Product Guide

Loadcentres
Circuit Breakers
Generator Panels
Spa Panels
Surge Suppressors
Street Lighting Panels
Mini-Power Centres
Fuse Panel Inserts
Pressure Switches

Residential & Light Commercial Distribution Products

Powering Business Worldwide

Residential & Light Commercial Distribution Products

Residential & Light Commercial Distribution Products

Type CPM/CPL Plug-In 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, GFCB 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, 3 wire, 120/240 volts AC and 3 phase, 4 wire, 120/208 volts AC. Mains through 400 amperes. Available with up to 84 branch circuits. Main breakers on 150 & 200 Amp panels are rated at 25,000 AIC.

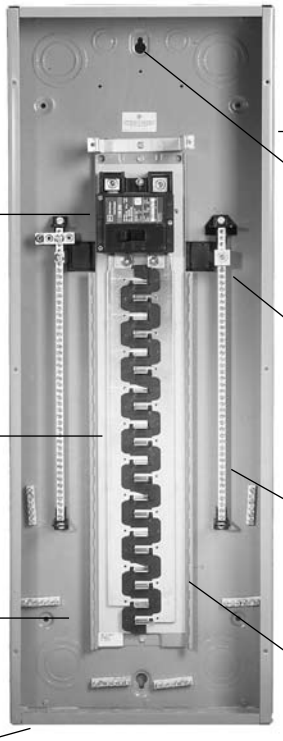
Metal Enclosure Specifications
Enclosures are made of 16 gauge galvanized sheet steel. The galvanized coating provides corrosion protection and as such does not require paint. All trims used on BR Loadcentres are chromate sealed and finished with an electro-disposition epoxy paint (ANSI-61) which exceeds requirements for outdoor and indoor applications. A combination surface/flush cover with integral door is supplied with indoor loadcentres rated from 100 through 400 amperes.
All plug-in loadcentres are CSA listed to file LL98266.
CSA Certified to C22.2 No.29.

All plug-in loadcentres are UL listed to file E52977.

All loadcentres carry GOS approvals of conformity.

Warranty
5 year limited.

Type CPM / CPL Loadcentre Features and Benefits



Adjustable Trim
For convenient flush leveling.

200A Commercial Grade Main Breaker
Designed for straight-in wiring – horizontally operated for top feed without modification. 100A models utilize a reverse fed branch circuit breaker.

Single Piece, Formed, Plated Aluminum Bus Bar
Provides superior conductivity.

Maximum Wiring Space
For ease of wiring in compliance with CSA requirements.

Contractor Friendly Knockouts
Improved knockout configurations include tangential knockouts in top and bottom box ends.

Standard 14-3/8" Wide Enclosure

Six Mounting Holes
Three top, three bottom for ease of installation in either vertical, horizontal or inverted positions.

Dry Wall Markings on Enclosure
Notches on outside of box enclosure indicates depth for dry wall.

Single Keyhole Mounting
Just one keyhole at top and bottom for easier mounting and leveling.

Neutral Bonding Strap
Pre-attached at factory to eliminate loose parts.

Twin Neutral Design
Reduces wireway congestion, provides for easier wiring and load balancing. I-beam design for improved durability.

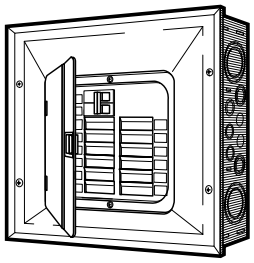
Steel Backpan
Provides positive, reliable breaker mounting.

3 Wire 120/240VAC Combination Service Entrance Type 1 (Indoor)

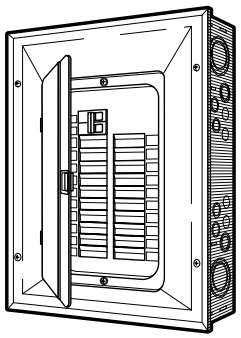
Product Selection

Table 1. Main Circuit Breaker Indoor Type 1 Loadcentres

Maximum Ampere Rating	Main Breaker Rating	Catalogue Number	Max. No. 1" Spaces	Max. No. 1/2" Spaces	Cover Style	Type of Main Breaker	Dimensions (in) H	W	D	Wire Size Range for Main CU/AL
125 Amp	100 Amp	CPM112	12	24	Flush/Surface	BR ①③	18-3/4	14-3/8	3-7/8	#4 - 1/0
125 Amp	–	CPM112LMB	12	24	Flush/Surface	BR ⑧	18-3/4	14-3/8	3-7/8	#4 - 1/0
125 Amp	100 Amp	CPM116	16	32	Flush/Surface	BR ①③	21	14-3/8	3-7/8	#4 - 1/0
125 Amp	–	CPM116LMB	16	32	Flush/Surface	BR ⑧	21	14-3/8	3-7/8	#4 - 1/0
125 Amp	125 Amp	CPM116Z	20	40	Flush/Surface	BR ⑥	21	14-3/8	3-7/8	#4-2/0
125 Amp	100 Amp	CPM120	20	40	Flush/Surface	BR ①③	27	14-3/8	3-7/8	#4 - 1/0
125 Amp	–	CPM120LMB	20	40	Flush/Surface	BR ⑧	27	14-3/8	3-7/8	#4 - 1/0
125 Amp	125 Amp	CPM120Z	20	40	Flush/Surface	BR ⑥	27	14-3/8	3-7/8	#4-2/0
125 Amp	100 Amp	CPM120H	20	40	Flush/Surface	BRH ⑦	27	14-3/8	3-7/8	#4 - 1/0
125 Amp	100 Amp	CPM130	30	60	Flush/Surface	BR ①③	29	14-3/8	3-7/8	#4 - 1/0
125 Amp	125 Amp	CPM130Z	30	60	Flush/Surface	BR ⑥	29	14-3/8	3-7/8	#4-2/0
125 Amp	100 Amp	CPM130H	30	60	Flush/Surface	BRH ⑦	29	14-3/8	3-7/8	#4 - 1/0
150 Amp	150 Amp	CPM1520	20	40	Flush/Surface	BWH ②	29-1/8	14-3/8	3-7/8	#2-300MCM
150 Amp	150 Amp	CPM1530	30	60	Flush/Surface	BWH ②	34-1/8	14-3/8	3-7/8	#2-300MCM
150 Amp	150 Amp	CPM1540	40	80	Flush/Surface	BWH ②	39	14-3/8	3-7/8	#2-300MCM
200 Amp	200 Amp	CPM216	16	32	Flush/Surface	BWH ②	29-1/8	14-3/8	3-7/8	#2-300MCM
200 Amp	200 Amp	CPM220	20	40	Flush/Surface	BWH ②	29-1/8	14-3/8	3-7/8	#2-300MCM
200 Amp	200 Amp	CPM230	30	60	Flush/Surface	BWH ②	34-1/8	14-3/8	3-7/8	#2-300MCM
200 Amp	200 Amp	CPM240	40	80	Flush/Surface	BWH ②	39	14-3/8	3-7/8	#2-300MCM
400 Amp	400 Amp	CPM442	42	42 ④	Flush/Surface	DK ⑤	66-1/2	16-1/8	6-5/16	(2)#2/0- 250MCM or (1)#2/0-500MCM ⑨



CPM112



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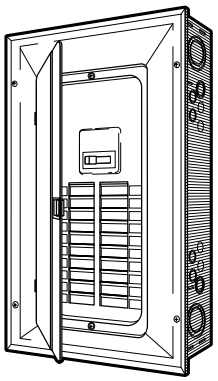

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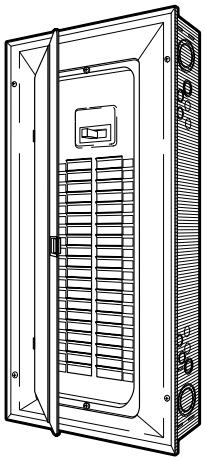


CPM240

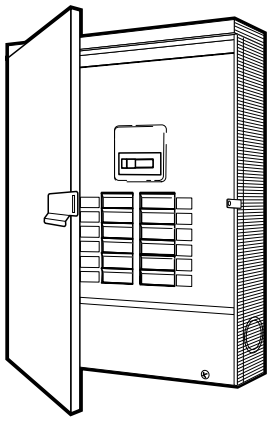
① Type BR-100 Amp 10kAIC Main Circuit Breaker is factory installed (BR2100).
② Factory installed 25 kAIC Main Breaker.
③ High Interrupting BRH Breakers are available on page 13.
④ Restricted due to available neutrals, extra neutrals are available on page 11, which will expand available circuitry to a maximum of 84 circuits.
⑤ DK Breaker is a 65 kAIC, factory-sealed Breaker.
⑥ BR2125 main breaker is factory installed.
⑦ BRH2100 – 22kA high interrupting main breaker is factory installed.
⑧ Main Breaker is not supplied.
⑨ 3TA401K must be ordered separately for #2/0-500 MCM.

3 Wire 120/240VAC Combination Service Entrance Type 3R③ (Outdoor/Raintight)

Product Selection

Table 2. Main Circuit Breaker Outdoor/Raintight Type 3R③ Loadcentres

Maximum Ampere Rating	Main Breaker Rating	Catalogue Number	Max. No. 1" Spaces	Max. No. 1/2" Spaces	Cover Style	Type of Main Breaker	Dimensions (in) H	W	D	Wire Size Range for Main CU/AL
125 Amp	100 Amp	RCPM112 ⑤	12	24	Outdoor	BR①④	18-1/2	14-3/8	5	#4 - 1/0
125 Amp	100 Amp	RCPM120 ⑤	20	40	Outdoor	BR①④	25	14-3/8	5	#4 - 1/0
125 Amp	100 Amp	RCPM130 ⑤	30	60	Outdoor	BR①④	28-7/8	14-3/8	5	#4 - 1/0
150 Amp	150 Amp	RCPM1530 ⑤	30	60	Outdoor	BWH②	33-7/8	14-3/8	5	#2-300MCM
200 Amp	200 Amp	RCPM220 ⑤	20	40	Outdoor	BWH②	28-7/8	14-3/8	5	#2-300MCM
200 Amp	200 Amp	RCPM230 ⑤	30	60	Outdoor	BWH②	33-7/8	14-3/8	5	#2-300MCM
200 Amp	200 Amp	RCPM240 ⑤	40	80	Outdoor	BWH②	38-3/4	14-3/8	5	#2-300MCM



RCPM220

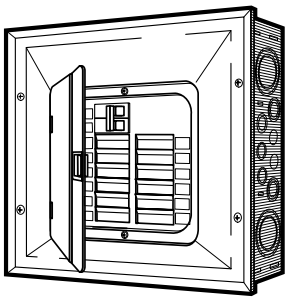
① Type BR-100 Amp 10kAIC Main Circuit Breaker is factory installed (BR2100).
② Factory installed 25 kAIC Main Breaker.
③ Outdoor Loadcentres accommodate Type DS Conduit Hubs. Hubs not included. See Page 11 for selection.
④ High interrupting BRH breakers are available on page 13.
⑤ All enclosures include a locking hasp as an integral part of the door latching mechanism.

4 Wire 120/208VAC Combination Service Entrance Type 1 (Indoor)

Product Selection

Table 3. Main Circuit Breaker Indoor Type 1 Loadcentres

Maximum Ampere Rating	Main Breaker Rating	Catalogue Number	Max. No. 1" Spaces	Max. No. 1/2" Spaces	Cover Style	Type of Main Breaker	Dimensions (in) H	W	D	Wire Size Range for Main CU/AL
125 Amp	100 Amp	3CPM112	12	24	Flush/Surface	BR ①②	21	14-3/8	3-3/4	#4 - 1/0
125 Amp	100 Amp	3CPM130	30	60	Flush/Surface	CC ③	39	14-3/8	3-3/4	#4 - 4/0
200 Amp	200 Amp	3CPM230	30	60	Flush/Surface	CC ③	39	14-3/8	3-3/4	#1 - 250 MCM
400 Amp	400 Amp	3CPM442④	42	42 ④	Flush/Surface	DK ⑤	66-1/2	16-1/8	6-5/16	(2) 2/0-250MCM (1) 2/0-500MCM ⑥



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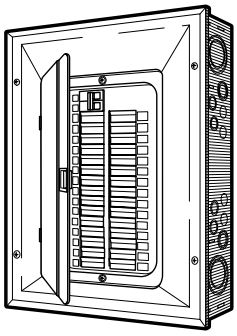

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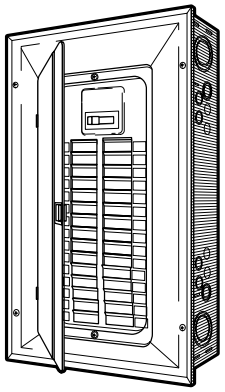


3CPM230

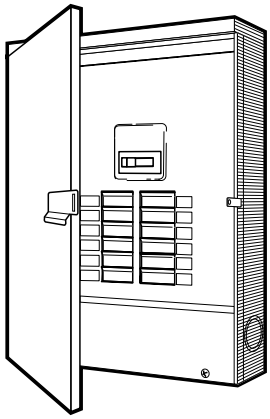
① Type BR-100 Amp 10kAIC Main Circuit Breaker is factory installed (BR3100).
② High interrupting BRH breakers are available on page 13.
③ Factory installed 10 kAIC Main Breaker.
④ Extra Neutrals which will expand available circuitry to a maximum of 84 circuits are available on page 11.
⑤ DK Breaker is a 65 kAIC factory-sealed Main Breaker.
⑥ Circuit breaker lug kit 3TA401 must be ordered separately to accept #2/0 - 500MCM cabling.

4 Wire 120/208VAC Combination Service Entrance Type 3R ④⑤ (Outdoor/Raintight)

Product Selection

Table 4. Main Circuit Breaker Outdoor/Raintight Type 3R ④⑤ Loadcentres

Maximum Ampere Rating	Main Breaker Rating	Catalogue Number	Max. No. 1" Spaces	Max. No. 1/2" Spaces	Cover Style	Type of Main Breaker	Dimensions (in) H	W	D	Wire Size Range for Main CU/AL
100 Amp	100 Amp	R3CPM112 ⑤	12	24	Outdoor	BR①②	20-3/4	14-3/8	5	#4 - 1/0
125 Amp	100 Amp	R3CPM130 ⑤	30	60	Outdoor	CC ③	38-3/4	14-3/8	3-3/4	#4 - 4/0
200 Amp	200 Amp	R3CPM230 ⑤	30	60	Outdoor	CC ③	38-3/4	14-3/8	3-3/4	#1-250MCM



R3CPM230

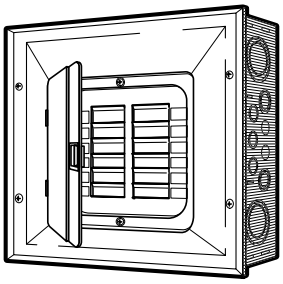
① Type BR-100 Amp 10kAIC Main Circuit Breaker is factory installed (BR3100).
② High interrupting BRH breakers are available on page 13.
③ Factory installed 10 kAIC Main Breaker.
④ Outdoor Loadcentres accommodate Type DS conduit hubs. Hubs not included. See Page 11 for selection.
⑤ All enclosures include a locking hasp as an integral part of the door latching mechanism.

3 Wire 120/240VAC Non-Combination Type 1 (Indoor)

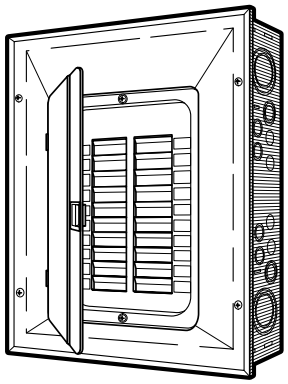
Product Selection

Table 5. Main Lug Only Indoor Type 1 Loadcentres

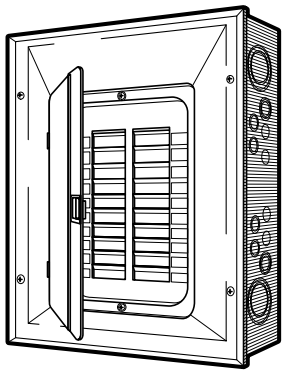
Maximum Ampere Rating	Catalogue Number	Max. No. 1" Spaces	Max. No. 1/2" Spaces	Cover Style	Dimensions (in) H	W	D	Wire Size Range for Main CU/AL
100 Amp	CCPL102	2 ①	4	Surface	11-1/2	6-3/4	3-1/4	#14 - 1/0
125 Amp	CCPL104	4	8	Flush/Surface	13	11	3-1/2	#14 - 1/0
125 Amp	CCPL108	8	16	Flush/Surface	13	11	3-1/2	#14 - 1/0
125 Amp	CPL112	12	24	Flush/Surface	16-3/4	14-3/8	3-7/8	#14 - 1/0
125 Amp	CPL116	16	32	Flush/Surface	18-3/4	14-3/8	3-7/8	#14 - 1/0
125 Amp	CPL116W ②	16	32	Flush/Surface	18-3/4	14-3/8	3-7/8	#14 - 1/0
125 Amp	CPL120	20	40	Flush/Surface	21	14-3/8	3-7/8	#14 - 1/0
125 Amp	CPL120W ②	20	40	Flush/Surface	21	14-3/8	3-7/8	#14 - 1/0
125 Amp	CPL130	30	60	Flush/Surface	29-1/8	14-3/8	3-7/8	#14 - 1/0
125 Amp	CPL130W ②	30	60	Flush/Surface	29-1/8	14-3/8	3-7/8	#14 - 1/0
200 Amp	CPL220	20	40	Flush/Surface	27	14-3/8	3-7/8	#2-300MCM
200 Amp	CPL220W ②	20	40	Flush/Surface	27	14-3/8	3-7/8	#2-300MCM
200 Amp	CPL240	40	80	Flush/Surface	34-1/8	14-3/8	3-7/8	#2-300MCM
200 Amp	CPL240W	40	80	Flush/Surface	34-1/8	14-3/8	3-7/8	#2-300MCM
400 Amp	CPL442	42	42 ③	Flush/Surface	54	16-1/8	6-5/16	(1) 250-750MCM (2) 3/0-250MCM



CPL112



CPL220



CPL120

① Service equipment approved when used with 2 pole BR type breaker.

② Loadcentre comes with a painted white trim & door

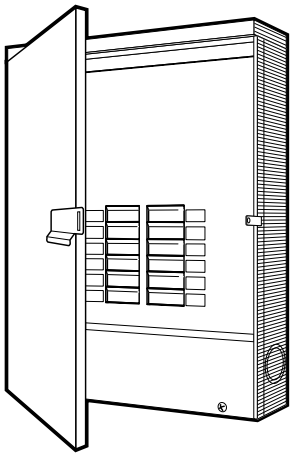
③ Extra Neutrals which will expand available circuitry to a maximum of 84 circuits are available on page 11.

3 Wire 120/240VAC Non-Combination Service Entrance Type 3R ① (Outdoor/Raintight)

Product Selection

Table 6. Main Lug Only Outdoor/Raintight Type 3R ① Loadcentres

Maximum Ampere Rating	Catalogue Number	Max. No. 1" Spaces	Max. No. 1/2" Spaces	Cover Style	Dimensions (in) H	W	D	Wire Size Range for Main CU/AL
100 Amp	RCCPL102 ③	2 ②	4	Outdoor	11-1/2	6-1/2	4	#14-2/0
125 Amp	RCCPL104 ③	4	8	Outdoor	13	11	3-1/2	#14-2/0
125 Amp	RCCPL108 ③	8	16	Outdoor	13	11	3-1/2	#14-2/0
125 Amp	RCPL112 ③	12	24	Outdoor	16-1/2	14-3/8	5	#14-2/0
125 Amp	RCPL120 ③	20	40	Outdoor	20-3/4	14-3/8	5	#14-2/0
125 Amp	RCPL130 ③	30	60	Outdoor	28-7/8	14-3/8	5	#14-2/0
200 Amp	RCPL220 ③	20	40	Outdoor	25	14-3/8	5	#2-300MCM
200 Amp	RCPL240 ③	40	80	Outdoor	33-7/8	14-3/8	5	#1-250MCM



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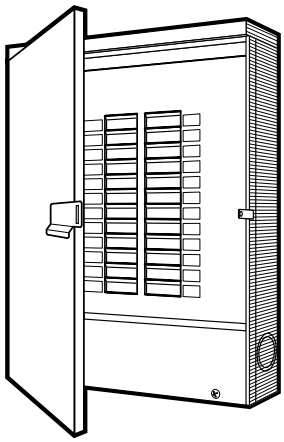


RCPL220

① Outdoor Loadcentres accommodate Type DS conduit hubs. Hubs not included. See page 11 for selection.

② Service equipment approved when used with 2 pole BR type breaker.

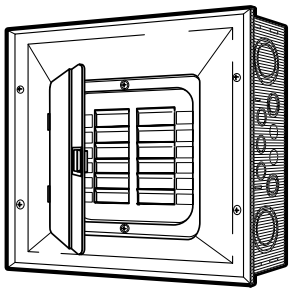
③ All enclosures include a locking hasp as an integral part of the door latching mechanism.

4 Wire 120/208VAC Non-Combination Type 1 (Indoor)

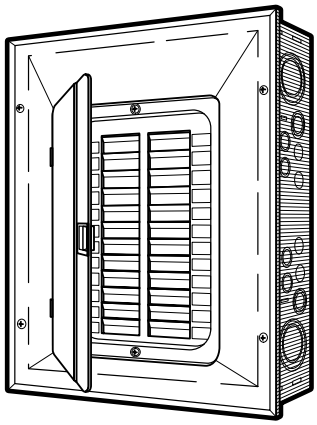
Product Selection

Table 7. Main Lug Only Indoor Type 1 Loadcentres

Maximum Ampere Rating	Catalogue Number	Max. No. 1" Spaces	Max. No. 1/2" Spaces	Cover Style	Dimensions (in) H	W	D	Wire Size Range for Main CU/AL
100Amp	3CCPL103	3 ①	6	Surface	14-1/4	6-1/2	3-1/4	#14-2/0
125 Amp	3CPL112	12	24	Flush/Surface	21	14-3/8	3-7/8	#14-2/0
125Amp	3CPL124	24	48	Flush/Surface	29	14-3/8	3-3/4	#14-2/0
125 Amp	3CPL130	30	60	Flush/Surface	34.12	14-3/8	3-3/4	#14-2/0
125 Amp	3CPL136	36	72	Flush/Surface	39	14-3/8	3-3/4	#14-2/0
200 Amp	3CPL218	18	36	Flush/Surface	27	14-3/8	3-7/8	#2-300MCM
200 Amp	3CPL224	24	48	Flush/Surface	34.12	14-3/8	3-7/8	#2-300MCM
200 Amp	3CPL230	30	60	Flush/Surface	34.12	14-3/8	3-3/4	#2-300MCM
200 Amp	3CPL242	42	84	Flush/Surface	39	14-3/8	3-7/8	#2-300MCM
400 Amp	3CPL442	42	42 ②	Flush/Surface	54	16-3/8	6-5/16	(1) 250-750MCM (2) 3/0-250MCM



3CPL112



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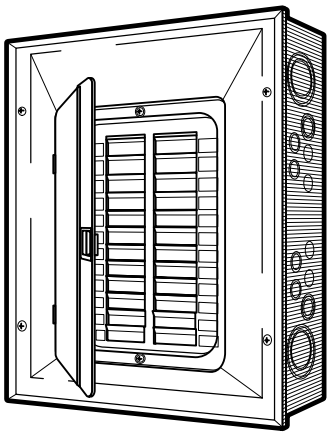


3CPL124

① Suitable for use as Service Equipment when used with 3 pole BR type breaker.

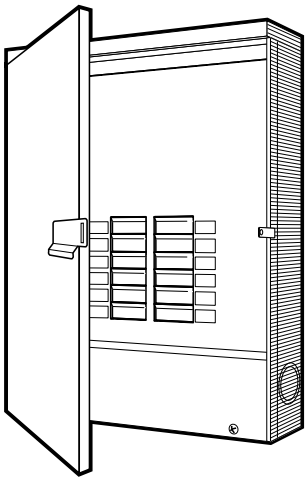
② Extra Neutrals which will expand available circuitry to a maximum of 84 circuits are available on page 11.

