



Mechanical Products Company

SERIES 17

RAISING THE BAR
MP - COUNT ON IT

High Amperage 25 to 300 AMP

Type I & III Vehicle Protection

IP67 Waterproof

SAE & ABYC Compliant

Ignition-Protected

LED TripID™ Option



SUPERIOR CIRCUIT PROTECTION

www.mechprod.com

Series 17 Overview

FEATURES:

48 VDC maximum for 25 - 150 Amp
 30 VDC maximum for 175 - 200 Amp
 Trip-free operation
 Standard Terminations in Surface
 and Panel Mount (S0 and P0)
 Easy Access Terminations for
 Surface and Panel Mount (S1, S3, P1,)

- Auto, manual, or switching option
- Visible trip indication
- Available with 1/4" and 3/8" Stainless
 - Steel Terminal Studs and Sems Nuts
- Waterproof
- Ignition-protected
- Improved Robust Design

Series 17 Specifications

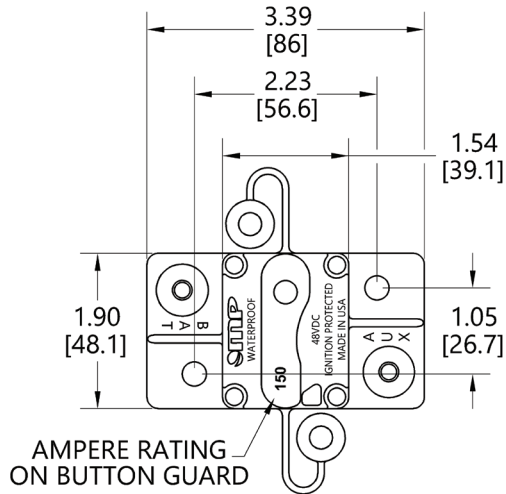
Standard Amp Ratings	25, 30, 35, 40, 50, 60, 70, 80, 90, 100, 110, 120, 135, 150, 175, 200, 225, 250, 275, and 300 Amps
Maximum Voltage Ratings	Type III: 48 VDC (25 -150A); 30 VDC (175 - 200A); 14VDC (225 - 250A) Type I: 30 VDC auto-reset (25 - 200A); 14VDC (225 - 300A)
Ultimate Trip	Must Hold 100% at 25°C/77°F Must Trip at 135% within 1 hour.
Dielectric Strength	1,500VAC Minimum
Interrupt Capacity (25 - 150A)	3,000A @ 14VDC (Type III) 1,500A @ 48VDC (Type III) 3,000A @ 30VDC (Type I)
Interrupt Capacity (175 - 200A)	2,500A @ 14VDC (Type III) 1,500A @ 30VDC (Type I and Type III)
Interrupt Capacity (225 - 300A)	2,500A, 14VDC per SAE J1625 (Type I) 225A, 250A, 275A, 300A 1,500A, 14VDC per SAE J1625 (Type III manual reset) 225A & 250A 1,500A, 14VDC ABYC Main Rated (Type III manual reset) 225A & 250A
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) 48VDC @ 50 cycles, 1.5X rating (Type III)
Endurance (175 - 200A)	14VDC @ 100 cycles, 6X rating (Type I, Type III 175A) 14VDC @ 50 cycles, 4X rating (Type III 200A) 28VDC @ 50 cycles, 2X rating (Type III) 30VDC @ 100 cycles, 2X rating (Type I)
Endurance (225 - 300A)	500 cycles, 200% 14VDC per SAE J1625 (Type I) 225A, 250A, 275A, 300A 50 cycles, 200% 14VDC per UL1077/SAE J1625 (Type III manual reset) 225A & 250A
Operating Temperature Range	-40°C/-40°F to 85°C/185°F
Weight	Panel Mount: 3.1 oz. (88 gm.) Surface Mount: 4.0 oz. (114 gm.)
Ignition Protected	Compliant to SAE J1171
Ingress Protection	IP67 dust and waterproof rated - protection against immersion up to 1 meter of water for 30 minutes.
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

