

MINIATURE CIRCUIT BREAKERS

PRODUCT PROFILE

ATC Diversified offers a comprehensive line of **Miniature Circuit Breakers** designed and manufactured to meet the needs of the machine builder. We promise durable products at a price that gives you an edge, and we guarantee same-day shipping. Check out all the features of our UL489 & UL 1077 Miniature Circuit Breakers below!



DELIVERING SUPERIOR PRODUCT QUALITY AND MANUFACTURING EXCELLENCE

✓ Proven	Our Miniature Circuit Breakers are UL Listed and Recognized, and CE marked to meet global standards requirements and are compliant to the RoHS directives.	
✓ Compact Design	17.5mm wide per pole construction for reduced panel size, allowing for smaller control panels.	
✓ Easy to Install	35mm DIN rail mounting for fast and easy installation and removal.	
✓ Visible Markings	High visibility labels and markings; product part number, amperage, and UL & IEC short circuit ratings can be seen from the front and side of the device for easy identification.	
✓ Added Safety	Line and load side IP20 guarded finger-safe terminals prevent accidental contact with live parts, while allowing ring, fork, and bare wire connections.	

UNIQUE FEATURES

Full Range Circuit Protection

- Available in single pole, two pole, and three pole constructions and includes both thermal and magnetic trip elements for overload and short circuit protection.

Industry-Leading Short Circuit Rating

- 10kA @ 480Y/277V short circuit current rating on all multi-pole constructions – the highest interruption rating available in the market.

Trip-Free Design

- Holding the operating handle in the ON position will not prevent the miniature circuit breaker from tripping.

Easy Wiring

- Captive screws make it impossible to lose screws when wiring and our box lug design terminals will accept a wide-range of copper wire sizes. Line/load wiring is reversible for ease of use.

Visible Markings & Status Indication

- High visibility labels and markings can be seen from the front and side of the device for easy installation. Color-coded status window for clear visual of the breaker status.

MCB				1
Operating Current				
2.0 Amp	2			
3.0 Amp	3			
5.0 Amp	5			
10 Amp	10			
15 Amp	15			
20 Amp	20			
Device Type				
UL 489 Miniature Circuit Breaker	CB			
UL 1077 Miniature Supplementary Protector *	SP			
Number of Poles				
Single Pole	1			
Two Pole **	2			
Three Pole **	3			
Trip Characteristics				
Trip Curve C ***	C			
Trip Curve D ****	D			
Frame Size				
17.5mm Frame per Pole				1