4 Wire 120/208VAC Non-Combination Service Entrance Type 3R [1] (Outdoor/Raintight)

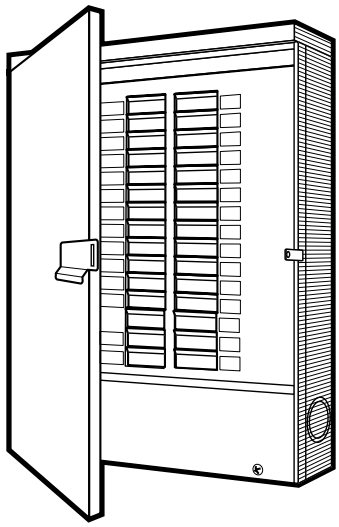
Product Selection

Table 8. Main Lug Only Outdoor/Raintight Type 3R [1] Loadcentres

Maximum Ampere Rating	Catalogue Number	Max. No. 1" Spaces	Max. No. 1/2" Spaces	Cover Style	Dimensions (in) H	W	D	Wire Size Range for Main CU/AL
100 Amp	R3CCPL103 [4]	3 [2]	-	Outdoor	14-1/4	7	3-1/2	#14-2/0
125 Amp	R3CPL112 [4]	12	24	Outdoor	20-3/4	14-3/8	5	#14-2/0
125 Amp	R3CPL130 [4]	30	60	Outdoor	38-3/4	14-3/8	5	#14-2/0
125 Amp	R3CPL136 [4]	36	72	Outdoor	38-3/4	14-3/8	5	#14-2/0
200 Amp	R3CPL230 [4]	30	60	Outdoor	33-7/8	14-3/8	5	#2-300MCM
200 Amp	R3CPL242 [4]	42	42 [3]	Outdoor	38-3/4	14-3/8	5	#2-300MCM



R3CPL112



R3CPL230

[1] Outdoor Loadcentres accommodate Type DS conduit hubs. Hubs not included. See page 11 for selection.
[2] Suitable for use as Service Equipment when used with 3 pole BR type breaker.
[3] Extra Neutrals to expand available circuitry to a maximum of 84 circuits are available on page 11.
[4] All enclosures include a locking hasp as an integral part of the door latching mechanism.

Type CPL Plug-In Loadcentres

Non-Combination (Main Lug Only) 70A Single Phase

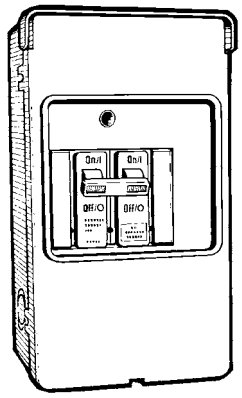
3 Wire 250VAC Maximum Non-Combination

♦ Service entrance approved when used with 2 pole BR or BRH breakers. ②

Product Selection

Table 9. 70A Main Lug Only Polymeric and Metallic Loadcentres

Maximum Ampere Rating (A)	Enclosure Style	Material	Catalogue Number	Max. No. 1" Spaces	Max. No. 1/2" Spaces	Dimensions (in) H	W	D	Wire Size Range for Main CU/AL (AWG)
70	Indoor Type 1①	Polymeric	CPL072	2	4	8-5/8	5	3-1/4	#14 - 2
70	Indoor/Outdoor Type 3R ①	Polymeric	CPL072R ④	2	4	8-11/16	6-1/4	4-5/16	#14 - 2
70	Indoor Type 1 Flush Mount ①	Metallic	CPL072FGP	2	4	9-7/16	4-1/2	3	#14 - 2
70	Indoor Type 1 Surface Mount ①	Metallic	CPL072SGP	2	4	9-7/16	4-1/2	3	#14 - 2
70	Indoor/Outdoor Type 3R ①	Metallic	CPL072RGP ③④	2	4	9-7/16	4-1/2	3	#14 - 2



CPL072 Indoor

CPL072R Outdoor

CPL072FGP Flush

CPL072SGP Surface

CPL072RGP Outdoor

① Service Entrance approved when used with 2 pole BR/BRH breakers.

② BR and BRH 2 pole breakers can be found on page 13.

③ Uses DS*H1 style hubs found on page 11.

④ The circuit breaker protective cover incorporates a locking hasp.

Accessories

Product Selection

Table 10. Plug-In Loadcentre Accessories

Description	Catalogue Number
Number Strips for CPL/CPM 42 Circuits ①	NSP42
Circuit Identification Labels (e.g. Hot Water Heater) ②	BP3110C
Replacement door ③ for CPM112	CPM112COV
Replacement door ③ for CPM116	CPM116COV
Replacement door ③ for CPM120	CPM120COV
Replacement door ③ for CPM130	CPM130COV
Replacement door ③ for CPM216	CPM216COV
Replacement door ③ for CPM220	CPM220COV
Replacement door ③ for CPM230	CPM230COV
Replacement door ③ for CPM240	CPM240COV
Replacement door ③ for CPL112	CPL112COV
Replacement door ③ for CPL116	CPL116COV
Replacement door ③ for CPL120	CPL120COV
Replacement door ③ for CPL130	CPL130COV
Replacement door ③ for CPL220	CPL220COV
Replacement door ③ for CPL240	CPL240COV
Replacement door ③ for 3CPM112	3CPM112COV
Replacement door ③ for 3CPM130	3CPM130COV
Replacement door ③ for 3CPM230	3CPM230COV
Replacement door ③ for 3CPL112	3CPL112COV
Replacement door ③ for 3CPL124	3CPL124COV
Replacement door ③ for 3CPL130	3CPL130COV
Replacement door ③ for 3CPL136	3CPL136COV
Replacement door ③ for 3CPL218	3CPL218COV
Replacement door ③ for 3CPL224	3CPL224COV
Replacement door ③ for 3CPL230	3CPL230COV
Replacement door ③ for 3CPL242	3CPL242COV

Description	Catalogue Number	
Door lock for 4-8 circuit 125A (CPM/CPL)	CH9FL ⑪	
Door lock for 12-42 circuit 100-225A & 400A (CPM/CPL)	TDL ⑪	
Isolated ground kit	ISGRD	
Trim screw kit (CPM/CPL) ④	CVRSCRW	
3/4" Hub for 100-125A Type 3R Loadcentres ⑤	DS075H1	3"x2-3/4"
1" Hub for 100-125A Type 3R Loadcentres ⑤	DS100H1	3"x2-3/4"
1-1/4" Hub for 100-125A Type 3R Loadcentres ⑤	DS125H1	3"x2-3/4"
1-1/2" Hub for 100-125A Type 3R Loadcentres ⑤	DS150H1	3"x2-3/4"
2" Hub for 100-125A Type 3R Loadcentres ⑤	DS200H1	3"x2-3/4"
2" Hub for 150 & 200A Type 3R Loadcentres	DS200H2	4-3/4"x4-5/8"
2-1/2" Hub for 150 & 200A Type 3R Loadcentres	DS250H2	4-3/4"x4-5/8"
3" Hub for 150 & 200A Type 3R Loadcentres	DS300H2	4-3/4"x4-5/8"
3/4" Hub for R3CCPL103 Loadcentres	RH75P	2-1/8"x3-1/4"
1" Hub for R3CCPL103 Loadcentres	RH100P	2-1/8"x3-1/4"
1-1/4" Hub for R3CCPL103 Loadcentres	RH125P	2-1/8"x3-1/4"
1" Filler plate kit ⑥	BRFP	
Sub-feed kit for 125A Loadcentres #8-2/0 ⑦	BRSF125	
Sub-feed kit for 150A 3 phase Loadcentres #8-2/0 ⑦	3BRSF150	
Sub-feed kit for 225A Loadcentres #2-300MCM ⑦	BRS225	
Sub-feed kit for 225A 3 phase Loadcentres #2-300MCM ⑦	3BRS225	
Sub-feed kit for 400A Loadcentres #8-300MCM ⑦	BRS400	
Sub-feed kit for 400A 3 phase Loadcentres ⑦	3BRS400	
Neutral/Ground lug kit for 2/0 ⑧	NL20	
Neutral/Ground lug kit for 3/0 ⑧	NL30	
Neutral/Ground lug kit for 300MCM (Maximum) ⑧	NL300	
Neutral kit for 400A Combination Loadcentres ⑨	CPM400KIT	
Neutral kit for 400A Non-combination Loadcentres ⑩	CPL400KIT	
Grey plastic replacement door latch	52-3125-5	

① 25 Per package. Catalogue number represents one package.
② 50 Per package. Catalogue number represents one package.
③ Includes trim, door, and deadfront..
④ 100 Per package. Catalogue number represents one package.
⑤ Except R3CCPL103.
⑥ Kit includes 25 pieces.
⑦ Line/Load terminals supplied only. Neutral conductor must be purchased separately. See above listed kits.
⑧ Neutral bolts to main neutral bar i.e. remove screw & install lug kit.
⑨ Kit includes 2 Neutral bars.
⑩ Kit includes 1 Neutral bar.
⑪ Comes with a set of keys.

Plug-In Circuit Breakers for CPM/CPL

Type BR, DNPL, GFCB, GFEP, & GFXB

BR Circuit Breakers

Eaton Type BR plug-in breakers in the standard 1-inch per pole moulded case and can be used as main and/or branch disconnect devices. All are CSA and UL listed. Typical ampacity range for BR breakers is 15 through 125 amperes [1].

FIRE-GUARD™ Arc Fault Circuit Interrupter (AFCI)

The FIRE-GUARD Arc Fault Circuit Interrupter (AFCI) is a residential circuit breaker with an integrated processor which recognizes the unique current and/or voltage signatures associated with arcing faults, and acts to interrupt the circuit to reduce the likelihood of an electrical fire. With the Eaton Fire-Guard AFCI, protection from arcing faults is combined with conventional thermal and magnetic overloads as found in standard residential circuit breakers protecting wiring from excessive heat or damage due to overloading or short circuits. Fire-Guard AFCI can also be equipped with 5 mA ground fault protection to protect from personal shock hazards. Now, there is a residential circuit breaker that provides protection from arcing faults, conductor damage due to thermal overloads and short circuits, as well as 5 mA ground fault protection in one integrated design.

GFCB® People Protection Breakers

Eaton Type GFCB (ground fault circuit breaker) combines state-of-the-art electronic technology with a circuit breaker mechanism in a compact 1-inch per pole moulded case. The GFCB automatically senses hot wire-to-ground faults in a 4 to 6 milliampere range and shuts off the power thus providing an extra margin of safety beyond that of conventional circuit breakers. GFCB applications include bathrooms, basement outlets, swimming pools, outdoor branch circuits and kitchen branch circuits. Type GFCB breakers are also available in 10mA and 30mA equipment protectors. 10mA GFCB are required for submersible pump, sump pump and well applications [2]. 30mA breakers are for equipment requiring a higher interrupting value such as heat tracing.

DNPL Twin Circuit Breakers

DNPL plug-in breakers have the same construction as Eaton Type BR 1-inch per pole devices except that two one pole circuits are provided in a 1-inch space [1]. CSA listed interrupting rating is 10,000 AIC. All ratings are CSA and UL listed.

DNPL Quad Circuit Breakers

Quadplex™ construction of Eaton Type DNPL plug-in breakers provides various combinations of two pole and single pole devices in a 2-inch moulded case.

All plug-in breakers are approved for HACR applications [1].

All ratings are CSA & UL listed. CSA certified to C22.2 No. 5, file LR3300.

All loadcentre breakers are GOS listed for conformity.

Handle position On, Off, and Tripped Indication

One-piece moulded case construction.

Hardened cradle for positive action under fault conditions.

Heavy duty mechanism spring for reliable operation.

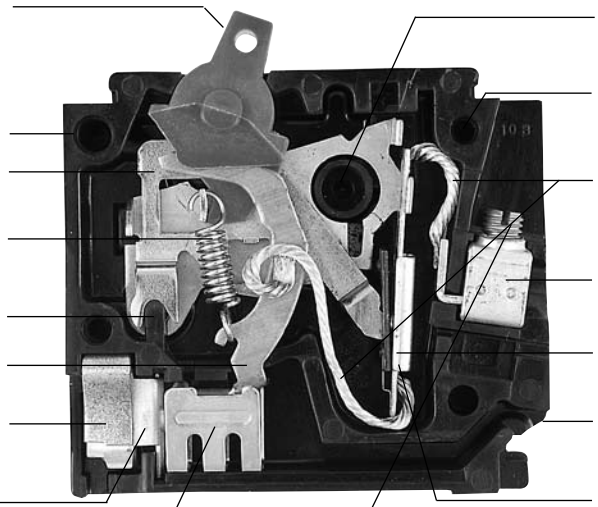
Non-abrasive integrally moulded pivot for quick mechanism response.

One-piece moving contact arm for quick on/off response.

Heavy duty line terminal and spring clip for quick loadcentre installation and cool operation.

Silver tungsten alloy contacts.

Unique one-piece heavy duty DE-ION® arc extinguisher for quick arc interruption.



Exclusive steel frame calibration provides greater calibration integrity than with screw adjustment.

Four rivet construction enhances strength and structural integrity of breaker case.

Heavy duty multi-strand flexible copper shunt provides load terminal torque isolation.

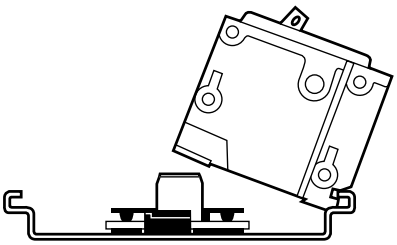
CSA approved terminal assembly for use with copper or aluminum wire, screw is "backed out" for faster insertion of wires.

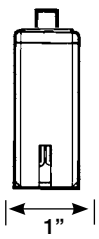
Magnetic assembly for reliable short circuit protection.

Large gas port for venting short circuit gases safely into loadcentre gutter.

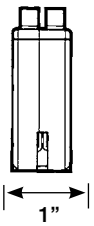
Calibrated one-piece bimetal for reliable thermal trip function.

Robertson/slot load side screw.





Type BR



Type DNPL Duplex

[1] One pole 15 and 20 ampere units are switching duty (SWD) rated.

[2] Submersible pump installations require ground fault protection to the maximum sensitivity level of 10 milliampere. These breakers meet Canadian electrical code CEC 26-956.

Type BR ③④

- 10,000 / 22,000 Amperes Interrupting Capacity at 120VAC, 120/240VAC, and 240VAC
- 2 and 3 pole versions feature a common trip

Product Selection

Table 11. Single and Multi-Pole Plug-In Circuit Breakers

Ampere Rating	Wire Size Range (Cu/AL 60°C or 75°C)	1-Pole 120/240VAC 10 per Shelf Carton 10kAIC Catalogue Number	1-Pole 120/240VAC 10 per Shelf Carton 22kAIC Catalogue Number	2-Pole 120/240VAC 5 per Shelf Carton 10kAIC Catalogue Number	2-Pole 120/240VAC 5 per Shelf Carton 22kAIC Catalogue Number	3-Pole 120/240VAC 5 per Shelf Carton 10kAIC Catalogue Number	3-Pole 120/240VAC 5 per Shelf Carton 22kAIC Catalogue Number
15	#14 - 4	BR115 ①②	BRH115	BR215	BRH215	BR315	BRH315
20	#14 - 4	BR120 ①②	BRH120	BR220	BRH220	BR320	BRH320
25	#14 - 4	BR125 ①	BRH125	BR225	BRH225	BR325	BRH325
30	#14 - 4	BR130 ①	BRH130	BR230	BRH230	BR330	BRH330
35	#14 - 4	BR135 ①	BRH135	BR235	BRH235	BR335	BRH335
40	#14 - 4	BR140 ①	BRH140	BR240	BRH240	BR340	BRH340
45	#14 - 4	—	BRH145	BR245	BRH245	BR345	BRH345
50	#14 - 4	BR150 ①	BRH150	BR250	BRH250	BR350	BRH350
60	#4 - 1/0	—	BRH160	BR260	BRH260	BR360	BRH360
70	#4 - 1/0	—	BRH170	BR270	BRH270	BR370	BRH370
80	#4 - 1/0	—	—	BR280	BRH280	BR380	BRH380
90	#4 - 1/0	—	—	BR290	BRH290	BR390	BRH390
100	#4 - 1/0	—	—	BR2100	BRH2100	BR3100	BRH3100
110	#4 - 1/0	—	—	—	—	—	—
125	#4 - 2/0 ⑤	—	—	BR2125 ⑤	—	⑤	—
150	⑤	—	—	⑤	—	⑤	—
175	⑤	—	—	⑤	—	⑤	—
200	⑤	—	—	⑤	—	⑤	—
		Requires One 1-Inch (25.4mm) Space		Requires Two 1-Inch (25.4mm) Spaces		Requires Three 1-Inch (25.4mm) Spaces	

BR120

BR215

BR320

① Available with high magnetic setting for switching large tungsten lamp loads. Add suffix **H** to catalogue number (e.g. BR115H).

② Switching duty rated.

③ All Type BR 1, 2, and 3-pole circuit breakers carry listing for HACR application..

④ Breaker shunt trips are available but only in 120VAC format. Addition of a shunt trip adds a 1" space width. For circuit breakers requiring a shunt trip add an **ST** suffix to the end of the catalogue number (e.g. BR115ST).

⑤ For subfeed applications in 200 or 400A loadcentres requiring a 125, 150, 175, or 200A subfeed circuit breaker a Type BJ circuit breaker can be used. Refer to page 62 for product space requirements and selection.

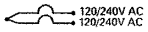
Type DNPL ①②

- 10,000 Amperes Interrupting Capacity at 120VAC, 120/240VAC, and 240VAC

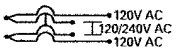
Product Selection

Table 12. Duplex™ and Independent Trip Quadplex™ Plug-In Circuit Breakers

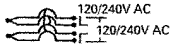
Duplex™		Quadplex™ Independent Trip				Quadplex™ Independent Trip			
Two Single Pole Circuits		Two Single Pole Circuits and One Double Pole Circuit				Two Double Pole Circuits			
10 per Shelf Carton		5 per Shelf Carton				5 per Shelf Carton			
120VAC		120VAC	120/240VAC	120VAC		120/240VAC			
		Ampere Rating				Ampere Rating			
Ampere Rating	Catalogue Number	Outer Left (1 Pole)	Centre (2 Poles)	Outer Right (1 Pole)	Catalogue Number	Outer Left & Right (2 Poles)	Centre (2 Poles)	Catalogue Number	Wire Size Range (Cu/AL 60°C or 75°C)
15-15	DNPL1515	15	15	15	DNPL151515	15	15	DNPL215215	#14 - 4 AWG
15-20	DNPL1520	15	20	15	DNPL152015	15	20	DNPL215220	#14 - 4 AWG
15-30	DNPL1530	15	25	15	DNPL152515	15	30	DNPL215230	#14 - 4 AWG
20-20	DNPL2020	15	30	15	DNPL153015	15	40	DNPL215240	#14 - 4 AWG
—	—	15	40	15	DNPL154015	20	20	DNPL220220	#14 - 4 AWG
—	—	15	50	15	DNPL155015	20	30	DNPL220230	#14 - 4 AWG



Requires One 1-Inch (25.4mm) Space



Independant Trip
Requires Two 1-Inch (25.4mm) Spaces



Independent Trip
Requires Two 1-Inch (25.4mm) Spaces

Type BP (Circuit Breaker Packs)

- Single carton packaged
- Represents common household combinations

DNPL2020

DNPL155015

DNPL230230

Product Selection

Table 13. Plug-in Circuit Breaker House Paks

Contents	Catalogue Number
(3) DNPL151515, (1) DNPL153015, (1) DNPL154015	BP2
(10) BR115, (3) BR215, (1) BR230, (1) BR240	BP4
(2) DNPL1515, (1) DNPL215215, (1) DNPL152015, (1) DNPL153015, (1) DNPL154015	BP16
(6) DNPL1515, (2) DNPL151515, (1) DNPL153015, (1) DNPL154015	BP18
(1) DNPL1515, (3) DNPL151515, (2) DNPL153015, (1) DNPL154015	BP21
(3) DNPL1515, (3) DNPL151515, (1) DNPL153015, (1) DNPL154015	BP23

Contents	Catalogue Number
(16) BR115, (3) BR215, (1) BR230, (1) BR240	BP24
(14) BR115, (2) BR120, (1) BR230, (1) BR240	BP27
5 of DNPL1515, 1 of DNPL2020, 1 of DNPL153015, 1 of DNPL154015	BP31
(1) BR120, (4) DNPL1515, (1) DNPL151515, (1) DNPL153015, (1) DNPL154015	BP32
(10) BR115, (2) BR120, (1) BR215, (1) BR220, (1) BR230, (1) BR240	BP41
(3) DNPL1515, (1) DNPL153015, (1) DNPL154015, (1) DNPL2020, (1) DNPL1520	BP54

① All Type DNPL Duplex™ and Quadplex™ circuit breakers carry listing for HACR applications.

② All 15 and 20 ampere single poles are switch-duty rated.

Type BR Arc Fault Circuit Interrupter Circuit Breakers

- 10,000 Amperes Interrupting Capacity at 120VAC, 120/240VAC, and 240VAC

Product Description

An arc fault circuit interrupter is a device intended to provide protection from the effects of arc faults by recognizing characteristics unique to arcing and by functioning to de-energize the circuit when the arc fault is detected. As of January 1, 2002, the Canadian Electrical Code now requires that all branch circuits that supply 125 Volt, single phase, 15 and 20 Ampere receptacle outlets installed in dwelling unit bedrooms shall be protected by an Arc Fault Circuit Interrupter(s).

Product Selection

Table 14. Single and Two Pole Plug-In FIRE-GUARD™ AFCI Circuit Breakers

		1-Pole 120/240VAC	2-Pole ①② 120/240VAC	
		10 per Shelf Carton	5 per Shelf Carton	
		10kAIC	10kAIC	
Ampere Rating	Configuration	Catalogue Number	Catalogue Number	Wire Size Range (Cu/AL 60°C or 75°C
15	Standard	BR115AF ③	—	#14 - 4 AWG
15	Compact	BRC115AF	—	#14 - 4 AWG
15	Common Trip	—	BRL215AF ④	#14 - 4 AWG
15	Independent Trip	—	BRL215AFIT ④	#14 - 4 AWG
20	Standard	BR120AF ③	—	#14 - 4 AWG
20	Compact	BRC120AF	—	#14 - 4 AWG
20	Common Trip	—	BRL220AF ④	#14 - 4 AWG
20	Independent Trip	—	BRL220AFIT ④	#14 - 4 AWG
		Requires One 1-Inch (25.4mm) Space	Requires Two 1-Inch (25.4mm) Spaces	

Type BR 1 and 2 Pole AFCI Circuit Breakers

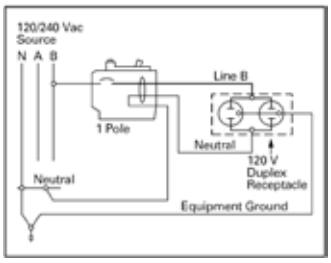


Figure 1. 1-Pole Single 120V Load Application Sourced by 120/240VAC

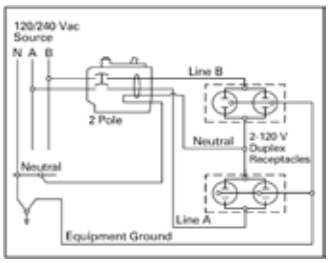


Figure 2. 2-Pole Shared Neutral with Multi-Duplex Receptacle Application

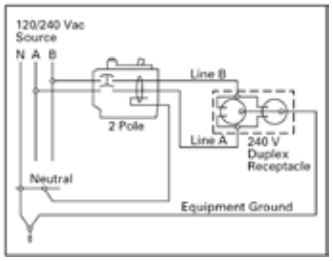


Figure 3. 2-Pole 240V Load Application Sourced by 120/240VAC

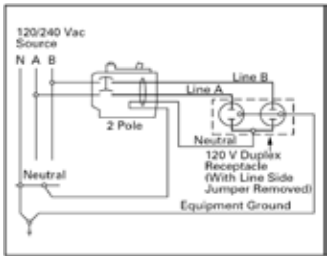


Figure 4. 2-Pole Shared Neutral with Duplex Receptacle Application

① Common trip refers to 2-pole 240 volt load application sourced by 120/240 Vac (see Figure 3).

② Independent trip refers to 2-pole multi-wire, home run or shared neutral circuits (see Figure 2 and Figure 4).

③ Will not fit into CPM112, CPL112, CPL116, CPL120, CPL220, CPL240, 3CPM112, 3CPL218, 3CPL224 or 3CPL230 prior to November 2004.

④ Long style circuit breakers. Please speak to your local Eaton sales rep for proper application.

Type GFCB and GFEP Ground Fault Circuit Breakers

- 10,000 / 22,000 Amperes Interrupting Capacity at 120VAC and 120/240VAC
- 5mA "People Protection" or 30mA Equipment Protectors
- Two pole version features common trip.

