


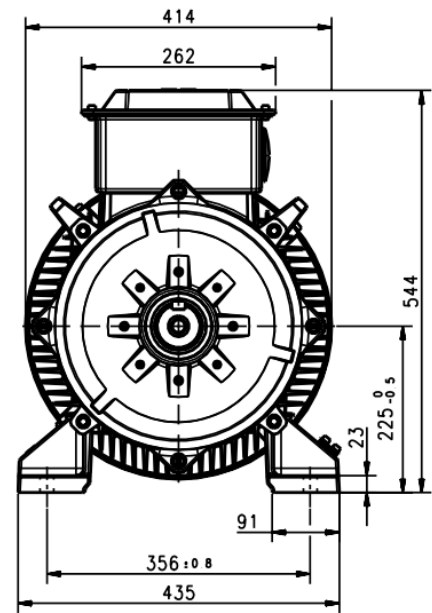
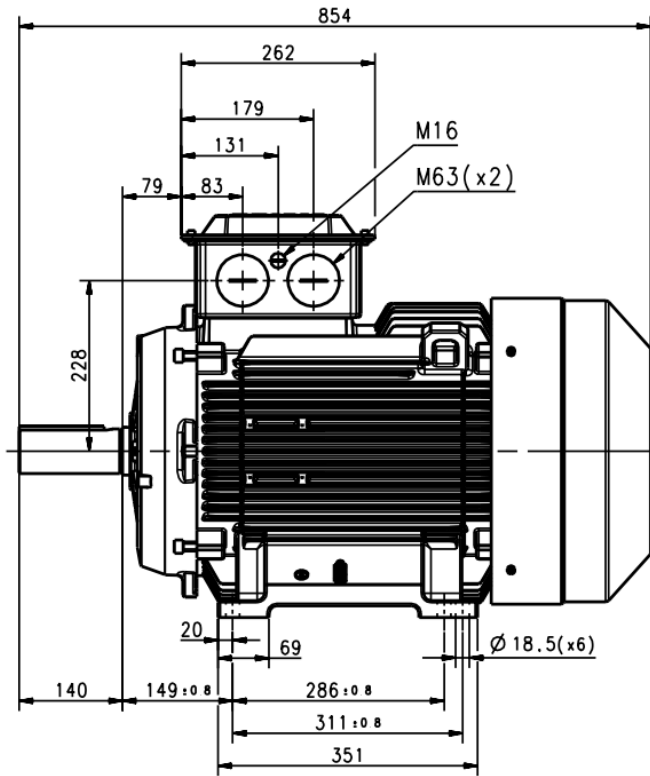
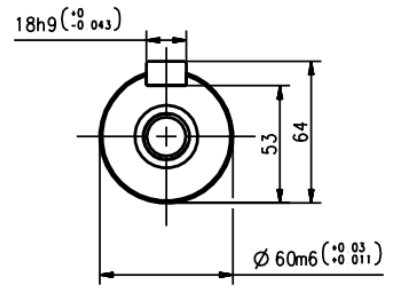
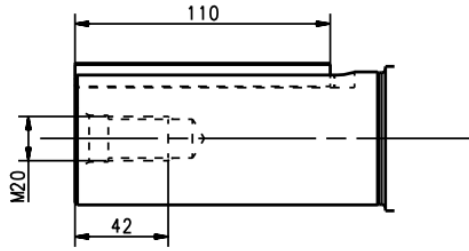
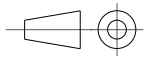


|   | | Technical Data Sheet | | |  | |
|---|--|--|-------------|--|---|--|
| Project | | Location United Arab Emirates | | | | |
| Company Trielectric International FZE | | Contact Mr.Saravanan(+971564345964) | | Contact Mr.Thamizh(+971502353763) | | |
| Our ref. Stock | | Rev/Changed by A | | Date of issue 9/14/2021 | | |
| | | | | Saving ident | | |
| | | | | Pages 1(3) | | |
| No. | Definition | Data | Unit | Remarks | | |
| 1 | Product | TEFC, 3-phase, squirrel cage induction motor | | | | |
| 2 | Product code | 3GBA 223 210-ADCIN | | Calc. ref. | 3GZH021022-4 | |
| 3 | Type/Frame | M2BAX 225SMA 6 | | | | |
| 4 | Mounting | IM1001, B3(foot) | | | | |
| 5 | Rated output P _N | 30 | kW | | | |
| 6 | Service factor | 1 | | | | |
| 7 | Type of duty | S1 100% | | | | |
| 8 | Rated voltage U _N | 400 | VD | ± 5 % | | |
| 9 | Rated frequency f _N | 50 | Hz | ± 2 % | | |
| 10 | Rated speed n _N | 981 | r/min | | | |
| 11 | Rated current I _N | 57.9 | A | | | |
| 12 | | | | | | |
| 13 | Starting current I _s /I _N | 6.5 | | | | |
| 14 | Nominal torque T _N | 292 | Nm | | | |
| 15 | Locked rotor torque T _s /T _N | 2.1 | | | | |
| 16 | Maximum torque T _{max} /T _N | 2.8 | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| Load characteristics | | Load % | Current A | Efficiency % | Power factor | |
| 19 | PLL determined from residual loss | 100 | 57.9 | 91.7 / IE2 | 0.82 | |
| 20 | | 75 | 45.3 | 92 | 0.78 | |
| 21 | | 50 | 34.4 | 91.2 | 0.69 | |
| 22 | | | | | | |
| 23 | Thermal withstand time hot | 14 | s | | | |
| 24 | Thermal withstand time cold | 23 | s | | | |
| 25 | Insulation class / Temperature class | F / B | | | | |
| 26 | Ambient temperature | 50 | | | | |
| 27 | Altitude | 1000 | | | | |
| 28 | Degree of protection | IP55 | | | | |
| 29 | Cooling system | IC411 | | | | |
| 30 | Bearing DE/NDE | 6313-2Z/C3 - 6210-2Z/C3 | | | | |
| 31 | Sound pressure level (LP dB(A) 1m) | 80 | dB(A) | at no-load | | |
| 32 | Moment of inertia J = ¼ GD2 | 0.5687 | kg-m2 | | | |
| 33 | Position of terminal box | Top | | | | |
| 34 | Direction of rotation | Bi-directional | | | | |
| 35 | Weight of rotor | 106 | kg | | | |
| 36 | Total weight of motor | 284 | kg | | | |
| 37 | Paint shade | Munsell Blue | | | | |
| 38 | Cable size | | | | | |
| 39 | Vibration | As Per IS 12075 | | | | |
| 40 | | | | | | |
| 41 | | | | | | |
| 42 | | | | | | |
| 43 | | | | | | |
| 44 | | | | | | |
| 45 | | | | | | |
| Ex-motors | | | | | | |
| 46 | | | | | | |
| 47 | | | | | | |
| 48 | | | | | | |
| Option Variant Codes / Definition | | | | | | |
| 49 | | | | | | |
| 50 | | | | | | |
| 51 | | | | | | |
| 52 | | | | | | |
| Remarks: | | | | | | |
| Applicable standards: IS 12615:2018, IEC 60034-30-1:2014 | | | | | | |

