Pow-R-Xpress quick selector reference guide

Frequently used distribution and control products available from distributor stock

Powering Business Worldwide

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Pow-R-Xpress panelboards

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Pow-R-Xpress panelboards

Application considerations for proper selection

- What is your panelboard type, voltage and phase?
  - PRL1X = 120/240 V single-phase, three-wire
  - PRL1X = 208/120 V three-phase, four-wire
  - PRL2X = 480/277 V three-phase, four-wire
- Bus amperes?
  - 100 A
  - 225 A
  - 400 A
  - 600 A
- Main lugs only (MLO) or main circuit breaker?
  - MLO
  - MCB (choose amperage and top or bottom)
- What is the number of "branch" circuits?
  - 18
  - 30
  - 42
- What is your bus type?
  - Aluminum
  - Copper
- Other options?
  - Short
  - Long (with TFL or SFB provisions)

Catalog numbering system — Pow-R-Xpress panelboard interiors

PRL1X 1 225 X 42 A S

Panelboard type
PRL1X = PRL1X
PRL2X = PRL2X

Phase
1 = Single-phase
3 = Three-phase

Bus amperes
100 = 100 A
225 = 225 A
400 = 400 A
600 = 600 A

Main device
L = MLO provisions only, not applicable for main breaker (only applicable for 225 A)
X = No main/use main breaker or main lug kit

Number of circuits
18 = 18 circuits
30 = 30 circuits
42 = 42 circuits

Bus type
A = Aluminum bus
C = Copper bus

Option
S = Short—no TFL or SFB provisions
L = Long with TFL or SFB provisions, only applicable for 600 A panelboards

Branch circuit breakers

Summary of branch breakers available

Breaker	No. of poles	Ampere rating	Voltage	kAIC rating	Example	Panelboard type
BAB ❶❷	1	15–70	120	10	**BAB1020**	PRL1X
	2	15–100	120/240	10	**BAB2020**	PRL1X
	2	15–100	240	10	**BAB2040H**	PRL1X
	3	15–100	240	10	**BAB3030H**	PRL1X
QBAF	1	15–20	120	10	**QBAF1020**	PRL1X
QB-AFGF	1	15–20	120	10	**QB1015AFGF**	PRL1X
QB-CAF	1	15–20	120	22	**QB1020CAF**	PRL1X
QBH-CAF	1	15–20	120	10	**QBH1020CAF**	PRL1X
QB-GF	1	15–20	120	22	**QB1020GF**	PRL1X
QBGFT	1	15–40	120	10	**QBGFT1020**	PRL1X
	2	15–50	120/240	10	**QBGFT2040**	PRL1X
QBHGFT	1	15–30	120	22	**QBHGFT1020**	PRL1X
	2	15–30	120/240	22	**QBHGFT2020**	PRL1X
QBGFEP	2	15–50	120/240	10	**QBGFEP2020**	PRL1X
QBH-EP	1	15–30	120	22	**QBH1020EP**	PRL1X
QBHGFEP	2	15–30	120/240	22	**QBHGFEP2020**	PRL1X
QBHW ❶	1	15–70	120	22	**QBHW1020**	PRL1X
	2	15–100	120/240	22	**QBHW2020**	PRL1X
	2	15–100	240	22	**QBHW2040H**	PRL1X
	3	15–100	240	22	**QBHW3030H**	PRL1X
GHQ ❶	1	15–20	277	14	**GHQ1020**	PRL2X
GHB ❶❷	1	15–100	277	14	**GHB1020**	PRL2X
	2	15–100	480Y/277	14	**GHB2040**	PRL2X
	3	15–100	480Y/277	14	**GHB3060**	PRL2X

❶ BAB, QBHW, GHQ and GHB breakers installed in PRL1X and PRL2X are available with shunt trip, i.e., BAB1020S.

❷ BAB-H, QBHW-H and GHB 50–100 A available as chassis-mounted main device.

Pow-R-Xpress unassembled panelboards—EZ Box™ and EZ Trim™

Box, interior and trim color match the grouping in the chart.

