

## EHS1 Series DC Isolator



Plastic box



Aluminum box



EHS1-C Terminal shroud

### Product Application

EHS1 series isolation switch is suitable for a power system with rated voltage DC 1500V or below and rated current 32A or below. The product can be used for infrequent switching-on and switching-off and can disconnect 1 - 2 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 DC current between solar panels and inverters

### Product Benefits

- UV resistance and V0 flame retardant material
- Contact Silver Plating, silver layer thickness up to the industry's highest standards
- Arcing Time in 3 ms
- No Polarity
- Lockable at OFF position
- IEC/EN60947.3 standard and AS 60947.3
- Five years warranty
- IP66 degree of protection

### Aluminum box

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

### Select Code

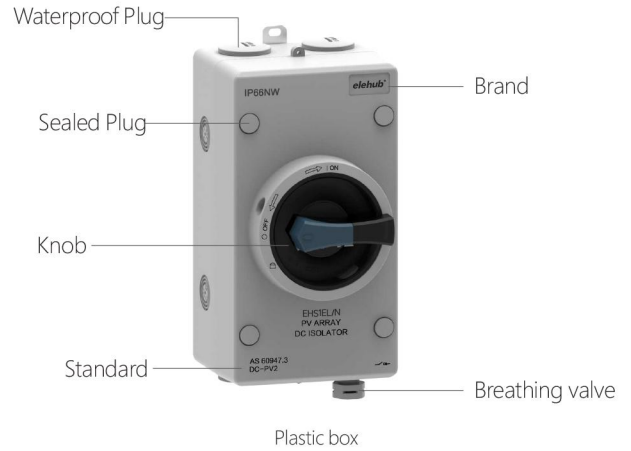
EH	S	□	□	□ / □	□ / □	□ / □	
1	2	3	4	5	6	7	8

Code	Name	Description
1	<b>elehub®</b>	EH
2	Isolation Switch	S
3	Series	1: Series 1
4	Mounting Type	DB: Distribution Board PM: Panel Mounting DC: Door Clutch EL: Plastic Enclosure Box ELA: Aluminum Enclosure Box
5	Voltage	N:1000VDC S:1200VDC
6	Ith	32:32A
7	Pole	2:2P 4:4P
8	With lock	R: With lock Nil: With out lock

Name	Description
Side Panel Protection	EHS1-C

## EHS1 Series DC Isolator

### Appearance Introduction



### Technical Data

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

Main Parameters			EHS1EL/N	EHS1EL/S
Rated Insulation Voltage	Ui	V	1500	
Rated thermal current	Ith	A	32	
Rated impulse withstand voltage	Uimp	V	8000	
Rated short- time withstand current	Icw	A	1 kA,1 S	
Maximum cable section(incl.jumper)				
Solid		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.		N·m	1.2-1.8	
Tightening torque shell mounting screws ST4.2(304 stainless steel)		N·m	1.5-2.0	
Tightening torque knob screws M3		N·m	0.5-0.7	
Switching on or off Torque		N·m	0.9-1.3	
The wiring Torque on Base		N·m	1.1-1.4	
General parameters				
Knob Positions			12 o'clock,OFF	3 o'clock,ON 9 o'clock,OFF 12 o'clock,ON
Electrical Life	Actual		3000 Cycles	
	Standard		300 Cycles	
Mechanical Life	Actual		10000 Cycles	
	Standard		1000 Cycles	
Number of DC poles			2 or 4	
Operation temperature		°C	-40 to +85	
Storage temperature		°C	-40 to +85	
Pollution degree			3	
Overvoltage category			III	
IP rating of shafte and mounting nul			IP66	

# DC ISOLATION SWITCH

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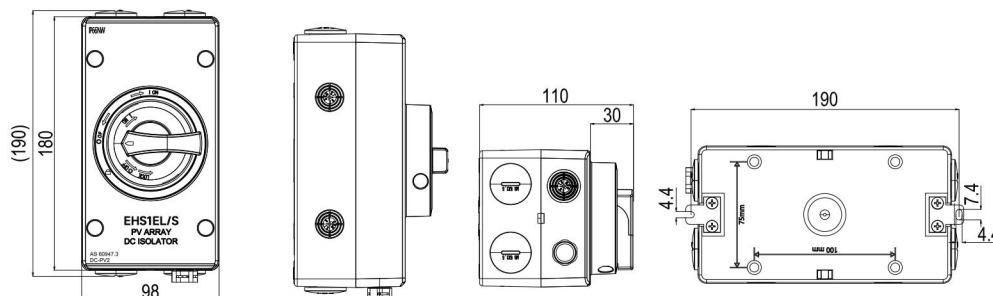
## EHS1/N Series DC Iso lator (DC1000V)

