

ELECTRIFICATION SERVICE

Synchronous 4 and 6 Pole Motor Reliability Enhancement



ABB Service Centers can help improve the reliability and performance of synchronous motors manufactured by ABB and other OEMs with an ABB-installed rotor lead enhancement.

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01 Previous design:
Pole-to-Pole connections
via the V-blocks

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02 New enhanced
design: Pole-to-Pole
connections via the shaft

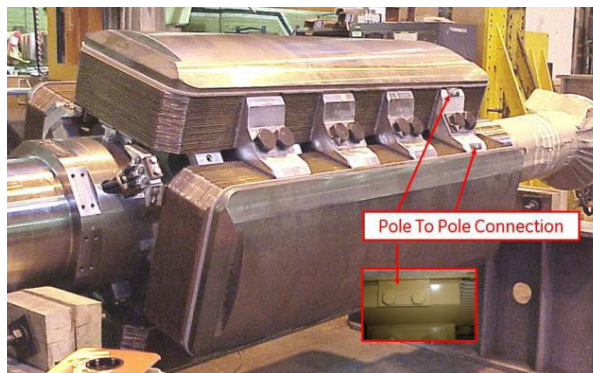
The ABB Service Center will inspect your machine, identify opportunities to increase reliability, and, if necessary, recommend replacing the old style pole-to-pole connection via the V-block with the new pole-to-pole connection via the shaft. In addition, ABB Service Centers will make recommendations for additional repairs and upgrades such as ground wall and turn insulation. As part of the inspection, Field Service Engineers will also help identify consumable and strategic spares to be held in stock, to help reduce the risk of significant unplanned outages.

Customer benefits

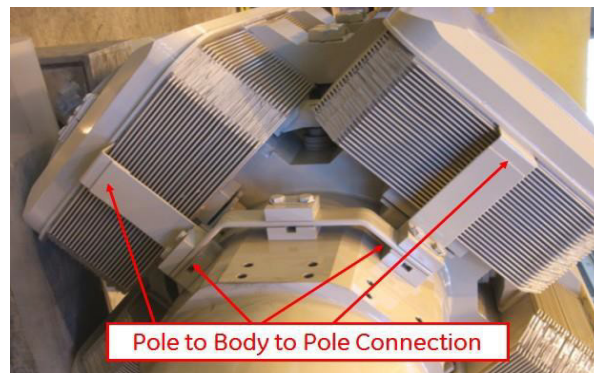
- Increase machine reliability
- Extend equipment life
- Increase plant uptime and productivity
- Reduce maintenance costs

Additional options

- New insulation hardware on lead connection end
- High stress fasteners replacement
- Rotating converter replacement parts
- New leads from exciter to pole connections
- Recommended list of consumable and strategic spares



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01



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02

Spares to maximize plant uptime

It is critical to verify your stock of spare parts regularly. If a part fails and is not available on site, it will have to be ordered, which can lead to extended downtime. Maintaining a sufficient stock of spare parts onsite helps minimize risk of motor failure.

4 and 6 pole motor recommended spares

ABB recommends you keep consumable and strategic spares in stock at all times to help minimize downtime in operations.

In the table below is a list of recommended spares for your 4 and 6 pole motor, whenever applicable. Work together with ABB Field Service Engineers to be sure you have all the recommended spares in stock for your synchronous motor.

Spare parts categories

Spares can be divided into four categories:

- **Commissioning spares:** parts that are used during commissioning and the first few years of operation

- **Consumable spares:** components that need to be replaced regularly over the motor lifetime because they wear out
- **Strategic spares:** lifetime spares that can be kept as a stock for easy replacement when components fail at later stages
- **Capital spares:** parts that could cause a long shutdown of the unit if they fail because they have a long delivery time

The ABB advantage

Trust ABB for top-quality reliable service, including:

- Experienced engineering and technical support
- Work performed in accordance with design specifications

Contact us

For more information, call toll free +1 888 434 7378 or visit electrification.us.abb.com/services.

	Brushless excitation	Slip ring motors
Commissioning spares	Diodes	Brush
	Varistors	-
Consumable spares	Diodes	Brush
	Varistors	-
	Bearing seals	Bearing seals
	Bearing oil rings	Bearing oil rings
	Shaft earth brush	Shaft earth brush
Strategic spares	Diodes, Varistors	Brush
	SCR's, Filters	-
	Firing Module	-
	Bearing seals	Bearing seals
	Bearing oil rings	Bearing oil rings
	Bearing sleeve	Bearing sleeve
	Shaft earth brush	Shaft earth brush
	Water cooler	Water cooler
	Pressurization unit	Pressurization unit
	Leakage detector	Leakage detector
	Vibration probes	Vibration probes
	Key phaser	Key phaser
	Space heater	Space heater
Bearing RTD	Bearing RTD	
Air RTD	Air RTD	
Capital spares	Stator, Rotor, Exciter	Stator, Rotor, Exciter