
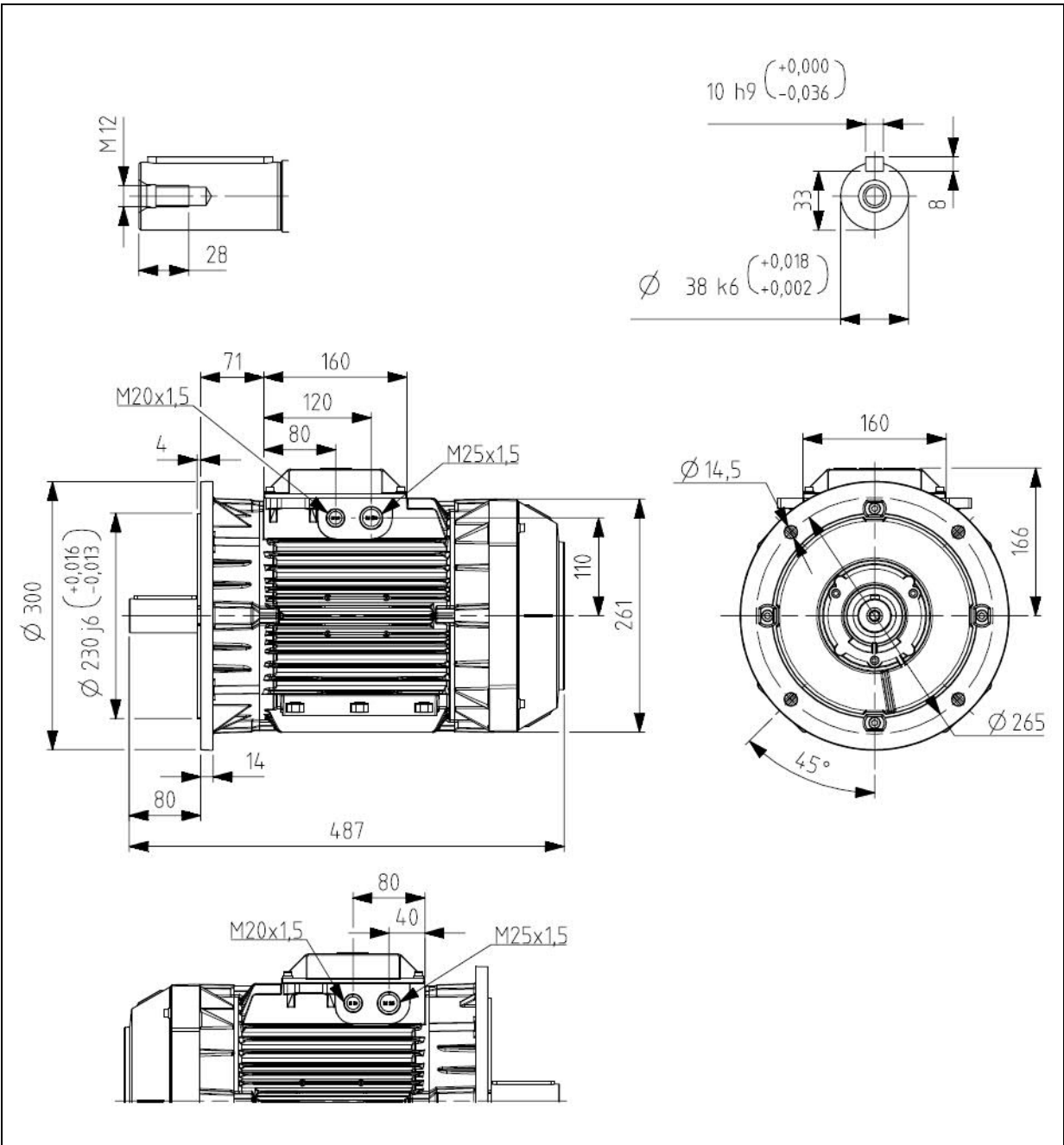


| IEC LV Motors | | Technical Data Sheet - DOL | | |  |
|---|--|---|-----------------------------------|--------------------------------------|---|
| Department/Author SARAVANAN | | Customer name | Customer ref | Item name 1.00006 | |
| Our ref. Trielectric International FZE | | Rev/Changed by A | Date of issue 10/2/2023 | Saving ident untitled.xlsm | Pages 1(3) |
| No. | Definition | Data | Unit | Remarks | |
| 1 | Product | TEFC, 3-phase, squirrel cage induction motor | | | |
| 2 | Product code | 3GAA 131 120-BDK | | Calc. ref. | 3GZF021013-756 |
| 3 | Type/Frame | M3AA 132SB 2 | | | |
| 4 | Mounting | IM3001, B5(flange) | | | |
| 5 | Rated output P _N | 5.5 | kW | | |
| 6 | Service factor | 1 | | | |
| 7 | Type of duty | S1(IEC) 100% | | | |
| 8 | Rated voltage U _N | 400 | VD | ± 5 % (IEC 60034-1) | |
| 9 | Rated frequency f _N | 50 | Hz | ± 2 % (IEC 60034-1) | |
| 10 | Rated speed n _N | 2901 | r/min | | |
| 11 | Rated current I _N | 9.7 | A | | |
| 12 | No-load current | 2.4 | A | | |
| 13 | Starting current I _s /I _N | 7.9 | | Meet IEC 60034-12, N | |
| 14 | Nominal torque T _N | 18.1 | Nm | | |
| 15 | Locked rotor torque T _s /T _N | 2.3 | | | |
| 16 | Maximum torque T _{max} /T _N | 3.4 | | | |
| 17 | Minimum torque T _{min} /T _N | 2.1 | | | |
| 18 | Speed at minimum torque | 450 | r/min | | |
| 19 | Load characteristics (IEC 60034-2-1:2014) | Load % | Current A | Efficiency % | Power factor |
| 20 | PLL determined from residual loss | 100 | 9.7 | 89.2 / IE3 | 0.91 |
| 21 | | 75 | 7.4 | 89.9 | 0.9 |
| 22 | | 50 | 5.2 | 90.1 | 0.84 |
| 22 | | Start | 77 | | 0.39 |
| 23 | Maximum starting time from hot | 14 | s | | |
| 24 | Maximum starting time from cold | 26 | 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 | 6208-2Z/C3 - 6206-2Z/C3 | | | |
| 31 | Type of Grease | | | | |
| 32 | Sound pressure level (LP dB(A) 1m) | 68 | dB(A) | at load | |
| 33 | Moment of inertia J = ¼ GD ² | 0.0154 | kg-m² | | |
| 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 | 13 | kg | | |
| 41 | Total weight of motor | 58 | 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 7/13/2022 | | | | | |
| All data subject to tolerances in accordance with IEC | | | | | |
| Guaranteed values on request | | | | | |



Additional information:

| | | |
|------------------------|--|--|
| Dimension Print | Motor Type: M3AA (K) 132 B5, V1, V3 | Document No: 3GZW500613-36 B 13 AA 132 A |
| | Description: SQUIRREL CAGE MOTOR. | |
| Unit: IEC LV Motors | Issued by: S.Tikkanen | Replaces: |
| Date: 21.02.2021 | Approved by: J.Honkala | Replaced by: |
| ABB Oy | 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