



**RAISING THE BAR
- COUNT ON IT**

High Amperage to 225 Amp
Type III Vehicle Protection
IP67 & IP69K Waterproof options
SAE & ABYC Compliant
Ignition-Protected
LED TripID™ Options



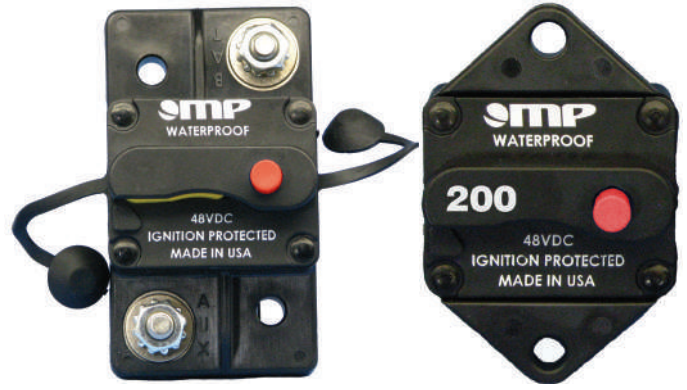
SUPERIOR CIRCUIT PROTECTION

www.mechprod.com

SERIES 17

HIGH AMP CIRCUIT BREAKER

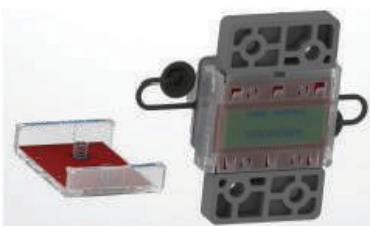
High Amp, IP67 dust & waterproof, ignition protected, SAE Type III (PTT) circuit breaker. Available 25 thru 225A. Panel and surface mount versions. Trip free operation. SAE and ABYC compliant. Options include 1/4" & 3/8" stainless terminals & hardware. Patented. Contact factory for LED TripID™ accessory.



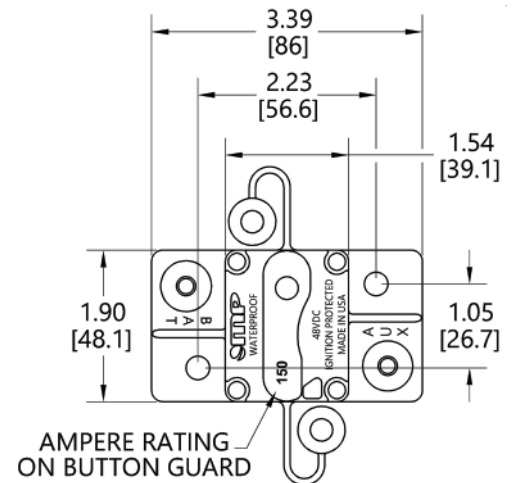
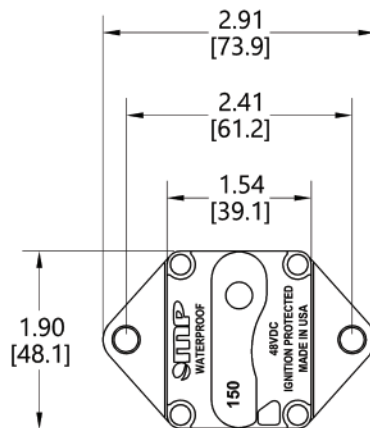
Panel Mount P/N	Surface Mount P/N	Amp Rating
175-P0-025-2R	175-S0-025-2R	25 Amp
175-P0-030-2R	175-S0-030-2R	30 Amp
175-P0-040-2R	175-S0-040-2R	40 Amp
175-P0-050-2R	175-S0-050-2R	50 Amp
175-P0-060-2R	175-S0-060-2R	60 Amp
175-P0-070-2R	175-S0-070-2R	70 Amp
175-P0-080-2R	175-S0-080-2R	80 Amp
175-P0-100-2R	175-S0-100-2R	100 Amp
175-P0-120-2R	175-S0-120-2R	120 Amp
175-P0-150-2R	175-S0-150-2R	150 Amp
175-P0-175-2R	175-S0-175-2R	175 Amp
175-P0-200-2R	175-S0-200-2R	200 Amp
175-P2-200-2R	175-S2-200-2R	200 Amp
175-P2-225-2R	175-S2-225-2R	225 Amp

