



# 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 <sub>n</sub> 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 Icn Ref. EN 60934	Min. 6 X Rated Current (6 X I <sub>n</sub> ), 250VAC inductive Min. 4 X Rated Current (4 X I <sub>n</sub> ), 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 <sub>n</sub>
Overload Rating	OLO 240Vac, 50Vdc, ref: CSA22.2, No. 235-04
Overload Switching Capacity	6x I <sub>n</sub> AC Up to 9A, 4x I <sub>n</sub> 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

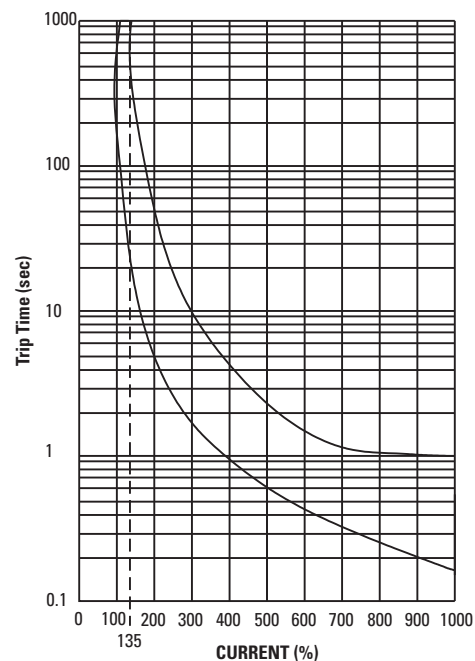
Ambient Temperature (°C)	- 20	- 10	0	+ 10	+ 25	+ 40	+ 50	+ 60
Multiplication Factor	0.8	0.85	0.88	0.9	1	1.1	1.3	1.4

#### 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)

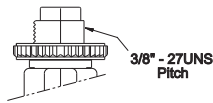
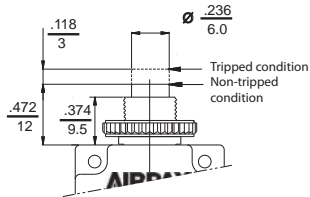
#### Operating Characteristics :



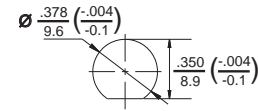
## MOUNTING OPTIONS, inches [mm]

### Central Mounting (A)

#### A. 3/8" - 27 UNS Thread

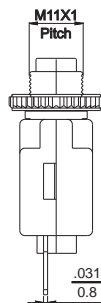
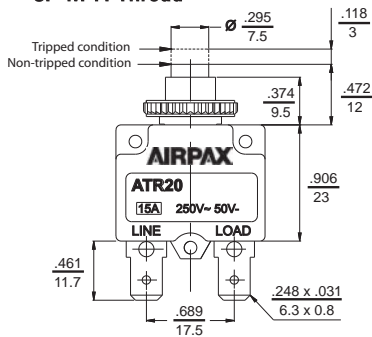


#### Panel cutout

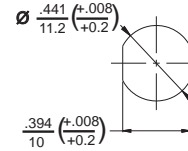


### Central Mounting (C)

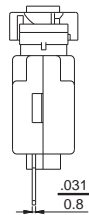
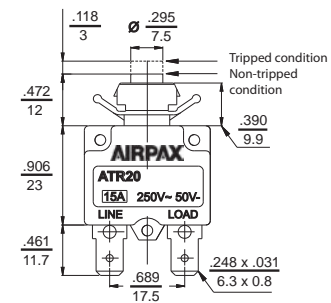
#### C. M 11 Thread



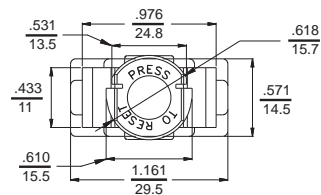
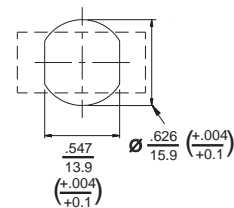
#### Panel cutout



### Wing Clips (W)



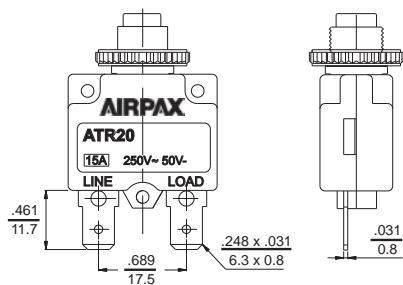
#### Panel cutout



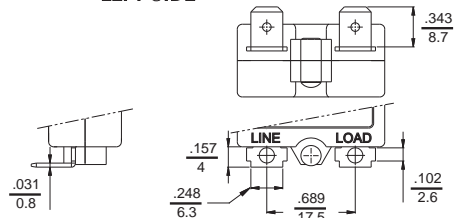
## ADDITIONAL OPTIONS

### Terminals

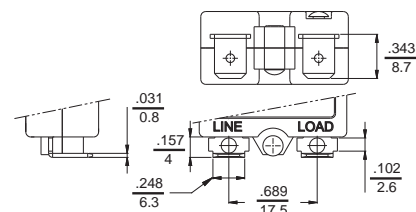
#### S. STRAIGHT



#### L. 90° BEND, LEFT SIDE

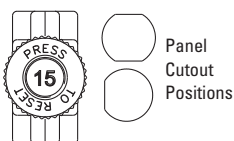


#### R. 90° BEND, RIGHT SIDE



### Button Marking

#### VERTICAL

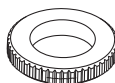


### Mounting Nuts

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



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



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

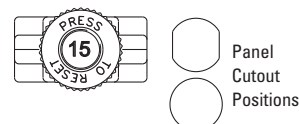


### Accessories

#### 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

