

SERIES CBR...BREAKERS MCCBs



Trip Versions

Fixed Trip - 15A-30A
Adjustable Trip 40A-600A

SERIES CBR



UL 489

File # E224055

OPTIONS FIELD KITS

- Auxiliary Contacts
- Alarm Contact
- Shunt Trip
- UV Trip

CBR-1, CBR-2
Interruption

CBR-4, CBR-6
Interruption

240V/100kA

240V/100kA

480V/65kA

480V/65kA

600V/20kA

600V/25kA

Accessories Available



Auxiliary Switch
(AUX)



Alarm Switch
(ALARM)



Shunt Trip
(SH)



Undervoltage
Trip (UV)

OPTIONS



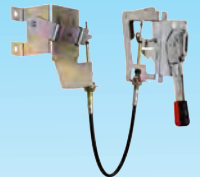
• Open



• Extended rotary
handles



• Enclosed



• Flange Handle

NEMA 1,3R,4,4X,12

MOLDED CASE CIRCUIT BREAKERS

15 AMP THRU 600 AMP



ELECTRICAL & ELECTRONIC
CONTROLS, INC.
3881 DANBURY ROAD
BREWSTER, NY 10509
845-278-5777, FAX 845-278-5444
www.eecontrols.com
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CBR Molded Case Circuit Breakers



- UL 489 Certified File # E224055
- CSA standards 22.2 No. 5-02
- IEC/EN 60947-2
- CE Compliant
- RoHS Compliant

15 Amp - 800 Amp

3 Pole UL489

**100kA@240VAC
690VAC, 600VDC Rated**



| Fixed / Adjustable Thermal Overload | Fixed / Adjustable Magnetic | Interruption Capacity kA | | | Part # | List | Dimensions mm / in | | |
|-------------------------------------|-----------------------------|--------------------------|--------|------|-----------------|----------|--------------------|-------------|-------------|
| Protection | Instantaneous Trip | 240v | 460v | 600v | | | H | W | D |
| 15A | 150A | 100 | 65 | 20 | CBR-1-15A | \$625 | 164 6.5" | 90 3.5" | 109 4.3" |
| 20A | 200A | | | | CBR-1-20A | \$625 | | | |
| 30A | 300A | | | | CBR-1-30A | \$625 | | | |
| 40A, 45A, 50A | 500A | | | | CBR-1-40A-50A | \$625 | | | |
| 56A, 63A, 70A | 700A | | | | CBR-1-56A-70A | \$625 | | | |
| 72A, 81A, 90A | 900A | | | | CBR-1-72A-90A | \$625 | | | |
| 80A, 90A, 100A | 1000A | | | | CBR-1-80A-100A | \$625 | | | |
| 100A, 112A, 125A | 625 thru 1250 A | | | | 100 | 65 | | | |
| 120A, 135A, 150A | 750 thru 1500 A | CBR-2-120A-150A | \$1380 | | | | | | |
| 140A, 157A, 175A | 875 thru 1750 A | CBR-2-140A-175A | \$1380 | | | | | | |
| 160A, 180A, 200A | 1000 thru 2000 A | CBR-2-160A-200A | \$1380 | | | | | | |
| 180A, 202A, 225A | 1125 thru 2250 A | CBR-2-180A-225A | \$1380 | | | | | | |
| 240A, 270A, 300A | 1500 thru 3000 A | 100 | 65 | 25 | CBR-4-240A-300A | \$2125 | 285 11.2" | 140 5.5" | 171 6.7" |
| 280A, 315A, 350A | 1750 thru 3500 A | | | | CBR-4-280A-350A | \$2125 | | | |
| 320A, 360A, 400A | 2000 thru 4000 A | | | | CBR-4-320A-400A | \$2125 | | | |
| 400A, 450A, 500A | 2500 thru 5000 A | 100 | 65 | 30 | CBR-6-400A-500A | \$4900 | 313 12.3" | 195 7.7" | 192 7.6" |
| 480A, 540A, 600A | 3000 thru 6000 A | | | | CBR-6-480A-600A | \$4900 | | | |
| 640A, 720A, 800A | 4000 thru 8000 A | 100 | 65 | 30 | CBR-8-800A | \$12,000 | 16.2" | 7.7" | 7.6" |