Capability						Catalog numbers					
						Interiors (less main device)		Boxes	Trims (NEMA® 1)		
Ampere rating	Max. number of poles	Main lugs	Main breaker	Through-feed ugs	Sub-feed breaker (225 A max.)	Aluminum bus	Copper bus	NEMA 1	Surface	Flush	NEMA 3R enclosures
Single-phase, three-wire 120/240 Vac											
100	18	■	■	■	N/A	PRL1X1100X18A	PRL1X1100X18C	EZB2036RBS	EZT2036S	EZT2036F	GWPBQ2036PR
100	30	■	■	■	100	PRL1X1100X30A	PRL1X1100X30C	EZB2048RBS	EZT2048S	EZT2048F	GWPBQ2048PR
100	42	■	■	■	N/A	PRL1X1100X42A	PRL1X1100X42C	EZB2048RBS	EZT2048S	EZT2048F	GWPBQ2048PR
225	30	■	■	■	100, 125, 150, 175, 200, 225	PRL1X1225X30A	PRL1X1225X30C	EZB2048RBS	EZT2048S	EZT2048F	GWPBQ2048PR
225	42	■	■	N/A	N/A	PRL1X1225X42AS ❶	PRL1X1225X42CS ❶	EZB2048RBS	EZT2048S	EZT2048F	GWPBQ2048PR
225	42	■	■	■	100, 125, 150, 175, 200, 225	PRL1X1225X42A	PRL1X1225X42C	EZB2060RBS	EZT2060S	EZT2060F	GWPBQ2060PR
400	42	■	■	N/A	N/A	PRL1X1400X42AS ❶	PRL1X1400X42CS ❶	EZB2060RBS	EZT2060S	EZT2060F	GWPBQ2060PR
400	42	■	■	■	100, 125, 150, 175, 200, 225	PRL1X1400X42A	PRL1X1400X42C	EZB2072RBS	EZT2072S	EZT2072F	GWPBQ2072PR
600	42	■	■	■	N/A	—	PRL1X1600X42C	EZB2072RBS	EZT2072R	EZT2072F	GWPBQ2072PR
600	42	■	■	■	100, 125, 150, 175, 200, 225, 250, 300, 350, 400	—	PRL1X1600X42CL	EZB2090RBS	EZT2090S	EZT2090F	GWPBQ2090PR
Three-phase, four-wire 208Y/120 Vac											
100	18	■	■	■	N/A	PRL1X3100X18A	PRL1X3100X18C	EZB2036RBS	EZT2036S	EZT2036F	GWPBQ2036PR
100	30	■	■	■	100	PRL1X3100X30A	PRL1X3100X30C	EZB2048RBS	EZT2048S	EZT2048F	GWPBQ2048PR
100	42	■	■	■	N/A	PRL1X3100X42A	PRL1X3100X42C	EZB2048RBS	EZT2048S	EZT2048F	GWPBQ2048PR
225	30	■	■	■	100, 125, 150, 175, 200, 225	PRL1X3225X30A	PRL1X3225X30C	EZB2048RBS	EZT2048S	EZT2048F	GWPBQ2048PR
225	42	■	N/A	N/A	N/A	PRL1X3225L42AS ❶	PRL1X3225L42CS ❶	EZB2042RBS	EZT2042S	EZT2042F	GWPBQ2042PR
225	42	■	■	N/A	N/A	PRL1X3225X42AS ❶	PRL1X3225X42CS ❶	EZB2048RBS	EZT2048S	EZT2048F	GWPBQ2048PR
225	42	■	■	■	100, 125, 150, 175, 200, 225	PRL1X3225X42A	PRL1X3225X42C	EZB2060RBS	EZT2060S	EZT2060F	GWPBQ2060PR
400	42	■	■	N/A	N/A	PRL1X3400X42AS ❶	PRL1X3400X42CS ❶	EZB2060RBS	EZT2060S	EZT2060F	GWPBQ2060PR
400	42	■	■	■	100, 125, 150, 175, 200, 225	PRL1X3400X42A	PRL1X3400X42C	EZB2072RBS	EZT2072S	EZT2072F	GWPBQ2072PR
600	42	■	■	■	N/A	—	PRL1X3600X42C	EZB2072RBS	EZT2072R	EZT2072F	GWPBQ2072PR
600	42	■	■	■	110, 125, 150, 175, 200, 225, 250, 300, 350, 400	—	PRL1X3600X42CL	EZB2090RBS	EZT2090S	EZT2090F	GWPBQ2090PR
Three-phase, four-wire 480Y/277 Vac											
100	18	■	■	■	N/A	PRL2X3100X18	PRL2X3100X18C	EZB2036RBS	EZT2036S	EZT2036F	GWPBQ2036PR
100	30	■	■	■	100	PRL2X3100X30A	PRL2X3100X30C	EZB2048RBS	EZT2048S	EZT20 48F	GWPBQ2048PR
100	42	■	■	■	N/A	PRL2X3100X42A	PRL2X3100X42C	EZB2048RBS	EZT2048S	EZT2048F	GWPBQ2048PR
225	30	■	■	■	100, 125, 150, 175, 200, 225	PRL2X3225X30A	PRL2X3225X30C	EZB2048RBS	EZT2048S	EZT2048F	GWPBQ2048PR
225	42	■	N/A	N/A	N/A	PRL2X3225L42AS ❶	PRL2X3225L42CS ❶	EZB2042RBS	EZT2042S	EZT2042F	GWPBQ2042PR
225	42	■	■	N/A	N/A	PRL2X3225X42AS ❶	PRL2X3225X42CS ❶	EZB2048RBS	EZT2048S	EZT2048F	GWPBQ2048PR
225	42	■	■	■	100, 125, 150, 175, 200, 225	PRL2X3225X42A	PRL2X3225X42C	EZB2060RBS	EZT2060S	EZT2060F	GWPBQ2060PR
400	42	■	■	N/A	N/A	PRL2X3400X42AS ❶	PRL2X3400X42CS ❶	EZB2060RBS	EZT2060S	EZT2060F	GWPBQ2060PR
400	42	■	■	■	100, 125, 150, 175, 200, 225	PRL2X3400X42A	PRL2X3400X42C	EZB2072RBS	EZT2072S	EZT2072F	GWPBQ2072PR
600	42	■	■	■	N/A	—	PRL2X3600X42C	EZB2072RBS	EZT2072R	EZT2072F	GWPBQ2072PR
600	42	■	■	■	110, 125, 150, 175, 200, 225, 250, 300, 350, 400	—	PRL2X3600X42CL	EZB2090RBS	EZT2090S	EZT2090F	GWPBQ2090PR

❶ S = Short—no TFL or SFB provisions.

Note: Series ratings available for main lug only interiors with selected upstream main devices.

Lug kits and accessories

Main/through-feed lug kits

Ampere rating	Wire range Al/Cu	Catalog number
100	(1) #14–1/0	**LUGKIT100**
225	(1) #6–300 kcmil	**LUGKIT225**
400	(2) #2–500 kcmil	**LUGKIT400**
600	(2) #2–500 kcmil	**LUGKIT600**

Kits

	Catalog number		
Description	**100 A**	**225 A**	**400/600 A**
Service entrance kit—MLO	**SEK1/2** ❶	**SEK1/2** ❶	**SEK4/6** ❶
Service entrance kit—MCB	**SEKB** ❷❹ **SEKG** ❸❹	**SEPD2** ❹❺	**SEPD3** ❹❻
200% neutral kit	**2NK100**	**2NK225**	**1NK400**

❶ Applicable for use with MLO, SE panelboards only.

