

AMC01-63

● Application

AMC Series Miniature Circuit Breaker (hereinafter referred to as breaker) is mainly used for communication 50Hz/60Hz, single pole 230V, two, three, four 400V, current up to 60A line played overload, short circuit protection may also be in not normally frequent on-off electrical equipment and lighting circuit. Especially for industrial and commercial lighting distribution system.

● Scope

1、 Ambient air temperature

Ambient air temperature is not lower than -5 °C, not higher than +40 °C, on average does not exceed +35 °C.

2、 Altitude

Installation site altitude does not exceed 2000m.

3、 Atmospheric conditions

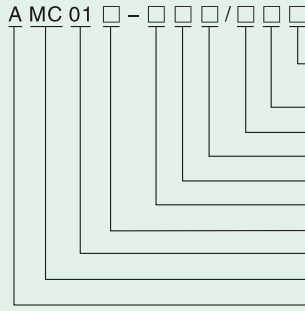
Atmospheric relative humidity at the highest temperature of +40 °C not more than 50% at lower temperatures can have a higher relative humidity, for example, at +20 °C, relative humidity of 90%, and taking into account changes in the product surface temperature of condensation.

2.4 Installation category

The circuit breaker for embedded installation (can be installed on the mounting rail), installation category II, III.



► Model Comments



Not breaking with the neutral line, said with N
 Rated residual operating current(A)
 Number of poles
 Wiring
 Rated Current
 Instantaneous release level
 Derived code
 Design Code
 Breaker
 AIKS

Derived code: Miniature Circuit Breaker: no representation; small leakage circuit breakers: The "E", said; small voltage circuit breakers: The "Q" that
 Number of poles: 1. One pole 2. Two pole 3. Three-pole 4. Four-pole
 Rated Current: 1:1A/3:3A/6:6A/10:10A/32:32A.....
 Instantaneous release level: C: for distribution protection; D: for motor protection
 Connection:(Wires or cables: no; said bus connection: The "H" said)
 Rated residual operating current:
 30mA: No representation; 50 mA: T5, said; 100 mA: T10 that

► Main structure and working principle

The main circuit breaker from the housing, the operating mechanism, instant release, interrupter devices and other components. Breaker moving contacts will remain in the closed or off position; multi-pole circuit breaker moving contact should be mechanical linkage, can be substantially the same time the very close or disconnect; vertical installation, the upward movement of the handle, the contact to close direction.

Circuit breaker works as follows: pull the handle to indicate when the circuit breaker On position, the moving contact driven by mechanical agencies set their eyes on the static contact and reliable contact to the circuit switched; When the overload protection circuit fault occurs, fault current so that the original thermal bimetallic bending, making the mechanical locking mechanism to promote the reset lever, the moving contact away from the static contact, in order to achieve the function of breaking the line; When a short circuit fault protection circuit when the fault current makes instantaneous tripping action, the core component of the ejector lever to move the top quickly reset the locking mechanism to achieve the function of breaking the line.

► **Rated voltage Short-circuit breaking capacity**

Rated Current(A)	Number of poles	Rated voltage(V)	Rated short circuit breaking capacity	
			Expected current(A)	Power Factor
C1~C40	One-pole	230/400	6000	0.65~0.70
	One-pole, Two-pole, three-pole	400		
C50~C60	One-pole	230/400	4000	0.75~0.80
D1~D60	One-pole, Two-pole, three-pole	400		

► **Characteristics of overcurrent release**

Code	Release rated current I_n	Initial state	Current experiments	Specified time	Expected results	Remarks
a	All values	Cold	$1.13I_n$	$t \leq 1h$	No tripping	
b	All values	Then after a pilot	$1.45I_n$	$t < 1h$	Trip	Current stability of the ground in 5 seconds up to the specified value
c	$I_n \leq 32A$	Cold	$2.55I_n$	$1s < t < 60s$	Trip	
	$I_n > 32A$			$1s < t < 120s$		
d	All values	Cold	$5I_n$	$t \leq 0.1s$	No tripping	
e	All values	Cold	$10I_n$	$t < 0.1s$	Trip	

