



AIRPAX® | ATR20 Series

Thermal Circuit Protector for Equipment

FEATURES

- RoHS compliant, single pole, thermal current overload protector
- Reliable, trip-free operation on current overloads
- Warranty: 24-months from date of manufacture
- Protection range and operating voltage:
0.1 to 16.0 Amps, 240 VAC, 50 VDC (cRUus,cCSAus)
0.5 to 12 Amps, 240 VAC, 24 VDC (VDE)

DESCRIPTION

The Airpax™ ATR20 product family is a single pole, thermally operated overload protector with a snap-acting trip mechanism that provides reliable, trip-free operation on current overloads. The ATR20 series is designed with multiple mounting configurations including central nut and wing clip.

SPECIFICATIONS

Standard Current Ratings	2.5, 3, 4, 5, 6, 7, 8, 10, 12, 15, 16, 20 Amps (AC - inductive, DC - resistive)
Voltage Ratings	125 / 250 VAC, 50/60 Hz, 50 VDC
Max Breaking Capacity	8x I _n for < 6A, 60A max. > 6A
Conditional Short Circuit Capacity Inc1 (PC1) per EN 60934	1000A 125 / 250VAC, 50VDC, SC:1kA, C1, 125 / 250VAC, 50VDC Ref. CSA 22.2 No. 235-04, UL 1077
Rated Short Circuit Capacity I _{cn} Ref. EN 60934	Min. 6 X Rated Current (6 X I _n), 250VAC inductive Min. 4 X Rated Current (4 X I _n), 50VDC resistive
Tripping Current Code (TC)	TC2 ref: CSA22.2, No. 235-04
Insulation Resistance	Min 100 MΩ @ 500VDC
Dielectric Strength	1.5 KV for 1 min. (per EN60934)
Initial Withstand Voltage	2.5 KV (per EN60934)
Operational Life	1000 Cycles @ 2 x I _n
Overload Rating	OL0 240Vac, 50Vdc, ref: CSA22.2, No. 235-04
Overload Switching Capacity	6x I _n AC Up to 9A, 4x I _n DC Up to 12A 60A Max. from 10A to 12A
Max Operating Temperature	60°C (140°F) Ambient
Application Type	General Industrial ref: CSA22.2, No. 235-04
Method of Tripping	Thermal "TO", trip-free
Type of Actuation	Reset button, type "R"
Weight	Approximately 17 grams
Applicable Approvals	UL 1077, CSA 22.2 No. 235-04, TÜV EN 60934

TIME / CURRENT CHARACTERISTICS

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

See the charts, graph and example below to help determine the right circuit protector rating for your application.

AMBIENT TEMPERATURE CORRECTION FACTOR - 2.5 AMP CIRCUIT PROTECTOR

Ambient Temperature (°C)	- 20	- 10	0	+ 10	+ 25	+ 30
Multiplication Factor	0.58	0.6	0.7	0.8	1	1

AMBIENT TEMPERATURE CORRECTION FACTOR - 3 AMP TO 4 AMP CIRCUIT PROTECTOR

Ambient Temperature (°C)	- 20	- 10	0	+ 10	+ 25	+ 30	+ 35
Multiplication Factor	0.8	0.85	0.9	0.9	1	1	1.1

AMBIENT TEMPERATURE CORRECTION FACTOR - 5 AMP TO 20 AMP CIRCUIT PROTECTOR

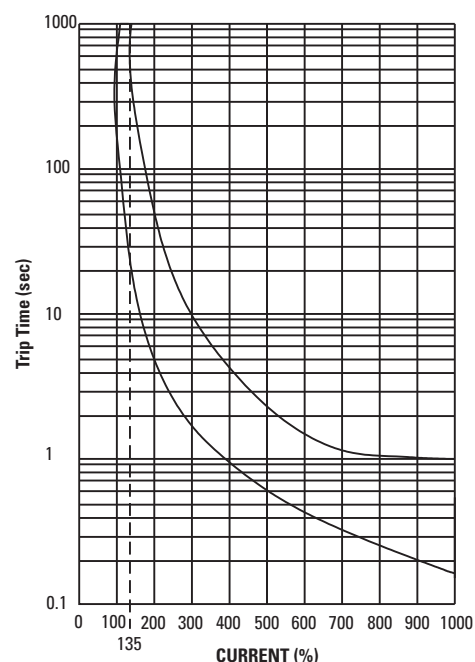
Ambient Temperature (°C)	- 20	- 10	0	+ 10	+ 25	+ 40	+ 50	+ 60
Multiplication Factor	0.8	0.85	0.88	0.9	1	1.1	1.3	1.4

Example :

