ASwich | Safety Is On

EDS1 Series Isolation Switches

隔离开关

1000V/1200V 32A DC ISOLATION SWITCH

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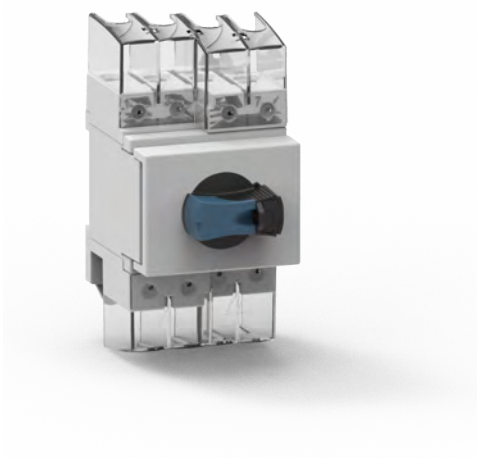
EDS1 Series Isolation Switches



plastic box

Product Application

EDS1 series isolation switch is suitable for a power system with rated voltage DC1500V or below and rated current 50A or below. The product can be used for infrequent switching-on and switching-off and can disconnect 1 ~ 4 MPPT lines at the same time. It is especially suitable for isolating lines in HVDC transmission and distribution systems, such as cutting off the high voltage direct current between solar panels and inverters.

Product Benefits

- Installed at any angle can achieve IP67 waterproof level
- UV resistance and V0 flame retardant material
- Contact Silver Plating, silver layer thickness to the industry's highest standards
- Arcing Time in 3ms
- Breather valve attached on the bottom of the isolator
- No Polarity
- Lockable at OFF position
- AS 60947.3:2018 and IEC 60947.1:2015 standard
- 5 years warranty, product insurance, and recall insurance available

Aluminum box

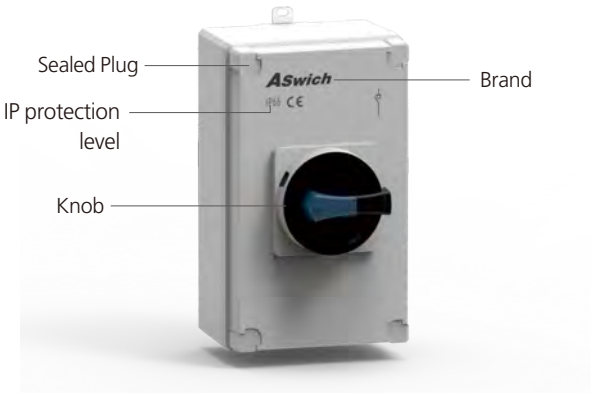
- Metal material, with anti-corrosion, anti-explosion resistance against IK10, can adapt to harsh environments

Select Code

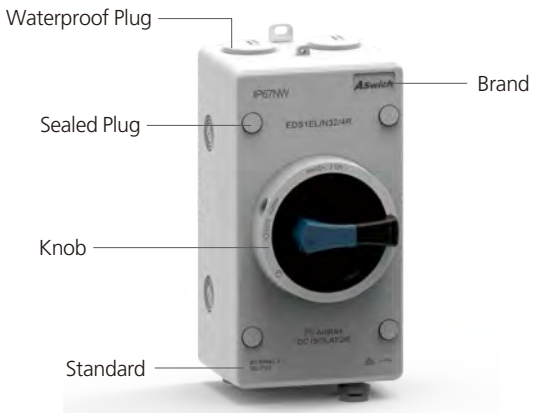
E	D	S	□	□ /	□	□ /	□	□ -	□
1	2	3	4	5	6	7	8	9	10

Code	Name	Description
1	ASwich brand	E
2	DC	D
3	Isolation Switch	S
4	Series	1: Series 1
5	Mounting Type	DB: Rail Installation PM: Panel Mounting DC: Door interlock EL: Enclosure box
6	Voltage	N:1000VDC S:1200VDC
7	Ith	32:32A
8	Pole	2:2P 8:8P 4:4P 4T/4B/4S 6:6P
9	Lockable/Unlock	R:lockable Nil:unlockable
10	Konb Type	RY: red/blue（1200V） BW:black/blue（1000V）

