

| ABB Motors and Generators                             |                                                                     | Technical Data Sheet - DOL                          |            |  |                |  |
|-------------------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------|------------|-------------------------------------------------------------------------------------|----------------|--|
| Project                                               |                                                                     | Location                                            |            |                                                                                     |                |  |
| Department/Author                                     |                                                                     | Customer name                                       |            | Customer ref.                                                                       |                |  |
| Our ref.                                              |                                                                     | Rev/Changed by<br>A                                 |            | Date of issue<br>3/19/2018<br>Saving ident<br>untitled.xls<br>Pages<br>1(3)         |                |  |
| No.                                                   | Definition                                                          | Data                                                | Unit       | Remarks                                                                             |                |  |
| 1                                                     | Product                                                             | <b>TEFC, 3-phase, squirrel cage induction motor</b> |            |                                                                                     |                |  |
| 2                                                     | Product code                                                        | <b>EMVM13046C-PP (3GBP 133 270-BCK)</b>             |            | Calc. ref.                                                                          | 3GZF021013-280 |  |
| 3                                                     | Type/Frame                                                          | <b>M3BP 132SMG 6</b>                                |            |                                                                                     |                |  |
| 4                                                     | Mounting                                                            | <b>IM3601, B14(flange)</b>                          |            |                                                                                     |                |  |
| 5                                                     | Rated output $P_N$                                                  | <b>4</b>                                            | kW         |                                                                                     |                |  |
| 6                                                     | Service factor                                                      | <b>1</b>                                            |            |                                                                                     |                |  |
| 7                                                     | Type of duty                                                        | <b>S1(IEC) 100%</b>                                 |            |                                                                                     |                |  |
| 8                                                     | Rated voltage $U_N$                                                 | <b>460</b>                                          | VY         | $\pm 5\%$ (IEC 60034-1)                                                             |                |  |
| 9                                                     | Rated frequency $f_N$                                               | <b>60</b>                                           | Hz         | $\pm 2\%$ (IEC 60034-1)                                                             |                |  |
| 10                                                    | Rated speed $n_N$                                                   | <b>1177</b>                                         | r/min      |                                                                                     |                |  |
| 11                                                    | Rated current $I_N$                                                 | <b>8.1</b>                                          | A          |                                                                                     |                |  |
| 12                                                    | No-load current                                                     | <b>4.1</b>                                          | A          |                                                                                     |                |  |
| 13                                                    | Starting current $I_s/I_N$                                          | <b>6.3</b>                                          |            | Meet IEC 60034-12, $N_1(H$ at 60 Hz)                                                |                |  |
| 14                                                    | Nominal torque $T_N$                                                | <b>32</b>                                           | Nm         |                                                                                     |                |  |
| 15                                                    | Locked rotor torque $T_s/T_N$                                       | <b>2.3</b>                                          |            |                                                                                     |                |  |
| 16                                                    | Maximum torque $T_{max}/T_N$                                        | <b>3.2</b>                                          |            |                                                                                     |                |  |
| 17                                                    | Minimum torque $T_{min}/T_N$                                        | <b>1.8</b>                                          |            |                                                                                     |                |  |
| 18                                                    | Speed at minimum torque                                             | <b>180</b>                                          | r/min      |                                                                                     |                |  |
| Load characteristics (CSA 390-10)                     |                                                                     | Load %                                              | Current A  | Efficiency %                                                                        | Power factor   |  |
| 19                                                    | NEMA nominal efficiency (*)                                         | <b>100</b>                                          | <b>8.1</b> | <b>39.5 / IE3 / 87.5</b>                                                            | <b>0.68</b>    |  |
| 20                                                    |                                                                     | <b>75</b>                                           | <b>6.9</b> | <b>89.4</b>                                                                         | <b>0.61</b>    |  |
| 21                                                    |                                                                     | <b>50</b>                                           | <b>5.7</b> | <b>87.9</b>                                                                         | <b>0.5</b>     |  |
| 22                                                    |                                                                     | <b>Start</b>                                        | <b>51</b>  |                                                                                     | <b>0.41</b>    |  |
| 23                                                    | Maximum starting time from hot                                      | <b>10</b>                                           | s          |                                                                                     |                |  |
| 24                                                    | Maximum starting time from cold                                     | <b>19</b>                                           | s          |                                                                                     |                |  |
| 25                                                    | Insulation class / Temperature class                                | <b>F / B</b>                                        |            |                                                                                     |                |  |
| 26                                                    | Ambient temperature                                                 | <b>40</b>                                           | °C         |                                                                                     |                |  |