Interrupt Capacity	
25-150 Amp SAE Type III	3kA @ 14VDC / 1.5kA @ 48VDC
175-225 Amp SAE Type III	1.5kA @ 14VDC / 1.5kA @ 30VDC
Max Voltage Rating SAE Type III	48VDC (25-150A); 30VDC (175-200A); 14VDC (225A)
Operating Temp Range	-40°C/-40°F to 85°C / 185°F
Type	Thermal - Type III Push to Trip manual reset
Terminal Stud	1/4"-28 (P0 & S0) 3/8"-16 (P2 & S2)
Termination Torque	1/4" stud - 50 IN-LBS [5.6 N.m] MAX 3/8" stud - 80 IN-LBS [9.0 N.m] MAX
Weight Panel Mount	3.1 oz (88 gm)
Weight Surface Mount	4.0 oz (114 gm)
Ingress Protection	IP67
Ignition Protected	SAE J1171
Regulatory	SAE J1625, ABYC E-11

17LED-R	Snap-On tripID™ (Bulk)
17LED-RP	Snap-On tripID™ (Bulk & Individually bagged)



MP P/N: 17LED-R* Rear Surface Mount Breaker w/17LED-R Snap-On tripID™
(Sold Separately or Assemblies)



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Specifications subject to change



Mechanical Products Company

BRANCH DISCONNECT CIRCUIT BREAKER

Disconnect & Protect
to 32VDC

SAE, ABYC Compliant

Tested to
UL1077, UL1107, UL1500

Ignition-Protected
IP67 Weatherproof
Harsh Environments



SERIES 53

RAISING THE BAR
MP - COUNT ON IT



SUPERIOR CIRCUIT PROTECTION

www.mechprod.com

Series 53 Overview

The Series 53 Branch Disconnect / Circuit Breaker incorporates into a single device both traditional battery disconnect switching (non-engine) and circuit protection. This unique combination of features in a single rotary switch allows OEM cost savings by eliminating the added components, material and labor of a separate battery switch and circuit breaker/fuse. For the end user or maintenance personnel, the Series 53 provides a quick means to disconnect traditional downstream circuit(s) while preventing unintentional battery drain or allowing for disconnected battery power during storage and/or maintenance.

- Made in the USA
- Combined UL1107 & UL1077
- Ignition Protected
- IP66 & IP67
- CE Marked

Series 53 Specifications

This product is not rated for an engine starter circuit

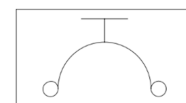
Standard Amp Ratings	10, 15, 20, 30, 35, 40, 45, 50, and 60 Amp (Contact factory for additional amp ratings)
Maximum Voltage Ratings	32VDC
Min / Max Ultimate Trip	Must Hold 100% of rated current at 25°C/77°F Must Trip at 135% of rated current within 1 hour. Unique / specific higher ambient calibrations are available, consult factory
Operating Temperature Range	-40°C (-40°F) to 85°C (185°F)
Dielectric Strength	2000VAC minimum, UL1107*
Interrupt Capacity	Per SAE J553 & UL1077* (U3) at 14 & 28VDC 1.5kA @ 14VDC per ABYC (SAE J553 & UL1077* U3) 3kA @ 14VDC
Endurance (Overload)	Per SAE J553 [100 overload trip cycles at 400% of rated current at 28VDC]
Endurance (Switching)	10-25A: 5000 switching cycles, 30-45A: 4000 switching cycles, 50-60A: 3000 switching cycles, at 110% of rated load, 28VDC, per requirements of UL1107
Effective Current Limit	Per SAE J553
Weight	90 gm
	Environmental
Ignition Protected	Tested to the requirements of ISO 8846, USCG, ABYC, UL1107, UL1500 and SAE J1171
Ingress Protection	IP66 & IP67
Corrosion	Conforms to MIL-STD-202, Method 101, Test Condition A (96 hrs)
Humidity	Conforms to MIL-STD-202, Method 106 (240 hrs)
Shock	Tested to the requirements of UL1107* at 100% rated current
Vibration (sine)	Tested to the requirements of UL1107* at 100% rated current
Vibration (Random)	MIL-STD-202, Method 214, Test Condition I, Letter D (12G), per SAE J1455 at 100%
Regulatory Compliance Summary	Interrupt Capacity: SAE J553, ABYC E-11, UL1077* Ignition Protection: ISO 8846*, USCG, ABYC, UL1500* and SAE J1171 Endurance: SAE J553, UL1107* Dielectric Strength: UL1077*, UL1107* Shock, Vibration, Corrosion, Humidity: MIL-STD-202, UL1077*, UL1107* Ingress Protection: IEC 60529 EU Approvals: CE

