

World's Smallest Switchable UL-489
Listed Branch Circuit Breaker

Double-Contact Break for Enhanced Interrupt Protection

MP Series 07, including Models 752, 762, and 772 switchable circuit breakers, offers the advantage of a dual-function, manual/automatic disconnect with many other advanced features. The unique, saddle-shaped bimetallic mechanism provides circuit interruption with double contact break. This configuration allows many models in this series to interrupt levels of fault current up to 5,000A, depending on voltage requirements, and continue to function.

Switchable Protection

A simple "push-pull" switching device allows the user to disconnect the entire system, while at the same time providing automatic disconnect in the presence of overcurrent conditions. This feature allows for safe access during repair or maintenance activities. A color band located on the actuator shaft gives a clear indication to users that the system is in a disconnected state.

High Capacity in a Small Package

Model 752 is the smallest switchable UL489-listed branch circuit breaker available that is capable of withstanding a 5,000A short circuit. This exceptional rating allows you to specify in circumstances where the internal configuration of your instrument or system offers limited space, but where high current protection is also a must.

Model 762 is a UL-recognized device per STD #1077 (Supplementary Circuit Protector), capable of opening circuit voltages of up to 277VAC.

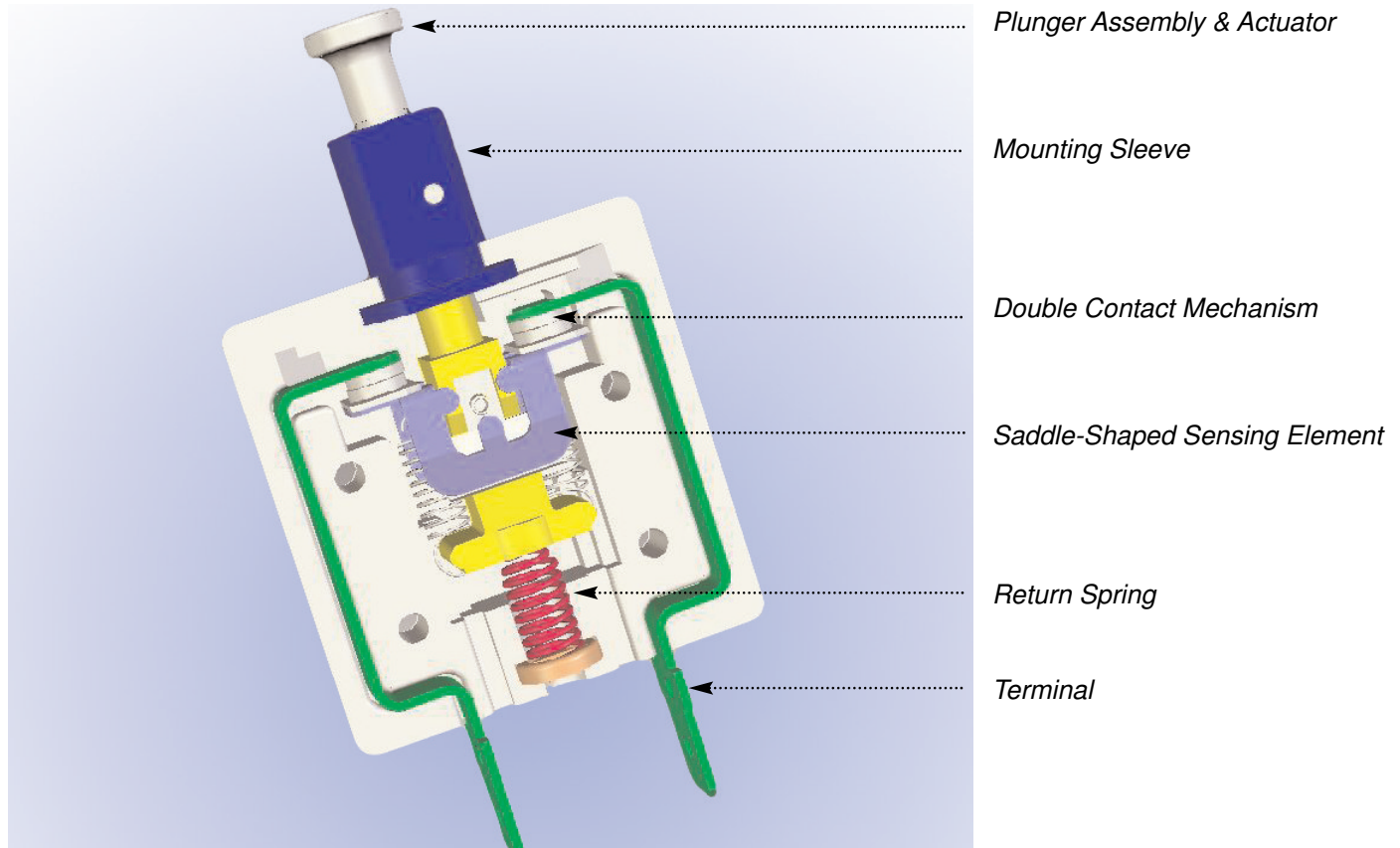
Model 772 is designed for higher-amp situations, subject to specific regulatory approvals at the time of application.