### Dimensions

#### Enclosure Box



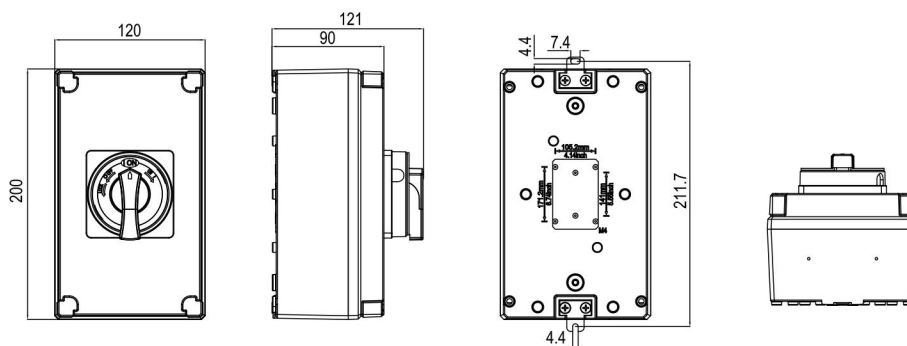
Plastic box  
EHS1EL/N32/...R



#### Enclosure Box



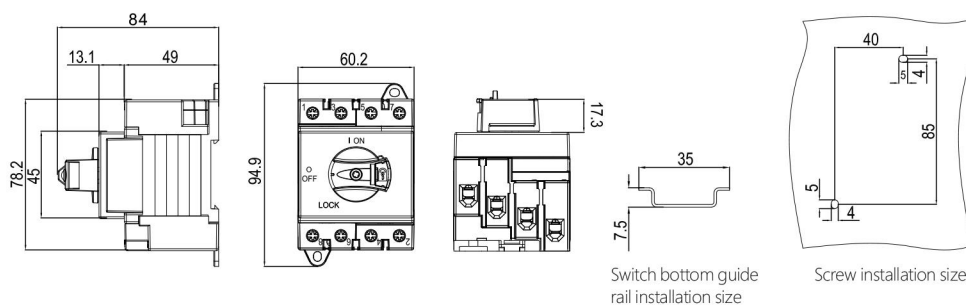
Aluminum box  
EHS1EL/N32/...R



#### Din-rail Mounting



EHS1DB/N32/...R



Switch bottom guide  
rail installation size

Screw installation size

# DC ISOLATION SWITCH

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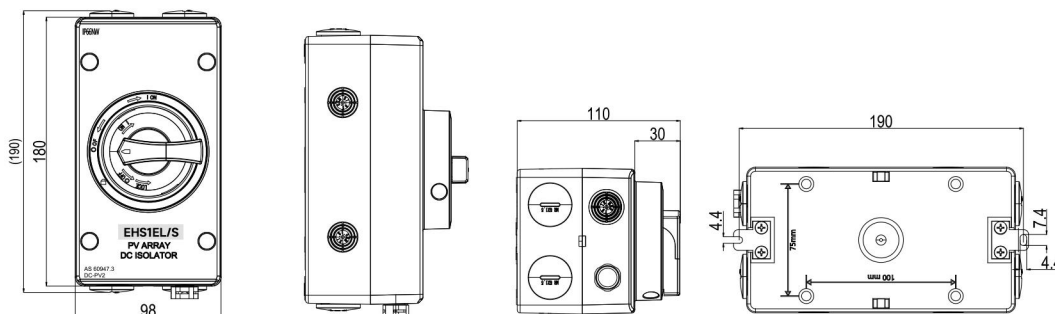
## EHS1/N Series DC Isolator (DC1200V)

