

Specifications

Electrical Ratings			
Poles	1, 2, 3, 1+N, 3+N		
Tripping characteristics	B, C, D		
Rated current (In)	0.5...63 A		
Rated frequency (f)	50/60 Hz		
Rated insulation voltage Ui acc. to IEC/EN 60664-1	250 V AC (phase to ground), 440V AC (phase to phase)		
Overvoltage category	III		
Pollution degree	3		
Data acc. to UL/CSA			
Rated voltage	1-pole	AC	277V AC
		DC	48V DC
	2-pole	AC	480Y/277V AC
		DC	96V DC
	3-pole	AC	480Y/277V AC
	Rated interrupting capacity acc. to UL 1077	≤ 32 A: 10 kA (AC); > 32 A: 5 kA (AC); 0.5...63 A: 10 kA (DC)	
Application	Supplementary Protector for general use; application codes: TC1, OL0, SC: U2 (AC), SC: U2 (DC), FW3 ♣		
Reference temperature for tripping characteristics	40 °C		
Electrical endurance	6,000 ops (AC), 6,000 ops. (DC) 1 cycle (1s - ON, 9s - OFF)		
Data acc. to IEC/EN 60947-2			
Rated operational voltage (Ue)	1-pole, 1+N	230V AC	
	2-pole, 3-pole, 3+N	400V AC	
Highest supply or utilization voltage (Umax)	AC	1-pole, 1+N	253V AC
		2-pole, 3-pole, 3+N	440V AC
	DC ★	1-pole	48V DC
		2-pole	96V DC
Min. operating voltage	12V AC/ DC		
Rated ultimate short-circuit breaking capacity (Icu)	15 kA		
Rated service short-circuit breaking capacity (Ics)	≤ 40 A: 11.25 kA > 40 A: 7.5 kA		
Rated impulse withstand voltage Uimp. (1.2/50µs)	4 kV (test voltage 6.2kV at sea level, 5kV at 2,000m)		
Dielectric test voltage	2 kV (50/60Hz, 1 min.)		
Reference temperature for tripping characteristics	30 °C		
Electrical endurance	In < 30A: 20,000 ops (AC) In ≥ 30A: 10,000 ops. (AC) 1 cycle (2s - ON, 13s - OFF, In ≤ 32A), 1 cycle (2s - ON, 28s - OFF, In > 32A) 1,000 ops. (DC)		

★ IEC DC ratings self-declared.

♣ 2-pole/3-pole single pole load: TC2.

Mechanical Data		
Housing	Insulation group II, RAL 7035	
Indicator window	red ON/green OFF	
Protection degree acc. to EN 60529	IP20, IP40 in enclosure with cover	
Mechanical endurance	20,000 operations	
Shock resistance acc. to IEC/EN 60068-2-27	25 g - 2 shocks - 13 ms	
Vibration resistance acc. to IEC/EN 60068-2-6	5g - 20 cycles at 5...150...5 Hz with load 0.8In	
Environmental		
Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30	28 cycles with 55°C/90-96% and 25°C/95-100%	
Ambient temperature Δ	-25...+55 °C	
Storage temperature	-40...+70 °C	
Installation		
Terminal	Dual terminal	
Cross-section of conductors (top/bottom) solid, stranded ♦	mm ² 35/35 mm ²	
Flexible	mm ²	25/25 mm ²
	AWG	18 - 4 AWG
Cross-section of busbars (top/bottom)	mm ²	10/10 mm ²
	AWG	14 - 8 AWG
Tightening torque	N·m	2.8 N·m
	in·lb.	AWG 18-16: 8.85 in·lb. AWG 14-10: 17.7 in·lb. AWG 8-4: 39.8 in·lb.
Screwdriver	No. 2 Pozidrive	
Mounting	DIN rail (EN 60715, 35mm) with fast clip	
Mounting position	Any	
Supply	Optional	
Approximate Dimensions and Weight		
Pole dimension (H x D x W)	88 x 69 x 17.5 mm	
Pole weight	115 g (4.1 oz.)	
Combination with Auxiliary Elements		
Auxiliary contact	Yes	
Signal contact	Yes	
Shunt trip	Yes	

♦ 35mm² self-declared, not included in IEC/EN approval.

