

AMC01E

● Application

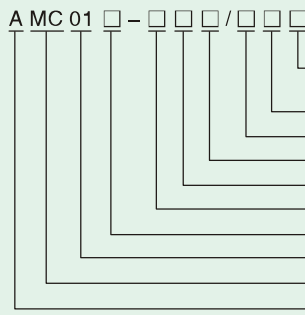
AMC01E series leakage circuit breaker (the tube that leakage circuit breaker) and leakage from the AMC01 MCB trip assembly is made with leakage (electric shock), overload, short-circuit protection, but also increase according to the user over-voltage, under pressure protection,

● Scope

AMC01E leakage circuit breaker is suitable for AC 50Hz three-phase 400V and 230V single-phase circuits. Used for human indirect contact protection, and use of buildings and similar lines for current protection. Also on the over-current protection device is not because the action and continuing fruitful ground fault caused the fire protection. With over-voltage protection for power leakage circuit breaker failure can cause excessive voltage rise protection. This product has been in the low-voltage distribution systems are increasingly being used as ground fault and direct contact, indirect contact electric shock back-up protection. This product complies with: GB16917.1-2002 standard.



► 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 technical parameters

Frame degree rated current I _{mn} (A)	Series	Plus neutral	Rated Current I _n (A)	Rated short circuit breaking capacity			Instantaneous overcurrent trip	Rated residual operating current (mA)	Rated residual operating current not (mA)	Rated residual breaking time (S)
				Voltage(V)	Breaking capacity I _M (A)	COS Φ				
32	1	N	6\10\16 \20\25\32	230	6000	0.7	C	30	15	<0.1
	2									
	3			400						
	3	N								
32	1	N	6\10\16 \20\25\32	230	4500	0.7	D	30	15	<0.1
	2									
	3			400						
	3	N								
	4									

► Main technical parameters

Frame degree rated current I _{mn} A	Series	Plus neutral	Rated Current I _n (A)	Rated short circuit breaking capacity			Instantaneous overcurrent trip	Rated residual operating current (mA)	Rated residual operating current not (mA)	Rated residual breaking time (S)
				Voltage(V)	Breaking capacity I _M (A)	COS Φ				
63	1	N	40/50/63	230	4500	0.7	C	30	15	<0.1
	2									
	3									
	3	N		400						
	4									

► Classification

Divided by number of poles: pole–wire, two wire, three–pole three–wire, three–pole four–wire, four–pole four–wire.

► Overcurrent trip protection features

Number	Test current(A)	Rated Current	Specified time	Expected results	Initial state	Remarks	
A	6–63	Cold	1.13I _n	t ≥ 1h	No tripping		
B		Immediately conduct a pilot	1.45I _n	T < 1h	Trip	Current 5s up to the specified value within the stable	
C		Cold	2.55I _n	1s < t < 60s	Trip	≤ 32A	
D				1s < t < 120s	Trip	> 2A	
E				5I _n	T ≥ 0.1s	No tripping	C
F				10I _n	T < 0.1s	Trip	
G		10I _n	T ≥ 0.1s	No tripping	D		
H		14I _n	T < 0.1s	Trip			

► Mechanical and electrical life

Mechanical operating cycles electrical life of 4,000 times, which is 2000 times the number of load operations.

► With overvoltage protection

Leakage circuit breaker with over–voltage protection over–voltage action setting is 280V ± 5%, over–voltage protection operating time ≤ 0.3s