❷ Only applicable for SE PRL1X with chassis-mounted BAB, QBH main breaker.

❸ Only applicable for SE PRL2X with chassis-mounted GHB main breaker.

❹ Main breaker panelboards only—includes barrier kit and bonding jumper.

❺ To be used with PDG2-frame main breaker.

❻ To be used with PDG3-frame main breaker.

Sub-feed breaker covers—used when adding a sub-feed breaker to 400 A or 600 A panelboard

Minimum quantity of 5

Panelboard ampere rating	Sub-feed breaker max. ampere rating	Catalog number
400	225	**SFBCVR225ATOP** ❶
		SFBCVR225ABOT ❶
600	225	**SFBCVR225BTOP** ❷
		SFBCVR225BBOT ❷
600	400	**SFBCVR400ATOP** ❷
		SFBCVR400ABOT ❷

❶ Must be used in conjunction with the 400 A panelboard only when adding a sub-feed breaker.

❷ Must be used in conjunction with the 600 A panelboard only when adding a sub-feed breaker.

Accessories

Description	Catalog number
Isolated ground bar kit	**ISOGROUND**
Copper ground bar kit	**CUGROUND**
1P filler plate ❶	**5155C62H01**
Series rating kit ❷	**SRK**

❶ Each PRX panelboard comes with 50% filler plates, e.g., 18 circuit interior contains 9 filler plates.

❷ Series rating kit includes series rating book and adhesive sleeve and series rating sticker. If panelboard is being series rated higher than the base rating, an SRK is required.

Convertible main circuit breaker kits—single-phase or three-phase

Kits include circuit breaker, line terminals and load bus connectors

Max. voltage	Ampere rating	kAIC rating	Breaker type	Wire range Al/Cu	Catalog number
240	100	35	PDD23F0100TFFL	(1) #14–1/0	**BKD2F100**
	125	35	PDD23F0125TFFL	(1) #4–4/0	**BKD2F125**
	150	35	PDD23F0150TFFL	(1) #4–4/0	**BKD2F150**
	175	35	PDD23F0175TFFL	(1) #4–4/0	**BKD2F175**
	200	35	PDD23F0200TFFL	(1) #4–4/0	**BKD2F200**
	225	35	PDD23F0225TFFL	(1) #4–4/0	**BKD2F225**
240	100	65	PDD23G0100TFFL	(1) #14–1/0	**BKD2G100**
	125	65	PDD23G0125TFFL	(1) #4–4/0	**BKD2G125**
	150	65	PDD23G0150TFFL	(1) #4–4/0	**BKD2G150**
	175	65	PDD23G0175TFFL	(1) #4–4/0	**BKD2G175**
	200	65	PDD23G0200TFFL	(1) #4–4/0	**BKD2G200**
	225	65	PDD23G0225TFFL	(1) #4–4/0	**BKD2G225**
240	250	65	PDD33G0250TFAN	(1) 250–500 kcmil	**BKD3G250**
	300	65	PDD33G0300TFAN	(1) 250–500 kcmil	**BKD3G300**
	350	65	PDD33G0350TFAN	(1) 250–500 kcmil	**BKD3G350**
	400	65	PDD33G0400TFAN	(2) 3/0–250 kcmil or (1) 3/0–500 kcmil	**BKD3G400**
480	100	35	PDG23G0100TFFL	(1) #14–1/0	**BKG2G100**
	110	35	PDG23G0110TFFL	(1) #4–4/0	**BKG2G110**
	125	35	PDG23G0125TFFL	(1) #4–4/0	**BKG2G125**
	150	35	PDG23G0150TFFL	(1) #4–4/0	**BKG2G150**
	175	35	PDG23G0175TFFL ❶	(1) #4–4/0	**BKG2G175**
	200	35	PDG23G0200TFFL ❶	(1) #4–4/0	**BKG2G200**
	225	35	PDG23G0225TFFL ❶	(1) #4–4/0	**BKG2G225**
480	100	65	PDG23M0100TFFL	(1) #14–1/0	**BKG2M100**
	110	65	PDG23M0110TFFL	(1) #4–4/0	**BKG2M110**
	125	65	PDG23M0125TFFL	(1) #4–4/0	**BKG2M125**
	150	65	PDG23M0150TFFL	(1) #4–4/0	**BKG2M150**
	175	65	PDG23M0175TFFL ❶	(1) #4–4/0	**BKG2M175**
	200	65	PDG23M0200TFFL ❶	(1) #4–4/0	**BKG2M200**
	225	65	PDG23M0225TFFL ❶	(1) #4–4/0	**BKG2M225**
480	250	35	PDG33G0250TFAN	(1) 250–500 kcmil	**BKG3G250**
	300	35	PDG33G0300TFAN	(1) 250–500 kcmil	**BKG3G300**
	350	35	PDG33G0350TFAN	(1) 250–500 kcmil	**BKG3G350**
	400	35	PDG33G0400TFAN	(2) 3/0–250 kcmil or (1) 3/0–500 kcmil	**BKG3G400**
480	250	65	PDG33M0250TFAN	(1) 250–500 kcmil	**BKG3M250**
	300	65	PDG33M0300TFAN	(1) 250–500 kcmil	**BKG3M300**
	350	65	PDG33M0350TFAN	(1) 250–500 kcmil	**BKG3M350**
	400	65	PDG33M0400TFAN	(2) 3/0–250 kcmil or (1) 3/0–500 kcmil	**BKG3M400**
480	500	35	PDG33G0500TFAN	(2) #2–500 kcmil	**BKG3G500**
	600	35	PDG33G0600TFAN	(2) #2–500 kcmil	**BKG3G600**

❶ Order optional lug kit catalog number 3TA225FDK for 175 A to 225 A PDG2-frame three-pole circuit breakers to provide terminations for (1) #6–300 kcmil.

