

tyco / *Electronics*

GLOBAL INDUSTRIAL AND COMMERCIAL



 **corcom**

RFI Power Line Filters

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**CORCOM Filters
for RFI Solutions**

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- High Power Filters
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- Military Filters

CORCOM filters comply with the requirements of the low voltage directive and can be CE marked.

Corcom products are manufactured in several locations, stocked and distributed through a worldwide network of Tyco Electronics Sales Offices and stocking distributors.

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Series in Alphabetical Order

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ADT	72	EEB	31	M	13
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AYA	74	EGG	28	N	45
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AYO	76	EHL	19	Q	62
B	46	EHT	58	R	50
BCD	85	EOP	44	SignalSentry	90
C	26	EP/VP	60	SK	56
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All specifications subject to change. Consult Tyco Electronics for latest design specifications. This also applies to contents and revisions of technical standards and guidelines referred to in this catalog. All dimensions in millimeters. AMP, CORCOM and TYCO are registered trademarks.

Summary

General Purpose

Power Entry Module with/without Filters

M-Series



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PCB Filters

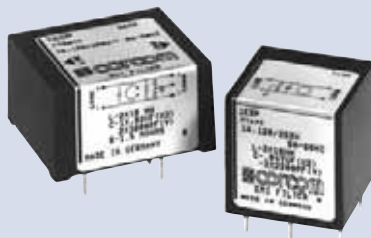
*XP-, YP-, ZP-Series
F-3443*



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PCB Filters for various Requirements

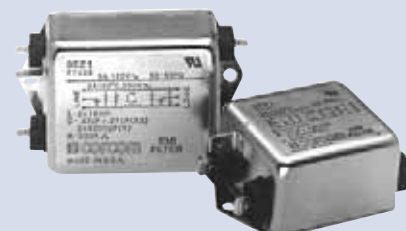
EBP-, EDP-, EOP-Series



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Chassis-mount Filters

X-, Z-Series



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Power Entry Module with/without Filters and variable Construction

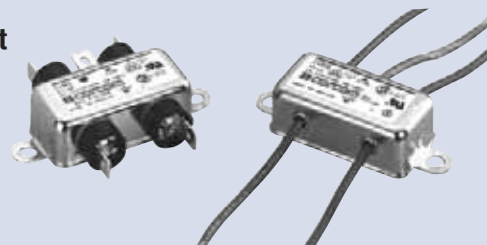
P-Series



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Universal Chassis-mount Filters

B-Series



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Power Entry Module Filters

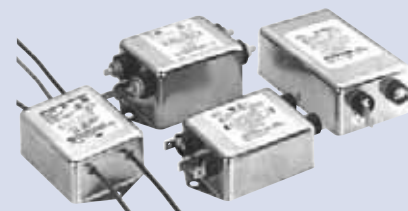
EDL-, EHL-Series, F-3558



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Chassis/Back Panel Mount Filters with/without IEC Connector

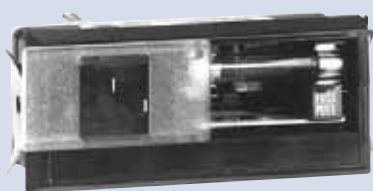
R-Series



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Power Entry Modules with/without Filters

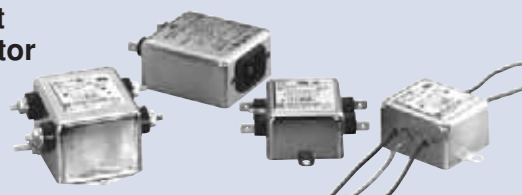
J-Series



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Universal Chassis/Back Panel Mount Filters with/without IEC Connector

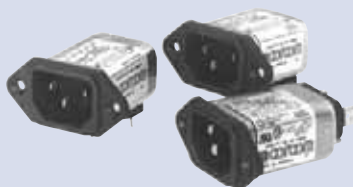
K-Series



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IEC Connector Filters

EEA-, EEB-Series



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Faston-, Solder Lugs or Wire Terminals

Universal Chassis/Back Panel Mount Filters with IEC Connector

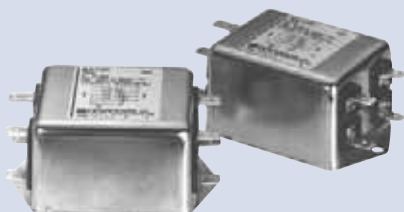
DK-Series



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3-Phase Filters

AYO-Series



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IEC Connector Filters

EF-Series, EH-Series



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Faston-, Solder Lugs or Wire Terminals

For Wide Performance Range

Power Entry Module with high performance Filter

LA-Series



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IEC Connector Filters

EC-Series, ED-Series

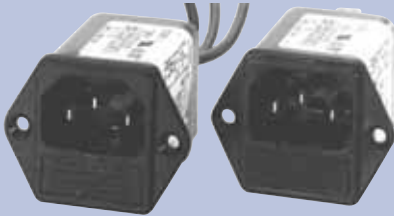


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Faston- or Wire Terminals

IEC Connector Filters with Fuses

EGG-Series



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Faston- or Wire Terminals

Chassis-mount Filters

G/N-Series



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IEC Connector Filters

EBF-Series



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Faston- or Wire Terminals

Chassis-mount Filters

VS-, VV-, VW-Series

NEW: *MV-Series* for medical applications up to 20A/250VAC



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IEC Connector Filters with Fuses

EHG-Series



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For medical applications

Chassis/Back Panel Mount Filters with/without IEC Connector

SK-Series



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2-Phase Filters

IK-Series



Page 66

3-Phase Filters (With neutral)

AYA6-Series



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IEC Connector Filters with double Pole Switch

C-Series



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High Current Filters

CFN-Series **NEW**



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For Superior Performance

Chassis-mount Filters with Screw Type Terminals

FC10-Series



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3-Phase Filters

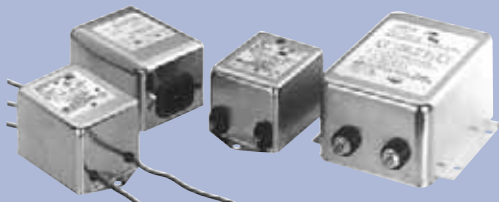
A-Series
ADT-Series



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Chassis-mount Filters

T-Series



For medical applications
up to 15A / 250VAC

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3-Phase Filters

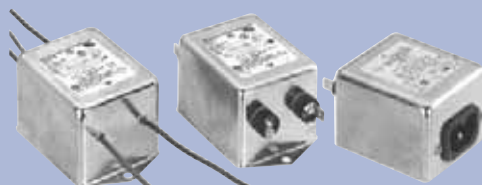
F-Series



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Chassis/Back Panel mount Filters with/without IEC Connector

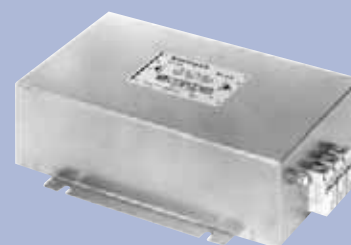
EP-Series



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3-Phase Filters with Screw Type Terminals

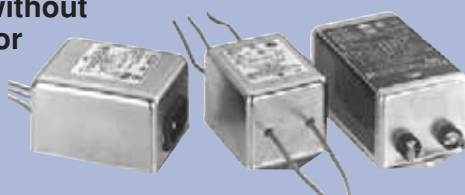
FCD-Series



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Chassis/Back Panel mount Filters with/without IEC Connector

Q-Series

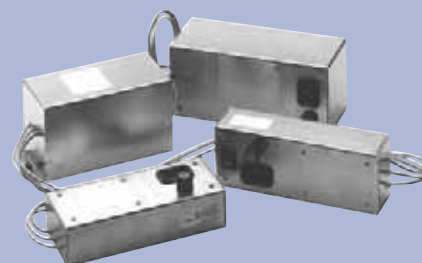


For medical applications
up to 6A / 250VAC

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Line Filters for Tempest Applications

AQ-Series



Page 88

3-Phase plus Neutral Filters

AYC-Series



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Chassis-mount Filters with Screw Terminal Plugs

FC10B-, FCD10B-Series



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3-Phase Filters

BCD-Series



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3-Phase Filters

FCD10BS-Series



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Introduction

1. General

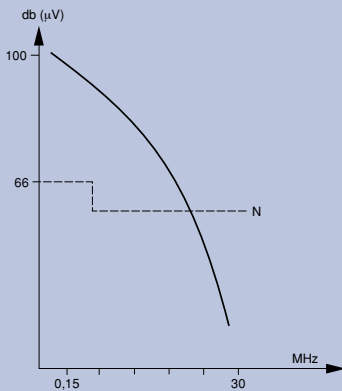
Interference suppression filters are being used in the conducted area of electromagnetic susceptibility to reduce noise potentials (currents, voltages).

Noise potentials may be of natural origin (lightning, electrostatic discharge) as well as of technical origin (transient voltages, switches, semiconductor switches, oscillators, switched power supplies). Both commonly produce - wanted or unwanted - noise spectra leading to undue influence of neighbouring electronic devices or systems. These interferences are being distinguished into wide band and narrow band values.

Typical wide band interference values are

- Transient noise voltages on the power lines
- Mechanical switches
- Thyristor switches
- Commutator motors

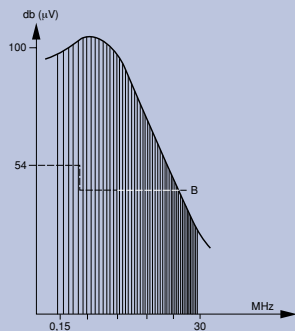
Figure 1 Continuous noise spectrum



Typical small band interference values are

- Supersonic devices
- Switched power supplies
- Transmitters
- HF generators

Figure 2 Discrete noise spectrum



The propagation modes for interference potentials are

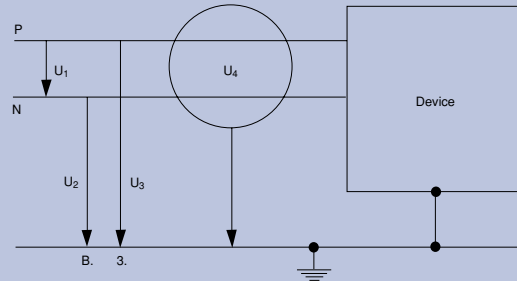
- Radiation (electromagnetic waves in free space)
- Conduction (noise voltages/currents on power lines or data lines)

In order to reduce conducted interferences an interference filter is the primary tool available. The frequency range concerned reaches from several kHz to approximately 30 MHz. Above this value the main means of propagation are radiated phenomena (antenna effect).

From the propagation of conducted interferences three different modes are being distinguished:

- U1 = Symmetrical noise value (differential mode)
- U2, U3 = Unsymmetrical noise value
- U4 = Asymmetrical noise value (common mode)

Figure 3

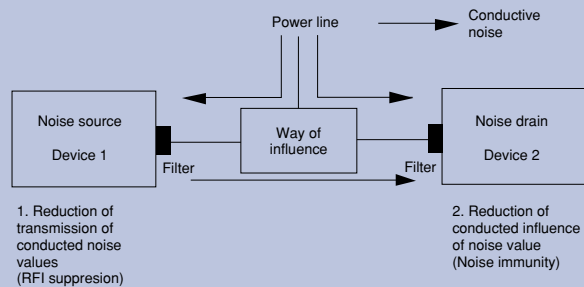


2. Purpose of Filtering

Filters preferably show bilateral results. Figure 4 visualizes the function of interference suppression filters:

Example:

Figure 4

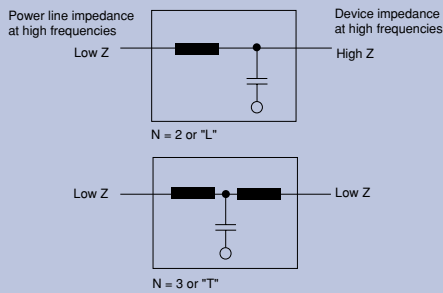


The purpose of filters is therefore to reduce the emission of noise (RFI suppression) and to prevent noise values from being entered into electronic systems (noise immunity). In the FRG the area of RFI suppression is governed by law. For the operation of electronic equipment an approval by the German Postal Authorities is mandatory (see item 8 Regulations). Even though noise immunity is not legally governed until end of 1995 it seems obvious that devices unduly influenced by its environment can not be marketed easily (see also item 8 Regulations).

3. Function of Filters

Suppression filters are usually low pass filters in form of TT- or T-networks. According to their requirements multistage filter arrangements can be built. The effects of such measures are steep filter characteristics and high attenuations over a wide frequency range. Filter networks of today's design usually work on the principles of reflexion. This means that the greater the mismatch of filter impedance to terminating impedance, the more effective the filter is in attenuating interference energies, e.g. low power line impedance should be met by high filter impedance.

Figure 5 Impedance conditions for power line filters



4. Insertion Loss

The selection criteria for a filter is its insertion loss. It is defined as the logarithmic ratio of the power delivered into a defined output impedance with and without filter.

$$A = 10 \times \log \frac{P_{Ref.}}{P}$$

$P_{Ref.}$: Power between energy source and load without filter (Figure 6)

P : Power between source and load with filter inserted (Figure 7)

Figure 6 Measurement of insertion values without filter

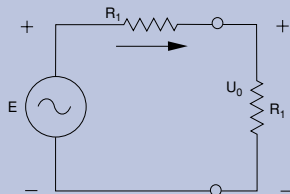
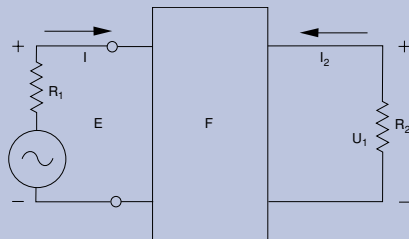


Figure 7 Measurement of insertion values with filter



The insertion loss can also be directly specified as voltage ratio

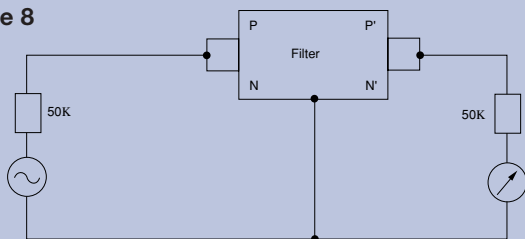
$$A = 20 \times \log \left(\frac{U_0}{U_1} \right)$$

When measuring attenuation it can usually be distinguished between

Symmetrical attenuation (differential mode) and Asymmetrical attenuation (common mode).

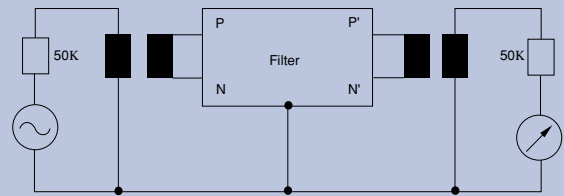
- a) Measurement of the asymmetrical component (common mode)

Figure 8



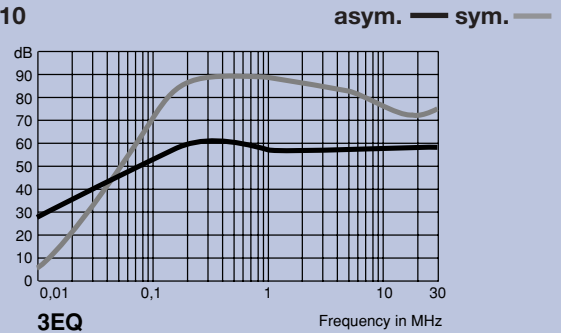
- b) Measurement of the symmetrical component (differential mode)

Figure 9



Measurements of attenuation are being performed over a wide frequency range. Figure 10 shows the typical attenuation curves resulting for the Corcom filter type 3EQ3.

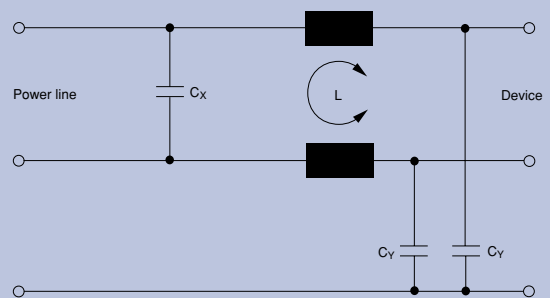
Figure 10



The predictability of the actual performance of insertion loss in a real application is not very accurate. The reason for this is the measuring method in a closed 50 Ohm system. In reality it is quite doubtful that line impedance as well as device impedance will stay at 50 Ohms over an extended frequency range. Therefore the true performance of a filter can only be measured empirically within a device or system by the user. For quality assurance however the insertion loss is an important tool. This measurement can certainly be used to prove a product's quality and consistency.

5. Typical Filter Network

Figure 11



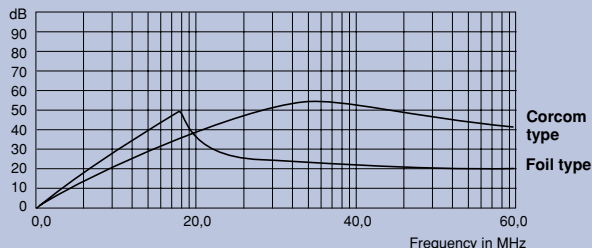
This network is the most frequently used type in real applications. It serves for both asymmetrical as well as symmetrical interference suppression. Symmetrical interferences are being suppressed by the capacitor showing the suffix X. If these capacitances are not sufficient, additional inductances (e.g. linear inductors) will be necessary. Asymmetrical interferences are being reduced by shown inductances and the capacitors carrying the suffix Y. The Y-capacitors connected to safety ground are acting as HF-shunts. The value of the capacity is determined by the maximum permissible leakage current of the device. The inductivities shown in the network above are usually current compensated inductances. For operating current these inductivities are of very low values. According to its winding technique the magnetic flux in the core is being neutralized, when operating

current is flowing through. In case of asymmetrical interferences however the magnetic fluxes are supporting one another. Therefore the inductances show their full efficiency.

6. Capacitors

The ceramic type capacitors used by Corcom offer - besides their very high 18 to 20 years life cycle as compared to a normal foil capacitor - a substantially better HF frequency response making it the best choice for use in filter networks. The following diagram illustrates the HF response of a foil capacitor as compared with the ceramic capacitor used by Corcom. Both devices are specified with 5.000 pF at 1 kHz.

Figure 12



7. General Technical Data

7.1 Safety Regulations

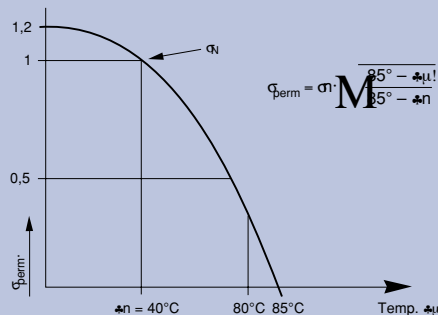
Interference suppression filters are subject to both national as well as international testing regulations. A summary of the most important regulations and testing agencies is shown in the table below.

The observance of above mentioned safety regulations does not free the designer of Electronic equipment from the responsibility to verify the safety instructions, for which the device must be designed. These regulations have first priority.

7.2 Operating Current

The permissible nominal current for Corcom filters is specified for an ambient temperature of 40°C. Above this temperature the permissible nominal current will be reduced according to the graph and formula shown in Figure 13 below.

Figure 13 Dependency of current I_{perm} and ambient temperature



Peak current load:

The operating current of most devices is not sinusoidal. Often high peak values appear during short periods of current flow. Corcom filters are designed to show no sign of saturation even if the current load is 3 to 6 times the nominal value. All inductances mentioned in the catalog are measured at nominal load.

Summary of International Testing Agencies Line Filter Regulations and Specifications

Country	Leakage Current Equipment Requirement*			Qualification Hipot Rating (1 minute)	Insulation Resistance		High Voltage Pulse Test	Current Overload Test	Approving Organization Name	City	Specifications
	Maximum I mA	at V	HZ		Minimum K x 10 ⁶	at V					
United Kingdom	0.5 ¹ 0.25/5.0 ²	250 250	50 50	2250 VDC or 1500 VAC ³ 4.3 x Ur. VDC ⁴	6.000 ^{3,4}	100	—	—	BEAB (BSI)	London	BS6201 Part 3 BS613
						20 ⁴	100	—			
Switzerland	0.5 ¹ 0.25/5.0 ²	250 250	50 50	2250 VDC or 1500VAC ³ 2000 VAC ⁷ 4.3 x Ur. VDC ⁴	3.000 ^{3,4}	100	Yes Par 5.6	—	SEV	Zürich	IEC939.1988
Sweden	0.5 ¹ 0.25/5.0 ²	250 250	50 50	1500 VAC ³	6.000 ^{3,4}	100	—	—	SEMKO	Stockholm	SEN432901
Canada	5.0	120	60	1000+2Ur. VAC ³ 1414 VDC Min. 500+2Ur. VDC	—	—	—	—	CSA	Rexdale	C22.2 No.0 No. 0.4 No. 14
Germany	0.75/3.5 ^{1,5} 0.25/3.5 ²	250 250	50 50	1500 VAC ³ 4.3 x Ur.VDC ⁴	6.000 ^{3,4}	100	—	75xl rated for 2.5 cycles	VDE	Offenbach	EN133200 EN60950
						2,000 ³ 1,500 ⁴	100 100				
France	—	—	—	—	—	—	—	—	UTE	Paris	—
United States	5.0	125	60	1000 VAC or 1414 VDC ³ 1000 VAC or 1414 VDC ⁴ 1500 VAC or 2121 VDC ⁸	—	—	—	—	UL	Various	UL1283, 544 UL2601

Ur-Line voltage

*applicable throughout Europe (substitute for national norms)

- 1-Devices of Safety Class 1
- 2-Devices of Safety Class 2
- 3-Conductor-Ground line/Case

- 4-Conductor-Conductor
- 5-Lower values for mobile devices
- 6-At higher temperatures

- 7-Between conductor and un-zeroered (non-metallic) case
- 8-Conductor-Ground line/Case and conductor-conductor for units not to be touched by a patient

Moreover Corcom filters are being tested at 6 times the nominal current for 8 seconds.

7.3 High Voltage Test

All Safety Class I Corcom filters are being tested with the following parameters (100 % testing):

P, N - Ground = 1800 VAC/2 sec for filter homologation
 P - N = 1450 VDC/2 sec 1 minute permitted

7.4 Leakage Current

When using filters for devices of Safety Class I Y-capacitors are being used to increase asymmetrical attenuation. These capacitors are connected line to ground. During normal operation leakage current flows to ground through these capacitors. This leakage current must be limited for the simple reason that in case of a faulty ground return within the device the body of the operator may serve as conductor for lethal voltages.

For this reason the permissible leakage currents are clearly defined for every product group in the appropriate safety regulations.

Typical values for internationally permissible leakage currents are by safety classes:

- Mobile devices of Safety Class I 0,75 mA
- Stationary motor units of Safety Class I 3.5 mA
- Stationary heating units of Safety Class I 5 mA
 (Stationary devices - fixed mounted, or weighing in excess of 18 kg)
- Devices of Safety Class II 0,25 mA
- Encapsulated units 5 mA
- Other units 3,5 mA

Internationally permissible values of leakage currents for various applications:

Ref. Analytical Medical DataProc. Calculator Instrument

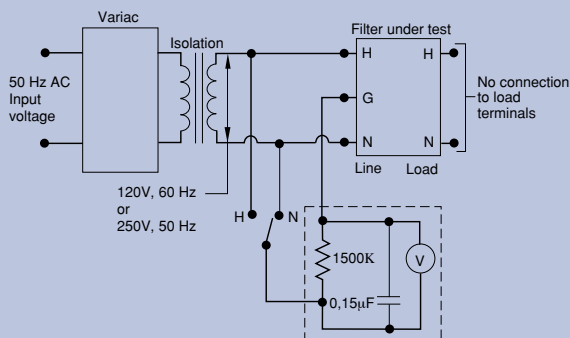
UL	0,5 mA	0,1 mA	5,0 mA	5,0 mA	0,5 mA
(UL 1262)	(UL 554)	(UL 478)	(UL 114)	(UL 1244)	
	0,1 mA	3,5 mA	0,5 mA	3,5 mA	
	(IEC 62A)	(IEC 435)	(IEC 380)	(IEC 348)	

Measuring Leakage Current:

For safety reasons during measurements an isolation transformer should be used. The filter output must not be connected to any load terminals. The current of each path will have to be measured.

Figure 14 Leakage Current Measurement

7.5 Operating Voltage and Frequency



If not explicitly stated in the various data sheets, the max. permissible operating voltage for filters is 250 VAC, 50/60 Hz. Filters can also be used in DC-networks if above stated operating voltages are not exceeded.

7.6 Climate Class

All filters are of Climate Class JPF (Ambient Temperature -10° to +85°C)
 Other values on special request.

8. Standards

8.1 RFI Suppression

The field of RFI suppression in Germany is governed by the new EMV Rules (EMVG) of November 1992. Observance of the EMV Rules is controlled by the following standards:

1. Subject Base Standards for RFI Emission
 CENELEC EN 50081-1 of 1.92
 DIN VDE 0839 Part 81-1/3.93 (German version)
 Electro magnetic compatibility for residential, trade and office areas as well as small industrial businesses.
 EN 50081-2 RFI Emission in industrial areas
2. Subject Base Standards for RFI Immunity
 CENELEC EN 50082-1 of 1.92
 DIN VDE 0839 Part 82-1/3.93 (German version)
 Electro magnetic compatibility for residential, trade and office areas as well as small industrial businesses.
 EN 50082-2 RFI Immunity in industrial areas
3. Product related Standards are

EN 55011	EN 55013	EN 55013A
EN 55014	EN 55015	EN 55022
EN 55020	EN 55104	EN 50091
EN 60555-2	EN 61000-3	

8. 2. CE Symbol

The CE Symbol has to be carried by all devices covered by the Technical Harmonisation Guidelines as of Jan 1st, 1996. **The application of the CE Symbol is mandatory.** After Dec 31st, 1995 relevant products must not be issued to the market any longer without carrying the CE Symbol. More than half of all presently sold technical industrial goods must thus carry the CE Symbol in the future. After publication of the respective locations where relevant European standards are found in the official gazettes the manufacturers can at their own responsibility declare conformity of their products with these EMC safety requirements and can further mark their electrical devices with the EG standardized CE Symbols on their own. The CE Symbol in a way represents a "passport" within the EC and guarantees the assurance of two attributes for the consumer/user: Reduced emission of and immunity from interferences as well as protection for the user. If any one product is covered by more than one EC guidelines requiring the application of the CE Symbol then the application of the CE Symbol signifies that the relevant requirements of these guidelines too are observed. The manufacturer is responsible for the observance of all safety requirements for his products. If the product is imported into the EC from any non-member country then the importer by law is the one firm or person issuing the product to the market and is thus equated with the EC manufacturer.



8.3 New nominal voltage 230 V

The new Harmonization Document HD 472 S1 authorized by CENELEC on 11/4/1988 changed the National Rules in two steps until latest 1995.

Newly standardized values of nominal voltages:

1. 400 V between outer conductors in a 4-conductor 3-phase supply network (3-phase operation)
2. 230 V between outer conductor and neutral (center-) conductor
3. 230 V between the outer conductors in a 3-conductor 3-phase supply network (1-phase operation)

Change-over deadlines

Until latest 1995 all energy supplying institutes had to change their present 220/380 V networks to the new voltages of 230/400 V +6%/-10%.

Countries with networks still operating at 240/415 V should adjust their voltages to 230/400 V +10%/-6%.

At the end of the change-over period in the year 2003 the standardized voltage should be at 230/400 V +/-10%.

In order to advance harmonization in the EU and EFTA States CENELEC Memorandum Nr.14 advised all appliance manufacturers to mark their products with the new nominal voltages beginning latest 1/1/1993.

This catalog contains only part of the comprehensive line of suppression filters produced by Tyco electronics. The filters depicted here mostly evolved out of specific requirements asked for by our worldwide customer base, have constantly been improved and were within their series extended by additional current classes.

Widely accepted by our clientele they now form part of our standard products program. They are competitively priced and available at short notice.

If any mechanical or electrical EMC problem cannot be solved by any one of our standard filters customers have access to a wide variety of thoroughly tested special filters.

If any of these products still does not fit the specific needs and there is no possible compromise, the costly way of designing a customer specific filter is inevitable.

All accruing tooling costs for new enclosures as well as approvals (VDE, UL, CSA, SEV, etc.) requested by the customer including the test sample necessary for each approval amount to a cost factor which usually requires manufacture and sales of considerably large quantities.

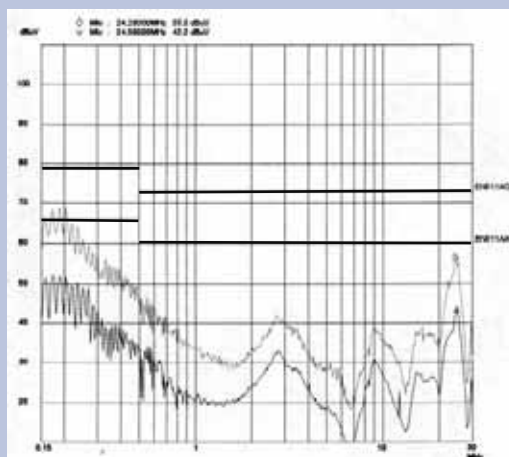
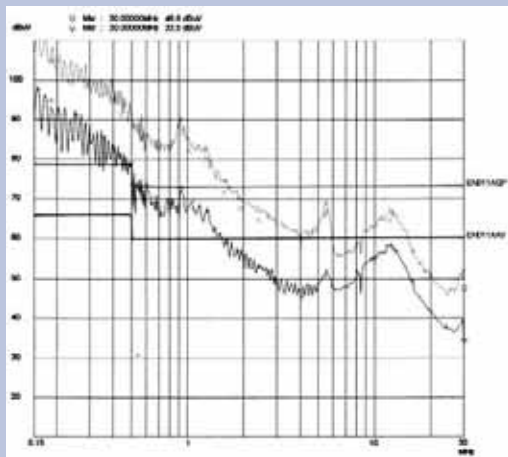
Frame orders with time schedules up to one year as well as fixed shipping volumes allowing economically produceable lot sizes are also pre-requisite.

Often only minor modifications have to be applied to standard filters. Willingness to compromise with mechanical layout by resort to existing enclosures and limiting the number of approvals to those really necessary to market the devices cause immediate cost reduction.

Please contact us - the commonly found solution will satisfy you.

Tyco Electronics will be happy to assist you in selecting the appropriate filter for your application. If your facility lacks time and resources all your necessary measurements can easily be quick and reliably performed by the qualified personnel in our laboratory.

Example of interference Suppression



Equipment characteristics without filtering

Equipment characteristics with the appropriate filter



Multifunction- Power-Entry-Module

P-Series

- IEC-plug with/without filter
- Two pole line switch (optional)
- Double voltage selector
- Combined fuse holder (twist protected)
- Line filter to 10 A/250 VAC (optional, also for medical applications)
- Mounting cutout appr. 27 x 56 mm only
- Filter mountable in the field



according IEC 950



Filter Selection Table

Filter type	Max.current UL/VDE	Shielding	Inductance	Capacity	
				C _y	C _x
S3A	3A	yes	2x 2,0mH	3nF	0,047µF
S30	3A	no	2x 2,0mH	3nF	0,047µF
S6A	6A	yes	2x 0,66mH	3nF	0,047µF
S60	6A	no	2x 0,66mH	3nF	0,047µF
SXA	10A	yes	2x 0,27mH	3nF	0,047µF
SX0	10A	no	2x 0,27mH	3nF	0,047µF
Z6C	6A	yes	2x 6,7mH	3nF	1,0µF
ZXC	10A	yes	2x 4,0mH	3nF	1,0µF

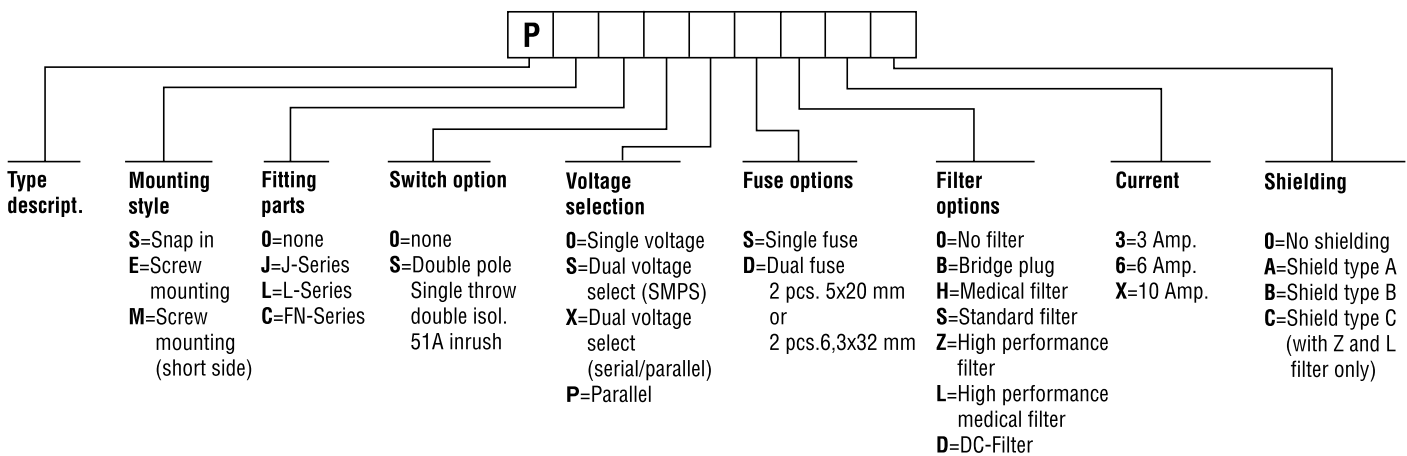
Max. leakage current line to ground 0,5 mA at 250 VAC/50Hz

Filter Selection Table for medical Applications

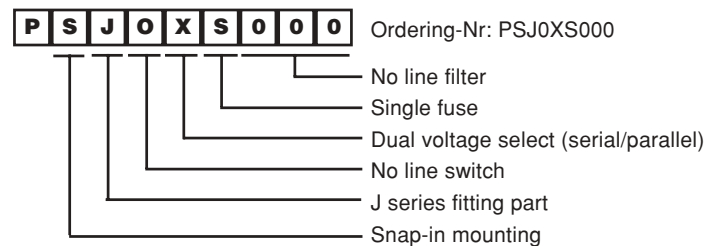
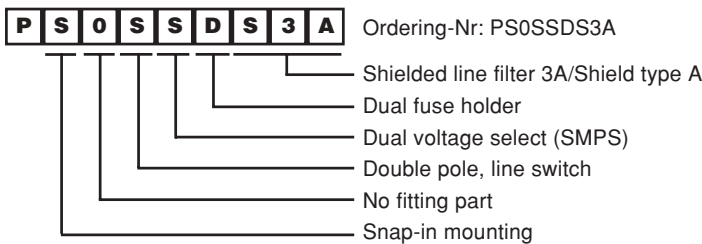
Filter type	Max.current UL/VDE	Shielding	Inductance	Capacity	
				C _y	C _x
H3A	3A	yes	2x 2,0mH	-	0,047µF
H30	3A	no	2x 2,0mH	-	0,047µF
H6A	6A	yes	2x 0,66mH	-	0,047µF
H60	6A	no	2x 0,66mH	-	0,047µF
HXA	10A	yes	2x 0,27mH	-	0,047µF
HX0	10A	no	2x 0,27mH	-	0,047µF
L6C	6A	yes	2x 6,7mH	-	1,0µF
LXC	10A	yes	2x 4,0mH	-	1,0µF

Max. leakage current line to ground < 5 µA at 250 VAC/50Hz

Ordering Information



Example:

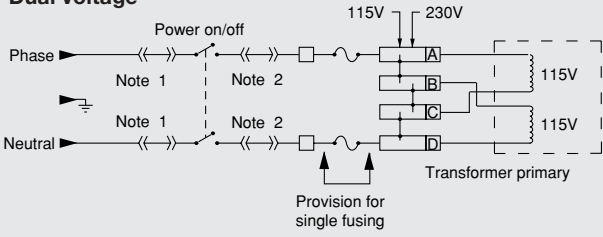


Note 1: If ordered w/o filter max. current 10A

Note 2: Z and L versions only available with screw mounting and without voltage selector (PE only)

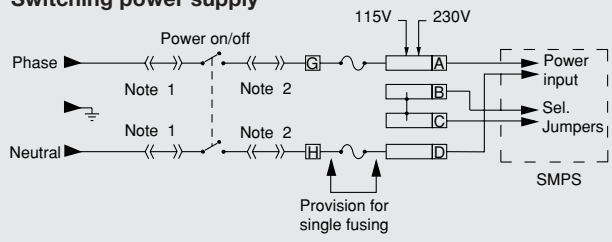
Note 3: No extender option possible when ordered with screw mounting (PE)

Dual voltage

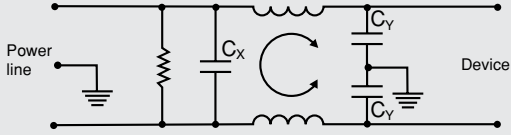


Note 1: Jumpers are not required if a filter or interconnection module is used.
 Note 2: Space for filter

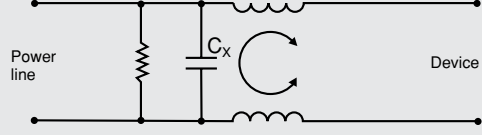
Switching power supply



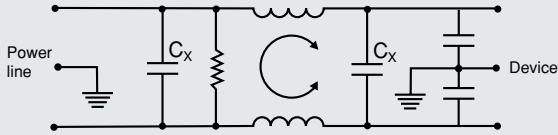
Filter S3 / S6 / SX



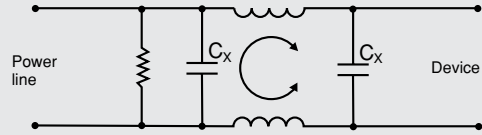
Filter H3 / H6 / HX



Filter Z6 / ZX

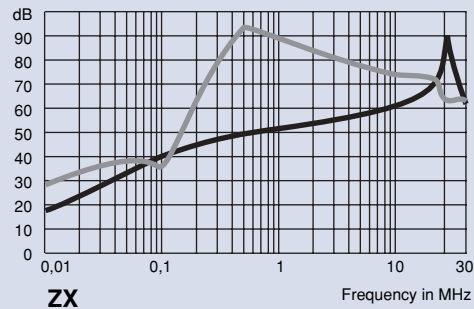
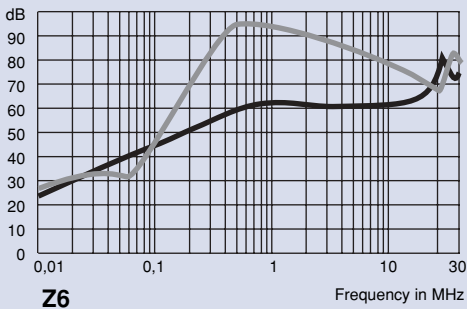
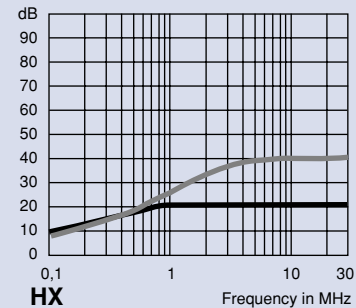
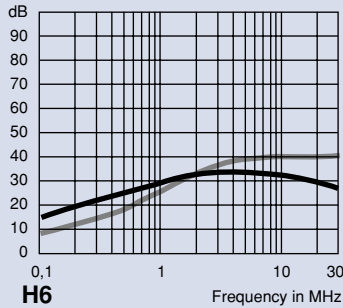
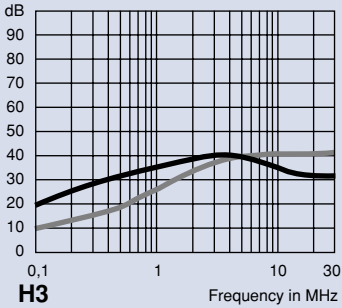
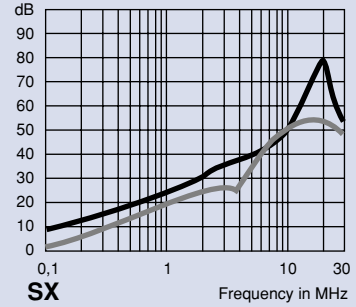
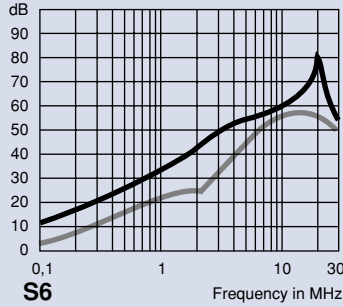
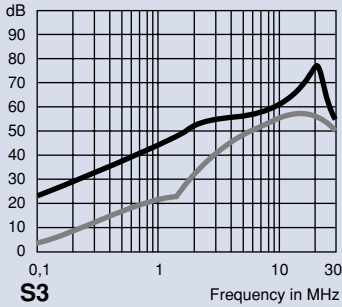


Filter L6 / LX



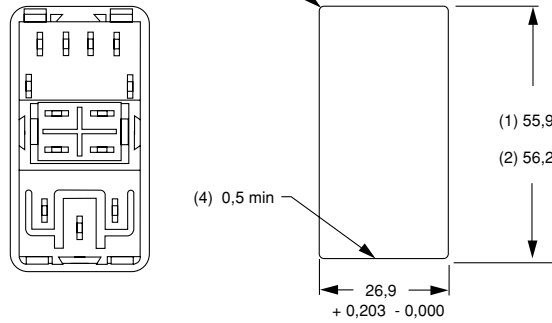
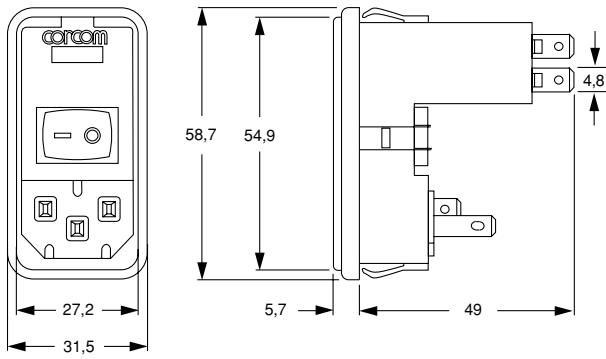
Typ. Insertion Loss

asym. — sym. —



Case Styles and typ. Sizes for Types without Filter

PSO



Rear view

Panel cutout without shield

Note 4:

For snap-in application, the 26.9 mm sides of the cutout must have a 0.5 mm radius on the installation side

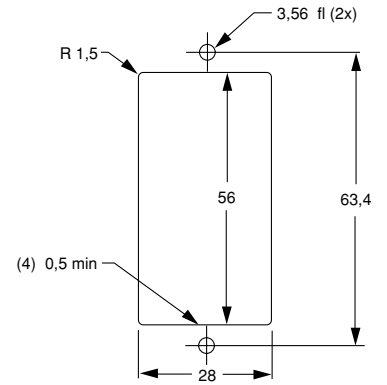
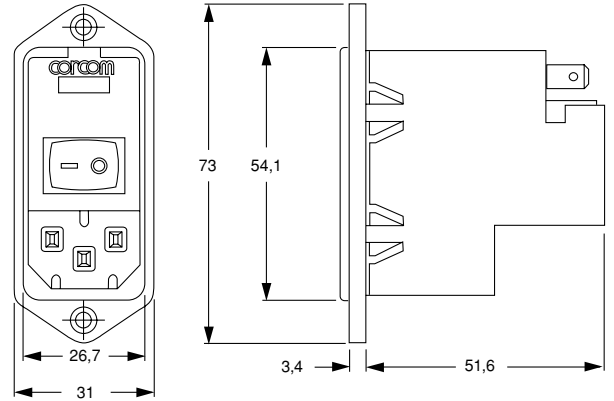
Panel thickness:

- 1) 0,8 - 2,0 mm
- 2) 2,1 - 2,9 mm
- 3) 1,5 - 2,3 mm

Note 5:

Terminals = 4,8 x 0,8mm; except Z and L version = 6,3mm

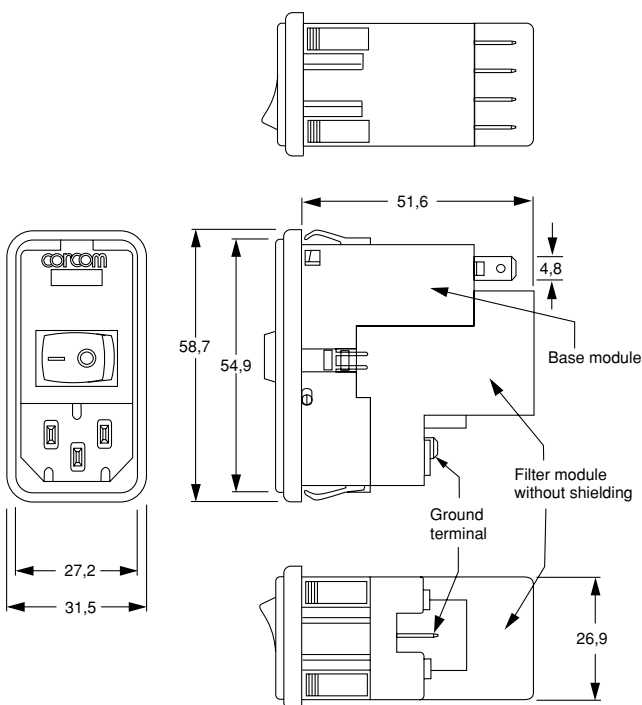
PMO



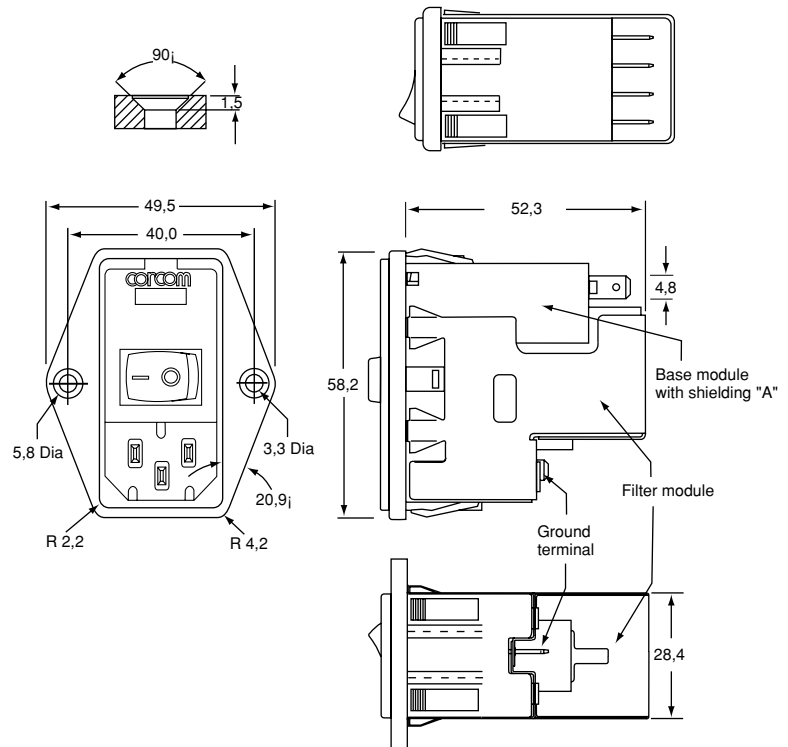
Panel cutout with shield and filter

Case Styles and typ. Sizes for Types with Filter

PS with filter without shielding

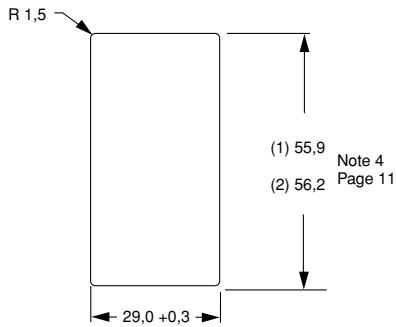


PE with filter and shielding type A

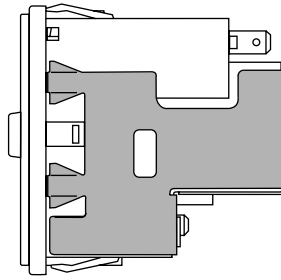


Case Styles and typ. Sizes for Types with shielded Filter

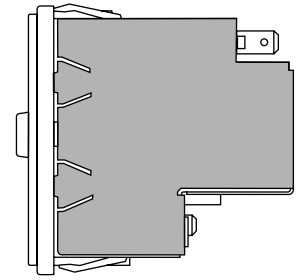
Panel cut-out for shield type A and B



Shielding type A (part shielding)



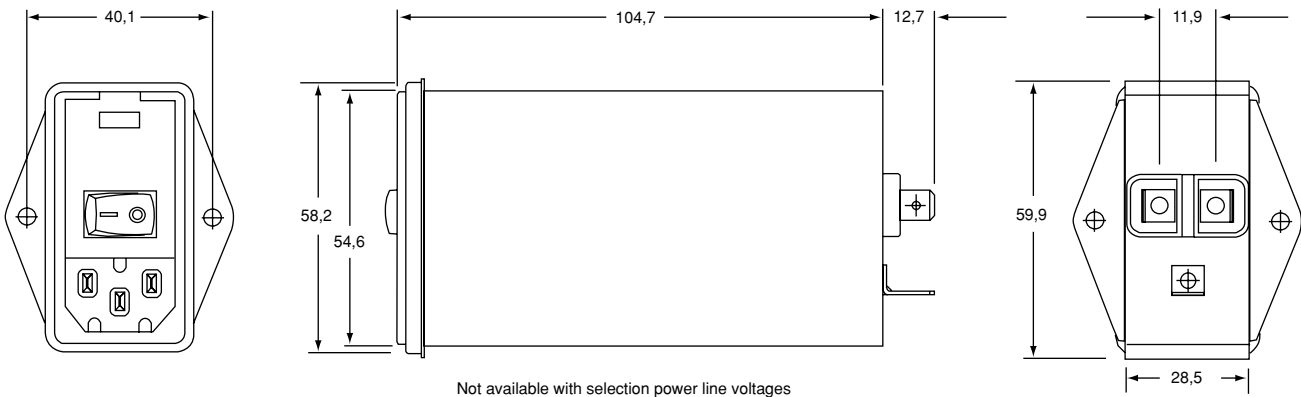
Shielding type B (full shielding)



Note: In case of B-shield no extender option possible

Case Styles and typ. Sizes

L / Z



Accessories P-Series

PA 100 Interconnect assembly; 4 x 150mm wire leads

PA 105 Interconnect assembly; 2 x 150mm wire leads



PA 101 Plug only

PA 102 Pins only

PA 103 Pins on reel

PA 200 Fuse clip

PA 400 Extender J for J-Series

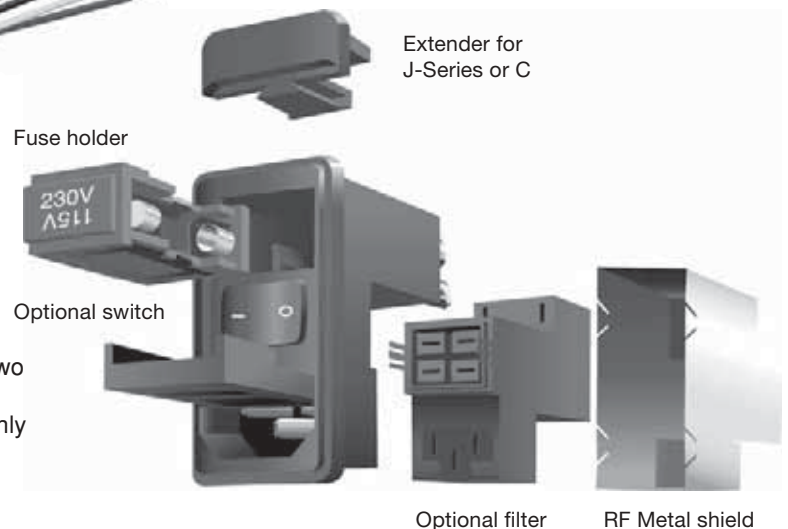
PA 410 Extender L for L-Series; fit L-panel cut out; use two per module, without shield only

PA 420 Extender C for FN-Series; fit FN-panel cut out; only snap-in versions

SPST Voltage selection S for Switching mode power supplies

PRSR Voltage selection X for dual primary transformers - parallel/serial

Description of possible Choices



Power Entry Module Filters

M-Series

- Suppression filters for various applications
- IEC-power line plug with fuses 2/5 x 20 or 1/6,3 x 32 mm to choose from
- Two pole line switch
- 110/120/230/240 V voltage selector
- Suitable for medical equipment



according IEC 950



Power Entry Module Filters

Type	Max. current UL / VDE	Max. leakage current line to ground	Inductance	Capacity		Line switch (switch on current)	Voltage selector	Cover order no.	Mounting
				C _x	C _y				
3EXM4/E	3A / 2A	0,50mA	2x2,21mH	0,27+0,1µF	2x4nF	-	x	-	
3EXM1S/E	3A / 2A	0,50mA	2x2,21mH	0,27+0,1µF	2x4nF	x(34A)	-	-	
3EXM4S/E	3A / 2A	0,50mA	2x2,21mH	0,27+0,1µF	2x4nF	x(34A)	x	-	
3EZM4/E	3A / 2A	0,50mA	2x13,77mH	0,47+0,27µF	2x4nF	-	x	-	
3EZM1S/E	3A / 2A	0,50mA	2x13,77mH	0,47+0,27µF	2x4nF	x(34A)	-	-	
3EZM4S/E	3A / 2A	0,50mA	2x13,77mH	0,47+0,27µF	2x4nF	x(34A)	x	-	
5EFM1/E	5A / 4A	0,50mA	2x0,93mH	0,009µF	2x3nF	-	-	3116	
5EFM4/E	5A / 4A	0,50mA	2x0,93mH	0,009µF	2x3nF	-	x	3115	
5EFM1S/E	5A / 4A	0,50mA	2x0,93mH	0,009µF	2x3nF	x(34A)	-	3114	
5EFM4S/E	5A / 4A	0,50mA	2x0,93mH	0,009µF	2x3nF	x(34A)	x	3113	
5EFM1C/E	5A / 4A	0,50mA	2x0,93mH	0,009µF	2x3nF	-	-	3116	Snap-in
5EFM4C/E	5A / 4A	0,50mA	2x0,93mH	0,009µF	2x3nF	-	x	3115	Snap-in
5EFM1SC/E	5A / 4A	0,50mA	2x0,93mH	0,009µF	2x3nF	x(34A)	-	3114	Snap-in
5EFM4SC/E	5A / 4A	0,50mA	2x0,93mH	0,009µF	2x3nF	x(34A)	x	3113	Snap-in
5EHM1/E	5A / 4A	0,005mA	2x0,93mH	0,009µF		-	-	3116	
5EHM4/E	5A / 4A	0,005mA	2x0,93mH	0,009µF		-	x	3115	
5EHM1S/E	5A / 4A	0,005mA	2x0,93mH	0,009µF		x(34A)	-	3114	
5EHM4S/E	5A / 4A	0,005mA at 250VAC/50Hz	2x0,93mH	0,009µF		x(34A) Two pole, 100 000 operations at full load	x	3113	

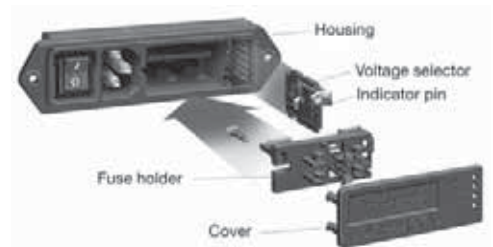
For medical Applications

Type	Max. current UL / VDE	Max. leakage current line to ground	Inductance	Capacity		Line switch (switch on current)	Voltage selector	Cover order No.
				C _x	C _y			
F-3374	3A / 2A	0,160 mA at 250VAC/50Hz	2x16mH(L1) 2x0,47mH(L2)	0,47µF 0,1µF	2x1nF	x(34A)	-	-

The M-Series offers the manufacturer of electronic equipment the maximum variety in a series of standard products with regard to the power line integration and various filter specifications.

