

BR Main Breakers



BR Main Breaker



BR Main Breaker Loadcenter

Product Description

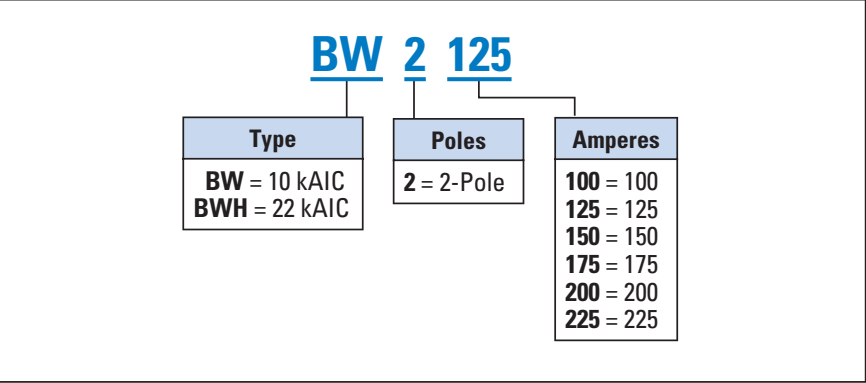
The main circuit breaker protects the entire loadcenter. It can also be used as a service disconnect. The main breaker delivers electricity to the branch circuit breakers within the loadcenter. It is either factory installed or sold separately depending on the model and application.

Features, Functions and Benefits

- ✓ Full range from 125 to 225 amperes, 120/240 volts.
- ✓ 10 kAIC and 25 kAIC available.
- ✓ Approved for service entrance.
- ✓ Five-year warranty.
- ✓ Meet UL 489, CSA, NEMA standards, Federal Spec Classification W-C 375 b/GEN.

Catalog Numbering System

TABLE 1-52. CATALOG NUMBERING SYSTEM



Note: All packaged quantities or single units.

Data Tables

TABLE 1-53. TYPES BW AND BWH CIRCUIT BREAKERS 120/240 VAC — 25 kAIC FOR USE IN TYPE ECB UNIT ENCLOSURES

Ampere Rating	Number of Poles	Wire Size Range Cu/Al 60°C or 75°C for Line Terminals	Catalog Number	UPC Code
10,000 AIC				
100	2	#2 – 300 kcmil	BW2100	782116061099
125			BW2125	786676460361
150			BW2150	786676460408
175			BW2175	786676460507
200			BW2200	786676460552
225			BW2225	786679122556
25,000 AIC				
100	2	#2 – 300 kcmil	BWH2100	782116061105
125			BWH2125	786676460439
150			BWH2150	786676460453
175			BWH2175	786676449700
200			BWH2200	786676460606
225			BWH2225	786679122563

Accessories

TABLE 1-54. SHUNT TRIPS, AUXILIARY AND ALARM CONTACTS

Description	Catalog Number Suffix Adder ①
Shunt Trip for Types BW/BWH	
12 Volts	SR12
24 Volts	SR24
120 Volts	SR01
Auxiliary Contact for Types BW/BWH	
(1) NO and (1) NC	AL1
(2) NO and (2) NC	AL2
Alarm Contacts for Types BW/BWH	
Types BW/BWH	CR1
Alarm Contacts for Type GFCB (1-Pole)	
Alarm Contact for GFCB (1-Pole)	W1
(1) NO and (1) NC	W2

① Add suffix indicated to end of breaker catalog number.

TABLE 1-55. BW/BWH LUG TREE KIT FOR REPLACEMENT PURPOSES ONLY FOR USE IN TYPE ECB UNIT ENCLOSURES

Ampere Rating	Description	Wire Size Range Cu/Al 60°C or 75°C for Line Terminals	Catalog Number	UPC Code
225	For use on 125, 150, 175, 200 and 225 Ampere BW and BWH Breakers	#2 – 300 kcmil	MCBK225	782114110591

MAIN DEVICES

TABLE 2-45. 2- AND 3-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		22/25 kAIC ①	
		Catalog Number	UPC Code	Catalog Number	UPC Code
2-Pole					
100	#4 – 1/0	BR2100	786676363259	BRH2100	786676373906
110	#4 – 1/0	BR2110	786676384278	BRH2110	786676374248
125	#4 – 2/0	BR2125	786676367059	BRH2125	786676373951
125	#2 – 300 kcmil	BW2125	786676460361	BWH2125	786676460439
150	#2 – 300 kcmil	BW2150	786676460408	BWH2150	786676460453
175	#2 – 300 kcmil	BW2175	786676460507	BWH2175	786676449700
200	#2 – 300 kcmil	BW2200	786676460552	BWH2200	786676460606
3-Pole					
100	#1	BR3100	786676368094	BRH3100	786676372909

① Series combination rating with Types BD, BR, BQ, BQC and GFCB is 22 kAIC with BRH main and 25 kAIC with BWH main.

