

|                           |  |                            |                            |                              |                                                                                     |
|---------------------------|--|----------------------------|----------------------------|------------------------------|-------------------------------------------------------------------------------------|
| ABB Motors and Generators |  | Technical Data Sheet - DOL |                            |                              |  |
|                           |  | Project                    |                            | Location                     |                                                                                     |
| Department/Author         |  | Customer name              |                            | Customer ref.                | Item name<br>1.00001                                                                |
| Our ref.                  |  | Rev/Changed by<br>A        | Date of issue<br>3/19/2018 | Saving ident<br>untitled.xls | Pages<br>1(3)                                                                       |

| No.                                                   | Definition                                                     | Data                                                | Unit      | Remarks                                        |              |
|-------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------|-----------|------------------------------------------------|--------------|
| 1                                                     | Product                                                        | <b>TEFC, 3-phase, squirrel cage induction motor</b> |           |                                                |              |
| 2                                                     | Product code                                                   | <b>EMVM13046D-PP (3GBP 133 270-BCK)</b>             |           | Calc. ref. 3GZF021013-280                      |              |
| 3                                                     | Type/Frame                                                     | <b>M3BP 132SMG 6</b>                                |           |                                                |              |
| 4                                                     | Mounting                                                       | <b>IM3001, B5(flange)</b>                           |           |                                                |              |
| 5                                                     | Rated output P <sub>N</sub>                                    | <b>4</b>                                            | kW        |                                                |              |
| 6                                                     | Service factor                                                 | <b>1</b>                                            |           |                                                |              |
| 7                                                     | Type of duty                                                   | <b>S1(IEC) 100%</b>                                 |           |                                                |              |
| 8                                                     | Rated voltage U <sub>N</sub>                                   | <b>460</b>                                          | VY        | ± 5 % (IEC 60034-1)                            |              |
| 9                                                     | Rated frequency f <sub>N</sub>                                 | <b>60</b>                                           | Hz        | ± 2 % (IEC 60034-1)                            |              |
| 10                                                    | Rated speed n <sub>N</sub>                                     | <b>1177</b>                                         | r/min     |                                                |              |
| 11                                                    | Rated current I <sub>N</sub>                                   | <b>8.1</b>                                          | A         |                                                |              |
| 12                                                    | No-load current                                                | <b>4.1</b>                                          | A         |                                                |              |
| 13                                                    | Starting current I <sub>s</sub> /I <sub>N</sub>                | <b>6.3</b>                                          |           | Meet IEC 60034-12, N <sub>L</sub> (H at 60 Hz) |              |
| 14                                                    | Nominal torque T <sub>N</sub>                                  | <b>32</b>                                           | Nm        |                                                |              |
| 15                                                    | Locked rotor torque T <sub>s</sub> /T <sub>N</sub>             | <b>2.3</b>                                          |           |                                                |              |
| 16                                                    | Maximum torque T <sub>max</sub> /T <sub>N</sub>                | <b>3.2</b>                                          |           |                                                |              |
| 17                                                    | Minimum torque T <sub>min</sub> /T <sub>N</sub>                | <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 (*)                                    | 100                                                 | 8.1       | 39.5 / IE3 / 87.5                              | 0.68         |
| 20                                                    |                                                                | 75                                                  | 6.9       | 89.4                                           | 0.61         |
| 21                                                    |                                                                | 50                                                  | 5.7       | 87.9                                           | 0.5          |
| 22                                                    |                                                                | Start                                               | 51        |                                                | 0.41         |
| 23                                                    | Maximum starting time from hot                                 | 10                                                  | s         |                                                |              |
| 24                                                    | Maximum starting time from cold                                | 19                                                  | s         |                                                |              |
| 25                                                    | Insulation class / Temperature class                           | <b>F / B</b>                                        |           |                                                |              |
| 26                                                    | Ambient temperature                                            | 40                                                  | °C        |                                                |              |
| 27                                                    | Altitude                                                       | 1000                                                | 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)                             | 60                                                  | dB(A)     | at load                                        |              |
| 33                                                    | Moment of inertia J = ¼ GD2                                    | 0.0416                                              | 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                                                | 21                                                  | kg        |                                                |              |
| 41                                                    | Total weight of motor                                          | 82                                                  | kg        |                                                |              |
| 42                                                    | Dimension drawing no.                                          |                                                     |           |                                                |              |
| 43                                                    |                                                                |                                                     |           |                                                |              |
| 44                                                    |                                                                |                                                     |           |                                                |              |
| 45                                                    |                                                                |                                                     |           |                                                |              |
| Ex-motors                                             |                                                                |                                                     |           |                                                |              |
| 46                                                    |                                                                |                                                     |           |                                                |              |
| 47                                                    |                                                                |                                                     |           |                                                |              |
| 48                                                    |                                                                |                                                     |           |                                                |              |
| Option Variant Codes / Definition                     |                                                                |                                                     |           |                                                |              |
| 49                                                    | +509 Fulfilling EISA Subtype I efficiency requirements, CC031A |                                                     |           |                                                |              |
| 50                                                    |                                                                |                                                     |           |                                                |              |
| 51                                                    |                                                                |                                                     |           |                                                |              |
| 52                                                    |                                                                |                                                     |           |                                                |              |
| Remarks:                                              |                                                                |                                                     |           |                                                |              |
| Data based on situation 7/26/2017                     |                                                                |                                                     |           |                                                |              |
| All data subject to tolerances in accordance with IEC |                                                                |                                                     |           |                                                |              |
| Guaranteed values on request                          |                                                                |                                                     |           |                                                |              |



