

Standards and Certifications**UL® Listings**

All Eaton Type CH loadcenters are listed under UL File E8741.

Neutral and Ground Terminals

The standard terminals on grounds and neutrals are rated to accept (3)—#14—#10 Cu/Al or (1)—#14—4 wires. For larger cables, add-on neutral lugs may be ordered from the Accessories.

Note: NEC® allows only one current carrying conductor per hole on neutrals unless otherwise noted.

Bottom-Fed Loadcenters

When the power cable is brought into the loadcenter from below the panel; then the main lug panels, and single-phase, 225 A and below, loadcenters can be rotated 180 degrees to allow straight-in wiring of power cables to the main terminals. Because the CSR main circuit breaker handle operates horizontally, the orientation of the main circuit breaker handle is consistent with the requirements of NEC Article 240.81.

Gutter Splicing

Loadcenters are not UL listed as wiring troughs. Therefore, gutter splicing of riser cables to tap off to the main device is not permitted. Refer to NEC Article 373.8.

Fire Rating

Due to the numerous openings in both loadcenter boxes and trims, they should not be mounted in firewalls. There is no approval method for sealing the enclosures for this application.

Date Code

The date of manufacture of each loadcenter is printed on the outside of the carton as well as inside the loadcenter. On the carton, the date code is printed on the end carton label. In the loadcenter, the date code is located on the small white label located on the right side wall (with the main device on top).

The date code is in the following format: F # # # &. The “F” is the numeric code for the Lincoln, IL plant, and the three numbers are the year and week of manufacture, e.g., 023. The “&” sign at the end signifies the decade of the 2000s. The “!” at the end signifies the decade of the 2010s. Therefore, the date code F023& would indicate that the product was manufactured in the 23rd week of 2000. The 1980s are represented by a “+” sign and the 1990s are represented by a “=” at the end of the code.

Plug-On Type CH Breakers

Quick-make, quick-break switch mechanism combined with inverse time element tripping operation and trip-free handle design. Type CH circuit breakers trip to the OFF position eliminating nuisance callbacks. The thermal-magnetic trip curve avoids nuisance tripping on mild overloads while reacting almost instantaneously to severe short-circuit conditions. CHF breakers include a ‘trip flag’ to differentiate between a tripped breaker and one that has been turned off. Multipole breakers have internal common trip connection to operate all poles simultaneously. Handles are marked with ON-OFF indication and ampere rating of the breaker. Type CH breakers meet UL Standard 489, NEMA standards, and Federal Spec Classification W-C 375 b/Gen. They are UL listed under File Number E11713, E8741, E3624 and E51287; and CSA® certified file number LR87196, except Type CHT breakers.

Type CH Circuit Breaker Ratings

Single- and double-pole CH breakers rated 15 and 20 A have low instantaneous magnetic trip levels. The 15 and 20 A breakers with “HM” suffix have high magnetic trip settings recommended for circuits with inherently high inrush currents. All Type CH breakers are marked for heating, air conditioning and refrigeration (HACR) equipment application. Single-pole 15–20 A breakers are also suitable for switching duty (SWD). Shunt trip coils operate on 120 Vac and require one additional pole space per breaker.



Type CH Loadcenter

Extra 1.5 inch Knockout (38.1 mm)

- Larger knockout provides easier installation and time savings for renovation installations

Top or Bottom Feed

- Straight-in wiring saves labor and material
- One panel for either top or bottom applications

2/0 Lug

- Easily removable and can be installed in any location on the neutral bar

Commercial Grade Main Breaker

- 25 kAIC series rated main breaker in 150 A–225 A loadcenters. 35, 42 and 100 kAIC series ratings are available
- Optional convertible design—reduces inventory requirements

One Piece Silver-Flashed Copper Bus

- Provides superior conductivity, corrosion resistance and durability

Drywall Marking on Enclosure

- Indicates proper mounting depth for flush applications

Steel Backpan

- Provides solid and reliable breaker mounting—single piece design for stability and durability

“Tangential” Center Knockout

- Easier installation for conduit applications

Unique Sandalwood Finish

- Aesthetically appealing, scratch-resistant powder coating

Neutral Bus (Strap)