Assembled power panelboards

Power panelboards can be a critical part of the complete small project or light commercial (LCOM) job. Pow-R-Xpress (PRX) distributors have access to additional support capabilities through Eaton's satellite network where the PRX distributor will be able to provide a complete package including power panelboards. By partnering with the local satellite, PRX distributors can get simple, **Lead Time: B**, power panelboards, fully assembled, in LCOM competitive lead times. This offering is available to distributors who are committed PRX program members. The balance of the materials will be provided by the PRX distributor through their stock.

PRX materials required through distributor stock include:

- PRL1X/PRL2X unassembled panelboards via Pow-R-Xpress program
- Safety switches
- Transformers
- Box for power panelboard (strongly recommended)

Lead Time: B can be seen in the Bid Manager Panelboard Take-off on the price ribbon tab or within the summary or hierarchical price detail.

PRL3X

Maximum voltage
600 Vac
250 Vdc, 2 W

Maximum amperage
600 A main, 800 A MLO
225 A branch
400 A sub-feed

Standard provisions
No—must be manually added

Product type
Panelboard

Features
- Standard chassis accepts Power Defense™ molded case circuit breakers
- Can include PRL1X or PRL2X sub-chassis for miniature circuit breakers
- EZ Box and EZ Trim standard
- Surge options are available up to 200 kA
- Integral customer metering options are available

The bottom line: The PRL3X is a hybrid lighting and power panelboard for lighting/appliance and small power distribution and motor applications.

Pow-R-Xpress assembled offering can include the following:

Maximum voltage ❶
480 Vac

Maximum amperage
600 A main breaker/MLO
225 A branch ❶
400 A sub-feed ❶

Standard features
- PRL1X and PRL2X sub-chassis for miniature circuit breakers
- EZ Box and EZ Trim with no modifications
- Enclosures NEMA 1 and NEMA 3R
- Standard accessories 1a/1b auxiliary, 120 Vac shunt trip, etc. ❶

PRL4X

Maximum voltage
600 Vac
600 Vdc, 2 W

Maximum amperage
1200 A main
1200 A branch

Standard provisions
No—must be manually added

Product type
Panelboard

Features
- Standard chassis accepts Power Defense molded case circuit breakers
- Can include PRL1X or PRL2X sub-chassis for miniature circuit breakers
- BX type can, DFC only standard
- Complete line of Power Xpert metering options are available
- GFCI on the main circuit breaker is available
- Surge options are available up to 400 kA with integral breaker

The bottom line: The PRL4X is designed for 1200 A and below, service entrance, power distribution and motor applications.

Pow-R-Xpress assembled offering can include the following:

Maximum voltage ❶
480 Vac

Maximum amperage
1200 A main breaker/MLO ❶
1200 A branch ❶
1200 A through-feed

Standard features
- PRL1X and PRL2X sub-chassis for miniature circuit breakers
- BX type can, DFC only standard
- Enclosures NEMA 1 and NEMA 3R
- Standard accessories 1a/1b auxiliary, 120 Vac shunt trip, etc. ❶

❶ Lead Time: B code may vary with specific selection. PRX assembled offering includes Lead Time: B selections as identified in Bid Manager Panelboard Take-off on the price ribbon tab or within the summary or hierarchical price detail.

Note: For power panelboards outside of these Pow-R-Xpress parameters, contact your local satellite for price and availability.

Safety switches/disconnects

Application considerations for proper selection

- Which type of switch do you need?
  - General-duty
  - Heavy-duty
  - Double-throw
- How many poles?
  - 1, 2, 3, 4, 6
- Choose the maximum circuit voltage.
  - 240 Vac
  - 600 Vac
- What current (ampere) rating do you need?
  - 30 A, 60 A, 100 A, 200 A, 400 A, 600 A, 800 A, 1200 A
- Should it be fused, non-fused or fusible with neutral?
  - Fusible without neutral
  - Non-fusible
  - Fusible with neutral
- What type of enclosure do you need?
  - NEMA 4X non-metallic
  - NEMA 1
  - NEMA 4 painted steel
  - NEMA 3R
  - NEMA 4X stainless steel

Catalog numbering system—safety switches

DH 3 6 1 N D K

Switch type
DG = General-duty
DH = Heavy-duty
DT = Double-throw

Poles/blades
1 = 1 pole
2 = 2 poles
3 = 3 poles
4 = 4 poles
6 = 6 poles

Voltage
2 = 240 Vac
6 = 600 Vac

Amperes
1 = 30 A
2 = 60 A
3 = 100 A
4 = 200 A
5 = 400 A
6 = 600 A
7 = 800 A
8 = 1200 A

Fusible/non-fusible or neutral
F = Fusible without neutral
U = Non-fusible
N = Fusible with neutral

NEMA enclosure ratings
C = NEMA 4X non-metallic
G = NEMA 1
P = NEMA 4 painted steel
R = NEMA 3R
W = NEMA 4X stainless steel

Series
K = Design all general-duty switches above 200 A and all heavy-duty switches incorporate K-Series switch design
B = Design general-duty 30–100 A

General-duty safety switches (disconnects)

