

High Amperage - 25 to 200 AMP

Type I & III Vehicle Protection

IP67 & IP69K Waterproof

Ignition-Protected

SAE & ABYC Compliant

LED TripID™ Option



Series 19

Raising the Bar

MP—Count on it



Mechanical Products Company

Series 19 Overview

The Series 19 features:

- Wider Amperage Range - 25 to 200 Amp
- Smallest Available Breaker to 200 Amp
- Superior Ingress Protection—IP67 & IP69K
- Designed for Harsh Applications to 30VDC
- New LED *tripID*™ for Open Circuits
- Recognized per UL1077 (pending)
- Type I and Type III Manual Reset

Single Pole Thermal Circuit Breakers



Type III Manual Reset w/New LED *tripID*™, Wide Mounting Plate and Attached Mounting Nuts
Shown: Part Number 19M-P21-R-200-02

Series 19 Specifications

Standard Amp Ratings

The Series 19 is available in ratings of 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 105, 120, 135, 150, **175 and 200** amps.

Maximum Voltage Ratings

30 VDC

Ultimate Trip

Must Hold 100% at 25°C/77°F.
Must Trip at 135% within 1 hour.

Dielectric Strength

1,500VAC Minimum

Interrupt Capacity (25 - 150A), up to

2,500A @ 14VDC (Type III)
1,500A @ 28VDC (Type III)
2,500A @ 30VDC (Type I)

Interrupt Capacity (175 - 200A)

2,500A @ 30VDC (Type I and Type III)

Endurance (25 - 150A)

14VDC @ 100 cycles, 6X rating (Type I & Type III)

28VDC @ 100 cycles, 2X rating (Type III)

30VDC @ 100 cycles, 2X rating (Type I)

Endurance (175 - 200A)

14VDC @ 100 cycles, 6X rating (Type I)

14VDC @ 100 cycles, 2X rating (Type III)

28VDC @ 50 cycles, 2X rating (Type III)

30VDC @ 100 cycles, 2X rating (Type I)

Torque Rating

Mounting: #10-32 screws (for attached nut), 25 in-lbs max.

¼" bolts (for 0.27" mtg holes), 50 in-lbs max.

Terminals: ¼"-28 studs, 50 in-lbs max.

Typical Overload Trip Time Data (in seconds)

Current Rating	200%	400%	600%	800 %	1000%
25-200 Amps	10-40	0.6-7.0	0.2-3.0	0.15- 2.0	0.09-1.2

**tested per UL1077 methods*

Typical Ambient Temperature Correction Factor

Current Rating	°F	-40	0	50	77	150	200
	°C	-40	-18	10	25	65	93
25-200 Amps		0.80	0.84	0.87	1.00	1.22	1.47

Operating Temperature Range

-40°C/-40°F to 85°C/185°F

Weight

Panel Mount: 2.6 oz. (74 gm.)

Panel Mount w/Plate: 5.0 oz. (140 gm.)

Environmental

Ignition Protected

Compliant to SAE J1171

Ingress Protection

IP67 - dust and waterproof rated.

IP69K - high temperature and pressure spray

Corrosion

Conforms to Mil-STD-202, Method 101, Test Condition A, for 96 hours under a 5% salt spray.

Humidity

Conforms to Mil-STD-202, Method 106, for 240 hours at 95% RH.

Shock

Rated to withstand 100g per Mil-STD-202, Method 213, Test Condition A.

Vibration

Rated to withstand 10g per Mil-STD-204, Test Condition A.

Regulatory Compliance Summary

Interrupt Capacity: SAE J1625, ABYC-E11, UL1077*

Ignition Protected: SAE J1171

Endurance: SAE J1625

Dielectric Strength: UL1077*

Shock, Vibration, Corrosion, Humidity: Mil-STD-202

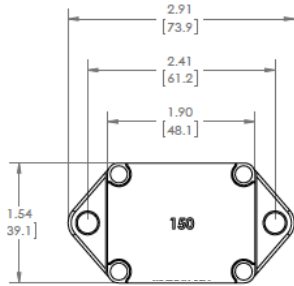
Dust and Waterproof: IP67

High Temp & Pressure Spray: IP69K

Series 19 Physical Configuration

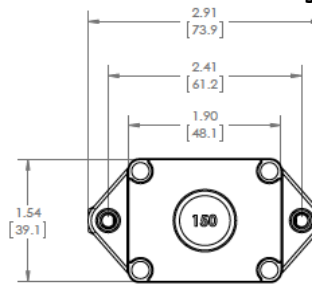
19A-P10

Type I Auto Reset Panel Mount



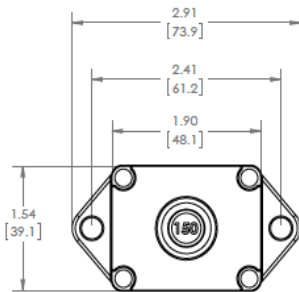
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Type I Auto Reset Panel Mount with LED *tripID*™ and Attached Mounting Nuts



