

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

| No. | Definition                                         | Data                                                | Unit       | Remarks                            |              |
|-----|----------------------------------------------------|-----------------------------------------------------|------------|------------------------------------|--------------|
| 1   | Product                                            | <b>TEFC, 3-phase, squirrel cage induction motor</b> |            |                                    |              |
| 2   | Product code                                       | <b>EMM09154-PP (3GBP092540-ACK+332+509)</b>         |            |                                    |              |
| 3   | Type/Frame                                         | <b>M3BP 90 LD 4</b>                                 |            |                                    |              |
| 4   | Mounting                                           | <b>IM1001, B3(foot)</b>                             |            |                                    |              |
| 5   | Rated output P <sub>N</sub>                        | <b>1.5</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>1751</b>                                         | r/min      |                                    |              |
| 11  | Rated current I <sub>N</sub>                       | <b>2.8</b>                                          | A          |                                    |              |
| 12  | No-load current                                    | <b>1.76</b>                                         | A          |                                    |              |
| 13  | Starting current I <sub>s</sub> /I <sub>N</sub>    | <b>9.1</b>                                          |            | Fullfilled IEC 60034-12 design N,H |              |
| 14  | Nominal torque T <sub>N</sub>                      | <b>8.2</b>                                          | Nm         |                                    |              |
| 15  | Locked rotor torque T <sub>S</sub> /T <sub>N</sub> | <b>3.7</b>                                          |            |                                    |              |
| 16  | Maximum torque T <sub>max</sub> /T <sub>N</sub>    | <b>5.3</b>                                          |            |                                    |              |
| 17  | Minimum torque T <sub>min</sub> /T <sub>N</sub>    | <b>3.5</b>                                          |            |                                    |              |
| 18  | Speed at minimum torque                            | <b>306</b>                                          | r/min      |                                    |              |
| 19  | Load characteristics (CSA 390-10)                  | Load %                                              | Current A  | Efficiency %                       | Power factor |
| 20  | NEMA nominal efficiency (*)                        | <b>100</b>                                          | <b>2.8</b> | <b>36.5 / IE3 / 84.0</b>           | <b>0.76</b>  |
| 21  |                                                    | <b>75</b>                                           | <b>2.3</b> | <b>86.7</b>                        | <b>0.68</b>  |
| 22  |                                                    | <b>50</b>                                           | <b>2</b>   | <b>85.5</b>                        | <b>0.54</b>  |
| 23  |                                                    | <b>Start</b>                                        | <b>26</b>  |                                    | <b>0.8</b>   |
| 24  | Maximum starting time from hot                     | <b>20</b>                                           | s          |                                    |              |
| 25  | Maximum starting time from cold                    | <b>36</b>                                           | s          |                                    |              |
| 26  | Insulation class / Temperature class               | <b>F / B</b>                                        |            |                                    |              |
| 27  | Ambient temperature                                | <b>40</b>                                           | °C         |                                    |              |
| 28  | Altitude                                           | <b>1000</b>                                         | m.a.s.l.   |                                    |              |
| 29  | Enclosure                                          | <b>IP55</b>                                         |            |                                    |              |
| 30  | Cooling system                                     | <b>IC411 self ventilated</b>                        |            |                                    |              |
| 31  | Bearing DE/NDE                                     | <b>6205-2Z/C3 - 6204-2Z/C3</b>                      |            |                                    |              |
| 32  | Type of Grease                                     | <b>Greased for life</b>                             |            |                                    |              |
| 33  | Sound pressure level (LP dB(A) 1m)                 | <b>63</b>                                           | dB(A)      | at load                            |              |
| 34  | Moment of inertia J = ¼ GD2                        | <b>0.0072</b>                                       | kg-m2      |                                    |              |
| 35  | Balancing                                          | <b>Half Key</b>                                     |            |                                    |              |
| 36  | Vibration class                                    | <b>Grade A</b>                                      |            |                                    |              |
| 37  | Position of terminal box                           | <b>Top</b>                                          |            |                                    |              |
| 38  | Terminal box entries; no, dimens.                  | <b>2xM32x1.5</b>                                    |            |                                    |              |
| 39  | Number of power terminals                          | <b>6</b>                                            |            |                                    |              |
| 40  | Direction of rotation                              | <b>CW or CCW</b>                                    |            |                                    |              |
| 41  | Total weight of motor                              | <b>34</b>                                           | kg         |                                    |              |
| 42  |                                                    |                                                     |            |                                    |              |

Variant Codes / Definition

332 = Baldor catalog number  
509 = Fulfilling EISA Subtype I efficiency requirements, CC031A

Remarks:

Data based on situation  
All data subject to tolerances in accordance with IEC  
Guaranteed values on request



