

BB1H-63 DC Isolator Switches

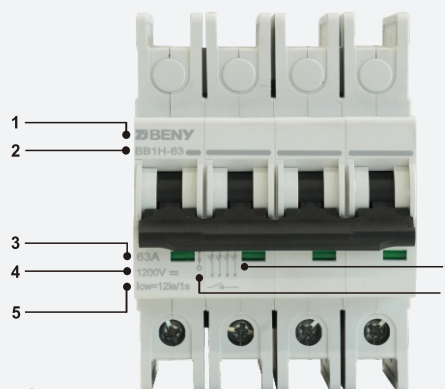


- 1 Brand
- 2 Type
- 3 Rated Current
- 4 Rated Voltage
- 5 Standard Code
- 6 Indicator
- 7 Wiring Diagram

Application

BENY BB1H-63 series PV DC Isolator switches are mainly be used in PV power generation and distribution system, that is, photovoltaic bus box, inverter and other DC electrical equipment. Rated working voltage up to 1200V DC, rated working current up to 63A, scientific arc extinguishing and current limiting system, can quickly disconnect the DC distribution system fault current, and can achieve countercurrent protection, to ensure the reliable operation of photovoltaic power generation system.

Appearance Introduction



Type Instruction

BB1H	63	4P	63A	1200V	MF	4B
Product Code	Max Rated Current	Pole	Rated Current	Rated Voltage	Accessory	Wiring Method
PV DC Isolator Switches	63A	2P 3P 4P	25A 40A 63A	600V 900V 1200V	MX: Shunt Release OF: Auxiliary Contact MF: Shunt Release & Auxiliary Contact	customization

Parameter

Electrical Characteristics

		BB1H-63		
Comply with		IEC 60947-3 / GB/T 14048.3		
Pole		2P	3P	4P
Rated Working Voltage	Ue	600V	900V	1200V
Max Rated Current	Ith	63A		
Rated Current	In	25A, 40A, 63A		
Rated Insulated Voltage	Ui	1200V DC		
Rated Impulsed Voltage	Uimp	6kV		
Rated short-time withstand current(1s)	Icw	12Ie		
Rated short-circui making capacity	Icm	20Ie		
Utiizatin category DC		DC-21B		

Service Life&Cycle Operation


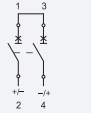
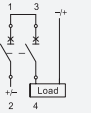
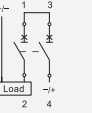
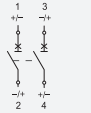
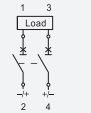
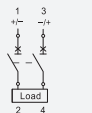
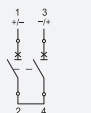
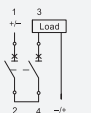
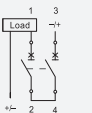

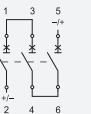
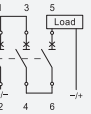
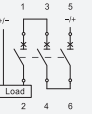
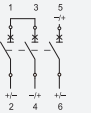
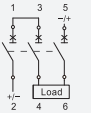
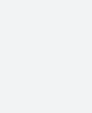
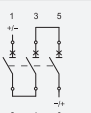
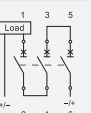
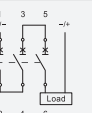
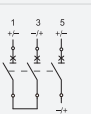
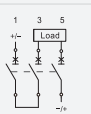
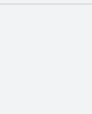
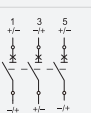

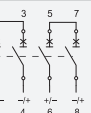
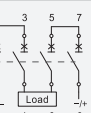
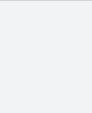

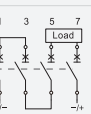
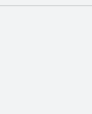

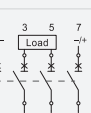
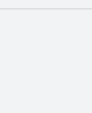
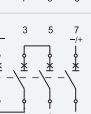
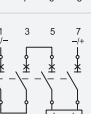
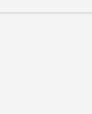