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phone 517 782 0391 fax 517 788 6773 www.mechprod.com mpsales2@mechprod.com

Series 07 Physical Configuration

Unique Double Contact Mechanism



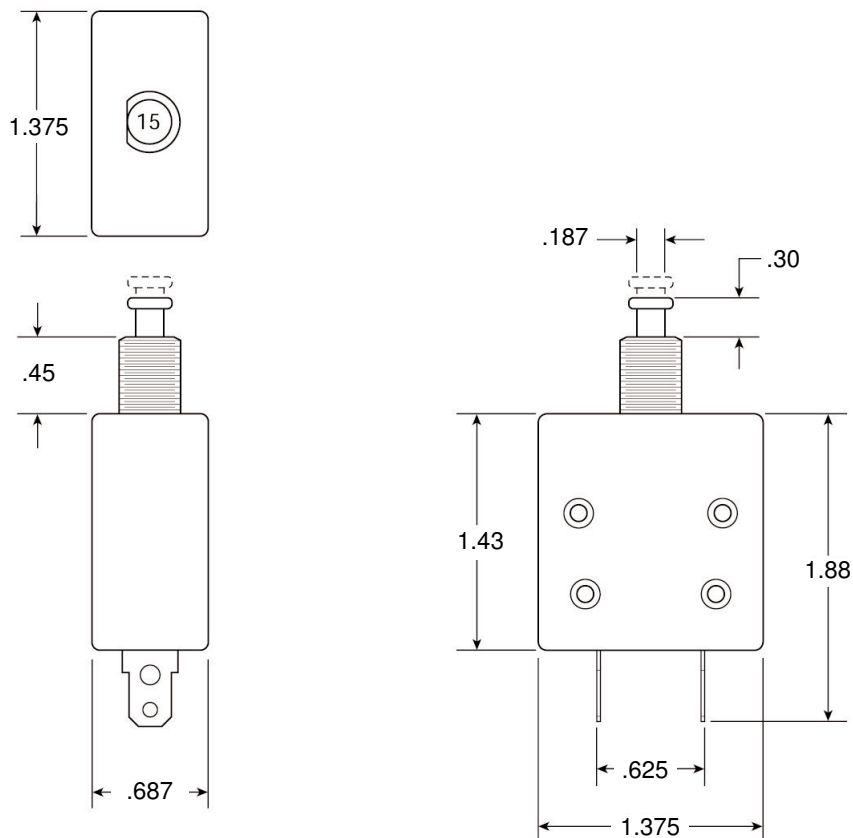
The internal workings of all Series 07 circuit breakers are based on a unique double-contact design. When a Series 07 breaker senses an over-current condition, the saddle-shaped bimetal breaks contact in two locations, ensuring a higher resistance to arcing than the same spacing of single contact separations. The result is superior short circuit protection. It is this unique design that has qualified Model 752 for a UL489 rating (Branch Circuit Protection), and qualifies Models 762 and 772 to be rated up to 277VAC - 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 07 Physical Configuration *(continued)*

Physical Attributes: Models 752–762



Models 752 and 762 offer single-pole switchable protection in a compact package size. Standard 0.250" quick-connect terminals are available, as is a "push-pull" actuator with imprinted amp rating. Through-the-panel mounting is facilitated by a $\frac{3}{8}$ "-27 diameter threaded bushing with a D-shaped flat for anti-rotational requirements.

