



DC Isolation Switch

EDS6EL DC Isolator(1500V) IP66 Enclosure

Leading Manufacturer Protects Solar Power Safety

Rev5.0 2023/08/22



Aluminum box



Plastic box

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Product Application

IP66 enclosure series - EDS6EL/50 DC Isolator is developed for 1000V commercial solar rooftops and installed between photovoltaic panels and inverters to guarantee safety. EDS6EL/50 DC Isolator has optional aluminum box and plastic box (optional breathable valve) and is produced by patented arc interrupter and UL certified materials to ensure the highest quality and solar DC safety.

Product Benefits

- IP66, UV Resistance
- Arcing Time < 1ms
- Earth Terminal
- IEC60947-3, AS60947.3
- 2 Poles, 4 Poles Available(Single | Double String)
- DC-PV2 / DC-21B: 55A up to 1500VDC

Aluminum box

- Metal material, with anti-corrosion, anti-explosion resistance against IK10, can adapt to harsh environments

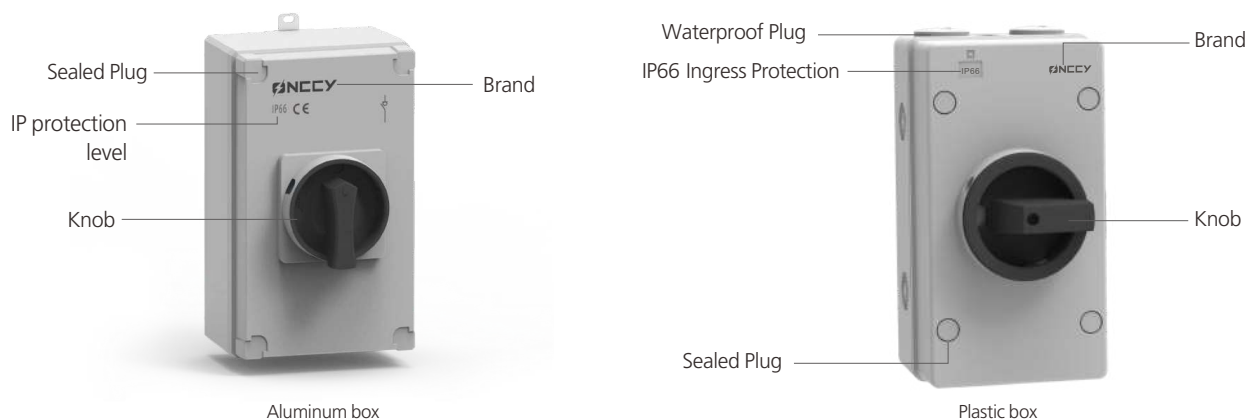
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1	2	3	4	5	6	7	8		

Code	Name	Description
1	NCCY brand	E
2	DC	D
3	Isolation Switch	S
4	Series	6: Series 6
5	Mounting Type	EL: Plastic enclosure box ELA: Aluminum enclosure box
6	Rated Current	13: 13A 25: 25A 50: 50A 20: 20A 40: 40A UL 13: 13A 25: 25A 20: 20A 30: 30A
7	Pole	2:2P 4:4P 4T/4B/4S UL 2:2P 4:4P
8	Lockable/Unlock	R:lockable Nil: unlockable

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Appearance Introduction



Technical Data

Data according to IEC/EN60947-3: AS60947.3, UL508i, GB/T14048.3. Utilization category DC-PV1/DC-PV2.