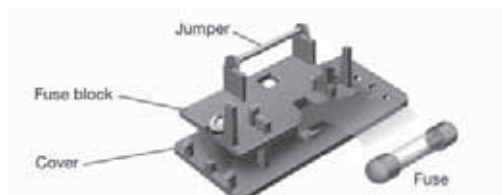
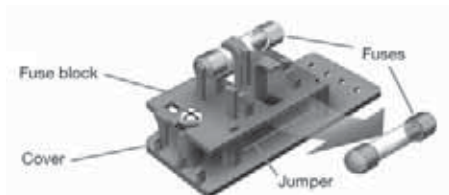
FILTER SPECIFICATIONS:

- XM-Series:** Suitable for high performance applications.
- ZM-Series:** Suitable for very high performance applications.
- FM-Series:** Suitable for general purpose requirements.
- HM-Series:** Suitable for medical equipment
(also suitable for medical equipment permitting body contact)

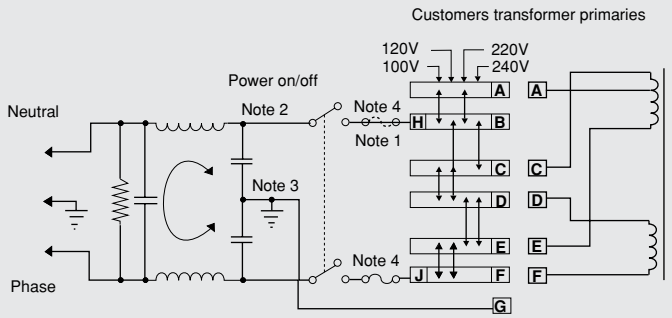


Fuse Change

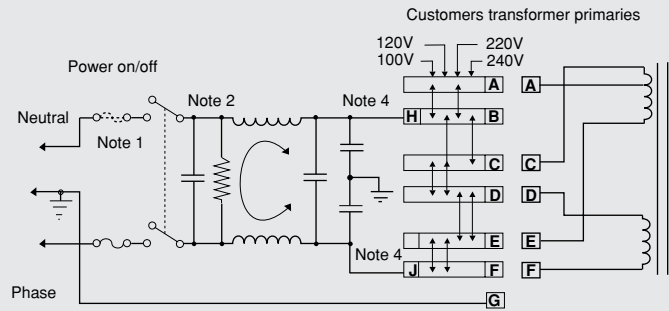
5 x 20 fuse -> change to -> 6,3 x 32 fuse



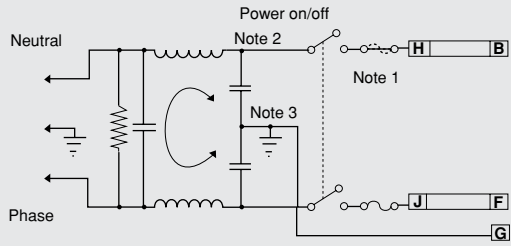
FM & HM models for 2 and 4 voltages



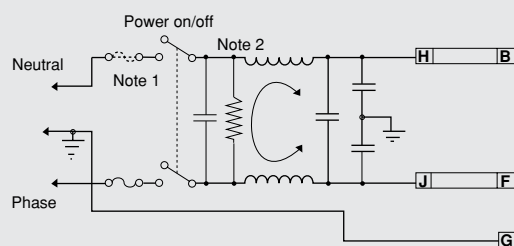
XM & ZM models for 2 and 4 voltages



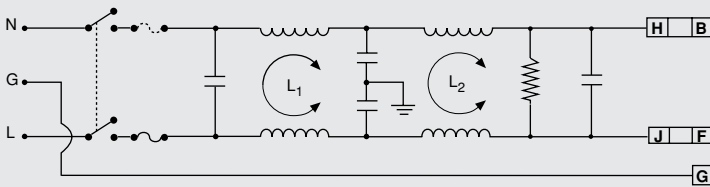
FM & HM models for 1 voltage



XM & ZM models for 1 voltage



F-3374



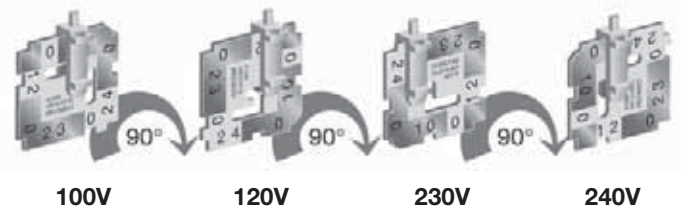
- Note 1: Provision for dual fusing (Euro standard)
- Note 2: Power on/off switch with suffix "S" only
- Note 3: HM models without Y-capacitors
- Note 4: Switch or bridge between K-H and L-J
Two more K- and L-connectors by 5EFM4

Voltage Selection

Before changing selected voltage, disconnect power cord

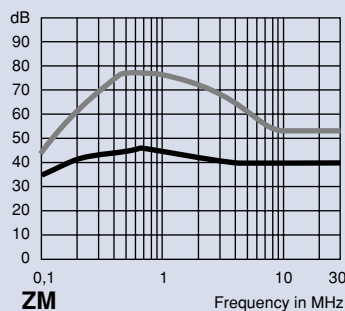
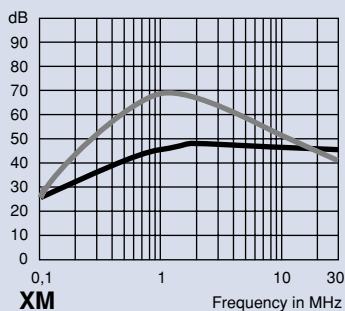
- Open cover using a small screwdriver or equivalent and store fuse block in a safe place.
- Using the indicator pin, pull voltage selector card straight out of housing.
- Turn card until desired voltage becomes readable at the bottom.
- Place indicator pin pointing up when desired voltage is readable at the bottom.
- Insert voltage selector card into the housing with printed side facing toward the IEC connector and indicator pin toward case maker.
- Replace fuse block and cover making sure that the indicator pin shows the desired voltage.

Selection of various power line voltages



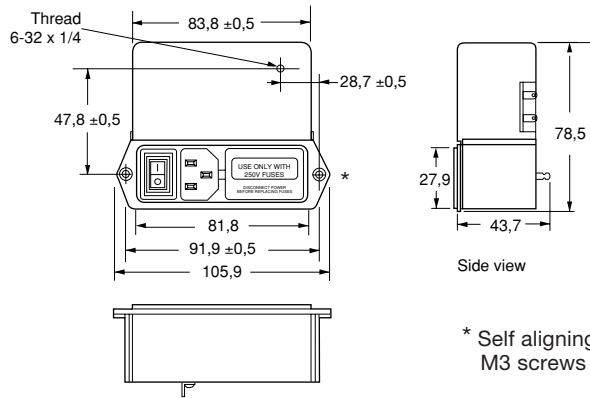
Typ. Insertion Loss

asym. — sym. —



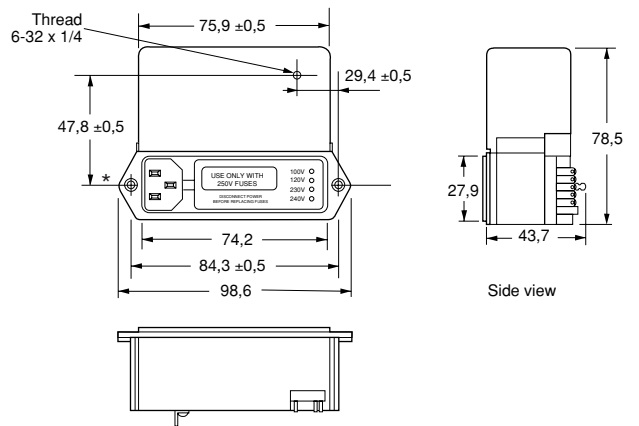
3EXM1S/3EZM1S/F-3374

IEC connector, DPST on/off switch, selectable fuse holder



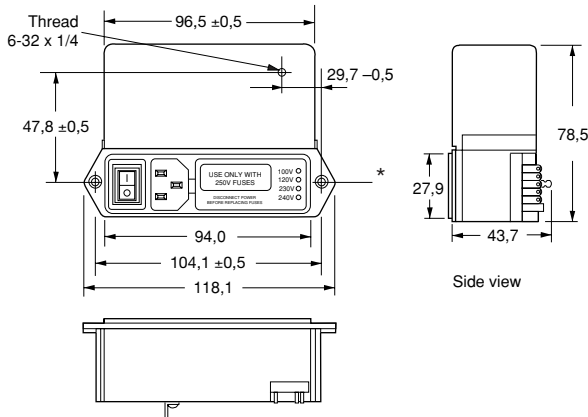
3EXM4/3EZM4

IEC connector, voltage selector, selectable fuse holder



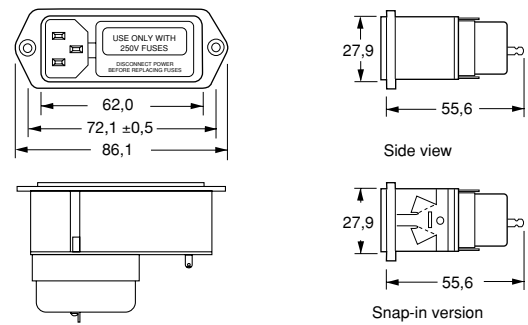
3EXM4S/3EZM4S

IEC connector, DPST on/off switch, voltage selector, selectable fuse holder



5EHM1 / 5EFM1

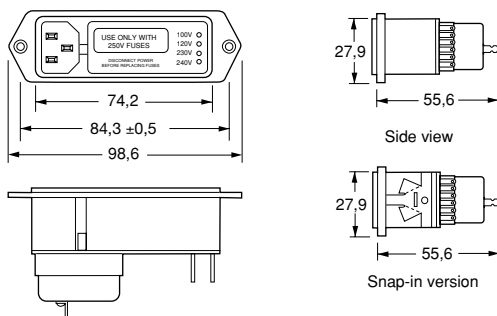
IEC connector, selectable fuse holder



All backplate terminals 2.8 mm flat type plugs/holes 1.4 Dia ±0,1
Exception: Solder lug ground terminal (wire wrap suitable) mounting holes 3.9 Dia.

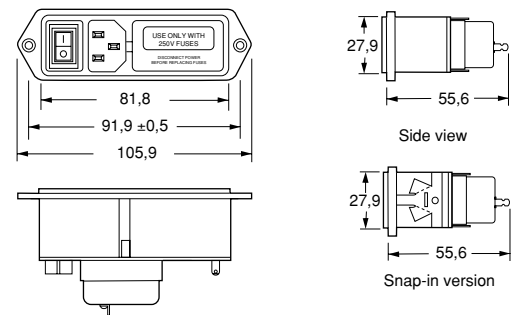
5EHM4 / 5EFM4

IEC connector, voltage selector, selectable fuse holder. Connection of external Switch



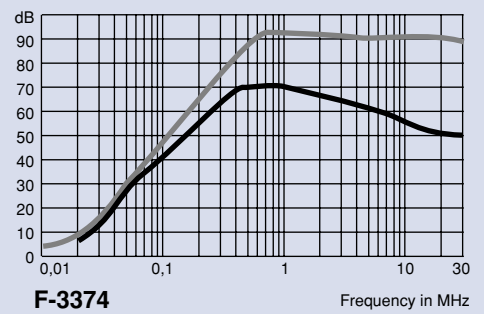
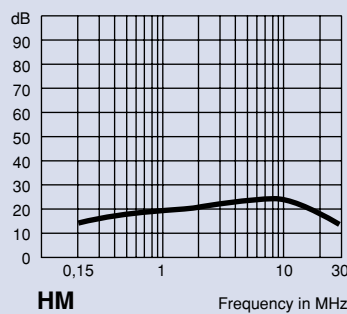
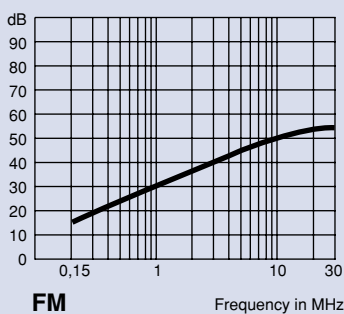
5EHM1S / 5EFM1S

IEC connector, DPST on/off switch, selectable fuse holder



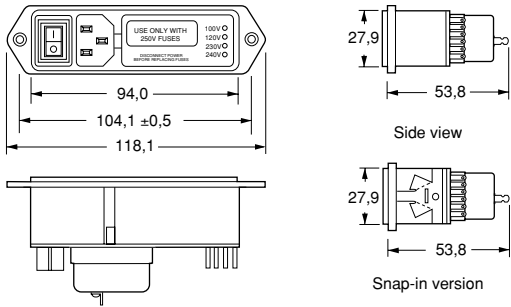
Typ. Insertion Loss

asym. — sym. —



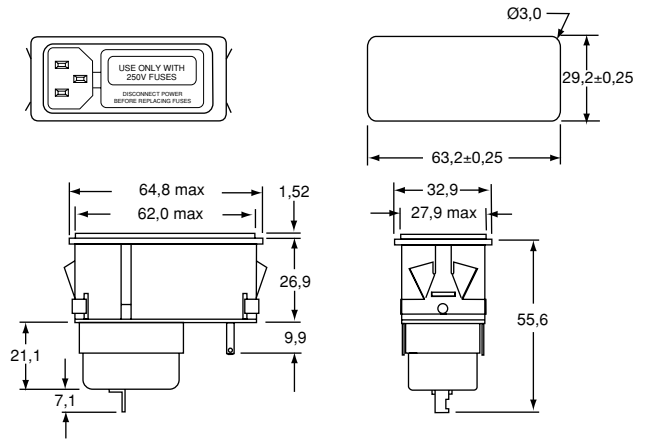
5EHM4S / 5EFM4S

IEC connector, DPST on/off switch, voltage selector, selectable fuse holder



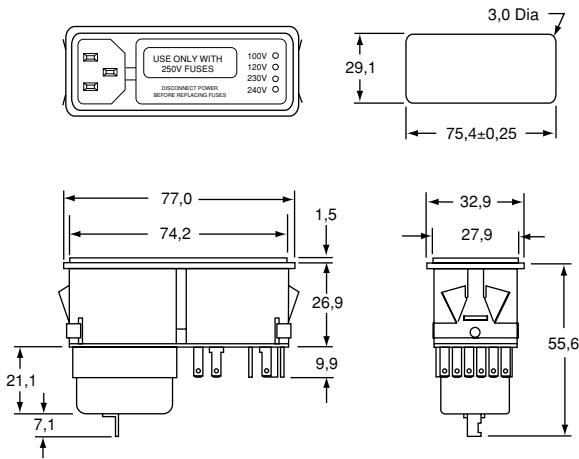
5EFM1C

IEC connector, selectable fuse holder, snap-in



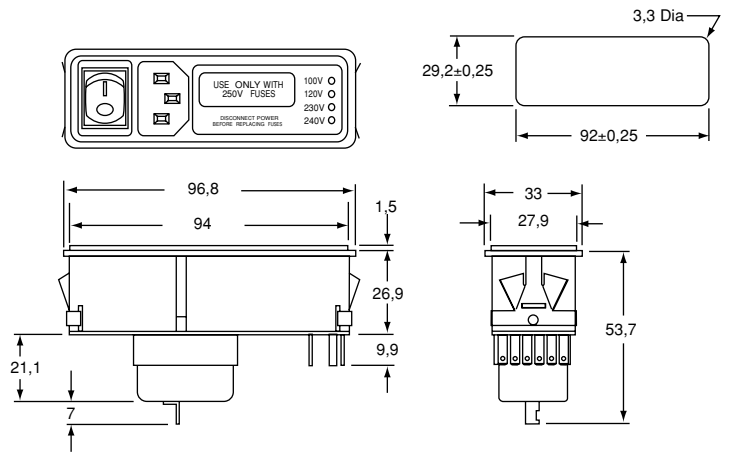
5EFM4C

IEC connector, voltage selector, selectable fuse holder, snap-in



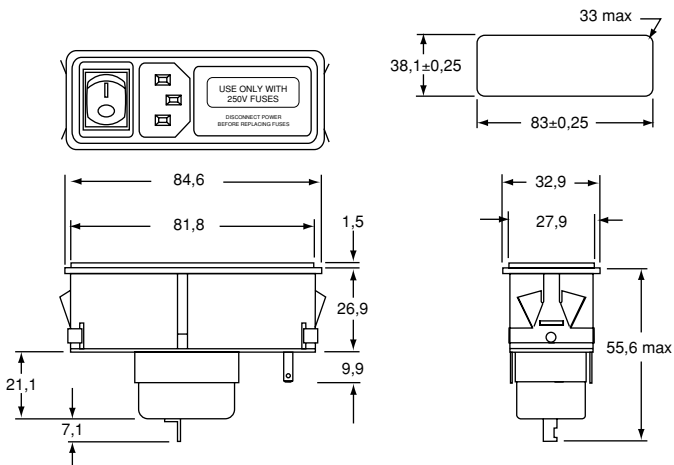
5EFM4SC

IEC connector, DPST on/off switch, voltage selector, selectable fuse holder, snap-in



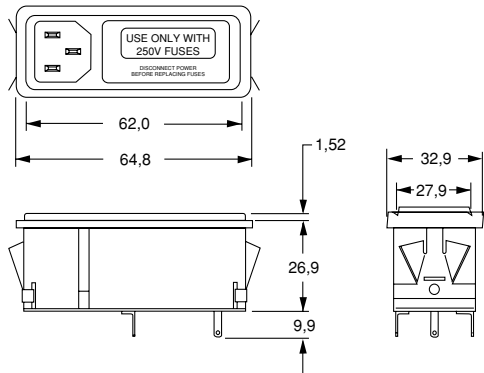
5EFM1SC

IEC connector, DPST on/off switch, selectable fuse holder, snap-in



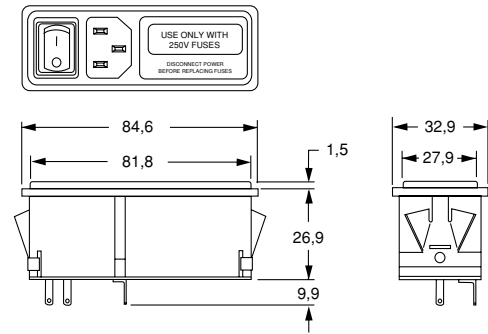
6VM1C

IEC connector, selectable fuse holder, snap-in



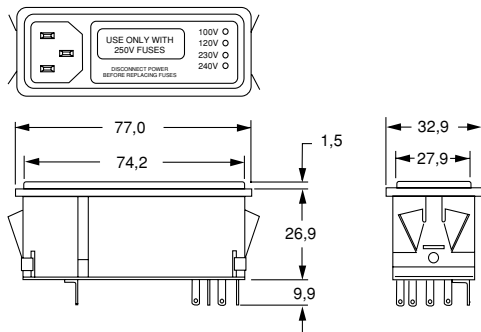
6VM1SC

IEC connector, DPST on/off switch, selectable fuse holder, snap-in



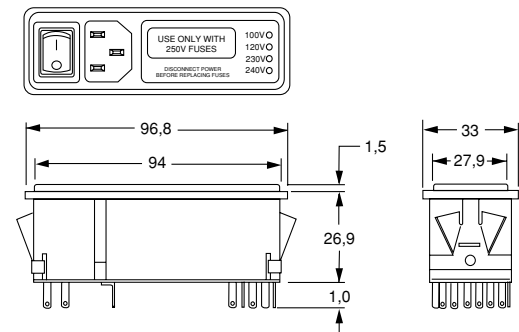
6VM4C

IEC connector, DPST on/off switch, selectable fuse holder, snap-in



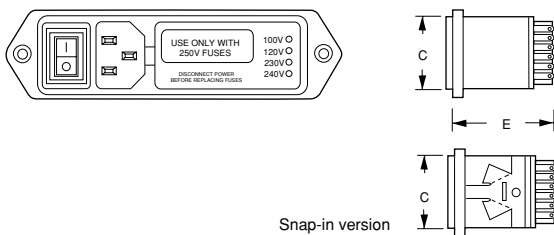
6VM4SC

IEC connector, DPST on/off switch, selectable fuse holder, snap-in



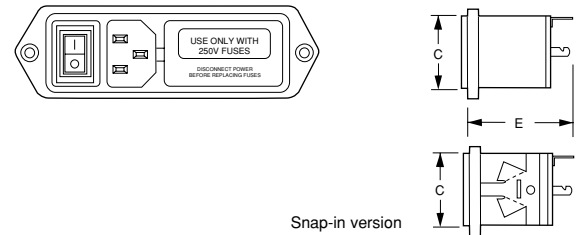
6VM4S/6VM2S

IEC connector, DPST on/off switch, voltage selector, selectable fuse holder



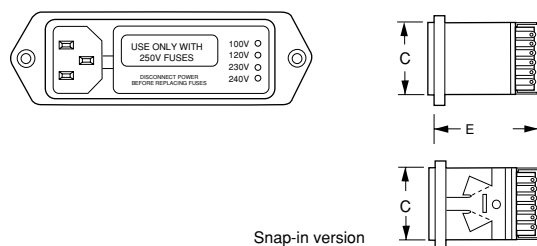
6VM1S

IEC connector, DPST on/off switch, selectable fuse holder



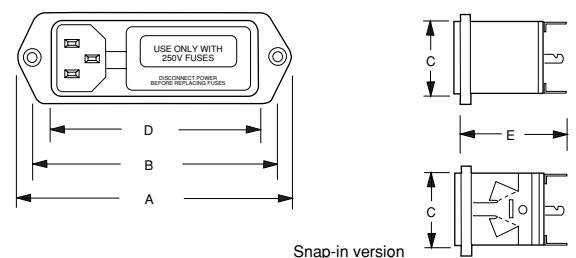
6VM4/6VM2

IEC connector, voltage selector, selectable fuse holder



6VM1

IEC connector, selectable fuse holder



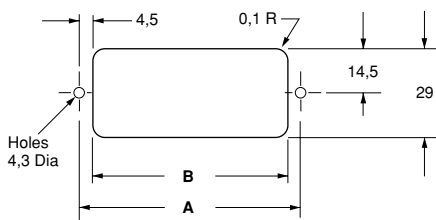
Typ. dimensions

All backplate terminals 2.8 Dia. Exception: slider lug ground terminal (wire wrap suitable) mounting holes 3.94 Dia. Holes 1.4 Dia±0.1

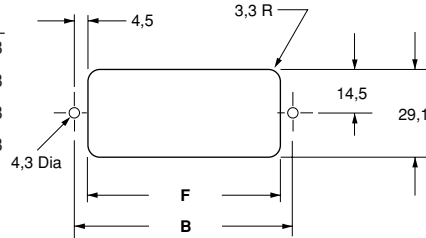
VM-models suitable for front and back mounting

Power Entry Module without Filter

Type	Case sizes					
	A (max)	B ($\pm 0,25$)	C (max)	D (max)	E (max)	F (max)
6VM1	86,1	72,1	27,9	62,0	36,8	63,5
6VM1C	64,8	-	27,9	62,0	36,8	63,5
6VM1S	105,9	91,9	27,9	81,8	36,8	83,3
6VM1SC	84,6	-	27,9	81,8	36,8	83,3
6VM2	98,6	84,3	27,9	74,2	36,8	75,7
6VM2S	118,1	104,1	27,9	94,0	36,8	95,5
6VM4	98,6	84,3	27,9	74,2	36,8	75,7
6VM4C	77,0	-	27,9	74,2	36,8	75,7
6VM4S	118,1	104,1	27,9	94,0	36,8	95,5
6VM4SC	96,8	-	27,9	94,0	36,8	95,5



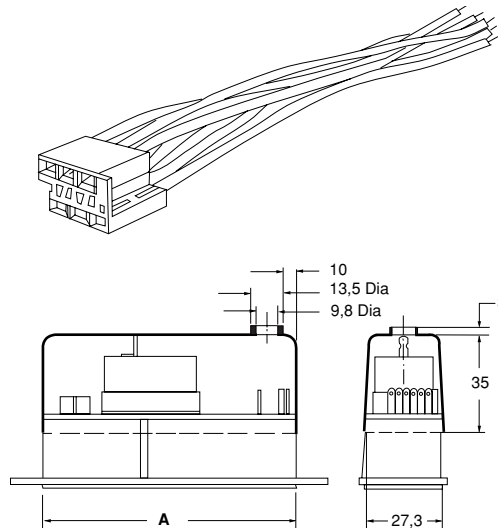
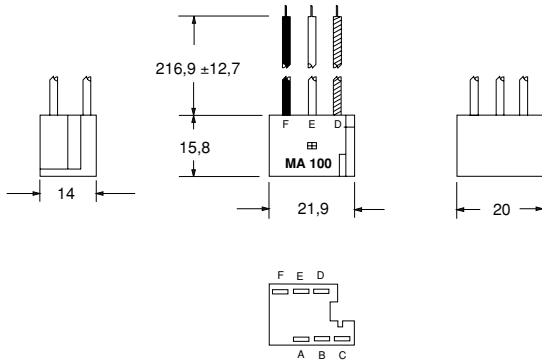
	A	B
xxxM1:	72,1 $\pm 0,5$	63,3 $\pm 0,3$
xxxM1S:	91,9 $\pm 0,5$	83,1 $\pm 0,3$
xxxM4:	84,3 $\pm 0,5$	75,4 $\pm 0,3$
xxxM4S:	104,1 $\pm 0,5$	95,2 $\pm 0,3$



VM und FM models suitable for front and back mounting.
XM and ZM models for back mounting only

Accessories for M-Modules

These plugs have been designed for all M-Series modules in order to accomplish simple connection.
Plugs are available with or without colour coded wire leads.



	Part No.
Assembly	MA - 100
Plug only	MA - 101
Pins on stripes (100)	MA - 102
Pins on reel (7000)	MA - 103

Note for tools: pliers/Molex:HTR 2445 A

Shroud-lupolen (HDPE/MDPE)

for M1 - versions (62,0)	41 - 3116 - AO
for M4 - versions (74,0)	41 - 3115 - AO
for M1S - versions (81,8)	41 - 3114 - AO
for M4S - versions (94,0)	41 - 3113 - AO

Material UL-94/2 listed



Medical safety bracket kit for use with HM models (UL - 544)	MA - 400
--	----------



Voltage selection card

120V / 240V (VM2)	MA - 302
100V / 120V / 230V / 240V (VM4)	MA - 304

The modules are standard delivered with one card

Power Entry Module Filters

EDL-, EHL-Series

Compact units for international applications

- IEC-Connector
- Fuse blocks for 2/5 x 20 or 1/6,3 x 32 fuses
- Choice of 4-voltage selector or power line switch
- Operating voltage 110/120/230/240 VAC
- Further standard types on request



according IEC 950



Type	Max. current UL/VDE	Inductance	Capacity		Line switch (switch on current)	4-fold voltage	Fuses	Mounting
			C _x	C _y				
2EDL4	2	2x0,79mH	0,047µF	2x2,8nF		x	1	Flange
2EDL4C	2	2x0,79mH	0,047µF	2x2,8nF		x	1	Snap-in
2EDL4M	2	2x0,79mH	0,047µF	2x2,8nF		x	2	Flange
2EDL4CM	2	2x0,79mH	0,047µF	2x2,8nF		x	2	Snap-in
4EDL4	4	2x0,35mH	0,047µF	2x2,8nF		x	1	Flange
4EDL4C	4	2x0,35mH	0,047µF	2x2,8nF		x	1	Snap-in
4EDL4M	4	2x0,35mH	0,047µF	2x2,8nF		x	2	Flange
4EDL4CM	4	2x0,35mH	0,047µF	2x2,8nF		x	2	Snap-in
6EDL4	6	2x0,27mH	0,047µF	2x2,8nF		x	1	Flange
6EDL4C	6	2x0,27mH	0,047µF	2x2,8nF		x	1	Snap-in
6EDL4M	6	2x0,27mH	0,047µF	2x2,8nF		x	2	Flange
6EDL4CM	6	2x0,27mH	0,047µF	2x2,8nF		x	2	Snap-in
2EDL1S	2	2x0,79mH	0,047µF	2x2,8nF	x(51A)		1	Flange
2EDL1SC	2	2x0,79mH	0,047µF	2x2,8nF	x(51A)		1	Snap-in
2EDL1SM	2	2x0,79mH	0,047µF	2x2,8nF	x(51A)		2	Flange
2EDL1SCM	2	2x0,79mH	0,047µF	2x2,8nF	x(51A)		2	Snap-in
4EDL1S	4	2x0,35mH	0,047µF	2x2,8nF	x(51A)		1	Flange
4EDL1SC	4	2x0,35mH	0,047µF	2x2,8nF	x(51A)		1	Snap-in
4EDL1SM	4	2x0,35mH	0,047µF	2x2,8nF	x(51A)		2	Flange
4EDL1SCM	4	2x0,35mH	0,047µF	2x2,8nF	x(51A)		2	Snap-in
6EDL1S	6	2x0,27mH	0,047µF	2x2,8nF	x(51A)		1	Flange
6EDL1SC	6	2x0,27mH	0,047µF	2x2,8nF	x(51A)		1	Snap-in
6EDL1SM	6	2x0,27mH	0,047µF	2x2,8nF	x(51A)		2	Flange
6EDL1SCM	6	2x0,27mH	0,047µF	2x2,8nF	x(51A)		2	Snap-in
					Two pole, 10000 operations at full load		One 6,3x32 mm or two 5x20 mm	

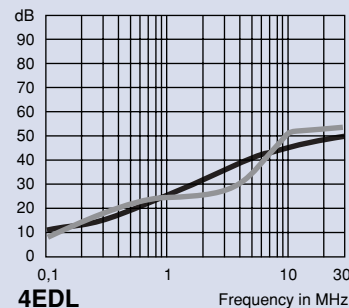
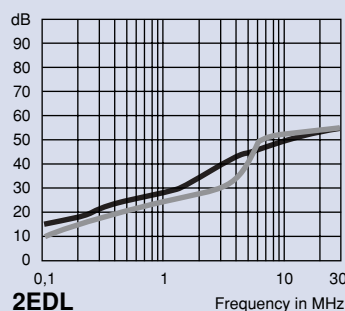
Max. leakage current line to ground 0,5 mA at 250 VAC/50 Hz

Type	Max. current UL/VDE	Inductance	Capacity C _x	Line switch (switch on current)	4-fold voltage	Fuses	Mounting
6EHL4	6	2x0,58mH	0,047µF		x	1	Flange
6EHL4C	6	2x0,58mH	0,047µF		x	1	Snap-in
6EHL4M	6	2x0,58mH	0,047µF		x	2	Flange
6EHL4CM	6	2x0,58mH	0,047µF		x	2	Snap-in
6EHL1S	6	2x0,58mH	0,047µF	x(51A)		1	Flange
6EHL1SC	6	2x0,58mH	0,047µF	x(51A)		1	Snap-in
6EHL1SM	6	2x0,58mH	0,047µF	x(51A)		2	Flange
6EHL1SCM	6	2x0,58mH	0,047µF	x(51A)		2	Snap-in

Max. leakage current line to ground 5 µA at 250 VAC/50 Hz

Typ. Insertion Loss

asym. — sym. —



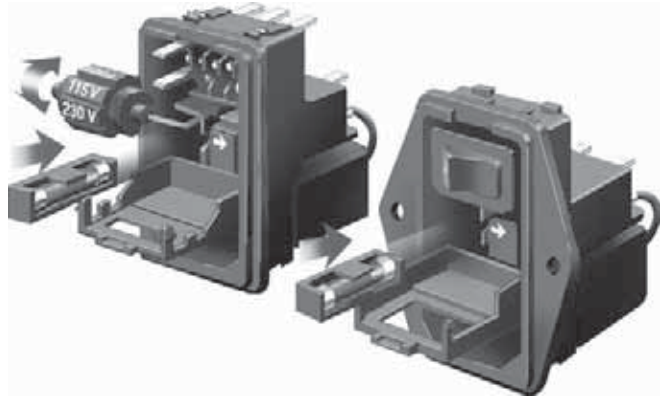
Voltage Selection

Before changing selected voltage, disconnect power cord. Open cover using a small screwdriver or equivalent. Rotate voltage selector to the desired voltage and replace cover.

Ordering notes:

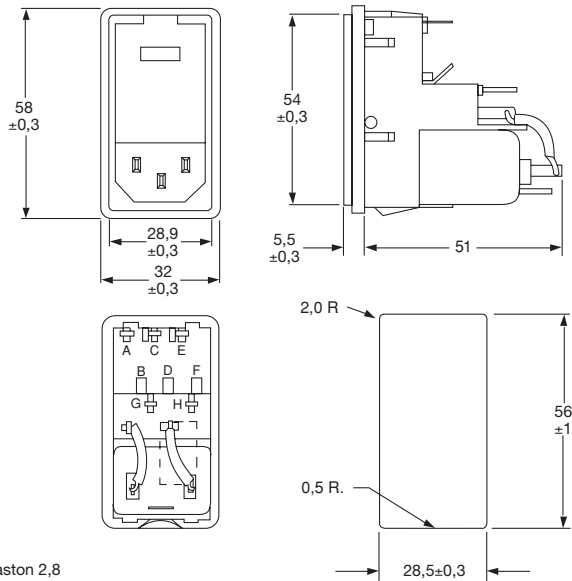
with **M** = Fuse block for 2/5 x 20 DIN fuses
 Without **M** = Fuse block for 1/6,3 x 32 DIN fuses

Further combinations voltage selector/fuse block on request.



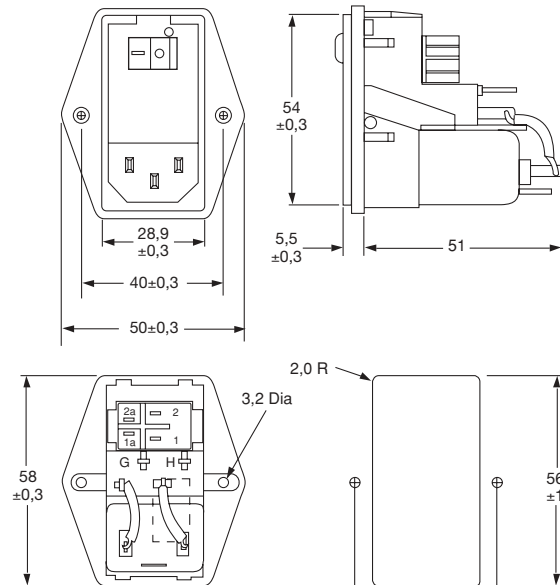
Case Styles and typ. Sizes

Snap-in version



Faston 2,8
 Faston switch 4,8
 Panel thickness
 0,8-2,0 mm 55,9±0,2 2,1-3,2 mm 56,2±0,2
 For snap-in version the cutout measuring 28.5 must have a 0.5 mm round off on the mounting side.

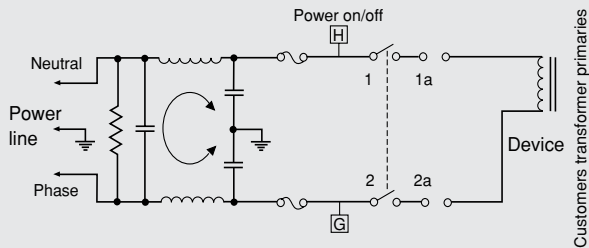
Flange mounted version



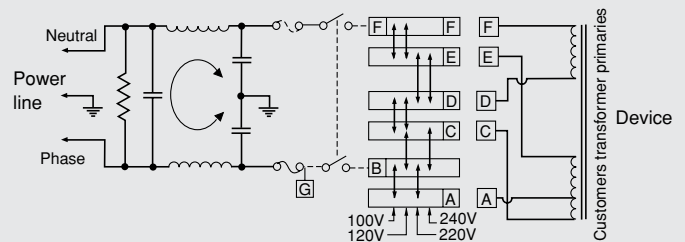
Hole 1,4 ±0,1 Dia
 Faston 2,8
 Faston switch 4,8
 Mounting holes 3,2 Dia

Electrical Schematic

DL models with switch



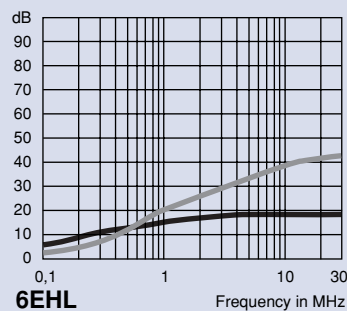
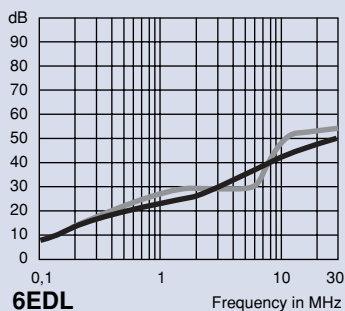
DL models with 4 Voltages



Note: EHL-models without Y-capacity

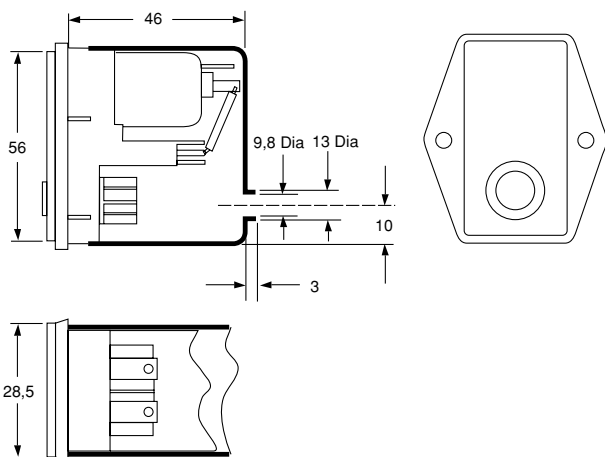
Typ. Insertion Loss in dB

asym. — sym. —



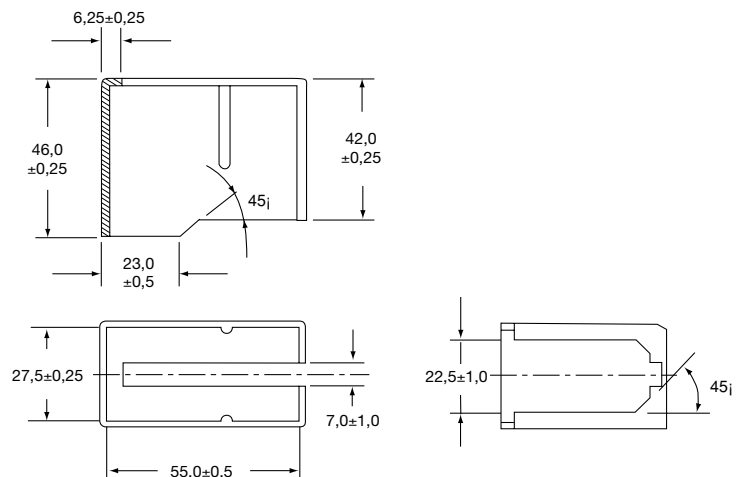
41-3150-AO

Round cable fitting



41-3150-AA

Flat cable fitting



Color black, material UL-94

Part No.

Shroud

Round cable fitting
Flat cable fitting

41-3150-AO
41-3150-AA



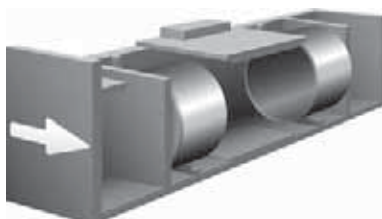
Voltage selection drum

for use with all L4 models

115V / 115V / 230V / 230V
110V / 230V / 240V
100V / 120V / 230V / 240V
115V / 230V
100V / 120V / 220V / 240V

72-2695-BO
72-2954-AO
72-2695-AO
72-2955-AO
72-2695-CO

The EDL- / EHL-Series are by standard equipped and held in stock with a voltage selector for 100V/120V/220V/240V as well as one fuse holder for North American fuses (6,3 x 32 mm) or two holders for European fuses (5 x 20 mm with "M" design). Different requirements regarding voltage selection or fuse holders can either be realized by parts offered as accessories or taken into consideration directly from manufacturing in case of sufficient order volume and delivery time.



Fuse holder

Accommodates DIN-fuse
5 x 20 mm

81-2694-AO

Accommodates North American fuse
6,3 x 32 mm

81-2693-AO

Standard

With 1 fuse: North American fuse holder
With 2 fuses: 2 x DIN fuse holder

Power Entry Module with IEC Connector and Switch

F-3558

Fuse holder (5 x 20) and filter



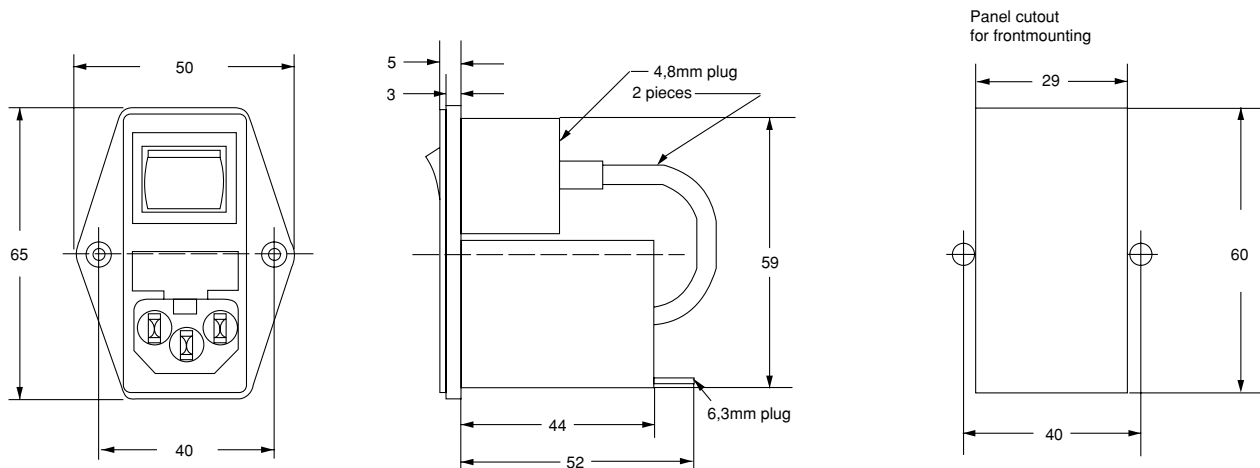
according IEC 950



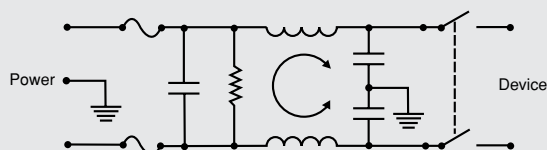
Type	Max. current VDE	Max. leakage current line to ground	Inductance L_1	Capacity		
				C_x	C_y	
F-3558	6A	0,5 mA with 250VAC/50Hz	2 x 0,93mH	0,1 μ F	2x3nF	with discharge resistor 1 MK

On request also available in 1A and 3A units.

Case Style and typ. Sizes

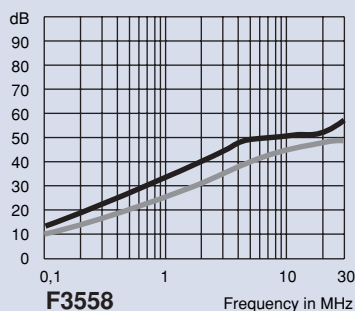


Electrical Schematic



Typ. Insertion Loss in dB

asym. — sym. —



Power Entry Module Filters

LA-Series

- IEC-Connector
- Fuse block 5 x 20 or 6,3 x 32 mm
- Two pole line switch (illuminated on request)
- Voltage selector 110 / 120 V or 230 / 240 V
- Further types on request
- Illuminated line switch F-7332A



for Series FLA, XLA and ZLA

according IEC 950



Type	Max. current UL/VDE	Max. voltage	Inductance L_1	Capacity		Line switch	Terminals	Application
				C_x	C_y			
5EFLA2S	5A/4A	250 VAC	2x0,93 mH	0,009 μ F	2x3nF	>50000 operations at full load 35A switch on current	Fastons 2,79 mm	Normal attenuation
3EXLA2S	3A/2A	250 VAC	2x2,3 mH	0,27+0,1 μ F	2x4nF			High attenuation
3EZLA2S	3A/2A	250 VAC	2x13,77 mH	0,47x0,27 μ F	2x4nF			Very high attenuation

Max. leakage current line to ground 0.5 mA at 250 VAC/50 Hz

All models are available with a cover to prevent electrical as well as with a common line plug.

Filters for Switching Power Supplies, illuminated

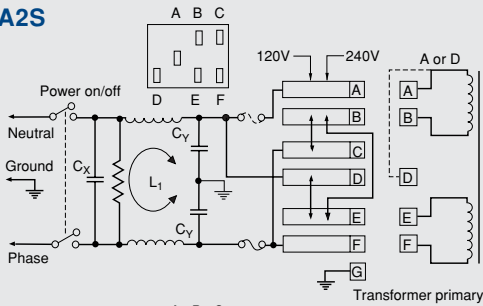
Type	Max. current UL/VDE	Max. voltage	Inductance L_1	Capacity		Line switch	Terminals	Application
				C_x	C_y			
F7332A	3A/2A	250 VAC	2x13,77 mH	0,47x0,27 μ F	2x4nF	s.a.	s.a.	Very high attenuation

Max. leakage current line to ground 0.5 mA at 250 VAC/50 Hz

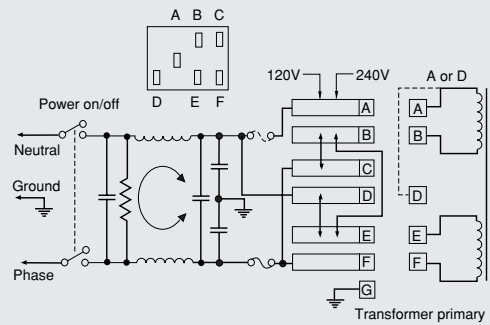
All models are available with a cover to prevent electrical as well as with a common line plug.

Electrical Schematic

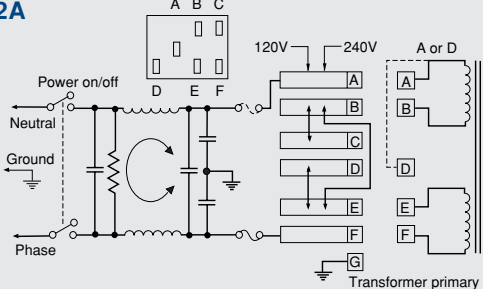
5EFLA2S



3EXLA2S & 3EZLA2S



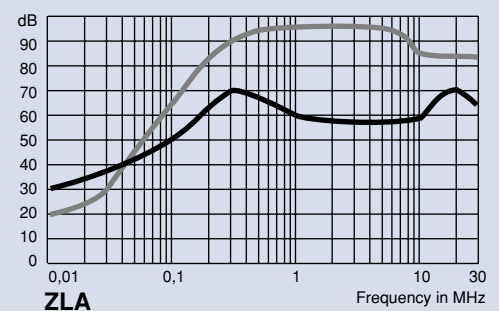
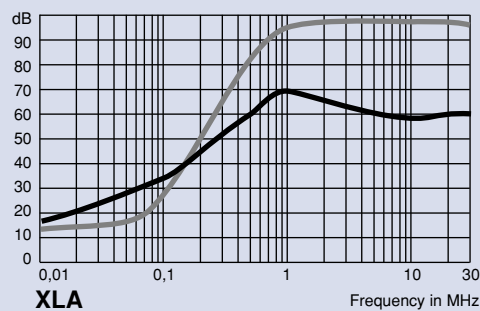
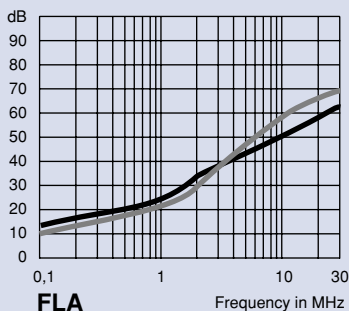
F7332A



F-7332A with var. switches

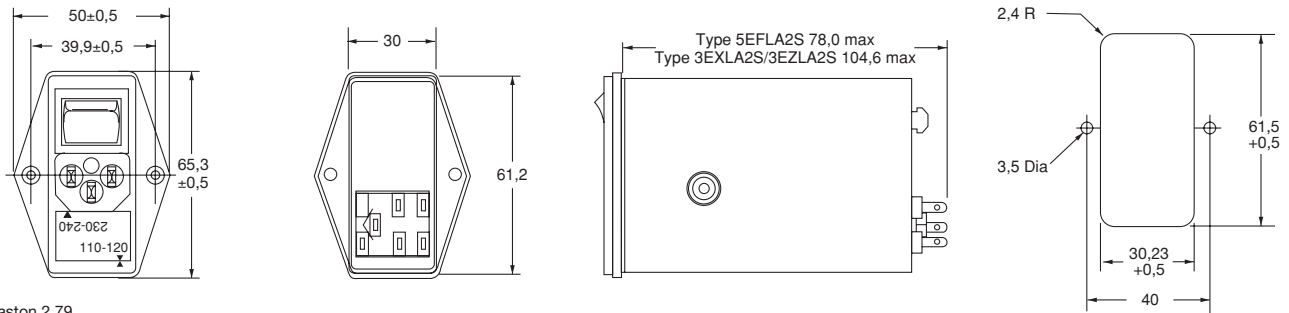
Typ. Insertion Loss

asym. — sym. —



Case Styles and typ. Sizes

5EFLA2S, 3EXLA2S & 3EZLA2S, F-7332A



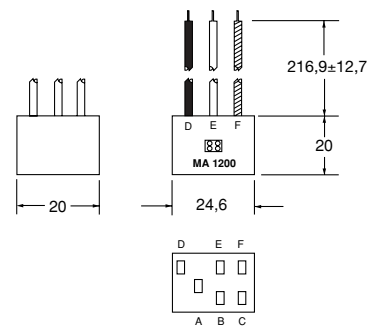
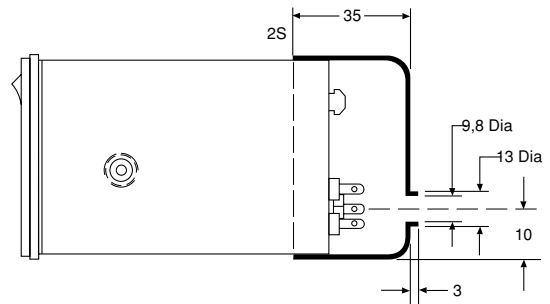
Faston 2,79
 Faston switch 2,79 Hole 3,20 Exception: Solder lug ground terminal (Wire wrap suitable).
 By using 6.3 x 32 fuses use left insertion.

Accessories for LA - Series and F7332A

Cover

Part No.

41 - 3116 - A0
 Material UL-94



Assembly

These plugs have been designed for all LA-Series + F-7332 modules in order to accomplish simple connection. Plugs are available with or without colour coded wire leads.

Assembly	MA - 1200
Plug only	MA - 1201
Pins on stripes (100)	MA - 102
Pins on reel (7000/MBM)	MA - 103

Power Entry Modules with/without Filters

J-Series

- Voltage selector, fuse and IEC-connector
- Selectable voltages
- Type 6J4 with attached interference suppression filter



according IEC 950

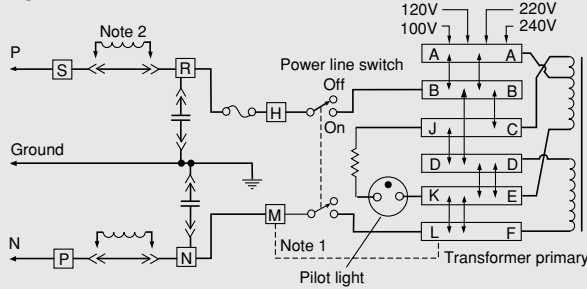


Type	Max. current UL/VDE	Inductance	Capacity		Power connector	Terminals	
			C _x	C _y			
6VJ1	6A				According to UL- and IEC-standards as well as CEE-public. 22 Typ VI	Back plane terminals suitable for soldering, wire wrap and crimp-on lugs such as MOLEX Nr.2123	Without filter
6J4	6A	2x0,46mH	0,009µF	2x2,8nF			With filter

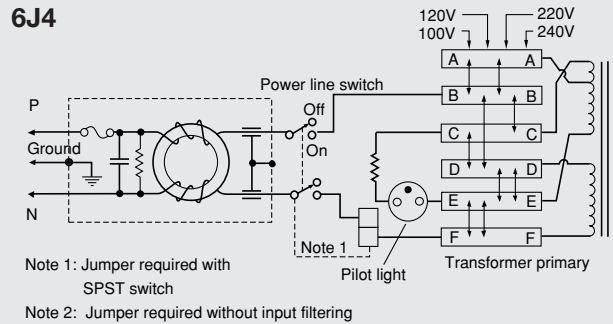
Max. leakage current line to ground: type 6VJ1 5 µA, type 6J4 0,5 mA at 250 VAC/50 Hz

Electrical Schematic

6VJ1

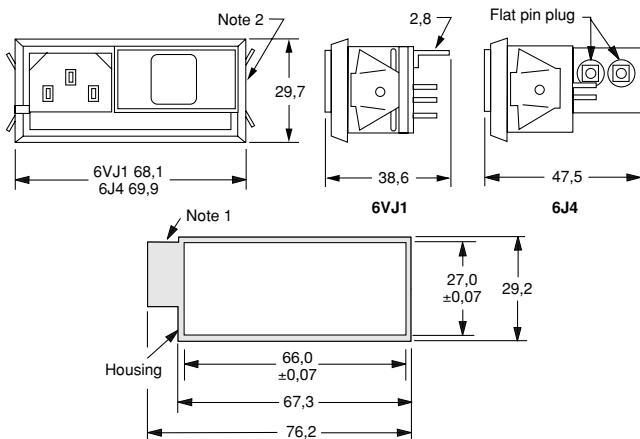


6J4



Case Styles and typ. Sizes

Mounting diagram Note 1: Fuse cover window open Note 2: Panel thickness 1.5-2.2 mm



Accessories J-Series



Voltage selector card
115V / 230V
100V / 120V / 230V / 240V*

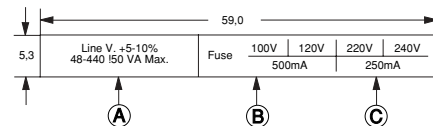
Part No.

JA - 302
JA - 304

* Standard

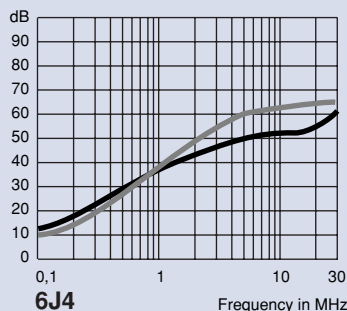
Mounting clip up to 3,2 mm thickness

JA - 403



Typ. Insertion Loss

asym. — sym. —



Device rating label

A	B	C	Part No.
VA	Fuse	230/240	
Max.	100/120	230/240	
25	250 mA	125 mA	85 - 1500
50	500 mA	250 mA	85 - 1501
100	1 A	500 mA	85 - 1502
200	2 A	1 A	85 - 1503
250	2,5 A	1,25 A	85 - 1504
300	3 A	1,5 A	85 - 1505
400	4 A	2 A	85 - 1506
500	5 A	2,5 A	85 - 1507
600	6 A	3 A	85 - 1508

IEC Connector Filters with double Pole Switch C-Series

- Three function PEM combining IEC socket DPST switch and filter
- Available up to 10A
- Compact size
- Also available w/o filter



according IEC 950



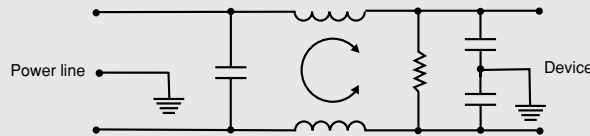
Type	Max. current UL/VDE	Inductance	Capacity		Switch	Terminals
			Cx	Cy		
10CS1 / 10CE1	10A	-	-	-	x	4,8mm x 0,8mm flat connectors
1CFS1 / 1CFE1	1A	2 x 10mH	0,1µF	2 x 3nF	x	6,35mm x 0,8mm flat connectors
3CFS1 / 3CFE1	3A	2 x 2,43mH	0,1µF	2 x 3nF	x	6,35mm x 0,8mm flat connectors
6CFS1 / 6CFE1	6A	2 x 0,82mH	0,1µF	2 x 3nF	x	6,35mm x 0,8mm flat connectors
10CFS1 / 10CFE1	10A	2 x 0,31mH	0,1µF	2 x 3nF	x	6,35mm x 0,8mm flat connectors

For medical Applications

Type	Max. current UL/VDE	Inductance	Capacity		Switch	Terminals
			Cx	Cy		
1CHS1 / 1CHE1	1A	2 x 10mH	0,1µF	-	x	6,35mm x 0,8mm flat connectors
3CHS1 / 3CHE1	3A	2 x 2,43mH	0,1µF	-	x	6,35mm x 0,8mm flat connectors
6CHS1 / 6CHE1	6A	2 x 0,82mH	0,1µF	-	x	6,35mm x 0,8mm flat connectors
10CHS1 / 10CHE1	10A	2 x 0,31mH	0,1µF	-	x	6,35mm x 0,8mm flat connectors

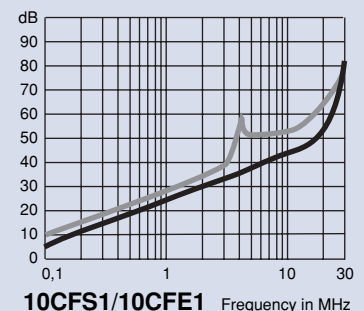
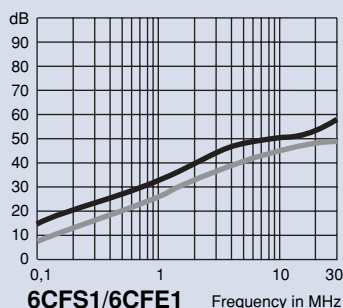
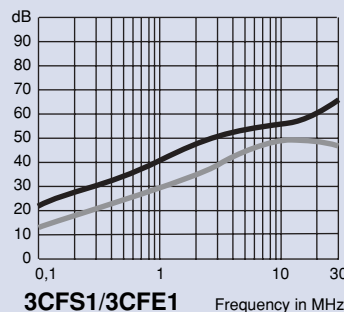
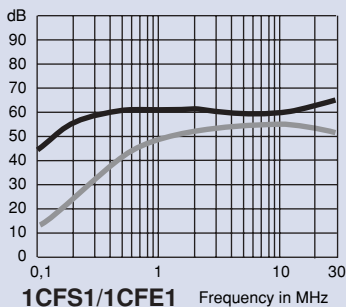
Electrical Schematic

F models

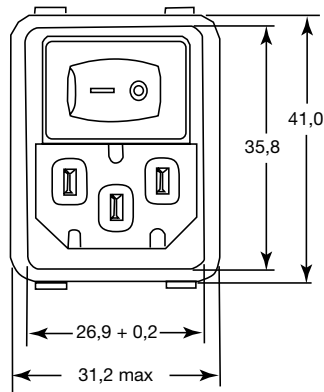


Typ. Insertion Loss

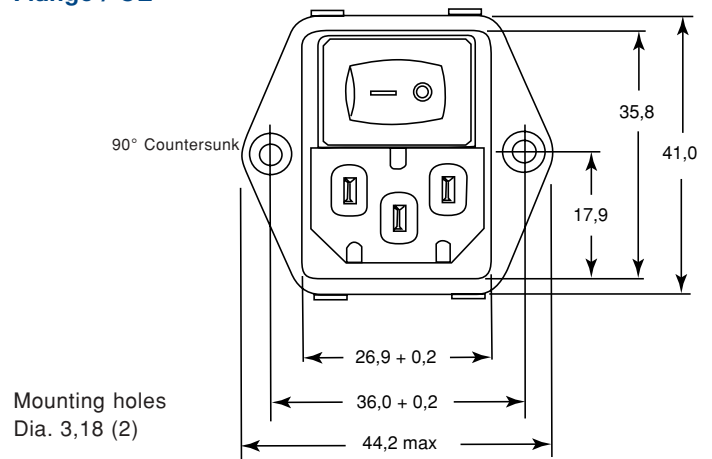
asym. — sym. —



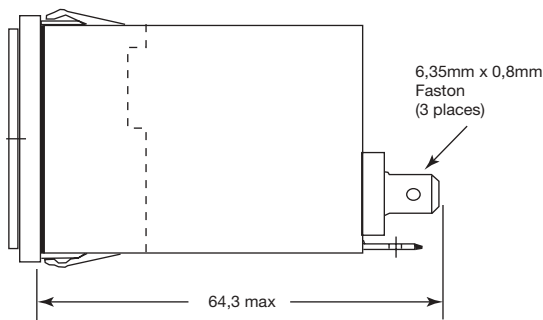
Snap-in / CS



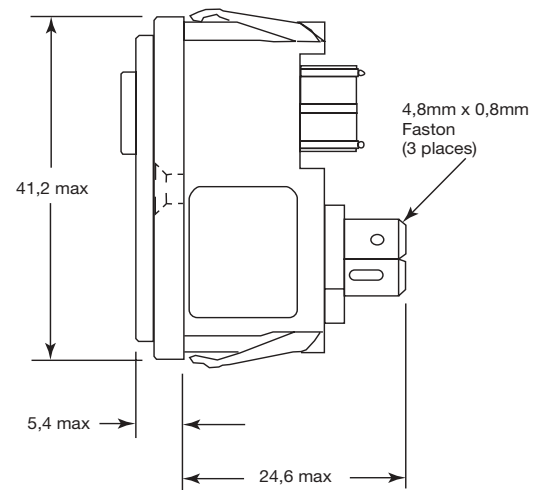
Flange / CE



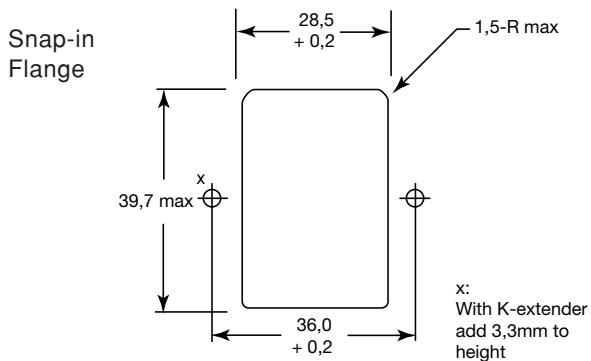
Filtered / CFS, CFE



Unfiltered / CS, CE



Panel cutout for CS, CE (CFE)



Panel cutout for thickness of 0,8-2,5mm. Not recommended for plastic panels.

