

Photovoltaic DC Components

YCIS8-55□PV Photovoltaic DC Isolation Switch



General

Isolating switch YCIS8 series is suitable for DC power systems with rated voltage DC1500V and below and rated current 55A and below. This product is used for infrequent on/off, and can disconnect 1~4 MPPT lines at the same time. It is mainly used in control cabinets, distribution boxes, inverters and combiner boxes in photovoltaic power generation systems for isolation of DC power distribution systems. The external waterproof performance of this product reaches IP66. The inner core of the product can be installed inside the inverter for controlling the incoming line of the inverter.

Standard: IEC/EN60947-3, AS60947.3, UL508i Standard.

Certification: TUV, CE, CB, SAA, UL, CCC.

Features

- Non-polarity design;
- Switch modular design, can provide 2-10 layers;
- Provide single-hole installation, panel installation, guide rail installation, door clutch or waterproof housing (dynamic sealing design and world-class sealing materials ensure IP66 protection grade);
- DC1500V insulation voltage design;
- Single-channel current 13-55A;
- Single hole installation, panel installation, power distribution module, door lock installation, external installation and other installation methods are optional;
- Provide 15 wiring schemes.

*: If you order "External installation" M25 and M16 interface products, we only reserve corresponding waterproof connector holes, and do not provide PG waterproof connectors

Selection

YCISC8	55	X	PV	P	2	MC4	25A
Model	Rated current	With lock or not	Usage	Installation mode	Wiring method	Joint type	Rated current
Isolation switch	55	/: No lock X: With lock	PV: Photovoltaic/ direct-current	No: Din rail installation	2/3/4/6/8/10 2H/3H/4H 4S/4B/4T 3T/6T/9T	/: No	13A, 20A, 25A, 40A, 50A (note the type when ordering)
				P: Panel installation			
				D: Door lock installation			
				S: Single hole installation			
E: External installation	2\4\4B\4T\4S	/: No M25: PG25 Waterproof joint M16: PG16 Waterproof joint MC4: MC4 joint					






Note:

1. The "Din rail installation" and "external installation" can only be with the lock.
2. The rated current is the category of DC-PV1, and DC1000V is the benchmark. For other scenarios, please refer to: "Current/Voltage Category Parameter Table (DC-PV1/DC-PV2)"
3. Rated current 55A, suitable for wiring mode 4B, 4T, 4S

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Technical data

Model	YCIS8-55□PV				
Standard	IEC/EN60947-3:AS60947.3, UL508i				
Use category	DC-PV1, DC-PV2				
Appearance					
	Din rail installation	Panel installation	Door lock installation	Single hole installation	External installation
Wiring method	2/3/4/6/8/10; 2H/3H/4H; 4S/4B/4T; 3T/6T/9T				2\4\4B\4T\4S
Joint type	/				/,M25,2MC4,4MC4
Electrical performance					
Rated current In(A)	13	20	25	40	50
Rated heating current Ith(A)	32	40	55	55	55
Rated insulation voltage Ui(V DC)	1500				
Rated working voltage Ue(V DC)	1500				
Rated impulse voltage Uimp(kV)	8				
Rated short-time withstand current Icw(1s)(A)	780				
Rated short-time making capacity(Icm)(A)	1200				
Rated limited short-circuit current Icc(A)	5000				
Maximum fuse specification gL(gG)(A)	160				
Overvoltage category	III				
Polarity	No polarity, "+" and "-" polarity can be interchanged				
Switch knob position	9 o'clock position off, 12 o'clock position on (or 12 o'clock position off, 3 o'clock position on)				
Contact spacing (per pole)(mm)	8				
Service life	Mechanical	10000			
	Electrical	3000			
Applicable environmental conditions and installation					
Maximum wiring capacity (including jumper wires)					
Single wire or standard(mm ²)	4-16				
Flexible cord(mm ²)	4-10				
Flexible cord (+ stranded cable end)(mm ²)	4-10				
Torque					
Tightening torque of terminal M4 screw(Nm)	1.2-1.8				
Tightening torque of upper cover mounting screw ST4.2 (304 stainless steel)(Nm)	2.0-2.5				
Tightening torque of knob M3 screw(Nm)	0.5-0.7				
Switching torque	0.9-1.9				
Environment					
Protection degree	IP20; External type IP66				
Operating temperature(°C)	-40~+85				
Storage temperature(°C)	-40~+85				
Pollution degree	3				
Overvoltage category	III				

