

TECHNICAL PRODUCT DATASHEET

OVR T1-T2 N 100-255 P TS (2CTB813011R2300)

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



$I_{imp} = 100 \text{ kA}$



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



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
Protection mode	N to PE
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 μ s) [(L-N) / (N-PE)]	I_{imp} (10 / 350 μ s)	- / 100	kA
Nominal discharge current [(L-N) / (N-PE)]	I_n (8 / 20 μ s)	- / 100	kA
Maximal continuous operating voltage	U_c AC	255	V
System frequency		47 to 63	Hz
Voltage protection level U_p at I_n [(L-N) / (N-PE) / (L-PE)]	U_p	- / ≤ 1.5 / -	kV
Short circuit current rating [(L-N) / (N-PE)]	I_{scrr}	- / -	kA
Maximum Prospective Short-Circuit Current [(L-N) / (N-PE)]	PSCC	- / 0,1	kA
Follow current interrupted [(L-N) / (N-PE)]	I_{fi}	- / 0,1	kA
Back up protection			
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 (N-PE: 200 ms)	e (TOV) [(L-N) (UT)	1200	V

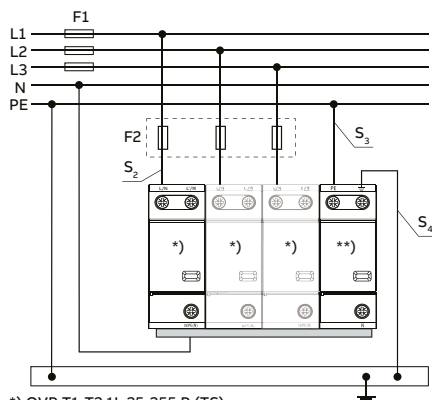
Mechanical features			
Dimensions	L x W x D	99 x 36 x 73	mm
Flexible wire (single wiring / V wiring)		10...35 / 10...25	mm ²
Solid/ Stranded wire (single wiring / V wiring)		10...50 / 10...35	mm ²
Stripping length		16,5	mm
Tightening torque		7	Nm
Maximal altitude		2000	m
Operating temperature		-40 to +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		0.32	Kg

Auxiliary contact (TS)	Contact information	1NO - 1NC
Minimum load		12 VDC - 10 mA
Maximum load		250 VAC - 1A
Connection cross-section [mm ²]	Flexible or Stranded	0.5...1.5
Tightening torque (TS)		0.2 Nm

Replacement cartridge

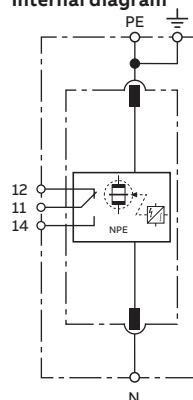
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Installation wiring



*) OVR T1-T2 1L 25-255 P (TS)
 **) OVR T1-T2 N 100-255 P (TS)

Internal diagram



Physical dimensions

