

BB1H-63
DC Isolator Switches

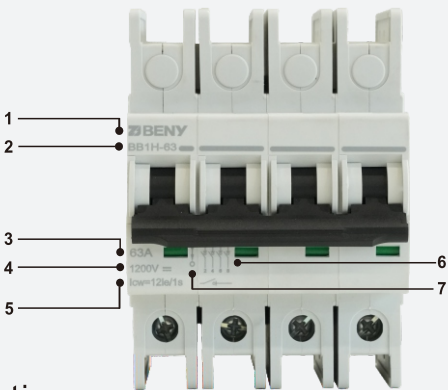


- 1 Brand
- 2 Type
- 3 Rated Current
- 4 Rated Voltage
- 5 Standard Code
- 6 Indicator
- 7 Wiring Diagram

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

Type	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

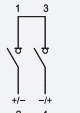
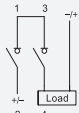
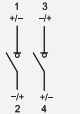
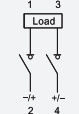
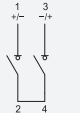
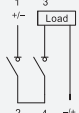
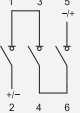
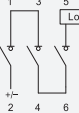
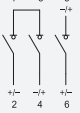
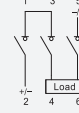
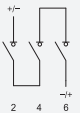
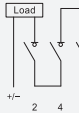
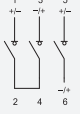
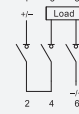
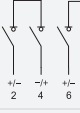
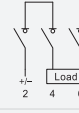
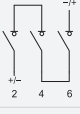
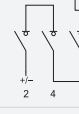
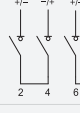
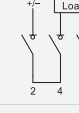
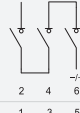
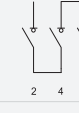
Mechanical	10000
Electrical	1500

Installation Environment

Ingress Protection	All Sides IP40,Connection TerminalIP20
Terminal Cross Section	2.5-25mm²
Product wiring torque M5	2N·m-2.5N·m
Working Temperature	-40℃~+80℃
Storage Temperature	-40℃~+85℃
Resistance to Humidityand Heat	II (Humidity 55℃, relative humidity 95%)
Fixed installation	Fixed to the 35mm guide rail



接线图

产品	极数	接线图	
	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					
Tem Proportion Type	-40°C-40°C	50°C	60°C	70°C	80°C
BB1H-63	100%	95%	90%	85%	80%

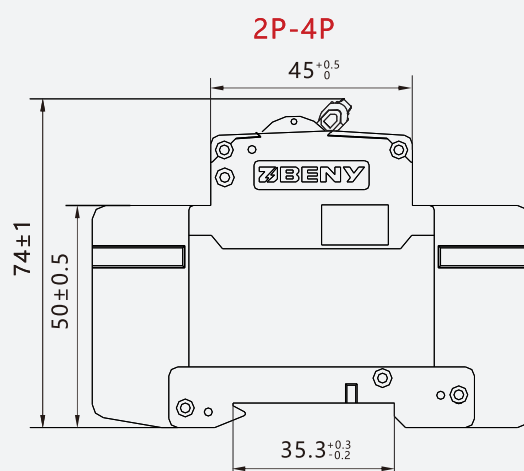
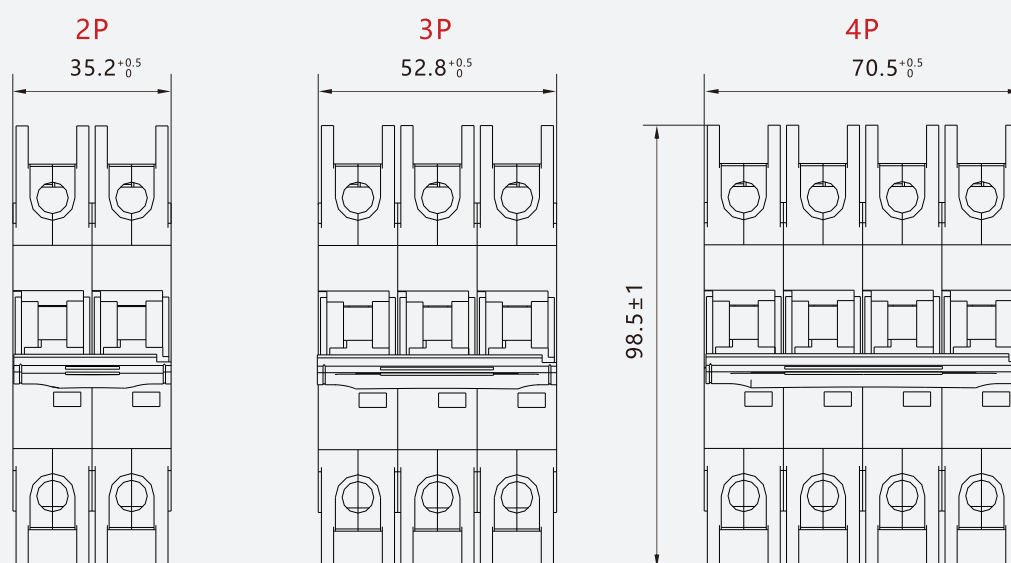
Altitude of Derating					
Altitude	2000m	3000m	4000m	5000m	
Power frequency withstand voltage	100%	100%	100%	100%	100%
Ui	100%	100%	100%	100%	100%
In	100%	100%	90%	80%	
Ue	N/A				

