

*World's Smallest Push-to-Reset UL489
Recognized Branch Circuit Protection*

Superior Short Circuit Protection

MP Series 02 includes Models 252, 600, and 601 Push-to-Reset circuit breakers. Together, they provide powerful security against hazardous fault currents. A distinctive characteristic of this design is its double-contact break, supported by the unique saddle-shaped thermal sensing element. This configuration allows some models in this family to withstand short circuit conditions as high as 5,000A and continue to function.

High Capacity in a Small Package

Model 252 is UL489 recognized for branch circuit protection. As such, it is one of the smallest units available that is capable of withstanding a 5,000A short circuit.

Such outstanding performance allows you to specify Model 252 in tight enclosures where high fault current protection is vital, thereby eliminating the necessity for other protective devices in series.

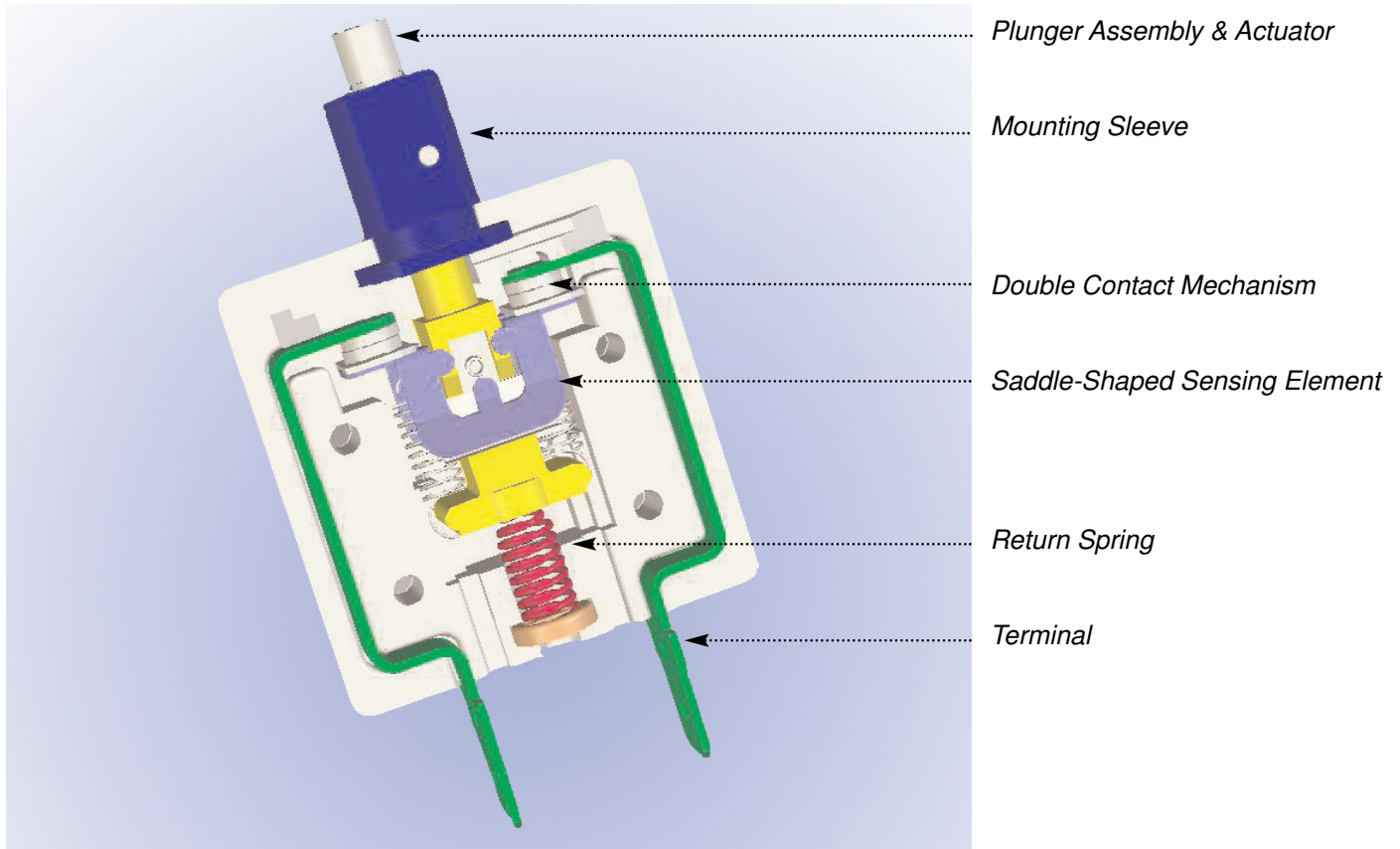
Models 600 and 601 are UL recognized per UL1077 as supplementary circuit protection devices, capable of opening circuit voltages of up to 277VAC and 32VDC.