**tested per methods of standard*

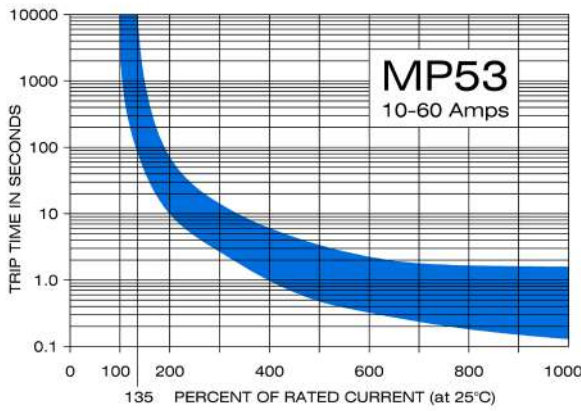
Switch ON, Continuity – Breaker is active and circuit is active.

Switch ON, NO Continuity – Breaker is tripped. Push the PUSH TO RESET button to reset breaker.

Switch OFF, NO Continuity – Breaker out of circuit. Circuit is Off.



Series 53 Trip Curve



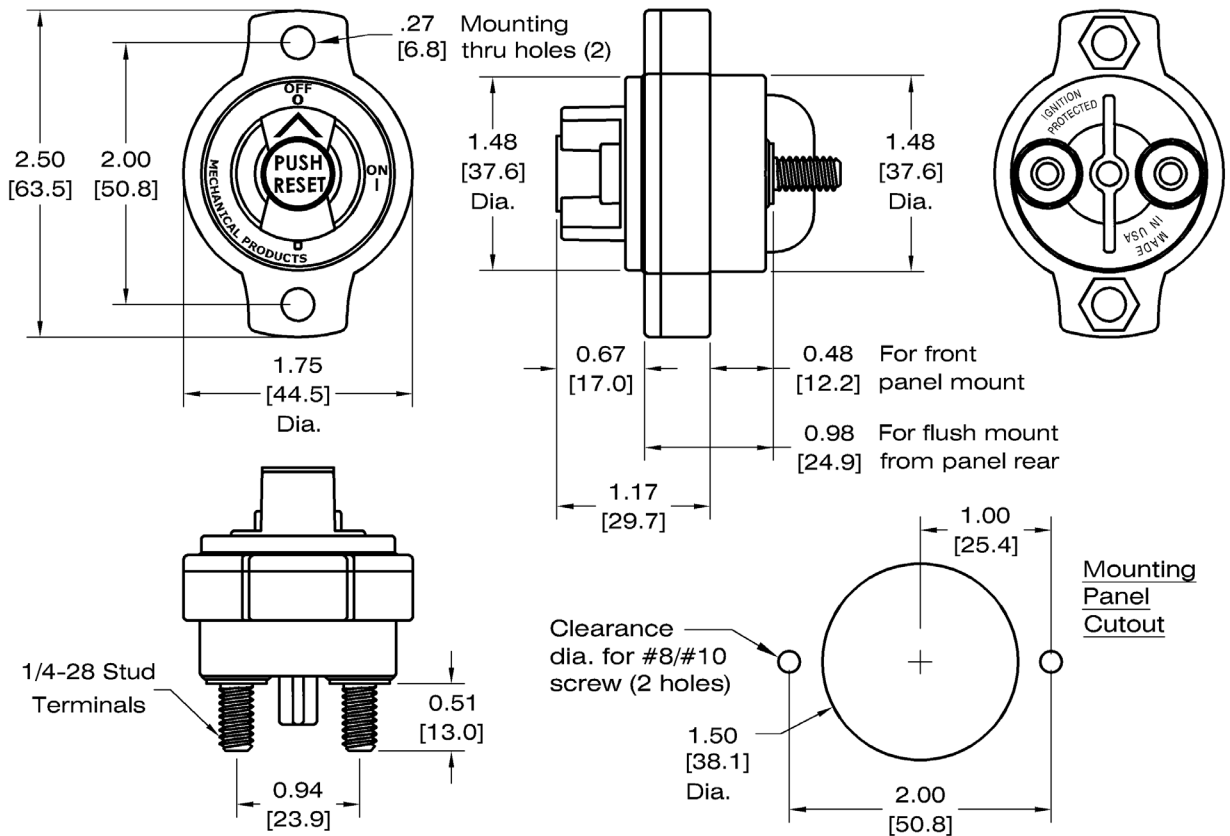
Typical Overload Trip Time Data (in seconds)