Mechanical	10000
Electrical	1500

Installation Environment

Ingress Protection	All Sides IP40, Connection Terminal IP20
Terminal Cross Section	2.5-25mm ²
Product wiring torque M5	2N·m-2.5N·m
Working Temperature	-40°C~+80°C
Storage Temperature	-40°C~+85°C
Resistance to Humidityand Heat	II (Humidity 55°C, relative humidity 95%)
Fixed installation	Fixed to the 35mm guide rail



Wiring Diagram

Type	Pole		Wiring Diagram		
	2P	2A			
		2B Default wiring method			
		2C			
	3P	3A			
		3B Default wiring method			
		3C			
		3D			
		3E		User-defined wiring method	
	4P	4A Default wiring method			
		4B			
		4C			
		4D			
		4E		User-defined wiring method	

Derating Date

Derating Temperature						
Type	Tem	-40°C-40°C	50°C	60°C	70°C	80°C
	Proportion					
BB1H-63		100%	95%	90%	85%	80%

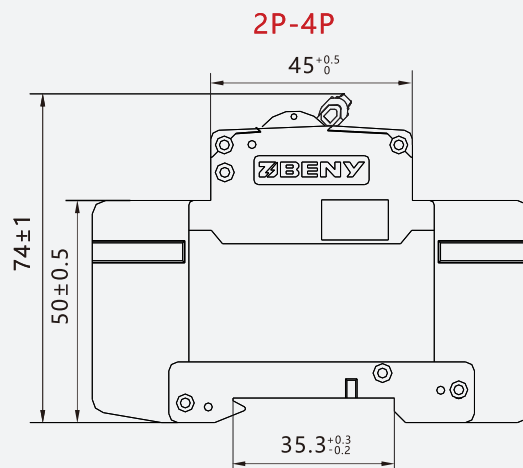
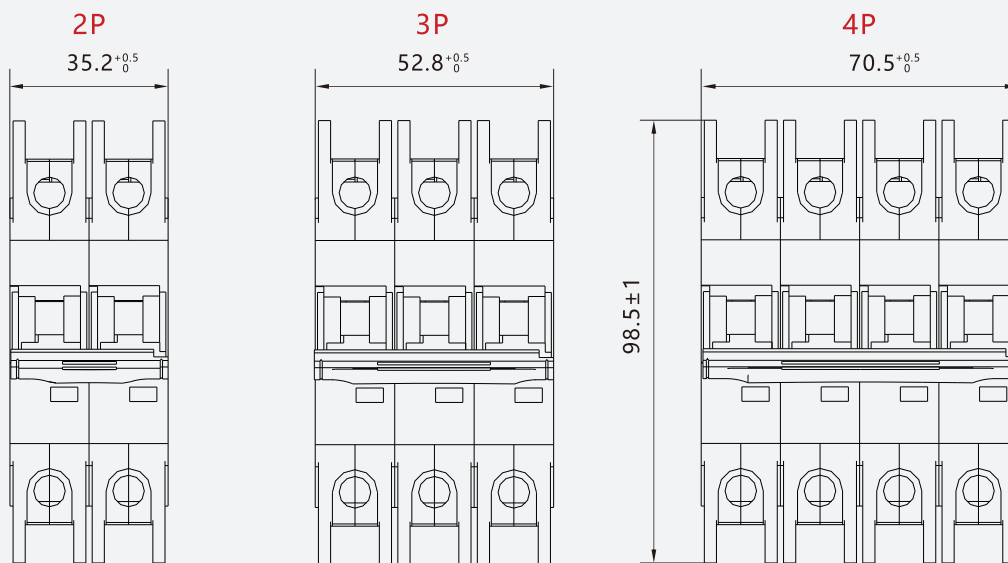
Altitude of Derating					
Altitude	2000m	3000m	4000m	5000m	
Power frequency withstand voltage	100%	100%	100%	100%	100%
Ui	100%	100%	100%	100%	100%
In	100%	100%	90%	80%	
Ue	N/A				

