearing D-end :  |                |           |       | 31   | 2  |                  | 3 Thermometer      |       |       |
| Rotor :  |                |           |       | 69   | 3  |                  |                    |       |       |
| Ambient Temperature :  |                |           |       | 25   | 2  |                  |                    |       |       |
| <p>These tests have been carried out on motor no.3G1P141700183, on date 2014-07-03 which is identical in design with the above.</p> <p>Manufactured and tested in accordance with rules of IEC 60034-1 and IEC 60034-2-1. PLL determined from residual loss.</p> |                |           |       |  |  |                  |                    |       |       |
| On behalf of customer  |                |           |       |  |  |                  |                    |       |       |
| On behalf of manufacturer  |                |           |       |  | Date of test                                       |                  |                    |       |       |
| 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.