



Leading Manufacturer Provides
Solar Power Safety



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Leading Supplier for Solar Photovoltaic Components



BENY Electrical Production Base in Wenzhou

COMPANY PROFILES



Leading Manufacturer for
PV Solution

ZBENY is one of pioneer in china in the development, production and sales of photovoltaic (PV) DC string combiner box .We mainly manufacturing DC isolator ,DC circuit breaker, DC fuse ,DC surge protection device and smart monitoring device.

With more than 25 years experiences in traditional electrical area we could provides powerful support for the renewable business.

With each product is backed by the skills and service of dedicated team of customer-focused specialists, we have been striving to provide high-quality products for residential, commercial and utility-scale solar projects, we strictly make the management as per the ISO9001:2008

So far we have already obtained TUV / ROHS / CE / SAA /CB / SEMKO / VDE / CCC / CQC certifications.

ZBENY Enjoys a ready market in many countries and areas, our products are widely exported to Australia, Japan, Germany, Malaysia, South Africa, Sri Lanka ,Indonesia, Middle East countries.

Our primary customers include Engineering Procurement Contractors (EPCs), solar developers, Real Estate developers, Electrical distributors and contractors, and Solar Financing companies with solar installations .

ZBENY is dedicated to make the solar power more reliable and safe.

Mission:

Making Solar PV Power System More Reliable and Safe

Value:

Honesty, Responsibility, Innovation

Faith:

People-oriented, creating value; Scientific management, keeping developing

Quality policy:

Create the Best Products and Superb Service

Social Responsibility:

Devote us to improve the quality of life of the workforce and their families as well as the local community and society at large and to behave ethically in business and contribute to economic development.

Making Superb Product ,Creating Top Brand

MANUFACTURING

The ZBENY Quality Management System, which includes this Policy, provides the framework through which a formal and continuing program of review is adopted and fully supported so that products, services and the effectiveness of systems, policies, objectives and targets may be continually measured and improved as far as possible.

ZBENY defines Quality as conformance to our Customers' needs, both internally and externally, and as conformance to all defined quality system requirements. Consequently, we recognise the value of our customers and the impact of our activities upon them.



Photovoltaic DC components production workshop
Smart junction box production workshop

CERTIFICATE

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BYH/BYT

Series DC Isolator Switches

Welcome to our website for more information:
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BYH/BYT Series DC Isolator Switches



- Pre-wired DC Main Switch with MC4(Optional)
- IP66 , UV Resistance, Flame-Retardant Enclosure
- Arcing Time < 3ms
- "OFF" Position Lockable
- Earth Terminal
- IEC/EN60947-3
- 2 Pole, 4 Poles Available(Single | Double String)
- DC-21B: 16A,25A,32A

- Pre-wired DC Main Switch with MC4(Optional)
- IP66 , UV Resistance, Flame-Retardant Enclosure
- Arcing Time < 3ms
- "OFF" Position Lockable
- Earth Terminal
- IEC/EN60947-3
- 2 Pole, 4 Poles Available(Single | Double String)
- DC-21B: 16A,25A,32A



Application

BENY BYH/BYT Series DC Isolator Switch in plastic enclosure is applied to 1-20kw residential and commercial PV systems, is installed between solar panels and inverter. Arcing time less than 3ms is the key of the switch and safety. Top material and highest PV test standard ensure high quality isolator switch and long working life.

BYH-32 DC Isolator Switches 1000V



BYH-32

BYH-32MC4

BYT-32 DC Isolator Switches 1200V



BYT-32

BYT-32MC4


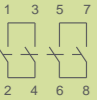
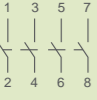
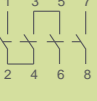


BYH/BYT

PV DC Isolator Switches

Parameter

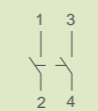
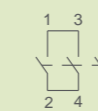
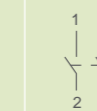
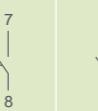
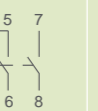
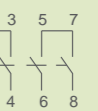


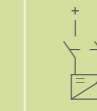



Electrical Characteristics		
Type	BYH-32	BYT-32
Function	Isolator, Control	
Comply with	IEC60947-3	
Pole	4P	
Max Rated Current	32A	
Rated Working Voltage	Ue	1000V DC
Rated Current	In	32A
Rated Insulated Voltage	Ui	1000V DC
Rated Impulsed Voltage	Uimp	8KV
Service Life/Cycle Operation		
Mechanical	20000	
Electrical	2000	
Installation Environment		
Ingress Protection	IP66	
Storage Temperature	-40°C~+85°C	

Wiring Diagram

Contacts wiring diagram	500V	600V	800V	1000V	1200V	Poles in series	Number of Strings	Type Number	Weight kg/PCS
	16A	16A	16A	9A	7.5A	2	1	PE2	0.70
	25A	25A	20A	11A	9A	2	1	PE2	0.70
	32A	32A	23A	13A	13A	2	1	PE2	0.70
	29A	29A	16A	9A	7.5A	2	1	PE2H	0.70
	45A	45A	20A	11A	9A	2	1	PE2H	0.70
	50A	50A	23A	13A	13A	2	1	PE2H	0.70
	16A	16A	16A	9A	7.5A	2	2	PE4	0.70
	25A	25A	20A	11A	9A	2	2	PE4	0.70
	32A	32A	23A	13A	13A	2	2	PE4	0.70
	16A	16A	16A	16A	16A	4	1	PE4S	0.70
	25A	25A	25A	25A	25A	4	1	PE4S	0.70
	32A	32A	32A	32A	32A	4	1	PE4S	0.70
	16A	16A	16A	16A	16A	4	1	PEB	0.70
	25A	25A	25A	25A	25A	4	1	PEB	0.70
	32A	32A	32A	32A	32A	4	1	PEB	0.70
	16A	16A	16A	16A	16A	4	1	PE4T	0.70
	25A	25A	25A	25A	25A	4	1	PE4T	0.70
	32A	32A	32A	32A	32A	4	1	PE4T	0.70

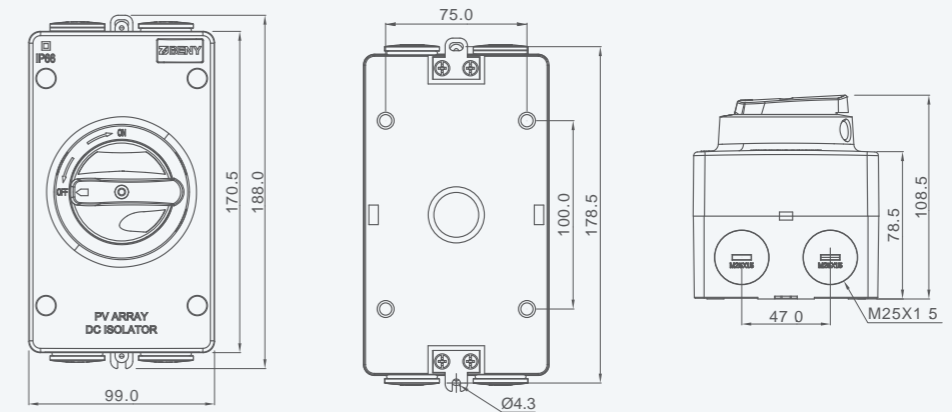
*Note: Recommend for MC4 Type

Switching Configurations

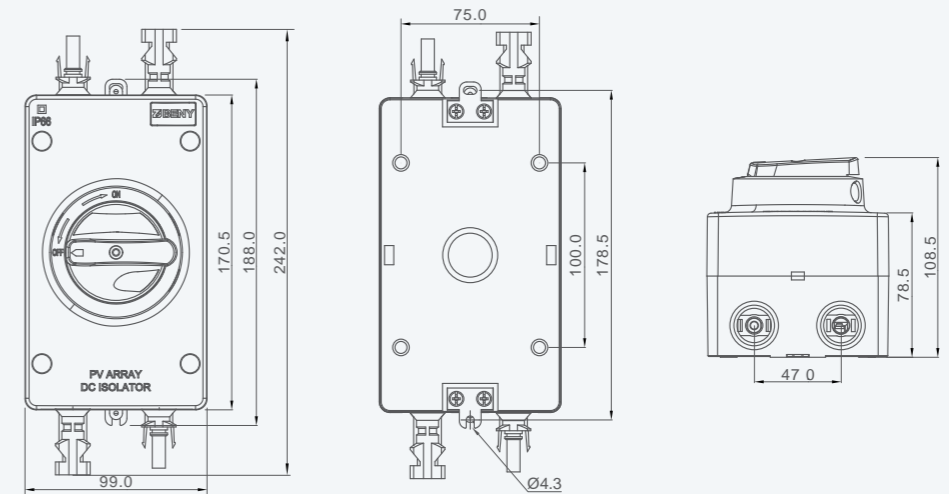
Type	2-pole	2-pole 4 Paralleled Poles	4-pole	4-pole with Input on top Output bottom	4-pole with Input and Output bottom	4-pole with Input and Output on top
BYH-16/BYT-16	2	2H	4	4S	4B	4T
BYH-25/BYT-25	2	2H	4	4S	4B	4T
BYH-32/BYT-32	2	2H	4	4S	4B	4T
Contacts Wiring graph						
Switching example						

Dimensions(mm)

BYH-32/BYT-32



BYH-32MC4 / BYT-32MC4



BYT

Series DC Isolator Switches

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BYT Series DC Isolator Switches



ZBENY

Application

ZBENY BYT series DC Isolator Switches are applied to 1-20KW Inverter, Controller, DC Combiner Box, used for Residential or Commercial PV solar power system(on-grid/off-grid). Arcing time less than 3ms, that make PV solar system effectively disconnected.

BYT.1-32 DC Isolator Switches

- BYT.1 -32 Rated Voltage 1200V DC
- Single Hole Mounting Ø22mm
- Flame-Retardant
- Arcing Time < 3ms
- IEC60947-3
- 4 poles(Single|Double Strings Available)
- DC-21B: 16A,25A,32A up to 1200V DC



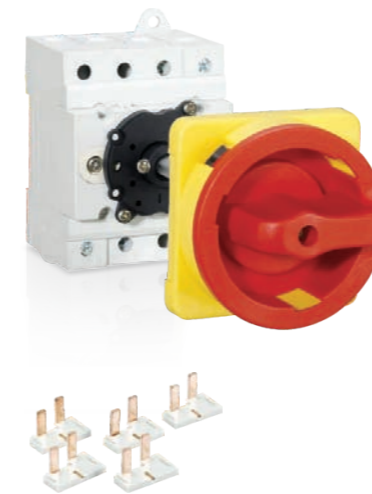
BYT.2-32 DC Isolator Switches

- DIN Rail Mounting
- BYT.2 -32 Rated Voltage 1200V DC
- OFF LOCKABLE
- Flame-Retardant
- Arcing Time < 3ms
- IEC60947-3
- 4Poles(Single|Double Strings Available)
- DC-21B: 16A,25A,32A up to 1200V DC



BYT.2-32 DC Isolator Switches

- DIN Rail Mounting Door Clutch
- BYT.2-32 Rated Voltage 1200V DC
- OFF LOCKABLE
- Flame-Retardant
- Arcing Time < 3ms
- IEC60947-3
- 4 poles(Single|Double Strings Available)
- DC-21B: 16A,25A,32A up to 1200V DC



BYT

PV DC Isolator Switches

Parameter

Electrical Characteristics		
Function	Isolator, Control	
Comply with	IEC60947-3, DC-21B	
Pole	4P	
Max Rated Current	32A	
Rated Working Voltage	Ue	1200V DC
Rated Current	In	16A/25A/32A
Rated Insulated Voltage	Ui	1200V DC
Rated Impulsed Voltage	Uimp	8KV
Service Life/Cycle Operation		
Mechanical	20000	
Electrical	500	
Installation Environment		
Size of Terminal Screw	M4	
Tightening Torque	Nm	2.5
Maximum Cable Cross Sections	mm ²	4-16
Ingress Protection	IP20	
Storage Temperature	-25°C~+85°C	

