

Type BR plug-in main breaker loadcentres

Product description

Loadcentres feature factory installed main lugs or main breakers. The BR interiors are manufactured of formed, plated aluminum. Eaton also supplies a full line of Eaton brand BR, DNPL, GFTCB and GFEP type branch circuit breakers and accessories for these loadcentres.

Product application

Designed for the protection and distribution of single and multi-dwelling residential and light commercial loads to 120/240 volts AC, such as lighting, heating, appliance and small motor branch circuits.

All main breaker combination loadcentres are CSA listed for use as service entrance equipment.

Ratings

Single-phase, three-wire, 120/240 volts AC and three-phase, four-wire, 120/208 volts AC. Mains through 400 A. Available with up to 84 branch circuits. Main breakers on 150 and 200 A panels are rated at 25,000 AIC.

Metal enclosure specifications

Enclosures are made of 16 gauge sheet steel, either galvanized or epoxy painted. These coatings provide superior corrosion protection. All trims used on BR loadcentres are chromate sealed and finished with an electro-disposition epoxy paint in grey (ANSI-61) or white, which exceeds requirements for outdoor and indoor applications. A combination surface/flush cover with integral door is supplied with indoor loadcentres rated from 100 through 400 A.

All plug-in loadcentres are CSA listed to file LL98266. CSA certified to C22.2 No.29.

Warranty

10 year limited.

Type BR loadcentre features and benefits:

Optimized knockout locations for additional access.

Easier to remove.

White box trim and barriers provide more professional look and feel.

Smooth case edges.

2/0 lug is easily removeable and can be installed in any location on the neutral bar.

Inboard neutral increases gutter space to allow for professional installation of conductors.

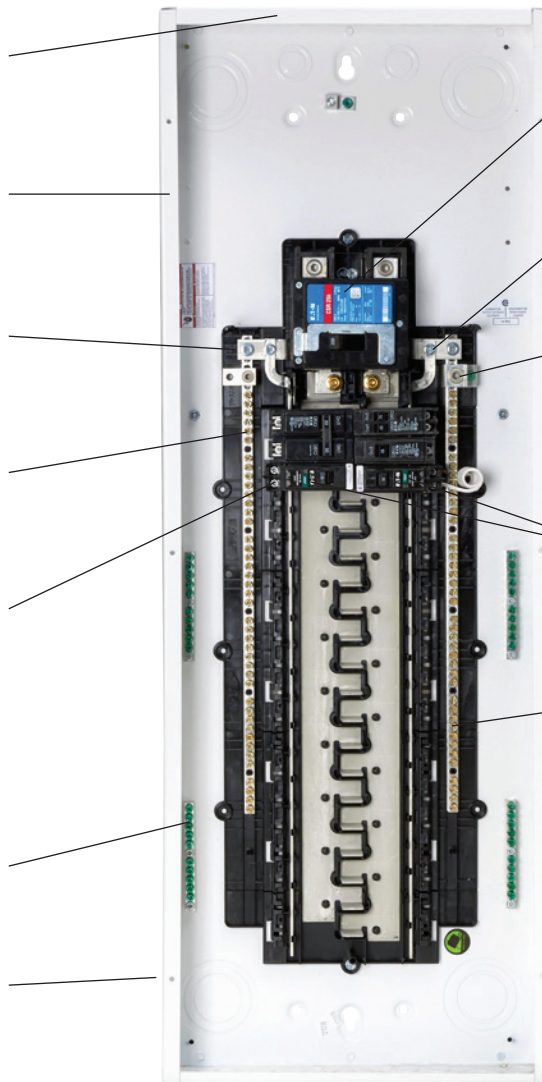
BR short-body configuration maximizes gutter space providing ease of installation of conductors.

Reduced clutter of pigtailed provides a clean gutter space.

Quicker and neater installation, along with a consistent form and fit.

Extra ground positions provided in panels with more than 20 circuits allows quicker and easier wiring.

Self-levelling tabs allow for quick drywall offset.



