

Residential Meter Breakers



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Residential Meter Breakers

Product Description

A meter breaker is service entrance equipment that consists of a single meter socket and loadcenter (circuit breaker distribution section) or meter socket and main breaker combined in one enclosure. Sometimes called Combos, All-in-Ones, Meter Centers or Meter Mains, these units are increasing in popularity as the socket and loadcenter or main breaker are located in one location, thus providing the contractor with a labor and material savings when installing.

Application Description

In addition to residential installations, meter breakers are equally applicable for rural service entrance, mobile homes and construction site temporary power. Meter breakers are most often sold in the western, southwestern and southeastern United States. The popularity of meter breakers is continuing to increase as more utilities deregulate and pass the responsibility of supplying wathour meter sockets on to the electrical contractor.

Application Considerations

Eaton has the meter breaker to meet your application, offering:

- Non-EUSERC
- EUSERC/West Coast
- House panels
- Commercial safety socket

Non-EUSERC (Page V1-T4-37)

Eaton’s line of non-EUSERC meter breakers are designed for customers served by utilities that are not members of EUSERC.

EUSERC/West Coast (Page V1-T4-44)

Eaton’s line of EUSERC required devices adhere to the agreed upon standards. EUSERC utilities are predominately located in the western United States, but some eastern and midwestern utilities are also members. These units can also be used in many Non-EUSERC areas.

House Panels (Page V1-T4-48)

CH and BR Styles (Page V1-T4-49).

Meter breaker device rated at 300–400 A. Applied in EUSERC and non-EUSERC areas.

Commercial Safety Sockets (Page V1-T4-55)

Applied in EUSERC and non-EUSERC service areas and used in commercial applications.

Features, Benefits and Functions

- Both Type BR and CH branch circuit breaker styles available
- Meets latest NEC wire bending space requirements
- Slotted sealing screws at hub with sealing provision provided
- Surface units are supplied with mounting tabs
- Semi-flush units are supplied with stucco flange
- Meter socket ring landing will accept locking security rings
- Overhead or underground service
- Fifth jaw can be installed in the 3 o’clock or 9 o’clock position
- Semi-flush with nail flange or surface mounting
- Meter mounting and underground pull sections are utility sealable
- Units are rated a minimum of 10 kAIC; some units are 22 kAIC
- Numerous units supplied with center keyhole for ease of mounting
- NEMA 3R rainproof construction

Standards and Certifications

- UL Specification 414 (socket)
- UL File Number E52977
- AEIC-EEI-NEMA Standards (MSJ-7)
- Meet EUSERC utility requirements where noted
- Documented seismic qualified—UBC and CBC Title 24
- UL Specification 67 (panel)

**Technical Data and Specifications**

- Ratings single-phase, three-wire, 120/240 Vac
- 100–225 A main breaker and main lug types
- 10,000 A rms symmetrical short-circuit rating
- Available kAIC ratings: 10 k with BW breaker, 22 k with CSR breaker and 35 k with CSH breaker

Consult TD.31F.01.T.E for dimensions, wiring diagrams and knockouts.

Non-EUSERC Combination Service Entrance Devices



Standard Design Non-EUSERC Panel

Compact Design

Non-EUSERC Combination Service Entrance Devices

Product Description

A device that may include a meter socket, main breaker and loadcenter section within the same enclosure.

- Meter main = meter socket and main breaker
- Meter breaker = meter socket, main breaker and loadcenter section

Application Description

Eaton’s line of non-EUSERC meter breakers are designed for customers served by utilities that are not members of EUSERC.

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Features, Benefits and Functions

Meter Mains and All-in-Ones

- Single-phase, three-wire, 120/240 Vac, 10 kAIC
- Larger lay-in lugs and 3-inch (76.2 mm) knockouts for ease of installation
- Box-type main lugs included
- Factory-installed neutral
- Hub provisions on top endwall. If hubs are required, order “DS” style
- Ring, ringless and ringless with horn bypass styles available
- Ringless style, provided with embossed covers and security latch for utility company lock
- Padlockable device covers provide additional measure of safety and help prevent tampering
- NEMA 3R rainproof construction

Meter Mains

- Meter socket and main breaker
- Stainless steel latches on meter compartments in MBP types
- No distribution section included

All-in-Ones

- Meter socket and loadcenter distribution section
- Stainless steel latches on meter compartments
- Several designs with horn bypass and fifth jaw
- Center-fed main breaker, lugs or provision
- Uses Type BR 1-inch (25.4 mm) wide branch breakers
- Special channel for top exit

