



77 Series Push To Reset Thermal Circuit Breaker

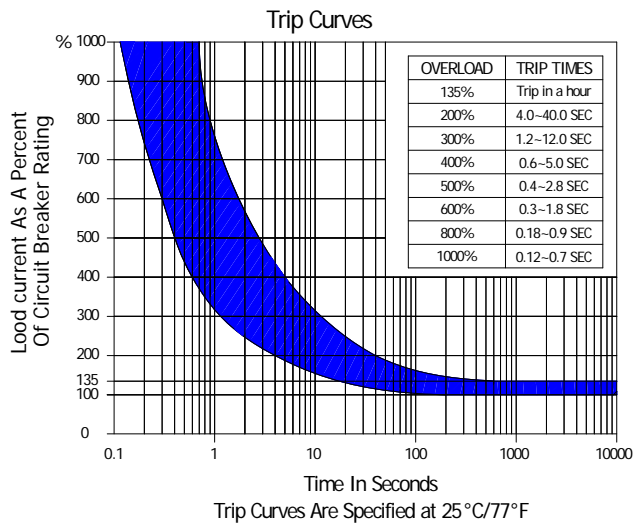
Features

- New compact design
- 3 to 20 amp rate current
- Push-to-Reset breaker
- Button extends for visual trip indication
- Numerous mounting and terminal options.

Technical data

| | |
|------------------------------|---------------------------|
| Rated voltage | 125/250VAC 50VDC, 50/60Hz |
| Rated current | 3~20A |
| Interrupt Capacity | 1000A |
| Dielectric strength | 1500VAC/1 min |
| Insulation resistance | ≥ 100 MΩ, 500VDC |
| Resettable Overload Capacity | Ten times rated current |
| Weight | Approx 15.6g (0.55 oz.) |

Time vs. Current Trip Curve@ +25°C



Ambient Compensation Table

| Current Rating Amps | | Capacity Correction Factors For Ambient Temperatures | | | | | | | | | |
|---------------------|--|--|-----|-----|-----|-----|------|------|------|------|------|
| | | Temperature | | | | | | | | | |
| | | °F | +14 | +32 | +50 | +68 | +77 | +86 | +104 | +122 | +140 |
| | | °C | -10 | +0 | +10 | +20 | +25 | +30 | +40 | +50 | +60 |
| 3 To 4 A | | | .70 | .75 | .82 | .90 | 1.00 | 1.10 | 1.25 | 1.61 | 2.15 |
| 5 To 20 A | | | .77 | .85 | .90 | .95 | 1.00 | 1.05 | 1.15 | 1.25 | 1.40 |

The unit is calibrated for ambient temperature of +25°C. To determine the rated current for a lower or higher ambient temperature, use a correction factor as above.

Approval

| Approval & File No. | Rated current range | Rated voltage |
|----------------------|---------------------|-------------------|
| VDE 40007436 | 5~16A | 250VAC |
| CCC 2003010307097859 | 5~20A | 125/250VAC, 50VDC |
| CSA LR65090 | 3~15A | 125VAC, 50VDC |
| UL/CUL E95802 | 3~20A | 125/250VAC, 50VDC |

Typical Resistance vs. Current Rating @ +25°C

| Current Rating in Amps | Typical Resistance in Ohms | Current Rating in Amps | Typical Resistance in Ohms |
|------------------------|----------------------------|------------------------|----------------------------|
| 3.0 | 0.083 | 10.0 | 0.025 |
| 4.0 | 0.062 | 12.0 | 0.021 |
| 5.0 | 0.050 | 15.0 | 0.017 |
| 6.0 | 0.042 | 16.0 | 0.016 |
| 7.0 | 0.036 | 20.0 | 0.012 |
| 8.0 | 0.031 | | |

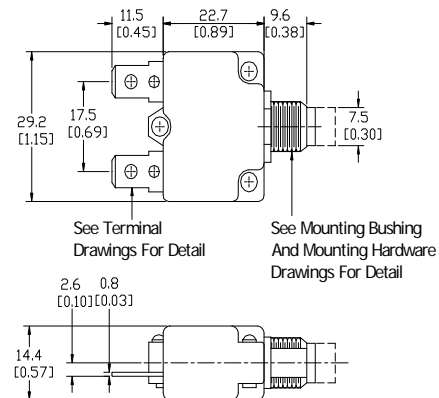
Mechanical/Environmental Data

Operating Ambient Temperature: -10°C to +60°C

Termination: 250" (6.35mm) quick connects or solder terminals

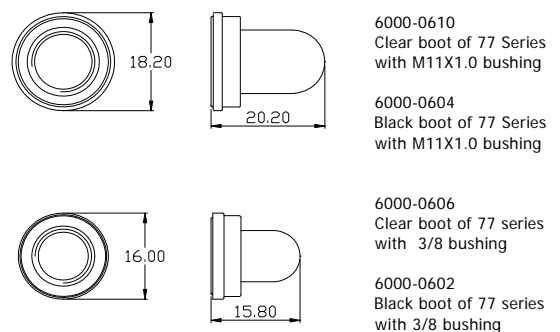
Mounting: Various options. See Ordering Information and drawings

