

## Luminaire Protection Device – Type 3

### For electronic devices

These protective components are fitted with an LED indicator. Once the end of the component's life has been reached, the green LED goes out and the protective component has to be replaced.

#### SP230/10 K/HS/i

The green LED light will go out if the protective function fails

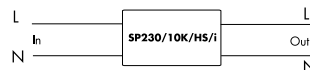
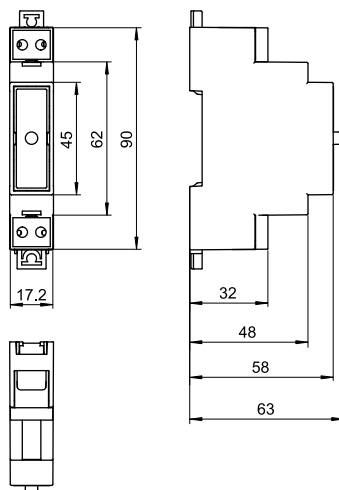
Dimensions (LxWxH): 90x17.2x63 mm

Weight: 45 g

Screw terminals: 0.5–2.5 mm<sup>2</sup>

Fixation on DIN installation rail

**Ref. No.: 147240**



Type	Ref. No.	Voltage 50/60 Hz V ±10 %	Max. load current (A)	Protection level at discharge current of 1000 A	Max. impulse voltage U <sub>OC</sub> (V)	Discharge current* (8/20 μs) I <sub>N</sub> (A)   I <sub>max.</sub> (A)	Safety max. A	Max. permitted casing temperature °C	Fixation
SP230/10 K/HS/i	<b>147240</b>	220–240	16	≤ 1000 V	10000	5000   10000	16	–35 to 80	DIN-rail

\* Discharge current: at 5000 A min. 15 strikes; at 10,000 A min. 1 strike

## Inrush Current Limiter ESB

### Limits capacitive inrush currents of electronic ballasts and LED drivers and converters

Due to their capacitive nature, electronic operating devices generate high inrush currents. By temporarily activating a limiting resistor, the inrush current is reduced to an uncritical value (see graph below).

Several electronic devices can be connected downstream under consideration of the maximum permissible continuous current of the inrush current limiter. As a result, the load per circuit breaker (MCB) can be increased by at least 2.5 fold.

The ESB thus prevents any automatic circuit breakers from being triggered or any damage from being caused to upstream relay contacts.

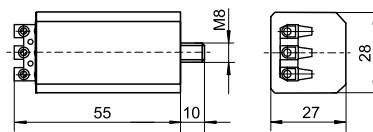
Switching cycles: > 10,000

#### ESB-6K

Casing: PC  
 Dimensions (LxWxH): 55x28x27 mm  
 Weight: 61 g  
 Screw terminals: 0.5–1.5 mm<sup>2</sup>  
 VDE approved

Ref. No.: 149820

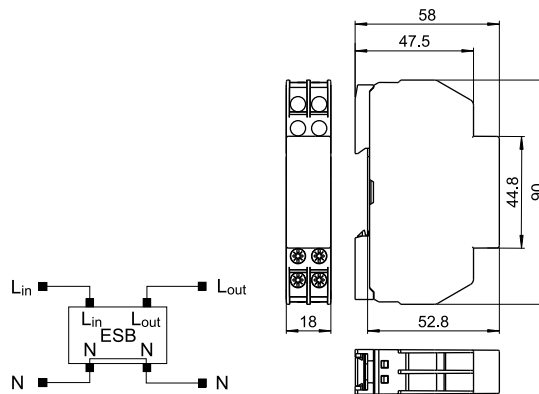
Ref. No.: 149822



#### ESB-16HS

Casing: PC  
 Dimensions (LxWxH): 90x18x58 mm  
 Weight: 75 g  
 Screw terminals: 0.5–2.5 mm<sup>2</sup>

Ref. No.: 149821



Type	Ref. No.	Nominal voltage 50–60 Hz V ± 10 %	Power consumption W	Max. direct current A	Limiting resistor Ω	Period of limitation ms	Max. permitted casing temperature (°C)	Min. permitted ambient temperature (°C)	Fixation
ESB-6K	149820	220–240	0.25	6	20	approx. 18	80	-30	M8x10
ESB-16HS	149821	220–240	0.6	16	11.2	approx. 18	80	-30	DIN-rail
ESB-6K_1A	149822	220–240	0.25	6	440	approx. 160	80	-30	M8x10

### Example using a 150 W LED driver

Brown: with ICL (ESB)  
 Blue: without ICL (ESB)  
 1 V = 1 A

