

## Arc-Fault Circuit Interrupters (AFCI)

### Combination Type AFCI<sup>®</sup>

AFCI's detect arcing faults (an unintentional arcing condition in a circuit) that standard circuit breakers are unable to detect. The Combination Type AFCI detects all three possible types of arc fault: line-to-ground, line-to-neutral, and series. The device is intended to mitigate the effects of arcing faults by functioning to de-energize the circuit when an arc-fault is detected.

Breaker Type	Ampere Rating	10,000 A IR	22,000 A IR
		Catalog Number	Catalog Number
<b>MP-AT/MP-HAT</b> 1-Pole 120V AC	15	MP115AFC <sup>①</sup>	MP115AFCH <sup>■①</sup>
	20	MP120AFC <sup>①</sup>	MP120AFCH <sup>■①</sup>
<b>MP-AT/MP-HAT</b> 2-Pole 120/240V AC	15	MP215AFC <sup>①</sup>	MP215AFCH <sup>■①</sup>
	20	MP220AFC <sup>①</sup>	MP220AFCH <sup>■①</sup>

### Branch-Feeder AFCI

AFCI's detect arcing faults (an unintentional arcing condition in a circuit) that standard circuit breakers are unable to detect. The Branch-Feeder AFCI detects line-to-ground and line-to-neutral arcs. The device is intended to mitigate the effects of arcing faults by functioning to de-energize the circuit when an arc-fault is detected.

<b>MP-AT/ MP-HAT</b> 1-Pole 120V AC	15 20	MP115AF <sup>①</sup> MP120AF <sup>①</sup>	MP115AFH <sup>■①</sup> MP120AFH <sup>■①</sup>
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### Ground-Fault Circuit Interrupters (Class A - 5mA)<sup>®</sup>

Ground-fault circuit interrupters (GFCI) provide Class A ground fault protection. A GFCI is a device intended for personnel protection and will de-energize the circuit when a fault current to ground is 6 milliamperes or more.

<b>MP-GT/MP-HGT</b> 1-Pole 120V AC	15	MP115GF <sup>①</sup>	MP115GFH <sup>■①</sup>
	20	MP120GF <sup>①</sup>	MP120GFH <sup>■①</sup>
	25	MP125GF <sup>■</sup>	—
	30	MP130GF	MP130GFH <sup>■</sup>
<b>MP-GT/MP-HGT</b> 2-Pole 120/240V AC	15	MP215GF	MP215GFH <sup>■</sup>
	20	MP220GF	MP220GFH <sup>■</sup>
	30	MP230GF	MP230GFH <sup>■</sup>
	40	MP240GF	MP240GFH <sup>■</sup>
	50	MP250GF	MP250GFH <sup>■</sup>
	60	MP260GF	MP260GFH <sup>■</sup>

### Ground Fault Equipment Protection (30mA)<sup>®</sup>

Type EQF circuit breakers provide protection of equipment from damaging line-to-ground fault currents by de-energizing the circuit for all ungrounded conductors of the faulted circuit.

<b>MP-ET/MP-HET</b> 1-Pole 120V AC	15	MP115EG <sup>①</sup>	MP115EGH <sup>■①</sup>
	20	MP120EG <sup>①</sup>	MP120EGH <sup>■①</sup>
	30	MP130EG	MP130EGH <sup>■</sup>
<b>MP-ET/MP-HET</b> 2-Pole 120/240V AC	15	MP215EG	MP215EGH <sup>■</sup>
	20	MP220EG	MP220EGH <sup>■</sup>
	30	MP230EG	MP230EGH <sup>■</sup>
	40	MP240EG	MP240EGH <sup>■</sup>
	50	MP250EG	MP250EGH <sup>■</sup>
	60	MP260EG <sup>■</sup>	MP260EGH <sup>■</sup>