Appearance Introduction



Aluminum box



plastic box

Technical Data

According to EN60947-3, AS/NZS 60947-3

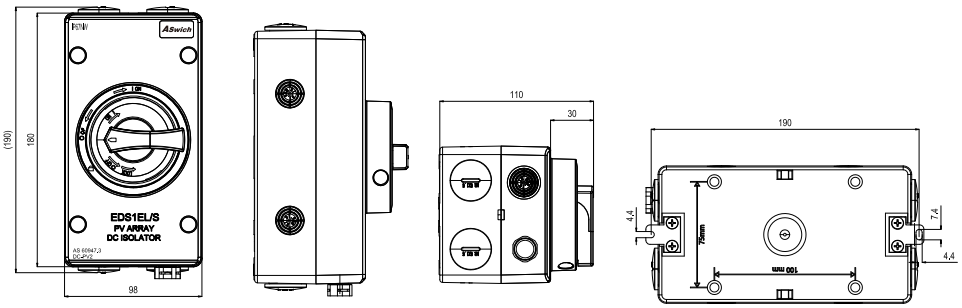
Main Parameters			EDS1/N EDS1/S
Rated Insulation Voltage	Ui	V	1500
Rated thermal current	Ith	A	32
Rated impulse withstand voltage	Uimp	V	8000
Rated short-circuit making capacity	Icw	A	1KA,IS
Maximum cable cross sections(incl.jumper)			
Solid or standard		mm^2	4-16
Flexible		mm^2	4-10
Flexible(+multicore cable end)		mm^2	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
General parameters			
Knob Positions			OFF at 9 hr, ON at 12 hr, ON at 3hr or OFF at 12hr,ON at 3hr
Mechanical life			1000
Number of DC poles			2 or 4(6,8 optional)
Operation temperature		°C	-40 to +85
Storage termperature		°C	-40 to +85
Pollution degree			3
Overvoltage category			III
IP rating of shafte and mounting nul			IP66

EDS1/N Series Isolation Switches(DC1000V)