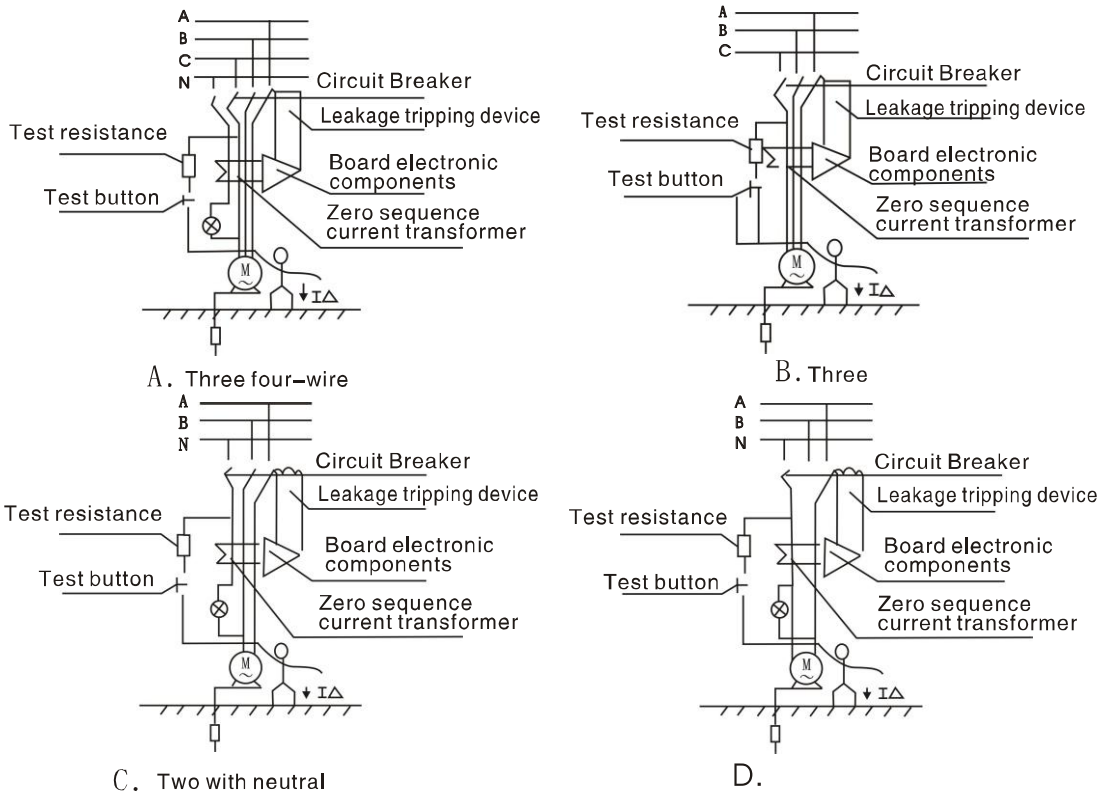
► Structure and working principle

Shown in Figure I, when the circuit when there is leakage. As long as the residual value of operating current to operating current, zero sequence current transformer secondary coil to generate a signal (induced voltage), amplified through the electronic circuit, so that leakage circuit breaker breaking: to cut off the power play leakage protection, if use of both over–voltage protection circuit breakers, can be used to obtain partial pressure principle to the voltage signal to the main thyristor switching off the power.

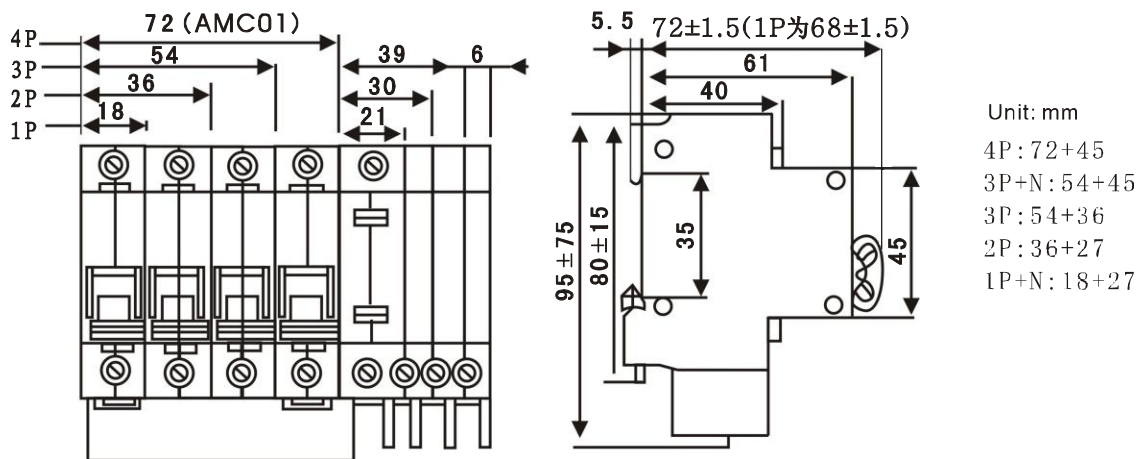
Works such as:

The leakage circuit breaker mainly by the zero sequence current transformer, electronic components board, release, contact parade ashamed institutions and plastic and other components.

