



Cutler-Hammer

Meter Breakers

Technical Data

Residential Meter Breakers
Type CH Residential
Type BR Residential

Supersedes Technical Data TD.31F.01.T.E

Pages 1-28, dated August 2001

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Residential Meter Breakers



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 load-center 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 watt-hour meter sockets on to the electrical contractor.

Application Considerations

We have the meter breaker to meet your application. Cutler-Hammer offers:

- Non-EUSERC.
- EUSERC/West Coast (Electrical Utility Service Equipment Requirements Committee).
- House Panels.
- Commercial Safety Sockets.

Non-EUSERC

The Cutler-Hammer line of Non-EUSERC meter breakers is designed for customers served by utilities that are not members of EUSERC.

EUSERC/West Coast

The Cutler-Hammer line of EUSERC approved devices adheres 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

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

Commercial Safety Sockets

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

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).

Product Specifications

- Ratings single-phase, 3-wire, 120/240V AC.
- 100 – 225 ampere main breaker and main lug types.
- 10,000 amperes rms symmetrical short circuit rating.

Features, Benefits and Functions

- Both BR and CH type 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.

Table 3. Combination Service Entrance Devices (EUSERC)

Ampere Rating	Bypass	Service	kAIC	Jaws	Distribution	Main	Branch Breaker Type	Dimensions & Enclosure Shape ①	Wiring		Knockout		Catalog Number		
									Page	Fig.	Page	Fig.	Surface	Flush	
Ring Style Meter Mains (no distribution section included)															
125	None	OH/UG	②	4	2/4	MLO	BR	2	9	14	15	39, 38	MBE24L125BTS	MBE24L125BTF	
125	None	OH/UG	②	4	2/4	MLO	CH	2	7	7	15	39, 38	CMBE24L125BTS ③	CMBE24L125BTF ③	
150	None	OH/UG	10	4	None	BW2150	None	3	9	18	15	39, 38	MBEB150BTS	MBEB150BTF	
150	None	OH/UG	22	4	None	CSR2150N	None	3	7	5	15	39, 38	CMBEB150BTS ③	CMBEB150BTF ③	
200	None	OH/UG	10	4	None	BW2200	None	3	9	18	15	39, 38	MBEB200BTS	MBEB200BTF	
200	None	OH/UG	22	4	None	CSR2200N	None	3	7	5	15	39, 38	CMBEB200BTS ③	CMBEB200BTF ③	
200	None	OH/UG	②	4	2/4	MLO	BR	3	9	15	15	39, 38	MBE24L200BTS	MBE24L200BTF	
200	None	OH/UG	②	4	2/4	MLO	CH	3	7	9	15	39, 38	CMBE24L200BTS ③	CMBE24L200BTF ③	
200	None	OH/UG	②	4	None	Provision	None	3	9	18	15	39	MBEP200BTS ④	N/A	

Ring Style All-In-Ones (includes distribution section)

