

SISO-40/SISO-63

DC ISOLATION SWITCHES

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SISO SERIES DC ISOLATOR



Features

- Non-polarity DC Isolator Switch
- Modular design, optional 2-10 levels.
- Positive contact or reverse contact optional.
- Single Hole Mounting, Panel Mounting, Distribution Board, Door Clutch or Enclosure optional.
- Dynamic sealing design and world class sealing materials guarantee an IP66 protection rate.
- DC 1500V insulation voltage design, passed IEC/EN60947-3:2009+A1+A2, AS60947.3, UL 5081,GB/T14048.3 test, with TUV, CE, CB, SAA, UL, CCC certifications.

Select Code

S

Company Code

ISO

PV switch-disconnectors

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40

Design No

/

MC

MD: Din rail mounting

MB: Panel mounting

MC: IP66NW with panel MC4 connector top in and bottom out

MT: IP66NW with cable MC4 connector bottom in and bottom out

No code default to: IP66NW waterproof DC isolator switch



Main Parameters

Rated Current(A)	13	20	25	40	50
Rated insulation voltage(Ui)	1500	1500	1500	1500	1500
Rated thermal current(Ith)	32	40	55	55	55
Rated impulse withstand voltage(Uimp)	8000V				
Rated short-time withstand current (1s)(Icw)	780A				

Maximum cable cross sections (incl. jumper)

Solid or stranded	4-16mm ²
Flexible	4-16mm ²
Flexible (+ multicore cable end)	4-16mm ²

Torque

Tightening torque terminal screws M4.	1.2-1.8Nm
Tightening torque single hole mounting nut M16	2.0-2.3Nm
Tightening torque knob screws M3	0.5-0.7Nm
Switching on or off torque	0.9-1.3Nm

General parameters

Knob positions	12 o'clock OFF, 3 o'clock ON (9 o'clock OFF, 12 o'clock ON)	
Electrical Life	Actua	3000 Cycles
	Standard	300 Cycles
Mechanical Life	Actua	10000 Cycles
	Standard	10000 Cycles
Number of DC poles	2 or 4 (6/8 optional)	
Distance of contacts (per pole)	8mm	
Operation temperature	-40 to +85°C	
Store temperature	-40 to +85°C	
Pollution degree :	3	
Overvoltage category	II	
IP rating of shafte and mounting nut	IP66	

