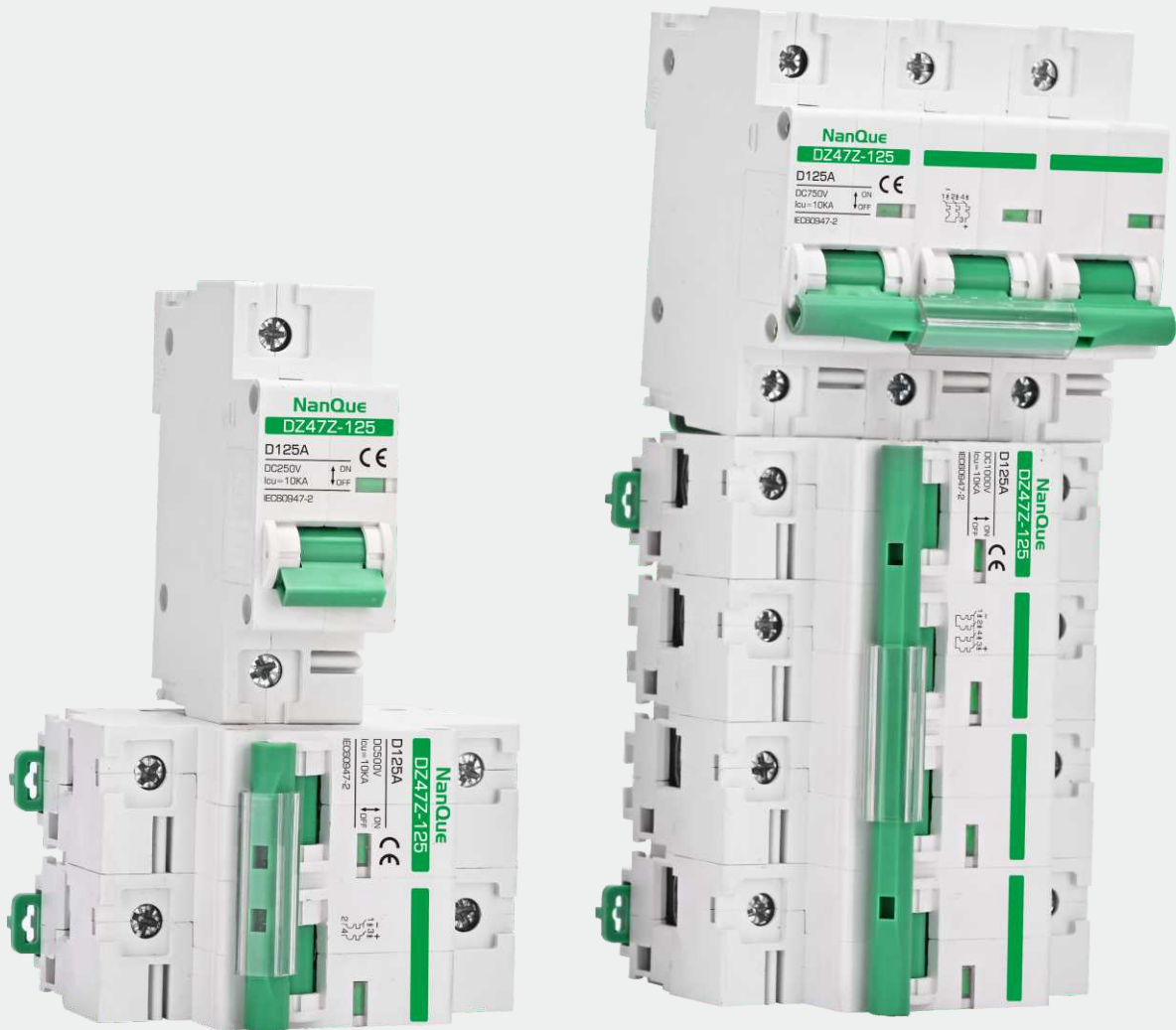


NanQue®



**DZ47Z-125**

DC250~1000V

**Photovoltaic DC circuit breaker**

**Series**

Seiko manufacturing, quality can be seen



### Product Introduction

DZ47Z-125 DC miniature circuit breaker series is mainly used in DC lines with rated voltage up to 1000V and rated working current up to 125A, for overload and short circuit protection of DC lines and infrequent conversion of lines. The circuit breaker is composed of a plastic casing, an operating mechanism, a contact arc extinguishing system, and a tripping mechanism. The shell is made of high flame-retardant, high-strength special plastic, which has strong impact resistance and light weight.

