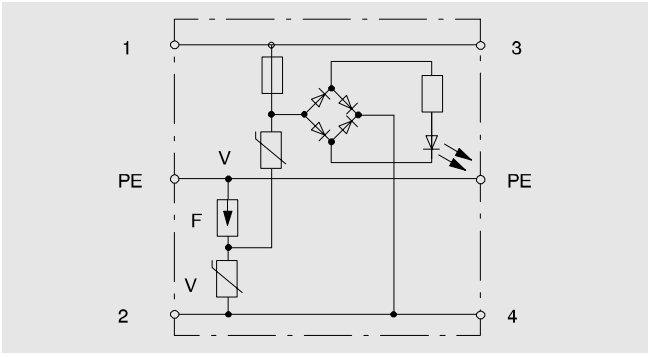
Precision mains protection on top-hat rail
VF 230-AC-FS, VF 230-AC, VF 230-AC/20A

Operation and fields of application

Lightning barrier VF 230-AC is a surge protection module for control engineering installations, signal current circuits, mains units and computer installations.
A protective circuit made up of varistors ensures a very low protection level at a maximum limit discharge surge current of 35 kA.

Mounting

OBO VF 230 devices are installed in standard commercial distribution box housings with two clamping feet, on a 35 mm top-hat rail.



Block diagram of VF 230-AC

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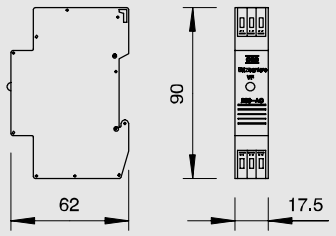
Technical data

Precision mains protection		VF 230-AC	VF 230-AC/20
Nominal voltage	U_N	230 V (50-60 Hz)	
Maximum continuous operating voltage	U_c	255 V~	
LPZ		2 → 3	
Requirement class to DIN VDE 0675, Part 6 (Draft 11.89) A1, A2 to IEC 61643-1		D class III	
Rated load current	I_L	16 A	20 A
Nominal discharge current	I_n	2.5 kA	
Maximum discharge current	I_{max}	7 kA	
Voltage protection level U_p	$U_{p\ L-N}$ $U_{p\ L/N-PE}$	≤ 1.0 kV ≤ 1.5 kV	
Connection cross-section single-stranded, multi-stranded, fine-stranded, fine-stranded with: core end sleeve, pin cable lug, crimp sleeves		0.14-2.5 mm²	
Stripping length for connecting cables		6-7 mm	
Response time	t_A	≤ 25 ns	
Colour		grey, RAL 7035	
Material		Polyamide 6	Duroplast
Mounting		Snap-fitting on 35 mm top-hat rail to DIN EN 50 022	2 clamping feet for fixing and earthing on 35 mm top-hat rail to DIN EN 50 022
Dimensions	Width Depth	17.8 mm 62.0 mm	35.0 mm 70.0 mm

Technical data VF 230 AC-FS see page 93

Ordering data

Type	Description	Order no.
VF 230-AC	Rated current 16 A	**5097 64 9**
VF 230-AC/20	Rated current 20 A	**5097 90 8**
VF 230-AC-FS	Rated current 16 A with remote signalling	**5097 85 1**



Features at a glance VF 230-AC	Advantages in use
Mounting on 35 mm top-hat rail	Direct installation in distribution board housing or switchgear cabinets
Available with remote signalling (VF 230-AC-FS)	Permanent check of the varistors in switchgear with poor access
Screwless clamp terminals	Easy to install
Y circuit	Safety from transient surges on the phase, neutral or protective earth wire