

# DC Miniature Circuit Breaker

PEBS-H series  
(Battery switch )



**PROJOY**  
electric

- Switch To Safety! -



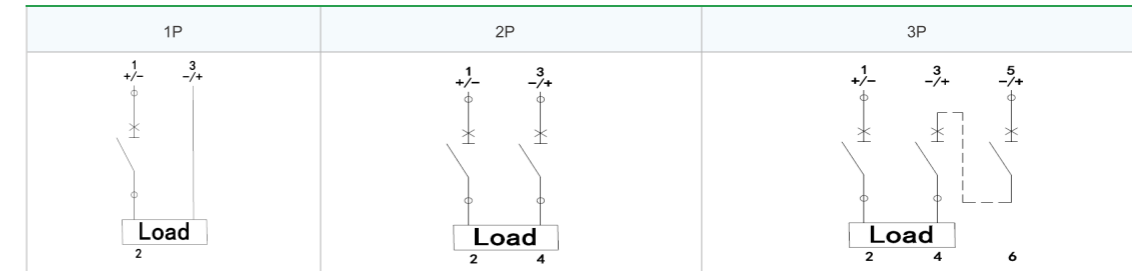
**PROJOY**  
electric

- Switch To Safety! -

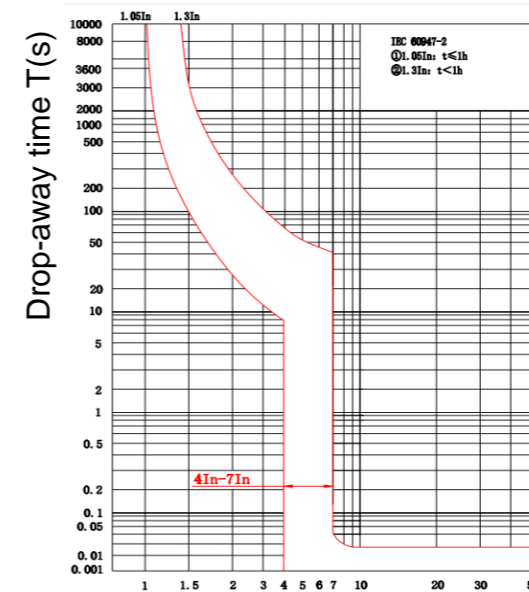
## Select Code

PEBS	H	F	C	P	V	T	W	A
Projoy Energy Battery Breaker	High voltage	Frame current	Rated current	Poles	Rated voltage	Trip type	width/1poles	ACC
		50	2A 4A 6A 10A 13A 16A 20A 25A 32A 40A 50A	1P 2P 3P	600V 1000V 1500V	B C	18mm	MX+OFboth in one module MX: Voltage optional 12V -24V or 48V - 60V OF:A pair of auxiliary contacts MX MX:Voltage optional 12V -24V or DC48V - 60V OF:One is always open and the other is always closed