### Dimensions

#### Enclosure Box



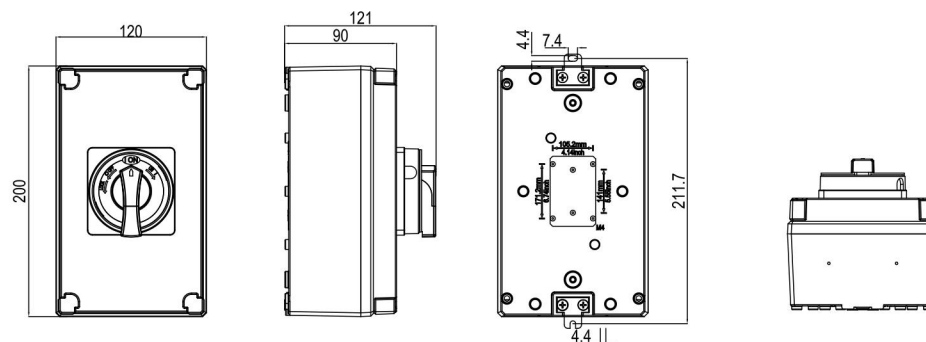
Plastic box  
EHS1E1/S32/...R



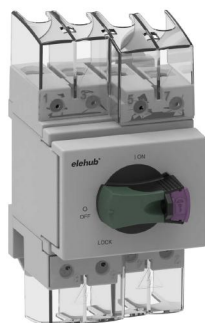
#### Enclosure Box



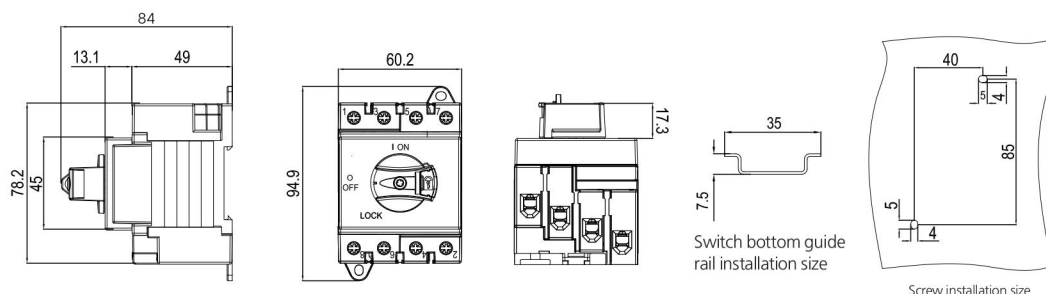
Aluminum box  
EHS1E1/S32/...R



#### Din-rail Mounting



EHS1DB/S32/...R



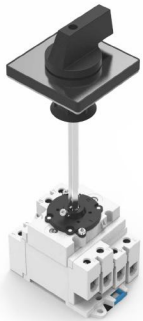
# DC ISOLATION SWITCH

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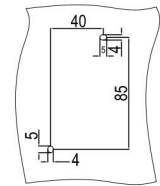
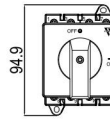
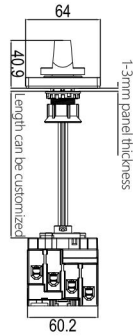
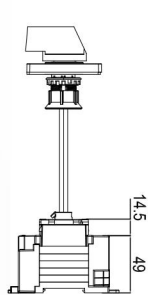


## EHS1/N&S Series DC Isolator (Panel)

### Door Interlock



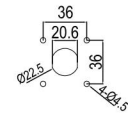
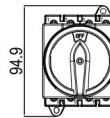
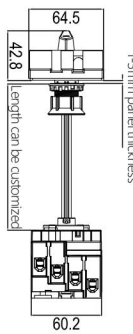
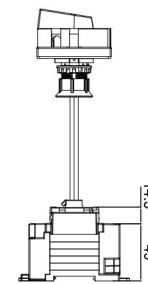
EHS1 DC/S32/...



Screw installation size



EHS1 DC/S32/...R



Head panel installation size

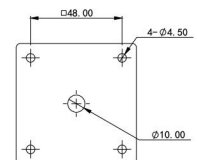
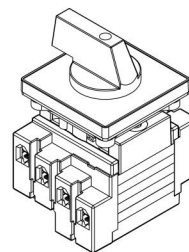
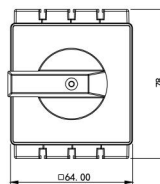
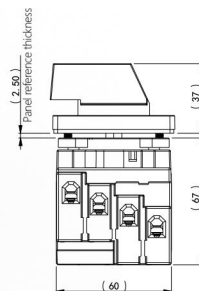


Switch bottom guide rail installation size

### Panel Mounting



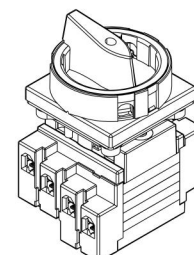
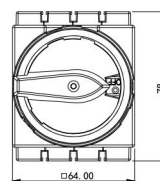
EHS1 PM/S32/...