| 27                                                    | Altitude                                                            | <b>1000</b>                                         | m.a.s.l.   |                                                                                     |                |  |
| 28                                                    | Enclosure                                                           | <b>IP55</b>                                         |            |                                                                                     |                |  |
| 29                                                    | Cooling system                                                      | <b>IC411 self ventilated</b>                        |            |                                                                                     |                |  |
| 30                                                    | Bearing DE/NDE                                                      | <b>6208-2Z/C3 - 6208-2Z/C3</b>                      |            |                                                                                     |                |  |
| 31                                                    | Type of Grease                                                      |                                                     |            |                                                                                     |                |  |
| 32                                                    | Sound pressure level (LP dB(A) 1m)                                  | <b>60</b>                                           | dB(A)      | at load                                                                             |                |  |
| 33                                                    | Moment of inertia $J = \frac{1}{4} GD^2$                            | <b>0.0416</b>                                       | kg-m2      |                                                                                     |                |  |
| 34                                                    | Balancing                                                           |                                                     |            |                                                                                     |                |  |
| 35                                                    | Vibration class                                                     |                                                     |            |                                                                                     |                |  |
| 36                                                    | Position of terminal box                                            | <b>Top</b>                                          |            |                                                                                     |                |  |
| 37                                                    | Terminal box entries; no, dimens.                                   |                                                     |            |                                                                                     |                |  |
| 38                                                    | Number of power terminals                                           |                                                     |            |                                                                                     |                |  |
| 39                                                    | Direction of rotation                                               | <b>CW or CCW</b>                                    |            |                                                                                     |                |  |
| 40                                                    | Weight of rotor                                                     | <b>21</b>                                           | kg         |                                                                                     |                |  |
| 41                                                    | Total weight of motor                                               | <b>82</b>                                           | kg         |                                                                                     |                |  |
| 42                                                    | Dimension drawing no.                                               |                                                     |            |                                                                                     |                |  |
| 43                                                    |                                                                     |                                                     |            |                                                                                     |                |  |
| 44                                                    |                                                                     |                                                     |            |                                                                                     |                |  |
| 45                                                    |                                                                     |                                                     |            |                                                                                     |                |  |
| Ex-motors                                             |                                                                     |                                                     |            |                                                                                     |                |  |
| 46                                                    |                                                                     |                                                     |            |                                                                                     |                |  |
| 47                                                    |                                                                     |                                                     |            |                                                                                     |                |  |
| 48                                                    |                                                                     |                                                     |            |                                                                                     |                |  |
| Option Variant Codes / Definition                     |                                                                     |                                                     |            |                                                                                     |                |  |
| 49                                                    | +047 IM 3601 flange mounted, IEC flange, from IM 3001 (B14 from B5) |                                                     |            |                                                                                     |                |  |
| 50                                                    | +509 Fulfilling EISA Subtype I efficiency requirements, CC031A      |                                                     |            |                                                                                     |                |  |
| 51                                                    |                                                                     |                                                     |            |                                                                                     |                |  |
| 52                                                    |                                                                     |                                                     |            |                                                                                     |                |  |
| Remarks:                                              |                                                                     |                                                     |            |                                                                                     |                |  |
| Data based on situation 7/26/2017                     |                                                                     |                                                     |            |                                                                                     |                |  |
| All data subject to tolerances in accordance with IEC |                                                                     |                                                     |            |                                                                                     |                |  |
| Guaranteed values on request                          |                                                                     |                                                     |            |                                                                                     |                |  |