100	None	OH/UG	10	4	12/24	BR2100	BR	2	7	8	15	39, 38	MBE1224B100BTS	MBE1224B100BTF
100	None	UG	10	4	14/28	BR2100	BR	4	8	12	14	37, 36	MBE1428B100BS	MBE1428B100BF
100	None	UG	10	4	22	CH2100X	CH	5	6	3	14	37, 36	CMBE2222B100BS ^③	CMBE2222B100BF ^③
100	None	OH	10	4	12/24	BR2100	BR	9	13	35	16	41, 40	MBE1224B100TS	MBE1224B100TF ^⑤
125	None	OH/UG	10	4	12/24	BR2125	BR	2	7	8	15	39, 38	MBE1224B125BTS	MBE1224B125BTF
125	None	OH	10	4	12/24	BR2125	BR	9	13	35	16	41, 40	MBE1224B125TS	MBE1224B125TF ^⑤
125	None	UG	10	4	14/28	BR2125	BR	4	8	12	14	37, 36	MBE1428B125BS	MBE1428B125BF
125	None	UG	10	4	18/36	BR2125	BR	5	8	11	14	37, 36	MBE1836B125BS	MBE1836B125BF
125	None	UG	10	4	22	CH2125X	CH	5	6	3	14	37, 36	CMBE2222B125BS ^③	CMBE2222B125BF ^③
150	None	OH/UG	22	4	8	CSR2150N	CH	3	7	6	15	39, 38	CMBE88B150BTS ^{③⑥}	CMBE88B150BTF ^{③⑥}
150	None	UG	22	4	32/42	CSR2150N	CH	7	6	2	14	37, 36	CMBE3242B150BS ^③	CMBE3242B150BF ^③
150	None	UG	10	4	20/40	BW2150	BR	6	8	10	14	37, 36	MBE2040B150BS	MBE2040B150BF
150	None	OH/UG	10	4	4/8	BW2150	BR	3	9	16	15	39, 38	MBE48B150BTS	MBE48B150BTF
150	None	OH/UG	10	4	8	BW2150	BR	3	9	17	15	39, 38	MBE88B150BTS	MBE88B150BTF
200	None	OH/UG	10	4	4/8	BW2200	BR	3	9	16	15	39, 38	MBE48B200BTS ^⑥	MBE48B200BTF ^⑥
200	None	OH/UG	22	4	8	CSR2200N	CH	3	7	6	15	39, 38	CMBE88B200BTS ^{③⑥}	CMBE88B200BTF ^{③⑥}
200	None	OH/UG	10	4	8	BW2200	BR	3	9	17	15	39, 38	MBE88B200BTS	MBE88B200BTF
200	None	OH/UG	②	4	8/16	Provision	BR	10	10	19	16	41	MBE816P200TSCU ^{③④}	N/A
200	None	OH	②	4	8/16	Provision	BR	10	10	19	16	41	MBE816P200TS ^{④⑥}	N/A
200	None	OH	②	4	6 – 2 Pole	Main Lug	CH	9	10	23	16	41	CMBE1212L200TS ^③	N/A
200	None	UG	②	4	6 – 2 Pole	Main Lug	CH	5	6	4	14	37, 36	CMBE1212L200BS ^③	CMBE1212L200BF ^③
200	None	OH	②	4	6 – 2 Pole	Main Lug	BR	9	10	21	16	41	MBE1212L200TS	N/A
200	None	UG	②	4	6 – 2 Pole	Main Lug	BR	5	8	13	14	37, 36	MBE1212L200BS	MBE1212L200BF
200	None	OH	10	4	20/40	BW2200	BR	10	10	20	16	41, 40	MBE2040B200TS	MBE2040B200TF
200	None	UG	10	4	20/40	BW2200	BR	6	8	10	14	37, 36	MBE2040B200BS	MBE2040B200BF
200	None	OH	②	4	20/40	Provision	BR	10	10	20	16	41, 40	MBE2040P200TS ^④	MBE2040P200TF ^{④⑤}
200	None	UG	22	4	32/42	CSR2200N	CH	7	6	2	14	37, 36	CMBE3242B200BS ^③	CMBE3242B200BF ^③
200	None	UG	22	4	40	BWH2200	BR	12	12	30	17	42	MBE4040B200BSH ^⑦	N/A
200	None	UG	22	4	42	CSR2200	CH	12	12	29	17	42	CMBE4242B200BSH ^{③⑦}	N/A
200	None	OH/UG	22	4	40	BWH2200	BR	12	12	30	17	42	MBE4040B200BTS	MBE4040B200BTF ^⑤
200	None	OH/UG	22	4	42	CSR2200N	CH	12	12	29	17	42	CMBE4242B200BTS ^③	CMBE4242B200BTF ^{③⑤}
200	None	OH/UG	10	4	20/40	BW2200	BR	—	—	—	—	—	MBE2040B200BTS	MBE2040B200BTF
200	None	OH/UG	10	4	4/8	BW2200	BR	—	—	—	—	—	WMB2048SLB ^⑥	N/A
225	None	OH/UG	10	4	20/40	BW2225	BR	—	—	—	—	—	MBE2040B225BTS	MBE2040B225BTF
225	None	UG	22	4	32/42	CSR2225N	CH	7	6	2	14	37, 36	CMBE3242B225BS ^③	CMBE3242B225BF ^③

① See Table 5 on Page 5 for box details.

② Interrupting rating is dependent on the main breaker that is installed.

③ Unit has copper bus.

④ When a provision for main is provided, order one of the main breakers listed in Table 2. All panels are dual labeled to accept Types BW or CSR Main Breakers.

⑤ Semi-flush flange, not full stucco flange.

⑥ Units come with feed-through lugs.

⑦ Includes factory mounted 2-1/2 inch hub on bottom endwall. UG feed only.

⑧ Use WMB70SMK if second main kit is needed.

Table 4. Main Breaker Selection Chart

Maximum Ampere Rating	2-Pole Breaker Catalog Numbers		
	10 kAIC	22 kAIC	22 kAIC
125	BW2125	BWH2125	CSR2125N
150	BW2150	BWH2150	CSR2150N
200	BW2200	BWH2200	CSR2200N
Load Side Lug Kit for BW and CSR Breakers ^⑨			MCKB225

⑨ When a provision for main is provided, order one of the main breakers listed in this table. All panels are dual labeled to accept Types BW, BWH and CSR Main Breakers.

