BYH Series Non-polarity DC Isolator Switch



4P 1000V 32A



1 Waterproof Plug

- 2 IP66NW Ingress Protection
- 3 Sealing Plug
- 4 OFF
- 5 LOCK
- 6 Standard
- 7 Brand
- 8 Type
- 9 ON
- 10 Knob

BYH-32 BYH-32 with MC4







Accessories

Application

ZBENY BYH Series DC Isolator Switch in plastic enclosure is applied 1~20KW Residential or Commercial Photovoltaic system, placed between photovoltage modules and inverters. Arcing time less than 3ms, that keep solar system more safe. To ensure its stability and long service life, our products are made by components with optimum quality. Max voltage up to 1000V DC It holds a safe lead among similar products.

Feature

- IP66, UV Resistance
- Arcing Time < 3ms
- Earth Terminal
- IEC60947-3, AS60947.3
- 2 Pole, 4 Poles Available(Single | Double String)
- DC-PV2 / DC-21B: 32A up to 1000VDC

Appearance Introduction

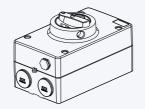


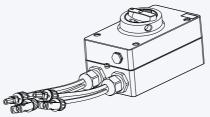
Parameter

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Igress Protection Enclosure IP66 Switch body IP20	Electrical		1000			
gress Protection Switch body IP20	Installation Environn	nent				
Switch body IP20	Ingress Protection	Enclsoure	IP66			
torage Temperature -50°C ~ +90°C			IP20			
	Storage Temperature		-50°C ~ +90°C			
peration Temperature -40°C ~ +85°C	Operation Temperature		-40°C ~ +85°C			
lounting Type Vertically or horizontally	Mounting Type		Vertically or horizontally			
ollution degree 3	Pollution degree		3			
uitable environment Outdoor / Indoor	Suitable environment		Outdoor / Indoor			



Breathing Valve





Remarks:

ZJBENY DC Isolator has a breathing valve already, to avoid the condensation issue.

Identi	fication		Rating data		
Switch, unenclosed - c (with DC-PV2 rating)	atalogue number	BYH.1-32, BYH.2-32			
Specific dedicated indicated indicated indicated indicated contractions (with rating)		BYH-32 IP66NW			
Assembly of switch and individual enclosure - c		/			
<i>I_{th}</i> rated thermal curren shade ambient air tem			32 amps		
<i>I_{the}</i> rated thermal currer shade ambient air tem dedicated enclosure		32 amps			
<i>I</i> _{the} rated thermal current <u>outdoors</u> at 40°C shade ambient air temperature <u>without solar</u> <u>effects in</u> a specific dedicated enclosure rated IP66NW <i>I</i> _{the} solar current value outdoors at 60°C shade ambient air temperature (see D.8.3.11,table D3), with solar effects in a specific dedicated enclosure rated IP66NW		32 amps			
		29 amps			
		<i>U</i> ℯ rated operational voltage DC Volts	<i>l</i> _e ; DC-PV2 rated operational current Amps	I _(make) and I _{c(break)} DC-PV2 4 x I _e Amps	
		300	32	128	
	(_1/_2/)	500	32	128	
4-pole 2 pole in series 4		600	13	52	
		800	9	36	
		1000	9	36	
		300	32	128	
2-pole		500	32	128	
pole in series (<u>1</u>	<u>/_2/_3/_4/)</u>	600	32	128	
1B		800	32	128	
		1000	32	128	



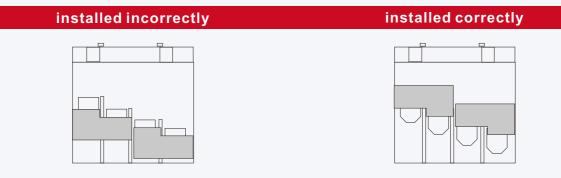
Wiring Diagram for Rated operational voltage Ue (V) & Rated operational current le (A)

Contacts wiring diagram	300V	500V	600V	800V	1000V	Poles in series	Number of Strings	Type Number
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	32A	32A	13A	9A	9A	2	2	4
	40A	40A	1	1	1	4	1	2H
	32A	32A	32A	32A	32A	4	1	4B
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	32A	32A	32A	32A	32A	4	1	4S

Switching Configurations

Туре	4-pole	2-pole 4 Paralleled Poles	4-pole with Input and Output bottom	4-pole with Input on top Output bottom
1	4	2H	4B	48
Contacts Wiring graph	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Switching example				

Bridging links installation



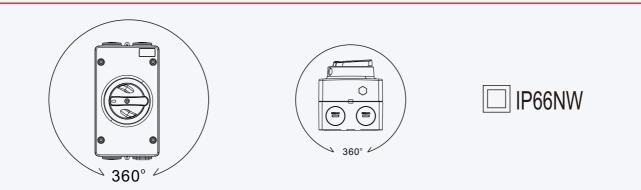
* Warning: Verify that all connections (including bridging link connections) are suitable for the rated current, prepared to ensure only conductive parts are clamped and tightened to the manufacturers required torque before energization.