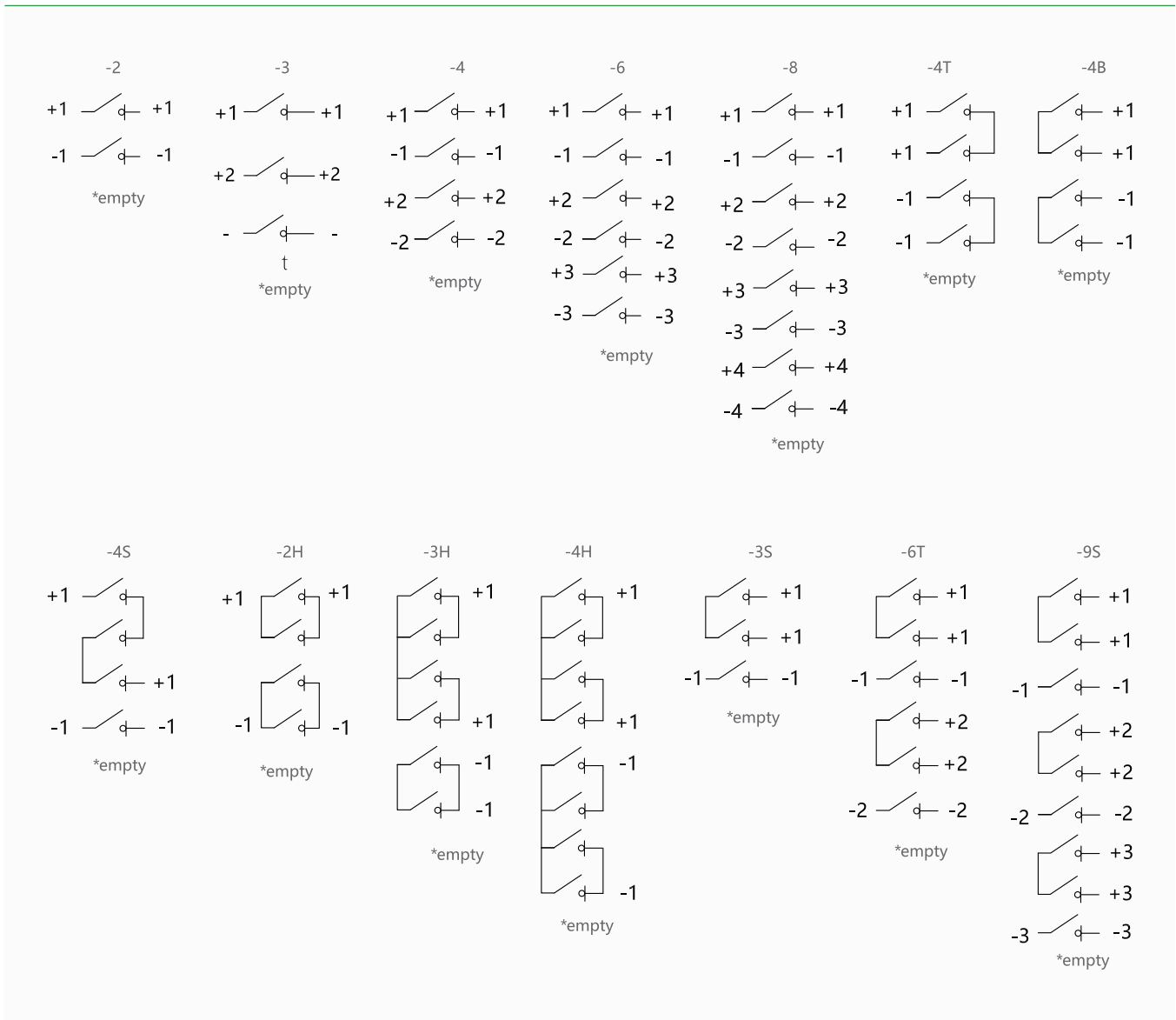
Technical data

Layers	Voltage/curren(DC PV1)				
2/3/4/6/8/10	600VDC	800VDC	1000VDC	1200VDC	1500VDC
	32	26	13	10	5
	40	30	20	12	6
	55	45	25	15	8
	/	50	40	30	20
	/	55	50	40	30
4T/B/S	/	/	32	26	13
	/	/	40	30	20
	/	/	55	40	30
	/	/	/	/	45
	/	/	/	/	50
3T/6T/9T	/	/	32	23	10
	/	/	40	30	13
	/	/	55	40	20
	/	/	55	45	30
	/	/	/	50	40
2H	50	26	13	10	5
	64	30	20	12	6
	80	45	25	15	8
	90	50	40	30	20
	100	55	50	40	30
3H	/	50	13	10	5
	/	64	20	12	6
	/	80	25	15	8
	/	90	40	30	20
	/	100	50	40	30
4H	/	/	50	10	5
	/	/	64	12	6
	/	/	80	15	8
	/	/	90	30	20
	/	/	100	40	30

Layers	Voltage/curren(DC PV2)				
2/3/4/6/8/10	600VDC	800VDC	1000VDC	1200VDC	1500VDC
	13	13	6	4	3
	20	15	8	6	5
	25	23	10	8	8
	40	30	20	15	10
	50	40	25	18	10
4T/B/S	/	/	12	/	/
	/	/	18	/	/
	/	/	20	/	/
	/	/	40	/	/
	/	/	50	/	/

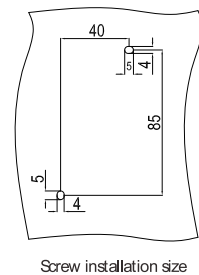
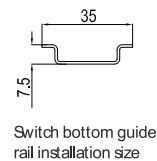
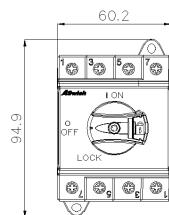
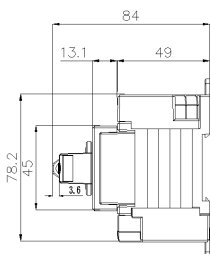
Note* 10P products needs to be customized, please kindly contact us if need them

