

## PROVEN ELECTRIC DRIVE AND POWERTRAIN

The Cat AC electric drive power train is designed, integrated and supported by Caterpillar and works seamlessly with the C175 engine and machine hydraulics. The engine, drive system and chassis are jointly tuned and leverage Caterpillar leadership in electric power generation along with the proven components of EMD locomotives.

- + The C175 engine is available with two horsepower options. Robust design delivers long life and the option to rebuild.
- + The proprietary AC drive inverter offers lower weight and longer life. It's pressurized and filtered to reduce maintenance and uses an evaporative cooled modular IGBT proven in EMD locomotives.
- + The radial retarder grid was also proven in locomotive applications. It is quieter, lighter, and offers better visibility than box grids.
- + AC Drive dynamic retarding delivers continuous retarding power.
- + State-of-the-art high voltage IGBTs deliver maximum AC drive system efficiency.
- + The variable hydraulic blower fan provides optimized cooling even at idle for increased component performance and life. Depending on application and temperature, it can also provide additional speed on grade or fuel savings.
- + The dual bearing brushless alternator delivers longer life and less maintenance, with no shimming required.
- + Thermal sensors on the alternator and motor bearings / motor windings result in better prognostics for longer life and lower cost.