

3-Phase Loadcenter Program



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Powering Business Worldwide

1. Product Selection

Type BR 3-Phase Loadcenters

Service	
3-Phase, four-wire, 208Y/120 Vac	
3-Phase, three-wire, 240 Vac Delta	
Short Circuit Rating	
Main Breaker Loadcenters	10 kAIC using BR / CC / HLD main breakers 22 kAIC using BRH / DK main breakers 100 kAIC using CHH main
Main lug Loadcenters	Up to 100 kAIC using series ratings. The rating of main lug only loadcenter is dependent on the lowest branch breaker AIC rating.
Convertible Loadcenters	10 kAIC using BR / CC main breakers 22 kAIC using BRH main breakers
Branch Breakers	Types BR, BRH, BRHH: 10-150A single, two, and three pole; selected amperage available in Switching Duty, HACR, shunt trip, and high magnetic settings Type GFCB ground fault circuit interrupter: 15-60A single and two-pole Type AFCI arc fault circuit interrupter: 15-20A single-pole Types BJ and BJH: 125-225A; two- and three-pole sub-fed breakers Type BD Twin: 10-50A; two of one-pole; takes one 1-inch (25.4 mm) space Type BQ and BQC Multi-breaker: 15-30A. Two of two-pole or one two-pole and two one-pole; takes two 1-inch (25.4 mm) spaces Type BRW: 15-30A; two-pole water heater breakers Type BRSN: 15-30A; two-pole switching neutral breakers Type BR 15-100A; two-pole, 240 Vac delta breakers
Enclosures	Nema Type 1 Indoor/Nema Type 3R Outdoor Nema 4x (Available via Flex Center 800-330-6479)
Bussing	Tin Plated Aluminum or Copper
Standards	UL67

