BYT Series DC Isolator Switches



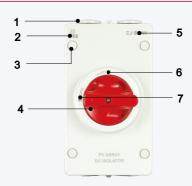
Application

BENY BYT 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 1200V 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 1200VDC

Appearance Introduction



Parameter

Suitable environment

Electrical Character	ristics			
Туре		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 vo	ltage (U₀)	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})	II		
Conventional enclosed thermal current(I _{the})		Same as $I_{\scriptscriptstyle e}$		
Rated short-time with	stand current (I _{cw})	1kA,1s (4, 4S,4B); 1.7kA, 1s (2H)		
Rated short-time mal	king capacity (I _{cm})	1.7kA,1s (4, 4S,4B); 3kA, 1s (2H)		
Rated conditional sho	ort-circuit current (Icn)	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		20000		
Electrical		2000		
Installation Environ	ment			
Ingress Protection	Enclsoure	IP66		
	Switch body	IP20		
Storage Temperature		-5°C ~ +85°C		
Mounting Type		Vertically or horizontally		
Pollution degree		3		













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



BYT-32



Accessories

Outdoor / Indoor



BYT Series PV DC Isolator Switches

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	1			
Ith rated thermal current, unenclosed, at 40°C shade ambient air temperature	32 amps			
Ithe rated thermal current, indoors, at 40°C shade ambient air temperature, in a specific dedicated enclosure	32 amps			
Ithe 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	32 amps			
Ithe 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		
	<i>U</i> ₅ rated operational voltage DC Volts	Ie; DC-PV2 rated operational current Amps	I _(make) and I _{c(break)} DC-PV2 4 x I _e Amps	
	≤600	32	128	
2 pole	800	13	52	
(<u>1</u> / <u>2</u> /)	1000	9	36	
	1200	9	36	
	≤600	32	128	
4 pole	800	32	128	
(<u>1/2/3/4/</u> _)	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.



BYT Series PV DC Isolator Switches

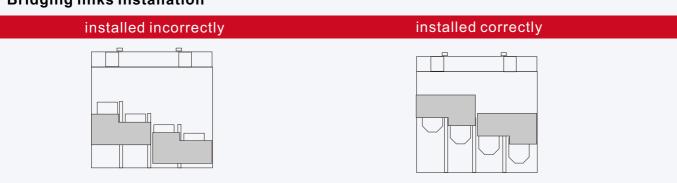
Wiring Diagram for Rated operational voltage Ue (V) & Rated operational current le (A)

Contacts wiring diagram	600V	800V	1000V	1200V	Poles in series	Number of Strings	Type Number	Weight kg/PCS
$ \begin{array}{c cccc} 1 & 3 & 5 & 7 \\ & & & & & \\ \hline & & & & & \\ 2 & 4 & 6 & 8 \end{array} $	32A	13A	9A	9A	2	2	4	0.70
1 3 5 7	40A	1	1	1	2	1	2Н	0.70
1 3 5 7	32A	32A	32A	32A	2	1	4B	0.70
1 3 5 7	32A	32A	32A	32A	4	1	48	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
1	4	2H	4B	48
Contacts Wiring graph	1 3 5 7	1 3 5 7 2 4 6 8	1 3 5 7	1 3 5 7
Switching example			=	†

Bridging links installation



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



BYT Series PV DC Isolator Switches

Terminals / connection

Туре		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		4.0-16mm²	
Type of onductor		4-16mm² (Rigid: Solid or Stranded)	
		4-10mm² (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)