Outline Dimensions



Optional Protective Boot

Silicone rubber boot to integral aluminum nut



Ordering Information

Typical Part No. ▶ **77 20 -1 3 1 2 -2 4 1**

1. Model No.:

77

2. Rating:

03=3A, 04=4A ... 20=20A

3. Voltage:

1= 125VAC/50VDC 2=250VAC/50VDC 3=125VAC/250VAC/50VDC

(適用於 5A~15A)

4. Button:

1=Black 2=White 3=Black with white rate marking (Vertical) 4=White with Red rate marking (Vertical)
 5=White with Black rate marking (Vertical) 6=Black with White rate marking (Horizontal)
 7=White with Red rate marking (Horizontal) 8= White with Black rate marking (Horizontal)

5. Bushing:

5.1. Plastic: 3=B Type 7=C1 Type 9=Snap-In II

5.2. Metal: 4=A Type 6=C1 Type 8=D Type A= C2 Type

6. Terminal:

1=A Type 2=B Type 3=C Type 4=D Type 5=E Type
 6=F Type 8=H Type A=K Type B=L Type C=M Type

7. Nameplate:

0=None 1=Embossed Aluminum 2=Silver Printing On Black 4=No Printing Aluminum

8. Mounting Hardware:

8.1. Plastic: 5= Knurlnut 7= Integrated Knurlnut 8=Integrated Knurlnut With Small Hole 0= None

8.2. Metal: 4= Knurlnut 6= Hex Nut 9= Hex Nut And Knurlnut("4"+"6") C=Two Hex Nut t
 B= Integrated Knurlnut And Hex Nut ("7"+"6") D= Integrated Knurlnut With Small Hole And Hex Nut("8"+"6")

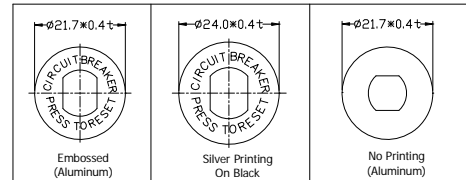
9. Hardware Packaging:

0=Assembled To Bushing 1=Bulk

Mounting Bushings and Recommended Panel Cutouts

| | | | | |
|------------|-------------------|-------------------|----------------------|----------------------|
| | | | | |
| Panel Hole | Panel Hole | Panel Hole | Panel Hole | Panel Hole |
| | | | | |
| Snap In II | M11X1.0 A Type | M11X1.0 B Type | 3/8-24UNF C1 Type | 3/8-24UNF C2 Type |
| | | | | |
| | | | | M12X1.0 D Type |

Optional Nameplates



Mounting Hardware options

| | | |
|----------------------------------|---|-------------------------------|
| | | |
| Knurlnut(2.6mm) | Hex Nut | Integrated Knurlnut |
| 5 | 6 | 7 |
| | | |
| Integrated Knurlnut W/Small Hole | Hex Nut + Knurlnut(2.6mm) | Integrated Knurlnut + Hex Nut |
| 8 | 9 | B |
| | | |
| Hex Nut | Integrated Knurlnut W/ Small Hole+Hex Nut | |
| C | D | |

Terminal Types

| | | | | |
|---------------------------|----------------------|---------------------|--------------------------------|--------------------------------|
| | | | | |
| .250 Tab straight | .250 Tab Bend 45 | .250 Tab Bend 90 | .250 Tab Bend 90 Backward | .250 Tab Bend 90 |
| A Type | B Type | C Type | D Type | E Type |
| | | | | |
| .250 Tab Bend 90 Backward | .250 Tab QC straight | .250 Tab QC Bend 90 | Load Terminal Bend 90 Backward | Load Terminal Bend 90 Backward |
| F Type | H Type | K Type | L Type | M Type |

Ordering Note:

Options denoted by "Special Order" in their descriptions are only offered on a special order basis. Other base and button colors and intermediate Amp ratings are also available on a special order basis. Due to ongoing technological advances, consult factory for certification specifics.