

AC Mini Circuit Breaker



- XL7-63PV ○ XNC-125
- XL8-63



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XL7-63

MINI CIRCUIT BREAKER (AC MCB)



Application



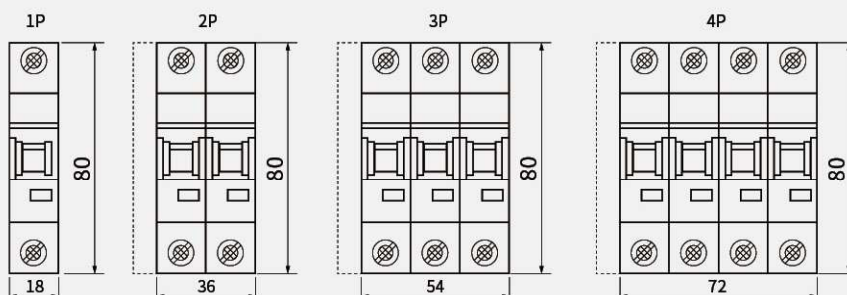
XL7-63 AC MCB have protective function as overload, and are used in lighting distribution system in industry commerce and dwelling, and protect fractional electric motors. And they also have many merits of high protective grade(up to IP20), high breaking capacity, reliable sensitive, action convenient, multi pole assembling, long life ect. The are mainly adapted to the circuit of AC 50Hz, 250V in single pole, 415V in double, three, four poles for protecting overload and short circuit. Mean while, they are also used in turning on or off the electric apparatus and lighting circuit under the normal conditions.



Specifications

Standard	EN60898(IEC60898)/IEC60947-2
Rated Voltage	230V/400V AC(1P), 400V AC(2P, 3P, 4P)
Rated Current	3,6,10,16,20,25,32,40,50,63A
Rated Breaking Capacity	10KA IEC60898(3~63A)
Characteristic Curve	B, C, D
Max. Fuse That Can Be Connected To	100AGL(> 10KA)
Selective Grade	3
Working Ambient Temperature	-5 ~+40
Enclosed Protective Class	IP20
Nominal Frequency	50/60Hz
Maximum Operating Voltage(U _e)	≥ 400V AC
Insulation Voltage(U _i)	≥ 6KV
Voltage Testing Pulse(U _{imp})	≥ 10KA
Maximum Cutting Capacity(I _{cu})	≥ 10KA
Electrical Life	Not less than 8000 times
Mechanical Life	Not less than 20000 times

Dimensions



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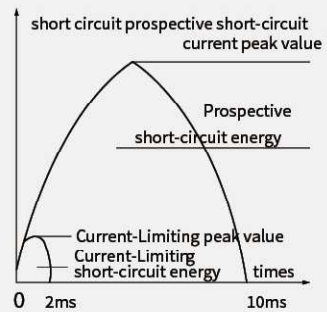
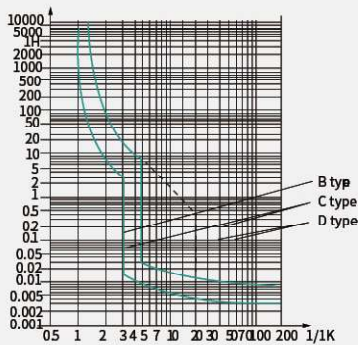
MINI CIRCUIT BREAKER (AC MCB)

Over current tripping characteristic

Item	Model	Rated Current(A)	Initial State	Test Current	Limited Time	Limited Time	Remark
a	B, C, D	1~63	Cold state	1.13I _n	t < 1h	Non-tripping	
b	B, C, D	1~63	Immediately after the previous test	1.45I _n	t < 1h	Tripping	The current rise steadily to a fixed value within 5s
c	B, C, D	I _n ≤ 32	Cold state	2.55I _n	1s < t < 60s	Tripping	
		I _n ≤ 32	Cold state	2.55I _n	1s < t < 120s	Tripping	
	B	1~63	Cold state	3I _n	t ≤ 0.1s	Non-tripping	
				5I _n	t ≤ 0.1s	Tripping	
	C			5I _n	t ≤ 0.1s	Non-tripping	
				10I _n	t ≤ 0.1s	Tripping	
	D			10I _n	t ≤ 0.1s	Non-tripping	
				10I _n	t ≤ 0.1s	Tripping	

Characteristic Curve

XL7-63 Characteristic curve



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MINI CIRCUIT BREAKER (AC MCB)



