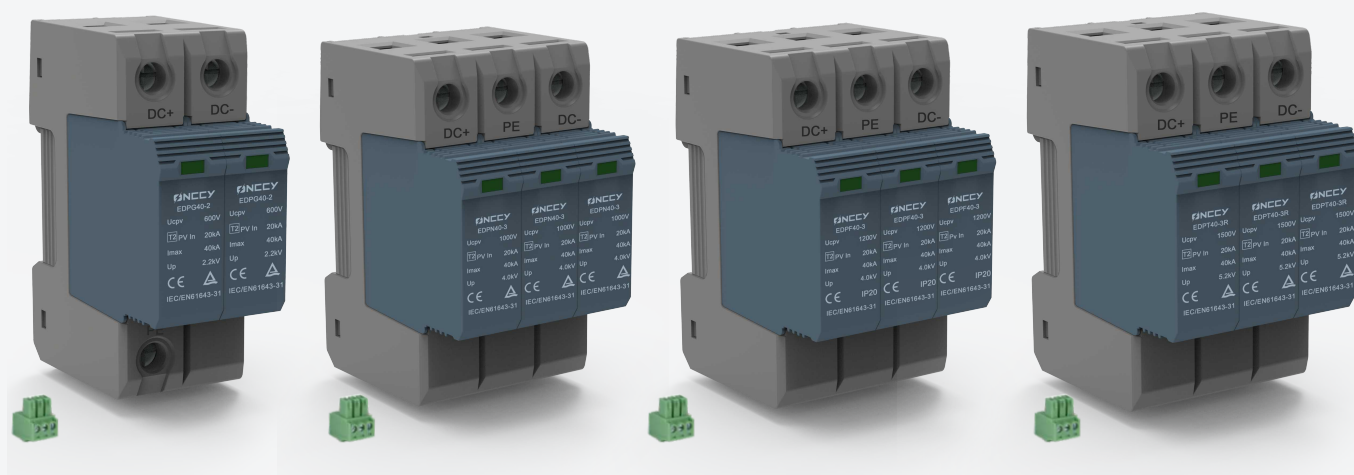




DC Surge Protector Surge Protection Device

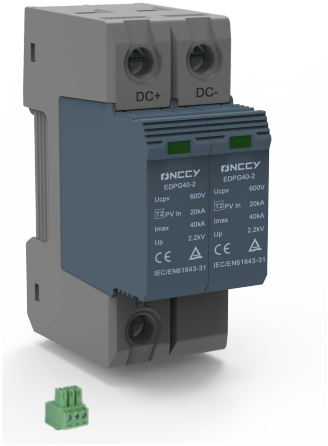
Leading Manufacturer Protects Solar Power Safety

Rev3.0 2023/03/18



DC SURGE PROTECTOR

Surge Protection Device T2 Series



Product Application

EDP series surge protective devices have reliable voltage protection level, super surge discharge capacity and safety overload capacity, which are used for lightning protection of photovoltaic power generation system. The product is equipped with high-energy mov chip, so when the system has overvoltage due to lightning stroke or other reasons, it can introduce the voltage into the earth with nanosecond response speed, so as to protect the equipment.

Product Benefits

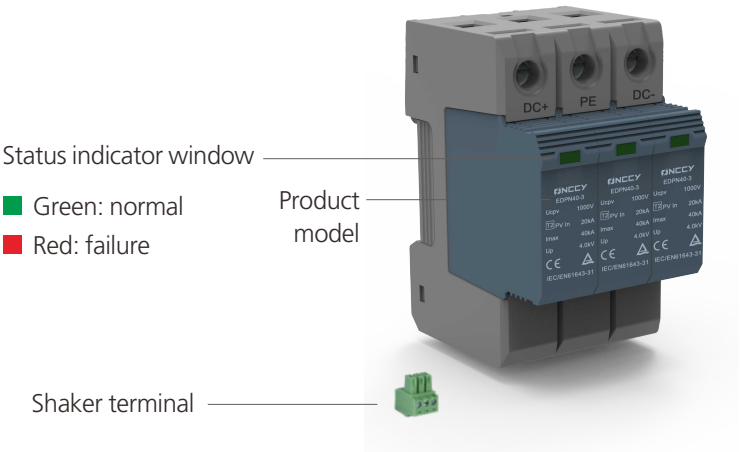
- Location of Use: String box, Inverter
- Mode of Protection: (DC+) - PE, (DC-) - PE, (DC+) - (DC-)
- Surge Ratings: $I = 20kA(8/20\mu s)$
 $I_{Total} = \text{up to } 40kA(8/20\mu s)$
- IEC/EN/UL Category: Class I-II / Type 2
- Protective Elements: High Energy MOV
- Housing: Pluggable Design
- Compliance: IEC 61643-31 EN 50539-11+ A1

