

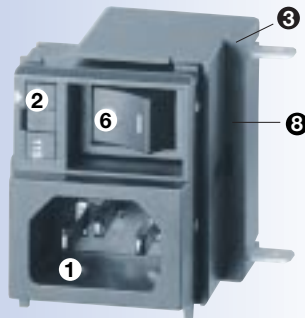


Multifunctional Power Entry Modules GRM1 / GRM2 / GRM4

Extension of the GRM4 product range

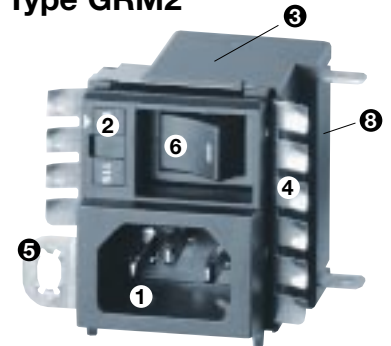
NEW

Type GRM1



NEW

Type GRM2

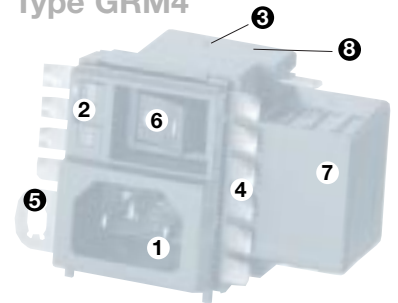


Characteristics and benefits

- Compact design
- Low mounting depth behind the panel
- All single elements prewired, pc-board (except voltage selector)
- Qualified for use in equipment with safety requirements according to IEC/EN 60950
- Time saving "Lock and Shield" snap-in design, for rear panel mounting
- Voltage selector (not included as option) for two voltage ranges
- Fuseholder on the inside of the equipment prevents accidental use of incorrect fuse-links by the user
- All GRM-types have the same front panel cut-out

Existing

Type GRM4



Functions of the GRM-types

		GRM1	GRM2	GRM4
①	Appliance-inlet according to IEC/EN 60320-1/C14, protection class I, pin-temperature 70°C (cold condition)	X	X	X
②	Voltage selector (optional without) for two voltage ranges	X	X	X
③	Fuseholder 1- or 2-pole (optional without) according to IEC/EN 60127-6 for miniature fuse-links 5x20 mm	X	X	X
④	EMC-shield		X	X
⑤	Additional ground-terminal lug		X	X
⑥	ON/OFF switch 2-pole (optional 1-pole), non-illuminated, IEC/EN 61058-1	X	X	X
⑦	Mains-filter, one-stage, standard- and medical versions 0,5-10 A			X
⑧	With housing and cover on the rear side	X	X	X