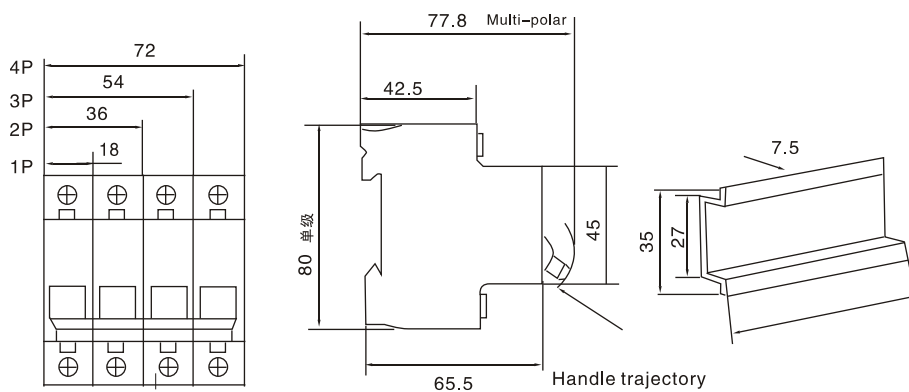
► **Mechanical and electrical life**

Electrical circuit breaker mechanical life of more than 4000

► **Making and breaking short-circuit characteristics**

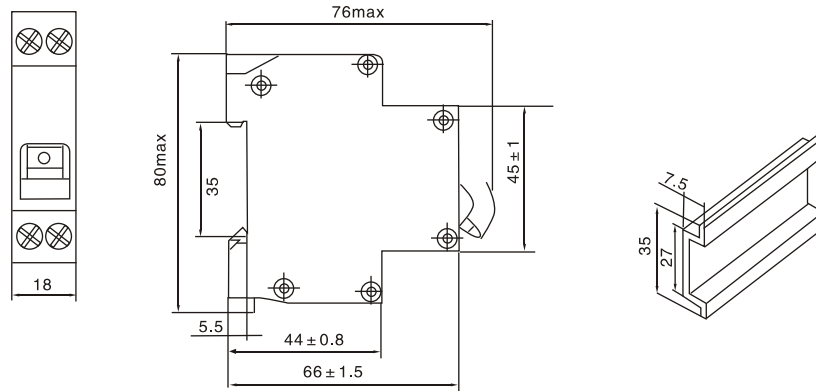
Circuit breaker can be switched on and breaking of the rated ultimate breaking capacity of the current and any of the following current value.

► **Circuit Breaker Dimensions**

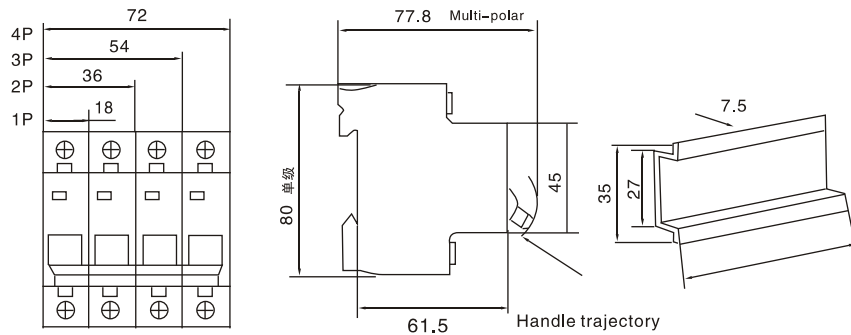


(AMC01Series)

► **Circuit Breaker Dimensions**



(AMC02 Series)



(AMC03 Series)

► **Circuit breaker before installation should note the following**

- 1, check the circuit breaker to confirm intact, power manual several times before the action should be flexible.
- 2, check the circuit breaker is marked with the use of normal operating conditions consistent.
- 3, use the circuit breaker rated current size of the actual use of the line to keep up to match.
- 4, is strictly prohibited in the outlet end of the circuit breaker testing.
- 5, circuit breakers should be installed so that the handle at the bottom (marked side up), so the upward movement of the handle, the contact to the closing direction.

► **Circuit breaker before installation should note the following**

Rated Current In(A)	Standard cross-sectional area of copper wire(mm ²)
1、2、3、4、5、6	1
10	1.5
15、16	2.5
20	2.5
25	4
32	6
40	10
50	10
60	16

► Use and maintenance of circuit breakers

- 1, circuit breakers (including boxed product) in the transport, storage and use, are not affected by the rain hit, product placement or installation of invasion in the absence of rain and snow, air circulation, monthly mean relative humidity less than 90% (at 20 ± 5 °C), the air temperature is not higher than +60 °C -25 °C and no less than the environment.
- 2, in the operation of circuit breakers should be checked regularly to check the working conditions of the decision cycle as check should be cut off the power supply, inspection of the main projects include:
 - a. Clear the dirt, with particular attention to remove dirt between the inlet and outlet pole, to avoid causing short circuits.
 - b. Tighten the screws.

► Security Alert

- 1, product installation, operation should not be charged to electric shock;
- 2, available FireWire (line) or short circuit to ground zero line (neutral line), then touch the line of fire way to test product performance, so as not to endanger the physical safety;
- 3, installation, wiring should tighten the screws (torque $2.0N \cdot m$), loose and easy to pull out the wire, the wire cross-section should be strictly selected in accordance with requirements of this note;
- 4, operation of circuit breaker with wet hands, or electric shock accident may occur;
- 5, circuit breaker protection feature from the factory setting, do not allow arbitrary open or adjust the circuit breaker;
- 6, the circuit breaker can not be unbalanced power line of personal electric shock and the protective effect.