Wiring Diagram

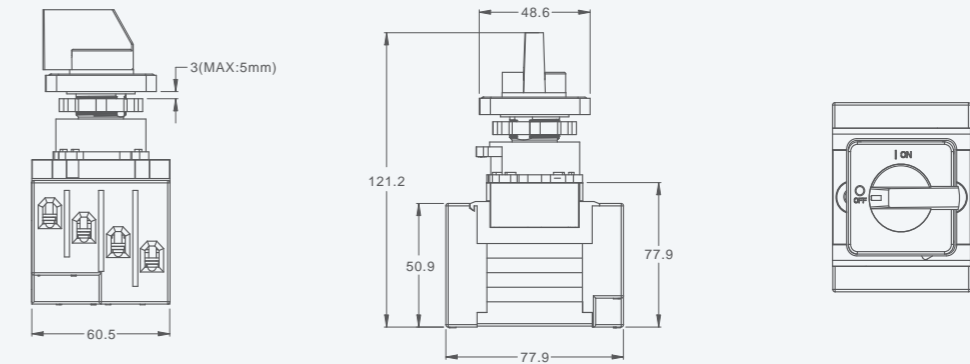
Contacts Configuration	600V	800V	1000V	1200V	Poles in series	Number of Strings	Code	Weight kg/PCS
	16A	16A	9A		2	1	DR2	0.23
	25A	20A	11A	9A	2	1	DR2	0.23
	32A	23A	13A	13A	2	1	DR2	0.23
	29A	16A	9A		2	1	DR2H	0.25
	45A	20A	11A	9A	2	1	DR2H	0.25
	50A	23A	13A	13A	2	1	DR2H	0.25
	16A	16A	9A		2	2	DR4	0.23
	25A	20A	11A	9A	2	2	DR4	0.23
	32A	23A	13A	13A	2	2	DR4	0.23
	16A	16A	16A	16A	4	1	DR4S	0.24
	25A	25A	25A	25A	4	1	DR4S	0.24
	32A	32A	32A	32A	4	1	DR4S	0.24
	16A	16A	16A	16A	4	1	DR4B	0.24
	25A	25A	25A	25A	4	1	DR4B	0.24
	32A	32A	32A	32A	4	1	DR4B	0.24
	16A	16A	16A	16A	4	1	DR4T	0.24
	25A	25A	25A	25A	4	1	DR4T	0.24
	32A	32A	32A	32A	4	1	DR4T	0.24

Switching Configurations

Type	2-pole	2-pole 4 Paralleled Poles	4-pole	4-pole with Input on top Output bottom	4-pole with Input and Output bottom	4-pole with Input and Output on top
BYT.1-16/BYT.2-16	2	2H	4	4S	4B	4T
BYT.1-25/BYT.2-25	2	2H	4	4S	4B	4T
BYT.1-32/BYT.2-32	2	2H	4	4S	4B	4T
Contacts Wiring graph						
Switching example						

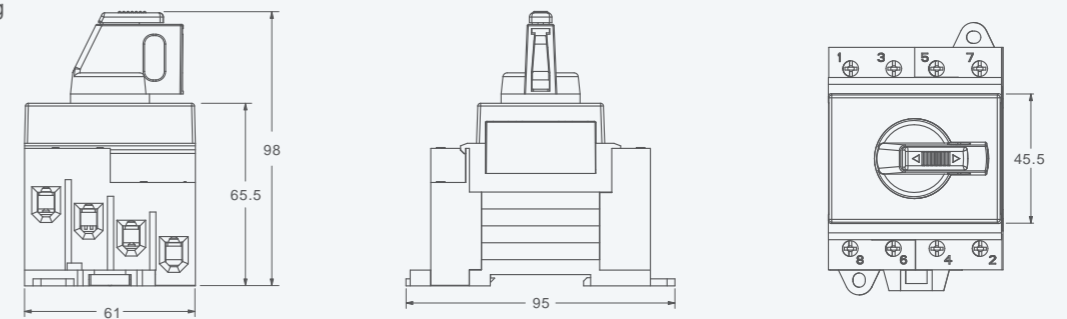
Dimensions(mm)

BYT.1



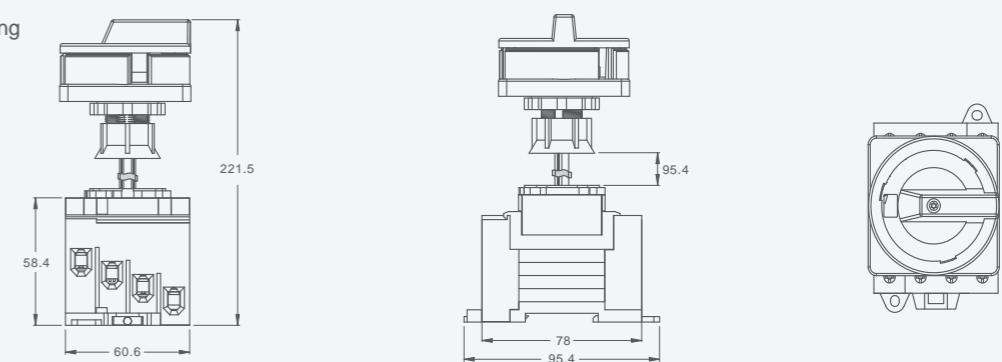
BYT.2-32

DIN Rail Mounting



BYT.2-32

DIN Rail Mounting Door Clutch





BYS series isolator switch is new developed products ,which successfully pass the IP66 inspection ,power frequency withstand voltage test, cycle operation endurance etc.
It successfully obtain certifications :UL ,TUV,CB,KEMA

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www.zjbeny.com



BYS Series DC Isolator Switches



- 1 Waterproof Plug
- 2 IP66 Ingress Protection
- 3 Sealed Plug
- 4 Type
- 5 Application Category
- 6 Rated Voltage
- 7 Rated Current
- 8 Knob
- 9 BE LOCKABLE
- 10 Electrical Diagram
- 11 Brand
- 12 ON
- 13 OFF



BYS-63



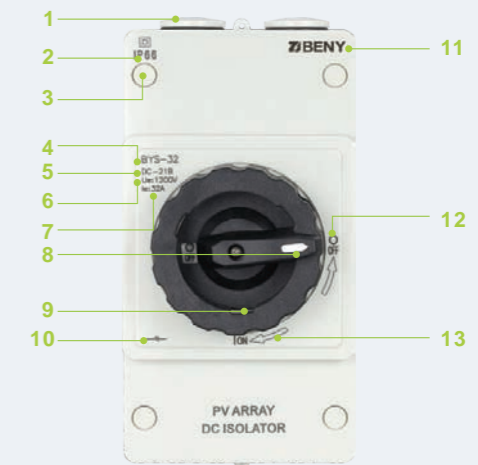
Application

ZBENY BYS-63 DC isolator switch is applied to 1kw to 20kw PV systems. The enclosure protection degree is IP66 for outdoor installation .

Feature

- Compact structure
- pre-wired DC Main Switch with MC4(optional)
- UV resistant, IP66 enclosure
- Arcing time < 3ms
- "OFF" position Lockable
- IEC60947-3 Standard
- 4P,6P
- DC-21B
- Ui 1500V Uimp 8kV

Appearance Introduction



Parameter

Technical date	Symbol	Merit	Unit
Rated operational voltage(DC poles)	Ue		VDC
Rated operational current(DC poles)	Ie		VDC
Conventional free air thermal current	Ith	63	A
Rated impulse withstand voltage	Uimp	8	kV
Rated short-time withstand current(1s)	Icw	8	kA
Rated short-circuit making capacity	Icm	8	kA
Rated conditional short-circuit current		8	kA
Standard Short Circuit Rating		5	kA
High-Fault Short Circuit Rating		8	kA
Insulation voltage	Ui	1500	V
Category DC		DC-21B	
Number of cycles of operation(With current)		3000times(6T Type is 2200 times only)	
Number of cycles of operation(With current)		7000	
Number of DC poles		4/6	
Method of mounting		Standard TH35-7.5 DIN rail mounting	
Method of operating		independent manual operation	
Knob operation force	max	1.4	Nm
Tightening torque terminal screws M4,-max.M4	1.2	1.8	Nm
Tightening torque panel mounting nut,min.-max.	2.5	3.0	Nm
Tightening torque M3 screw in the standard black knob,min.-max.	0.5	0.7	Nm
Ambient temperature allowed between		-40to+70	
Storage temperature allowed between		-40to+85	
Maximum relative humidity,without condensation at 20		90	%
Pollution degree		2	
IP rating terminals		Ip66	

BYS Series
PV DC Isolator Switches

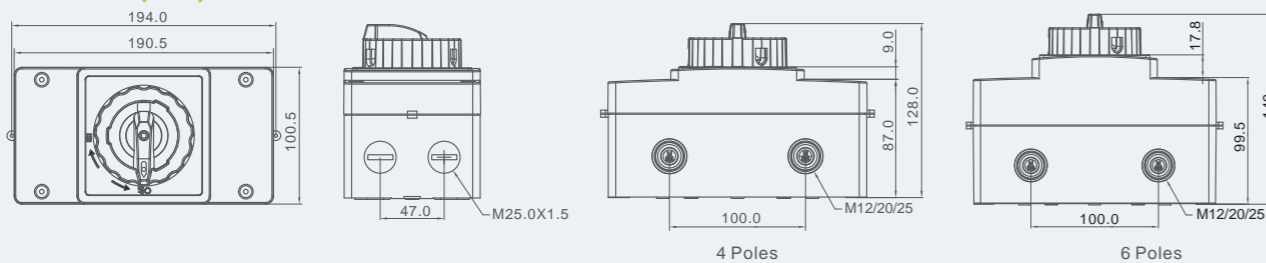
Wiring Diagram

Contact Configuration	DC-21B Rating					Poles in series	Number of Strings	Type Number	Weight kg/pcs
	600V	800V	900V	1000V	1200V				
	50A					2	1	BYS-63-2H	0.91
	32A	23A 30A		16A 20A	10A 5A	2	2	BYS-63-4	0.91
				40A	32A 16A	4	1	BYS-63-4S	0.91
				40A	32A 16A	4	1	BYS-63-4B	0.91
					32A 16A	4	1	BYS-63-4T	0.91
	32A	23A 30A		16A 20A	10A 5A	2	3	BYS-63-6	1.05
	63A					2	1	BYS-63-3H	1.05
					32A	6	1	BYS-63-6S	1.05
					32A	6	1	BYS-63-6B	1.05
			40A			3	2	BYS-63-6T	1.05

Switching Configurations

Type	2-pole 4Parlleled poles	4-pole	2-pole with Input on top Output bottom	2-pole with Input and Output bottom	2-pole with Input and Output on top	6-pole	2-pole 6Parlleled poles	2-pole with Input on top Output bottom	2-pole with Input and Output bottom	4-pole with Input and Output bottom
Part Number	2H	4	4S	4B	4T	6	3H	6S	6B	6T
Contacts Wiring diagram										
Switching example										

Dimensions(mm)





- 1 Brand
- 2 Type
- 3 OFF
- 4 Application Category
- 5 Insulation voltage
- 6 Rated impulse withstand voltage
- 7 Rated Current
- 8 ON
- 9 Certificate Symbol
- 10 Knob
- 11 Standard Code

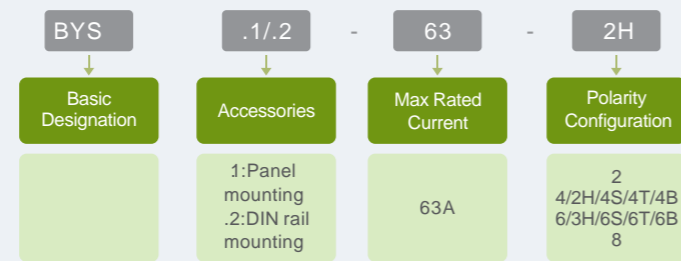
Application

BENY BYS series DC isolator switch for PV system. Rated current is 5A to 63A, Rated working voltage is 600V to 1500V. Single design can match with many wire ways. Mounting: Standard Din Rail/Panel mounting/Fix installation.