* 3 Amp [3], 5 Amp [5], and 10 Amp [10] only

** 10 Amp [10], 15 Amp [15], 20 Amp [20], and UL 489 Miniature Circuit Breaker [CB] only

*** 2 Amp [2], 3 Amp [3], 5 Amp [5], 10 Amp [10], and Single Pole [1] only

**** 10 Amp [10], 15 Amp [15], 20 Amp [20], and UL 489 Miniature Circuit Breaker [CB] only

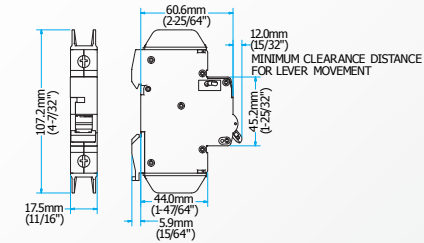
MINIATURE CIRCUIT BREAKERS

SPECIFICATIONS

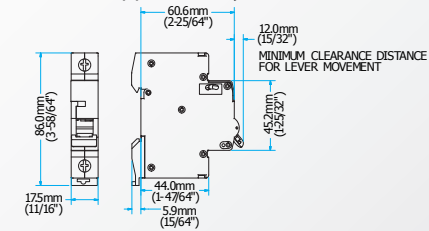
UL 489 BRANCH CIRCUIT BREAKERS				
	UNITS	1 POLE	2 POLE	3 POLE
ELECTRICAL GENERAL				
Rated Operating Current	A		0.5 ~ 63	
Operating Frequency	Hz		50/60	
Electrical Life	Ops.		6,000	
Line/Load Wiring		Suitable for reverse feed		
ELECTRICAL UL/CSA APPLICATIONS				
Conformity to Standards		cULus, UL 489, CSA C22.2 No. 5		
AC Rated Operating Voltage	V	277		480Y/277
DC Rated Operating Voltage (wired in series)	V	48	96	—
MAXIMUM SHORT CIRCUIT RATING				
@ 120 VAC	kA		10	
@ 240 VAC	kA		10	
@ 277 VAC	kA		10	
@ 480Y/277 VAC	kA		10	
@ 48 VDC	kA	10	10	—
@ 96 VDC (wired in series)	kA	—	10	—
ELECTRICAL IEC APPLICATIONS				
Conformity to Standards		IEC 60947-2, IEC 60898		
ULTIMATE SHORT CIRCUIT BREAKING CAPACITY (Icu)				
@ 240 VAC	kA		10	
@ 415 VAC	kA		10	
RATED SERVICE SHORT CIRCUIT BREAKING CAPACITY (Ics)				
@ 240 VAC	kA		10	
@ 415 VAC	kA		10	
CONSTRUCTION - CONDUCTOR SIZE				
UL/CSA	AWG		1 x #14 ~ #3	
Solid, Stranded, Fine Stranded	mm ²		1 x 2.08 ~ 26.7	
ROHS COMPLIANCE				
UL 1077 SUPPLEMENTARY PROTECTORS				
	UNITS	1 POLE	2 POLE	3 POLE
ELECTRICAL GENERAL				
Rated Operating Current	A		0.5 ~ 63	
Operating Frequency	Hz		50/60	
Electrical Life	Ops.		6,000	
Line/Load Wiring		Suitable for reverse feed		
ELECTRICAL UL/CSA APPLICATIONS				
Conformity to Standards		cURus, UL 1077, CSA C22.2 No. 235		
AC Rated Operating Voltage	V	277		480Y/277
DC Rated Operating Voltage (wired in series)	V	48	96	—
MAXIMUM SHORT CIRCUIT RATING				
@ 120 VAC	kA		10	
@ 240 VAC	kA		10	
@ 277 VAC	kA		10	
@ 480Y/277 VAC	kA		10	
@ 48 VDC	kA	10	10	—
@ 96 VDC (wired in series)	kA	—	10	—
ELECTRICAL IEC APPLICATIONS				
Conformity to Standards		IEC 60947-2, IEC 60898		
ULTIMATE SHORT CIRCUIT BREAKING CAPACITY (Icu)				
@ 240 VAC	kA		10	
@ 415 VAC	kA		10	
RATED SERVICE SHORT CIRCUIT BREAKING CAPACITY (Ics)				
@ 240 VAC	kA		10	
@ 415 VAC	kA		10	
CONSTRUCTION - CONDUCTOR SIZE				
UL/CSA	AWG		1 x #14 ~ #3	
Solid, Stranded, Fine Stranded	mm ²		1 x 2.08 ~ 26.7	
ROHS COMPLIANCE				

DIMENSIONS

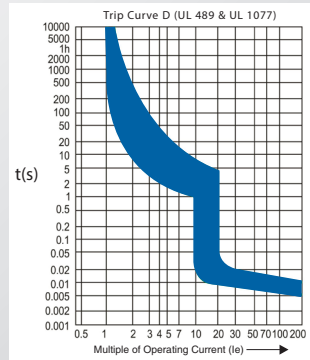
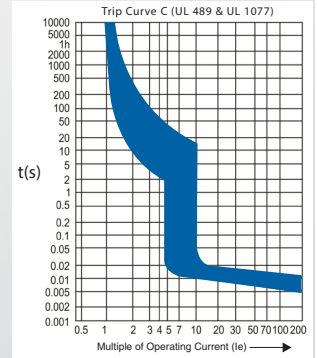
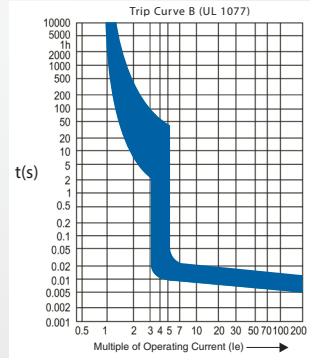
UL 489 Branch Circuit Breaker - 1 Pole



UL 1077 Supplementary Protector - 1 Pole



TRIP CURVES



CERTIFICATIONS

Conformity to Standards:

UL 489
UL 1077
UL 508
CSA C22.2 No. 5, No. 235
IEC 60947-2, IEC 60898

Certifications:

UL File#: E496118
UL File#: E496119
UL File#: E508090
CE Marked (per EU Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EU)

