

GE Transportation

Drill Rig Motor Standard Specification

Model Number: 5GEB20B4



Description

GE 1150 HP (858 kW) **ATEX & IECEx certified** AC drilling motor.

Type

Vertical, splash-proof fully guarded (IP44) with additional IP accessories, not provided by GE.

Ratings

Maximum continuous power: 1150 HP (858 kW), 7550 lb-ft (10240 Nm), 1120 AAC,
800 to 1550 rpm at 587 VAC; 800 to 2000 rpm at 640 VAC (motor terminal voltage)
Intermittent TD duty cycle: 10,600 lb-ft (14372 Nm), 1470 AAC, 0-100 rpm, (15 sec. on – 45 sec. off)
Maximum RPM: 2300
Temperature rating: 110°C rise at 45°C ambient (1150 HP, 858 kW)
100°C rise at 55°C ambient (1075 HP, 782 kW, 1048 AAC)

Features

- Special frame head and thrust bearing for vertical operation.
- 6-pole stator with form wound windings.
- Copper alloy rotor bars and end rings.
- Class H insulation, robotically taped, Mica-Kapton system.
- Insulated non-drive end bearing.
- Double shaft extension. Hubs included on request. 1045 alloy steel ABS certified shaft.
- (3) 16 ft. long armored marine cables, 646 MCM. Connection lugs and connection box not included.
- (6) RTDs, 100-ohm platinum, two per phase embedded in stator slots, leads are not terminated.
- Separately ventilated – flanged inlet provided for forced ventilation, blower not included – 2800 scfm required.
- Drill motor is ATEX certified Ex e II T3,  II 2 G c T3 by Sira, 09ATEX3076X.
- 400-watt tape heaters (200-watts on each end of motor), connected at 240V and field convertible to 120V, ATEX certified EEx e II,  II 2 G.
-   when motor is used in hazardous areas with approved Variable Frequency Drives (VFD).
- IECEx certification
- Motor enclosure: IP22; IP44 rating when fitted with additional ATEX approved components by drilling equipment OEM.
- Paint – Primer only. Final coat by others.
- Encoder, pressure sensor and discharge air handler are not included.
- Approximate weight: 6162 lb., 2795 kg.

5GEB20B is a standard vertical GE Drilling Motor that requires additional wiring, modifications and accessories to be added by the user. This motor is not a direct replacement for an existing top drive. Top drive manufacturers make modifications and/or additions to these motors prior to mounting. These modifications and/or additions are not included in this equipment. GE recommends contacting the equipment manufacturer for replacement motors.