GFCB 1-Pole

GFCB 2-Pole

Product Selection

Table 15. 5mA Single and Two Pole Plug-In Ground Fault Circuit Breakers

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C (AWG)	1-Pole 120VAC 1 per Shelf Carton 10kAIC Catalogue Number	1-Pole 120VAC 1 per Shelf Carton 22kAIC Catalogue Number	2-Pole 120/240VAC 1 per Shelf Carton 10kAIC Catalogue Number	2-Pole 120/240VAC 1 per Shelf Carton 22kAIC Catalogue Number
15	#14 - 4	GFCB115 ①	GFCBH115	GFCB215	GFCBH215
20	#14 - 4	GFCB120 ①	GFCBH120	GFCB220	GFCBH220
25	#14 - 4	GFCB125 ①	GFCBH125	GFCB225	GFCBH225
30	#14 - 4	GFCB130 ①	GFCBH130	GFCB230	GFCBH230
40	#14 - 4	GFCB140 ①	—	GFCB240	—
50	#14 - 4	—	—	GFCB250 ②	—
60	#14 - 6	—	—	GFCB260	—
		Requires One 1-Inch (25.4mm) Space		Requires Two 1-Inch (25.4mm) Spaces	

Table 16. 30mA Single and Two Pole Plug-In Ground Fault Circuit Breaker Equipment Protectors

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C (AWG)	1-Pole 120VAC 1 per Shelf Carton 10kAIC Catalogue Number	2-Pole 120/240VAC 1 per Shelf Carton 10kAIC Catalogue Number
15	#14 - 4	GFEP115	GFEP215
20	#14 - 4	GFEP120	GFEP220
25	#14 - 4	GFEP125	GFEP225
30	#14 - 4	GFEP130	GFEP230
40	#14 - 4	—	GFEP240
50	#14 - 4	—	GFEP250 ②
		Requires One 1-Inch (25.4mm) Space	Requires Two 1-Inch (25.4mm) Spaces

Ground Fault Application Note

Single-pole ground fault circuit breakers (GFCBs) are designed for use in 2-wire, 120VAC circuits. Figure 5 shows a typical wiring configuration.

Two-pole GFCBs are designed for use in 3-wire, 120/240VAC circuits, 120VAC multi-wire circuits employing common, neutral and 2-wire, 240VAC circuits obtained from a 120/240VAC source.

Figures 6 and 7 illustrate typical wiring configurations for 120/240VAC multi-wire circuits.

Figure 8 depicts a 240VAC, 2-wire circuit. Note the "panel neutral" conductor connects to the neutral bar, even though the neutral is not included in the load circuit. This connection is necessary to supply a 120VAC power source to the ground fault sensing circuit.

The figures are shown with a 120/240VAC, single-phase, 3-wire power source, but are also applicable to a 120/208VAC, 3-phase, 4-wire power supply. For all figures the electrical operation of the GFCB is not affected by the equipment ground.

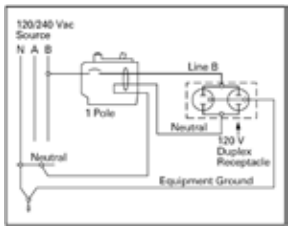


Figure 5. 1-Pole

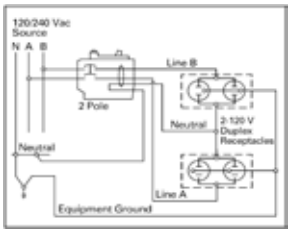


Figure 6. 2-Pole

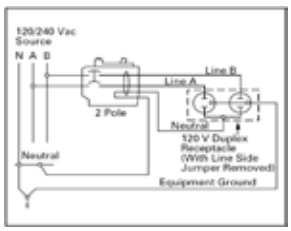


Figure 7. 2-Pole

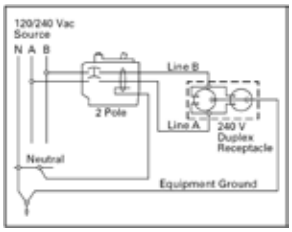


Figure 8. 2-Pole

① Auxiliary switches and bell alarms are available under special order. Add suffix W1 for alarm switch and W2 for auxiliary switch.

② For use with copper wire only.

Type BR Internationally Rated Circuit Breakers

BR120E

- 3,000 / 6,000 Amperes Interrupting Capacity at 240/415VAC
- Two and three pole versions feature common trip

Product Selection

Table 17. Single and Two Pole Plug-In Internationally Rated Circuit Breakers ①②

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C (AWG)	1-Pole 240/415VAC 10 per Shelf Carton 3kAIC Catalogue Number	1-Pole 240/415VAC 10 per Shelf Carton 6kAIC Catalogue Number	2-Pole 240/415VAC 5 per Shelf Carton 3kAIC Catalogue Number	2-Pole 240/415VAC 5 per Shelf Carton 6kAIC Catalogue Number
15	#14 - 4	BR115E	BRH115E	BR215E	BRH215E
20	#14 - 4	BR120E	BRH120E	BR220E	BRH220E
25	#14 - 4	BR125E	BRH125E	BR225E	BRH225E
30	#14 - 4	BR130E	BRH130E	BR230E	BRH230E
35	#14 - 4	BR135E	BRH135E	BR235E	BRH235E
40	#14 - 4	BR140E	BRH140E	BR240E	BRH240E
45	#14 - 4	—	BRH145E	BR245E	BRH245E
50	#14 - 4	BR150E	BRH150E	BR250E	BRH250E
60	#4 - 1/0	—	BRH160E	BR260E	BRH260E
70	#4 - 1/0	—	BRH170E	BR270E	BRH270E
80	#4 - 1/0	—	—	BR280E	BRH280E
90	#4 - 1/0	—	—	BR290E	BRH290E
100	#4 - 1/0	—	—	BR2100E	BRH2100E
		Requires One 1-Inch (25.4mm) Space		Requires Two 1-Inch (25.4mm) Spaces	

BR215E

Table 18. Three Pole Plug-In Internationally Rated Circuit Breakers ①②

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C (AWG)	3-Pole 240-415VAC 5 per Shelf Carton 3kAIC Catalogue Number	3-Pole 240-415VAC 5 per Shelf Carton 6kAIC Catalogue Number
15	#14 - 4	BR315E	BRH315E
20	#14 - 4	BR320E	BRH320E
25	#14 - 4	BR325E	BRH325E
30	#14 - 4	BR330E	BRH330E
35	#14 - 4	BR335E	BRH335E
40	#14 - 4	BR340E	BRH340E
45	#14 - 4	BR345E	BRH345E
50	#14 - 4	BR350E	BRH350E
60	#4 - 1/0	BR360E	BRH360E
70	#4 - 1/0	BR370E	BRH370E
80	#4 - 1/0	BR380E	BRH380E
90	#4 - 1/0	BR390E	BRH390E
100	#4 - 1/0	BR3100E	BRH3100E
		Requires Three 1-Inch (25.4mm) Spaces	

BR320E

① Built to British Standard BS3871.

② Non-stocked item requiring special order. Speak to your local Eaton sales rep for lead times.

Type GFXB Internationally Rated Ground Fault Circuit Breakers

Type GFXB

- 3,000 Amperes Interrupting Capacity at 120/240VAC, 220/380VAC, and 240/415VAC.

Product Selection

Table 19. 30mA Single Pole Plug-In Ground Fault Circuit Breakers ①②③

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C (AWG)	1-Pole 120VAC 1 per Shelf Carton 3kAIC Catalogue Number ①
15	#14 - 4	GFXB115B2
20	#14 - 4	GFXB120B2
25	#14 - 4	GFXB125B2
30	#14 - 4	GFXB130B2
		Requires One 1-Inch (25.4mm) Space

Type BR Non-Automatic Moulded Case Switches

BR250NA

Product Selection

Table 20. Two Pole Plug-In Non-Automatic Moulded Case Switches ③

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C (AWG)	2-Pole 120/240VAC 5 per Shelf Carton Catalogue Number ③
50	#4 - 1/0	BR250NA
60	#4 - 1/0	BR260NA
100	#4 - 1/0	BR2100NA
		Requires Two 1-Inch (25.4mm) Spaces

① Auxiliary switches and bell alarms are available under special order. Add suffix W1 for alarm switch and W2 for auxiliary switch.

② Meets requirements of BS3871 section 31C and BS4293.

③ Non-stocked part requiring special ordering. Speak to your local Eaton sales rep for lead times.

Type CSR Loadcentre Main Circuit Breaker Kit

CSR2150N

♦ 25,000 Amperes Interrupting Capacity at 120/240VAC.

Product Selection

Table 21. Two Pole Main Circuit Breakers for Single Phase Plug-In Combination Loadcentres

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C	2-Pole 120/240VAC 1 per Shelf Carton 25kAIC Catalogue Number
125	#2AWG - 300kcmil	CSR2125N
150	#2AWG - 300kcmil	CSR2150N
200	#2AWG - 300kcmil	CSR2200N

Type BWH Loadcentre Main Circuit Breaker Kit

BWH2150

♦ 25,000 Amperes Interrupting Capacity at 120/240VAC.

Product Selection

Table 22. Two Pole Main Circuit Breakers for Single Phase Plug-In Combination Loadcentres

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C	2-Pole 120/240VAC 1 per Shelf Carton 25kAIC Catalogue Number
125	#2AWG - 300kcmil	BWH2125
150	#2AWG - 300kcmil	BWH2150
175	#2AWG - 300kcmil	BWH2175
200	#2AWG - 300kcmil	BWH2200

Type CC Loadcentre Main Circuit Breaker Kit

CC3150

Product Selection

Table 23. Three Pole Main Circuit Breakers for Three Phase Plug-In Combination Loadcentres

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C	3-Pole 120/240VAC 1 per Shelf Carton 10kAIC Catalogue Number
100	#4AWG - 4/0AWG	CC3100
125	#2AWG - 300kcmil	CC3125
150	#2AWG - 300kcmil	CC3150
200	#2AWG - 300kcmil	CC3200

Plug-In Circuit Breaker Accessories

Product Selection

Table 24. Field Installation Kits and Parts for Plug-In Loadcentre Circuit Breakers

Description	Ordering Qty. [1]	Catalogue Number
Handle Tie for single pole Type BR circuit breakers. Joins handles on breakers mounted adjacent to each other via a clip-on mechanism.	1	BQHT-10
Handle Tie for Type DNPL circuit breakers. Joins the two outside independent poles on two adjacent Duplex or one Quadplex circuit breakers.	1	THOW-10
Handle Tie for Type DNPL circuit breakers. Joins the outside independent poles on adjacent Duplex or Quadplex circuit breakers.	1	THS1
Handle Lockoff (Escutcheon mounted). 1, 2, or 3-Pole Type BR; 1-pole of a Type DNPL Duplex or; one independent outside pole of a Type DNPL Quadplex circuit breakers.	1	BRLW-10
Handle Lockoff [2] (Handle mounted). 1-Pole Type BR circuit breakers.	1	BRLW1-10
Handle Lockoff [2] (Handle mounted). 2 and 3-Pole Type BR circuit breakers.	1	BRLW2-10
Handle Lockoff [2] (Handle mounted). 1-Pole Type DNPL Quadplex circuit breakers.	1	BRDL1-10
Handle Lockoff [2] (Escutcheon mounted). 2 pole Type DNPL Quadplex circuit breakers.	1	BRQLW-10
Handle Lockoff [2] (Screw mounted). Locks the handle of main circuit breaker types CC and CHH in the OFF or ON position.	1	CCPL
Handle Lockoff [2] (Escutcheon mounted). Locks the handle of main circuit breaker type CSR and BWH in the OFF of ON position.	1	MCBPL
Handle Lockdog [2] (Escutcheon mounted). 1, 2, and 3-pole Type BR; 1-pole of a Type DNPL Duplex or; one independent pole of a Type DNPL Quadplex circuit breaker. Secures handle in the ON or OFF position.	1	BHLW-10
Handle Lockdog [2] (Handle mounted). 1-pole Type BR circuit breakers. Secures handle in the ON or OFF position.	1	BHLW1-10
Handle Lockdog [2] (Handle mounted). 2, and 3-pole Type BR circuit breakers. Secures handle in the ON or OFF position.	1	BHLW2-10
Handle Lockdog [2] (Handle mounted). 1-pole Type GFCB ground fault circuit breakers. Secures handle in the ON or OFF position.	1	BHGW-10
Handle Lockdog [2] (Handle mounted). 1-pole Type DNPL Duplex or 1 outside independent pole of a Quadplex. Secures handle in the ON or OFF position.	1	HLW1-10
Main Breaker Lug Kit. Types CC and CHH circuit breakers (2) 300kcmil	1	CCL300
Main Breaker Lug Kit. Types CSR, BW, and BWH circuit breakers (2) 300kcmil	1	MCBL300

Definitions

Handle Ties - devices used to join two similar independent single-pole circuit breakers to form a 2-pole non-common trip breaker.

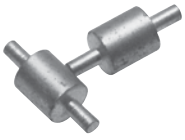
Handle Lockoffs - devices that use a padlock to lock a circuit breaker's handle in either the ON or OFF position.

Handle Lockdogs - devices used to secure a circuit breaker's handle in the ON or OFF position. They are not padlockable devices.

Escutcheon Mounted - a semipermanent mounting to the face of the circuit breaker and secured by the loadcentre's deadfront cover.

Handle Mounted - a mounting made directly to the handle of the circuit breaker by means of a set screw.

Screw Mounted - a permanent mounting to the face of the circuit breaker by means of a non-removable screw.



THS1

BHLW2-10

THOW-10 (Installed)

MCBPL (Installed)

BRLW2-10

BRQLW-10

BHLW-10

[1] Must be purchased in multiples of ordering quantities indicated.

[2] Refer to your local Eaton sales representative for handle position changeability chart.

Plug-In OEM Loadcentre Interior Assemblies

Product Description

As a leader in the electrical distribution equipment business, Eaton has a unique product offering for equipment manufacturers, panel builders and virtually any OEM that has a need for power distribution within their equipment. The OEM interior offering consists of a wide variety of power distribution options utilizing components from Eaton's Eaton BR Loadcentre product lines. With high-volume, standardized products, OEMs can expect to receive high-quality products covering configurations meeting virtually any power distribution need.

Coupled with Eaton's expertise in circuit breaker design and manufacturing, our OEM interiors provide solid power distribution and circuit protection in a compact, easy-to-install package.

Product Offering

The BR interiors are manufactured of formed, plated aluminum, and use the Eaton Type BR 1-inch (25.4 mm) wide circuit breaker by Eaton Corporation. This design affords customers the most circuit flexibility as many of these interiors allow the installation of standard 1-and 2-pole breakers as well duplex (2 poles in a 1-inch (25.4 mm) space) or quadplex (4 poles in a 2-inch (50.8 mm) space) breakers. The stab rating of the BR interiors is 140 amperes maximum, meaning that the handle rating of the breakers that are mounted across from one another may not exceed 140 amperes.

The interiors are designed for either horizontal (single-row breaker mounting), or vertical (double-row breaker mounting). To comply with National Electrical Code (NEC) requirements if mounted horizontally, when the breaker is "ON," the handle should be in the UP position. When mounted vertically, the handle toggles from left to right, so this is not a concern.

Standards and Certifications

Canadian Standards Association Listing
All 1-pole and 2-pole, 120/240 volt breakers, both 1-inch (25.4 mm), 1/2-inch (12.7 mm) and 3/4-inch (19.1 mm) per pole, 225 ampere maximum, are listed as Certified by the Canadian Standards Association, Guide No. 69-11.19, Class 1432, File 18328.

Underwriters Laboratories Listing
All grounding bars manufactured comply with Underwriters Laboratories standards and are listed under Guide No. DHJR, File E31424, Volume W, Section 17.

All circuit breakers 10 amperes and larger comply with the Underwriters Laboratories "Standard for Branch Circuit and Service Circuit-Breakers" UL 489; Guide No. 60 10.2 File E31424, and "Requirements for Wire Connectors and Soldering Lugs," UL486B, Guide No. 461 10-C File E7830.

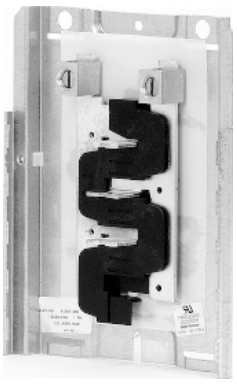
All Eaton breakers where marked, are suitable for use with 60/75˚ rated wire, unless otherwise specified.

All devices comply with the 22kAIC-10kAIC UL series connected components File DKSY2 of the Recognized Components Index.

Product Selection

Table 25. Plug-In OEM Loadcentre Interior Assemblies

Ampere Rating	1" Spaces	½" Spaces	Main Terminal Size (Per Phase)	Package Quantity	Catalogue Number
125	4	8	(1) 2/0 - #14 AWG Cu/Al	20	48INT125B
125	8	16	(1) 2/0 - #14 AWG Cu/Al	20	816INT125B
125	12	24	(1) 2/0 - #14 AWG Cu/Al	20	1224INT125B
125	16	24	(1) 2/0 - #14 AWG Cu/Al	20	1624INT125B
125	20	24	(1) 2/0 - #14 AWG Cu/Al	10	2024INT125B
125	24	24	(1) 2/0 - #14 AWG Cu/Al	10	2424INT125B



Dimensions

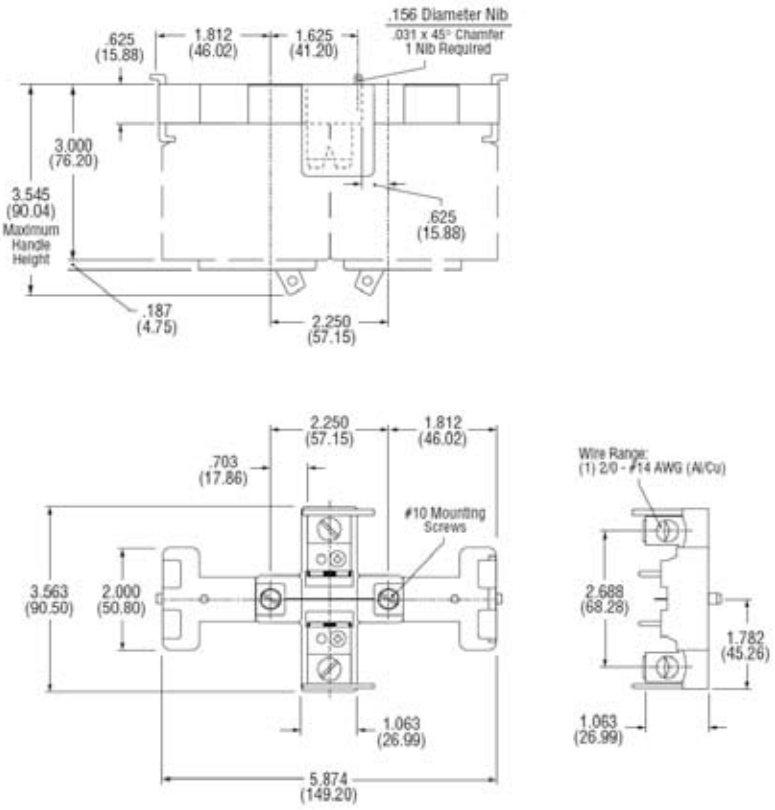
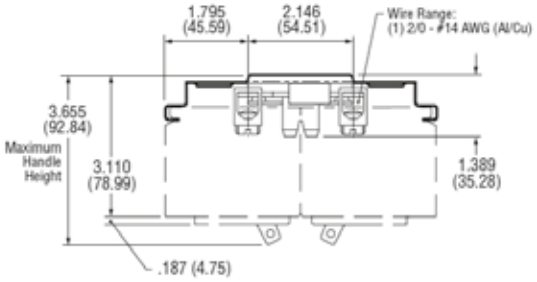
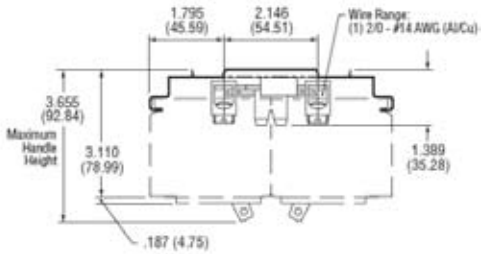


Figure 9. 48INT125B





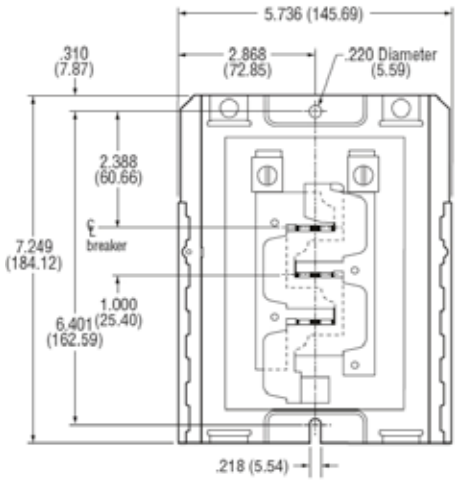


Figure 10. 816INT125B

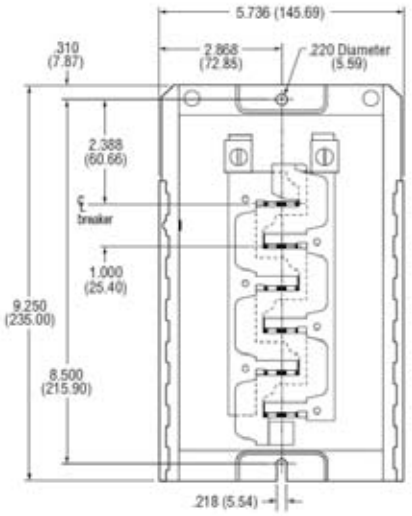
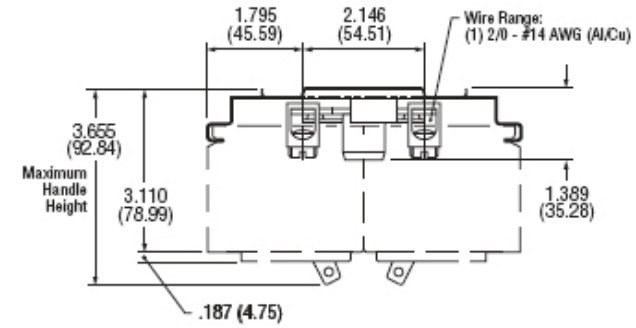
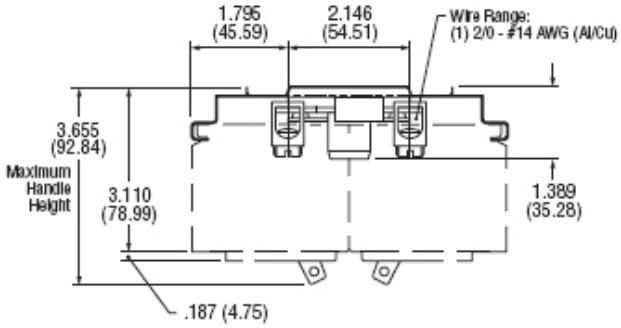


Figure 11. 1224INT125B

Dimensions Continued





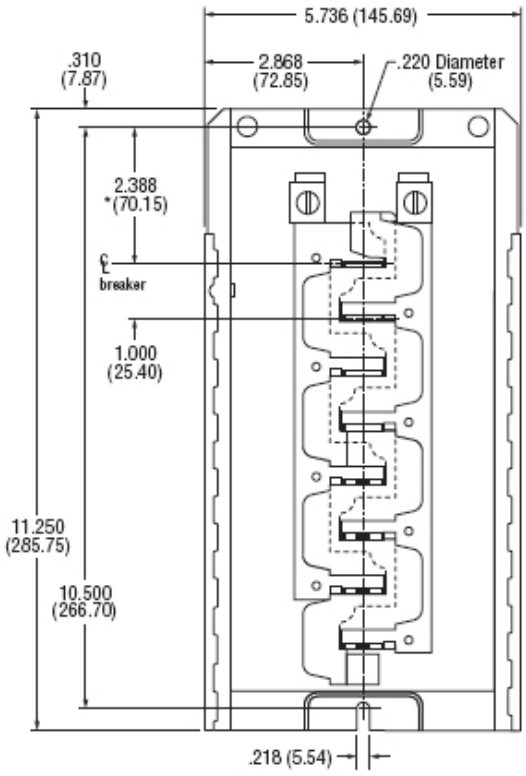


Figure 12. 1624INT125B

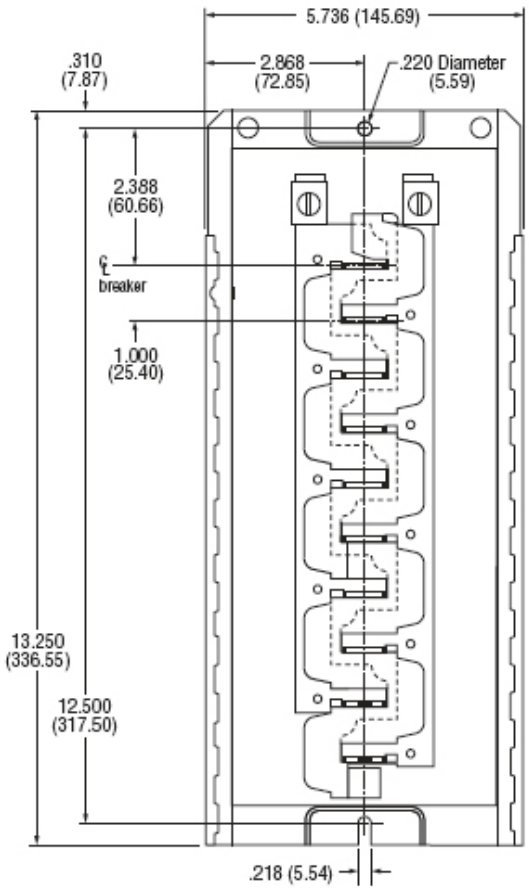
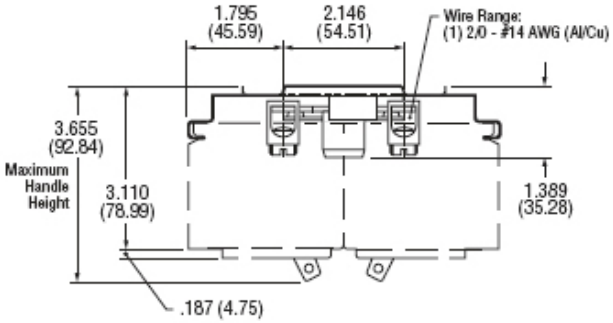


Figure 13. 2024INT125B

Dimensions Continued



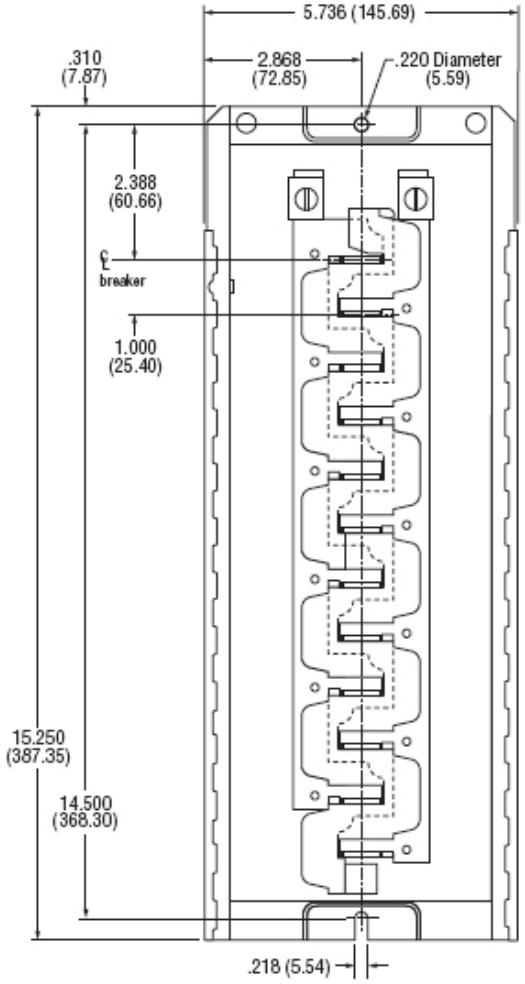


Figure 14. 2424INT125B

Product Description
Loadcentres feature factory installed main lugs or main circuit breakers. The CH interiors are manufactured of formed, silver flash plated copper. Eaton also supplies a full line of Type CH 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 Circuit Breaker Combination Loadcentres are CSA listed for use as service entrance equipment.

