

# RPBC-100/280/3N.

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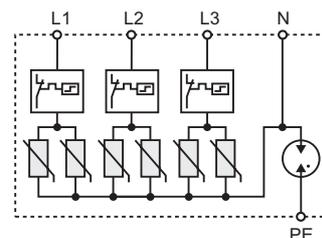
multi-pole, lightning and surge arrester,  $I_{imp} = 25 \text{ kA (10/350 } \mu\text{s) / pole}$

- **Category IEC / EN / VDE:** Class I / Type 1 / B+C
- **Purpose:** the **RPBC-100 (3+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<sub>A-1</sub>** as per PN-EN (IEC) 62305. The (3+1) range is intended to be used on TT three phase networks, where N to PE galvanic isolation is required. The circuit topology consists of three varistor stages each protected by a thermal disconnection device. Each three phase unit comprises a total of three high performance dual MOV blocks, providing a surge rating suitable for branch service applications. A high energy encapsulated air gap (GDT) provides galvanic separation between the N and PE conductors. A unique indicator monitors all disconnectors and brings up a common status flag if any one stage should fail
- **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-100/280/3N** - without RC damage contact  
**RPBC-100/280/3NR** - with potential-free signaling RC damage contact
- **Housing:** compact design
- **Compliance with standard:** PN-IEC 61643-1
- **Recognitions, certifications:** 

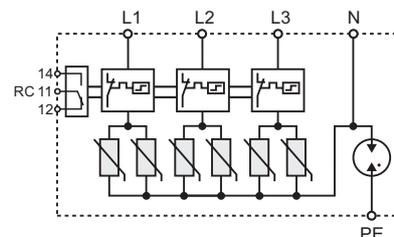


 NEW product

**RPBC-100/280/3N**



**RPBC-100/280/3NR**

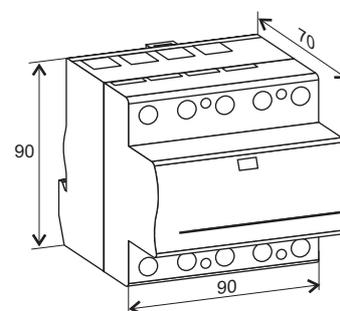
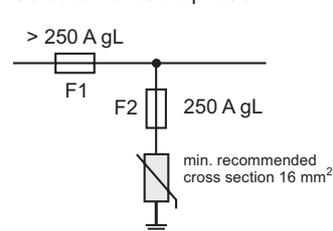


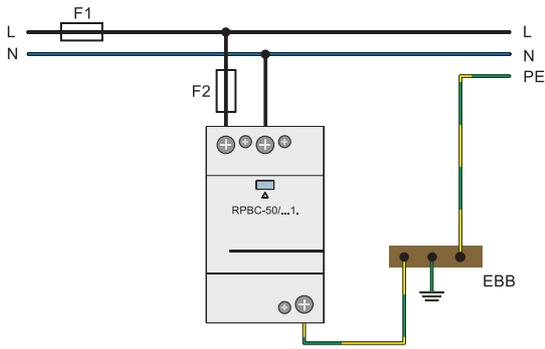
Type of arrester **RPBC-100/280/3N, RPBC-100/280/3NR**