TABLE 2-46. 2- AND 3-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	UPC Code
2-Pole			
125	#6 – 2/0	BRSF125 ②	786676001762
150	#1 – 300 kcmil	BRL200	786676460101
175	#1 – 300 kcmil	BRL200	786676460101
200	#1 – 300 kcmil	BRL200	786676460101
3-Pole			
150	#6 – 3/0	3BRSF150	786676001786

② Accessory clamshell number BRF125CS clamshell available.

Main Circuit Breaker with Accessory
Example: BW22005R01
(Put description with catalog number on order.)

SINGLE-PHASE AND 3-PHASE — CIRCUIT BREAKER UNIT ENCLOSURES — 10,000/25,000 AMPERES INTERRUPTING CAPACITY



TABLE 2-63. CIRCUIT BREAKER UNIT ENCLOSURES — UNIT ENCLOSURE INCLUDES LUG TREE KIT

Circuit Breaker Type	Wire Size Range Cu/Al 60°C or 75°C	Main Ampere Rating	Unit Enclosure Catalog Number				Unit Enclosure Catalog Number			
			Flush Cover			Surface Cover		Encl. Type	Rainproof NEMA Type 3R	
			Encl. Type	Catalog Number	UPC Code	Catalog Number	UPC Code		Catalog Number	UPC Code
Type ECB Circuit Breaker Unit Enclosures — Factory-Installed Main Breaker										
BW/BR 10 kAIC	①	100 150 200	—	—	—	—	—	Outdoor	BR2100BRP RCC150SEBP RCC200SEBP	786676001687 782114105344 782114105337
Type ECB Circuit Breaker Unit Enclosures — Order Types BW and BWH Circuit Breakers Separately Single-Phase 3-Wire — 240 Vac Maximum										
BW 10 kAIC	①	225	Indoor	ECB225F ②③	782113098753	ECB225S ②③	782113098746	Outdoor	ECB225R ②③④	782113098760
BWH 25 kAIC										
Type ECC Circuit Breaker Unit Enclosures — Order Type CC Circuit Breakers Separately Single-Phase 3-Wire/3-Phase 4-Wire — 240 Vac Maximum										
CC 10 kAIC	①	225	Indoor	ECC225F ②③	782114225196	ECC225S ②③	782114225202	Outdoor	ECC225R ②③④	782114225219

- ① Wire size is determined by the circuit breaker installed in enclosure. See table below.
- ② Order circuit breaker separately.
- ③ One ground lug accepting (1) #14 – #2 is factory installed. Also, there are pre-drilled holes to accept a GBK5 ground bar.
- ④ Rainproof enclosures are furnished with hub closure plates.

TABLE 2-64. MAXIMUM WIRE SIZE

Maximum Ampere Rating	Wire/Application	Maximum Wire Size
200	Aluminum – Standard	250 kcmil
225	Aluminum – Service Entrance	250 kcmil
225	Copper – Standard and Service Entrance	250 kcmil

SINGLE-PHASE AND 3-PHASE — CIRCUIT BREAKER UNIT ENCLOSURES — 10,000/25,000 AMPERES INTERRUPTING CAPACITY

TABLE 2-65. TYPES BW AND BWH CIRCUIT BREAKERS — 120/240 VAC — 10 AND 25 kAIC FOR USE IN TYPE ECB UNIT ENCLOSURES

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C for Line Terminals	2-Pole Breakers			
		10 kAIC		25 kAIC	
		Catalog Number	UPC Code	Catalog Number	UPC Code
125	#2 – 300 kcmil	BW2125	786676460408	BWH2125	786676460439
150		BW2150	786676460507	BWH2150	786676460453
175		BW2175	786676460552	BWH2175	786676449700
200		BW2200	786679122556	BWH2200	786676460606
225		BW2225	786679122556	BWH2225	786679122563

TABLE 2-66. BW/BWH LUG TREE KIT — FOR REPLACEMENT PURPOSES ONLY FOR USE IN TYPE CCM UNIT ENCLOSURES

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C for Line Terminals	Description	Catalog Number	UPC Code
225	#2 – 300 kcmil	For use on 125, 150, 175, 200 and 225 Ampere BW and BWH Breakers	MCBK225	782114110591