Dimensions

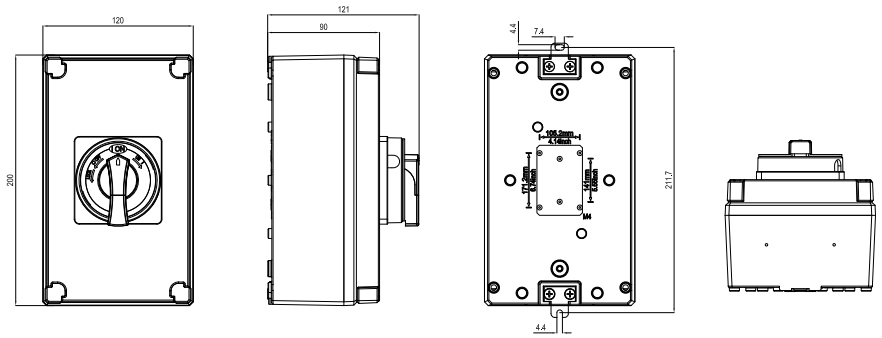
Enclosure Box

plastic box
EDS1 EL/N32/...R

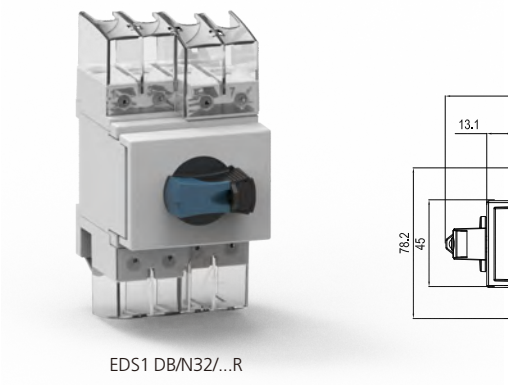


Enclosure Box

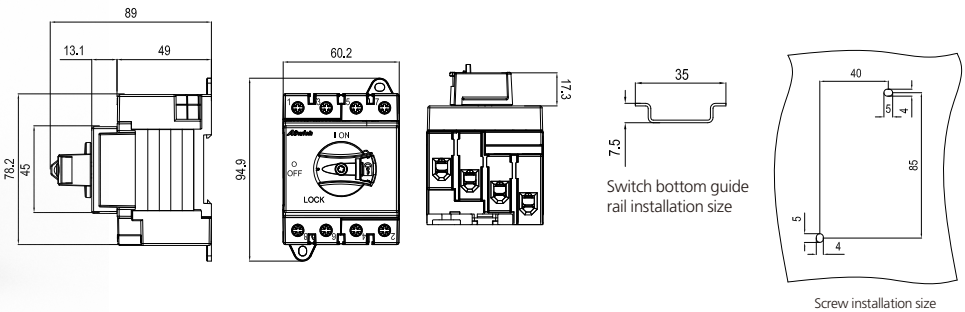
Aluminum box
EDS1 EL/N32/...R



Din-rail Mounting



EDS1 DB/N32/...R



EDS1/N Series Isolation Switches

Technical Data

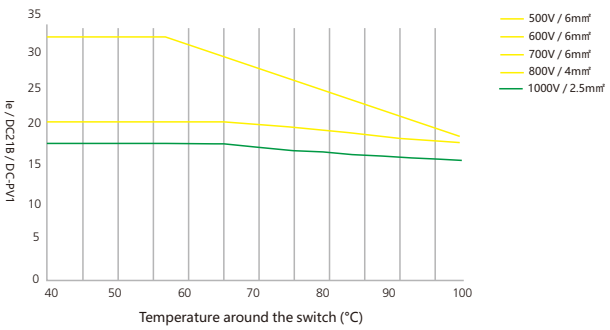
Data according to IEC/EN60947-3:2009+A1+A2, AS60947.3, Utilization category DC-PV1, DC-PV2

300V		600V		800V		1000V		Pole	No. of Strings	Part Number
PV1	PV2	PV1	PV2	PV1	PV2	PV1	PV2			
32	32	32	32	32	16	16	9	2	1	EDS1/N32/2
32	32	32	32	32	16	16	9	4	2	EDS1/N32/4
32	32	32	32	32	32	32	32	4	1	EDS1/N32/4S
32	32	32	32	32	32	32	32	4	1	EDS1/N32/4B
32	32	32	32	32	32	32	32	4	1	EDS1/N32/4T

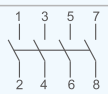
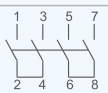
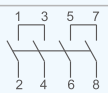
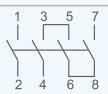
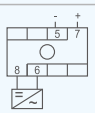
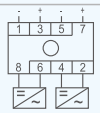
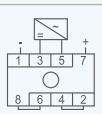
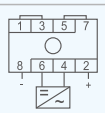
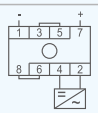
Data according to AS60947-3:2018

Main Contacts		Type	EDS1/N32	Appendix B5
Rated thermal current	I_{the}	A	32	Making &
Rated insulation voltage	U_i	V	1500	Breaking
Distance of contacts(per pole)		mm	8	5x
Rated operational current Ie(DC-PV2)				operations
4 layers, only 2layers in series, with one load 4 layers, 4 layers in series, with two load 1 / 2 /	300V	A	32	128
	600V	A	32	128
	800V	A	16	64
	1000V	A	9	36
4 layers, 4 layers in series, with one load 1 / 2 / 3 / 4 /	300V	A	32	128
	600V	A	32	128
	800V	A	32	128
	1000V	A	32	128

Type		
Number of poles		4-pole
Terminal designation, main circuit		1; 3; 5;7; 2; 4; 6; 8
Type of terminal, main circuit		Screw terminal
Rated cross section area, main circuit		4.0-16mm²
Type of Conductor		4-16mm²(Rigid: Solid or Stranded)
		4-10mm²(Flexible)
Number of conductors per terminal		1
Required preparation of the conductor		Yes
Stripping length (mm), main circuit		8mm
Tightening torque (M4), main circuit		Min: 1.2Nm
		Max: 1.8Nm



Switching Configurations

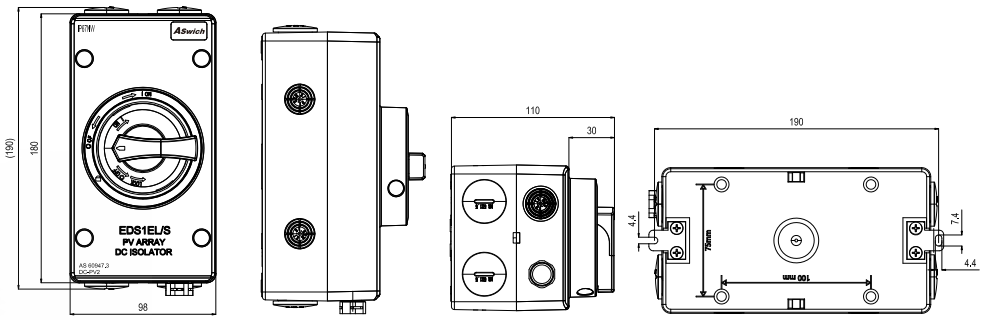
Type	2-pole	4-pole	4-pole with Input and Output on top	4-pole with Input and Output bottom	4-pole with Input on top Output bottom
-	2	4	4T	4B	4S
Contacts Wiring graph					
Switching example					