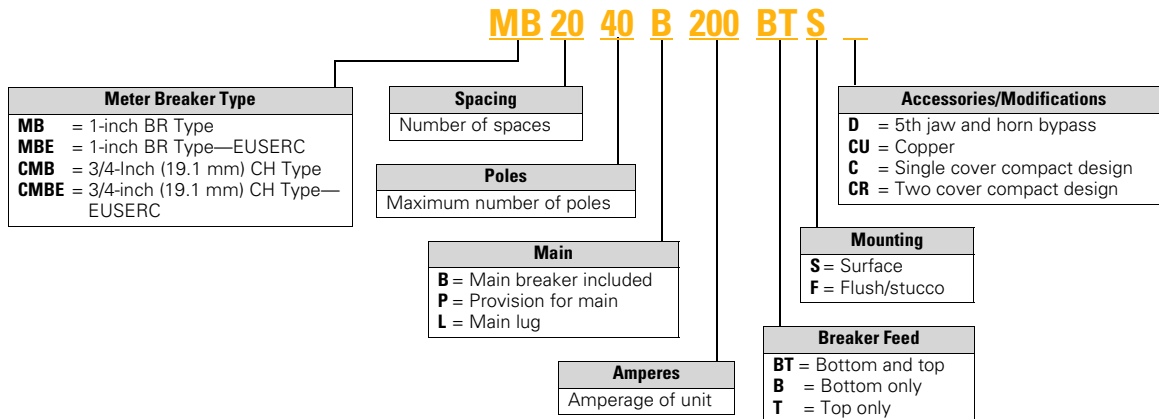
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Metering Products

Meter Breakers

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Catalog Number Selection



Product Selection

Main Breaker Selection Chart

| Maximum Ampere Rating | Two-Pole Breaker Catalog Numbers | | | |
|---|----------------------------------|----------------|-----------------|-----------------|
| | 10 kAIC | 25 kAIC | 25 kAIC | 35 kAIC |
| 100 | BW2100 | CSR2100 | CSR2100N | CSH2100N |
| 125 | BW2125 | CSR2125 | CSR2125N | CSH2125N |
| 150 | BW2150 | CSR2150 | CSR2150N | CSH2150N |
| 200 | BW2200 | CSR2200 | CSR2200N | CSH2200N |
| Load Side Lug Kit for BW and CSR Breakers | | | MCBK225 | |

Note: See knockout drawings on Pages V1-T4-61 through V1-T4-67 for hub information.

Ring Style All-in-Ones



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Combination Service Entrance Devices—Non-EUSERC, continued