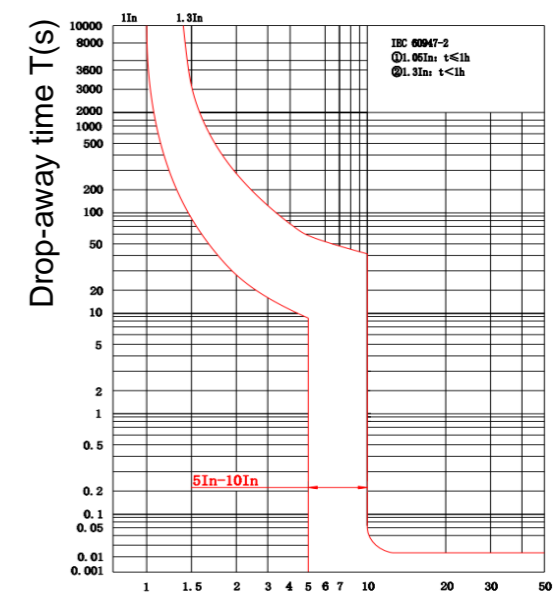
## Contact Configuration



## Tripping Characteristics



B Type Rated current multiple I/In



C Type Rated current multiple I/In

## HIGH CRAFTSMANSHIP AND HIGH STANDARDS



Small Volume



Short circuit Protection



Overload Protection



Flame Retardant



High Breaking Capability



Arcing Short



Complete Accessories



Multiple Wiring

## Technical data

According to : IEC/EN 60947-2		1P	2P	3P
Pole				
MAX working voltage DC		600V	1000V	1500V
Electrical endurance	Actual	1500Cycles		
	Standard	300 Cycles		
Rated Ultimate Short-Circuit Breaking Capacity Icu		1.5KA		
Read Service short -Circuit Breaking Capacity Ics		1.5KA		
Mechanical life	Actual	>20000Cycles		
	Standard	10000 Cyles		
Frame class		50A		
Rated Current In		50A,40A, 32A, 25A,20A,16A , 13A,10A,6A,4A,2A		
Rated Insulation Voltage Ui		1500V		
Rated Impulse Withstand Voltage Uimp		8KV		
Tripping Characteristics		B/C		
