



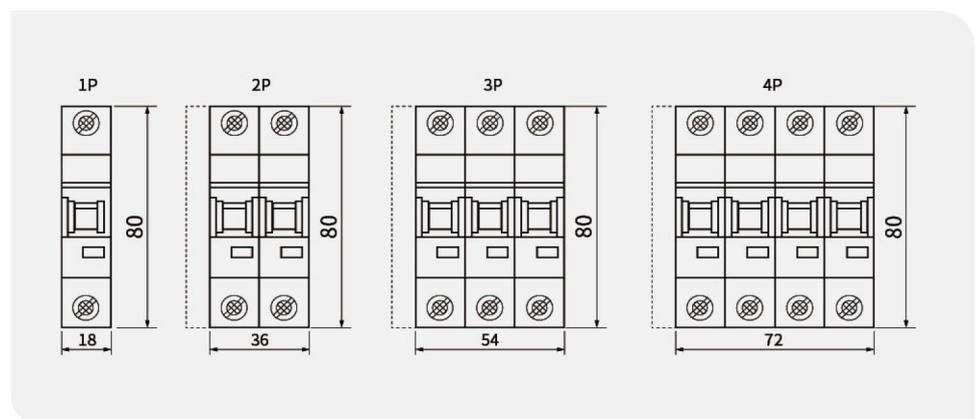
### Application

ES7-63 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 if high protective grade (up to IP20), high breaking capacity, reliable sensitive, action convenient, multi pole assembling, long life etc. They 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. Meanwhile, 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(Ue)	≥ 400V AC
Insulation Voltage(Ui)	≥ 6KV
Voltage Testing Pulse(Uimp)	≥ 10KA
Maximum Cutting Capacity(Icu)	≥ 10KA
Electrical Life	Not less than 8000 times
Mechanical Life	Not less than 20000 times

### Dimensions



# ES7-63

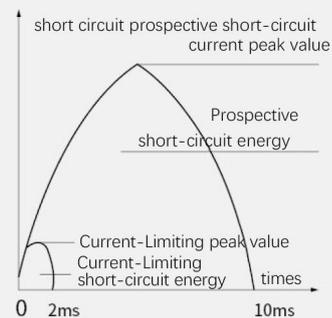
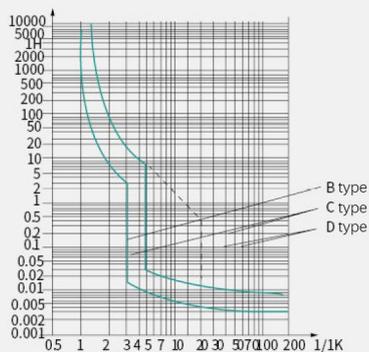
## MINI CIRCUIT BREAKER(AC MCB)

### 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 <sub>n</sub>	t < 1h	Non-tripping	
b	B, C, D	1~63	Immediately after the previous test	1.45I <sub>n</sub>	t < 1h	Tripping	The current rise steadily to a fixed value within 5s
c	B, C, D	I <sub>n</sub> ≤ 32	Cold state	2.55I <sub>n</sub>	1s < t < 60s	Tripping	
		I <sub>n</sub> ≤ 32	Cold state	2.55I <sub>n</sub>	1s < t < 120s	Tripping	
	B	1~63	Cold state	3I <sub>n</sub>	t ≤ 0.1s	Non-tripping	
				5I <sub>n</sub>	t ≤ 0.1s	Tripping	
	C			5I <sub>n</sub>	t ≤ 0.1s	Non-tripping	
				10I <sub>n</sub>	t ≤ 0.1s	Tripping	
	D			10I <sub>n</sub>	t ≤ 0.1s	Non-tripping	
				10I <sub>n</sub>	t ≤ 0.1s	Tripping	

### Characteristic Curve

ES7-63 Characteristic curve





### Current correction values used at different ambient temperatures

Fixed current(A) Rated Current(A)	-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