Terminals / connection

Туре		BYH-32, BYH-32M1, BYH-32M2		
Number of poles		4-pole		
Terminal designation,	main circuit	1; 3; 5; 2; 4; 6; 7; 8		
Type of terminal, main circuit		Screw terminal		
Rated cross section area, main circuit		4.0-16mm ²		
Type of onductor		4-16mm ² (Rigid: Solid or Stranded)		
Type of onductor		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		Min: 1.2Nm		
		Max: 1.8Nm		

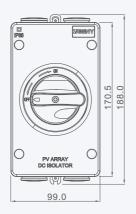
IP Rating

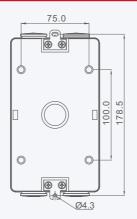


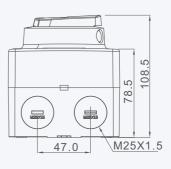
Remarks:

 ${\sf ZJBENY\,DC\,Isolator\,can\,be\,installed\,in\,any\,direction,\,but\,must\,do\,well\,performance\,for\,waterproof.}$

Dimensions(mm)









Data according to AS60947-3: 2018

Main Contacts		Туре	BYH-32	Appendix B5
Rated thermal current I _{the}		А	32	Making &
Rated insulation voltage U _i	V	1000	Breaking	
Distance of contacts (per pole)	mm	8	5x	
Rated operational current le (DC-PV2	!)			operations
1 pole	300V	А	25	100
1	400V	А	10	40
A /	500V	А	8	32
_1/	600V	А	8	32
	800V	А	3	12
	1000V	A	2	8
4-pole	500V	А	32	128
2 pole in series 4	600V	А	13	52
_1/_2/	700V	А	9	36
	800V	А	9	36
	900V	А	9	36
	1000V	А	9	36
2-pole	500V	А	40	160
4 parallel poles 2H	600V	А	1	/
_1/_2/	700V	А	1	/
3/_4/	800V	А	/	/
	900V	А	/	/
	1000V	А	/	/
2-pole	500V	А	32	128
4 pole in series 4B	600V	А	32	128
<u>1/2/3/4/</u>	700V	А	32	128
	800V	А	32	128
	900V	А	32	128
	1000V	А	32	128



Enclosed Solar Isolator Extended Warranty Terms

Zhejiang Benyi Electrical Co.,Ltd offers the following extended **5 Year Warranty** for installations within the Australia, Europe and Middle East only.

Zhejiang Benyi Electrical Co.,Ltd warrants that if under proper use the solar isolator BYH-32 and/or BYT-32 and/or BYSS-50 develop any defect during the period 5 years from date of delivery due to defective parts or materials supplied Zhejiang Benyi Electrical Co.,Ltd shall at its own expense replace or repair such goods as are defective so as to remedy the defects except where such defects are attributable to accident, fair wear and tear, or any action omission or neglect of the buyer or of its agents. The buyer must ensure that during the period the solar isolator is operated at least once per annum within the product's specified parameters of proper use and is not used outside or beyond such specification as stated by Zhejiang Benyi Electrical Co.,Ltd. Such conditions and parameters are agreed in writing by Zhejiang Benyi Electrical Co.,Ltd. Such conditions include but are not limited to current rating, voltage rating, temperature conditions and sunlight exposure.

The buyer must give Zhejiang Benyi Electrical Co.,Ltd notice of any alleged defect as soon as it becomes apparent, and shall (unless otherwise instructed by Zhejiang Benyi Electrical Co.,Ltd) retain the goods at the buyer's premises for inspection by Zhejiang Benyi Electrical Co.,Ltd and give Zhejiang Benyi Electrical Co.,Ltd adequate facilities to investigate the complaint at the buyer's premises.

Zhejiang Benyi Electrical Co.,Ltd shall not be liable in any event whatsoever for any indirect, special or consequential damages, arising out of the use of the goods at any time or howsoever caused by the goods.