Typical Wiring Diagrams (Residential Meter Breakers)

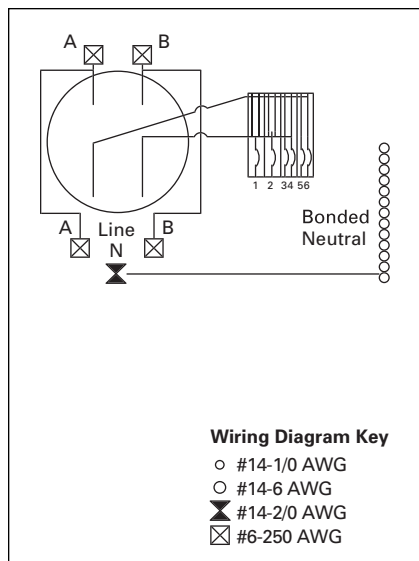


Figure 14. Catalog Numbers —
MBE24L125BTS and MBE24L125BTF

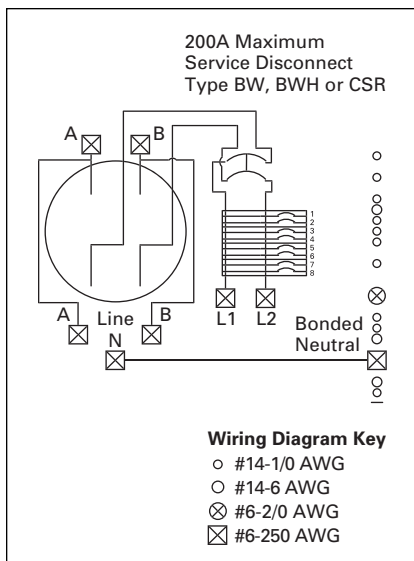


Figure 16. Catalog Numbers —
MBE48B150BTS, MBE48B150BTF,
MBE48B200BTS, MBE48B200BTF and
MB48B200BTS

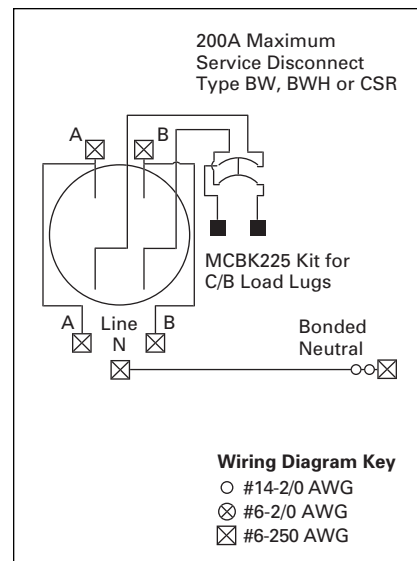


Figure 18. Catalog Numbers —
MBEP200BTS, MBEB200BTS, MBEB200BTF,
MBEB150BTS and MBEB150BTF

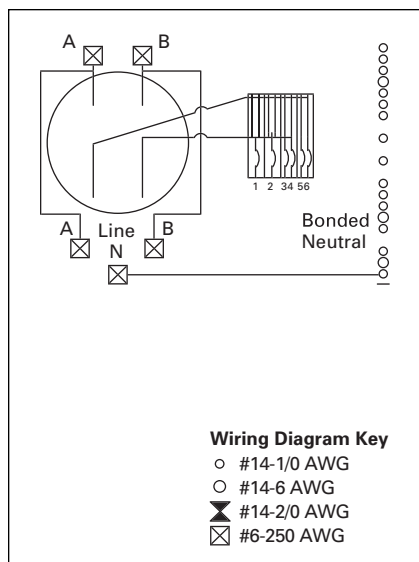


Figure 15. Catalog Numbers —
MBE24L200BTS and MBE24L200BTF

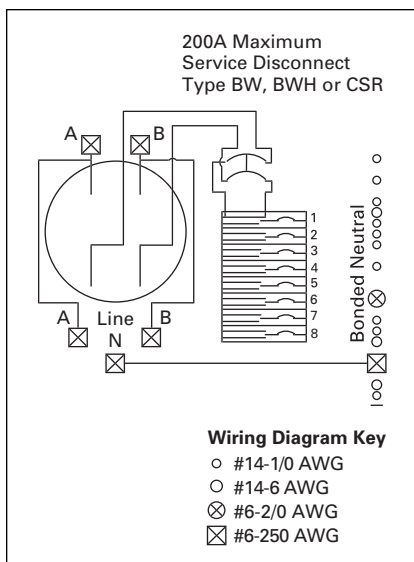


Figure 17. Catalog Numbers —
MBE88B200BTS, MBE88B200BTF,
MBE88B150BTS and MBE88B150BTF

Dimensions and Knockouts (Residential Meter Breakers) — Dimensions in Inches (mm)