Main Parameters			13	20	25	40	50
Rated insulation voltage	Ui	V	1500	1500	1500	1500	1500
Rated thermal current	Ith	A	32	40	55	55	55
Rated impulse withstand voltage	Uimp	V	8000				
Rated short-time withstand current (1s)	Icw	A	780				
Rated short-time making capacity	Icm		1200A				
Maximum cable cross sections (incl. jumper)							
Solid or standard	mm ²	4-16					
Flexible	mm ²	4-16					
Flexible (+ multicore cable end)	mm ²	4-16					
Torque							
Tightening torque terminal screws M4.	Nm	1.2-1.8					
Tightening torque single hole mounting nut M16	Nm	2.0-2.3					
Tightening torque knob screws M3	Nm	0.5-0.7					
Switching on or off torque	Nm	0.9-1.9					
General parameters							
Knob positions		9 o'clock OFF, 12 o'clock, ON					
Electrical Life	Actual	3000 Cycles					
	Standard	300 Cycles					
Mechanical Life	Actual	10000 Cycles					
	Standard	10000 Cycles					
Number of DC poles		2 or 4					
Distance of contacts (per pole)	mm	8					
Operation temperature	°C	-40 to +85					
Store temperature	°C	-40 to +85					
Pollution degree		3					
Overvoltage category		III					
IP rating of shafte and mounting nut		IP66					



DC ISOLATION SWITCH

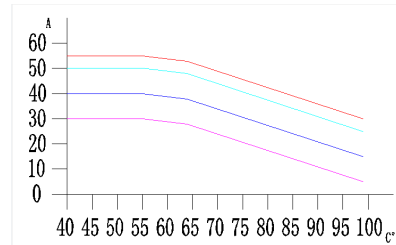
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Number of layers	Voltage/Current (DC-PV1)					Model
	600Vdc	800Vdc	1000Vdc	1200Vdc	1500Vdc	
2/4	32	26	13	10	5	EDS6EL/13/ZY
	40	30	20	12	6	EDS6EL/20/ZY
	55	45	25	15	8	EDS6EL/25/ZY
	/	50	40	30	20	EDS6EL/40/ZY
	/	55	50	40	30	EDS6EL/50/ZY
4T/B/S	/	/	32	26	13	EDS6EL/13/ZY
	/	/	40	30	20	EDS6EL/20/ZY
	/	/	55	40	30	EDS6EL/25/ZY
	/	/	/	/	45	EDS6EL/40/ZY
	/	/	/	/	50	EDS6EL/50/ZY

According to UL 508i

Layers	Voltage / current (UL 508i)			Model
	600VDC	800VDC	1000VDC	
2/4	30	30	13	EDS6EL/13/ZY
	30	30	20	EDS6EL/20/ZY
	30	30	25	EDS6EL/25/ZY
	30	30	30	EDS6EL/30/ZY

Type		
Cable section		4.0-16mm ²
Type of Conductor		4-16mm ² (Rigid: Solid or Stranded)
		4-10mm ² (Flexible)
Number of conductors per terminal		1
Required preparation of the conductor		Yes
Stripping length (mm), main circuit		8mm
Tightening torque (M4), main circuit		1.2~1.8N.m



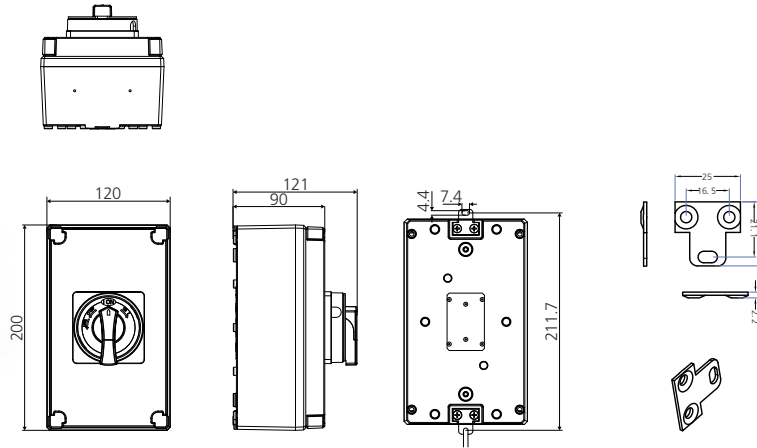
Note: As the temperature increases, the current decreases