Wiring Diagram



Dimensions

Din-rail Mounting



SISO SERIES DC ISOLATOR



PRODUCT APPLICATION

SISO series isolation switch is suitable for a power system with rated voltage DC 1200V 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
- Provide 5-year warranty product guarantee

MODEL AND SIGNIFICANCE

S

Company Code

ISO

PV switch-disconnectors

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Design No

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MC

MD: Din rail mounting MB: Panel mounting

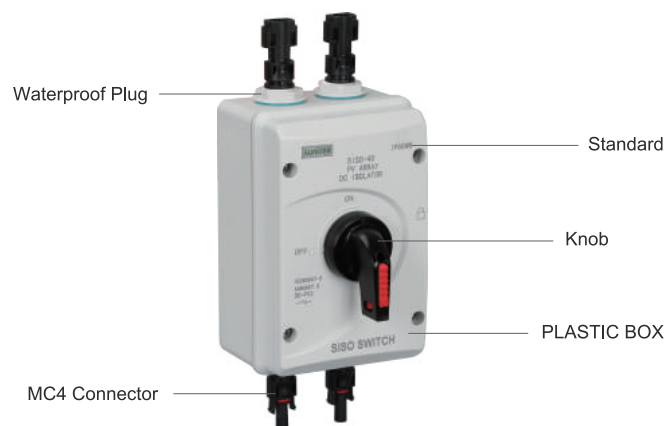
MC: IP66NW with panel MC4 connector top in and bottom out

MT: IP66NW with cable MC4 connector bottom in and bottom out

No code default to: IP66NW waterproof DC isolator switch



APPEARANCE INTRODUCTION



TECHNICAL DATA

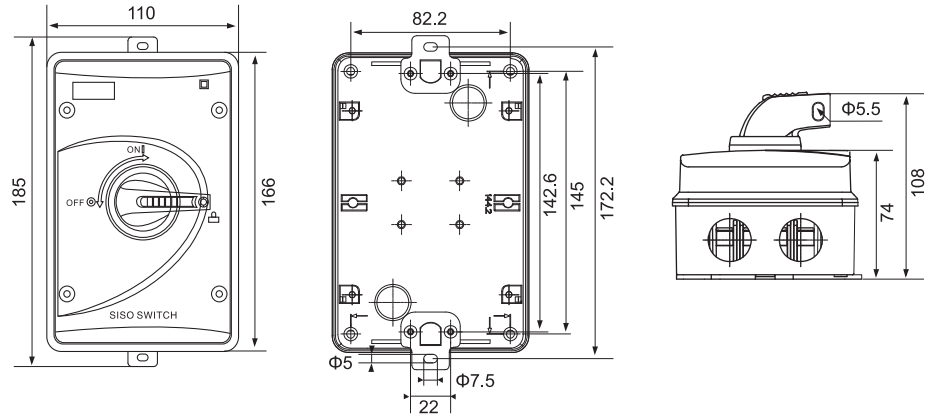
Data according to IEC/EN60947-3:AS60947.3, UL508i, GB/T14048.3. Utilization category DC-PV1/DC-PV2.

MAIN PARAMETERS			SISO
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	1 kA, 1 S
MAXIMUM CABLE SECTION(INCL.JUMPER)			
Solid		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			9 o'clock, OFF 12 o'clock, ON
Electrical Life	Actual		3000 Cycles
	Standard		300 Cycles
Mechanical Life	Actual		10000 Cycles
	Standard		10000 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