| Ampere Rating | Bypass | Service | kAIC | Jaws | Distribution | Main | Branch Breaker Type | Dimensions and Enclosure Shape ① | Page Numbers | Knockout ① | Catalog Number |
|---|--------|---------|------|------|--------------|------------------------------------|---------------------|----------------------------------|---------------------|------------|---------------------|
| Ring Style All-in-Ones (includes distribution section) | | | | | | | | | | | |
| 125 | None | OH/UG | ② | 4 | 2/4 | None—refer to Distribution CSR2150 | CH | 2 | V1-T4-62 | V1-T4-62 | CMB24L125BTS ④⑤ |
| 150 | None | OH/UG | 22 | 4 | 8 | | CH | 3 | | | CMB88B150BTS ④⑤ |
| 200 | None | OH/UG | 10 | 4 | 4/8 | CSR2200 | BR | 3 | V1-T4-62 | V1-T4-62 | MB48B200BTS ⑤⑥ |
| 200 | None | OH/UG | 22 | 4 | 8 | CSR2200 | CH | 3 | CMB88B200BTS ④⑤⑥ | | |
| 200 | None | UG | 22 | 4 | 32/42 | CSR2200 | CH | 7 | V1-T4-61 | V1-T4-61 | CMB3242B200BS ④⑤ |
| 200 | None | OH/UG | 22 | — | 42/42 | — | CH | — | — | | CMB4242B200BTS ④ |
| Ringless All-in-Ones (includes distribution section) | | | | | | | | | | | |
| 125 | None | OH/UG | 22 | 4 | 4/8 | CSR2125 | BR | 21 | V1-T4-64 | V1-T4-64 | MBT48B125BTS |
| 150 | None | OH/UG | 22 | 4 | 4/8 | CSR2150 | BR | 21 | MBT48B150BTS | | |
| 150 | Horn | OH/UG | 10 | 5 | 8/16 | BW2150 | BR | 11 | — | — | MB816B150STD |
| 150 | Horn | OH/UG | 10 | 5 | 20/40 | BW2150 | BR | 11 | V1-T4-66 | V1-T4-66 | MB2040B150SD |
| 200 | None | OH/UG | 10 | 4 | 8/16 | CSR2200 | BR | 10 | MB816B200BTS ⑤⑥ | | |
| 200 | None | OH/UG | 10 | 4 | 8/16 | CSR2200 | BR | 10 | V1-T4-66 | V1-T4-66 | MB816B200BTSCU ④⑤⑥ |
| 200 | Horn | OH/UG | 10 | 5 | 8/16 | BW2200 | BR | 11 | — | | MB816B200STD |
| 200 | None | OH/UG | ② | 4 | 8/16 | Provision ③ | BR | 10 | V1-T4-66 | V1-T4-66 | MB816P200BTS ⑤⑥ |
| 200 | None | OH/UG | ② | 4 | 8/16 | Provision ③ | BR | 10 | MB816P200BTSCU ④⑤⑥ | | |
| 200 | Horn | OH/UG | ② | 5 | 8/16 | Provision ③ | BR | 11 | V1-T4-66 | V1-T4-66 | MB816P200STD ⑥ |
| 200 | Horn | OH/UG | ② | 5 | 8/16 | Provision ③ | BR | 10 | MB816P200BTSD ⑥ | | |
| 200 | None | OH/UG | 10 | 4 | 12/12 | CSR2200 | CH | 10 | V1-T4-62 | V1-T4-62 | CMB1212B200BTS ④⑤⑥ |
| 200 | None | OH/UG | ② | 4 | 6–2 Pole | Main lugs | CH | 9 | V1-T4-63 | | CMB1212L200BTS ④⑥ |
| 200 | None | OH/UG | ② | 4 | 12/12 | Provision ③ | CH | 10 | V1-T4-63 | V1-T4-63 | CMB1212P200BTS ④⑤⑥ |
| 200 | None | OH/UG | ② | 4 | 6–2 Pole | Main lugs | BR | 9 | MB1212L200BTS ⑥ | | |
| 200 | None | OH/UG | 22 | 4 | 24/24 | CSR2200 | CH | 10 | V1-T4-66 | V1-T4-66 | CMB2424B200BTS ④⑤ |
| 200 | None | OH/UG | 22 | 4 | 24/36 | CSR2200 | CH | 10 | MB2436B200BTS ④ | | |
| 200 | None | OH/UG | 10 | 4 | 20/40 | CSR2200 | BR | 10 | V1-T4-66 | V1-T4-66 | MB2040B200BTS |
| 200 | None | OH/UG | ② | 4 | 20/40 | Provision ③ | BR | 10 | MB2040P200BTS ⑤ | | |
| 200 | Horn | OH/UG | ② | 5 | 20/40 | Provision ③ | BR | 11 | V1-T4-66 | V1-T4-66 | MB2040P200SD |
| 200 | Horn | OH/UG | 10 | 5 | 20/40 | CSR2200 | BR | 10 | MB2040B200SD | | |
| 200 | Lever | OH/UG | 10 | 5 | None | CSR2200 | None | 14 | V1-T4-65 | V1-T4-65 | CMBXB200BTS ④⑦ |
| 200 | Lever | OH/UG | 10 | 5 | 12/12 | CSR2200 | CH | 14 | CMBX1212B200BTS ④⑥⑦ | | |
| 200 | Lever | OH/UG | 10 | 5 | 32/42 | CSR2200 | CH | 14 | V1-T4-65 | V1-T4-65 | CMBX3242B200BTS ④⑦ |
| 200 | Lever | OH/UG | 10 | 5 | None | Provision | None | 14 | CMBXP200BTS ④⑦ | | |
| 200 | Lever | OH/UG | 10 | 5 | 12/12 | Provision | CH | 14 | V1-T4-65 | V1-T4-65 | CMBX1212P200BTS ④⑥⑦ |
| 200 | Lever | OH/UG | 10 | 5 | 32/42 | Provision | CH | 14 | CMBX3242P200BTS ④⑦ | | |
| 200 | None | OH/UG | ② | 4 | 4/8 | Provision | BR | 21 | V1-T4-65 | V1-T4-65 | MBT48P200BTS ⑥ |
| 200 | None | OH/UG | 22 | 4 | 4/8 | CSR2200 | BR | 21 | MBT48B200BTS ⑥ | | |

Notes

- ① See Page V1-T4-61 for box details.
- ② Per installed main breaker rating.
- ③ When a provision for main is provided, order one of the main breakers listed on Page V1-T4-38. All panels are dual labeled to accept Types BW, CSR, CSH Main Breakers.
- ④ Copper bus.
- ⑤ One-piece cover on utility side, Florida approved.
- ⑥ Units come with feed-through lugs.
- ⑦ Approved by Xcel Energy Inc.