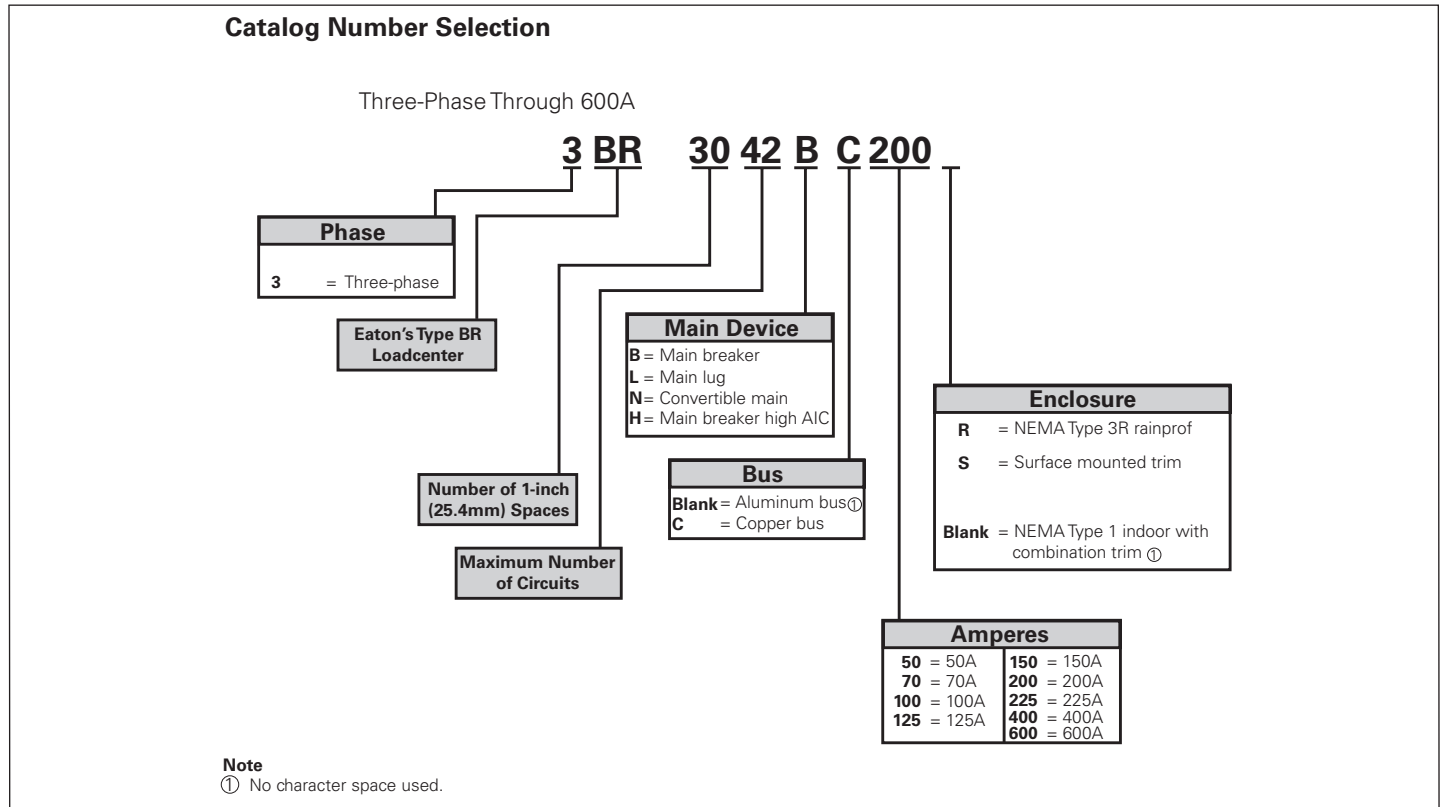


Figure 1. Three Phase through 600A.

3-Phase Loadcenter Program

Effective February 2014

Main Breaker, 3-Phase 208Y/120 Vac or 240 Vac – Aluminum Bus

Main Breaker Type	Ampere Rating	Catalog Number Indoor	Catalog Number Outdoor	Max # of Spaces	Max # of Circuits	Box Size		Wire Size Range CU/AL 60 C or 75 C for Main
						Nema 1	Nema 3R	
BR - 10 kAIC	100A	3BR1224B100	3BR1224B100R	12	24	C1	C1R	#4 – 1/0
	125A	3BR3042B125	3BR3042B125R	30	42	L1	L1R	#4 – 2/0
	150A	3BR3042B150	3BR3042B150R	30	42	L	L1R	#1 – 3/0
CC - 10 kAIC	200A	3BR3042B200	3BR3042B200R	30	42	L1	L1R	#1 – 250 MCM
		3BR4242B200	3BR4242B200R	42	42	L2	L2R	#1 – 250 MCM
	225A	3BR4242B225	3BR4242B225R	42	42	L2	L2R	#1 – 300 MCM
DK - 22 kAIC	400A	3BR4242B400S	3BR4242B400R	42	42	24	47	(2) 3/0 – 250 kcmil
HLD - 10 kAIC	600A	3BR4242B600S	----	42	42	24		(2) 3/0 – 500 kcmil

Main Lug Only, 3-Phase 208Y/120V or 240 Vac – Aluminum Bus

Main Ampere Rating	Catalog Number Indoor	Catalog Number Outdoor	Max # of Spaces	Max # of Circuits	Box Size		Wire Size Range CU/AL 60 C or 75 C for Main
					Nema 1	Nema 3R	
125A	3BR1224L125	3BR1224L125R	12	24	C1	C1R	#6 – 2/0
150A	3BR2442L150	3BR2442L150R	24	42	D1	D1R	#1 – 300 MCM
	3BR1224L200	3BR1224L200R	12	24	C4	C3R	#1 – 300 MCM
200A	3BR1836L200	3BR1836L200R	18	36	19	43	#1 – 300 MCM
	3BR3042L200	3BR3042L200R	30	42	G1	G1R	#1 – 300 MCM
	3BR4242L200	3BR4242L200R	42	42	L1	L1R	#1 – 300 MCM
225A	3BR4242L225	3BR4242L225R	42	42	L1	L1R	#1 – 300 MCM
400A	3BR4242L400S	3BR4242L400R	42	42	22	46	(1) 250 – 750 kcmil or (2) #3/0 – 250 kcmil
600A	3BR4242L600S	---	42	42	22		(2) #2 – 500 kcmil