Two-pole—240 Vac
(suitable for service entrance use with a neutral or ground kit)

Current rating (amps)	Type	Enclosure type	Max. hp ratings ❶ Single-phase 120 Vac	Single-phase 240 Vac	Catalog number
30	Fusible with neutral	NEMA 1	–	1.5–3	**DG221NGB**
30	Non-fusible	NEMA 1	2	3	**DG221UGB**
30	Fusible with neutral	NEMA 3R	–	1.5–3	**DG221NRB**
30	Non-fusible	NEMA 3R	2	3	**DG221URB**
60	Fusible with neutral	NEMA 1	–	3–10	**DG222NGB**
60	Non-fusible	NEMA 1	3	10	**DG222UGB**
60	Fusible with neutral	NEMA 3R	–	3–10	**DG222NRB**
60	Non-fusible	NEMA 3R	3	10	**DG222URB**
100	Fusible with neutral	NEMA 1	–	7.5–15	**DG223NGB**
100	Non-fusible	NEMA 1	–	15	**DG223UGB**
100	Fusible with neutral	NEMA 3R	–	7.5–15	**DG223NRB**
100	Non-fusible	NEMA 3R	–	15	**DG223URB**

❶ Maximum hp ratings for fusible units apply only when dual element time-delay fuses are used.

Three-pole—240 Vac
(suitable for service entrance use with a neutral or ground lug kit)

Current rating (amps)	Type	Enclosure type	Max. hp ratings ❶ Single-phase 240 Vac	Three-phase 240 Vac	Catalog number
30	Fusible with neutral	NEMA 1	1.5–3	3–7.5	**DG321NGB**
30	Non-fusible	NEMA 1	3	7.5	**DG321UGB**
30	Fusible with neutral	NEMA 3R	1.5–3	3–7.5	**DG321NRB**
30	Non-fusible	NEMA 3R	3	7.5	**DG321URB**
60	Fusible with neutral	NEMA 1	3–10	7.5–15	**DG322NGB**
60	Non-fusible	NEMA 1	10	15	**DG322UGB**
60	Fusible with neutral	NEMA 3R	3–10	7.5–15	**DG322NRB**
60	Non-fusible	NEMA 3R	10	15	**DG322URB**
100	Fusible with neutral	NEMA 1	7.5–15	15–30	**DG323NGB**
100	Non-fusible	NEMA 1	15	30	**DG323UGB**
100	Fusible with neutral	NEMA 3R	7.5–15	15–30	**DG323NRB**
100	Non-fusible	NEMA 3R	15	30	**DG323URB**

❶ Maximum hp ratings for fusible units apply only when dual element time-delay fuses are used.

General-duty safety switches (disconnects) (continued)

Neutral and ground lug kits (general duty)

Description	Catalog number
Neutral kit for 30 A switches	**DG030NB**
Neutral kit for 60–100 A switches	**DG100NB**
Ground lug kit for 30–100 A switches	**DG030GB**

Class R fuse adapter kits

Ampere rating	Type	Voltage	Catalog number
30	General-duty	240	**DG030RB**
60	General-duty	240	**DS16FK**
100	General-duty	240	**DG100RB**

Heavy-duty safety switches (disconnects)

Three-pole—480–600 Vac (suitable for service entrance use with a neutral or ground lug kit below)

Current rating (amps)	Type	Enclosure type	Max. hp ratings with time delay fuses				Catalog number
			Single-phase		Three-phase		
			480 V	600 V	480 V	600 V	
30	Fusible	NEMA 1	7.5	10	15	20	**DH361FGK** ❶
30	Non-fusible	NEMA 1	7.5	10	20	30	**DH361UGK**
30	Fusible	NEMA 3R	7.5	10	15	20	**DH361FRK** ❶
30	Non-fusible	NEMA 3R	7.5	10	20	30	**DH361URK**
30	Fusible	NEMA 4X	7.5	10	15	20	**DH361FWK** ❶
30	Non-fusible	NEMA 4X	7.5	10	20	30	**DH361UWK**
60	Fusible	NEMA 1	20	25	30	50	**DH362FGK**
60	Non-fusible	NEMA 1	20	25	50	60	**DH362UGK**
60	Fusible	NEMA 3R	20	25	30	50	**DH362FRK**
60	Non-fusible	NEMA 3R	20	25	50	60	**DH362URK**
60	Fusible	NEMA 4X	20	25	30	50	**DH362FWK**
60	Non-fusible	NEMA 4X	20	25	50	60	**DH362UWK**
100	Fusible	NEMA 1	30	40	60	75	**DH363FGK**
100	Non-fusible	NEMA 1	40	50	75	100	**DH363UGK**
100	Fusible	NEMA 3R	30	40	60	75	**DH363FRK**
100	Non-fusible	NEMA 3R	40	50	75	100	**DH363URK**
100	Fusible	NEMA 4X	30	40	60	75	**DH363FWK**
100	Non-fusible	NEMA 4X	40	50	75	100	**DH363UWK**
200	Fusible	NEMA 1	50	50	125	150	**DH364FGK**
200	Non-fusible	NEMA 1	50	50	125	150	**DH364UGK**
200	Fusible	NEMA 3R	50	50	125	150	**DH364FRK**
200	Non-fusible	NEMA 3R	50	50	125	150	**DH364URK**
200	Fusible	NEMA 4X	50	50	125	150	**DH364FWK**
200	Non-fusible	NEMA 4X	50	50	125	150	**DH364UWK**

❶ For 30 A switches requiring Class J fusing, switch must be ordered with the Class J clips from the factory by adding a suffix "J" on the end.