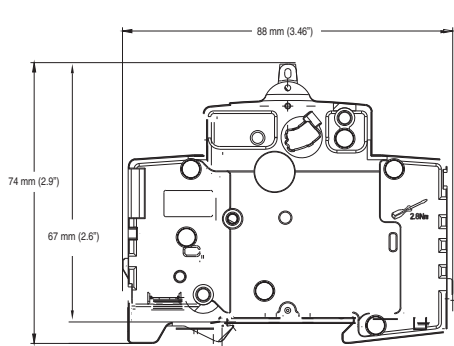
Δ Refer to the Ambient Temperature Derating tables.

Power Loss Due to Current

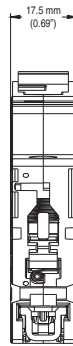
Rated Current [A]	Power Loss Per Pole [W]	Rated Current [A]	Power Loss Per Pole [W]
0.5	1.4	13	2.3
1	1.4	15	2.4
2	1.8	16	2.5
3	1.6	20	2.5
4	1.8	25	3.2
5	1.9	30	3.5
6	2.0	32	3.7
7	1.1	40	4.5
8	1.5	50	4.5
10	2.1	63	5.4

Approximate Dimensions

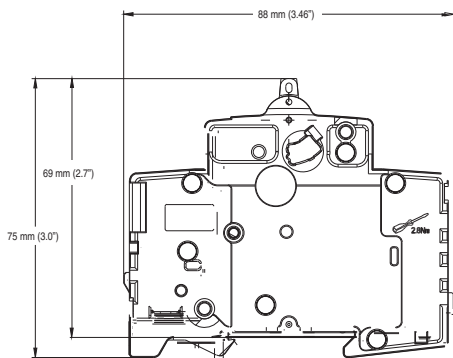
Note: Dimensions are shown in millimeters (inches). Dimensions are not intended for manufacturing purposes.



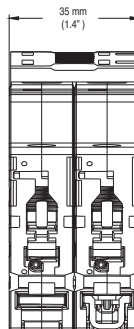
1-Pole



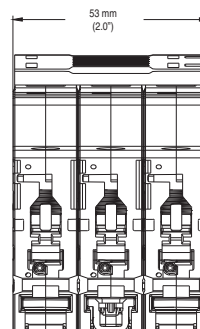
1-Pole



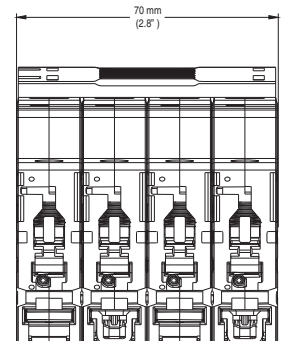
2-, 3-, 4-Pole



2-Pole



3-Pole



4-Pole

Ambient Temperature Derating

Note: Application below 0° C is for non-condensing atmosphere. Care should be taken for applications below 0 °C. These devices are not certified to operate correctly in the presence of ice.

Bulletin 1492-SP

Temperature Derating, UL

Reference temperature = 40 °C

Current Rating [A]	Ambient temperature (°C)									
	-25	-20	-10	0	10	20	30	40	50	55
0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5
1	1.2	1.2	1.2	1.1	1.1	1.1	1.0	1	1.0	0.9
2	2.5	2.4	2.4	2.3	2.2	2.1	2.1	2	1.9	1.9
3	3.7	3.7	3.6	3.4	3.3	3.2	3.1	3	2.9	2.8
4	5.0	4.9	4.7	4.6	4.4	4.3	4.1	4	3.9	3.8
5	6.2	6.1	5.9	5.7	5.6	5.4	5.2	5	4.8	4.7
6	7.4	7.3	7.1	6.9	6.7	6.4	6.2	6	5.8	5.7
7	8.7	8.6	8.3	8.0	7.8	7.5	7.3	7	6.7	6.6
8	9.9	9.8	9.5	9.2	8.9	8.6	8.3	8	7.7	7.6
10	12.4	12.2	11.9	11.5	11.1	10.7	10.4	10	9.6	9.4
13	16.1	15.9	15.4	14.9	14.4	14.0	13.5	13	12.5	12.3
15	18.6	18.3	17.8	17.2	16.7	16.1	15.6	15	14.4	14.2
16	19.8	19.6	19.0	18.4	17.8	17.2	16.6	16	15.4	15.1
20	24.8	24.4	23.7	23.0	22.2	21.5	20.7	20	19.3	18.9
25	31.0	30.6	29.6	28.7	27.8	26.9	25.9	25	24.1	23.6
30	37.2	36.7	35.6	34.4	33.3	32.2	31.1	30	28.9	28.3
32	39.7	39.1	37.9	36.7	35.6	34.4	33.2	32	30.8	30.2
40	49.6	48.9	47.4	45.9	44.4	43.0	41.5	40	38.5	37.8
50	62.0	61.1	59.3	57.4	55.6	53.7	51.9	50	48.2	47.2
63	78.2	77.0	74.7	72.3	70.0	67.7	65.3	63	60.7	59.5