Convertible, 3-Phase 208Y/120 Vac or 240 Vac

Main Breaker Type	Ampere Rating	Bus Material	Catalog Number* Indoor	Catalog Number* Outdoor	Max # of Spaces	Max # of Circuits	Box Size	
							Nema 1	Nema 3R
BR	100A	Aluminum	3BR3030N100	3BR3030N100R	30	30	D1	D1R
CC	125A	Aluminum	3BR1224N125	3BR1224N125R	12	24	C1	C1R

* Order main breaker kit or main lug kit separately

Main Breaker Kits:

Type BR Main Breaker Kit	Catalog Number
BR3100	10 kAIC
BRH3100	22 kAIC

Type CC Main Breaker Kit	Catalog Number
CC3100N	10 kAIC
CC3125N	
CC3150N	
CC3175N	
CC3200N	
CC3225N	

Main Lug Kits Only:

Main Lug Kit	Catalog Number
3BRSF150	

Note: Additional product selection is available in the Eaton catalog.

Ground Bar Kit

Catalog Number	
GBK5	5 POS #14–4
GBK520	5 POS #14–4 + (1) 2/0 POS
GBK10	10 POS #14–4
GBK1020	10 POS 14–4 + (1) 2/0 POS
GBK14	14 POS 14–4
GBK1420	14 POS #14–4 + (1) 2/0 POS
GBK21	21 POS #14–4
GBK2120	21 POS #14–4 + (1) 2/0 POS

3-Phase – Main Circuit Breaker Loadcenters – Copper Bus

Main Breaker Type	Main Ampere Rating	Maximum Number 1-inch (24.5 mm) Spaces	Circuits	Catalog Number Indoor	Catalog Number Outdoor	Box Size Nema1	Box Size Nema 3R	Wire Size Range CU/AL 60 C or 75 C for Main
BR 10 KAIC	100	12	24	3BR1224BC100	3BR1224BC100R	C1	C1R	#14 – 1/0
CC 10 KAIC	150	30	42	3BR3042BC150	3BR3042BC150R	L1	L1R	#6 – 4/0
CC 10 KAIC	200	42	42	3BR4242BC200	3BR4242BC200R	L2	L2R	#4 – 300 MCM
CC 10 KAIC	225	42	42	3BR4242BC225	3BR4242BC225R	L2	L2R	#4 – 300 MCM
DK 22 KAIC	400	42	42	3BR4242BC400S	3BR4242BC400R	24	47	(2) 3/0 - 250 MCM
HLD 10 KAIC	600	42	42	3BR4242BC600S	N/A	24	N/A	(2) 3/0 - 500MCM

3-Phase – Main Lug Loadcenters – Copper Bus

Main Ampere Rating	Maximum Number 1-inch (24.5 mm) Spaces	Circuits	Catalog Number Indoor	Catalog Number Outdoor	Box Size Nema1	Box Size Nema 3R	Wire Size Range CU/AL 60 C or 75 C for Main
125A	12	24	3BR1224LC125	3BR1224LC125R	C1	C1R	#6 – 3/0
150A	24	42	3BR2442LC150	3BR2442LC150R	D1	D1R	#4 – 300 MCM
200A	12	24	3BR1224LC200	3BR1224LC200R	C4	C3R	#4 – 300 MCM
200A	30	42	3BR3042LC200	3BR3042LC200R	G1	G1R	#4 – 300 MCM
200A	42	42	3BR4242LC200	3BR4242LC200R	L1	L1R	#4 – 300 MCM
225A	42	42	3BR4242LC225	3BR4242LC225R	L1	L1R	#4 – 300 MCM
400A	42	42	3BR4242LC400S	3BR4242BC400R	24	47	(2) 3/0 - 250 MCM
600A	42	42	3BR4242LC600S	N/A	24	N/A	(2) 3/0 - 500MCM

2. Accessories*

Accessories for branch circuit breakers	Auxiliary components, lockoffs, hold-down kits, lockdogs, handle ties.
Sub-feed devices	Main and sub-feed lugs 125,150, 225A two and three pole. Shunt trips available.
Surge protection	SPD Type 1 devices available for 208Y/120 Vac loadcenters
Universal rainproof conduit hubs	Small Hub - Group 1 : 3/4, 1, 1-1/4, 1-1/2, 2 inches Large Hub - Group 2: 1, 1-1/4, 1-1/2, 2, 2-1/2, 3 inches Adapter kits available

*See Eaton catalog volume 1 for part number information.