For snap-in application, the D sides of the cutout must have a 0,5mm radius on the installation side.

Snap-in models allow front mounting only.

Accessories for C-Series

Available extenders are:

- PA420** - extender C increases height by 5,1mm
- PA400** - extender J increases height by 10,7mm
- CA430** - extender K increases height by 3,3mm

IEC Connector Filters with Fuses

EGG-Series

- IEC-connector including 1 or 2 5 x 20 fuses
- Universal filter with high attenuation
- C-Version suppresses RF noise between equipment ground and protective ground



according IEC 950



Type	Max. current UL/VDE	Induct.	Type	Max. current UL/VDE	Induct.	Type	Max. current UL/VDE	Inductance	Capacity		Fuses	Ground line induct.	Terminals
									Cx	Cy			
1EGG1-1	1A	2x10mH	3EGG1-1	3A	2x2mH	6EGG1-1	6A/5A	2x0,93mH	0,1µF	2x3nF	1		Faston
1EGS1-1	1A	2x10mH	3EGS1-1	3A	2x2mH	6EGS1-1	6A/5A	2x0,93mH	0,1µF	2x3nF	1		Faston
1EGG1C-1	1A	2x10mH	3EGG1C-1	3A	2x2mH	6EGG1C-1	6A/5A	2x0,93mH	0,1µF	2x3nF	1	x	Faston
1EGG1-2	1A	2x10mH	3EGG1-2	3A	2x2mH	6EGG1-2	6A/5A	2x0,93mH	0,1µF	2x3nF	2		Faston
1EGS1-2	1A	2x10mH	3EGS1-2	3A	2x2mH	6EGS1-2	6A/5A	2x0,93mH	0,1µF	2x3nF	2		Faston
1EGG1C-2	1A	2x10mH	3EGG1C-2	3A	2x2mH	6EGG1C-2	6A/5A	2x0,93mH	0,1µF	2x3nF	2	x	Faston
1EGG8-1	1A	2x10mH	3EGG8-1	3A	2x2mH	6EGG8-1	6A/5A	2x0,93mH	0,1µF	2x3nF	1		Wire
1EGG8C-1	1A	2x10mH	3EGG8C-1	3A	2x2mH	6EGG8C-1	6A/5A	2x0,93mH	0,1µF	2x3nF	1	x	Wire
1EGG8-2	1A	2x10mH	3EGG8-2	3A	2x2mH	6EGG8-2	6A/5A	2x0,93mH	0,1µF	2x3nF	2		Wire
1EGG8C-2	1A	2x10mH	3EGG8C-2	3A	2x2mH	6EGG8C-2	6A/5A	2x0,93mH	0,1µF	2x3nF	2	x	Wire

Max. leakage current line to ground 0,5 mA at 250 VAC/50 Hz

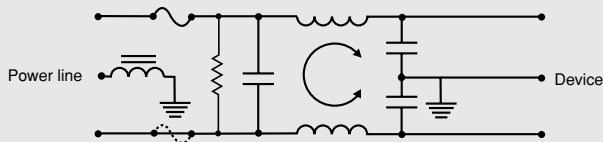
For medical Applications

Type	Max. current UL/VDE	Induct.	Type	Max. current UL/VDE	Induct.	Type	Max. current UL/VDE	Inductance	Capacity		Fuses	Ground line induct.	Terminals
									Cx	Cy			
1EHG1-2	1A	2x10mH	3EHG1-2	3A	2x2mH	6EHG1-2	6A/5A	2x0,93mH	0,1µF		2	-	Faston

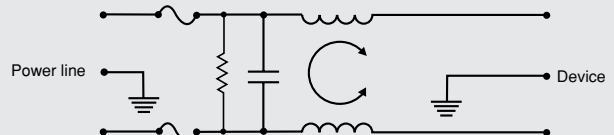
Max. leakage current line to ground 5 µA at 250 VAC/50 Hz

Electrical Schematic

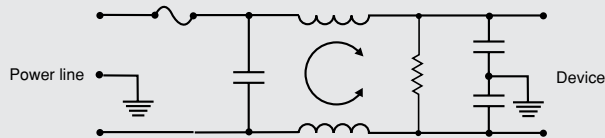
EGG with ground line inductance (C-version)



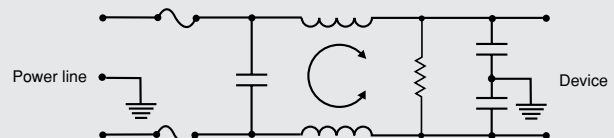
EHG



EGG-1 / EGS-1

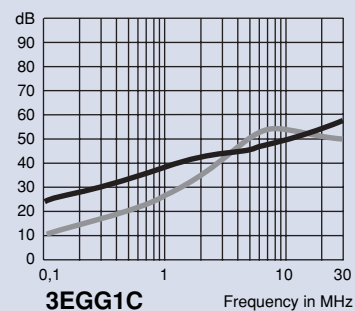
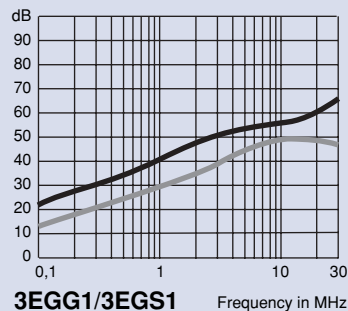
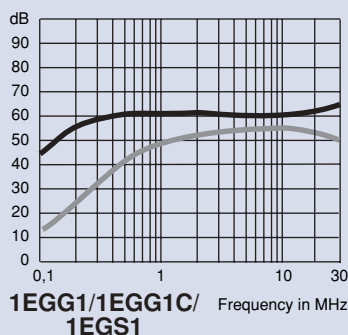


EGG-2 / EGS-2



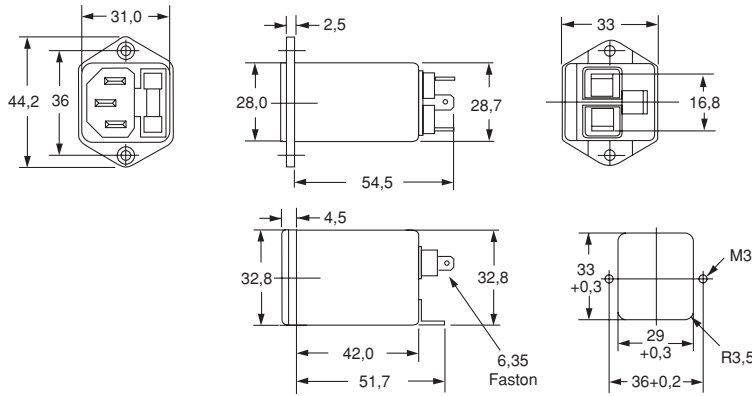
Typ. Insertion Loss

asym. — sym. —

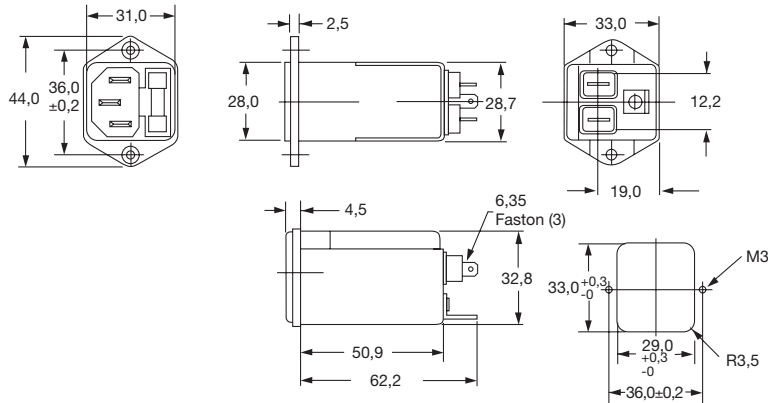


Case Styles and typ. Sizes

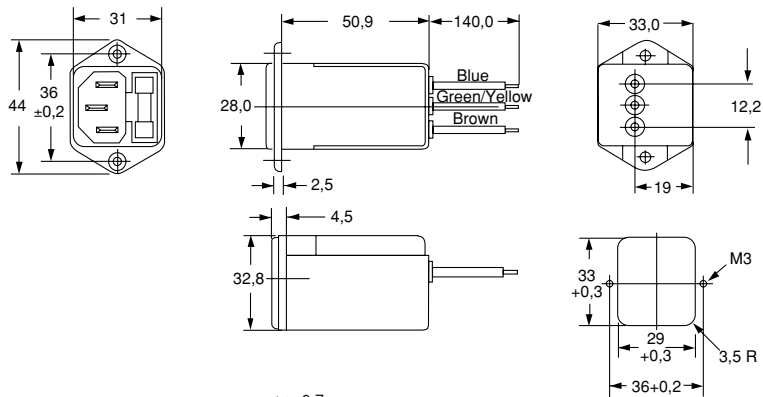
EGG1 / EHG 1



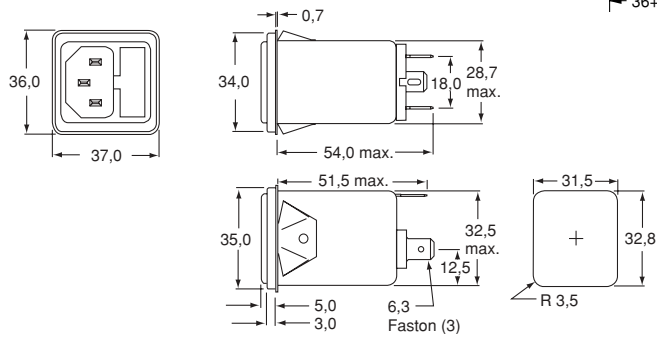
EGG1C



EGG8 / EGG8C

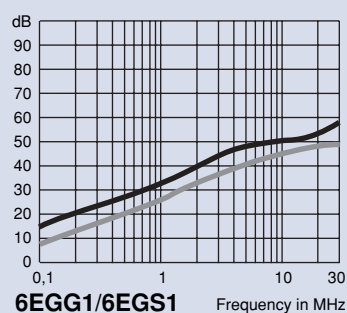
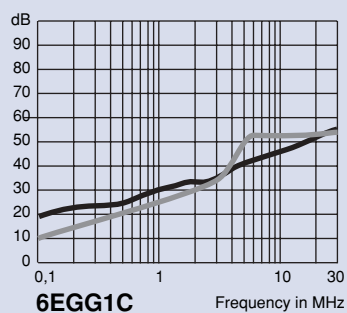


EGS



Typ. Insertion Loss

asym. — sym. —



IEC Connector Filters

EBF-Series

- Accessory outlet filter



according IEC 950

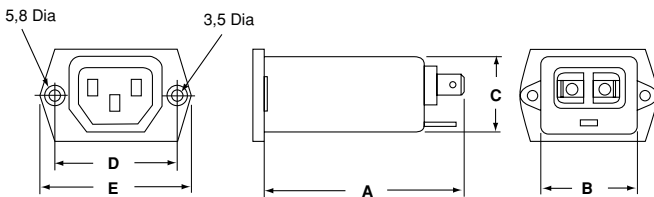


Type	Max.current UL/VDE	Inductance	Capacity		Terminals	Sizes				
			C _y	C _x		A	B	C	D	E
1EBF1	1A	2x10mH	2x3nF	0,047µF	Faston	65,3	33,0	29,5	40,01	50,5
1EBF4	1A	2x10mH	2x3nF	0,047µF	Wire	52,1	33,0	29,5	40,01	50,5
3EBF1	3A	2x1,5mH	2x3nF	0,047µF	Faston	65,3	33,0	29,5	40,01	50,5
3EBF4	3A	2x1,5mH	2x3nF	0,047µF	Wire	52,1	33,0	29,5	40,01	50,5
6EBF1	6A	2x0,47mH	2x3nF	0,047µF	Faston	65,3	33,0	29,5	40,01	50,5
6EBF4	6A	2x0,47mH	2x3nF	0,047µF	Wire	52,1	33,0	29,5	40,01	50,5
10EBF1	10A	2x0,35mH	2x3nF	0,047µF	Faston	65,3	33,0	29,5	40,01	50,5
10EBF4	10A	2x0,35mH	2x3nF	0,047µF	Wire	52,1	33,0	29,5	40,01	50,5

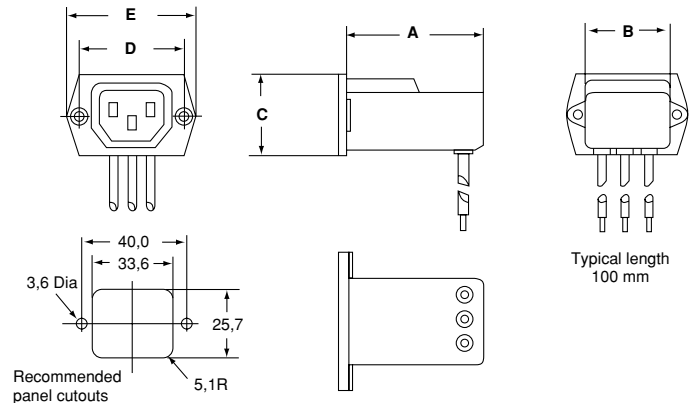
Max. leakage current line to ground 0.42 mA at 250 VAC/50 Hz

Case Styles and typ. Sizes

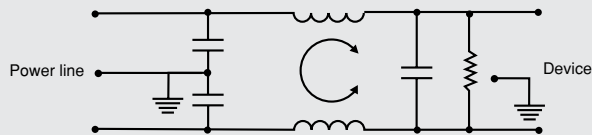
EBF1



EBF4

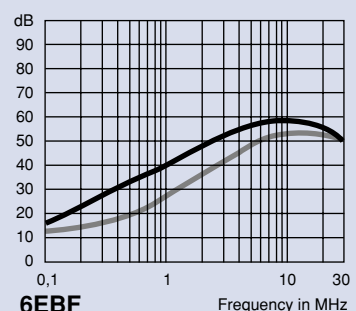
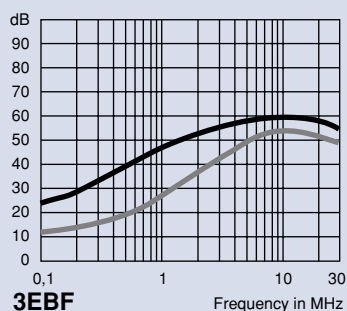
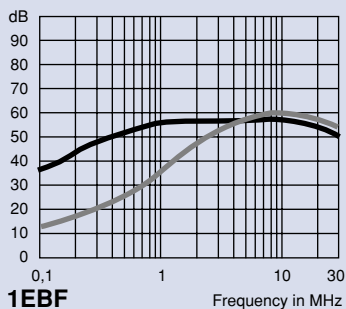


Electrical Schematic



Typ. Insertion Loss

asym. — sym. —



IEC Connector Filters

EEA-/EEB-Series

- Best price/performance ratio
- Compatible with many standard filters



according IEC 950



Type	Max.current UL/VDE	Inductance	Capacity		Terminals	Type	Max.current UL/VDE	Inductance	Capacity		Terminals
			C _v	C _x					C _v	C _x	
1EEA1	1A	2x 10mH	3nF	0,009µF	Faston	1EEB1	1A	2x 10mH	3nF	0,047µF	Faston
1EEAP	1A	2x 10mH	3nF	0,009µF	PCB	1EEBP	1A	2x 10mH	3nF	0,047µF	PCB
1EEA2	1A	2x 10mH	3nF	0,009µF	90° Faston	1EEB2	1A	2x 10mH	3nF	0,047µF	90° Faston
1EAS1	1A	2x 10mH	3nF	0,009µF	Faston	1EBS1	1A	2x 10mH	3nF	0,047µF	Faston/snap-in
3EEA1	3A	2x 1,5mH	3nF	0,009µF	Faston	3EEB1	3A	2x 1,5mH	3nF	0,047µF	Faston
3EEAP	3A	2x 1,5mH	3nF	0,009µF	PCB	3EEBP	3A	2x 1,5mH	3nF	0,047µF	PCB
3EEA2	3A	2x 1,5mH	3nF	0,009µF	90° Faston	3EEB2	3A	2x 1,5mH	3nF	0,047µF	90° Faston
3EAS1	3A	2x 1,5mH	3nF	0,009µF	Faston	3EBS1	3A	2x 1,5mH	3nF	0,047µF	Faston/snap-in
6EEA1	6A	2x 0,47mH	3nF	0,009µF	Faston	6EEB1	6A	2x 0,47mH	3nF	0,047µF	Faston
6EEAP	6A	2x 0,47mH	3nF	0,009µF	PCB	6EEBP	6A	2x 0,47mH	3nF	0,047µF	PCB
6EEA2	6A	2x 0,47mH	3nF	0,009µF	90° Faston	6EEB2	6A	2x 0,47mH	3nF	0,047µF	90° Faston
6EAS1	6A	2x 0,47mH	3nF	0,009µF	Faston	6EBS1	6A	2x 0,47mH	3nF	0,047µF	Faston/snap-in
10EEA1	10A	2x 0,36mH	3nF	0,009µF	Faston	10EEB1	10A	2x 0,36mH	3nF	0,047µF	Faston
10EEAP	10A	2x 0,36mH	3nF	0,009µF	PCB	10EEBP	10A	2x 0,36mH	3nF	0,047µF	PCB
10EEA2	10A	2x 0,36mH	3nF	0,009µF	90° Faston	10EEB2	10A	2x 0,36mH	3nF	0,047µF	90° Faston
10EAS1	10A	2x 0,36mH	3nF	0,009µF	Faston	10EBS1	10A	2x 0,36mH	3nF	0,047µF	Faston/snap-in

Max. leakage current line to ground 0.5 mA at 250 VAC/50 Hz

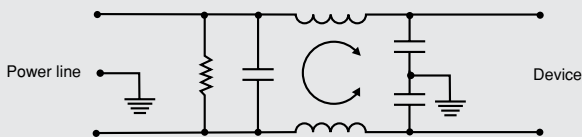
For medical Applications

Type	Max.current UL/VDE	Inductance	Capacity C _x	Type	Max.current UL/VDE	Inductance	Capacity C _x
1EAH1	1A	2x 10mH	0,009µF	1EBH1	1A	2x 10mH	0,047µF
3EAH1	3A	2x 1,5mH	0,009µF	3EBH1	3A	2x 1,5mH	0,047µF
6EAH1	6A	2x 0,47mH	0,009µF	6EBH1	6A	2x 0,47mH	0,047µF
10EAH1	10A	2x 0,36mH	0,009µF	10EBH1	10A	2x 0,36mH	0,047µF

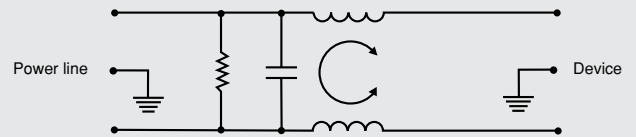
Max. leakage current line to ground 5 µA at 250 VAC/50 Hz

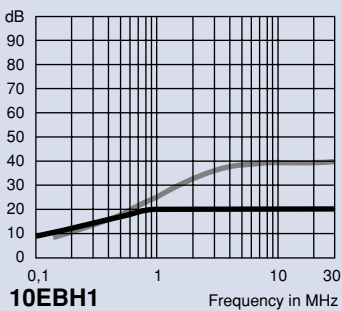
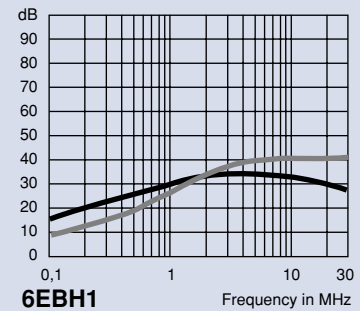
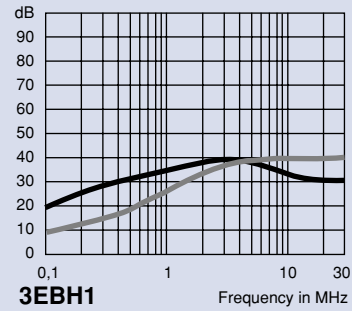
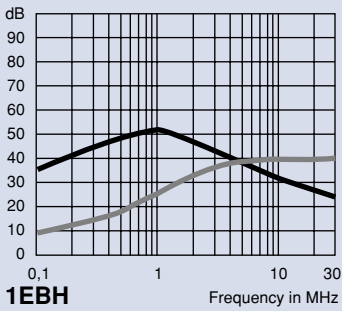
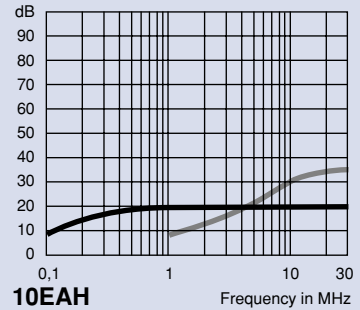
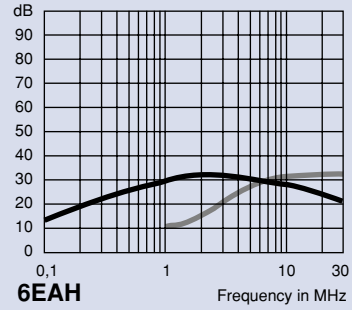
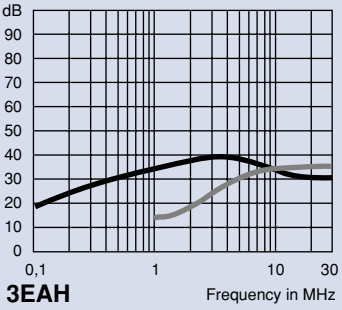
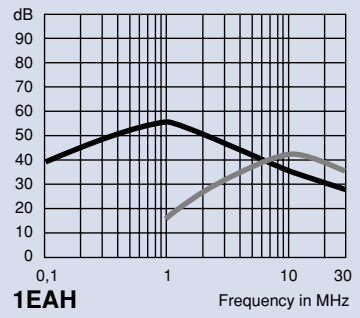
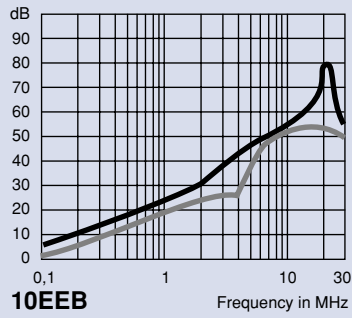
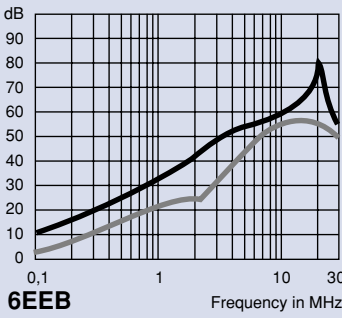
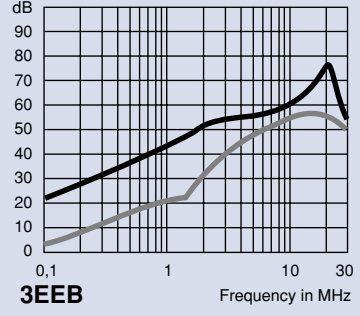
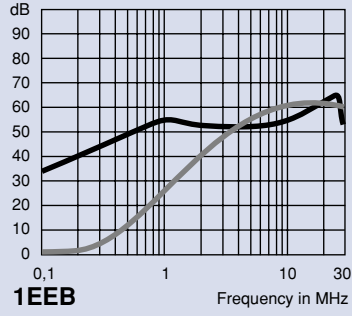
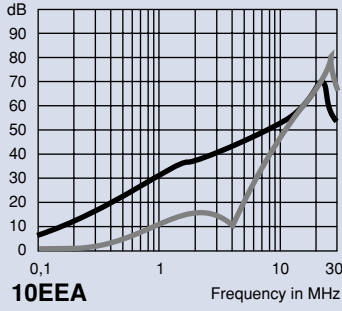
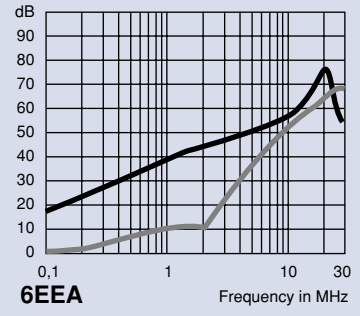
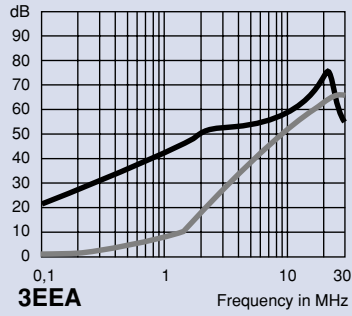
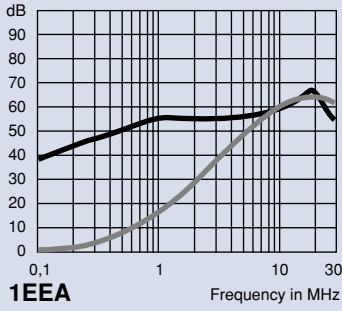
Electrical Schematic

EEA / EEB / EAS / EBS

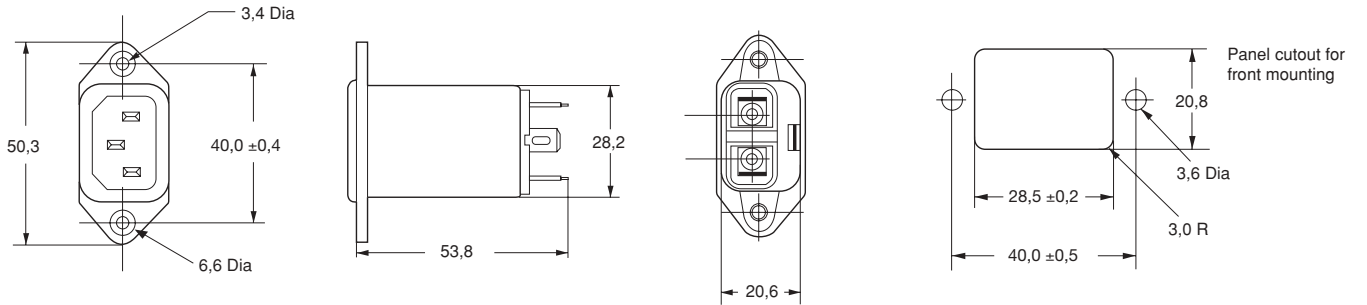


EAH / EBH



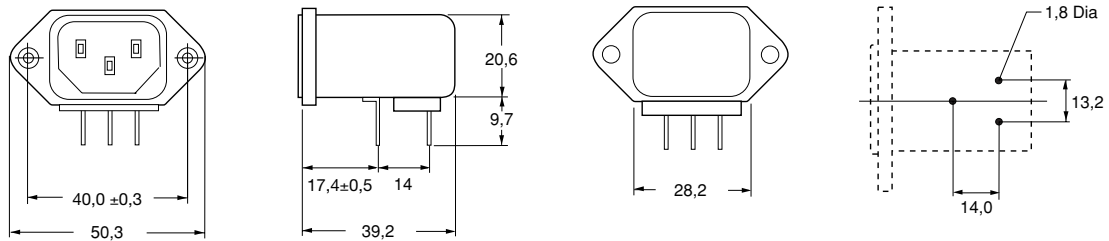


EEA / EEB / EAH



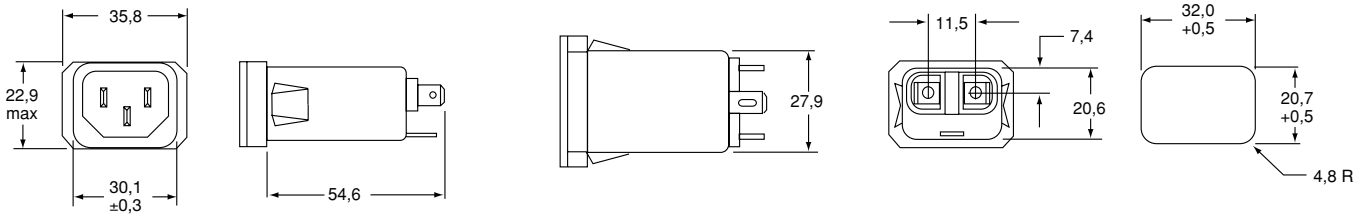
Faston 6,35
Hole 1,8 Dia
Mounting holes 3,4 Dia
Tolerance ±0,1

EEAP / EEBP for PLB

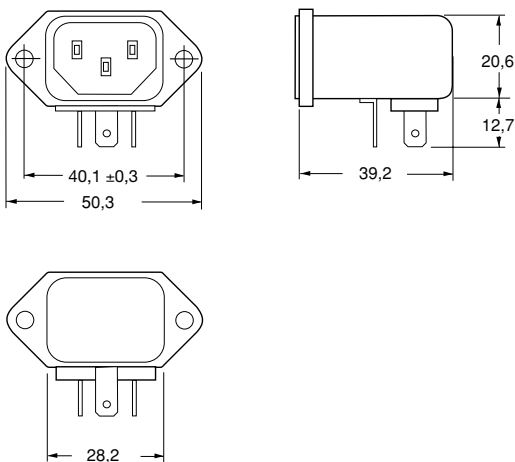


Order information:

EAS / EBS snap-in mounting for thickness 0,8 – 1,2 mm: F-7533F
for thickness 1,3 – 2,0 mm: F-7533B



EEA2 / EEB2



Accessories for EEA / EEB / EAH / EBH / EAS / EBS -Series

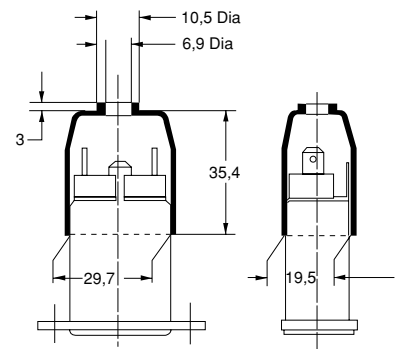
Shroud

for all versions

Material UL-94

Part No.

41-3151-AO



IEC Connector Filters

EF-Series

- FC-version with ground line inductor



for EF1F and EF2F Series

according IEC 950

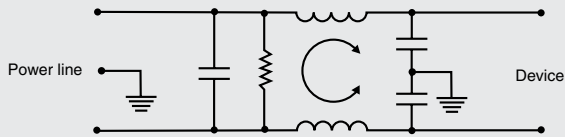


Type	Max.current ULVDE	Inductance	Capacity		Mounting terminals	Type	Max.Current ULVDE	Inductance	Capacity		Mounting terminals
			C _x	C _y					C _x	C _y	
1EF1	1A	2x1,8mH	0,009µF	2x2,8nF	Solder lugs	1EF2	1A	2x1,8mH	0,009µF	2x2,8nF	Solder lugs
1EF4	1A	2x1,8mH	0,009µF	2x2,8nF	Wire	1EF8	1A	2x1,8mH	0,009µF	2x2,8nF	Wire
3EF1	3A	2x0,99mH	0,009µF	2x2,8nF	Solder lugs	3EF2	3A	2x0,99mH	0,009µF	2x2,8nF	Solder lugs
3EF4	3A	2x0,99mH	0,009µF	2x2,8nF	Wire	3EF8	3A	2x0,99mH	0,009µF	2x2,8nF	Wire
6EF1	6A	2x0,46mH	0,009µF	2x2,8nF	Solder lugs	6EF2	6A	2x0,46mH	0,009µF	2x2,8nF	Solder lugs
6EF4	6A	2x0,46mH	0,009µF	2x2,8nF	Wire	6EF8	6A	2x0,46mH	0,009µF	2x2,8nF	Wire
1EF1F	1A	2x1,8mH	0,009µF	2x2,8nF	Faston	1EF2F	1A	2x1,8mH	0,009µF	2x2,8nF	Faston
3EF1F	3A	2x0,99mH	0,009µF	2x2,8nF	Faston	3EF2F	3A	2x0,99mH	0,009µF	2x2,8nF	Faston
6EF1F	6A	2x0,46mH	0,009µF	2x2,8nF	Faston	6EF2F	6A	2x0,46mH	0,009µF	2x2,8nF	Faston
10EF1F	10A	2x0,36mH	0,009µF	2x2,8nF	Faston	10EF1FC	10A	2x0,36mH	0,009µF	2x2,8nF	Faston

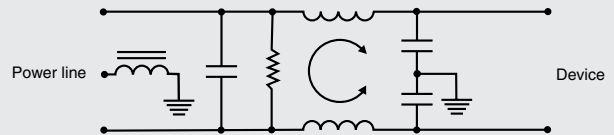
Max. leakage current line to ground 0.5 mA at 250 VAC/50 Hz

Electrical Schematic

EF1 / EF2 / EF1F / EF2F

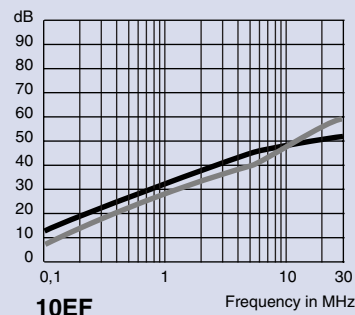
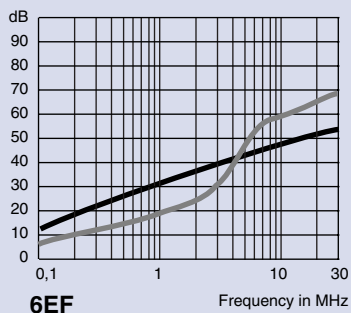
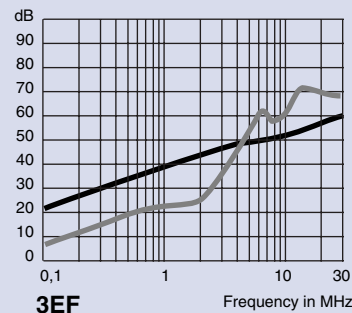
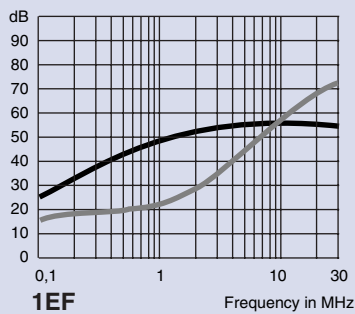


EF1FC



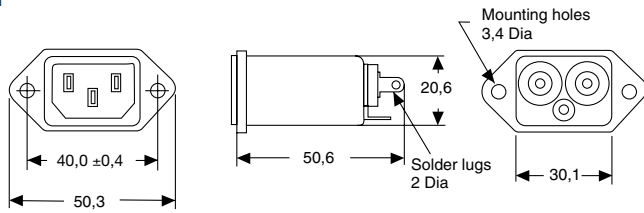
Typ. Insertion Loss in dB

asym. — sym. —

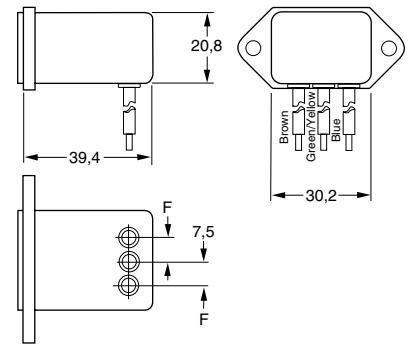


Case Styles and typ. Sizes

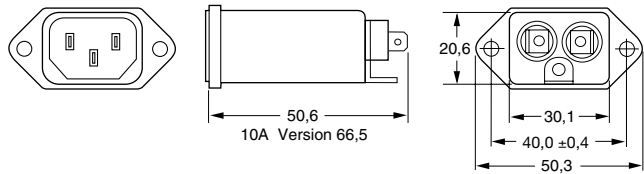
EF1



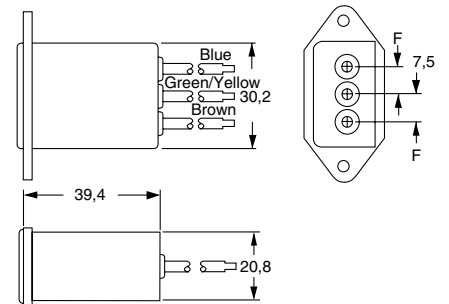
EF4



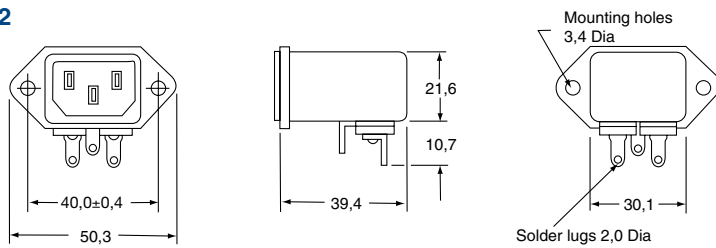
EF1F



EF8

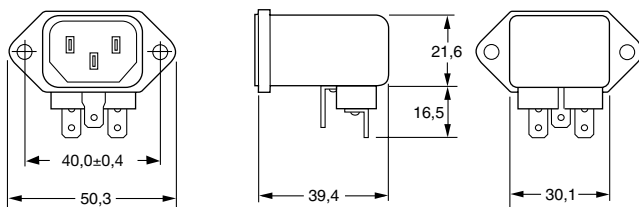


EF2



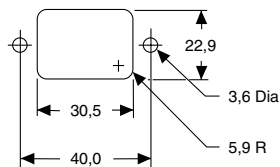
Typical wire length 100 mm

EF2F

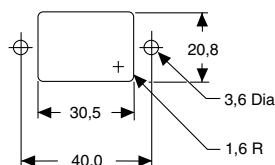


Panel cutout

for back mounting



for front mounting



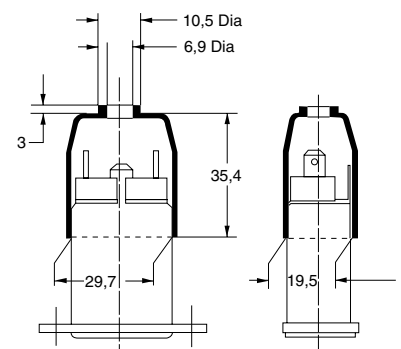
Faston 6,35
Hole 1,8 Dia
Mounting holes 3,4 Dia
Tolerance ± 0,1

Accessories for EF-Series

Shroud

for all versions
EF1 / EF1F
Material UL-94

Part No.
41-3151-AO



IEC Connector Filters

ED-Series

- 6ED1C/10ED1C with ground line inductor
- F-3550 high performance filter for switching power supplies



according IEC 950



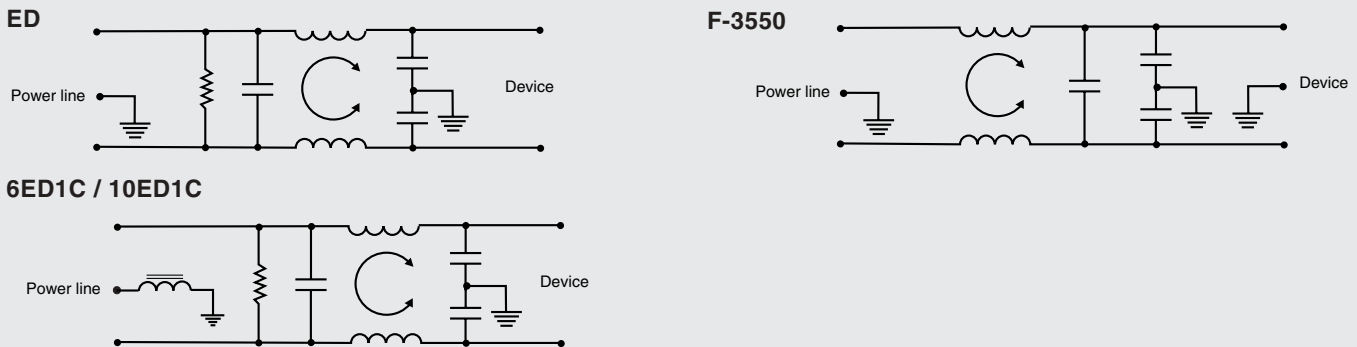
corcom

F-3550 only approved

Type	Max.current UL/VDE	Inductance	Capacity C _x C _y		Ground line inductor	Type	Max.current UL/VDE	Inductance	Capacity C _x C _y		Ground line inductor
1ED1	1A	2x3,7mH	0,1µF	2x3nF	No	1ED2	1A	2x3,7mH	0,1µF	2x3nF	No
1ED4	1A	2x3,7mH	0,1µF	2x3nF	No	1ED8	1A	2x3,7mH	0,1µF	2x3nF	No
3ED1	3A	2x2,0mH	0,1µF	2x3nF	No	3ED2	3A	2x2,0mH	0,1µF	2x3nF	No
3ED4	3A	2x2,0mH	0,1µF	2x3nF	No	3ED8	3A	2x2,0mH	0,1µF	2x3nF	No
6ED1	6A	2x0,93mH	0,1µF	2x3nF	No	6ED1C	6A	2x0,93mH	0,1µF	2x3nF	Yes
6ED2	6A	2x0,93mH	0,1µF	2x3nF	No	6ED4	6A	2x0,93mH	0,1µF	2x3nF	No
6ED4C	6A	2x0,93mH	0,1µF	2x3nH	Yes	6ED8	6A	2x0,93mH	0,1µF	2x3nF	No
6ED8C	6A	2x0,93mH	0,1µF	2x3nH	Yes	10ED1C	10A	2x0,36mH	0,1µF	2x3nF	Yes
10ED1	10A	2x0,36mH	0,1µF	2x3nF	No	F-3550	3A	2x7mH	0,1µF	2x4nF	No

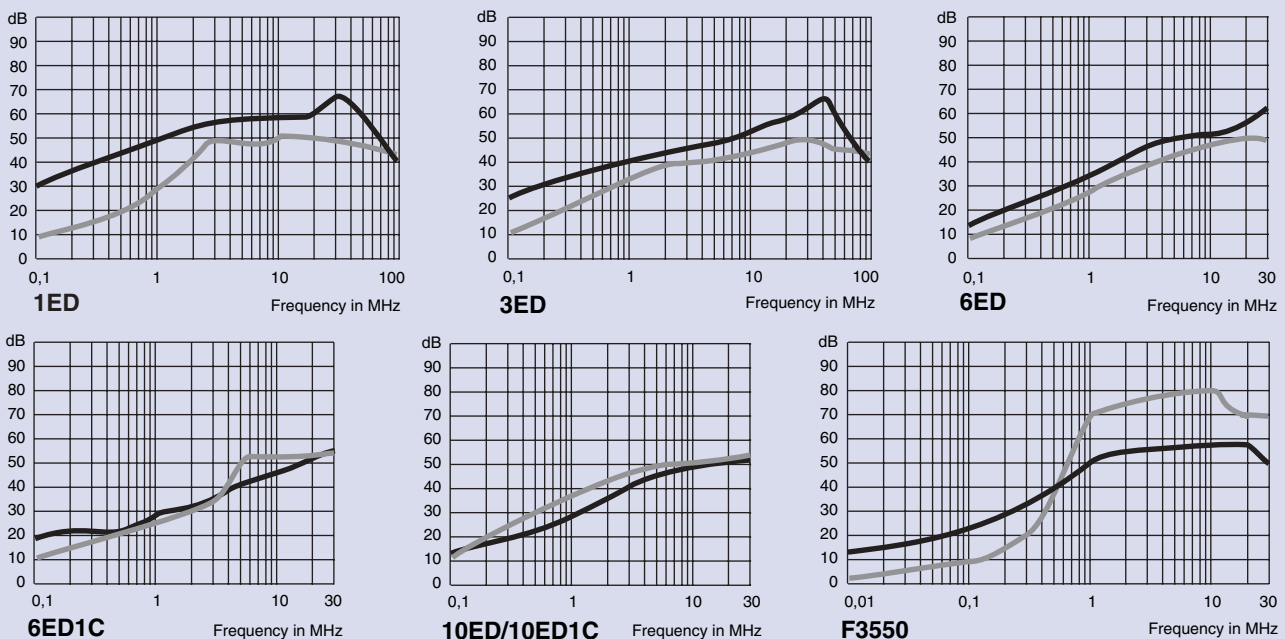
Max. leakage current line to ground 0.5 mA at 250 VAC/50 Hz

Electrical Schematic



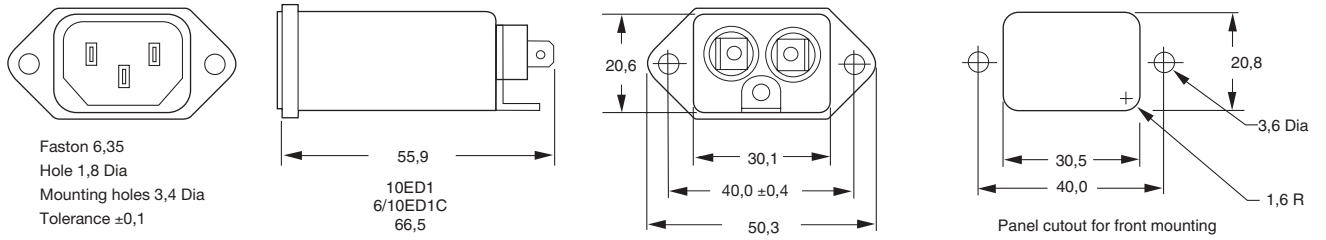
Typ. Insertion Loss

asym. — sym. —

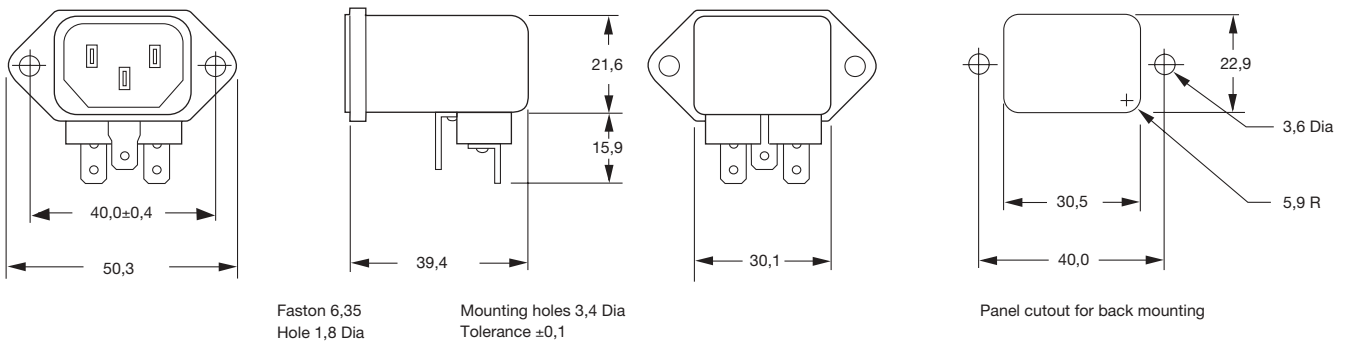


Case Styles and typ. Sizes

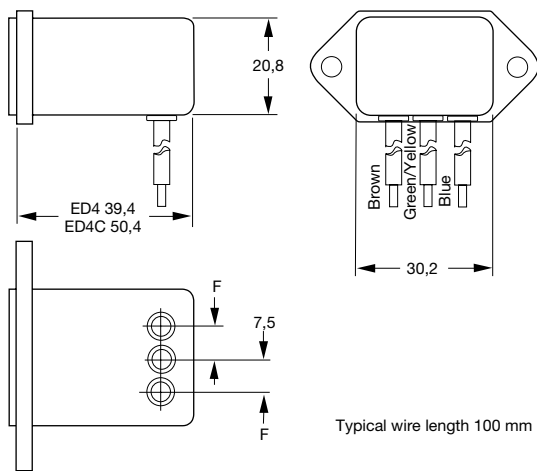
ED1



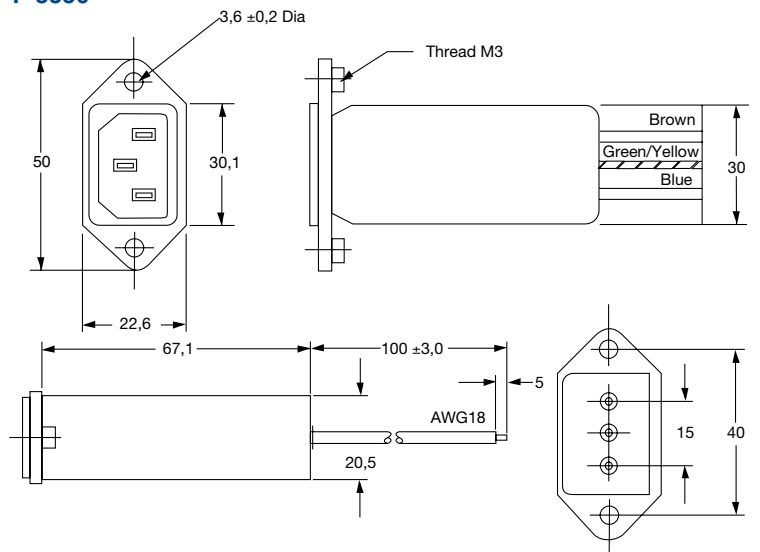
ED2



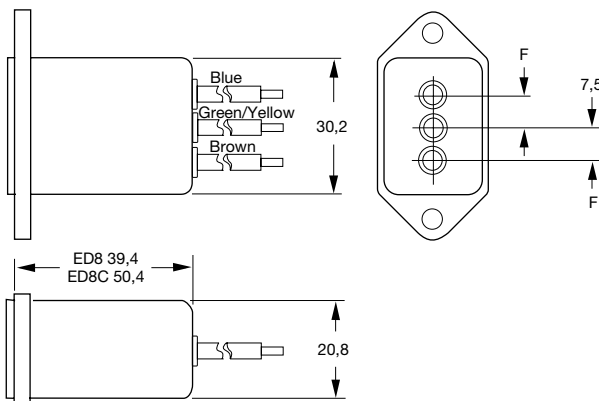
ED4 / ED4C



F-3550



ED8 / ED8C

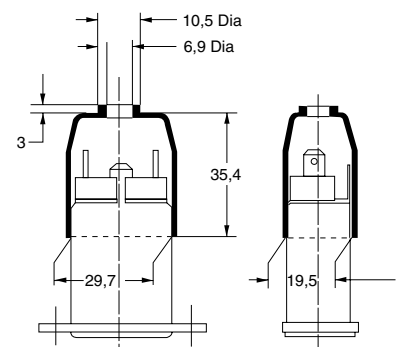


Accessories for ED-Series

Shroud

for all versions
ED1 / ED1C
Material UL-94

Part No.
41-3151-AO



IEC Connectors Filters

EC-Series

Like ED-Series, additionally equipped with a second X-capacitor for increased symmetrical attenuation



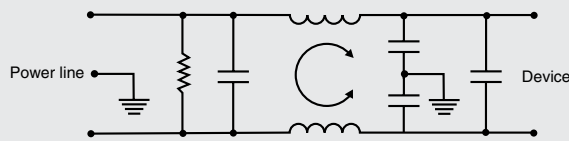
according IEC 950



Type	Max.current UL/VDE	Inductance	Capacity		Type	Max.current UL/VDE	Inductance	Capacity	
			C _x	C _y				C _x	C _y
1EC1	1A	2x3,7mH	2x0,1µF	2x3nF	1EC2	1A	2x3,7mH	2x0,1µF	2x3nF
1EC4	1A	2x3,7mH	2x0,1µF	2x3nF	1EC8	1A	2x3,7mH	2x0,1µF	2x3nF
3EC1	3A	2x2,0mH	2x0,1µF	2x3nF	3EC2	3A	2x2,0mH	2x0,1µF	2x3nF
3EC4	3A	2x2,0mH	2x0,1µF	2x3nF	3EC8	3A	2x2,0mH	2x0,1µF	2x3nF
6EC1	6A	2x0,93mH	2x0,1µF	2x3nF	6EC2	6A	2x0,93mH	2x0,1µF	2x3nF
6EC4	6A	2x0,93mH	2x0,1µF	2x3nF	6EC8	6A	2x0,93mH	2x0,1µF	2x3nF
10EC1	10A	2x0,36mH	2x0,1µF	2x3nF					

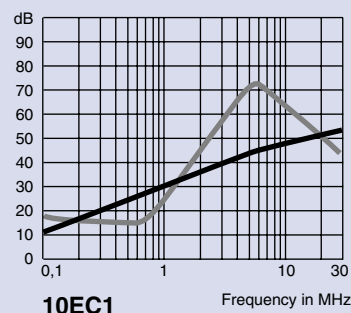
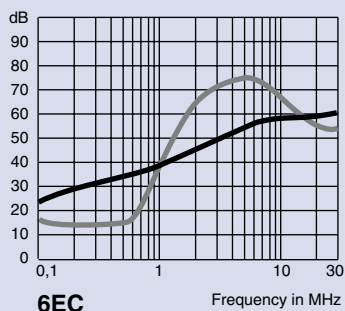
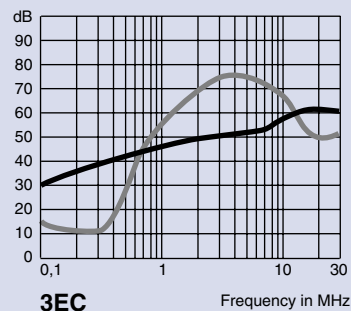
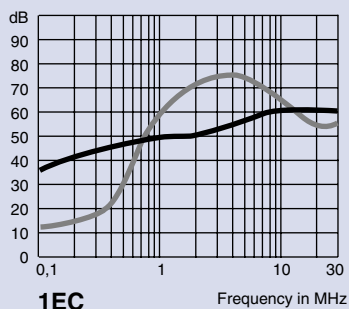
Max. leakage current line to ground 0.5 mA at 250 VAC/50 Hz

Electrical Schematic

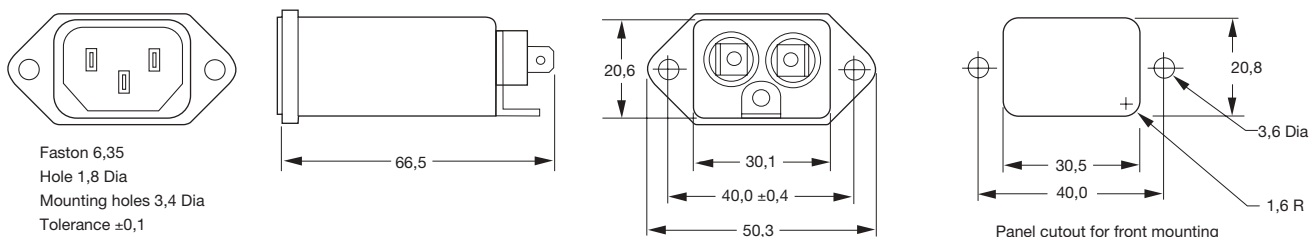


Typ. Insertion Loss

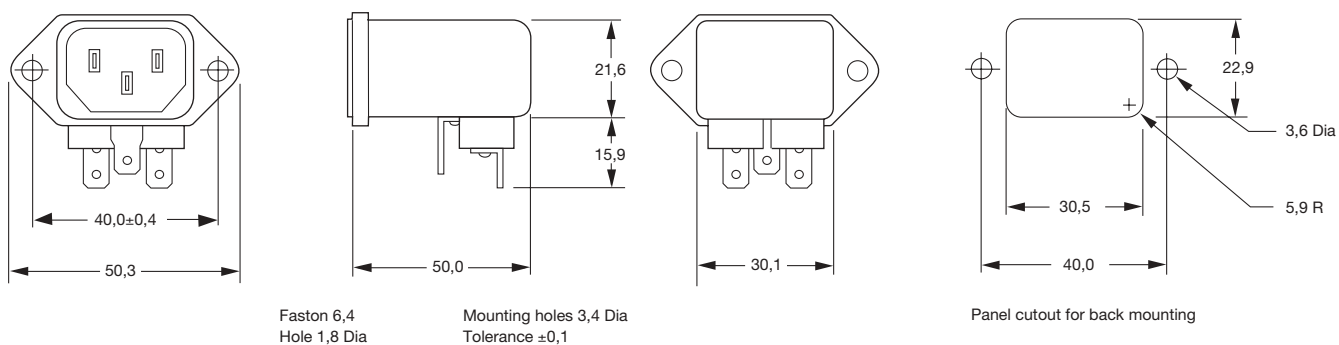
asym. — sym. —



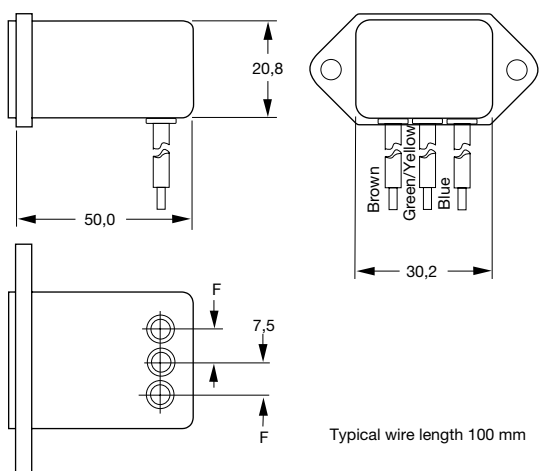
EC1



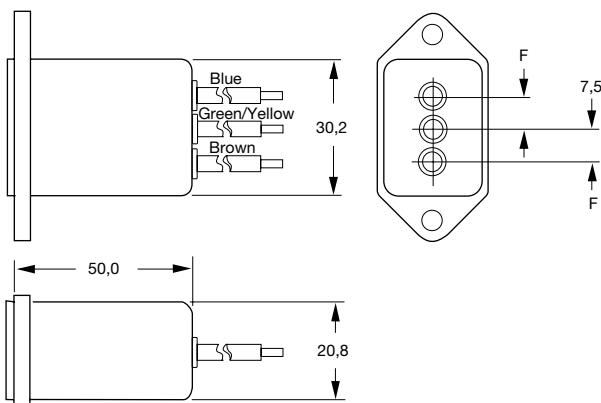
EC2



EC4



EC8

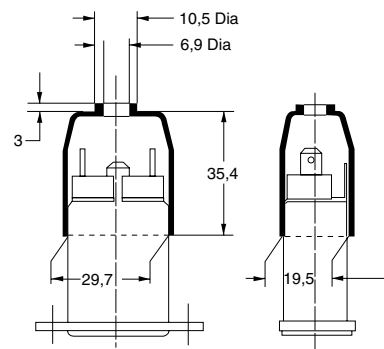


Accessories for EC-Series

Shroud

for all versions
with EC1
Material UL-94

Part No.
41-3151-AO



IEC Connector Filters

Chassis-mount

EH-Series

- For medical applications (UL 544)
- Type 10EH4C with ground line inductor



according IEC 950

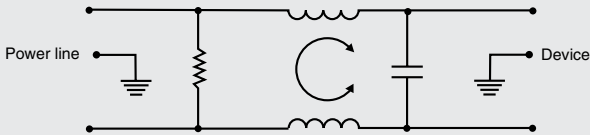


Type	Max.current UL/VDE	Inductance	Capacity	
			C _x	C _y
3EH1	3A	2x1,00mH	0,01µF	—
3EH3	3A	2x1,00mH	0,01µF	—
6EH1	6A	2x0,46mH	0,01µF	—
6EH3	6A	2x0,46mH	0,01µF	—
6EH4	6A	2x0,46mH	0,01µF	—
6EH5	6A	2x0,46mH	0,01µF	—
6EH8	6A	2x0,46mH	0,01µF	—
6EH9	6A	2x0,46mH	0,01µF	—
10EH1	10A	2x0,36mH	0,01µF	—
10EH3	10A	2x0,36mH	0,01µF	—
10EH4	10A	2x0,36mH	0,01µF	—
10EH4C	10A	2x0,36mH	0,01µF	—