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Dimension and Mounting



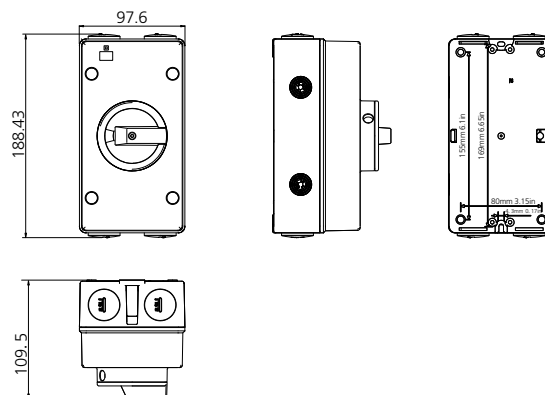
Aluminum box



Dimension and Mounting



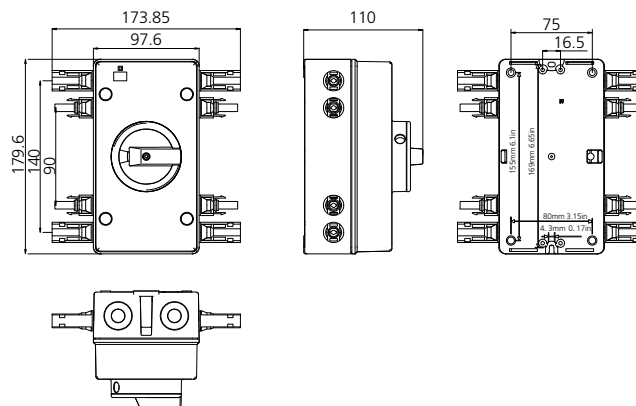
Plastic box



Enclosure Box



Plastic box
EDS6 EL/XX/4R (4MC4)



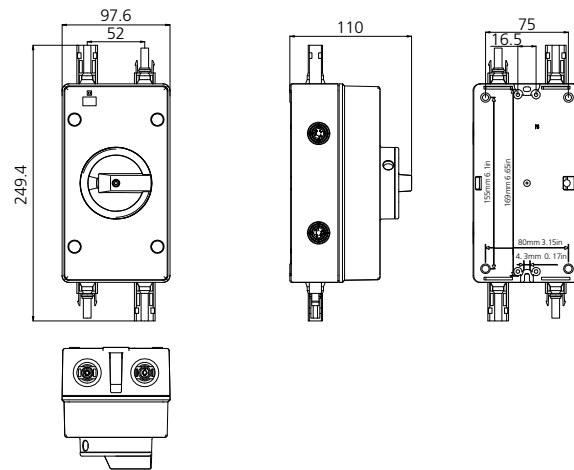
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Enclosure Box



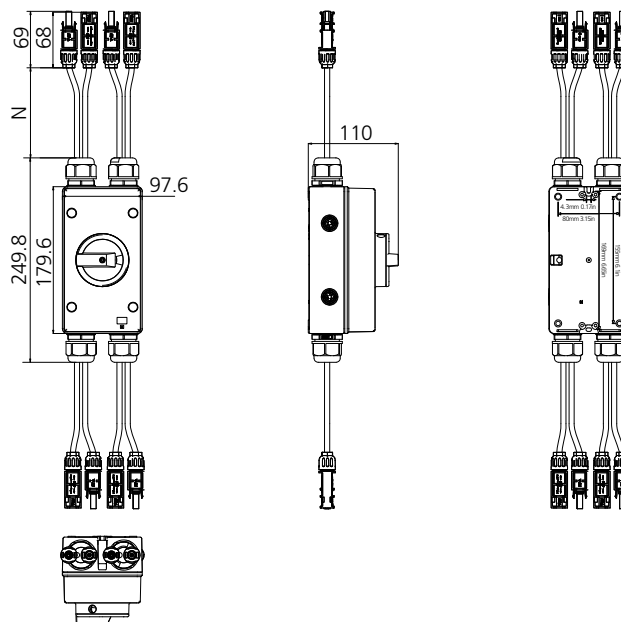
Plastic box
EDS6 EL/XX/XR (2MC4)



Enclosure Box



EDS6 EL/XX/4R (4MC4yanchang)



Enclosure Box



EDS6 EL/XX/4R (2MC4yanchang)

