



Technical Data Sheet - DOL



Project Location
United Arab Emirates

Company Contact Contact Item name
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Our ref. Rev/Changed by Date of issue Saving ident Pages
Stock A 9/15/2021 1(3)

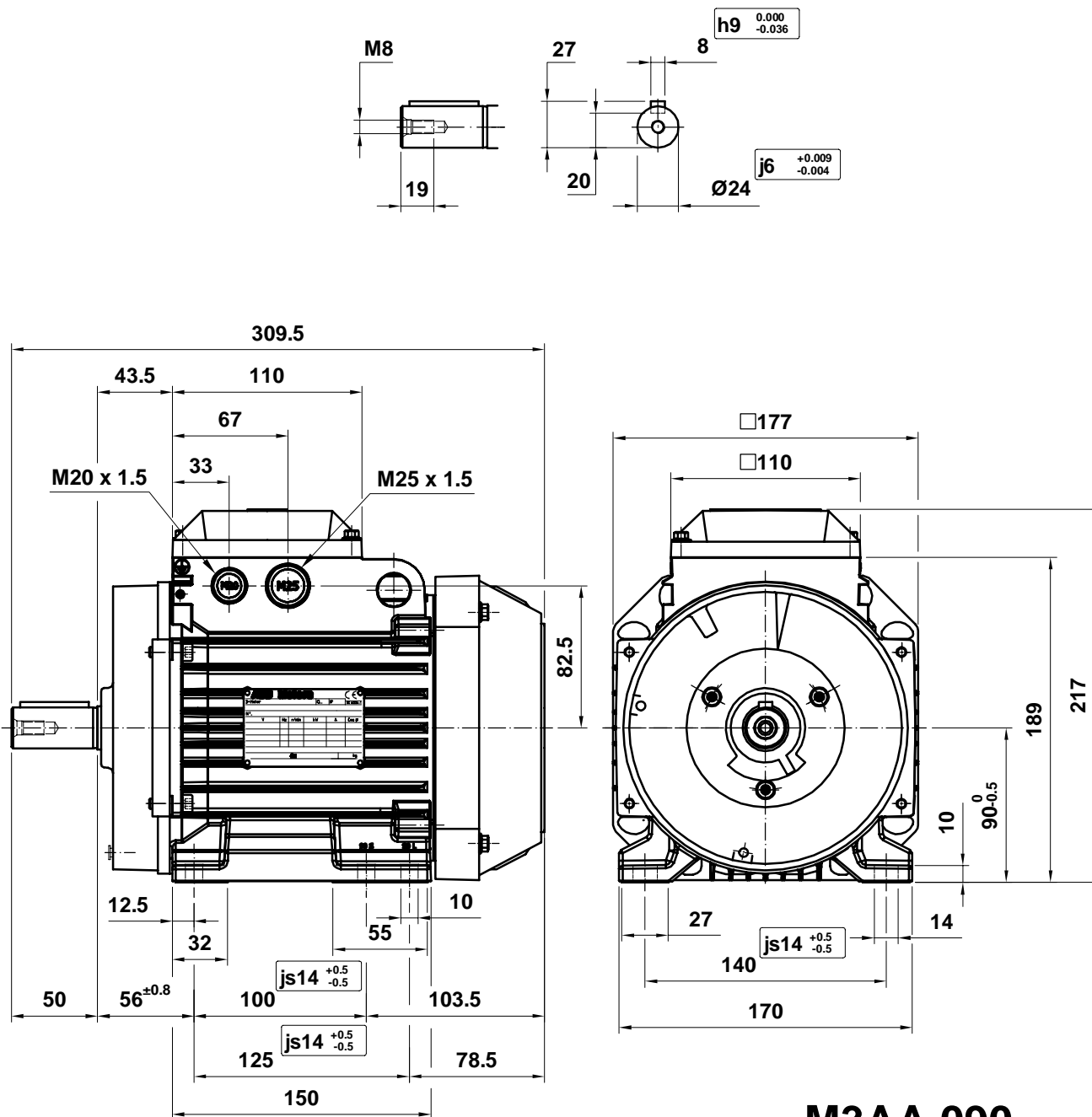
| No. | Definition | Data | Unit | Remarks |
|-----------|--|---|-------------------|---------------------------|
| 1 | Product | TEFC, 3-phase, squirrel cage induction motor | | |
| 2 | Product code | 3GAA 093 520-ASE | | Calc. ref. 3GZF021009-321 |
| 3 | Type/Frame | M3AA 90LB 6 | | |
| 4 | Mounting | IM1001, B3(foot) | | |
| 5 | Rated output P _N | 0.75 | kW | |
| 6 | Service factor | 1 | | |
| 7 | Type of duty | S1(IEC) 100% | | |
| 8 | Rated voltage U _N | 400 | VY | ± 5 % (IEC 60034-1) |
| 9 | Rated frequency f _N | 50 | Hz | ± 2 % (IEC 60034-1) |
| 10 | Rated speed n _N | 930 | r/min | |
| 11 | Rated current I _N | 1.94 | A | |
| 12 | No-load current | 1.38 | A | |
| 13 | Starting current I _s /I _N | 4 | | Meet IEC 60034-12, N |
| 14 | Nominal torque T _N | 7.7 | Nm | |
| 15 | Locked rotor torque T _s /T _N | 2 | | |
| 16 | Maximum torque T _{max} /T _N | 2.3 | | |
| 17 | Minimum torque T _{min} /T _N | 1.7 | | |
| 18 | Speed at minimum torque | 50 | r/min | |