Bulletin 1492-SP

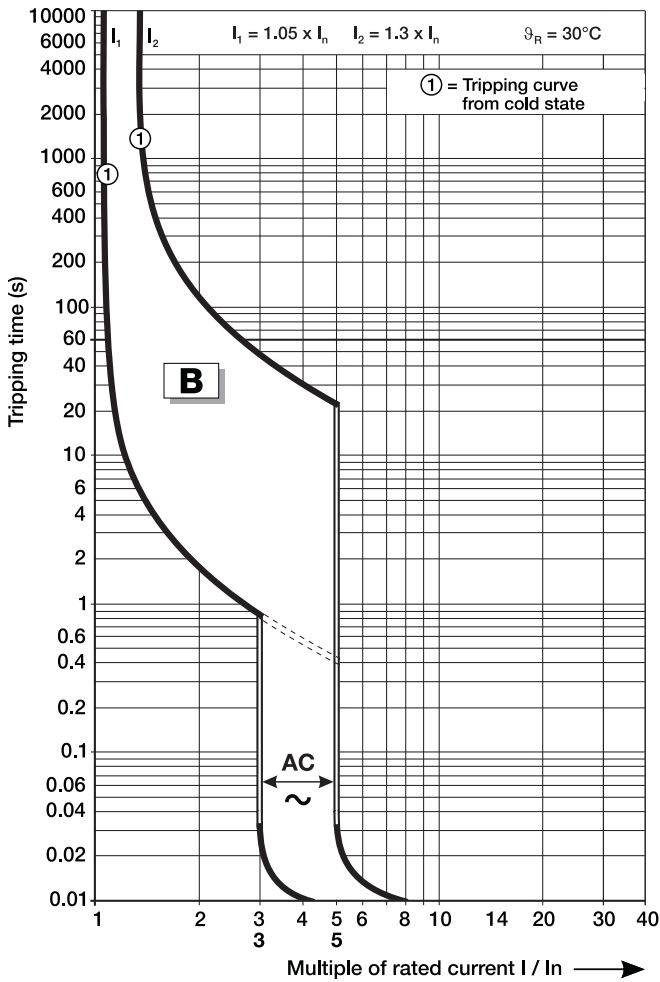
Temperature Derating, IEC

Reference temperature = 30 °C

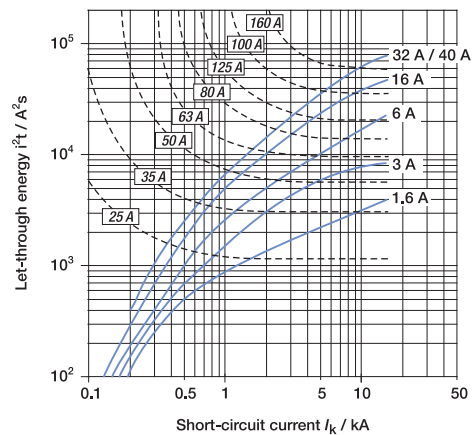
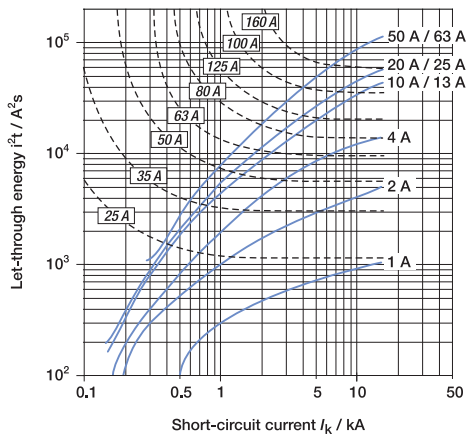
Current Rating [A]	Ambient temperature (°C)									
	-25	-20	-10	0	10	20	30	40	50	55
0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5
1	1.2	1.2	1.1	1.1	1.1	1.0	1	1.0	0.9	0.9
2	2.3	2.3	2.2	2.2	2.1	2.1	2	1.9	1.9	1.9
3	3.5	3.5	3.4	3.3	3.2	3.1	3	2.9	2.8	2.8
4	4.7	4.6	4.5	4.4	4.2	4.1	4	3.9	3.8	3.7
5	5.8	5.8	5.6	5.5	5.3	5.2	5	4.9	4.7	4.6
6	7.0	6.9	6.7	6.5	6.4	6.2	6	5.8	5.6	5.6
7	8.2	8.1	7.8	7.6	7.4	7.2	7	6.8	6.6	6.5
8	9.3	9.2	9.0	8.7	8.5	8.2	8	7.8	7.5	7.4
10	11.7	11.5	11.2	10.9	10.6	10.3	10	9.7	9.4	9.3
13	15.1	15.0	14.6	14.2	13.8	13.4	13	12.6	12.2	12.0
15	17.5	17.3	16.8	16.4	15.9	15.5	15	14.6	14.1	13.9
16	18.6	18.4	17.9	17.4	17.0	16.5	16	15.5	15.0	14.8
20	23.3	23.0	22.4	21.8	21.2	20.6	20	19.4	18.8	18.5
25	29.1	28.8	28.0	27.3	26.5	25.8	25	24.3	23.5	23.1
30	35.0	34.5	33.6	32.7	31.8	30.9	30	29.1	28.2	27.8
32	37.3	36.8	35.8	34.9	33.9	33.0	32	31.0	30.1	29.6
40	46.6	46.0	44.8	43.6	42.4	41.2	40	38.8	37.6	37.0
50	58.3	57.5	56.0	54.5	53.0	51.5	50	48.5	47.0	46.3
63	73.4	72.5	70.6	68.7	66.8	64.9	63	61.1	59.2	58.3