*tested per UL1077 methods

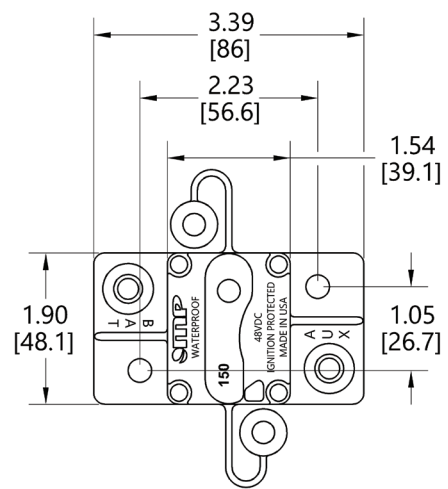


Series 17 Physical Configuration

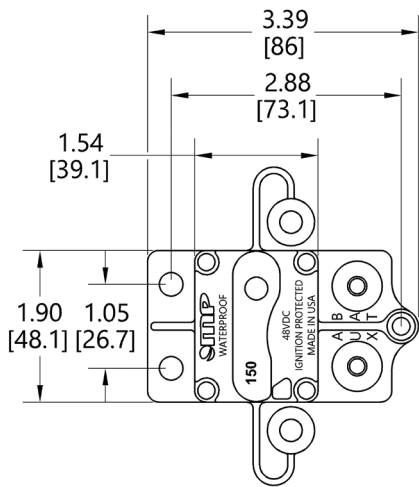
**S0 Standard Surface Mount
1/4" -28 Stud Terminals**



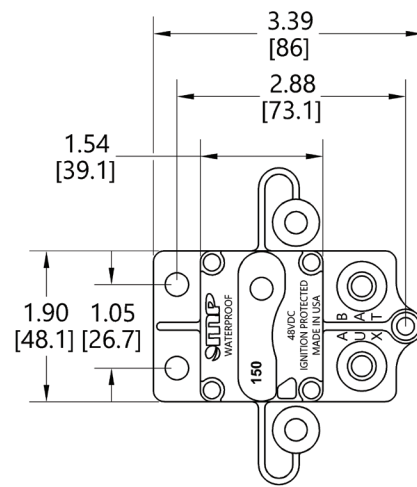
**S2 Standard Surface Mount
3/8" -16 Stud Terminals**



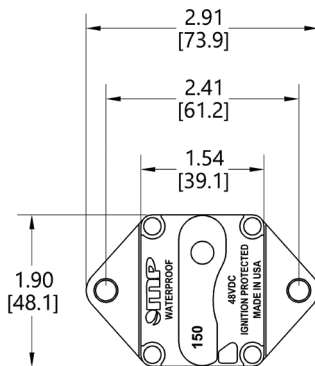
**S1 Easy Access Side by Side Surface Mount
1/4" -28 Stud Terminals**



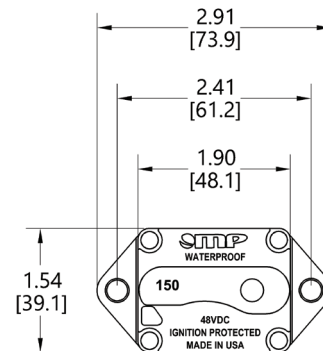
**S3 Easy Access Side by Side Surface Mount
3/8" -16 Stud Terminals**

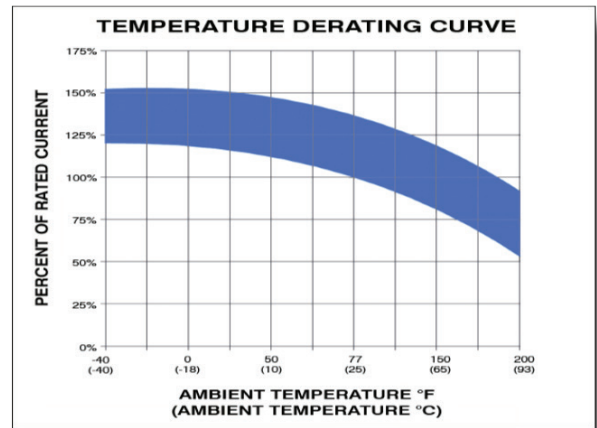
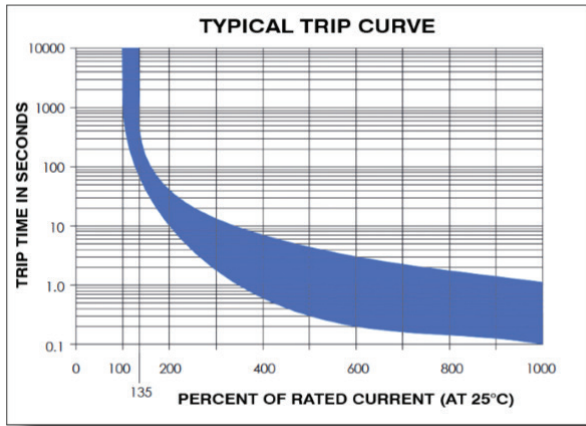


**P0 / P2 Standard Panel Mount
1/4" -28 or 3/8" -16 Stud Terminals**



**P1 Easy Access 90° Panel Mount
3/8" -16 Stud Terminals**





Typical Overload Trip Time Data (in seconds)