| | Load characteristics (IEC 60034-2-1:2014) | Load % | Current A | Efficiency % |
| 19 | PLL determined from residual loss | 100 | 1.94 | 77.6 / IE2 |
| 20 | | 75 | 1.65 | 78.6 |
| 21 | | 50 | 1.49 | 76.3 |
| 22 | | Start | 7.8 | 0.58 |
| 23 | Maximum starting time from hot | 35 | s | |
| 24 | Maximum starting time from cold | 63 | s | |
| 25 | Insulation class / Temperature class | F / B | | |
| 26 | Ambient temperature | 40 | °C | |
| 27 | Altitude | 1000 | m.a.s.l. | |
| 28 | Enclosure | IP55 | | |
| 29 | Cooling system | IC411 self ventilated | | |
| 30 | Bearing DE/NDE | 6205-2Z/C3 - 6204-2Z/C3 | | |
| 31 | Type of Grease | | | |
| 32 | Sound pressure level (LP dB(A) 1m) | 44 | dB(A) | at load |
| 33 | Moment of inertia J = ¼ GD ² | 0.0048 | kg-m ² | |
| 34 | Balancing | | | |
| 35 | Vibration class | | | |
| 36 | Position of terminal box | Top | | |
| 37 | Terminal box entries; no, dimens. | | | |
| 38 | Number of power terminals | | | |
| 39 | Direction of rotation | CW or CCW | | |
| 40 | Weight of rotor | 5 | kg | |
| 41 | Total weight of motor | 18 | kg | |
| 42 | Dimension drawing no. | | | |
| 43 | | | | |
| 44 | | | | |
| 45 | | | | |
| Ex-motors | | | | |
| 46 | | | | |
| 47 | | | | |
| 48 | | | | |

