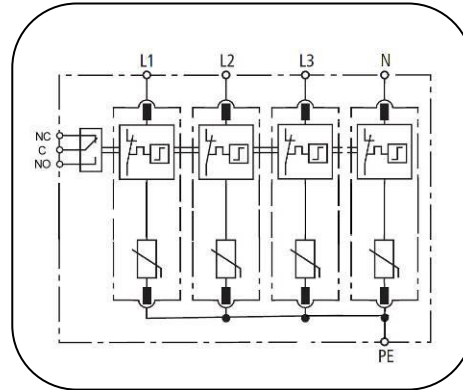
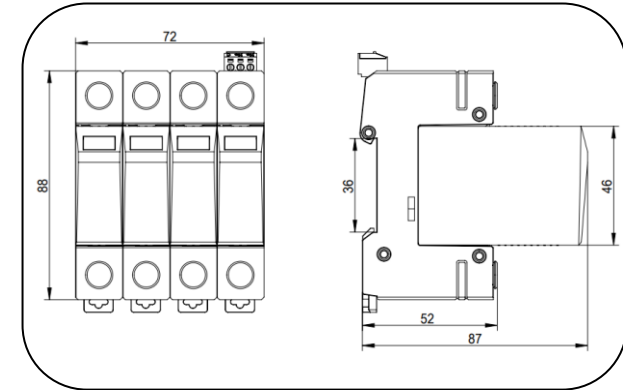


Class I + Class II, Four poles Surge Arresters

BPS12.5V...4P



Basic circuit diagram



Dimension drawing

The BPS12.5V 4P 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, BPS12.5V 4P ensures remarkable lightning current discharge capacity up to 12.5kA 10/350µs. The unique design of thermal protection provides quick thermal response and secure disconnection. BPS12.5V 4P is ideal protection for environments with frequent switching operations or lightning strikes.

- TUV certified T1+ T2 SPD per IEC/EN 61643-11 standard.
- Prewired three poles SPD (“4+0” circuit) for use in three phase TN / TT systems.
- 18mm narrow model design, pluggable module for easy replacement without the need to remove system wiring.
- Unique thermal disconnecter design provides quick thermal response and secure disconnection
- Lightning current capacity up to 12.5kA10/350 µ s
- Surge current capability up to 80kA 8/20 µ s
- Low voltage protection level
- High short-circuit current rating up to 50kArms, suitable for application in most AC power systems.
- Degradation failure indication and optional remote signal contact.
- Wide operating temperature -40° C ~85° C
- 35mm DIN-rail mounting
- Comply with UL1449 5th, IEEE C62.41,CSA C22.2 standards