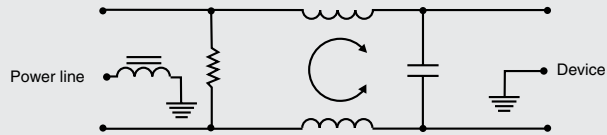
Max. leakage current line to ground 5 µA at 250 VAC/50 Hz

Electrical Schematic

6EH

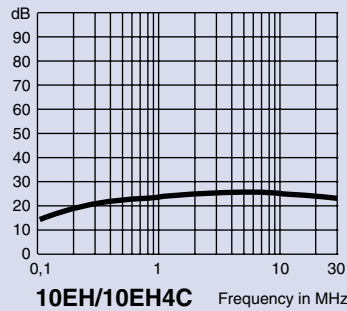
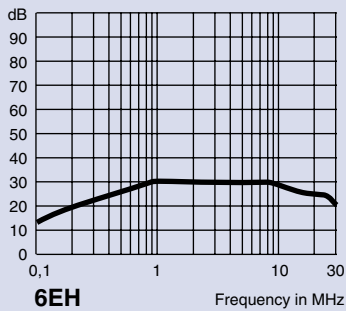


10EH4C



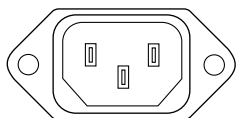
Typ. Insertion Loss

asym. —

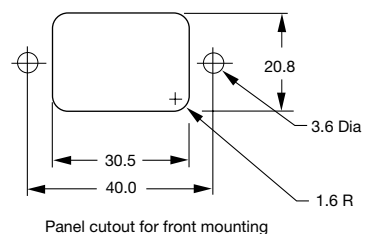
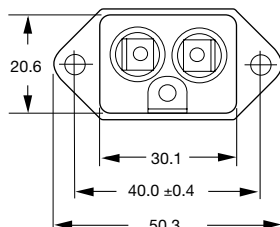
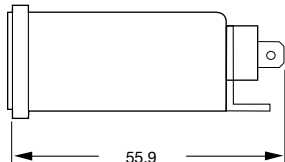


Case Styles and typ. Sizes

6EH4/10EH4 (C)

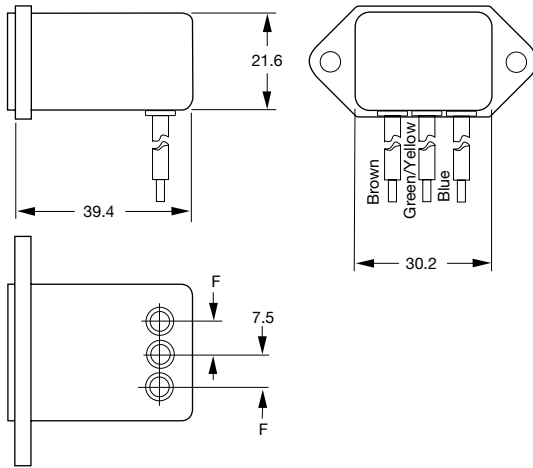


Flat connectors 6.35
Hole 1.8 Dia
Mounting holes 3.4 Dia
Tolerance ±0.13

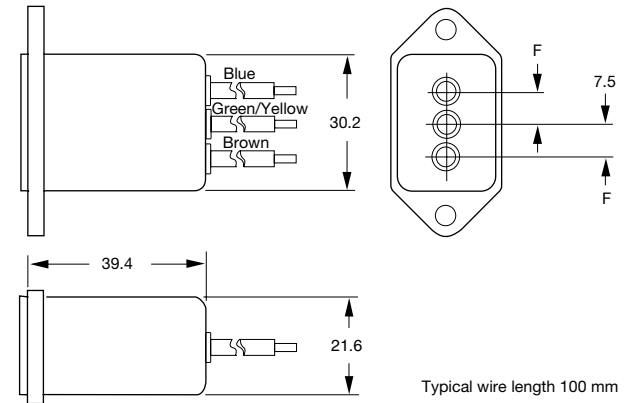


Case Styles and typ. Sizes

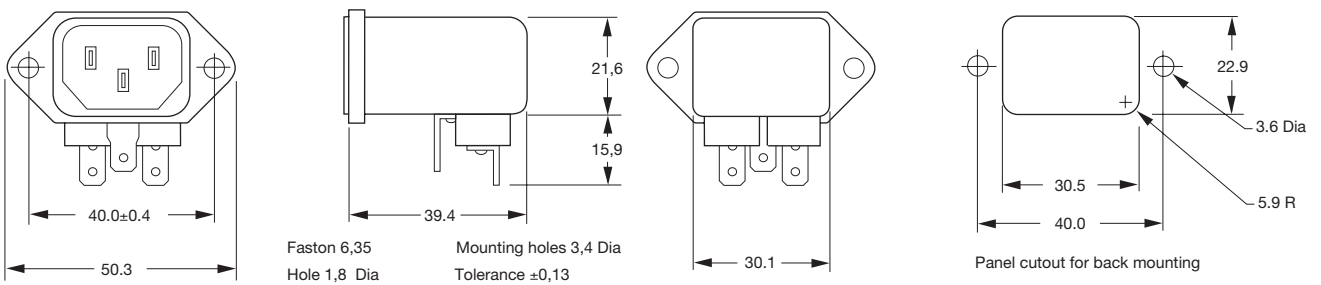
6EH5



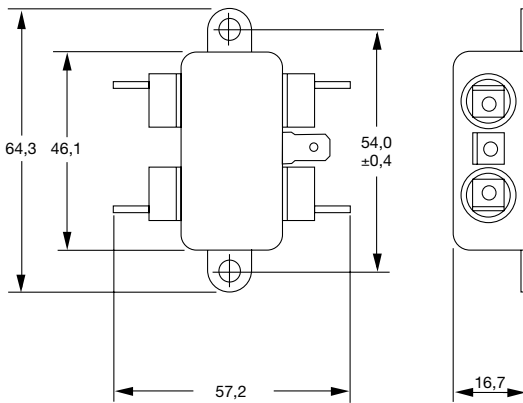
6EH8



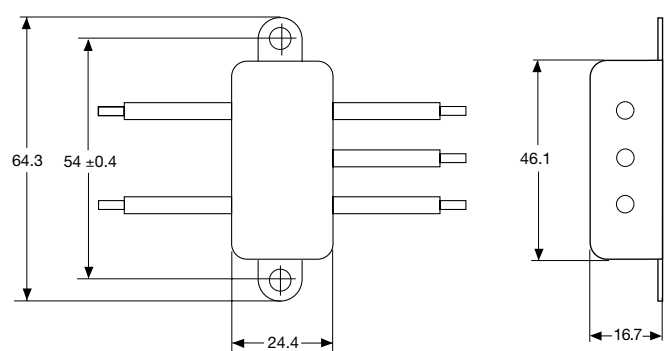
6EH9



EH1



EH3

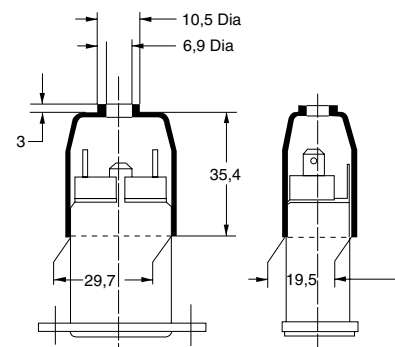


Accessories for EH-Series

Shroud

for all versions
6EH4
10EH4
10EH4C
Material UL-94

Part No.
41-3151-AO



PCB Filters

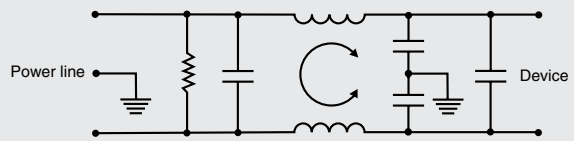
XP-, YP-, ZP-Series

- Compact housing
- For various applications



Type	Max.current UL/VDE	Inductance	Capacity	
			C _x	C _y
3EXP	3A/2A	2x2,3mH	0,27+0,1μF	2x4nF
4EXP	4A	2x2,2mH	0,33+0,1μF	2x4nF
6EXP	6A	2x2,4mH	0,33+0,1μF	2x4nF
2EYP	2A/1,5A	2x5,7mH	0,27+0,1μF	2x4nF
3EYP	3A/2A	2x9,6mH	0,27+0,1μF	2x4nF
4EYP	4A	2x4,7mH	0,33+0,1μF	2x4nF
1EZP	1A/0,75A	2x21,2mH	2x0,27μF	2x4nF
2EZP	2A/1,5A	2x21,5mH	0,27+0,33μF	2x4nF
3EZP	3A/2A	2x13,77mH	0,47+0,27μF	2x4nF

Electrical Schematic



Max. leakage current line to ground 0.5 mA at 250 VAC/50 Hz

X-Series - Normal attenuation

Example: RFI suppression in electronic devices acc. to FCC Part 15J, Class B.

Y-Series - Increased attenuation

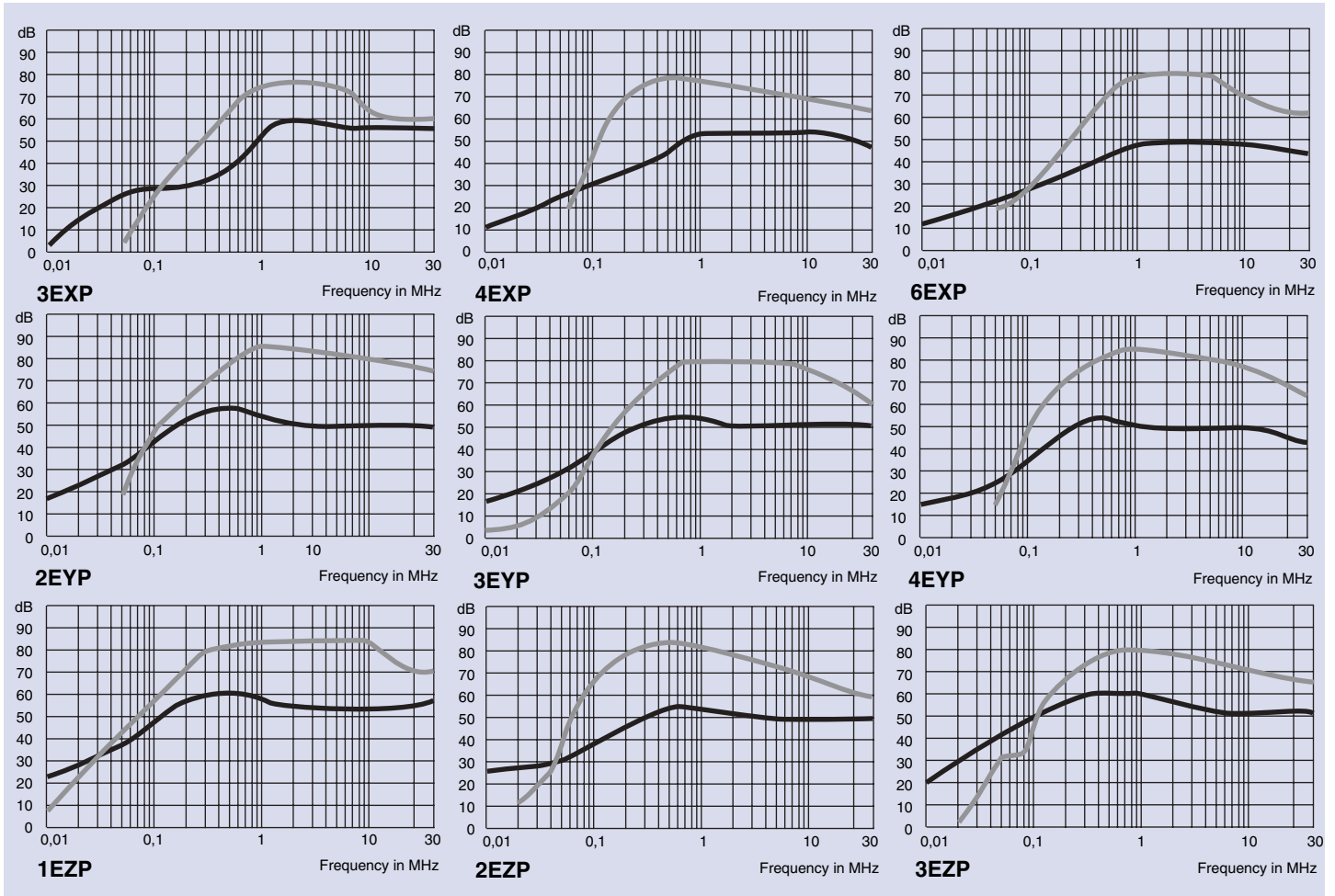
Example: RFI suppression in electronic devices also equipped with switching power supplies acc. to VDE 0871, Class A or FCC Part 15 J, Class B

Z-Series - Very high attenuation

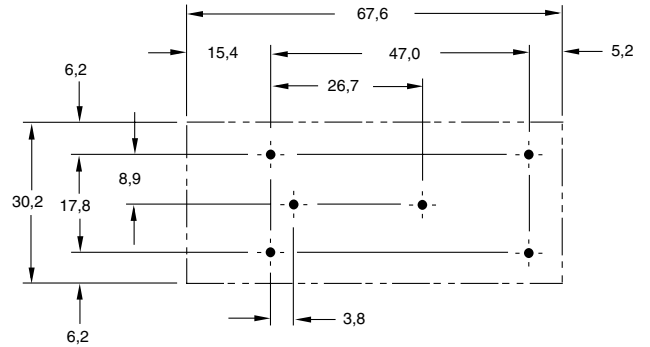
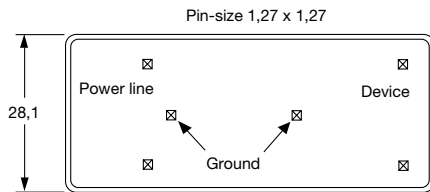
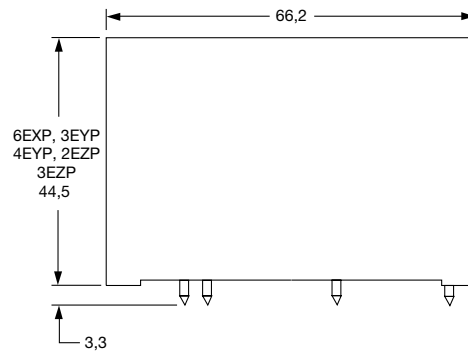
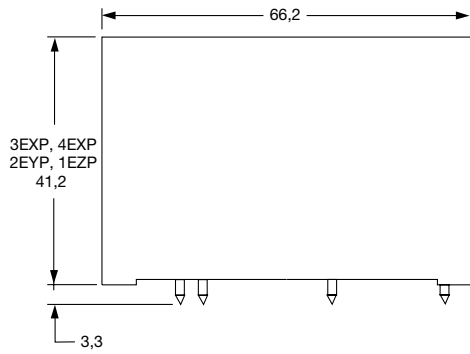
Example: RFI suppression in electronic devices also equipped with switching power supplies acc. to VDE 0871, Class B.

Typ. Insertion Loss

asym. — sym. —



Case Styles and typ. Sizes



Tolerance 0,15 Hole 1,9 Dia



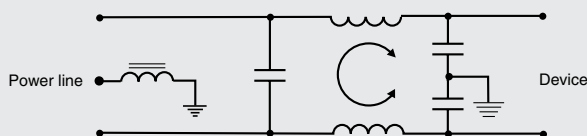
PCB Filters for various requirements

- Applications: gambling machines, ATMs, office appliances.
- For higher requirements

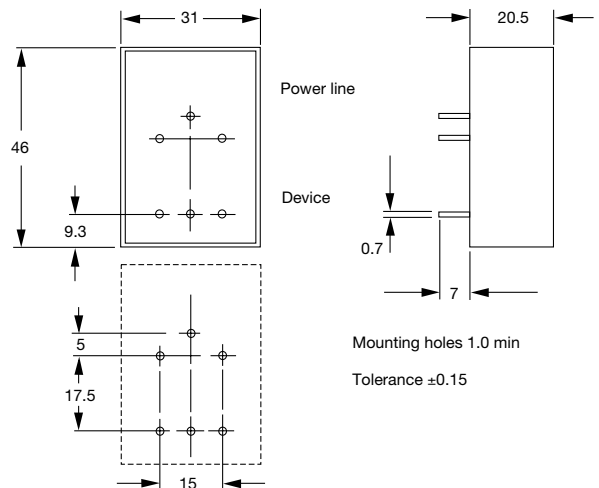


Type	Max.current VDE	Inductance	Capacity C_x	Capacity C_y	Max. leakage current line to ground	
F-3443	3A	2x2mH	0,1 μ F	2x3nF	0,50mA	Ground line inductance

Electrical Schematic



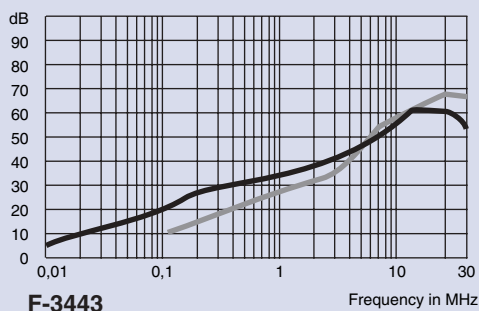
Case Styles and typ. Sizes



Mounting holes 1.0 min
Tolerance ± 0.15

Typ. Insertion Loss in dB

asym. — sym. —



PCB Filters for various Requirements

EBP-, EDP-, EOP-Series

- Applications:

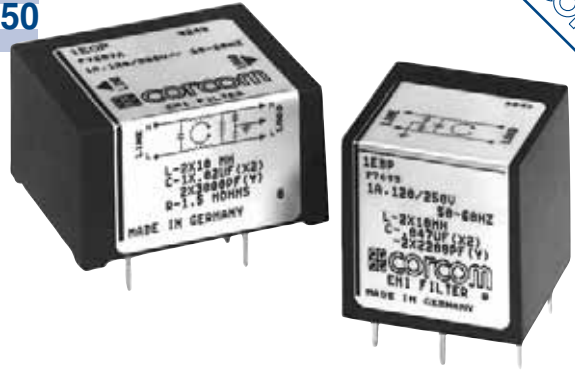
gambling machines, ATMs, office appliances

- Compact housing and best price/performance ratio for normal requirements



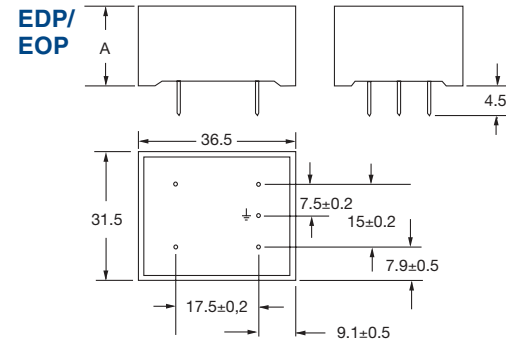
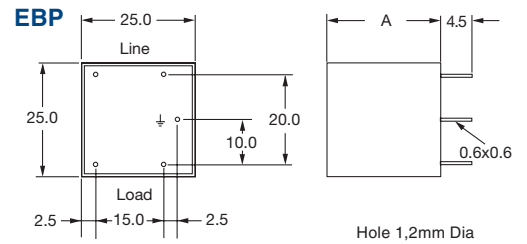
for EDP- and EOP-Series

according IEC 950



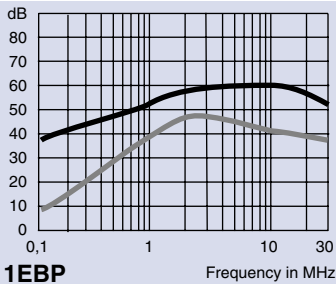
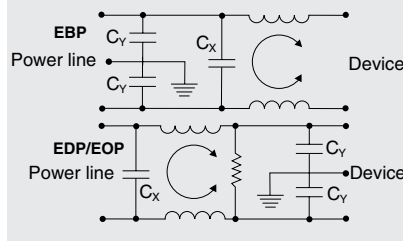
Type	Max. current VDE	Inductance	Capacity		Max. leakage current line to ground	Dimensions A
			C _x	C _y		
1EBP	1A	2x10,0 mH	0,047 µF	2,2 nF	0,50 mA	25,0
3EBP	3A	2x2,0 mH	0,047 µF	2,2 nF	0,50 mA	25,0
1EDP	1A	2x10,0 mH	0,1 µF	3 nF	0,50 mA	24,0
3EDP	3A	2x2,0 mH	0,1 µF	3 nF	0,50 mA	24,0
6EDP	6A	2x0,93 mH	0,1 µF	3 nF	0,50 mA	24,0
10EDP	10A	2x0,36 mH	0,1 µF	3 nF	0,50 mA	24,0
1EOP	1A	2x10,0 mH	0,02 µF	3 nF	0,50 mA	19,5
3EOP	3A	2x2,0 mH	0,02 µF	3 nF	0,50 mA	19,5
6EOP	6A	2x0,93 mH	0,02 µF	3 nF	0,50 mA	19,5
10EOP	10A	2x0,36 mH	0,02 µF	3 nF	0,50 mA	19,5

Case Styles and typ. Sizes

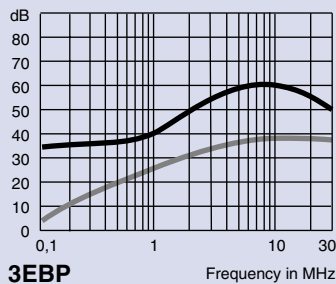


Typ. Insertion Loss in dB asym. — sym. —

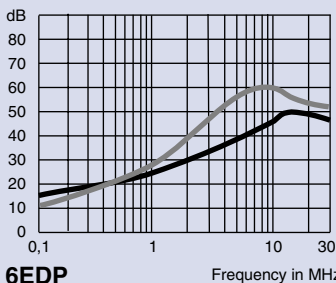
Electrical Schematic



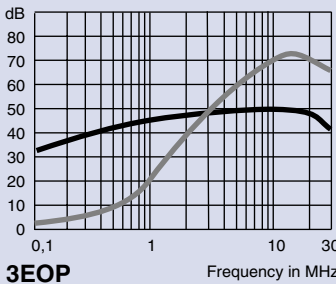
1EBP



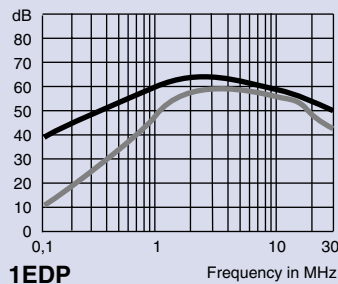
3EBP



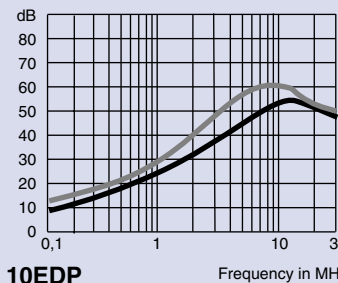
6EDP



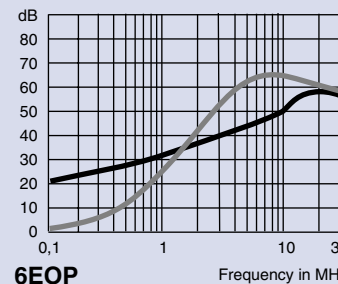
3EOP



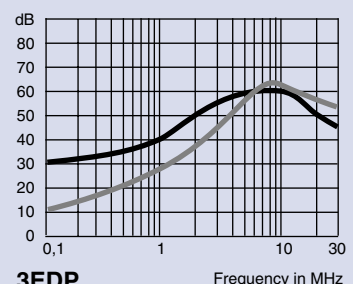
1EDP



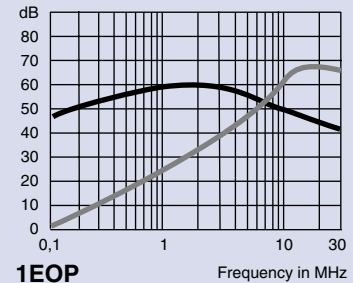
10EDP



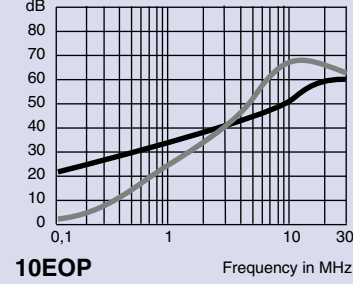
6EOP



3EDP



1EOP



10EOP

Chassis-mount Filters

G/N-Series

For increased requirements

- For applications in switching power supplies with switching frequencies from 20/50 to 150 kHz
- Suitable for frequency converter applications (motor drives etc.)

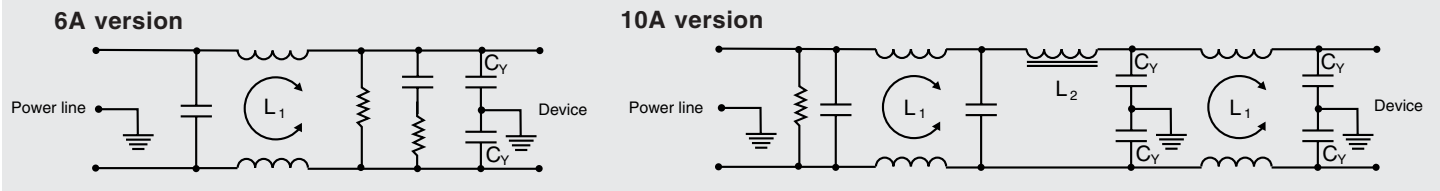


according IEC 950



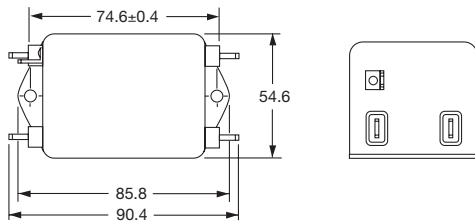
Type	Max. current UL/VDE	Inductance		Capacity		Max. leakage current (line to ground) at 250VAC / 50Hz
		L ₁	L ₂	C _x	C _y	
6EG1	6A/5A	2x4,6mH		0,47µF+0,1µF	4nF	0,50mA
6VG1	6A/5A	2x4,0mH		0,47µF+0,1µF	15nF	2,10mA
6VN1	6A/5A	2x5,4mH		0,68µF+0,27µF	15nF	2,10mA
10EG1	10A/8A	2x7,83mH	0,036mH	0,47µF+0,27µF	2+2nF	0,60mA
10VG1	10A/8A	2x7,14mH	0,036mH	0,47µF+0,27µF	10+5,5nF	2,50mA
10VN1	10A/8A	2x7,83mH	0,036mH	0,68µF+0,47µF	10+5,5nF	2,50mA

Electrical Schematic

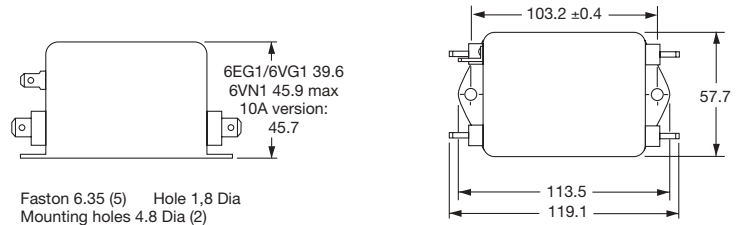


Case Styles and typ. Sizes

6EG1 / 6VG1 / 6VN1

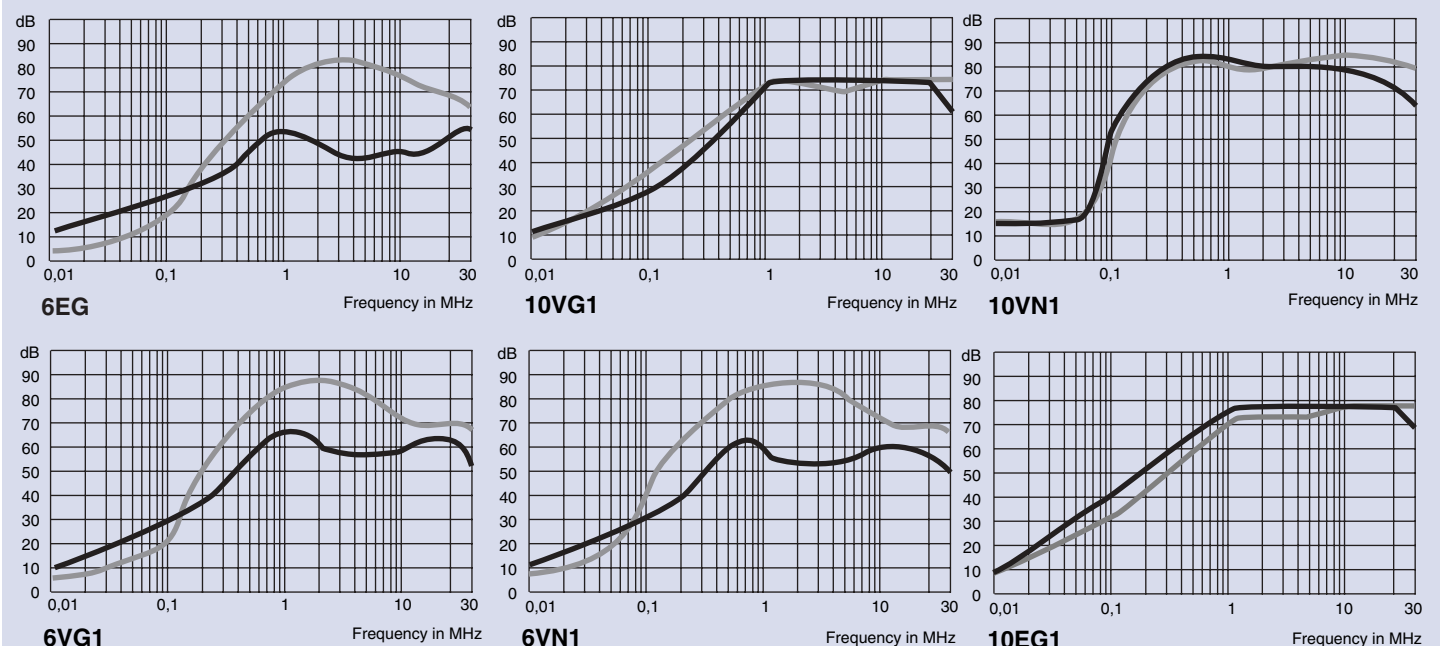


10EG1 / 10VG1 / 10VN1



Typ. Insertion Loss

asym. — sym. —



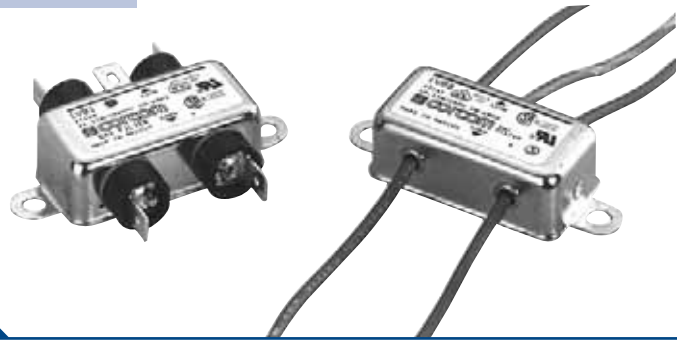
Universal Chassis-mount Filters

B-Series

Designed to clean-up noise in a wide range of electrical and electronic devices (VB, EB)

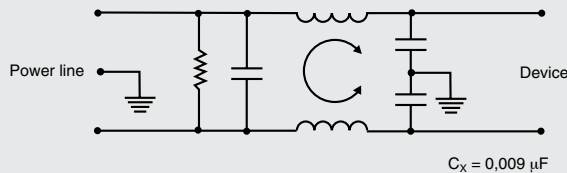


according IEC 950



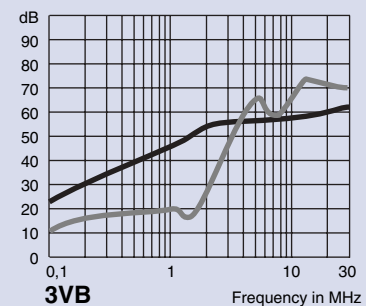
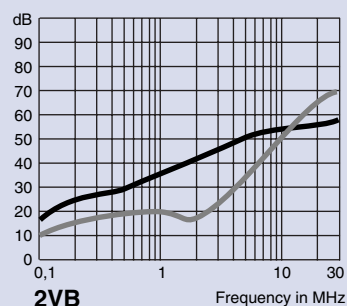
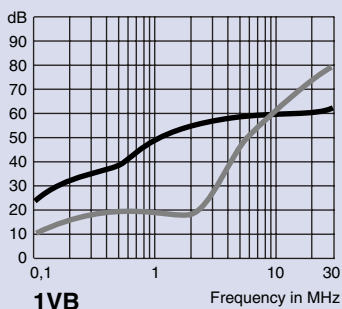
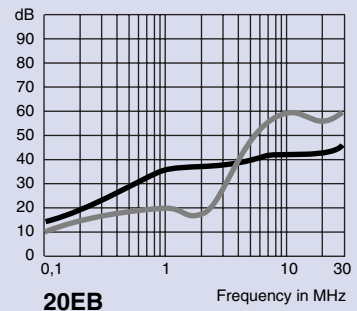
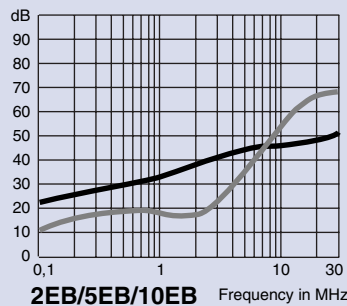
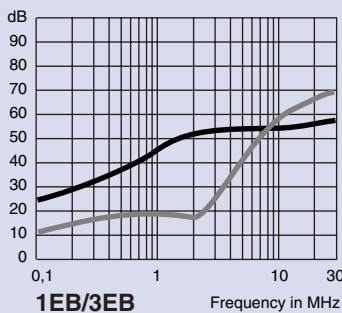
Type	Max. leakage current	Capacity C_Y	Type	Max. leakage current	Capacity C_Y	Max. current UL/VDE	Inductance	Dimensions (mm)				
								A	B	C	D	E
1EB1	Line to ground	2x2,8nF	1VB1	Line to ground	2x5,5nF	1A	2x1,8mH	57,1	46,1	16,7	54,0	64,2
1EB3		2x2,8nF	1VB3		2x5,5nF	1A	2x1,8mH	24,3	46,1	16,7	54,0	64,2
2EB1		2x2,8nF	2VB1		2x5,5nF	2A	2x0,54mH	57,1	46,1	16,7	54,0	64,2
2EB3	250VAC 50Hz	2x2,8nF	2VB3	250VAC 50Hz	2x5,5nF	2A	2x0,54mH	24,3	46,1	16,7	54,0	64,2
3EB1		2x2,8nF	3VB1		2x5,5nF	3A	2x1,7mH	66,1	46,1	19,9	54,0	64,2
3EB3		2x2,8nF	3VB3		2x5,5nF	3A	2x1,7mH	33,2	46,1	19,9	54,0	64,2
5EB1	0,40mA	2x2,8nF	5VB1	1,0mA	2x5,5nF	5A	2x0,51mH	66,1	46,1	19,9	54,0	64,2
5EB3		2x2,8nF	5VB3		2x5,5nF	5A	2x0,51mH	33,2	46,1	19,9	54,0	64,2
10EB1		2x2,8nF	10VB1		2x5,5nF	10A/8A	2x0,49mH	66,1	46,1	29,4	54,0	64,2
10EB3	0,40mA	3x2,8nF	10VB3	1,0mA	2x5,5nF	10A/8A	2x0,49mH	33,4	46,1	29,4	54,0	64,2
20EB1		2x2,8nF	20VB6		2x5,5nF	10A/8A	2x0,49mH	69,1	46,1	29,4	54,0	64,2
					20VB1	2x5,5nF	20A/16A	2x0,44mH	85,2	52,4	29,4	60,3
			20VB6		2x5,5nF	20A/16A	2x0,44mH	87,9	52,4	29,4	60,3	71,3
			30VB6		2x5,5nF	30A/25A	2x0,69mH	135,6	85,7	38,9	95,3	106,7

Electrical Schematic

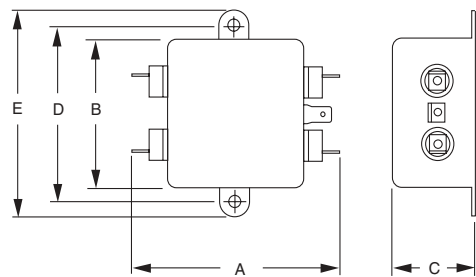


Typ. Insertion Loss

asym. — sym. —

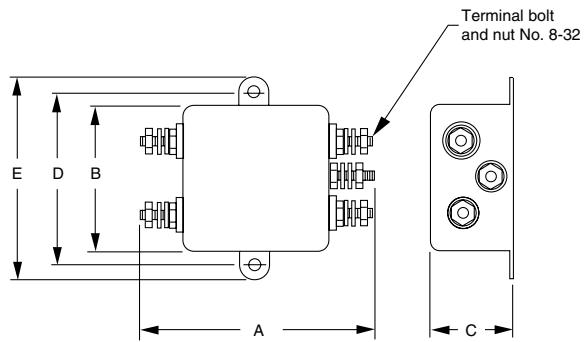


B1



Faston 6,35 Hole 1,8 Dia Mounting holes 4,8 Dia

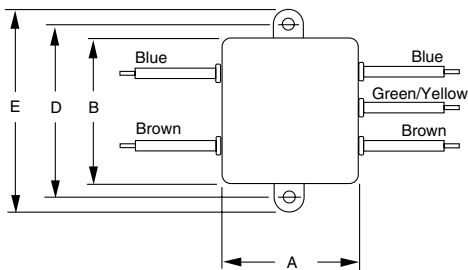
10B6 / 20B6



Mounting holes 4,8 Dia

Terminal bolt and nut No. 8-32

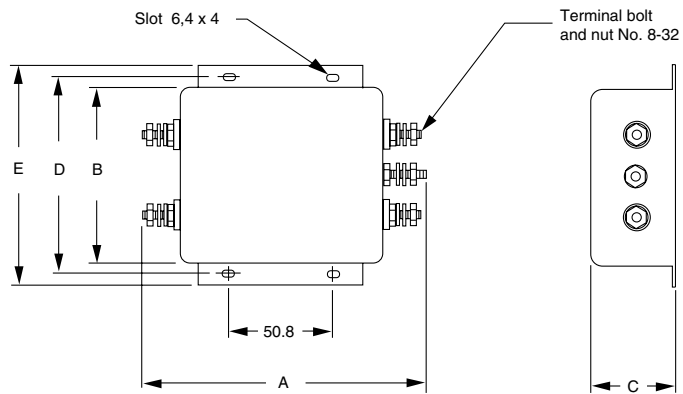
B3



Wire length 100 min.

Mounting holes 4,8 Dia

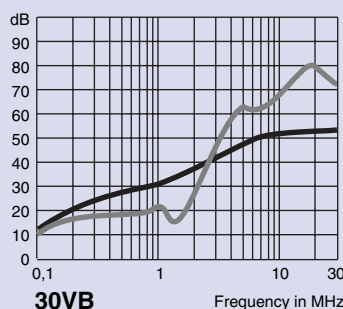
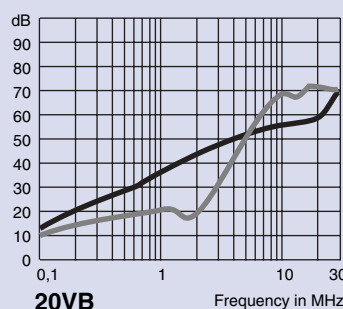
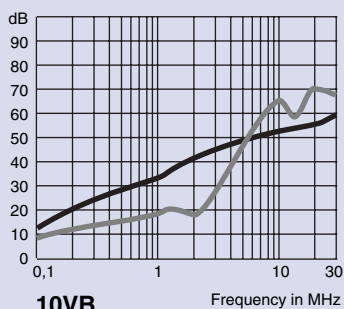
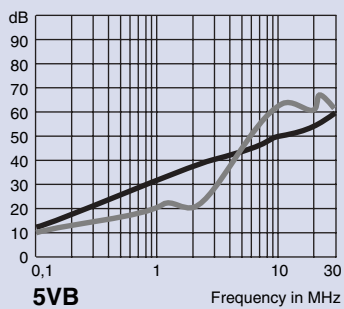
30B6



Terminal bolt and nut No. 8-32

Typ. Insertion Loss

asym. — sym. —



Chassis/Back Panel Mount Filters with/without IEC Connector

K-Series

- Comparable to B-Series, with increased symmetrical attenuation

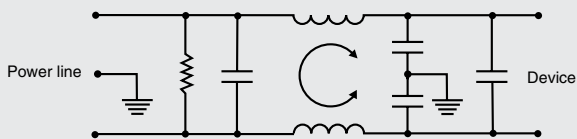


according IEC 950



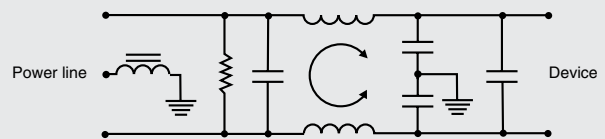
Type	Max.leak-age current	Capacity C_V	Type	Max.leak-age current	Capacity C_V	Max.current UL/VDE	Inductance.	Tapped insert	Dimensions (mm)						
									A	B	C	D	E		
1EK1	Line to ground 250VAC 50Hz	2x2,8nF	1VK1	Line to ground 250VAC 50Hz	2x5,5nF	1A	2x1,8mH		78,7	52,4	23,1	60,3	71,3		
1EK3		2x2,8nF	1VK3		2x5,5nF	1A	2x1,8mH		45,9	52,4	23,1	60,3	71,3		
2EK1		2x2,8nF	2VK1		2x5,5nF	2A	2x0,54mH		78,7	52,4	23,1	60,3	71,3		
2EK3		2x2,8nF	2VK3		2x5,5nF	2A	2x0,54mH		45,9	52,4	23,1	60,3	71,3		
3EK1		2x2,8nF	3VK1		2x5,5nF	3A	2x1,7mH		78,7	52,4	29,4	60,3	71,3		
3EK3		2x2,8nF	3VK3		2x5,5nF	3A	2x1,7mH		45,9	52,4	29,4	60,3	71,3		
3EK7		2x2,8nF	3VK7		2x5,5nF	3A	2x1,7mH	6-32x1/4	81,4	57,1	32,4	40,0	16,0		
3EK7M		2x2,8nF	3VK7M		2x5,5nF	3A	2x1,7mH	M 3x0,5	81,4	57,1	32,4	40,0	16,0		
5EK1		2x2,8nF	5VK1		2x5x5nF	5A	2x0,51mH		78,7	52,4	29,4	60,3	71,3		
5EK3		2x2,8nF	5VK3		2x5,5nF	5A	2x0,51mH		45,9	52,4	29,4	60,3	71,3		
5EK7		2x2,8nF	5VK7		2x5,5nF	5A	2x0,51mH	6-32x1/4	81,4	57,1	32,4	40,0	16,0		
5EK7M		2x2,8nF	5VK7M		2x5,5nF	5A	2x0,51mH	M 3x0,5	81,4	57,1	32,4	40,0	16,0		
10EK1		0,40mA	2x2,8nF		10VK1	1,0mA	2x5,5nF	10A/8A	2x0,49mH		85,1	52,4	29,4	60,3	71,3
10EK3			2x2,8nF		10VK3		2x5,5nF	10A/8A	2x0,49mH		52,4	52,4	29,4	60,3	71,3
				10VK6	2x5,5nF		10A/8A	2x0,49mH		87,9	52,4	29,4	60,3	16,0	
10EK7	2x2,8nF		10VK7	2x5,5nF	10A/8A		2x0,49mH	6-32x1/4	94,1	57,1	44,4	40,0	16,0		
10EK7M	2x2,8nF		10VK7M	2x5,5nF	10A/8A		2x0,49mH	M 3x0,5	94,1	57,1	44,4	40,0	16,0		
20EK1	2x2,8nF		20VK1	2x5,5nF	20A/16A		2x0,44mH		87,9	65,0	38,8	74,6	85,1		
			20VK6	2x5,5nF	20A/16A		2x0,44mH		87,9	65,0	38,8	74,6	85,1		
			20VK7	2x5,5nF	20A/16A		2x0,44mH	6-32x1/4	96,5	57,9	50,8	40,4	21,5		
			30VK6	2x5,5nF	30A/25A		2x0,69mH		135,6	85,7	38,9	95,3	106,7		
			30VK6C	2x5,5nF	30A/25A		2x0,69mH		135,6	85,7	38,9	95,3	106,7		

Electrical Schematic



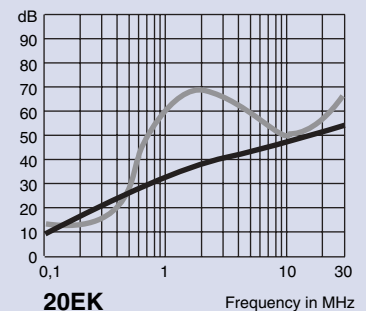
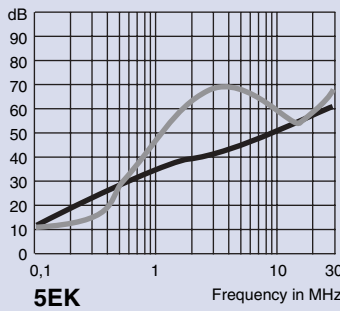
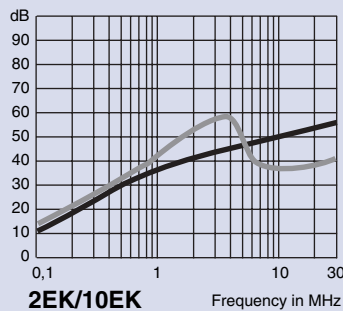
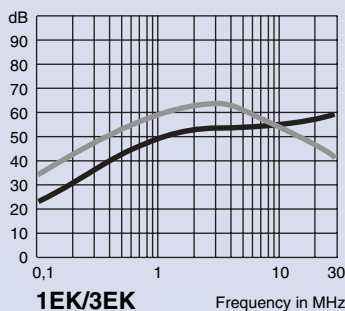
$C_x = 2 \times 0,1 \mu\text{F}$ except 30VK6: $C_x = 2 \times 0,27 \mu\text{F} + 0,47 \mu\text{F}$

30VK6C (with choke)

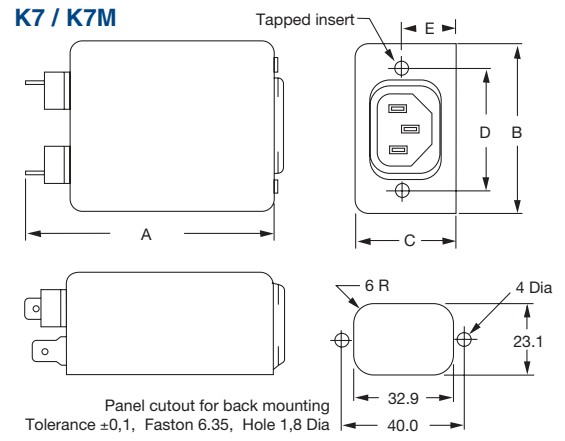
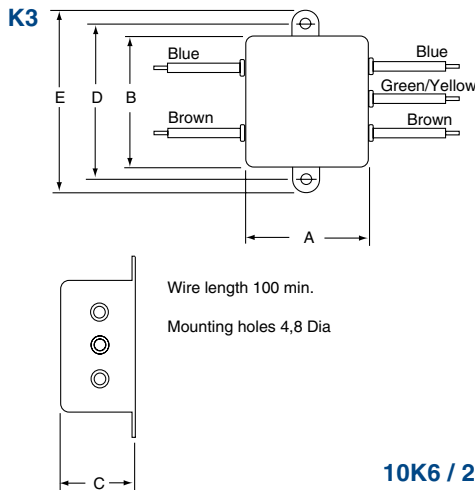
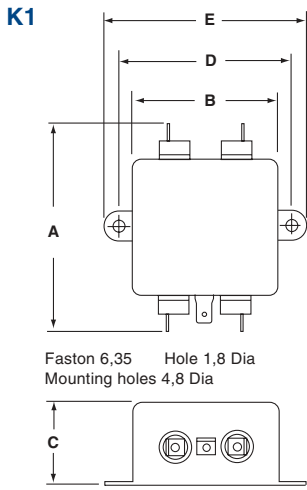


Typ. Insertion Loss

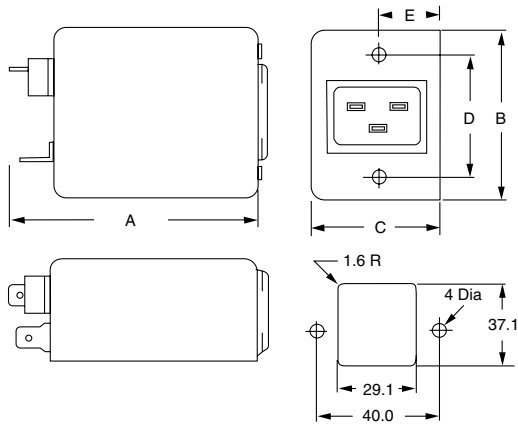
asym. — sym. —



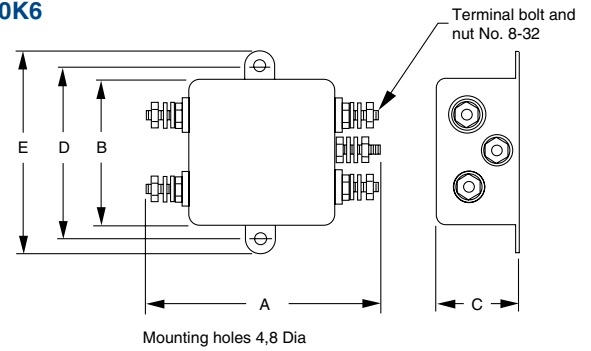
Case Styles and typ. Sizes



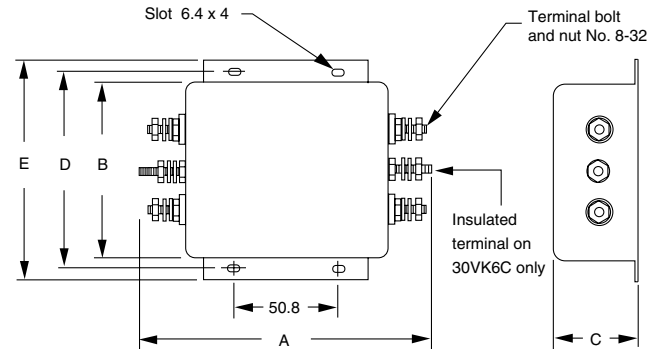
20VK7



10K6 / 20K6

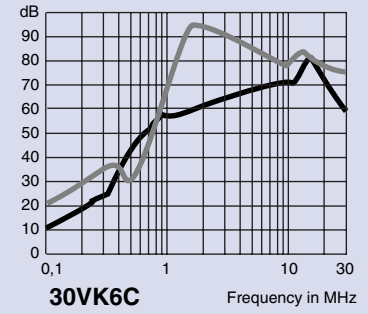
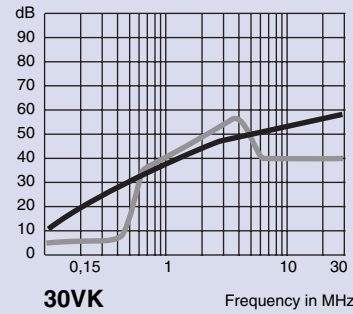
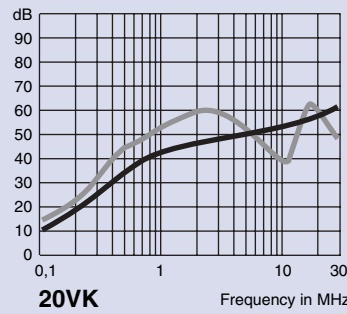
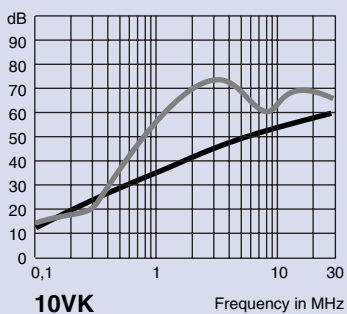
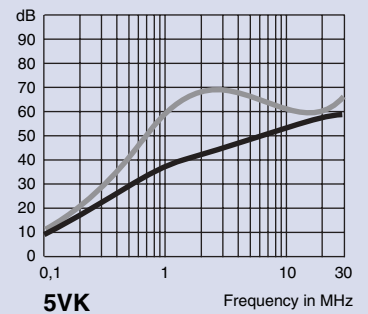
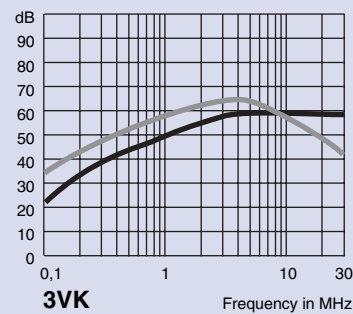
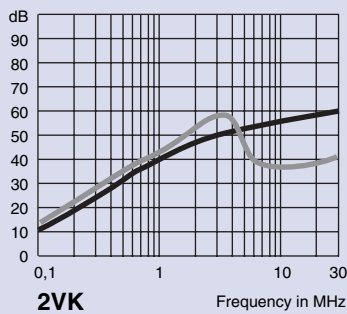
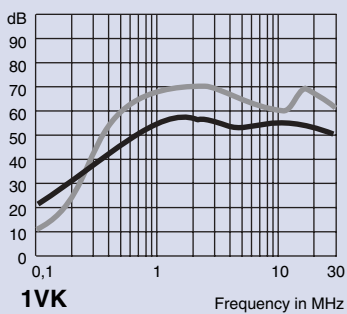


30VK6/30VK6C



Typ. Insertion Loss

asym. — sym. —



Chassis/Back Panel Mount Filters with/without IEC Connector

R-Series

- Double tuned circuit filter for low impedance loads (motors, semiconductor actuators etc.)