- Easily removable for sub-panel applications

Bonding Z-Strap

- Provides easy field conversion for service entrance applications

Twin Neutral Bars

- Minimum 150% neutral capacity

Type CHF AFCI/GFCI/Thermal-Magnetic Breakers

- Advanced electronics effectively reduce nuisance tripping
- CHF AFCI breakers have a standard diagnostic LED indicating 1 of 7 trip codes
- Mechanical flag for trip indication (on thermal-magnetic AFCI and GFCI)
- All CH breakers provide industry exclusive 2-position handle with simple 1 step reset

Single Keyhole Mounting

- One keyhole at the top and bottom provides easier mounting and leveling



Warranty

The minimum warranty for residential loadcenters, breakers and surge protection devices shall be as follows:

- Lifetime loadcenter warranty
- Lifetime warranty on CH circuit breakers
- Lifetime warranty on CHSPT2ULTRA including \$75,000 connected equipment warranty
- 1-year warranty on plug-in surge protective device (CHSA)

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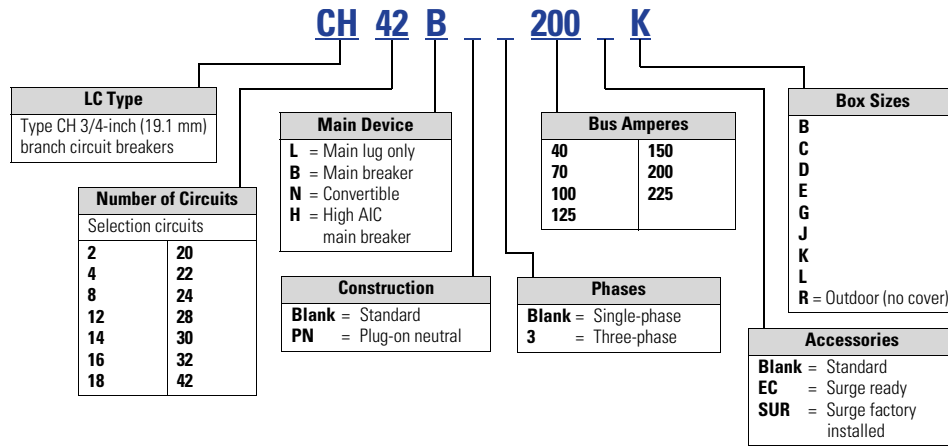
Loadcenters and Circuit Breakers

Type CH Loadcenters and Circuit Breakers

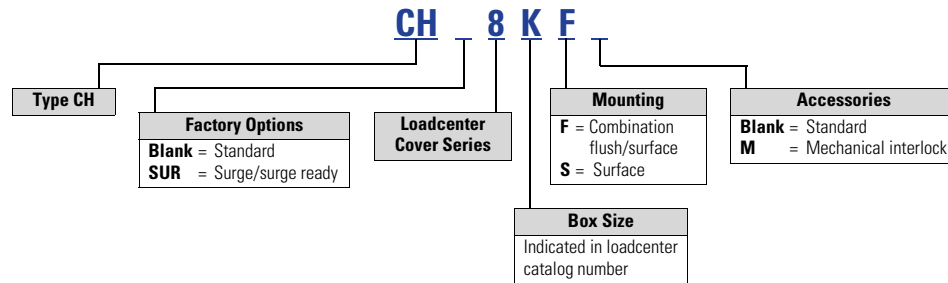
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Catalog Number Selection

Loadcenters 100–225 A and 12–42 Circuits



Indoor Covers Ordered Separately



Note: All combinations are not valid, refer to the catalog section.

Product Selection

Single-Phase—Main Circuit Breaker Loadcenters—10/25 kAIC

CH42B200K



Single-Phase Three-Wire—120/240 Vac—Insulated/Bondable Split Neutral (Unless Otherwise Noted)