Tripping Characteristics

B Curve

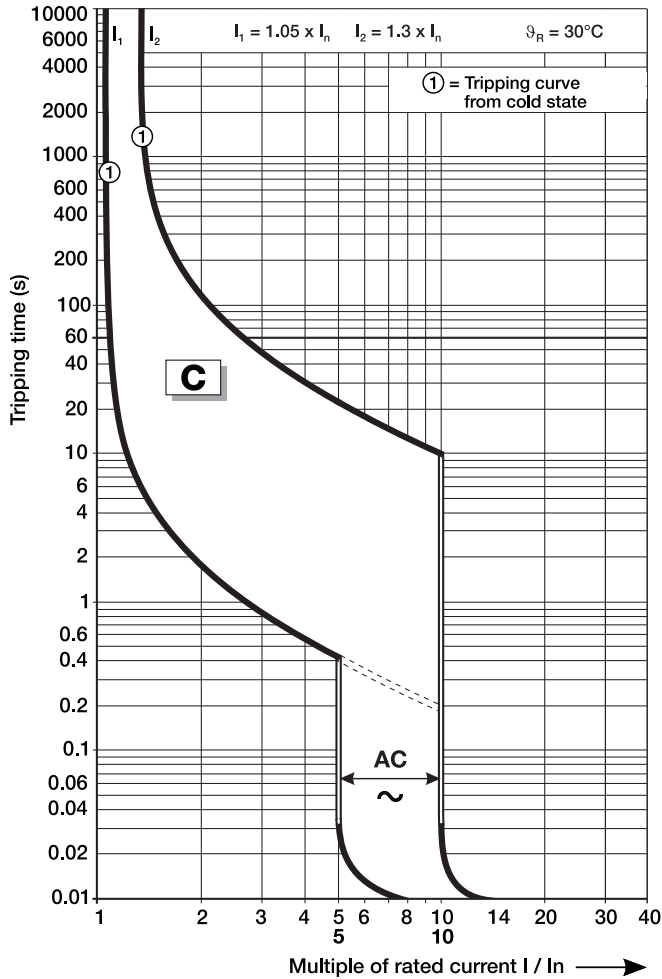


B and C Curve - 230/400V AC Let-through Energy

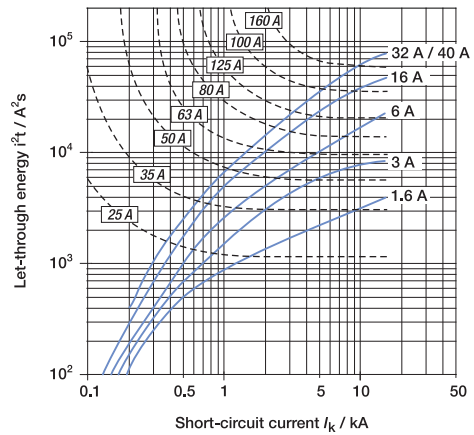
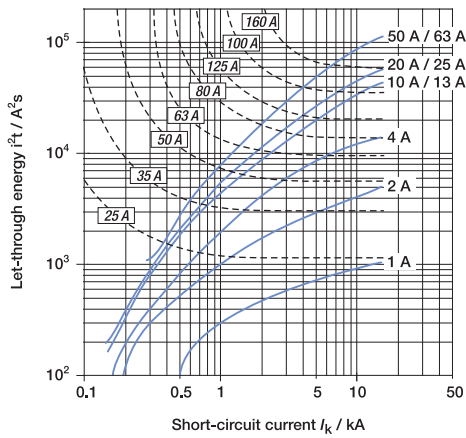