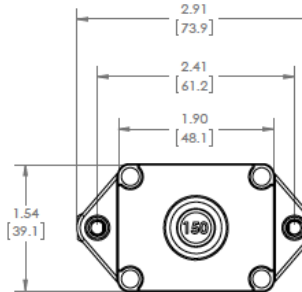
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Type III Manual Reset Panel Mount



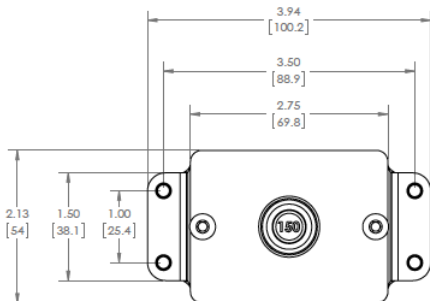
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Type III Manual Reset Panel Mount with Attached Mounting Nuts

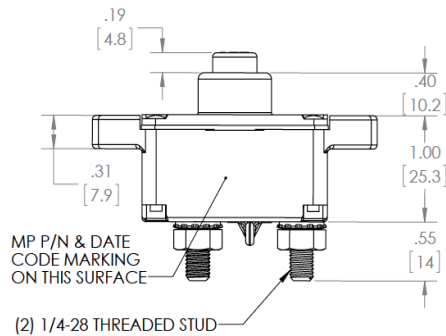


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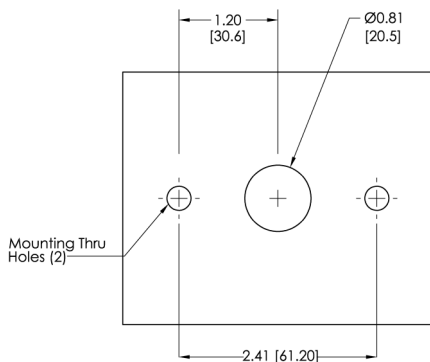
Type III Manual Reset Panel Mount with Wide Mounting Plate and Attached Mounting Nuts