 6,5VR1 VDE only
Approvals are not valid for C-models

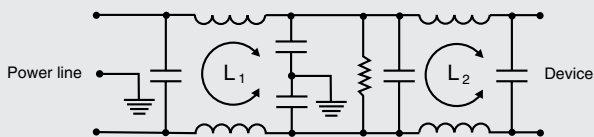
according IEC 950



Type	Max.leak-age current	Capacity C _V	Type	Max.leak-age current	Capacity C _V	Max.current UL/VDE	Inductance L ₁ /L ₂	Tapped insert	Dimensions (mm)							
									A	B	C	D	E			
1ER1	Line to ground	2x2,8nF	1VR1	Line to ground	2x5,5nF	1A	2x1,8mH	6-32x1/4 M 3x0,5	85,1	45,9	29,4	60,3	70,6			
1ER3		2x2,8nF	1VR3		2x5,5nF	1A	2x1,8mH		52,4	45,9	29,4	60,3	70,6			
2ER1		2x2,8nF	2VR1		2x5,5nF	2A	2x0,54mH		85,1	45,9	29,4	60,3	70,6			
2ER3		2x2,8nF	2VR3		2x5,5nF	2A	2x0,54mH		52,4	45,9	29,4	60,3	70,6			
3ER1		2x2,8nF	3VR1		2x5,5nF	3A	2x1,7mH		97,7	52,4	29,4	74,6	85,1			
3ER1C		2x2,8nF			3A	2x1,7mH	65,1		52,6	38,9	74,6	85,1				
3ER3		2x2,8nF	3VR3		2x5,5nF	3A	2x1,7mH		65,0	52,4	29,4	74,6	85,1			
3ER7		2x2,8nF	3VR7		2x5,5nF	3A	2x1,7mH		110,0	57,1	32,4	40,0	16,3			
3ER7M		2x2,8nF	3VR7M		2x5,5nF	3A	2x1,7mH		110,0	57,1	32,4	40,0	16,3			
5ER1		250VAC 50Hz	2x2,8nF		5VR1	250VAC 50Hz	2x5,5nF		5A	2x0,51mH	6-32x1/4 M 3x0,5	97,7	52,4	29,4	74,6	85,1
5ER3	2x2,8nF		5VR3	2x5,5nF	5A		2x0,51mH	65,0	52,4	29,4		74,6	85,1			
5ER7	2x2,8nF		5VR7	2x5,5nF	5A		2x0,51mH	110,0	57,1	32,4		40,0	16,3			
5ER7M	2x2,8nF		5VR7M	2x5,5nF	5A		2x0,51mH	110,0	57,1	32,4		40,0	16,3			
6ER1C	2x2,8nF		6,5VR1	2x5,5nF	6,5A		2x0,52mH	65,1	52,6	38,9		74,6	85,1			
10ER1	0,40mA		2x2,8nF	10VR1	1,0mA		2x5,5nF	10A/8A	2x0,49mH	6-32x1/4 M 3x0,5		97,7	52,4	38,8	74,6	85,1
10ER1C			2x2,8nF				10A/8A	2x0,49mH	65,1			52,6	38,9	74,6	85,1	
10ER3			2x2,8nF	10VR3			2x5,5nF	10A/8A	2x0,49mH			65,0	52,4	38,8	74,6	85,1
				10VR6			2x5,5nF	10A/8A	2x0,49mH			100,6	52,4	38,8	74,6	85,1
10ER7			2x2,8nF	10VR7			2x5,5nF	10A/8A	2x0,49mH			110,0	57,1	38,8	40,0	22,3
10ER7M		2x2,8nF	10VR7M	2x5,5nF		10A/8A	2x0,49mH	110,0	57,1		38,8	40,0	22,3			
20ER1		2x2,8nF	20VR1	2x5,5nF		20A/16A	2x0,44mH	132,6	85,6		38,8	95,3	106,7			
			20VR6	2x5,5nF		20A/16A	2x0,44mH	135,6	85,6		38,8	95,3	106,7			

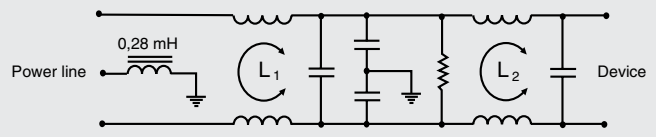
Electrical Schematic

ER / VR



C_x = 3 x 0,1 µF

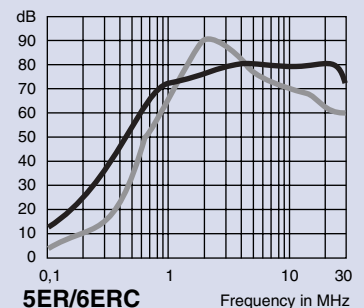
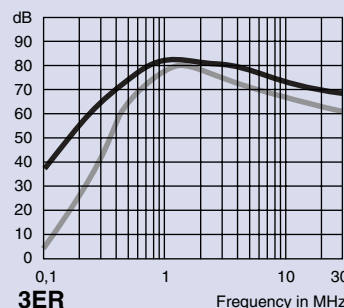
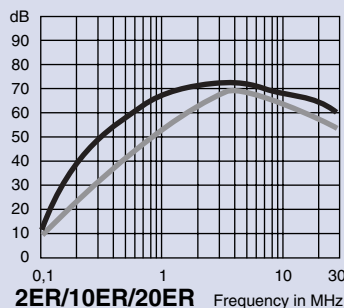
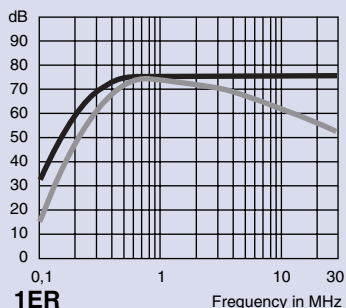
ER1C



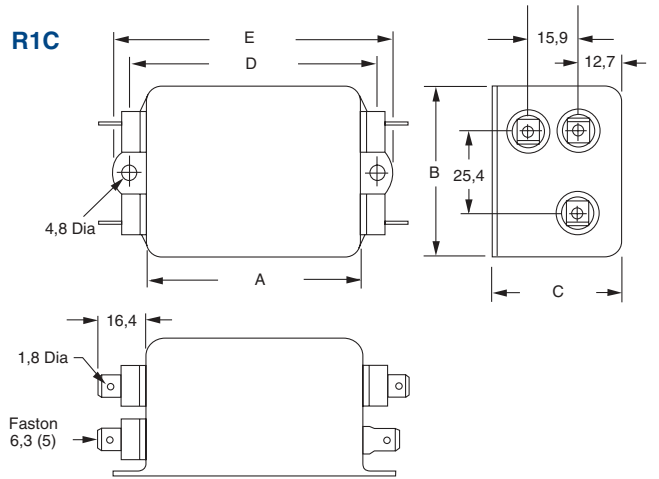
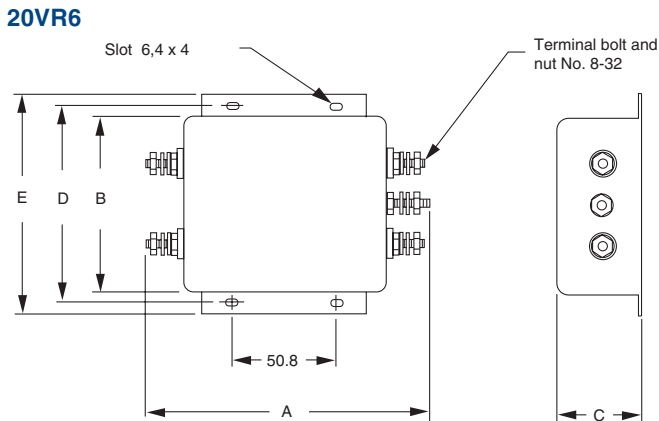
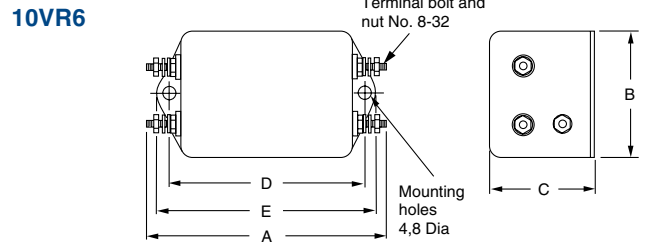
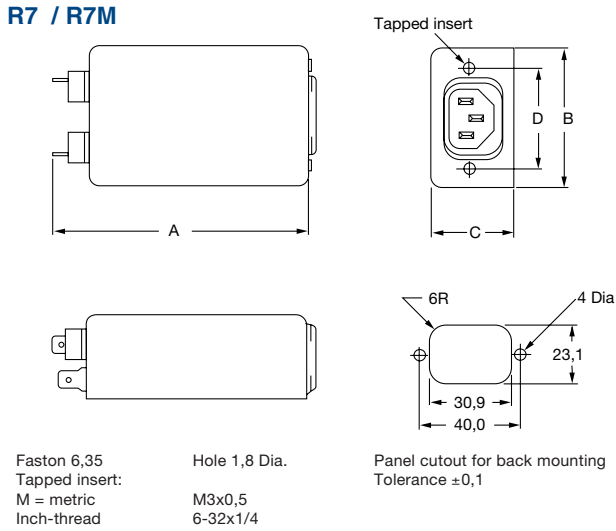
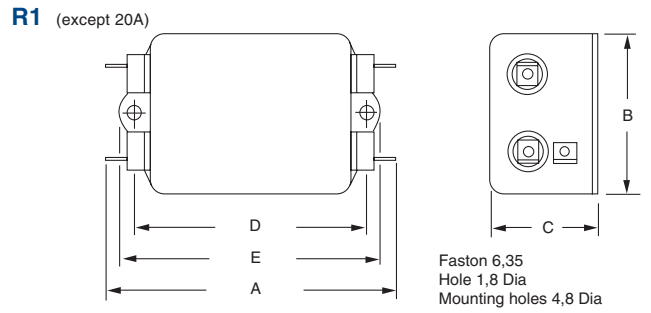
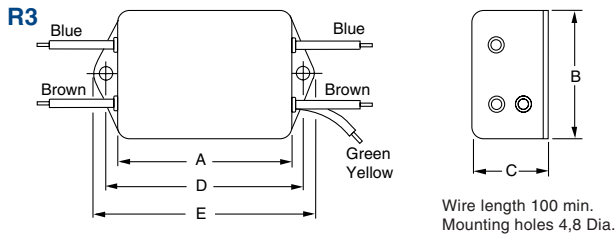
C_x = 2 x 0,1 µF

Typ. Insertion Loss

asym. — sym. —



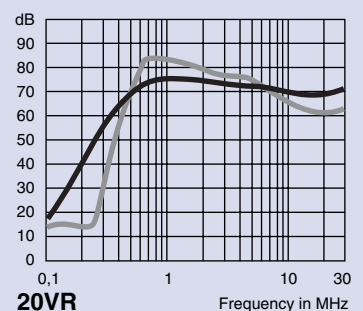
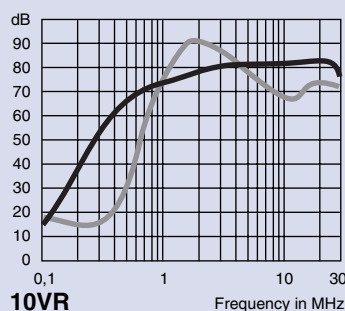
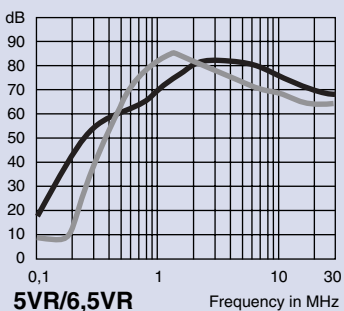
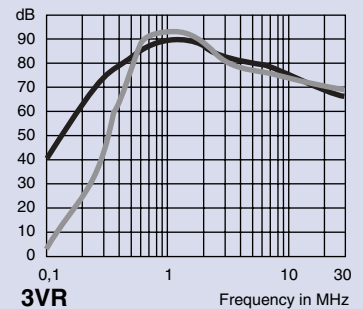
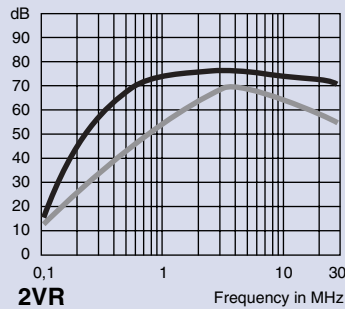
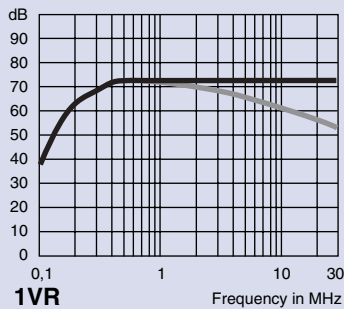
Case Styles and typ.Sizes



Models 20VR1 and 20ER1 are the same as 20VR6, with Faston 6.35 instead of terminal bolts shown.

Typ. Insertion Loss

asym. — sym. —



Chassis/Back Panel Mount Filters with IEC Connector

DK-Series

- Extended K-Series

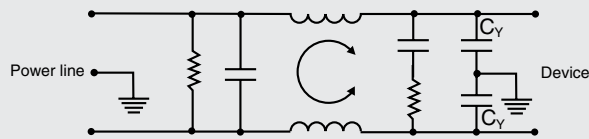


according IEC 950



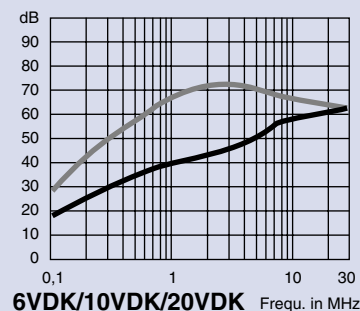
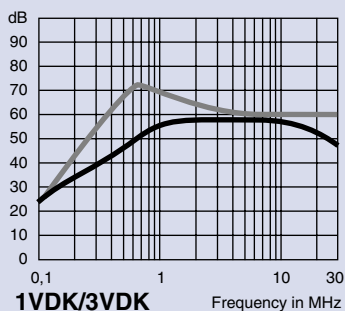
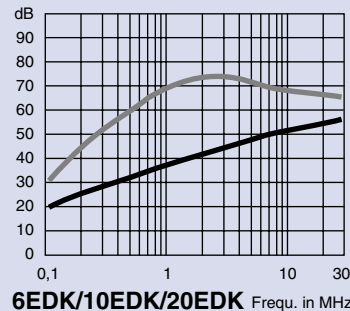
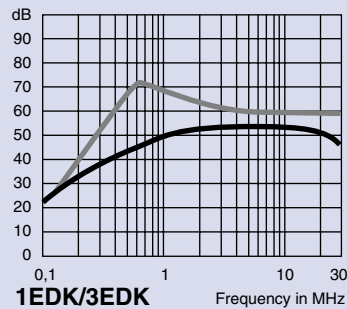
Type	Max.leak-age current	Capac. C _Y	Type	Max.leak-age current	Capacity		Max. current UL/VDE	Inductance	Dimensions (mm)				
					C _X	C _Y			A	B	C	D	E
1EDK1	Line to ground	3nF	1VDK1	Line to ground	0,54x0,27μF	4,7nF	1A/1A	2x 1,86mH	85,1	52,6	29,5	60,3	71,4
1EDK3		3nF	1VDK3		0,54x0,27μF	4,7nF	1A/1A	2x 1,86mH	52,6	52,6	29,5	60,3	71,4
3EDK1		3nF	3VDK1		2x0,54μF	5,5nF	3A/3A	2x 1,76mH	97,8	52,6	29,5	74,6	85,1
3EDK3	250VAC 50Hz	3nF	3VDK3	250VAC 50Hz	2x0,54μF	5,5nF	3A/3A	2x 1,76mH	65,0	52,6	29,5	74,6	85,1
6EDK1		3nF	6VDK1		2x0,54μF	5,5nF	6A/6A	2x 0,516mH	97,8	52,6	33,5	74,6	85,1
6EDK3		3nF	6VDK3		2x0,54μF	5,5nF	6A/6A	2x 0,516mH	65,0	52,6	29,5	74,6	85,1
10EDK1	0,50mA	3nF	10VDK1	0,90mA	2x0,54μF	5,5nF	10A/8A	2x 0,495mH	97,8	52,6	33,5	74,6	85,1
10EDK3		3nF	10VDK3		2x0,54μF	5,5nF	10A/8A	2x 0,495mH	65,3	52,6	33,5	74,6	85,1
20EDK1		3nF	20VDK1		2x0,54μF	5,5nF	20A/16A	2x 0,540mH	97,8	52,6	45,2	74,6	85,1
			20VDK6		2x0,54μF	5,5nF	20A/16A	2x 0,540mH	87,9	52,6	45,2	74,6	85,1

Electrical Schematic

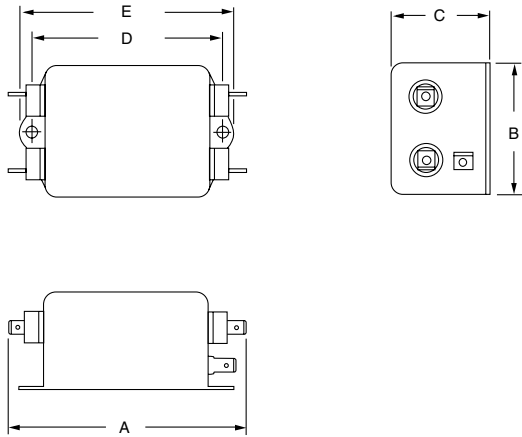


Typ. Insertion Loss

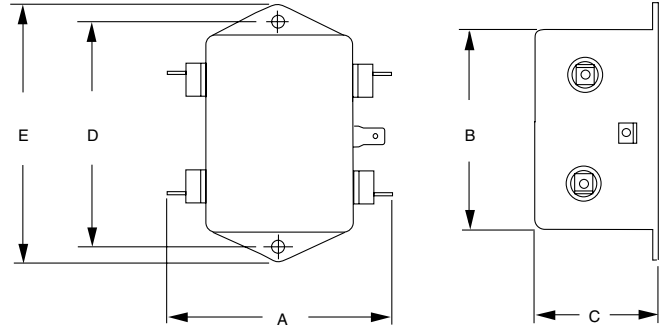
asym. — sym. —



VDK1 / EDK1

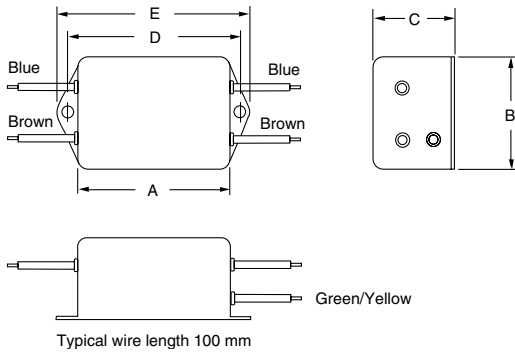


20VVK1 / 20EDK1

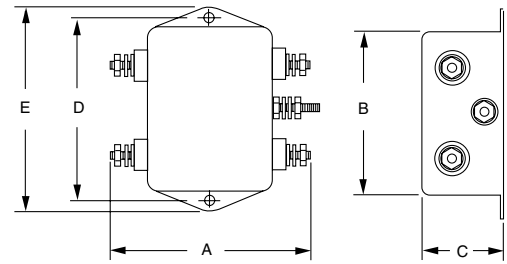


Faston 6,35 (5)
 Hole 1,8 Dia.
 Mounting holes 4,8 Dia (2)

VDK3 / EDK3



20VVK6



Terminal screws No. 8-32 (5x)

Chassis-mount Filter

VS- VV-, VW-Series

These series of similarly constructed filters are available in various electronic designs, optimized for the respective impedance requirements (switching power supplies, thyristor circuits, motor drives etc.). Also for DC/DC applications.



according IEC 950



Type	Max.current UL/VDE	Inductance		Capacity C_x	Comm.mode impedance	Normal mode impedance	Device impedance at high frequencies	Dimensions (mm)				
		L_1	L_2					A	B	C	D	E
3VS1	3A/2,5A	2x1mH	2x0,03mH	2x0,27 μ F	N=2 (‘L’)	N=3 (‘Pi’)	High	85,3	46,1	29,4	60,3	70,5
6VS1	6A/5A	2x1,8mH	2x0,07mH	2x0,27 μ F				98,0	52,8	38,9	74,6	84,8
10VS1	10A/8A	2x1,2mH	2x0,04mH	2x0,27 μ F				98,0	52,8	38,9	74,6	84,8
20VS1	20A/16A	2x0,93mH	2x0,03mH	2x0,27 μ F				132,8	85,7	38,9	95,3	106,7
20VS6	20A/16A	2x0,93mH	2x0,03mH	2x0,27 μ F				135,6	85,7	38,9	95,5	106,6
3VV1	3A/2,5A	2x1mH	2x0,03mH	3x0,27 μ F				N=3 (‘T’)	N=3 (‘Pi’)	Low	85,3	46,1
6VV1	6A/5A	2x1,8mH	2x0,07mH	3x0,27 μ F	98,0	52,8	38,9				74,6	84,8
10VV1	10A/8A	2x1,2mH	2x0,04mH	3x0,27 μ F	98,0	52,8	38,9				74,6	84,8
20VV1	20A/16A	2x1,73mH	2x0,03mH	3x0,27 μ F	132,8	85,7	38,9				95,3	106,7
20VV6	20A/16A	2x1,73mH	2x0,03mH	3x0,27 μ F	135,6	85,7	38,9				95,5	106,6
3VW1	3A/2,5A	2x1mH	2x0,03mH	3x0,27 μ F	N=4 (‘Dbl.L’)	N=3 (‘Pi’)	High				85,3	46,1
6VW1	6A/5A	2x1,8mH	2x0,07mH	3x0,27 μ F				98,0	52,8	38,9	74,6	84,8
10VW1	10A/8A	2x1,2mH	2x0,04mH	3x0,27 μ F				98,0	52,8	38,9	74,6	84,8
20VW1	20A/16A	2x1,73mH	2x0,03mH	3x0,27 μ F				132,8	85,7	38,9	95,3	106,7
20VW6	20A/16A	2x1,73mH	2x0,03mH	3x0,27 μ F				135,6	85,7	38,9	95,5	106,6

Max. leakage current line to ground 1.0 mA at 250 VAC/50 Hz, VS, VV; 1.5 mA VW

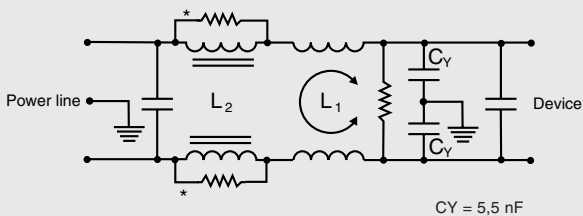
For medical Applications

Type	Max.current UL/VDE	Inductance		Capacity C_x	Comm.mode impedance	Normal mode impedance	Device impedance at high frequencies	Dimensions (mm)				
		L_1	L_2					A	B	C	D	E
3MV1	3A/2,5A	2x1mH	2x0,04mH	3x0,27 μ F	N=3 (‘T’)	N=3 (‘Pi’)	Low	85,3	46,1	32,6	60,3	70,5
6MV1	6A/5A	2x1,8mH	2x0,07mH	3x0,27 μ F				98,0	52,8	38,9	74,6	84,8
10MV1	10A/8A	2x1,2mH	2x0,05mH	3x0,27 μ F				98,0	52,8	38,9	74,6	84,8
20MV1	20A/16A	2x1,73mH	2x0,03mH	2x0,47 μ F				132,8	85,7	38,9	95,3	106,7

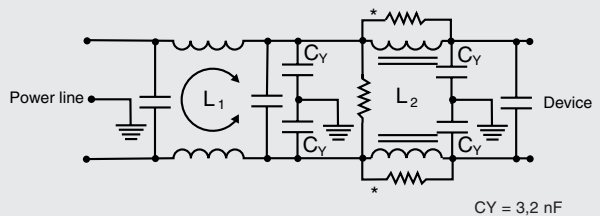
Max. leakage current line to ground 250 VAC/50 Hz 0,15 mA

Electrical Schematic

VS-Series

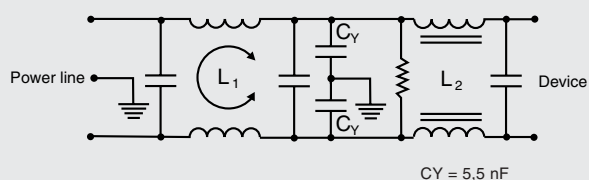


VW-Series

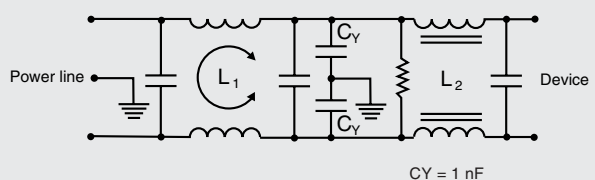


* R only by 20A-device

VV-Series

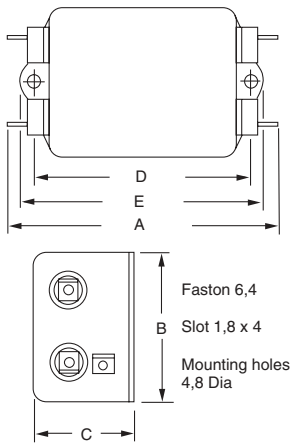


MV-Series

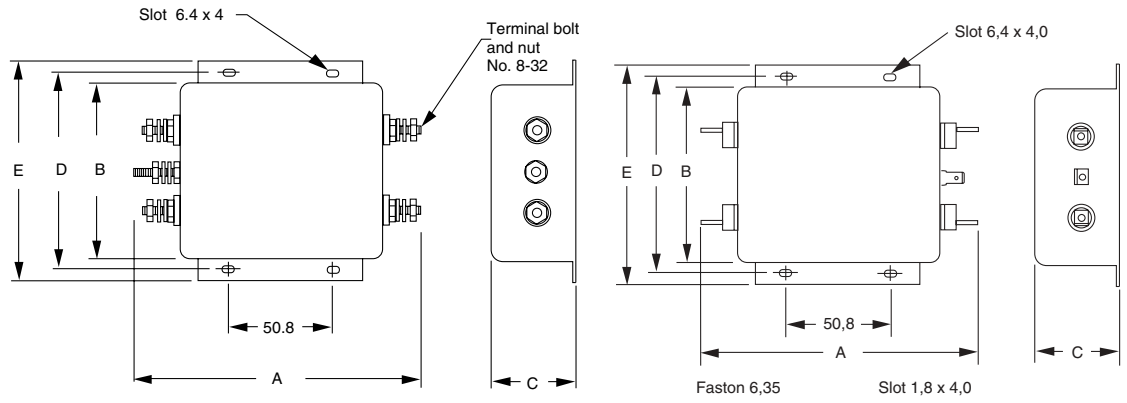


Case Styles and typ. Sizes

3A / 6A / 10A

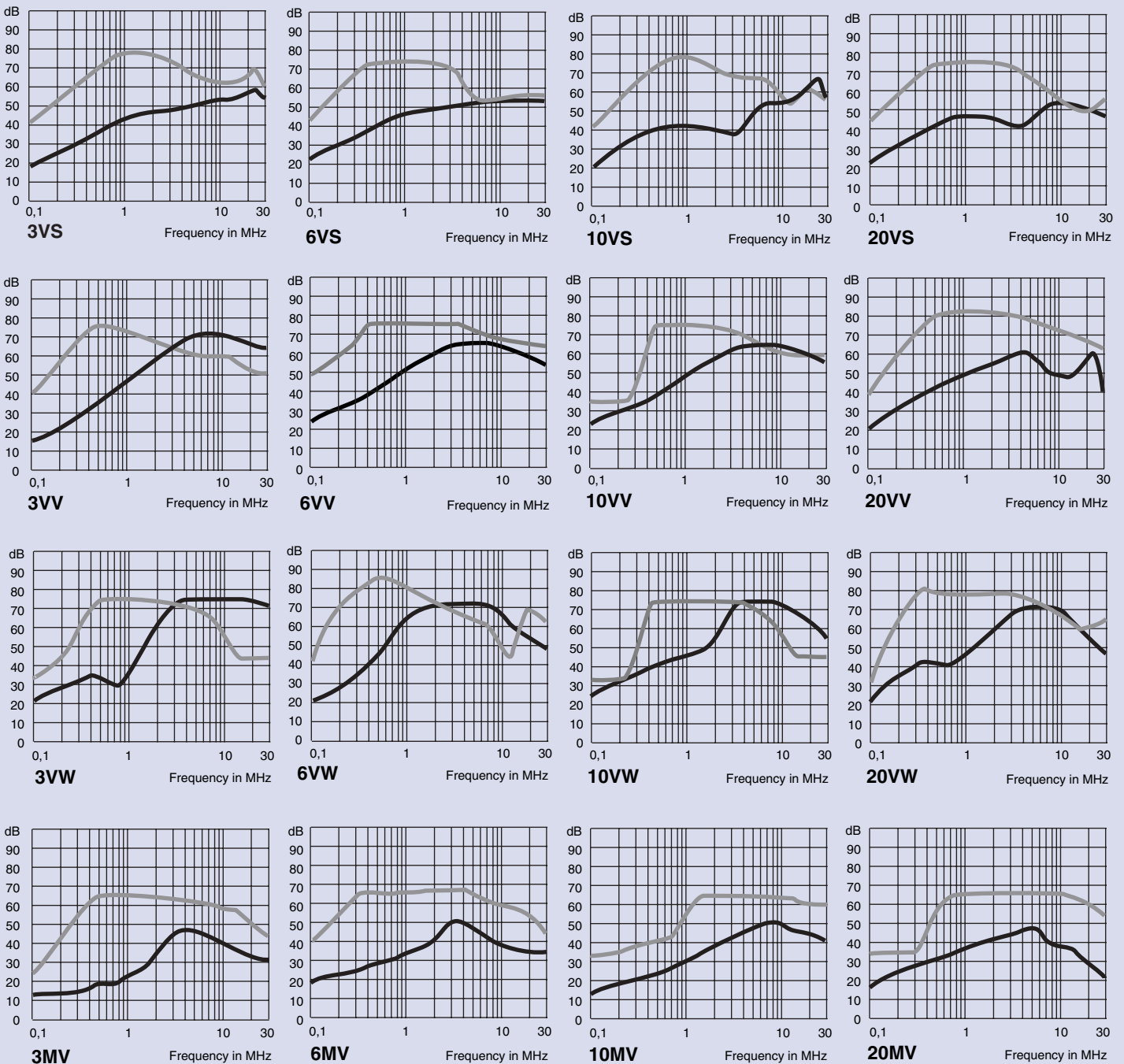


20A



Typ. Insertion Loss

asym. — sym. —



Chassis/Back Panel Mount Filters with/without IEC Connector

SK-Series

- Single stage filter with very high symmetrical and asymmetrical attenuation
- Extended frequency range (effective above 10 kHz)

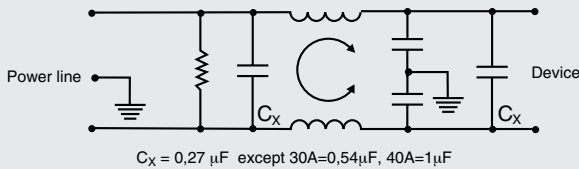


according IEC 950

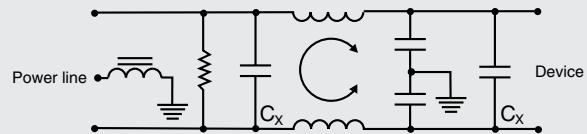


Type	Max.leak-age current	Induc.	Capacity C _V	Typ	Max.leak-age current	Induc.	Capacity C _V	Max.Current UL/VDE	Terminal	Dimensions (mm)				
										A	B	C	D	E
3ESK1	Line to ground	2x7mH	2x2,8nF	3VSK1	Line to ground	2x7mH	2x5,5nF	3A	Faston	97,7	52,4	29,4	74,6	85,1
3ESK3		2x7mH	2x2,8nF	3VSK3		2x7mH	2x5,5nF	3A	Wire	65,0	52,4	29,4	74,6	85,1
3ESK7		2x7mH	2x2,8nF	3VSK7		2x7mH	2x5,5nF	3A	IEC-connector	81,5	57,1	38,8	40,0	16,0
3ESK7M	250VAC 50Hz	2x7mH	2x2,8nF	3VSK7M	250VAC 50Hz	2x7mH	2x5,5nF	3A	IEC-connector	81,5	57,1	38,8	40,0	16,0
6ESK1		2x8,7mH	2x2,8nF	6VSK1		2x8,7mH	2x5,5nF	6A/5A	Faston	110,1	57,1	32,4	87,1	97,1
6ESK3		2x8,7mH	2x2,8nF	6VSK3		2x8,7mH	2x5,5nF	6A/5A	Wire	77,4	57,1	32,4	87,1	97,1
6ESK7		2x8,7mH	2x2,8nF	6VSK7		2x8,7mH	2x5,5nF	6A/5A	IEC-connector	81,5	57,1	45,1	40,0	16,0
6ESK7M		2x8,7mH	2x2,8nF	6VSK7M		2x8,7mH	2x5,5nF	6A/5A	IEC-connector	81,5	57,1	45,1	40,0	16,0
10ESK1		2x7mH	2x2,8nF	10VSK1		2x7mH	2x5,5nF	10A/8A	Faston	126,2	57,1	45,1	103,2	113,3
10ESK3		2x7mH	2x2,8nF	10VSK3		2x7mH	2x5,5nF	10A/8A	Wire	93,6	57,1	45,1	103,2	113,3
10ESK7	2x7mH	2x2,8nF	10VSK7	2x7mH	2x5,5nF	10A/8A	IEC-connector	109,9	57,1	45,1	40,0	16,0		
10ESK7M	2x7mH	2x2,8nF	10VSK7M	2x7mH	2x5,5nF	10A/8A	IEC-connector	109,9	57,1	45,1	40,0	16,07		
20ESK6	Line/ground 250VAC 0,50mA	2x6,1 mH	2x4nF	20VSK6	Line/ground 250VAC 1,25mA	2x6,1mH	2x10nF	20 A / 16 A	Mounting stud	127,3	57,1	45,1	103,2	113,3
30ESK6		2x1,7mH	2x4nF	30VSK6		2x1,7mH	2x10nF	30 A / 25 A	Mounting stud	125,0	79,3	69,9	87,3	101,6
30ESK6C		2x1,7mH	2x4nF	30VSK6C		2x1,7mH	2x10nF	30 A / 25 A	Mounting stud	125,0	79,3	69,9	87,3	101,6
40VSK6				40VSK6		2x2,3mH	2x10nF	40 A / 36 A	Mounting stud	152,4	79,3	55,4	88,9	100,6

Electrical Schematic

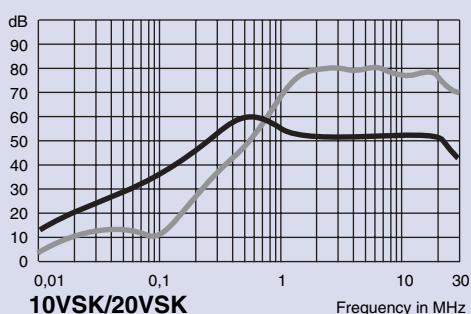
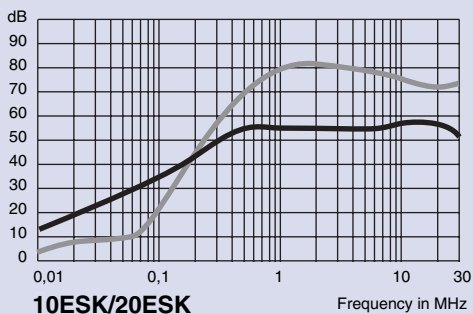
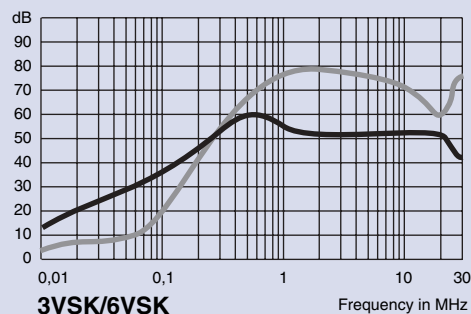
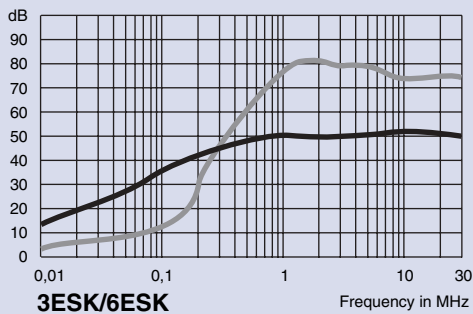


Only 30ESK6C / 30VSK6C



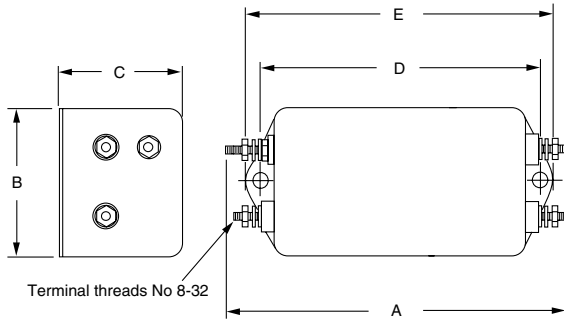
Typ. Insertion Loss

asym. — sym. —

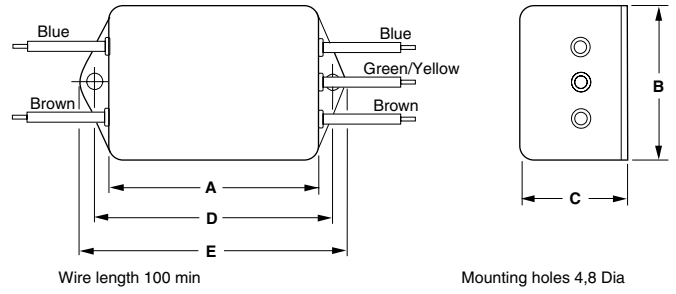


Case Styles and typ. Sizes

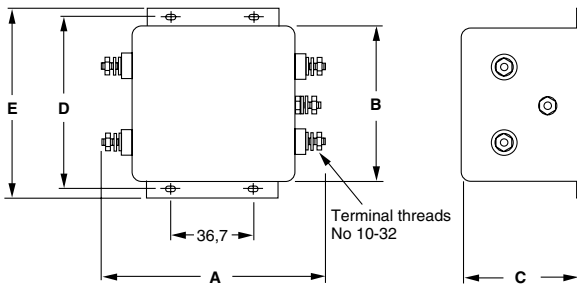
20ESK6 / 20VSK6



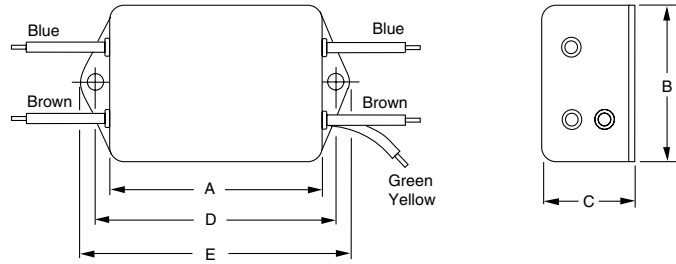
6SK3 / 10SK3



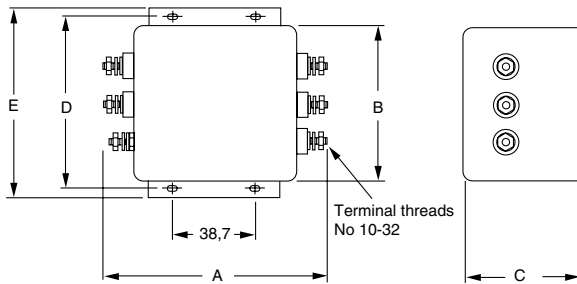
30ESK6 / 30VSK6



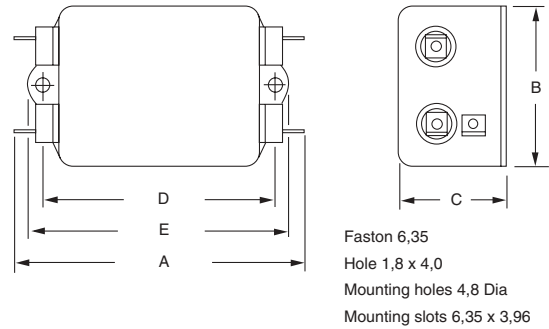
3SK3



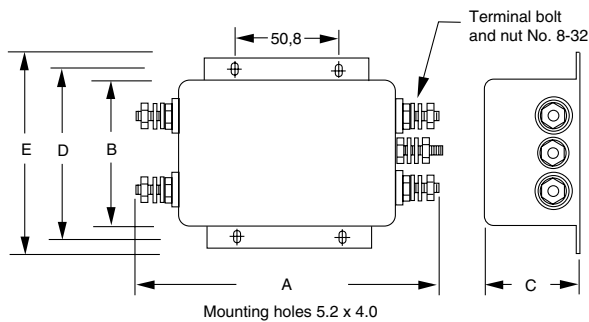
30ESK6C / 30VSK6C



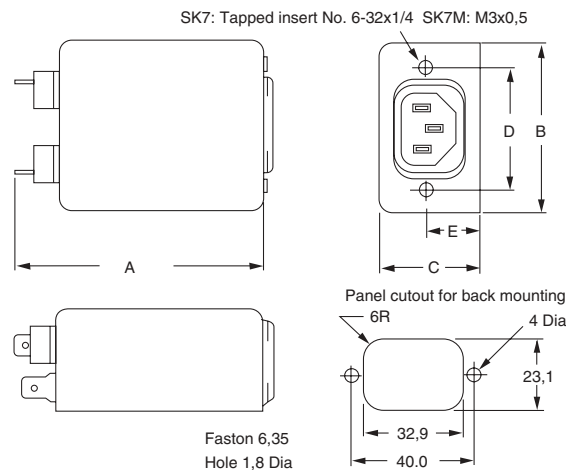
SK1



40VSK6

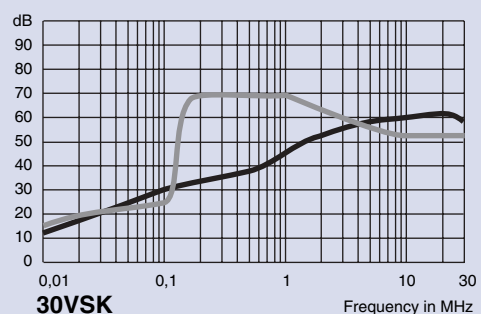
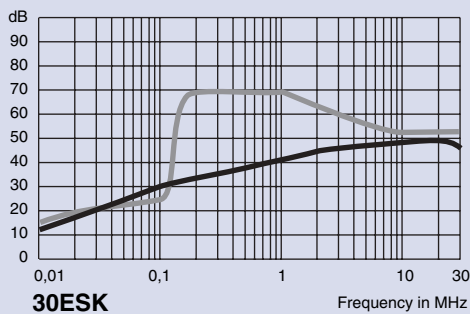


SK7 / SK7M



Typ. Insertion Loss

asym. — sym. —



Chassis-mount Filters

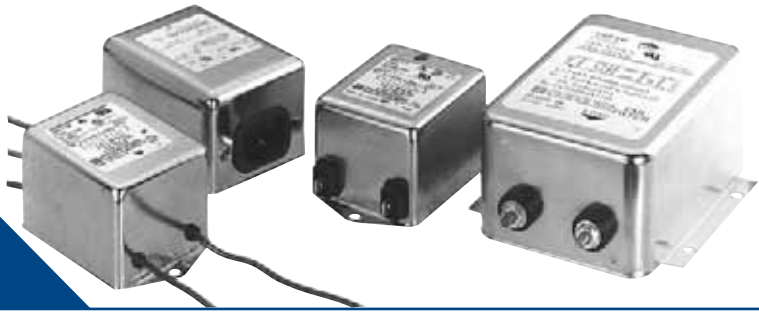
T-Series

Applications, special features:

- Optimized filter with regard to attenuation and size
- Very high symmetrical and asymmetrical attenuation
- Low leakage currents
- Especially suited for RFI suppression above 10 kHz
- Suitable for motor drive applications
- HT types for medical applications



according IEC 950

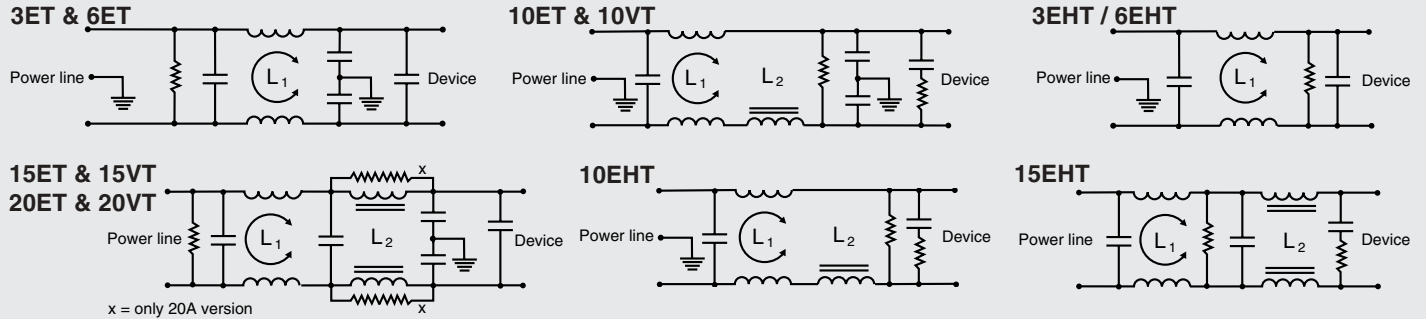


Type	Max.current UL/VDE	Max. leakage current	Capacity C _y	Inductance		Capacity C _x
				L ₁	L ₂	
3ET1	3A/2,75A	Line to ground	2x4nF	2x36,8mH		2x0,47μF
3ET3	3A/2,75A		2x4nF	2x36,8mH		2x0,47μF
3ET7	3A/2,75A		2x4nF	2x36,8mH		2x0,47μF
6ET1	6A/5A	250VAC/50Hz	2x4nF	2x18,5mH		2x0,47μF
6ET3	6A/5A		2x4nF	2x18,5mH		2x0,47μF
6ET7	6A/5A		2x4nF	2x18,5mH		2x0,47μF
10ET1	10A/8A	0,5mA	2x4nF	2x9,5mH	0,074mH	1,77μF
10ET3	10A/8A		2x4nF	2x9,5mH	0,074mH	1,77μF
15ET1	15A/12A		2x4nF	2x5,04mH	2x0,03mH	2,07μF
15ET6	15A/12A	1,25mA	2x4nF	2x5,04mH	2x0,03mH	2,07μF
10VT1	10A/8A		2x10nF	2x9,5mH	0,074mH	1,77μF
10VT3	10A/8A		2x10nF	2x9,5mH	0,074mH	1,77μF
15VT1	15A/12A	2,1mA	2x15nF	2x5,04mH	2x0,03mH	2,07μF
15VT6	15A/12A		2x15nF	2x5,04mH	2x0,03mH	2,07μF
20ET1/6	20A/20A		0,5mA	2x4nF	2x3,88mH	2x0,03mH
20VT1/6	20A/20A	2,1mA	2x15nF	2x3,88mH	2x0,03mH	2,07μF

For medical Applications

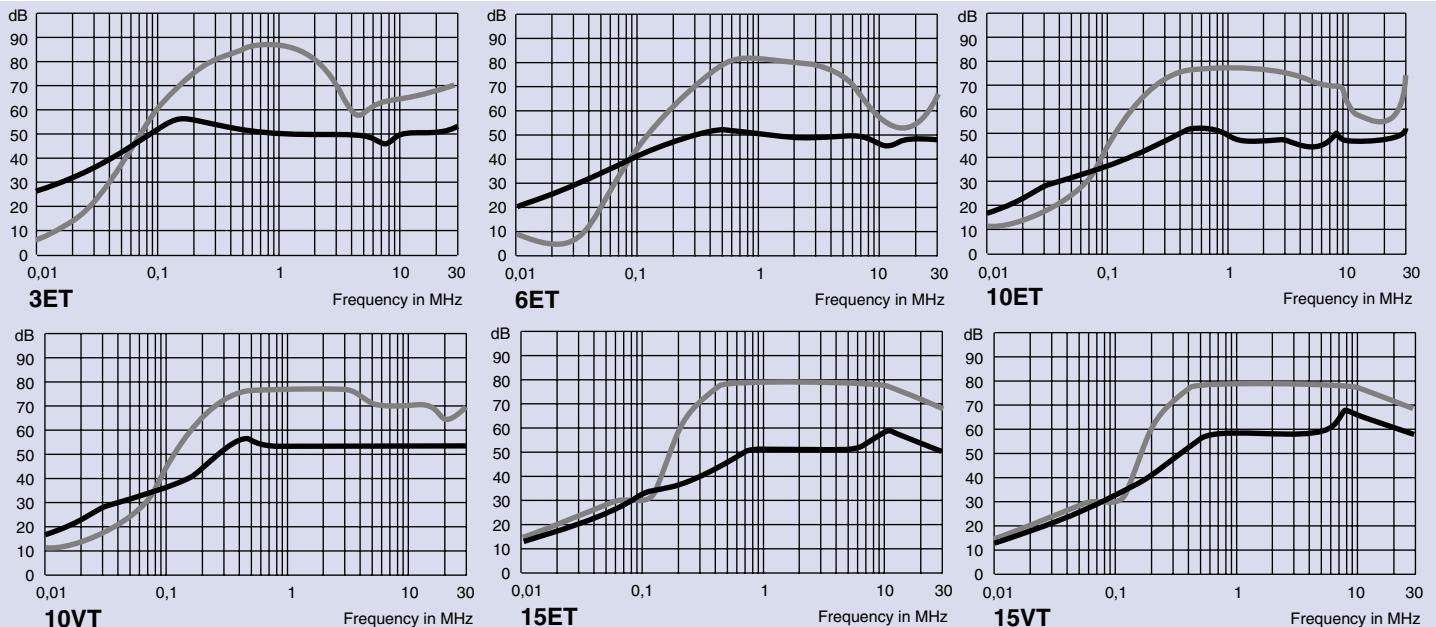
Type	Max.current UL/VDE	Max. leakage current	Inductance		Capacity C _x
			L ₁	L ₂	
3EHT1	3A/2,75A	Line to ground	2x36,8mH		2x0,47μF
3EHT3	3A/2,75A		2x36,8mH		2x0,47μF
3EHT7	3A/2,75A		2x36,8mH		2x0,47μF
6EHT1	6A/5A	250VAC/50Hz	2x18,5mH		2x0,47μF
6EHT3	6A/5A		2x18,5mH		2x0,47μF
6EHT7	6A/5A		2x18,5mH		2x0,47μF
10EHT1	10A/8A	5μA	2x9,5mH	0,074mH	1,77μF
10EHT3	10A/8A		2x9,5mH	0,074mH	1,77μF
15EHT1	15A/12A		2x5,04mH	2x0,03mH	2,07μF
15EHT6	15A/12A		2x5,04mH	2x0,03mH	2,07μF

Electrical Schematic

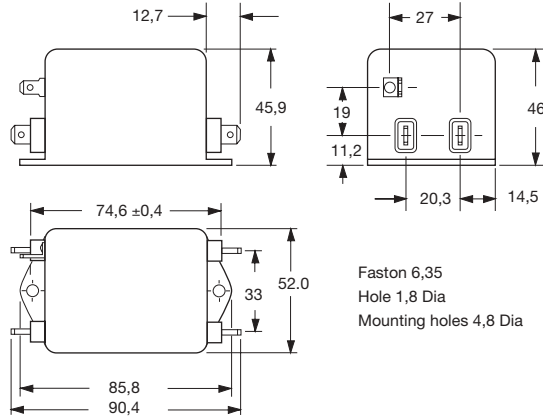


Typ. Insertion Loss

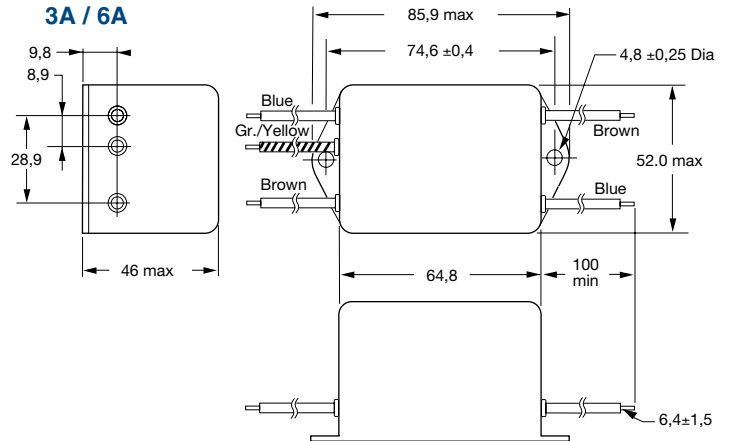
asym. — sym. —



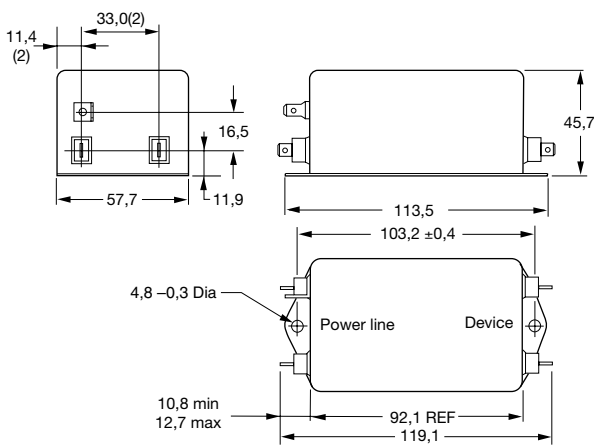
**Terminal variant 1
3A / 6A**



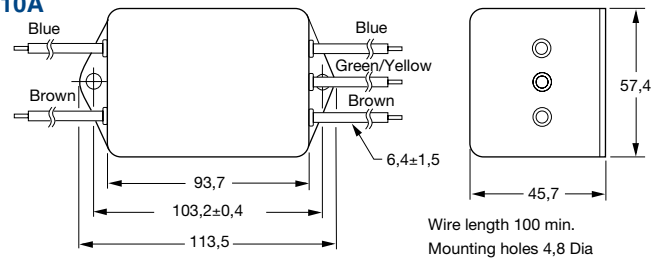
**Terminal variant 3
3A / 6A**



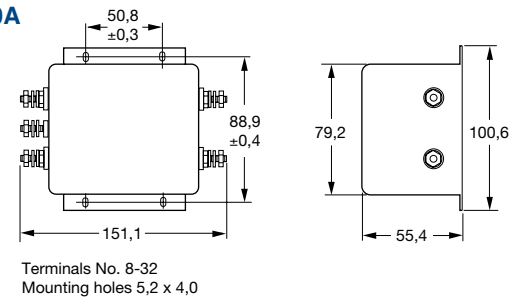
**Terminal variant 1
10A**



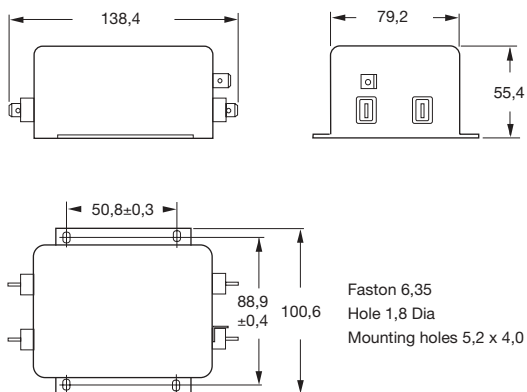
**Terminal variant 3
10A**



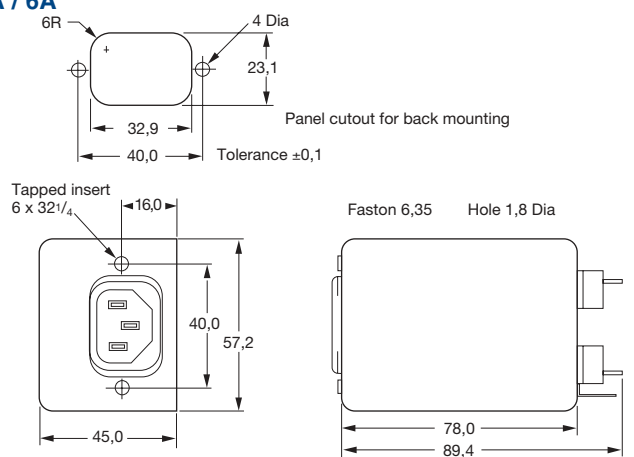
**Terminal variant 6
15A / 20A**



**Terminal variant 1
15A / 20A**

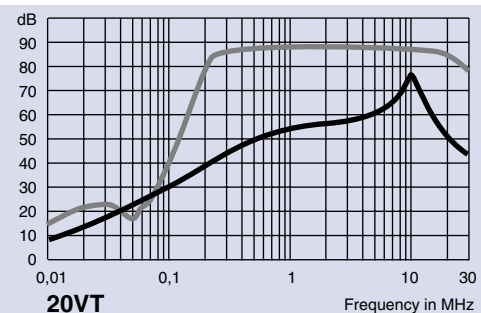
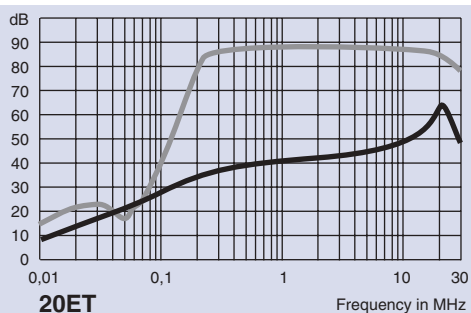


**Terminal variant 7
3A / 6A**



Typ. Insertion Loss

asym. — sym. —



Chassis/Back Panel Mount Filters with/without IEC Connector

EP/VP-Series

- Two stage filter series for equipment with interferences difficult to suppress



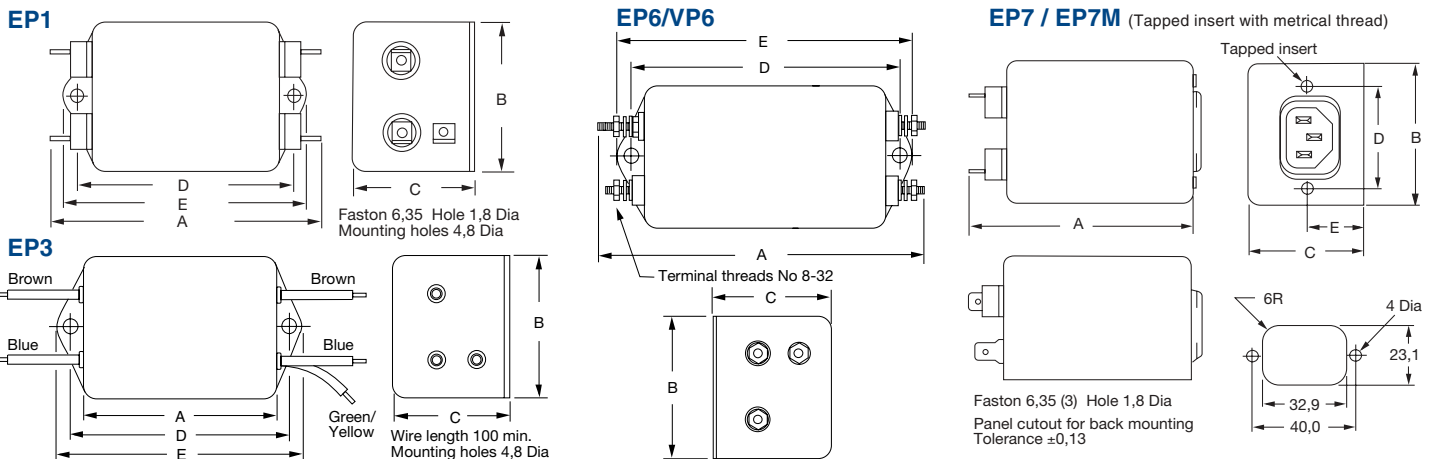
according IEC 950



Type	Max.current UL/VDE	Inductance L ₁	L ₂	Capacity		Tapped insert	Dimensions (mm)				
				C _x	C _y		A	B	C	D	E
3EP1	3A	2x7mH	2x7mH	3x0,27μF	2x2,8nF	6-32x1/4 M3x0,5	97,7	52,3	45,1	74,6	85,1
3EP3	3A	2x7mH	2x7mH	3x0,27μF	2x2,8nF		65,0	52,3	45,1	74,6	85,1
3EP7	3A	2x7mH	2x7mH	3x0,27μF	2x2,8nF		81,5	57,1	45,1	40,0	16,8
3EP7M	3A	2x7mH	2x7mH	3x0,27μF	2x2,8nF		81,5	57,1	45,1	40,0	16,8
6EP1	6A/5A	2x7mH	2x7mH	3x0,27μF	2x2,8nF		168,1	52,4	57,9	142,9	153,2
6EP3	6A/5A	2x7mH	2x7mH	3x0,27μF	2x2,8nF		135,3	52,4	57,9	142,9	153,2
10EP1	10A/8A	2x7mH	2x7mH	3x0,27μF	2x2,8nF		168,1	52,4	70,6	142,9	153,2
10EP3	10A/8A	2x7mH	2x7mH	3x0,27μF	2x2,8nF		135,3	52,4	70,6	142,9	153,2
20EP1/6	20A/20A	2x1,73mH	2x1,73mH	2x1,0μF	2x2,8nF		127,3	57,7	45,7	103,2	113,5
20VP1/6	20A/20A	2x1,73mH	2x1,73mH	2x1,0μF	2x10nF		127,3	57,7	45,7	103,2	113,5

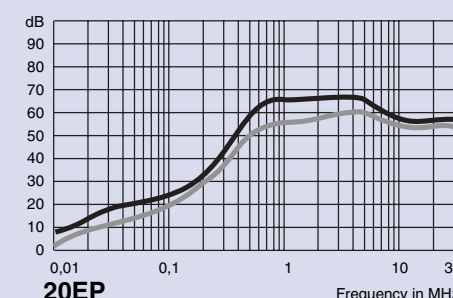
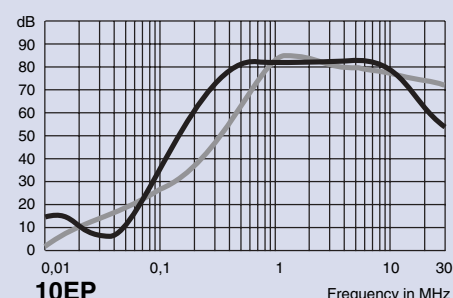
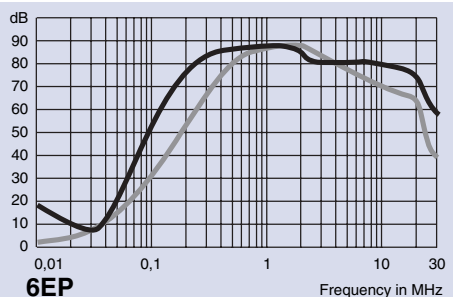
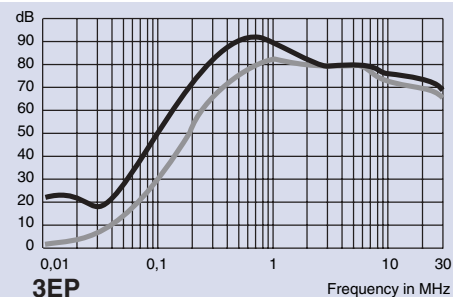
Max. leakage current line to ground 0.4 mA at 250 VAC/50 Hz

Case Styles and typ. Sizes

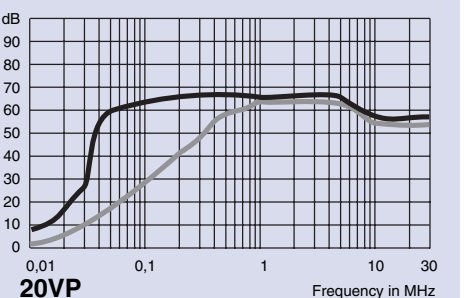
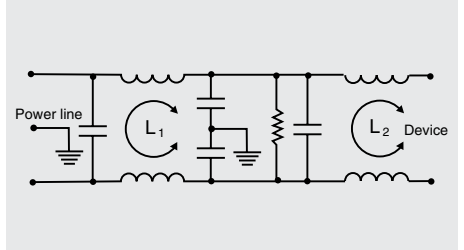


Typ. Insertion Loss

asym. — sym. —



Electrical Schematic



Chassis-mount Filters

X-,Z-Series

- Optimized differential and common mode performance filter to clean up switch mode power supplies and similar equipment



according IEC 950



Type	Max.current UL/VDE	Inductance	Capacity		Dimensions (mm)				
			C _x	C _y	A	B	C	D	E
3EX1	3A/2A	2x2,3mH	0,27+0,1µF	2x4nF	76,7	46,7	29,5	60,3	70,8
3EZ1*	3A/2A	2x13,77mH	0,47+0,27µF	2x4nF	89,9	52,8	33,3	74,6	85,1

Max. leakage current line to ground 0.5 mA at 250 VAC/50 Hz

*Suitable for frequency applications

For medical Applications

Type	Max.current UL/VDE	Inductance	Capacity		Dimensions (mm)				
			C _x	C _y	A	B	C	D	E
3EHZ1	3A/2A	2x13,77mH	0,47+0,27µF	-	89,9	52,8	33,3	74,6	85,1

Max. leakage current line to ground 250 VAC/50 Hz 5 µA

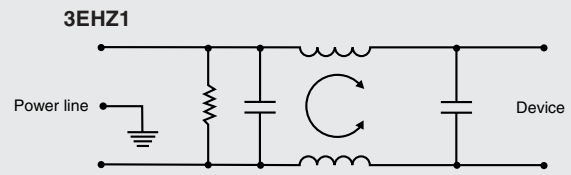
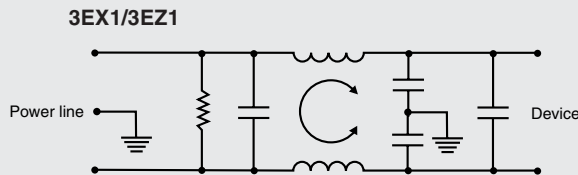
X-Series -Normal attenuation

Example: RFI suppression in electronic devices acc. to FCC Part 15J, Class B.