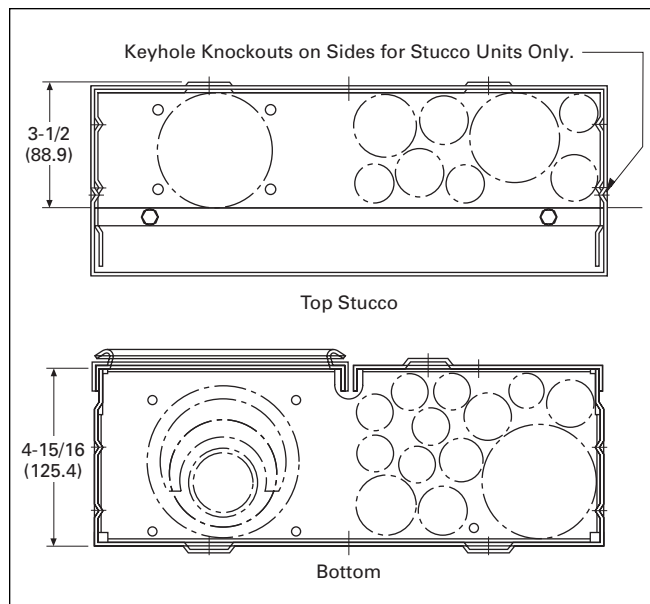


Figure 38. Knockouts for Stucco and Surface Units Catalog Numbers —
CMBE24L200BTF, CMBE24L125BTF, CMBEB200BTF, CMBEB150BTF,
CMBE88B150BTF, CMBE88B200BTF, MBE24L125BTF, MBE24L200BTF,
MBE48B150BTF, MBE48B200BTF, MBE88B150BTF, MBE88B200BTF,
MBEB150BTF, MBEB200BTF, MBE1224B100BTF and MBE1224B125BTF

Table 13. Top Endwall (Surface)

Hub Provision
DS100H2 DS125H2 DS150H2
DS200H2 DS250H2 DS300H2 DS900AP (Adapter Plate) ①

① Use when DS H1 Type 1, 1-1/4 and 1-1/2-inch hubs are needed.

Table 14. Top Endwall (Stucco)

Knockout Size (Dimensions in Inches)	Quantity
1-1/4, 1-1/2, 2, 2-1/2	1
1, 1-1/4, 1-1/2	1
1/2, 3/4, 1	1
1/2, 3/4	3
1/2	3

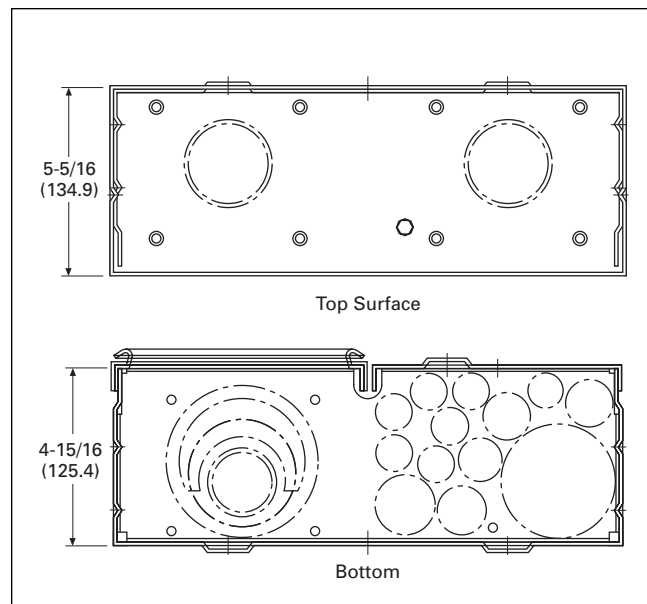


Figure 39. Knockouts for Stucco and Surface Units Catalog Numbers —
CMBB150BTS, CMBB200BTS, CMBE24L125BTS, CMB24L125BTS,
CMBE24L200BTS, CMBEB200BTS, CMBEB150BTS, CMBE88B150BTS,
CMBE88B200BTS, CMBP200BTS, MBE24L125BTS, MBE24L200BTS,
MBE48B150BTS, MBE48B200BTS, MBE88B150BTS, MBE88B200BTS,
MBEB150BTS, MBEB200BTS, MBEP200BTS, MBE1224B100BTS,
MBE1224B125BTS, CMB88B150BTS, CMB88B200BTS and MB48B200BTS

Table 15. Bottom Endwall

Knockout Size (Dimensions in Inches)	Quantity
1/2	7
1/2, 3/4	4
1/2, 3/4, 1	1
1, 1-1/4, 1-1/2, 2	1
1-1/4, 1-1/2, 2, 2-1/2, 3	1