Option Variant Codes / Definition

| | | | | |
|----|--|--|--|--|
| 49 | | | | |
| 50 | | | | |
| 51 | | | | |
| 52 | | | | |

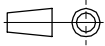
Remarks:

Data based on situation 2/7/2020
All data subject to tolerances in accordance with IEC
Guaranteed values on request



M3AA 090
 (*) Except 090_LD

Additional information:

| | | | |
|--|-------------------------------------|--------------------------------------|---|
| Motor Dimension Print | | Motor Type : M3AA 090 (*) | Document Nº : A1.4877 / 3D A2.4285 |
| Description : Motor foot mounted IM1001 / Motor con patas IM1001 | | |  |
| Unit : Discrete Automation & Motion - Fábrica Motores | Issued by : EMD / G.Gállego | Replaces : To date 2011-03-10 | |
| Date : 2012-07-17 | Approved by : EMD / G.Blanes | Replaced by : | |
| Asea Brown Boveri, S.A. | Customer Reference : | | ABB |

Motors in brief

Motor sizes 56–132

| Motor size | M3AA | 56–63 | 71 | 80 | 90 | 100 | 112 | 132 |
|--|--|---|---|-------------|------------|------------|-----------------------------|-------------------------------|
| Stator and end shields | Material | Die-cast aluminum alloy | | | | | | |
| | Paint colour shade | Munsell blue 8B 4.5/3.25 | | | | | | |
| | Corrosion class | C3 according to IEO/EN 12944-5 | | | | | | |
| Feet | Integrated aluminum feet | | | | | | | |
| Bearings | D-end | 6201-2Z/C3 | 6203-2Z/C3 | 6204-2Z/C3 | 6205-2Z/C3 | 6306-2Z/C3 | 6306-2Z/C3 | 6208-2Z/C3 |
| | | | | | | | | 6308-2Z/C3 ¹⁾ |
| | | | | | | | | E2.6208-2Z/C3 ²⁾ |
| | | | | | | | E2.6308-2Z/C3 ³⁾ | |
| | N-end | 6201-2Z/C3 | 6202-2Z/C3 | 6203-2Z/C3 | 6204-2Z/C3 | 6205-2Z/C3 | 6205-2Z/C3 | 6206-2Z/C3 |
| | | | | | | | | E2.6206-2Z/C3 ⁴⁾ |
| Axially-locked bearings | Inner bearing cover | ND-end retaining ring | Locked at D-end | | | | | |
| Bearing seal | D-end | V-ring | | | | | | |
| | N-end | Labyrinth seal | | | | | | |
| Lubrication | Permanent grease lubrication. Grease temperature range -40°C to +160°C | | | | | | | |
| Measuring nipples for condition monitoring of the bearings | Not included | | | | | | | |
| Rating plate | Material | Aluminum | | | | | | |
| Terminal box | Material | Die-cast aluminum alloy, integrated to stator | | | | | | |
| | Cover screws material | Zinc-electroplated steel | | | | | | |
| Connections | Openings | 2x(M16+M16) | 2x(M20 + M20) | 2x(M20+M25) | | | | 2x(M20+M25) ⁵⁾ |
| | | | | | | | | 2x(M40+M32+M12) ⁶⁾ |
| | | Terminals | 6 terminals for connection with cable lugs (not included) | | | | | |
| | Cable glands | Optional | | | | | | |
| Fan | Material | Glass-fiber reinforced polypropylene | | | | | | |
| Fan cover | Material | Polypropylene | | | | | | |
| | Paint colour shade | Munsell blue 8B 4.5/3.25 | | | | | | |
| | Corrosion class | C3 | | | | | | |
| Stator winding | Material | Copper | | | | | | |
| | Insulation | Insulation class F | | | | | | |
| | Winding protection | Optional | | | | | | |
| Rotor winding | Material | Die-cast aluminum | | | | | | |
| Balancing | Half key balancing | | | | | | | |
| Key ways | Closed key way | | | | | | | |
| Drain holes | | Without drain holes | Drain holes with closable plastic plugs, open on delivery | | | | | |
| External earthing bolt | As option | | | | | | | |
| Enclosure | IP 55 | | | | | | | |
| Cooling method | IC 411 | | | | | | | |

¹⁾ (SM) except 4p 11&15kW HO

⁴⁾ HO 2p 9,2&15kW

²⁾ 2p 9,2kW HO

⁵⁾ S, SB, M, MA

³⁾ 2p 15kW HO

⁶⁾ SC, MC, SMA-SME