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Railway static converter

The inverter is supplied by the railway contact line at 3 kV DC



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Device for the conversion of
electrical energy in a rail vehicle



Rail static inverter type PT 3000/40 is a device for the conversion of electrical energy in a rail vehicle.

The static inverter is designed to power compressors installed on board electric locomotives. The inverter is supplied by the railway contact line at 3 kV DC. It can operate with the supply voltage variation range of 2 kV to 4 kV DC.

The static converter is designed to power compressors installed on board electric locomotives.

The control circuit is programmed to allow the compressor motor to start under load when the power supplied is temporarily significantly higher than the rated power. The proposed solution has been installed on more than a dozen electric locomotives and successfully powers the circuits for which it is designed.

Inverter input circuits	
Rated input voltage	3 [kV] DC
Input voltage variation	2 [kV] - 4 [kV]
Rated output power	35 [kW]
Inverter output circuits	
Rated voltages	3x400 [V], 50 [Hz]
Nominal output power	35 [kW]
Voltage stability	<5%