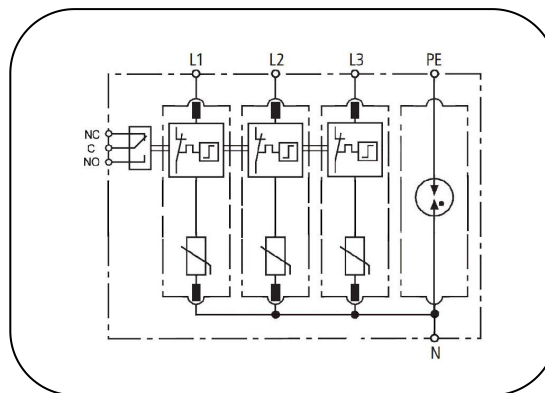


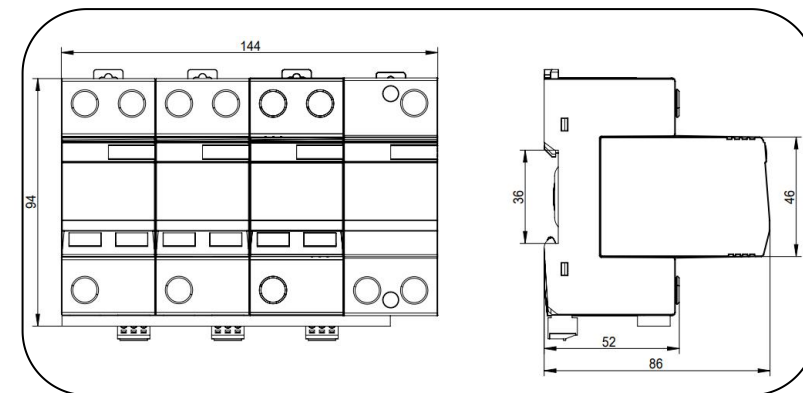
## POWER SUPPLY SYSTEM

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

#### BP25V...3PN100



Basic circuit diagram



Dimension drawing

The BP25V 3PN100 is class I & class II (or T1+T2) prewired four poles SPD designed for low-voltage power system lightning current & surge protection, especially for location of high risk exposure or LPZ 0-2 building entrances (IEC 62305-4) to against the damage from direct or close lightning strikes.

With built in PROSURGE high energy MOV and GDT, BP25V 3PN100 ensures remarkable lightning current discharge capacity up to 25kA 10/350 $\mu$ s (L-N) and 100kA 10/350 $\mu$ s (N-PE). The unique design of thermal protection provides quick thermal response and secure disconnection. B25V 3PN100 is ideal protection for environments with frequent switching operations or lightning strikes.

A notable feature of BP25V is dual module redundancy design, two individual MOV protection modules in parallel in one pole SPD with two indication windows, so that the SPD could keep on working in spite of one protection module fault or one indication window turns to red. That will help to realize the uninterrupted surge protection, since user can replace the failure models according to the timing and the condition

- 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
- Dual module redundancy for one pole SPD and dual fault indication windows, with optional remote signal contact.
- Lightning current capacity up to 25kA10/350 $\mu$ s (L-N), 100kA 10/350 $\mu$ s (N-PE); Surge current capability up to 100kA 8/20 $\mu$ s (L-N), 150kA 8/20 $\mu$ s (N-PE)
- High short-circuit current rating up to 50kArms, suitable for application in most AC power systems.
- 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

## POWER SUPPLY SYSTEM

### Technical data

Part No.	<b>BP25V/320-S/3PN100</b>		
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		
Max. continuous operating voltage(AC) $U_c$	L-N	320V	
	N-PE	255V	
Nominal discharge current (8/20) $I_n$	L-N	25kA	
	N-PE	100kA	
Max. discharge current (8/20) $I_{max}$	L-N	100kA	
	N-PE	150kA	
Lightning impulse current (10/350) $I_{imp}$	L-N	25kA	
	N-PE	100kA	
Voltage protection level $U_p$	L-N	1.4kV	
	N-PE	1.5kV	
Response time $t_A$	L-N $\leq$ 25ns; N-PE $\leq$ 100ns		
Temporary overvoltage TOV $U_T$ Withstand mode	L-N	335V/5s	
	N-PE	1200V/200ms	
Follow current & interrupt rating $I_{fi}$	N-PE	100A	
Leakage current $I_{pe}$	<0.1mA		
Short-circuit current rating $I_{sscr}$	50kArms		
Backup fuse(only required if not already provided in mains)	$\leq$ 315A gL/gG		
Operating temperature range	-40°C ~ +85°C		
Altitude	-500m ~ +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	8 modules, DIN 43880		
Thermal disconnecter	Internal	Green – normal ; red - failure	
Remote alarm contact	Yes		
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)		