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|--|--|----------------------------|--------------------------------------|--|---------------------|-----------------------------|-------------|--------------------------------|--------------------|
| <b>Test Report</b>   |  |                            |                                      | Cert. No. ATEX Cert.No.LCIE 06 ATEX 6047 |                     |                             |             |                                |                    |
| Customer:  |  |                            |                                      | Date of Issue                            |                     |                             |             |                                |                    |
| Customer ref.:   |  |                            |                                      | Type: M3HP 90SLC 2                       |                     | Protection type: Ex e II T3 |             |                                |                    |
|  |  |                            |                                      | Serial no.:                              |                     | Tag no.:                    |             |                                |                    |
|  |  |                            |                                      | Order no.:                               |                     |                             |             |                                |                    |
| Rating:<br>3-Motor   |  | Product Code 3GHP091030_DG |                                      |  |                     |                             |             |                                |                    |
| Insul.cl. F  |  | V                          | Hz                                   | kW                                       | r/min               | A                           | cos φ       | I <sub>A</sub> /I <sub>N</sub> | t <sub>E</sub> [s] |
| S1   |  | 690 Y                      | 50                                   | 2,2                                      | 2871                | 2,42                        | 0,90        | 7,3                            | 6                  |
| IP 55  |  | <b>400 D</b>               | <b>50</b>                            | <b>2,2</b>                               | <b>2871</b>         | <b>4,19</b>                 | <b>0,90</b> | <b>7,3</b>                     | <b>6</b>           |
| 44 kg  |  |                            |                                      |  |                     |                             |             |                                |                    |
| Resistance   |  |                            | Insulation resistance                |  |                     | Overload test               |             |                                |                    |
| U <sub>1</sub> -V <sub>1</sub> 4,533 Ω   |  |                            | 4500 MΩ 1000 V                       |  |                     | 1,6 x T <sub>N</sub> 15 s   |             |                                |                    |
| U <sub>1</sub> -W <sub>1</sub> 4,538 "   |  |                            | 38,5 °C                              |  |                     |                             |             |                                |                    |
| V <sub>1</sub> -W <sub>1</sub> 4,536 "   |  |                            |                                      |  |                     |                             |             |                                |                    |
|  |  |                            | High-voltage test                    |  |                     |                             |             |                                |                    |
|  |  |                            | 2900 V 1 s                           |  |                     |                             |             |                                |                    |
| Test   |  | Line                       |                                      | Input                                    |                     | Output                      |             |                                |                    |
|  |  | U[V]                       | f[Hz]                                | I[A]                                     | P <sub>1</sub> [kW] | P <sub>2</sub> [kW]         | n[r/min]    | cos φ                          | η [%]              |
| No-load test   |  | 400,1 D                    | 50                                   | 1,56                                     | 0,145               |                             |             | 0,1345                         |                    |
| Locked-rotor test  |  | 72,2 D                     | 50                                   | 4,18                                     | 0,298               |                             |             | 0,5699                         |                    |
| Temperature-rise test  |  | 400,1 D                    | 50                                   | 4,27                                     | 2,630               | 2,20                        | 2875        | 0,89                           | 83,6               |
| Temperature rise at amb.temp. 25 °C  |  |                            | Temperature rise at amb. temp. 25 °C |  |                     | Measurement method          |             |                                |                    |
| [K] Method   |  |                            | [K] Method                           |  |                     | 1 Resistance                |             |                                |                    |
| Stator winding 41,9 1  |  |                            | Frame 19,3 3                         |  |                     | 2 Embedded temp. detector   |             |                                |                    |
|  |  |                            | Bearing D-end 22,8 3                 |  |                     | 3 Thermometer               |             |                                |                    |
|  |  |                            | Rotor 50,2 2                         |  |                     |                             |             |                                |                    |
| <p>These tests have been carried out on motor no. 3GF10020502B, 2010-05-11 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.<br/>PLL determined from residual loss.</p> |  |                            |                                      |  |                     |                             |             |                                |                    |
| On behalf of customer  |  |                            |                                      |  |                     |                             |             |                                |                    |
| On behalf of manufacturer  |  |                            |                                      |  |                     |                             |             |                                |                    |
| Tested by ABB Oy<br>Motors/Vaasa   |  |                            |                                      |  |                     |                             |             |                                |                    |