Commercial grade 25 kAIC series rated main breaker with lock-off bracket for superior protection.

Common screws minimize the number of tools required for installation. Neutral bar, ground bar, and BR breaker screws share a common drive type.

Bonding screw provides a quick and easy means of bonding the ground and neutral.

Plug-on neutral (PON) eliminates the pigtail connection providing time and labour savings for a professional installation.

Backed out neutral and ground screws allow for quick connection of neutral and ground conductors.

Cover features include:

Improved twist-outs that are easier to remove

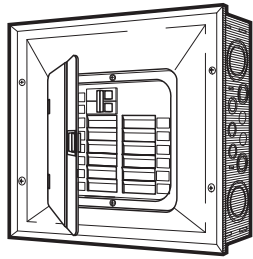
Durable embossed circuit numbering with added marking for twin breakers

Keyhole hanging feature allows for easier cover installation

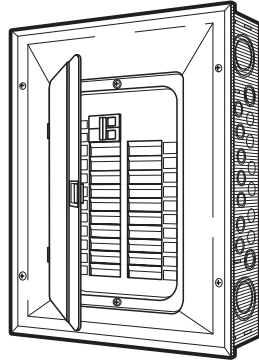
Type BR plug-in main breaker loadcentres

Combination (main circuit breaker) single-phase Type 1

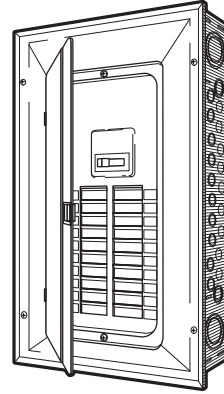
Three-wire, 120/240 Vac combination service entrance Type 1 (indoor)



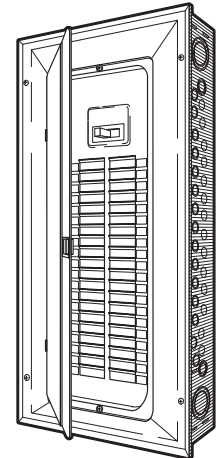
CBRPM112



CBRPM120



CBRPM1520



CBRPM240

Product selection

Table 1a. Main circuit breaker indoor Type 1 BR plug-on neutral loadcentres

Maximum ampere rating	Main breaker rating	Catalogue number	Max. no. 1-inch spaces	Max. no. 1/2-inch spaces	Cover style	Type of main breaker	Dimensions (inches)			Wire size range for main CU/AL
							H	W	D	
125	100	CBRPM112	12	24	Flush/surface	BRH a	18-3/4	14-3/8	3-7/8	#8-1/0
125	100	CBRPM116	16	32	Flush/surface	BRH a	21	14-3/8	3-7/8	#8-1/0
125	125	CBRPM116Z	16	32	Flush/surface	BRH b	21	14-3/8	3-7/8	#4-2/0
125	100	CBRPM120	20	40	Flush/surface	BRH a	27	14-3/8	3-7/8	#8-1/0
125	100	CBRPM130	30	60	Flush/surface	BRH a	29-1/8	14-3/8	3-7/8	#8-1/0
125	125	CBRPM130Z	30	60	Flush/surface	BRH b	29-1/8	14-3/8	3-7/8	#4-2/0
125	100	CBRPM140	40	80	Flush/surface	BRH a	34-1/8	14-3/8	3-7/8	#8-1/0
125	125	CBRPM140Z	40	80	Flush/surface	BRH b	34-1/8	14-3/8	3-7/8	#4-2/0
150	150	CBRPM1520	20	40	Flush/surface	CSR c	29-1/8	14-3/8	3-7/8	#2-300 MCM
150	150	CBRPM1530	30	60	Flush/surface	CSR c	34-1/8	14-3/8	3-7/8	#2-300 MCM
150	150	CBRPM1540	40	80	Flush/surface	CSR c	39	14-3/8	3-7/8	#2-300 MCM
200	200	CBRPM216	16	32	Flush/surface	CSR c	29-1/8	14-3/8	3-7/8	#2-300 MCM
200	200	CBRPM220	20	40	Flush/surface	CSR c	29-1/8	14-3/8	3-7/8	#2-300 MCM
200	200	CBRPM230	30	60	Flush/surface	CSR c	34-1/8	14-3/8	3-7/8	#2-300 MCM
200	200	CBRPM240	40	80	Flush/surface	CSR c	39	14-3/8	3-7/8	#2-300 MCM
200	200	CBRPM260	60	120	Flush/surface	CSR c	49	14-3/8	3-7/8	#2-300 MCM