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

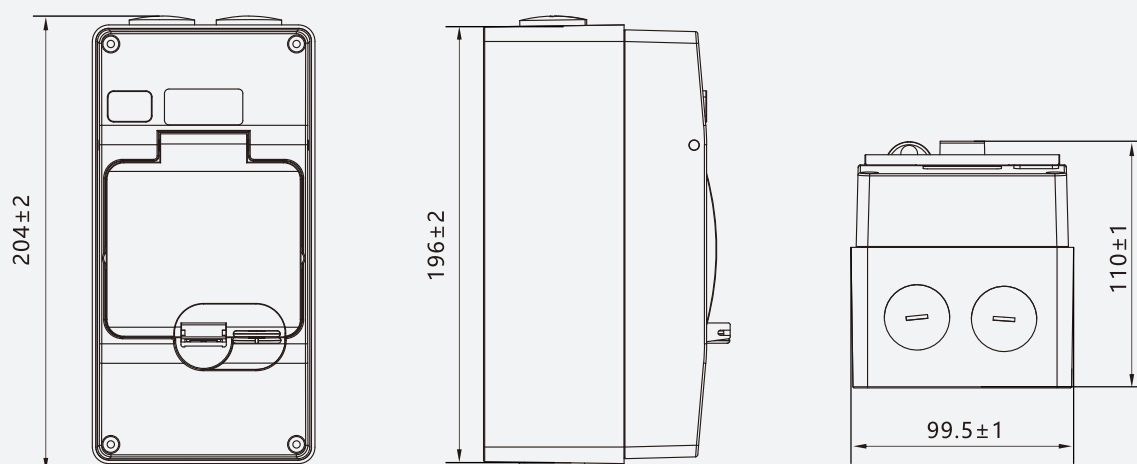
Recommended wiring section										
Current	6A	10A	13A	16A	20A	25A	32A	40A	50A	63A
Section mm ²	1	1.5	2.5	2.5	2.5	4	6	10	10	16

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

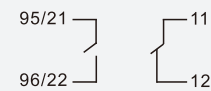
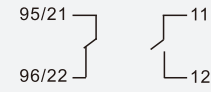
Type Instruction BY-OF – Auxiliary contact

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

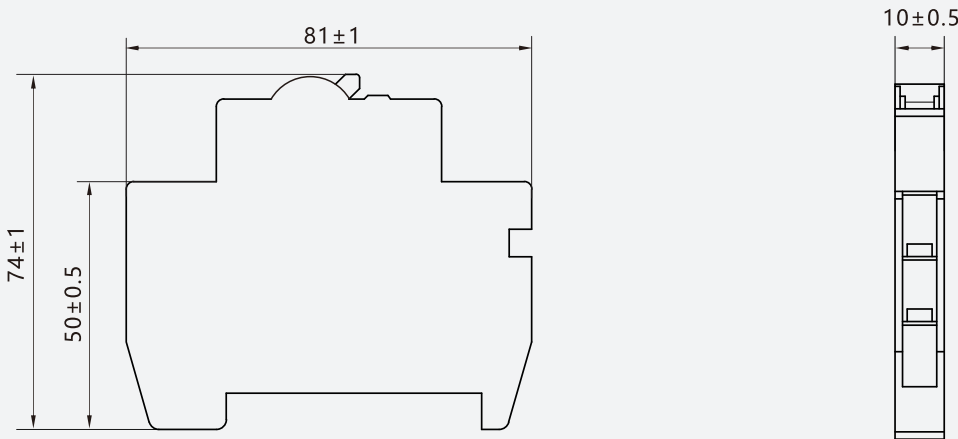
Parameter

Electrical Parametes		
Product parameters	AC 12	Ie=3A Ue=415V
		Ie=6A Ue=240V
	DC 12	Ie=1A Ue=110V
		Ie=2A Ue=48V
		Ie=6A Ue=24V
Rated Insulated Voltage	Ui	500V
Rated Impulsed Voltage	Uimp	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 temperture		-40~+80℃