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Series 02 Physical Configuration

Unique Double-Contact Break Mechanism



The internal workings of all models in Series 02 are based on a double-contact break mechanism. When a Series 02 breaker responds to an overcurrent, the saddle-shaped bimetal disconnects the circuit in two locations. This provides higher resistance to arcing than the same spacing of single-contact separations, and thus, superior short circuit protection. This original design has qualified Model 252 to a UL489 rating for Branch Circuit Protection, and allows models 600 and 601 to be rated at 277VAC and 32VDC - a superior voltage rating for their package size.

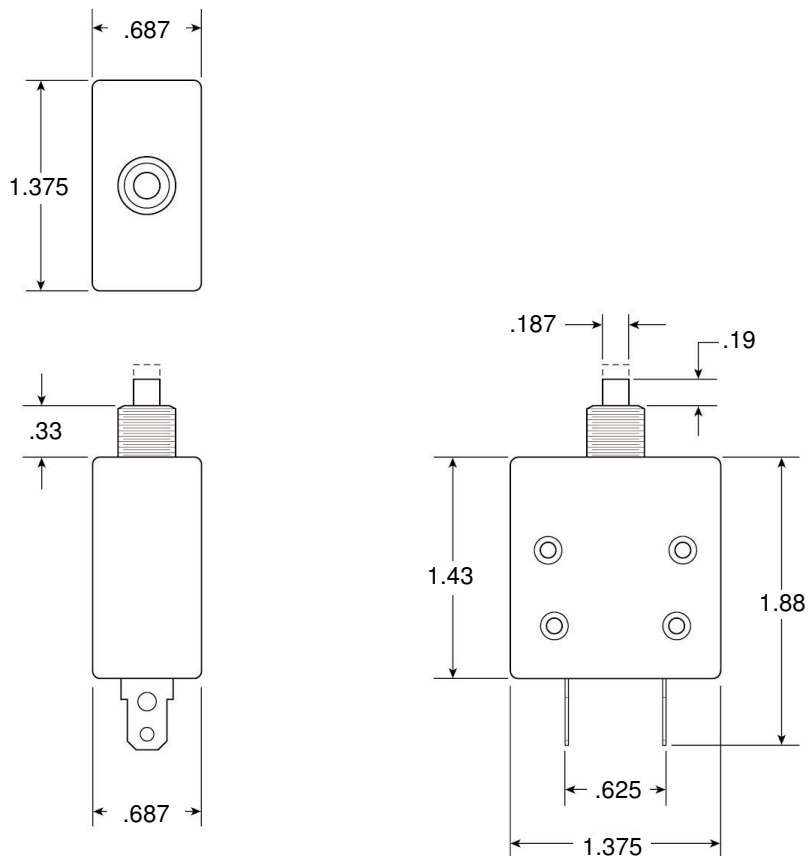
(Consult specification sheet for details.)

For applications assistance call 517-782-0391

FAX 517-788-6773

Series 02 Physical Configuration *(continued)*

Physical Attributes: Models 252-600



Models 252 and 600 offer single-pole, push-to-reset circuit protection. Standard terminals are 0.250" quick-connect-type. Standard through-the-hole mounting, is a threaded $\frac{3}{8}$ "-27 bushing with a D-shaped flat for anti-rotation requirements.

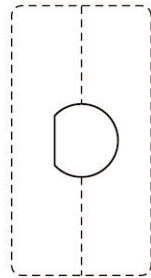
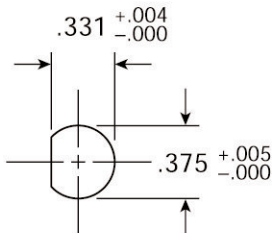
Note: All dimensions are in inches.

