

Surge Protection Device

WENZHOU LONGQI NEW ENERGY TECHNOLOGY CO.LTD

Product Description

The Role of DC Surge Protectors

- Protects the PV system from transient overvoltages and surges
- Limits voltage to prevent damage to inverters or other connected equipment
- Enhances the reliability and lifetime of the solar power system



Lightning protection

20/40kA, surge and lightning protection, capable of protecting equipment during thunderstorms

Flame retardant

The shell is made of PBT(LD3)/PA66(LD1) new material, the flame retardant grade can reach UL94V-0

Shield Storm chip

Thick Shield Storm Lightning Chip, thicker and more reliable

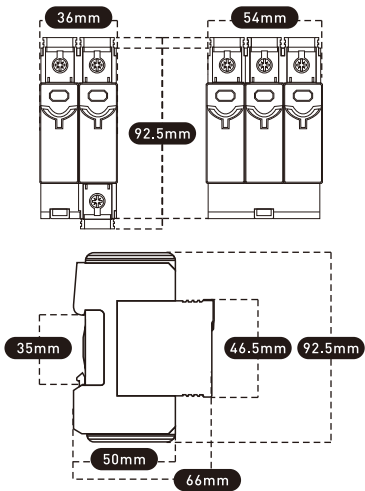
Indicator light

Green indicator for normal operation, red needs to be replaced

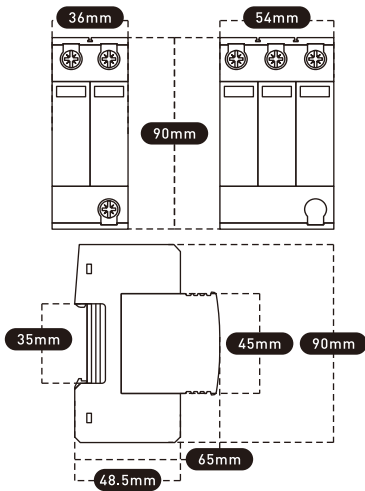
Parametric

Model	LD3-40PV / LD1-40PV	
Pole	2P	3P
Rated Working DC Voltage Ue (V)	500/600/800/1000V	1000/1500V
Up(kV)	2.2/2.2/2.5/3.6	3.6/5.3
Classified Test	II	
In (8/20)us (kA)	20	
I_{max} (8/20)us (kA)	40	
Standard	IEC61643-31	
lightning Protection	Yes	
Quality Certificate	CE/ISO9001	
Operating Temperature	-30 °C ~ +70 °C	
Humidity	≤95%	
Altitude	2000m	
Installation	35mm DIN Rail	

LD3-40PV Product Size

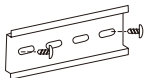


LD1-40PV Product Size



Installation

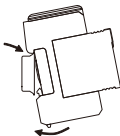
Step 1 Inspect the product



Verify whether the model and current specification are consistent with the requirements. Check that there is no damage to the appearance.

Step 2 Installation of DIN rail

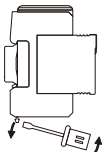
Fix the guide rail in place by screwing it in



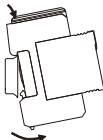
Step 3 Install Surge Protection Device

- Hang the Surge Protection Device slot on the DIN rail
- Push the lower end of the Surge Protection Device into the DIN rail

Demolition

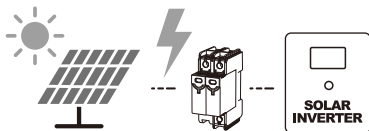


- Pull out the latch



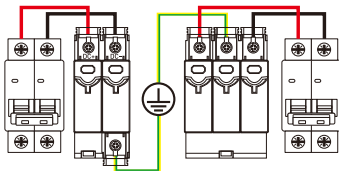
- Pull out the Surge Protection Device from the DiN rail

Working Principle



Connect a wire

+,- pole enters from above, 2P earth wire from below, The ground wire for the 3P is in the upper center.



Warnings

Define equipment requirements

According to the rated voltage, current and sensitivity of the equipment to be protected, select the matching surge protector to ensure that its rating is higher than the equipment operating voltage but lower than the limit of withstand.

Power failure operation

The power supply must be disconnected before installation, especially in critical places such as hospitals and data centres, where power failure protocols must be strictly adhered to.

Operation and Maintenance

Pay attention to the maximum continuous operating temperature, starting voltage and heat generated during operation to prevent overheating damage.

Periodic inspection

including the appearance of the state, grounding reliability and alarm function test, timely replacement of the failed protector

Important Notes

 **DANGER:** Hazardous Voltage. Disconnect power before
EN installation or service. Must be installed by a qualified electrician.

 **GEFAHR:** Gefährliche Spannung. Vor der Installation oder
DE Wartung den Strom abschalten. Muss von einer qualifizierten
Elektrofachkraft installiert werden.

 **DANGER:** Tension dangereuse. Couper l'alimentation avant
FR l'installation ou l'entretien. Doit être installé par un électricien
qualifié.

 **PERICOLO:** Tensione pericolosa. Scollegare l'alimentazione
IT prima dell'installazione o della manutenzione. Deve essere
installato da un elettricista qualificato.

 **PELIGRO:** Voltaje peligroso. Desconecte la energía antes de la
ES instalación o mantenimiento. Debe ser instalado por un
electricista calificado.

 **GEVAAR:** Gevaarlijke spanning. Schakel de stroom uit vóór
NL installatie of onderhoud. Moet worden geïnstalleerd door een
gekwalficeerde elektricien.

 **NIEBEZPIECZEŃSTWO:** Niebezpieczne napięcie. Odłącz zasilanie
PL przed instalacją lub konserwacją. Musi być zainstalowane przez
wykwalifikowanego elektryka.

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