Ratings
Single phase, 3 wire, 120/240 volts AC. Mains through 200 amperes. Available with up to 120 branch circuits. Main breakers on 100 & 200 Amp panels are rated at 35,000 AIC.

Metal Enclosure Specifications
Enclosures are made of 16 gauge galvanized sheet steel powder coated sandalwood beige. The galvanized coating provides corrosion protection. Trims are similarly scratch-resistant powder coated a sandalwood beige colour to match the tub. A combination surface/flush cover with integral door is supplied.

All plug-in loadcentres are CSA listed to file LL98266.

Warranty
Limited lifetime.

Type CH Plug-On Neutral Loadcentre Features and Benefits

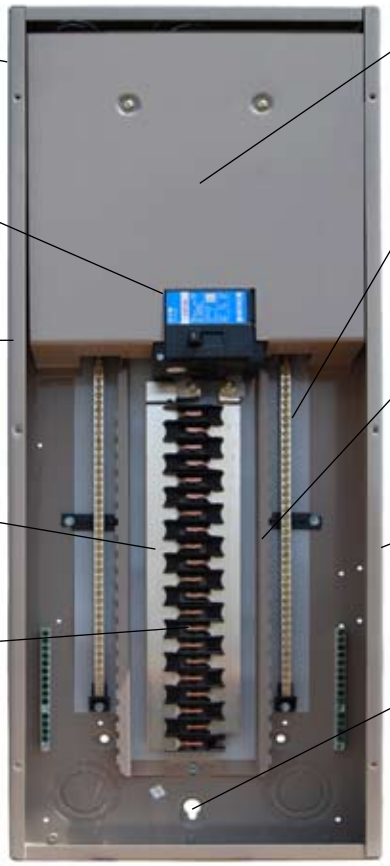
Ample Cable Entry Knockouts
- Sidewall, endwall, and backplane locations.
- Standard sizing for service entrance and branch circuit cabling.

Commercial Grade Main Circuit Breaker
- 35kAIC series rated main circuit breaker.
- Highest in the industry.

Attractive Sandalwood Finish
- Esthetically appealing, scratch-resistant powder coating.
- Both tub and trim are painted.

Silver Flash Plated Copper Bus
- Provides superior connectivity.

Patented Stab Design
- Unique design provides a tight connection to the bus.
- Prevents the misapplication of non-approved branch circuit breakers.



Large Service Entrance Section
- Straight-in wiring saves labour and material.
- Large cable bending space.

Inboard Neutral Connections
- Provides direct neutral connection for plug-on style ground fault and arc fault circuit breakers.
- Ample additional 2/0 lugs provided - no kits necessary.

Steel Backpan
- Reliable breaker mounting.
- One-piece design provides superior stability.

Drywall Marking on Enclosure
- Indicates proper mounting depth for flush mounting applications.

Single Keyhole Mounting
- One keyhole at the top and bottom provides easier mounting and leveling.

3 Wire 120/240VAC Plug-On Neutral Style Combination Service Entrance Type 1 (Indoor)

Product Selection

Table 26. Type CH Main Circuit Breaker Plug-On Neutral Indoor Type 1 Loadcentres

Maximum Ampere Rating	Main Breaker Rating	Catalogue Number	Max. No. 3/4" Spaces	Cover Style	Type of Main Circuit Breaker	Dimensions [in (mm)] H	W	D	Wire Size Range for Main CU/AL
100 Amp	100 Amp	CHM24PN100	24	Flush/Surface	CSH	29-1/8 (739.8)	14-3/16 (360.4)	3-11/16 (93.7)	#2 - 300 kcmil
100 Amp	100 Amp	CHM32PN100	32	Flush/Surface	CSH	34-1/8 (866.8)	14-3/16 (360.4)	3-11/16 (93.7)	#2 - 300 kcmil
200 Amp	200 Amp	CHM32PN200	32	Flush/Surface	CSH	34-1/8 (866.8)	14-3/16 (360.4)	3-11/16 (93.7)	#2 - 300 kcmil
200 Amp	200 Amp	CHM42PN200	42	Flush/Surface	CSH	37 (939.8)	14-3/16 (360.4)	3-11/16 (93.7)	#2 - 300 kcmil
200 Amp	200 Amp	CHM60PN200L	60	Flush/Surface	CSH	39 (990.6)	14-3/16 (360.4)	3-11/16 (93.7)	#2 - 300 kcmil

3 Wire 120/240VAC Plug-On Neutral Style Non-Combination Service Entrance Type 1 (Indoor)

Product Selection

Table 27. Type CH Main Lug Only Plug-On Neutral Indoor Type 1 Loadcentres

Maximum Ampere Rating	Catalogue Number	Max. No. 3/4" Spaces	Cover Style	Dimensions [in (mm)] H	W	D	Wire Size Range for Main CU/AL
125 Amp	CHNL24PN125	24	Flush/Surface	29-1/8 (739.8)	14-3/16 (360.4)	3-11/16 (93.7)	#2 - 300 kcmil
125 Amp	CHNL32PN125	32	Flush/Surface	34-1/8 (866.8)	14-3/16 (360.4)	3-11/16 (93.7)	#2 - 300 kcmil
225 Amp	CHNL32PN225	32	Flush/Surface	34-1/8 (866.8)	14-3/16 (360.4)	3-11/16 (93.7)	#2 - 300 kcmil
225 Amp	CHNL42PN225	42	Flush/Surface	37 (939.8)	14-3/16 (360.4)	3-11/16 (93.7)	#2 - 300 kcmil

3 Wire 120/240VAC Standard Neutral Non-Combination Type 3R ① ② (Outdoor/Raintight)

Product Selection

Table 28. Type CH Main Lug Only Standard Neutral Outdoor/Raintight Type 3R ① Loadcentres

Maximum Ampere Rating	Catalogue Number	Maximum No. ¾" Spaces	Maximum No. 3/8" Spaces	Enclosure Style	Dimensions [in (mm)] H	W	D	Wire Size Range for Main CU/AL (AWG)
100 Amp	RCCHL102	2	4	Indoor/Outdoor Type 3R ①③	12 (304.8)	6-7/8 (174.62)	4-3/8	#14-1/0

RCCHL102

① Outdoor Loadcentres accommodate Type DS conduit hubs. Hubs not included. See page 11 for selection.

② Does not accept plug-on neutral style of arc fault and ground fault circuit breakers. Uses standard type arc fault and ground fault circuit breakers.

③ Enclosure assembly incoporates a swing out locking hasp for the cover.

Type CH Plug-In Circuit Breakers ⑨

- 10,000 Amperes Interrupting Capacity at 120/240VAC
- Flag trip models provide visual indication of trip

Product Selection

Table 29. Single and Multi-Pole Plug-In Breakers

Amperes	Wire Size Range (Cu/AL 60ºC or 75ºC) (AWG)	1-Pole 120/240VAC Standard 10 per Shelf Carton Catalogue Number	1-Pole 120/240VAC Flag Trip Indication 10 per Shelf Carton Catalogue Number	2-Pole 120/240VAC Standard 5 per Shelf Carton Catalogue Number	2-Pole 120/240VAC Flag Trip Indication 5 per Shelf Carton Catalogue Number	3-Pole 240VAC Standard 5 per Shelf Carton Catalogue Number
10	(1) #14-8 ①, (2) #14-10 ①②, (1) #14-6 ③	CH110	—	CH210	—	CH310
15	(1) #14-8 ①, (2) #14-10 ①②, (1) #14-6 ③	CH115 ⑦⑧	CHF115	CH215 ⑧	CHF215	CH315 ⑧
20	(1) #14-8 ①, (2) #14-10 ①②, (1) #14-6 ③	CH120 ⑦⑧	CHF120	CH220 ⑧	CHF220	CH320 ⑧
25	(1) #14-8 ①, (2) #14-10 ①②, (1) #14-6 ③	CH125 ⑧	CHF125	CH225 ⑧	CHF225	CH325 ⑧
30	(1) #14-8 ①, (2) #14-10 ①②, (1) #14-6 ③	CH130 ⑧	CHF130	CH230 ⑧	CHF230	CH330 ⑧
35	#14-2 ①, #14-6 ③	CH135 ⑧	—	CH235 ⑧	—	CH335 ⑧
40	#10-1/0 ④, #14-2 ⑤, #3-0 ⑥	CH140 ⑧	—	CH240 ⑧	—	CH340 ⑧
45	#10-1/0 ④, #14-2 ⑤, #3-0 ⑥	CH145 ⑧	—	CH245 ⑧	—	CH345 ⑧
50	#10-1/0 ④, #14-2 ⑤, #3-0 ⑥	CH150 ⑧	—	CH250 ⑧	—	CH350 ⑧
60	#10-1/0 ④, #14-2 ⑤, #3-0 ⑥	CH160 ⑧	—	CH260 ⑧	—	CH360 ⑧
70	#10-1/0 ④, #14-2 ⑤, #3-0 ⑥	CH170	—	CH270 ⑧	—	CH370 ⑧
80	#10-1/0 ④, #14-2 ⑤, #3-0 ⑥	—	—	CH280	—	CH380
90	#10-1/0 ④, #14-2 ⑤, #3-0 ⑥	—	—	CH290	—	CH390
100	#10-1/0 ④, #14-2 ⑤, #3-0 ⑥	—	—	CH2100	—	CH3100
110	#10-1/0 ④, #14-2 ⑤, #3-0 ⑥	—	—	CH2110	—	—
125	#10-1/0 ④, #14-2 ⑤, #3-0 ⑥	—	—	CH2125	—	—
		Requires One ¾-Inch (19.1mm) Space		Requires Two ¾-Inch (19.1mm) Spaces		Requires Three ¾-Inch (19.1mm) Spaces

Type CH Twin Circuit Breakers ⑦⑧⑨

- 10,000 Amperes Interrupting Capacity at 120/240VAC
- Provides 2 single-pole circuits in one ¾" space

Product Selection

Table 30. Twin Plug-In Circuit Breakers

Ampere Rating	Wire Size Range (Cu/AL 60ºC or 75ºC) (AWG)	1-Pole 120/240VAC 10 per Shelf Carton Catalogue Number
15-15	#14 - 8	CHNT1515
15-20	#14 - 8	CHNT1520
20-20	#14 - 8	CHNT2020
		Requires One ¾-Inch (19.1mm) Space

① For 1- and 2-pole breakers.
② Solid and stranded wire can be used together.
③ For 3-pole breakers.
④ 1-Pole 60-70 amperes, 2-pole 80-125 amperes, 3-pole 40-100 amperes.
⑤ 1-Pole 40-50 amperes, 2-pole 40-70 amperes.
⑥ 2-Pole 150 amperes.
⑦ Switching duty rated.
⑧ HACR rated.
⑨ Not for use in Type BR Loadcentres i.e. CPM or CPL prefixed catalogue numbers.

Type CHP Commercial Circuit Breakers ⑧

- 10,000 Amperes Interrupting Capacity at 120VAC, 120/240VAC, and 240VAC
- 3 Position trip breakers for commercial applications when On-Off and Trip position is required.

Product Selection

Table 31. Commercial Plug-In Circuit Breakers

Amperes	Wire Size Range (Cu/AL 60°C or 75°C) (AWG)	1-Pole 120/240VAC 10 per Shelf Carton Catalogue Number	2-Pole 120/240VAC 5 per Shelf Carton Catalogue Number	3-Pole 240VAC 5 per Shelf Carton Catalogue Number
10	(1) #14-8 ①, (2) #14-10 ①②, (1) #14-6 ③	CHP110	CHP210	CHP310
15	(1) #14-8 ①, (2) #14-10 ①②, (1) #14-6 ③	CHP115 ⑥⑦	CHP215 ⑦	CHP315 ⑦
20	(1) #14-8 ①, (2) #14-10 ①②, (1) #14-6 ③	CHP120 ⑥⑦	CHP220 ⑦	CHP320 ⑦
25	(1) #14-8 ①, (2) #14-10 ①②, (1) #14-6 ③	CHP125 ⑦	CHP225 ⑦	CHP325 ⑦
30	(1) #14-8 ①, (2) #14-10 ①②, (1) #14-6 ③	CHP130 ⑦	CHP230 ⑦	CHP330 ⑦
35	#14-2 ①, #14-6 ③	CHP135 ⑦	CHP235 ⑦	CHP335 ⑦
40	#10-1/0 ④, #14-2 ⑤	CHP140 ⑦	CHP240 ⑦	CHP340 ⑦
45	#10-1/0 ④, #14-2 ⑤	CHP145 ⑦	CHP245 ⑦	CHP345 ⑦
50	#10-1/0 ④, #14-2 ⑤	CHP150 ⑦	CHP250 ⑦	CHP350 ⑦
60	#10-1/0 ④, #14-2 ⑤	CHP160 ⑦	CHP260 ⑦	CHP360 ⑦
70	#10-1/0 ④, #14-2 ⑤	CHP170	CHP270	CHP370
80	#10-1/0 ④, #14-2 ⑤	—	CHP280	—
90	#10-1/0 ④, #14-2 ⑤	—	CHP290	—
100	#10-1/0 ④, #14-2 ⑤	—	CHP2100	CHP3100
110	#10-1/0 ④, #14-2 ⑤	—	CHP2110	—
125	#10-1/0 ④, #14-2 ⑤	—	CHP2125	—
		Requires One ¾-Inch (19.1mm) Space	Requires Two ¾-Inch (19.1mm) Spaces	Requires Three ¾-Inch (19.1mm) Spaces

① For 1- and 2-pole breakers.
② Solid and stranded wire can be used together.
③ For 3-pole breakers.
④ 1-Pole 60-70 amperes, 2-pole 80-125 amperes, 3-pole 40-100 amperes.
⑤ 1-Pole 40-50 amperes, 2-pole 40-70 amperes.
⑥ Switching duty rated.
⑦ HACR rated.
⑧ Not for use in Type BR Loadcentres i.e. CPM or CPL prefixed catalogue numbers.

Type CH Arc Fault Circuit Interrupter Circuit Breakers ③

- 10,000 Amperes Interrupting Capacity at 120VAC, and 120/240VAC
- Plug-On Neutral style for Plug-On Neutral type CH loadcentres

Product Description

A Branch Feeder Type Arc Fault Circuit Interrupter is a device intended to mitigate parallel arcing faults in the complete circuit, including connected cords. Parallel arcing faults can occur from line to neutral or line to ground. These arcing faults are in parallel with the load and produce the most energy of all arcing faults..

Product Selection

Table 32. Single and Two Pole Plug-In FIRE-GUARD™ AFCI Circuit Breakers

Ampere Rating	Wire Size Range (Cu/AL 60°C or 75°C) (AWG)	Configuration	1-Pole 120/240VAC 10 per Shelf Carton 10kAIC Catalogue Number	2-Pole 120/240VAC 5 per Shelf Carton 10kAIC ①② Catalogue Number
15	#14 - 4	Standard	CH115AF	—
15	#14 - 4	Common Trip	—	CH215AF
15	#14 - 4	Independent Trip	—	CH215AFIT
15	#14 - 4	Plug-On Neutral ④	CH115AFPN	—
20	#14 - 4	Standard	CH120AF	
20	#14 - 4	Common Trip	—	CH220AF
20	#14 - 4	Independent Trip	—	CH220AFIT
20	#14 - 4	Plug-On Neutral ④	CH120AFPN	—
			Requires One ¾-Inch (19.1mm) Space	Requires Two ¾-Inch (19.1mm) Spaces

Type CH 1-Pole AFCI Circuit Breaker

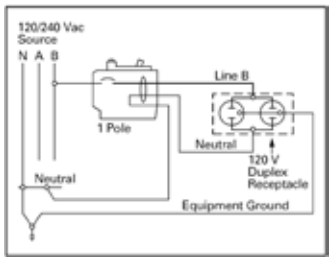


Figure 15 1-Pole Single 120V Load Application Sourced by 120/240VAC

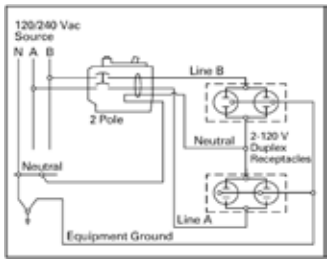


Figure 16 2-Pole Shared Neutral with Multi-Duplex Receptacle Application

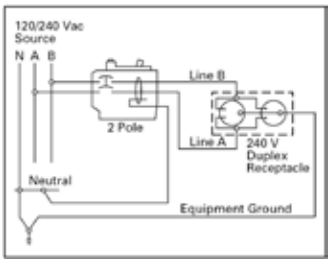


Figure 17 2-Pole 240V Load Application Sourced by 120/240VAC

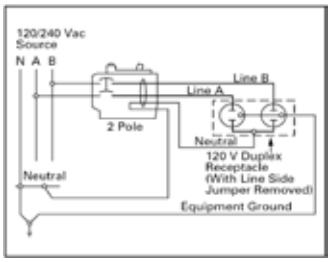


Figure 18 2-Pole Shared Neutral with Duplex Receptacle Application

① Common trip refers to 2-pole 240 volt load application sourced by 120/240 Vac (see Figure 17).

② Independent trip refers to 2-pole multi-wire, home run or shared neutral circuits (see Figure 16 and Figure 18).

③ Not for use in Type BR Loadcentres i.e. CPM or CPL prefixed catalogue numbers.

③ Only for use in the Type CH Plug-On Neutral style of combination and non-combination loadcentres.

Type CH Ground Fault Circuit Breakers ②

- 10,000 Amperes Interrupting Capacity at 120VAC and 120/240VAC
- 5mA "People Protection" or 30mA Equipment Protectors
- Two pole version features common trip.

Type CH 2-Pole GFCI Circuit Breaker

Product Selection

Table 33. 5mA Single and Two Pole Plug-In Ground Fault Circuit Breakers

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C (AWG)	1-Pole 120VAC Standard 1 per Shelf Carton 10kAIC Catalogue Number	1-Pole 120VAC Plug-On Neutral ③ 1 per Shelf Carton 10kAIC Catalogue Number	2-Pole 120/240VAC Standard 1 per Shelf Carton 10kAIC Catalogue Number
15	#14 - 6 ①	CH115GF	CH115GFPN ③	CH215GF
20	#14 - 6 ①	CH120GF	CH120GFPN ③	CH220GF
25	#14 - 6 ①	CH125GF	—	CH225GF
30	#14 - 6 ①	CH130GF	—	CH230GF
35	#14 - 6 ①	—	—	CH235GF
40	#14 - 6 ①	—	—	CH240GF
45	#14 - 6 ①	—	—	CH245GF
50	#14 - 6 ①	—	—	CH250GF
60	#14 - 6 ①	—	—	CH260GF
		Requires One ¾-Inch (19.1mm) Space		Requires Two ¾-Inch (19.1mm) Spaces

Table 34. 30mA Single and Two Pole Plug-In Ground Fault Circuit Breaker Equipment Protectors

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C (AWG)	1-Pole 120VAC 1 per Shelf Carton 10kAIC Catalogue Number	2-Pole 120/240VAC 1 per Shelf Carton 10kAIC Catalogue Number
15	#14 - 6 ①	CH115EPD	CH215EPD
20	#14 - 6 ①	CH120EPD	CH220EPD
25	#14 - 6 ①	CH125EPD	—
30	#14 - 6 ①	CH130EPD	CH230EPD
40	#14 - 6 ①	—	CH240EPD
50	#14 - 6 ①	—	CH250EPD
60	#14 - 6 ①	—	CH260EPD
		Requires One ¾-Inch (19.1mm) Space	Requires Two ¾-Inch (19.1mm) Spaces

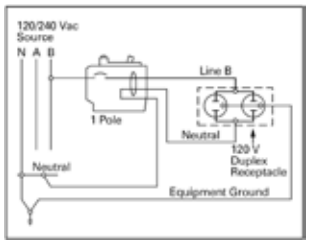


Figure 19 1-Pole Single 120V Duplex Receptacle Application

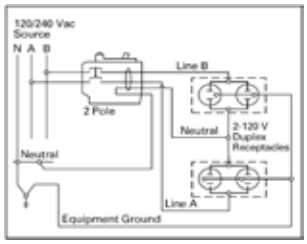


Figure 20 2-Pole 120V Multi-Duplex Receptacle Application

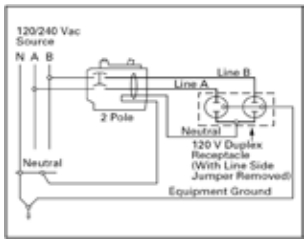


Figure 21 2-Pole 120V Duplex Receptacle Application

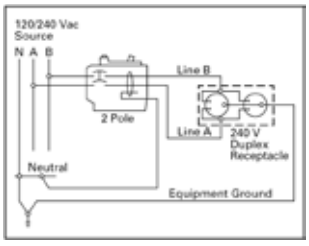


Figure 22 2-Pole 240V Duplex Receptacle Application

Ground Fault Application Note

Single-pole ground fault circuit breakers (Type CHGFIs) are designed for use in 2-wire, 120VAC circuits. Figure 19 shows a typical wiring configuration.

Two-pole ground fault circuit breakers (Type CHGFIs) are designed for use in 3-wire, 120/240VAC circuits, 120VAC multi-wire circuits employing common, neutral and 2-wire, 240VAC circuits obtained from a 120/240VAC source.

Figures 20 and 21 illustrate typical wiring configurations for 120/240VAC multi-wire circuits.

Figure 22 depicts a 240VAC, 2-wire circuit. Note the "panel neutral" conductor connects to the neutral bar, even though the neutral is not included in the load circuit. This connection is necessary to supply a 120VAC power source to the ground fault sensing circuit.

