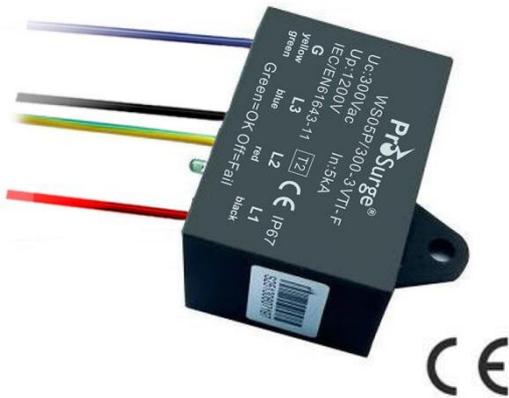


POWER SUPPLY SYSTEM

Three-phase Surge Protective Devices

WS05P/xxx-3VTI-F

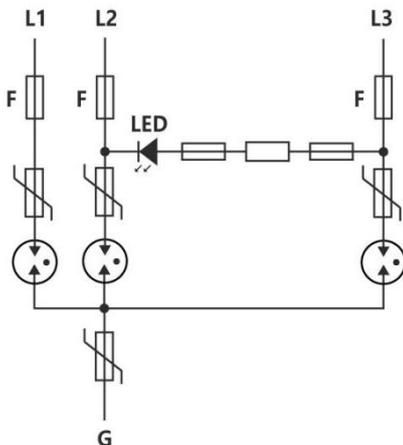


Prosurge's WS...3VTI series low voltage surge protector is a compact size surge protection device (SPD) especially for surge protection of three-phase AC power lines. It can effectively suppress the transient over voltage on power line caused by lightning strikes and other electrical source. The products are generally installed in the distribution or power unit of the equipment to be protected.

This series is designed for use in three-phase power circuit applications, including:

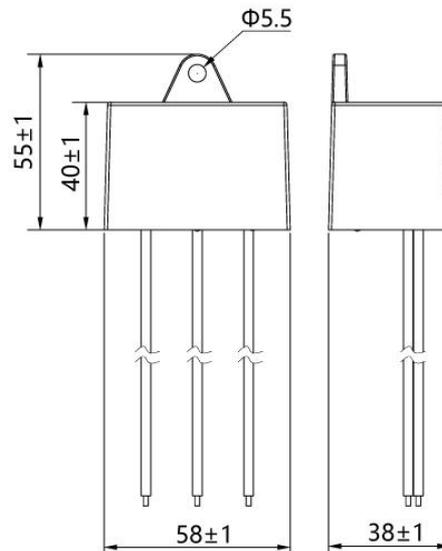
- Outdoor LED Luminaire
- Electric vehicle charger
- Vehicle air conditioner
- Power conditioner for solar photovoltaic systems
- Electrical facilities
- Industrial equipment

Basic Circuit Diagram



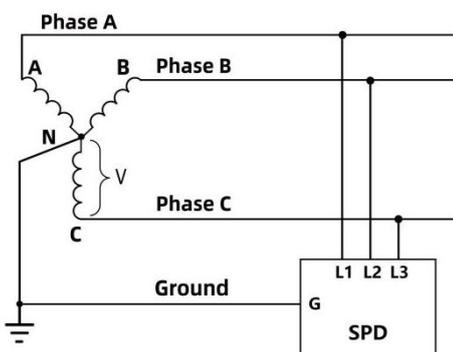
Dimension Drawing

Unit: mm

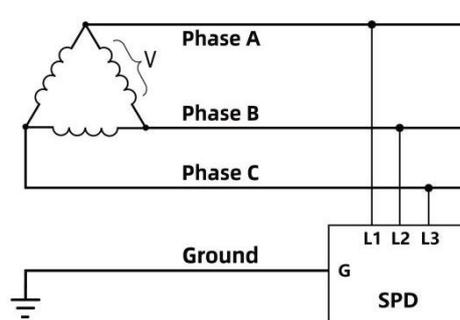


Installation

TN-C system connection



IT system connection



POWER SUPPLY SYSTEM

Technical Features

- Surge protector comply with IEC/EN 61643-11 and UL 1449 5th
- Fail-safe technology to prevent a hazard to the facility due to end-of-life of MOV component or extreme failure conditions which may caused by abnormal line voltage fluctuation etc.
- Engineered specifically for three-phase power circuit applications such as LED lighting systems and drivers.
- Max Discharge Current up to 10kA 8/20 us
- Installed in parallel with the power supply, compatible with TN-C & IT systems
- LED fault indication
- IP67 waterproof enclosure to resist dirt, dust and water

Technical Data

Part No.		WS05P/150-3VTI-F	WS05P/300-3VTI-F	WS05P/350-3VTI-F	WS05P/640-3VTI-F
In accordance with		IEC/EN 61643-11:2011; UL 1449 5th			
Category IEC/EN/UL		II/2/Type 2ca			
Connection type		Parallel connection			
Nominal voltage (three-phase) AC Un	TN-C system	120/208Vac 127/220Vac	220/380Vac 230/400Vac 240/415Vac	240/415Vac 277/480Vac	400/690Vac 462/800Vac
	IT system	120Vac	240Vac	240Vac	480Vac
Operating frequency range		50/60Hz			
Max. continuous operating voltage AC Uc		150V	300V	350V	640V
Mode of protection		Full mode protection			
Nominal discharge current(8/20μs) In		5kA			
Max. discharge current(8/20μs) Imax		10kA			
Voltage protection level (V)	Up	900	1200	1500	2500
	VPR	700	1000	1200	2000
Leakage current		0mA			
Temporary over-voltage TOV-120min U _T -Withstand mode		228V	442V	442V	528V
Short-circuit current rating I _{sc} per IEC 61643-11		10kArms			
Backup fuse(only required if not already provided in mains)		25A gL/gG			
Failure indication		LED On= normal ; LED Off=Failure or power off			
Thermal disconnecter		internal			
Working environment		- 40°C ~ +85°C; ≤95% RH			
Connection wire		16AWG(L1=Black; L2=Red; L3=Blue; PE=Yellow/Green) ,150mm			
Enclosure material		thermoplastic; extinguishing degree UL94 V-0			
Degree of protection		IP67 (Waterproof)			
Dimension		58x40x38mm			
Altitude		≤4000m			
Certification		CE			