Amp stamp and flat on bushing may be rotated 180° from that shown.

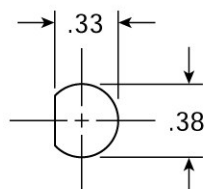
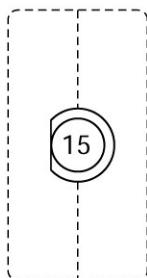
Note: All dimensions are in inches.

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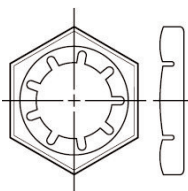
Series 07 Physical Configuration *(continued)*

Mounting Considerations

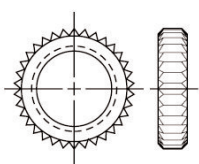


All Series 07 models have the actuator button imprinted with the amp rating. The flat area on the panel cutout should be to the left of the actuator in vertical orientation.

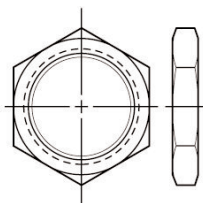
Mounting Hardware



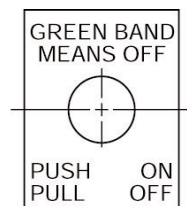
Palnut



Knurlnut

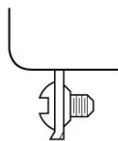


Hexnut



Instruction Plate

Standard Terminals on Model 772



#10-32 SCREW

Model 772, rated at 30A and 40A, comes with standard #10-32 screw terminals.

Note: *All dimensions are in inches.*

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Series 07 Specifications

Standard Amp Ratings

Model 752 is offered in ratings of 15A & 20A.

Model 762 is offered in ratings of 5A, 7A, 10A, 15A, and 20A.

Model 772 is offered in ratings of 30A and 40A.

Voltage Ratings

Model 752 is rated at 120VAC

Model 762 is rated at
277VAC in ratings of 5A to 9A
120VAC in ratings of 10A to 20A

Model 772 is rated at 277VAC

Interrupt Capacity (UL489 and UL1077)

Model 752 short circuit interrupt capacity of 5,000A/120VAC per UL489

Model 762 short circuit interrupt capacity of 5,000A/120VAC per UL1077
1,000A/277VAC per UL1077

Model 772 short circuit interrupt capacity of 1,000A /120VAC per UL1077

Inrush Capacity

Series 07 models will not trip at 35X rated current for 1/2 cycle (0.008 sec.)

Dielectric Strength

Series 07 Models have a dielectric strength rating of 1,500VAC.

Regulatory Approvals

Model 752

UL - listed per UL489 (File #50952)
suitable for Branch Circuit Protection

CSA - certified (File #LR13089)

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

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

Model 762

UL - recognized per STD 1077 (File #E27727)

CSA - certified (File #LR27156)

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

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

Model 772

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 07 Operating Characteristics

Minimum Ultimate Trip

Model 752, 762, and 772 offer a minimum ultimate trip of 100% of rated current at 25°C/77°F.

Maximum Ultimate Trip

Model 752, 762, and 772 have a maximum ultimate trip of 125% of rated current at 25°C/77°F.

Overload Trip Time Data (in seconds)

Model	Current Rating	200%	300%	400%	500%	600%	800%	1000%
762	5-7 A	5-20	1.7-6.4	.9-3.1	.5-1.9	.35-1.4	.2-.76	.17-.53
752/762/ 772	10-40A	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
752	15 & 20A	0.25V
762	5 & 7A	0.35V
	10A	0.25V
	15 & 20A	0.25V
772	30 & 40A	0.15V