All performance values are subject to IS/IEC tolerances



Additional information:

| | | |
|---|--|---|
| Dimension Print | Motor Type: | Document No: |
| | IE2&IE1 M2BAX 225SM_4-6 B3, B6, B7, B8, V5, V6 | 3GZC500022-6 F |
| | IE3 M2BAX 225SM_4-6 B3, B6, B7, B8, V5, V6 | 13 BA 225 A |
| Description: STANDARD SQUIRREL CAGE MOTOR | |  |
| Unit: ABB Motors and Generators | Issued by: Jeff Wang | Replaces: |
| Date: 2019-07-05 | Approved by: Adam Zhu | Replaced by: |
| ABB Ltd. | Customer Reference: | ABB |

Motors in brief

General performance IE2 high efficiency cast iron motors

| Size | 160 | 180 | 200 | 225 | 250 | |
|----------------------------|---------------------|---|------------|------------|--------------------------|------------|
| Stator | Material | Cast iron grade 200 : ISO 185 | | | | |
| | Paint colour shade | Munsell blue 8B 4.5/3.25 / NCS 4822 B05G | | | | |
| | Surface Treatment | C3 medium according to ISO / EN 12944-5 | | | | |
| Feet | | Integrated with stator | | | | |
| | Material | Cast iron grade 200 : ISO 185 | | | | |
| Bearing end shields | Material | Cast iron grade 200 : ISO 185 | | | | |
| | Paint colour shade | Munsell blue 8B 4.5/3.25 / NCS 4822 B05G | | | | |
| | Surface Treatment | Aliphatic polyurethane enamel paint_70µm | | | | |
| Bearings | D-end | 6209-2Z/C3 | 6310-2Z/C3 | 6312-2Z/C3 | 6313-2Z/C3 | 6315-2Z/C3 |
| | N-end | 6209-2Z/C3 | 6209-2Z/C3 | 6209-2Z/C3 | 6210-2Z/C3 | 6212-2Z/C3 |
| Axially-locked | Inner Bearing Cover | As standard, locked at D-end | | | | |
| Bearing seals | D-end | V-ring | | | | |
| | N-end | V-ring | | | | |
| Lubrication | | Permanently lubricated shielded bearings | | | | |
| Terminal Box | Material | Sheet of Steel, Cold Rolled | | | | |
| | Surface | Treatment Similar to stator | | | | |
| | Screws | Steel 8.8 | | | | |
| Connections | Cable Entries | 2xM40, 1xM16 | | | 2xM50, 1xM16 | |
| | Cable Sizes | 2Rx3Cx70mm ² | | | 2Rx3Cx120mm ² | |
| | Terminal Stud Size | M6 | | | M10 | |
| | Terminal Box | 6 terminals for connection, cable lugs (not included) | | | | |
| Fan | Material | Polypropylene, Reinforced with 20% glass fibre | | | | |
| Fan Cover | Material | Sheet of Steel, Cold Rolled | | | | |
| | Paint colour shade | Munsell blue 8B 4.5/3.25 / NCS 4822 B05G | | | | |
| | Surface Treatment | Similar to stator | | | | |
| Stator winding | Material | Copper | | | | |
| | Insulation | Insulation class F | | | | |
| Rotor winding | Material | Diecast aluminum | | | | |
| Balancing method | | Half Key Balancing as standard | | | | |
| Key ways | | Open Key Way | | | | |
| Enclosure | | IP 55 | | | | |
| Cooling method | | IC 411 | | | | |
| Drain holes | | Drain holes with closable plastic plugs, open on delivery | | | | |
| Lifting lugs | | Integrated with the stator | | | | |