



# Firefighter Safety Switch

Leading Manufacturer Protects Solar Power Safety

Rev1.0 2023/11/24



# FIREFIGHTER SAFETY SWITCH

ERS-2/4 Series



## Product Benefits

- Max shut down one or two strings modules
- Maximum circuit current 63A
- Maximum circuit voltage 1600VDC
- CE certificated
- PC + ABS material, IP66 protection grade
- Multi clock interface type optional (knockout hole / gland / MC4 terminal)
- The Isolation switches are TUV.CE.CB.SAA certificated
- Waterproof Vent valve to avoid condensation inside the shell
- Advanced temperature sensor is used to detect the highest temperature in the shell in real time temperature, when the internal temperature exceeds 70 degrees, automatic cut-off switch
- It is suitable for residential, industrial and commercial photovoltaic systems



Product naming				
E	RS	□	-	□ - □
1	2	3		4 5

Code	Name	Description
1	ONCCY brand	E
2	Rapid Shut-down Switch	RS
3	Rated Current	13:13A 20:20A 25:25A 40:40A 50:50A
4	Pole	2: 2P 4: 4P 4B
5	Wiring	Mc4: MC4 terminal / Blank

## ERS-2/4 Series

### ■ Main parameter

Standard	Data
Main parameter	ERS
String voltage (VDC)	300~1600
String current (A)	9~63
Circuit	1/2
Connection mode of Isolation switch	2/4/4B
Working voltage	100Vac - 270Vac
Rated voltage	230Vac
Rated current	30mA
Starting (loading) current	100mA(AVG)
Action current	300mA(Max)
Contact action condition	24Vdc -300mA(Max)
Operating temperature	-20°C - +50°C
Maximum temperature before automatic shutdown	+70°C
Storage temperature	-40°C - +85°C
Protection level	IP66
Over current protection	II
Authentication	CE
The DC isolation switch meets the standard	EN 60947-1&3
Mechanical life	10000
Number of loaded operations (PV1)	>1500

### ■ Technical data

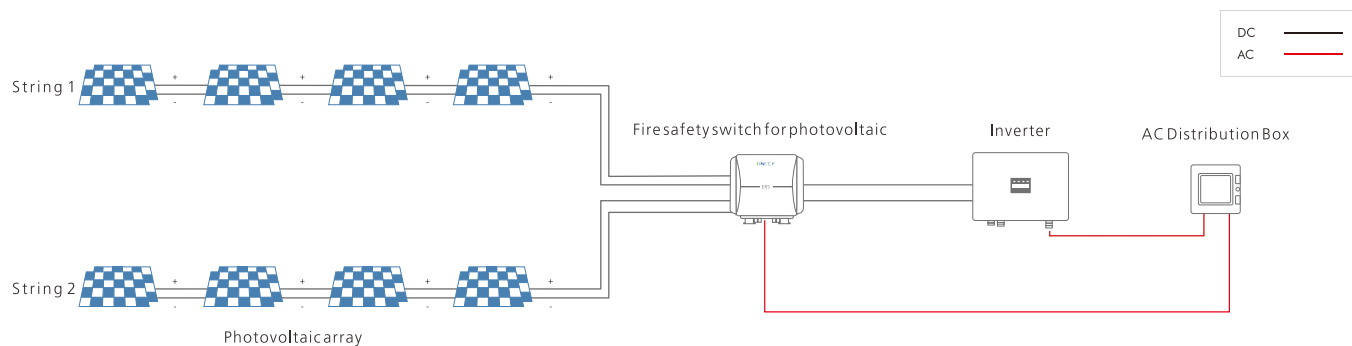
Data of ERS refer to built-in DC isolators. Data according to IEC60947-3(ed.3.2):2015,UL508i.Utilization category DC-PV1.								Pole number	Circuit	Model
600VDC	800VDC	1000VDC	1100VDC	1200VDC	1300VDC	1500VDC	1600VDC			
32	26	13	13	10	10	5	5	2	1	ERS13-2
40	30	20	20	12	12	6	6	2	1	ERS20-2
55	45	25	25	15	15	8	6	2	1	ERS25-2
/	50	40	40	30	30	20	12	2	1	ERS40-2
/	63	50	50	40	35	32	16	2	1	ERS50-2
32	26	13	13	10	10	5	5	4	2	ERS13-4
40	30	20	20	12	12	6	6	4	2	ERS20-4
55	45	25	25	15	15	8	6	4	2	ERS25-4
/	50	40	40	30	30	20	12	4	2	ERS40-4
/	63	50	50	40	35	32	16	4	2	ERS50-4
/	/	32	/	26	/	13	/	4	1	ERS13-4B
/	/	40	/	30	/	20	/	4	1	ERS20-4B
/	/	55	/	40	/	30	/	4	1	ERS25-4B
/	/	/	/	/	/	45	/	4	1	ERS40-4B
/	/	/	/	/	/	50	/	4	1	ERS50-4B

