

Convertible Loadcenters MCB or MLO—Base Units and Main Devices—10/25/35 kAIC

Complete assembly consists of: loadcenter, cover, and either main breaker kit or main lug kit.

Indoor—Single-Phase—Three-Wire—120/240 V—Insulated/Bondable Split Neutral—Top or Bottom Feed

Maximum Main Ampere Rating	Maximum Number of Single Poles	Box Size	Loadcenter Box and Panel Catalog Number ①	Loadcenter Cover Catalog Number		Main Lug Kit		Main Breaker Kit		Catalog Number	
				Combination	Surface	Wire Size	Catalog Number	kAIC Rating	Wire Size		
125	22	C	CH22N125C	CH8CF	CH8CS	#10–1/0	CHL125N	10	#10–1/0	CH2100N ③	—
										CH2125N ③	—
200	32	J	CH32N200J	CH8JF	CH8JS	#4–300 kcmil	CHL225N	25/35 ②	#2–300 kcmil	CSR2125N	CSH2125N ④
										CSR2150N	CSH2150N ④
										CSR2175N	CSH2175N ④
										CSR2200N	CSH2200N ④
225	42	K	CH42N225K	CH8KF	CH8KS	#4–300 kcmil	CHL225N	25/35 ②	#2–300 kcmil	CSR2125N	CSH2125N ④
										CSR2150N	CSH2150N ④
										CSR2175N	CSH2175N ④
										CSR2200N	CSH2200N ④
										CSR2225N	CSH2225N ④

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

Maximum Main Ampere Rating	Maximum Number of Single Poles	Box Size	Loadcenter Box and Panel Catalog Number ①	Main Lug Kit		Main Breaker Kit		Catalog Number	
				Wire Size	Catalog Number	kAIC Rating	Wire Size		
125	22	C	CH22N125R ⑤	#10–1/0	CHL125N	10	#10–1/0	CH2100N ③	—
								CH2125N ③	—
200	8	E	CH8N200RF ⑤⑥⑦	#4–300 kcmil	CHL225N	25/35 ②	#2–300 kcmil	CSR2125N	CSH2125N
								CSR2150N	CSH2150N
								CSR2175N	CSH2175N
								CSR2200N	CSH2200N
200	32	J	CH32N200R ⑤	#4–300 kcmil	CHL225N	25/35 ②	#2–300 kcmil	CSR2125N	CSH2125N ④
								CSR2150N	CSH2150N ④
								CSR2175N	CSH2175N ④
								CSR2200N	CSH2200N ④
225	42	K	CH42N225R ⑤	#4–300 kcmil	CHL225N	25/35 ②	#2–300 kcmil	CSR2125N	CSH2125N ④
								CSR2150N	CSH2150N ④
								CSR2175N	CSH2175N ④
								CSR2200N	CSH2200N ④
								CSR2225N	CSH2225N ④

Notes

- ① Panel does not include main. Order main breaker or main lug kit separately.
 ② If 35 kAIC is required, use CSH breaker.
 ③ Hold-down kit included.
 ④ 35 kAIC series combination rating is obtained when Types CH, CHT and CHP branch breakers are used with CSH main.
 ⑤ Rainproof panels are furnished with hub closure plates. For rainproof hubs, refer to **Page V1-T1-25**.
 ⑥ Includes feed-through lugs for both phase and neutral conductors.
 ⑦ Insulated/bondable single neutral.

Interrupting rating depends on main circuit breaker selected.

1 Surge Ready Loadcenters (provision only, CHSPT2ULTRA and breaker not included)

Ampere Rating	Type	Number of Circuits	Loadcenter Catalog Number ^①	Loadcenter Cover Catalog Number Combination	Catalog Number Surface
225	Convertible	42	CHEC42N225L	CHSUR8LF	CHSUR8LS
225	Convertible ^②	42	CHEC42L225L	CHSUR8LF	CHSUR8LS
200	Main breaker	42	CHEC42B200L	CHSUR8LF	CHSUR8LS
225	Convertible ^②	32	CHEC32L225K	CHSUR8KF	CHSUR8KS
225	Convertible	32	CHEC32N225K	CHSUR8KF	CHSUR8KS
225	Convertible	32	CHEC32N225R ^③	—	—
200	Main breaker	32	CHEC32B200K	CHSUR8KF	CHSUR8KS
150	Main breaker	32	CHEC32B150K	CHSUR8KF	CHSUR8KS
100	Main breaker	32	CHEC32B100K	CHSUR8KF	CHSUR8KS
125	Convertible ^②	24	CHEC24L125E	CHSUR8EF	CHSUR8ES
100	Main breaker	24	CHEC24B100E	CHSUR8EF	CHSUR8ES

Main Breaker Kits

Maximum Main Ampere Rating	Catalog Number	
	25 kAIC	35 kAIC
100	CSR2100N	CSH2100N
150	CSR2150N	CSH2150N
200	CSR2200N	CSH2200N
225	CSR2225N	CSH2225N