Z-Series -Very high attenuation

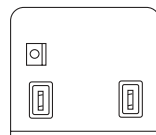
Example: RFI suppression in electronic devices also equipped with switching power supplies according to VDE 0871, Class B.

Electrical Schematic

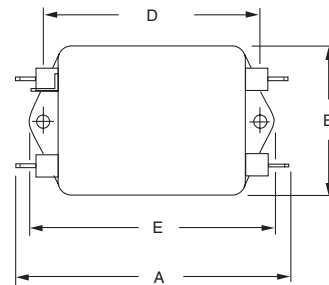


Case Styles and typ. Sizes

For PCB mounting also with plastic case available (see XP, YP, ZP Series)

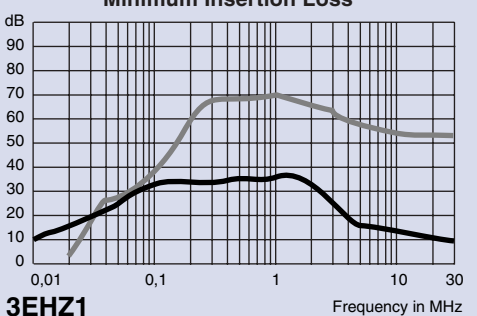
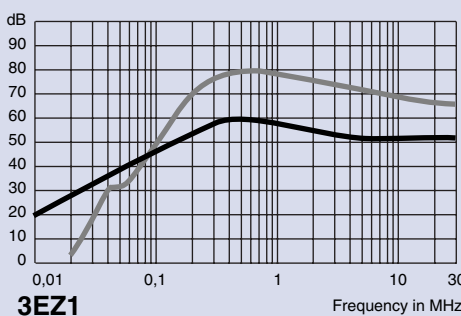
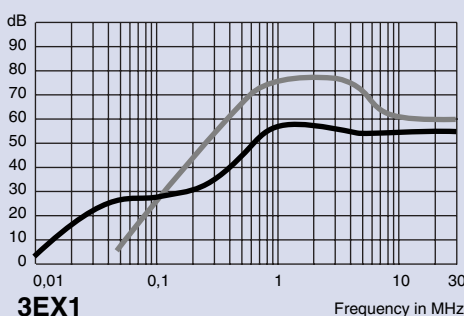


Faston 6,35 Mounting holes 4,8 Dia



Typ. Insertion Loss

asym. — sym. —



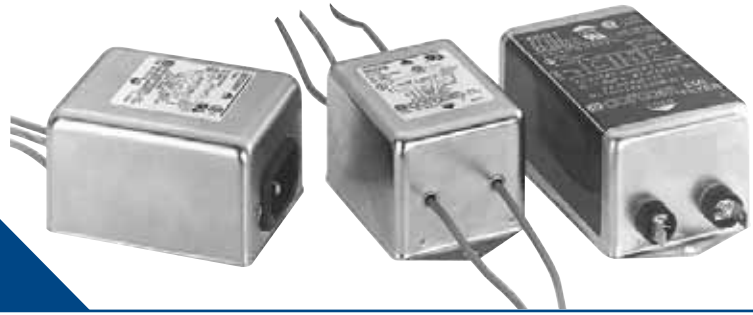
Chassis/Back Panel Mount Filters with/without IEC Connectors

Q-Series

- Very high attenuation and low leakage currents also at high current transients (switching power supplies)
- Optimized filter with regard to attenuation and size (exceeding T-Series)
- Especially suited for RFI suppression in equipment above 10 kHz
- EHQ-types for medical applications

 For F3426 VDE only

according IEC 950



Type	Max.leak-age current	Capac. C _y	Type	Max.leak-age current	Capac. C _y	Max.current UL/VDE	Inductance		Capacity C _x	Tapped insert	Dimensions (mm)					
							L ₁	L ₂			A	B	C	D	E	
3EQ1*	Line to ground 250VAC	2x3nF	3VQ1	Line	2x10nF	3A/2A	2x31,8mH	2x0,4mH	2x0,47µF		97,8	52,4	45,1	74,6	84,6	
3EQ3*		2x3nF	3VQ3	to	2x10nF	3A/2A	2x31,8mH	2x0,4mH	2x0,47µF		65,0	52,4	45,1	74,6	84,6	
3EQ7		2x3nF	3VQ7	Ground	2x10nF	3A/2A	2x31,8mH	2x0,4mH	2x0,47µF	6-32x1/4	92,5	57,2	45,1	40,0	77,0	
3EQ8	50Hz	2x3nF	3VQ7M	250VAC	2x10nF	3A/2A	2x31,8mH	2x0,4mH	2x0,47µF	M 4x0,5	92,5	57,2	45,1	40,0	77,0	
3EQ8M	0,42mA	2x3nF	3VQ8	50Hz	2x10nF	3A/2A	2x31,8mH	2x0,4mH	2x0,47µF	6-32x1/4	77,8	57,2	45,1	40,0	16,0	
6EQ1*	0,5mA	2x4nF	3VQ8M	1,25mA	2x10nF	3A/2A	2x31,8mH	2x0,4mH	2x0,47µF	M 3x0,5	77,8	57,2	45,1	40,0	16,0	
6EQ3*		2x4nF				6A/5A	2x47,2mH	2x1,6mH	1,5+0,47µF		126,5	57,4	45,7	103,2	113,5	
6EQ8		2x4nF				6A/5A	2x47,2mH	2x1,6mH	1,5+0,47µF		93,6	57,4	45,7	103,2	113,5	
6EQ8M		2x4nF				6A/5A	2x47,2mH	2x1,6mH	1,5+0,47µF	6-32x1/4	135,2	50,7	44,1	40,0	68,6	
20EQ1		2x4nF		20VQ1		2x10nF	20A/20A	2x3,26mH	2x3,26mH	2x2,2µF	M 3x0,5	135,2	50,7	44,1	40,0	68,6
												168,1	52,6	57,9	142,9	153,2

*Suitable for frequency converter applications

For Medical Applications

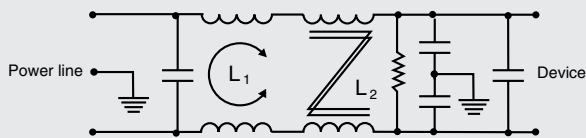
Type	Max.leak-age current	Max.current UL/VDE	Inductance		Capacity C _x	Tapped insert	Dimensions (mm)				
			L ₁	L ₂			A	B	C	D	E
3EHQ1	Line to ground 250VAC	3A/2A	2x31,8mH	2x0,4mH	0,27+0,27+0,47µF		97,8	52,4	45,1	74,6	84,6
3EHQ3		3A/2A	2x31,8mH	2x0,4mH	0,27+0,27+0,47µF		65,0	52,4	45,1	74,6	84,6
3EHQ8		3A/2A	2x31,8mH	2x0,4mH	0,27+0,27+0,47µF	6-32x1/4	77,8	57,2	45,1	40,0	16,0
3EHQ8M	50Hz	3A/2A	2x31,8mH	2x0,4mH	0,27+0,27+0,47µF	M 3x0,5	77,8	57,2	45,1	40,0	16,0
6EHQ1	5µA	6A/5A	2x47,2mH	2x1,6mH	1,5+0,47µF		126,5	57,4	45,7	103,2	113,5
6EHQ3		6A/5A	2x47,2mH	2x1,6mH	1,5+0,47µF		93,6	57,4	45,7	103,2	113,5
6EHQ8		6A/5A	2x47,2mH	2x1,6mH	1,5+0,47µF	6-32x1/4	135,2	50,7	44,1	40,0	68,6
6EHQ8M		6A/5A	2x47,2mH	2x1,6mH	1,5+0,47µF	M 3x0,5	135,2	50,7	44,1	40,0	68,6

Special Construction Style

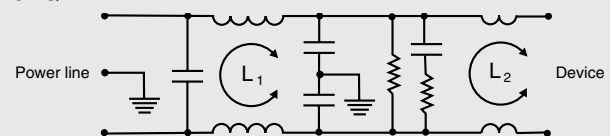
Type	Max. current VDE	Max. leakage current line to ground 250 VAC	Inductance		Capacity	
			L ₁	L ₂	C _x	C _y
F-3426B	1A	2,5mA	2x21,1mH	2x0,37mH	0,2µF	2x14nF

Electrical Schematic

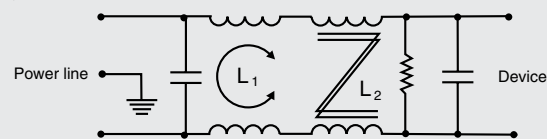
3EQ & 3VQ



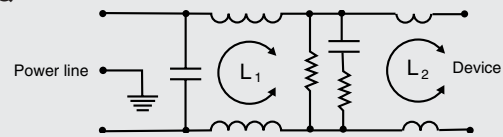
6EQ



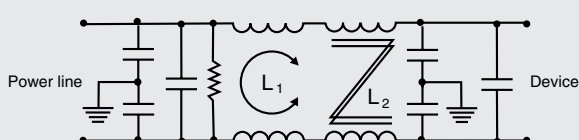
3EHQ



6EHQ

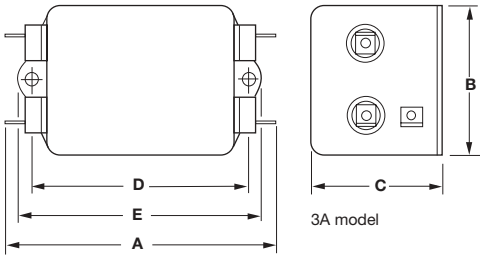


F-3426



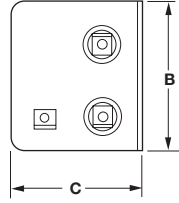
Case Styles and typ. Sizes

Q1



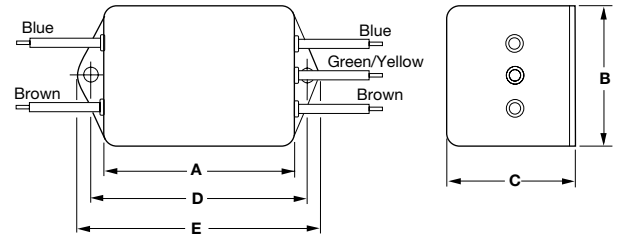
Faston 6,35
Hole 1,8 Dia
Mounting holes 4,8 Dia

3A model



6A model

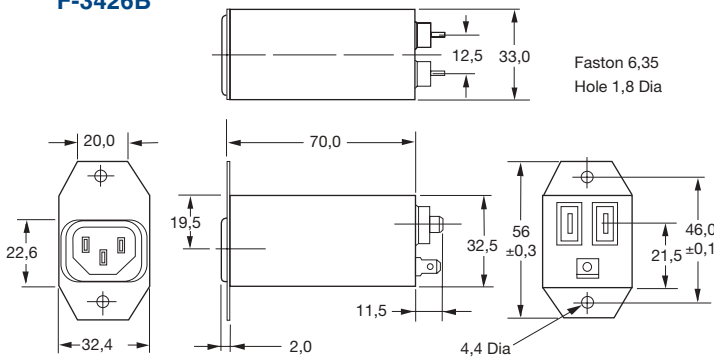
Q3



Wire length 100 min

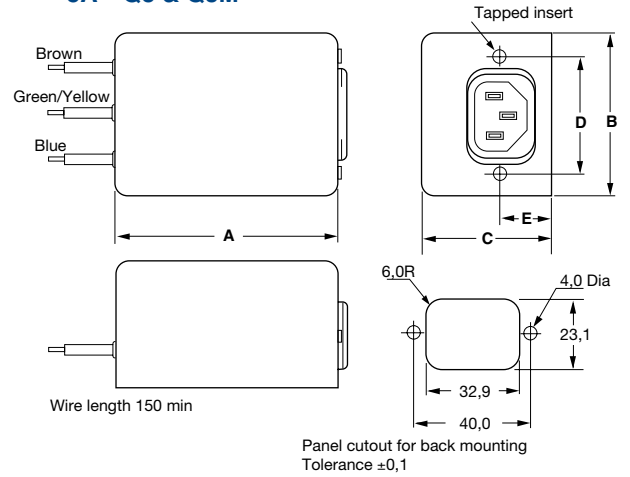
Mounting holes 4,8 Dia

F-3426B



Faston 6,35
Hole 1,8 Dia

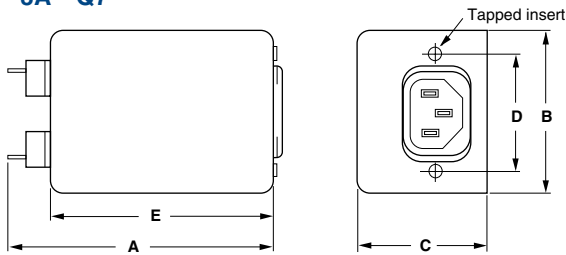
3A Q8 & Q8M



Wire length 150 min

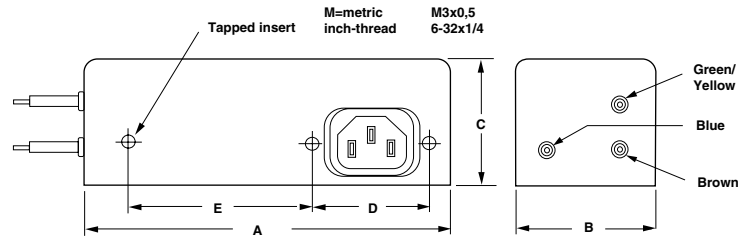
Panel cutout for back mounting
Tolerance $\pm 0,1$

3A Q7



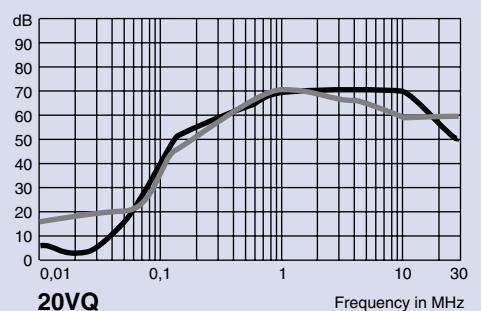
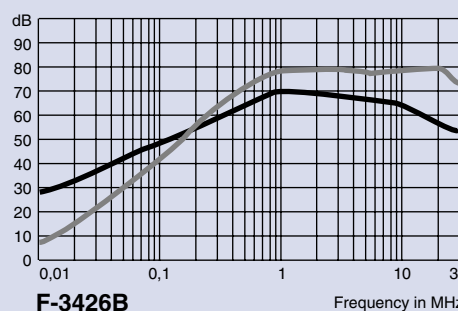
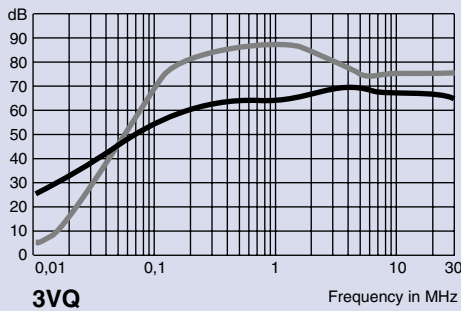
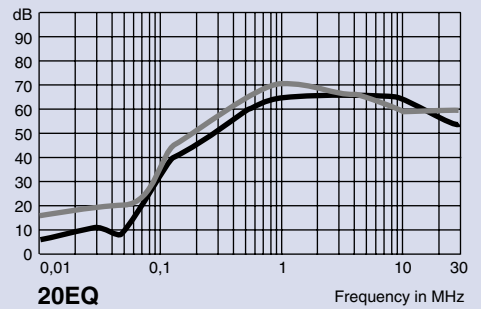
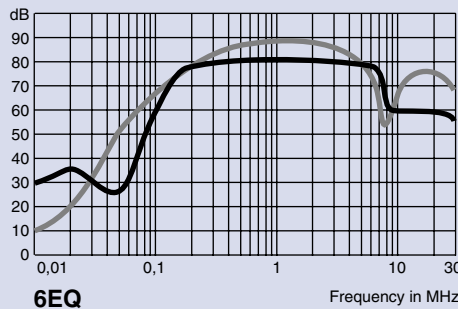
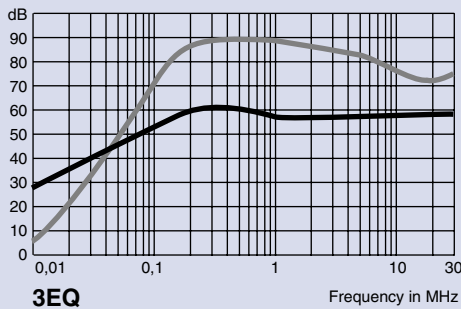
Wire terminals also valid for 6EQ3

6A Q8 & Q8M



Typ. Insertion Loss

asym. — sym. —



Chassis-mount Filters

FC-Series

- High performance single phase filter
- Suitable to meet latest EMC standards (EN55011, -14, UL1283 and EN133200)
- Applicable in single phase-powered FC-drives with long motor-cables
- Very high insertion loss
- Double stage design
- Shock protected screw type terminals
- Ideal for EMC-trouble shooting and EMC-refurbishing in the field



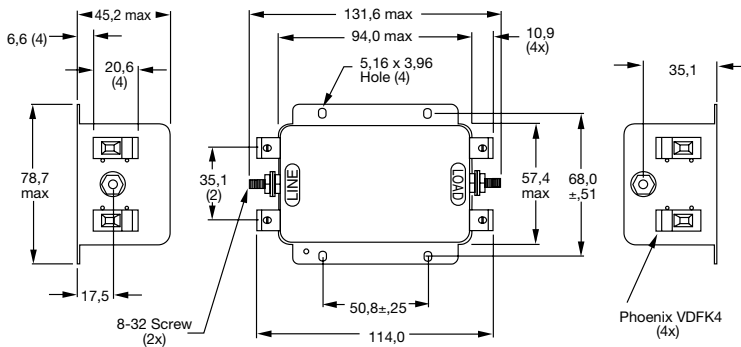
Type	Operating voltage AC 50/60Hz	Max. current	Leakage current 250V/50Hz	Inductance L	Capacity		Type of connection
					C _x	C _y	
6FC10	250V	6A	5,2mA	8,8mH	4,4µF	62nF	Terminal block 4mm ²
12FC10	250V	12A	5,2mA	5,6mH	4,4µF	62nF	Terminal block 4mm ²
16FC10	250V	16A	5,2mA	5,5mH	4,4µF	62nF	Terminal block 4mm ²
25FC10	250V	25A	5,2mA	5,0mH	4,4µF	62nF	Terminal block 6mm ²
36FC10	250V	36A	5,2mA	2,0mH	4,4µF	62nF	Terminal block 6mm ²
50FC10	250V	50A	6,5mA	2,0mH	6,6µF	77nF	Terminal block 6mm ²
12FC10B	250V	12A	7mA	5,4mH	4,4µF	62nF	Terminal block 4mm ²
16FC10B	250V	16A	7mA	4,9mH	4,4µF	62nF	Terminal block 4mm ²
25FC10B	250V	25A	7mA	5,0mH	4,4µF	62nF	Terminal block 6mm ²
36FC10B	250V	36A	7mA	2,0mH	4,4µF	62nF	Terminal block 6mm ²
50FC10B	250V	50A	7mA	2,0mH	6,6µF	62nF	Terminal block 6mm ²

Earth-conductor-connection on both sides with threaded studs

Caution: Increased leakage current - please observe mounting instructions

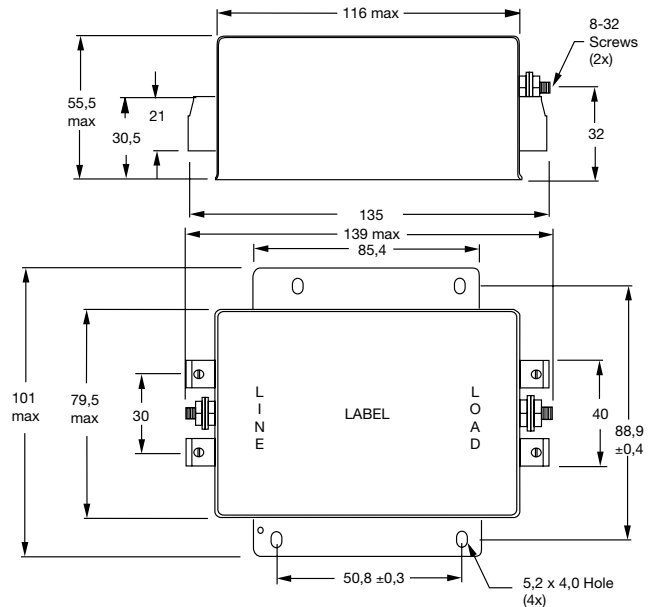
Case Styles and typ. Sizes

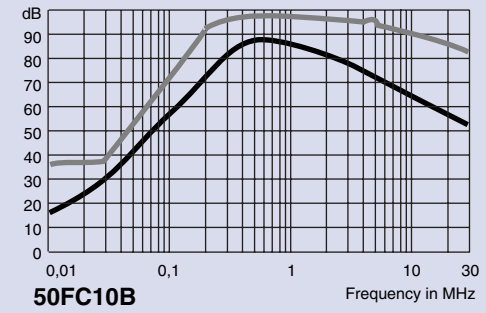
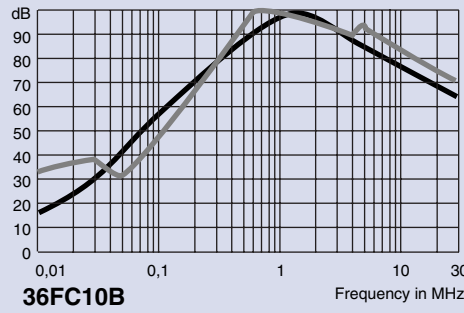
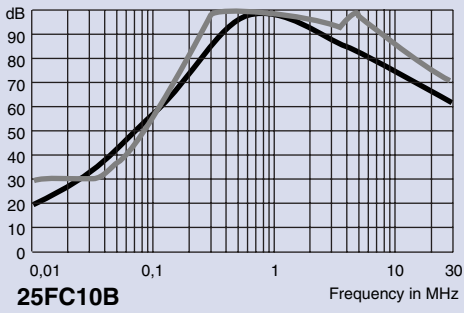
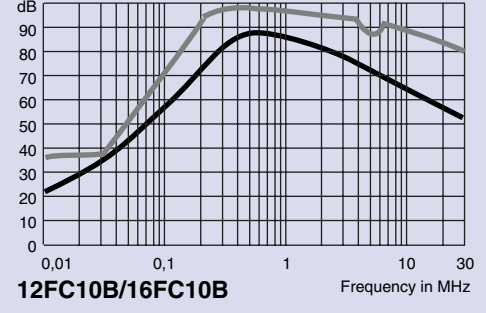
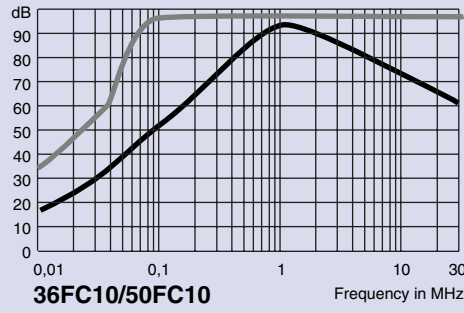
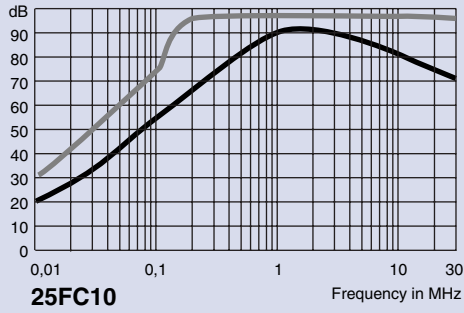
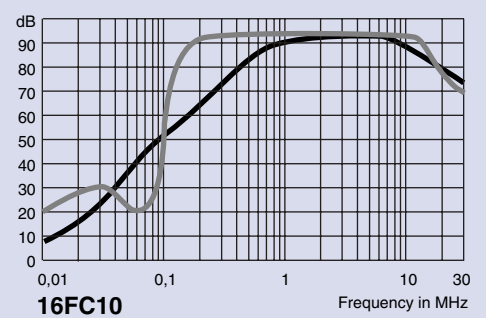
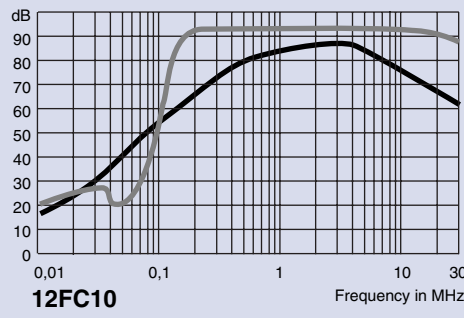
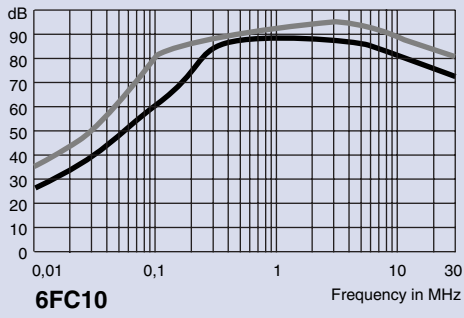
6FC10



Terminals
 6, 12, 16A : to 4mm²
 25, 36, 50A : to 6mm²

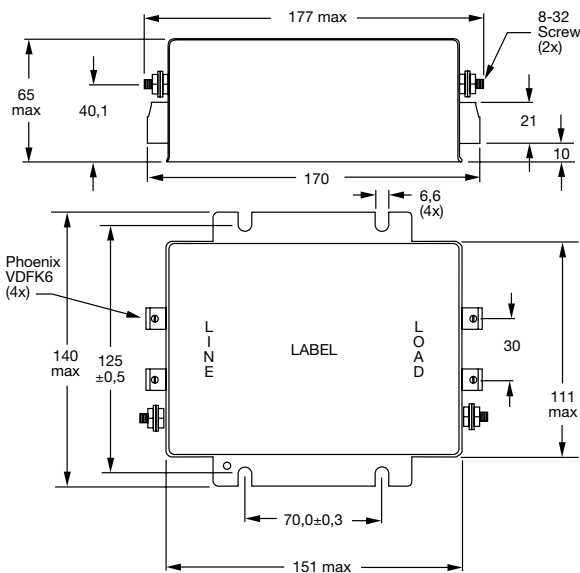
12FC10 / 16FC10





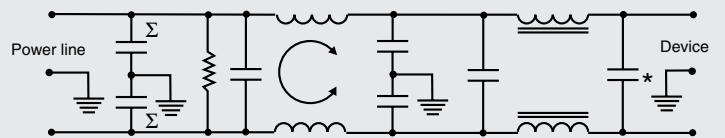
Case Styles and typ. Sizes

25FC10 / 36FC10 / 50FC10



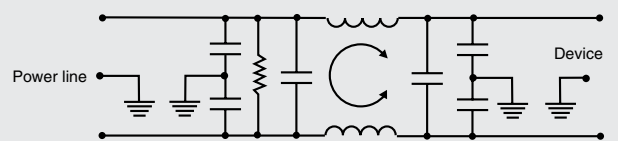
Electrical Schematic

FC10



* 50A only
Σ 25, 36 and 50A only

FC10B



2-Phase Filters

IK-Series

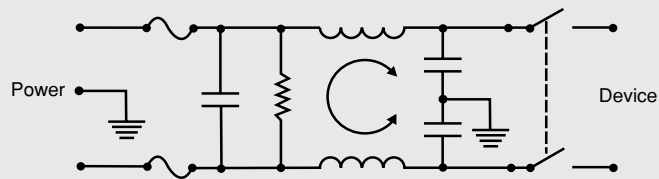
- Designed for 2-phase industrial applications

according IEC 950



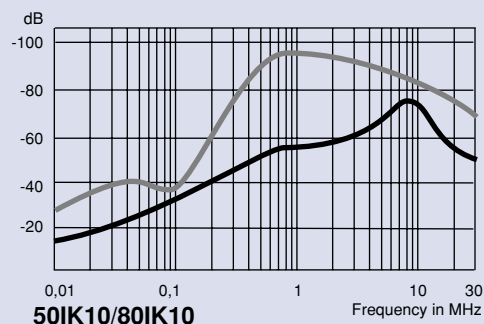
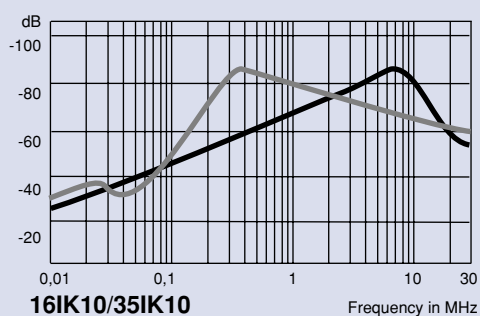
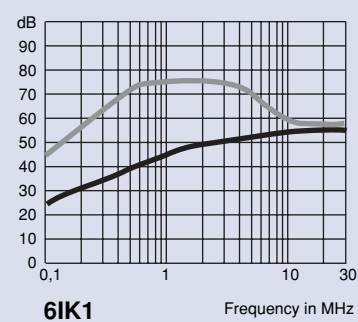
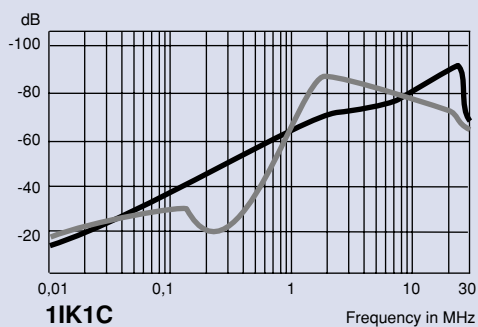
Type	Operating voltage AC 50/60Hz	Max. current	Max. leakage current 250V/50Hz	Inductance	Capacity		Connections	
					C_x	C_y	Power line	Device
11K1C	500V	1x1A	1,2mA	1,1mH	0,22 μ F	11nF	Faston	Faston
61K1	480V	2x6A	1,2mA	1,9mH	0,54 μ F	11nF	Faston	Faston
161K10	480V	2x16A	3,2mA	6,1mH	2,2 μ F	30nF	Terminal screw	Cable
351K10	480V	2x35A	3,2mA	3,0mH	2,2 μ F	30nF	Terminal screw	Cable
501K10	480V	2x50A	3,2mA	1,7mH	2,2 μ F	30nF	Terminal screw	Terminal screw
801K10	480V	2x80A	7,9mA	1,0mH	2,2 μ F	94nF	Terminal screw	Terminal screw

Electrical Schematic

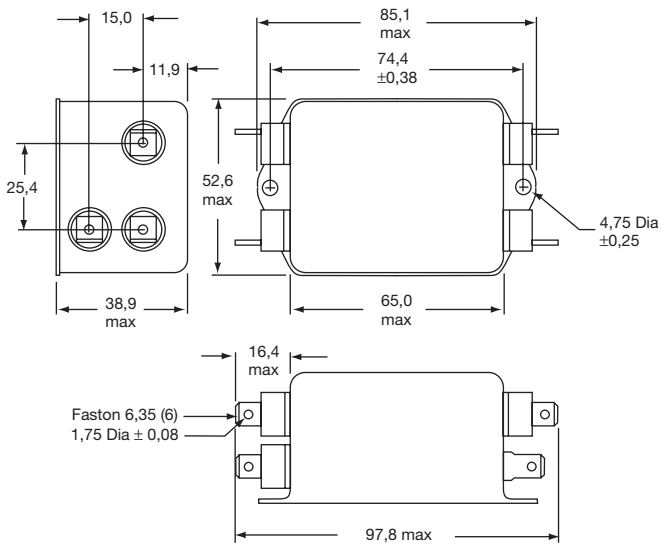


Typ. Insertion Loss

asym. — sym. —

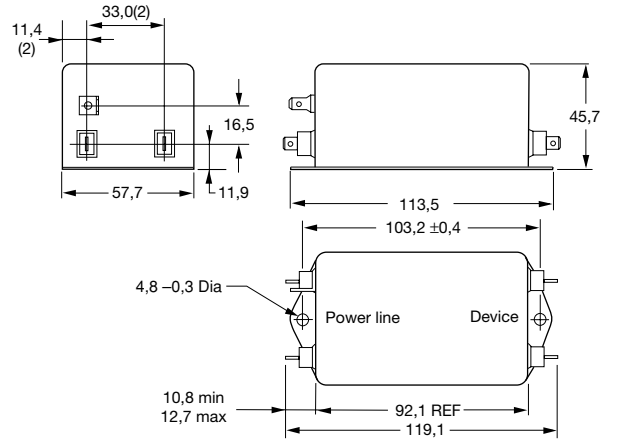


1IK1C

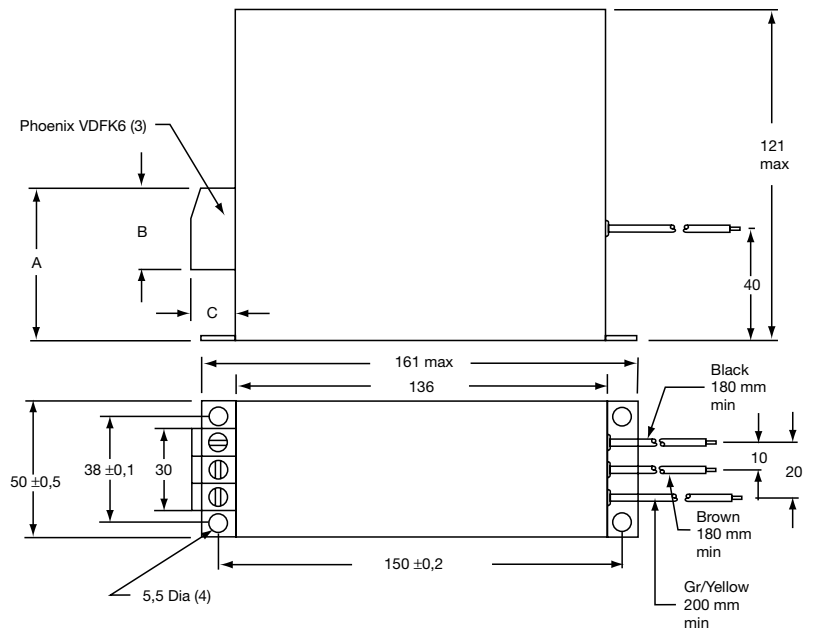


Type	Dimensions		
	A	B	C
16IK10	50,5	21	11
35IK10	55,5	31	16

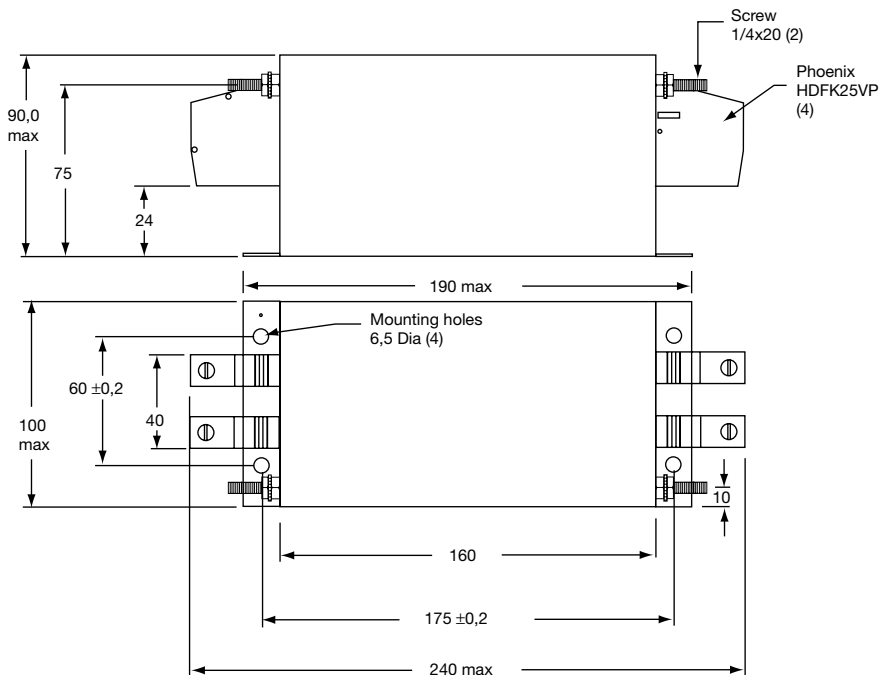
6IK1



16IK10/35IK10



50IK10/80IK10



3-Phase Filters

A-Series

3-phase RFI filters with high attenuation in wye/delta applications with integrated ground-inductor

- Max. operating voltage 440V

Main Keypoints

- Effective by symmetrical and asymmetrical load
- Universal possibility in the industrial field
- Input filters for motor drives



up to 30A

20AYT6C and 60AYT6C also TÜV

according IEC 950



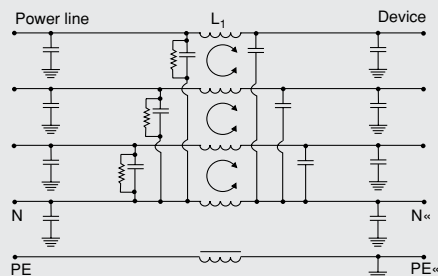
Type	Max. current UL	Max. voltage	Inductance		Capacity		Ground wire	Dimensions (mm)				
			L ₁	L ₂	C _x	C _y		A	B	C	D	E
20AYP6C	20A	440V	4x4,44mH	—	3x3,2µF+ 6x47nF	4x18nF	0,261mH	224,0	141,5	65,0	117,2	38,1
20AYT6C	20A	440V	4x3,5mH	4x3,5mH	6x1,5µF+ 3x1,47µF	4x26nF	0,261mH	351,0	141,5	65,0	117,2	38,1
30AYP6C	30A	440V	4x1,97mH	—	3x3,2µF 6x47nF	4x18nF	0,261mH	224,0	141,5	65,0	117,2	38,1
30AYT6C	30A	440V	4x1,66mH	4x1,66mH	6x1,5µF 3x1,47µF	4x26nF	0,261mH	351,0	141,5	65,0	117,2	38,1
45AYP6C	45A	440V	4x1,1mH	—	6x1,0µF	8x10nF	0,261mH	239,5	175,8	122,4	151,1	95,3
45AYT6C	45A	440V	4x1,1mH	4x1,1mH	9x1,5µF	4x26nF	0,261mH	351,3	175,8	122,4	151,1	95,3
60AYP6C	60A	440V	4x0,74mH	—	6x1,0µF	8x10nF	0,242mH	239,5	175,8	122,4	151,1	95,3
60AYT6C	60A	440V	4x0,74mH	4x0,74mH	9x1,5µF	4x26nF	0,242mH	351,3	175,8	122,4	151,1	95,3

Max. leakage current lead/ground 3.4 mA at 250 VAC/50 Hz

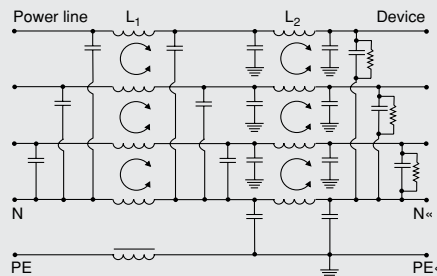
8 mounting studs No. 8-32 for installation. 10 mounting studs 1/4"x20 with nuts and washers for cable connection.

Electrical Schematic

AYP6C

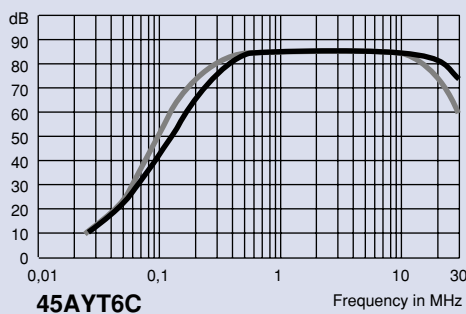
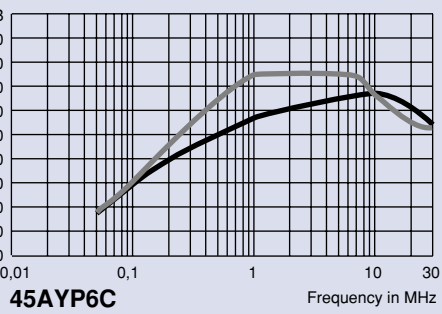
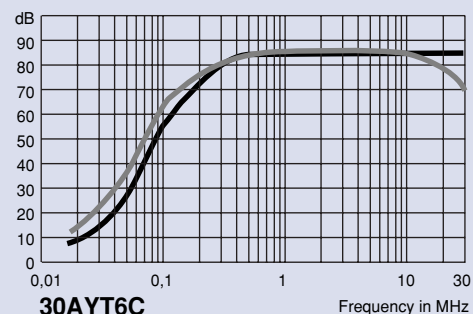
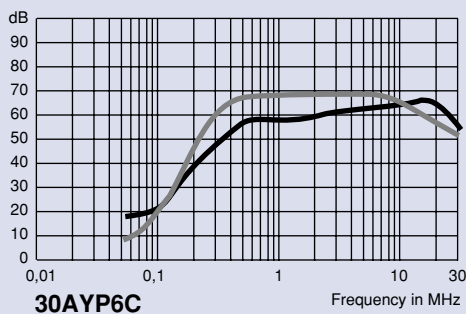
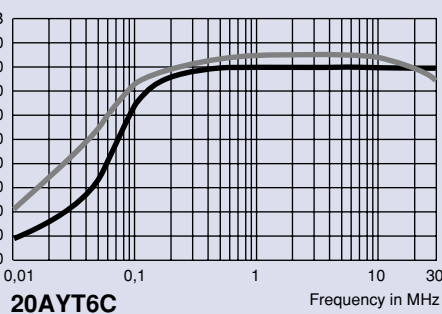
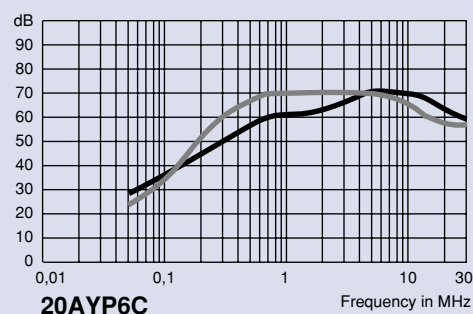


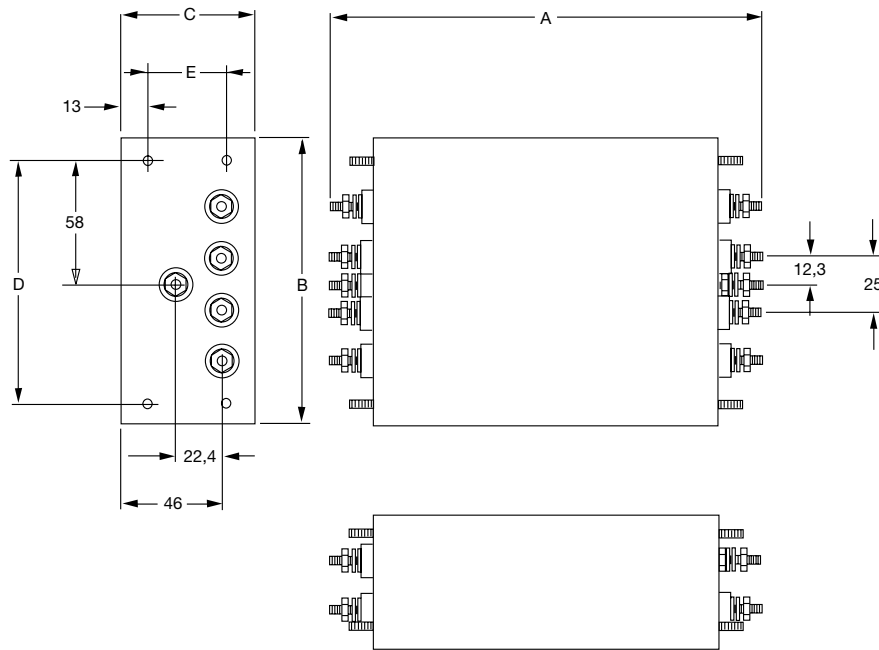
AYT6C



Typ. Insertion Loss

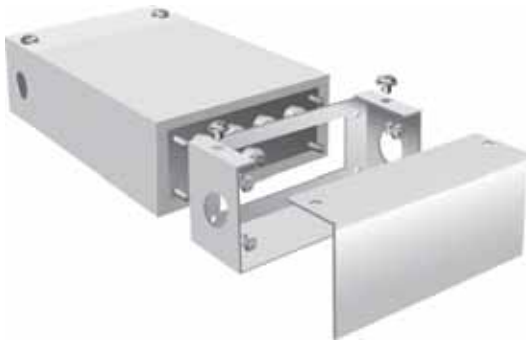
asym. — sym. —



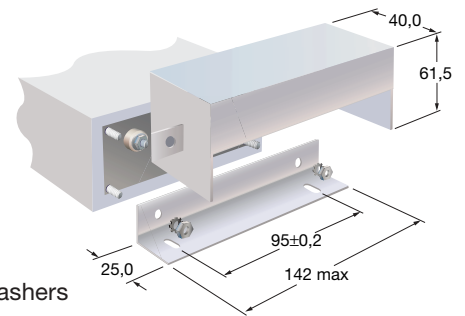


Mounting Accessories

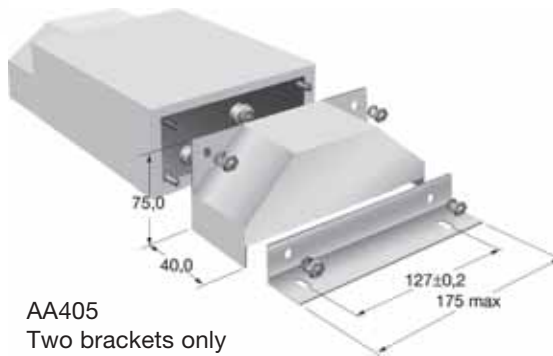
Shock protection incl. nuts and lock washers
 AA406 for 20/30A version
 AA407 for 45/60A version



Shock protection incl. nuts and lock washers
 AA406A for 20/30A version



Shock protection incl. nuts and lock washers
 AA407A for 45/60A version

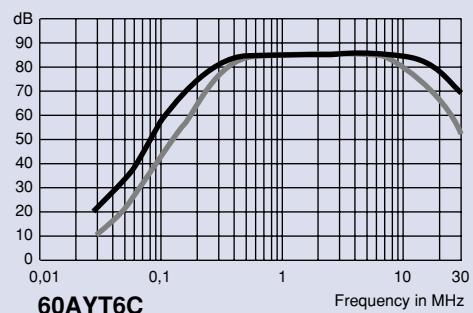
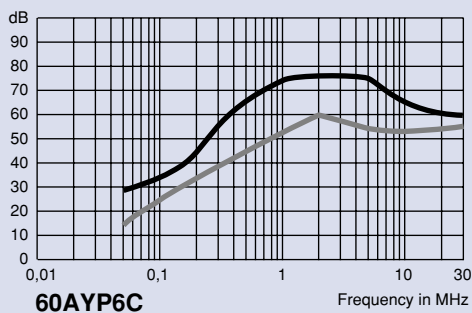


AA400
 Two brackets only

AA405
 Two brackets only

Typ. Insertion Loss

asym. — sym. —



3-Phase plus Neutral Filters

AYC-Series

- Suitable to meet latest EMC standards (EN55011, -14, UL1283 and EN133200)
- Designed for very noisy delta and wye applications, e.g. frequency converters with long motor cables
- Very high insertion loss
- Low leakage currents
- Ideal for EMC - trouble shooting and EMC - refurbishing in the field
- Nominal operating voltage 480V

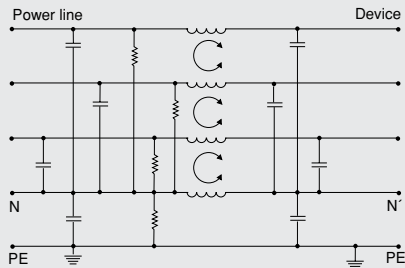
 (pending)





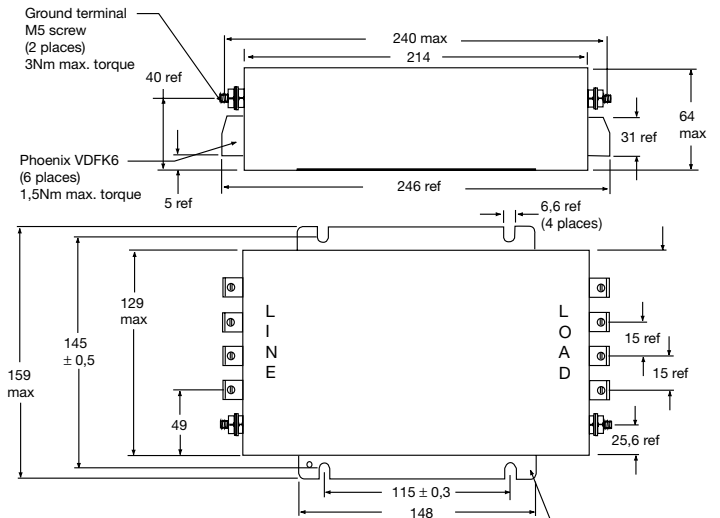
Type	Operating voltage AC 50/60Hz	Max. current	Max. leakage current voltage drop N to PE	Inductance	Capacity		Terminal in-/output
					C _x	C _y	
16AYC10B	480V	4x16A	0,70mA/V	2,66mH	4,5µF	2µF	Terminal block 4mm ²
25AYC10B	480V	4x25A	0,70mA/V	3,96mH	6,6µF	2µF	Terminal block 6mm ²
36AYC10B	480V	4x36A	0,70mA/V	1,66mH	6,6µF	2µF	Terminal block 10mm ²
63AYC10B	480V	4x63A	0,70mA/V	1,00mH	8,8µF	2µF	Terminal block 16mm ²
80AYC10B	480V	4x80A	0,70mA/V	0,69mH	8,8µF	2µF	Terminal block 50mm ²
110AYC10B	480V	4x110A	0,70mA/V	0,53mH	8,8µF	2µF	Terminal block 50mm ²
150AYC10B	480V	4x150A	0,70mA/V	0,53mH	11,0µF	2µF	Terminal block 50mm ²
150AYC10B-95	480V	4x150A	0,70mA/V	0,53mH	11,0µF	2µF	Terminal block 95mm ²
180AYC10B	480V	4x180A	1,05mA/V	0,35mH	13,2µF	3µF	Terminal block 95mm ²
200AYC10B	480V	4x200A	1,05mA/V	0,35mH	13,2µF	3µF	Terminal block 95mm ²

Electrical Schematic

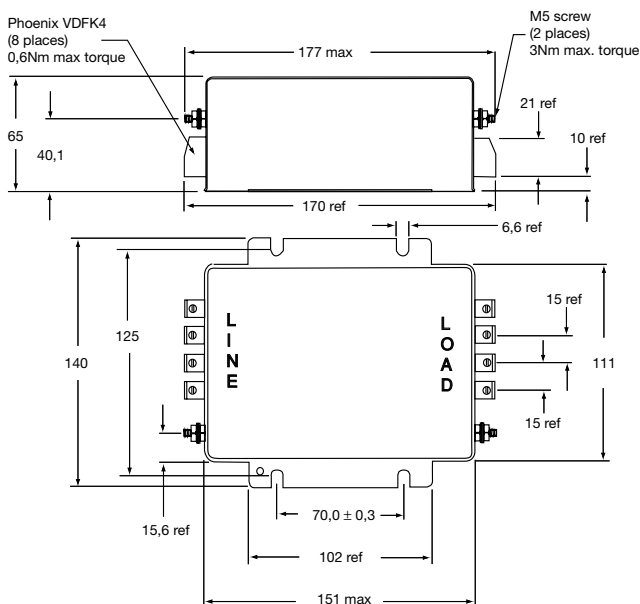


Case Styles and typ. Sizes

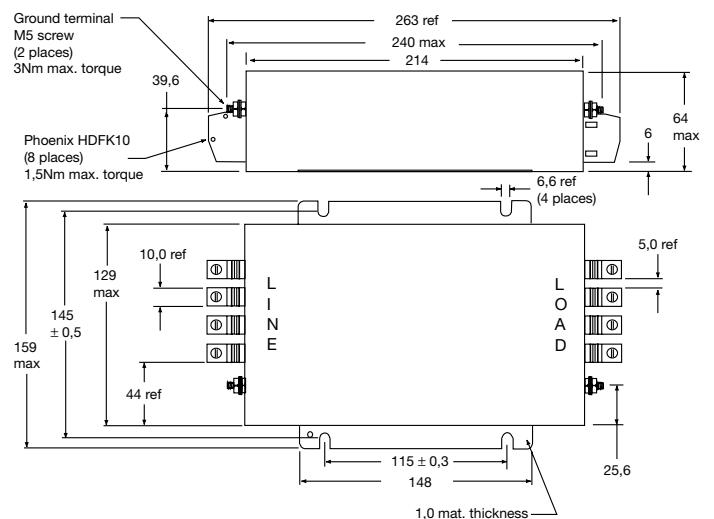
25AYC10B

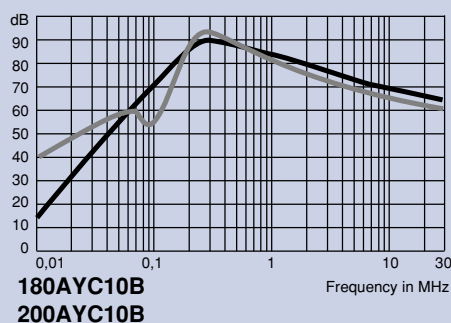
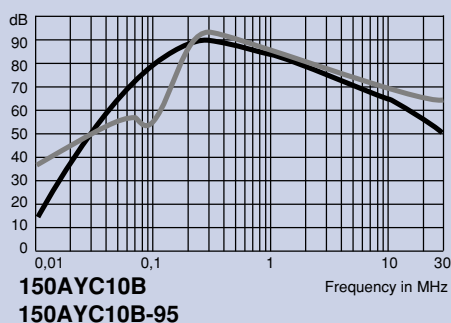
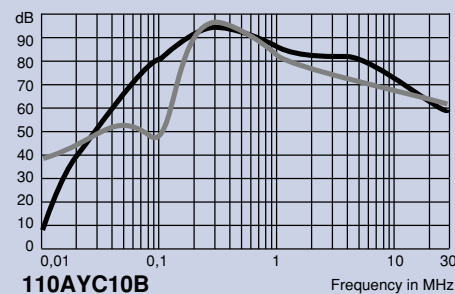
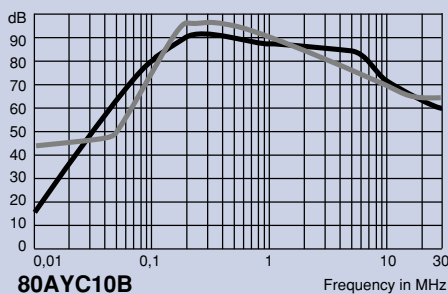
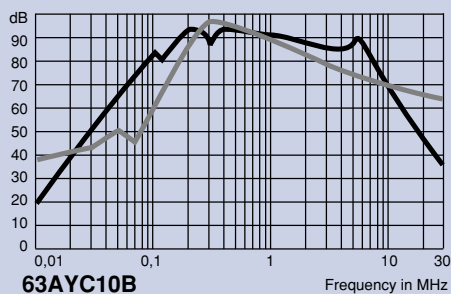
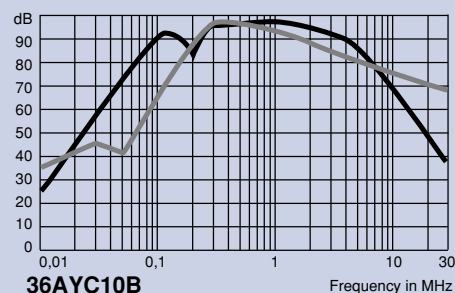
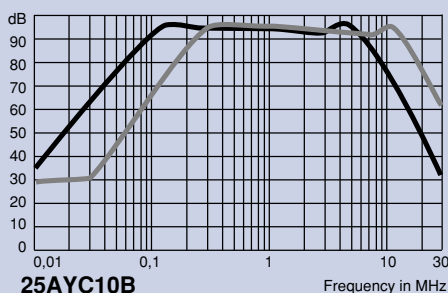
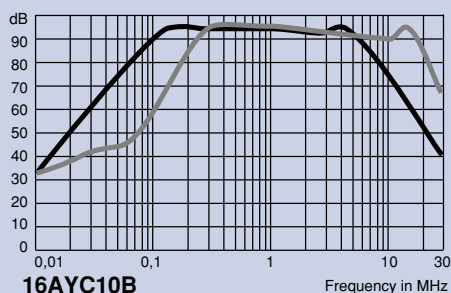