Appearance Introduction



Type Instruction



Parameter

Technical data	Symbol	Merit	Unit
Rated operational voltage (DC poles)	Ue		
Rated operational current (DC poles)	Ie		
Conventional free air thermal current	Ith	63	A
Rated impulse withstand voltage	Uimp	8	kV
Rated short time withstand current (I _s)	I _{cw}	8	kA
Rated short-circuit making capacity	I _{cm}	8	kA
Rated conditional short-circuit current		8	kA
Standard Short Circuit Rating		5	kA
High-Fault Short Circuit Rating		8	kA
Insulation voltage	Ui	1500	V
Installation Environment			
Utilization category DC		DC-21B	
Number of cycles of operation (With current)		3000 times (6T Type is 2200 times only)	
Number of cycles of operation (Without current)		7000 times	
Number of DC poles		1/2/3/4/6/8	
Method of mounting	Panel mounting	Standard TH35-7.5 DIN rail mounting	
Method of operation		independent manual operation	
Knob operation force	max.	1.4	Nm
Tightening torque terminal screws M4, min. - max. M4	1.2	1.8	Nm
Tightening torque panel mounting nut, min. - max.	2.5	3.0	Nm
Tightening torque M3 screw in the standard black knob, min. - max.	0.5	0.7	Nm
Ambient temperature allowed between		-40°C ~ +70°C	
Storage temperature allowed between		-40°C ~ +85°C	
Maximum relative humidity, without condensation at 20°C		90	%
Pollution degree		2	
IP rating terminals		IP20	
IP rating gland of the shaft in case of single hole panel mounting		IP66	



Wiring Diagram

Contact Configuration	DC-21B Rating						UL Ratings UL508i			Poles in series	Number of Strings	Type Number	Weight kg/pcs
	600V	800V	900V	1000V	1200V	1500V	500V	600V	1000V				
	12A	8A	6A	4A						2	1	BYS.1-63-2	0.18
	32A	25A	20A	16A	16A	5A	32A	25A		2	1	BYS.1-63-2	0.18
	20A	16A	13A	11A	9A	3A				2	2	BYS.1-63-3	0.18
	50A							45A		2	1	BYS.1-63-2H	0.26
	32A	23A		16A	10A	5A	32A	25A		2	2	BYS.1-63-4	0.26
		30A		20A									
				40A	32A	16A			32A	4	1	BYS.1-63-4S	0.26
				40A	32A	16A			32A	4	1	BYS.1-63-4B	0.26
					32A	16A			32A	4	1	BYS.1-63-4T	0.26
	32A	23A		16A	10A	5A	32A	25A		2	3	BYS.1-63-6	0.33
	63A							50A		2	1	BYS.1-63-3H	0.33
							32A		40A	6	1	BYS.1-63-6S	0.33
							32A		40A	6	1	BYS.1-63-6B	0.33
					40A				20A	3	2	BYS.1-63-6T	0.33
	32A	23A	20A	16A	10A	5A	32A	25A		2	4	BYS.1-63-8	0.4
		63A						58A		4	1	BYS.1-63-4H	0.4

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Switching Configurations

Type	1-pole	2-pole	3-pole	2-pole 4Parallel poles	4-pole	2-pole with Input on top and Output bottom	2-pole with Input and Output bottom	2-pole with Input and Output on top
Part Number	BYS.1-63-1	BYS.1-63-2	BYS.1-63-3	BYS.1-63-2H	BYS.1-63-4	BYS.1-63-4S	BYS.1-63-4B	BYS.1-63-4T
Contacts Wiring diagram								
Switching example								

Type	6-pole	2-pole 6Parallel poles	2-pole with Input on top Output bottom	2-pole with Input and Output bottom	4-pole with Input and Output bottom	8-pole	2-pole 8Parallel poles
Part Number	BYS.1-63-6	BYS.1-63-3H	BYS.1-63-6S	BYS.1-63-6B	BYS.1-63-6T	BYS.1-63-8	BYS.1-63-4H
Contacts Wiring diagram							
Switching example							

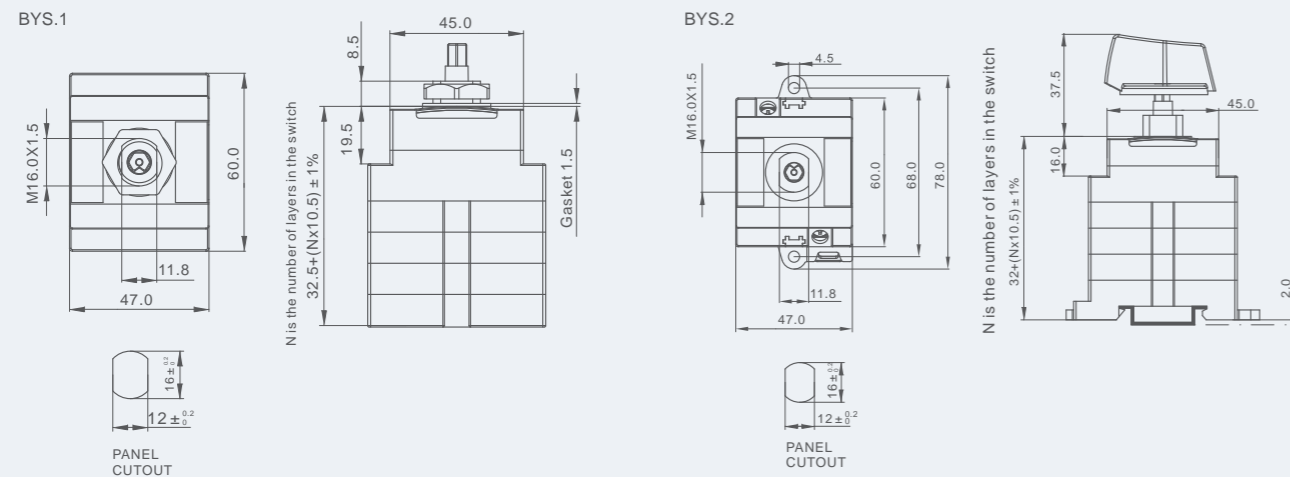
Bus-barwire A and Bus-barwire A for series and parallel switching of contacts

Type	Weight
Bus-barwire A	2.9g/pc
Bus-barwire B	2.9g/pc

WIRING RATINGS

Wires per pole	Conductor material	Wire size(AWG)	Wire size(mm ²)	Torque
1	Copper (Cu)	14 AWG-8 AWG, Stranded	2.5mm ² -10.0mm ²	1.2N·m-1.8N·m

Dimensions(mm)



BB1H-63

PV DC Isolator Switches



- 1 Brand
- 2 Type
- 3 Rated Current
- 4 Rated Voltage
- 5 Standard Code
- 6 Certificate Symbol
- 7 Indicator
- 8 Wiring Diagram

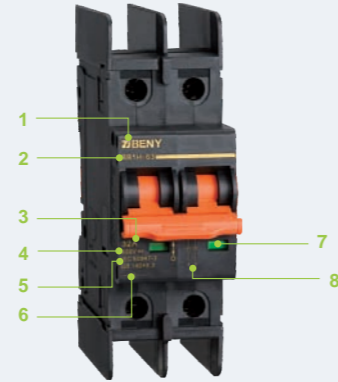
- Nonpolarity
- Functions: Unfrequent operation and Isolation
- Rated Current: Up to 63A
- Rated Voltage: 1200V DC
- Flash Barrier Keep System More Safe
- Comply with :IEC60947-3/GB14048-3



Application

ZBENY BB1 Series PV DC Isolator switches are mainly be used in PV solar power system, which are applied for DC solar combiner box, controller etc. The Max voltage up to 1200V DC, current up to 63A ,with the function of effective disconnection and Anti-reflux protection. Scientific design of arc-extinguishing system keep PV system more safe.

Appearance Introduction



Type Instruction

BB1H	-	63	4P	25	1200V
Product Code		Max Rated Current	Pole	Rated Current	Rated Voltage
PV DC Isolator Switches		63A	1P 2P 3P 4P	25A 40A 63A	300V 600V 900V 1200V

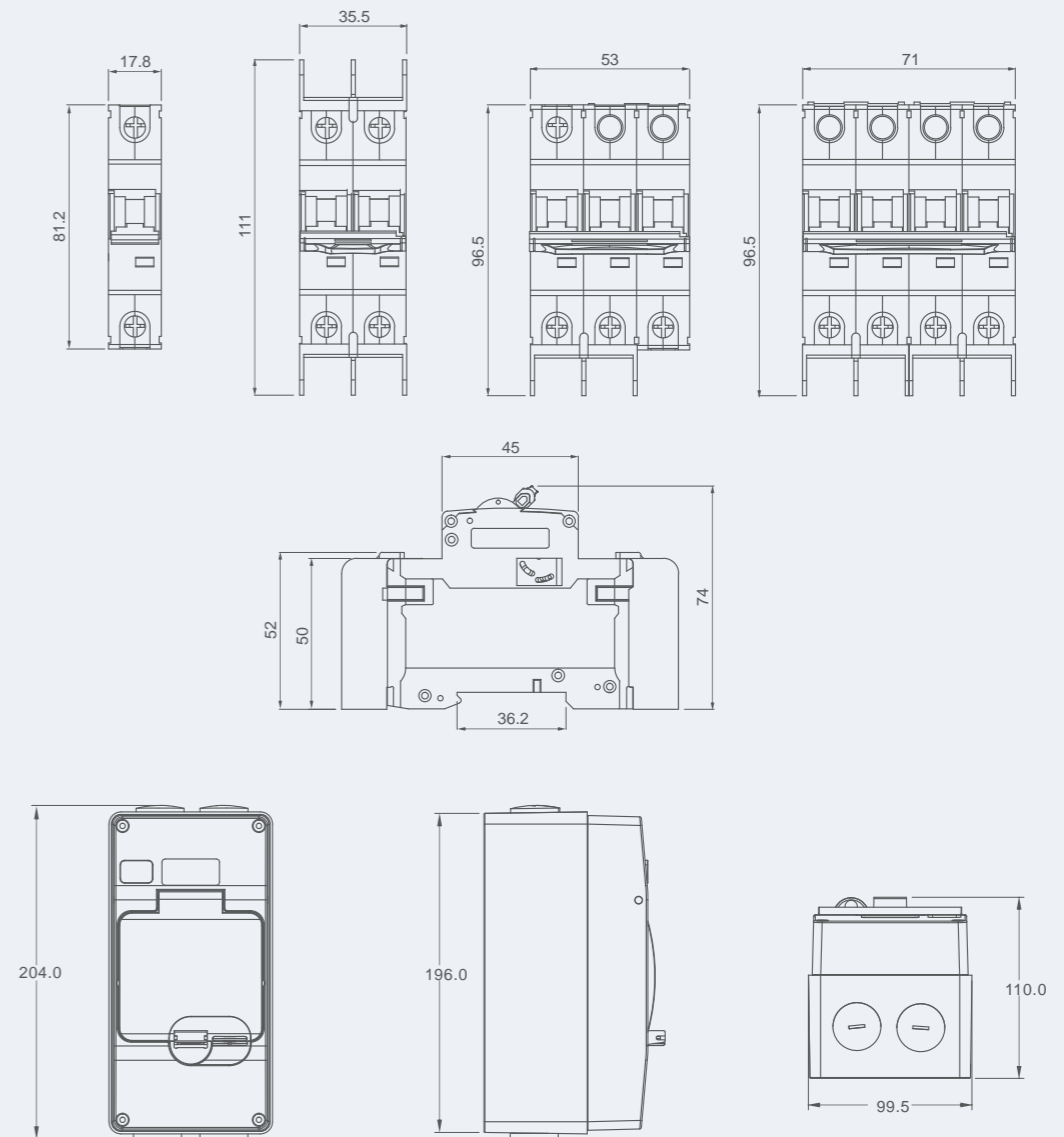
Parameter

Electrical Characteristics		BB1H-63			
Type		BB1H-63			
Comply With		IEC60947-3/GB14048.3			
Pole		1P	2P	3P	4P
Rated Working Voltage Ue		300V DC	600V DC	900V DC	1200V DC
Max Rated Current		63A			
Rated Current In		25A,40A,63A			
Rated Insulated Voltage Ui		1200V DC			
Rated Impulsed Voltage Uimp		6KV			
Service Life/cycle Operation					
Mechanical	Actual Value	20000			
	Standard Value	8500			
Electrical	Actual Value	4000			
	Standard Value	1500			
Isolator Function		Yes			
Installation Environment					
Ingress Protection		All Sides IP40 ,Connection Terminal IP20			
Terminal Cross Section		2.5-25mm ²			
Working Temperature		-25 ~+70			
Storage Temperature		-40 ~+85			
Resistance to Humidity And Heat		(when humidity arrived to 55 relative humidity95%)			
Resistance to Shock		2.6 IEC60068			
Resistance to Impact		2.27 IEC60068			

