BYT Series
DC Isolator Switches

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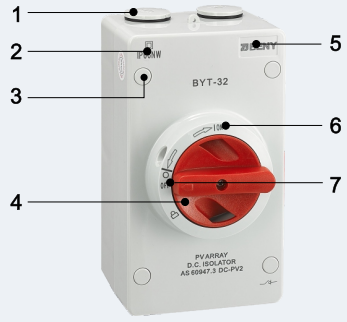
Application

ZBENY BYT-32 1200V 32A is the first DC isolator complies with AS 60947.3:2018 DC PV-2. The true DC isolator use widely in residential and commercial solar PV installations. With the most suitable material and specific switch instruction design, the DC arc is extinguished in 3ms. Also means a reliable and durable DC isolator for the solar PV systems.

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 1200VDC

Appearance Introduction



1 Waterproof Plug
2 IP66 Ingress Protection
3 Sealed Plug
4 Knob
5 Brand
6 ON
7 OFF

Parameter

Electrical Characteristics		
Type		BYT-32, BYT-32M1, BYT-32M2 BYT.1-32, BYT.2-32
Function		Isolator, Control
Standard		IEC60947-3, AS60947.3
Utilization category		DC-PV2 / DC-21B
Pole		4P
Rated frequency		DC
Rated operational voltage (U_e)		600V, 800V, 1000V, 1200V
Rated operational current (I_e)		See the next page
Rated insulation voltage (U_i)		1200V
Conventional free air thermal current(I_{th})		//
Conventional enclosed thermal current(I_{the})		Same as I_e
Rated short-time withstand current (I_{cw})		1kA,1s (4, 4S,4B); 1.7kA, 1s (2H)
Rated short-time making capacity (I_{cm})		1.7kA,(4, 4S,4B); 3kA, (2H)
Rated conditional short-circuit current (I_{cn})		3kA
Rated impulsed withstand voltage (U_{imp})		8.0kV
Overvoltage category		II
Suitability for isolation		Yes
Polarity		No polarity, "+" and "-" polarities could be interchanged.
Service Life/Cycle Operation		
Mechanical		15000
Electrical		1000
Installation Environment		
Ingress Protection	Enclsoure	IP66
	Switch body	IP20
Storage Temperature		-5°C ~ +85°C
Mounting Type		Vertically or horizontally
Pollution degree		3
Suitable environment		Outdoor / Indoor

BYT-32

Accessories

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Identification	Rating data		
Switch, unenclosed - catalogue number (with DC-PV2 rating)	BYT.1-32, BYT.2-32		
Specific dedicated individual enclosure - catalogue number (with minimum IP56NW rating)	BYT-32 IP66NW		
Assembly of switch and specific dedicated individual enclosure - catalogue number	/		
I_{th} rated thermal current, unenclosed, at 40°C shade ambient air temperature	32 amps		
I_{the} rated thermal current, indoors, at 40°C shade ambient air temperature, in a specific dedicated enclosure	32 amps		
I_{the} rated thermal current outdoors at 40°C shade ambient air temperature without solar effects in a specific dedicated enclosure rated IP66NW	32 amps		
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	29 amps		
	U_e rated operational voltage DC Volts	I_e; DC-PV2 rated operational current Amps	$I_{(make)}$ and $I_{c(break)}$ DC-PV2 4 x I_e Amps
2 pole (_1/_2/__)	≤600	32	128
	800	13	52
	1000	9	36
	1200	9	36
4 pole (_1/_2/_3/_4/__)	≤600	32	128
	800	32	128
	1000	32	128
	1200	32	128

NOTE 1 The rating data in the table is example data, it is intended to be replaced by the relevant actual data.

NOTE 2 The ratings section of this table for U_e, I_e and $I_{(make)}$ and $I_{c(breaker)}$ may have other number of poles or pole configurations than that shown, based on the test evidence obtained.

NOTE 3 The other data required in D.5.2.4 need not be in a table format.

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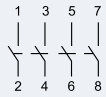
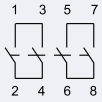
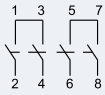
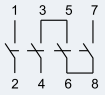
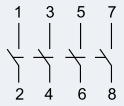
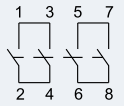
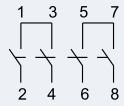
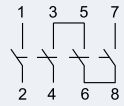
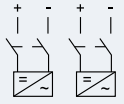
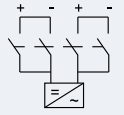
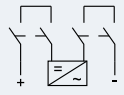
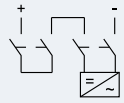
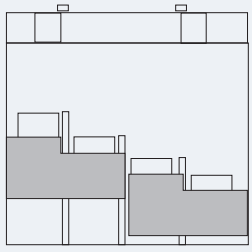
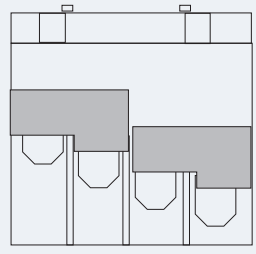
Wiring Diagram for Rated operational voltage Ue (V) & Rated operational current Ie (A)

Contacts wiring diagram	600V	800V	1000V	1200V	Poles in series	Number of Strings	Type Number	Weight kg/PCS
	32A	13A	9A	9A	2	2	4	0.70
	40A	/	/	/	2	1	2H	0.70
	32A	32A	32A	32A	2	1	4B	0.70
	32A	32A	32A	32A	4	1	4S	0.70

Switching Configurations

Type	4-pole	2-pole 4 Paralleled Poles	4-pole with Input and Output bottom	4-pole with Input on top Output bottom
/	4	2H	4B	4S
Contacts Wiring graph				
Switching example				

Bridging links installation

installed incorrectly	installed correctly
	

* Please note that all connections (including bridging link connections) should be tightening before energization.

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Terminals / connection

Type		BYT-32, BYT-32M1, BYT-32M2 BYT.1-32, BYT.2-32
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)
		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

Dimensions(mm)