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

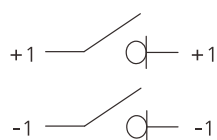
# FIREFIGHTER SAFETY SWITCH

## ERS-2/4 Series

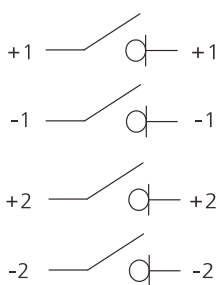
### ■ Sketch Map



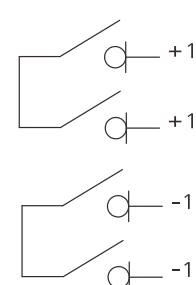
### ■ Wiring diagram



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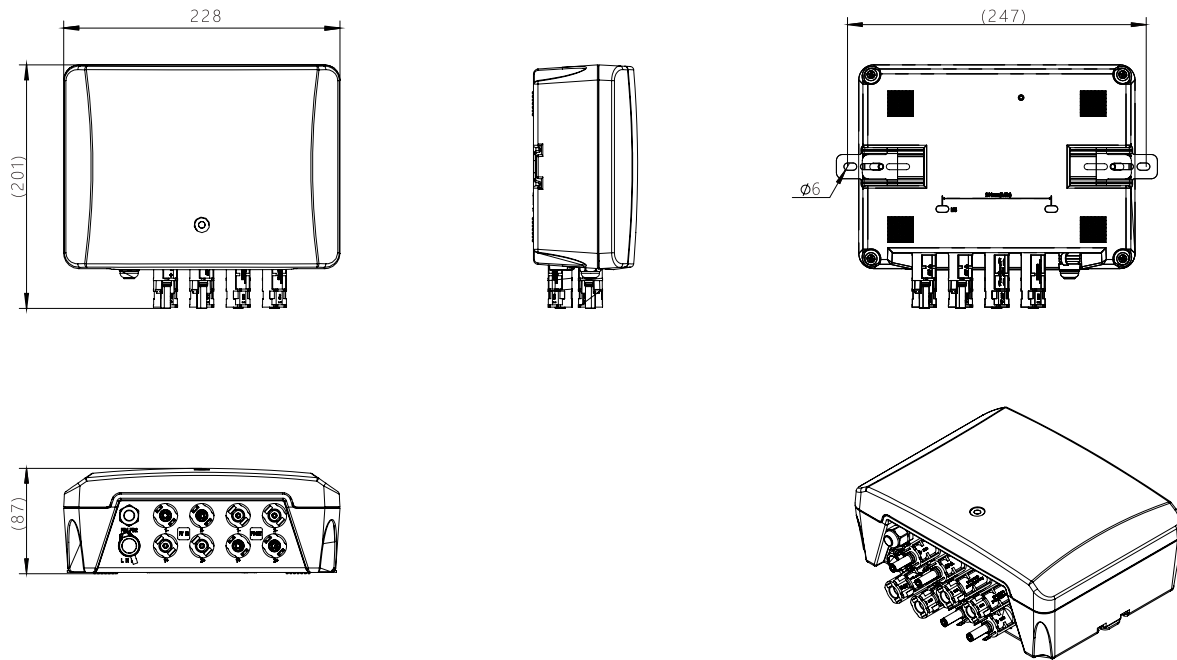
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4B

# ERS-2/4 Series

## ■ Product size



Note: the fire safety switch cannot be installed in the place with direct sunlight, and the sun visor is recommended.