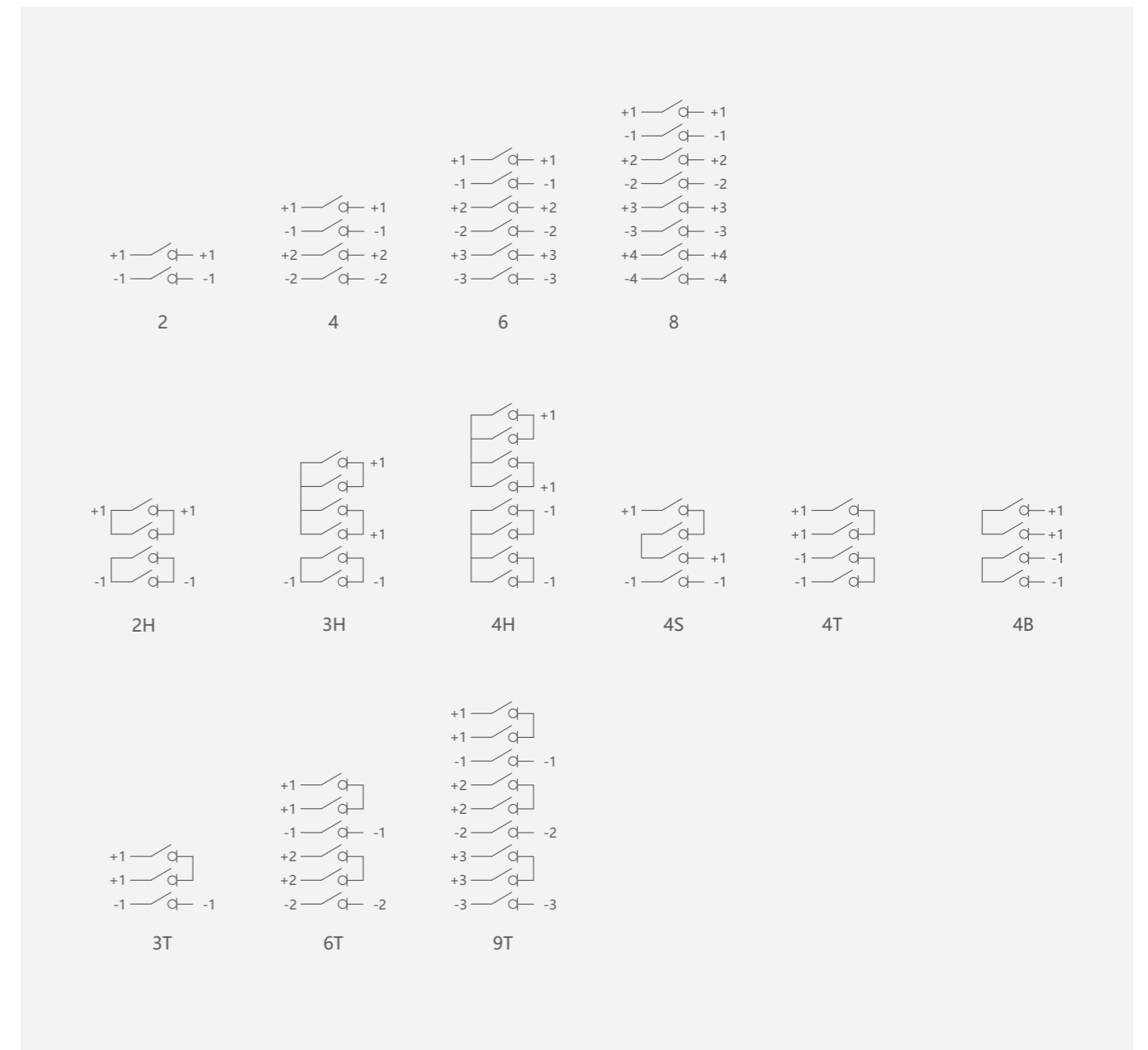
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Maximum power loss per contact pair