The figures are shown with a 120/240VAC, single-phase, 3-wire power source, but are also applicable to a 120/208VAC, 3-phase, 4-wire power supply. For all figures the electrical operation of the Type CHGFI is not affected by the equipment ground.

① 60 Ampere breaker listed for 75°C Cu wire only

② Not for use in Type BR Loadcentres i.e. CPM or CPL prefixed catalogue numbers.

③ Only for use in the Type CH Plug-On Neutral style of combination and non-combination loadcentres.

Type CSH Loadcentre Main Circuit Breaker Kit

CSH2150N

- 35,000 Amperes Interrupting Capacity at 120/240VAC.

Product Selection

Table 35. Two Pole Main Circuit Breakers for Single Phase Plug-In Combination Loadcentres

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C	2-Pole 120/240VAC 1 per Shelf Carton 35kAIC Catalogue Number
100	#2AWG - 300kcmil	CSH2100N
150	#2AWG - 300kcmil	CSH2150N
200	#2AWG - 300kcmil	CSH2200N

Plug-In Loadcentre and Circuit Breaker Accessories for CH

Product Selection

Table 36. Field Installation Kits and Parts for Plug-In Loadcentres and Circuit Breakers

Description	Ordering Qty. [1]	Catalogue Number
Handle Tie for single pole Type CH circuit breakers. Joins handles on breakers mounted adjacent to each other via a moulded plastic handle cover.	1	CHHT
Handle Lockoff (Escutcheon mounted). 1, or 2-Pole Type CH circuit breakers.	1	CHPL
Handle Lockoff (Escutcheon mounted). 1, or 2-Pole Type CHGFI circuit breakers.	1	CHPLGF
Handle Lockoff (Escutcheon mounted). Locks the handle of main circuit breaker type CSH in the OFF of ON position.	1	MCBPL
Handle Lockdog (Handle mounted). 1-pole Type CH circuit breakers. Secures handle in the ON or OFF position.	1	CHLO
Sub-feed kit for 125A Loadcentres. Requires Two 3/4" (19.1mm) spaces.	1	CHSF2125
3/4" (19.1mm) Filler plate kit [1]	1	CHFP [1]
Door lock for 24-60 circuit 100 and 200A (CH).	1	TDL [2]
Trim screw kit (CH)	1	LCCS [3]
Sandalwood plastic replacement door latch	1	CHRLS
Branch Circuit Numbering Strip Kit for CH	1	CHNS [4]

Definitions

Handle Ties - devices used to join two similar independent single-pole circuit breakers to form a 2-pole non-common trip breaker.
Handle Lockoffs - devices that use a padlock to lock a circuit breaker's handle in either the ON or OFF position.
Handle Lockdogs - devices used to secure a circuit breaker's handle in the ON or OFF position. They are not padlockable devices.
Escutcheon Mounted - a semipermanent mounting to the face of the circuit breaker and secured by the loadcentre's deadfront cover.
Handle Mounted - a mounting made directly to the handle of the circuit breaker by means of a set screw.
Screw Mounted - a permanent mounting to the face of the circuit breaker by means of a non-removable screw.

[1] Kit includes 25 pieces.
[2] Comes with a set of keys.
[3] Kit includes 25 pieces.
[4] Kit includes 20 pieces.

Single Phase 120/240VAC Type 1 (Indoor) Loadcentres

- CSA Certified only (Not UL Approved)
- Utilize Type BAB, QBHW, QBA, DNBA, or QBGF circuit breakers as branch circuit breakers.

Product Selection

Table 37. Single Phase 3 Wire 120/240VAC Aluminum Bus Loadcentres

Maximum Ampere Rating	Main Breaker Rating	Catalogue Number	Max. No. 1" Spaces	Max. No. 1/2" Spaces	Cover Style	Dimensions (Inches / mm) H	W	D	Wire Size Range for Main CU/AL
125	100	CBM118 ①	18	36	Flush/Surface	27 / 685.8	14-1/4 / 361.9	3-3/4 / 95.3	#8 - #1 Cu / #8 - 1/0 Al
125	100	CBM130 ①	30	60	Flush/Surface	34-1/8 / 866.8	14-1/4 / 361.9	3-3/4 / 95.3	#8 - #1 Cu / #8 - 1/0 Al
125	100	CBM142 ①	42	84	Flush/Surface	39 / 990.6	14-1/4 / 361.9	3-3/4 / 95.3	#8 - #1 Cu / #8 - 1/0 Al
225	200	CBM218 ②	18	36	Flush/Surface	34-1/8 / 866.8	14-1/4 / 361.9	3-3/4 / 95.3	#4 - 4/0
225	200	CBM230 ②	30	60	Flush/Surface	39 / 990.6	14-1/4 / 361.9	3-3/4 / 95.3	#4 - 4/0
225	200	CBM242 ②	42	84	Flush/Surface	45 / 1143	14-1/4 / 361.9	3-3/4 / 95.3	#4 - 4/0

Three Phase 240VAC Type 1 (Indoor) Loadcentres

- CSA Certified only (Not UL Approved)
- Utilize Type BAB, QBHW, QBA, DNBA, or QBGF circuit breakers as branch circuit breakers.

Product Selection

Table 38. Three Phase 4 Wire 240VAC Maximum Aluminum Bus Loadcentres

Maximum Ampere Rating	Main Breaker Rating	Catalogue Number	Max. No. 1" Spaces	Max. No. 1/2" Spaces	Cover Style	Dimensions (Inches / mm) H	W	D	Wire Size Range for Main CU/AL
125	100	3CBM118 ③	18	36	Flush/Surface	27 / 685.8	14-1/4 / 361.9	3-3/4 / 95.3	#8 - #1 Cu / #8 - 1/0 Al
125	100	3CBM130 ③	30	60	Flush/Surface	34-1/8 / 866.8	14-1/4 / 361.9	3-3/4 / 95.3	#8 - #1 Cu / #8 - 1/0 Al
125	100	3CBM142 ③	42	84	Flush/Surface	39 / 990.6	14-1/4 / 361.9	3-3/4 / 95.3	#8 - #1 Cu / #8 - 1/0 Al
225	200	3CBM218 ④	18	36	Flush/Surface	34-1/8 / 866.8	14-1/4 / 361.9	3-3/4 / 95.3	#4 - 4/0
225	200	3CBM230 ④	30	60	Flush/Surface	39 / 990.6	14-1/4 / 361.9	3-3/4 / 95.3	#4 - 4/0
225	200	3CBM242 ④	42	84	Flush/Surface	45 / 1143	14-1/4 / 361.9	3-3/4 / 95.3	#4 - 4/0

3CBM242

① BAB2100 Main circuit breaker factory installed.
② ED2200 Main circuit breaker factory installed.
③ BAB3100H Main circuit breaker factory installed.
④ ED3200 Main circuit breaker factory installed.

Single Phase 120/240VAC Type 1 (Indoor) Loadcentres

- CSA Certified only (Not UL Approved)
- Utilize Type BAB, QBHW, QBA, DNBA, or QBGF circuit breakers as branch circuit breakers.

Product Selection

Table 39. Single Phase 3 Wire 120/240VAC Copper Bus Loadcentres

Maximum Ampere Rating	Main Breaker Rating	Catalogue Number	Max. No. 1" Spaces	Max. No. 1/2" Spaces	Cover Style	Dimensions (Inches / mm) H	W	D	Wire Size Range for Main CU/AL
125	100	CBM118CU ①	18	36	Flush/Surface	27 / 685.8	14-1/4 / 361.9	3-3/4 / 95.3	#8 - #1 Cu / #8 - 1/0 Al
125	100	CBM130CU ①	30	60	Flush/Surface	34-1/8 / 866.8	14-1/4 / 361.9	3-3/4 / 95.3	#8 - #1 Cu / #8 - 1/0 Al
125	100	CBM142CU ①	42	84	Flush/Surface	39 / 990.6	14-1/4 / 361.9	3-3/4 / 95.3	#8 - #1 Cu / #8 - 1/0 Al
225	200	CBM218CU ②	18	36	Flush/Surface	34-1/8 / 866.8	14-1/4 / 361.9	3-3/4 / 95.3	#4 - 4/0
225	200	CBM230CU ②	30	60	Flush/Surface	39 / 990.6	14-1/4 / 361.9	3-3/4 / 95.3	#4 - 4/0

Three Phase 240VAC Type 1 (Indoor) Loadcentres

- CSA Certified only (Not UL Approved)
- Utilize Type BAB, QBHW, QBA, DNBA, or QBGF circuit breakers as branch circuit breakers.

Product Selection

Table 40. Three Phase 4 Wire 240VAC Maximum Copper Bus Loadcentres

Maximum Ampere Rating	Main Breaker Rating	Catalogue Number	Max. No. 1" Spaces	Max. No. 1/2" Spaces	Cover Style	Dimensions (Inches / mm) H	W	D	Wire Size Range for Main CU/AL
125	100	3CBM118CU ③	18	36	Flush/Surface	27 / 685.8	14-1/4 / 361.9	3-3/4 / 95.3	#8 - #1 Cu / #8 - 1/0 Al
125	100	3CBM130CU ③	30	60	Flush/Surface	34-1/8 / 866.8	14-1/4 / 361.9	3-3/4 / 95.3	#8 - #1 Cu / #8 - 1/0 Al
125	100	3CBM142CU ③	42	84	Flush/Surface	39 / 990.6	14-1/4 / 361.9	3-3/4 / 95.3	#8 - #1 Cu / #8 - 1/0 Al
225	200	3CBM230CU ④	30	60	Flush/Surface	39 / 990.6	14-1/4 / 361.9	3-3/4 / 95.3	#4 - 4/0

① BAB2100 Main circuit breaker factory installed.
② ED2200 Main circuit breaker factory installed.
③ BAB3100H Main circuit breaker factory installed.
④ ED3200 Main circuit breaker factory installed.

Single Phase 120/240VAC Type 1 (Indoor) Loadcentres

- CSA Certified only (Not UL Approved)
- Utilize Type BAB, QBHW, QBA, DNBA, or QBGF circuit breakers as branch circuit breakers.

Product Selection

Table 41. Single Phase 3 Wire 120/240VAC Aluminum Bus Loadcentres

Maximum Ampere Rating	Catalogue Number	Max. No. 1" Spaces	Max. No. 1/2" Spaces	Cover Style	Dimensions (Inches / mm) H	W	D	Wire Size Range for Main Cu/Al
125	CBL118	18	36	Flush/Surface	27 / 685.8	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM
125	CBL130	30	60	Flush/Surface	34-1/8 / 866.8	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM
125	CBL142	42	84	Flush/Surface	39 / 990.6	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM
225	CBL218	18	36	Flush/Surface	27 / 685.8	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM
225	CBL230	30	60	Flush/Surface	34-1/8 / 866.8	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM
225	CBL242	42	84	Flush/Surface	39 / 990.6	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM

Three Phase 240VAC Type 1 (Indoor) Loadcentres

- CSA Certified only (Not UL Approved)
- Utilize Type BAB, QBHW, QBA, DNBA, or QBGF circuit breakers as branch circuit breakers.

Product Selection

Table 42. Three Phase 4 Wire 240VAC Aluminum Bus Loadcentres

Maximum Ampere Rating	Catalogue Number	Max. No. 1" Spaces	Max. No. 1/2" Spaces	Cover Style	Dimensions (Inches / mm) H	W	D	Wire Size Range for Main Cu/Al
125	3CBL118	18	36	Flush/Surface	27 / 685.8	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM
125	3CBL130	30	60	Flush/Surface	34-1/8 / 866.8	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM
125	3CBL142	42	84	Flush/Surface	39 / 990.6	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM
225	3CBL218	18	36	Flush/Surface	27 / 685.8	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM
225	3CBL230	30	60	Flush/Surface	34-1/8 / 866.8	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM
225	3CBL242	42	84	Flush/Surface	39 / 990.6	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM

CBL130

Type CBL Bolt-On Loadcentres

Non-Combination (Main Lug Only) Single & Three Phase Copper Bus

Single Phase 120/240VAC Type 1 (Indoor) Loadcentres

- CSA Certified only (Not UL Approved)
- Utilize Type BAB, QBHW, QBA, DNBA, or QBGF circuit breakers as branch circuit breakers.

Product Selection

Table 43. Single Phase 3 Wire 120/240VAC Copper Bus Loadcentres

Maximum Ampere Rating	Catalogue Number	Max. No. 1" Spaces	Max. No. 1/2" Spaces	Cover Style	Dimensions (Inches / mm) H	W	D	Wire Size Range for Main Cu/Al
125	CBL118CU	18	36	Flush/Surface	27 / 685.8	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM
125	CBL130CU	30	60	Flush/Surface	34-1/8 / 866.8	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM
125	CBL142CU	42	84	Flush/Surface	39 / 990.6	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM
225	CBL218CU	18	36	Flush/Surface	27 / 685.8	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM
225	CBL230CU	30	60	Flush/Surface	34-1/8 / 866.8	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM
225	CBL242CU	42	84	Flush/Surface	39 / 990.6	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM

Three Phase 240VAC Type 1 (Indoor) Loadcentres

- CSA Certified only (Not UL Approved)
- Utilize Type BAB, QBHW, QBA, DNBA, or QBGF circuit breakers as branch circuit breakers.

Product Selection

Table 44. Three Phase 4 Wire 240VAC Copper Bus Loadcentres

Maximum Ampere Rating	Catalogue Number	Max. No. 1" Spaces	Max. No. 1/2" Spaces	Cover Style	Dimensions (Inches / mm) H	W	D	Wire Size Range for Main Cu/Al
125	3CBL118CU	18	36	Flush/Surface	27 / 685.8	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM
125	3CBL130CU	30	60	Flush/Surface	34-1/8 / 866.8	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM
125	3CBL142CU	42	84	Flush/Surface	39 / 990.6	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM
225	3CBL230CU	30	60	Flush/Surface	34-1/8 / 866.8	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM
225	3CBL242CU	42	84	Flush/Surface	39 / 990.6	14-1/4 / 361.9	3-3/4 / 95.3	#6-300MCM

Type BAB and QBHW

♦ 10,000 / 22,000 Amperes Interrupting Capacity at 120VAC, 120/240VAC, and 240VAC

Product Selection

Table 45. Single and Multi-Pole Bolt-On Circuit Breakers

Ampere Rating	Wire Size Range (Cu/AL 60ºC or 75ºC) (AWG)	1-Pole 120/240VAC 10kAIC Catalogue Number	1-Pole 120/240VAC 22kAIC Catalogue Number	2-Pole 120/240VAC 10kAIC Catalogue Number	2-Pole 120/240VAC 22kAIC Catalogue Number	3-Pole 120/240VAC 10kAIC Catalogue Number	3-Pole 120/240VAC 22kAIC Catalogue Number
10	#14 - 4	BAB1010	—	—	—	—	—
15	#14 - 4	BAB1015	QBHW1015	BAB2015	QBHW2015	BAB3015H	QBHW3015
20	#14 - 4	BAB1020	QBHW1020	BAB2020	QBHW2020	BAB3020H	QBHW3020
25	#14 - 4	BAB1025	—	—	—	—	—
30	#14 - 4	BAB1030	QBHW1030	BAB2030	QBHW2030	BAB3030H	QBHW3030
40	#14 - 4	BAB1040	QBHW1040	BAB2040	QBHW2040	BAB3040H	QBHW3040
50	#14 - 4	BAB1050	QBHW1050	BAB2050	QBHW2050	BAB3050H	QBHW3050
60	#8 - 1 CU, #8 - 1/0 AL	BAB1060	QBHW1060	BAB2060	QBHW2060	BAB3060H	QBHW3060
70	#8 - 1 CU, #8 - 1/0 AL	BAB1070	QBHW1070	BAB2070	QBHW2070	BAB3070H	QBHW3070
90	#8 - 1 CU, #8 - 1/0 AL	—	—	BAB2090	QBHW2090	BAB3090H	QBHW3090
100	#8 - 1 CU, #8 - 1/0 AL	—	—	BAB2100	QBHW2100	BAB3100H	QBHW3100
125	#8 - 1 CU, #8 - 1/0 AL	—	—	BAB2125	QBHW2125	—	—
		Requires One 1-Inch (25.4mm) Space		Requires Two 1-Inch (25.4mm) Spaces		Requires Three 1-Inch (25.4mm) Spaces	

Type BAB High Intensity Discharge (HID) Rated

♦ 10,000 Amperes Interrupting Capacity at 120VAC, 120/240VAC, and 240VAC

Product Selection

Table 46. Single-Pole HID Rated Bolt-On Circuit Breakers

Ampere Rating	Wire Size Range (Cu/AL 60ºC or 75ºC) (AWG)	1-Pole 120/240VAC 10kAIC Catalogue Number
15	#14 - 4	BAB1015D
20	#14 - 4	BAB1020D
		Requires One 1-Inch (25.4mm) Space

Type QBA Arc Fault Circuit Interrupter Circuit Breakers

- 10,000 / 22,000 Amperes Interrupting Capacity at 120VAC, 120/240VAC, and 240VAC

Product Selection

Table 47. Single and Two Pole Bolt-On FIRE-GUARD™ AFCI Circuit Breakers

Ampere Rating	Configuration	1-Pole 120/240VAC 10kAIC Catalogue Number	1-Pole 120/240VAC 22kAIC Catalogue Number	2-Pole ①② 120/240VAC 10kAIC Catalogue Number	2-Pole ①② 120/240VAC 22kAIC Catalogue Number	Wire Size Range (Cu/AL 60°C or 75°C) (AWG)
15	Standard	QBAF1015	QBHAF1015	—	—	#14 - 4
15	with GFCI	QBAG1015	QBHAG1015	—	—	#14 - 4
15	Common Trip	—	—	QBAF2015	QBHAF2015	#14 - 4
15	Independent Trip	—	—	QBAF2015IT	QBHAF2015IT	#14 - 4
15	Common Trip with GFCI	—	—	QBAG2015	QBHAG2015	#14 - 4
20	Standard	QBAF1020	QBHAF1020	—	—	#14 - 4
20	with GFCI	QBAG1020	QBHAG1020	—	—	#14 - 4
20	Common Trip	—	—	QBAF2020	QBHAF2020	#14 - 4
20	Independent Trip	—	—	QBAF2020IT	QBHAF2020IT	#14 - 4
20	Common Trip with GFCI	—	—	QBAG2020	QBHAG2020	#14 - 4
		Requires One 1-Inch (25.4mm) Space	Requires One 1-Inch (25.4mm) Space	Requires Two 1-Inch (25.4mm) Spaces	Requires Two 1-Inch (25.4mm) Spaces	

Type DNBA Duplex Circuit Breakers

- 10,000 Amperes Interrupting Capacity at 120/240VAC
- Provides 2 single-pole circuits in one 1" space

Product Selection

Table 48. Twin Plug-In Circuit Breakers

Ampere Rating	Wire Size Range (Cu/AL 60°C or 75°C) (AWG)	1-Pole 120/240VAC 10 per Shelf Carton Catalogue Number
15-15	#14 - 4	DNBA1515
20-20	#14 - 4	DNBA2020
30-30	#14 - 4	DNBA3030
		Requires One 1-Inch (25.4mm) Space

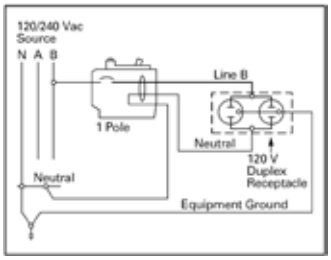


Figure 23. 1-Pole Single 120V Load Application Sourced by 120/240VAC

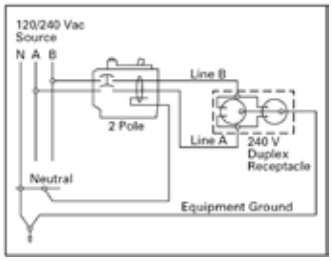


Figure 25. 2-Pole 240V Load Application Sourced by 120/240VAC

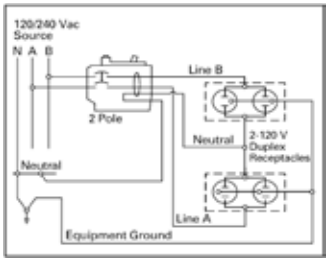


Figure 24. 2-Pole Shared Neutral with Multi-Duplex Receptacle Application

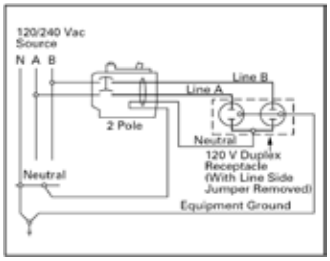


Figure 26. 2-Pole Shared Neutral with Duplex Receptacle Application

① Common trip refers to 2-pole 240 volt load application sourced by 120/240 Vac (see Figure 25).
② Independent trip refers to 2-pole multi-wire, home run or shared neutral circuits (see Figure 24 and Figure 26).

Type QBGF and QBGFEP Ground Fault Circuit Breakers

- 10,000 / 22,000 Amperes Interrupting Capacity at 120VAC and 120/240VAC
- 5mA "People Protection" or 30mA Equipment Protectors
- Two pole version features common trip.

Product Selection

Table 49. 5mA Single and Two Pole Bolt-On Ground Fault Circuit Breakers

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C (AWG)	1-Pole 120VAC 1 per Shelf Carton 10kAIC Catalogue Number	2-Pole 120/240VAC 1 per Shelf Carton 10kAIC Catalogue Number
15	#14 - 10 CU, #12 - 10 AL	QBGF1015	QBGF2015
20	#14 - 10 CU, #12 - 10 AL	QBGF1020	QBGF2020
30	#10 CU #8 AL	QBGF1030	QBGF2030
40	#8 CU #8 - 6 AL	QBGF1040	QBGF2040
50	#8 - 6 CU #6 - 4 AL	—	QBGF2050
		Requires One 1-Inch (25.4mm) Space	Requires Two 1-Inch (25.4mm) Spaces

Table 50. 30mA Single and Two Pole Bolt-On Ground Fault Circuit Breaker Equipment Protectors

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C (AWG)	1-Pole 120VAC 1 per Shelf Carton 10kAIC Catalogue Number	1-Pole 120VAC 1 per Shelf Carton 22kAIC Catalogue Number	2-Pole 120/240VAC 1 per Shelf Carton 10kAIC Catalogue Number	2-Pole 120/240VAC 1 per Shelf Carton 22kAIC Catalogue Number
15	#14 - 4	QBGFEP1015	QBHGFEP1015	QBGFEP2015	QBHGFEP2015
20	#14 - 4	QBGFEP1020	QBHGFEP1020	QBGFEP2020	QBHGFEP2020
25	#14 - 4	QBGFEP1025	QBHGFEP1025	QBGFEP2025	QBHGFEP2025
30	#14 - 4	QBGFEP1030	QBHGFEP1030	QBGFEP2030	QBHGFEP2030
		Requires One 1-Inch (25.4mm) Space	Requires One 1-Inch (25.4mm) Space	Requires Two 1-Inch (25.4mm) Spaces	Requires Two 1-Inch (25.4mm) Spaces

Bolt-On Accessories

Product Selection

Table 51. Field Installation Kits and Parts for Bolt-On Loadcentres and Circuit Breaker

Description	Ordering Qty.	Catalogue Number
Handle Lockoff 1 Pole of Type DNBA Duplex Circuit Breakers (Package of 10).	1	BRDL1-10
Handle Lockoff Type BQL circuit breakers	1	BQL-10
Handle Lockoff Type BAB and QBHW circuit breakers	1	QL123PL
Handle Lockdog 1-pole Type BAB and QBHW circuit breakers	1	QL1NPL
Handle Lockdog 2 and 3-pole Type BAB and QBHW circuit breakers.	1	QL23NPL
Filler Plates 1" Space (Package of 24)	1	BRFP
Sub Feed Lug 100A (For Main Lug panel style)	1	CBSF100
Sub Feed Lug 225A (For Main Lug panel style)	1	CBSF225
Sub Feed Lug Kit 100A 3 Phase (For Main Lug panel style)	1	3CBSF100
Sub Feed Lug Kit 225A 3 Phase (For Main Lug panel style)	1	3CBSF225
Circuit Breaker Directory Card 1-42 (Package of 50)	1	DIRCARD42
Circuit Breaker Directory Sleeve (Package of 25)	1	DIRSLEEVE
Loadcentre Door Lock	1	TDL
Isolated Ground Kit	1	ISGRD

Definitions

Handle Lockoffs - devices that use a padlock to lock a circuit breaker's handle in either the ON or OFF position.
Handle Lockdogs - devices used to secure a circuit breaker's handle in the ON or OFF position. They are not padlockable devices.

Product Description

A Transfer Switch Panel is a device that is mounted next to or incorporated within the loadcentre (distribution panel) in the home or small business. The Transfer Switch Panel is used in conjunction with an emergency generator (usually supplied by others) and serves the purpose of turning selected circuits on and off during a power outage. The Transfer Switch Panel allows the owner to start up a generator and then restore power to critical circuits when utility power is not available.

