

Supplementary Circuit Protector ATR20

The ATR20 circuit protector is a single pole, thermally operated, snap-action overload protector, with a manual, push-to-reset mechanism providing reliable 'trip-free' operation on overloads and short-circuits within the maximum capacity specified. A high contact force is maintained until the contacts break due to overload through the snap-action bimetal disc.

OPERATION:

The entire mechanism of the circuit protector is based on the use of a snap-action cantilevered, thermo-bimetal disc profile with silver alloy contacts, designed to open in the event of a current flow in excess of the rated current, according to the time/current characteristics of the device. The contacts open and close with a positive snap action and the tripped state is clearly indicated by the extended projection of the reset button.

TIME & CURRENT CHARACTERISTICS:

The standard characteristic is valid for ambient temperature of 25°C. If the device is to be used in an ambient temperature other than 25°C, allowance must be made when selecting the current rating according to the following guidelines:

MULTIPLIER	Ambient temp. (°C)						
	-20°C	-10°C	0°C	10°C	25°C	30°C	35°C
2.5A	0.58	0.6	0.7	0.8	1	1	
3A to 4A	0.8	0.85	0.9	0.9	1	1	1.1

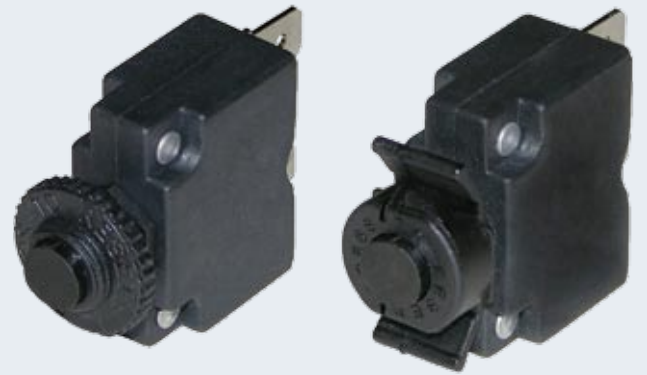
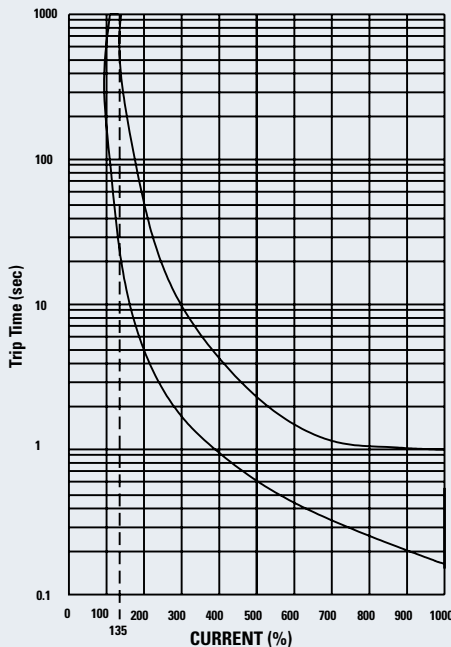
MULTIPLIER	Ambient temp. (°C)							
	-20°C	-10°C	0°C	10°C	25°C	40°C	50°C	60°C
5A to 20A	0.8	0.85	0.88	0.9	1	1.1	1.3	1.4

Example:

Normal continuous current 5.0A
 Ambient temperature 40°C
 Multiplication factor 1.1
 Selected rated current at 40°C
 ambient temperature 5.0 x 1.1 = 5.5
 Select 6.0A (nearest)



Operating Characteristics:



Technical Data

Application Type	General Industrial Ref. CSA 22.2 No. 235-04
Function	SPST
Standard Ratings (Amps)	2.5, 3, 4, 5, 6, 7, 8, 10, 12, 15, 16, 20
Rated Voltage	AC - inductive DC - resistive
Method of Tripping	125 / 250 VAC 50/60 Hz, 50VDC
Type of Actuation	Thermal TO, Cycling trip-free
Initial Insulation Resistance	Reset button, type "R"
Dielectric Strength	>100MW (DC 500V)
Impulse Withstand Voltage	1500 VAC for 1 minute
Contact Gap	2.5kV Ref. EN60934
Housing Material	Micro Disconnection (µ) Ref. EN60934
Button Material	Thermoplastic / Thermoset
Contact Material	Thermoset
Terminal Material	Silver Alloy
Resettable Overload Capacity	Copper Alloy
Overload Capacity	10 X Rated Current
Rated Short Circuit Capacity I _{cn}	2X Rated Current for min. 50 switching cycles, per UL 1077
Rated Conditional Short Circuit Current Capacity I _{nc1} (PC1)	Min. 6 X Rated Current (6 X I _n), 250VAC inductive Ref. EN 60934
Tripping Current Code (TC)	Min. 4 X Rated Current (4 X I _n), 50VDC resistive Ref. EN 60934
Overload Rating	1000A 125 / 250VAC, 50VDC, SC:1kA, C1, 125 / 250VAC, 50VDC, Ref. CSA 22.2 No. 235-04, UL 1077
Weight	TC 2, ref. CSA 22.2 No. 235-04
Applicable Approvals	Overload Rating
	OLO 240VAC, 50VDC, ref. CSA 22.2 No. 235-04
	Approximately 17g
	UL 1077, CSA 22.2 No. 235-04, TÜV EN 60934

