

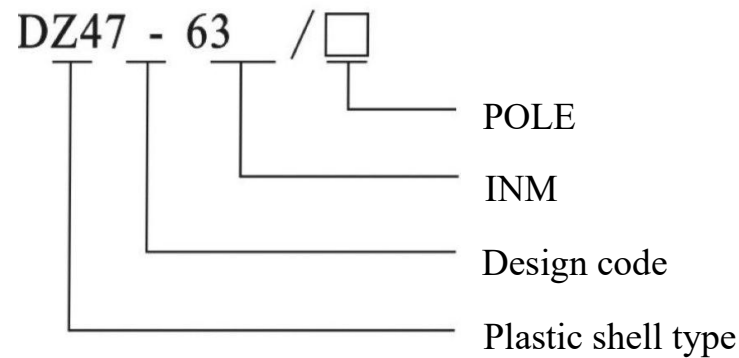
1、Scope of application

The DZ47-63 series small circuit breaker (hereinafter referred to as the circuit breaker) is a high breaking small circuit breaker with dual protection of overload and short circuit. It is suitable for AC 50Hz or 60Hz, rated voltage up to 400V, and rated current up to 63A lines. It is used for overcurrent protection of line facilities and electrical equipment in buildings and similar places, and can also be used for infrequent making and breaking operations.

This circuit breaker is suitable for use by non professionals and does not require maintenance. The circuit breaker product complies with GB10963-1999 "Circuit Breakers for Overcurrent Protection in Household and Similar Places".

2、Product model and specifications

2.1 The model and meaning of the circuit breaker are as follows.



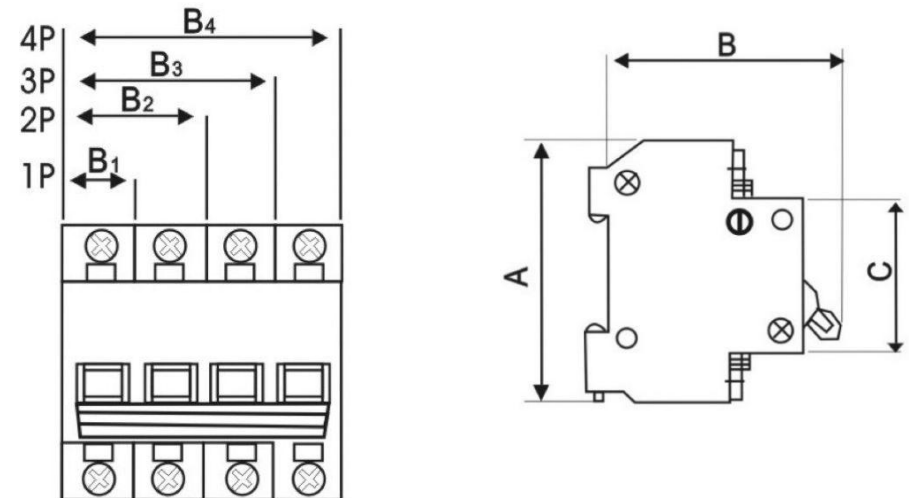
2.2 The basic specifications and parameters of the circuit breaker are shown in Table 1

Table 1 Basic Specifications and Parameters of Circuit Breakers

INM	POLE	Ui	IN(A)	Rated short-circuit breaking capacity		Instantaneous release type	Tripping current range
				KA	COSΦ		
63	1	230/400	6、10、16、20、25、32、40	6	0.7	C	5In~10In
	2			4	0.8	D	10In~50In
	3		40	4	0.8	C	5In~10In
	4		50、63	4	0.8	C	5In~10In

3、External dimensions and installation dimensions

The overall dimensions and installation dimensions of the circuit breaker are shown in Figure 1, Figure 2, and Table 2.



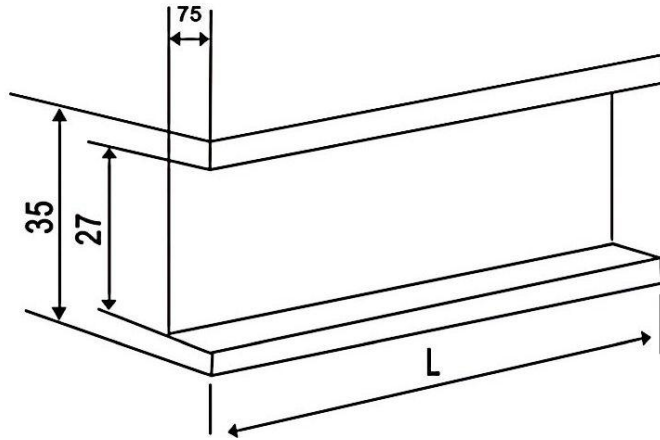


Figure 2 Installation Rail Dimensions (TH35-7.5)