The owner designates which circuits are critical such as their refrigerator, furnace, and certain lighting loads. Sometimes called Emergency Power Panels, Emergency Generator Panels, Gen. Panels, Transfer Switches or Emergency Panels; Transfer Switch Panels provide the homeowner or small business owner with a safe and easy way to continue using essential electrical loads when utility power is not available.

Application Description

Transfer Switch Panels are most often used in residential, agricultural and light commercial applications. Comfort and safety are key concerns of many homeowners who are dependent on an uninterrupted supply of electricity.

The increase in our dependence on power is due in part to the popularity of home business and in-home care. In addition, various rural and urban regions in North America experience periodic power outages due to extreme weather conditions such as ice and snowstorms, heat waves, tornadoes or hurricanes. Regions such as Pacific, Atlantic, and Central are the strongest markets for portable generators and Transfer Switch Panels.

Features, Functions, and Benefits

Eaton offers two unique manual transfer switch emergency power solutions.

- Manual Transfer Switches or a Generator sub-panel.
- Combination Service Entrance Loadcentre with Generator Sub-panel.

Important:
Before installation, consult appropriate electrical codes. Installation information is included in the carton.

Manual Transfer Switches/ Generator Panels

CPL112GI3 (30A only)

- Main utility and emergency (generator) breaker factory installed.
- Available in 30 and 60 ampere design.
- Utility breaker and generator breakers are mechanically interlocked to protect equipment and personnel by preventing dangerous dual-source feeding.
- Critical loads permanently connected to allow for quick and convenient switching from utility power to stand-by generator power.
- Designed for switched neutral applications. Can be reconfigured in field for non-switched neutral applications.
- Sturdy and reliable 125A rated aluminum bus design.
- Type BR/DNPL branch breakers sold separately.
- Ideal for new and retrofit installations.
- EEMAC 1 indoor enclosure design.
- CPL112GI3 special features
  - NEMA L14-30 Inlet for generator connection.
  - Two Watt meters measure power consumption on L1 and L2 to aid in balancing

Standards and Certifications

- CSA approved.

Product Specifications

- 10,000 AIC rating.
- Switching devices must be circuit breakers.
- Transfer switch panel must be supplied with neutral and ground.

Combination Service Entrance Loadcentre Generator Panel

CPM126GEN

- Single enclosure (EEMAC 1) to house both loadcentre and generator breakers
- Factory installed main breakers.
- Available in 100 and 200 ampere designs.
- Utility and emergency transfer switch breaker factory installed.
- Utility breaker and generator breakers are mechanically interlocked to protect equipment and personnel by preventing dangerous dual-source feeding.
- Critical loads permanently connected to allow for quick and convenient switching from utility power to stand-by generator power.
- Designed for switched neutral applications. Can be reconfigured in field for non-switched neutral applications.
- Type BR/DNPL branch breakers sold separately.
- Ideal for new and retrofit installations.
- EEMAC 1 indoor enclosure design.

Standards and Certifications

- CSA approved.

Product Specifications

- 10,000 AIC rating for CPM126GEN
- 25,000 AIC rating for CPM236GEN
- Switching devices must be circuit breakers.
- Transfer switch panel must be supplied with neutral and ground.

Product Selection

Table 52. Manual Transfer Switches/ Generator Panels

Catalogue Number	Bus Rating (A)	Generator Breaker (A)	Switched Neutral	Enclosure Rating	Max. Total Branch Circuits (1"/½")	Inlet Receptacle Type	Height Branch Circuits (Inches / mm)	Width (Inches / mm)	Depth (Inches / mm)
CPL112G3	125	30	Yes	EEMAC 1	6 / 12	-	16.750 / 425.45	14.375 / 365.13	3.875 / 98.43
CPL112G6	125	60	Yes	EEMAC 1	6 / 12	-	16.750 / 425.45	14.375 / 365.13	3.875 / 98.43
CPL120G6	125	60	Yes	EEMAC 1	14 / 28	-	21.000 / 533.40	14.375 / 365.13	3.875 / 98.43
CPL130G6	125	60	Yes	EEMAC 1	24 / 48	-	29.125 / 739.78	14.375 / 365.13	3.875 / 98.43
CPL112GI3	125	30	Yes	EEMAC 1	6 / 12	L14-30	16.750 / 425.45	14.375 / 365.13	3.875 / 98.43
RCPL112GI3	125	30	Yes	EEMAC 3	6 / 12	L14-30	16.50 / 419.10	14.375 / 365.13	5 / 127.00

Table 53. Combination Service Entrance Loadcentre Generator Panel

Catalogue Number	Bus Rating (A)	Loadcentre Main Breaker (A)	Max. Total Branch Circuits (1"/½")	Generator Breaker (A)	Switched Neutral	Max. Generator Branch Circuits	Height (Inches / mm)	Width (Inches / mm)	Depth (Inches / mm)
CPM126GEN	125	100	26/52	30	Yes	6/12	39.000 / 990.60	14.375 / 365.13	3.875 / 98.43
CPM236GEN	200	200	36/72	60	Yes	6/12	45.000 / 1143	14.375 / 365.13	3.875 / 98.43

Table 54. Portable Generator Power Inlet Box

Catalogue Number	Ampere Rating (A)	Inlet Receptacle Type	Enclosure Rating	Height (Inches / mm)	Width (Inches / mm)	Depth (Inches / mm)
CH10EGENPIB ①	30	L14-30	NEMA 3R	6-1/16 / 153.99	5-9/16 / 141.29	5-3/8 / 136.52

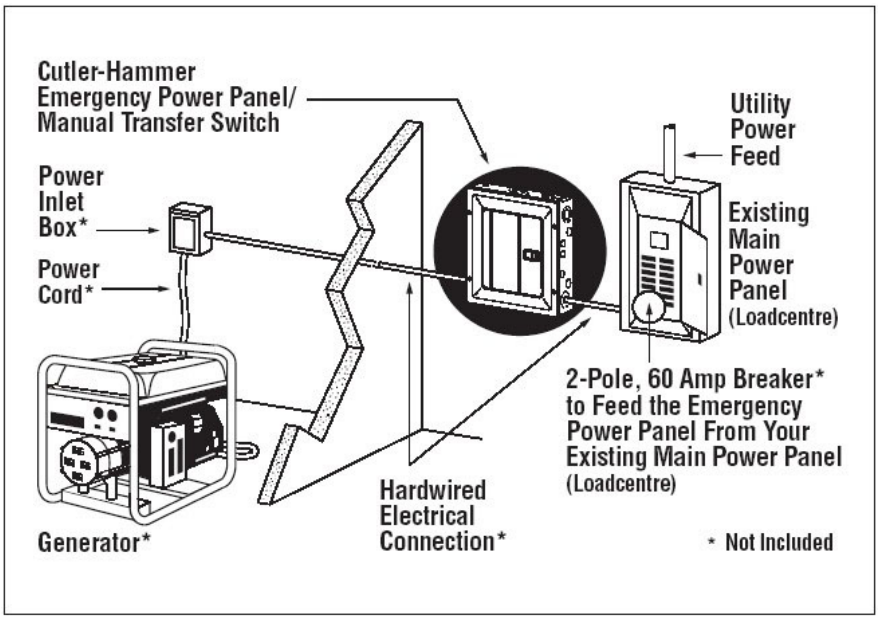


Figure 27. Typical Installation Diagram

Notes:

- Combination Service Entrance Loadcentre Generator Panels come complete with an integrated emergency generator panel.
- Combination Service Entrance Loadcentre Generator Panels come complete with factory installed utility feeder breaker for emergency generator panel section.

*** Not Included**

① Not CSA approved.

Single Phase 3-Wire 120/240VAC Ground Fault Circuit Interrupter Spa Panels

- Factory assembled, prewired, tested, and ready to install.
- Two-Pole 5mA "People Protection" type CH Ground fault circuit interrupter circuit breaker.
- Two additional one-pole circuits available.
- Test button provides a means of confirming proper GFCI circuit breaker operation.
- 10,000 amps interrupting capacity.
- 120/240VAC Single Phase 3-wire
- Pre installed neutral and ground bars.
- Type 3R enclosure good for indoor or outdoor mounting.
- Interior deadfront provides protection from energized parts.
- Padlockable cover provides added security and safety.
- Audible alarm option factory or field installable.
- Can be used as a disconnect to turn the spa pump on and off.
- Main lug connections will accomodate a single #14 - 1/0 AWG conductor. ②

Product Description

CEC Rule 68-086 (1) and (6) requires that a Ground Fault Circuit Interrupter, of a Class A Type, be installed not closer than 3m (10 feet) to a pool or spa water. In cases where a spa is installed some distance from your main loadcentre it is often more convenient to locate this protection device in a small panel closer to the spa. Excessive cable lengths required to connect directly back to a protection device in your main loadcentre may be more susceptible to insulation breakage and result in nuisance tripping of the breaker. The reduced distance the owner must travel to reset a tripped circuit breaker in a localized spa panel may also be an excellent selling point for the owner.

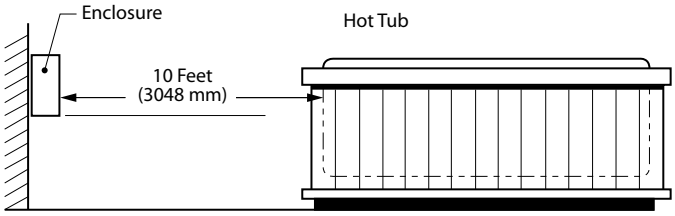
Product Selection

Table 55. Two Pole Plug-In Type 3R Spa Panels

Catalogue Number	Breaker Amperage (A)	Breaker Type	Enclosure Style	Audible Alarm	Height (Inches / mm)	Width (Inches / mm)	Depth (Inches / mm)
CH30SPA	30	CH	Indoor/Outdoor Type 3R ①	N	12 / 304.8	6.875 / 174.62	4.5 / 114.3
CH30SPALARM	30	CH	Indoor/Outdoor Type 3R ①	Y	12 / 304.8	6.875 / 174.62	4.5 / 114.3
CH40SPA	40	CH	Indoor/Outdoor Type 3R ①	N	12 / 304.8	6.875 / 174.62	4.5 / 114.3
CH40SPALARM	40	CH	Indoor/Outdoor Type 3R ①	Y	12 / 304.8	6.875 / 174.62	4.5 / 114.3
CH50SPA	50	CH	Indoor/Outdoor Type 3R ①	N	12 / 304.8	6.875 / 174.62	4.5 / 114.3
CH50SPALARM	50	CH	Indoor/Outdoor Type 3R ①	Y	12 / 304.8	6.875 / 174.62	4.5 / 114.3
CH60SPA	60	CH	Indoor/Outdoor Type 3R ①	N	12 / 304.8	6.875 / 174.62	4.5 / 114.3
CH60SPALARM	60	CH	Indoor/Outdoor Type 3R ①	Y	12 / 304.8	6.875 / 174.62	4.5 / 114.3

Table 56. Spa Panel Accessories

Catalogue Number	Description
CHSPALARM	Field installable Audible Alarm Kit (breaker & panel not included)



Check national and local codes for compliance.

CEC Code Note

CEC Rule 68-086 (1) and (6) requires that a Ground Fault Circuit Interrupter, of a Class A Type, be installed not closer than 3m (10 feet) to a pool or spa water

① Outdoor Loadcentres accommodate Type DS conduit hubs. Hubs not included. See page 11 for selection.
② Refer to page 30 for Type CH ground fault circuit breaker accepted load conductor sizes.

Residential Surge Suppression Products

- Stage 1 and Stage 2 surge protection as well as Type 1 and Type 2 offering.
- Convenient in-panel mount unit for Type BR loadcentres.
- Knockout mount or surface mount CHSP design. DIN mount adapter for Type 1.
- Limited lifetime warranty on CHSP family.
- Dovetail clip together telephone and cable surge accessories for CHSPT2 design.
- Flush mount kit for CHSPT2 design knockout mounting.
- Type 1 & 2 surge supression product designed to meet UL 1449 3rd edition standard.



Product Description

Today's homes are filled with increasing quantities of devices containing sensitive electronic components. These devices can easily be damaged by common power surges also some times called line transients, spikes, or voltage impulses. Lighting strikes, utility grid switching, other users on the powerline, and internal surges from air conditioners and powers tools are the most common sources these damaging line transients. To protect your investment it is recommended that a surge suppression device be installed. Surge protection can be broken into two stages. Stage 1 protection is primary protection for your service entrance. This protection is typically installed inside or adjacent to a home's service entrance distribution panel. Stage 2 protection is secondary protection or protection at the point of use. For proper surge protection both a stage 1 and stage 2 device must be installed. Eaton offers surge products to provide both levels of protection to your sensitive equipment as well as both Type 1 and Type 2 surge devices that meet the latest UL 1449 3rd standard. We also offer surge protection devices for telephone, cable/satellite and ethernet protection since surges are not isolated to the utility lines only.

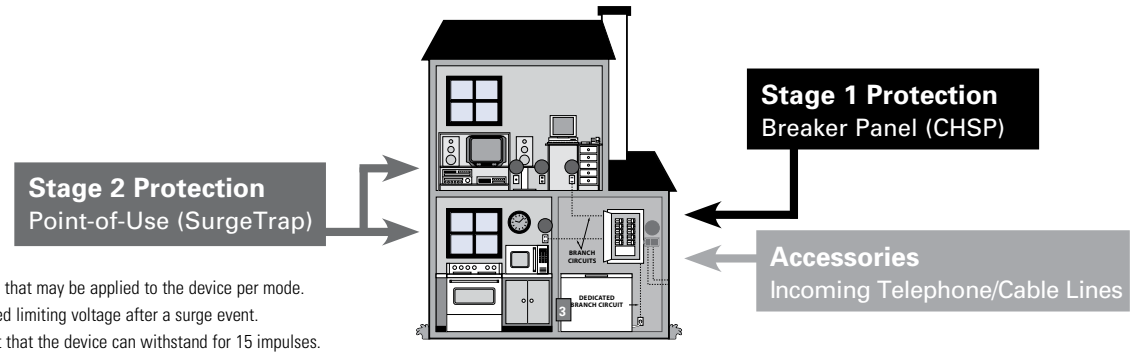
Product Selection

Table 57. Stage 1 (Point of service entrance) Residential Surge Suppression Products for Type BR Plug-In Loadcentres

Catalogue Number	Connection	Voltage (Vac)	Phase	Frequency (Hz)	Maximum Continuous Operating Voltage ① (V)	Voltage Protection Rating ②	Nominal Discharge Current ③ (A)	Short Circuit Current Rating ④ (A)	Surge Current Capacity per Phase ⑤ (A)
BRSURGE	Plug-On to loadcentre bus in Type BR loadcentres.	120/240	Single	60	200 Line to Neutral (L-N) 400 Line to Line (L-L)	600V L-N 1000V L-L	3,000	10,000	18,000

Table 58. Stage 1 Type 2 (Point of service entrance) Residential Surge Suppression Products for Any Loadcentre

Catalogue Number	Connection	Voltage (Vac)	Phase	Frequency (Hz)	Maximum Continuous Operating Voltage ① (V)	Voltage Protection Rating ②	Nominal Discharge Current ③ (A)	Short Circuit Current Rating ④ (A)	Surge Current Capacity per Phase ⑤ (A)
CHSPT2MICRO	Can be attached to the outside of any manufacturer's loadcentre (breaker box). This product should be connected on the load side of the loadcentre main service disconnect through a dedicated circuit breaker (follow CEC Guidelines).	120/240	Single	60	150 Line to Neutral (L-N) 300 Line to Line (L-L)	600V L-N 1000V L-L 800V N-G 600V L-G	5,000	22,000	36,000
CHSPT2MAX		120/240	Single	60			10,000	22,000	72,000
CHSPT2ULTRA		120/240	Single	60			20,000 ⑥	22,000	108,000
CHSPT23PACK ⑦		120/240	Single	60			20,000 ⑥	22,000	108,000



① Maximum Continuous Operating Voltage that may be applied to the device per mode.
② Voltage Protection Rating is the measured limiting voltage after a surge event.
③ Nominal Discharge Current is the current that the device can withstand for 15 impulses.
④ The amount of current the product can withstand under short circuit conditions.
⑤ The maximum one time surge current rating per phase.
⑥ When used with a 50A two-pole breaker, 10kA when used with a 15A two-pole breaker.
⑦ CHSPT23PACK contains one each of CHSPT2ULTRA, CHSPCABLE, and CHSPTELE.

Residential Surge Suppression Products Continued

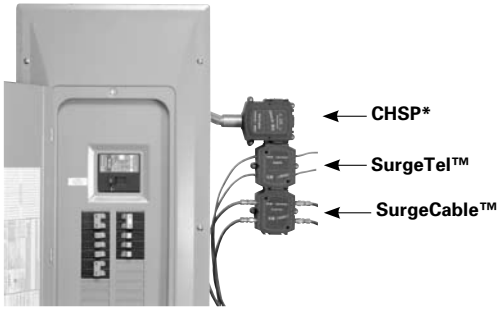
Table 59. Stage 2 (Point-of-use) Residential Surge Suppression Products

Catalogue Number	Protection Level	Application	AC Outlets	Telephone Outlets	Cable Outlets	Cord Length	Product Warranty	Connected Equipment Warranty	Maximum Surge Current (A) ①	Total Joules (Joules)
SMICRO1T	Entry Level	AC Power, Telephone/Modem	1	1	—	—	Lifetime	$50,000	36,000	540
SMICRO1C	Entry Level	AC Power, Cable TV	1	—	1	—	Lifetime	$50,000	36,000	540
SMICRO6T	Entry Level	AC Power, Telephone/Modem	6	1	—	—	Lifetime	$50,000	36,000	540
SMICRO6TC	Entry Level	AC Power, Telephone/Modem, Cable TV	6	1	1	—	Lifetime	$50,000	36,000	540
SMICRO7	Entry Level	AC Power	7	—	—	6ft	Lifetime	$50,000	36,000	540
SMAX7	Mid Level	AC Power	7	—	—	6ft	Lifetime	$75,000	72,000 - 144,000	1,080 - 2,160
SMAX7T	Mid Level	AC Power, Telephone/Modem	7	1	—	6ft	Lifetime	$75,000	72,000 - 144,000	1,080 - 2,160
SMAX7C	Mid Level	AC Power, Cable TV	7	—	1	6ft	Lifetime	$75,000	72,000 - 144,000	1,080 - 2,160
SMAX8TC	Mid Level	AC Power, Telephone/Modem, Cable TV	8	1	1	6ft	Lifetime	$75,000	72,000 - 144,000	1,080 - 2,160
SULT10TC	Advanced	AC Power, Telephone/Modem, Cable TV, DBS Satellite	10	1	1	6ft	Lifetime	$150,000	144,000 - 288,000	2,160 - 4,320
SULT12TC	Advanced		12	1	1	6ft	Lifetime	$150,000	144,000 - 288,000	2,160 - 4,320
SULT8T	Advanced	AC Power, Telephone/Modem	8	1	—	6ft	Lifetime	$150,000	144,000 - 288,000	2,160 - 4,320
SCONST7	Heavy Duty	AC Power	7	—	—	6ft	Lifetime	N/A	72,000	1,080
POWER3	None	Power Strips	36	—	—	3ft	—	—	—	—
POWER5	None	Power Strips	6	—	—	5ft				

Micro Max Ultra Construction

Table 60. Residential Surge Suppression Accessories

Catalogue Number	Description	Application	Product Warranty	Connected Equipment Warranty	Maximum Surge Current (A) ①
CHSPTELE	SurgeTel™	Telephone, modem, and DSL (4 lines)	Lifetime	$10,000	80,000
CHSPCABLE	SurgeCable™	Cable TV, satellite, cable modems (2 lines)	Lifetime	$10,000	20,000
CHSPFMKIT	Flushmount Kit™	Flush mount kit for finished wall installations	—	N/A	N/A



Installation

CHSP and accessories can be mounted on the side, top, or bottom of a circuit breaker panel.
* CHSP MICRO, MAX, ULTRA or the 3 pack can be used interchangeably depending on protection required.

SurgeTel™ SurgeCable™

① Maximum surge rating is the sum of all modes of protection.

Type 1 Surge Protective Devices

- Commercial grade AC power protection.
- Type 1 surge device for installation before or after the main service disconnect.
- Universal fit to any manufacturer's equipment.
- Clear visible LED indication displaying status of surge protector.
- Optional accessory kit enables wall or DIN-rail mounting (SP1DINRAILKIT).
- Suitable for indoor or outdoor applications.
- Can be used as a replacment for what was previously known as secondary surge arrestors or lightning arrestors.

Table 61. Type 1 Surge Protective Devices for Service Entrance Surge Protection of Any Loadcentre - UL 1449 3rd Edition Compliant

Catalogue Number	Connection	Voltage (Vac)	Phase	Frequency (Hz)	Maximum Continuous Operating Voltage ① (V)	Voltage Protection Rating ②	Nominal Discharge Current ③ (A)	Short Circuit Current Rating ④ (A)	Surge Current Capacity per Phase ⑤ (A)
CHSPT1MICRO	Permanently connected device installed before or after the service disconnect overcurrent device. (follow CEC Guidelines for connection).	100/200 110/220 120/240	Single	50/60	150 Line to Neutral (L-N) 300 Line to Line (L-L)	600V L-N 1000V L-L	20,000	200,000	36,000
CHSPT1MAX		100/200 110/220 120/240	Single	50/60	150 Line to Neutral (L-N) 300 Line to Line (L-L)	600V L-N 1000V L-L	20,000	200,000	45,000
CHSPT1ULTRA		100/200 110/220 120/240	Single	50/60	150 Line to Neutral (L-N) 300 Line to Line (L-L)	600V L-N 1000V L-L	20,000	200,000	50,000
CHSPT1-208Y		100/200 110/220 120/240	Three-Phase WYE	50/60	150 Line to Neutral (L-N) 300 Line to Line (L-L)	600V L-N 1000V L-L	20,000	200,000	50,000

① Maximum Continuous Operating Voltage that may be applied to the device per mode.
② Voltage Protection Rating is the measured limiting voltage after a surge event.
③ Nominal Discharge Current is the current that the device can withstand for 15 impulses.
④ The amount of current the product can withstand under short circuit conditions.
⑤ The maximum one time surge current rating per phase.

Service Entrance Approved Street and Roadway Lighting Panels

- Compact in-pole panel fits into lighting pole hand well.
- Pole mount 3R (rain-tight) street lighting panels can be mounted right onto the pole.
- Pedestal mount 3R (rain-tight) street lighting panels feature a Eaton loadcentre housed in a Pencell enclosure.

Product Description

Since January 1, 2003 the Ontario Electric Safety Code requires that all roadway lighting shall meet the service entrance requirements of Rule 30-1002. Eaton has developed several designs of approved products to suit the various installation points (pole mounted, within an enclosure etc). All products are CSA approved.

In-Pole Street Lighting Panels

- Fits into most pole manufacturers' hand well.
- Service entrance approved.
- 3R Rain-tight.
- Pre-wired.
- Single pole or 2-pole 22kA 50A versions.
- Removable mounting plates accommodate multiple hand wells.
- CSA Approved.
- Approximate dimensions 9" x 2-1/4" x 4".
- Line power connections via #6 AWG conductor pigtail.
- Load power connections via #14 AWG conductor pigtail.
- #6 AWG Conductor pigtail provided for daisy chaining of additional light poles.

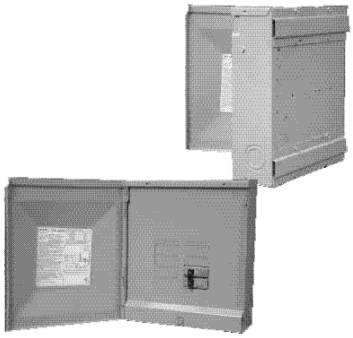
Product Selection

Table 62. In-Pole Street Lighting Panels

Catalogue Number		Voltage (V)	Main Circuit Breaker	Interrupting (kAIC)
1SL150PCO	120Vac In-Pole Compact Street Lighting Panel	120Vac	Single Pole 15A	22
1SL300PCO	120V In-Pole Compact Street Lightning Panel	120Vac	Single Pole 30A	22
1SL500PCO	120Vac In-Pole Compact Street Lighting Panel	120Vac	Single Pole 50A	22
2SL150PCO	240Vac In-Pole Compact Street Lighting Panel	120/240Vac	Two Pole 15A	22
2SL300PCO	240Vac In-Pole Compact Street Lighting Panel	120/240Vac	Two Pole 30A	22
2SL500PCO	240Vac In-Pole Compact Street Lighting Panel	120/240Vac	Two Pole 50A	22

Service Entrance Approved Street and Roadway Lighting Panels Continued

On-Pole Street Lighting Panels



- Mounts directly onto the pole.
- Strap mount version includes slots in the enclosure back to allow for strap mounting.
- Two extra 1" breaker locations that accept type BR and DNPL plug-in circuit breakers for additional lighting loads.
- Service entrance approved.
- 3R Rain-tight.
- Single pole or 2-pole 22kA 50, 60, or 70A versions.
- CSA Approved.
- Approximate dimensions 13" x 11" x 4-1/2".
- Bottom entry service entrance cabling only.