Main Breaker Type	Main Ampere Rating	Maximum Number 3/4-Inch (19.1 mm) of Poles	Enclosure Type	Box Size	Wire Size Range Cu/Al 60 °C or 75 °C for Main Breaker	Loadcenter ^{①②} Catalog Number	Loadcenter Cover Catalog Number Combination ^③	Surface
CH 10 kAIC	100	14	Indoor	B	#6–1/0	CH14B100B ^④	CH8BF	CH8BS
		14	Outdoor	B	#6–1/0	CH14B100R ^⑤	—	—
		18	Indoor	C	#6–1/0	CH18B100C ^④	CH8CF	CH8CS
		18	Outdoor	C	#6–1/0	CH18B100R ^⑤	—	—
		22	Indoor	C	#6–1/0	CH22B100C ^④	CH8CF	CH8CS
		22	Outdoor	C	#6–1/0	CH22B100R ^⑤	—	—
		30	Indoor	D	#6–1/0	CH30B100D ^④	CH8DF	CH8DS
		30	Outdoor	D	#6–1/0	CH30B100R ^⑤	—	—
	125	22	Indoor	C	#6–1/0	CH22B125C ^④	CH8CF	CH8CS
		22	Outdoor	C	#6–1/0	CH22B125R ^⑤	—	—
		30	Indoor	D	#6–1/0	CH30B125D ^④	CH8DF	CH8DS
		30	Outdoor	D	#6–1/0	CH30B125R ^⑤	—	—
CSR 25 kAIC	150	8	Outdoor	E	#2–300 kcmil	CH8B150RF ^⑥	—	—
		24	Indoor	E	#2–300 kcmil	CH24B150E ^④	CH8EF	CH8ES
		24	Outdoor	E	#2–300 kcmil	CH24B150R ^⑤	—	—
		32	Indoor	J	#2–300 kcmil	CH32B150J ^④	CH8JF	CH8JS
		32	Outdoor	J	#2–300 kcmil	CH32B150R ^⑤	—	—
	200	8	Outdoor	E	#2–300 kcmil	CH8B200RF ^⑥	—	—
		24	Indoor	E	#2–300 kcmil	CH24B200E ^④	CH8EF	CH8ES
		24	Outdoor	E	#2–300 kcmil	CH24B200R ^⑤	—	—
		32	Indoor	J	#2–300 kcmil	CH32B200J ^④	CH8JF	CH8JS
		32	Outdoor	J	#2–300 kcmil	CH32B200R ^⑤	—	—
		42	Indoor	K	#2–300 kcmil	CH42B200K ^④	CH8KF	CH8KS
		42	Outdoor	K	#2–300 kcmil	CH42B200R ^⑤	—	—
	225	32	Indoor	J	#2–300 kcmil	CH32B225J ^④	CH8JF	CH8JS
		32	Outdoor	J	#2–300 kcmil	CH32B225R ^⑤	—	—
		42	Indoor	K	#2–300 kcmil	CH42B225K ^④	CH8KF	CH8KS
		42	Outdoor	K	#2–300 kcmil	CH42B225R ^⑤	—	—
DK 10 kAIC	300	42	Indoor	PM	(2) 3/0–250 kcmil	CH42PM300	CH7PMF ^⑦	CH7PMS
	400	42	Indoor	PM	(2) 3/0–250 kcmil	CH42PM400	CH7PMF ^⑦	CH7PMS

Notes

- ^① All main circuit breaker loadcenters are listed for use as service entrance equipment.
^② Ground bar kits priced separately. See **Page V1-T1-25**.
^③ Combination style covers may be used in surface or flush applications.
^④ Can be top or bottom fed by rotating the enclosure and trim 180 degrees.
^⑤ Rainproof panels are furnished with hub closure plates. For rainproof hubs, refer to **Page V1-T1-25**.
^⑥ Panel includes #4–300 kcmil feed-through lugs.
^⑦ This cover is for flush applications only (not combination).

Box sizes **Pages V1-T1-27** and **V1-T1-28**.

Single-Phase—High Interrupting Rated Main Circuit Breaker Loadcenters—100 kAIC**Single-Phase Three-Wire—120/240 Vac—Insulated/Bondable Split Neutral**






Main Breaker Type	Main Ampere Rating	Maximum Number 3/4-Inch (19.1 mm) Poles	Enclosure Type	Box Size	Wire Size Range Cu/Al 60 °C or 75 °C for Main Breaker	Loadcenter ^① Catalog Number	Loadcenter Cover Catalog Number Combination ^②	Surface
CHB4 100 kAIC ^⑤	100	32	Indoor	L	#6–1/0	CH32H100L ^③	CH8LF	CH8LS
		32	Outdoor	L	#6–1/0	CH32H100R ^④	—	—
CHH 100 kAIC ^⑤	150	32	Indoor	L	#2/0–300 kcmil	CH32H150L	CH8LF	CH8LS
		32	Outdoor	L	#2/0–300 kcmil	CH32H150R ^④	—	—
	200	32	Indoor	L	#2/0–300 kcmil	CH32H200L	CH8LF	CH8LS
		32	Outdoor	L	#2/0–300 kcmil	CH32H200R ^④	—	—
		42	Indoor	L	#2/0–300 kcmil	CH42H200L	CH8LF	CH8LS
		42	Outdoor	L	#2/0–300 kcmil	CH42H200R ^④	—	—
	225	42	Indoor	L	#2/0–300 kcmil	CH42H225L	CH8LF	CH8LS
		42	Outdoor	L	#2/0–300 kcmil	CH42H225R ^④	—	—