This product complies with GB10963.2 and IEC60947-2 standards.



### Model Meaning

## DZ47Z-125-1P-D80A-T

Model

B: B-curve  
C: C-curve  
D: D-curve

Poles

Blank: white shell  
T: transparent shell

Rated current



### Technical Parameters



- Short circuit protection
- Overload protection (overcurrent protection)
- Isolation function
- Auxiliary control function

- Rated current  $I_n$ : 80A, 100A, 125A;
- Rated working voltage  $U$ : DC250V/DC500V/DC750V/DC1000V;
- Rated short-circuit breaking capacity  $I_{cn}$ : 10kA
- Rated impulse withstand voltage  $U_{imp}$  (1.2/50): 6kV
- Number of poles: 1P single pole, 2P double pole, 3P triple pole, 4P quadrupole;
- Trip form: thermal magnetic trip;
- Tripping characteristics: C type (5 $I_n$ ~10 $I_n$ ), D type (10 $I_n$ ~20 $I_n$ );
- Current limiting level: 3
- Ambient working temperature: -30°C~70°C;
- IP grade: IP20;
- Pollution level: 2;



Installation method: Installation: where there is no significant vibration and shock, tunnel wiring Terminal, can be easily installed on TH35-7.5 type DIN standard rail;

Installation torque: 80~125A: 3.5N.

Mechanical and electrical life:

- a. Electrical life: not less than 8000 times;
- b. Mechanical life: not less than 10,000 times.

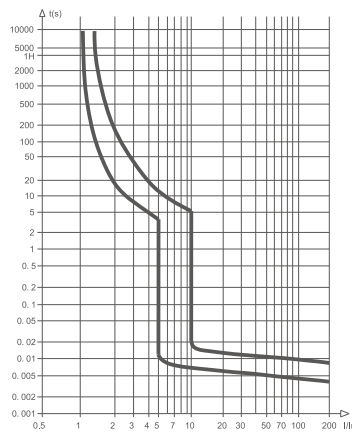
Compliant with the standard: GB10963.2/IEC60947-2

Compliance certification: CCC, CE

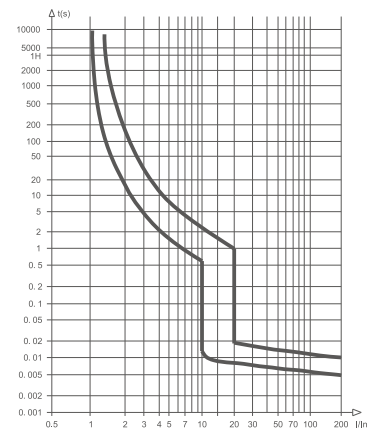
Application place:

It is used in DC power power system, electric propulsion system, photovoltaic power system (photovoltaic combiner box) and other places.