Ambient Temperature Correction Factor

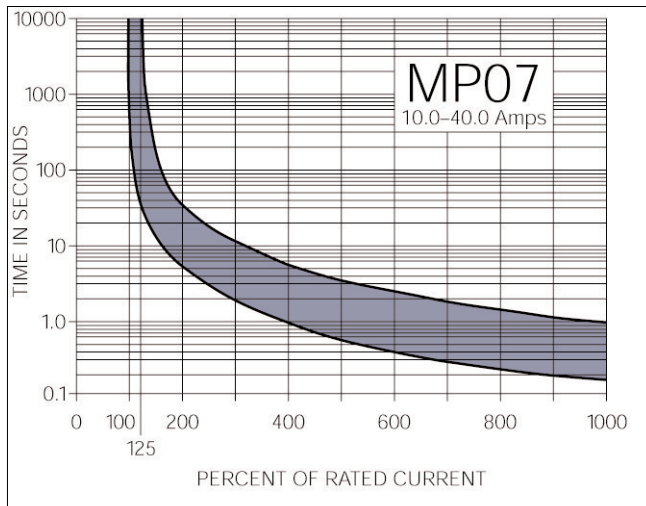
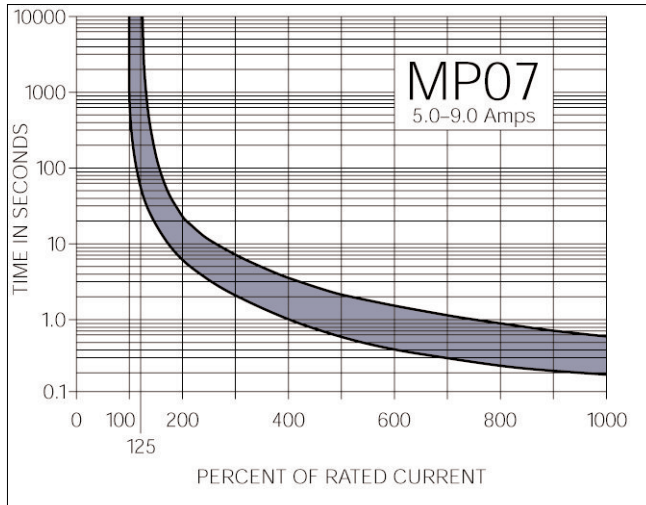
	0°C/32°F	25°C/77°F	40°C/104°F	50°C/122°F	60°C/140°F
5 & 7A	0.84	1.00	1.15	1.30	1.53
10 to 40A	0.88	1.00	1.11	1.20	1.32

Factors are typical for amperages listed.

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Series 07 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 07 Part Numbering Guide

P/N: - - -

CODE	MODEL	CODE	VARIATION	CODE	AMP RATINGS	CODE	HARDWARE
752	UL489 listed CSA certified 5,000A Interrupt @ 120VAC	001	3/8"-27 dia. threaded mounting bushing w/ anti-rotation flat (see illustration – p.4). 0.250" quick-connect terminals. White actuator with trip indicator. Black ampere rating marking on actuator.	150	15.0A	051	Palnut/Knurlnut
		002	3/8"-27 dia. threaded mounting bushing w/ anti-rotation flat (see illustration – p.4). 0.250" quick-connect terminals. Terminals bent outbound 45 degrees. White actuator with trip indicator. Black ampere rating marking on actuator.	200	20.0A	054	Hexnut/Hexnut
762	UL1077 recognized CSA certified: 10 to 20A 5,000A Interrupt @ 120VAC 5 & 7A 1,000A Interrupt @ 277VAC	001	3/8"-27 dia. threaded mounting bushing w/ anti-rotation flat (see illustration – p.4). 0.250" quick-connect terminals. White actuator with trip indicator. Black ampere rating marking on actuator.	050	5.0A	087	Knurlnut/ Hexnut/ Inst. Plate
		012	3/8"-27 dia. threaded mounting bushing w/ anti-rotation flat (see illustration – p.4). 0.250" quick-connect terminasl. Black actuator with trip indicator. White ampere rating marking on actuator.	070	7.0A	098	Palnut/ Knurlnut/ Instruction Plate
772	1,000A Interrupt @ 120VAC	001	3/8"-27 dia. threaded mounting bushing w/ anti-rotation flat (see illustration – p.4). #10-32 UNF screw terminals. White actuator with trip indicator. Black ampere rating marking on actuator.	100	10.0A		
				150	15.0A		
				200	20.0A		
				300	30.0A		
				400	40.0A		

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