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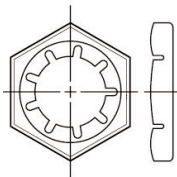
Series 02 Physical Configuration *(continued)*

Mounting Considerations

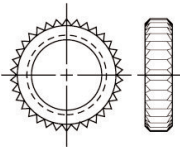


If the actuator button is imprinted with the amp rating, the flat on the panel cutout should be to the left of the actuator in vertical orientation. If no amp stamp is specified, the flat can be oriented parallel or perpendicular to the case seam.

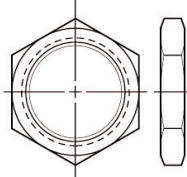
Mounting Hardware



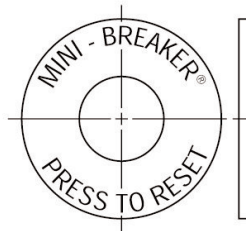
Palnut



Knurlnut

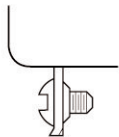


Hexnut



Nameplate

Standard Terminals on Model 601



#10-32 SCREW

Model 601, rated at 30A, comes with standard #10-32 screw terminals.

Note: *All dimensions are in inches.*

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Series 02 Specifications

Standard Amperage Ratings

Model 252 is offered in ratings of 10A, 15A & 20A.

Model 600 is offered in ratings of 5A, 7A, 10A, 15A, and 20A.

Model 601 is offered in a 30A rating.

Voltage Ratings

Model 252 is rated at 120VAC

Model 600 is rated at 277VAC/32VDC

Model 601 is rated at 277VAC

Interrupt Capacity (UL489 and UL1077)

Model 252 short circuit interrupt capacity of 5,000A/120VAC per UL489

Model 600 short circuit interrupt capacity of 5,000A/277VAC per UL1077
1,000A/120VAC per UL1077

Model 601 short circuit interrupt capacity of 5,000A/277VAC per UL1077

Inrush Capacity

Series 02 Models will not trip at 35X rated current for 1/2 cycle (0.008 sec.)

Dielectric Strength

Series 02 Models have a dielectric strength that exceeds 1,500V.

Regulatory Approvals

Model 252

UL - recognized per UL489 (File #E14942) suitable for Branch Circuit Protection

CSA - certified (File #LR13089).

VDE - licensed to IEC STD 60934 (License #10011788)

CCC - CQC STD GB17701-1999 (Certificate #2004010307133518)

Models 600

UL - recognized per (File #E27727)

CSA - certified (File #LR27156).

VDE - licensed to IEC STD 60934 (License #10011788)

CCC - CQC STD GB17701-1999 (Certificate #2004010307133518)

Models 601

UL - recognized per STD 1077 (File #E27727)

CSA - certified (File #LR27156)

CCC - CQC STD GB17701-1999 (Certificate #2004010307133518)

For ratings not listed, please consult factory.



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Series 02 Operating Characteristics

Minimum Ultimate Trip

Series 02 has a minimum ultimate trip of 100% of rated current at 25°C/77°F.

Maximum Ultimate Trip

Series 02 has a maximum ultimate trip of 125% of rated current at 25°C/77°F.

Overload Trip Time Data (in seconds)

Current Rating	200%	300%	400%	500%	600%	800%	1000%
5-7A	5-20	1.7-6.4	.9-3.1	.5-1.9	.35-1.4	.2-.76	.17-.53
10-30A	5-30	1.8-10	.9-5	.5-3.3	.38-2.3	.2-1.3	.15-.9

See corresponding trip curve on facing page.

Voltage Drop

Model	Ampere Range	Voltage Drop
252	10 to 20A	0.25V
600	5 & 7A	0.35V
	10 to 20A	0.25V
601	30A	0.15V

