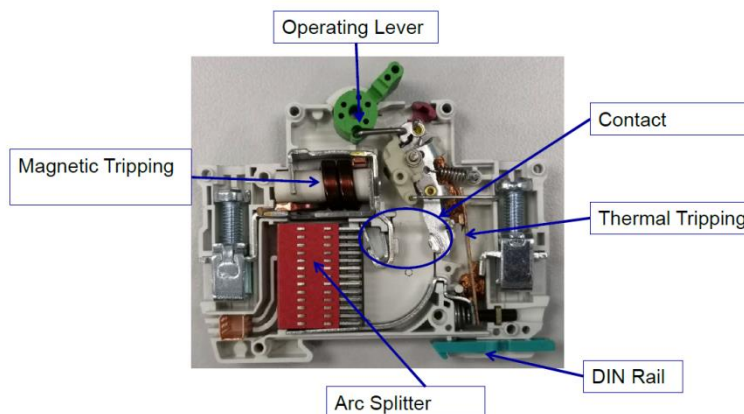


## The features of PROJOY Non-polarity DC MCB

The traditional DC MCB is polarity (The current enters from the upper end "+" and flows out from the "-" on the lower end). Low cost and wide range of uses. But it only protect the circuit in one direction, once the electrical current enters from the opposite direction, can't effectively break the circuit, can't play a protective role. Therefore, Non-polarity MCB (Incoming and Outgoing lines don't distinguish between "+" and "-") has advantage in the energy storage system is reflected. Projoy Non-polarity MCB, by changing clearance between moving contact and fixed contact, shorten electric arc jump distance, increasing arc coil. Non-polarity DC MCB series make DC arc in either direction into arc extinguish chamber successfully, then fault can be cut off by cutting the arc into small segments through the arc splitter.



According to the application of Non-polarity DC MCB, Projoy have high voltage circuit breaker (PEBS-H Commercial Rooftop) and low voltage circuit breaker (PEBS-L, Residential Rooftop) to choose. In terms of parameters, some manufacturers have a high breaking capacity, but the voltage can only reach 360V. There are also some manufacturers use double contact to improve the ability to extinguish arc ,can achieve very high voltage, but the rated current can only reach 40A, the breaking capacity is only 1.5kA.

These two kinds of circuit breakers can be integrated on hybrid inverters, off-grid inverters, separating AC coupling inverters and battery packs, or installed between batteries and power controllers.

	Maximum rated voltage	Rated current	Breaking Capacity
PEBS-H	1000V	63A	6kA
PEBS-L	160V	125A	10kA

PEBS-H and PEBS-L can also be mounted into a switch box with enclosure protection class IP66 to realize external use. Besides their excellent non-polarity performance advantages, the MCB series have perfect protection functions of short circuit & overload and high short circuit breaking capacity. With its scientific mechanism of arc suppression and current limiting, Projoy DC MCB is able to realize quick switch-off of fault current on DC side to ensure the reliable operation of DC system and perfectly match PV, energy storage and other DC applications.



In addition, by increasing the size of the moving contact, the electrical life of the product can be improved (1000 operating cycles). The personalized handle makes the design, two steel needles are used to enhance the mechanical strength, and the surface plastic pattern increases the friction, which is conducive to customers to pull the handle, and guide customers to center the handle, to avoid sliding buckle phenomenon, the mechanical life of the product can be improved (20000 operating cycles). Some manufacturers did not use steel needle in order to save costs, mechanical life only a few thousand times.

PROJOY actively communicates with the authoritative certification agency TUV Rheinland, an authoritative certification body, to keep abreast of the industry trends. At present, PROJOY Non-polarity DC MCBs have passed TUV / CE / CB / SAA successfully. Actively participate in the new energy exhibition, have won a good reputation among users in the

domestic and overseas markets. For product after-sales service, PROJOY provides 5 years warranty (18 months or 2 years warranty provided by other friends) . Professional after-sales team replies on fast response to solve the customers' needs in timely manner, and has received unanimous praise from customers. PROJOY adheres to its slogan 'Switch to safety', and continues to escort the development of energy storage systems.