Installation Derating					
MCB side by side quantity	1	2-3	4-5	6-9	10 Above
Reduction coefficient	1	0.95	0.9	0.8	0.7

Installation and use

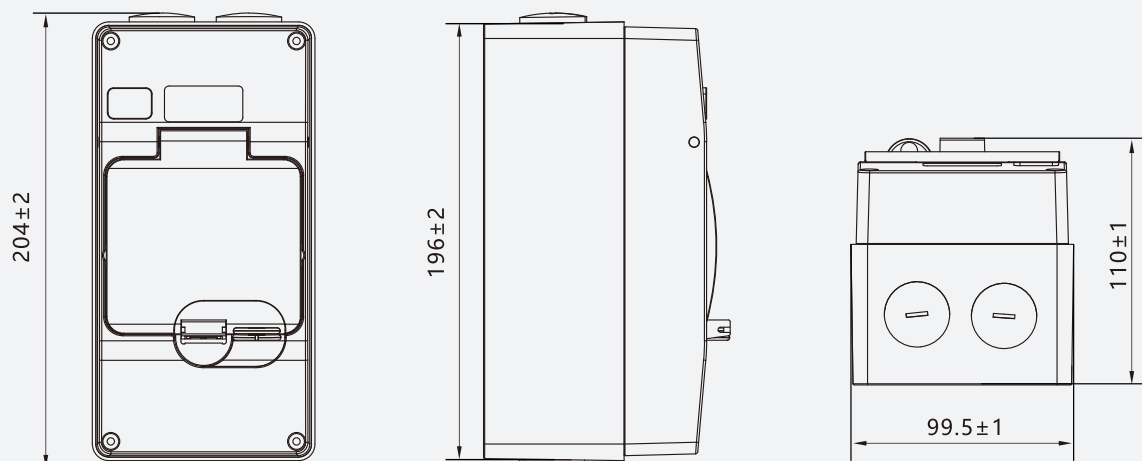
Recommended wiring section										
Current	6A	10A	13A	16A	20A	25A	32A	40A	50A	63A
Section mm ²	1	1.5	2.5	2.5	2.5	4	6	10	10	16

Dimensions(mm)



Dimensions with IP65 Waterproof Enclosure(mm)

Choose the waterproof box according to your needs, and the maximum installation width of the waterproof box is 72mm.



BY-OF

Type Instruction **BY-OF** – Auxiliary contact

- Auxiliary contact synchronous with main contacts of device
- According IEC 60947-5-1, GB/T14048.5

Parameter

Electrical Parametes

Product parameters	AC 12	le=3A Ue=415V
		le=6A Ue=240V
	DC 12	le=1A Ue=110V
		le=2A Ue=48V
		le=6A Ue=24V
Rated Insulated Voltage U_i		500V
Rated Impulsed Voltage U_{imp}		4kV
Min.op.current per contact I_{min}		10mA
Min.op.voltage per contact U_{min}		11V DC
Rated frequency		50/60Hz

