ASwich | Safety Is On

DC Surge Protector

Surge Protection Device

Leading Manufacturer Protects Solar Power Safety

Rev1.0 2022/03/22

Surge Protection Device

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

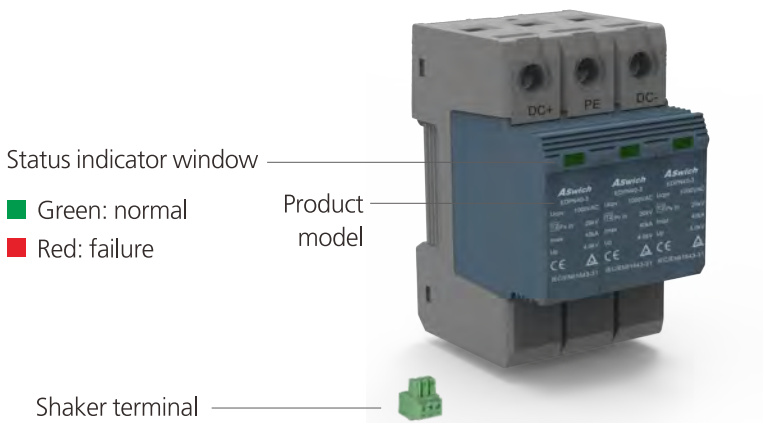
- Location of Use: String box, Inverter
- Mode of Protection: (DC+) - PE, (DC-) - PE, (DC+) - (DC-)
- Surge Ratings: I_n =20kA(8/20μs)
  $I_{n_{total}}$ =up to 40kA(8/20μs)
- IEC/EN/UL Category: Class I+II / Type 2
- Protective Elements: High Energy MOV
- Housing: Pluggable Design
- Compliance: IEC 61643-31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

Select Code

E	D	P	□	□	-	□	□
1	2	3	4	5		6	7

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

Appearance Introduction



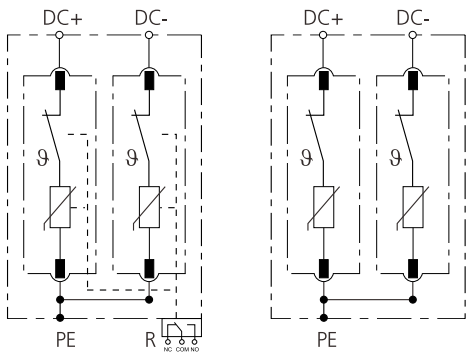
Surge Protection Device

Technical Data

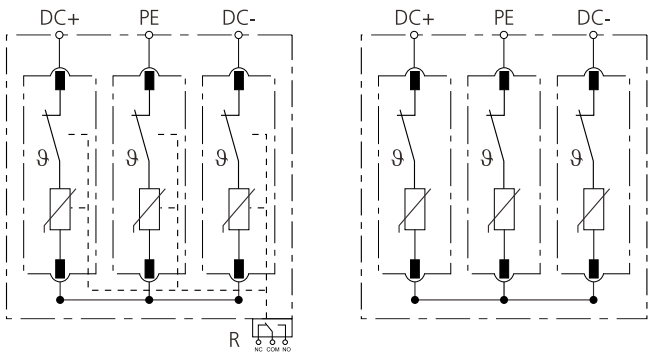
Product model			EDPG40-2 (R)	EDPN40-3 (R)	EDPT40-3 (R)
IEC Electrical					
Maximum Continuous Operating DC Voltage	(DC+) - PE, (DC-) - PE	U_{CPV}	600V	1000V	1500V
	(DC+) - (DC-)	U_{CPV}	-	1000V	1500V
Nominal Discharge Current (8/20 μs)		I_n	20kA		
Total Discharge Current (8/20 μs)		I_{Total}	40kA		
Maximum Discharge Current (8/20 μs)		I_{max}	40kA		
Voltage Protection Level	(DC+) - PE, (DC-) - PE	U_p	2200V	4000V	5200V
	(DC+) - (DC-)	U_p	-	4000V	5200V
Response Time		t_A	<25ns		
Short-Circuit Current Rating		I_{SCPV}	2000A		
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