### AFCI and GFCI Accessories

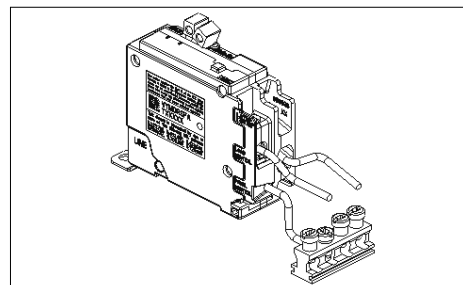
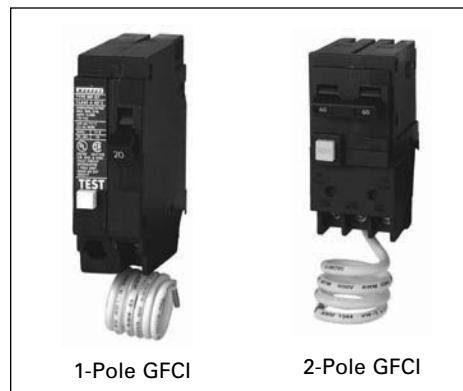
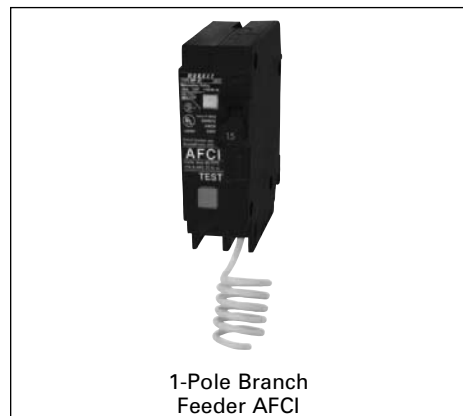
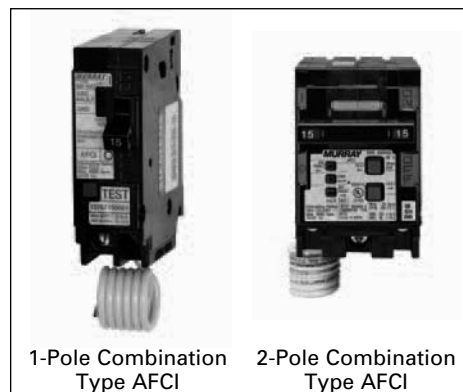
Description	Catalog Number
Padlocking Device for 1" & Twin Breakers	ECPLD1
Padlocking Device for 2" & Quad Breakers	ECPLD2
Handle Blocking Device for 1/2" Circuit Breakers	ECBX231M

■ Built to order. Allow 2-3 weeks for delivery.

①UL Listed as SWD (Switching Duty) Rated, suitable for 120V AC Fluorescent Lighting.

②White line neutral (pigtail) must be connected to the panel neutral for the device to function.

- UL Listed
- HACR & SWD Rated
- Standard 1 inch per pole format with plug-in design



## Lug Data

Circuit Breaker Type	Circuit Breaker Ampere Rating	Cables Per Connector	Connector Wire Range
	<b>LOAD SIDE</b>		
<b>MP-T, MP-HT, MP-MT</b>	7	2	#18-#14 CU
	10	2	#16-#14 CU
	15-35	1 1	#14-#16 AWG Cu #14-#16 AWG Al
	40-50	1 1	#8-#6 AWG Cu #8-#4 AWG Al
	55-125	1 1	#8-#2/0 Cu #8-#2/0 Al
<b>MH-T</b>	15-35	1 1	#14-#8 AWG Cu #12-#8 AWG Al
	40	1	#8 AWG CU-AL
	40-50	1 1	#8-#6 AWG Cu #8-#4 AWG Al
<b>MP-GT, MP-HGT, MP-ET, MP-HET BLF, BLHF, BLE, BLEH</b>	15-30	1 1	#14-#10 AWG Cu #12-#8 AWG Al
	40-60	1 1	#8-#6 AWG Cu #8-#4 AWG Al
<b>MP-AT, MP-HAT, BAF, BAFH</b>	15-20	1 1	#14-#12 AWG Cu #12-#10 AWG Al
<b>MSQ</b>	15-20	2	#14-#8 AWG Cu Only
	15-20	1 1	#14-#12 AWG Cu #12-#10 AWG Al
	25-35	1 1	#10-#8 AWG Cu #10-#6 AWG Al
	40-60	1 1	#8-#6 AWG Cu #8-#4 AWG Al
<b>MD-T, MD-HT, MD-MT, MD-PT, MD-TR, MD-HTR, MD-MTR, MD-PTR</b>	150-200	1	#1-300kcmil Cu-Al
<b>M1</b>	100	1	#4-3/0 AWG Cu #4-3/0 AWG Al
		1	#4-3/0 AWG Cu #4-3/0 AWG Al
	125	1	#4-3/0 AWG Cu-Al
<b>M2</b>	150	1	#1-300kcmil Cu-Al
	200	1	#1-300kcmil Cu-Al
	225	1	#1-300kcmil Cu-Al
<b>MPP-T, MPP-HT, MPP-MT, MPP-PT</b>	125	1 1	#1 AWG Cu #2/0 AWG Al
	150	1 1	#1/0 AWG Cu #3/0 AWG Al
	175	1 1	#2/0 AWG Cu #4/0 AWG Al
	200	1 1	#3/0 AWG Cu 250kcmil AWG Al
	225	1 1	#4/0 AWG Cu 300kcmil AWG Al
<b>MQ, MQH, MQL</b>	60-225	1	#6-300kcmil Cu #4-300kcmil Al

# Circuit Breakers

## Technical Information

### Time-Current Characteristic Curves

#### 125 Amp MP Frame, Type MP-T, 1, 2 & 3 Poles

For application and coordination purposes only. Based on 40°C ambient cold start. Connected with 4 feet of rated wire (75°C) per terminal. Tested in open air with current in all poles.