EDS1/S Series Isolation Switches(DC1200V)

Dimensions

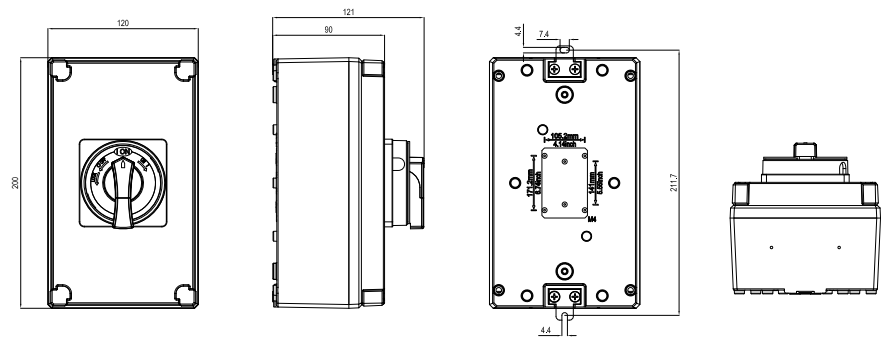
Enclosure Box

plastic box
EDS1 EL/S32/...R



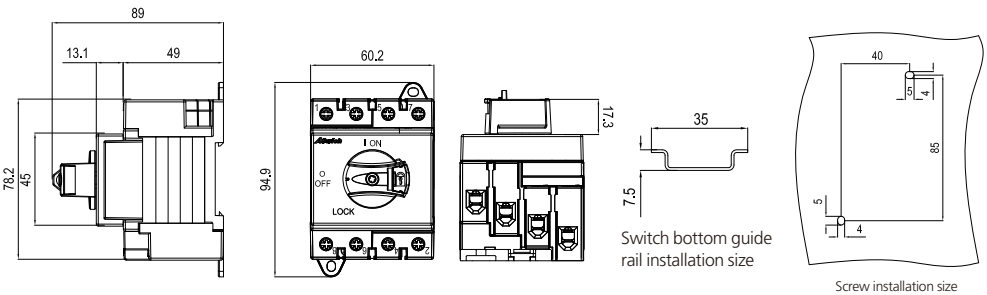
Enclosure Box

Aluminum box
EDS1 EL/S32/...R



Din-rail Mounting

EDS1 DB/S32/...R



Switch bottom guide rail installation size

Screw installation size

EDS1/S Series Isolation Switches

Technical Data

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PV1	PV2	PV1	PV2	PV1	PV2	PV1	PV2	PV1	PV2			
32	32	32	32	32	16	16	9	13	9	2	1	EDS1/S32/2
32	32	32	32	32	16	16	9	13	9	4	2	EDS1/S32/4
32	32	32	32	32	32	32	32	32	32	4	1	EDS1/S32/4S
32	32	32	32	32	32	32	32	32	32	4	1	EDS1/S32/4B
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	600V	A	32	128
	800V	A	16	64
	1000V	A	9	36
	1200V	A	9	36
4 layers, 4 layers in series, with one load 1 / 2 / 3 / 4 / —	300V	A	32	128
	600V	A	32	128
	800V	A	32	128
	1000V	A	32	128
	1200V	A	32	128

Type		
Number of poles		4-pole
Terminal designation, main circuit		1; 3; 5;7; 2; 4; 6; 8
Type of terminal, main circuit		Screw terminal
Rated cross section area, main circuit		4.0-16mm²
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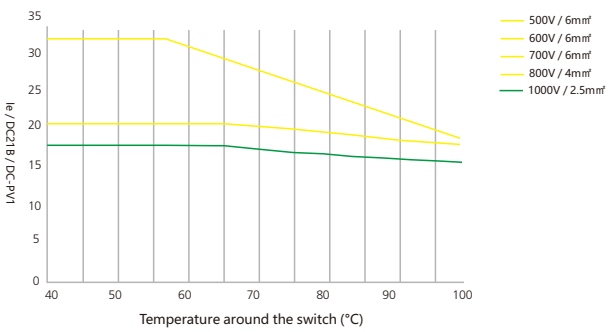

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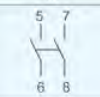
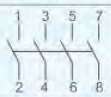
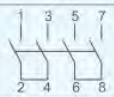
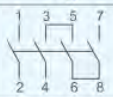
Contacts Wiring graph					
Switching example