

Surge protection mains filter

WAVEFILTERS for simple radio interference suppression in the control cabinet

The WAVEFILTER series eliminates the time-consuming work of screwing in mains filters. These filters are simply clipped on to the TS35 rail and connected to the device requiring suppression. The two-stage WAVEFILTER with overall width 22.5 mm in 1 A, 3 A, 6 A and 10 A versions offers high attenuation.

The WAVEFILTER with current-compensating choke is ideal for applications in drive technology and control/automation systems, e.g. for suppressing continuous interference types such as “noise” or “ripple” caused by interfering radiation from other systems, or interference from frequency converters and switch-mode power supplies. A short, low-ohm mass connection is required for the WAVEFILTER to function perfectly. We recommend earthing all devices directly with the largest possible cross-section to a central earthing point in the control cabinet.

Interference signals

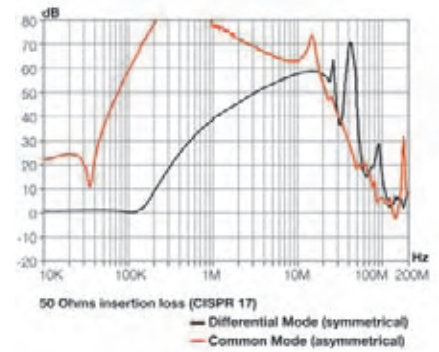
We distinguish between two types of induced transient and continuous interference signals: symmetrical (differential mode) and asymmetrical (common mode). The symmetrical interference signals generate a voltage between the signal leads of the system. The asymmetrical interference voltages occur between the signal leads and earth.

The WAVEFILTER is suitable for attenuating both kinds of interference signal. In addition, WAVEFILTER 10 A also has an earthing conductor choke. This earthing conductor choke supports both attenuation on the earthing conductor for the filter and additional attenuation of asymmetrical interference voltages.

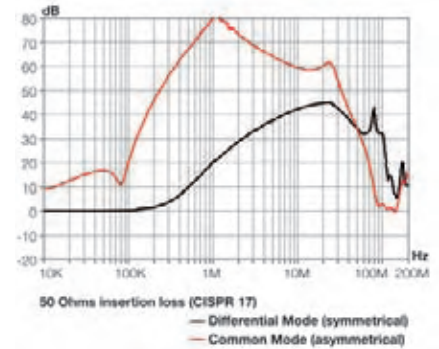
The WAVEFILTER have cULus approval.