# FIREFIGHTER SAFETY SWITCH

ERS-6/8/10 Series



## Product features



- Suitable for 3-string, 4-string, 5-string modules
- Maximum circuit current 63A
- Maximum circuit voltage 1600VDC
- CE certificated
- PC + ABS material, IP66 protection grade
- Multi clock interface type optional (knockout hole / gland / MC4 terminal)
- The Isolation switches are TUV.CE.CB.SAA certificated
- Waterproof Vent valve to avoid condensation inside the shell
- Advanced temperature sensor is used to detect the highest temperature in the shell in real time temperature, when the internal temperature exceeds 70 degrees, automatic cut-off switch
- It is suitable for residential, industrial and commercial photovoltaic systems

Product naming				
E	RS	□	-	□
1	2	3	4	5

Code	Name	Description
1	ONCCY brand	E
2	Rapid Shut-down Switch	RS
3	Rated Current	13:13A 20:20A 25:25A 40:40A 50:50A
4	Pole	6:6P 8:8P 10:10P
5	Wiring	Mc4: MC4 terminal / Blank

## ERS-6/8/10 Series

### ■ Main parameter

Standard	Data
Main parameter	ERS
String voltage (VDC)	300~1600
String current (A)	9~63
Circuit	3/4/5
Connection mode of Isolation switch	6/8/10
Working voltage	100Vac - 270Vac
Rated voltage	230Vac
Rated current	30mA
Starting (loading) current	100mA(AVG)
Action current	300mA(Max)
Contact action condition	24Vdc -300mA(Max)
Operating temperature	-20°C - +50°C
Maximum temperature before automatic shutdown	+70°C
Storage temperature	-40°C - +85°C
Protection level	IP66
Over current protection	II
Authentication	CE
The DC isolation switch meets the standard	EN 60947-1&3
Mechanical life	10000
Number of loaded operations (PV1)	>1500

### ■ Technical data

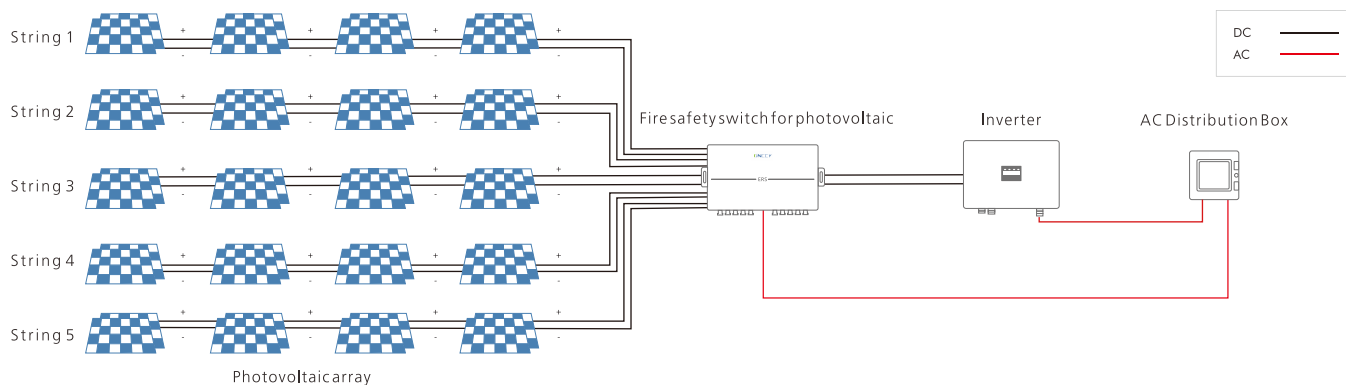
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/	50	40	40	30	30	20	12	10	5	ERS40-10
/	63	50	50	40	35	32	16	10	5	ERS50-10

