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 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 indicator 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, 6X rating (Type III)
28VDC @ 50 cycles, 2X rating (Type III)
30VDC @ 100 cycles, 2X rating (Type I)

Typical Overload Trip Time Data (in seconds)

<table>
<thead>
<tr>
<th>Current Rating</th>
<th>200%</th>
<th>400%</th>
<th>600%</th>
<th>800%</th>
<th>1000%</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-200 Amps</td>
<td>10-40</td>
<td>0.6-7.0</td>
<td>0.2-3.0</td>
<td>0.15-2.0</td>
<td>0.00-1.2</td>
</tr>
</tbody>
</table>

**Typical Ambient Temperature Correction Factor**

<table>
<thead>
<tr>
<th>Current Rating</th>
<th>°C</th>
<th>°F</th>
<th>-40</th>
<th>0</th>
<th>50</th>
<th>77</th>
<th>150</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>°C</td>
<td>°F</td>
<td>-40</td>
<td>-18</td>
<td>10</td>
<td>25</td>
<td>65</td>
<td>93</td>
</tr>
<tr>
<td>25-200 Amps</td>
<td>0.60</td>
<td>0.84</td>
<td>0.87</td>
<td>1.00</td>
<td>1.22</td>
<td>1.47</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Specifications subject to change

**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

*Rated per UL1077 methods

WAYTEK, INC.
800-328-2724  
www.waytekwire.com  
sales@waytekwire.com

Single Pole Thermal Circuit Breakers

Type III Manual Reset w/ New LED indicator™ Wide Mounting Plate and Attached Mounting Nuts shown. Part Number 1WM-P21-R-200-02
Series 19 Typical Trip Curve

TYPICAL TRIP CURVE

TRIP TIME IN SECONDS

PERCENT OF RATED CURRENT (AT 25°C)

0 100 200 300 400 500 600 700 800 900 1000

150 300 450 600 750 900 1050

Series 19 Derating Curve

TEMPERATURE DERATING CURVE

PERCENT OF RATED CURRENT

AMBIENT TEMPERATURE °F
(AMBIENT TEMPERATURE °C)

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

Series 19 Part Numbering Guide

P/N: 19

Series Number
19 = Series 19 Circuit Protector

Vehicle Protection
A = Type I - Auto Reset
M = Type III - Manual Reset

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

Mounting Hardware
0 = None (P10, P20 Options)
1 = Bulk Package (2 pcs - 10-32 Screws)
P11 Option
2 = Bulk Package (3 pcs - 10-32 Screws)
P21 Option

Amp Rating
025 = 250 Amps

Terminal Hardware
0 = No Hardware
1 = Bulk. (2) 5/16” Sems Nuts
2 = Assembled. (2) 5/16” Sems Nuts

Button/Lighting Option
N = None, Shield Cover (Type I - Auto Reset Only)
B = Button (Flat), no lighting option
(Options B, I, C include AMP Stamp on Button)

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Specifications Subject To Change