Wiring method	Power loss(W)
2	≤6
4	≤12
6	≤18
8	≤24
2H	≤3
3H	≤4.5
4H	≤6

Wiring diagram



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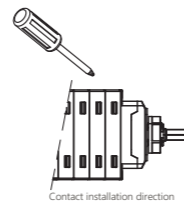
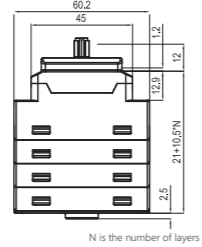
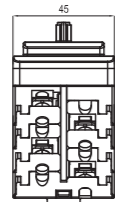
Overall and mounting dimensions(mm)

Din rail type

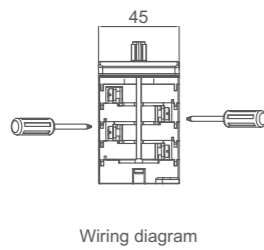
Default



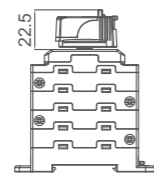
YCIS8-55XPV



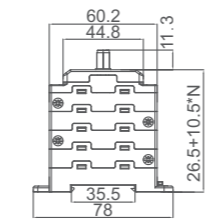
Order notes



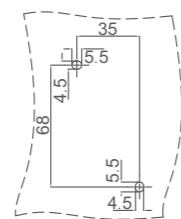
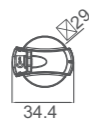
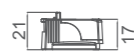
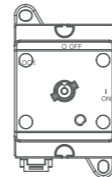
Wiring diagram



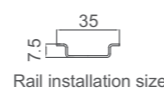
Head height



N is the number of layers



Bottom screw installation size



Rail installation size



12 o'clock, OFF
3 o'clock, ON

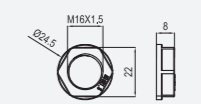
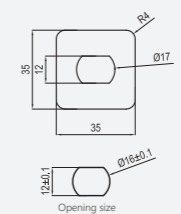
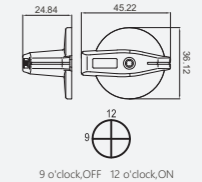
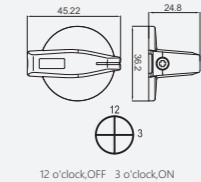
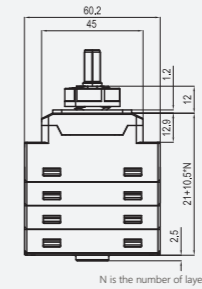
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Single hole type