3-Phase Loadcenter Program

Submittal Drawings

Dimensions

Approximate Dimensions in Inches (mm)

Commercial Loadcenter Unit Enclosures—Box Sizes

Note: Box sizes do not include covers/fronts.

Loadcenters—NEMA Type 1 Indoor

Box Size	Height	Width	Depth
C1	21.00 (533.4)	14.31 (363.5)	3.88 (98.4)
C4	27.00 (685.8)	14.31 (363.5)	3.88 (98.4)
D1	29.13 (739.8)	14.31 (363.5)	3.88 (98.4)
G1	34.13 (866.8)	14.31 (363.5)	3.88 (98.4)
L1	39.00 (990.6)	14.31 (363.5)	3.88 (98.4)
L2	45.00 (1143.0)	14.31 (363.5)	3.88 (98.4)
19	44.00 (1117.6)	16.16 (410.4)	6.25 (158.8)
20	44.00 (1117.6)	16.16 (410.4)	6.25 (158.8)
22	54.00 (1371.6)	16.22 (412.0)	6.31 (160.3)
24	66.50 (1689.1)	16.22 (412.0)	6.31 (160.3)
A	38.00 (965.2)	18.13 (460.4)	5.00 (127.0)
B	44.00 (1117.6)	18.13 (460.4)	5.00 (127.0)
C	66.50 (1689.1)	18.13 (460.4)	6.25 (158.8)

Loadcenters—NEMA Type 3R Outdoor

Box Size	Height	Width	Depth
D1R	29.13 (739.8)	14.31 (363.5)	5.19 (131.8)
G1R	34.13 (866.8)	14.31 (363.5)	5.19 (131.8)
L1R	39.00 (990.6)	14.31 (363.5)	5.19 (131.8)
L2R	45.00 (1143.0)	14.31 (363.5)	5.19 (131.8)
C1R	21.00 (533.4)	14.31 (363.5)	5.19 (131.8)
C3R	25.00 (635.0)	14.31 (363.5)	5.19 (131.8)
42	38.00 (965.2)	16.31 (414.3)	6.38 (161.9)
43	44.00 (1117.6)	16.31 (414.3)	6.38 (161.9)
46	54.00 (1371.6)	16.31 (414.3)	6.38 (161.9)
47	66.56 (1690.7)	16.31 (414.3)	6.38 (161.9)

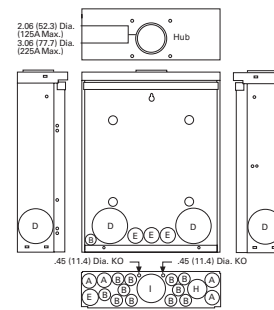
Approximate Dimensions in Inches (mm)

Residential Loadcenter Knockouts

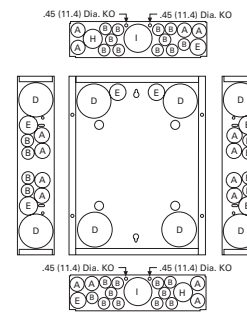
Knockouts for Box Sizes C4, D1, G1, L1, L2, C1R, C3R, D1R, G1R, L1R, L2R

Code	Diameter					
A	0.50 (12.7)	0.75 (19.1)	—	—	—	—
B	0.50 (12.7)	—	—	—	—	—
C	0.50 (12.7)	1.25 (31.8)	1.50 (38.1)	2.00 (50.8)	2.50 (63.5)	—
D	1.25 (31.8)	1.25 (31.8)	2.00 (50.8)	2.50 (63.5)	—	—
E	0.50 (12.7)	0.75 (19.1)	1.00 (25.4)	—	—	—
F	0.50 (12.7)	0.75 (19.1)	1.00 (25.4)	1.50 (38.1)	2.00 (50.8)	—
G	1.25 (31.8)	1.50 (38.1)	2.00 (50.8)	—	—	—
H	0.50 (12.7)	0.75 (19.1)	1.00 (25.4)	1.25 (31.8)	1.50 (38.1)	—
I	1.00 (25.4)	1.25 (31.8)	1.50 (38.1)	2.00 (50.8)	2.50 (63.5)	—
J	1.00 (25.4)	1.25 (31.8)	1.50 (38.1)	—	—	—