Current correction values used at different ambient temperatures

Fixed current(A) Rated Current (A) \ Temperature	-35	-30	-20	-10	0	10	20	30	40	50	60	70
3A	3.9	3.78	3.69	3.57	3.42	3.3	3.12	3	2.88	2.79	2.64	2.496
6A	7.8	7.56	7.38	7.14	6.84	6.6	6.24	6	5.76	5.64	5.28	4.98
10A	13.2	12.7	12.5	12	11.5	11.1	10.6	10	9.6	9.3	8.9	8.4
16A	21.12	20.48	20	19.2	18.4	17.76	16.96	16	15.36	14.88	14.24	13.44
20A	26.4	25.6	25	24	23	22.2	21.2	20	19.2	18.6	17.8	16.8
25A	33	32	31.25	30	28.75	27.75	26.5	25	24	23.25	22.25	21
32A	42.56	41.28	40	38.72	37.12	35.52	33.93	32	30.72	29.76	28.16	26.88
40A	53.2	51.2	50	48	46.4	44.8	42.4	40	38.4	37.2	35.6	33.6
50A	67	65.5	63	60.5	58	56	53	50	48	46.5	44	41.5
63A	83.79	81.9	80.01	76.86	73.71	73.71	66.78	63	60.48	58.9	55.44	52.29

Current correction factor used at different altitudes

Rated Current (A)	Different altitude correction factors		
	≤2000m	2000~3000m	≥3000m
3,6,10,16,20,25,32,40,50,63A	1.0	0.9	0.8

Wire connection terminals

Rated current In(A)	Copper wire nominal cross sectional area(mm)
3,6	1
10	1.5
16,20	2.5
25	4
32	6
48	10
63	10

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MINI CIRCUIT BREAKER (AC MCB)

Application

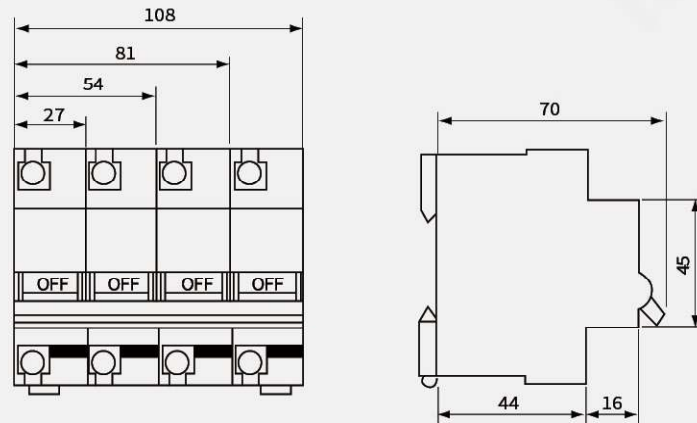
XNC-125 high breaking capacity circuit breaker is used for AC 50/60HZ, single-pole 230V or two, three, four-pole 415V circuit for protecting the circuit that overload and short circuit may take place. It can be used in lighting and electric motor distribution system. Mean while it is applicable to an unfrequented switch over the electric apparatus and lighting circuit under normal condition. Breaking capacity is up to standard of IEC60947-7 10KA.



Technical Data

Rated Current	63, 80, 100, 125A			
Rated Voltage	230V/415V AC			
Electrical Life	6000 Times			
Mechanical Life	20000 times(C.O.)			
No. of Pole	1P, 2P, 3P, 4P			
Weight	1P	2P	3P	4P
	150	300	450	600

Dimensions



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MINI CIRCUIT BREAKER (AC MCB)



Application

XL8 AC MCB is applicable to a line of AC50/60Hz, 230/400V in single pole, 400V in double, three, four poles for protecting overload and short circuit, and rated current up to 63A. It can also be used for infrequent line conversion under the normal condition. The breaker is applicable to lighting distribution system in industrial enterprise, commercially district, high-rise building and dwelling house. It conforms with the standards of IEC60898 -1.



Main Technical Parameter

Type	XL8-63			
Pole	1P		2P,3P,4P	
Rated current (A)	6, 10, 16, 20, 25, 32, 40, 50, 63			
Rated voltage(V)	230 / 400		400	
Ambient temperature	-5°C ~+40°C			
Type of instantaneous release	C	D	C	D
Rated short circuit breaking capacity Icn(kA)	1-32A: 6 50-63A: 4	4	1-32A: 6 50-63A: 4	4

Rated current(A)	Normal cross section of wire mm ²
1-6A	1
10A	1.2
16,20A	2.5
25A	4
32A	6
40,50A	10
63A	16

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The Over-current Protection Property

Ambient temperature	Initial status	Test current	Test time	Expected result	Note
30±2°C	Cold position	1.13 I _n	t ≤ 1h	Non-release	-
	Carried out immediately after orevious test	1.45 I _n	t < 1h	Release	-
	Cold position	2.55 I _n	1s < t < 60s (I _n ≤ 32A)	Release	Current smoothly rises to specified value within 5s
	Cold position	2.55 I _n	1s < t < 120s (I _n > 32A)	Release	
-5~+40°C	Cold position	3 I _n	t ≤ 0.1s	Non-release	Type B
	Cold position	5 I _n	t < 0.1s	Release	Type B
	Cold position	5 I _n	t ≥ 0.1s	Non-release	Type C
	Cold position	10 I _n	t < 0.1s	Release	Type C
	Cold position	10 I _n	t ≥ 0.1s	Non-release	Type D
	Cold position	20 I _n	t < 0.1s	Release	Type D

Dismantling