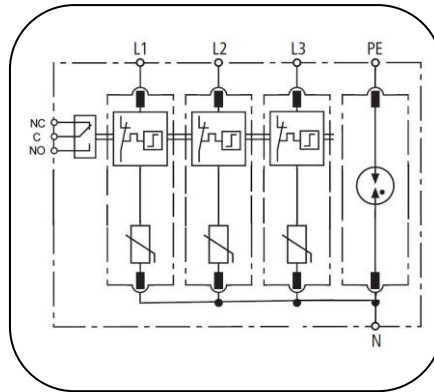
POWER SUPPLY SYSTEM

Technical data

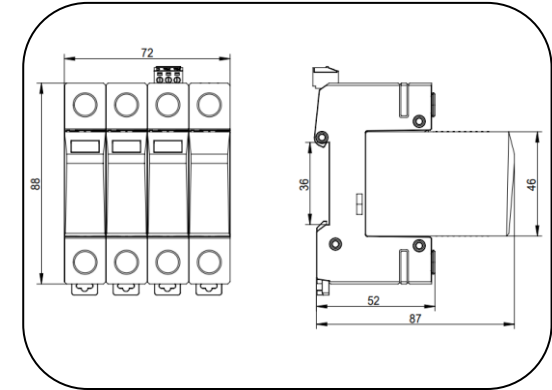
Part No.	BPS12.5V/75(-S)/4P	BPS12.5V/150(-S)/4P	BPS12.5V/180(-S)/4P	BPS12.5V/275(-S)/4P	BPS12.5V/320(-S)/4P	BPS12.5V/350(-S)/4P	BPS12.5V/385(-S)/4P	BPS12.5V/440(-S)/4P	BPS12.5V/480(-S)/4P	BPS12.5V/600(-S)/4P	BPS12.5V/750(-S)/4P
In accordance with	IEC/EN 61643-11:2011; UL1449 5th										
Category IEC/EU/VDE	I+ II /1+2/ B+C										
Protection mode	L-PE, N-PE										
Nominal Voltage (AC) Un	60V	120V	120V	230V	230V	277V	277V	400V	400V	480V	600V
Power frequency	50/60Hz										
Max. continuous operating voltage(AC) Uc	75V	150V	180V	275V	320V	350V	385V	440V	480V	600V	750V
Nominal discharge current(8/20) In	25kA										
Max. discharge current(8/20) I _{max}	80kA	80kA	80kA	80kA	80kA	80kA	80kA	65kA	65kA	65kA	65kA
Lightning impulse current (10/350) I _{imp}	12.5kA	12.5kA	12.5kA	12.5kA	12.5kA	12.5kA	12.5kA	8kA	8kA	6kA	4kA
Voltage protection level Up	0.6kV	0.8kV	1.0kV	1.2kV	1.4kV	1.5kV	1.8kV	2.0kV	2.2kV	2.5kV	2.8kV
Response time t _A	≤25 ns										
Temporary overvoltage TOV U _T Withstand mode	90V/5s	174V/5s	228V/5s	335V/5s	335V/5s	403V/5s	403V/5s	580V/5s	580V/5s	700V/5s	870V/5s
Follow current & interrupt rating I _{fi}	No										
Leakage current I _{pe}	<0.1mA										
Short-circuit current rating I _{sscr}	50 kArms										
Backup fuse(only required if not already provided in mains)	≤250A gL/gG										
Operating temperature range	-40°C ~ +85°C										
Altitude	-500m ~ +4000m										
Cross-section of connection wire (max)	Single-strand 35mm ² ; multi-strand 25mm ²										
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 Un/In	AC: 250V/0.5A DC: 250V/0.1A; 125V/0.2A; 75V/0.5A										
Cross-section of remote signaling wire	Max. 1.5mm ² (or # 16AWG)										

Class I + Class II, Four poles Surge Arresters

BPS12.5V/...-3PN50



Basic circuit diagram



Dimension drawing

The BPS12.5V 3PN50 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, BP12.5V 3PN50 ensures remarkable lightning current discharge capacity up to 12.5 kA 10/350 μ s(L-N) and 50kA 10/350 μ s(N-PE). The unique design of thermal protection provides quick thermal response and secure disconnection. BPS12.5V 3PN50 is ideal protection for environments with frequent switching operations or lightning strikes.

- 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
- 18mm narrow model design, pluggable module for easy replacement without the need to remove system wiring.
- Unique thermal disconnecter design provides quick thermal response and secure disconnection
- Lightning current capacity up to 12.5kA10/350 μ s(L-N), 50kA 10/350 μ s(N-PE)
- Surge current capability up to 80kA 8/20 μ s(L-N), 100kA 8/20 μ s(N-PE)
- Low voltage protection level
- High short-circuit current rating up to 50kArms, suitable for application in most AC power systems.
- Degradation failure indication and optional remote signal contact.
- Wide operating temperature -40° C ~85° C
- 35mm DIN-rail mounting
- Comply with UL1449 5th, IEEE C62.41,CSA C22.2 standards

POWER SUPPLY SYSTEM

Technical data

Part No.	BPS12.5V/150(-S)/3PN50	BPS12.5V/180(-S)/3PN50	BPS12.5V/275(-S)/3PN50	BPS12.5V/320(-S)/3PN50	BPS12.5V/350(-S)/3PN50	BPS12.5V/385(-S)/3PN50	
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) Un	120V/208V	120V/208V	230V/400V	230V/400V	277V/480V	277V/480V	
Power frequency	50/60Hz						
Max. continuous operating voltage(AC) Uc	L-N	150V	180V	275V	320V	350V	385V
	N-PE	150V	150V	255V	255V	255V	255V
Nominal discharge current(8/20) In	L-N	25kA					
	N-PE	50kA					
Max. discharge current(8/20) I _{max}	L-N	80kA					
	N-PE	100kA					
Lightning impulse current (10/350) I _{imp}	L-N	12.5kA	12.5kA	12.5kA	12.5kA	12.5kA	12.5kA
	N-PE	50kA	50kA	50kA	50kA	50kA	50kA
Voltage protection level Up	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	≤25 ns					
	N-PE	≤100 ns					
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	N-PE	100A					
Leakage current I _{pe}	<0.1mA						
Short-circuit current rating I _{sscr}	50kArms						
Backup fuse(only required if not already)	≤250A gL/gG						
Operating temperature range	-40°C ~ +85°C						
Altitude	-500m ~ +4000m						
Cross-section of connection wire (max)	Single-strand 35mm ² ; multi-strand 25mm ²						
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 Un/In	AC: 250V/0.5A DC: 250V/0.1A; 125V/0.2A; 75V/0.5A						
Cross-section of remote signaling wire (max)	1.5mm ² (or # 16AWG)						