2 Boundary dimensions of circuit breakers

MODEL	A	B1	B2	B3	B4	C	B
DZA7-63	77	18	36	54	72	45	70

4、 Normal working and installation conditions

4.1 The upper limit value of the ambient air temperature shall not exceed +40 °C, the lower limit value shall not be less than -5 °C, and the average value within 24 hours shall not exceed +35 °C.

4.2 The elevation of the installation site shall not exceed 2000m.

4.3 The relative humidity of the atmosphere at the installation site shall not exceed 50% at the highest ambient temperature of +40 °C, and there may be higher relative humidity at lower temperatures. The average maximum relative humidity of the highest humidity shall not exceed 90%, and the monthly average minimum temperature of the month shall not exceed +25 °C, taking into account the condensation on the product surface caused by temperature changes.

4.4 The pollution level of the installation site is Level 2.

4.5 The installation category is suitable for installation at locations II and III.

4.6 The circuit breaker is installed using standard guide rails, and the dimensions of the installation guide rails are shown in Figure 2.

4.7 Circuit breakers should generally be installed vertically, with the handle facing upwards in the power on position.

4.8 There should be no significant impact or vibration at the installation site.

5、 Main Technical Performance

5. 1 The overcurrent tripping characteristics of the circuit breaker are shown in Table 3.

Table 3 Tripping Characteristics of Circuit Breakers

NO.	Type of overcurrent instantaneous release	IN (A)	Initial state	Test current (A)	Prescribed time (t)	Expected results	Test ambient temperature	Remark
a	C、D	<63	cold state	1.13In	≥1h	No tripping	30-35	
b	C、D	<63	Follow test a	1.45In	<1h	trip		The current rises to the specified value within 5 seconds
c	C、D	<32	cold state	2.55In	1S<t<60S	trip		
		>32			1S<t<120S			
d	C	<63	cold state	5In	≥0.1s	No tripping		
	D			10In				
e	D	<63	cold state	10In	<0.1s	trip		
				50In				

5.2 Mechanical and electrical life

The circuit breaker is installed under normal working conditions and can withstand 4000 operating cycles through rated current at rated voltage.

6 · Structure and Working Principle

6.1 The circuit breaker mainly consists of an operating mechanism, a

double release, contacts, and an arc extinguishing chamber, all assembled in a flame-retardant plastic shell.

6.2 The circuit breaker is installed under normal working conditions. Push the operating handle to close the contacts, and the latch locks the free release mechanism to keep the circuit connected. There is a thermal magnetic overcurrent release in series in the main circuit. When the current of any phase of the main circuit exceeds a certain value, the thermal magnetic force generated by the overcurrent release causes the free release mechanism to trip, and the contact separation causes the circuit to break.

7 · Installation, Use, and Protection

7.1 Before installing the circuit breaker, the following precautions should be taken

- a) Check that the specifications of the circuit breaker match;
- b) Check the appearance of the circuit breaker, which should be intact and undamaged;
- c) Operate the circuit breaker handle without slipping or rejecting the opening.

7.2 When installing circuit breakers, attention should be paid to the markings on the terminals.

7.3 The installation and disassembly methods of circuit breakers can be found in the schematic diagram on the side of the circuit breaker product.

- a) Installation: Place the circuit breaker onto the rail, align it with the lower end of the installation, tilt it slightly to the right, push the circuit breaker up along the direction of arrow 1, and press arrow 2 to push the recess onto the upper end of the installation guide rail. Release your hand.

b) Disassembly: Contrary to the installation process, push the circuit breaker up in the direction of arrow 1 and rotate arrow 2 in the opposite direction to remove it.

7.4 The overcurrent tripping characteristics of circuit breakers are manufactured by

Factory set and sealed, and cannot be adjusted arbitrarily during use.

8. Ordering instructions

Users must indicate when ordering

a) Product model name such as DZ47-63 small circuit breaker

b) The number of poles of the circuit breaker, such as 1P, 2P, etc

c) The instantaneous release type and rated current of the circuit breaker, such as C16, C40, etc.

d) Order quantity

