

IEC Appliance Inlet C14 with Filter, Fuseholder 1-or 2-pole, optional Voltage Selector (Series-Parallel), "Lock and Shield" Mounting

Standard- or Medical-Filter



GRM4: with shield and line filter



Description

- Panel Mount:
Snap-in version from rear-side
- 5 Functions:
Appliance Inlet Protection class I, Line Switch 2-pole, with or without Fuseholder for fuse-links 5 x 20 mm, with or without voltage selector, Line filter in standard and medical version
- On phase-out, not recommended for new design

Approvals

- VDE Certificate Number: 118913
- UL File Number: E72928
- CSA File Number: 701867

Characteristics

- Ultra-compact design
Time saving "Lock and Shield" snap-in design for rear-panel mounting
- All single elements are already wired
- Fuseholder on the inside of the equipment prevents accidental use of incorrect fuse-links by the user
- Voltage selector for two voltage ranges
Innovative EMC-shielding with flexible steel segments for an excellent contact to the panel
- Insulation cover on the rear-side
- Qualified for use in equipment according IEC/EN 60950

Other versions on request

- Panel thickness 1.0 / 2 / 2.5 mm (max.)
- Fuseholder 1-pole
- Line switch 1-pole
- Voltage selector with other marking

Weblinks

[pdf](#), [html](#), [General Product Information](#), [Approvals](#), [RoHS](#), [CHINA-RoHS](#), [Mating Connectors](#), [e-Shop](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#), [Accessories](#), [Detailed request for product](#)

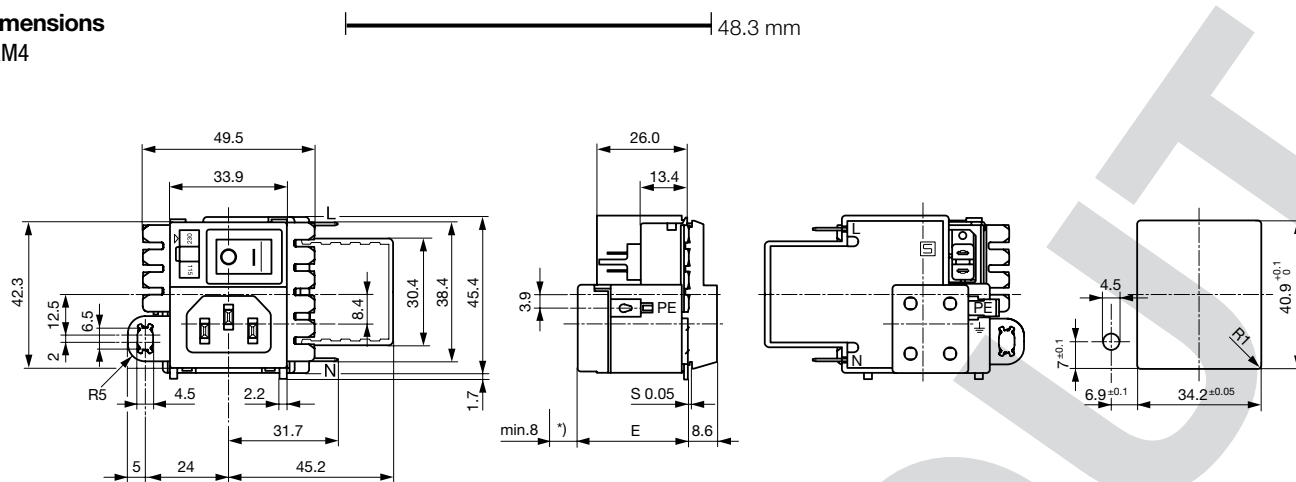
Technical Data

Ratings IEC	0.5 - 10A @ Ta 40 °C / 250VAC; 50Hz
Ratings UL/CSA	0.5 - 10A @ Ta 40 °C / 125VAC; 60Hz
Leakage Current	standard < 0.5 mA (250 V / 60Hz) medical < 5 µA (250 V / 60 Hz)
Dielectric Strength	> 1.7 kVDC between L-N > 2.7 kVDC between L/N-PE Test voltage (2 sec)
Allowable Operation Temp.	-25 °C to 85 °C
Climatic Category	25/085/21 acc. to IEC 60068-1
Degree of Protection	from front side IP 40 acc. to IEC 60529
Protection Class	Suitable for appliances with protection class 1 acc. to IEC 61140
Terminal	Quick connect terminals 4.8 x 0.8 mm Solder terminal on request Solder terminals for voltage selector
Panel Thickness s	Snap-in: 1.5 mm (other on request)
Material: Housing	Thermoplastic, black, UL 94V-0