## Tripping Characteristic Curve



C-curve







D-curve

## Temperature Current Correction Factor

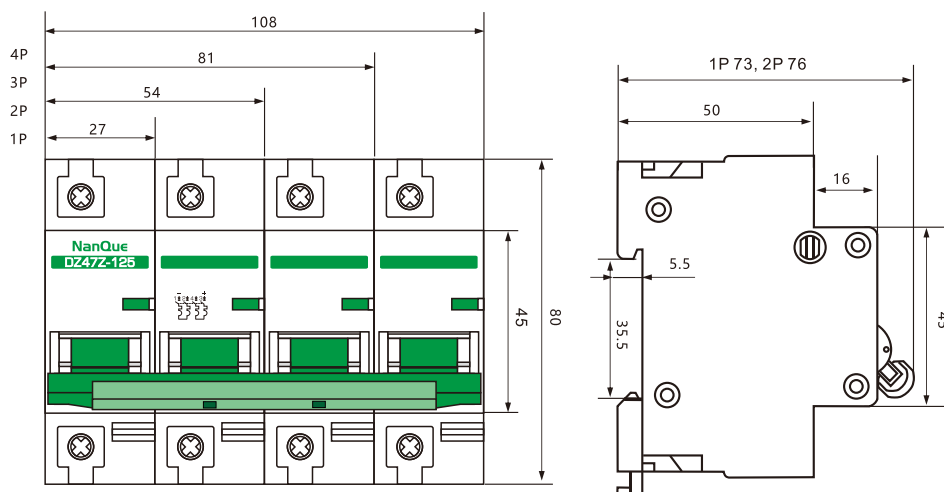
Temperature°C	-30	-20	-10	0	10	20	30	40	50	60	70
Current factor	1.3	1.25	1.2	1.15	1.1	1.05	1	0.95	0.9	0.85	0.8



### Product Selection

Model	Poles	Current	Shell
DZ47Z-125	1P 	80A, 100A, 125A	white (default) Transparent (customized) Other colors (mass customization)
	2P 		
	3P 		
	4P 		

### Product Size



### Connecting Cables

Current	Recommended cable cross-section	Maximum wiring capacity
80~125A	25mm <sup>2</sup>	50mm <sup>2</sup> (Hard Cable) 35mm <sup>2</sup> (Soft Cable)



## Order Instructions

---

1. When ordering, the user should indicate the product model, tripping type, rated current, Rated Voltage, number of poles, accessories and quantity of the circuit breaker.
2. Example: DZ47Z-63X circuit breaker 2P C63A DC500V, 200 pieces.
3. Users have special requirements, such as custom printing, which can be negotiated separately.

# Appendix I

## Product selection datasheet



1P



2P



3P



4P

Product Model	Poles	Voltage	Current	Order Code	Customized
DZ47Z-125	1P	DC250V	80A	NQPD-DZ47Z1251PDC1001	No
	1P	DC250V	100A	NQPD-DZ47Z1251PDC1002	No
	1P	DC250V	125A	NQPD-DZ47Z1251PDC1003	No
	1P	DC250V	150A	NQPD-DZ47Z1251PDC1004	Yes
	2P	DC500V	80A	NQPD-DZ47Z1252PDC2001	No
	2P	DC500V	100A	NQPD-DZ47Z1252PDC2002	No
	2P	DC500V	125A	NQPD-DZ47Z1252PDC2003	No
	2P	DC500V	150A	NQPD-DZ47Z1252PDC2004	Yes
	3P	DC750V	80A	NQPD-DZ47Z1253PDC3001	No
	3P	DC750V	100A	NQPD-DZ47Z1253PDC3002	No
	3P	DC750V	125A	NQPD-DZ47Z1253PDC3003	No
	3P	DC750V	150A	NQPD-DZ47Z1253PDC3004	Yes
	4P	DC1000V	80A	NQPD-DZ47Z1254PDC4001	No
	4P	DC1000V	100A	NQPD-DZ47Z1254PDC4002	No
	4P	DC1000V	125A	NQPD-DZ47Z1254PDC4003	No
	2P	DC1000V	80A	NQPD-DZ47Z1252PDC4001	No
	2P	DC1000V	100A	NQPD-DZ47Z1252PDC4002	No
	2P	DC1000V	125A	NQPD-DZ47Z1252PDC4003	No
	2P	DC1000V	150A	NQPD-DZ47Z1252PDC4004	Yes

Remark:

- 1, "Customized products" (gray marked), cannot be ordered directly, you need to determine the quantity, price and order cycle before ordering,
- 2, Customized products does not support returns and exchanges.