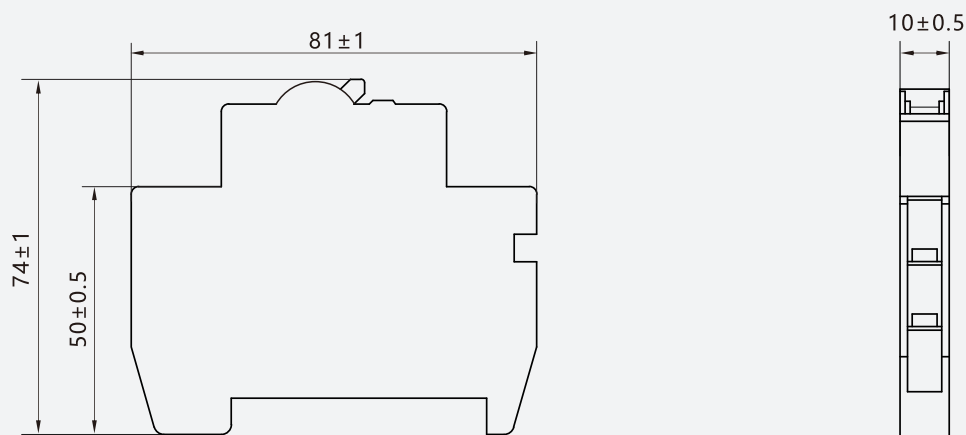
Mechanical parameters

Mounting		Fixed to the 35mm guide rail
Degree of protection		IP20
Terminals capacity		1mm ² -2.5mm ²
Fastening torque of terminals		0.5N·m-0.7N·m
Working temprature		-40~+80°C

Wiring Method

Show	Wiring Diagram
OFF	
ON	

Dimensions(mm)



BY-MX

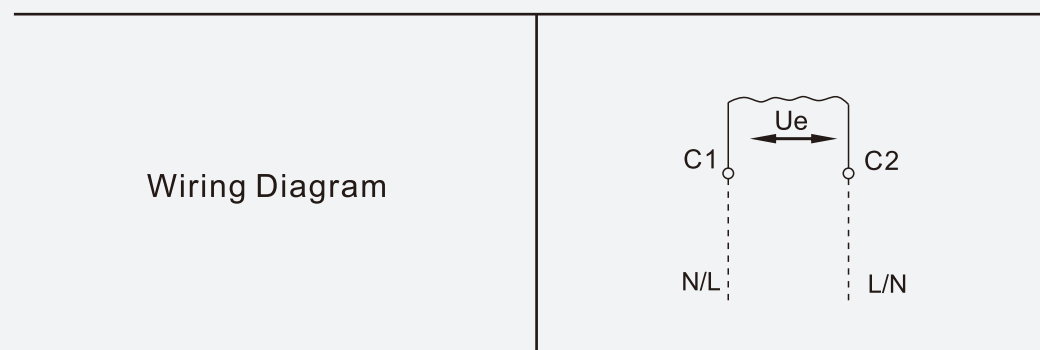
Type Instruction **BY-MX** – **Shunt trip**

- Shunt trip synchronous with main contacts of device
- According GB/T 14048.1

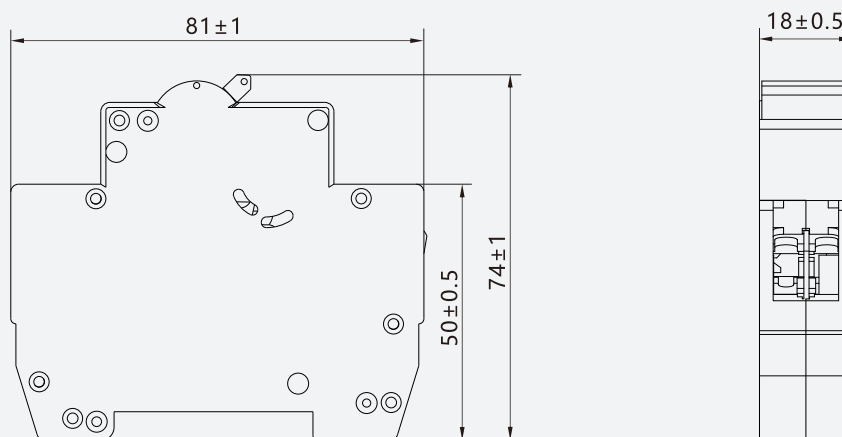
Parameter

Electrical Parametes		
Rated op. voltage	AC	Ue=110/415V
		Ue=24/48V
	DC	Ue=24/48V
Conduction time		< 1s
Min.op.voltage		Ue*70%
Max. op. voltage		Ue*110%
Working current		0.5A-5A
Operation frequency		6 times per minute
Rated frequency		50/60Hz
Mechanical parameters		
Mounting		Fixed to the 35mm guide rail
Degree of protection		IP20
Terminals capacity		1mm ² ~2.5mm ²
Fastening torque of terminals		0. 8N. m-1N. m
Working temprature		-40~+80°C