16AYC10B



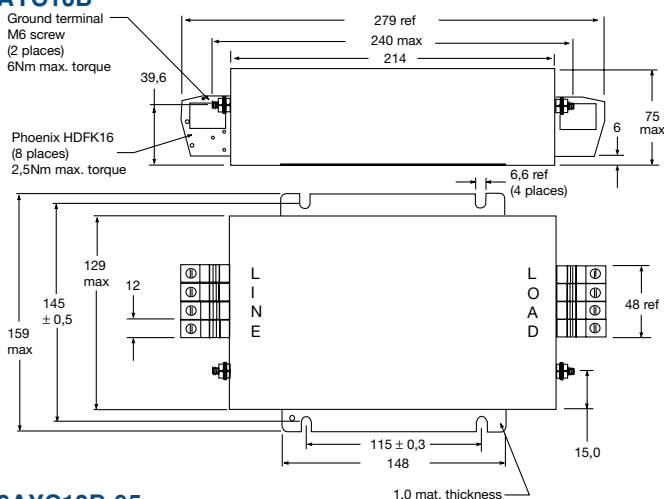
36AYC10B



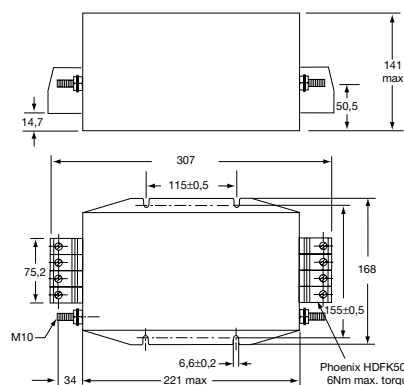


Case Styles and typ. Sizes

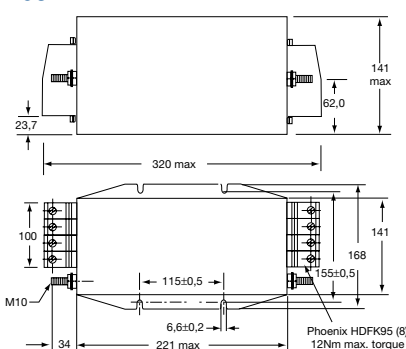
63AYC10B



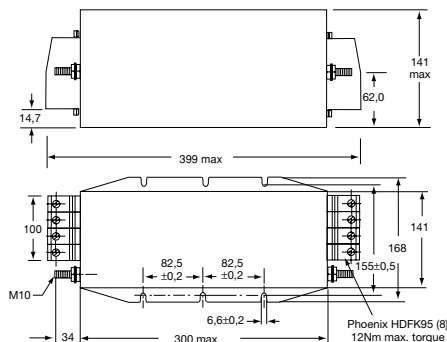
80AYC10B
110AYC10B
150AYC10B



150AYC10B-95



180AYC10B
200AYC10B



3-Phase Filters

ADT-Series

- Very high insertion loss for delta applications and difficult cases of RFI suppression
- Max. operating voltage 480 VAC/Ph/Ph
- EMC conform design
- Shielding ≥ 100 dB
- Voltage drop $\leq 1\%$
- Peak current carrying capacity 15 Min/140% I_{nom}
- Case sheet metal, hermetically sealed, corrosion protected, varnished surface

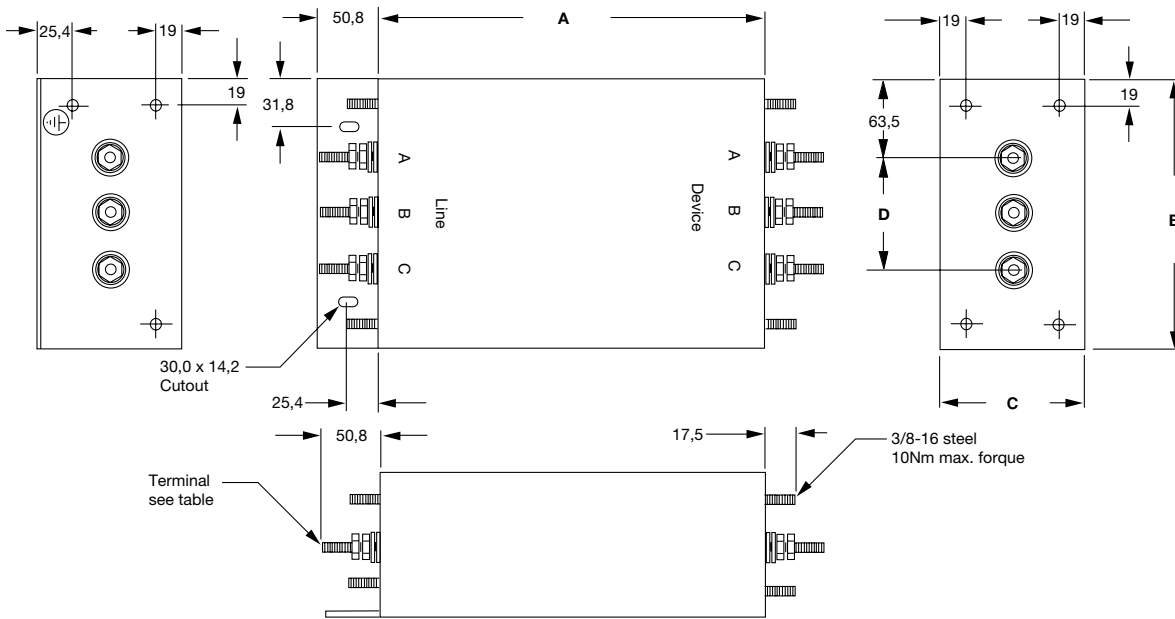


Type	Max. current	Max. leakage current 230 VAC/50 Hz	Dimensions				Terminal thread	Type	Max. current	max. leakage current 230 VAC/50 Hz	Dimensions				Terminal thread	Max. torque
			A	B	C	D					A	B	C	D		
63ADT6	63A	0,76 A	254,0	254,0	89,0	127,0	3/8-16	63ADT6-S	63A	1,5 A	381,0	254,0	114,3	127,0	3/8-16	2Nm
100ADT6	100A	0,76 A	381,0	254,0	114,3	127,0	3/8-16	100ADT6-S	100A	2,7 A	381,0	279,4	114,3	127,0	3/8-16	2Nm
160ADT6	160A	0,76 A	381,0	254,0	114,3	127,0	7/16-20	160ADT6-S	160A	2,7 A	457,2	330,2	114,3	177,8	7/16-20	5Nm
200ADT6	200A	0,76 A	381,0	254,0	114,3	127,0	7/16-20	200ADT6-S	200A	2,7 A	457,2	330,2	114,3	177,8	7/16-20	5Nm
300ADT6	300A	0,76 A	381,0	254,0	114,3	127,0	1/2-20									

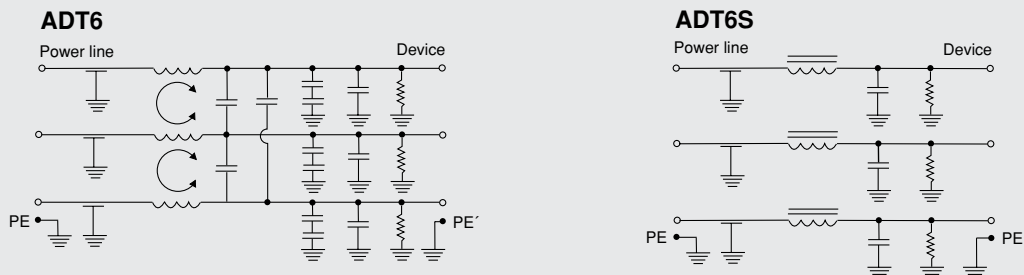
Caution: Increased leakage current - please observe mounting instructions
Suitable for frequency converter applications

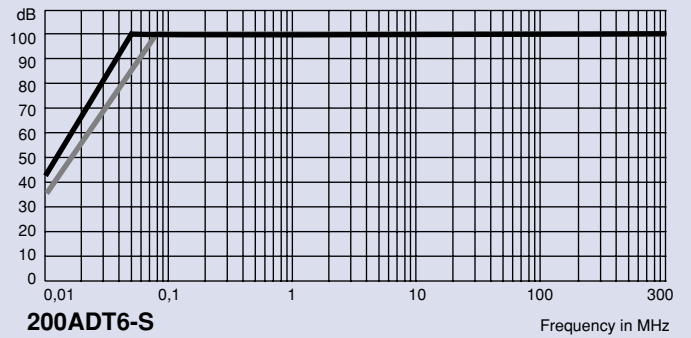
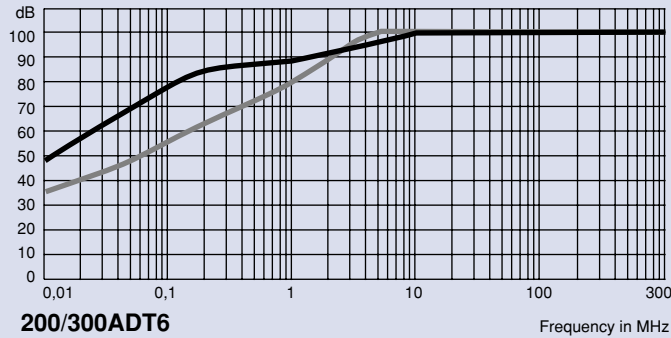
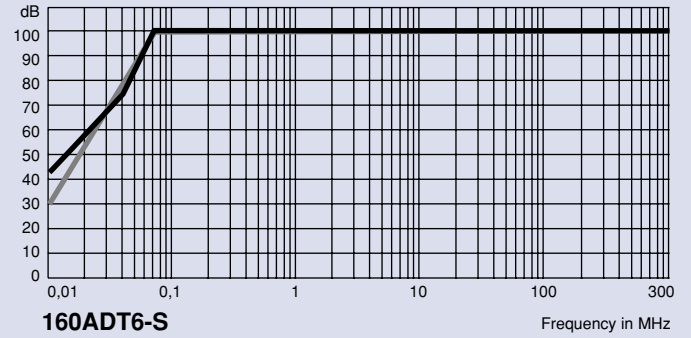
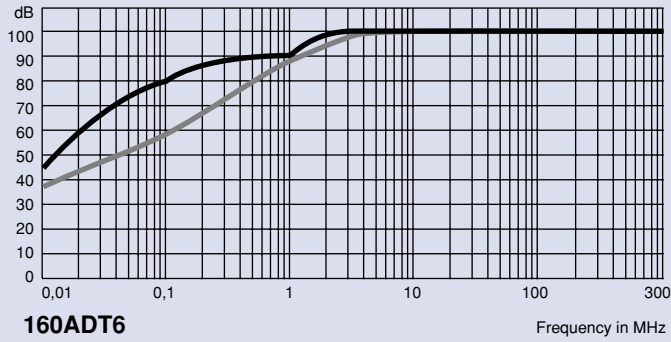
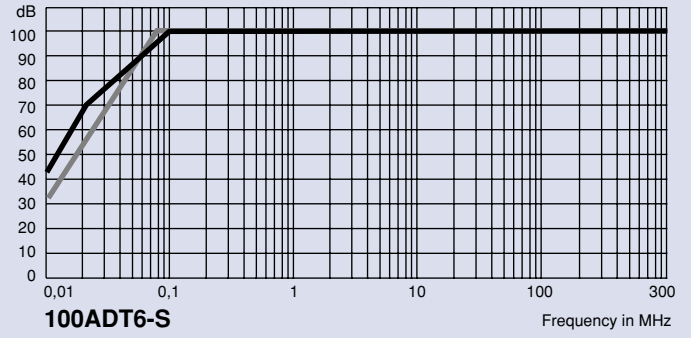
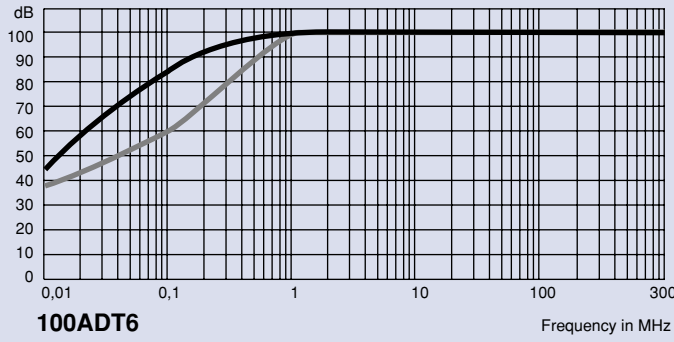
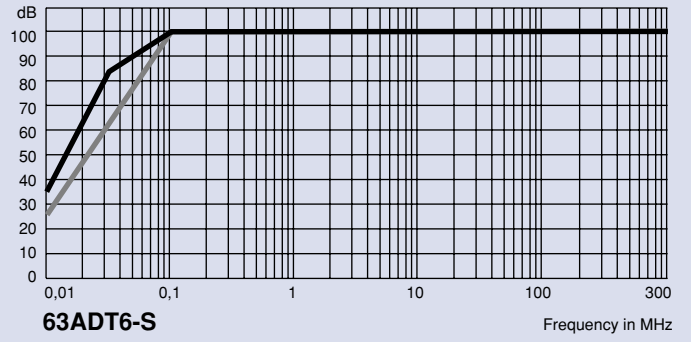
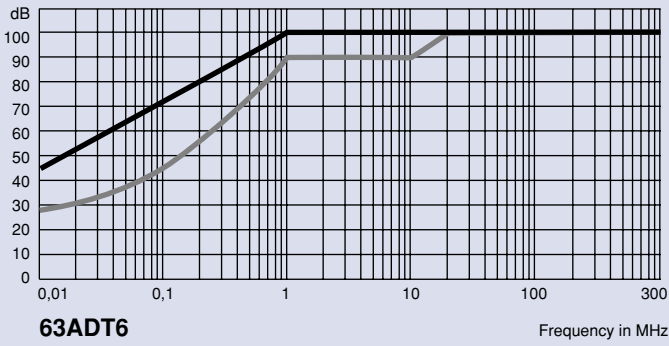
Other designs - also with overvoltage protection - on request

Case Styles and typ. Sizes



Electrical Schematic





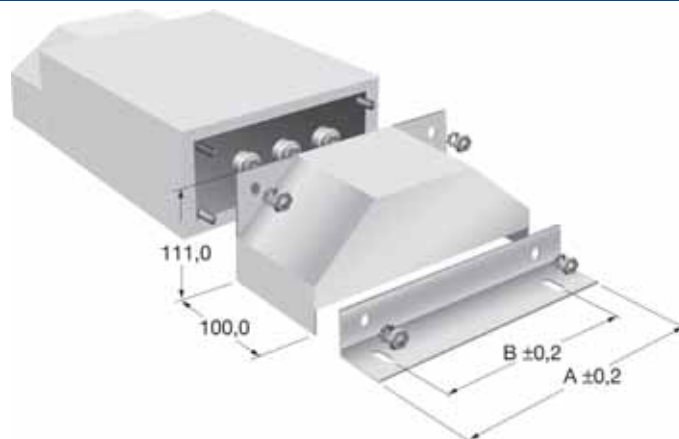
Accessories

Protective cover (2ea.) with nuts and lockwashers for case width (Ref. B)

- 254,0 mm AA-500A
- 279,4 mm AA-501A
- 330,2 mm AA-502A

Mounting bracket for wall/floor mounting with nuts and lockwashers for case width

- | A | | B |
|----------|--------|----------|
| 254,0 mm | AA-506 | 190,5 mm |
| 279,4 mm | AA-507 | 216,0 mm |
| 330,2 mm | AA-508 | 267,0 mm |



3-Phase Filters

AYA-Series

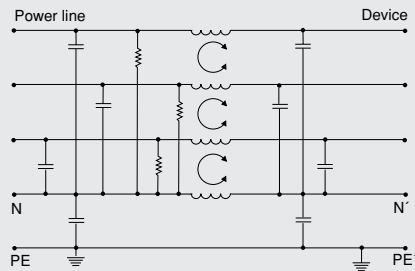
- 4-wire-style suitable for high industrial requirements
- Applicable in wye and delta configurations

RU 440V AC for
16AYA6/A,
25AYA6/A
36AYA6/A
50AYA6/A
 pending
 for others

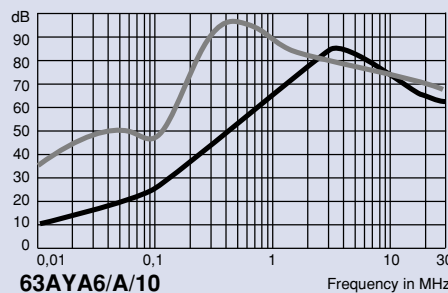
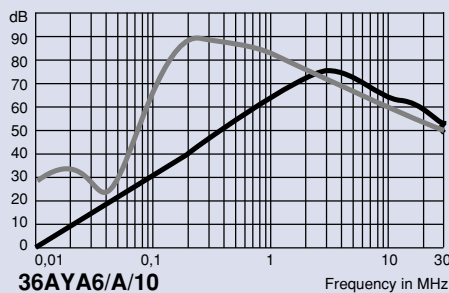
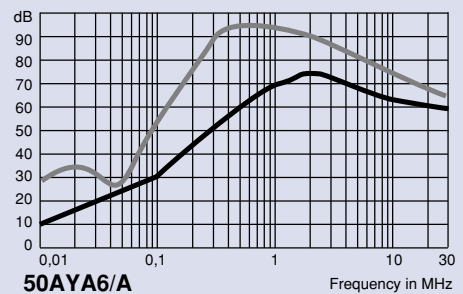
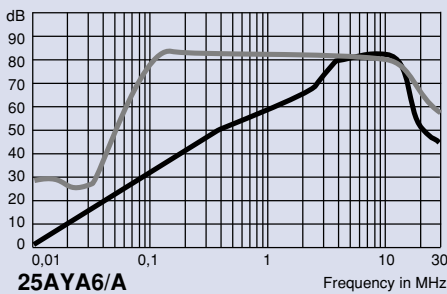
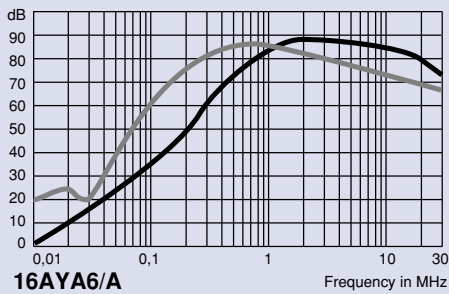


Type	Operating voltage AC 50/60Hz	Max. current	Max. leakage current voltage drop N to PE	Inductance	Capacity		Terminal in-/output
					C_x	C_y	
16AYA6/A	480V	4x16A	20 μ A/V	1,2mH	2,1 μ F	30nF	Threaded bolt 8-32; turn. mom. 3Nm max
25AYA6/A	480V	4x25A	20 μ A/V	1,1mH	4,4 μ F	30nF	Threaded bolt 8-32; turn. mom. 3Nm max
36AYA6/A	480V	4x36A	20 μ A/V	1,0mH	4,4 μ F	30nF	Threaded bolt 10-32; turn. mom. 4Nm max
50AYA6/A	480V	4x50A	20 μ A/V	0,67mH	4,4 μ F	30nF	Threaded bolt 1/4-20; turn. mom. 5Nm max
63AYA6/A	480V	4x63A	20 μ A/V	0,34mH	4,4 μ F	30nF	Threaded bolt 1/4-20; turn. mom. 5Nm max
100AYA6/A	480V	4x100A	20 μ A/V	0,25mH	4,4 μ F	30nF	Threaded bolt 1/4-20; turn. mom. 5Nm max
16AYA10	480V	4x16A	20 μ A/V	1,2mH	2,1 μ F	30nF	Terminal block 4mm ²
36AYA10	480V	4x36A	20 μ A/V	1,0mH	4,4 μ F	30nF	Terminal block 10mm ²
63AYA10	480V	4x63A	20 μ A/V	0,34mH	4,4 μ F	30nF	Terminal block 16mm ²

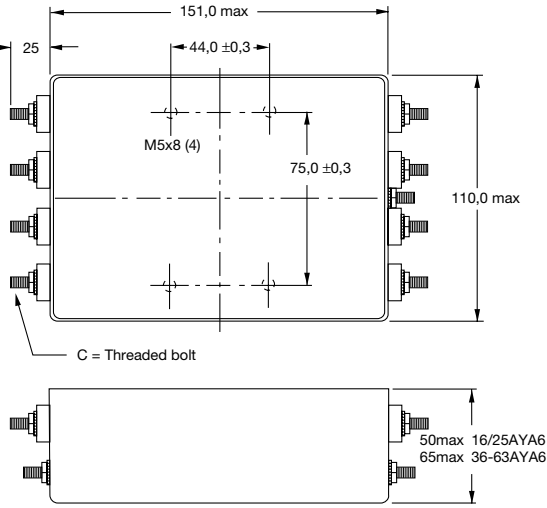
Electrical Schematic



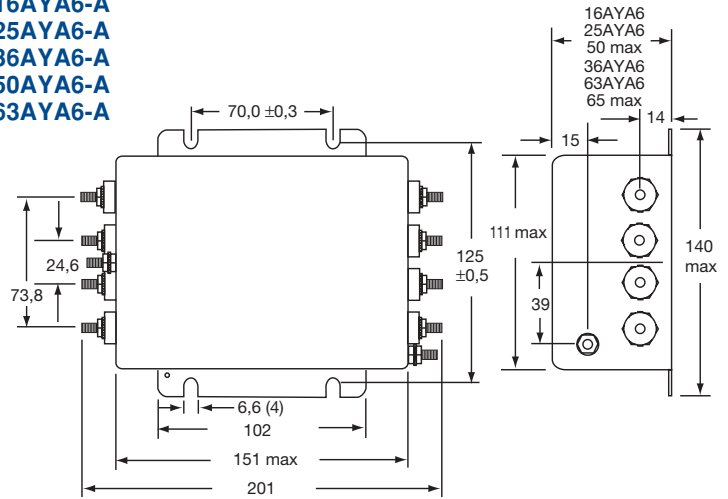
Typ. Insertion Loss



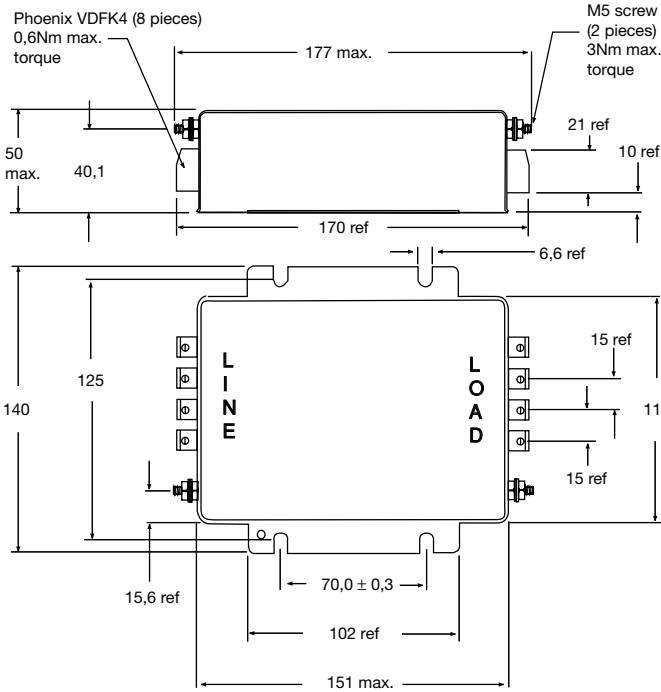
16AYA6
25AYA6
36AYA6
50AYA6
63AYA6



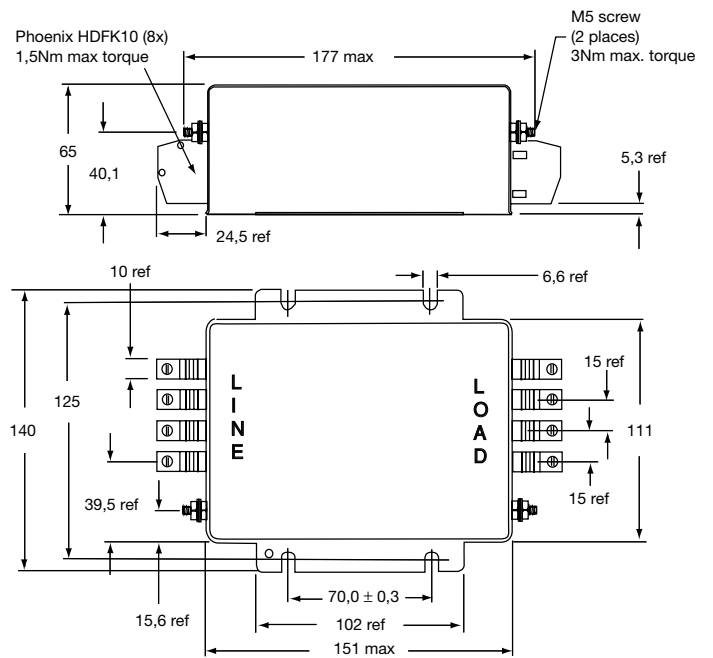
16AYA6-A
25AYA6-A
36AYA6-A
50AYA6-A
63AYA6-A



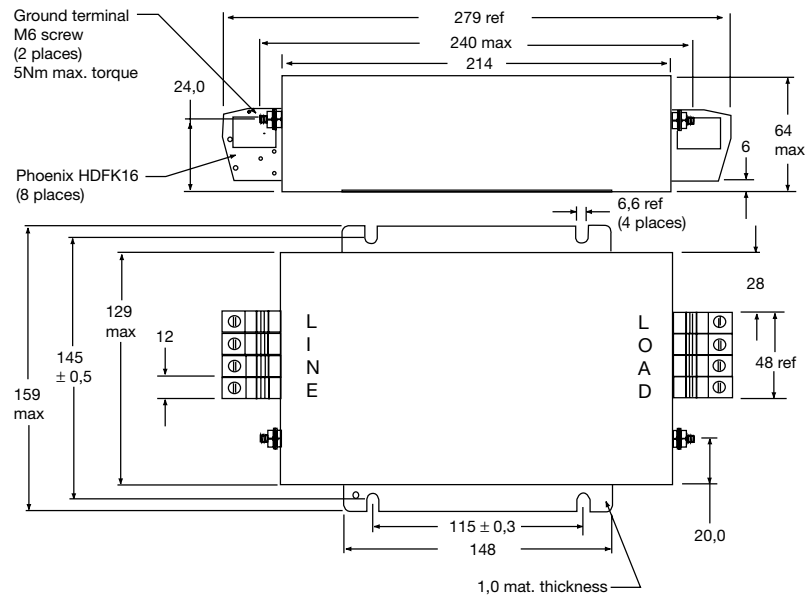
16AYA10



36AYA10



63AYA10



3-Phase Filters

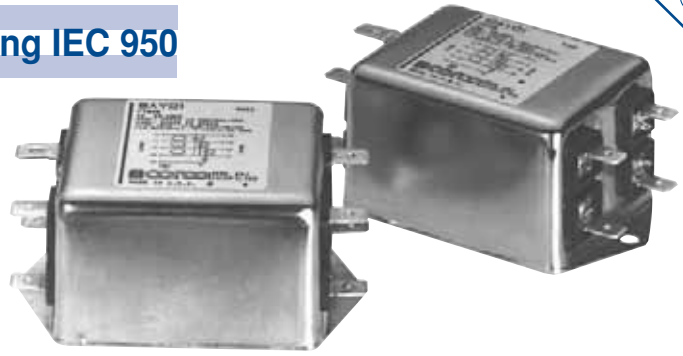
AYO-Series

- 3-Phase RFI filter for wye and delta applications
- Best price/performance ratio



not for 50AYO6 and 100AYO6

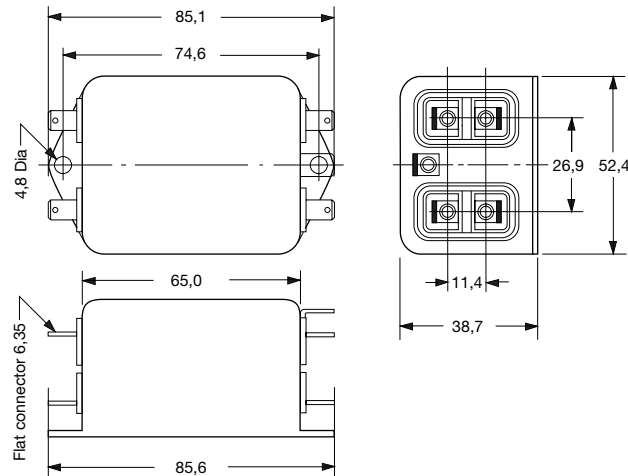
according IEC 950



Type	Operating voltage AC 50/60Hz	Max. current	Max. leakage current 250 VAC / 50 Hz	Inductance	Capacity	
					C _x	C _y
3AYO1	440V	3A	1,5 mA	4x1,0mH	0,1µF	15nF
6AYO1	440V	6A	1,5 mA	4x0,45mH	0,1µF	15nF
10AYO1	440V	10A	1,5 mA	4x0,2mH	0,1µF	15nF
20AYO1	440V	20A	3,5 mA	4x0,12mH	0,1µF	47nF

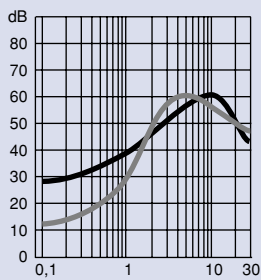
Case Styles and typ. Sizes

3AYO1/6AYO1
10AYO1/20AYO1

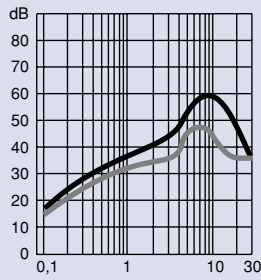


Typ. Insertion Loss

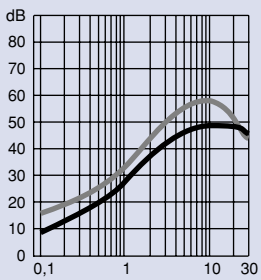
asym. — sym. —



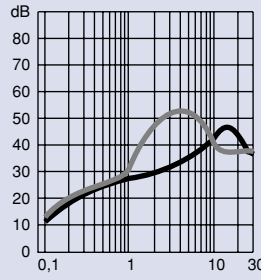
3AYO1 Frequency in MHz



6AYO1 Frequency in MHz



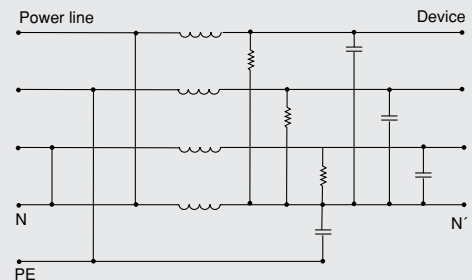
10AYO1 Frequency in MHz



20AYO1 Frequency in MHz

Electrical Schematic

AYO



3-Phase Filters

F-Series

3-phase RFI filter with high attenuation in wye/delta-applications

- Max. operating voltage 440V/480V/660V
- Low leakage current

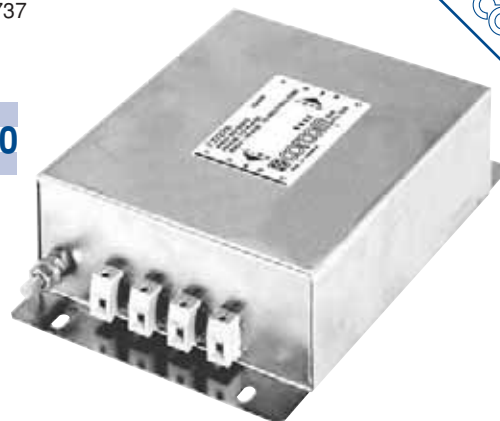
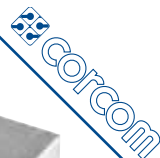


F-2810, F-3297, F-3737



F-3297

according IEC 950



Type	Operating voltage AC 50/60Hz	Max. current	Leakage current	Circuit No.	Inductance		Capacity		Case No.	Type of connection
					L ₁	L ₂	C _x	C _y		
F3719*	440V	8A	3,0mA	5	3x2,8mH	3x380μH	3x2,2μF + 3x2,3μF	3x15nF	2	Terminal screw/cable
F3727*	440V	10A	3,4mA	2	4x4,44mH	4x74μH	3x3,7μF + 3x3,2μF	25nF	3	Mounting stud
F3727A	440V	10A	3,4mA	2	4x4,44mH	4x74μH	3x3,7μF + 3x3,2μF	25nF	7	Terminal screw
F2810	440V	10A	3,5mA	6	4x0,94mH	4x0,94mH	4x0,1μF	4x18nF	3	Mounting stud
F3737	400V	15A	1,4mA	1	3x0,45mH	-	3x0,33μF + 3x0,47μF	15nF	1	Mounting stud
F3380C	480V	16A	4,0mA	3	3x4,44mH	3x360μH	3x2,2μF + 3x1,0μF	3x35nF	6	Terminal screw
F3738*	440V	20A	2,5mA	4	3x4,3mH	3x30μH	3x1,5μF + 3x0,74μF	3x15nF	5	Mounting stud
F3297	480V	30A	3,0mA	7	4x0,67mH	-	3x0,135μF + 3x0,135μF	4x10nF	4	Mounting stud
F3297A	660V	30A	3,0mA	7	4x0,67mH	-	3x0,75μF + 3x0,75μF	4x10nF	4	Mounting stud

*Suitable for frequency converter applications

Plastic encapsulated screw terminal (polyamide 6.6) for easy handling for wire sizes up to 4 mm (AWG 12)

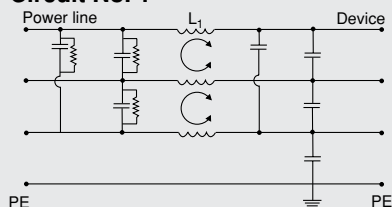
Leakage current line/ground at 250 V/50 Hz max. 3.4 mA/F3380-40 μA. Further versions with wire connections or combined with screw terminal on request.

F2810/F3727 – 8 mounting studs No. 8-32 for fixed installation, 10 mounting studs with nut and washer No. 10-32 for cable connection.

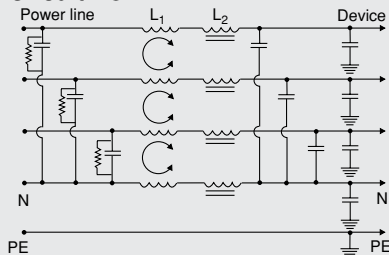
F3297A – 10 mounting studs with nut and washer. No. 10-32 for cable connection, 4 mounting straps for fixed installation (4x5.5 mm holes).

Electrical Schematic

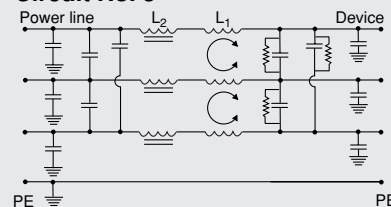
Circuit No. 1



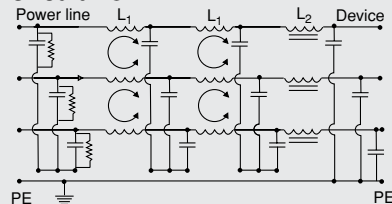
Circuit No. 2



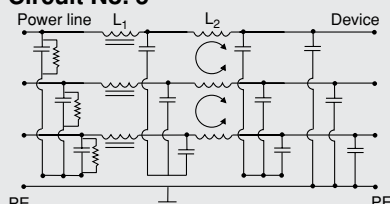
Circuit No. 3



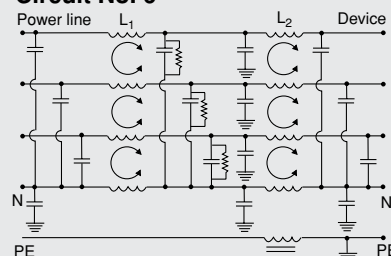
Circuit No. 4



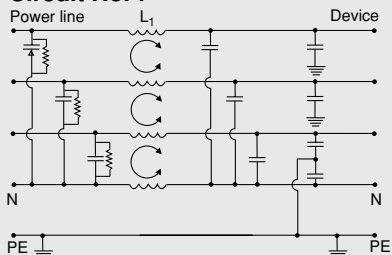
Circuit No. 5



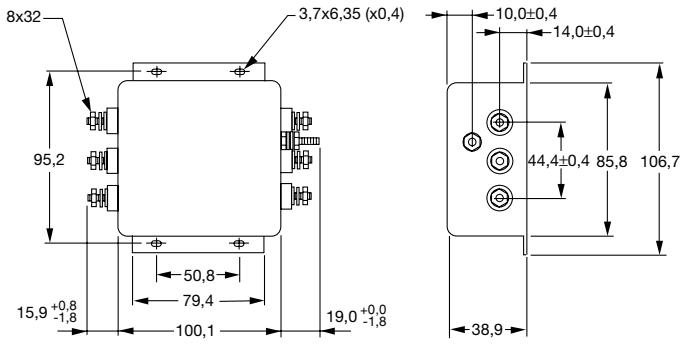
Circuit No. 6



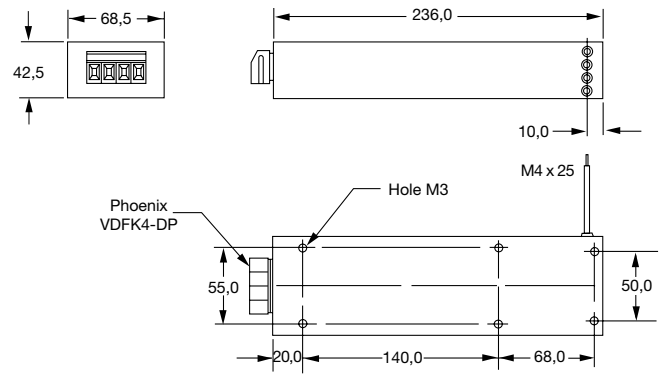
Circuit No. 7



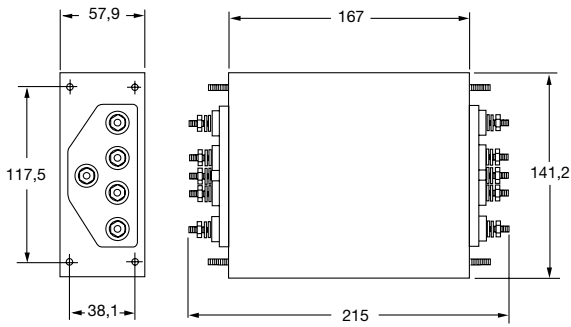
Case No. 1



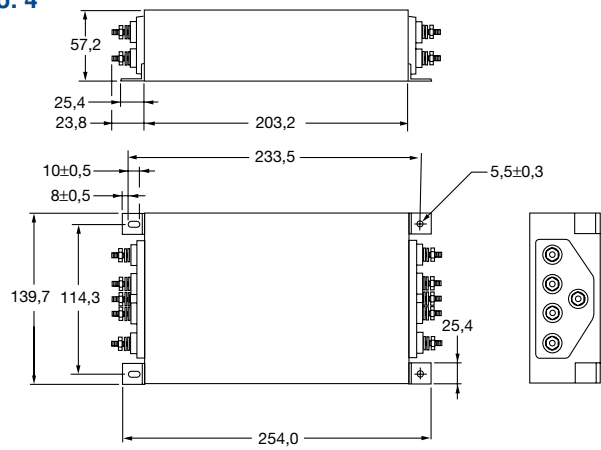
Case No. 2



Case No. 3

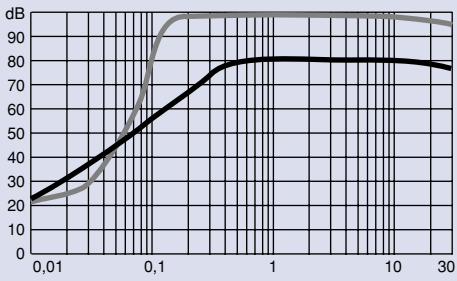


Case No. 4



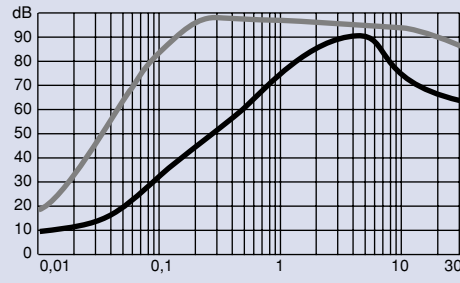
Typ. Insertion Loss

asym. — sym. —



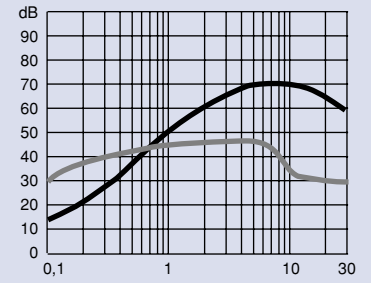
F3738

Frequency in MHz



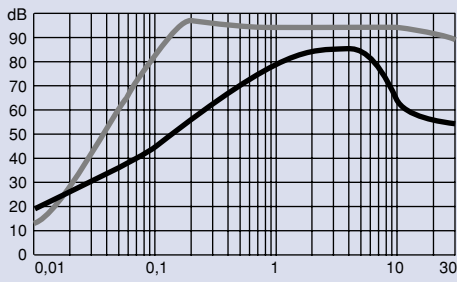
F3719

Frequency in MHz



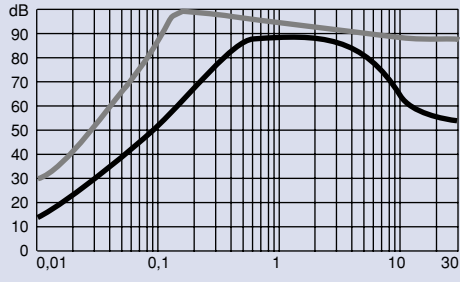
F3380

Frequency in MHz



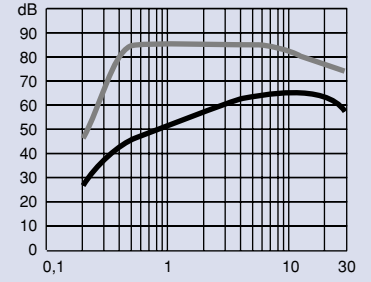
F3380B

Frequency in MHz



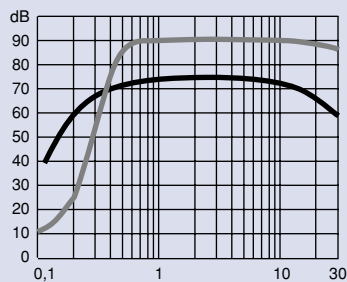
F3727

Frequency in MHz



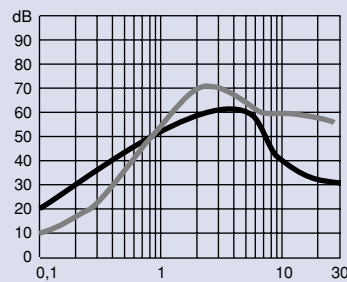
F3737

Frequency in MHz



F2810

Frequency in MHz

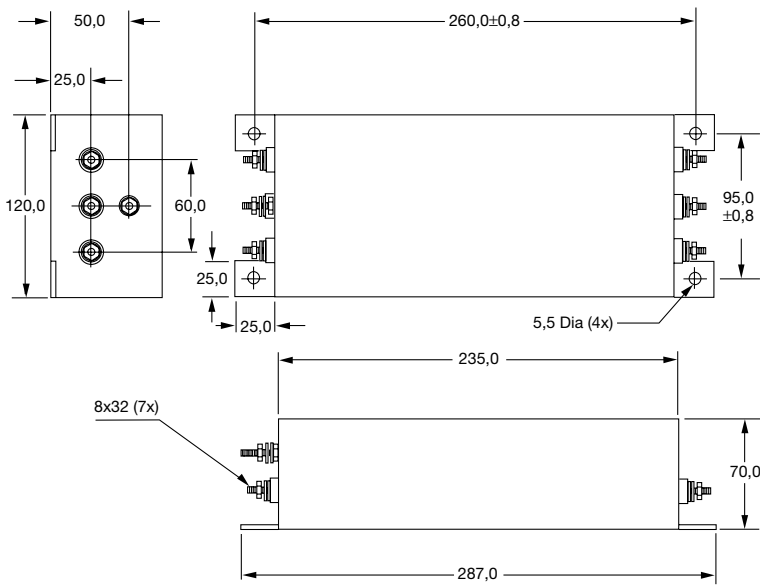


F3297/F3297A

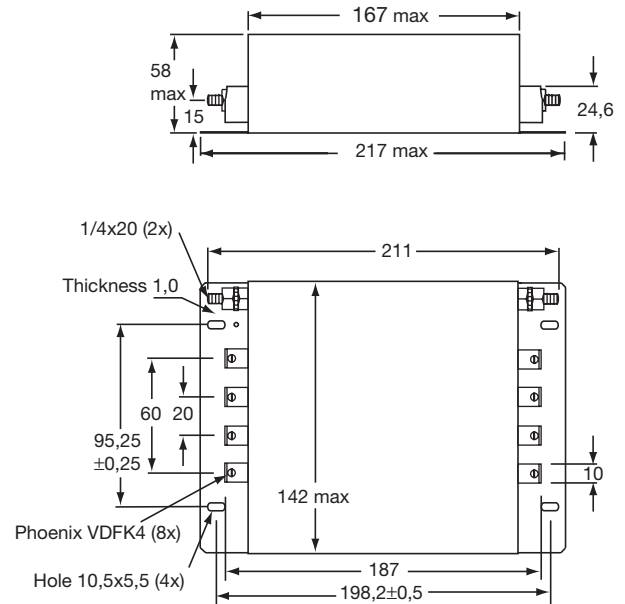
Frequency in MHz

Case Styles and typ. Sizes

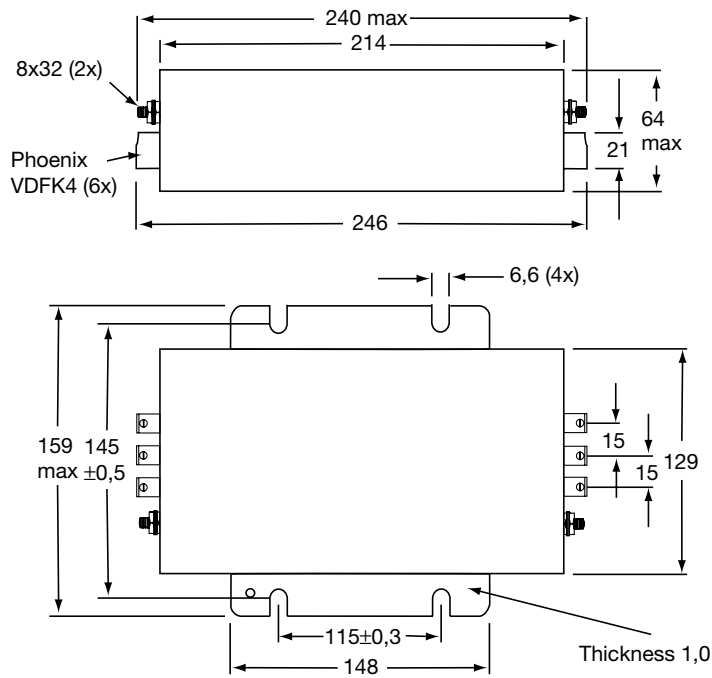
Case No. 5



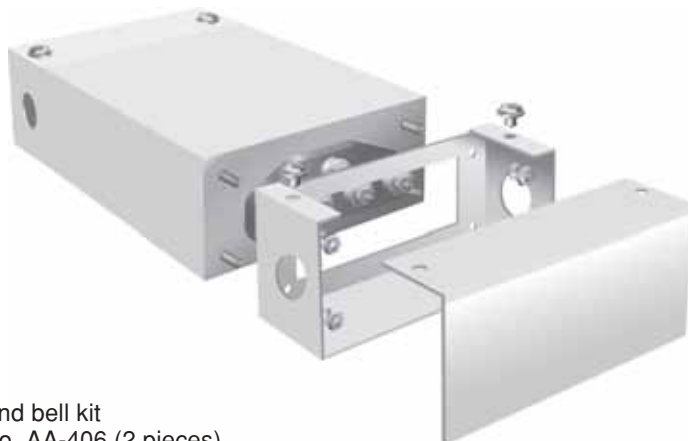
Case No. 7



Case No. 6



Accessories for F2810 and F3727



End bell kit
No. AA-406 (2 pieces)

Mounting bracket kit
Mo. AA-400 (2 pieces)



3-Phase Filters

FCD-Series

- Suitable to meet latest EMC standards (EN55011, -14, UL1283 and EN133200)
- Designed for very noisy delta applications, e.g. frequency converters with long motor cables
- Very high insertion loss
- Low leakage currents
- Shock protected screw-type terminal
- Ideal for EMC-trouble shooting and EMC-refurbishing in the field
- Nominal operating voltage 480V
- Voltages up to 500V and beyond on request

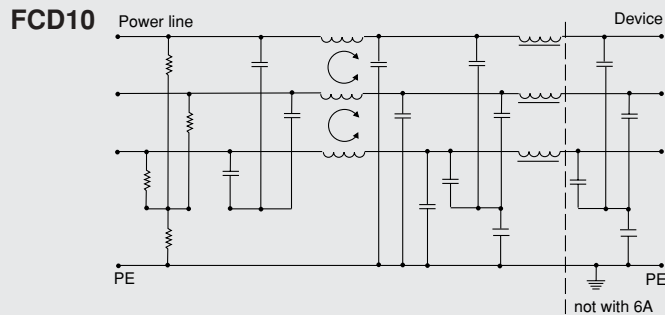


Type	Operating voltage AC 50/60Hz	Max. current	Max. Leakage current voltage drop virtual N to PE/V	Inductance L	Capacity		Type of connection
					C _x	C _y	
6FCD10	480V	3x6A	0,26mA/V	4,62mH	2,2µF	0,7µF	Terminal block 4mm ²
12FCD10	480V	3x12A	0,45mA/V	3,47mH	2,3µF	1,22µF	Terminal block 4mm ²
16FCD10	480V	3x16A	0,45mA/V	3,46mH	2,3µF	1,22µF	Terminal block 4mm ²
25FCD10	480V	3x25A	0,52mA/V	4,0mH	3,3µF	1,39µF	Terminal block 6mm ²
36FCD10	480V	3x36A	0,52mA/V	1,7mH	3,3µF	1,39µF	Terminal block 6mm ²
50FCD10	480V	3x50A	0,52mA/V	1,03mH	3,3µF	1,39µF	Terminal block 10mm ²
12FCD10B	480V	3x12A	0,46mA/V	3,37mH	1,5µF	1,22µF	Terminal block 4mm ²
16FCD10B	480V	3x16A	0,46mA/V	3,40mH	1,5µF	1,22µF	Terminal block 4mm ²
25FCD10B	480V	3x25A	0,52mA/V	3,96mH	2,2µF	1,39µF	Terminal block 6mm ²
36FCD10B	480V	3x36A	0,52mA/V	1,66mH	2,2µF	1,39µF	Terminal block 6mm ²
50FCD10B	480V	3x50A	0,57mA/V	1,03mH	3,3µF	1,52µF	Terminal block 10mm ²
80FCD10B	480V	3x80A	0,62mA/V	0,80mH	4,4µF	1,64µF	Terminal block 50mm ²
110FCD10B	480V	3x110A	0,62mA/V	0,70mH	4,4µF	1,64µF	Terminal block 50mm ²
150FCD10B	480V	3x150A	0,63mA/V	0,53mH	5,5µF	1,70µF	Terminal block 50mm ²
150FCD10B-95	480V	3x150A	0,63mA/V	0,53mH	5,5µF	1,70µF	Terminal block 95mm ²
180FCD10B	480V	3x180A	0,92mA/V	0,62mH	6,6µF	2,46µF	Terminal block 95mm ²
200FCD10B	480V	3x200A	0,92mA/V	0,62mH	6,6µF	2,46µF	Terminal block 95mm ²
230FCD10B	480V	3x230A	0,92mA/V	0,40mH	7,7µF	2,50µF	Terminal block 95mm ²

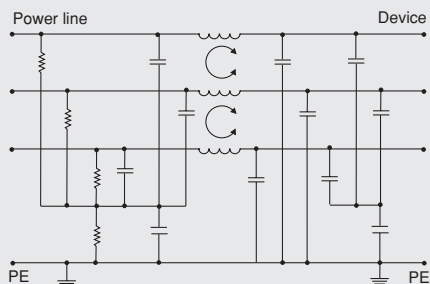
Earth-conductor-connection with threaded studs on each side

Caution: Increased leakage current - please observe mounting instructions

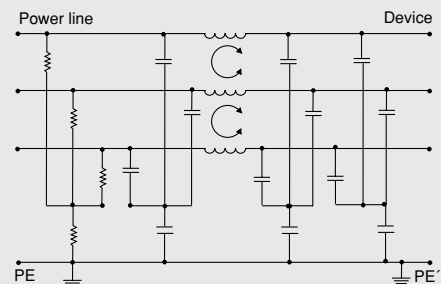
Electrical Schematic



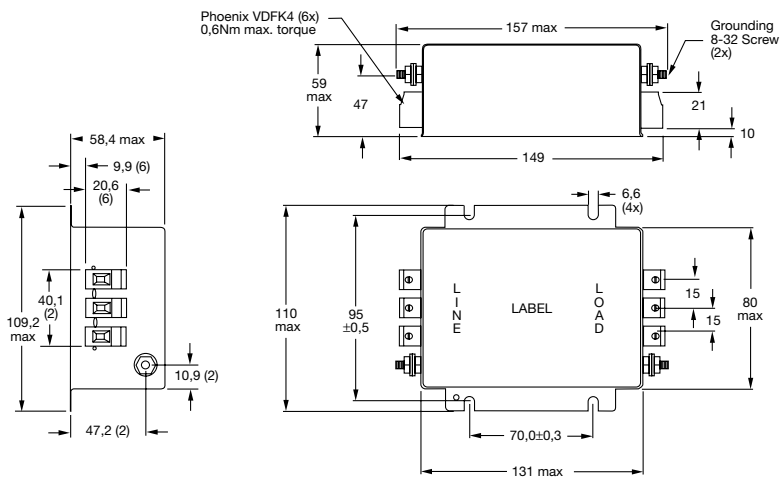
**FCD10B
12A to 50A**



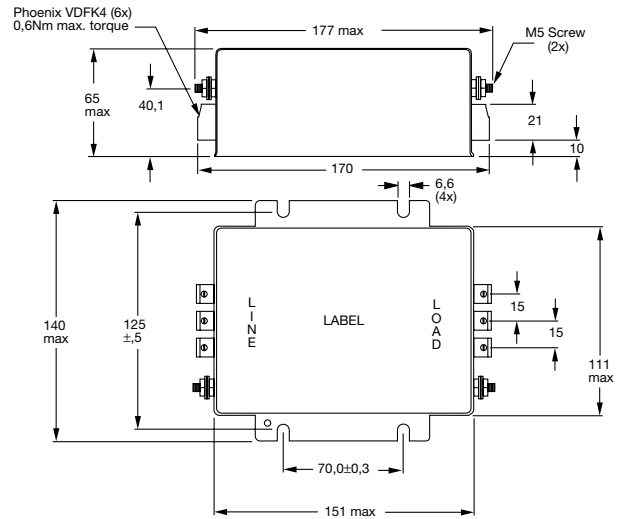
**FCD10B
80A to
230A**



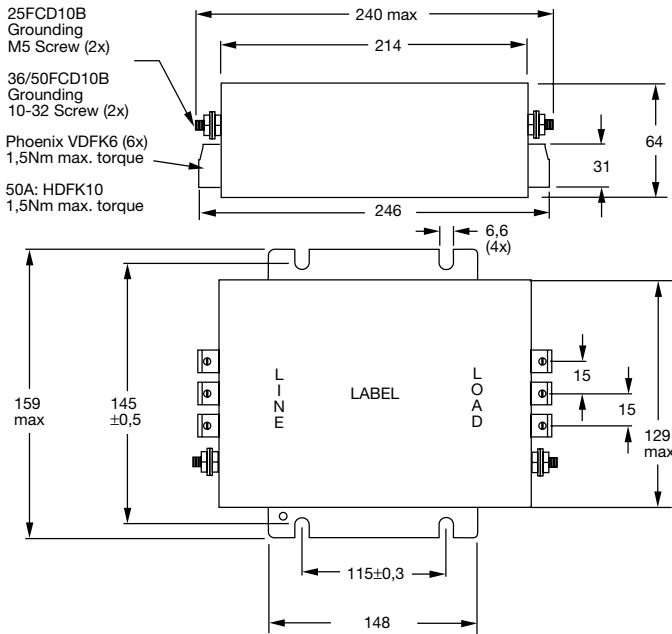
6FCD10



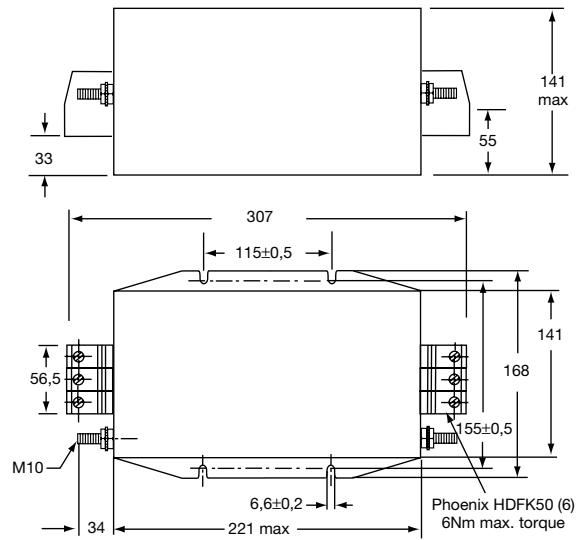
12FCD10 / 16FCD10/12FCD10B / 16FCD10B



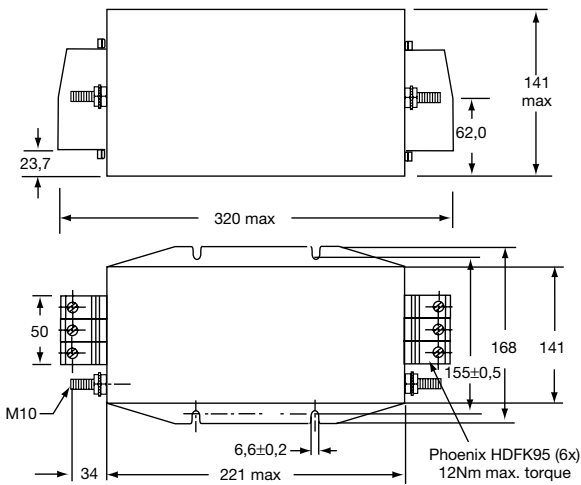
**25FCD10 / 36FCD10 / 50FCD10
25FCD10B / 36FCD10B / 50FCD10B**