Tripping Characteristics

C Curve

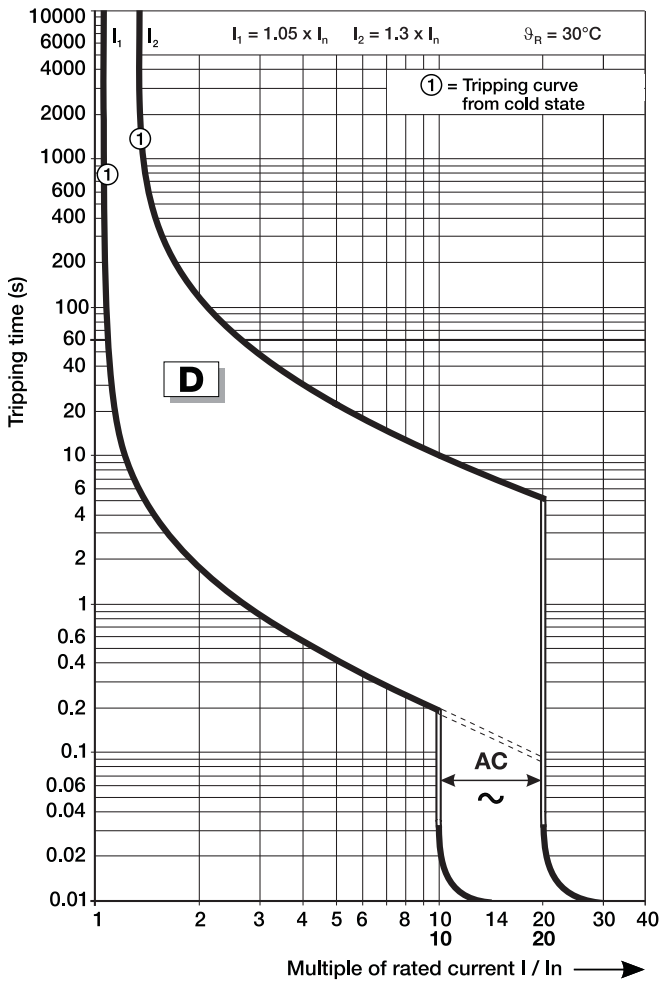


B and C Curve - 230/400V AC Let-through Energy



Tripping Characteristics

D Curve



D Curve - 230/400V AC Let-through Energy