SCHURTER

Certified Management Systems



ISO 9001/ISO 14001

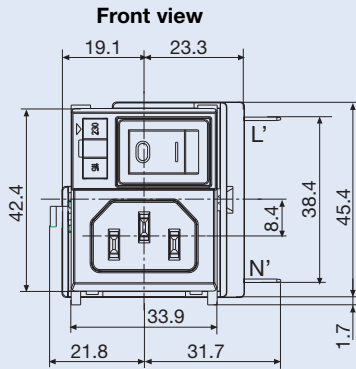


FM 11590

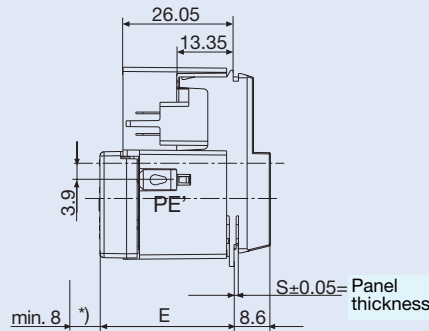


Dimensions

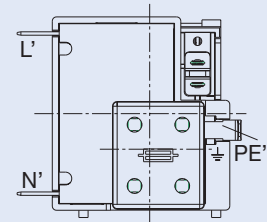
GRM1 with fuseholder



Side view



Rear view

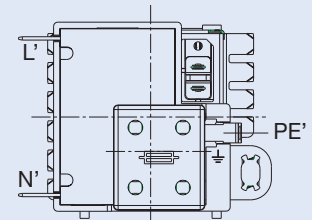
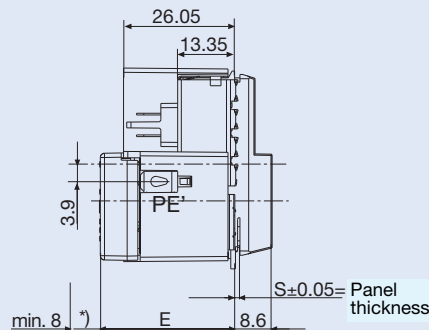
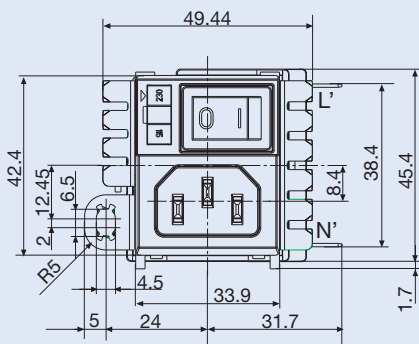


Terminals

L', N', PE': combined solder-/ quick-connect terminals 4,8x0,8 mm

Voltage selector: solder terminals for 1.5 mm²

GRM2 with fuseholder



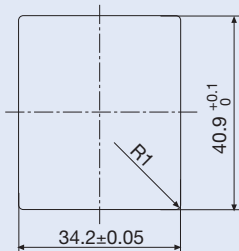
*) Min. space to remove the fuseholder cover

E = 31.7 mm for GRM1/2 with fuseholder

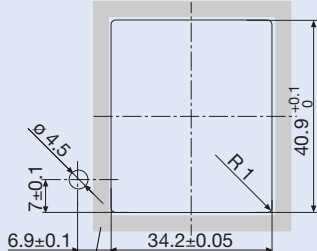
E = 26.25 mm for GRM1/2 without fuseholder

Panel cut-out

GRM1



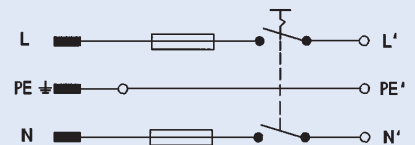
GRM2/GRM4



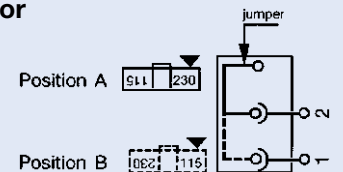
Shaded area (55x43 mm) on the inside of the equipment must be conductive for optimal shielding. Do not apply paint or coating

Diagrams

2-pol. Version



Voltage selector



Mounting instructions

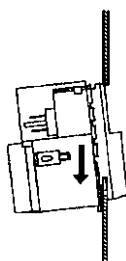
Step 1

Place the socket in bottom edge of the panel cut-out



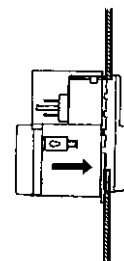
Step 2

Push the socket downwards



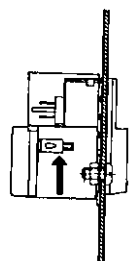
Step 3

Push the socket forward into the panel cut-out



Step 4

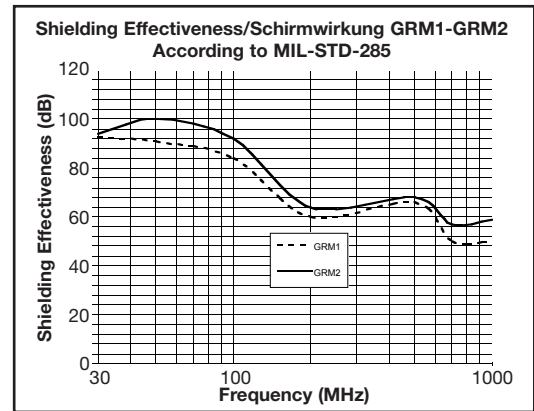
Release the socket. The component is self adjusting