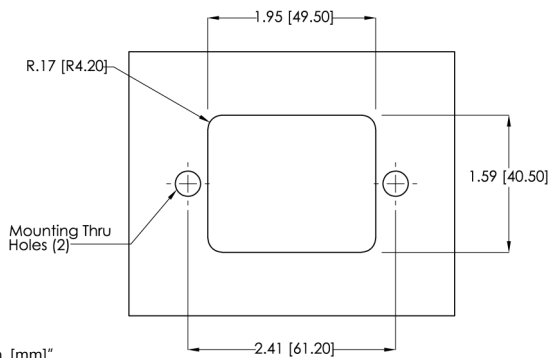
Type III Manual Reset - Side View



Rear Mount Panel Cutout Dimensions Without Wide Mounting Plate

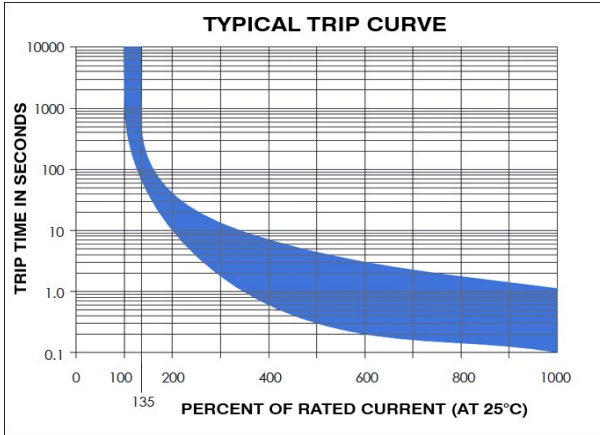


Front Mount Panel Cutout Dimensions Without Wide Mounting Plate

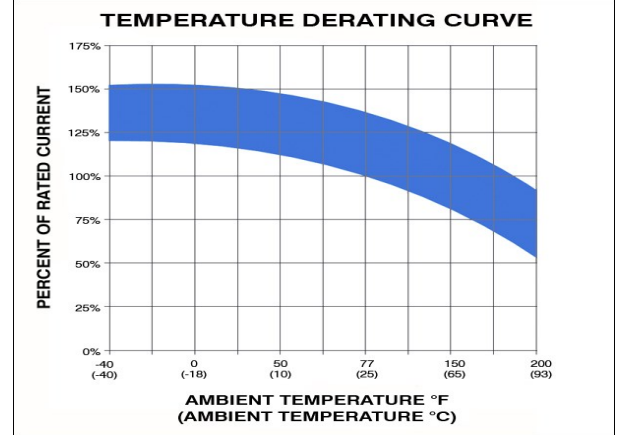


All Dimensions: "in. [mm]"

Series 19 Typical Trip Curve



Series 19 Derating Curve



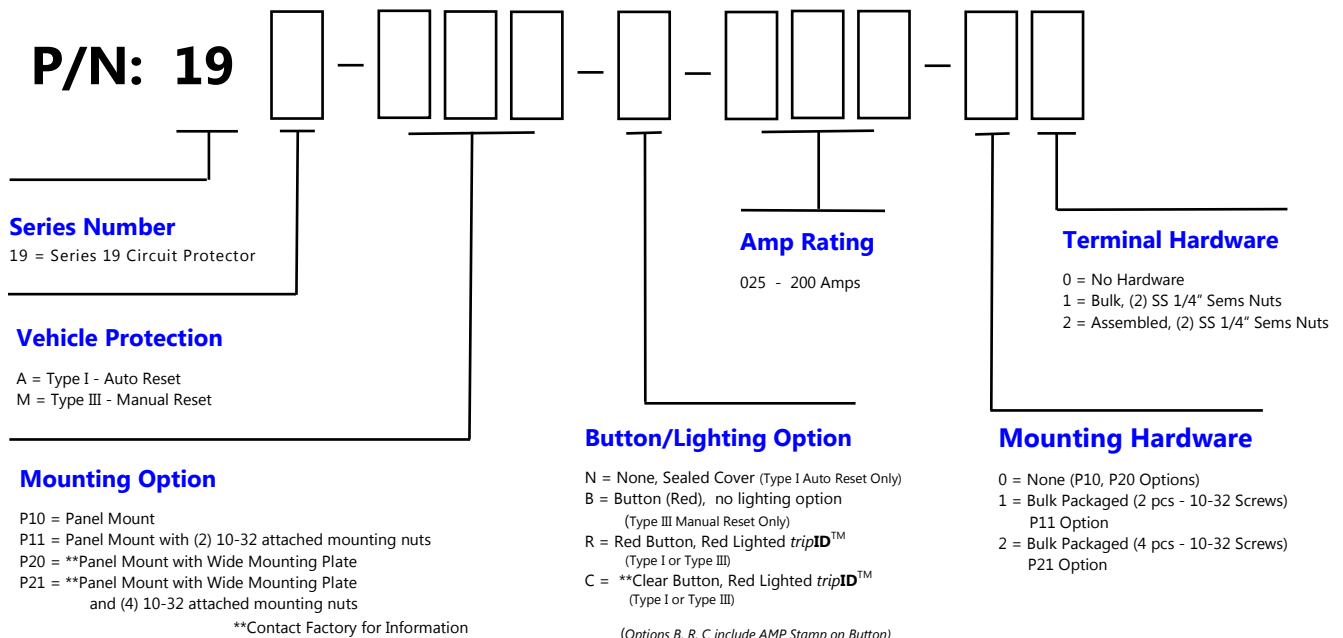
Series 19 Typical High Amp Applications

- Heavy Trucks
- Motorhomes
- Marine
- Battery Chargers
- Wheelchair Lifts
- Construction
- Buses
- Earth-moving Equipment
- Harsh Environments
- Engine Compartments
- Mining Equipment
- Military



Type I Auto Reset w/New LED *tripID™*
Shown: Part Number 19A-P10-C-150-02

Series 19 Part Numbering Guide



WARNING: CANCER & REPRODUCTIVE HARM – www.P65Warnings.Ca.Gov/

• For More Information visit www.mechprod.com/MP_Prop_65



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Specifications subject to change

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