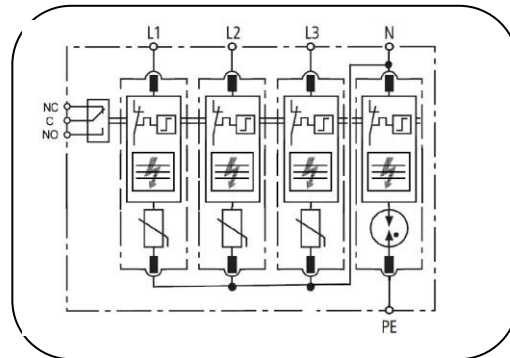


**POWER SUPPLY SYSTEM**

**SURGE ARRESTERS – CLASS II**

**SP320/3PN-S**



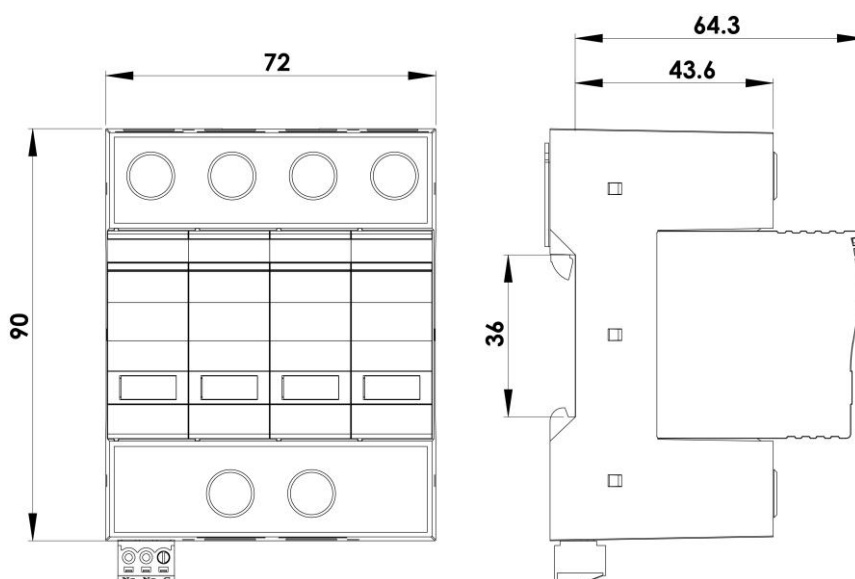
Basic circuit diagram

Class II/T2 surge protective device is designed for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 1-2 and higher.

- KEMA certified Class II/T2 SPD per IEC/EN 61643-11.
- UL certified Type 1ca SPD per UL1449 5<sup>th</sup> edition
- Prewired “3+1” circuit application for three phases TT/TN system protection
- High surge current discharge capacity up to 40kA 8/20 $\mu$ s.
- High reliability due to global patented thermally protected MOV with reliable arc-extinguish (TPAE) technology.
- Short circuit current rating up to 200kArms (UL1449 5<sup>th</sup>)
- Pluggable module for easy replacement
- Degradation indication and remote signal contact.
- Comply with IEC/EN 61643-11, UL1449 5<sup>th</sup>, CSA C22.2 etc standards.

■ **Dimension drawing**

Unit: mm



## ■ Technical data

Model		SP320/3PN-S	
In accordance with		IEC61643-11:2011; EN61643-11:2012;UL1449 5th	
Category IEC/VDE/EN/UL		II/C/T2/Type1ca	
Power system	Un	220/380VAC, 230/400VAC ,240/415V Three phase, 50/60Hz	
Protection mode		L-N,N-PE	
Max. continuous operating voltage	L-N	Uc MCOV	320Vac
	N-PE		255Vac
Nominal discharge current(8/20us)		In	20kA
Max. discharge current(8/20us)		Imax	40kA
Voltage protection level (IEC 61643-11)	L-N @In	Up	≤1.5kV
	N-PE@1.2/50		≤1.5kV
Voltage protection rating (UL1449)	L-N	VPR	≤1.2kV
	N-PE		≤0.9kV
Temporary overvoltage TOV	L-N	UtoV	337V/5s, Withstand mode 442V/120min, Safe failure mode
	N-PE		1200V/200ms, Withstand mode
Residual current		Ipe	<0.1mA
Follow current interrupt rating	N-PE	I <sub>fi</sub>	100Arms @ 255Vac
Short circuit withstand capability (IEC61643-11)		I <sub>scCR</sub>	25kArms
Short circuit current rating (UL1449)		SCCR	200kArms
Response time		tA	≤25 ns (L-N); ≤100 ns (N-PE);
Backup fuse(only required if not already provided in mains)		125A gL/gG	
Operating temperature range		- 40°C ~ +70°C	
Cross-section of connection wire		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	
Failure indication/Status		Internal green – normal ; red - failure	
Remote alarm contact		“-S” means with remote alarm contact	
Approvals, Certifications		UL,KEMA,CE	
<b>Additional data for Remote Alarm Contacts</b>			
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 connecting wire		Max. 1.5mm <sup>2</sup> (or # 16AWG)	