

RSP-E7.5...

4-pole lightning and surge arresters, $I_{imp} = 7,5 \text{ kA/pole}$

RSP-E7.5-40



RSP-E7.5-31



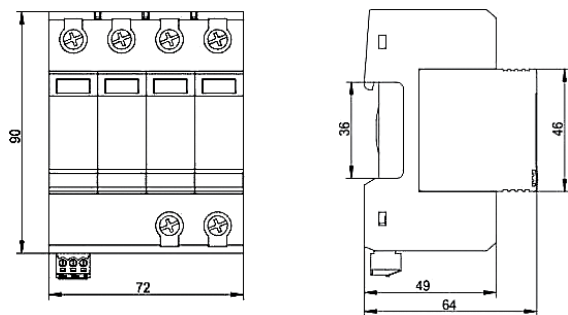
- Category IEC / EN / VDE: class I+II / type 1+2 / B+C
- Location of use: sub-distribution boards (SB)
- Network systems: TT, TN-S, TN-C
- Modes of protection: L-N, N-PE
- Protection elements: MOV, MOV+GDT
- Cover: compact
- Mechanical status indicator: green/red flag
- Compliance with standards: IEC/EN 61643-11:2011, IEC 60364-4-53, IEC 62305, CE, RoHS

Type of arrester		RSP-E7.5-4	RSP-E7.5-31
Electrical data			
Number of poles		4	
Nominal voltage (50/60 Hz)	U_n	230 V AC	
Max. continuous operating voltage	U_c	275 V AC	275 V AC / 255 V AC (L-N / N-PE)
Nom. discharge current (8/20 μ s)	I_n	20 kA	20 kA / 20 kA (L-N / N-PE)
Max. discharge current (8/20 μ s)	I_{max}	50 kA	50 kA / 50 kA (L-N / N-PE)
Impulse discharge current (10/350 μ s)	I_{imp}	7,5 kA	7,5 kA / 12,5 kA (L-N / N-PE)
Voltage protection level	U_p	1,2 kV	1,2 kV / 1,5 kV (L-N / N-PE)
Response time	t_A	$\leq 25 \text{ ns}$	
Backup fuse		$\leq 125 \text{ A gL/gG}$	
Short-circuit current rating	I_{scCR}	25 kA _{RMS}	
Leakage current	I_{pe}	$< 0,1 \text{ mA}$	
TOV withstand (5 s)	U_T	335 V	
General data			
Ambient temperature (operating)	T_a	$-40...+85 \text{ }^\circ\text{C}$	
Cross section of cables connected to terminals		35 mm ² (single core) / 25 mm ² (multi-core)	
Terminal tightening moment		max. 4,5 Nm	
Mounting		direct mounting on 35 mm rail mount (EN 60715)	
Cover protection category		IP 20 (built-in, EN 60529)	
Cover material		thermoplastic; extinguishing degree V-0 (UL 94)	
Dimensions (L x W x H) [mm]		90 x 72 x 64	
Weight		486 g	457 g
Remote fault signalisation			
Type of contact		potential-free (isolated contact 1 CO)	
Switching capability of contact		0,5 A / 250 V AC 0,1 A / 250 V DC, 0,2 A / 125 V DC, 0,5 A / 75 V DC	
Cross section of cables connected to terminals		1,5 mm ² (wire single core)	

RSP-E7.5...

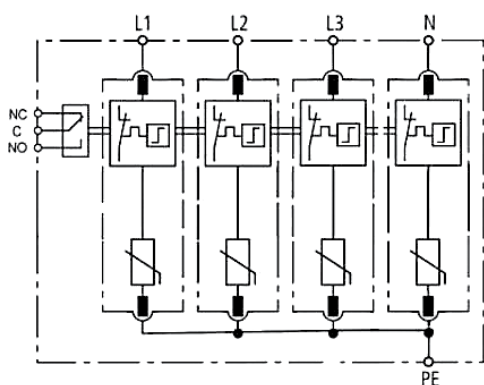
4-pole lightning and surge arresters, $I_{imp} = 7,5 \text{ kA/pole}$

Dimensions

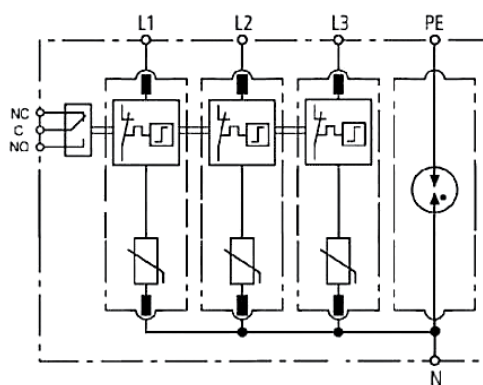


RSP-E7.5...

Connection diagrams



RSP-E7.5-40



RSP-E7.5-31

Features:

- designed according to IEC/EN 61643-11:2011, IEC 60364-4-53, IEC 62305,
- unique thermal disconnecter design provides quick thermal response and secure disconnection,
- high lightning current discharge capacity up to 7,5 kA (10/350 μs), surge current capability up to 50 kA (8/20 μs),
- high short-circuit current rating up to 25 kA_{RMS}, suitable for application in most AC power systems, low voltage protection level,
- anti-vibration module locking system with release button,
- degradation failure indication window and remote signal contact.

Series description:

- **RSP-E7.5...** is the class I+II SPD for low-voltage power supply system lightning current & surge protection, especially for location of high risk exposure or LPZ 0-2 building entrances (IEC 62305-4) to against the damage from transient surge and spikes caused by lightning and other electrical source; is suit for the sub-distribution board,
- high energy MOVs are employed to provide stable lightning & surge protection service with no follow current; notable feature is dual module redundancy for one pole, two individual MOV protection modules in parallel in one pole SPD with two indication windows, so that the SPD could keep on working in spite of one protection module fails or one indication windows turns to red - that will help to realize the uninterrupted surge protection, since user can replace the failure models according to the timing and the condition,
- high energy gas discharge tube technology (**RSP-E7.5-31**) is designed especially for separation and protection between the N and PE conductors.

Types for reference:

- **RSP-E7.5-40**: combined, prewired four-pole SPD application for various power grids,
- **RSP-E7.5-31**: combined, prewired four-pole SPD application for various power grids - "3+1" protection circuit for single phase 230/440 TT/TN systems.