Wiring Method

Pole	1P	2P	3P	4P
Type				
Contacts Wiring graph				

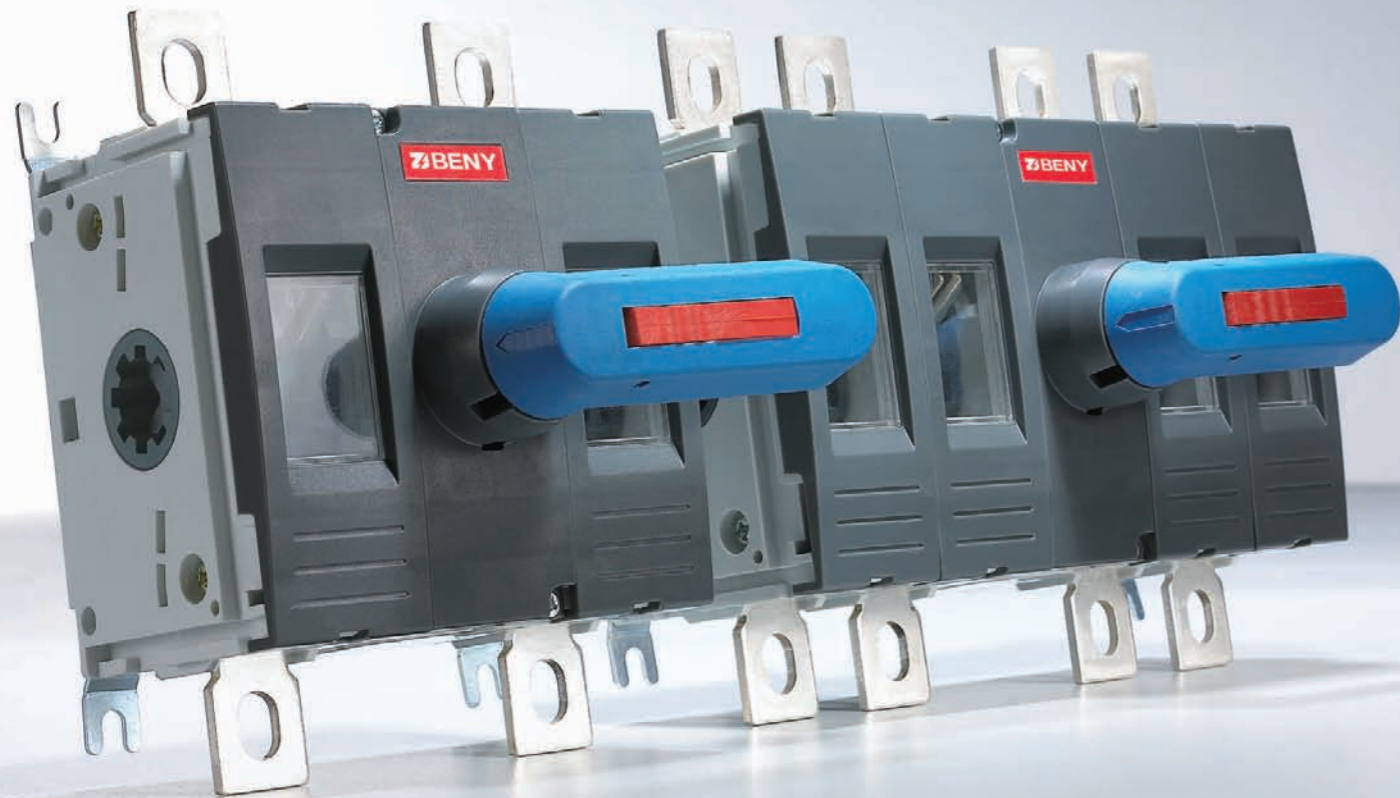
Dimensions(mm)



BH

Series PV DC Isolator Switches

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BH Series PV DC Isolator Switches



- Breaking Power Optimized Across The Entire Current Range.
- Visible Contacts
- Simplicity in Installation
- Padlockable in The "OFF" Position and with Door Interlock in The "ON" Position
- Adjustable Shaft for a Depth of Installation Ranges
- DC21B:160A,200A,250A with Operational Voltage of 1000V DC



2P



4P

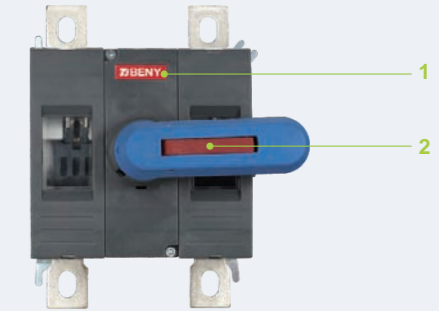


Application

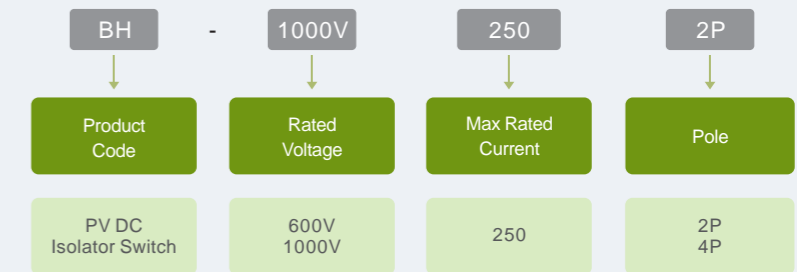
ZBENY BH series PV DC Isolator Switches are mainly used in large solar power system, such like solar DC combiner box ,inverter and DC power distribution cabinet. Rated voltage up to 1000V DC, Rated Current up to 250 A with the function of effective disconnection.

Appearance Introduction

- 1 Brand
- 2 Knob



Type Instruction



Parameter

Bh Series Pv Dc Isolator Switches							
Pole	2P			4P			
Electrical Characteristics							
Rated Working Voltage	U _e	600V DC			1000V DC		
Max Rated Current		250A			250A		
Rated Current	I _n	160A	200A	250A	160A	200A	250A
Rated Insulated Voltage	U _i	600V DC			1000V DC		
Rated Impulsed Voltage	U _{imp}	8KV			12KV		
Rated Short-time Withstand Current 1s		8KA			8KA		
Rated Thermal Current	Free Air	200A	200A	250A	200A	200A	250A
	(Ambient Temperature:40) Enclosed Air	160A	200A	250A	160A	200A	250A
Service Life/cycle Operation							
Mechanical		10000			10000		
Weight(without Accessory)	kg	0.8			1.5		
Terminal Screw Specification	mm	M8X25			M8X25		
Terminal Torque Force	NM	15-22			15-22		
Ingress Protection		IP20			IP20		
Installation Environment							
Comply with		IEC60947-3					
Operating Temperature		-45 ~ +70					

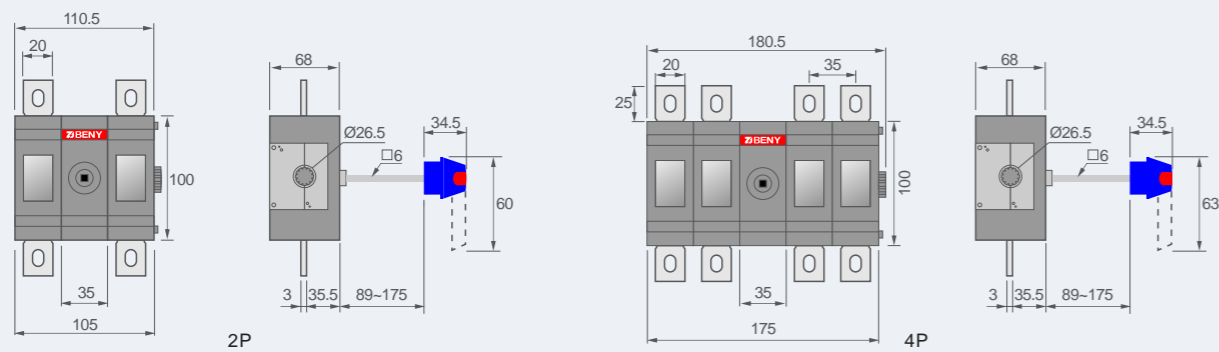
BH

Series PV DC Isolator Switches

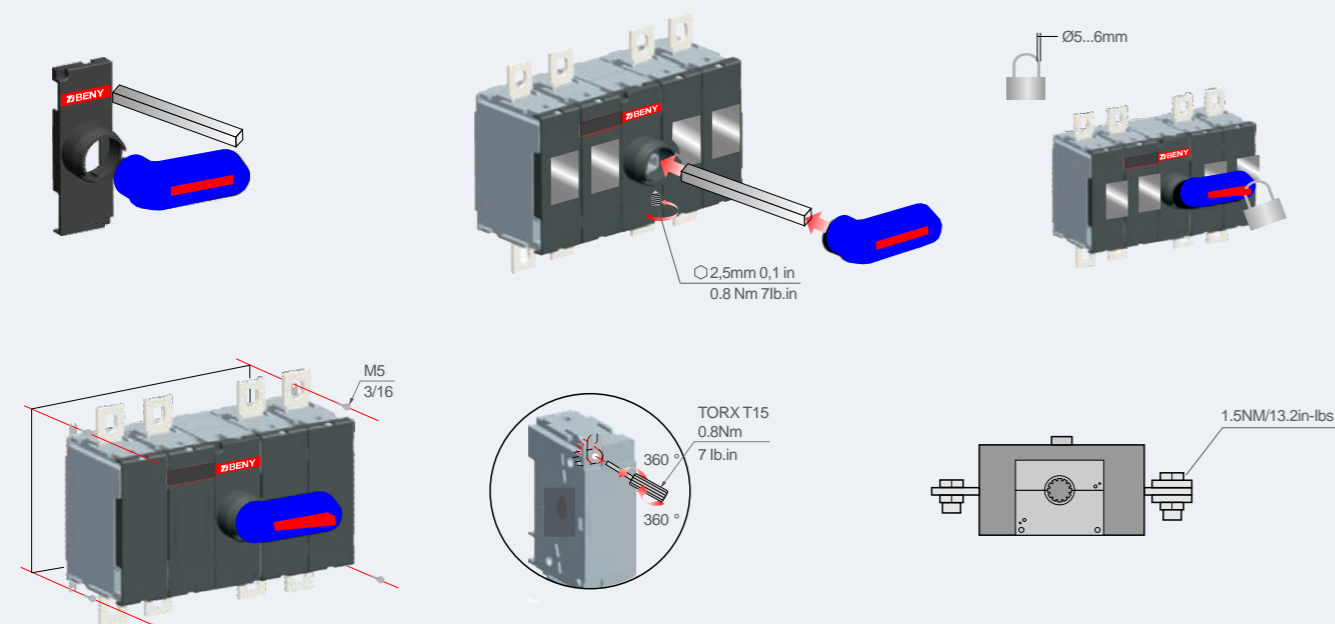
Wiring Method

Contacts wiring graph	Pole	Rated insulation voltage Ui	Max Rated Current A
	4P	DC 1000V	250A
	2+2P	DC 600V	250A
	2P	DC 600V	250A

