

# RPBC-75/280/3.

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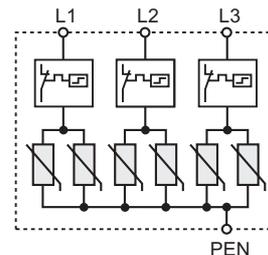
multi-pole, lightning and surge arrester,  $I_{imp} = 25 \text{ kA (10/350 } \mu\text{s) / pole}$

- **Category IEC / EN / VDE:** Class I / Type 1 / B+C
- **Purpose:** the **RPBC-75 (3+0)** 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+0) range is intended to be used on TNC three phase networks with PEN conductor. 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 high surge rating suitable for primary service entrance applications. 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-75/280/3** - without RC damage contact  
**RPBC-75/280/3R** - with potential-free signaling RC damage contact
- **Housing:** compact design
- **Compliance with standard:** PN-IEC 61643-1
- **Recognitions, certifications:** 

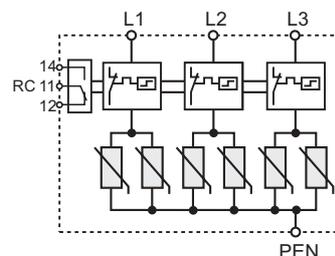


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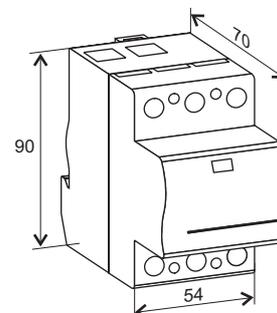
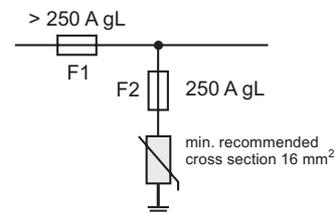
**RPBC-75/280/3**



**RPBC-75/280/3R**



### Selection of backup fuse



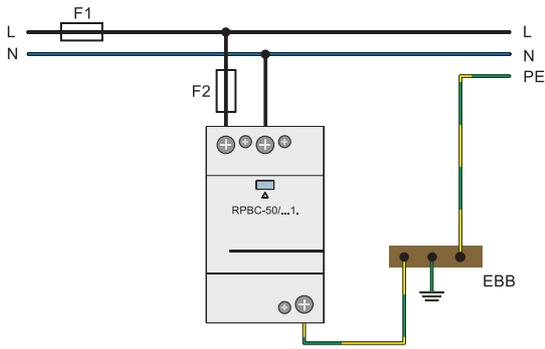
## Type of arrester RPBC-75/280/3, RPBC-75/280/3R

### Technical data

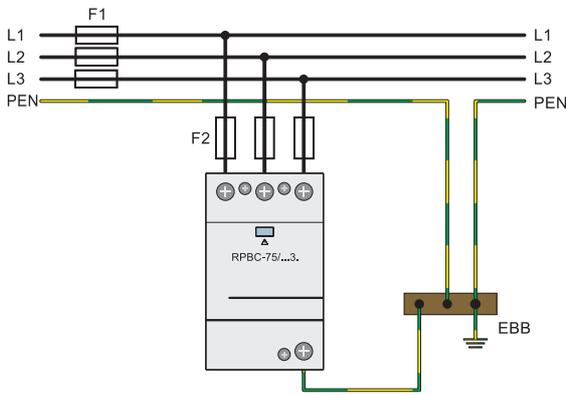
Max. continuous operating voltage	$U_c$	275 / 350 V AC/DC
Nominal discharge current (8/20)	$I_n$	per pole: 40 kA
Max. discharge current (8/20)	$I_{max}$	per pole: 100 kA
Current peak value (10/350) (L1+L2+L3-PEN)	$I_{imp}$	per pole: 25 kA 75 kA
Specific energy		per pole: 156 kJ/Ω
Charge Q		per pole: 12,5 As
Protection level	$U_p$	
• at $I_n$ (8/20)		1,4 kV
• at $I_{imp}$ (10/350)		1,1 kV
Follow current	$I_f$	no
Response time	$t_A$	< 25 ns
Residual current at $U_c$	$I_{PE}$	< 2,5 mA
Thermal protection		yes
Back-up fuse		max. 250 A gL (if mains > 250 A)
Short-circuit withstand		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 54 x 70 mm (DIN 43880: 3TE)
Packaging dimensions		108 x 79 x 76 mm
Weight		610 g

### Additional data for RPBC-...R

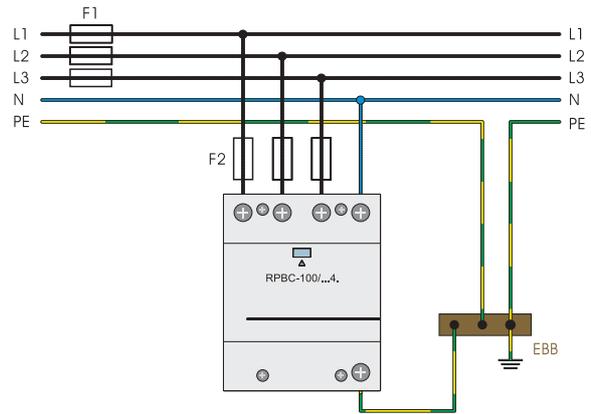
Remote signalisation		potential-free contact RC
Switching capability		0,5 A / 250 V AC 3 A / 125 V AC
Cross-section of connection wire		max. 1,5 mm <sup>2</sup>
Terminal screw torque		0,25 Nm
Weight		620 g



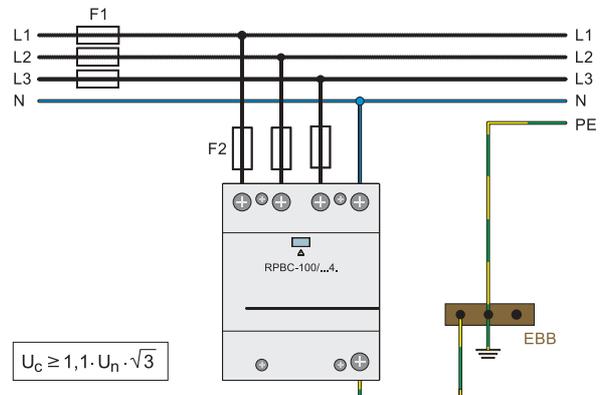
TT (1+1) single-phase network



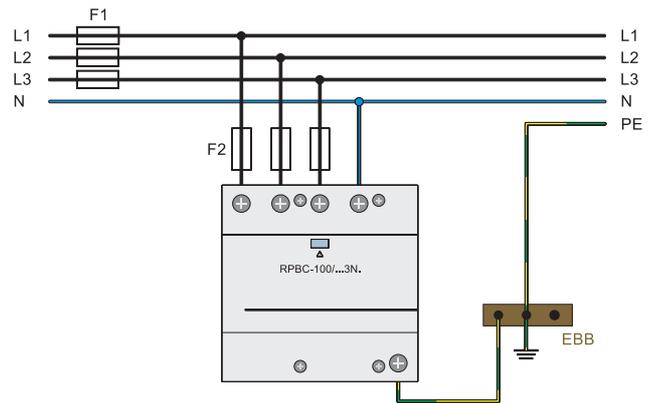
TNC (3+0) three-phase network



TNS (4+0) three-phase network



IT three-phase network - parallel wiring



TT (3+1) three-phase network