Residential NEMA Type 1 Indoor and NEMA Type 3R Outdoor Enclosures



**Outdoor Boxes
B1R, B2R, C1R, C3R, D1R,
G1R, L1R, L2R**



**Indoor Boxes
C1, C2, C4, D1, G1, L1, L2**

Approximate Dimensions in Inches (mm)

Commercial Loadcenter Knockouts

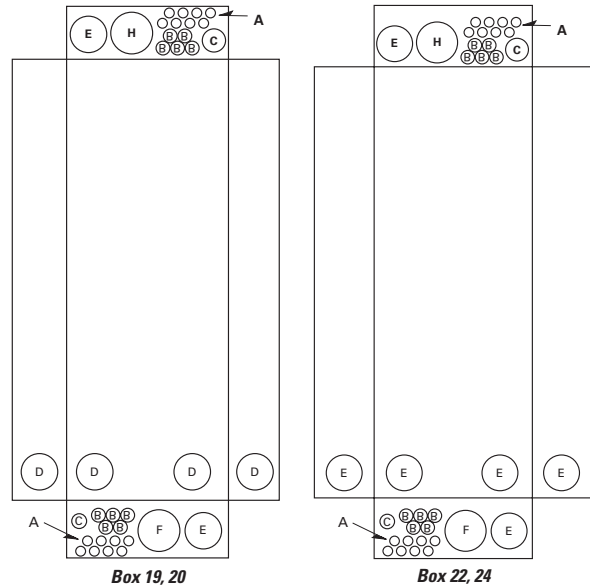
**NEMA Type 1 Indoor Commercial Enclosures
Knockouts for Box Sizes 19, 20, 22, 24**

Code	Diameter			
A	0.50 (12.7)	—	—	—
B	0.50 (12.7)	0.75 (19.1)	—	—
C	0.75 (19.1)	1.00 (25.4)	1.50 (38.1)	—
D	1.50 (38.1)	2.00 (50.8)	2.50 (63.5)	3.00 (76.2)
E	2.00 (50.8)	2.50 (63.5)	3.00 (76.2)	—
F	2.50 (63.5)	3.00 (76.2)	3.50 (88.9)	—

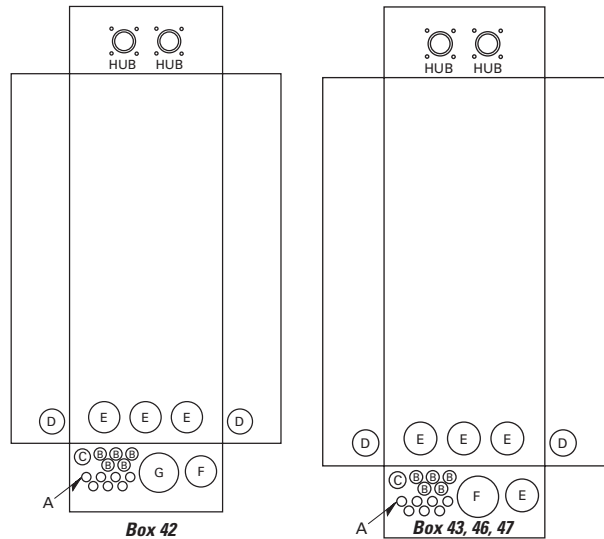
**NEMA Type 3R Outdoor Commercial Enclosures
Knockouts for Box Sizes 42, 43, 46, 47**

Code	Diameter			
A	0.50 (12.7)	—	—	—
B	0.50 (12.7)	0.75 (19.1)	—	—
C	0.75 (19.1)	1.00 (25.4)	1.25 (31.8)	—
D	1.50 (38.1)	2.00 (50.8)	2.50 (63.5)	—
E	2.00 (50.8)	2.50 (63.5)	3.00 (76.2)	—
F	2.50 (63.5)	3.00 (76.2)	3.50 (88.9)	—
G	1.25 (31.8)	1.50 (38.1)	2.00 (50.8)	2.50 (63.5)
H	3.25 (82.6) Sq.	—	—	—

Indoor Commercial Enclosures



Outdoor Commercial Enclosures



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