Dimensions(mm)



Installation



BDH Series PV DC Moulded Case Isolator Switch

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BDH Series PV DC Moulded Case Isolator Switch



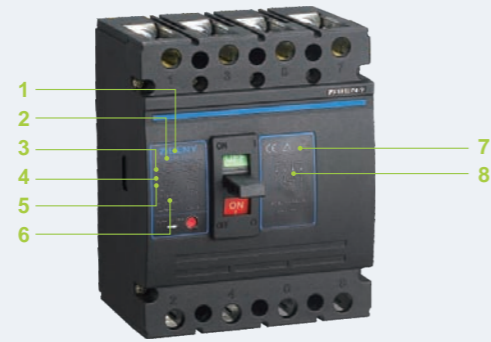
- 1 Brand
- 2 Type
- 3 Rated Current
- 4 Rated Voltage
- 5 Rated Short-time Withstand Current
- 6 Standard Code
- 7 Certificate Symbol
- 8 Wiring Diagram

- High Insulation Performance
- Functions: Unfrequent Operation and Isolation
- Rated Voltage up to 1200V
- Rated Current 125A,250A,400A,630A
- IEC60947-3, GB14048-3

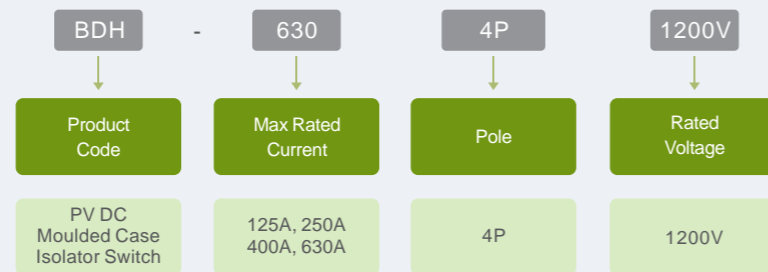
Application

BENY BDH series PV DC Moulded Case Isolator Switches are mainly used in large solar power system, such like solar DC combiner box ,inverter and DC power distribution cabinet. Rated voltage up to 1200V DC, Rated Current up to 630A with the function of effective isolator.

Appearance Introduction



Type Instruction

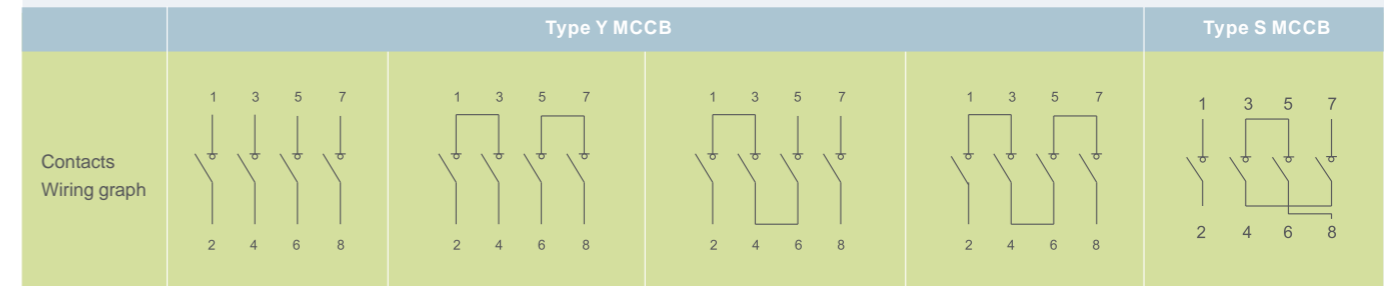


Parameter

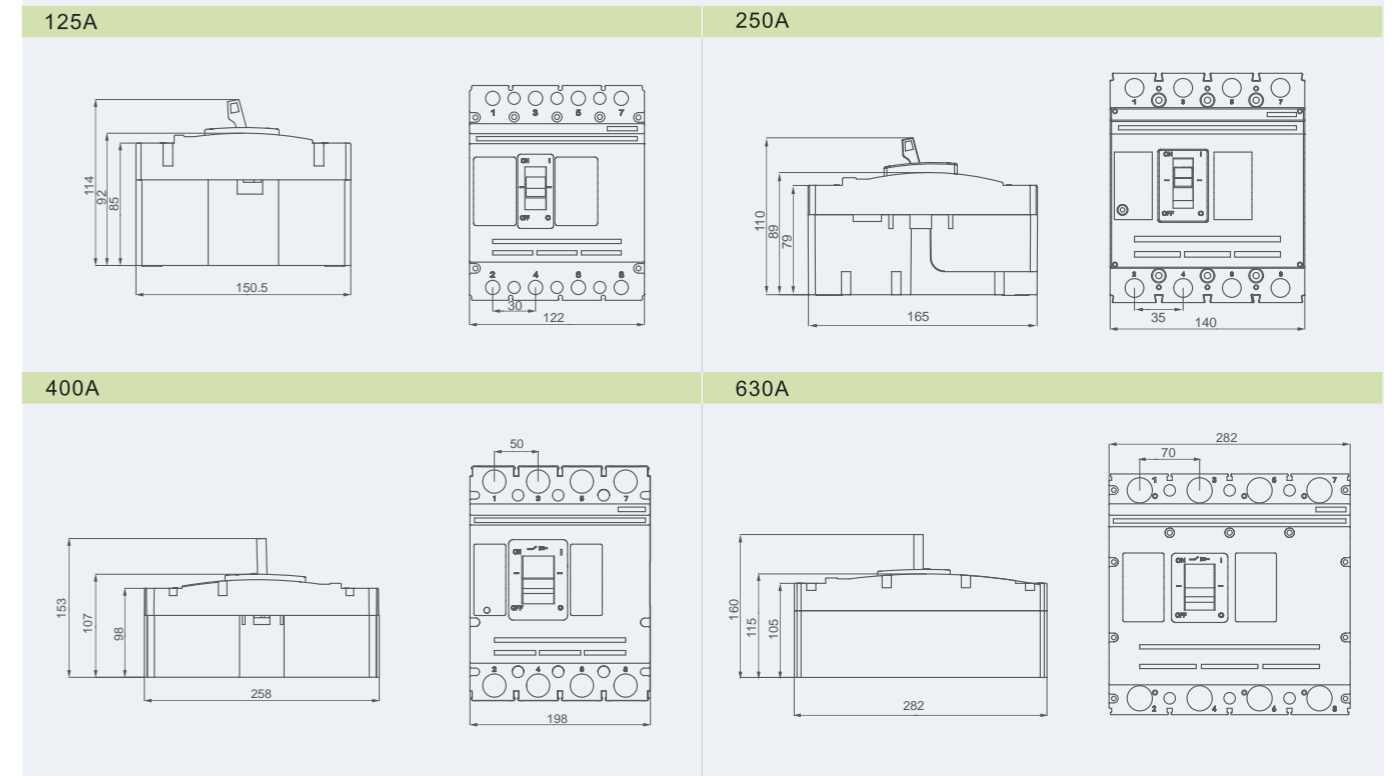
BDH series PV DC Moulded Case Isolator Switch					
Type	BDH-125	BDH-250	BDH-400	BDH-630	
Pole	4P				
Max Rated Current	125A	250A	400A	630A	
Electrical Characteristics					
Rated Working Voltage	U _e 1200V DC				
Rated Current	I _n (A) 60/80 100/125	125/160 200/250	250/300/315 350/400	400/500/630	
Rated Insulated Voltage	U _i 1200V DC				
Rated Impulsed Voltage	U _{imp} 8KV				
1 Min Power Frequency Withstand Voltage	3.8KV				
Control And Indication					
Control Mode	Manual	Direct (RHD)	Optional		
		Extended(ERH)	Optional		
	MOD	Optional			
Shunt Release (SHT)	Optional				
Auxiliary Release	Optional				
Terminal End Cover	Yes				
Interphase Barriers	Yes				
Service Life/Cycle Operation					
Mechanical	14000	14000	5000	5000	
Electrical	5000	5000	1500	1500	
Size (L x W x H)	150x122x92	165x140x89	258x198x107	282x282x115	
Ingress Protection	All Sides IP40 ,Connection Terminal IP20				
Installation Environment					
Comply with	IEC60947-3/GB14048.3				
Storage Temperature	-45°C ~ +70°C				



Wiring Method



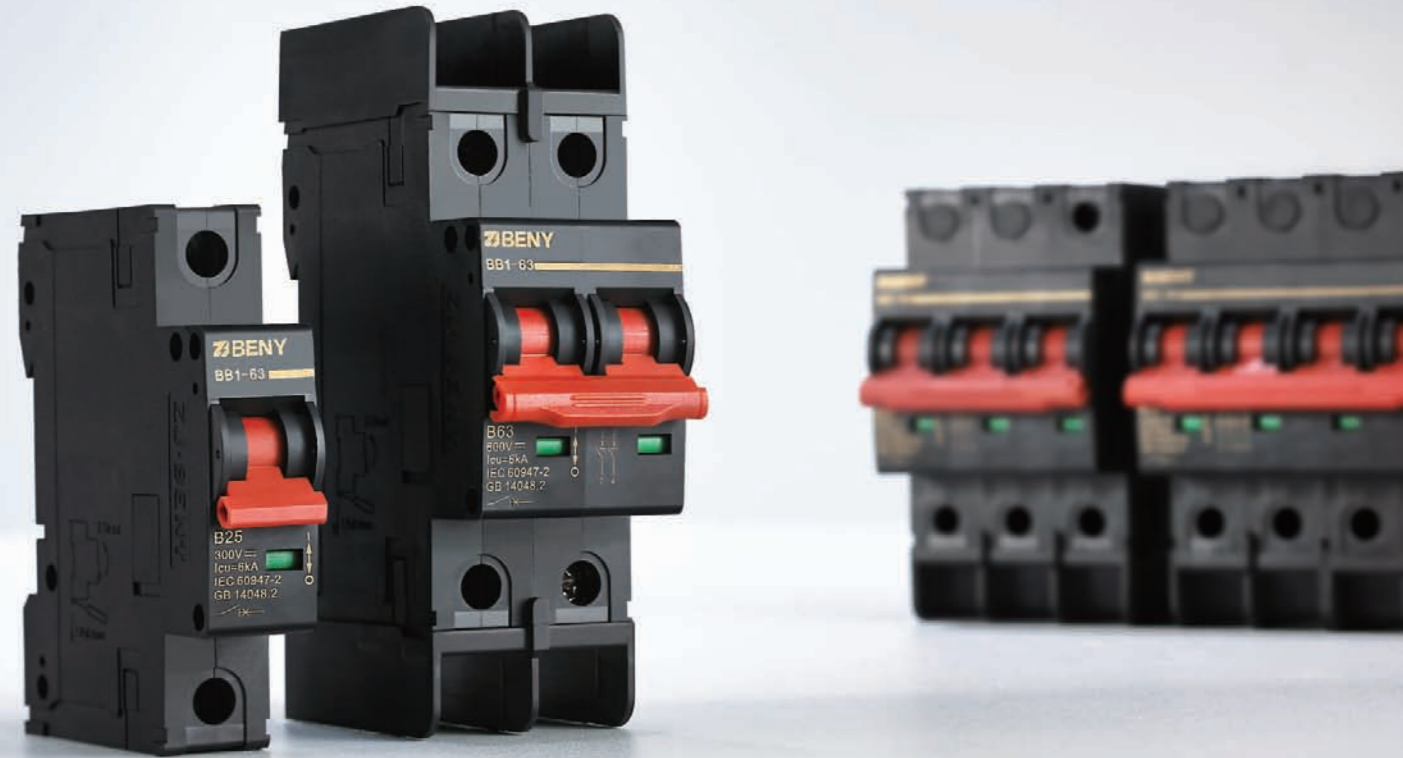
Dimensions(mm)



