

TECHNICAL PRODUCT DATASHEET

OVR T1-T2 1L 25-255 P (2CTB813250R2300)

Surge Protective Devices



Type 1 + 2 SPD's have characteristics of type 1 but also type 2, they are capable of discharging a very high lightning current and they have as well a low residual voltage (U_p).

If the announced U_p is not compatible with the withstand voltage of the equipment to protect or if the cable length to the equipment is longer than 10m, another level of coordination with OVR T2-T3 will be needed.



T1-T2 / UL Type 2 CA



$I_{imp} = 25 \text{ kA}$



$U_p < 1,5 \text{ kV}$



IEC 61643-11
EN 61643-11
UL 1449 5th Ed
GB/T 18802.11-2020



Approvals
VDE, KEMA, UL, UKCA,
RCM, CMIM, CQC

Application

They are typically installed inside the main AC distribution switchboard but also in subdistribution board.

Technical specifications and standards

Key features

System network	TNS - TT- TNC
Protection mode	L to N / N to PE / L to PE (N)
Number of protected lines	1
End of life indicator	Green = functional / Red = replace
Technology	Spark Gap

Electrical performances

Nominal Network Voltage	U_N	230 / 400	V
Lightning impulse current (10 / 350 μs) [L-N] / [N-PE]	I_{imp} (10 / 350 μs)	25 / -	kA
Nominal discharge current [L-N] / [N-PE]	I_n (8 / 20 μs)	25 / -	kA
Maximal continuous operating voltage	U_c AC	264	V
System frequency		47 to 63	Hz
Voltage protection level U_p at I_n [L-N]	U_p	≤ 1.5	kV
Short circuit current rating [(L-N) / (N-PE)]	I_{scrr}	50 / -	kA
Maximum Prospective Short-Circuit Current [(L-N) / (N-PE)]	PSCC	100 / -	kA
Follow current interrupted [(L-N) / (N-PE)]	I_{fi}	50 / -	kA
Back up protection		$\leq 315 \text{ gG}$	A
Leakage current	I_{pe}	< 1	mA
Response time		< 100	ns
V wiring according to IEC 61643-11 Ed 2011	IL	$I_n \leq 125$	A
TOV withstand (L-N: 120 min. / N-PE)	e (TOV) [L-N] (UT)	440	V

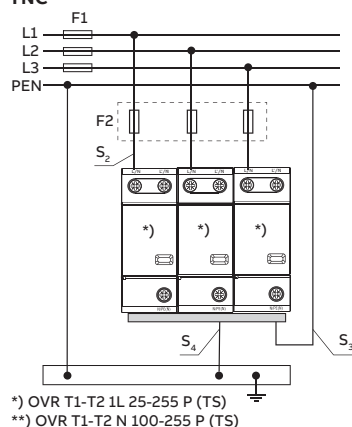
Mechanical features			
Dimensions	L x W x D	90 x 36 x 73	mm
Flexible wire (single wiring / V wiring)		10...35 / 10...25	mm ²
Solid/ Stranded wire (single wiring / V wiring)		10...50 / 10...35	mm ²
Stripping length		16,5	mm
Tightening torque		7	Nm
Maximal altitude		2000	m
Operating temperature		-40 to +80	°C
Relative humidity		95 (non condensing)	%HR
Degree of protection		IP 20	
Enclosure material rating and color		UL 94 V-0 / Grey RAL 7035	
Weight		0.27	Kg

Auxiliary contact (TS)	Contact information		
Minimum load			
Maximum load			
Connection cross-section [mm ²]	Flexible or Stranded		
Tightening torque (TS)			Nm

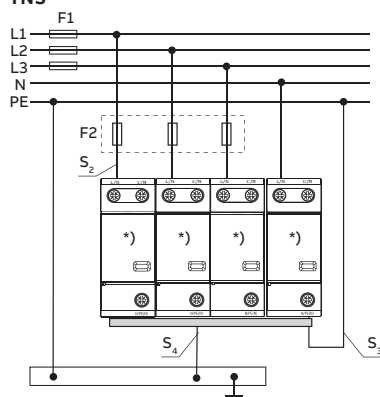
Replacement cartridge		
Product ID / Model no	2CTB813252R2300	OVR T1-T2-T3 1L 25-255 C

Installation wiring

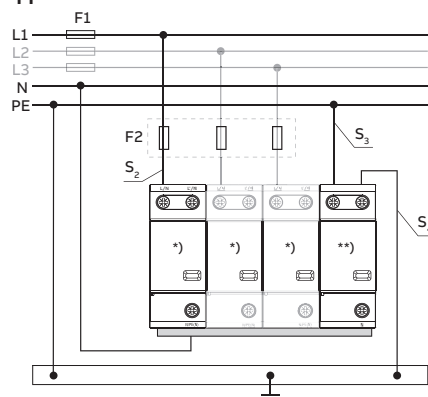
TNC



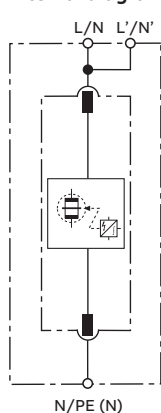
TNS



TT



Internal diagram



Physical dimensions

