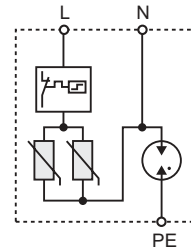




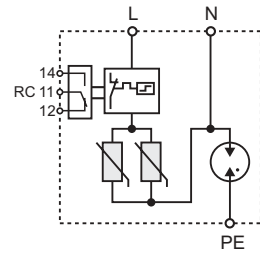
- **Category IEC / EN / VDE:** Class I / Type 1 / B+C
- **Purpose:** the RPBC-50 (1+1) series of overvoltage surge protective devices has been developed to protect against partial direct and indirect lightning discharges and is intended to provide protection in zones **0_{A-1}** as per PN-EN (IEC) 62305. The (1+1) range is intended to be used on TT single phase networks, where N to PE galvanic isolation is required. The circuit topology consists of one varistor stage protected by a thermal disconnection device. Each single phase unit comprises a high performance varistor block. A high energy encapsulated air gap (GDT) provides galvanic separation between the N and PE conductors. An indicator monitors the disconnecter and brings up a status flag if this should operate
- **Application site:** the arresters are mounted in the main-distribution boards (MB)
- **Mounting:** direct mounting on 35 mm DIN rail mount, EN 50022
- **Status indication:** mechanical flag + remote contact RC
- **Remote signalisation:** **RPBC-50/280/1N** - without RC damage contact
RPBC-50/280/1NR - with potential-free signaling RC damage contact
- **Housing:** compact design
- **Compliance with standard:** PN-IEC 61643-1
- **Recognitions, certifications:**



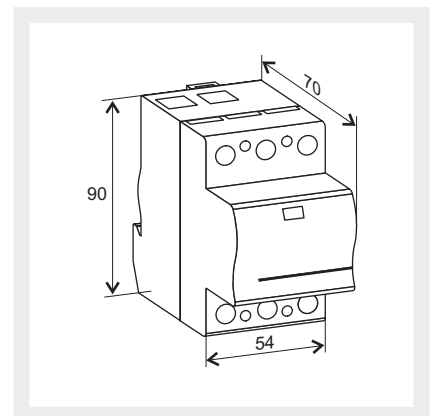
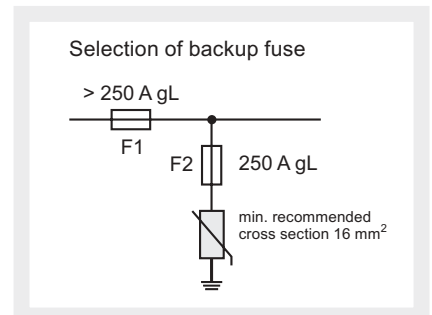
RPBC-50/280/1N

