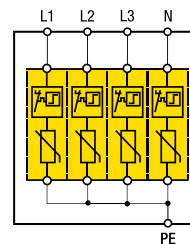
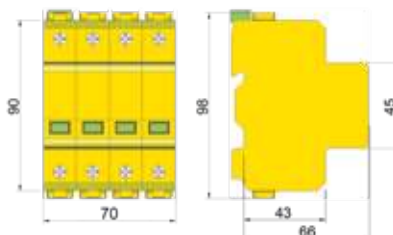


Surge Protective Devices: ZOTUPLIMITER



L 13/40 230 ff 4

L 13/40 230 ff 4 is a ready to install assembly of four voltage limiting SPDs providing four modes of protection, typically installed at the origin of the installation, e.g. in the Main Distribution Board (MDB), for three-phase plus neutral 230/400 V TN-systems, with the following features and benefits:

- **Impulse test classification: Test class I and II** according to IEC 61643-11 Ed. 1 (2011-03) and **Type 1 and 2** according to EN 61643-11 (2012-10);
- L 13/40 230 ff 4 is a voltage limiting SPD, for the protection of low voltage installations and equipment against direct and indirect lightning effects;
- **Backup protection is not required with an upstream CB ≤ 160 A or up to an Isccr ≤ 5 kA rms;**
- **Three colour Status Indicator with progressive indication of remaining performance.**

Model L 13/40 ...

CODE		230 ff 4
Nominal ac system voltage	U_N	230/400 V ac
Modes of protection (number of poles)		4
Max Continuous Operating Voltage	U_c	335 V ac
Test Class according to IEC 61643-11 Ed.1 (2011-03)		I and II
Type according to EN 61643-11 (2012-10)		T1 and T2
Impulse discharge current (10/350 μ s)	I_{imp}	13 kA
Charge	Q	6,5 As
Nominal discharge current (8/20 μ s)	I_n	35 kA
Max. discharge current (8/20 μ s)	I_{max}	70 kA
Voltage protection level at a discharge current of:		
1 kA	U_p	≤ 0,80 kV
5 kA	U_p	≤ 0,93 kV
13 kA	U_p	≤ 1,15 kV
20 kA	U_p	≤ 1,25 kV
35 kA	U_p	≤ 1,50 kV
Response time	t_a	≤ 25 ns
End of Life		OCFM (Open Circuit Failure Mode)
Behaviour in case of Temporary OverVoltage (TOV)	U_T	440 V / 120 min, withstand (W)
Short Circuit Current rating <u>without backup protection (internal disconnecter)</u>	I_{sccr}	5 kA rms
Short Circuit Current rating with max. backup protection fuse	I_{sccr}	100 kA rms
Max. back-up protection with up-stream CB with a max. let-through energy of (max. prospective short circuit current depends on the CB breaking capability)		160 A (max. $4,50 \times 10^5$ A ² s)
Max. back-up protection with FUSE at prospective short circuit currents of		160/125 A gG* (> 5 ÷ 100 kA rms)
Follow current interrupt rating	I_{fi}	NFC No Follow Current®
Status indicator (indication of disconnecter operation)		3 colours with progressive performance indication
Operating temperature range / Humidity		-40 ... +80 °C (extended) / 5% ... 95%
Terminal - Conductor size		4-35 mm ² flexible / 4-50 mm ² semi rigid
Mounting		indoor, 35 x 7,5 mm top hat DIN rail IEC/EN 60715
Case material / Flammability grade		BMC / V-0 in accordance with UL 94
Pollution degree / Degree of protection	PD / IP	3 / 20 (built-in)
Approximate weight		560 g
Dimensions: width		70 mm (4 modules)
Certifications / Quality Mark		CB, STC issued by OVE / KEMA-KEUR
GTIN (EAN)		8054890320696

TECHNICAL DATA

Model L 13/40 ... with remote signal contact

CODE		230 t ff 4
Remote signal contact		potential-free changeover contact
Terminal - conductor size for remote signal contact		max. 1,5 mm ² flexible
Switching capacity remote signal contact		ac: 250 V / 0,5 A – dc: 125 V / 0,2 A; 75 V / 0,5 A
GTIN (EAN)		8054890321334

*with fuse 125 A gG I_{imp} = 10 kA and I_{max} = 40 kA