Wiring Method

Show	Wiring Diagram
OFF	
ON	

Dimensions(mm)



BY-MX

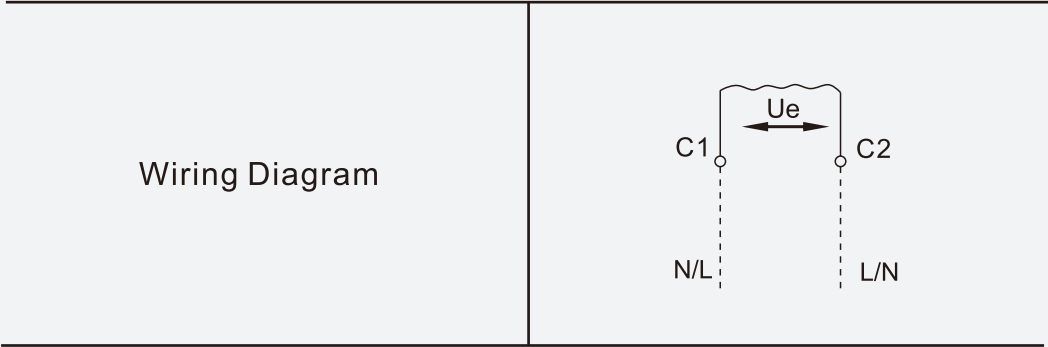
Type Instruction **BY-MX** – **Shunt trip**

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

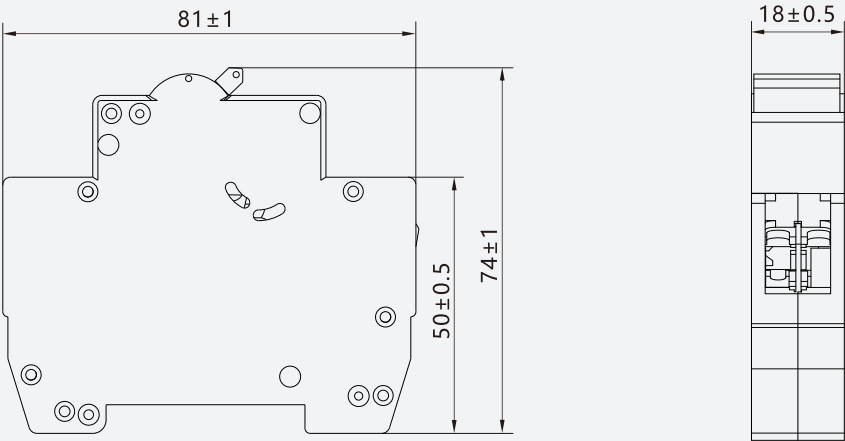
Parameter

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 tempreture	-40~ +80℃	

Wiring Method



Dimensions(mm)



BY-MF

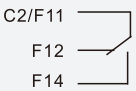
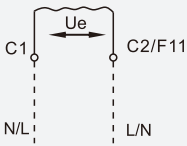
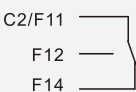
Type Instruction **BY-MF** – **Shunt trip&Auxiliary contact**