Wiring Method



Dimensions(mm)



BY-MF

Type Instruction **BY-MF** – **Shunt trip&Auxiliary contact**

- Shunt assist one of the ports shared
- According GB/T 14048.1, GB/T14048.5, IEC 60947-5-1

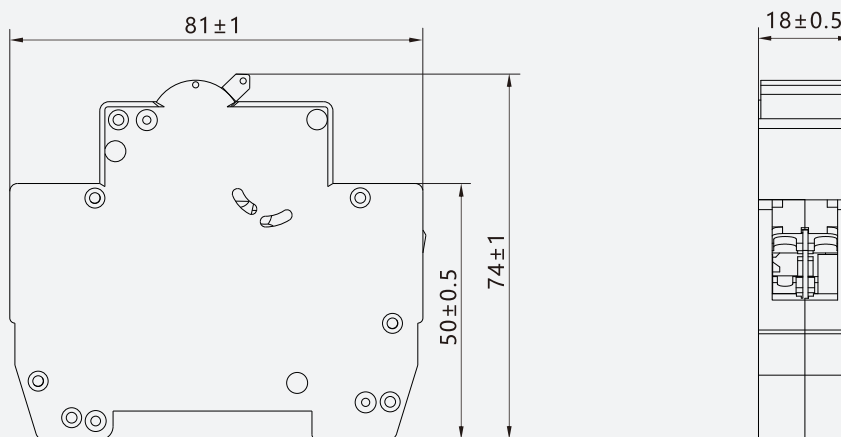
Parameter

Electrical Parametes			
Product parameters	Shunt trip	AC	Ue=110/415V
			Ue=24/48V
	Auxiliary contact	DC	Ue=24/48V
		AC	Ie=2 Ue=250V
		DC	Ie=5 Ue=12-125V
			Ie=5 Ue=12-36V
Rated frequency		50/60Hz	
Shunt trip parameters	Conduction time		< 1s
	Min.op.voltage		Ue*70%
	Max. op. voltage		Ue*110%
	Working current		0.5A-5A
	Operation frequency		6 times per minute
Mechanical parameters			
Mounting		Fixed to the 35mm guide rail	
Degree of protection		IP20	
Terminals capacity		1mm ² -2.5mm ²	
Fastening torque of terminals		0.5N·m-0.7N·m	
Working tempreture		-40~+80°C	

Wiring Method

Show	Auxiliary contact Wiring Diagram	Shunt Release Wiring Diagram
OFF		
ON		

Dimensions(mm)



BY-MF

Type Instruction **BY-MF** – **Shunt trip&Auxiliary contact**

- Shunt auxiliary independent port
- According GB/T 14048.1, GB/T14048.5, IEC 60947-5-1

Parameter

Electrical Parametes			
Product parameters	Shunt trip	AC	Ue=110/415V
			Ue=24/48V
	Auxiliary contact	DC	Ue=24/48V
		AC	Ie=2 Ue=250V
		DC	Ie=5 Ue=12-125V
			Ie=5 Ue=12-36V
Rated frequency		50/60Hz	
Shunt trip parameters	Conduction time		< 1s
	Min.op.voltage		Ue*70%
	Max. op. voltage		Ue*110%
	Working current		0.5A-5A
	Operation frequency		6 times per minute
Mechanical parameters			
Mounting		Fixed to the 35mm guide rail	
Degree of protection		IP20	
Terminals capacity		1mm ² -2.5mm ²	
Fastening torque of terminals		0.5N·m-0.7N·m	
Working tempreture		-40~+80°C	

Wiring Method

Show	Auxiliary contact Wiring Diagram	Shunt Release Wiring Diagram
OFF		
ON		

Dimensions(mm)