Tripping Type		Thermal Magnetic		
Overvoltage Category		III		
Pollution Degree		3		
Ingress Protection		IP40; Wiring port IP20		
Resistance to humidity and heat		Class 2		
Relative Humidity		≤ 95 %		
Wiring knob		2.5 N.m		
Ambient Temperature		-30°C~70°C		
Storage Temperature		-40°C~85°C		
Installation Method		DIN		
Elevation		≤2000m		
Dimension		Width: 54.0mm(3P); 36.0mm(2P); 18.0mm(1p)		
		High:99.2mm		
		Depth:76.4mm		
Weight		0.092Kg/Pole		

## Reduction coefficient

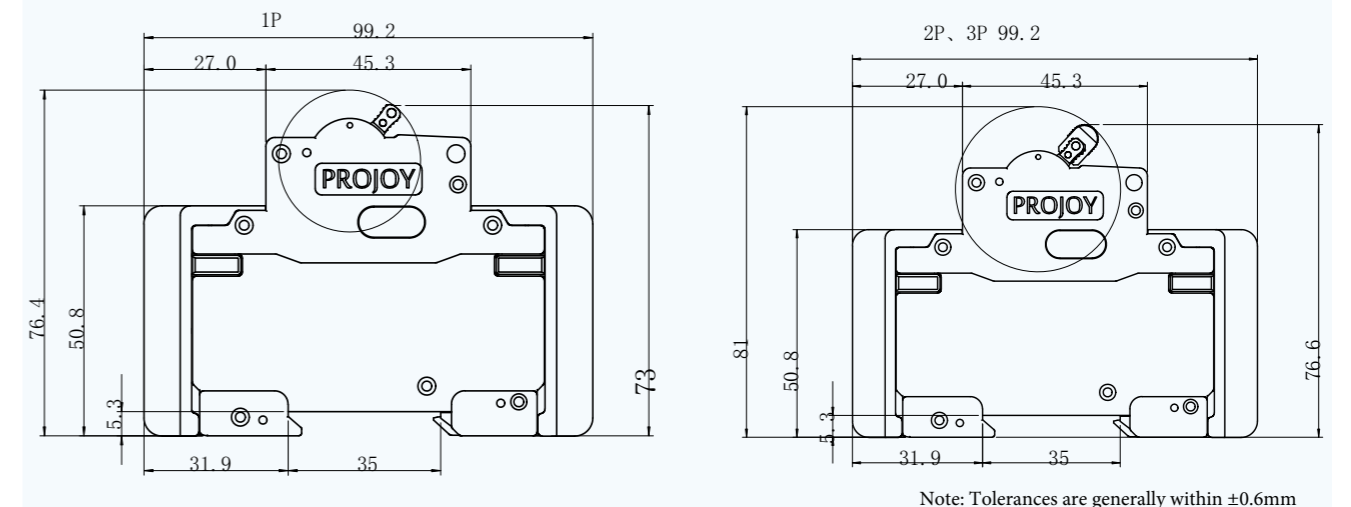
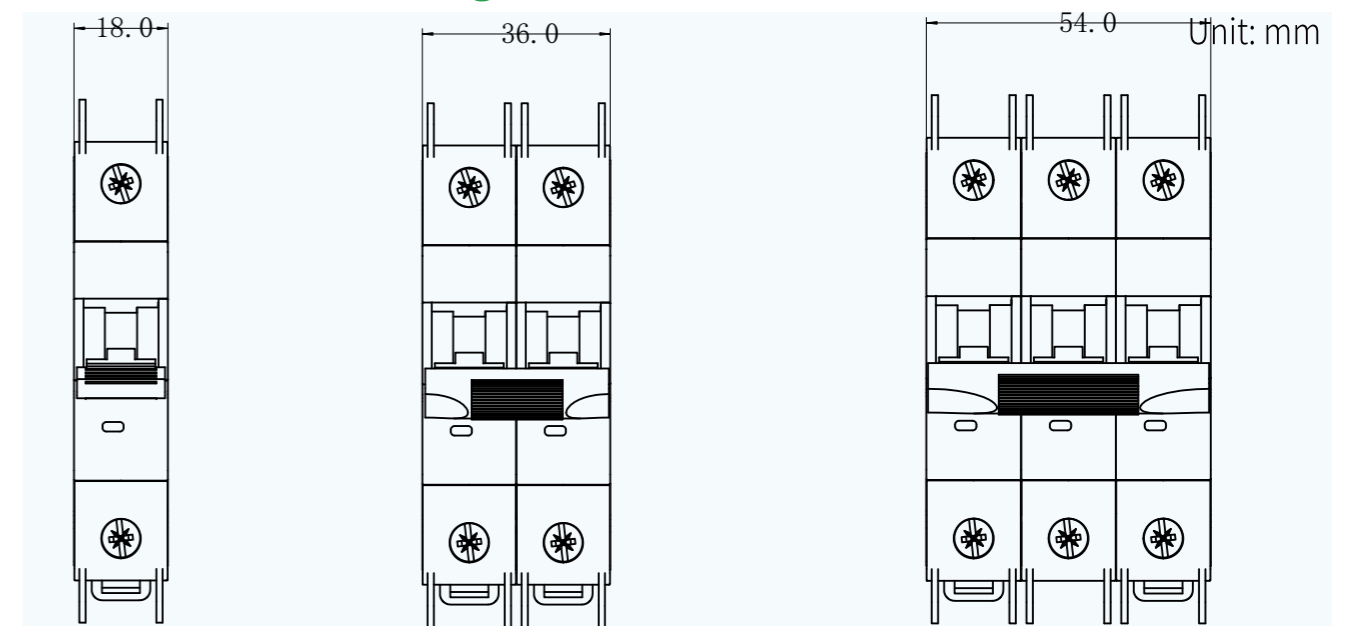
Temperature reduction coefficient 30°C		-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70
Temperature coefficient		1.300	1.275	1.250	1.225	1.200	1.175	1.150	1.125	1.100	1.075	1.050	1.025	1	0.975	0.950	0.925	0.900	0.875	0.850	0.825	0.800
In (A)		65.0	63.8	62.5	61.25	60.0	58.8	57.5	56.3	55.0	53.8	52.5	51.3	50	48.8	47.5	46.3	45.0	43.75	42.5	41.3	40.0