Current Rating	200%	400%	600%	800 %	1000%
25-300 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
25-300 Amps		0.80	0.84	0.87	1.00	1.22	1.47

Series 17 Typical High Amp Applications

Main or supplementary circuit protection in industrial/commercial vehicles:

- Agricultural
- Construction
- Marine
- Trucks
- Buses
- Emergency Vehicles
- Automotive Lifts
- Battery Chargers
- Recreational Vehicles

Protect:

- Wiring
- Lighting
- Components
- Batteries
- Motors
- Pumps
- Alternators
- Air Compressors
- Inverters
- Converters
- Generators
- and more

To visit the MP website:



Series 17 Part Numbering Guide up to 200A

P/N: 1 7 - - -

Series Number

17 = Series Circuit Protector

Vehicle Protection

- 1 = Type I Auto Reset
- 4 = Type III Manual Reset
- 5 = Type III Manual Push To Trip Reset
- 6 = Type III Manual Push to Trip w/ red recessed button

Special Options

- Blank = None
- L = 17LED-R Assembled (S0, S1, S2 & S3 Models Only)

Hardware

- 0 = No Hardware
- 1 = Stainless Steel Sems Nuts (Bulk)
- 2 = Stainless Steel Sems Nuts (Installed)

Amp Rating

- 025 - 200 = 25 to 200A
- **225-300A see back page

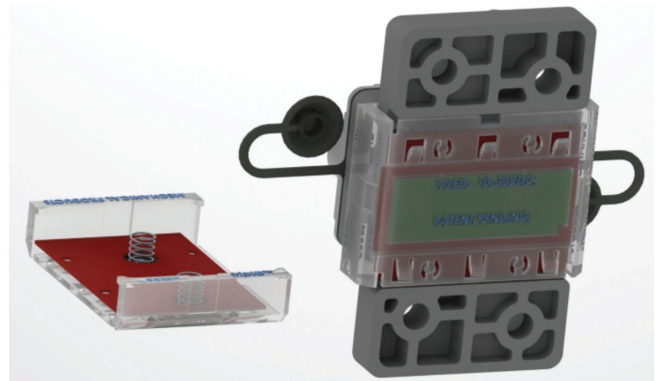
Mounting Options / Configurations

Surface Mount


- S0 = Standard Surface Mount with 1/4"-28 Stud Terminals
- S1 = Side By Side Surface Mount with 1/4"-28 Stud Terminals
- S2 = Standard Surface Mount with 3/8"-16 Stud Terminals
- S3 = Side By Side Surface Mount with 3/8"-16 Stud Terminals

Panel Mount

- P0 = Standard Panel Mount with 1/4"-28 Stud Terminals
- P1 = 90° Panel Mount with 1/4"-28 Stud Terminals
- P2 = Standard Panel Mount with 3/8"-16 Stud Terminals



MP P/N: 17LED-R
 (Sold separately or assembled)
 TripID™ snaps on to rear of surface mount breaker.

 WARNING: Cancer & Reproductive Harm
www.p65warnings.ca.gov/

Series 17 Part Numbering Guide 225-300A

P/N: 1 7 - 2 - -

Series Number

17 = Series Circuit Protector

Vehicle Protection

- 1 = Type I Auto Reset (225 - 300A)
- 4 = Type III Manual Reset (225 - 250A)
- 5 = Type III Panel Mount Manual Push To Trip Reset (225A Only)

****275A and 300A only available in Type I Auto Reset**

Special Options

- Blank = None
- L = 17LED-R Assembled (Surface Mount Models Only)

Hardware

- 0 = No Hardware
- 1 = Stainless Steel Sems Nuts (Bulk)
- 2 = Stainless Steel Sems Nuts (Installed)

Amp Rating

225, 250, 275, 300 = 225 to 300A only

Mounting Options / Configurations

Surface Mount

S2 = Standard Surface Mount with 3/8"-16 Stud Terminals

Panel Mount

P2 = Standard Panel Mount with 3/8"-16 Stud Terminals



Series 17 225 - 300A Features

Rated for applications using 12VDC systems (14Vdc max)

Auto Reset (Series 171-S2-xxx)

- Amperages: 225A, 250A, 275A, 300A
- Endurance: 500 cycles, 200% 14Vdc per SAE J1625
- Short Circuit: 2.5kA, 14Vdc per SAE J1625

Manual Reset (Series 174-S2-xxx)

- Amperages: 225A & 250A
- Endurance: 50 cycles, 200% 14Vdc per UL1077/SAE J1625
- Short Circuit: 1.5kA, 14Vdc per SAE J1625
1.5kA, 14Vdc ABYC Main Rated

3/8" Stainless Steel terminal studs

3/8" Battery Lug for wire size of 4/0 minimum recommended