Normal Continuous Current = 5.0 A
 Ambient Temperature = 40°C
 Multiplication Factor = 1.1 (from 3rd chart)

Recommended Rating: $5.0 \times 1.1 = 5.5$
 Select the Nearest Rating = 6.0 amps (nearest)

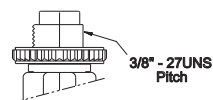
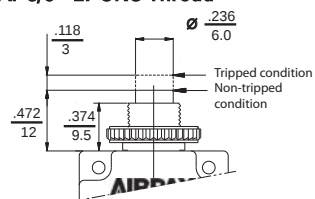
Operating Characteristics :



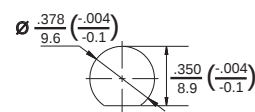
MOUNTING OPTIONS, inches [mm]

Central Mounting (A)

A. 3/8" - 27 UNS Thread

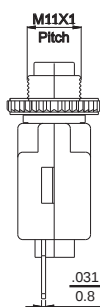
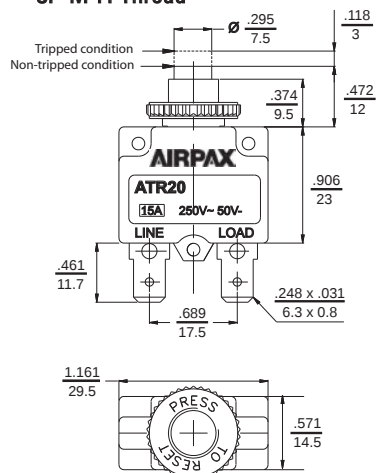


Panel cutout

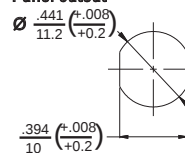


Central Mounting (C)

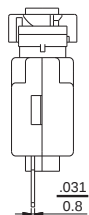
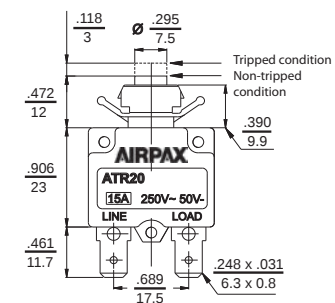
C. M 11 Thread



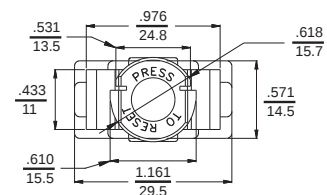
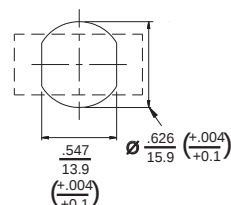
Panel cutout



Wing Clips (W)



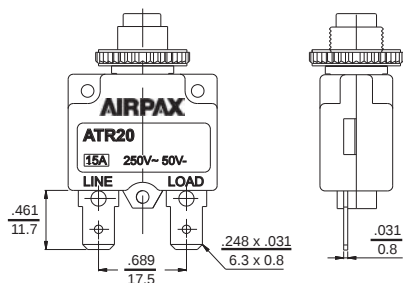
Panel cutout



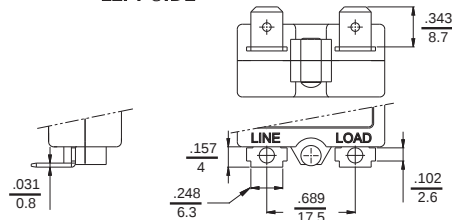
ADDITIONAL OPTIONS

Terminals

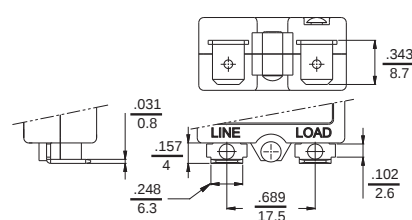
S. STRAIGHT



L. 90° BEND, LEFT SIDE

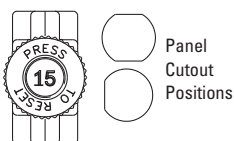


R. 90° BEND, RIGHT SIDE



Button Marking

VERTICAL

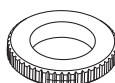


Mounting Nuts

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



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



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

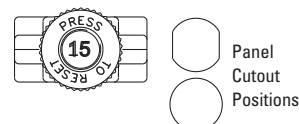


Accessories

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



HORIZONTAL



Indicator Plate



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

DECISION TABLES

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

4 Terminal Options

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

6 Button Marking

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

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

3 Terminal Size

63 .250

5 Button Color

B Black
WB White with trip indication

7 Mounting Nut

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

9 Indicator Plate

0 None
1 Embossed Aluminium
2 Silver Letters on Black