Appliance-Inlet/-Outlet	C14 acc. to IEC/EN 60320-1, UL 498, CSA C22.2 no. 42 (for cold conditions) pin-temperature 70 °C, 10A, Protection Class 1
Fuseholder	1 or 2 pole, Shocksafe category PC2 acc. to IEC 60127-6, for fuse-links 5 x 20mm
Rated Power Acceptance @ Ta 23 °C	5 x 20: 2W (1 pole)/ 1.6W (2-pole) per pole
Power Acceptance @ Ta > 23°C	Admissible power acceptance at higher ambient temperature see derating curves
Line Switch	2-pole, non-illuminated, acc. to IEC 61058-1 Technical Details
Voltage Selectors	optional, jumper, 2 pos.
Line Filter	Standard and Medical Version, IEC 60939, IEC 60601-1, UL 1283, UL 544, EN 133 200, CSA C22.2 no. 8 Technical Details
MTBF	> 1'400'000 h acc. to MIL-HB-217 F

Dimensions

GRM4



E = 31.7 mm with fuseholder

E = 26.25 mm without fuseholder

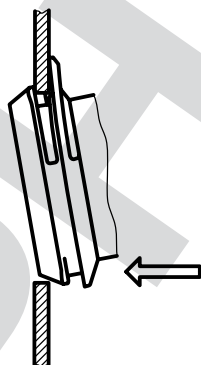
*) Min. space to remove the fuseholder cover

Technical Data of Filter-Components

Rated Current [A]	Filter-Type	Inductances L [mH]	Capacitance CX [nF]	Capacitance CY [nF]	R [MΩ]
0.5	Standard Version	2 x 24	100	2.2	-
1	Standard Version	2 x 12	100	2.2	-
3	Standard Version	2 x 2.5	100	2.2	-
6	Standard Version	2 x 0.78	100	2.2	-
10	Standard Version	2 x 0.225	100	2.2	-
0.5	Medical Version (M5)	2 x 24	100	-	1
0.5	Medical Version (M5)	2 x 24	100	2.2	1
1	Medical Version (M5)	2 x 12	100	-	1
1	Medical Version (M5)	2 x 24	100	2.2	1
3	Medical Version (M5)	2 x 2.5	100	-	1
3	Medical Version (M5)	2 x 24	100	2.2	1
6	Medical Version (M5)	2 x 0.78	100	-	1
6	Medical Version (M5)	2 x 24	100	2.2	1
10	Medical Version (M5)	2 x 0.225	100	-	1
10	Medical Version (M5)	2 x 24	100	2.2	1
10	Standard and Medical Version	2 x 24	100	2.2	1

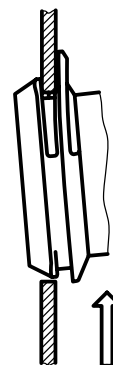
Dimensions

Step 1



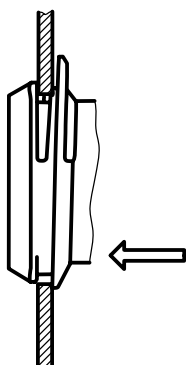
Place the socket in top edge of the panel cut-out.

Step 2



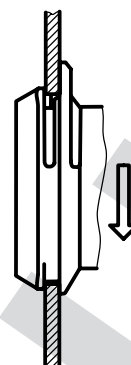
Push the socket upwards.

Step 3



Push the socket forward into the panel cut-out.

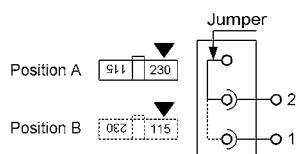
Step 4



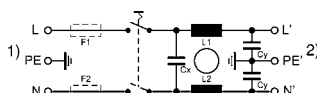
Release the socket. The component is self adjusting.