Ambient Temperature Correction Factor

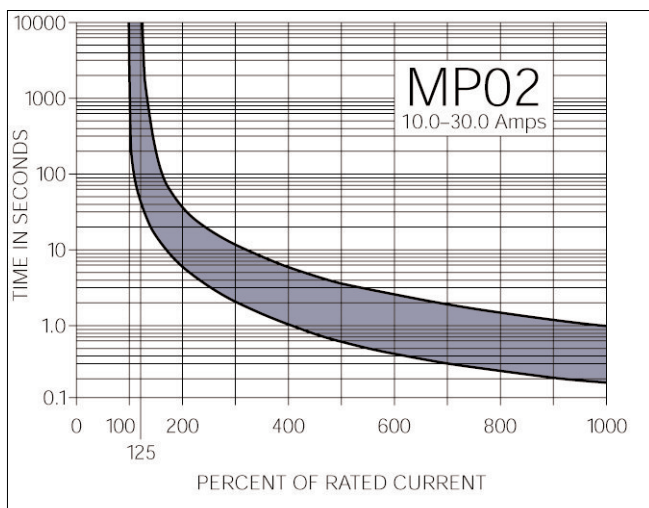
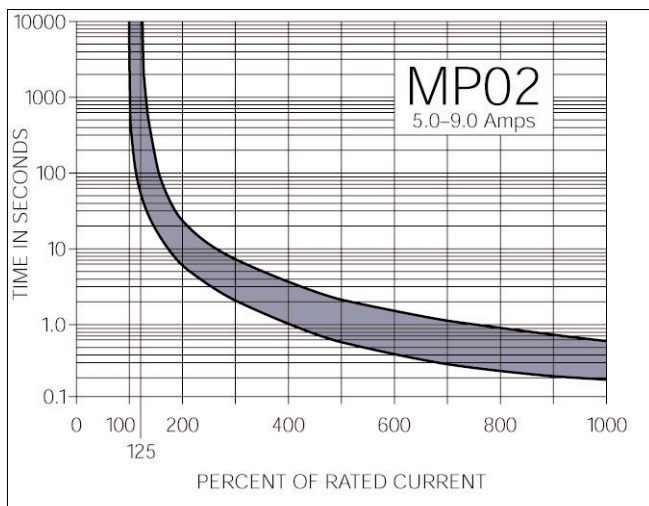
	0°C/32°F	25°C/77°F	40°C/104°F	50°C/122°F	60°C/140°F
5 & 7A	0.84	1.00	1.15	1.30	1.53
10 to 30A	0.88	1.00	1.11	1.20	1.32

Factors are typical for amperages listed.

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Series 02 Operating Characteristics *(continued)*



Trip curves presented here are based on typical samples and are for reference.

Please consult the factory for more specific application information.

Trip curves are specified at 25°C / 77°F.

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Series 02 Part Numbering Guide

P/N: - - -

CODE	MODEL	CODE	MODEL	CODE	AMP RATINGS	CODE	HARDWARE
252	UL489 recognized CSA certified 5,000A Interrupt @ 120VAC	001	3/8"-27 dia. threaded mounting bushing w/ anti-rotation flat. 0.250" quick-connect terminals. White actuator with trip indicator.	100	10.0A	050	Palnut/ Knurlnut/ Nameplate
		041	3/8"-27 dia. threaded mounting bushing w/ anti-rotation flat 0.250" quick-connect terminals. Terminals bent outbound 90 degrees. White actuator with trip indicator.	150	15.0A		
		401	3/8"-27 dia. threaded mounting bushing w/ anti-rotation flat. 0.250" quick-connect terminals. White actuator with trip indicator. Black ampere rating marking on actuator.	200	20.0A		
600	UL1077 recognized CSA certified: 5,000A Interrupt @ 277VAC 1,000A Interrupt @ 32VDC	001	3/8"-27 dia. threaded mounting bushing w/ anti-rotation flat. 0.250" quick-connect terminals. White actuator with trip indicator.	050	5.0A	051	Palnut/ Knurlnut
		011	3/8"-27 dia. threaded mounting bushing w/ anti-rotation flat. 0.250" quick-connect terminals. White actuator with trip indicator. Black ampere rating marking on actuator.	070	7.0A		
		017	3/8"-27 dia. threaded mounting bushing w/ anti-rotation flat. 0.250" quick-connect terminals. Terminals bent outbound 90 degrees. White actuator with trip indicator.	100	10.0A		
601	UL1077 recognized CSA certified 5,000A Interrupt @ 277VAC	001	3/8"-27 dia. threaded mounting bushing w/ anti-rotation flat. #10-32 UNF screw terminals. White actuator with trip indicator.	150	15.0A	054	Hexnut/ Hexnut
				200	20.0A		
				300	30.0A		

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