

DMI - DC motors for peak performance

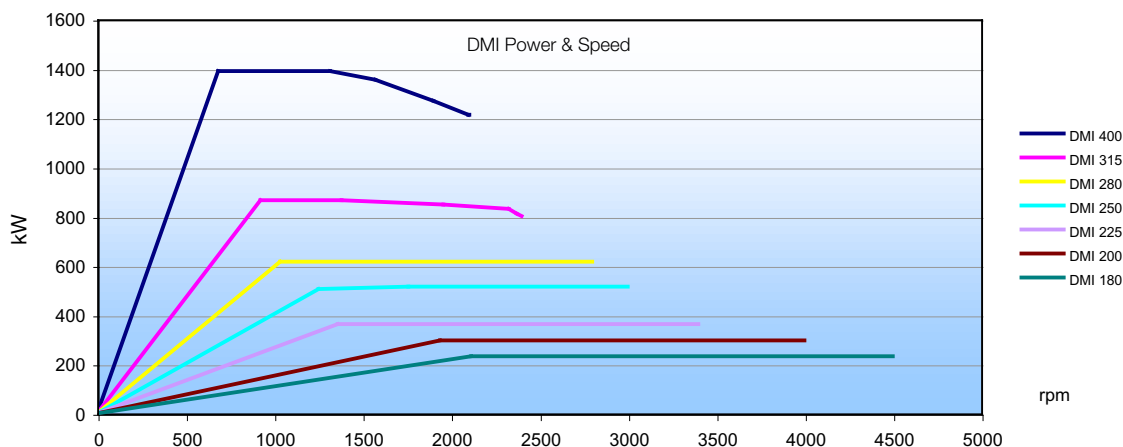


What is the DMI motor?

The DMI motor series is ABB's latest DC product range in the market. It combines improved output performance with less maintenance, higher reliability and adaptability compared to conventional DC motors. This means increased productivity and a smooth integration in almost any application. The DMI benefits from all the know-how and experience embodied in its highly successful predecessors, and represents the next step in the evolution of DC motors.

What are the main features?

-Frame sizes	IEC 180, 200, 225, 250, 280, 315, 400
-Comp. wind	frame size \geq 250
-Power	up to 1400 kW / 1910 HP
-Torque	up to 22 kNm
-Voltage	up to 810 V
-Field voltage	110-440 V
-IM	Horizontal or vertical, foot or flange
-IP	23-55
-IC	06, 17, 37, 86W, 666, 410
-Insulation	Class 200
-Standards	IEC, CE, CSA (up to 710 V)





PM607 EN RevB 2008

Product Notes

What are the main features?

The DMI DC motor is designed to allow fan cooling, air/water and air/air heat exchangers, external cooling or frame cooling. The wide selection of options and built-in flexibility means that these motors can be tailored for any application and industry.

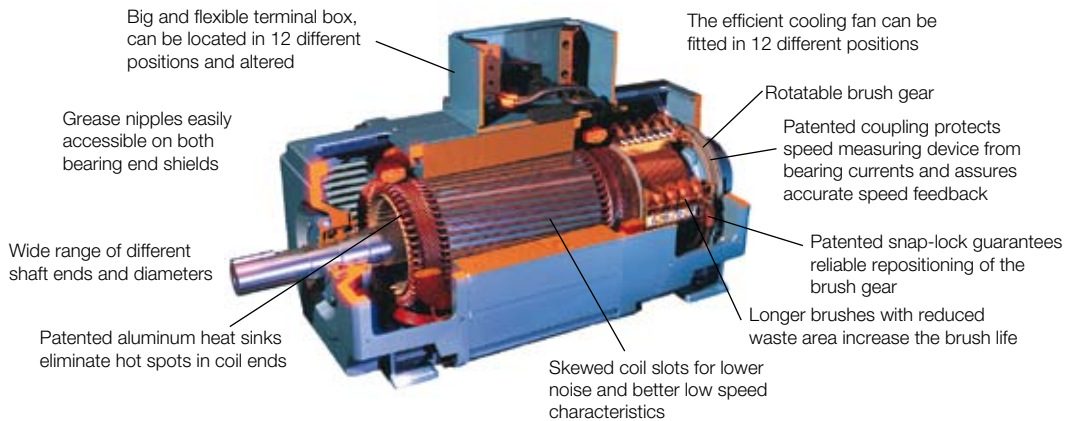
During the development of the DMI's patented cross-section, efforts were taken to increase the power output, torque and speed range. The key behind DMI's peak performance lies in optimization of the electromagnetic circuit, reduced flux intrusion from the cooling ducts and improved efficiency of the cooling.

Skewed coil slots give the motor excellent low-speed characteristics and also a lower noise level.

The DMI motors comply with the requirements of class 200 insulation. The insulation system is moisture resistant and has a temperature index well above class H. The built-in extra margin is substantial, which ensures a very long life.

The DMI has positive environmental characteristics. In fact it was the first rotating machine in the world which was granted the Environmental Product Declaration certificate, issued by BVQI.

It's the details that make the difference



What about reliability and maintenance?

The DMI motor has been designed to reduce the maintenance needs and its built-in margins increase the reliability and the possibility to predict with certainty the maintenance needs.

The DMI motors have the following features:

- Wide commutation margin – Optimum brush grade can be selected
- Longer brush wear length
- High commutator shape stability – Low brush wear
- Small sealing gaps in the bearings – No risk of grease leakage into the motor
- High quality bearings with long lubrication intervals
- High quality air filter– Long cleaning intervals
- High resistance to contaminants – Long cleaning intervals
- Rotatable brush gear - Makes it possible to change all the brushes from one side.

What are the customer values?

- High output and small dimensions - Increased productivity and capacity
- High output over a wide speed range - More flexible solution and wider commutation margins
- Smooth running at low speeds and low moment of inertia - Shorter cycle times and smaller converters
- Benefits of DC and the minimum of maintenance



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