Note: For fuses, please consider Bussmann fuses. For fuse selection assistance, please visit https://disconnectfuseselector.bussmann.com/

Safety switch kits

Neutral and ground lug kits ❶

Description	Catalog number
Neutral kit for 30–60 A switches	**DH030NK**
Neutral kit for 100 A switches	**DH100NK**
Neutral kit for 200 A switches (NEMA 1 & NEMA 3R)	**DH200NK**
Ground lug kit for 30–100 A switches	**DS100GK**
Ground lug kit for 200 A switches	**DS200GK**

❶ A factory-installed ground lug is supplied on all NEMA 4, 4X and 12 safety switches, as well as all 400 A and higher NEMA 1 and 3R safety switches. A factory-installed ground lug is also supplied on all heavy-duty NEMA 1 and 3R 30–200 A switches that do not have a factory-installed neutral.

Class R fuse adapter kits

Ampere rating	Type	Voltage	Catalog number
30	Heavy-duty	600	**DS16FK**
60	Heavy-duty	600	**DS26FK**
100	Heavy-duty	600	**DS36FK**
200	Heavy-duty	600	**DS46FK**

Class J fuse adapter kit ❶

Ampere rating	Type	Voltage	Catalog number
60	Heavy-duty	600	**DS26JK**

❶ 30 A switches must be ordered from the factory with Class J fuse provisions by adding suffix "J" at the end of the switch catalog number. 100 A and 200 A switches can be field modified by moving the load side fuse base.

Transformers

Application considerations for proper selection

- What type of enclosure is required?
  - Ventilated
  - Encapsulated
- What is the primary voltage? (input voltage)
  - 240 V x 480 V (single-phase)
  - 480 V delta (three-phase, three-wire)
- What is the secondary voltage? (output voltage)
  - 120/240 V (single-phase)
  - 208Y/120 V (three-phase, four-wire)
  - 240 V delta with 120 V lighting tap
- How many phases?
  - Single-phase
  - Three-phase
- What kVA transformer is required?
  - If single-phase encapsulated, kVAs are: 0.05, 0.075, 0.10, 0.15, 0.25, 0.50, 0.75, 1, 1.5, 2, 3, 5, 7.5, 10, 15, 25, 37.5
  - If single-phase ventilated, kVAs are: 15, 25, 37.5, 50, 75, 100, 167
  - If three-phase encapsulated, kVAs are: 3, 6, 9, 15, 30, 45, 75
  - If three-phase ventilated, kVAs are: 15, 30, 45, 75, 112.5, 150, 225, 300
- If a ventilated transformer was selected
  - Field kits: lug kits or weathershields
  - Select from selection tables

Catalog numbering system—DOE 2016 ventilated transformers

V 48 M 28 T 75 16 ___

Type
T = DS-3 (single-phase ventilated)
V = DT-3 (three-phase ventilated)

Primary voltage
20 = 240 V x 480 V ❶
48 = 480 V delta ❷

Taps
D = 2@+2.5%, 2@–2.5%
G = 2@–5%
L = 2@–5%X 4@–2.5%
M = 2@+2.5%,4@–2.5%
N = None
P = 1@+5%, 2@–5%X ❶ 2@+2.5%,4@–2.5%

Secondary voltage
11 = 120/240 V ❶
28 = 208Y/120 V
22 = 240 V delta with 120 V lighting tap

Phase
S = Single-phase
T = Three-phase

kVA

15 = 15	**99** = 100 ❶
25 = 25 ❶	**12** = 112.5
30 = 30	**49** = 150
37 = 37.5 ❶	**67** = 167 ❶
45 = 45	**22** = 225
50 = 50 ❶	**33** = 300
75 = 75	

DOE 10 CFR 431.2016
16 = DOE 2016 efficiency

Suffix options
Blank = Aluminum windings
CU = Copper windings
ES = Shielded

❶ Typically used with single-phase transformers.
❷ Three-phase, three-wire.

Catalog numbering system—encapsulated transformers

S 20 N 11 S 05 A ___

Type
S = EP (single-phase encapsulated)
Y = EPT (three-phase encapsulated)

Primary voltage
20 = 240 V x 480 V ❶
48 = 480 V delta ❷

Taps
D = 2@+2.5%, 2@–2.5%
G = 2@–5%
L = 2@–5%X 4@–2.5%
M = 2@+2.5%,4@–2.5%
N = None
P = 1@+5%, 2@–5%X ❶ 2@+2.5%,4@–2.5%

Secondary voltage
11 = 120/240 V ❶
28 = 208Y/120 V
22 = 240 V delta with 120 V lighting tap

Phase and shield
S = Single-phase
T = Three-phase
P = Epoxy potted ❸
E = Shielded

kVA

81 = 0.05 ❶	**05** = 5 ❶
85 = 0.075 ❶	**06** = 6
82 = 0.10 ❶	**07** = 7.5 ❶
83 = 0.15 ❶	**09** = 9
26 = 0.25 ❶	**10** = 10 ❶
51 = 0.50 ❶	**15** = 15
76 = 0.75 ❶	**25** = 25 ❶
01 = 1 ❶	**30** = 30
16 = 1.5 ❶	**37** = 37.5 ❶
02 = 2 ❶	**45** = 45
03 = 3	**75** = 75

Model number
Model number (A–Z) omitted when additional suffixes are used

Suffix options
Blank = Aluminum windings
CU = Copper windings

❶ Typically used with single-phase transformers.
❷ Three-phase, three-wire.
❸ Single-phase 0.25–2 kVA encapsulated transformers only.

