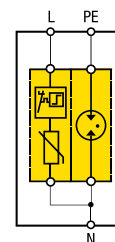
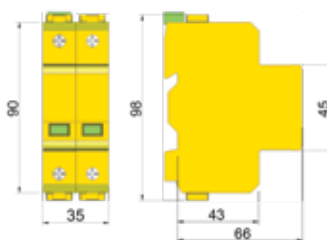




Surge Protective Devices: ZOTUPLIMITER



L 13/40 230 ff 1+1

L 13/40 230 ff 1+1 is a ready to install assembly of a voltage limiting and a voltage switching SPD providing two modes of protection, typically installed in single-phase 230 V TT-systems where connection type CT2 (1+1) is required according to HD 60364-5-534, e.g. in the Main Distribution Board (MDB), 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);
- **Backup protection is not required with an upstream CB ≤ 160 A or up to an I_{sc} ≤ 5 kA rms;**
- **Three colour Status Indicator with progressive indication of remaining performance.**

Model L 13/40 ...

230 ff 1+1

CODE		204 121	
Nominal ac system voltage	U _N	230 V ac	
Modes of protection (number of poles)		1+1 (L-N + N-PE)	
Max Continuous Operating Voltage (L-N)	U _c	335 V ac	
Max Continuous Operating Voltage (N-PE)	U _c	255 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 μs) (L-N)	I _{imp}	13 kA	
Impulse discharge current (10/350 μs) (N-PE)	I _{imp}	52 kA	
Charge (L-N)	Q	6,5 As	
Charge (N-PE)	Q	26 As	
Nominal discharge current (8/20 μs) (L-N)	I _n	35 kA	
Nominal discharge current (8/20 μs) (N-PE)	I _n	52 kA	
Max. discharge current (8/20 μs) (L-N) and (N-PE)	I _{max}	70 kA	
Voltage protection level (L-N, L-PE) at a discharge current of:			
1 kA	U _p	≤ 0,80 kV	≤ 1,50 kV
5 kA	U _p	≤ 0,93 kV	≤ 1,50 kV
13 kA	U _p	≤ 1,15 kV	≤ 1,50 kV
20 kA	U _p	≤ 1,25 kV	≤ 1,50 kV
35 kA	U _p	≤ 1,50 kV	≤ 1,50 kV
Voltage protection level (N-PE)	U _p	≤ 1,50 kV	
Response time (L-N / N-PE)	t _a	≤ 25 ns / ≤ 100 ns	
End of Life (L-N)		OCFM (Open Circuit Failure Mode)	
Behaviour in case of Temporary OverVoltage (TOV):			
L-N	U _T	440 V / 120 min, withstand (W)	
N-PE	U _T	1200 V / 200 ms, withstand (W)	
Short Circuit Current rating without backup protection (internal disconnecter)	I _{sc}	5 kA rms	
Short Circuit Current rating with max. backup protection fuse	I _{sc}	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 x 10 ⁵ A ² s)	
Max. back-up protection with FUZE at prospective short circuit currents of		160/125 A gG* (> 5 ÷ 100 kA rms)	
Follow current interrupt rating (L-N)	I _{fi}	NFC No Follow Current®	
Follow current interrupt rating (N-PE)	I _{fi}	100 A rms	
Status indicator (indication of disconnecter operation) / N-PE (no disconnecter)		3 colours with progressive performance indication / 2 colours for N-PE	
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		280 g	
Dimensions: width		35 mm (2 modules)	
Certifications / Quality Mark		CB, STC issued by OVE / KEMA-KEUR	
GTIN (EAN)		8054890320672	

TECHNICAL DATA

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

230 t ff 1+1

CODE		214 121
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)		8054890321297

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