Diagrams

Voltage selector

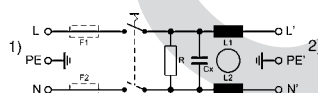


GRM4 Standard version



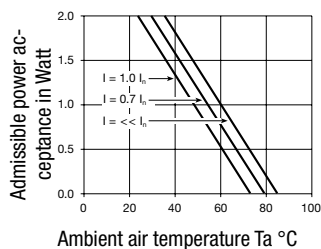
1) Line
2) Load

GRM4 Medical version

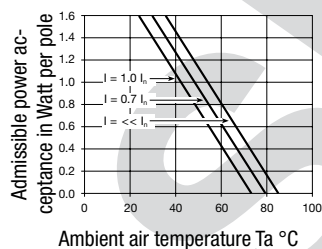


Derating Curves

1-pole



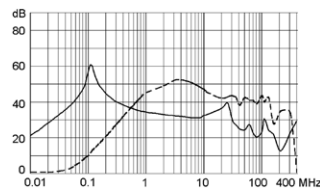
2-pole



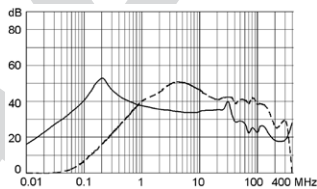
Attenuation Loss

Standard version

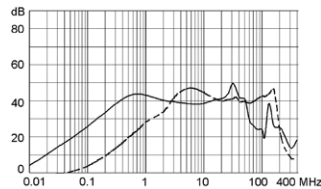
0.5 A



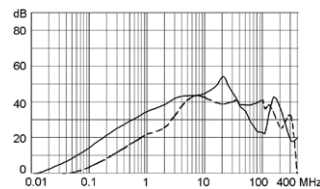
1 A



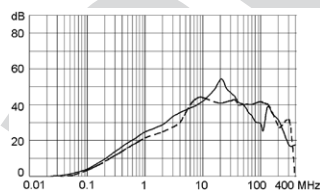
3 A



6 A

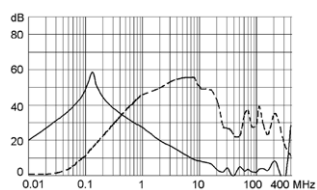


10 A

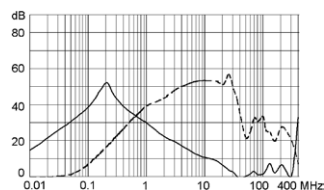


--- differential mode ____ common mode

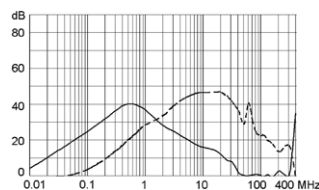
Medical version (M5)
0.5 A



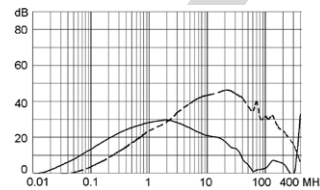
1 A



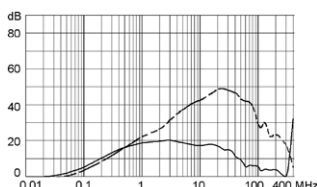
3 A



6 A



10 A



Variants

Basic version:

- Marking of the voltage selector 115/230
- with housing and cover on the rear-side

Rated Current [A]	Filter-Type	Fuseholder	Line Switch	Voltage Selectors	Order Number
1	Standard Version	-	2-pole	●	GRM4.4202.123
1	Standard Version	2-pole	2-pole	●	GRM4.4222.123
6	Medical Version (M5)	2-pole	2-pole	●	GRM4.5422.123

Packaging unit 120 Pcs

Mating Outlets/Connectors

Category / Description

Appliance Outlet Overview complete

IEC Appliance Outlet F, Screw-on Mounting, Front Side, Solder Terminal	4787
IEC Appliance Outlet F, Snap-in Mounting, Front Side, Solder or Quick-connect Terminal	4788
IEC Appliance Outlet F or H, Screw-on Mounting, Front Side, Solder, PCB or Quick-connect Terminal	5091
IEC Appliance Outlet F or H, Screw-on Mounting, Front Side, Solder or Quick-connect Terminal	5092

[Appliance Outlet further types to GRM4](#)

Connector Overview complete

IEC Connector C15, Rewireable, Straight	0101
IEC Connector C15A, Rewireable, Straight	0102
IEC Connector C15A, Rewireable, Straight	0102-G
IEC Connector C15A, Rewireable, Angled	0112
IEC Connector C13, Rewireable, Angled	4012

[Connector further types to GRM4](#)

Power Cord Overview complete

Power Cord with IEC Connector C13, Angled	0311
Power Cord with IEC Connector C13, Angled	3011
Power Cord with IEC Connector C13, Angled	3012
Power Cord with IEC Connector C13, Angled	3013
Power Cord with IEC Connector C13	3020

[Power Cord further types to GRM4](#)