Notes

- ^① All main circuit breaker loadcenters are listed for use as service entrance equipment.
- ^② Combination style covers may be used in surface or flush applications.
- ^③ Loadcenter can be top or bottom fed by rotating the enclosure and trim 180 degrees.
- ^④ Rainproof panels are furnished with hub closure plates. For rainproof hubs, refer to **Page V1-T1-25**.
- ^⑤ Series rated for 100 kAIC with all Types CH, CHT and CHP breakers.

Single-Phase—Main Lug Loadcenters

Single-Phase Three-Wire—120/240 Vac—Insulated/Bondable Single Neutral

Surface	Outdoor	Main Ampere Rating	Maximum Number 3/4-Inch (19.1 mm)		Enclosure Type	Type of Trim (Included)	Box Size	Wire Size Range Cu/Al 60 °C or 75 °C for Main Lugs	Loadcenter Catalog Number
			Space	Poles					
		40	2	4 ①	Indoor	Surface (no door)	5	#14–6	CH2L40SP ②③
			2	4 ①	Outdoor	—	5R	#14–6	CH2L40RP ②③④
			2	4 ①	Indoor	Flush (no door)	5	#14–6	CH2L40FP ②③
		70	2	4 ①	Indoor	Surface (no door)	5	#14–2	CH2L70SP ②③
			2	4 ①	Outdoor	—	5R	#14–2	CH2L70RP ②③④
			2	4 ①	Indoor	Flush (no door)	5	#14–2	CH2L70FP ②③
	Surface (No Door)	125	2	4 ①	Indoor	Surface (no door)	6	#14–1/0	CH2L125SP ②③
			2	4 ①	Outdoor	—	6R	#14–1/0	CH2L125RP ②③④
			2	2	Outdoor	—	—	#14–1/0	CH2L125RSE2P ④⑤⑥
			2	4 ①	Indoor	Flush (no door)	6	#14–1/0	CH2L125FP ②③
			4	8 ①	Indoor	Surface (no door)	7	#14–1/0	CH4L125SP ②⑦
			4	8 ①	Outdoor	—	7R	#14–1/0	CH4L125RP ②④⑦
			4	8 ①	Indoor	Flush (no door)	7	#14–1/0	CH4L125FP ②⑦
			6	12 ①	Outdoor	—	6R	#14–1/0	CH6L125R ②⑥⑦
			8	16 ①	Indoor	Surface (no door)	7	#6–1/0	CH8L125SP ②⑧
			8	16 ①	Outdoor	—	7R	#6–1/0	CH8L125RP ②⑥⑦
	Flush (No Door)		8	16 ①	Indoor	Flush (no door)	7	#6–1/0	CH8L125FP ②⑧
	Outdoor								

Notes

- ① Requires the use of Type CHT breakers.
- ② Ground bar kits priced separately, see **Page V1-T1-25**
 - For 2/4 and 6/12 circuit loadcenters, use Type GBK5 or GBK520 ground bar
 - For 4/8 and 8/16 circuit loadcenters, use Type GBK10 ground bar
 - Ground bars mount to the left side wall of the enclosure for the 4/8, 6/12 and 8/16 circuit loadcenters
- ③ Suitable for use as service equipment when not more than two service disconnecting mains are provided or when not used as a lighting and appliance panelboard (see Article 408.34 of the NEC).
- ④ Rainproof panels are furnished with hub closure plates. For rainproof hubs, refer to **Page V1-T1-25**.
- ⑤ For use as service entrance applications only.
- ⑥ Neutral/ground holes (6) #14–6 and (3) #14–2/0 AWG Cu/Al.
- ⑦ Suitable for use as service equipment when not more than two service disconnecting mains are provided or when not more than six service disconnecting mains are provided and when not used as a lighting and appliance panelboard (see Article 408.34 of the NEC).
- ⑧ Suitable for use as service equipment when a main breaker is used or when not more than six service disconnecting mains are provided and when not used as a lighting and appliance panelboard (see Article 408.34 of the NEC).

Box sizes **Pages V1-T1-27** and **V1-T1-28**.