General-purpose transformers

Three-phase ventilated, 480 delta—208 Y/120, 150 °C rise, aluminum windings, DOE 2016

kVA	Frame number	Wiring diagram	Weathershield	Typical lug kit	Catalog number
15	939	280B	WS57	LKS1	**V48M28T1516** ❶
30	940	280B	WS58	LKS1	**V48M28T3016** ❶
45	940	280B	WS58	LKS1	**V48M28T4516** ❶
75	942	280B	WS59	LKS2	**V48M28T7516** ❷
112.5	943	280B	WS60	LKS2	**V48M28T1216** ❷
150	943	280B	WS60	LKS3	**V48M28T4916** ❷
225	944	280B	WS61	LKS3	**V48M28T2216**
300	945	280B	WS62	LKS3	**V48M28T3316**

❶ Suitable for use with wall-mounted bracket WMB05.

❷ Suitable for use with wall-mounted bracket WMB04.

Three-phase ventilated, 480 delta—240/120 lighting tap, 150 °C rise, aluminum windings, DOE 2016

kVA	Frame number	Wiring diagram	Weathershield	Typical lug kit	Catalog number
15	939	282B	WS57	LKS1	**V48M22T1516** ❶
30	940	282B	WS58	LKS1	**V48M22T3016** ❶
45	940	282B	WS58	LKS1	**V48M22T4516** ❶
75	942	282B	WS59	LKS2	**V48M22T7516** ❷
112.5	943	282B	WS60	LKS2	**V48M22T1216** ❷
150	943	282B	WS60	LKS3	**V48M22T4916** ❷
225	944	282B	WS61	LKS3	**V48M22T2216**
300	945	282B	WS62	LKS3	**V48M22T3316**

❶ Suitable for use with wall-mounted bracket WMB05.

❷ Suitable for use with wall-mounted bracket WMB04.

Three-phase encapsulated, 480 delta—208 Y/120, 115 °C rise

kVA	Frame number	Wiring diagram	Catalog number
3	201	70A	**Y48G28T03N**
6	200	70A	**Y48G28T06N**
9	103	70A	**Y48G28T09N**
15	95	72B	**Y48D28T15N**
30	243	84A	**Y48M28T30N**
45	244	84A	**Y48M28T45N**
75	245	84A	**Y48M28T75N**

Note: For frame drawings and wiring diagrams, refer to www.eaton.com/transformers.

Single-phase ventilated, 240 x 480—120/240, 150 °C rise, aluminum windings, DOE 2016

kVA	Frame number	Wiring diagram	Weathershield	Typical lug kit	Catalog number
15	842	3XA	WS45	LKS1	**T20P11S1516** ❶
25	842	3XA	WS45	LKS1	**T20P11S2516** ❶
37.5	843	3XA	WS43	LKS1	**T20P11S3716**
50	843	3XA	WS43	LKS2	**T20P11S5016**
75	844	3XA	WS44	LKS2	**T20P11S7516**
100	844	3XA	WS44	LKS3	**T20P11S9916**
167	814	288A	WS13	LKS3	**T48P11S6716** ❷

❶ Suitable for use with wall-mounted bracket WMB01.

❷ 480 V primary only.

Single-phase encapsulated 240 x 480—120/240, 115 °C rise

kVA	Frame number	Wiring diagram	Catalog number
0.05	52	3A	**S20N11S81N**
0.075	53	3A	**S20N11S85N**
0.1	54	3A	**S20N11S82N**
0.15	55	3A	**S20N11S83N**
0.25	57P	3A	**S20N11P26P**
0.5	57P	3A	**S20N11P51P**
0.75	58P	3A	**S20N11P76P**
1	67P	3A	**S20N11P01P**
1.5	67P	3A	**S20N11P16P**
2	68P	3A	**S20N11P02P**
3	176	3A	**S20N11S03N**
5	177	3A	**S20N11S05N**
7.5	178	3A	**S20N11S07N**
10	179	3A	**S20N11S10N**
15	180	3A	**S20N11S15N**
25	182	23A	**S20L11S25N**
37.5	300A	248A	**S20L11S37**

Note: For frame drawings and wiring diagrams, refer to www.eaton.com/transformers.

General-purpose transformers sizing tables

Three-phase transformer full load current

	Rated line–line voltage						
kVA	208	240	480	600	2400	4160	4800
3	8.3	7.2	3.6	2.9	0.7	0.4	0.4
6	16.7	14.4	7.2	5.8	1.4	0.8	0.7
9	25.0	21.7	10.8	8.7	2.2	1.2	1.1
15	41.6	36.1	18.0	14.4	3.6	2.1	1.8
30	83.3	72.2	36.1	28.9	7.2	4.2	3.6
45	124.9	108.3	54.1	43.3	10.8	6.2	5.4
75	208.2	180.4	90.2	72.2	18.0	10.4	9.0
112.5	312.3	270.6	135.3	108.3	27.1	15.6	13.5
150	416.4	360.9	180.4	144.3	36.1	20.8	18.0
225	624.6	541.3	270.6	216.5	54.1	31.2	27.1
300	832.7	721.7	360.9	288.7	72.2	41.6	36.1
500	1387.9	1202.8	601.4	481.1	120.3	69.4	60.1
750	2081.9	1804.3	902.1	721.7	180.4	104.1	90.2
1000	2775.8	2405.7	1202.8	962.3	240.6	138.8	120.3

Note: Line current = (kVA x 1000) / (line voltage x 1.732).

