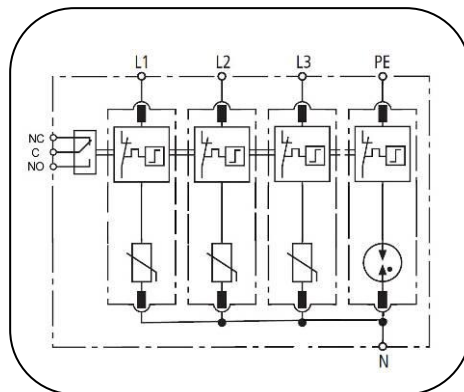
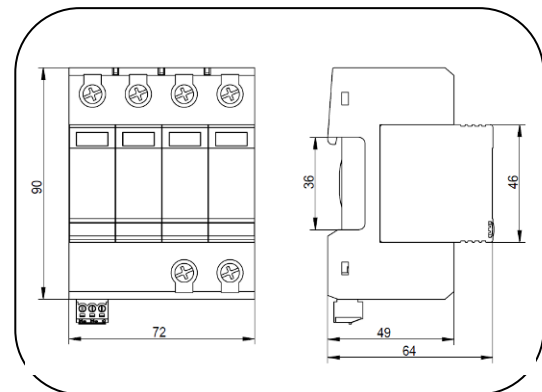


**Class I + Class II (T1+T2), Four poles Surge Arresters**

**DT50/...-(3V+T)**



Basic circuit diagram



Dimension drawing

The DT50 3V+T is class I & class II (or T1+T2 ) prewired four poles SPD designed for low-voltage power system lightning current & surge protection, used at the boundaries from lightning protection zone 0<sub>B</sub> -2 and higher. With built in PROSURGE high energy MOV and GDT, DT50 3V+T ensures remarkable lightning current discharge capacity up to 7.5kA 10/350µs (L-N), 12.5kA 10/350µs (N-PE) and high reliability. The unique design of thermal protection provides quick thermal response and secure disconnection.

- TUV certified T1+ T2 SPD per IEC/EN 61643-11 standard
- Prewired four poles SPD (“3+1” circuit) for use in three phase TN/TT systems
- Unique thermal disconnecter design provides quick thermal response and secure disconnection
- Lightning current capacity up to 7.5kA 10/350µs (L-N), 12.5kA 10/350µs (N-PE)
- Surge current capability up to 50kA 8/20µs
- Low voltage protection level
- High short-circuit current rating up to 25kArms, suitable for application in most AC power system.
- Degradation failure indication and optional remote signal contact.
- Pluggable module for easy replacement without the need to remove system wiring.
- Wide operating temperature -40° C ~85° C
- 35mm DIN-rail mounting
- Comply with UL1449 5<sup>th</sup>, IEEE C62.41,CSA C22.2 standards

**Technical data**

Part No.	DT50/150-(3V+T) (-S)	DT50/180-(3V+T) (-S)	DT50/275-(3V+T) (-S)	DT50/320-(3V+T) (-S)	DT50/350-(3V+T) (-S)	DT50/385-(3V+T) (-S)	
In accordance with	IEC/EN 61643-11:2011; UL1449 5th						
Category IEC/EU/VDE	I+ II /1+2/ B+C						
Protection mode	L-N ,N-PE						
Nominal Voltage (AC) $U_n$	120V/208V	120V/208V	230V/400V	230V/400V	277V/480V	277V/480V	
Power frequency	50/60Hz						
Max. continuous operating voltage(AC) $U_c$	L-N	150V	180V	275V	320V	350V	385V
	N-PE	150V	150V	255V	255V	255V	255V
Nominal discharge current (8/20) $I_n$	20kA						
Max. discharge current (8/20) $I_{max}$	50kA						
Lightning impulse current (10/350) $I_{imp}$	L-N	7.5kA	7.5kA	7.5kA	7.5kA	7.5kA	7.5kA
	N-PE	12.5kA	12.5kA	12.5kA	12.5kA	12.5kA	12.5kA
Voltage protection level $U_p$	L-N	0.8kV	1.0kV	1.2kV	1.4kV	1.5kV	1.8kV
	N-PE	1.5kV	1.5kV	1.5kV	1.5kV	1.5kV	1.5kV
Response time $t_A$	L-N	$\leq 25ns$					
	N-PE	$\leq 100ns$					
Temporary overvoltage TOV $U_T$ Withstand mode	L-N	174V/5s	228V/5s	335V/5s	335V/5s	403V/5s	403V/5s
	N-PE	1200V/200ms	1200V/200ms	1200V/200ms	1200V/200ms	1200V/200ms	1200V/200ms
Follow current & interrupt rating $I_{fi}$	N-PE	100A					
Leakage current $I_{pe}$	$< 0.1mA$						
Short-circuit current rating $I_{sscr}$	25kArms						
Backup fuse(only required if not already provided in mains)	$\leq 125A$ gL/gG						
Operating temperature range	$-40^{\circ}C \sim +85^{\circ}C$						
Altitude	$-500m \sim +4000m$						
Cross-section of connection wire (max)	Single-strand 35mm <sup>2</sup> ; multi-strand 25mm <sup>2</sup>						
Mounting	35mm DIN-rail in accordance with EN 50022/DIN46277-3						
Enclosure material	Thermoplastic; extinguishing degree UL94 V-0						
Degree of protection	IP20						
Installation width	4 module, DIN 43880						
Thermal disconnecter	Internal Green – normal ; red - failure						
Remote alarm contact	Optional						
Approvals, Certifications	TUV, CE						
Additional data for Remote Alarm Contacts							
Remote alarm contact type	Isolated Form C						
Switching capability $U_n/I_n$	AC: 250V/0.5A		DC: 250V/0.1A; 125V/0.2A; 75V/0.5A				
Cross-section of remote signaling wire (max)	1.5mm <sup>2</sup> (or # 16AWG)						