



EMC filters

Customer-specific filters
for power line communication
Rated current 63 A

Series/Type: B84131-PLC
Date: January 2006

Power line filters for 3-phase systems
Rated voltage 440/250 V AC, 50/60 Hz
Rated current 63 A



Construction

- 4-line filter
- Metal case
- Footprint filter

Features

- High differential-mode insertion loss in the frequency range 1 to 10 MHz
- No shorting of data signal
- Easy to install
- Space-saving design

Options

- Input/output coupling unit
- Electricity meter add-on

Applications

- Repeater for PLC
- For further information refer to Chapter “Application notes”

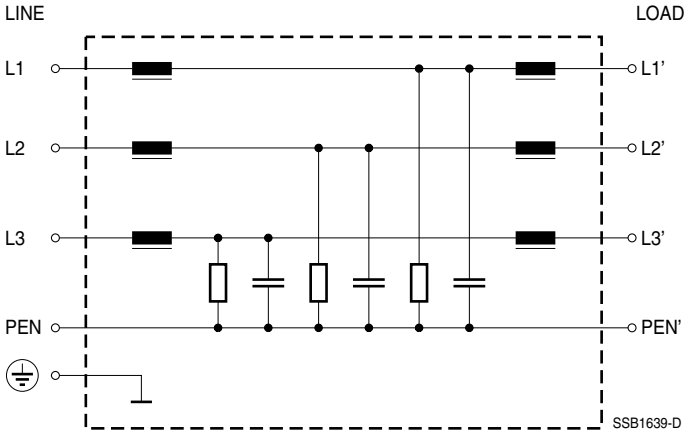
Terminals

- To custom specification

Marking

Marking on component:
Manufacturer's logo, ordering code,
rated voltage, rated current, rated temperature,
climatic category, terminal assignment, date code

Circuit diagram




Technical data and measuring conditions

Rated voltage V_R	440/250 V AC, 50/60 Hz
Rated current I_R	Referred to 40 °C ambient temperature
Test voltage V_{test}	1770 V DC, 2 s (line/line) 2700 V DC, 2 s (lines/case)
Overload capability (thermal)	$1.5 \cdot I_R$ for 3 min per hour or $2.5 \cdot I_R$ for 30 s per hour
Leakage current I_{leak}	At 250 V AC, 50 Hz
Climatic category (IEC 60068-1)	25/100/21 (-25 °C/+100 °C/21 days damp heat test)

Characteristics and ordering codes

V_R AC V	I_R A	Terminal cross section mm ²	I_{leak} mA	R_{typ} mΩ	Approx. weight kg	Ordering code
440/250	63	50	440	1.9	5.9	upon request

Important information

Please read all safety and warning notes carefully before installing the EMC filter and putting it into operation (see ). The same applies to the warning signs on the filter. Please ensure that the signs are not removed nor their legibility impaired by external influences.

Death, serious bodily injury and substantial material damage to equipment may occur if the appropriate safety measures are not carried out or the warnings in the text are not observed.

Using according to the terms

The EMC filters may be used only for their intended application within the specified values in low-voltage networks in compliance with the instructions given in the data sheets and the data book. The conditions at the place of application must comply with all specifications for the filter used.

Warnings

- It shall be ensured that only qualified persons (electricity specialists) are engaged on work such as planning, assembly, installation, operation, repair and maintenance. They must be provided with the corresponding documentation.
- Danger of electric shock. EMC filters contain components that store an electric charge. Dangerous voltages can continue to exist at the filter terminals for longer than five minutes even after the power has been switched off.
- The protective earth connections shall be the first to be made when the EMC filter is installed and the last to be disconnected. Depending on the magnitude of the leakage currents, the particular specifications for making the protective-earth connection must be observed.
- Impermissible overloading of the EMC filter, such as impermissible voltages at higher frequencies that may cause resonances etc. can lead to destruction of the filter housing.
- EMC filters must be protected in the application against impermissible exceeding of the rated currents by suitable overcurrent protective.

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