

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

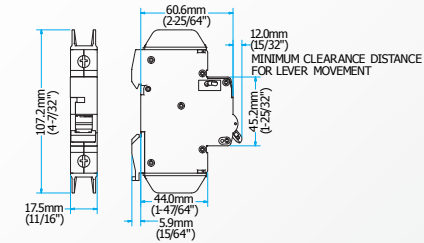
MINIATURE CIRCUIT BREAKERS

SPECIFICATIONS

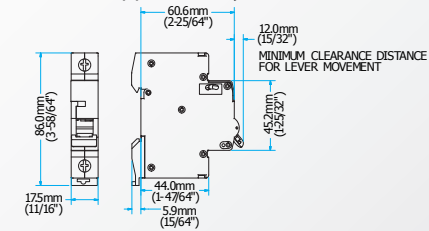
| UL 489 BRANCH CIRCUIT BREAKERS | | | | |
|--|-----------------|-----------------------------------|-----------------|----------|
| | UNITS | 1 POLE | 2 POLE | 3 POLE |
| ELECTRICAL GENERAL | | | | |
| Rated Operating Current | A | | 0.5 ~ 63 | |
| Operating Frequency | Hz | | 50/60 | |
| Electrical 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 | — |
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| ROHS COMPLIANCE | | | | |

DIMENSIONS

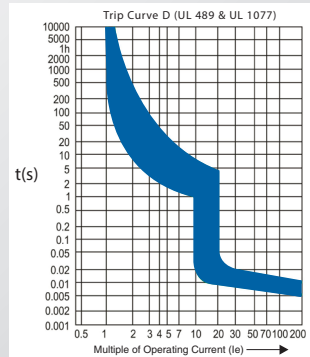
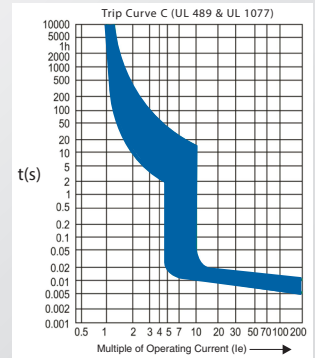
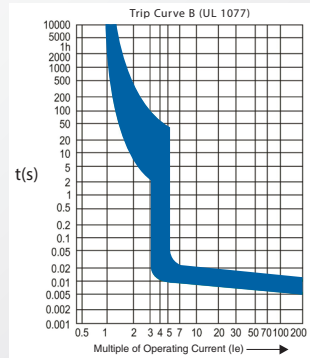
UL 489 Branch Circuit Breaker - 1 Pole



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)