Head panel installation size



EHS1 PM/S32/...R



## EHS1 Series DC Isolator (DC1000V)

### Technical Data

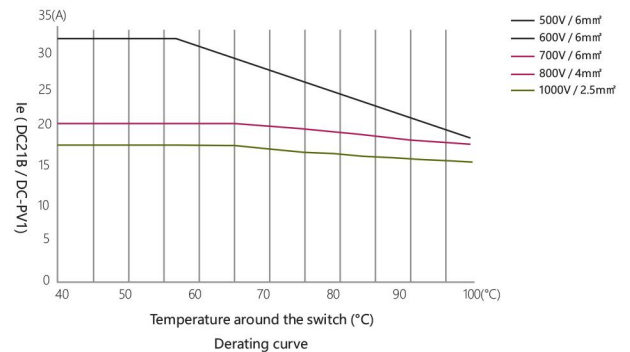
Data according to IEC/EN60947-3, AS60947.3, Utilization category DC-PV1, DC-PV2

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	EHS1/N32/2
32	32	32	32	32	16	16	9	4	2	EHS1/N32/4
32	32	32	32	32	32	32	32	4	1	EHS1/N32/4S
32	32	32	32	32	32	32	32	4	1	EHS1/N32/4B
32	32	32	32	32	32	32	32	4	1	EHS1/N32/4T

### Data according to AS60947-3

Main Contacts	Voltage	EHS1/N32
Rated thermal current $I_{the}$		32A
Rated insulation voltage $U_i$		1500V
Distance of contacts(per pole)		8mm
Rated operational current $I_e$ (DC-PV2)		
4 layers, only 2layers in series, with two load <u>1 / 2 / _</u>	300V	32A
	600V	32A
	800V	16A
	1000V	9A
4 layers, 4 layers in series, with one load <u>1 / 2 / 3 / 4 / _</u>	300V	32A
	600V	32A
	800V	32A
	1000V	32A

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				
Cable section	4.0-16mm <sup>2</sup>				
Type of Conductor	<table border="0"> <tr> <td></td> <td>4-16mm<sup>2</sup>(Rigid: Solid or Stranded)</td> </tr> <tr> <td></td> <td>4-10mm<sup>2</sup>(Flexible)</td> </tr> </table>		4-16mm <sup>2</sup> (Rigid: Solid or Stranded)		4-10mm <sup>2</sup> (Flexible)
	4-16mm <sup>2</sup> (Rigid: Solid or Stranded)				
	4-10mm <sup>2</sup> (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				



### 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					
Schematic diagram					

## EHS1 Series DC Isolator (DC1200V)

### Technical Data

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

300V		600V		800V		1000V		1200V		Pole	No. of Strings	Part Number
PV1	PV2	PV1	PV2	PV1	PV2	PV1	PV2	PV1	PV2			
32	32	32	32	32	16	16	9	13	9	2	1	EHS1/S32/2
32	32	32	32	32	16	16	9	13	9	4	2	EHS1/S32/4
32	32	32	32	32	32	32	32	32	32	4	1	EHS1/S32/4S
32	32	32	32	32	32	32	32	32	32	4	1	EHS1/S32/4B
32	32	32	32	32	32	32	32	32	32	4	1	EHS1/S32/4T

### Data according to AS60947-3

Main Contacts	Voltage	EHS1/S32
Rated thermal current $I_{the}$		32A
Rated insulation voltage $U_i$		1500V
Distance of contacts(per pole)		8mm
Rated operational current $I_e$ (DC-PV2)		
4 layers, only 2layers in series, with two load 	300V	32A
	600V	32A
	800V	16A
	1000V	9A
	1200V	9A
4 layers, 4 layers in series, with one load 	300V	32A
	600V	32A
	800V	32A
	1000V	32A
	1200V	32A

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
Cable section	4.0-16mm <sup>2</sup>
Type of Conductor	4-16mm <sup>2</sup> (Rigid: Solid or Stranded) 4-10mm <sup>2</sup> (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