Current Rating	200%	400%	600%	800 %	1000%
10-60 Amps	10-80	1-6	0.35-2	0.18-1.4	0.15-1.3

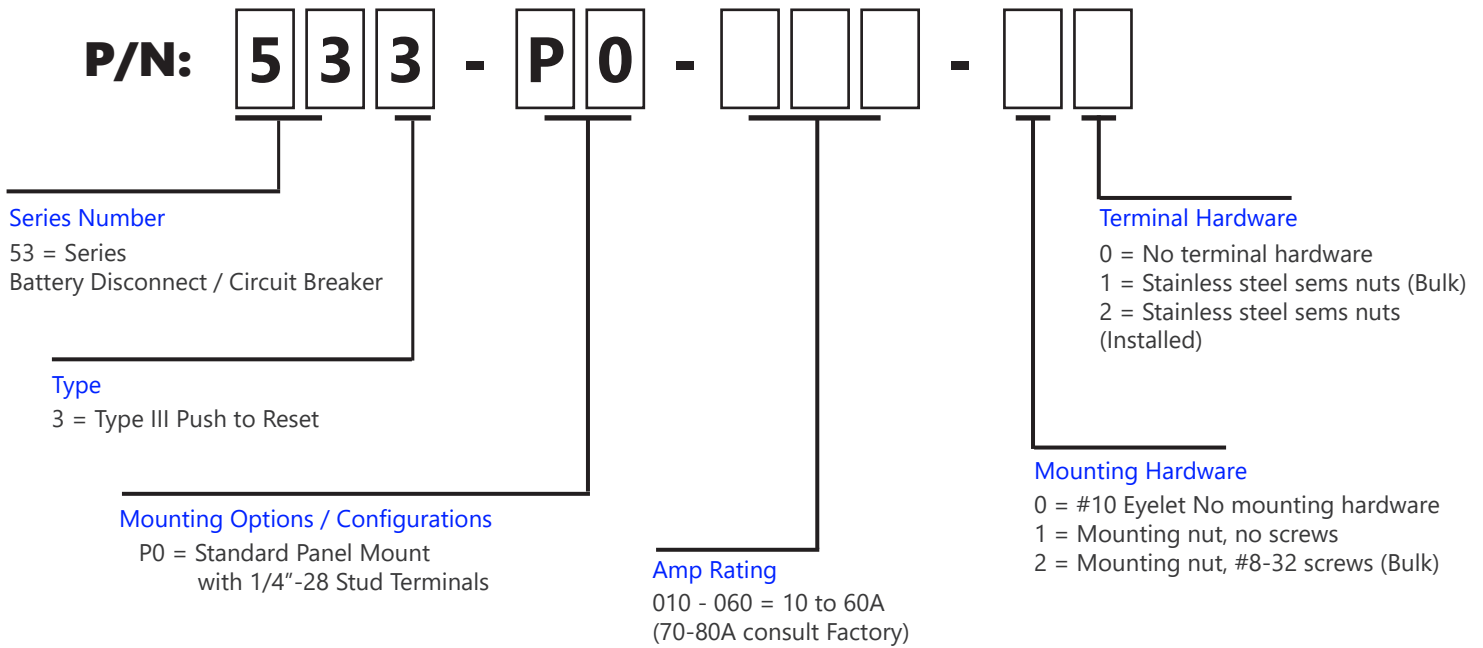
Typical Ambient Temperature Correction Factor

Current Rating	°F	-65	0	32	77	100	140
	°C	-54	-17	0	25	38	60
10-60 Amps		.83	.87	.93	1.00	1.11	1.25

Series 53 Physical Configuration



Series 53 Part Numbering Guide up to 60A



Branch circuit protection in industrial/commercial vehicles:

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

Protect:

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

