# Motors DMI DC motors

### Reliability with less maintenance

The DMI DC motor provides higher output performance over a wide speed range and is easier to maintain compared to conventional DC motors. This motors robust design and unique features increase reliability and extend the time between maintenance intervals. The power dense low profile of the DMI DC motor also makes it easy to integrate into almost any existing application.

#### **Product features**

- Extended speed range capabilities with superior commutating performance
- Longer brush wear lengths compared to conventional designed brushes
- Reduced commutator peripherals for extended brush life
- Precise bearing tolerances preventing the risk of grease leakage into the motor
- Roller bearings available for belted applications
- Mechanical brush wear monitoring system no special monitoring probed brushes required
- 45 degree rotatable brush gear assembly in either direction for easy brush maintenance



## **Product specifications**

- IEC frame sizes 180, 200, 225, 250, 280, 315, 400
- Power up to 1400 kW (1910 hp)
- Torque up to 22,000 Nm
- Voltage up to 810 V
- IM horizontal or vertical, foot or flange
- IP 22-55
- IC-06, 17, 37, 86W, 666, 410
- Insulation Class 200
- Meets standards IEC, CE, CSA (up to 710V)

### Innovative mechanical design



The efficient cooling fan can be fitted in multiple locations on DE or NDE of motor (not shown in this diagram)

45 degree rotatable brush gear in either direction for easy brush access

Shaft grounding brush is standard on all DMI motors



## Unsurpassed power and performance

DMI's patented cross-section allows for increased power output, torque and speed range. The key behind DMI's peak performance lies in the optimized electromagnetic circuit, reduced flux intrusion from the cooling ducts and improved efficiency of the cooling system. Skewed coil slots give the motor excellent low-speed characteristics and also a lower noise level. In addition, the insulation system is moisture resistant and has a temperature index for class H designations.

Many cooling options are available, including blower mounted assemblies, air to water and air to air heat exchangers, separate pipe-in / pipe-out cooling, and limited totally enclosed non-ventilated designs.

## An easy choice for replacement and retrofit

The flexible design and high output power capability of the DMI DC motor makes it an ideal choice for upgrading existing DC motor installations. Because of the low profile design, this motor is also a simple drop-in replacement.

The innovative mechanical design of the DMI product is extremely versatile, which means DMI motors can be tailored to meet specific performance requirements. Variations of cooling fan and conduit box arrangements, flexible foot hole dimensioning, and endless shaft mounting configurations makes it easy to customize a DMI motor for any application and industry.



### Simplified maintenance

The DMI motor is designed with the maintenance engineer in mind. Typical brush changes are often cumbersome with hard to reach access of many brushes. However, a special snap-lock feature in the DMI motor relocates the factory neutral set point after the rocker ring is rotated 45 degrees in either direction, allowing bushes to be changed easily during scheduled maintenance intervals.

### **Brush replacement savings**

Customers can save tens of thousands of dollars by choosing the DMI DC motor with its mechanical brush wear indicator monitoring system that requires only standard factory installed brushes. This unique system uses an electrical signal to indicate when the brush length is reduced to its final wear mark and needs to be replaced.