TABLE 2-67. TYPE CC CIRCUIT BREAKERS — 240 VAC — 10 kAIC FOR USE IN TYPE ECC UNIT ENCLOSURES

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C for Line Terminals	Type CC 10 kAIC		Type CC Hi-Mag 10 kAIC	
		Catalog Number	UPC Code	Catalog Number	UPC Code
2-Pole					
100 125 150	#4 – 4/0	CC2100	782113386546	CC2100HM	782113828589
		CC2125	782113266565	CC2125HM	782113828596
		CC2150	782113266572	CC2150HM	782113828602
175 200 225	#2/0 – 300 kcmil	CC2175	782113266589	CC2175HM	782113828619
		CC2200	782113266596	CC2200HM	782113828626
		CC2225	782113266602	CC2225HM	782113828633
3-Pole					
100 125 150	#4 – 4/0	CC3100	782113386553	CC3100HM	782113828640
		CC3125	782113266619	CC3125HM	782113828657
		CC3150	782113266626	CC3150HM	782113828664
175 200 225	#2/0 – 300 kcmil	CC3175	782113266633	CC3175HM	782113828671
		CC3200	782113266640	CC3200HM	782113828688
		CC3225	782113266657	CC3225HM	782113828695

Product Selection

TABLE 3-3. COMBINATION SERVICE ENTRANCE DEVICES — NON-EUSERC (CONTINUED)

Ampere Rating	Bypass	Service	kAIC	Jaws	Distribution	Main	Branch Breaker Type	Catalog Number	UPC Code
Ring Style All-in-Ones (includes distribution section)									
125	None	OH/UG	①	4	②	None — Refer to Distribution	BR	WMB1224SCN CMB24L125BTS ④⑤	786676258456
125	None	OH/UG	①	4	2/4		CH		782114872512
150	None	OH/UG	22	4	8	CSR2150	CH	CMB88B150BTS ④⑤	782114872482
150	None	UG	22	4	32/42	CSR2150	CH	CMB3242B150BS ④⑤	782114872536
200	None	OH/UG	10	4	4/8	BW2200	BR	MB48B200BTS ⑤⑥	782114872499
200	None	OH/UG	22	4	8	CSR2200	CH	CMB88B200BTS ④⑤⑥	782114872475
200	None	UG	22	4	32/42	CSR2200	CH	CMB3242B200BS ④⑤	782114872529
200	None	OH/UG	22	—	42/42	—	CH	CMB4242B200BTS	782114872543
200	None	OH/UG	10	4	4/8	BW2200	BR	MBER48B200BTS ⑥	782116077373
200	None	OH/UG	22	4	8/8	CSR2200N	CH	CMBER88B200BTS ⑥	782116077380
150	None	OH/UG	10	4	4/8	BW2150	BR	MBER48B150BTS ⑥	782116197682
150	None	OH/UG	22	4	8/8	CSR2150N	CH	CMBER88B150BTS ⑥	782116197699
Ringless All-in-Ones (includes distribution section)									
200	None	OH/UG	10	4	8/16	BW2200	BR	MB816B200BTS ⑤⑥	782114858615
200	None	OH/UG	10	4	8/16	BW2200	BR	MB816B200BTSV ⑤⑥⑦	782116094851
200	None	OH/UG	10	4	8/16	BW2200	BR	MB816B200BTSCU ④⑤⑥	782114858622
200	None	OH/UG	①	4	8/16	Provision ③	BR	MB816P200BTS ⑤⑥	782114860076
200	None	OH/UG	①	4	8/16	Provision ③	BR	MB816P200BTSCU ④⑤⑥	782114860083
200	Horn	OH/UG	①	5	8/16	Provision ③	BR	MB816P200STD ⑥	782114668894
200	Horn	OH/UG	①	5	8/16	Provision ③	BR	MB816P200BTSD ⑥	782114887714
200	None	OH/UG	10	4	12/12	CSR2000	CH	CMB1212B200BTS ④⑤⑥	782114858561
200	None	OH/UG	①	4	6 – 2 Pole	Main Lugs	CH	CMB1212L200BTS ④⑥	782114848753
200	None	OH/UG	①	4	12/12	Provision ③	CH	CMB1212P200BTS ④⑤⑥	782114858554
200	Horn	OH/UG	①	5	12/12	Provision ③	CH	CMB1212P200BTSD ④⑥	782114858592
200	None	OH/UG	①	4	6 – 2 Pole	Main Lugs	BR	MB1212L200BTS ⑥	782114849019
200	None	OH/UG	22	4	24/24	CSR2200	CH	CMB2424B200BTS ⑤	782114987896
200	None	OH/UG	10	4	20/40	BW2200	BR	MB2040B200BTS ⑤	782114858639
200	None	OH/UG	①	4	20/40	Provision ③	BR	MB2040P200BTS ⑤	782114860090
200	Horn	OH/UG	①	5	20/40	Provision ③	BR	MB2040P200SD	782114668900
200	Horn	OH/UG	10	5	20/40	BW2200	BR	MB2040B200SD	782116287727
150	Horn	OH/UG	10	5	20/40	BW2150	BR	MB2040B150SD	782116199631
200	Lever	OH/UG	10	5	None	CSR2200	None	CMBXB200BTS	782116142347
200	Lever	OH/UG	10	5	12/12	CSR2200	CH	CMBX1212B200BTS ⑥	782116142354
200	Lever	OH/UG	10	5	32/42	CSR2200	CH	CMBX3242B200BTS	782116142361
200	Lever	OH/UG	10	5	None	Provision	None	CMBXP200BTS	782116128884
200	Lever	OH/UG	10	5	12/12	Provision	CH	CMBX1212P200BTS ⑥	782116128891
200	Lever	OH/UG	10	5	32/42	Provision	CH	CMBX3242P200BTS	782116128907
200	None	OH/UG	①	4	4/8	Provision	BR	MBT48P200BTS ⑥	782116484324
200	None	OH/UG	22	4	4/8	BWH2200	BR	MBT48B200BTS ⑥	782116157372

