

# ENCLOSURE DC ISOLATOR

## PEDSC100R/120R-EL32R



## Product Features

### IP66 BODY

- Screw fixing doesn't interfere with the sealing performance;
- Multiple mechanical seals around the shaft guarantee the reliability of a waterproof and moisture-proof;
- Stainless steel rotary screw does not rust nor damp;
- Standard cable interface available with seal rings, Internal sealing in top and bottom covers, combined with 2 screws, guarantee an IP66 protection rate;

### GOOD THERMAL DISSIPATION

Sufficient space design, with good thermal dissipation, is employed, so that under ambient temperatures  $-40\text{ }^{\circ}\text{C} \sim +70\text{ }^{\circ}\text{C}$ , the product can work without lowering the loads.

### FLEXIBLE CABLE END

The isolator is compatible with various cables: M25, M20, M16, and M12, and with optional waterproof cable joints and MC4 joints.

### EASY WIRING

Compact space saving and V-type bridge jumper design make wiring easier even after the body fixed. The installer can choose series or parallel connections freely.

### SAFE-LOCK

SAFE-LOCK with two rotational positions, reducing the risk of tampering.

### APPROVALS

Rated isolation voltage up to 1500V, product carries the most important approvals including TUV, CE(IEC/EN60947-3:2009+A1+A2), SAA(AS 60947.3), DC-PV1 and DC-PV2. etc.


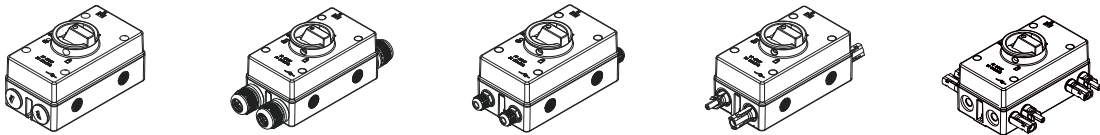
### INTEGRATED TRUE DC ISOLATOR

- Parallel wiring and larger aperture guarantee stability and flexibility.
- Ding rail and base type isolator. Dynamic sealing design and world class sealing materials guarantee an IP66 protection rate.
- Compact structure and modular design, levels with different versions from 2 to 8 are available.
- Incorporating a user independent switching action, spring mechanism, to ensure a very fast break/make action, ensuring that the disconnection of the load circuits and suppression of the arc normally occurs within 3ms.
- Self-cleaning contact mechanism, reducing power loss and abrasion, improving the conduction performance, reducing the resistance and energy loss of the switch, extending the lifecycle.
- Double arc extinguishing mechanism, magnetic and arc chutes, restrain the arc efficiency, especially DC arcs.
- Non-polarity DC Isolator Switch

# PEDSC100R/120R-EL32R

## Technical data

Data according to IEC/EN60947-3:2009+A1+A2, AS60947.3, Utilization category DC-PV1, DC-PV2

Main Parameters		Type	EL32R		
Rated insulation voltage	$U_i$	V	1500		
Rated thermal current	$I_{the}$	A	32		
Rated Operation Voltage	$U_e$	V	1200		
Rated Current	$I_n$	A	PEDSC100R: 1000V DC in 32A, PEDSC120R:1200V DC in 32A		
Rated impulse withstand voltage	$U_{imp}$	V	8000		
Rated short-time withstand current (1s)	$I_{cw}$	A	1000		
Maximum cable cross sections (incl. jumper)					
Solid or standard		mm <sup>2</sup>	4-16		
Flexible		mm <sup>2</sup>	4-10		
Flexible (+ multicore cable end)		mm <sup>2</sup>	4-10		
Torque					
Tightening torque terminal screws M4.		Nm	1.2-1.8		
Tightening torque shell mounting screws ST4.2(304 stainless steel)		Nm	1.5-2.0		
Tightening torque knob screws M3		Nm	0.5-0.7		
Switching on or off torque		Nm	0.9-1.3		
The wiring torque on base		Nm	1.1-1.4		
Power loss per switch Max					
2		W	2		
4(4S/4B/4T)		W	4		
General parameters					
Method of mounting	Wall-mounted or screw installation				
Type of knob					
Knob positions	OFF at 9 hr, ON at 12 hr				
Mechanical life	10,000				
Number of DC poles	2 or 4				
Operation temperature	°C	-40 to +85			
Storage temperature	°C	-40 to +85			
Pollution degree	2				
Overvoltage category	III				
IP rating of shafting and mounting screws	IP66NW				
Types					
Specs	M25 Waterproof Cap	Cable Gland M25	Cable Gland M16	2MC4/H4(Optional)	4MC4/H4(Optional)
Independent strings	1 or 2	1 or 2	1	1	2
Recommend types	2/4T/4B/4S or 4	2/4T/4B/4S or 4	2/4T/4B/4S	2/4T/4B/4S	4

# PEDSC100R/120R-EL32R

## Technical data

Data according to IEC/EN60947-3:2009+A1+A2, AS60947.3, Utilization category DC-PV1, DC-PV2										Poles in series	No. of strings	Part Number	Contact Configuration
300V		600V		800V		1000V		1200V					
PV1	PV2	PV1	PV2	PV1	PV2	PV1	PV2	PV1	PV2				
32	32	32	32	32	16	16	9	/	/	2	1	PEDSC100R-EL32R-2	
32	32	32	32	32	16	16	9	13	9	2	1	PEDSC120R-EL32R-2	
32	32	32	32	32	16	16	9	/	/	4	2	PEDSC100R-EL32R-4	
32	32	32	32	32	16	16	9	13	9	4	2	PEDSC120R-EL32R-4	
32	32	32	32	32	32	32	32	/	/	4	1	PEDSC100R-EL32R-4S	
32	32	32	32	32	32	32	32	32	32	4	1	PEDSC120R-EL32R-4S	
32	32	32	32	32	32	32	32	/	/	4	1	PEDSC100R-EL32R-4B	
32	32	32	32	32	32	32	32	32	32	4	1	PEDSC120R-EL32R-4B	
32	32	32	32	32	32	32	32	/	/	4	1	PEDSC100R-EL32R-4T	
32	32	32	32	32	32	32	32	32	32	4	1	PEDSC120R-EL32R-4T	

