

# DC Miniature Circuit Breaker

PEBS-H-125 Series



**PROJOY**  
electric  
- Switch To Safety! -

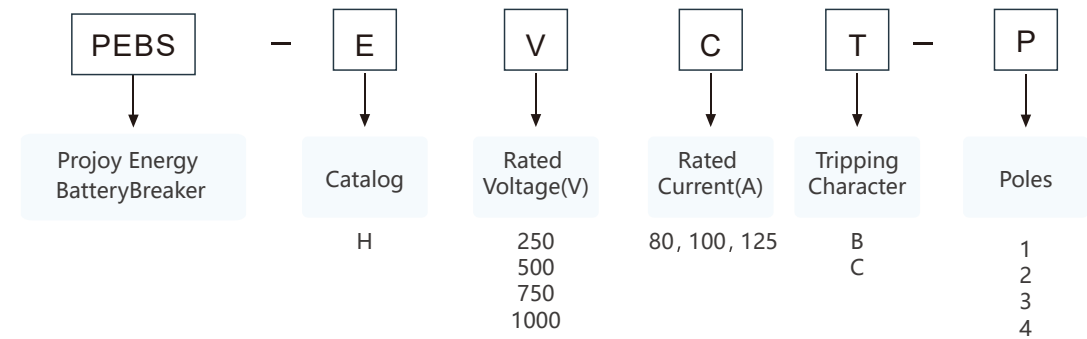


## HIGH CRAFTSMANSHIP AND HIGH STANDARDS

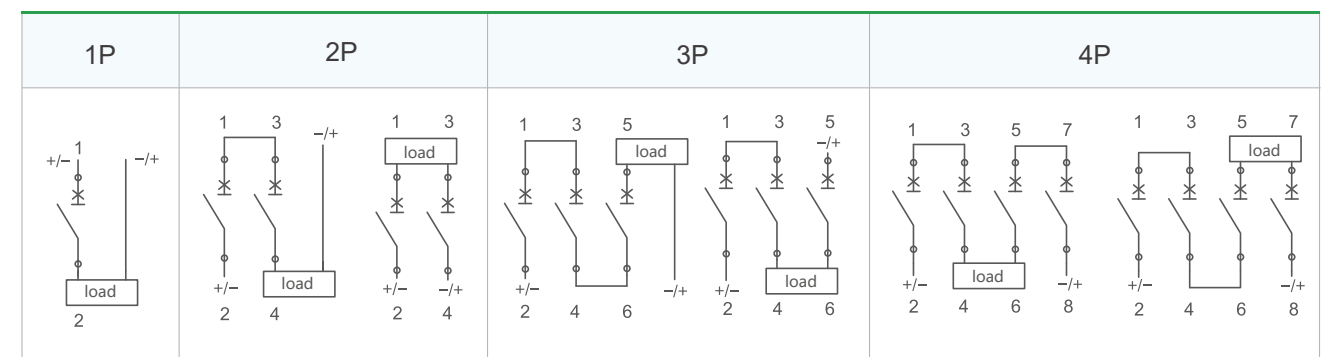
-   
**Small Volume**
-   
**Short circuit Protection**
-   
**Overload Protection**
-   
**Flame Retardant**
-   
**High Breaking Capability**
-   
**Arcing Short**
-   
**Complete Accessories**
-   
**Multiple Wiring**

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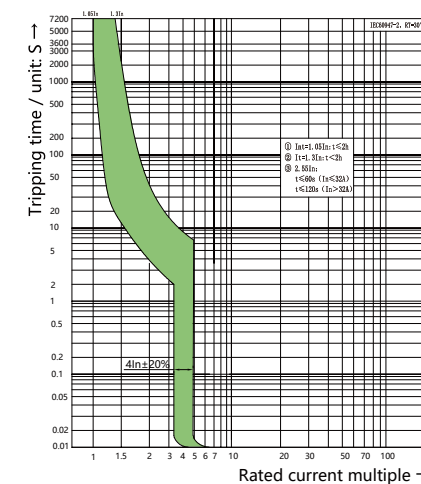
### Select Code



