

Transformers for railway applications

CONVERTER CHOKES

Main Characteristics

Converter transformers are used within the passenger cars power supply converter. Four different operations:

- Converter Input Chokes (Line chokes): to suppress the harmonic generated by the converter.
- Battery charger chokes: to dampen the ripple on the charger output voltage, which is used to charge the batteries for supplying the passenger car during power cuts.

- DC Link Chokes: to dampen the ripple on the DC Link voltage.
- Converter Output Chokes (sinus filters): to dampen the PWM ripple of the output inverter. They also protect the semiconductors in the inverter circuit.

Construction and materials

- Highly permeable iron core, low losses.
- High quality copper or aluminium windings.
- Low losses, high efficiency.

- Vacuum impregnated varnish to ensure silent and moisture-immune operation.

Upon request

RTR's technical team offers the possibility of manufacturing equipment according to customer application need.

Standards

- IEC 60310
- UNE-EN 60310



Technical Characteristics

| | |
|---------------------|--------------|
| Operating voltage | 24V-1500V |
| Operating frequency | DC-100Hz |
| Switching frequency | 2kHz-8kHz |
| Ripple | %30 |
| Nominal current | 10A-2000A |
| Isolation class | F (155°C) |
| Isolation voltage | 6000V |
| Ambient Temperature | -40°C/ +60°C |