ENCLOSED TYPE BREAKERS

| BREAKER Frame Size | NEMA 1/3R | | NEMA 4/12 | | NEMA 4X | |
|-----------------------|------------|------------|------------|------------|------------|------------|
| | Add Suffix | Cost Adder | Add Suffix | Cost Adder | Add Suffix | Cost Adder |
| CBR-1 | -3R | +\$890 | -4/12 | +\$910 | -4X | +\$950 |
| CBR-2 | -3R | +\$1,300 | -4/12 | +\$1,440 | -4X | +\$2,050 |
| CBR-4 | -3R | +\$1,680 | -4/12 | +\$1,830 | -4X | +\$3,830 |
| CBR-6 | -3R | +\$2,480 | -4/12 | +\$2,730 | -4X | +\$5,800 |

* If enclosed unit is desired add above suffix to end of breaker part number, then add additional cost to list price of breaker. Enclosed units include safety door interlock with padlockable handle.
Example: CBS-1S-15A-3R List Each \$1,515



-NEMA 4/12 (Metal) Enclosed

Discount Schedule: CB

Auxiliary contact blocks

| Auxiliary Type | Aux. Part # Suffix | Switched by Actuation | Thermal Overload Trip |
|----------------|--------------------|-----------------------|-----------------------|
| Auxiliary | AUX | YES | YES |
| Alarm Contact | ALARM | NO | YES |

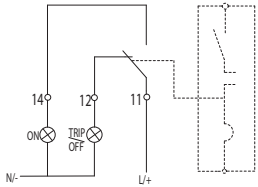
Rated Operational Current

| Voltage | Current |
|------------|---------|
| 110 / 220V | 0.25A |
| 240V | 5.0A |
| 480V | 2.0A |

- UL 489 Listed
- CSA standards 22.2 No. 5-02
- IEC/EN 60947-2
- CE Compliant
- RoHS Compliant



Auxiliary contact blocks



Description

1 N.O. + 1 N.C. (Form "C") contact.

| Breaker Size | Max # |
|---------------|-------|
| CBR-1 / CBR-2 | 2 |
| CBR-4 | 3 |
| CBR-6 | 4 |

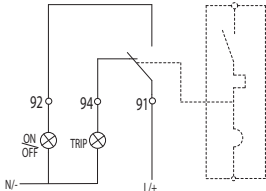
For use with

Cat. no.

List

| | | |
|------------------|---------|------|
| CBR-1 thru CBR-6 | CBR-AUX | \$57 |
|------------------|---------|------|

Alarm contact block



Description

1 N.O. + 1 N.C. (Form "C") contact.

| Breaker Size | Max # |
|--------------|-------|
| All | 1 |

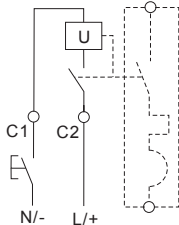
For use with

Cat. no.

List

| | | |
|------------------|-----------|------|
| CBR-1 thru CBR-6 | CBR-ALARM | \$57 |
|------------------|-----------|------|

Shunt trip device



Description

1 N.O. + 1 N.C. (Form "C") contact.

| Breaker Size | Max # |
|--------------|-------|
| All | 1 |

Voltage

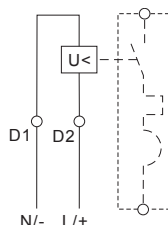
Cat. no.

List

| | | |
|---------------|----------------|-------|
| 24 Vdc | CBR-SH-24VDC-* | \$148 |
| 100 - 130 Vac | CBR-SH-120V-* | \$148 |
| 220 - 240 Vac | CBR-SH-240V-* | \$148 |
| 480 - 500 Vac | CBR-SH-480V-* | \$148 |

| Frame Size | * Suffix | Frame Size | * Suffix |
|------------|----------|------------|----------|
| CBR-1 | 1 | CBR-4 | 4 |
| CBR-2 | 2 | CBR-6 | 6 |

Undervoltage trip device



Description

1 N.O. + 1 N.C. (Form "C") contact.

| Breaker Size | Max # |
|--------------|-------|
| All | 1 |

Voltage

Cat. no.