Select Code

E	D	P	□	□	-	□	□
1	2	3	4	5	6	7	

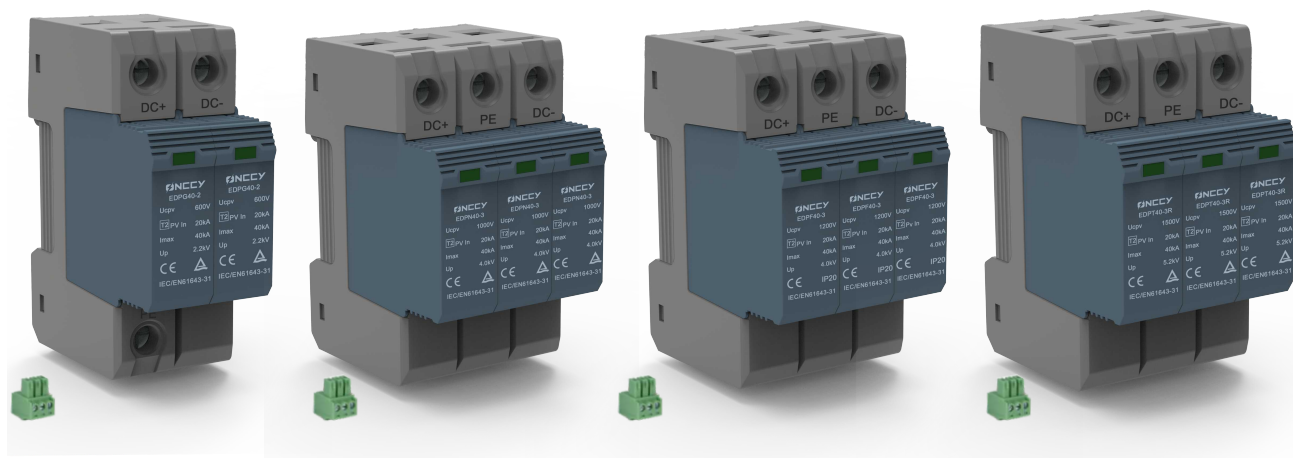
Code	Name	Description
1	ONCCY brand	E
2	D	DC
3	Product Code	P: Surge Protector
4	Voltage	G:600V N:1000V F:1200V T:1500V
5	Imax	40:40kA
6	Pole	2:2P 3:3P
7	Remote signal	R: with RC Nil: with out RC

Appearance Introduction



Surge Protection Device

Technical Data



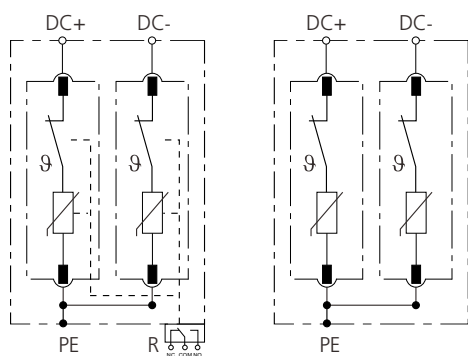
Product model			EDPG40-2 (R)	EDPN40-3 (R)	EDPF40-3 (R)	EDPT40-3 (R)
IEC Electrical						
Maximum Continuous Operating DC Voltage	(DC+) - PE, (DC-) - PE	U_{CPV}	600V	1000V	1200V	1500V
	(DC+) - (DC-)	U_{CPV}	-	1000V	1200V	1500V
Nominal Discharge Current (8/20 μ s)		I_n	20kA			
Total Discharge Current (8/20 μ s)		I_{Total}	40kA			
Maximum Discharge Current (8/20 μ s)		I_{max}	40kA			
Voltage Protection Level	(DC+) - PE, (DC-) - PE	U_p	2200V	4000V	4000V	5200V
	(DC+) - (DC-)	U_p	-	4000V	4000V	5200V
Response Time		t_A	≤ 25 ns			
Short-Circuit Current Rating		I_{SCP}	1000A			
Number of Ports			1			
Mechanical & Environmental						
Operating Temperature Range		T_a	-40°C to +80°C			
Permissible Operating Humidity		RH	5%...95%			
Atmospheric pressure and altitude			80k Pa ... 106k Pa / -500m ... 2000m			
Terminal Screw Torque		M_{max}	39.9 lbf-in [2.0~2.5 N·m]			
Conductor Cross Section (max)			2 AWG (Solid, Stranded) / 4 AWG (Flexible)			
			35 mm²(Solid, Stranded) / 25 mm² (Flexible)			
Mounting			35 mm DIN Rail, EN 60715			
Degree Of Protection			IP20 (built-in)			
Housing Material			Thermoplastic, Red, Degree UL 94 V-0			
Thermal Protection			Yes			
Operating State / Fault Indication			Green: ok / Red: failure			
Remote Contacts (RC)			Optional			
RC Switching Capacity			DC:250V / 0.1A;125V / 0.2A;75V / 0.5A			
RC Conductor Cross Section (max)			16 AWG (Solid) / 1.5 mm²(Solid)			