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

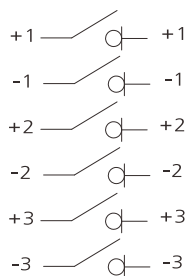
# FIREFIGHTER SAFETY SWITCH

## ERS-6/8/10 Series

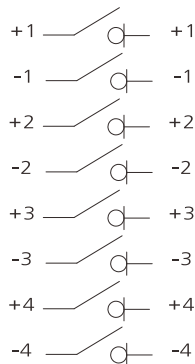
### ■ Sketch Map



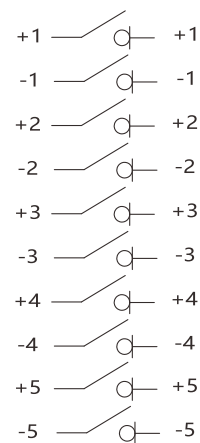
### ■ Wiring diagram



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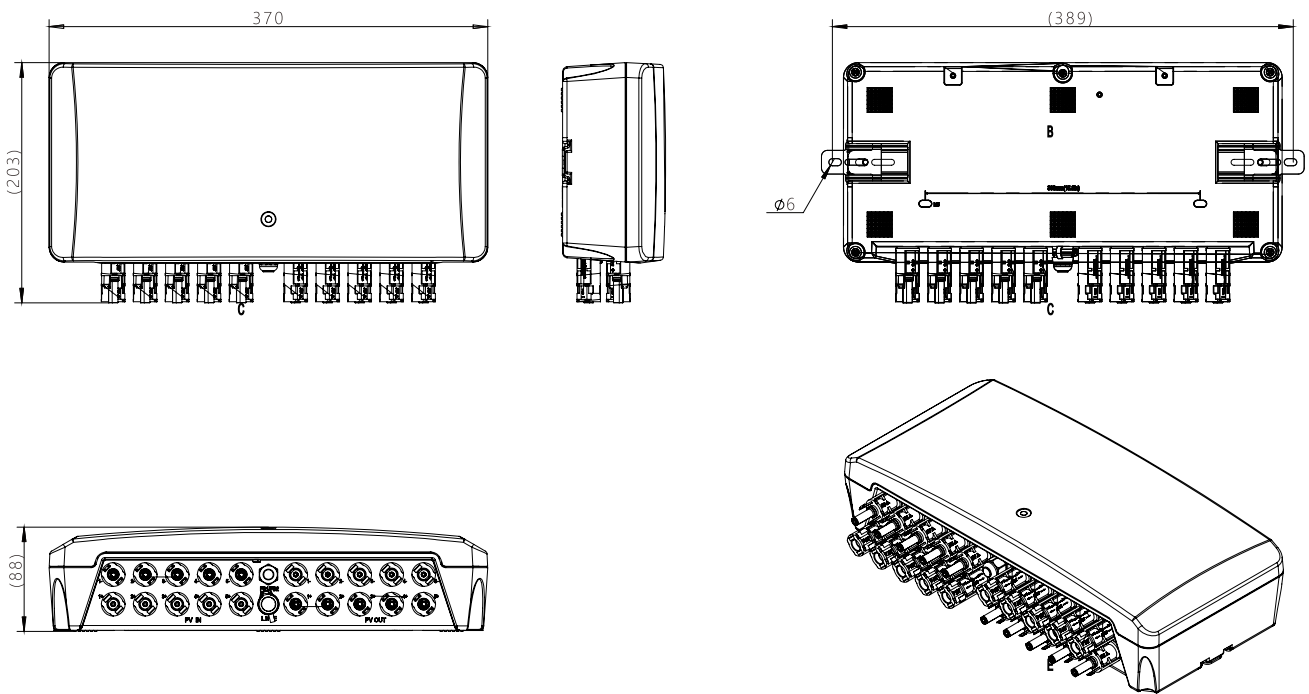


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# ERS-6/8/10 Series

■ Product size



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