Main Lug Kits

Maximum Main Ampere Rating	Catalog Number
125	CHL125N
225	CHL225N

Technical Data and Specifications

Ratings

- Loadcenter
 - 25 kAIC main breaker, main lug only, and convertible main breaker/main lug
 - Factory installed or provision for field-installed surge suppressor
 - Top or bottom feed
- Surge protective device (CHSPT2ULTRA)
 - Nominal discharge current: 20 kA (I_n)
 - Surge current capacity per phase: 108 kA
 - Warranty: \$75,000 connected equipment^④
 - For further product ratings, see Volume 1, Tab 2.1 Surge Protection

Notes

- ① Order cover separately.
- ② With main lugs installed.
- ③ Rainproof loadcenters are furnished with hub closure plates. For rainproof hubs, refer to **Page V1-T1-25**.
- ④ For warranty details, visit www.eaton.com/surgetrap.

1.2

Loadcenters and Circuit Breakers

Type BR Loadcenters and Circuit Breakers

1

Convertible Loadcenters MCB or MLO—Base Units and Main Devices 10/22/25 kAIC, Complete Assembly Consists of: Loadcenter and Either Main Breaker Kit or Main Lug Kit

Note: Interrupting rating depends on main circuit breaker selected.

BW2200



Main Devices—Two- and Three-Pole Main Circuit Breakers—120/240 Vac or 208Y/120 Vac or 240 Vac

Ampere Rating	Wire Size Range Cu/Al 60 °C or 75 °C for Main Breaker	10 kAIC Catalog Number	22/25 kAIC Catalog Number ①
Two-Pole			
100	#4–1/0	BR2100	BRH2100
110	#4–1/0	BR2110	BRH2110
125	#4–2/0	BR2125	BRH2125
125	#2–300 kcmil	BW2125	CSR2125N
150	#2–300 kcmil	BW2150	CSR2150N
175	#2–300 kcmil	BW2175	CSR2175N
200	#2–300 kcmil	BW2200	CSR2200N
Three-Pole			
100	#1	BR3100	BRH3100

BRL200



Main Devices—Two- and Three-Pole Main Lug Kits—120/240 Vac or 208Y/120 Vac or 240 Vac

Ampere Rating	Wire Size Range Cu/Al 60 °C or 75 °C for Main Lugs	Catalog Number
Two-Pole		
125	#6–2/0	BRSF125
150	#1–300 kcmil	BRL200
175	#1–300 kcmil	BRL200
200	#1–300 kcmil	BRL200
Three-Pole		
150	#6–3/0	3BRSF150

Main Circuit Breaker with Accessory

Example: BW22005R01 (Put description with catalog number on order. See **Page V1-T1-87.**)

Main Circuit Breaker Loadcenters—Copper Bus 10/22/25 kAIC

BR3030BC100



Main Circuit Breaker Loadcenters—With Copper Bus—Single-Phase Three-Wire—120/240 Vac—Insulated/Bondable Split Neutral

Main Breaker Type	Main Ampere Rating	Maximum Number 1-Inch (25.4 mm)		Enclosure Type	Box Size	Wire Size Range Cu/Al 60 °C or 75 °C for Main Breaker	Loadcenter Catalog Number with Combination Cover ②③
		Spaces	Circuits				
BR 10 kAIC	100	20	20	Indoor	C2	#4–1/0	BR2020BC100
		30	30	Indoor	D1	#4–1/0	BR3030BC100
BRH 22 kAIC ④	100	30	30	Indoor	D1	#4–1/0	BR3030HC100
CSR 25 kAIC	150	30	30	Indoor	G1	#2–300 kcmil	BR3030BC150
	200	20	40	Indoor	D1	#2–300 kcmil	BR2040BC200
		30	40	Indoor	G1	#2–300 kcmil	BR3040BC200
		40	40	Indoor	L1	#2–300 kcmil	BR4040BC200

Main Lug Only Loadcenters—Copper Bus

BR816LC125FDP



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

Main Ampere Rating	Maximum Number 1-Inch (25.4 mm)		Enclosure Type	Trim Type	Box Size	Wire Size Range Cu/Al 60 °C or 75 °C for Main Lugs	Loadcenter Catalog Number
	Spaces	Circuits					
125	8	16	Indoor	Surface (with door)	7	#14–1	BR816LC125SDP
	8	16	Indoor	Flush (with door)	7		BR816LC125FDP

Notes

- ① Series combination rating with Types BD, BR, BQ, BQC and GFCB is 22 kAIC with BRH main and 25 kAIC with CSR main.
- ② All main circuit breaker loadcenters are listed for use as service entrance equipment and are shipped with neutral bonding strap preattached. The maximum rating of the panel is the main circuit breaker rating when used as service entrance equipment.
- ③ Ground bar kits priced separately. See **Page V1-T1-66.**
- ④ 22 kAIC series combination rating is obtained when Types BD, BR, BQ, BQC and GFCB 10 kAIC branch breakers are used in series with Type BRH main breaker.

Box sizes **Pages V1-T1-67 through V1-T1-70.**