① Per installed main breaker rating.
② Will accept maximum four 1-pole, two 2-pole, or two quad breakers.
③ All panels are dual labeled to accept Types BW or CSR Main Breakers.
④ Copper bus.
⑤ One-piece cover on utility side, Florida approved.
⑥ Units come with feed-through lugs.
⑦ Value pack includes breakers 5-BR115 and 1-BR230.

Wiring diagrams and dimensional information on Pages 3-10 – 3-26.

TABLE 3-4. MAIN BREAKER SELECTION CHART

Maximum Ampere Rating	2-Pole Breaker Catalog Numbers		
	10 kAIC	22 kAIC	22 kAIC
100	BW2100	BWH2100	CSR2125N
125	BW2125	BWH2125	CSR2150N
150	BW2150	BWH2150	CSR2200N
200	BW2200	BWH2200	—
Load Side Lug Kit for BW and CSR Breakers ⑧			MCBK225

⑧ 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.

Product Selection

TABLE 3-5. COMBINATION SERVICE ENTRANCE DEVICES (EUSERC)

Ampere Rating	Bypass	Service	kAIC	Jaws	Distri- bution	Main	Branch Breaker Type	Catalog Number		Catalog Number	
								Surface	UPC Code	Flush	UPC Code
Ring Style Meter Mains (no distribution section included)											
125 125	None None	OH/UG OH/UG	① ①	4 4	2/4 2/4	MLO MLO	BR CH	MBE24L125BTS CMBE24L125BTS ②	782114849156 782114848845	MBE24L125BTF —	782114849149 —
150 200 200	None None None	OH/UG OH/UG OH/UG	22 10 22	4 4 4	None None None	CSR2150N BW2200 CSR2200N	None None None	CMBEB150BTS ② MBEB200BTS CMBEB200BTS ②	782114849286 782114849279 782114849002	— MBEB200BTF —	— 782114849262 —
200 200	None None	OH/UG OH/UG	① ①	4 4	2/4 2/4	MLO MLO	BR CH	MBE24L200BTS CMBE24L200BTS ②	782114849170 782114848852	MBE24L200BTF —	782114849163 —
Ring Style All-in-Ones (includes distribution section)											
100 100 100	None None None	OH/UG UG OH	10 10 10	4 4 4	12/24 14/28 12/24	BR2100 BR2100 BR2100	BR BR BR	MBE1224B100BTS MBE1428B100BS MBE1224B100TS	782114890790 782114849064 782114872574	MBE1224B100BTF MBE1428B100BF —	782114890806 782114849057 —
125 125 125	None None None	OH/UG OH UG	10 10 10	4 4 4	12/24 12/24 18/36	BR2125 BR2125 BR2125	BR BR BR	MBE1224B125BTS MBE1224B125TS —	782114890813 782114872550 —	MBE1224B125BTF — MBE1836B125BF	782114890820 — 782114849095
150 150 150	None None None	OH/UG UG UG	22 22 10	4 4 4	8 32/42 20/40	CSR2150N CSR2150N BW2150	CH CH BR	CMBE88B150BTS ②③ CMBE3242B150BS ② —	782114848968 782114848883 —	CMBE88B150BTF ②③ — MBE2040B150BF ⑤	782114848951 — 782114865293
150 150	None None	OH/UG OH/UG	22 10	4 4	20/40 4/8	BW2150 BW2150	BR BR	MBE2040B150BTS ⑤ MBE48B150BTS	782116015849 782114865262	— —	— —