BB1-63

PV Mini Circuit Breakers

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BB1-63

PV Mini Circuit Breakers



- 1 Brand
- 2 Type
- 3 Rated Current
- 4 Rated Voltage
- 5 Ultimate Breaking Capacity
- 6 Certificate Symbol
- 7 Standard Code
- 8 Indicator
- 9 Wiring Diagram

- Nonpolarity
- High Short-Circuit / Breaking Capacity
- Functions: Overload, Short Circuit, Unfrequent Operation and, Anti-reflux Protection
- Rated Voltage: 1200V, Ultimate
- Breaking Capacity : 6KA
- Rated Current: 63A
- Comply with : IEC60947-2/GB14048-2

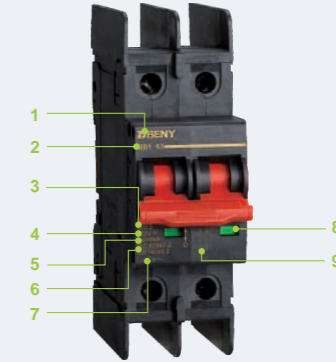


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Application

ZBENY BB1 Series PV Mini Circuit Breakers are mainly applied to DC solar combiner box ,Controller etc. The main function include overload protection ,Anti-reflux protection and short-circuit protection. Scientific design of arc-extinguishing system keep solar system more safe. Max Voltage up to 1200V DC, current up to 63A.

Appearance Introduction



Type Instruction





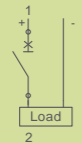
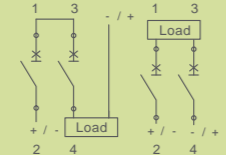
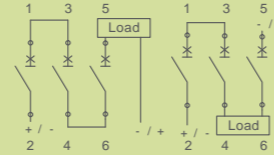
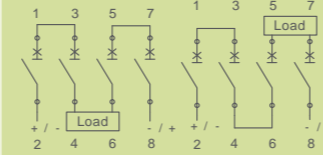
BB1	-	63	4P	25	1200V
Product Code		Max Rated Current	Pole	Rated Current	Rated Voltage
PV Mini Circuit Breakers		63A	1P 2P 3P 4P	3A,4A,6A 10A,13A,16A 20A,25A,32A 40A,50A,63A	300V 600V 900V 1200V

Parameter

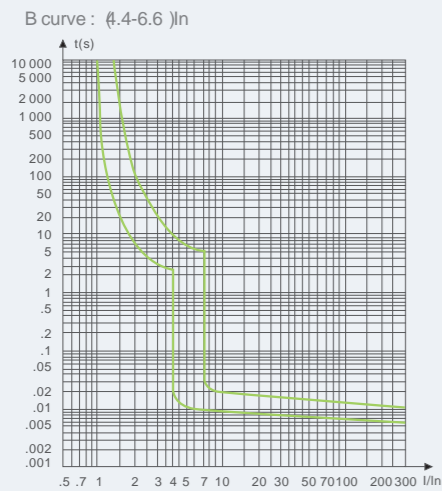
Electrical Characteristics		BB1-63			
Type		BB1-63			
Comply with		IEC60947-2/GB14048.2			
Pole		1P	2P	3P	4P
Rated Working Voltage	Ue	300V DC	600V DC	900V DC	1200V DC
Max Rated Current		63A			
Rated Current	In	3A, 4A, 6A, 10A, 13A, 16A, 20A, 25A, 32A, 40A, 50A, 63A			
Rated Insulated Voltage	Ui	1200V DC			
Rated Impulsed Voltage	Uimp	6KV			
Ultimate Breaking Capacity	Icu	6KA			
Run Breaking Capacity	Ics	100%			
Tripping Type		Thermal Magnetic Type			
Service Life/cycle Operation					
Mechanical	Actual Value	20000			
	Standard Value	8500			
Electrical	Actual Value	4000			
	Standard Value	1500			
Installation Environment					
Ingress Protection		All Sides IP40 ,Connection Terminal IP20			
Terminal Cross Section		2.5-25mm ²			
Working Temperature		-25 ~+70			
Storage Temperature		-40 ~+85			
Resistance to Humidity And Heat		(when Humidity arrived to 55 Relative Humidity95%)			
Resistance to Shock		2.6 IEC60068			
Resistance to Impact		2.27 IEC60068			

BB1-63 PV Mini Circuit Breakers

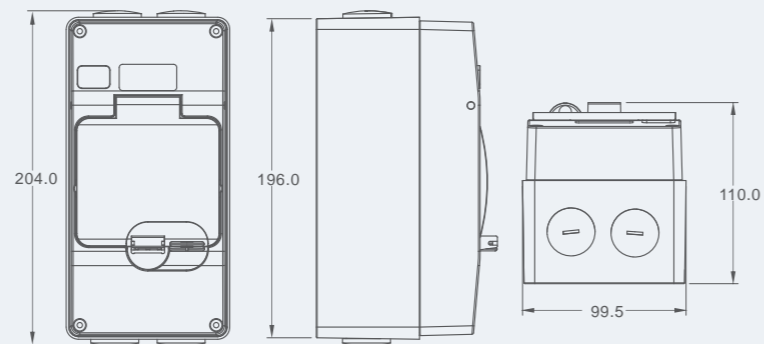
Wiring Method

Pole	1P	2P	3P	4P
Type				
Contacts Wiring graph				

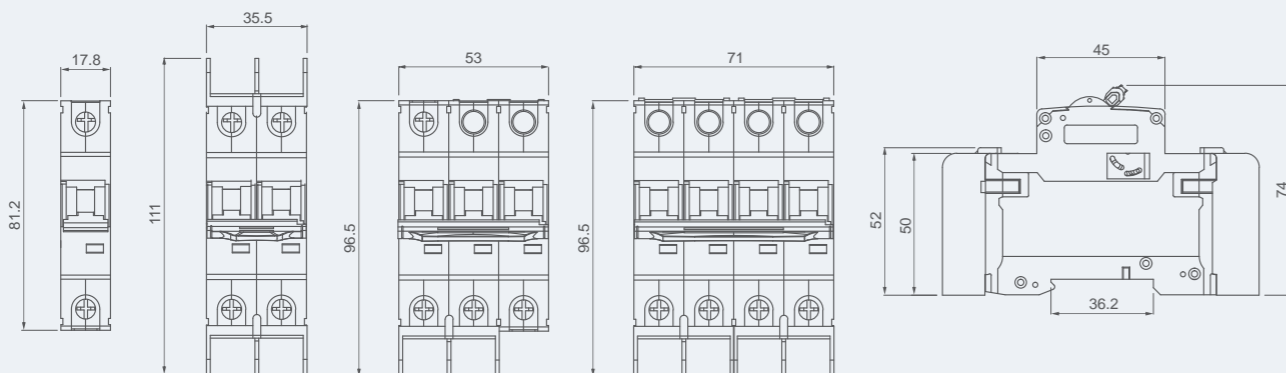
Characteristic Curve



Dimensions(mm)



Dimensions(mm)



BB2-40 PV Mini Circuit Breakers

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BB2-40

PV Mini Circuit Breakers



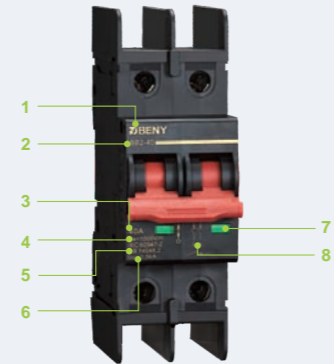
- 1 Brand
- 2 Type
- 3 Rated Current
- 4 Rated Voltage
- 5 Standard Code
- 6 Ultimate Breaking Capacity
- 7 Indicator
- 8 Wiring Diagram

- Nonpolarity
- High Short-Circuit / Breaking Capacity
- Functions: Overload, Short Circuit, Unfrequent Operation and, Anti-reflux Protection
- Rated Voltage: 1200V, Ultimate
- Breaking Capacity : 6KA
- Rated Current: 40A
- Comply with : IEC60947-2/GB14048-2

Application

BENY BB2-40 Series PV Mini Circuit Breakers are mainly applied to DC solar combiner box ,Controller etc. The main function include overload protection ,Anti-reflux protection and short-circuit protection. Scientific design of arc-extinguishing system keep solar system more safe. Max Voltage up to 1500V DC, current up to 40A.

Appearance Introduction



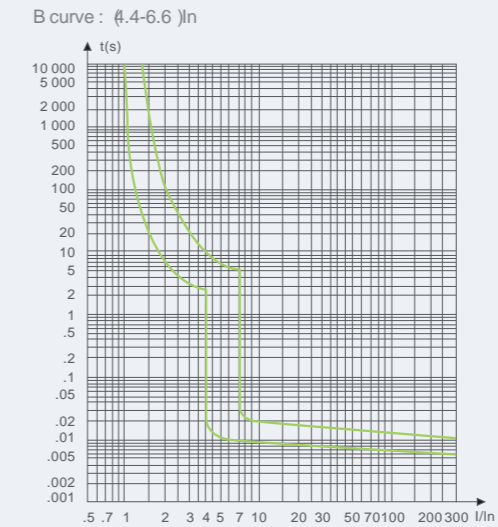
Type Instruction

BB2	-	40	4P	25	1200V
Product Code		Max Rated Current	Pole	Rated Current	Rated Voltage
PV Mini Circuit Breakers		40A	1P 2P 3P 4P	3A,4A,6A 10A,13A,16A 20A,25A, 32A,40A,	500V 1000V 1200V 1500V

Parameter

Electrical Characteristics		BB2-40		
Type		BB2-40		
Comply with		IEC60947-2/GB14048.2		
Pole		1P	2P	3P
Rated Working Voltage Ue		600V DC	1000V DC	1500V DC
Max Rated Current		40A		
Rated Current In		2A,4A,6A,10A,13A,16A,20A,25A,32A,40A		
Rated Insulated Voltage Ui		1500V DC		
Rated Impulsed Voltage Uimp		8KV		
Ultimate Breaking Capacity Icu		3KA		
Run Breaking Capacity Ics		100%		
Tripping Type		Thermal Magnetic Type		
Service Life/cycle Operation				
Mechanical	Actual Value	20000		
	Standard Value	8500		
Electrical	Actual Value	4000		
	Standard Value	1500		
Installation Environment				
Ingress Protection		All Sides IP40 ,Connection Terminal IP20		
Terminal Cross Section		2.5-25mm ²		
Working Temperature		-25 ~+70		
Storage Temperature		-40 ~+85		
Resistance to Humidity And Heat		(when Humidity arrived to 55 Relative Humidity95%)		
Resistance to Shock		2.6 IEC60068		
Resistance to Impack		2.27 IEC60068		