Appearance Introduction

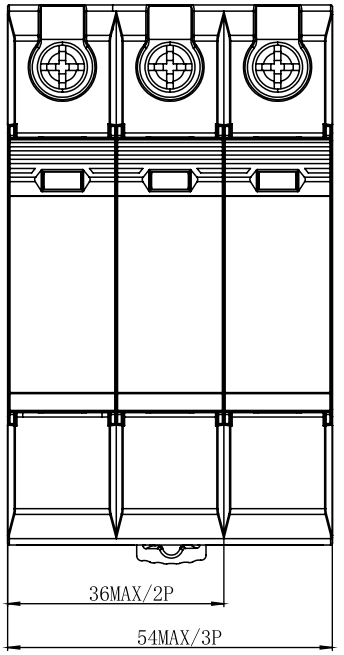


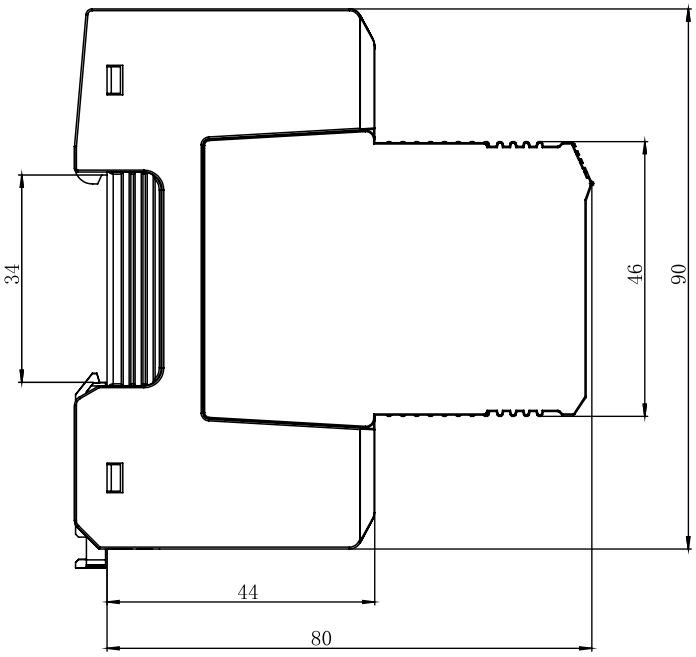
EDPG40-2 (R)



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

Drawing size





DC SURGE PROTECTOR

Surge Protection Device

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 μs)
  I_{Total} =up to 40kA(8/20 μs)
- 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	□	□	-	□	□
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Code	Name	Description
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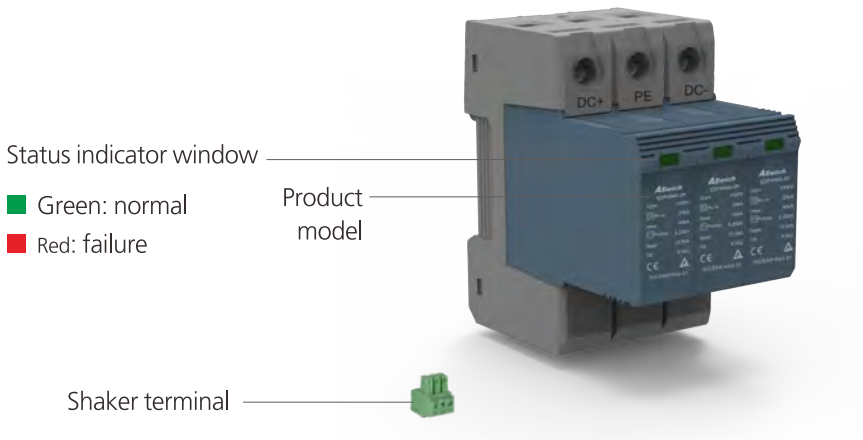
2	D	DC
3	Product Code	P: Surge Protector
4	Voltage	AG:600V AN:1000V AT:1500V
5	Imax	40: 40kA
6	Pole	2:2P 3:3P
7	Remote signal	R: with RC Nil: with out RC

Appearance Introduction



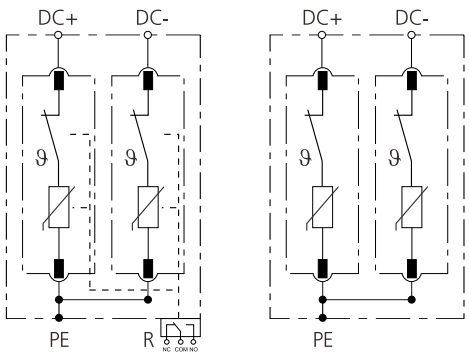
Surge Protection Device

Technical Data

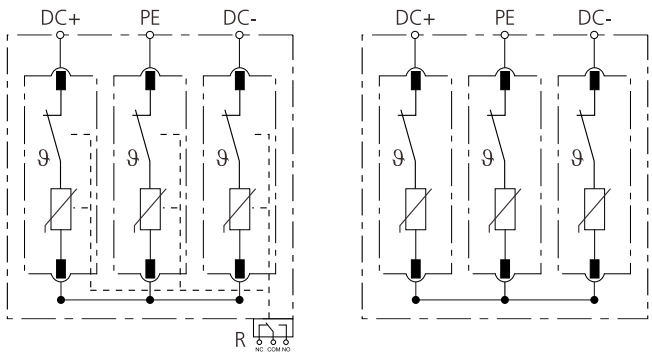
Product model			EDPAG40-2 (R)	EDPAN40-3 (R)	EDPAT40-3 (R)
IEC Electrical					
Maximum Continuous Operating DC Voltage	(DC+) - PE, (DC-) - PE	U_{CPV}	600V	1000V	1500V
	(DC+) - (DC-)	U_{CPV}	-	1000V	1500V
Nominal Discharge Current (8/20 μs)		I_n	20kA		
Impulse Discharge Current (10/350 μs)		I_{imp}	6.25kA		
Total Discharge Current (10/350 μs)		I_{Total}	12.5kA		
Total Discharge Current (8/20 μs)		I_{Total}	40kA		
Maximum Discharge Current (8/20 μs)		I_{max}	40kA		
Voltage Protection Level	(DC+) - PE, (DC-) - PE	U_p	2200V	4000V	5200V
	(DC+) - (DC-)	U_p	-	4000V	5200V
Response Time		t_A	<25ns		
Short-Circuit Current Rating		I_{SCPV}	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

Appearance Introduction



EDPAG40-2 (R)



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

Drawing size