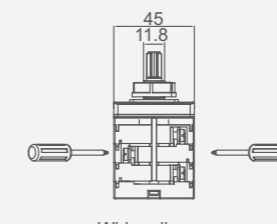
Default



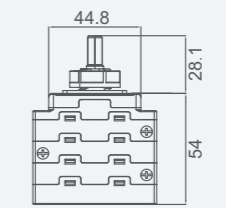
YCIS8-55PV S



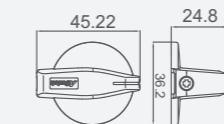
Order notes



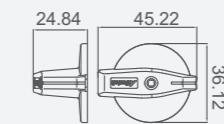
Wiring diagram



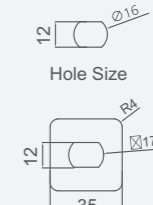
N is the number of layers



12 o'clock, OFF
3 o'clock, ON



9 o'clock, OFF
12 o'clock, ON



Hole Size



M16X1.5

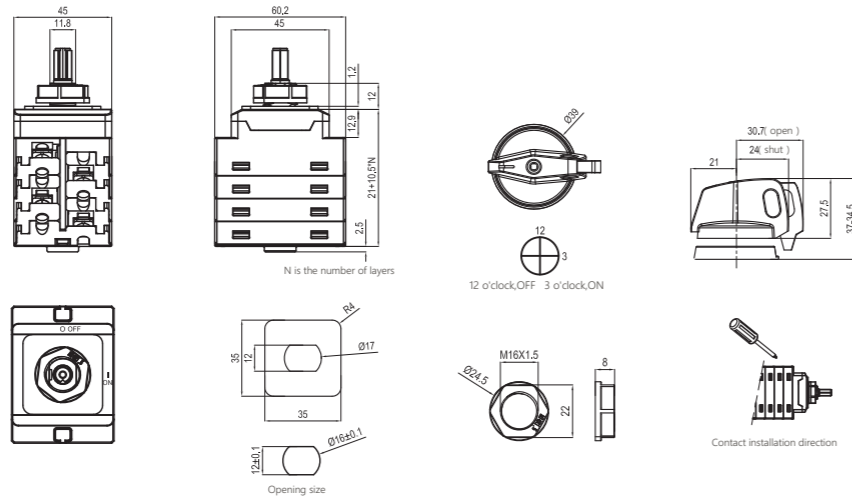
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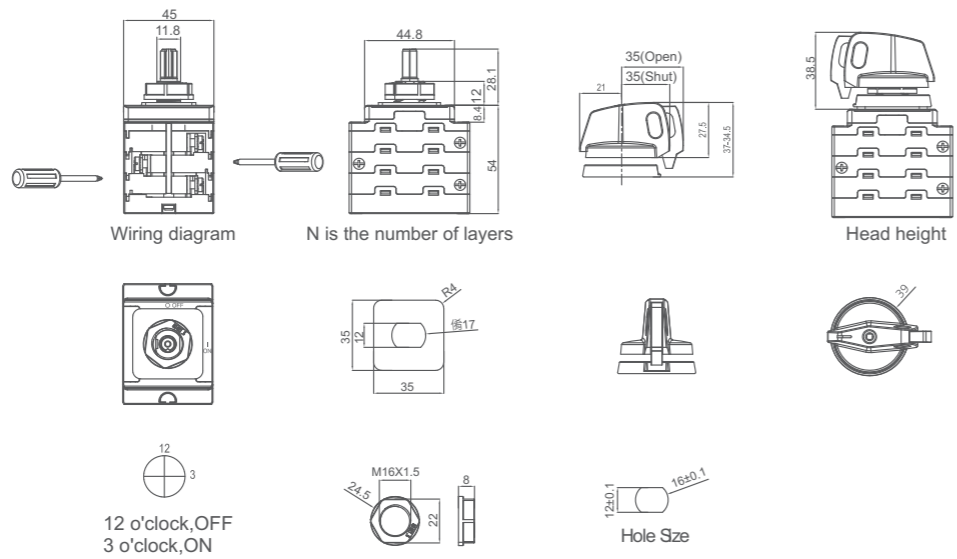
YCIS8-55XPV S