Mechanical Interlock Cover

Covers mechanically interlock two breakers. Covers interlock main breaker with two-pole breaker mounted in the distribution section of the meter breakers.

Meter Breaker with Interlock Cover



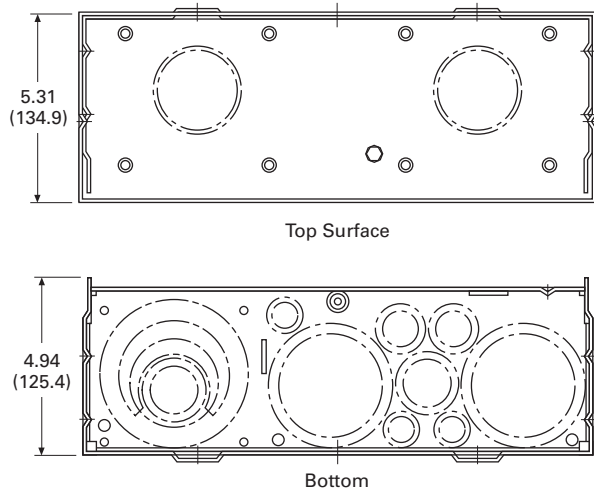
Mechanical Interlock Cover

| Mechanical Interlock Deadfront | Meter Breaker Catalog Number |
|--------------------------------|------------------------------|
| MBDF1M | CMB1212B200BTS |
| | CMB1212B200BTSD |
| | CMB1212P200BTS |
| | CMB1212P200BTSD |
| MBDF2M | MB816B200BTS |
| | MB816B200BTSCU |
| | MB816P200BTS |
| | MB816P200BTSCU |
| MBDF3M | MB816P200STD |
| | MB2040B200BTS |
| | MB2040P200BTS |
| MBDF4M | MB2040P200SD |
| | MBE816P200TS |
| | MBE816P200TSCU |
| MBDF5M | MBE2040B150BF |
| | MBE2040B150BS |
| | MBE2040B200BF |
| | MBE2040B200BS |
| MBDF6M | MBE2040B200TF |
| | MBE2040B200TS |
| | MBE2040P200TF |
| | MBE2040P200TS |
| MBDF7M | CMBE3242B150BF |
| | CMBE3242B150BS |
| | CMBE3242B200BF |
| | CMBE3242B200BS |
| | CMB3242B150BS |
| | CMB3242B200BS |
| MBDF8M | CMBE4242B200BSH |
| | CMBE4242B200BTF |
| | CMBE4242B200BTS |
| MBDF9M | MBE4040B200BSH |
| | MBE4040B200BSHH |
| | MBE4040B200BTF |
| | MBE4040B200BTS |

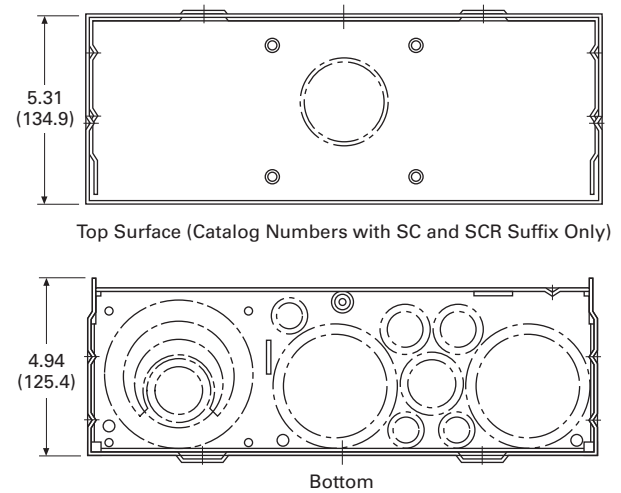
| Mechanical Interlock Deadfront | Meter Breaker Catalog Number |
|--------------------------------|------------------------------|
| MBDF1AM | CMB2424B200BTS |
| MBDF10M | CMB24B200TFR |
| | CMB24B200TSR |
| MBDF12M | CMBX3242B200BTS |
| | CMBX3242P200BTS |
| MBDF13M | MBE3042B200BF |
| | MBE3042B225BF |
| MBDF14M | CMBE88B150BTF |
| | CMBE88B150BTS |
| | CMBE88B200BTF |
| | CMBE88B200BTS |
| MBDF15M | MBE48B150BTF |
| | MBE48B150BTS |
| | MBE48B200BTF |
| | MBE48B200BTS |
| MBDF16M | MBE88B150BTF |
| | MBE88B150BTS |
| | MBE88B200BTF |
| | MBE88B200BTS |
| MBDF17M | MBE2040BC200BTS |
| | MBE2040BH200BTF |
| | MBE2040BH200BTS |
| | MBE2040B150BTF |
| | MBE2040B150BTS |
| | MBE2040B200BTF |
| | MBE2040B200BTS |
| MBE2040B225BTF | |
| MBE2040B225BTS | |