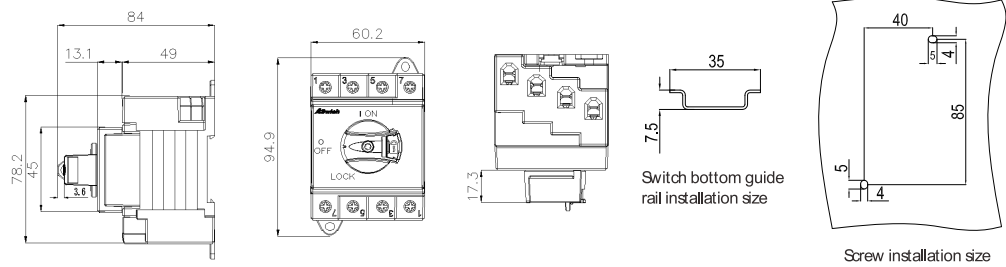
SISO SERIES DC LSOLATOR(DC1000V/DC1200V)

Dimensions

Enclosure Box



Din-rail Mounting



SISO SERIES DC ISOLATOR(DC1000)



Technical Data

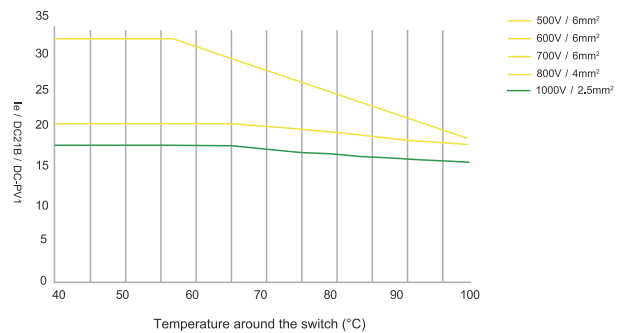
Data according to EC/EN 60947-3, AS60947.3, Utilization category DC-PV1,DC-PV2

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

Data according to AS60947-3

Main Contacts	Voltage	SISO/N32
Rated therm alcurrent I _{the}		32A
Rated insulation voltage U _i		1500V
Distance of contacts(perpole)		8mm
Rated operational current I _e (DC-PV2)		
4 layers, only 2layers in series, with two load 1/2/___	300V	32A
	600V	32A
	800V	16A
	1000V	9A
4 layers, 4 layers in series, with one load 1/2/3/4/___	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 ²
Type of Conductor	4-16mm ² (Rigid: Solid or Stranded) 4-10mm ² (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					

SISO SERIES DC ISOLATOR(DC1200)



Technical Data

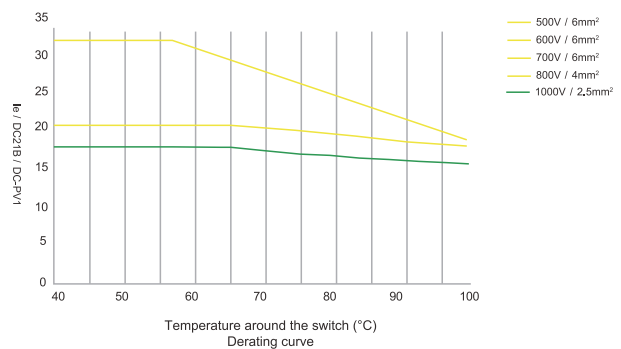
Data according to EC/EN 60947-3, AS60947.3, Utilization category DC-PV1,DC-PV2

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	SISO/S32/2
32	32	32	32	32	16	16	9	13	9	4	2	SISO/S32/4
32	32	32	32	32	32	32	32	32	32	4	1	SISO/S32/4S
32	32	32	32	32	32	32	32	32	32	4	1	SISO/S32/4B
32	32	32	32	32	32	32	32	32	32	4	1	SISO/S32/4T

Data according to AS60947-3

Main Contacts	Voltage	SISO/N32
Rated thermal current I _{the}		32A
Rated insulation voltage U _i		1500V
Distance of contacts(perpole)		8mm
Rated operational current I _e (DC-PV2)		
4 layers, only 2layers in series, with two load 1 / 2 / _	300V	32A
	600V	32A
	800V	16A
	1000V	9A
	1200V	9A
4 layers, 4 layers in series, with one load 1 / 2 / 3 / 4 / _	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 ²
Type of Conductor	<input type="checkbox"/> 4-16mm ² (Rigid: Solid or Stranded) <input checked="" type="checkbox"/> 4-10mm ² (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





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