Table 1b. Main circuit breaker indoor Type 1 BR non plug-on neutral loadcentres

Maximum ampere rating	Main breaker rating	Catalogue number	Max. no. 1-inch spaces	Max. no. 1/2-inch spaces	Cover style	Type of main breaker	Dimensions (inches)			Wire size range for main CU/AL
							H	W	D	
400	300	CPM342	42	84	Flush/surface	DK d	66-1/2	16-1/8	6-5/16	(2)#2/0-250 MCM or (1)#2/0-500 MCM f
400	400	CPM442	42	42 f	Flush/surface	DK d	66-1/2	16-1/8	6-5/16	(2)#2/0-250 MCM or (1)#2/0-500 MCM f

a High Interrupting 22 kAIC BRH breakers

b 22 kAIC BRH2125 main breaker is factory installed.

c Factory installed 25 kAIC main breaker.

d DK breaker is a 65 kAIC, factory-sealed breaker.

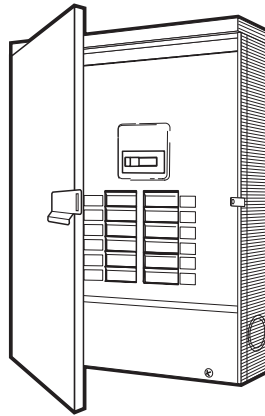
e Restricted due to available neutrals, extra neutrals are available on **page 15 table 10b** which will expand available circuitry to a maximum of 84 circuits.

f 3TA401K must be ordered separately for #2/0-500-MCM.

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Combination (main circuit breaker) single-phase Type 3R

Three-wire 120/240 Vac combination service entrance Type 3R (outdoor/raintight) ^a



RCPM220

Table 2. Main circuit breaker outdoor/raintight Type 3R loadcentres ^a

Maximum ampere rating	Main breaker rating	Catalogue number	Max. no. 1-inch spaces	Max. no. 1/2-inch spaces	Cover style	Type of main breaker	Dimensions (inches)			Wire size range for main Cu/Al
							H	W	D	
125	100	RCPM112 ^b	12	24	Outdoor	BR ^{cd}	18-1/2	14-3/8	5	#8-1/0
125	100	RCPM120 ^b	20	40	Outdoor	BR ^{cd}	25	14-3/8	5	#8-1/0
125	100	RCPM130 ^b	30	60	Outdoor	BR ^{cd}	28-7/8	14-3/8	5	#8-1/0
150	150	RCPM1530 ^b	30	60	Outdoor	CSR ^e	33-7/8	14-3/8	5	#2-300 MCM
200	200	RCPM220 ^b	20	40	Outdoor	CSR ^e	28-7/8	14-3/8	5	#2-300 MCM
200	200	RCPM230 ^b	30	60	Outdoor	CSR ^e	33-7/8	14-3/8	5	#2-300 MCM
200	200	RCPM240 ^b	40	80	Outdoor	CSR ^e	38-3/4	14-3/8	5	#2-300 MCM

^a Outdoor loadcentres accommodate Type DS conduit hubs. Hubs not included. See **page 15 table 10b** for selection.

^b All enclosures include a locking hasp as an integral part of the door latching mechanism.

^c Type BR—100 A 10 kAIC main circuit breaker is factory installed (BR2100).

^d High interrupting BRH breakers are available on **page 17**.

^e Factory installed 25 kAIC main breaker.