Approximate Dimensions in Inches (mm)

Knockouts for Non-EUSERC Units Catalog Numbers—
MBB150BTS, MBB200BTS, MBP200BTS, MB816P200BTS,
MB816P200BTSCU, MB816P200BTSD, MB816B200BTS,
MB816B200BTSCU, MB2040P200BTS, MB2040B200BTS,
MBP200BTSD, MBP200SD, MB816P200STD,
MB2040B150SD, MB2040B200SD and MB2040P200SD



Knockouts for Non-EUSERC Units Catalog Numbers—
CMB2424B200BTS, MBB150BTSCR, MBB200BTSCR,
MBB150BTSC, MBB200BTSC and CMB2436B200BTS



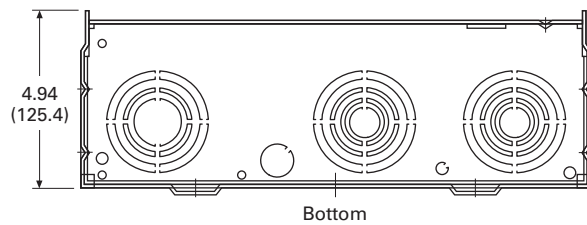
Top Endwall (Surface)

| Hub Provision Catalog Number | Quantity |
|---------------------------------|----------|
| DS100H2 | ① |
| DS125H2 | ① |
| DS150H2 | ① |
| DS200H2 | ① |
| DS250H2 | ① |
| DS300H2 | ① |
| DS900AP (Adapter Plate) ② | ① |

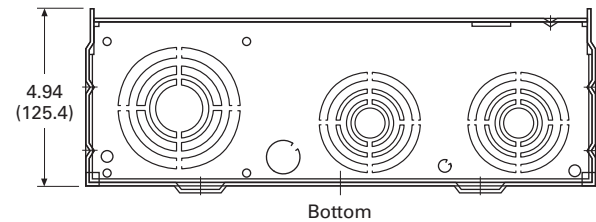
Bottom Endwall

| Knockout Size Dimensions in Inches (mm) | Quantity |
|---|----------|
| 0.31 (7.9) | 3 |
| 0.50 (12.7) | 3 |
| 0.50, 0.75 (12.7, 19.1) | 2 |
| 0.75, 1.00 (12.7, 25.4) | 1 |
| 1.25, 1.50, 2.00, 2.50 (19.1, 38.1, 50.8, 63.5) | 2 |
| 1.50, 2.00, 2.50, 3.00 (38.1, 50.8, 63.5, 76.2) | 1 |

Knockouts for Non-EUSERC Units Catalog Number—
CHMMB100BTS



Knockouts for Non-EUSERC Units Catalog Numbers—
CHMMB150BTS and CHMMB200BTS



Bottom Endwall

| Knockout Size Dimensions in Inches (mm) | Quantity |
|---|----------|
| 0.31 (7.9) | 1 |
| 0.50 (12.7) | 1 |
| 0.50, 0.75, 1.00, 1.25, 1.50, 2.00, 2.50 (12.7, 19.1, 25.4, 31.8, 38.1, 50.8, 63.5) | 2 |
| 1.00, 1.25, 1.50, 2.00, 2.50 (25.4, 31.8, 38.1, 50.8, 63.5) | 1 |

Bottom Endwall

| Knockout Size Dimensions in Inches (mm) | Quantity |
|---|----------|
| 0.31 (7.9) | 1 |
| 0.50 (12.7) | 1 |
| 0.50, 0.75, 1.00, 1.25, 1.50, 2.00, 2.50 (12.7, 19.1, 25.4, 31.8, 38.1, 50.8, 63.5) | 2 |
| 1.00, 1.25, 1.50, 2.00, 2.50, 3.00 (25.4, 31.8, 38.1, 50.8, 63.5, 76.2) | 1 |

Notes

- ① For details regarding quantities, please contact the Technical Resource Center (TRC) at 1-877-ETN-CARE.
- ② Use when DS H1 Type 1, 1.25 and 1.50-inch hubs are needed.