DC SURGE PROTECTOR

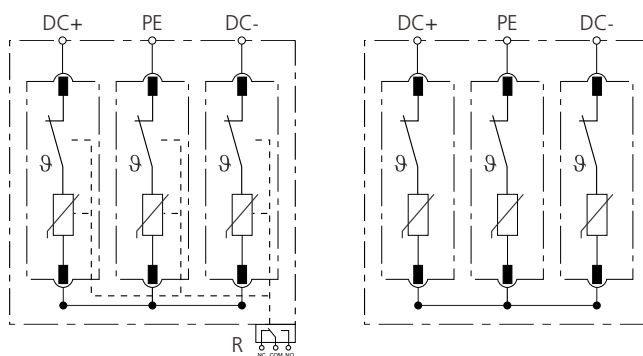
Surge Protection Device



Schematic Diagram

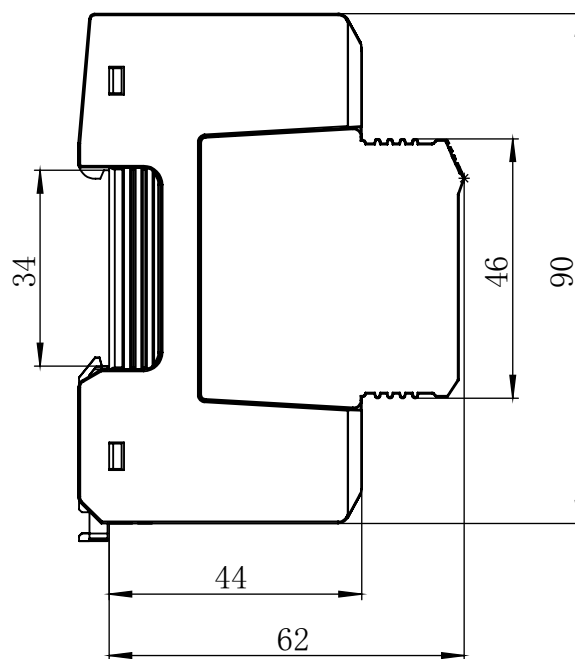
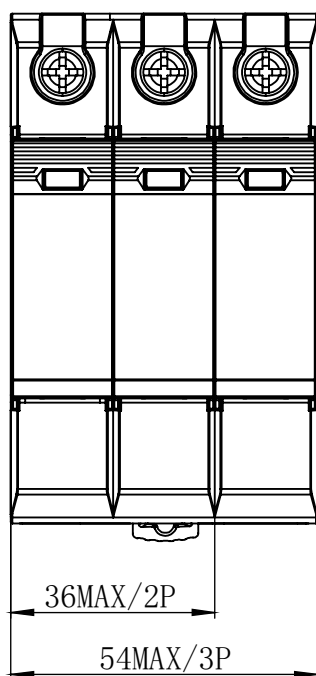


EDPG40-2 (R)



EDPN40-3 (R), EDPF40-3 (R), EDPT40-3 (R)

Drawing size



Surge Protection Device T1+T2



Product Application

EDP series surge protective devices have reliable voltage protection level, super surge discharge capacity and safety overload capacity, which are used for lightning protection of photovoltaic power generation system. The product is equipped with high-energy mov chip, so when the system has overvoltage due to lightning stroke or other reasons, it can introduce the voltage into the earth with nanosecond response speed, so as to protect the equipment.

Product Benefits

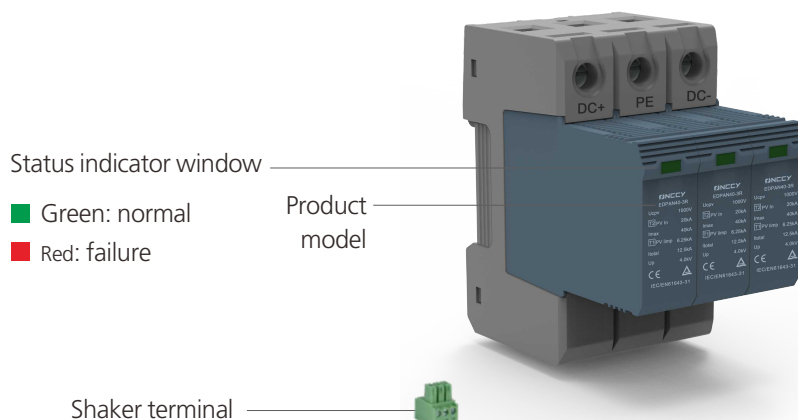
- Location of Use: String box, Inverter
- Mode of Protection: (DC+) - PE, (DC-) - PE, (DC+) - (DC-)
- Surge Ratings: I_{Total} = up to 12.5kA(10/350 μ s)
 I_{Total} = up to 40kA(8/20 μ s)
- IEC/EN/UL Category: Class I+II / Type 1+2
- Protective Elements: High Energy MOV
- Housing: Pluggable Design
- Compliance: IEC 61643-31 EN 50539-11 + A1