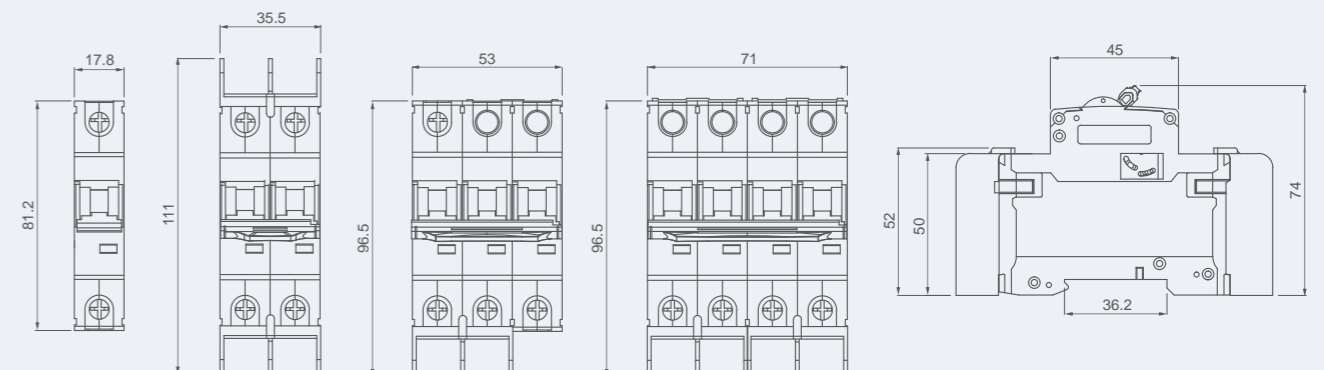
Characteristic Curve



Wiring Method

Pole	1P	2P	3P	4P
Type				
Contacts Wiring graph				

Dimensions(mm)



BD

Series PV DC Moulded Case Circuit Breaker

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BD Series PV DC Moulded Case Circuit Breaker



- 1 Brand
- 2 Type
- 3 Rated Current
- 4 Rated Voltage
- 5 Breaking Capacity
- 6 Operation Breaking Capacity
- 7 Standard Code
- 8 Certificate Symbol
- 9 Wiring Diagram
- 10 Characteristic Curve

- High Short-Circuit/Breaking Capacity
- Protection Functions: Overload, Short circuit, Unfrequent Operation
- Rated Voltage up to 1000V DC
- Rated Current 125A, 250A, 400A, 630A
- IEC60947-2, GB14048-2
- Easy Installation



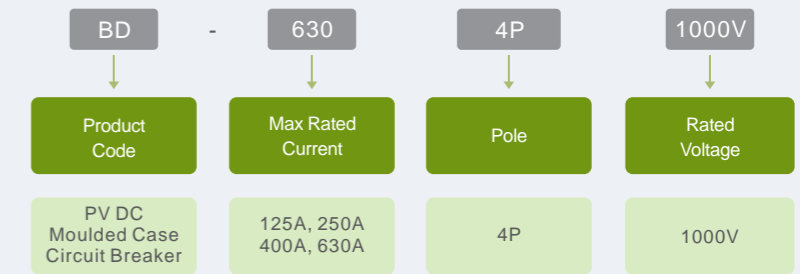
Application

ZBENY BD series PV DC Moulded Case Circuit Breaker (MCCB) are mainly used in large solar power system, which are applied for solar DC combiner box, inverter and DC power distribution cabinet. Rated voltage up to 1000V DC, current up to 630A, with the function of overload protection and short-circuit protection.

Appearance Introduction



Type Instruction

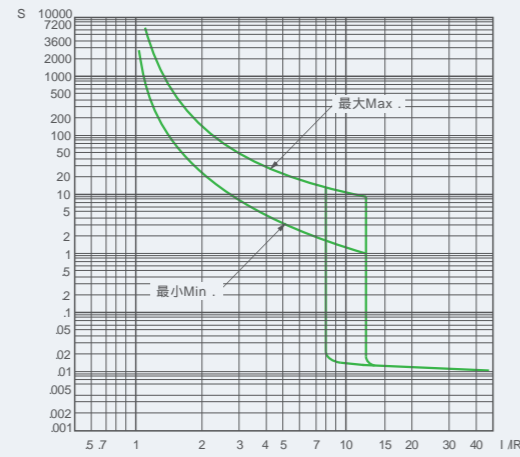


Parameter

BD series PV DC MCCB				
Type	BD-125	BD-250	BD-400	BD-630
Pole	4P	4P	4P	4P
Max Rated Current	125A	250A	400A	630A
Electrical Characteristics				
Rated Working Voltage	Ue	1000V DC	1000V DC	1000V DC
Rated Current	In(A)	63/80 100/125	125/160 200/250	250/300/315 350/400
Rated Insulated Voltage	Ui	1000V DC		
Rated Impulsed Voltage	Uimp	8KV		
1 Min Power Frequency Withstand Voltage		3.8 KV	3.8 KV	3.8 KV
Ultimate Breaking Capacity	Icu	20 KA	20 KA	20 KA
Run Breaking Capacity	Ics	15 KA	15 KA	15 KA
Protection				
Tripping Type	Thermal Magnetic Type			
Control And Indication				
Control Mode	Manual	Direct (RHD)	Optional	
		Extended(ERH)	Optional	
	MOD		Optional	
Shunt Release (SHT)			Optional	
Auxiliary Release			Optional	
Terminal End Cover			Yes	
Interphase Barriers			Yes	
Service Life/Cycle Operation				
Mechanical	14000	14000	5000	5000
Electrical	5000	5000	1500	1500
Size (L x W x H)	150x122x92	165x140x89	258x198x107	282x282x115
Ingress Protection	All Sides IP40, Connection Terminal IP20			
Installation Environment				
Comply With	IEC60947-2/GB14048.2			
Storage Temperature	-45°C ~ +70°C			

BD Series PV DC Moulded Case Circuit Breaker

Characteristic Curve



Type	BD-125	BD-250	BD-400	BD-630
Picture				

Type	Type Y MCCB				Type S MCCB
Contacts Wiring graph					

Dimensions(mm)

125A	250A
400A	630A

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BD2 Series PV DC Moulded Case Circuit Breaker



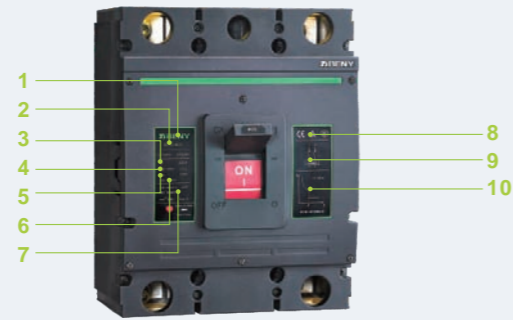
- 1 Brand
- 2 Type
- 3 Rated Current
- 4 Rated Voltage
- 5 Breaking Capacity
- 6 Operation Breaking Capacity
- 7 Standard Code
- 8 Certificate Symbol
- 9 Wiring Diagram
- 10 Characteristic Curve

- High Short-Circuit/Breaking Capacity
- Protection Functions: Overload, Short circuit, Unfrequent Operation
- Rated Voltage up to 1000V DC
- Rated Current 225A, 400A
- IEC60947-2, GB14048-2
- Easy Installation

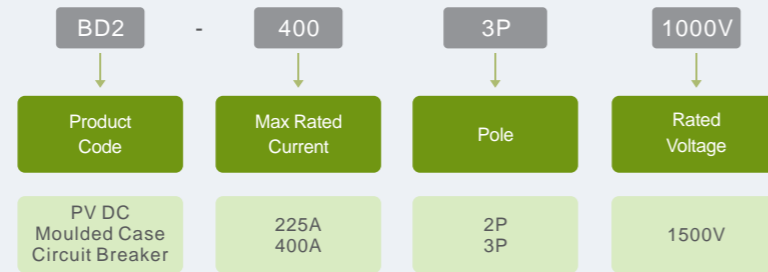
Application

ZBENY BD2 series PV DC Moulded Case Circuit Breaker (MCCB) are mainly used in large solar power system, which are applied for solar DC combiner box, inverter and DC power distribution cabinet. Rated voltage up to 1500V DC, current up to 400A, with the function of overload protection and short-circuit protection.

Appearance Introduction



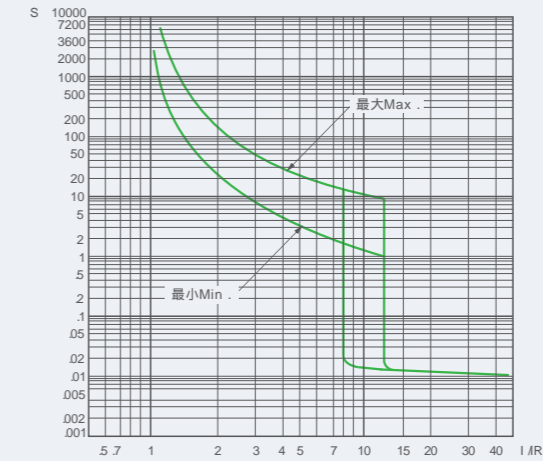
Type Instruction



Parameter

BD2 series PV DC MCCB				
Type	BD2-225T	BD2-225S	BD2-400	
Pole	2P	3P	3P	
Max Rated Current	225A	225A	400A	
Electrical Characteristics				
Rated Working Voltage U _e	1000V DC	1500V DC	1500V DC	
Rated Current I _n (A)	80A/100A/125A/160A/200A/225A	80A/100A/125A/160A/200A/225A	250A/300A/350A/400A	
Rated Insulated Voltage U _i	1000V DC	1500V DC	1500V DC	
Rated Impulsed Voltage U _{imp}	8KV			
1 Min Power Frequency Withstand Voltage	3.8 KV			
Ultimate Breaking Capacity I _{cu}	20 KA			
Run Breaking Capacity I _{cs}	15 KA			
Instantaneous action	8In			
Protection				
Tripping Type	Thermal Magnetic Type			
Control And Indication				
Control Mode	Manual	Direct (RHD)	Optional	
		Extended(ERH)	Optional	
	MOD		Optional	
	Shunt Release (SHT)		Optional	
	Auxiliary Release		Optional	
	Terminal End Cover		Yes	
	Interphase Barriers		Yes	
Service Life/Cycle Operation				
Mechanical	8500	8500	4000	
Electrical	1500	1500	1000	
Size (L x W x H)	180x92x87	180x135x87	258x204x119	
Ingress Protection	All Sides IP40, Connection Terminal IP20			
Installation Environment				
Comply With	IEC60947-2/GB14048.2			
Storage Temperature	-45°C ~+70°C			

Characteristic Curve



Type	BD2-225T	BD2-225S	BD2-400
Picture			
Contacts Wiring graph			

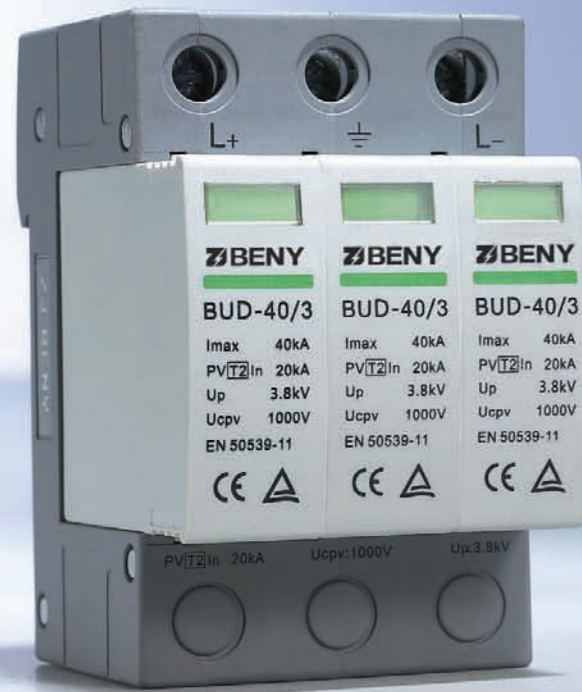
Dimensions(mm)