Product Selection

Table 63. On-Pole Street Lighting Panels Standard Mount

Catalogue Number	Voltage (V)	Main Circuit Breaker	Interrupting (kAIC)	Branch Circuits (1"/½")	Main Circuit Breaker Wire Size Range (Cu/AL 60°C or 75°C) (AWG)
1SL502	120	Single Pole 50A	22	2 / 4	#14 - 4
1SL602	120	Single Pole 60A	22	2 / 4	#4 - 1/0
1SL702	120	Single Pole 70A	22	2 / 4	#4 - 1/0
2SL502	120/240	Two Pole 50A	22	2 / 4	#14 - 4
2SL602	120/240	Two Pole 60A	22	2 / 4	#4 - 1/0
2SL702	120/240	Two Pole 70A	22	2 / 4	#4 - 1/0

Product Selection

Table 64. On-Pole Street Lighting Panels Strap Mount

Catalogue Number	Voltage (V)	Main Circuit Breaker	Interrupting (kAIC)	Branch Circuits (1"/½")	Main Circuit Breaker Wire Size Range (Cu/AL 60°C or 75°C) (AWG)
1SL502S	120	Single Pole 50A	22	2 / 4	#14 - 4
1SL602S	120	Single Pole 60A	22	2 / 4	#4 - 1/0
1SL702S	120	Single Pole 70A	22	2 / 4	#4 - 1/0
2SL502S	120/240	Two Pole 50A	22	2 / 4	#14 - 4
2SL602S	120/240	Two Pole 60A	22	2 / 4	#4 - 1/0
2SL702S	120/240	Two Pole 70A	22	2 / 4	#4 - 1/0
2SL706S	120/240	Two Pole 70A	22	6 / 12	#4 - 1/0

Service Entrance Approved Street and Roadway Lighting Panels Continued

Pedestal Mounted Street Lighting Panels

- Lightweight, stand-alone units mount on the ground.
- Polyethylene Pencell enclosure provides rugged, Low profile, rain-tight assembly.
- Penta head and key lock provision for security.
- Vented or non-vented enclosure styles..
- Two extra 1" breaker locations accept type BR and DNPL plug-in circuit breakers for additional lighting loads.
- Service entrance approved.
- 3R Rain-tight.
- Single pole or 2-pole 22kA 50, 60, or 70A versions.
- CSA Approved.
- Underground duct or direct burial cable accessible.

Non-Vented

Product Selection

Table 65. Pedestal Mount Non-Vented Street Lighting Panels

Catalogue Number	Voltage (V)	Main Circuit Breaker	Interrupting (kAIC)	Branch Circuits (1"/½")	Extension	Main Circuit Breaker Wire Size Range (Cu/AL 60ºC or 75ºC) (AWG)
1SL502NV	120	Single Pole 50A	22	2 / 4	No	#14 - 4
1SL602NV	120	Single Pole 60A	22	2 / 4	No	#4 - 1/0
1SL702NV	120	Single Pole 70A	22	2 / 4	No	#4 - 1/0
2SL502NV	120/240	Two Pole 50A	22	2 / 4	No	#14 - 4
2SL602NV	120/240	Two Pole 60A	22	2 / 4	No	#4 - 1/0
2SL702NV	120/240	Tow Pole 70A	22	2 / 4	No	#4 - 1/0
1SL502NVE	120	Single Pole 50A	22	2 / 4	Yes	#14 - 4
1SL602NVE	120	Single Pole 60A	22	2 / 4	Yes	#4 - 1/0
1SL702NVE	120	Single Pole 70A	22	2 / 4	Yes	#4 - 1/0
2SL502NVE	120/240	Two Pole 50A	22	2 / 4	Yes	#14 - 4
2SL602NVE	120/240	Two Pole 60A	22	2 / 4	Yes	#4 - 1/0
2SL702NVE	120/240	Tow Pole 70A	22	2 / 4	Yes	#4 - 1/0

Product Selection

Table 66. Pedestal Mount Vented Street Lighting Panels

Catalogue Number	Voltage (V)	Main Circuit Breaker	Interrupting (kAIC)	Branch Circuits (1"/½")	Extension	Main Circuit Breaker Wire Size Range (Cu/AL 60ºC or 75ºC) (AWG)
1SL502VE	120	Single Pole 50A	22	2/4	Yes	#14 - 4
1SL602VE	120	Single Pole 60A	22	2/4	Yes	#4 - 1/0
1SL702VE	120	Single Pole 70A	22	2/4	Yes	#4 - 1/0
2SL502VE	120/240	Two Pole 50A	22	2/4	Yes	#14 - 4
2SL602VE	120/240	Two Pole 60A	22	2/4	Yes	#4 - 1/0
2SL702VE	120/240	Tow Pole 70A	22	2/4	Yes	#4 - 1/0

Vented

Combined Loadcentre and Meter Socket

- 4 Jaw, 100 and 200A, 120/240V 22kAIC.
- Service entrance rated with 100 or 200A main circuit breaker included.
- Suitable for underground or overhead service entrance.
- Meter socket mechanical lugs accommodate #6-250MCM Cu/Al line conductors and (2) #6-300MCM Cu/Al neutral conductors.
- Loadcentre mechanical lugs load and neutral (2) #6-300MCM Cu/Al.
- CSR circuit breaker mechanical load lugs #2-300MCM.
- Suitable for over head or under ground service entrance.
- Suitable applications include farming, temporary service, construction sites, trailers, and mobile homes.
- Hub opening and plate included. Hubs ordered separately (use DS type hubs)
- 3R Enclosure
- CSA Approved

Product Selection

Table 67. Combined Loadcentre and Meter Socket

Catalogue Number	Enclosure	Voltage (V)	Amperage (A)	Interrupting (kAIC)	Entrance Type	Branch Circuits (1"/½")	Weight (lbs / kg)	Dimensions (In / mm)
RCPM108M	Indoor/Outdoor Type 3R	120/240	100	22	Underground/Overhead	8/16	36.5 / 16.6	28-3/8 x 14-7/16 x 5-3/8 974.7 x 366.7 x 136.5
RCPM208M	Indoor/Outdoor Type 3R	120/240	200	22	Underground/Overhead	8/16	36.5 / 16.6	28-3/8 x 14-7/16 x 5-3/8 974.7 x 366.7 x 136.5

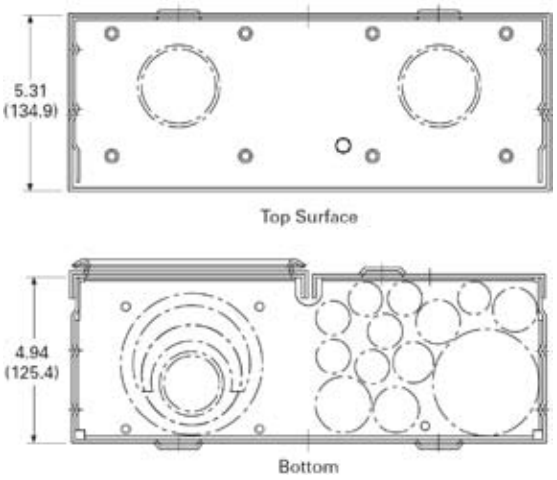


Table 68. Knockout Legend

Location	Knockout Size (Inches (mm))	Quantity
Bottom End Wall	.50 (12.7)	7
Bottom End Wall	.50, .75 (12.7, 19.1)	4
Bottom End Wall	.50, .75, 1.00 (12.7, 19.1, 25.4)	1
Bottom End Wall	1.00, 1.25, 1.50, 2.00 (25.4, 31.8, 38.1, 50.8)	1
Bottom End Wall	1.25, 1.50, 2.00, 2.50, 3.00 (31.8, 38.1, 50.8, 63.5, 76.2)	1
Top End Wall	Provision for Hub① (e.g. DS200H2, DS250H2, DS300H2)	2
Backplane	1.25, 1.50, 2.00, 2.50 (31.8, 38.1, 50.8, 63.5)	1
Backplane	1.25, 1.50, 2.00 (31.8, 38.1, 50.8)	1
Right Sidewall	1.25, 1.50, 2.00, 2.50 (31.8, 38.1, 50.8, 63.5)	1

① Accommodate Type DS conduit hubs. Hubs not included. See Page 11 for selection.

Metered Temporary Power Panel with Ground Fault Protection

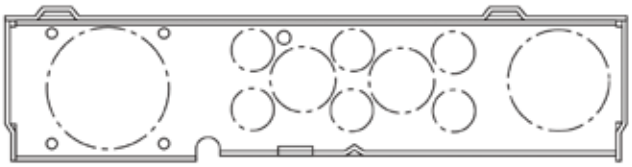
- Combination loadcentre, meter socket, and electrical outlets for temporary work site installations.
- Single phase 3 wire
- 4 Jaw, 100 or 200A, 120/240V 22kAIC meter socket.
- Suitable for over head or under ground service entrance.
- CSA approved for service entrance.
- 3R Enclosure suitable for outdoor installations.
- Two different receptacle combinations 6X20A and 2X30A or 10X20A.
- Hub opening and plate included. Hubs ordered separately (uses DS type hubs).
- Meter socket mechanical lugs accommodate #6-250MCM Cu/Al line conductors and #6-300MCM Cu/Al neutral conductors.

Product Selection

Table 69. Metered Temporary Ground Fault Protected Power Panel

Catalogue Number	Enclosure	Voltage (V)	Amperage (A)	Interrupting (kAIC)	Entrance Type	20A Receptacles	30A Receptacles	Dimensions (In / mm)
RCPM1GF6H	Indoor/Outdoor Type 3R	120/240	100	22	Underground/Overhead	6	2	34-3/8 x 22 x 5-3/8 873.1 x 558.8 x 136.5
RCPM1GF10	Indoor/Outdoor Type 3R	120/240	100	22	Underground/Overhead	10	0	34-3/8 x 22 x 5-3/8 873.1 x 558.8 x 136.5
RCPM2GF6H	Indoor/Outdoor Type 3R	120/240	200	22	Underground/Overhead	6	2	34-3/8 x 22 x 5-3/8 873.1 x 558.8 x 136.5
RCPM2GF10	Indoor/Outdoor Type 3R	120/240	200	22	Underground/Overhead	10	0	34-3/8 x 22 x 5-3/8 873.1 x 558.8 x 136.5

Top Surface



Bottom

Table 70. Knockout Legend

Catalogue Number	Knockout Size (in)	Quantity
Bottom Endwall	1/2, 3/4	6
Bottom Endwall	1/2, 3/4, 1, 1-1/4	2
Bottom Endwall	1, 1-1/4, 1-1/2, 2, 2-1/2	1
Bottom Endwall	1, 1-1/4, 1-1/2, 2, 2-1/2, 3	1
Top Endwall	Provision for Hub① (e.g. DS200H2, DS250H2, DS300H2)	1

① Accommodate Type DS conduit hubs. Hubs not included. See Page 11 for selection.

Mini-Power Centres

- Distribution transformer, breaker protection, and loadcentre all in one compact package.
- Primary and secondary breaker protection via factory installed EHD or FDB type MCCBs.
- 18, 25, or 35kAIC Interrupting capacity versions available on select models through special order.
- Two styles of interior; one for plug-in or bolt-on (breakers not included).
- Loadcentre accommodates up to 24 feeder circuit breakers. (Breakers purchased separately)
- Aluminum chassis on plug-in type, copper chassis on bolt-on type, standard ground bar, and enclosure grounded neutral bar.
- All live parts are enclosed.
- Hinged, padlockable cover prevents removal.
- Enclosure includes grounding terminal.
- Type 3R enclosure with baked polymer polyester powder coating is good for indoor or outdoor mounting.
- Optional type 3R, 316 grade stainless steel enclosure.
- Main circuit breaker barrier provides CSA approval for service entrance applications.
- Electrical grade aluminum windings standard on the distribution transformer (copper optional).
- Copper windings standard on bolt-on style units.
- 185°C Insulation system.
- 115°C Winding temperature rise.
- Full capacity taps (FCBN) 2-5%.
- Resin encapsulated, core-coil assembly (cores grounded with copper lead).

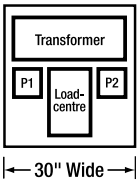
Product Description

Contemporary electrical distribution systems are required to do more in less space while at the same time being cost-effective. Eaton provides a solution to these requirements with the proven Mini-Power Centre. It occupies considerably less space and can save up to 31 percent of the installation costs normally required when individual components are used. The solution is possible because a Mini-Power Centre combines three individual components into one NEMA Type 3R enclosure: a main breaker, an encapsulated Type EP or EPT Dry-Type Transformer, and a secondary distribution loadcentre with main breaker. Interconnecting wiring is completed at the factory. A Mini-Power Centre is delivered ready for installation. It's suitable for use as service entrance equipment, too. Mini-Power Centres are used wherever there is a 480V or 600V distribution system and loads requiring 208Y/120V three-phase or 120/240V single-phase.
Typical installations include:

- Industrial plant assembly lines
- Test equipment
- Warehouses
- Plant expansions
- Temporary power at construction sites
- Car washes
- Commercial buildings
- Sewage disposal plants
- Parking lots

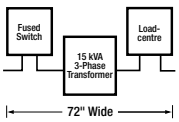
The Mini-Power Centre saves you space, time, and money.
A Mini-Power Centre installation takes up only 42% of the space taken up by a typical installation. A typical installation being comprised of a separately mounted distribution transformer, disconnect switch, loadcentre and all associated wiring and connectors.

Mini-Power Centre 15kVA, Three-Phase



P1 – Primary Breaker
P2 – Secondary Breaker

Normal Layout 15kVA, Three-Phase



The installation costs of a Mini-Power Centre are 31% less when compared with the same typical installation.

	Time To Perform Task(s) [1] (Hours)			
	15kVA	15kVA	25kVA	25kVA
Installation	Typical Installation	Mini-Power Centre Installation	Typical Installation	Mini-Power Centre Installation
Switch & Fuse Mounting	5	0	5	0
Transformer Layout (remove knockout, etc.)	16	16	24	24
Fasten Transformer to wall	4	0	4	0
Layout Loadcentre, mount and connect source	4	4	6	4
Total Hours:	29	20	39	28
% Time Saved by using a Eaton Mini-Power Centre:		31%		28%

[1] Time estimates are typical and will vary according to geographical area.

Product Selection

Table 71. Single Phase Plug-In Mini-Power Centres

kVA	Primary & Secondary Voltage (V)	Catalogue Number ①	Main Circuit Breaker ③		Maximum Number of Feeder Circuit Breakers			Maximum Amperage	Dimensions ② (Inches / mm)			Weight (lbs / kg)
			Primary	Secondary	1-Pole	2-Pole	3-Pole		Height	Width	Depth	
3	480 to 120/240	P48G11S03P	EHD2015	BR215	8	4	-	12	27.5 / 699	12.6 / 320	105 / 47	105 / 47
5	480 to 120/240	P48G11S05P	EHD2020	BR225	12	6	-	20	29.5 / 749	12.6 / 320	105 / 47	105 / 47
7.5	480 to 120/240	P48G11S07P	EHD2030	BR230	12	6	-	30	29.5 / 749	12.6 / 320	125 / 56	125 / 56
10	480 to 120/240	P48G11S10P	EHD2040	BR250	12	6	-	40	38.2 / 970	13.5 / 343	177 / 80	177 / 80
15	480 to 120/240	P48G11S15P	EHD2060	BR270	20	10	-	60	38.2 / 970	13.5 / 343	212 / 96	212 / 96
25	480 to 120/240	P48G11S25P	EHD2100	BR2125	26	13	-	100	43.9 / 1115	16.4 / 417	373 / 169	373 / 169
5	600 to 120/240	P60G11S05P	FDB2015	BR225	12	6	-	20	29.5 / 749	12.6 / 320	105 / 47	105 / 47
7.5	600 to 120/240	P60G11S07P	FDB2030	BR230	12	6	-	30	29.5 / 749	12.6 / 320	125 / 56	125 / 56
10	600 to 120/240	P60G11S10P	FDB2040	BR250	12	6	-	40	38.2 / 970	13.5 / 343	177 / 80	177 / 80
15	600 to 120/240	P60G11S15P	FDB2060	BR270	20	10	-	60	38.2 / 970	13.5 / 343	212 / 96	212 / 96
25	600 to 120/240	P60G11S25P	FDB2100	BR2125	26	13	-	100	43.9 / 1115	16.4 / 417	373 / 169	373 / 169

Table 72. Three Phase Plug-In Mini-Power Centres

kVA	Primary & Secondary Voltage (V)	Catalogue Number ①	Main Circuit Breaker ③		Maximum Number of Feeder Circuit Breakers			Maximum Amperage	Dimensions ② (Inches / mm)			Weight (lbs / kg)
			Primary	Secondary	1-Pole	2-Pole	3-Pole		Height	Width	Depth	
15	480 to 120/208	P48G28T15P	EHD3040	BR350	18	9	6	40	36.1 / 917	28.8 / 732	320 / 145	320 / 145
22.5	480 to 120/208	P48G28T21P	EHD3070	BR370	18	9	6	60	40.9 / 1039	29.9 / 759	565 / 256	565 / 256
30	480 to 120/208	P48G28T30P	EHD3090	BR3100	24	12	8	80	41.9 / 1064	29.9 / 759	635 / 288	635 / 288
15	600 to 120/208	P60G28T15P	FDB3030	BR350	18	9	6	40	36.1 / 917	28.8 / 732	320 / 145	320 / 145
22.5	600 to 120/208	P60G28T21P	FDB3050	BR370	18	9	6	60	40.9 / 1039	29.9 / 759	565 / 256	565 / 256
30	600 to 120/208	P60G28T30P	FDB3070	BR3100	24	12	8	80	41.9 / 1064	29.9 / 759	635 / 288	635 / 288

① For a primary main circuit breaker interrupting capacity greater than 10kAIC add the following suffixes to the catalogue number; for 18kAIC add "F", for 25kAIC add "H", and for 35kAIC add "C".

② Not for construction purposes.

③ Main circuit breakers fixed only. No substitutes.

④ Feeder circuit breakers not included. Uses Eaton Type BR circuit breakers.

Note: For price and delivery on a unit with copper transformer windings or 316 grade stainless steel enclosure contact your local Eaton sales representative or our Customer Service centre at 1-800-268-3578.

Product Selection

Table 73. Single Phase Bolt-On Mini-Power Centres

kVA	Primary & Secondary Voltage (V)	Catalogue Number	Main Circuit Breaker ②		Maximum Number of Feeder Circuit Breakers ③④			Maximum Amperage	Dimensions ① (Inches / mm)			Weight (lbs / kg)
			Primary	Secondary	1-Pole	2-Pole	3-Pole		Height	Width	Depth	
3	480 to 120/240	P48G11S03CUB	EHD2015L	BAB2015	12	6	-	12	33.2 / 845	12.6 / 320	9.7 / 245	105 / 47
5	480 to 120/240	P48G11S05CUB	EHD2020L	BAB2025	18	9	-	20	36.1 / 918	12.6 / 320	9.7 / 245	110 / 50
7.5	480 to 120/240	P48G11S07CUB	EHD2030L	BAB2030	18	9	-	30	36.1 / 918	12.6 / 320	9.7 / 245	110 / 50
10	480 to 120/240	P48G11S10CUB	EHD2040L	BAB2050	18	9	-	40	40.9 / 1038	13.5 / 343	11.8 / 300	180 / 82
15	480 to 120/240	P48G11S15CUB	EHD2060L	BAB2070	24	12	-	60	43.9 / 1115	15 / 380	11.8 / 300	215 / 98
25	480 to 120/240	P48G11S25CUB	EHD2100L	BAB2125	30	15	-	100	43.4 / 1102	20.4 / 518	14.6 / 370	385 / 175
3	600 to 120/240	P60G11S03CUB	FDB2015L	BAB2015	12	6		12	33.2 / 845	12.6 / 320	9.7 / 245	105 / 47
5	600 to 120/240	P60G11S05CUB	FDB2020L	BAB2025	18	9	-	20	36.1 / 918	12.6 / 320	9.7 / 245	110 / 50
7.5	600 to 120/240	P60G11S07CUB	FDB2030L	BAB2030	18	9	-	30	36.1 / 918	12.6 / 320	9.7 / 245	110 / 50
10	600 to 120/240	P60G11S10CUB	FDB2040L	BAB2050	18	9	-	40	40.9 / 1038	13.5 / 343	11.8 / 300	180 / 82
15	600 to 120/240	P60G11S15CUB	FDB2060L	BAB2070	24	12	-	60	43.9 / 1115	15 / 380	11.8 / 300	215 / 98
25	600 to 120/240	P60G11S25CUB	FDB2100L	BAB2125	30	15	-	100	43.4 / 1102	20.4 / 518	14.6 / 370	385 / 175

Table 74. Three Phase Bolt-On Mini-Power Centres

kVA	Primary & Secondary Voltage (V)	Catalogue Number	Main Circuit Breaker ②		Maximum Number of Feeder Circuit Breakers ③④			Maximum Amperage	Dimensions ① (Inches / mm)			Weight (lbs / kg)
			Primary	Secondary	1-Pole	2-Pole	3-Pole		Height	Width	Depth	
15	480 to 120/208	P48G28T15CUB	EHD3040L	BAB3050H	18	9	6	40	36.1 / 917	28.7 / 730	9.4 / 238	320 / 148
22.5	480 to 120/208	P48G28T21CUB	EHD3070L	BAB3070H	18	9	6	60	40.9 / 1038	29.9 / 759	13.6 / 346	565 / 257
30	480 to 120/208	P48G28T30CUB	EHD3090L	BAB3100H	24	12	8	80	41.9 / 1063	29.9 / 759	13.6 / 346	635 / 288
15	600 to 120/208	P60G28T15CUB	FDB3030	BAB3050H	18	9	6	40	36.1 / 917	28.7 / 730	9.4 / 238	320 / 148
22.5	600 to 120/208	P60G28T21CUB	FDB3050	BAB3070H	18	9	6	60	40.9 / 1038	29.9 / 759	13.6 / 346	565 / 257
30	600 to 120/208	P60G28T30CUB	FDB3070	BAB3100H	24	12	8	80	41.9 / 1063	29.9 / 759	13.6 / 346	635 / 288

① Not for construction purposes.

② Main circuit breakers fixed only. No substitutes.

③ Feeder circuit breakers not included. Uses Eaton Type BAB circuit breakers.

④ Combinations can be selected.

Residential Fuse Panel Inserts ①

- Convenient and economical option to completely replacing an entire fuse panel assembly.
- Original fuse panel tub and wiring remains in place and only the fuse panel trim and interior is removed and replaced.
- 16 and 24 circuit breaker interiors designed to fit any manufacturers' fuse panel or discontinued design circuit breaker panel.
- Custom trim and door oversized to ensure fit with existing tub.
- Circuit breaker interior replacement eliminates the possibility of improperly sized amperage protection.
- No more loose fuses causing arcing and damage to the panel or wiring.
- CSA certified to mount into any existing box under file LL264-222.
- Can be mounted in any orientation as defined by the existing fuse panel tub orientation.
- Accepts plug-in type BR, DNPL, or GFCB circuit breakers. (Circuit breakers sold separately. Refer to pages 13 - 16 for selection)
- Trim comes complete with hinged door, non-locking spring latch, clear plastic card holder, and circuit directory card.
- Tin plated aluminum bus bars.

Product Description

Fuses and Fuse Panels were designed decades ago, to prevent the overload of circuit wiring that could lead to fires caused by overloaded electrical circuit connections and / or short circuits. Records show however, that problems of fire and smoke inhalation are the more serious causes of death or injury.

Since early 1960's, technology has allowed a tremendous increase in the number and use of appliances, tools, and control systems, many of which are automatically controlled and cycle on and off. We now know that a cycling load will actually cause a plug (screw-on-type) fuse to loosen in its holder (that explains why you can always find one or two fuses that can be tightened a quarter turn). Loose connections such as these develop heat, and in turn increase the risk of fire.

Small overloads can be absorbed by the margin of safety built into CSA certified devices. However, prolonged overloads or loose fuses will cause arcing and ultimately, melting of the connections in either the panel or wiring, wherever the weakest link may be.

Eaton has designed a low cost method of replacing Fuse Panels with modern Circuit Breaker Panels. This method eliminates the need for cutting, re-plastering and repainting the walls around the old panel.

Another risk with the old fuse panel design was the ease with which incorrect fuses could be used or changed without realization of the risks involved.

