



Control Circuit and Load Protection

Bulletin Numbers 188, 1489, 1492, 1694



Allen-Bradley

by ROCKWELL AUTOMATION

Selection Guide

Original Instructions

Specifications

Electrical Ratings		
Poles	1, 2	
Tripping characteristics	C	
Rated current (I_n)	0.5...63 A	
Rated frequency [f]	0 Hz (DC only)	
Rated insulation voltage U_i per IEC/EN 60664-1	250V AC (phase to ground) 440V AC (phase to phase)	
Overvoltage category	III	
Pollution degree	3	
Data per UL/CSA		
Rated voltage	1-pole	250V DC
	2-pole	500V DC
Rated interrupting capacity per UL 1077	10 kA	
Application	Supplementary Protector for DC application use; application codes: TC2, OLO, SC: U1, 250V DC, 10kA (1 pole); TC2, OLO, SC: U1, 500V DC, 10kA (2 pole)	
Reference temperature for tripping characteristics	25 °C	
Electrical endurance	6,000 operations	
Data per IEC/EN 60947-2		
Rated operational voltage (U_e)	1-pole	220V DC
	2-pole	440 V DC
Highest supply or utilization voltage (U_{max})	1-pole	250V DC
	2-pole	500 V DC
Min. operating voltage	12V DC	
Rated ultimate short-circuit breaking capacity (I_{cu})	10 kA	
Rated service short-circuit breaking capacity (I_{cs})	10 kA	
Rated impulse withstand voltage U_{imp} . (1.2/50 μ s)	4 kV (test voltage 6.2 kV at sea level, 5 kV at 2,000 m)	
Dielectric test voltage	2 kV (50/60 Hz, 1 min.)	
Reference temperature for tripping characteristics	55 °C	
Electrical endurance 1 cycle (2s - ON, 13s - OFF, $I_n \leq 32$ A), 1 cycle (2s - ON, 28s - OFF, $I_n > 32$ A)	1,500 operations	

Mechanical Data		
Housing	Insulation group II, RAL 7035	
Indicator window	red ON/green OFF	
Protection degree per EN 60529	IP20, IP40 in enclosure with cover	
Mechanical endurance	20,000 operations	
Shock resistance per IEC/EN 60068-2-27	25 g - 2 shocks - 13 ms	
Vibration resistance per IEC/EN 60068-2-6	5g - 20 cycles at 5...150...5 Hz with load 0.8 I_n	
Environmental		
Environmental conditions (damp heat) per IEC/EN 60068-2-30	28 cycles with 55 °C/90-96% and 25 °C/95-100%	
Ambient temperature ⁽¹⁾	-25...+55 °C (-13...+131 °F)	
Storage temperature	-40...+70 °C (-40...+158 °F)	
Installation		
Terminal	Dual terminal	
Cross-section of wire ⁽²⁾ - solid, stranded (front/back terminal slot)	35/35 mm ²	
	18...4/18...10 AWG	
Cross-section of wire - flexible (front/back terminal slot)	25/10 mm ²	
Multi-wire rating per UL, CSA	1 wire, 18...4 AWG	
	2-4 wires ⁽³⁾ , 18...10 AWG	
Cross-section of bus bars (back terminal slot)	10 mm ²	
Tightening torque	IEC	2.8 N•m
	UL/CSA	AWG 18...16: 13.3 in•lb, AWG 14...10: 17.7 in•lb, AWG 8...4: 39.8 in•lb
Screwdriver	No. 2 Pozidriv	
Mounting	DIN Rail (EN 60715, 35 mm) with fast clip	
Mounting position	Any	
Supply	Note polarity of device	
Approximate Dimensions and Weight		
Pole dimension (H x D x W)	88 x 69 x 17.5 mm	
Pole weight	125 g (4.5 oz.)	
Combination with Auxiliary Elements		
Auxiliary contact	Yes	
Signal contact	Yes	
Shunt trip	Yes	

(1) 35 mm² self-declared, not included in IEC/EN approval.

(2) Refer to the ambient temperature derating tables.

(3) Wires must be of like size and stranding. Up to two wires per terminal slot.