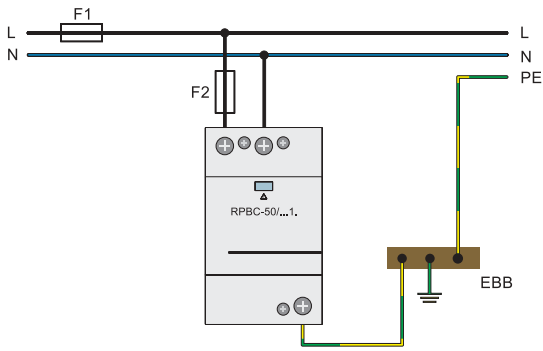


RPBC-50/280/1NR

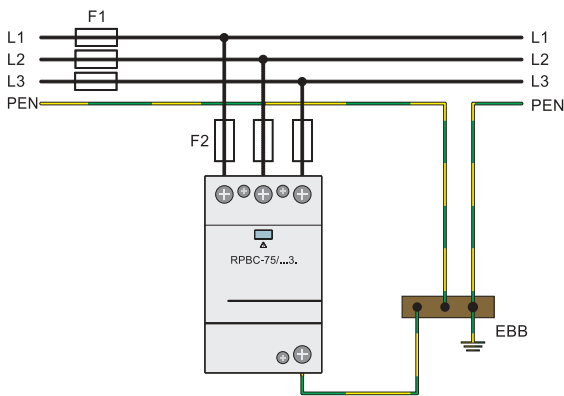


Type of arrester	RPBC-50/280/1N, RPBC-50/280/1NR	
Technical data		
Max. continuous operating voltage	U_c	275 / 350 V AC/DC
Nominal discharge current (8/20)	I_n	MOV/GDT: 40 / 50 kA
Max. discharge current (8/20)	I_{max}	MOV/GDT: 100 / 100 kA
Current peak value (10/350) (L+N-PE)	I_{imp}	MOV/GDT: 25 / 50 kA 50 kA
Specific energy		MOV/GDT: 156 / 625 kJ/Ω
Charge Q		MOV/GDT: 12,5 / 25 As
Protection level	U_p	
• at I_n (8/20)		MOV: 1,4 kV
• at I_{imp} (10/350)		MOV: 1,1 kV
• at (1,2/50)		GDT: 1,2 kV
Follow current	I_f	GDT: 100 Arms
Response time	t_A	MOV/GDT: < 25 / 100 ns
Residual current at U_c	I_{PE}	MOV: < 2,5 mA
Thermal protection		MOV: yes
Back-up fuse		MOV: max. 250 A gL (if mains > 250 A)
Short-circuit withstand		MOV: 25 kA 50 Hz
Temperature range		-40...+80 °C
Cross-section of connection wire		solid: 35 mm ² stranded: 25 mm ²
Terminal screw torque		max. 4,5 Nm
Housing protection category		IP 20
Housing material		thermoplastic, extinguishing degree UL 94 V-0
Dimensions		90 x 54 x 70 mm (DIN 43880: 3TE)
Packaging dimensions		108 x 71 x 76 mm
Weight		420 g
Additional data for RPBC-...R		
Remote signalisation		potential-free contact RC
Switching capability		0,5 A / 250 V AC 3 A / 125 V AC
Cross-section of connection wire		max. 1,5 mm ²
Terminal screw torque		0,25 Nm
Weight		430 g

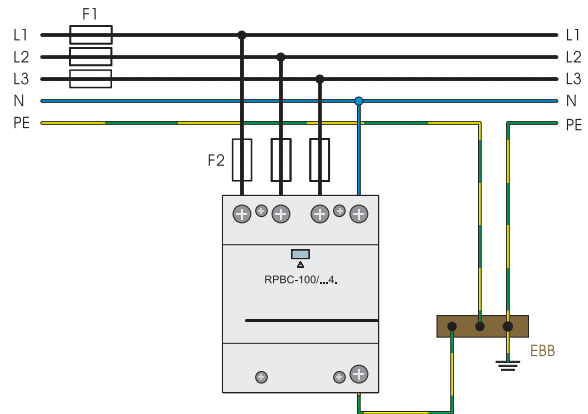




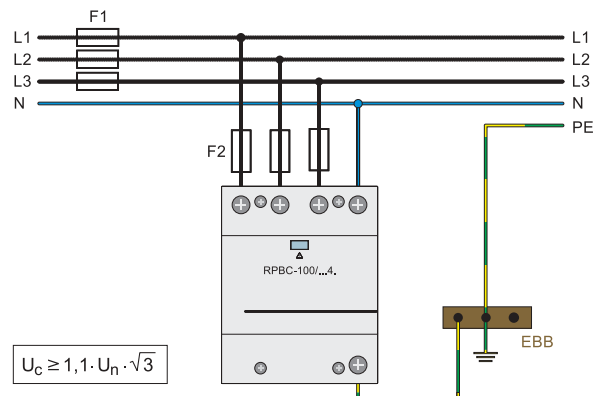
TT (1+1) single-phase network



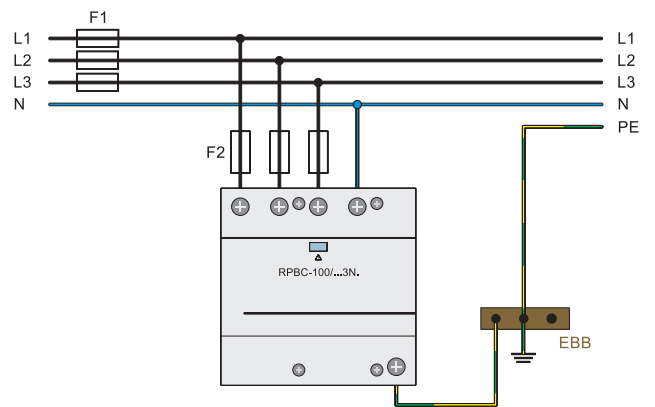
TNC (3+0) three-phase network



TNS (4+0) three-phase network



IT three-phase network - parallel wiring



TT (3+1) three-phase network