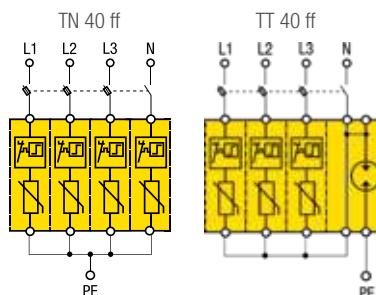


Surge Protective Devices: ZOTUPBOX



Protection Box ...

These Protection Boxes with an IP65 enclosure provide a compact and preinstalled solution for applications in Power Centers, when there is no remaining space in existing distribution boards, for outdoor applications as well as for line termination at or close to the origin of the installation where the lines may be subject to direct lightning strikes.

They are available as:

- TN 40 ff with four voltage limiting SPDs (four modes of protection), for three-phase plus neutral 230/400 V TN-systems;
- TT 40 ff with three voltage limiting and a voltage switching SPD (four modes of protection), for three-phase plus neutral 230/400 V TT-systems where connection type CT2 (3+1) is required according to HD 60364-5-534.

They provide 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);
- They are suitable for installation at zone boundaries up to $O_A - 2$ according to the lightning protection zones concept as defined in IEC 62305.

Model Protection Box ...

		TN 40 ff	TT 40 ff
CODE		244 100	245 100
Nominal ac system voltage	U_N	230/400 V ac	
Max Continuous Operating Voltage	U_c	335 V ac	-
Max Continuous Operating Voltage (L-N, L-PE)	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 μ s) (L-N, L-PE)	I_{imp}	5 kA	10 kA
Impulse discharge current (10/350 μ s) (N-PE)	I_{imp}	5 kA	100 kA
Charge (L-N, L-PE)	Q	12,5 As	5 As
Charge (N-PE)	Q	12,5 As	50 As
Nominal discharge current (8/20 μ s) (L-N, L-PE)	I_n	40 kA	40 kA
Nominal discharge current (8/20 μ s) (N-PE)	I_n	40 kA	100 kA
Max. discharge current (8/20 μ s) (L-N, L-PE)	I_{max}	40 kA	40 kA
Max. discharge current (8/20 μ s) (N-PE)	I_{max}	40 kA	100 kA
Voltage protection level at a discharge current of:		(L-PE)	(L-N) (L-PE)
1 kA	U_p	$\leq 0,75$ kV	$\leq 0,75$ kV $\leq 1,50$ kV
5 kA	U_p	$\leq 0,85$ kV	$\leq 0,85$ kV $\leq 1,50$ kV
10 kA	U_p	$\leq 1,00$ kV	$\leq 1,00$ kV $\leq 1,50$ kV
20 kA	U_p	$\leq 1,15$ kV	$\leq 1,15$ kV $\leq 1,50$ kV
40 kA	U_p	$\leq 1,50$ kV	$\leq 1,50$ kV $\leq 1,50$ kV
Voltage protection level (N-PE)	U_p	$\leq 1,50$ kV	$\leq 1,50$ kV
Response time (L-N, L-PE / N-PE)	t_a	≤ 25 ns	≤ 25 ns / ≤ 100 ns
End of Life		OCFM (Open Circuit Failure Mode)	
Behaviour in case of Temporary Overvoltage (TOV):			
L-N	U_T	440 V / 120 min, withstand (W)	440 V / 120 min, withstand (W)
N-PE	U_T	440 V / 120 min, withstand (W)	1200 V / 200 ms, withstand (W)
Max. back-up protection with fuse (L)		125 A gG (incorporated)	
Short circuit current rating with max. back-up protection	I_{scr}	50 kA rms	
Follow current interrupt rating (L-N)	I_{fi}	NFC No Follow Current®	NFC No Follow Current®
Follow current interrupt rating (N-PE)	I_{fi}	NFC No Follow Current®	100 A rms
Operating temperature range / Humidity		-40 ... +80 °C (extended) / 5% ... 95%	
Terminal-Conductor size		16 mm ² flexible	
Approximate weight		2460 g	
Size		l 300 x h 400 x d 140 mm	
Degree of protection	IP	65 (enclosure)	
Remote signal contact		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)		8054890321846	8054890321860

TECHNICAL DATA