



Technical Data Sheet - DOL



Project Location
United Arab Emirates

Company Contact Contact Item name
Trielectric International FZE **Mr.Saravanan(+971564345964)** **Mr.Thamizh(+971502353763)** **1.00006**

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 102 530-BSE Calc. ref. 3GZF021010-257 | | |
| 3 | Type/Frame | M3AA 100LC 4 | | |
| 4 | Mounting | IM3001, B5(flange) | | |
| 5 | Rated output P _N | 2.2 | 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 | 1450 | r/min | |
| 11 | Rated current I _N | 4.6 | A | |
| 12 | No-load current | 2.8 | A | |
| 13 | Starting current I _s /I _N | 7.3 | | Meet IEC 60034-12, N,(H at 60 Hz) |
| 14 | Nominal torque T _N | 14.5 | Nm | |
| 15 | Locked rotor torque T _s /T _N | 2.8 | | |
| 16 | Maximum torque T _{max} /T _N | 3.4 | | |
| 17 | Minimum torque T _{min} /T _N | 2.4 | | |
| 18 | Speed at minimum torque | 210 | r/min | |
| Load characteristics (IEC 60034-2-1:2014) | | Load % | Current A | Efficiency % |
| 19 | PLL determined from residual loss | 100 | 4.6 | 86.4 / IE2 |
| 20 | | 75 | 3.8 | 86.2 |
| 21 | | 50 | 3.1 | 84.1 |
| 22 | | Start | 34 | 0.61 |
| 23 | Maximum starting time from hot | 15 | s | |
| 24 | Maximum starting time from cold | 27 | 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 | 6306-2Z/C3 - 6205-2Z/C3 | | |
| 31 | Type of Grease | | | |
| 32 | Sound pressure level (LP dB(A) 1m) | 54 | dB(A) | at load |
| 33 | Moment of inertia J = ¼ GD ² | 0.009 | 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 | 8 | kg | |
| 41 | Total weight of motor | 25 | kg | |
| 42 | Dimension drawing no. | | | |
| 43 | | | | |
| 44 | | | | |
| 45 | | | | |

Ex-motors

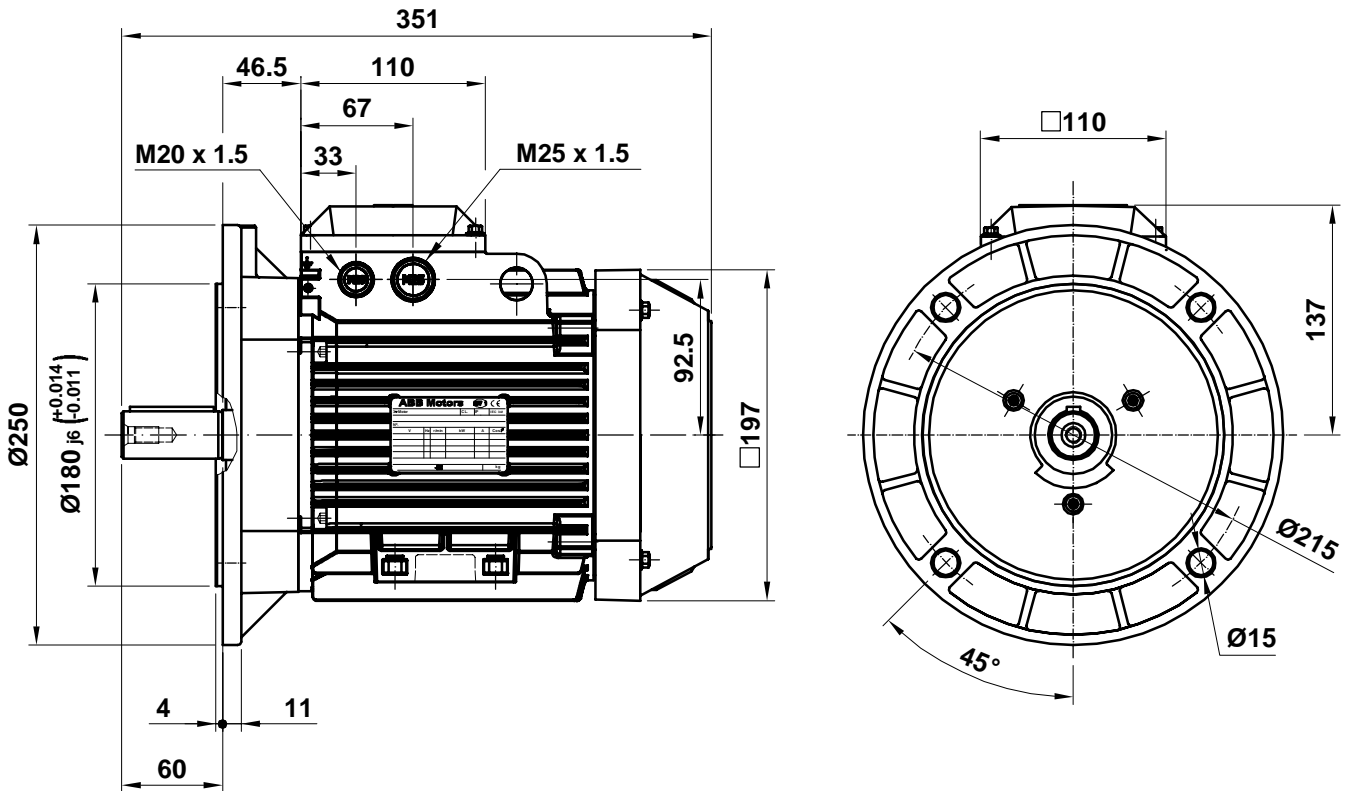
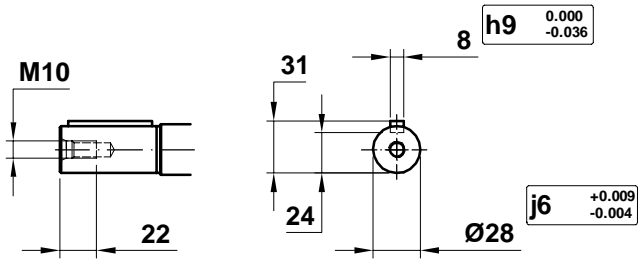
| | | | | |
|----|--|--|--|--|
| 46 | | | | |
| 47 | | | | |
| 48 | | | | |

Option Variant Codes / Definition

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

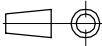

Remarks:

Data based on situation 2/10/2020
All data subject to tolerances in accordance with IEC
Guaranteed values on request



M3AA 100

(*) Except 100 LD

| | | |
|---|---|---|
| Motor Dimension Print | Motor Type : M3AA 100 L (*) | Document N° : A1.4730 / 3D A2.4301 |
| Description : Motor flange mounted IM3001 / Motor con brida IM3001 | |  |
| Unit : Discrete Automation & Motion - Fáb. Motores Date : 2012-01-26 | Issued by : EMD/ J.Muñoz Approved by : EMD/ G.Blanes | Replaces : To date 2008-02-18 Replaced by : |
| Asea Brown Boveri, S.A. | Customer Reference : | |
|  | | |

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