Select Code

E	D	P	□	□	-	□	□
1	2	3	4	5	6	7	

Code	Name	Description
1	NCCY brand	E
2	D	DC
3	Product Code	P: Surge Protector
4	Voltage	AG:600V AN:1000V AT:1500V
5	I _{max}	40: 40kA
6	Pole	2:2P 3:3P
7	Remote signal	R: with RC Nil: with out RC

Appearance Introduction



DC SURGE PROTECTOR

Surge Protection Device T1+T2

Technical Data

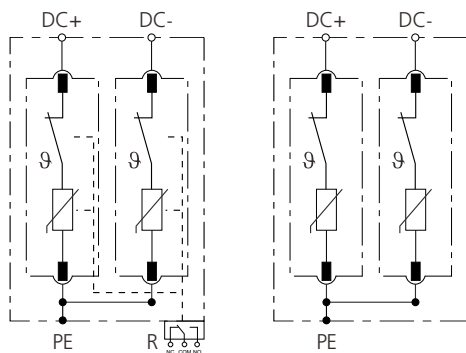


Product model		EDPAG40-2 (R)	EDPAN40-3 (R)	EDPAT40-3 (R)
IEC Electrical				
Maximum Continuous Operating DC Voltage	(DC+) - PE, (DC-) - PE (DC+) - (DC-)	U_{CPV} 600V U_{CPV} -	1000V 1000V	1500V 1500V
Nominal Discharge Current (8/20 μ s)		I_n 20kA		
Impulse Discharge Current (10/350 μ s)		I_{imp} 6.25kA		
Total Discharge Current (10/350 μ s)		I_{Total} 12.5kA		
Total Discharge Current (8/20 μ s)		I_{Total} 40kA		
Maximum Discharge Current (8/20 μ s)		I_{max} 40kA		
Voltage Protection Level	(DC+) - PE, (DC-) - PE (DC+) - (DC-)	U_p 2200V U_p -	4000V 4000V	5200V 5200V
Response Time		t_A <25ns		
Short-Circuit Current Rating		I_{SCP} 1000A		
Number of Ports		1		
Mechanical & Environmental				
Operating Temperature Range	T_a	-40°F to +158°F [-40°C to +70°C]		
Permissible Operating Humidity	RH	5%...95%		
Atmospheric pressure and altitude		80k Pa ... 106k Pa / -500m ... 2000m		
Terminal Screw Torque	M_{max}	39.9 lbf-in [2.0~2.5 N·m]		
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35 mm ² (Solid, Stranded) / 25 mm ² (Flexible)		
Mounting		35 mm DIN Rail, EN 60715		
Degree Of Protection		IP20 (built-in)		
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0		
Thermal Protection		Yes		
Operating State / Fault Indication		Green: ok / Red: failure		
Remote Contacts (RC)		Optional		
RC Switching Capacity		AC:250V / 0.5A;DC:250V / 0.1A;125V / 0.2A;75V / 0.5A		
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm ² (Solid)		

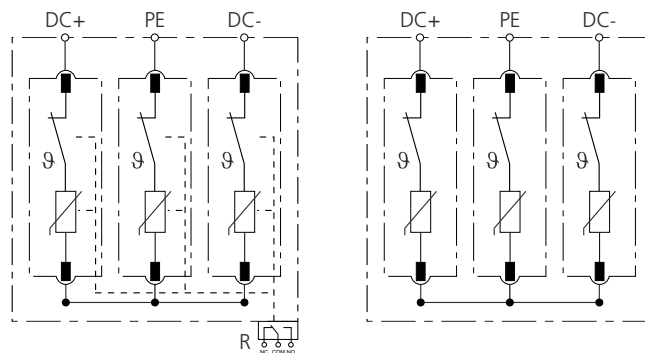
Surge Protection Device T1+T2



Schematic Diagram



EDPAG40-2 (R)



EDPAN40-3 (R), EDPAT40-3 (R)

Drawing size

