RT8122-40-1M2

SAP Code: 822791



PCB Common Mode Choke

Horizontal 40 A PCB two line Common Mode Choke with 1,2 mH Inductance

General

2 Line





Family Technical Specifications

Rated currents	40
Rated inductance	0.3 to 6 mH (3-line) 0.5 to 10 mH (2-line)
Altitude	2000 m, current and voltage derating above
Vibration and shock	3M4 (according IEC 60721-3-3)
Flammability according to	UL 94 V0
MTBF	>2'000'000 h (MIL-HDBK-217)
Operating voltage	600 VAC (3-line) 300 VAC/425 VDC (2-line)
Operating frequency	DC to 400 Hz
Stray inductance	Max. 1% of rated inductance (@ 100 kHz 1 V, 0 A)
High potential test voltage	3 kV DC 3s (coil to coil) Repetition with max. 80% of the HV test voltage
Temperature range (operation and storage)	-40°C to +100°C (6 to 20 A) / -40°C to +125°C (25 to 63 A)
Climatic category	40/100/56 (acc. IEC 60068-1) (6 to 20 A) / 40/125/56 (acc. IEC 60068-1) (25 to 63 A)
Design corresponding to	UL/IEC 60938-1/-2 UL1446 (>20A)
Overvoltage category	III (acc. IEC 60664-1)
Creepage and clearance distances	Creepage & Clearance (2-line): ≥ 3.5 mm (Coil - Coil) / ≥ 3.0 mm (Coil-Core) Creepage & Clearance (3-line): ≥ 6.3 mm (Coil - Coil) / ≥ 5.5 mm (Coil-Core)

PD2 (acc. IEC60664-1)

Pollution degree

Approvals & Compliances



EIS applicable for currents > 20A

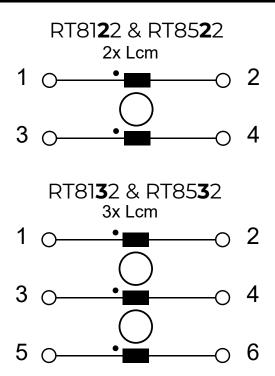
Features and Benefits

- Cost-effective PCB designs for up to 100 A with forced cooling *
- EIS (elektrical insulation system E332676) for currents > 20A acc. to UL 1446
- Compact size and light weight
- Low magnetic leakage flux
- Excellent winding insulation
- Standardized foot print
- Broad range of inductance ratings
- Custom-specific versions on request

Typical Applications

- AC and DC filtering for midsize power range drives, photovoltaic inverters, fast chargers, EV charging stations, UPS and switch mode power supplies
- Filter with low leakage current noise or improved immunity against grid disturbances
- Electronic devices, automation and (industrial)
- LED lighting
- Communication devices
- Medical and laboratory Equipment
- Converters

Typical electrical schematic



02 - PCB Pin

1.2 (Millihenry)

General Specification

Voltage AC	300 (Volt)
Voltage DC	425 (Volt)
Nominal Frequency	50 (Hertz)
Rated Current @ambient	40
Ambient temperature [°C]	60

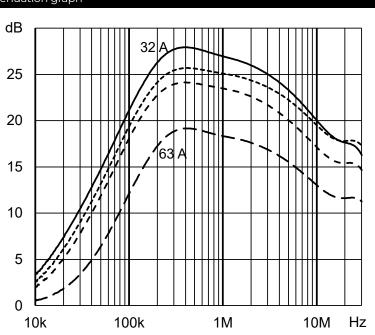
Electric Specification

Input terminal

Attenuation Specification

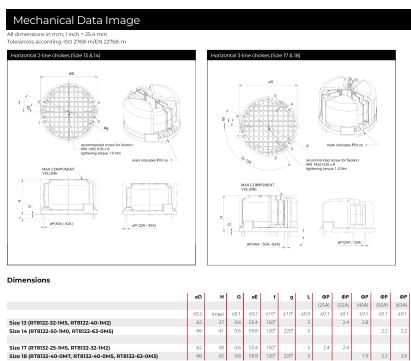
Inductance L1

Attenuation graph



Mechanic Specification

Schaffner schemes



Dimensions