200 200 200	None None None	OH/UG OH/UG OH/UG	10 22 10	4 4 4	4/8 8 8	BW2200 CSR2200N BW2200	BR CH BR	MBE48B200BTS ③ CMBE88B200BTS ②③ MBE88B200BTS	782114849217 782114848982 782114849255	MBE48B200BTF ③ CMBE88B200BTF ②③ —	782114849200 782114848975 —
200 200 200	None None None	OH UG OH/UG	① ① ①	4 4 4	8/16 6 – 2 Pole 6 – 2 Pole	Provision Main Lug Main Lug	BR CH BR	MBE816P200TS ③④ CMBE1212L200BS ② MBE1212L200BTS	782114849231 782114848777 782113493749	— MBE1212L200BTF —	— 782113493756 —
200 200 200	None None None	OH UG OH/UG	10 10 22	4 4 4	20/40 20/40 20/40	BW2200 BW2200 BWH2200	BR BR BR	MBE2040B200TS ⑤ MBE2040B200BS ⑤ MBE2040BH200BTS ⑤	782114887684 782114849118 782116073924	MBE2040B200TF ⑤ MBE2040B200BF ⑤ —	782114887691 782114849101 —
200 200 200	None None None	OH/UG UG UG	22 22 22	4 4 4	20/40 30/42 32/42	BWH2200 BW2200 CSR2200N	BR BR CH	MBE2040BH200BTF ⑤ — CMBE3242B200BS ②	782116073931 — 782114848906	— MBE3042B200BF CMBE3242B200BF ②	— 782113554686 782114848890
200 200 200	None None None	UG OH/UG OH/UG	22 22 22	4 4 4	40 40 42	BWH2200 BWH2200 CSR2200N	BR BR CH	MBE4040B200BSH ⑥ MBE4040B200BTS CMBE4242B200BTS ②	782114867068 782114849194 782114869222	— MBE4040B200BTF ⑦ —	— 782114881767 —
200 200 200	None None None	OH/UG OH/UG OH/UG	10 10 10	4 4 4	20/40 20/40 4/8	BW2200 BW2200 BW2200	BR BR BR	MBE2040B200BTS ⑤ MBE2040B200BTSV ⑤⑧ MBER48B200BTS ⑨	782114883594 782116094844 782116077373	MBE2040B200BTF ⑤ — —	782114883587 — —
200 225 225 225	None None None None	OH/UG OH/UG UG UG	22 10 22 22	4 4 4 4	8/8 20/40 30/42 32/42	CSR2200N BW2225 BW2225 CSR2225N	CH BR BR CH	CMBER88B200BTS ⑨ MBE2040B225BTS ⑤ — CMBE3242B225BS ②	782116077380 782114883617 — 782114848920	— MBE2040B225BTF ⑤ MBE3042B225BF CMBE3242B225BF ②	— 782114883600 782113554891 782114848913

① Interrupting rating is dependent on the main breaker that is installed.
② Unit has copper bus.
③ Units come with feed-through lugs.
④ All panels are dual labeled to accept Types BW or CSR Main Breakers.
⑤ Please use RH-Type hubs on top end wall for overhead feed.
⑥ Includes factory mounted 2.50 inch hub on bottom endwall. UG feed only.
⑦ Semi-flush flange, not full stucco flange.
⑧ Value pack includes breakers 2-BD115, 2-BR115 and 1-BR230.
⑨ Ranch panel includes provision for second main up to 70 A wired in parallel.

Wiring diagrams and dimensional information on Pages 3-10 – 3-26.

TABLE 3-6. MAIN BREAKER SELECTION CHART

Maximum Ampere Rating	2-Pole Breaker Catalog Numbers		
	10 kAIC	22 kAIC	22 kAIC
125 150 200	BW2125 BW2150 BW2200	BWH2125 BWH2150 BWH2200	CSR2125N CSR2150N CSR2200N
Load Side Lug Kit for BW and CSR Breakers ⑩			MCBK225

⑩ 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.