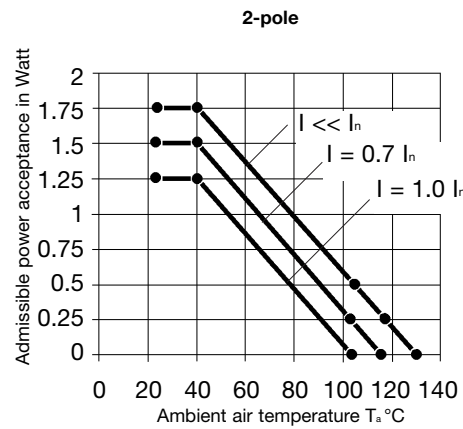
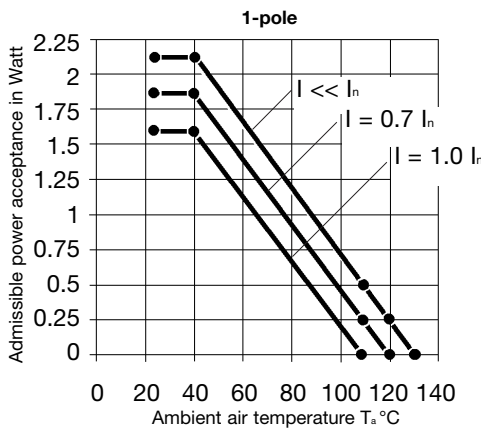
Technical data (T_a 40°C)

Rated voltage	250 VAC/50-60 Hz
Rated current	10 A
Test voltage (50Hz, 1Min.)	> 2.3 kV between L + N > 2.8 kV between L/N + PE
Allowable ambient air temperatures	-25°C to +70°C
Rated power acceptance at ambient air temperature T _a 23°C	2 W (1-pole) 1.6 W (2-pole)
Power acceptance at higher T _a	see derating curves
Climatic category	40/085/21 acc. to IEC 60068
Degree of protection (front side)	IP40 acc. to IEC 60529
Protection class	suitable for equipment with protection class I acc. to IEC 60536
Panel thickness (max. 2.5 mm)	standard 1.5 mm (other on request)
Materials (housing and cover)	Thermoplastic, black, UL94 V-0

Approvals



Derating curves for fuseholder



Note

The admissible power acceptance of the fuseholder is determined by a standardized testing procedure at rated current and at an ambient air temperature of 23°C, whereby the maximum permissible temperatures at the fuseholder (printed circuit board 130°C) must not be exceeded. Application and mounting method, especially for closed fuseholders, can influence the heating situation considerably. Therefore the heating situation has to be tested at the working condition of the fuseholder at maximum current and maximum ambient air temperature.

Take note of the information on pages 139–143 in the main-catalogue

Order No.

- | | |
|---|---|
| <p>Basic version:</p> <ul style="list-style-type: none"> - Snap-in mounting - Protection class I, 70°C (cold condition) - Marking of the voltage selector 115/230 - with housing and cover on the rear side | <ul style="list-style-type: none"> - Combined solder-/quick connect terminals 4,8x0,8 mm - Voltage selector with solder terminals - Packing unit 20 pieces |
|---|---|

Type	Order no.	Switch	Voltage selector	Fuseholder	EMC shield	Housing/cover on the rear side	Panel thickness (mm)
GRM1	GRM1.1160.013	2-pole	without	without	without	with	1.5
	GRM1.1161.023	2-pole	with	without	without	with	1.5
	GRM1.1180.013	2-pole	without	with, 2-pole	without	with	1.5
	GRM1.1181.023	2-pole	with	with, 2-pole	without	with	1.5
GRM2	GRM2.1160.013	2-pole	without	without	with	with	1.5
	GRM2.1161.023	2-pole	with	without	with	with	1.5
	GRM2.1180.013	2-pole	without	with, 2-pole	with	with	1.5
	GRM2.1181.023	2-pole	with	with, 2-pole	with	with	1.5

Other versions on request

- Panel thickness 1.0 / 2 / 2.5 mm
- Switch 1-pole
- Fuseholder 1-pole
- without housing and cover on the rear side
- Voltage selector with other marking
- for protection class II (only without housing and cover on the rear side)