

TOSHIBA

TOSHIBA INTERNATIONAL CORPORATION

LOW VOLTAGE MOTORS

EQP Global[®] SD Top Mount



**SEVERE
DUTY**

BUILT FOR SEVERE DUTY APPLICATIONS

The Toshiba EQP Global Top Mount motor series offers a reliable solution for severe duty applications. These totally enclosed fan cooled motors include a top-mounted conduit box that reduces the installation profile and the need to stock multiple motors with different terminal locations. Their rugged design is engineered with high quality materials, providing superior performance for harsh conditions. In general, Toshiba's EQP Global Series motors offer one of the lowest costs of ownership in the industry by maintaining a high level of efficiency.



Application Specific Design	Horizontal or vertical mounting provisions, ingress protection, and corrosion-resistant paint system offered for protection in severe duty environments.
Ingress Protection	A totally enclosed fan cooled design combined with a v-ring or shaft slinger seals provide IP55 protection, helping prevent ingress of humidity, dust, dirt, and other contaminants present in the environment.
Low Vibration	A vibration level exceeding NEMA MG1 requirements provides stability and durability by prolonging motor life and helping to reduce downtime.
Multi Drain Provisions	Multiple drain plug provisions on brackets, frame, and conduit box allow drainage for all available vertical and horizontal mounting positions.
Inverter Duty Rated	Motor is designed for use with an adjustable speed drive, which can lead to energy savings when motor is run at optimum fan speed. The insulation system meets NEMA MG1 Part 31, providing speed ranges of up to 60:1 Variable Torque, 10:1 Constant Torque in Class I Division 2 environment.
Dual-Frequency Rated	50/60 Hz design allows the SD Top Mount motor to be a drop-in replacement for motors anywhere in the world. Standard dual rating label plate mounted on motor.
Severe Duty Applications	V-ring seal on the drive end, severe duty paint system and IP55 enclosure allow for the SD Top Mount motor to be used in a wide variety of applications in industrial environments.

DESIGNED FOR SUPERIOR QUALITY & OPTIMAL PERFORMANCE

Toshiba's EQP Global motor series rugged design is engineered with advanced materials for high performance and longer life - suitable for severe conditions and offering one of the lowest costs of ownership in the industry.

- Oversized 300 Series Bearings
- Heavy Duty Cast Iron Construction
- 100% Quality Tested
- Insulation with Wide Thermal Capability
- C5-Rated Inter-Lamination Material
- High Torque Output
- Proven Design

ASD CAPABILITIES

Frame	None	T-Code	60:1 VT					
			2:1 CT	T-Code	3:1 CT	T-Code	10:1 CT	T-Code
140	5 HP Max.	T4	5 HP Max.	T4	5 HP Max.	T4	5 HP Max.	T4
180								
210								
250								
280	100 HP Max.	T3	100 HP Max.	T3	100 HP Max.	T3	100 HP Max.	T3
320								
360								
400								
440								
440	350 HP Max.	T3	350 HP Max.	T3	350 HP Max.	T3	350 HP Max.	T3

* The constant torque coverage dictates the maximum horsepower.
 * Above temperature codes are based on Class I, Division 2, and standard ambient and altitude.
 * 20:1 CT can be accommodated on motors up to 200 HP, up to 447 frame, 4 & 6 Pole, and non-hazardous area.

AVAILABLE OPTIONS

- Space Heaters
- Thermal Protection Devices (Thermostat or Thermistor)
- F1/F2 Mount
- Auxiliary Terminal Box
- Drip Cover
- Rotation of Main Terminal Box
- C-Flange
- Shaft Grounding (Not Available for Div 2 Locations)
- Insulated Bearings

DUAL FREQUENCY 50/60 HZ DESIGN

TOSHIBA SEVERE DUTY **EQP Global SD**

MODEL NO. 0254SDSR41A-P3
 SERIAL NO. _____

HP 25 kW 18.5 RPM 1770
 VOLT 230/460 AMP 62/31
 Hz 60 S.F. 1.15 P.F. 83.0 CODE G
 NEMA NOM EFF 93.6 MAX SAFE RPM 2700

FRAME 284T ENCL. TEFC
 TYPE TKKH NEMA B
 FORM FBK1 INS. F
 IP: 55 DUTY CONT
 PH. 3 MAX. AMB. 40°C
 WT. 198 Kg. 437 Lbs.
 O.S.: 6310ZC3
 L.S.: 6310ZC3
 MFG. DATE _____
 USABLE ON 208V, AT 67 AMP