List

| | | |
|---------------|---------------|-------|
| 100 - 130 Vac | CBR-UV-120V-* | \$120 |
| 220 - 240 Vac | CBR-UV-240V-* | \$120 |
| 480 - 500 Vac | CBR-UV-480V-* | \$120 |

| Frame Size | * Suffix | Frame Size | * Suffix |
|------------|----------|------------|----------|
| CBR-1 | 1 | CBR-4 | 4 |
| CBR-2 | 2 | CBR-6 | 6 |

External Handle Kits 16 Amp - 600 Amp

Kits Include:

- Rotary Drive Converter (*converts toggle to rotary operation*)
- Shaft Extension • External Operator Handle (*NEMA 4, 4X*)
- See Factory for longer shafts • Defeatable Operator Handle

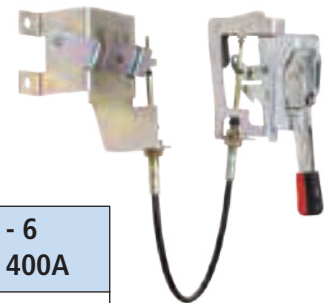


Operator Handle is padlockable and safety door interlock type

| Frame Size | Color | Min. Depth mm/inches | Max. Depth mm/inches | Part Number | List Price |
|----------------|------------|----------------------|----------------------|--------------|------------|
| 16A - 100 Amp | Red/Yellow | 180/7.1" | 452/17.8" | CBR-1RED-12 | \$410 |
| | Grey | | | CBR-1GREY-12 | \$410 |
| 100A - 225 Amp | Red/Yellow | 214/8.4" | 461/18.1" | CBR-2RED-12 | \$420 |
| | Grey | | | CBR-2GREY-12 | \$420 |
| 300A - 400 Amp | Red/Yellow | 249/9.8" | 495/19.5" | CBR-4RED-12 | \$490 |
| | Grey | | | CBR-4GREY-12 | \$490 |
| 500A - 600 Amp | Red/Yellow | 276/10.9" | 522/20.5" | CBR-6RED-12 | \$610 |
| | Grey | | | CBR-6GREY-12 | \$610 |

Flange Handle Kits

- Kits Include:**
- External Flange handle operator
 - Cable - 36" (*additional sizes available, contact factory*)
 - Converter mechanism (*mounts to breaker*)
- Type 4, 4x**



| Circuit Breaker Frame Size | CBR - 1 16A - 100A | CBR - 2 125A - 225A | CBR - 4 300A - 400A | CBR - 6 300A - 400A |
|----------------------------|-----------------------|------------------------|------------------------|------------------------|
| Part # | CBR-1FHK-36 | CBR-2FHK-36 | CBR-4FHK-36 | CBR-6FHK-36 |
| List Price | \$700 | \$730 | \$760 | \$800 |

HYW bJW'8 UU

| CBR Breakers | | CBR-1 | CBR-2 | CBR-4 | CBR-6 | CBR-8 |
|---------------------------------------|-----------------|-------------|-------------|---------------|------------------|------------------|
| Poles | | 3 | 3 | 3 | 3 | 3 |
| Rated Current (A) | | 15 - 100 | 100 - 225 | 240 - 400 | 400 - 600 | 640 - 800 |
| Rated Voltage AC / DC | | 600 | | | | |
| Insulation Voltage (Vi) | | 800 Vac | | | | |
| Impulse Withstand Voltage (Vimp) | | 8 kVac | | | | |
| Operation Voltage (Ve) | IEC | 690 Vac | | | | |
| | UL | 600 Vac | | | | |
| IEC Ics (% Icu) | | 100 % | | | | |
| Mechanical Operating Cycles | | 10,000 | | 8,000 | | 3,000 |
| Electrical Operating Cycles | | 6,000 | | 5,000 | | 500 |
| Flexible Cable AWG | | 14~3/0 | 8~350 kcmil | 3/0~500 kcmil | 2x 3/0~400 kcmil | 2x 250~600 kcmil |
| Tightening Torque in-lb (N.m) | | 89 (10) | 230 (23) | 310 (35) | 310 (35) | 398 (45) |
| Weight lb (kg) | | 3.68 (1.67) | 4.41 (2.00) | 13.45 (6.1) | 25.35 (11.5) | 33.18 (15.1) |
| Interrupting Capacity (kA rms) | | | | | | |
| Ratings | 240 Vac | 100 | | 100 | 100 | |
| UL 489 | 480 Vac | 65 | | 65 | 65 | |
| CSA C22.2 (kA rms) | 600 Vac | 20 | | 25 | 30 | |
| Vac 50/60 Hz | 600 Vdc 3 Poles | 35 | | 50 | 50 | |
| IEC 60947-2 | 220 / 240 Vac | 100 | 100 | 100 | | |
| Ultimate Breaking Capacity | 380 / 415 Vac | 100 | 100 | 100 | | |
| (Icu = 100% Ics) | 660 / 690 Vac | 8 | 10 | 15 | | |
| (kA rms) | 500 Vdc 3 Poles | 35 | 35 | 50 | | |

DC APPLICATIONS