## Switching Configurations

Type	2-pole	4-pole	4-pole with Input and Output on top	4-pole with Input and Output bottom	4-pole with Input on top Output bottom
PEDSC100R/120R	2	4	4T	4B	4S
Contacts Wiring graph					
Switching example					

# PEDSC100R-EL32R

## Non-polarity DC Isolator Switch

Identification		Rating data	
Switch, unenclosed — catalogue number (with DC-PV2 rating)		PEDSC100R-EL32-2/4/4T/4B/4S	
Specific dedicated individual enclosure —catalogue number(with minimum IP56NW rating)		PEDSC100R-EL32-2/4/4T/4B/4S	IP66NW
Assembly of switch and specific dedicated individual enclosure— catalogue number		/	
Ith rated thermal current, unenclosed, at 40 C shade ambient air temperature		32 amps	
Ithe rated thermal current, indoors, at 40 C shade ambient air temperature, in a specific dedicated enclosure		32 amps	
Ithe rated thermal current outdoors at 40 C shade ambient air temperature without solar effects in a specific dedicated enclosure rated IP66NW		32 amps	
Ithe solar current value outdoors at 60 C shade ambient air temperature, with solar effects in a specific dedicated enclosure rated IP66NW		29 amps	
Rated Insulation voltage Ui		1500V	
Rated short-time withstand current Icw		Icw: 1kA, 1 s	
Rated short-time making capacity Icm		N/A	
Rated conditional short-circuit current Icn		N/A	
Rated Impulse withstand voltage Uimp		8,0 kV	
UV Resistance		Yes	
Mounting Type		Vertically or Horizontally	
Pollution degree		3	
Polarity		No polarity, "+" and "-" polarities could be interchanged.	
	Ue rated operational voltage DC volts	Ie; DC-PV2 rated operational current Amps	I(make) and Ic(break) DC-PV2 4 x Ie Amps
1 pole <u>  1  </u> / <u>  </u> / <u>  </u> / <u>  </u>	300V	27	108
	500V	13	52
	600V	10	40
	800V	5	20
	1000V	2.5	10
	1200V	/	/
2 poles <u>  1  </u> / <u>  2  </u> / <u>  </u> / <u>  </u>	300V	32	128
	600V	32	128
	800V	16	64
	1000V	9	36
	1200V	/	/
4 poles <u>  1  </u> / <u>  2  </u> / <u>  3  </u> / <u>  4  </u> / <u>  </u>	300V	32	128
	600V	32	128
	800V	32	128
	1000V	32	128
	1200V	/	/

# PEDSC120R-EL32R

## Non-polarity DC Isolator Switch

Identification		Rating data	
Switch, unenclosed — catalogue number (with DC-PV2 rating)		PEDSC120R-EL32-2/4/4T/4B/4S	
Specific dedicated individual enclosure —catalogue number(with minimum IP56NW rating)		PEDSC120R-EL32-2/4/4T/4B/4S	IP66NW
Assembly of switch and specific dedicated individual enclosure— catalogue number		/	
I <sub>th</sub> rated thermal current, unenclosed, at 40 °C shade ambient air temperature		32 amps	
I <sub>the</sub> rated thermal current, indoors, at 40 °C shade ambient air temperature, in a specific dedicated enclosure		32 amps	
I <sub>the</sub> rated thermal current outdoors at 40 °C shade ambient air temperature without solar effects in a specific dedicated enclosure rated IP66NW		32 amps	
I <sub>the</sub> solar current value outdoors at 60 °C shade ambient air temperature, with solar effects in a specific dedicated enclosure rated IP66NW		29 amps	
Rated Insulation voltage U <sub>i</sub>		1500V	
Rated short-time withstand current I <sub>cw</sub>		I <sub>cw</sub> : 1kA, 1 s	
Rated short-time making capacity I <sub>cm</sub>		N/A	
Rated conditional short-circuit current I <sub>cn</sub>		N/A	
Rated Impulse withstand voltage U <sub>imp</sub>		8,0 kV	
UV Resistance		Yes	
Mounting Type		Vertically or Horizontally	
Pollution degree		3	
Polarity		No polarity, "+" and "-" polarities could be interchanged.	
	U <sub>e</sub> rated operational voltage DC volts	I <sub>e</sub> ; DC-PV2 rated operational current Amps	I <sub>(make)</sub> and I <sub>(break)</sub> DC-PV2 4 x I <sub>e</sub> Amps
1 pole <u>1</u> / ___	300V	27	108
	500V	13	52
	600V	10	40
	800V	5	20
	1000V	2.5	10
	1200V	2	8
2 poles <u>1</u> / <u>2</u> / ___	300V	32	128
	600V	32	128
	800V	16	64
	1000V	9	36
	1200V	9	36
4 poles <u>1</u> / <u>2</u> / <u>3</u> / <u>4</u> / ___	300V	32	128
	600V	32	128
	800V	32	128
	1000V	32	128
	1200V	32	128

# PEDSC100R/120R-EL32R

## Dimensions