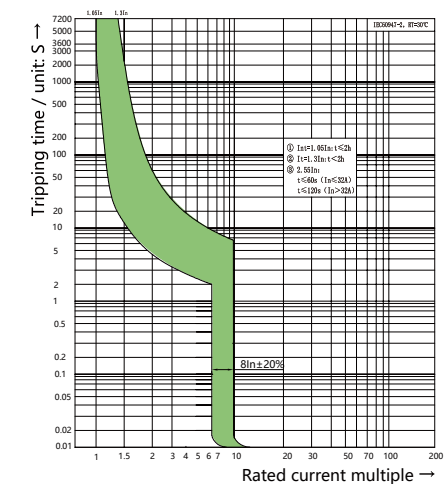
### Contact Configuration



### Tripping Characteristics



B Curve  $4I_n \pm 20\%$   
Applicable rated current 80A-125A



C Curve  $8I_n \pm 20\%$   
Applicable rated current 80A-125A

## Technical data

PEBS-H-125

According to EN60947-2, AS/NZS IEC 60947.2:				
Pole	1P	2P	3P	4P
Rated Working Voltage Ue	250 V DC	500 V DC	750 V DC	1000 V DC
Frame Current	125A			
Rated Current In	80A, 100A, 125A			
Rated Insulation Voltage Ui	1000V			
Rated Impulse Withstand Voltage Uimp	6kV			
Tripping Characteristics	B/C			
Tripping Type	Thermal Magnetic			
Rated Ultimate Short-Circuit Breaking Capacity Icu	6kA			
Rated Service Short-Circuit Interrupting Capacity Ics	6kA			
Electrical Life	Actual	Average 1000 Cycles		
	Standard	200 Cycles		
Mechanical Life	Actual	> 10000 Cycles		
	Standard	9700 Cycles		
Overvoltage Category	III			
Pollution Degree	3			
Ingress Protection	IP40; Wiring port IP20			
Resistance to humidity and heat	Class 2			
Relative Humidity	≤ 95 %			
Vibration	acc. to IEC60068-2-6			
Shocks	acc. to IEC60068-2-27			
Terminal capacity	2.5~35mm <sup>2</sup>			
Fastening Torque of Terminals	3.5 Nm			
Ambient Temperature	-30°C~70°C			
Storage Temperature	-40°C~85°C			
Installation Method	DIN35			
Elevation	≤2000m			
Dimension	length: 89mm			
	Width: 108mm (4P), 81mm (3P), 54mm (2P), 27mm (1P)			
	High: 75.5mm			
Weight	0.17kg/Pole			

## Accessories

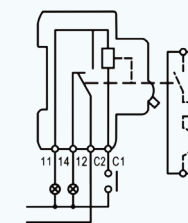
### Technical parameter of shunt trip release, MX

working voltage Us	DC: 24 ~ 48V
Maximum deduction time	< 10ms
Coil resistance	1.8Ω
Mechanical life	10000 times
Electrical life	4000 times
Torque	0.3 ~ 0.8Nm
Wiring ability	1 ~ 2.5mm <sup>2</sup> (hard line), 1 ~ 2.5mm <sup>2</sup> (Soft line, with hoop line terminal)
Range of working temperature	-30 °C ~ +70 °C
Environmental conditions	There should be no medium that causes the danger of explosion, nor does it have no harmful gases and electric conductivity dust that corrodes and damage insulation.
Assembly position	Left side of the circuit breaker
Installation conditions	DIN35mm