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

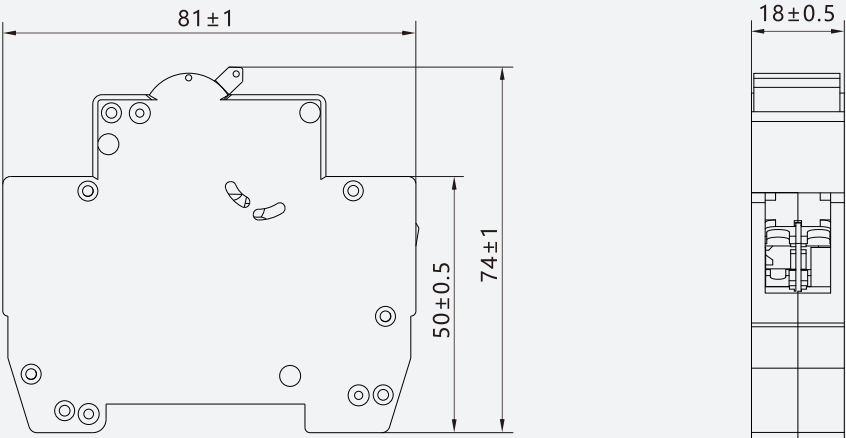
Parameter

Electrical Parametes				
Product parameters		Shunt trip	AC	Ue=110/415V
				Ue=24/48V
		Auxiliary contact	DC	Ue=24/48V
			AC	Ie=2 Ue=250V
				Ie=5 Ue=12-125V
	DC	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		1mm²-2.5mm²		
Fastening torque of terminals		0.5N·m-0.7N·m		
Working tempreture		-40 ~ +80℃		

Wiring Method

Show	Auxiliary contact Wiring Diagram	Shunt Release Wiring Diagram
OFF		
ON		

Dimensions(mm)



BY-MF

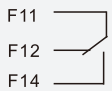
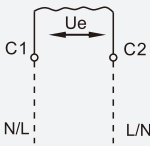
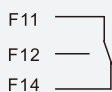
Type Instruction **BY-MF** – **Shunt trip&Auxiliary contact**

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

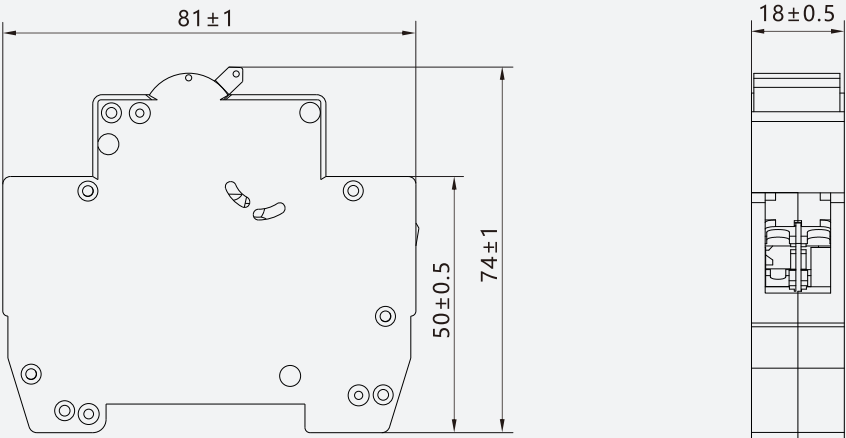
Parameter

Electrical Parametes				
Product parameters		Shunt trip	AC	Ue=110/415V
				Ue=24/48V
		Auxiliary contact	DC	Ue=24/48V
			AC	Ie=2 Ue=250V
				Ie=5 Ue=12-125V
	DC	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℃		

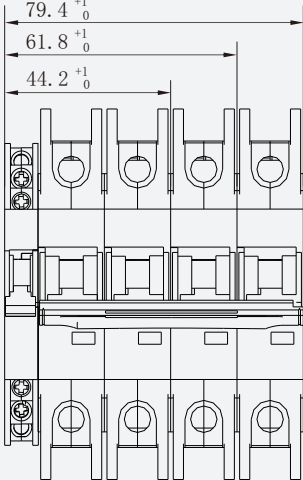
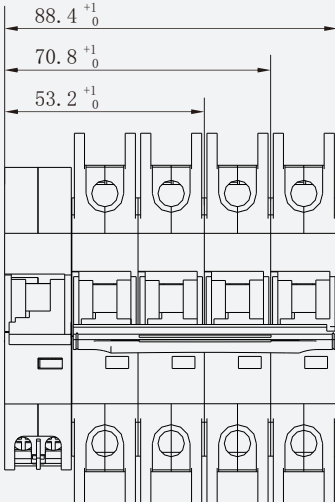
Wiring Method

Show	Auxiliary contact Wiring Diagram	Shunt Release Wiring Diagram
OFF		
ON		

Dimensions(mm)



Product assembly accessory diagram(mm)

Type	Dimensions(mm)
BY-OF	4P+OF 79.4⁺¹₀ 3P+OF 61.8⁺¹₀ 2P+OF 44.2⁺¹₀ 
BY-MX	4P+MX 88.4⁺¹₀ 3P+MX 70.8⁺¹₀ 2P+MX 53.2⁺¹₀ 
BY-MF	4P+MF 88.4⁺¹₀ 3P+MF 70.8⁺¹₀ 2P+MF 53.2⁺¹₀ 