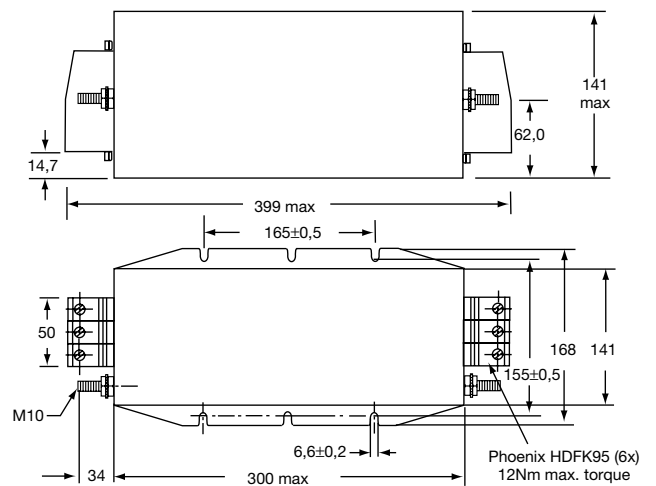
80FCD10B / 110FCD10B / 150FCD10B

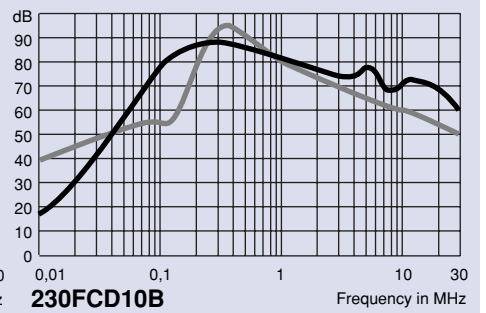
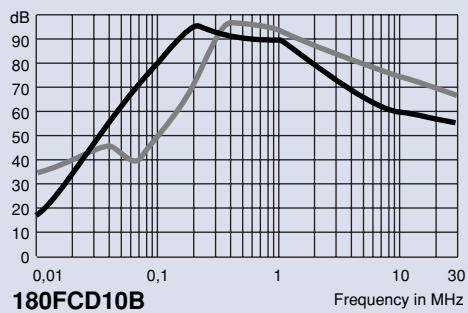
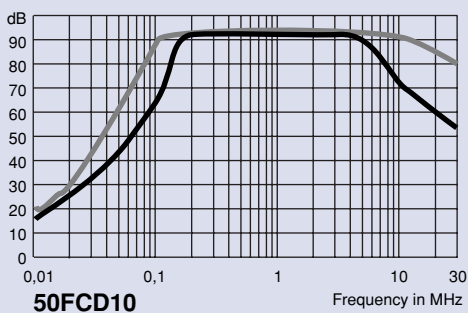
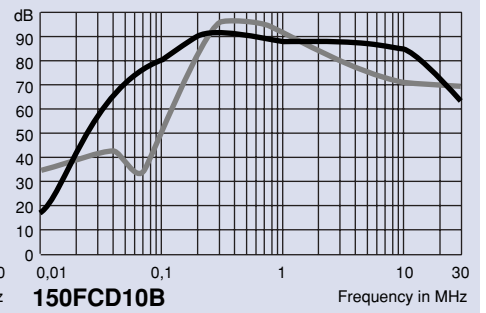
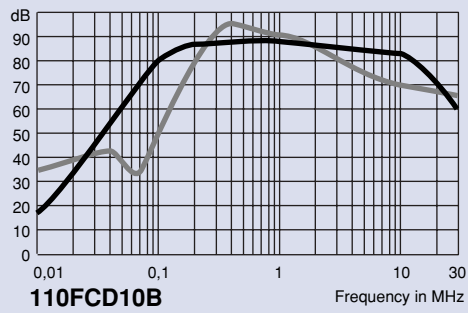
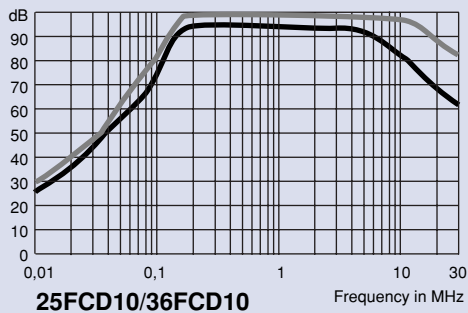
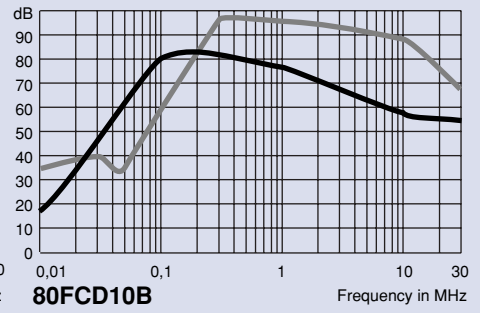
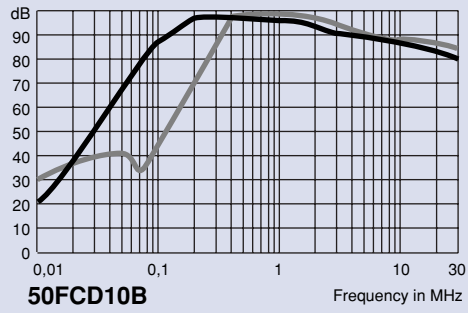
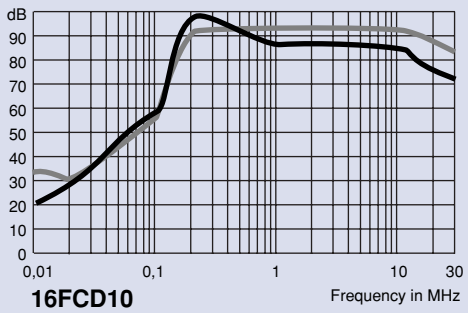
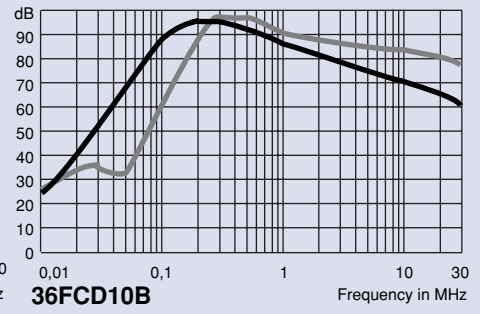
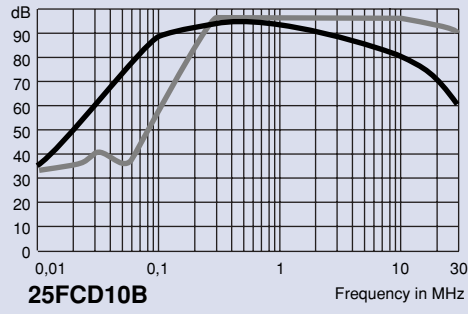
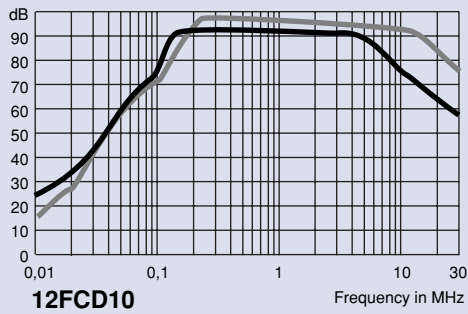
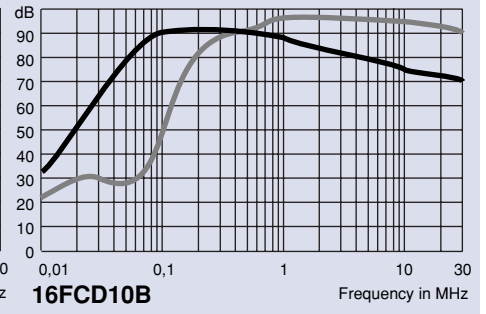
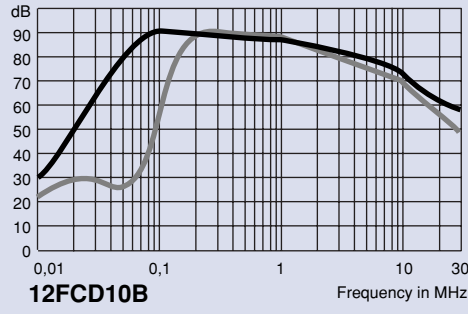
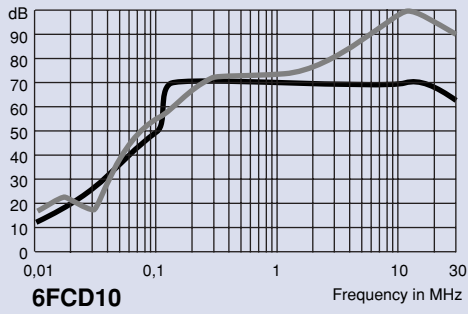


150FCD10B-95



180FCD10B / 200FCD10B / 230FCD10B





3-Phase Filters

FCD10BS-Series

- Optimized for very high insertion loss
- Suitable for infeed/regenerative-(ER)-modules

 (pending)



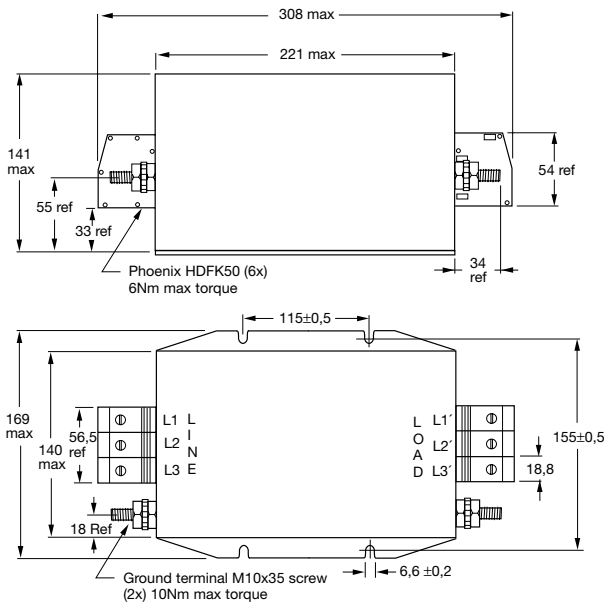
Type	Operating voltage AC 50/60Hz	max. current	Max. Leakage current voltage drop virtual N to PE/V	Inductance L	Capacity		Type of connection (both sides)
					C _x	C	
36FCD10BS	480V	3x36A	3,25mA/V	1,66mH	11µF	8,6µF	Terminal block 16mm ²
50FCD10BS	480V	3x50A	3,25mA/V	1,03mH	11µF	8,6µF	Terminal block 16mm ²
63FCD10BS	480V	3x63A	3,25mA/V	0,99mH	11µF	8,6µF	Terminal block 16mm ²
80FCD10BS	480V	3x80A	3,25mA/V	0,8mH	11µF	8,6µF	Terminal block 50mm ²
110FCD10BS	480V	3x110A	3,25mA/V	0,7mH	11µF	8,6µF	Terminal block 50mm ²
150FCD10BS	480V	3x150A	3,25mA/V	0,53mH	11µF	8,6µF	Terminal block 50mm ²
180FCD10BS	480V	3x180A	3,25mA/V	0,62mH	11µF	8,6µF	Terminal block 95mm ²
230FCD10BS	480V	3x230A	3,25mA/V	0,4mH	11µF	8,6µF	Terminal block 95mm ²

Earth-conductor-connection with threaded studs on each side

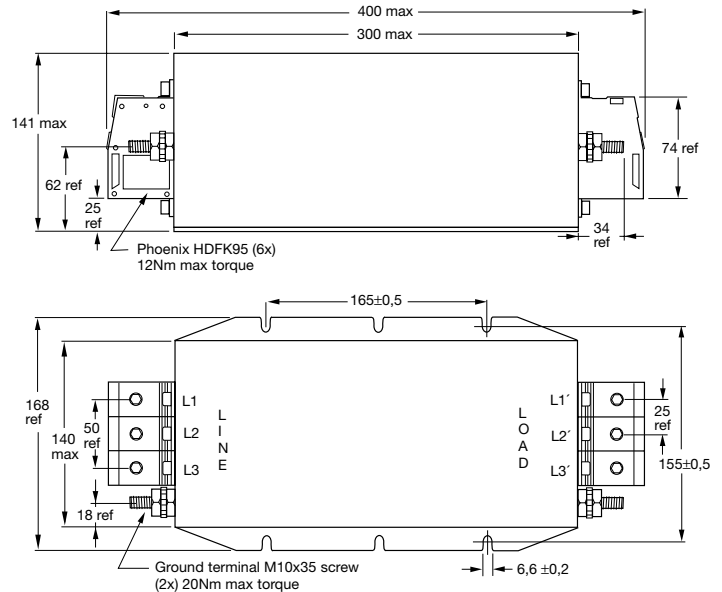
Caution: Increased leakage current - please observe mounting instructions

Case Styles and typ. Sizes

36FCD10BS / 50FCD10BS / 63FCD10BS /
80FCD10BS / 110FCD10BS / 150FCD10BS

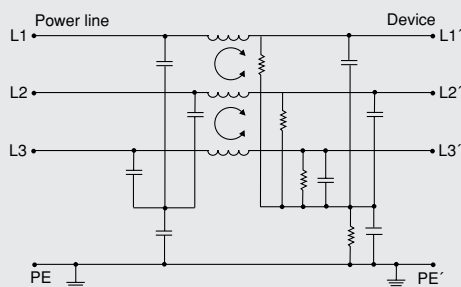


180FCD10BS / 230FCD10BS



Electrical Schematic

FCD10BS
36A to
230A



Typ. Insertion Loss

asym. — sym. —



High Current Filter

CFN-Series

- standard aluminium housing
- suitable to meet UL1283, CSA, EN 133 200
- universal High-current-filter for industrial applications like frequency-converter, High current-driving-system, etc.
- Delivered in three operating-voltages

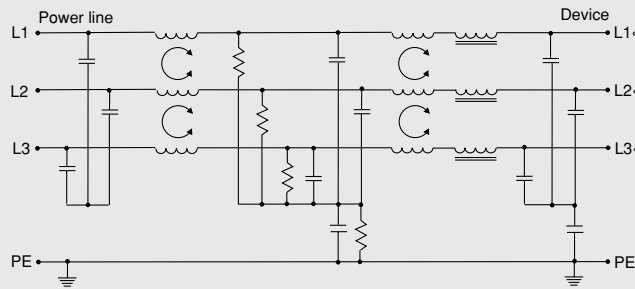
according IEC 950



Type	Operating-voltage 50-60Hz	Leakage current 50Hz	Type	Operating-voltage 50-60Hz	Leakage current 50Hz	Type	Operating-voltage 50-60Hz	Leakage current 50Hz	Operating current
300CFN12	480VAC	39mA	300CFN12H	520VAC	51mA	300CFN12HV	690VAC	60mA	300A
400CFN12	480VAC	39mA	400CFN12H	520VAC	51mA	400CFN12HV	690VAC	60mA	400A
500CFN12	480VAC	39mA	500CFN12H	520VAC	51mA	500CFN12HV	690VAC	60mA	500A
600CFN12	480VAC	39mA	600CFN12H	520VAC	51mA	600CFN12HV	690VAC	60mA	600A

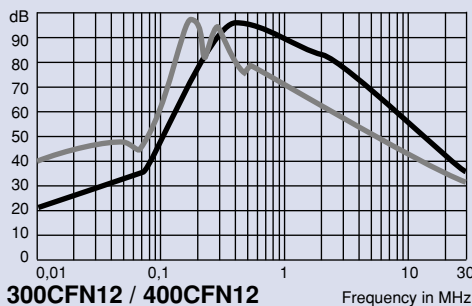
* Leakage current measured by IEC 1000-2-4 under normal operating conditions. Are two phases disconnected, may be that the leakage current by unfavourable facts can reach the multiple of the value.

Electrical Schematic



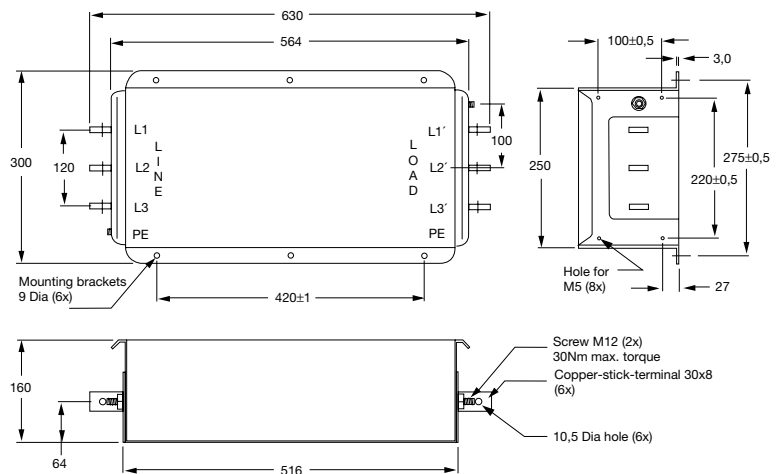
Typ. Insertion Loss

asym. — sym. —



300CFN12 / 400CFN12
500CFN12 / 600CFN12

Case Styles and typ. Sizes



3-Phase Filters

BCD-Series

- Bookform with insulated safety terminals for input and output
- Very high insertion loss
- Ideal for EMC-trouble shooting and refurbishing in the field
- Operating voltages over 480V AC available on request

 (pending)





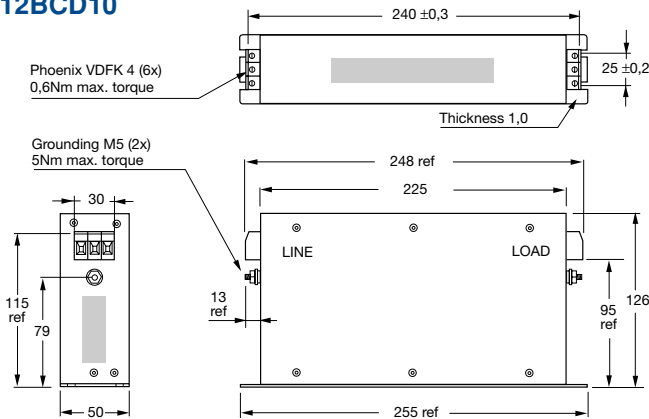
Type	Operating voltage AC 50/60Hz	Max. current	Max. leakage current voltage drop virtual N to PE/V	Inductance L	Capacity		Type of connection
					C _x	C _y	
6BCD10	480V	3x6A	0,26mA/V	4,62mH	2,25µF	0,7µF	Terminal block 4mm ²
12BCD10	480V	3x12A	0,45mA/V	3,46mH	2,25µF	1,2µF	Terminal block 4mm ²
16BCD10	480V	3x16A	0,45mA/V	3,46mH	2,25µF	1,2µF	Terminal block 6mm ²
25BCD10	480V	3x25A	0,52mA/V	4,0mH	3,3µF	1,38µF	Terminal block 10mm ²
36BCD10	480V	3x36A	0,52mA/V	1,69mH	3,3µF	1,38µF	Terminal block 10mm ²
50BCD10	480V	3x50A	0,52mA/V	1,03mH	3,3µF	1,38µF	Terminal block 25mm ²
63BCD10	480V	3x63A	0,52mA/V	1,02mH	3,3µF	1,38µF	Terminal block 25mm ²
80BCD10B	480V	3x80A	3,25mA/V	1,0mH	11µF	8,6µF	Terminal block 50mm ²
110BCD10B	480V	3x110A	3,25mA/V	0,88mH	11µF	8,6µF	Terminal block 50mm ²
130BCD10B	480V	3x130A	3,25mA/V	0,83mH	11µF	8,6µF	Terminal block 50mm ²
150BCD10B	480V	3x150A	3,25mA/V	0,83mH	11µF	8,6µF	Terminal block 50mm ²
180BCD10B	480V	3x180A	3,25mA/V	0,71mH	11µF	8,6µF	Terminal block 95mm ²
230BCD10B	480V	3x230A	3,25mA/V	0,4mH	11µF	8,6µF	Terminal block 95mm ²

Earth-conductor-connection with threaded studs on each side; unless specified, tolerance to be ±0,5

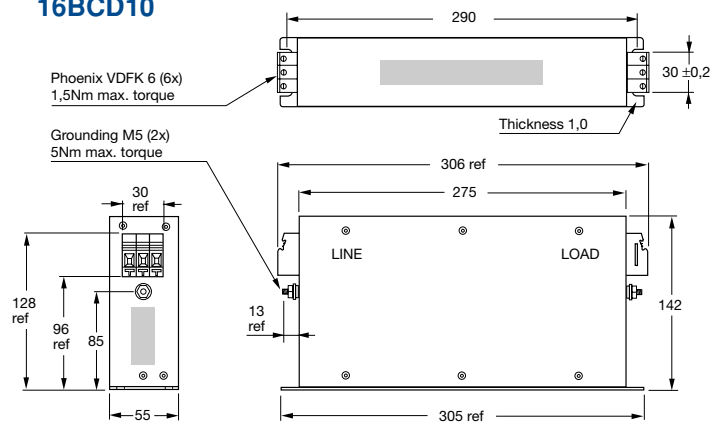
Caution: Increased leakage current - please observe mounting instructions

Case Styles and typ. Sizes

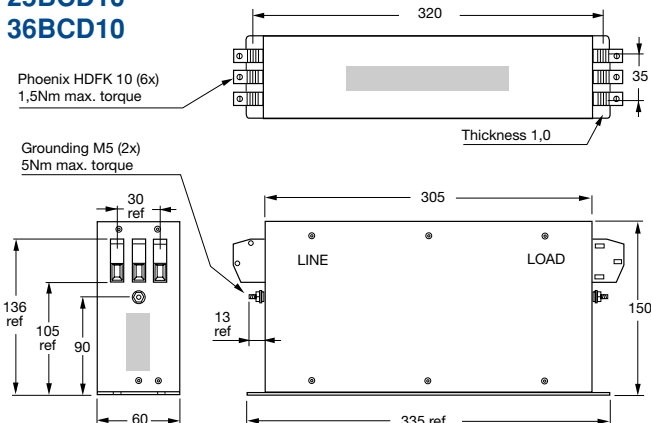
6BCD10 12BCD10



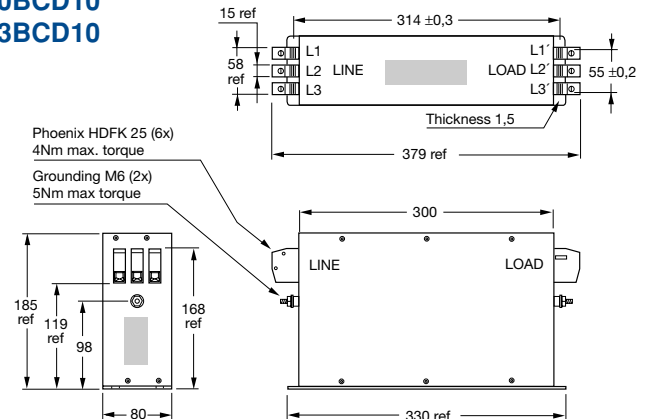
16BCD10



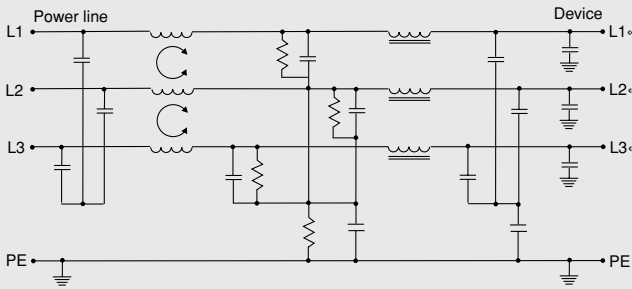
25BCD10 36BCD10



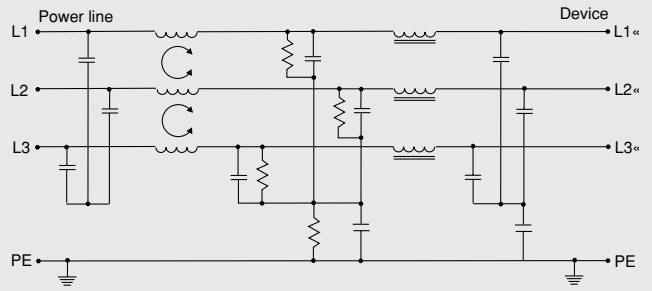
50BCD10 63BCD10



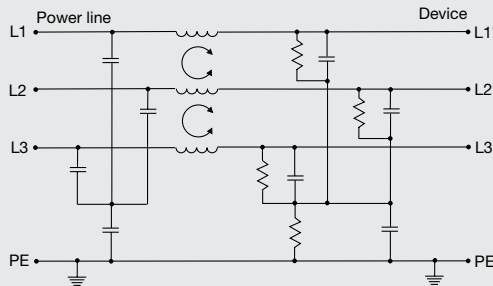
**BCD10
6A**



**BCD10
12A to 63A**

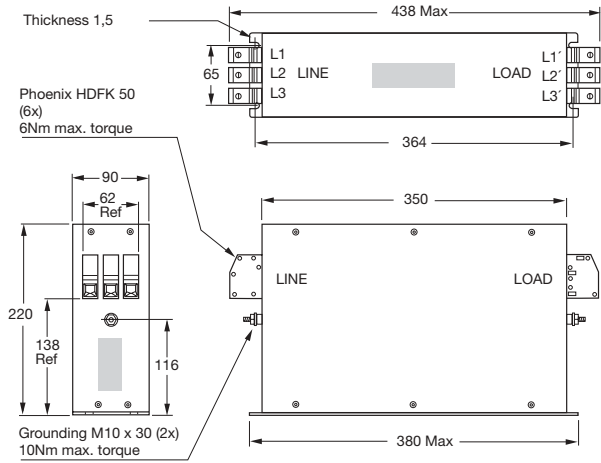


**BCD10B
80A to 230A**

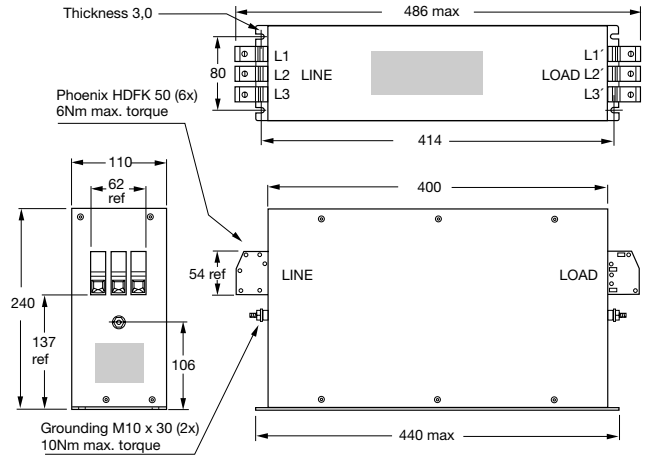


Case Styles and typ. Sizes

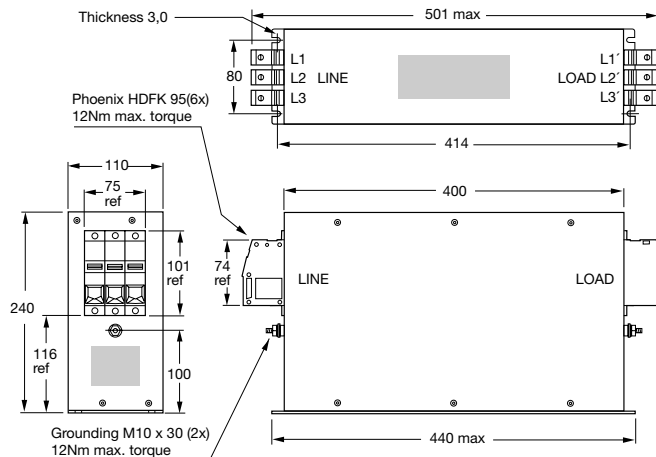
**80BCD10B / 110BCD10B /
130BCD10B**

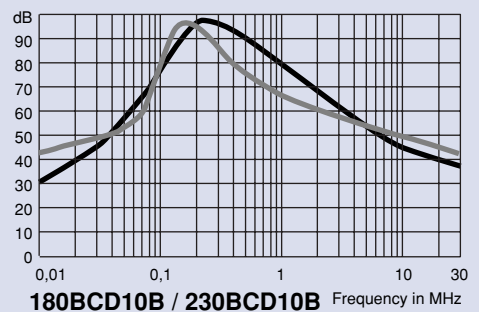
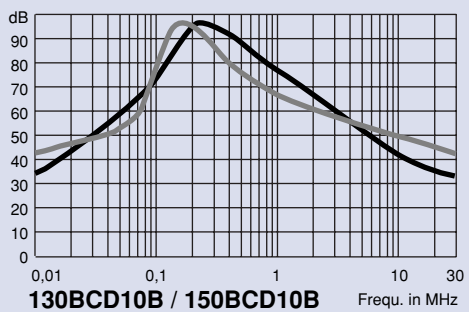
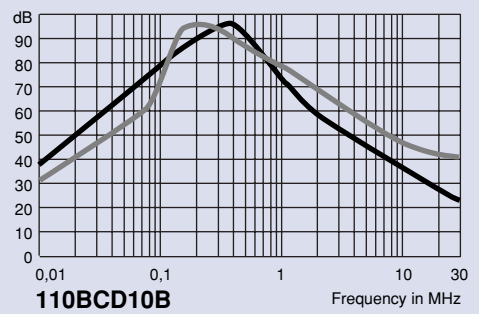
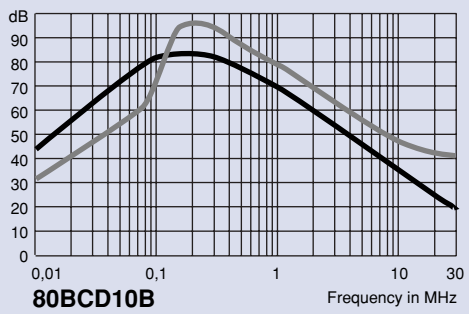
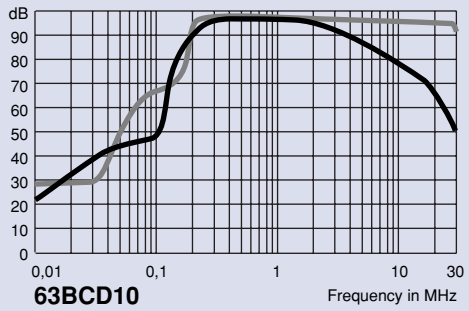
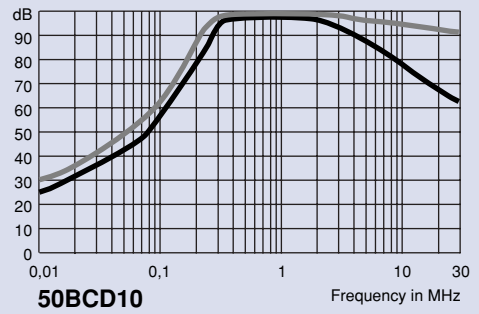
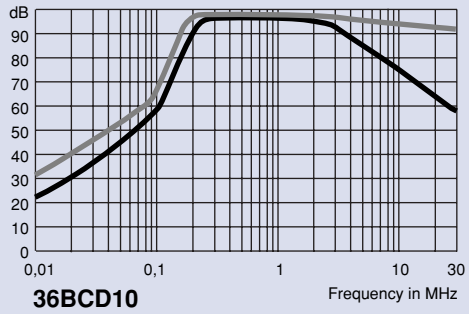
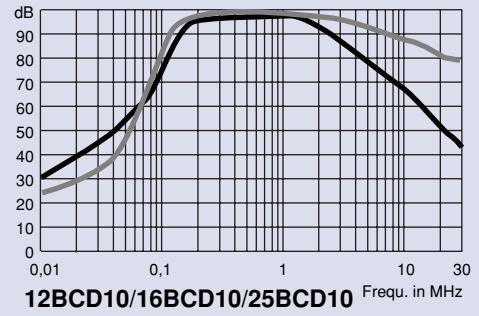
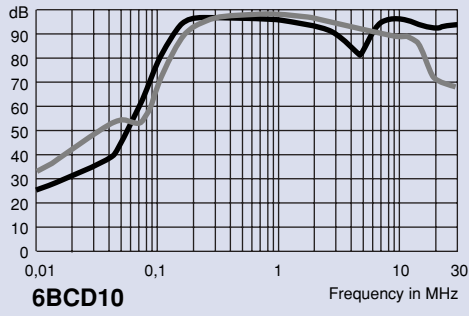


150BCD10B



**180BCD10B
230BCD10B**





Line Filters for TEMPEST Applications

AQ-Series

- For commercial applications

Tempest-Series

- Standard and custom applications



Type	Max. current	Max. voltage	Max. leakage current line to ground at 250 VAC/50 Hz	Additions
3VAQ3	3 A	250 VAC	2,3 mA	
3VAQ8F	3 A	250 VAC	2,3 mA	IEC connector and fuse holder
3VAQ8FS	3 A	250 VAC	2,3 mA	IEC connector / fuse holder / switch
6VAQ3	6 A	250 VAC	1,2 mA	—
6VAQ8F	6 A	250 VAC	1,2 mA	IEC connector and fuse holder

Electronic computing devices processing confidential informations must be protected against misuse by unauthorized personnel. The most common standard in this respect is the TEMPEST specification issued by the U.S. Government. The same principle applies to all related equipment in the military, commercial or industrial field processing original or encoded data.

Data, which have not been encoded, can easily be read out by either emission or propagation via power line. Availability of highly sensitive receiving equipment is the only provision necessary. The available methods to prevent this are in principle similar to those being utilized for interference suppression in electronic equipment according to FCC or VDE standards. Radiated interference requires shielding, conducted interference requires line filtering.

The concepts of power line filters for applications in accordance with TEMPEST specifications and those for common power line interference suppression are of considerable difference. The actual TEMPEST specifications are confidential and the required attenuation factors vary from

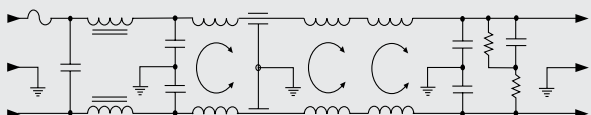
one device to the next. CORCOM TEMPEST filters provide a very high conformity with the TEMPEST specifications. This is accomplished by a filter design with extremely high attenuation factors over the range from 10 kHz through 1 GHz for common as well as differential mode. Signals exceeding this frequency range are mainly being radiated. Filtering below 10 kHz is commonly unnecessary.

The stated performance features are being accomplished by means of a multi-stage circuit and shielding in extension to a design for the observance of attenuation values in switching power supplies in accordance with VDE level B. The filters are hermetically sealed into metal cases and have been built in accordance with all applicable UL specifications.

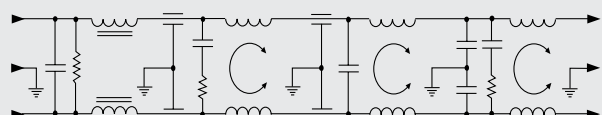
These standard filters can directly be used within a variety of applications without creating further design costs. For applications requiring further functions such as switches, power line plugs, fuses etc. different styles can on request easily be accomplished. For further advice we will be glad to be at your service.

Electrical Schematic

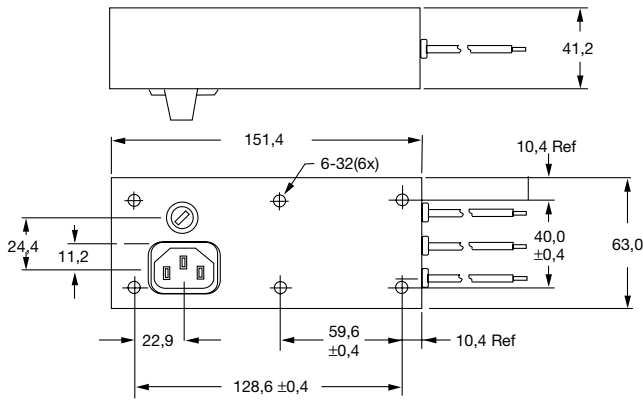
3A models



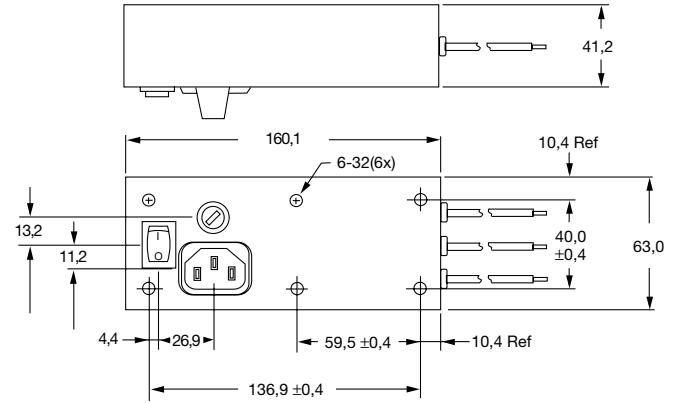
6A models



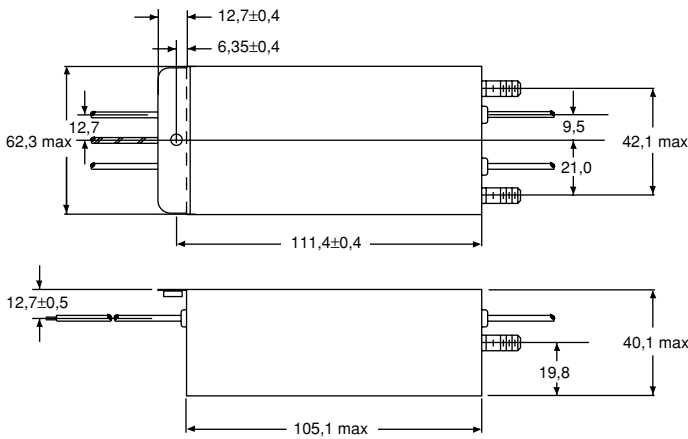
3VAQ8F



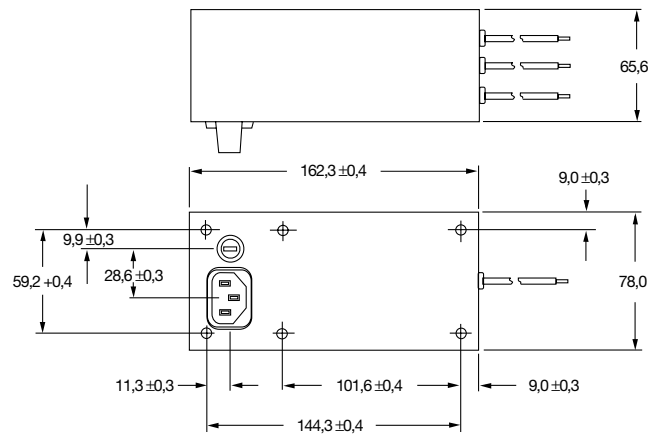
3VAQ8FS



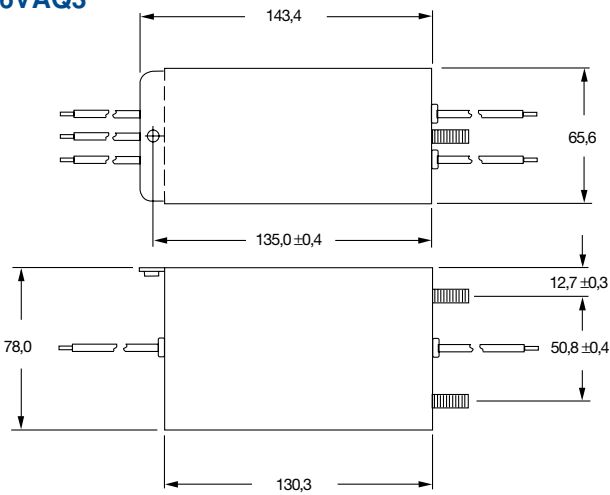
3VAQ3



6VAQ8F

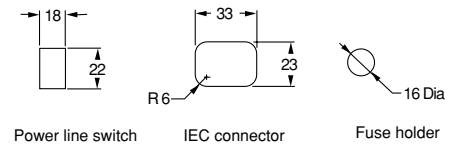


6VAQ3



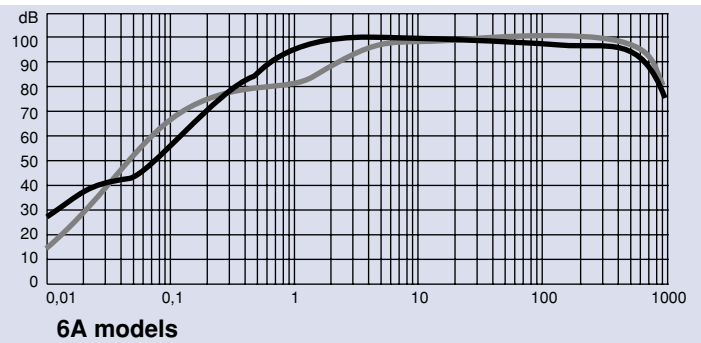
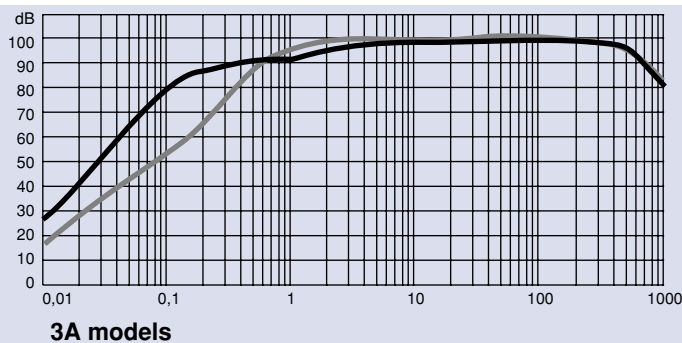
Inserts and studs: 6-32
Wire leads: 300 min.

Recommended panel cutouts



Typ. Insertion Loss

asym. — sym. —

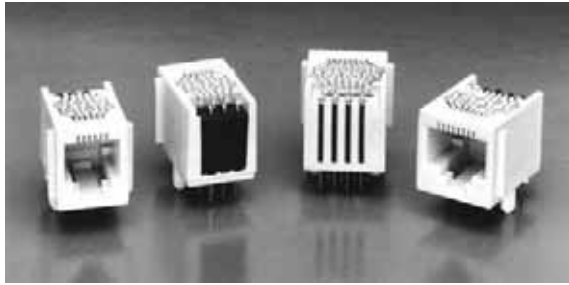




SIGNALSENTRY™

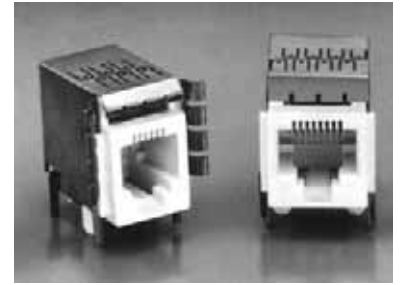
Filtered Modular Jack

Space saving and cost effective device for interference elimination in signal lines. L and C components integrated in plug-in space. Available in three sizes and pole numbers 2-4-6-8. Can optionally be shipped with shielding with/without ground spring. Separate catalogue on request.



L-Models

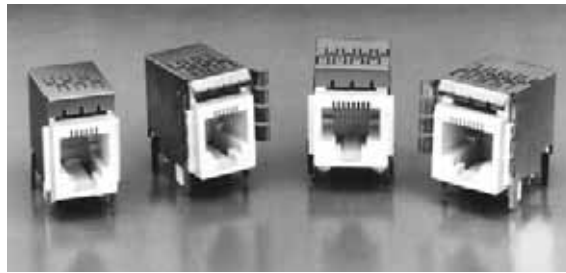
Inductive filtering in a direct retrofit to standard, unfiltered jacks. Both L and LC models are offered with standard ferrite sleeve (or higher performance ferrite block) inductors for RJ11 and RJ45 style jacks.



Shielded L-Models

Inductance filtering with the additional metal shield. The shield is available with RFI gasket style spring fingers to provide a low impedance ground path across the interface.

LC-Models
Capacitance components enhance the filtering performance in the LC models. Available with block or sleeve inductance, all models are shielded for additional protection.



N-Models

Low profile RJ jacks



RJH-Models

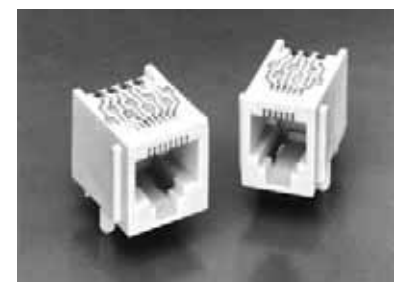
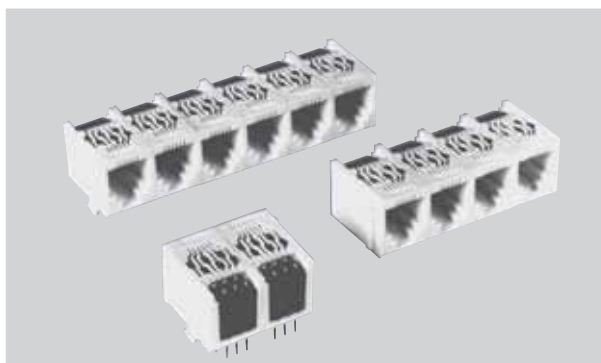
A direct retrofit to handset connectors, the RJH models feature block inductance for optimal filtering of up to four lines.

BLF-Series
Surface mountable RFI filters



NEW

Ganged Version:
2 RJ11 - 6 LB
4 RJ11 - 6 LB
6 RJ11 - 6 LB



X-Models

Standard, unfiltered jacks to complement our filtered models.

Surface mountable RFI filters BLF-Series



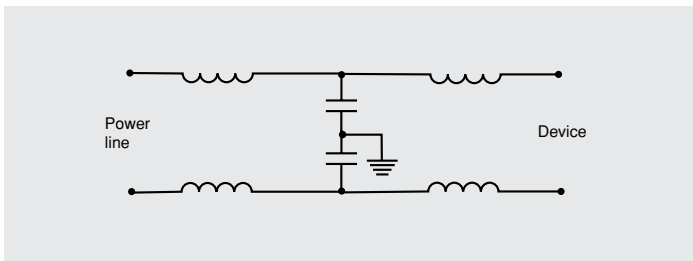
This line of surface mountable RFI filters is specifically designed to eliminate noise on the signal line. These board level filters attenuate noise on the signal line at the frequency range of 10MHz to 1000MHz with maximum attenuation at 40MHz to 400MHz.

The U shaped ferrite features a parallel first and second leg with a center leg surrounded by a grounding/shorting strap and a capacitor for each line. This unique design optimizes

Type	Max. current UL, VDE	Capacity	Inductance
BLF082	1A	82pF	2μH
BLF820	1A	820pF	2μH

the filter performance by combining the elements into one low profile single piece filter. Each filter acts on two signal lines, but can be stacked an an array to allow performance over multiple lines.

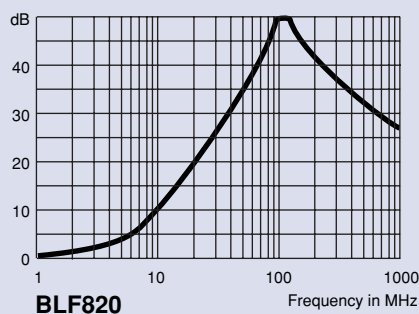
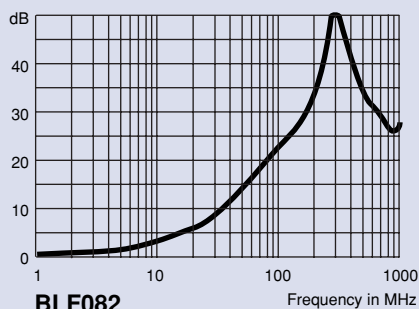
Electrical Schematic



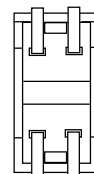
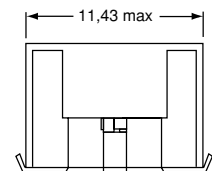
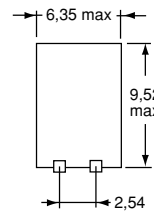
The BLF filter can withstand dielectric voltage of 1000VAC for 60 seconds, thereby allowing placement of this filter at the optimal location, immediately behind the connector. This placement allows immunity protection from signal line interference as well as significant reduction of RFI emissions. The filter can be used in conjunction with unfiltered RJ jacks, ganged jacks, or with filtered modular jacks for additional protection.

Typ. Insertion Loss

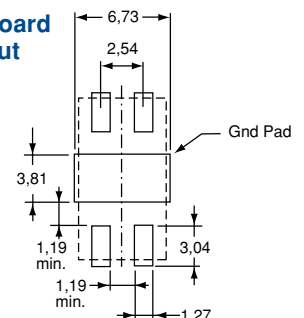
asym. —



Case Styles and typical Sizes



PC Board Layout



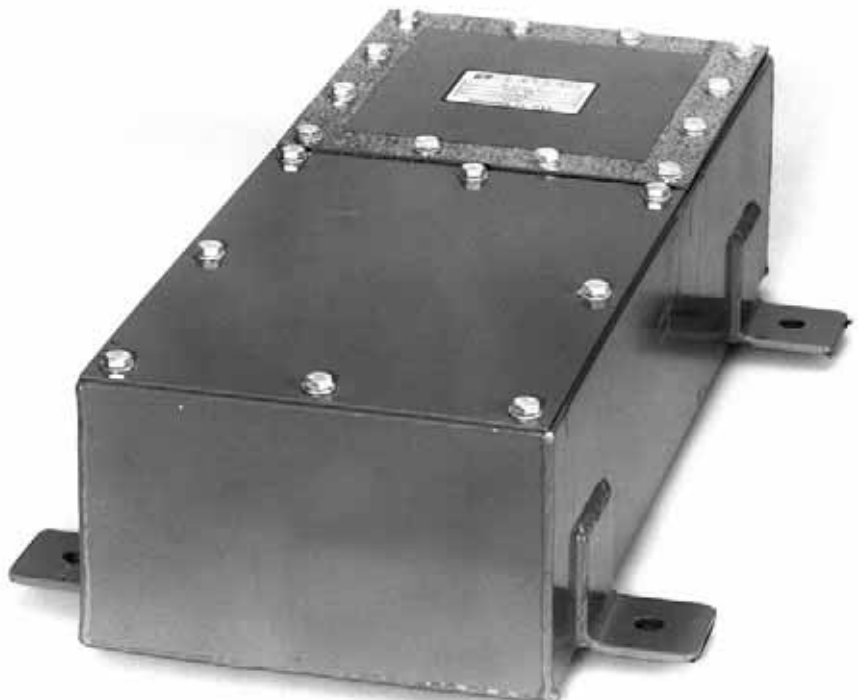
Cross Reference List

Corcom PN	Tyco PN	Corcom PN	Tyco PN	Corcom PN	Tyco PN	Corcom PN	Tyco PN
100ADT6	0-1609071-4	10MV1	0-1609056-3	15DCF10	1-1609074-1	1EGG8C-2	0-1609115-9
100ADT6-S	0-1609071-3	10R1	0-1609030-5	15DCF10B	1-1609074-2	1EGS1-1	0-1609117-1
100AYA6A	0-1609977-7	10R6	0-1609030-6	15DCF6	0-1609074-1	1EGS1-2	0-1609117-2
100AYO6	0-1609972-2	10VB1	0-1609021-9	15DCF6B	0-1609074-2	1EHG1-2	0-1609116-1
100DCB10	5-1609074-3	10VB3	1-1609021-0	15ED1	1-1609016-8	1EK1	0-1609027-1
100DCB10B	5-1609074-5	10VB6	1-1609021-2	15EF1F	0-1609015-9	1EK3	0-1609027-2
100DCB10BF	5-1609074-6	10VDK1	0-1609034-7	15EHT1	1-1609053-1	1EOP	0-1609064-1
100DCB10F	5-1609074-4	10VDK3	0-1609034-8	15EHT6	1-1609053-2	1ER1	0-1609031-1
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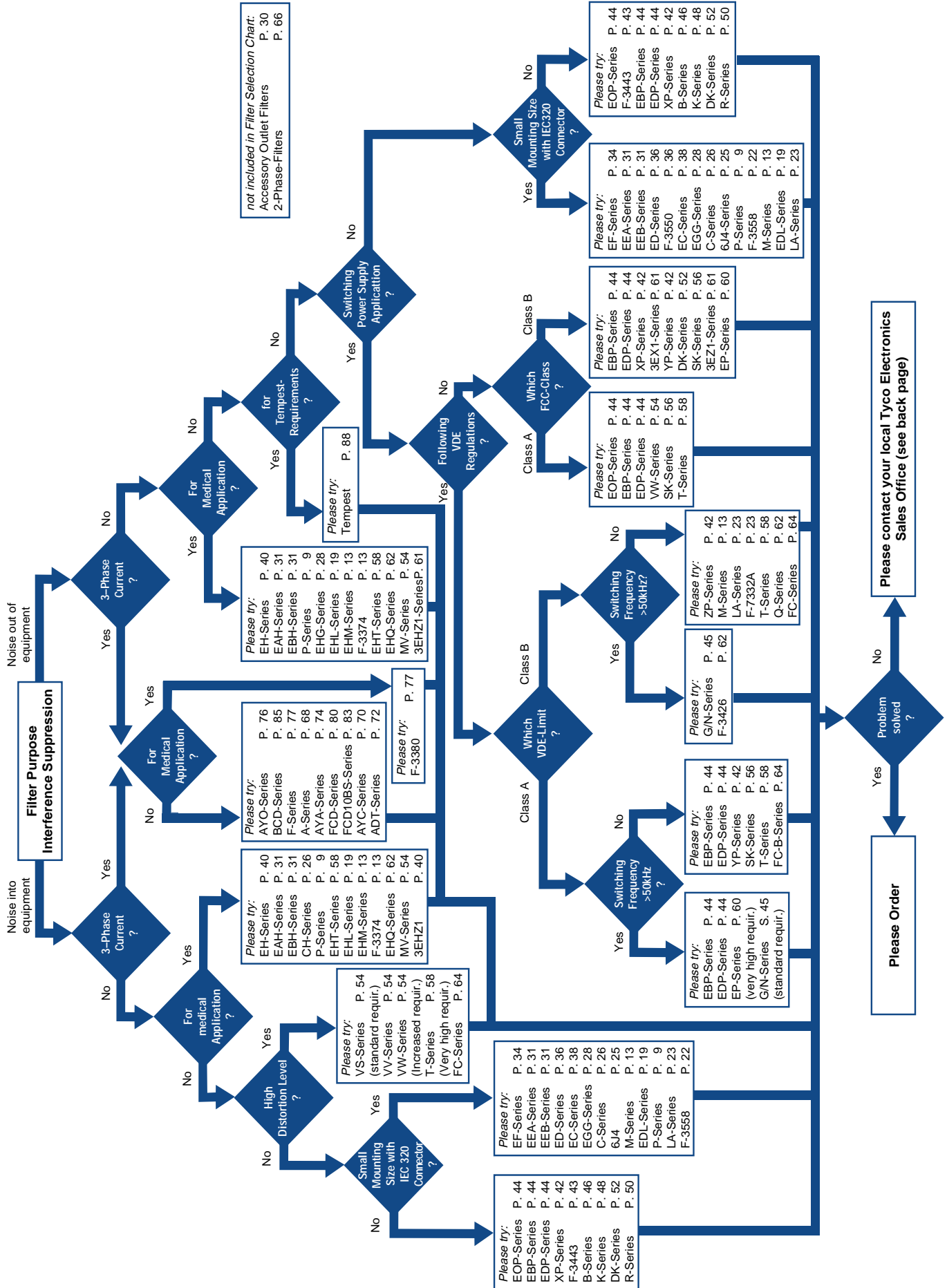
Manufacturing Program High Current Filter

- **High current filter to 4 x 4.000 A for buildings and cabins**, manufactured according to UL and MIL Standard, choice of inductive or capacitive inputs.
- **Signal-, data- and control line filters**, single filters and cabinet style with 4 to 200 filter pairs.

For detailed information call for the separate catalogue.



Filter Selection Chart



Americas

Argentina – Buenos Aires
Phone: +54-1-733-2000
Fax: +54-1-717-0988

Brasil – São Paulo
Phone: +55-11-3611-1311
Fax: +55-11-3611-0397

Canada – Toronto
Phone: +905-475-6222
Fax: +905-474-5520

Chile – Santiago
Phone: +56-2-739-1230
Fax: +56-2-739-1227

Colombia – Bogota
Phone: +57-1-231-9398
Fax: +57-1-240-3769

Mexico – Mexico City
Phone: +52-5-729-0400
Fax: +52-5-361-8545

United States –
Harrisburg, PA
Phone: +1-717-564-0100
Fax: +1-717-986-7575

Troy, MI
Phone: +1-248-273-3359
Fax: +1-248-273-3322

Customer Service:
Phone: +1-800-522-6752

Venezuela – Caracas
Phone: +58-2-986-7774
Fax: +58-2-986-9739

For Latin/South American Countries not shown
Phone: +54-11-4733-2015
Fax: +54-11-4733-2083

Asia/Pacific

Australia – Sydney
Phone: +61-2-9554-2600
Fax: +61-2-9502-2556

India – Bangalore
Phone: +91-80-841-0200
Fax: +91-80-841-0210

Indonesia – Jakarta
Phone: +62-21-526-7852
Fax: +62-21-526-7856

Japan – Kawasaki, Kanagawa
Phone: +81-44-844-8111
Fax: +81-44-812-3207

Korea – Seoul
Phone: +82-2-3415-4500
Fax: +82-2-3486-3810

Malaysia – Selangor
Phone: +60-3-7805-3055
Fax: +60-3-7805-3066

New Zealand – Auckland
Phone: +64-9-634-4580
Fax: +64-9-634-4586

Philippines – Makati City
Phone: +632-867-8641
Fax: +632-867-8661

People's Republic of China –
Hong Kong
Phone: +852-2735-1628
Fax: +852-2735-0243

Shanghai
Phone: +86-21-5383-8188
Fax: +86-21-5383-8018

Shunde
Phone: +86-765-775-1368
Fax: +86-765-775-2823

Singapore – Singapore
Phone: +65-480-4525
Fax: +65-482-1012

Taiwan – Taipei
Phone: +886-2-2664-9977
Fax: +886-2-2664-9900

Thailand – Bangkok
Phone: +66-2-955-0500
Fax: +66-2-955-0505

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