Reduction Coefficient Of Plateau Area					
Altitude (m)		2000	3000	4000	5000
Rated Current (In)		1	0.97	0.91	0.86
Rated Insulation (Ui)		1	0.90	0.82	0.76
Power-Frequency Dielectric Strength		1	0.90	0.82	0.76
Rated Impact Tolerance Voltage (Uimp)		1	0.90	0.82	0.76
Values Of Rated Shour-Circuit Capacity (Icn)		1	0.87	0.77	0.67
Electrical Life (Cycles)		1	0.87	0.77	0.67

## Technical data

Harness specification selection		
Current specification(A)	Cross sectional area of wire(mm <sup>2</sup> )	Wiring knob (N.m)
2-6	1	2.5
10	1.5	
13-20	2.5	
25	4.0	
32	6.0	
40 50	10	

## Dimensional drawing

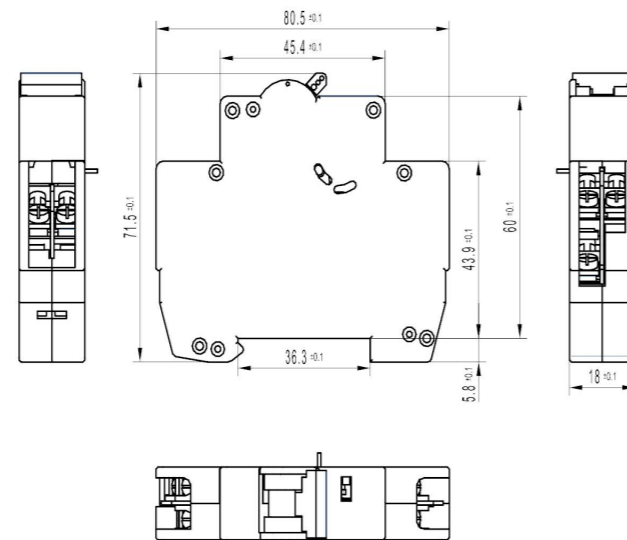


Note: Tolerances are generally within ±0.6mm

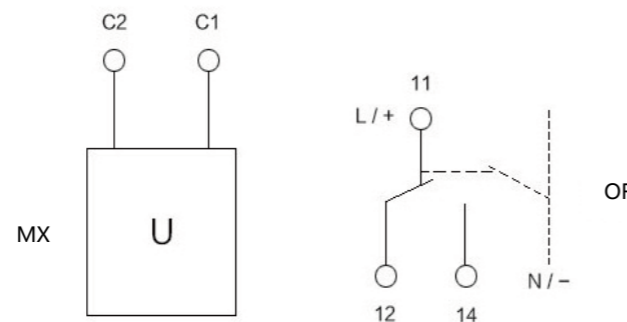
## Technical data

Shunt trip release ,MX + Auxiliary contact, OF (Passive)		
Rated insulation voltage	415V	
Rated control voltage	DC: 12-24V	DC: 48-60V <small>NOTE: Other voltages indicate when placing an order</small>
Minimum trip current	0.5 A	1.0 A
Pull-in voltage	(0.7~1.1) Us	
MAX trip time	<20ms	
auxiliary contact	3A 240V/415VAC	
Wiring torque	0.3~0.8 N.m	
Wiring capacity	1~2.5mm <sup>2</sup>	

Accessory size



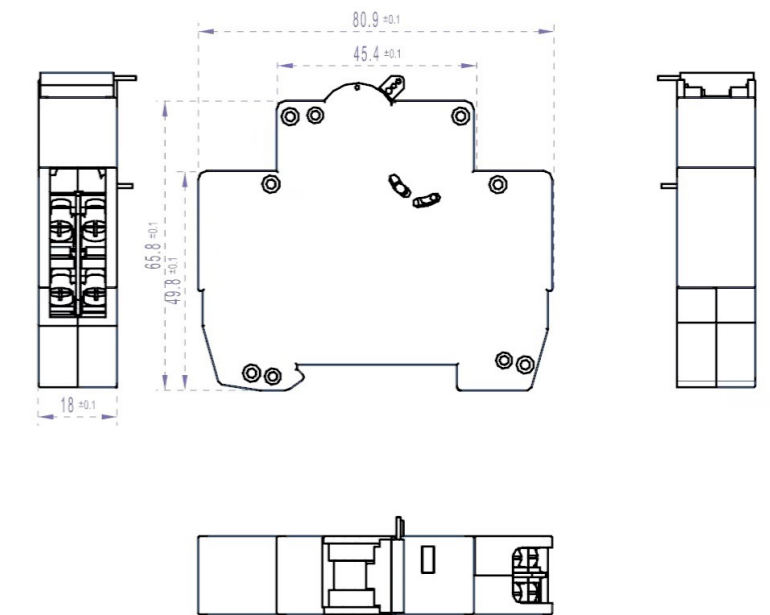
Wiring principle



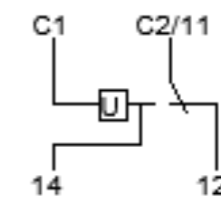
## Technical data

Shunt trip release ,MX + Auxiliary contact, OF (Active)		
Rated insulation voltage	415V	
Rated control voltage	DC: 12-24V	DC: 48-60V <small>NOTE: Other voltages indicate when placing an order</small>
Minimum trip current	0.5 A	1 A
MAX trip time	<20ms	
Pull-in voltage	(0.7~1.1) Us	
auxiliary contact	3A 240V/415VAC	
Wiring torque	0.3~0.8 N.m	
Wiring capacity	1~2.5mm <sup>2</sup>	

Accessory size



Wiring principle



## Technical data

PEBS-H MX		
Rated insulation voltage	415V	
Rated control voltage	DC: 12-24V	DC: 48-60V <small>NOTE: Other voltages indicate when placing an order</small>
Minimum trip current	0.5 A	1 A
Pull-in voltage	<20ms	
MAX trip time	(0.7~1.1) Us	
Wiring torque	0.3~0.8 N.m	
Wiring capacity	1~2.5mm <sup>2</sup>	
Accessory size		
Wiring principle		

## Technical data

PEBS-H OF		
working voltage	Rated current (A)	Use classes
AC 240V/415V	6A/3A	AC12
DC24V/DC48V/DC110-220V/DC250V	6A/2A/1A/0.4A	DC12
Auxiliary contact OF		
Accessory size		
Wiring principle		



编订	参数校核	批准
严九元	徐明	曹华惠

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electric  
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