Insertion loss

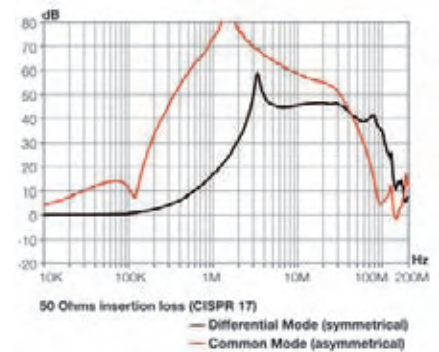
1 A WAVEFILTER



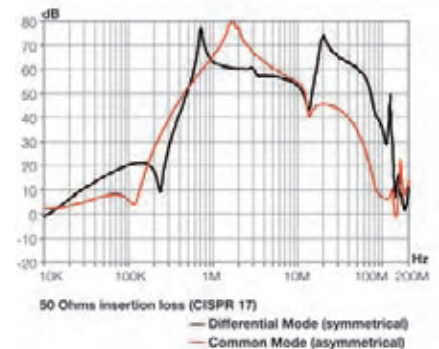
3 A WAVEFILTER



6 A WAVEFILTER



10 A WAVEFILTER



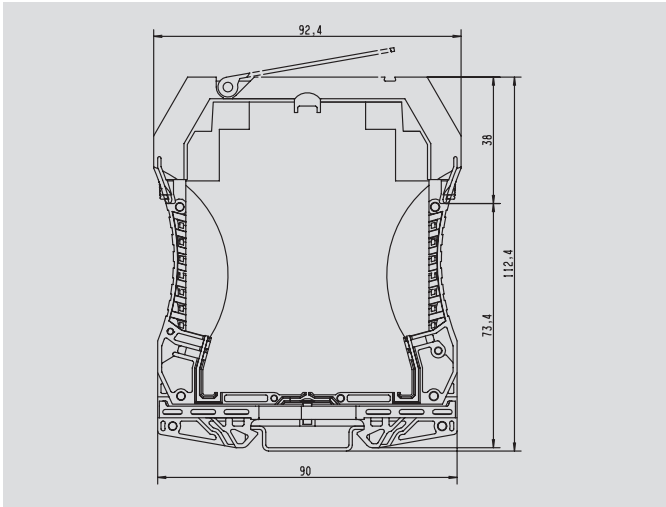
Installation height 112.4 mm



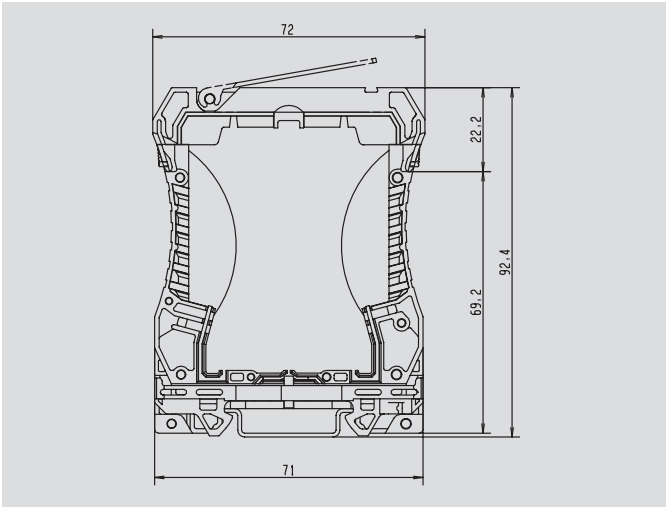
Installation height 92.4 mm



Dimensions



Dimensions

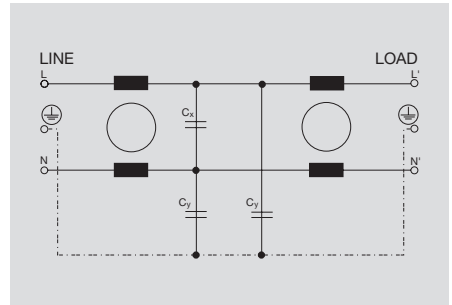
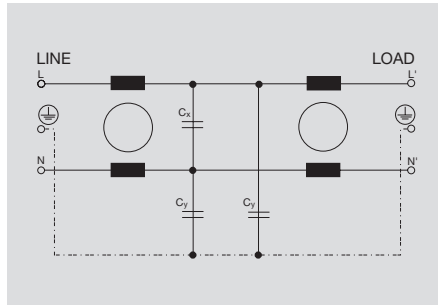


Surge protection for low-voltage supplies

mains filter

WAVEFILTER 1 A 250 V

WAVEFILTER 3 A 250 V



Technical data

Technical data

Rated voltage (AC/DC)
 Rated current
 Capacitance
 Inductance L and L1
 Leakage current at Un
 Test voltage P/N-PE
 Test voltage P-N
 Operating temperature, min./max.
 Approvals

250 V
 1 A
 C_x / C_y: 33nF
 10.00 mH
 190 µA
 2000.00 V AC
 1700.00 V DC
 -20 °C/40 °C
 cURus

250 V
 3 A
 C_x / C_y: 33nF
 2.00 mH
 190 µA
 2000.00 V AC
 1700.00 V DC
 -20 °C/40 °C
 cURus

Dimensions

Clamping range (rating- / min. / max.) mm²
 Length x width x height mm

2.5 / 0.5 / 2.5
 90 x 22.5 x 73.4

2.5 / 0.5 / 2.5
 90 x 22.5 x 73.4

Note

see attenuation curve

see attenuation curve

Ordering data

Version

Type	Qty.	Order No.
WAVEFILTER 1A	1	8614790000

Type	Qty.	Order No.
WAVEFILTER 3A	1	8614780000

Note

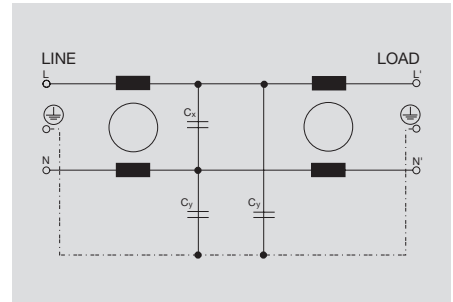
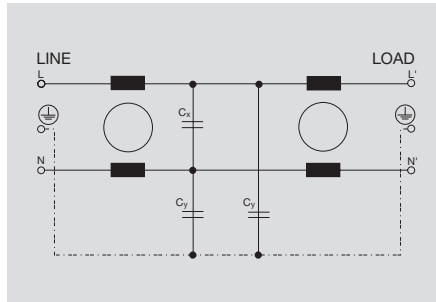
Accessories

Note

mains filter

WAVEFILTER 6 A 250 V

WAVEFILTER 10 A 250 V



Technical data

Technical data

Rated voltage (AC/DC)
 Rated current
 Capacitance
 Inductance L and L1
 Leakage current at Un
 Test voltage P/N-PE
 Test voltage P-N
 Operating temperature, min./max.
 Approvals

250 V
 6 A
 $C_x: 33 \text{ nF} / C_y: 22 \text{ nF}$
 0.80 mH
 190 μA
 2000.00 V AC
 1700.00 V DC
 -20 °C/40 °C
 cURus

250 V
 10 A
 $C_x: 470 \text{ nF} / C_y: 4,7 \text{ nF}$
 0.80 mH
 190 μA
 2000.00 V AC
 1700.00 V DC
 -20 °C/40 °C
 cURus

Dimensions

Clamping range (rating- / min. / max.) mm²
 Length x width x height mm

2,5 / 0,5 / 2,5
 90 x 22,5 x 73,4

2,5 / 0,5 / 2,5
 90 x 22,5 x 73,4

Note

see attenuation curve

see attenuation curve

Ordering data

Version

Type	Qty.	Order No.
WAVEFILTER 6A	1	8614800000

Type	Qty.	Order No.
WAVEFILTER 10A	1	8614770000

Note

Accessories

Note