

High Amperage — 25 to 200 AMP

Type I & III Vehicle Protection

IP67 & IP69K Waterproof

Ignition-Protected

SAE & ABYC Compliant





Series 19

Raising the Bar
MP—Count on it

Series 19





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

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)

Single Pole Thermal Circuit Breakers



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

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

*tested per UL1077 methods

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

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	



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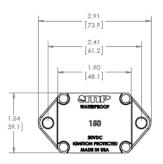
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Series 19 Physical Configuration

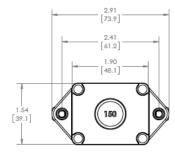
19A-P10

Type I Auto Reset Panel Mount



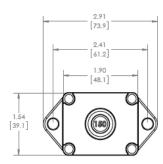
19A-P11

Type I Auto Reset Panel Mount with LED *trip*IDTM and Attached Self Lock Mounting Nuts



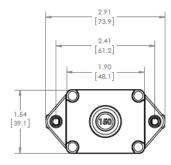
19M-P10

Type III Manual Reset Panel Mount



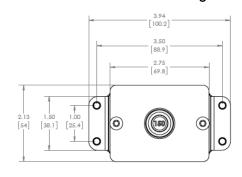
19M-P11

Type III Manual Reset Panel Mount with Attached Self Lock Mounting Nuts

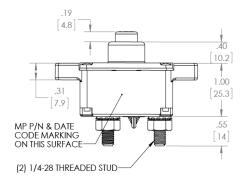


19M-P21

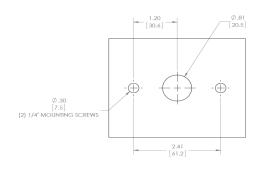
Type III Manual Reset Panel Mount with Wide Mounting Plate and Attached Mounting Nuts



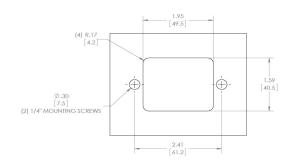
Type III Manual Reset - Side View



Rear Mount Panel Cutout Dimensions Without Wide Mounting Plate



Front Mount Panel Cutout Dimensions Without Wide Mounting Plate

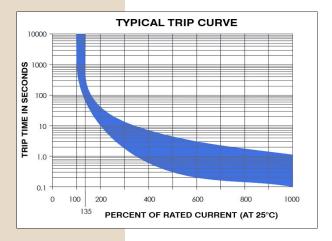


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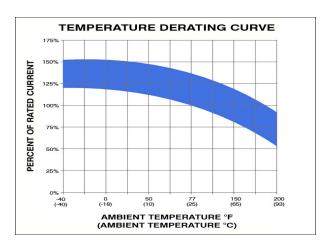
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Series 19 Typical Trip Curve



Series 19 Derating Curve



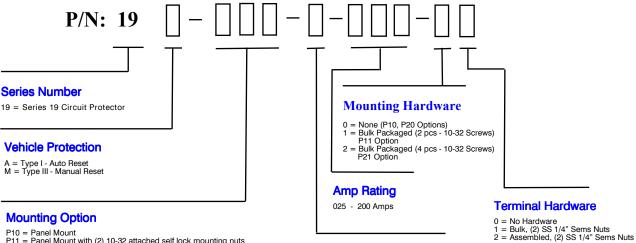
Typical High Amp Applications Series 19

- **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 *trip*ID™ Shown: Part Number 19A-P10-C-150-02

Series 19 Part Numbering Guide



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P10 = Panel Mount P11 = Panel Mount with (2) 10-32 attached self lock mounting nuts P20 = **Panel Mount with Wide Mounting Plate P21 = **Panel Mount with Wide Mounting Plate and (4) 10-32 attached mounting nuts

**Contact Factory for Information

Button/Lighting Option

N = None, Sealed Cover (Type I Auto Reset Only)
B = Button (Red), no lighting option
(Type III Manual Reset Only)
R = Red Button, Red Lighted tripID™ (Type I or Type III)
C = Clear Button, Red Lighted tripID™ (Type I or Type III)

(Options B, R, C include AMP Stamp on Button,





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Ignition Protected: SAE J1171 Endurance: SAE J1625 Dielectric Strength: UL1077*

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Dust and Waterproof: IP67

High Temp & Pressure Spray: IP69K

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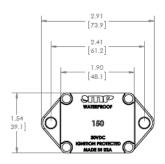
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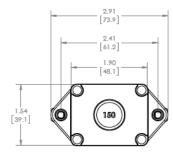
19A-P10

Type I Auto Reset Panel Mount



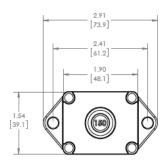
19A-P11

Type I Auto Reset Panel Mount with LED *trip*IDTM and Attached Self Lock Mounting Nuts



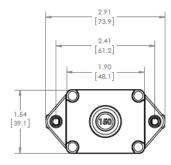
19M-P10

Type III Manual Reset Panel Mount



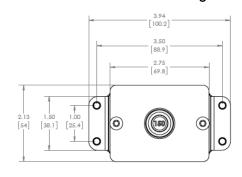
19M-P11

Type III Manual Reset Panel Mount with Attached Self Lock Mounting Nuts

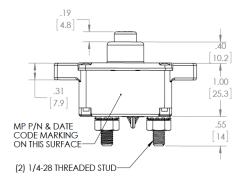


19M-P21

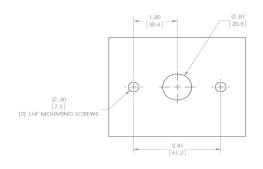
Type III Manual Reset Panel Mount with Wide Mounting Plate and Attached Mounting Nuts



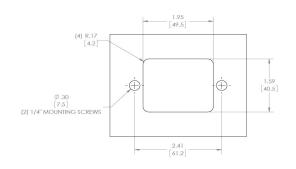
Type III Manual Reset - Side View



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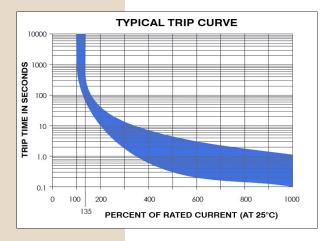


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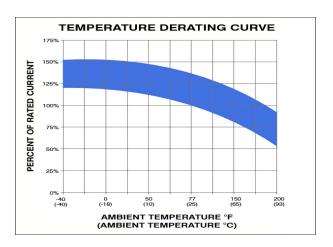
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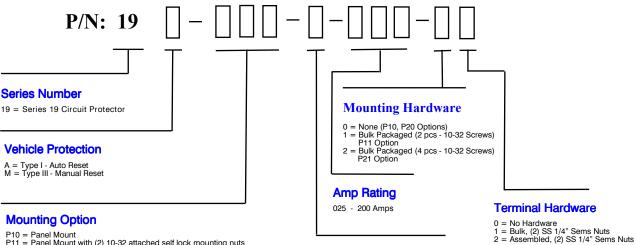
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