Single hole type

Default



Order notes



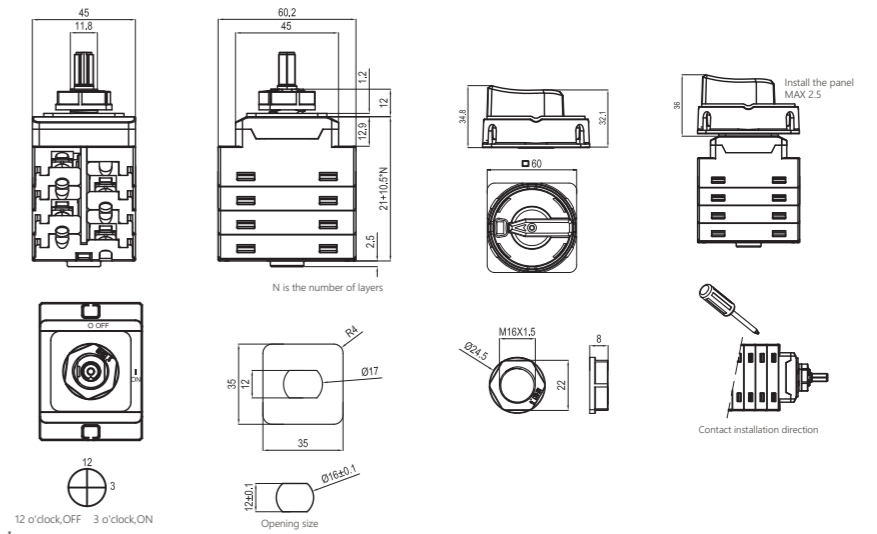
Photovoltaic DC Components
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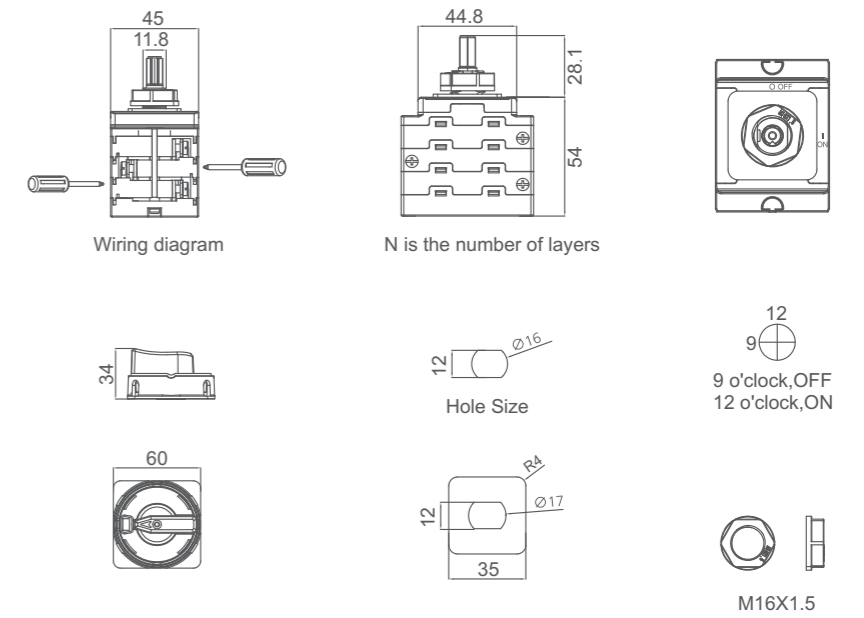
YCIS8-55XPV P

Panel type

Default



Order notes



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Door lock type

YCIS8-55XPV D

45, 47.5, 58, 68.5, 89.5, 110.5, 121, 131.5

2, 3/3T, 4/4T/4B/4S/2H, 6/6T/3H, 8/4H, 9T, 10

length can be customized

44.7

26.5±10.5N

N is the number of layers

35.2

78

64

12

9 o'clock, OFF
12 o'clock, ON

Bottom screw installation size

35

Rail size

Panel cut-out size

36 ± 0.1

$\phi 22.5 \pm 0.2$

20.5±0.2

YCIS8-55PV D

20

65.4

19

27.2

9.5

26.5±10.5N

N is the number of layers

35.2

78

64

12

9 o'clock, OFF
12 o'clock, ON

Bottom screw installation size

35

Rail size

Panel cut-out size

36 ± 0.1

$\phi 22.5 \pm 0.2$

20.5±0.2

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External type

YCIS8-55XPV E
(None: No joint)

188, 180, 98

YCIS8-55XPV E M16
(Waterproof joint)

225, 180, 98

YCIS8-55XPV E M25
(Waterproof joint)

251, 180, 98

YCIS8-55XPV E2 MC4
(MC4 Joint)

251, 180, 98

YCIS8-55XPV E4 MC4
(MC4 Joint)

180, 175, 98

Photovoltaic DC Components

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Current/Voltage category parameter table

Wiring method	Rated current	Working voltage	600V		800V		1000V		1200V		1500V	
			PV1	PV2	PV1	PV2	PV1	PV2	PV1	PV2	PV1	PV2
2、3、4 6、8、10	13		32	13	26	13	13	6	10	4	5	3
	20		40	20	30	15	20	8	12	6	6	4
	25		55	25	45	23	25	10	15	8	8	5
	40		55	40	50	30	40	15	30	15	20	8
	50		55	50	55	40	50	18	40	18	30	10
4T、4B、4S	13		32	12	32	12	32	8	26	8	13	5
	20		40	18	40	18	40	12	30	12	20	8
	25		55	20	55	20	55	15	40	15	30	10
	40		55	40	55	40	55	32	50	32	45	20
	50		55	50	55	50	55	40	55	40	50	/

Note: 2H/3H/4H/3T/6T/9T/10P products need to be customized, if necessary, please contact us.

Derating table