To eliminate these potential hazards Eaton has a new circuit breaker interior and trim kit that will quickly upgrade the existing installation to today's electrical standards and needs. An average upgrade takes one hour and thus creates the minimum of inconvenience to the homeowner/occupant.

Sample Specification

- Supply and install a new circuit breaker interior to replace existing plug fuse panel interior or out of date circuit breaker interior in each apartment or condominium.
- Interior to be 16 or 24 circuit, rated 100A and 120/240V, designed in a single row breaker arrangement for fitting into existing recessed electrical panels.
- Supply and install new Trim & Door Assembly slightly larger then discarded fuse trim to minimize any requirements for patching or repainting.
- Bus bars shall be tin plated aluminum suitable for plug-in circuit breakers.
- Supply and install a Trim and Door Assembly with latch, to protect the circuit breaker toggle handles.
- Inserts must be CSA certified for mounting in any position, for ease in connecting to existing wiring.
- Install circuit breakers with ratings as indicated in specifications or drawings.
- Interiors to be mounted with directions template and hardware supplied by Eaton.
- Inserts, Trim & Door Assembly and circuit breakers, shall be manufactured by Eaton.
- Provide a Circuit Identification Card, mounted under clear plastic on the inside of the door.

① Not for use as service entrance equipment..

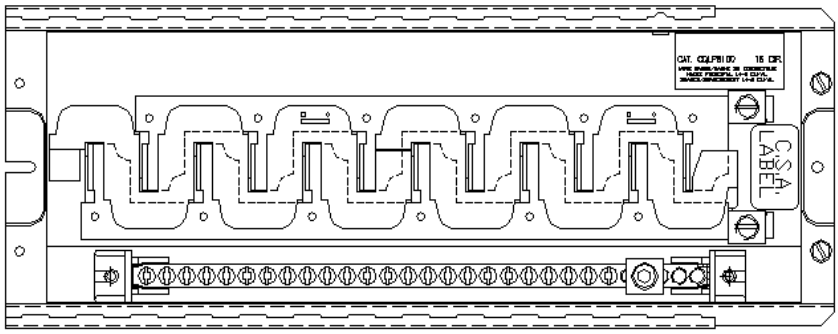
Residential Fuse Panel Insert Interiors

- 100A Single phase 3 wire 120/240VAC.
- 16 and 24 circuit breaker capacity. ③
- CSA certified to mount into any existing box under file LL264-222.
- Accepts plug-in type BR and DNPL circuit breakers. ①③
- Tin plated aluminum bus bars.
- Neutral available with 16 or 24 Cu/Al terminals.
- Main and neutral lugs located at the same end.
- All terminals accept #14-3AWG cabling.

Product Selection

Table 75. 3 Wire 120/240VAC Fuse Panel Insert Interiors

Catalogue Number	Drilling Template Catalogue Number ②	Amperage Rating (A)	Voltage (V)	Number of Installable Circuit Breakers 1" Spaces	1/2" Spaces	Bus Material	Neutral Material	Wire Size Range Cu/Al
CQLP8100	CSABP4683B	100	120/240	8	16	Aluminum	Aluminum	#14-3 AWG
CQLP12100	CSABP4734B	100	120/240	12	24	Aluminum	Aluminum	#14-3 AWG

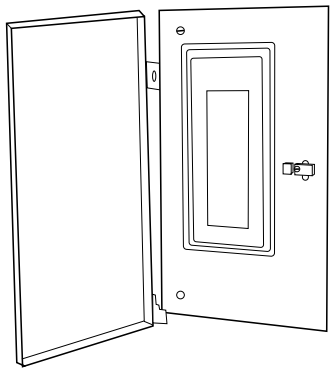


① Refer to pages 13-16 for plug-in circuit breaker selection.

② We suggest the use of templates to ensure proper sizing for installation.

③ Filler plates for unused fuse panel insert circuit breaker installation locations can be ordered as BRFP (package of 24).

Residential Fuse Panel Insert Trims



- Doors are die formed with sloping sides and rounded corners and permanently mounted to the trim.
- Semi concealed hinges. ①
- Includes circuit directory card and self adhesive clear plastic directory holder.
- Painted ASA61 light grey baked on enamel.
- Mounting hardware included. ③
- Trims are custom sized larger than the existing trim and door.
- Mounting holes located to line up with existing box holes. ②

Product Selection

Table 76. Fuse Panel Insert Trims

		Box Dimensions				Trim Size (Inches)			Trim Mounting Holes (Inches)	
Original Manufacturer	Fuse Panel Catalogue Number	Height	Width	Depth	Replacement Trim Catalogue Number	Height	Width	Replacement Interior Catalogue Number	Height	Width
Amalgamated	4112	16-1/8	8-1/2	2-15/16	QLPT16D	18-1/4	9-3/4	CQLP8100	16-1/6	4
Amalgamated	4116	19-1/2	8-1/2	2-15/16	QLPT19D	20-7/8	9-3/4	CQLP8100	18-11/16	4
Amalgamated	4120	22-7/8	8-1/2	2-15/16	QLPT22AD	25	10-1/2	CQLP12100 ④	22-1/4	6
Amalgamated	4208	16-1/8	8-1/2	2-15/16	QLPT16AD	18-1/4	10-5/16	CQLP8100	15-1/2	6
Amalgamated	4212	19-1/2	8-1/2	2-15/16	QLPT20AD	20-7/8	9-3/4	CQLP8100	18-11/16	6
Amalgamated	4216	22-7/8	8-1/2	2-15/16	QLPT22AD	25	10-1/2	CQLP12100 ④	22-1/4	6
Amalgamated	4220	24-1/8	8-1/2	2-15/16	QLPT24D	26	9-3/4	CQLP12100 ④	23-13/16	4
Amalgamated	4312	22-7/8	8-1/2	2-15/16	QLPT22AD	25	10-1/2	CQLP12100 ④	22-1/4	6
CEB	NHP10-636-3 ⑤	24	10	3	QLPT24LD	26	12	CQLP12100 ④	23-13/16	4
CEB	NHP12-60	20	7-3/4	3	QLPT20D	21-3/4	9-3/4	CQLP12100 ④	19-9/16	4
CEB	NHP12-633	23	7-3/4	3	QLPT24D	26	9-3/4	CQLP12100 ④	23-13/16	4
CEB	NHP4-632	16-1/4	7-3/4	3	QLPT16D	18-1/4	9-3/4	CQLP8100	16-1/6	4
CEB	NHP6-633	20	7-3/4	3	QLPT19D	20-7/8	9-3/4	CQLP8100	18-11/16	4
CEB	NHP6-636-4	24	7-3/4	3	QLPT24D	26	9-3/4	CQLP12100 ④	23-13/16	4
CEB	NHP8-60	16-1/8	7-3/4	3	QLPT16D	18-1/4	9-3/4	CQLP8100	16-1/6	4
CEB	NHP8-635-3	23	7-3/4	3	QLPT24D	26	9-3/4	CQLP12100 ④	23-13/16	4
Taylor (CrouseHinds)	NHP6-30-60	21	7-3/8	3	QLPT20D	21-3/4	9-3/4	CQLP12100 ④	19-9/16	4
Taylor (CrouseHinds)	NHP20-1231	24-1/2	9-1/2	3	QLPT24D	26	9-3/4	CQLP12100 ④	23-13/16	4
Taylor (CrouseHinds)	NHP20-0821-6	24-1/2	9-1/2	3	QLPT24D	26	9-3/4	CQLP12100 ④	23-13/16	4
Taylor (CrouseHinds)	NHP12B-1000-2	17-1/8	9-1/2	3	QLPT16AD	18-1/8	10-5/16	CQLP8100	15-1/2	6
Taylor (CrouseHinds)	NHP10-0401-4	17-1/8	9-1/2	3	QLPT16AD	18-1/8	10-5/16	CQLP8100	15-1/2	6
Taylor (CrouseHinds)	NHP10-0601-2	17-1/8	9-1/2	3	QLPT16AD	18-1/8	10-5/16	CQLP8100	15-1/2	6
Taylor (CrouseHinds)	NHP10-0611	17-1/8	9-1/2	3	QLPT16AD	18-1/8	10-5/16	CQLP8100	15-1/2	6
Taylor (CrouseHinds)	NHP10-0801	17-1/8	9-1/2	3	QLPT16AD	18-1/8	10-5/16	CQLP8100	15-1/2	6
Taylor (CrouseHinds)	NHP12-0811	19-1/4	9-1/2	3	QLPT22AD	25	10-1/2	CQLP12100 ④	22-1/4	6
Taylor (CrouseHinds)	NHP14-0801-4	19-1/4	9-1/2	3	QLPT22AD	25	10-1/2	CQLP12100 ④	22-1/4	6
Taylor (CrouseHinds)	NHP14-0621-2	19-1/4	9-1/2	3	QLPT22AD	25	10-1/2	CQLP12100 ④	22-1/4	6

① If the main service entrance is bottom entry the door hinges left. If it is top entry then the door hinges right.

② Measure the existing box holes locations as they may be part of the end walls, side walls, or tapped into a box flange.

③ The hardware supplied will accommodate boxes that are mounted up to 1/2" too deep or equal to 3-1/2" net depth.

④ Panel insert CQLP8100 can also be used with this size trim.

⑤ For box sizes either 26" or 27-1/2" high no insert or trim is available..

Residential Fuse Panel Inserts

Data Information Form

Residential Fuse Panel Insert Data Information Form

(Required to replace a Plug Fuse Panel, with a Circuit Breaker Interior, and retain the existing Fuse Box).

Project_____ Location_____

Engineer _____Existing Catalogue Number_____

Manufacturer

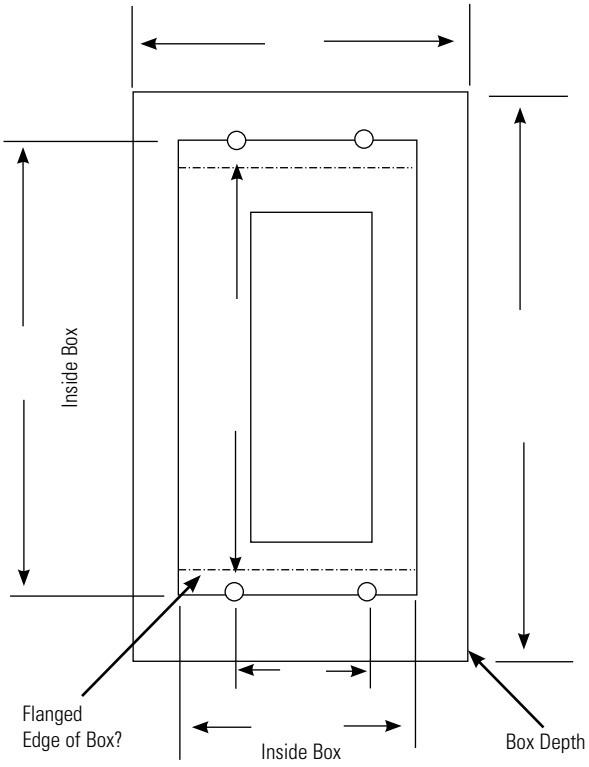
- ❒ Canadian Electric Box and Stamping
- ❒ CEB Ltd.
- ❒ Sylvania
- ❒ Amalgamated
- ❒ Taylor
- ❒ Crouse-Hinds
- ❒ _____

Mains Capacity ❒ 100A or _____

Mains Cable Type ❒ Copper ❒ Aluminum

Main Cable Gauge #8 #6 #4 #3 #2 (if identifiable)

Branch Cable Type ❒ Copper ❒ Aluminum



Up Stream Protection

Circuit Breakers ❒ 50A ❒ 60A ❒ 70A ❒ 100A

Fused Switches ❒ 60A ❒ 100A

Every Floor ❒ Every third floor

	15A	20A	30A	40A
1 Pole				
2 Pole				
GFCB				

Required Circuits in replacement breaker Interior.

Existing Fuse Panel Circuits

1 Pole 120 V Qty._____

2 Pole Pullouts (30A max.)* Qty._____

2 Pole Pullouts (60A max.) Qty._____

* CEB has cartridge fuses, Amalgamated & Taylor have Plug fuses.

Installation Problems Foreseen: _____

_____

Information Supplied By: _____ Date: _____

Type BQL ②

- 10,000 / 22,000 Amperes Interrupting Capacity at 120/240VAC.
- Captive line screw included (#2 Robertson/Slot).

Product Selection

Table 77. Single and Multi-Pole Bolt-On Classic Replacement Circuit Breakers

Ampere Rating	Wire Size Range (Cu/AL 60°C or 75°C) (AWG)	1-Pole 120/240VAC 10kAIC Catalogue Number	1-Pole 120/240VAC 22kAIC Catalogue Number	2-Pole 120/240VAC 10kAIC Catalogue Number	3-Pole 120/240VAC 10kAIC Catalogue Number	3-Pole 120/240VAC 22kAIC Catalogue Number
15	#14 - 8	BQL15 ①	HBQL15	BQL215	BQL315	HBQL315
20	#14 - 8	BQL20 ①	HBQL20	BQL220	BQL320	—
25	#14 - 8	BQL25	HBQL25	BQL225	—	—
30	#14 - 8	BQL30	HBQL30	BQL230	BQL330	HBQL330
40	#14 - 4	BQL40	HBQL40	BQL240	BQL340	—
50	#14 - 4	BQL50	HBQL50	BQL250	BQL350	HBQL350
60	#8 - 2/0	BQL60	HBQL60	BQL260	BQL360	HBQL360
70	#8 - 2/0	—	—	BQL270	BQL370	HBQL370
90	#8 - 2/0	—	—	BQL290	BQL390	HBQL390
100	#8 - 2/0	—	—	BQL2100	BQL3100	HBQL3100
125	#8 - 2/0	—	—	BQL2125	—	—
135	#8 - 2/0	—	—	BQL2135	—	—
		Requires One 1-Inch (25.4mm) Space		Requires Two 1-Inch (25.4mm) Spaces	Requires Three 1-Inch (25.4mm) Spaces	

Type BQL Duplex™ and Quadplex™ ②

- 10,000 Amperes Interrupting Capacity at 120/240VAC.
- Captive line screw included (#2 Robertson/Slot).

Product Selection

Table 78. Type BQL Duplex™ and Quadplex™ Bolt-On Classic Replacement Circuit Breakers

Duplex™ Two Single Pole Circuits 120VAC		Quadplex™ Independent Trip Two Single Pole Circuits and One Double Pole Circuit				Quadplex™ Independent Trip Two Double Pole Circuits			
		120VAC Ampere Rating	120/240VAC Ampere Rating	120VAC Ampere Rating		120/240VAC Ampere Rating	120/240VAC Ampere Rating		
Ampere Rating	Catalogue Number	Outer Left (1 Pole)	Centre (2 Poles)	Outer Right (1 Pole)	Catalogue Number	Outer Left & Right (2 Poles)	Centre (2 Poles)	Catalogue Number	Wire Size Range (Cu/AL 60°C or 75°C) (AWG)
15-15	BQLT-15 ①	15	15	15	BQLT-15-215	15	15	BQLT-215-215	#14 - 4
20-20	BQLT-20 ①	15	20	15	BQLT-15-220	20	20	BQLT-220-220	#14 - 4
30-30	BQLT-30 ①	15	25	15	BQLT-15-225	15	30	BQLT-215-230	#14 - 4
—	—	15	30	15	BQLT-15-230	15	40	BQLT-215-240	#14 - 4
—	—	15	40	15	BQLT-15-240	—	—	—	#14 - 4
Requires One 1-Inch (25.4mm) Space		Requires Two 1-Inch (25.4mm) Spaces				Requires Two 1-Inch (25.4mm) Spaces			

① Switching duty rated (SWD).
② HACR rated.
③ Internal common trip.

Type BQL Ground Fault Circuit Breakers

- 10,000 Amperes Interrupting Capacity at 120/240VAC
- 5mA "People Protection".

Product Selection

Table 79. 5mA Single and Two Pole Bolt-On Ground Fault Circuit Breakers

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C (AWG)	1-Pole 120VAC 10kAIC Catalogue Number	2-Pole 120/240VAC 10kAIC Catalogue Number
15	#14 - 8	BQGF15	BQGF215
20	#14 - 8	BQGF20	BQGF220
30	#14 - 8	BQGF30	BQGF230
40	#14 - 8	—	BQGF240
50	#14 - 8	—	BQGF250
		Requires One 1-Inch (25.4mm) Space	Requires Two 1-Inch (25.4mm) Spaces

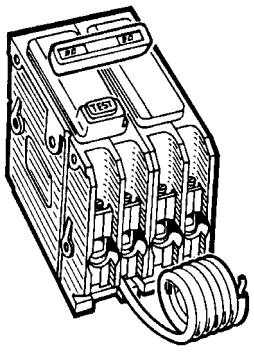
Type BQL Non-Automatic Circuit Breakers (Moulded Case Switches)

- 240VAC.
- Two pole and three pole versions.

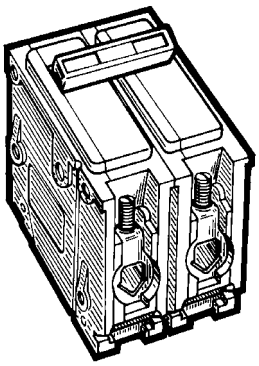
Product Selection

Table 80. Two and Three Pole Bolt-On Non-Automatic Circuit Breakers (Moulded Case Switches)

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C (AWG)	2-Pole 240VAC Catalogue Number	3-Pole 240VAC Catalogue Number
60	#8 - 1 Cu #8 - 1/0 Al	BQL260NA	BQL360NA
		Requires Two 1-Inch (25.4mm) Spaces	Requires Three 1-Inch (25.4mm) Spaces



Ground Fault Circuit Interrupter



Non-Automatic Circuit Breaker (Moulded Case Switch)

[1] When the Canadian Electrical Code requires the use of an unfused disconnect device as a local isolation switch then a circuit breaker enclosure may be used in conjunction with a moulded case switch (a.k.a. a non-automatic circuit breaker). For example with an airconditioning unit. The protective device for these applications is located upstream.

Type QBH

- 120/240VAC
- 3/4" Form factor.
- Designed to fit the classic CEB, Sylvania or Commander Electric design bolt-on loadcentres.
- Suitable for loadcentres, lighting & distribution panelboards, and meter centres.
- Silver Tungsten contacts with wiping action to prevent carbon buildup on the contact surface.
- Handle provides clear indication of ON/OFF/TRIPPED position.
- Quick-make / quick-break mechanism provides tease-proof operation.
- Internal common trip mechanism on two pole circuit breakers.
- Each breaker is electronically calibrated for 40°C.
- Compression moulded housing and handle for durability and service.

Product Selection

Table 81. Single and Two Pole Bolt-On Classic Replacement Circuit Breakers

Ampere Rating	Wire Size Range 60°C or 75°C (AWG)	1-Pole 120VAC 10kAIC Catalogue Number	2-Pole 120/240VAC 10kAIC Catalogue Number
15	#14 - 10 CU, #12 - 10 AL	QBH15	QBH215
20	#14 - 10 CU, #12 - 10 AL	QBH20	QBH220
25	#14 - 10 CU, #12 - 10 AL	QBH25	QBH225
30	#10 - 2 CU, #10 - 1 AL	QBH30	QBH230
40	#10 - 2 CU, #10 - 1 AL	QBH40	QBH240
50	#10 - 2 CU, #10 - 1 AL	QBH50	QBH250
60	#10 - 2 CU, #10 - 1 AL	QBH60	QBH260
70	#10 - 2 CU, #10 - 1 AL	—	QBH270
90	#10 - 2 CU, #10 - 1 AL	—	QBH290
100	#10 - 2 CU, #10 - 1 AL	—	QBH2100
125	#10 - 1 CU	—	QBH2125
		Requires One 3/4-Inch (19.1mm) Space	Requires Two 3/4-Inch (19.1mm) Spaces

Type QBH Accessories

Product Selection

Table 82. Type QBH Classic Bolt-On Circuit Breaker Accessories

Description	Catalogue Number
Filler Plate (Package of 50)	QBF
Handle Tie	QBHT

Type BJ [2]

- Main circuit breakers for classic Westinghouse NovaLine loadcentres
- 10,000 Amperes Interrupting Capacity at 120/240VAC

Product Selection

Table 83. Type BJ Two and Three Pole Plug-In Classic Replacement Circuit Breakers

Ampere Rating	Wire Size Range Cu/Al 60°C or 75°C (AWG)	2-Pole 120/240VAC 1 per Shelf Carton 10kAIC Catalogue Number	3-Pole 120/240VAC 1 per Shelf Carton 10kAIC Catalogue Number
125	#2 - 300MCM	BJ2125	BJ3125
150	#2 - 300MCM	BJ2150	BJ3150
175	#2 - 300MCM	BJ2175	BJ3175
200	#2 - 300MCM	BJ2200	BJ3200
		Requires Four [1] 1-Inch (25.4mm) Spaces	**Requires Six [3] 1-Inch (25.4mm) Spaces**

[1] When mounted the type BJ circuit breakers span both sides of the bus bar occupying an equivalent number of pole spaces on both the left and right side of the loadcentre. For example a two pole type BJ circuit breaker occupies 2 pole spaces on the left and the same number of spaces on the right thus requiring four 1-inch spaces.

[2] BJ breakers are also approved as branch circuit breakers on CPM/CPL panels 200A and greater.

[3] When mounted the type BJ circuit breakers span both sides of the bus bar occupying an equivalent number of pole spaces on both the left and right side of the loadcentre. For example a three pole type BJ circuit breaker occupies 3 pole spaces on the left and the same number of spaces on the right thus requiring six 1-inch spaces.

Pressure Switches

- Ensures smooth delivery of water into your home.
- Commercial, residential, or agricultural applications.
- Can be used on all types of pumps.
- Pressure ratings 20 - 40PSI, 30 - 50PSI, and 40 - 60PSI.
- Adjustable cut-in and cut-out pressure.
- Easy installation.
- CSA® certified and UL® listed.
- Pulsation plug models prevent pump cycling due to water surges.
- Low pressure cut-off models prevent pump burn out due to lack of well water (10PSI below turn on pressure).
- 3 Year product warranty.

Pressure Switch

Product Selection

Table 84. Pressure Switches

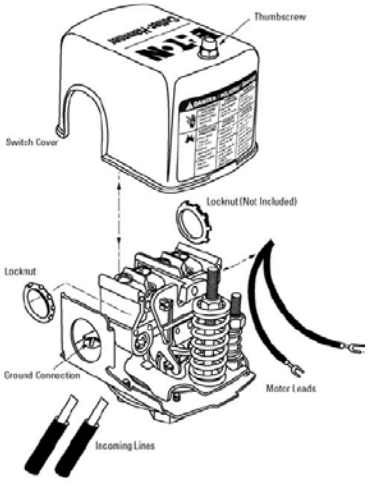
Description	Enclosure Style	Catalogue Number
20-40 PSI Pressure Switch	NEMA® 1	CHWPS2040D
20-40 PSI Pressure Switch with Pulsation Plug	NEMA® 1	CHWPS2040DP
20-40 PSI Pressure Switch with Low Pressure Cut-Off	NEMA® 1	CHWPS2040DL
30-50 PSI Pressure Switch	NEMA® 1	CHWPS3050D
30-50 PSI Pressure Switch with Low Pressure Cut-Off	NEMA® 1	CHWPS3050DL
40-60 PSI Pressure Switch	NEMA® 1	CHWPS4060D

Table 85. Pressure Switch Ratings

Phase	Voltage (AC)	Amperage	Horsepower
Single	115	20	1.5
Handle Tie	230	12	2.0

Table 86. Pressure Switch Cross-Reference

Description	Eaton Catalogue Number	Square D® Catalogue Number	Flotec® Catalogue Number	Water Ace® Catalogue Number	Furnas® Catalogue Number
20-40 PSI Pressure Switch	CHWPS2040D	9013FSG2J20	—	15767A510	69WA4Z2040
20-40 PSI Pressure Switch with Pulsation Plug	CHWPS2040DP	9013FSG2J20P	—	—	69WA4Z2040B
20-40 PSI Pressure Switch with Low Pressure Cut-Off	CHWPS2040DL	9013FSG2J20M4	—	—	69WEC
30-50 PSI Pressure Switch	CHWPS3050D	9013FSG2J21	TC2151	15760A501	69WA4
30-50 PSI Pressure Switch with Low Pressure Cut-Off	CHWPS3050DL	9013FSG2J21M4	FP217-1140	19180A501	—
40-60 PSI Pressure Switch	CHWPS4060D	9013FSG2J24	TC2153	—	69WA4Z4060



Index

Symbols

B

C

Catalogue Number Index

Q

R

S

T

Eaton is dedicated to ensuring that reliable, efficient and safe power is available when it's needed most. With unparalleled knowledge of electrical power management across industries, experts at Eaton deliver customized, integrated solutions to solve our customers' most critical challenges.

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