Type MP-T	60 HZ 1-Pole	120 Volts
	60 HZ 2-Pole	120/240 Volts
	60 HZ 3-Pole	240 Volts

#### 1 Pole Instantaneous Trip Table

Rating Amperes	Fixed Instantaneous Trip Amperes
15-20	160-210
25-40	350-550
45-50	450-700

#### 2 & 3 Pole Instantaneous Trip Table

Rating Amperes	Fixed Instantaneous Trip Amperes
15, 25-35	350-700
20	450-700
40	350-550

#### Interrupting Rating Symmetrical RMS Amperes

Breaker Type	120V	120/240V	240V
1-Pole	10,000	—	—
2-Pole	—	10,000	—
3-Pole	—	—	10,000

Footnotes refer to curve at right.

① Single pole test data at 25°C in accordance with NEMA standards.

0-30 amperes—50 seconds

31-50 amperes—80 seconds

② Sample Instantaneous shown (20 Amp 1, 2 & 3 Pole). For other instantaneous values, see tables above.

## Industry and Government Specifications

Murray circuit breakers meet or exceed the latest edition of the following specifications:

### Industry

NEMA—Standard #AB1  
 UL —Standard #489  
 CSA —Standard #C22.1, No. 5.1

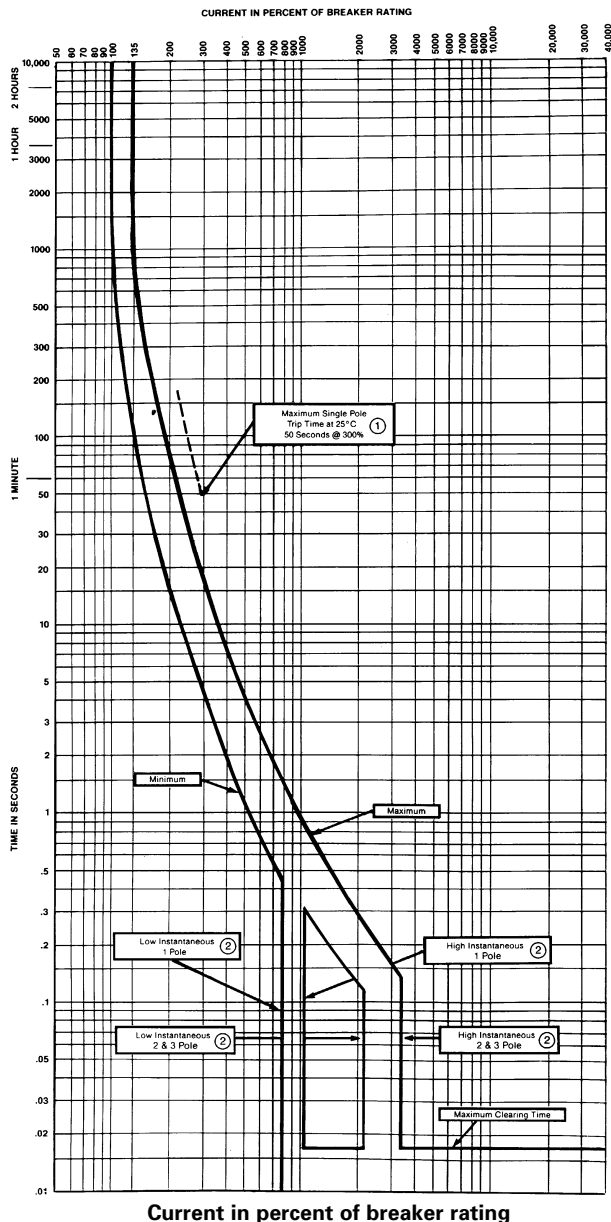
### U.S. Government

Standard #W-C-375B

### 60°C/75°C Ampacity Rating

Murray circuit breakers rated 125A and below are Listed by UL for use with 60°/75°C ampacities. This listing allows use of smaller wire sizes in many applications. Consult NEC Article #310 for application details and limitations.

### Murray Time-Current Characteristic Curves 125 AMP MP Frame, Type MP-T 1, 2 & 3 Poles



### Circuit Breaker UL Type

Catalog # Prefix	UL Type*
MP(150-200A)	MD-A, MD-H, MD-T, MD-HT
MP(15-125A)	MP-T, MP-HT, MP-MT, MG, MW
MP(Duplex)	MH-T
MP(Triplex)	MH-T
MP(GFCI)	MP-GT, MP-HGT
MP(AFCI)	MP-AT, MP-HAT

\*UL Type is shown on circuit breaker label.

### SWD

MP-T circuit breakers are UL Listed "SWD", for switching duty use on circuits controlling fluorescent lights. 2005 NEC Article 240-83 (D).