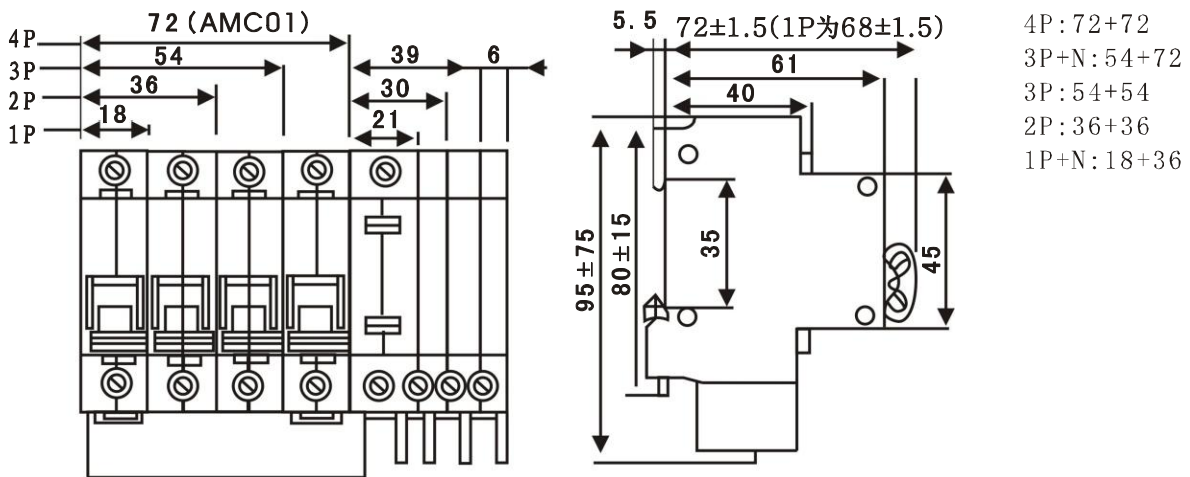
► Structure and working principle



► Circuit Breaker Dimensions



► Circuit Breaker Dimensions



► Installation and maintenance

- (1) leakage circuit breakers due to leakage after operation, AMCO1E leakage indicates that the button has raised the instructions, press the direction button before closing.
- (2) The second pole, three cable leakage circuit breaker on the "N" terminals should be connected to the zero line to make the trip to work, or can not afford to leakage protection.
- (3) leakage trip device to be assembled with AMCO1E off the hoof into the power leakage circuit breaker before trial, or they will burn release.
- (4) cross-sectional area of ??conductors connected with the circuit breaker should be rated to adapt the table below:

Rated current A	6	10	16 20	25	32	40 50	63
Conductor cross-sectional area mm ²	1	1.5	2.5	4	6	10	16

- 5) Check the power before the trial. Work according to the schematic Figure I, to distinguish between power supply terminal, (the circuit breaker N, 1,3,5 terminal access). Load (from leakage release N, 2,4,6 pick out), can not pick the wrong, or to burn off the Road leakage device.
- (6) leakage circuit breaker to be controlled because of failure of sub-barrier. Need to identify the reasons, troubleshooting, before closing.
- (7) leakage circuit breakers work base temperature of 30 °C. When the ambient temperature changes, the rating to be revised, corrected value according to Table 4. If more than one leakage circuit breaker at the same time into the closed cabinets, Corresponding increase in temperature inside the rated current should be multiplied by the factor 0.8 derating factor.

Rated current correction value

Rated Current A	Rated current correction value A				
	0°C	10°C	20°C	30°C	40°C
1	1.15	1.10	1.05	1	0.94
3	3.57	3.57	2.18	3	2.82
6	6.96	6.62	6.30	6	5.64
10	12.25	11.45	10.70	10	9.30
16	19.06	17.98	16.96	16	15.04
20	23.82	22.47	21.20	20	18.80
25	29.78	28.09	26.50	25	23.25
32	38.12	35.96	33.92	32	30.08
40	49.00	45.80	42.80	40	36.80
50	63.00	58.32	54.00	50	46.00
63	71.4	65.33	63.6	60	55.79