ORDERING EXAMPLE:

ATR20 - C - 63 S - B 1 - A - 7.0A - 2

Product Type

2 Mounting Bushing

- A Plastic 3/8"-27
- C Plastic M11
- W Wing Clip

3 Terminal Size

63 .250

4 Terminal Options

- S Straight
- L 90° Bend, Left Side
- R 90° Bend, Right Side

5 Button Color

- B Black
- WB White with trip indication

6 Button Marking

- 0 None
- 1 White, Vertical
- 2 Black, Vertical
- 3 White, Horizontal
- 4 Black, Horizontal

7 Mounting Nut

- N None or Wing Clip
- A Plastic Knurled
- B Metal Knurled
- C Metal Hex Nut
- D Sealing Knurled Boot

8 Std. Current Rating

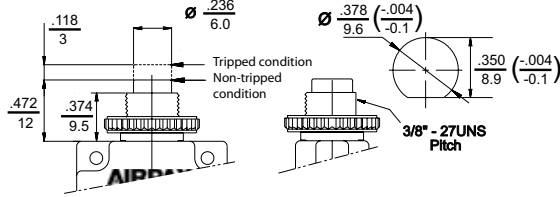
- 2.5, 3.0, 4.0, 5.0, 6.0,
- 7.0, 8.0, 10.0, 12.0,
- 15.0, 16.0, 20.0

9 Indicator Plate

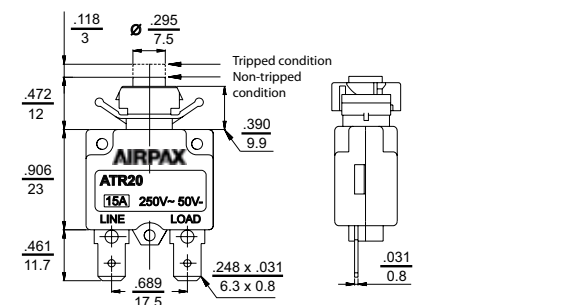
- 0 None
- 1 Embossed Aluminium
- 2 Silver Letters on Black

MOUNTING OPTIONS

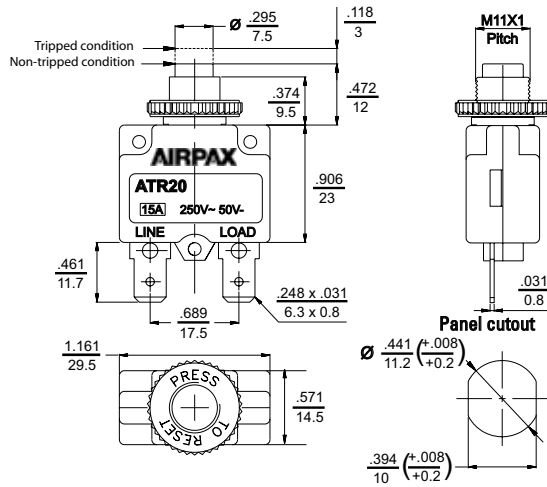
A. 3/8" - 27 UNS



W. WING CLIP

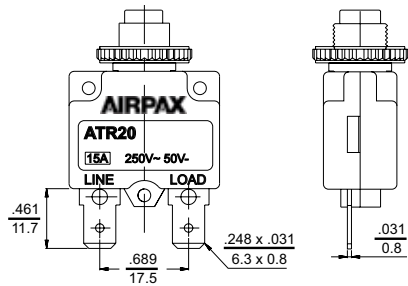


C. M11

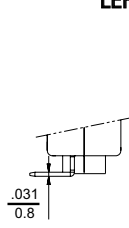


TERMINAL OPTIONS

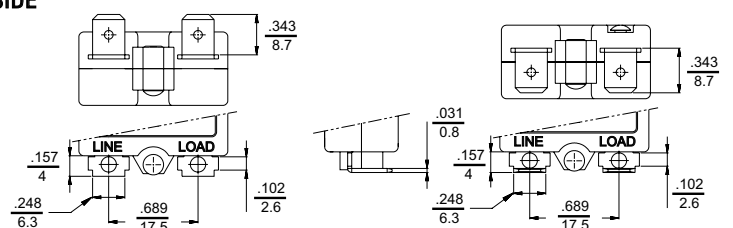
S. STRAIGHT



L. 90° BEND, LEFT SIDE

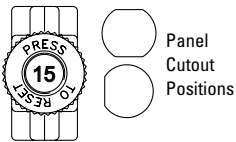


R. 90° BEND, RIGHT SIDE

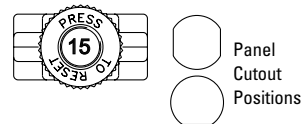


BUTTON PRINTING

VERTICAL



HORIZONTAL



ACCESSORIES

DUST COVER METAL KNURLED NUT (053-200-0005)

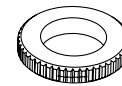


MOUNTING NUTS

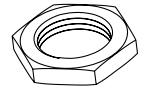
PLASTIC KNURLED NUT (P/N 053-200-0001)



METAL KNURLED NUT (P/N 053-200-0002)



METAL HEXAGONAL NUT (P/N 053-200-0003)



INDICATOR PLATE



- TYPES:
1. Embossed (Aluminium) (P/N 053-200-0004)
 2. Silver Letters on Black (P/N 053-200-0007)