LOW VOLTAGE
 HIGH VOLTAGE

CONNECTIONS
 9 6
 8 5 7
 10 11 12
 3 4 1

HP 25 kW 18.5 RPM 1460
 VOLT 190/380 AMP 72/36
 Hz 50 S.F. 1.0 P.F. 84.0 CODE G
 NEMA NOM EFF 91.7
 NOM EFF (3/4) 94.0 NOM EFF (1/2) 94.4
 CSA CERTIFIED: CL I, DIV 2, GRP A, B, C, D/ZONE 2, GRP IIA, IIB, IIC; SINEWAVE - T3 @ 1.15SF OR T3C @ 1.05F, OR VPWM VFD T3 @ 1.05F - 60:1VT, 10:1CT, 1:1.5CHP

V482-ADN TOSHIBA INTERNATIONAL CORPORATION - HOUSTON, TEXAS
 MADE IN VIETNAM

NEMA Premium
 E133052
 IEC 60034-2
 ISO 9001
 ISO 14001
 ISO 45001
 C00278
 ee

INDUSTRIES SERVED

- Oil & Gas
- HVAC
- Chemical
- Pulp & Paper
- Power Generation
- Mining & Minerals
- Agriculture
- Water & Wastewater

APPLICATIONS

- Compressors
- Conveyors
- Pumps
- Fans
- Mixers
- Material Handling

3 THREE YEAR WARRANTY



CC027B



GENERAL	
Horsepower	1 to 200 HP
Speed (60 Hz)	3600, 1800, or 1200 RPM
(50 Hz)	3000, 1500, or 1000 RPM
Voltage (60 Hz)	230/460, 460 or 575 V
(50 Hz)	190/380 V (Where Applicable)
Service Factor	1.15 SF (60 Hz), 1.0 SF (50 Hz)
Enclosure	Totally Enclosed Fan Cooled
Frame Size	143T through S447T
Ingress Protection	IP55
Insulation	Class F Inverter Duty, Exceeds NEMA MG1 Part 31 Requirements (Inverter Duty)
Vibration	Typically 0.10 Inches/Second or Less (Unfiltered)
Environment	Severe Duty, Suitable for Use in Class I Division 2 Hazardous Locations
Efficiency	NEMA Premium®
Hardware	Zinc Dichromate Plated
CONSTRUCTION	
Frame	Cast Iron
Paint	External-Corrosion-Resistant Severe Duty System; Painted Internal-Machined Surfaces
Shaft Seals	V-Ring or Shaft Slinger on DE & ODE
Lifting	Forged Shouldered Eyebolt
Mounting	Double Drilled Feet for Multi-Mount Capabilities on Most Frames
Drains	Multiple Drain Provisions for Horizontal & Vertical Mounting in Frame & Bearing Brackets
Nameplate	Stainless Steel with Connection Diagram
BEARINGS	
Type	Oversized 300 Bearing Series
Life	150,000 Hours Direct Coupled; 40,000 Hours Belted
CONDUIT BOX	
Material	Cast Iron with Threaded NPT Opening
Mounting	Rotatable 90° Increments, F3 Mounting
Grounding	Grounding Provisions
Gasket	Neoprene between Conduit Box and Frame with Permanent Marking for Lead Orientation
INSULATION SYSTEM	
Temperature Rise	Class B Rise by Resistance Method (80°C) @ 1.0 SF
Material	Low-Loss Electrical Grade Silicon Core Steel with C5 Interlamination Insulation; Phase Paper & Coil Bracing on DE & ODE; Magnet Wire High Voltage Can Withstand Capability of 2000 V in 0.1 μs; Meets NEMA MG1 Part 31 Requirements (Inverter Duty)
Class	Class F with Class H Wire and Varnish
Leads	Permanently Identified Leads; Single Ring Compression Type Lead Lugs (284 Frame & Larger)

© 2021
Toshiba International Corporation
Motors & Drives
13131 West Little York Road
Houston, Texas 77041 USA
Tel +713-466-0277
US 1-800-231-1412
Rev.06ESSENCE1021



TOSHIBA MOTORS & DRIVES
Adjustable Speed Drives • Motors • Motor Controls



www.toshiba.com/tic