

# COMBINED LIGHTNING & VOLTAGE SURGE ARRESTERS

## TYPE 1 & 2: I<sub>max</sub> 100KA 8/20

### limp 25KA per pole 10/350



**Raycap**

**TYPES: PROBLOC BR 50 (2+0), PROBLOC BR 75 (3+0), PROBLOC BR 100 (4+0)**

250

#### ■ FEATURES

- Type 1 & 2 combined
- Protection level 8/20 100KA, 10/350 25KA per pole
- Available 2, 3 or 4 pole, wired in parallel
- With auxiliary contact
- Flag indication



#### ■ DESCRIPTION & MODE OF OPERATION

Modular 2, 3 and 4 pole combined lightning 10/350 and voltage surge arrester 8/20 conforming to the latest IEC standards Class I & II (Type 1 & 2), to protect against the effects of direct lightning strikes and the resultant mains disturbance.

**When selecting the nominal voltage required the voltage should be selected on the basis of L-N or L-Earth depending on the system. The standard version recommended for 380-550V L-L or 220-320V L-N systems is the 320V version. For 110V L-L systems use the 150V version, according to IEC-61643-11.**

The units are suitable for AC single phase or three phase systems and are purchased either as 2, 3 or 4 pole units, thus a TP&N system requires a 4 pole unit (if a Neutral is present, it must be protected). Wiring is in parallel with discrimination fuses or a MCB fitted. For systems of  $\geq 250$  Amps fuses 250 Amps gG are recommended. All units have a common Earth terminal that needs to be bonded down to Earth.

All units have a front mechanically driven flag indicator per pole, green for healthy and red for fault. All versions have a mechanically driven auxiliary C/O contact. In a healthy state the contact is made between terminals 11 & 12. In the event of the MOV's failing due to an intense or multiple surges the contact will change state to 11 & 14 (also indicated by the red flag). In this state protection has been lost, the unit will need replacing.

#### ■ SPECIFICATIONS

Complies with:	IEC 61643-11:2011 / EN61643-11:2012	
Category:	Class I & II / Type 1 & 2	
Protection mode:	L/N – Earth	
Protection via:	High energy MOV's (Metal Oxide Varistors)	
Nominal discharge current 8/20:	25KA per pole	
Max discharge current 8/20:	100KA per pole	
Impulse current 10/350:	25KA per pole	
Total impulse current 10/350:	(4+0) L1 + L2 + L3 + N – E:	100KA
	(3+0) L1 + L2 + L3 – E:	75KA
	(2+0) L1 + N – E:	50KA
Specific energy:	156KJ / Ohm per pole	
Response time:	<25n Sec	
Thermal protection:	Yes	
Back up fuse if mains >250 Amps:	250 Amps gG	
Short circuit withstand current:	25KA / 50Hz	
Operating temperature range:	-40°C to +70°C	
Terminal cross section:	Max 35mm <sup>2</sup> solid cable / 25mm <sup>2</sup> stranded cable	
Module size:	2 pole (4 modules, 72mm), 3 pole (6 modules, 108mm), 4 pole (8 modules, 144mm)	
Auxiliary contact:	Yes	
Contact rating:	250VAC/0.5 Amps / 125VAC/3 Amps	
<b>PROBLOC BR xxx/xxx</b>	<b>150</b>	<b>320</b>
Max AC continuous voltage L-N/L-E:	150V	320V
Protection level:	<0.7KV	<1.4KV

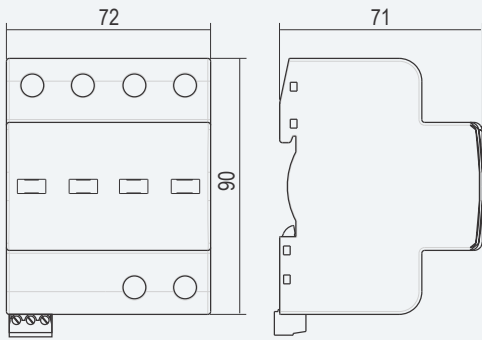
#### ■ ORDERING INFORMATION

<b>2 pole</b>		<b>3 pole</b>		<b>4 pole</b>	
PROBLOC BR 50/150	56.0573	PROBLOC BR 75/150	56.0583	PROBLOC BR 100/150	56.0593
PROBLOC BR 50/320	56.0577	PROBLOC BR 75/320	56.0587	PROBLOC BR 100/320	56.0597

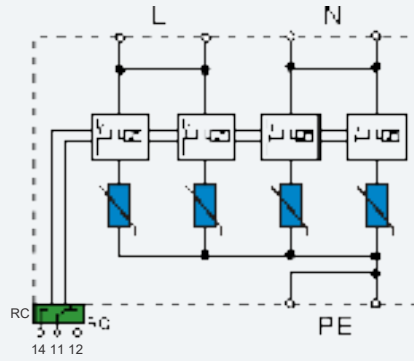
**PROBLOC BR 50/150**  
**PROBLOC BR 50/320**



**DIMENSIONS**

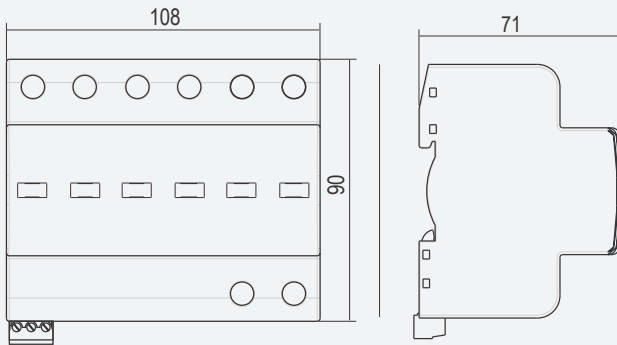


**INTERNAL CONFIGURATION**

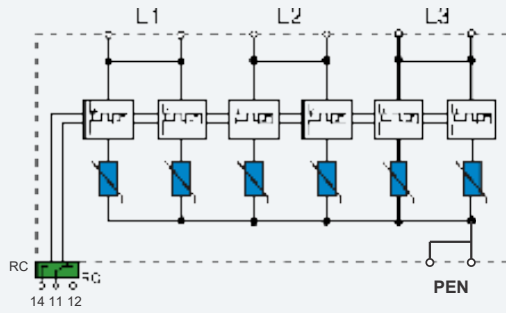


**PROBLOC BR 75/150**  
**PROBLOC BR 75/320**

**DIMENSIONS**

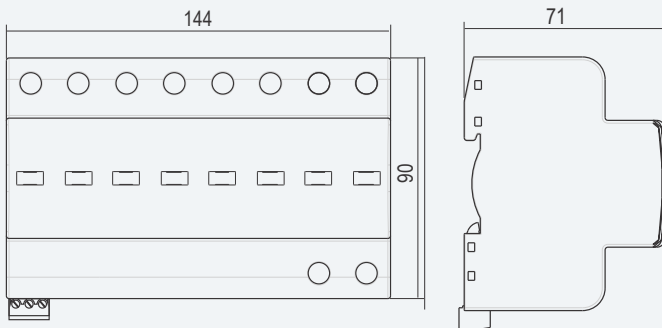


**INTERNAL CONFIGURATION**



**PROBLOC BR 100/150**  
**PROBLOC BR 100/320**

**DIMENSIONS**



**INTERNAL CONFIGURATION**