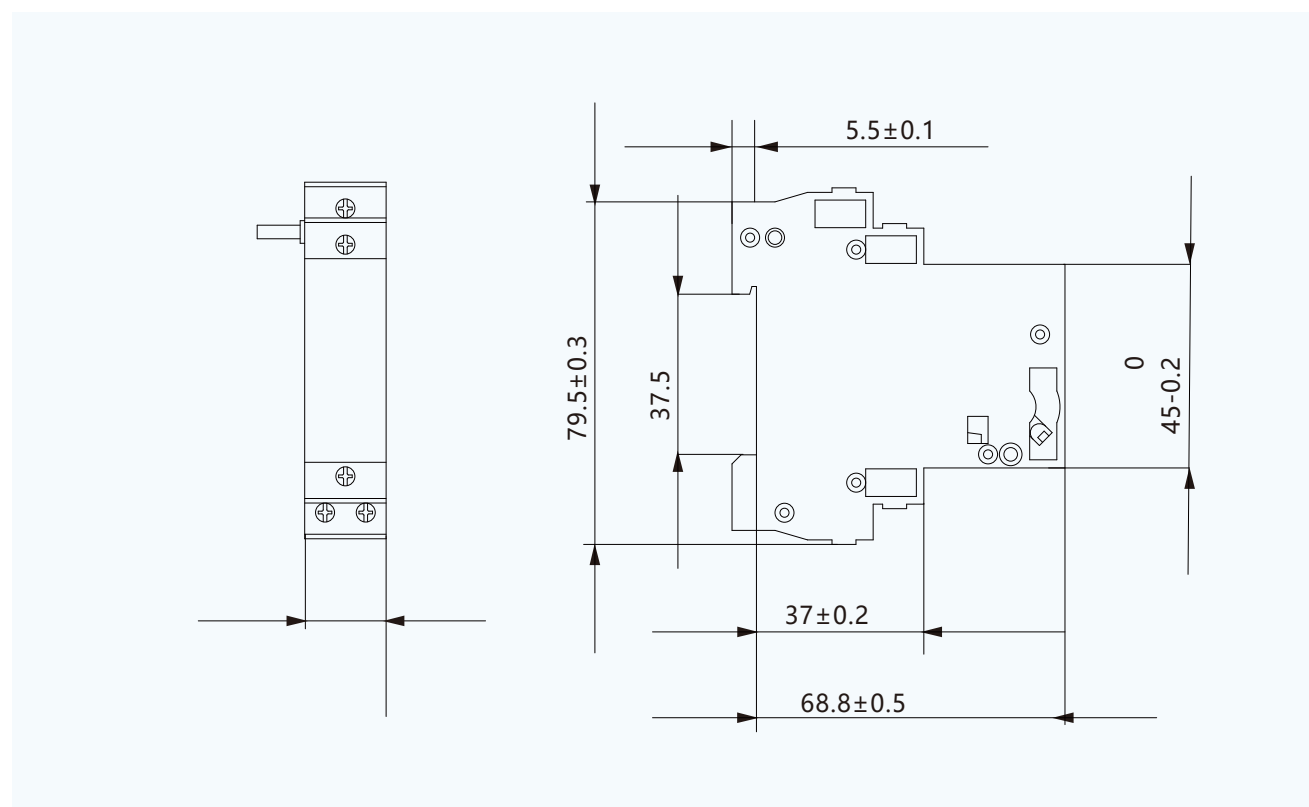
### Technical parameters auxiliary contact, OF

Contact capacity of OF	AC13: Ie=3A; Ue=250V AC15: Ie=2A; Ue=250V DC12: Ie=0.5A; Ue=110V
Minimum operating voltage	5V
Run the minimum current	10mA
Rated insulation voltage	415V
Rating restricted short -circuit current Ik	1000A
Conventional thermal current Ith	4A
Mechanical life	10000 times
Electrical life	4000 times
Torque	0.3 ~ 0.8NM
Wiring ability	1 × 1.0 ~ 1 × 2.5mm <sup>2</sup>
Number of contacts	1 NO contact, 1 NC contact
Range of working temperature	-30 °C ~ +70 °C
Environmental conditions	There should be no medium that causes the danger of explosion, nor does it have no harmful gases and electric conductivity dust that corrodes and damage insulation.
Assembly position	Left side of the circuit breaker
Installation conditions	DIN35mm

### Wiring diagrams



## Dimensions of MX+OF



## Reduction coefficient

### Temperature reduction coefficient

Temperature	-30℃	-25℃	-20℃	-15℃	-10℃	-5℃	0℃	5℃	10℃	15℃	20℃	30℃	35℃	40℃	45℃	50℃	55℃	60℃	65℃	70℃
The rated work current coefficient	1.242	1.223	1.204	1.182	1.161	1.143	1.127	1.103	1.079	1.063	1.047	1	0.984	0.968	0.952	0.922	0.904	0.891	0.872	0.844

### Altitude reduction coefficient

Altitude m	2000	3000	4000	5000
The rated working current coefficient	1	0.96	0.91	0.86
The rated work voltage coefficient	1	1	1	1
Rated industrial frequency resistance coefficient	1	0.9	0.82	0.71
The rated impact tolerance voltage coefficient	1	0.9	0.82	0.71
The rated ultimate short-circuit capacity and electronic life coefficient	1	0.82	0.7	0.6

### MCB Side-by-side installation reduction coefficient

Number of MCBs	1	2~3	4~5	6~8	9~10
$I_n \leq 25A$ coefficient	1	0.96	0.9	0.8	0.7
$32A \leq I_n \leq 63A$ coefficient	1	0.92	0.8	0.7	0.6
$80A \leq I_n \leq 125A$ coefficient	1	0.9	0.8	0.7	/

## Dimensions