BD2-225T	BD2-225S
BD2-400	

BUD-40/3

PV DC Surge Protection Device

Welcome to our website for more information:
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BUD-40/3

PV DC Surge Protection Device



- 1 Brand
- 2 Type
- 3 Max. Discharge Current I_{max}
- 4 Nominal Discharge Current I_n
- 5 Voltage Protection Level U_p
- 6 Max. Continuous Operating Voltage U_{cpv}
- 7 Indicator
- 8 Standard Code
- 9 Certificate Symbol

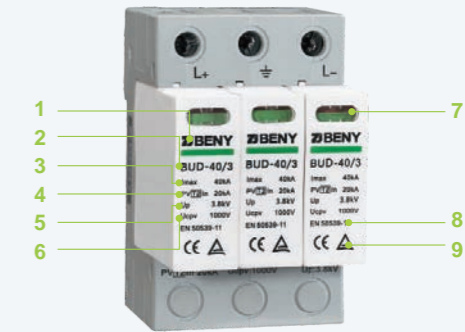
- Suitable For Use in All Photovoltaic Systems
- Prewired Modular Complete Unit, Consisting of A Base Part and Plug-in Protection Modules
- Plug-in Protection Module, Easily Installation and Maintainance
- High Energy Varistor, Response Time Less Than 25 Nanosecond
- Optional Remote Signalling Contact(FM) for Monitoring Device (Floating Changeover Contact)
- Din Rail Mounting TH35-7.5/DIN35
- Comply with :EN 50539-11



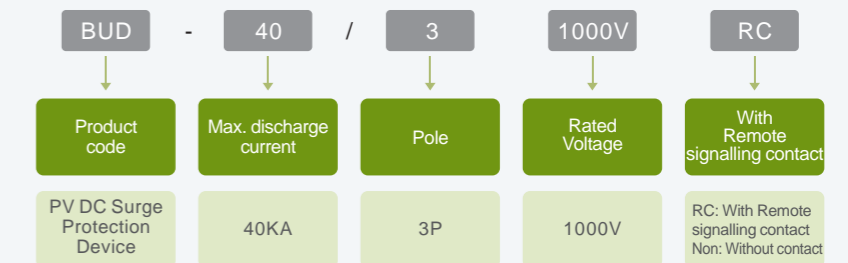
Application

ZBENY DC Surge Arrester BUD-40/3 is a Type 2 DC Surge Protection Device for DC side to protect the terminal devices in PV system from over voltage, like solar panels or inverters. Available for 600Vdc ,1000Vdc,1500Vdc.
*The only RoHS compliant DC SPD in China
*EN 50539-11 PV standard

Appearance Introduction



Type Instruction



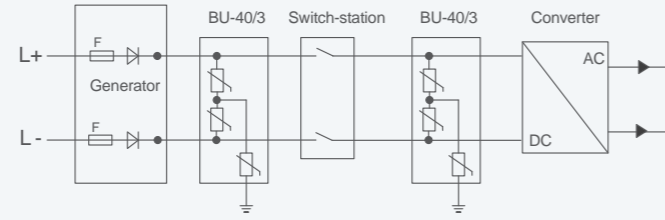
Parameter

PV DC Surge Protection Device		
Modules	3 modules	
Standard	EN 50539-11 Type 2	
Electrical Characteristics		
Open Voltage	$U_{oc Max}$	1000V
Max Continuous Operational Voltage	U_c	1000V
Nominal Discharge Current	$I_n(8/20)\mu s$	20KA
Maximum Discharge Current	$I_{max}(8/20)\mu s$	40KA
Voltage Protection Level U_p		3.8KV
Response Time	t_A	25ns
Indication		
Operating State/fault Indication	Green/Red	
Plug-in Protection Module	YES	
Type of remote signalling contact	changeover contact	
Remote Signalling Max Working Voltage	30V DC	
Remote Signalling Max Working Current	1A	
Connection And Installation		
Cross-sectional area	min.	1.5 mm ² solid / flexible
Cross-sectional area	max.	35 mm ² stranded / 25 mm ² flexible
Connection	mm ²	By screw terminal 4-25 mm ²
Torque(Nm)	Main Circuit	2.5
	Remote Contact	0.25
For mounting on 35 mm DIN rails		
Place of installation	indoor installation	
Degree of Protection	IP20	
Installation Environment		
Operating Temperature Range	TU	-40 ~+80
Relative Humidity	30%-90%	
Weight kg	0.36	

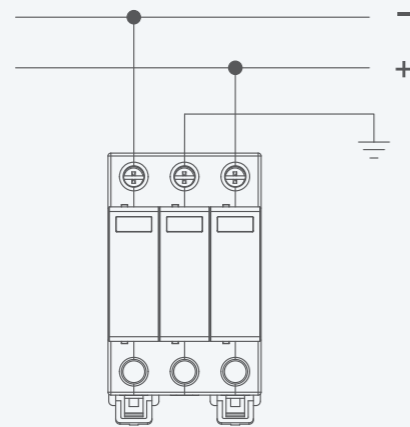
BUD-40/3
PV DC Surge
Protection Device



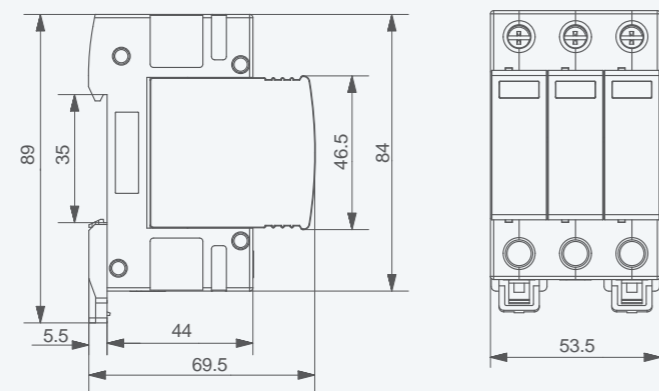
Principal Drawing



Wiring Method



Dimensions(mm)



BR-30
PV DC Fuse Holder

Welcome to our website for more information:
www.zjbeny.com



BR-30 PV DC Fuse Holder



- 1 Brand
- 2 Type
- 3 Rated Current
- 4 Rated Voltage
- 5 Fuse Size
- 6 Electrical Diagram
- 7 Status Indicator

- Photovoltaic Applications
- Max Breaking Capacity up to 20KA, Effective Protection
- The Innovation Replacing Fuse Link Touch-safe
- Led Indicator, Reminding Fuse Link Replacement
- Be Suit for 10x38mm Fuse Size
- Comply with :IEC6094-3



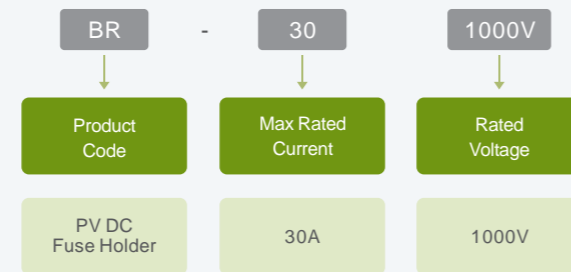
Application

ZBENY PV DC BR-30 Fuse Holder was designed and manufactured, complying with the standard IEC60947-3. The Rated Current up to 30A, rated voltage up to 1000V DC. It applied for PV DC combiner box, inverter etc, with the main function of over-current protection and effective disconnection.

Appearance Introduction



Type Instruction

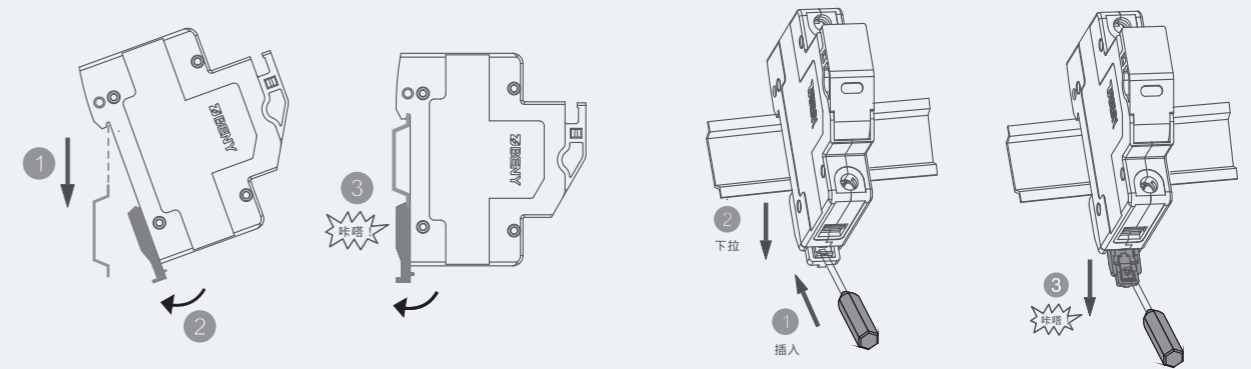


Parameter

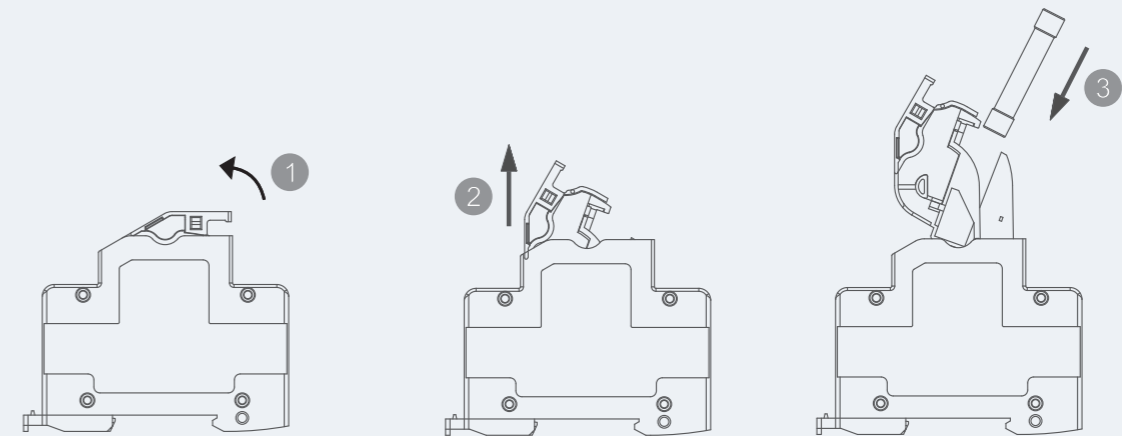
PV DC BR-30 Fuse Holder	
Pole	1P
According to	IEC 60947-3
Electrical Characteristics	
Rated Working Voltage	Ue 1000V DC
Rated Current	In 30 A
Breaking Capacity	20KA
Max Power Dissipation	3W
Contol and Indication	
Operating State/Fault Indication	Indicator Light OFF/Indicator Light ON
Connection and Installation	
Wire	2.5mm ² ~25mm ²
Terminal Screws	M5
Torque	Nm 2.5
Degree of Protection	IP20
Installation Environment	
Fuse Size	10x38 mm
Operating Temperature Range	TU -30 ~+70
For Mounting On	TH35-7.5/DIN35
Pollution Degree	3
Relative Humidity	+20 95%, +40 50%
Weight	0.07kg Per pole
Installation Class	

BR-30 PV DC Fuse Holder

Installation



Replacement Fuse



Dimensions(mm)

