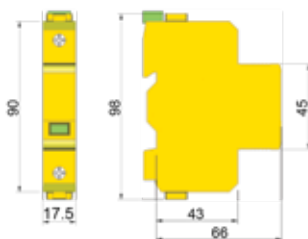




# Surge Protective Devices: ZOTUPLIMITER



## L 3/30 ... ff

L 3/30 ... ff is a voltage limiting SPD providing a single mode of protection, typically installed in Sub Distribution Boards (SDBs), in TN-systems or in TT-systems in combination with N-PE SPD model I 100, I 52 or I 12 and with connection type CT2 (1+1 or 3+1). It provides the following features and benefits:

- **Impulse test classification: Test class II** according to IEC 61643-11 Ed. 1 (2011-03) and **Type 2** according to EN 61643-11 (2012-10);
- L 3/30 ... ff is a voltage limiting SPD, for the protection of low voltage installations and equipment against indirect lightning effects;
- **Backup protection is not required with an upstream CB ≤ 160 A or up to an I<sub>sc</sub> ≤ 5 kA rms (for U<sub>n</sub> 230/400 V);**
- Short circuit current withstand of 50 kA rms with max. back-up fuse;
- **Three colour Status Indicator with progressive indication of remaining performance.**

Model L 3/30 ...

		60 ff	120 ff	230 ff	400 ff
<b>CODE</b>		<b>200 102</b>	<b>200 103</b>	<b>200 100</b>	<b>200 104</b>
Nominal ac system voltage	U <sub>n</sub>	60/104 V ac	120/208 V ac	230/400 V ac	400/690 V ac
Modes of protection (number of poles)		1			
Max Continuous Operating Voltage	U <sub>c</sub>	75 V ac	150 V ac	335 V ac	460 V ac
Test Class according to IEC 61643-11 Ed.1 (2011-03)		II			
Type according to EN 61643-11 (2012-10)		T2			
Nominal discharge current (8/20 μs)	I <sub>n</sub>	20 kA	20 kA	30 kA	30 kA
Max. discharge current (8/20 μs)	I <sub>max</sub>	30 kA	30 kA	40 kA	40 kA
Voltage protection level at a discharge current of:	1 kA	U <sub>p</sub> ≤ 0,22 kV	≤ 0,42 kV	≤ 0,81 kV	≤ 1,20 kV
	5 kA	U <sub>p</sub> ≤ 0,28 kV	≤ 0,50 kV	≤ 1,00 kV	≤ 1,45 kV
	10 kA	U <sub>p</sub> ≤ 0,36 kV	≤ 0,60 kV	≤ 1,20 kV	≤ 1,58 kV
	20 kA	U <sub>p</sub> ≤ 0,50 kV	≤ 0,80 kV	≤ 1,35 kV	≤ 1,90 kV
	30 kA	U <sub>p</sub> -	-	≤ 1,50 kV	≤ 2,15 kV
Response time	t <sub>a</sub>	≤ 25 ns			
End of Life		OCFM (Open Circuit Failure Mode)			
Behaviour in case of Temp. OverVoltage (TOV) withstand (W)/safe (S):	U <sub>T</sub>	87 V / 5 s, (W)	174 V / 5 s, (W)	440 V / 5 s, (W)	607 V / 5 s, (W)
	U <sub>T</sub>	115 V / 120 min, (W)	230 V / 120 min, (S)	440 V / 120min, (W)	760 V / 120 min, (S)
Short Circuit Current rating without backup protection (internal disconnecter)	I <sub>sc</sub>	5 kA rms			3 kA rms
Short Circuit Current rating with max. backup protection fuse	I <sub>sc</sub>	50 kA rms			
Max. back-up protection with up-stream CB with max. let-through energy of (max. prospective short circuit current depends on CB breaking capability)		160 A	160 A	160 A	160 A
		(max. 4,80x10 <sup>5</sup> A <sup>2</sup> s)	(max. 4,80x10 <sup>5</sup> A <sup>2</sup> s)	(max. 4,50x10 <sup>5</sup> A <sup>2</sup> s)	(max. 4,50x10 <sup>5</sup> A <sup>2</sup> s)
Max. back-up protection with FUSE at prospective short circuit current of		125 A gG at	125 A gG at	125 A gG at	125 A gG at
		(> 5 ÷ 50 kA rms)	(> 5 ÷ 50 kA rms)	(> 5 ÷ 50 kA rms)	(> 3 ÷ 50 kA rms)
Follow current interrupt rating	I <sub>fi</sub>	NFC No Follow Current®			
Status indicator (indication of disconnecter operation)		3 colors with progressive performance indication			
Operating temperature range / Humidity		-40 ... +80 °C (extended) / 5% ... 95%			
Terminal - Conductor size		4-35 mm <sup>2</sup> flexible / 4-50 mm <sup>2</sup> semi rigid			
Busbar connections		fork-type busbar 16 mm <sup>2</sup>			
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		120 g	140 g	160 g	175 g
Dimensions: width		17,5 mm (1 module)			
Certifications / Quality Mark		CB, STC issued by OVE / KEMA-KEUR			
GTIN (EAN)		8054890320405	8054890320412	8054890320399	8054890320429

TECHNICAL DATA

Model L 3/30 ... with remote signal contact

		60 t ff	120 t ff	230 t ff	400 t ff
<b>CODE</b>		<b>210 102</b>	<b>210 103</b>	<b>210 100</b>	<b>210 104</b>
Remote signal contact		potential-free changeover contact			
Terminal - conductor size for remote signal contact		max. 1,5 mm <sup>2</sup> 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)		8054890320993	8054890321006	8054890320986	8054890321013