## Technical data

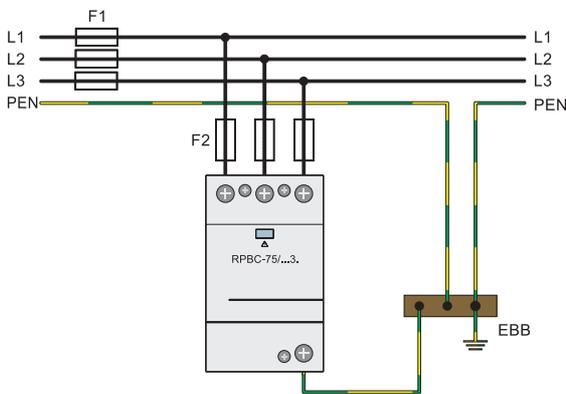
Max. continuous operating voltage	<b>U<sub>c</sub></b>	275 / 350 V AC/DC
Nominal discharge current (8/20)	<b>I<sub>n</sub></b>	MOV/GDT: 40 / 100 kA
Max. discharge current (8/20)	<b>I<sub>max</sub></b>	MOV/GDT: 100 / 160 kA
Current peak value (10/350) (L1+L2+L3+N+PE)	<b>I<sub>imp</sub></b>	MOV/GDT: 25 / 100 kA 100 kA
Specific energy		MOV/GDT: 156 / 2500 kJ/Ω
Charge Q		MOV/GDT: 12,5 / 25 As
Protection level	<b>U<sub>p</sub></b>	
• at I <sub>n</sub> (8/20)		MOV: 1,4 kV
• at I <sub>imp</sub> (10/350)		MOV: 1,1 kV
• at (1,2/50)		GDT: 1,2 kV
Follow current	<b>I<sub>f</sub></b>	GDT: 100 Arms
Response time	<b>t<sub>A</sub></b>	MOV/GDT: < 25 / 100 ns
Residual current at U <sub>c</sub>	<b>I<sub>PE</sub></b>	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 <sup>2</sup> stranded: 25 mm <sup>2</sup>
Terminal screw torque		max. 4,5 Nm
Housing protection category		IP 20
Housing material		thermoplastic, extinguishing degree UL 94 V-0
Dimensions		90 x 90 x 70 mm (DIN 43880: 5TE)
Packaging dimensions		108 x 103 x 76 mm
Weight		870 g
<b>Additional data for RPBC-...R</b>		
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 <sup>2</sup>
Terminal screw torque		0,25 Nm
Weight		880 g

## Selection of backup fuse

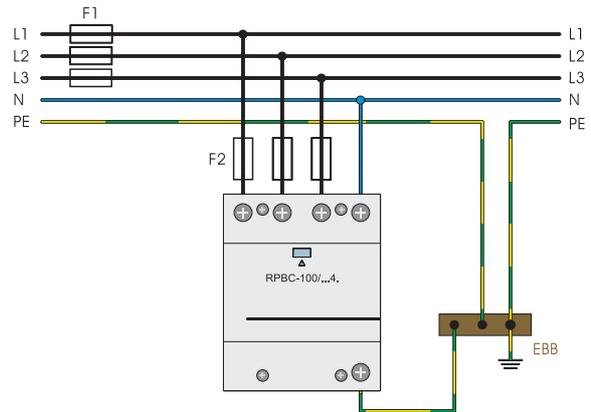




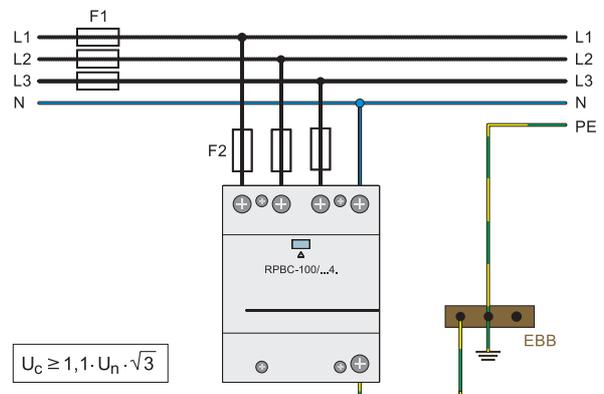
TT (1+1) single-phase network



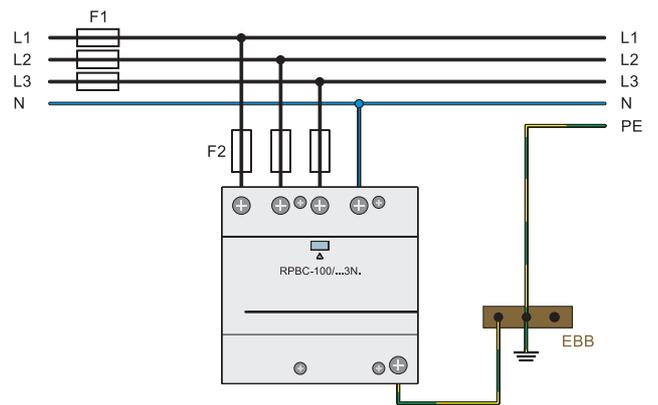
TNC (3+0) three-phase network



TNS (4+0) three-phase network



IT three-phase network - parallel wiring



TT (3+1) three-phase network