Single-phase transformer full load current

	Rated line–line voltage								
kVA	120	208	240	277	480	600	2400	4160	4800
0.5	4.2	2.4	2.1	1.8	1.0	0.8	0.2	0.1	0.1
1	8.3	4.8	4.2	3.6	2.1	1.7	0.4	0.2	0.2
1.5	12.5	7.2	6.3	5.4	3.1	2.5	0.6	0.4	0.3
2	16.7	9.6	8.3	7.2	4.2	3.3	0.8	0.5	0.4
3	25.0	14.4	12.5	10.8	6.3	5.0	1.3	0.7	0.6
5	41.7	24.0	20.8	18.1	10.4	8.3	2.1	1.2	1.0
7.5	62.5	36.1	31.3	27.1	15.6	12.5	3.1	1.8	1.6
10	83.3	48.1	41.7	36.1	20.8	16.7	4.2	2.4	2.1
15	125.0	72.1	62.5	54.2	31.3	25.0	6.3	3.6	3.1
25	208.3	120.2	104.2	90.3	52.1	41.7	10.4	6.0	5.2
37.5	312.5	180.3	156.3	135.4	78.1	62.5	15.6	9.0	7.8
50	416.7	240.4	208.3	180.5	104.2	83.3	20.8	12.0	10.4
75	625.0	360.6	312.5	270.8	156.3	125.0	31.3	18.0	15.6
100	833.3	480.8	416.7	361.0	208.3	166.7	41.7	24.0	20.8
167	1391.7	802.9	695.8	602.9	347.9	278.3	69.6	40.1	34.8
250	2083.3	1201.9	1041.7	902.5	520.8	416.7	104.2	60.1	52.1
333	2775.0	1601.0	1387.5	1202.2	693.8	555.0	138.8	80.0	69.4

Note: Line current = (kVA x 1000) / line voltage.

Enclosed control

Application considerations for proper selection

- What class of starter do you need?
  - Non-combination, non-reversing
  - Combination, non-fusible or fusible, non-reversing
  - Combination, breaker, non-reversing
- What type of enclosure do you need?
  - NEMA 1
  - NEMA 3R
  - NEMA 4X
  - NEMA 12
- What is the horsepower and voltage of the motor?

  Note: This will determine the NEMA starter size.
  - Horsepower: 1, 5, 10, 25 hp, etc.
  - Motor voltage: 200, 230, 460, 575 V
- What is the control voltage for the coil?
  - 120 V
  - 240 V
  - 480 V
- What additional accessories do you need?
  - Cover control kits, such as HAND/OFF/AUTO selector switch or STOP/START pushbuttons
  - CPT kits
  - Fuse kits
- What size overload relay is needed?
  - 1–5 FLA
  - 4–20 FLA
  - 9–45 FLA

Catalog numbering system—non-combination and combination NEMA enclosed starters

ECN 05 1 1 A A A - R63/C

Type
ECN = Enclosed starter

Class
05 = Non-combination, non-reversing
16 = Combination, non-fusible or fusible, non-reversing
22 = Combination, breaker, non-reversing

Enclosure type
1 = NEMA 1
2 = NEMA 3R
4 = NEMA 4X
8 = NEMA 12

NEMA size
A = 00
0–9 = 0–9

Coil voltage
A = 120 V
B = 240 V
C = 480 V

Cover control
A = None
B = Start/stop pushbuttons
H = HOA selector switch

Disconnect fuse clip rating
A = None—non-fusible
B = 30 A / 250 V
C = 30 A / 600 V
D = 60 A / 250 V
E = 60 A / 600 V

SSOL rating
R63/B = 1–5 FLA
R63/C = 4–20 FLA
R63/D = 9–45 FLA

Starters

NEMA non-combination, non-reversing starters, Type 1

NEMA size	Motor voltage	Maximum hp rating	Magnet coil voltage	SSOL range	Catalog number
00	200, 230	1-1/2	120	1–5	**ECN05A1AAA-R63/B**
	460	2	120	1–5	**ECN05A1AAA-R63/B**
0	200, 230	3	120	1–5	**ECN0501AAA-R63/B**
	460	5	120	1–5	**ECN0501AAA-R63/B**
	200, 230	3	120	4–20	**ECN0501AAA-R63/C**
	460	5	120	4–20	**ECN0501AAA-R63/C**
1	200, 230	7-1/2	120	4–20	**ECN0511AAA-R63/C**
	460	10	120	4–20	**ECN0511AAA-R63/C**
2	200, 230	10	120	9–45	**ECN0521AAA-R63/D**
	460	25	120	9–45	**ECN0521AAA-R63/D**

NEMA combination, non-reversing starters, non-fusible disconnect Type 1

NEMA size	Motor voltage	Maximum hp rating	Magnet coil voltage	SSOL range	Catalog number
00	200, 230	1-1/2	120	1–5	**ECN16A1AAA-R63/B**
	460	2	120	1–5	**ECN16A1AAA-R63/B**
0	200, 230	3	120	1–5	**ECN1601AAA-R63/B**
	460	5	120	1–5	**ECN1601AAA-R63/B**
	200, 230	3	120	4–20	**ECN1601AAA-R63/C**
	460	5	120	4–20	**ECN1601AAA-R63/C**
1	200, 230	7-1/2	120	4–20	**ECN1611AAA-R63/C**
	460	10	120	4–20	**ECN1611AAA-R63/C**
2	200, 230	10	120	9–45	**ECN1621AAA-R63/D**
	460	25	120	9–45	**ECN1621AAA-R63/D**

NEMA enclosures with CPT modifications

To order an enclosure with CPT:

1. Change ECN05 to ECN07 for non-combination units, and ECN16 to ECN18 for combination units.
2. Change the "A" in the 7th catalog string to the correct letter based on the below table

Catalog string letter	Primary	Secondary
E	208/60	120/60
B	240/480–220/440 wired for 240 V	120/60–110/50
C	240/480–220/440 wired for 480 V	120/60–110/50

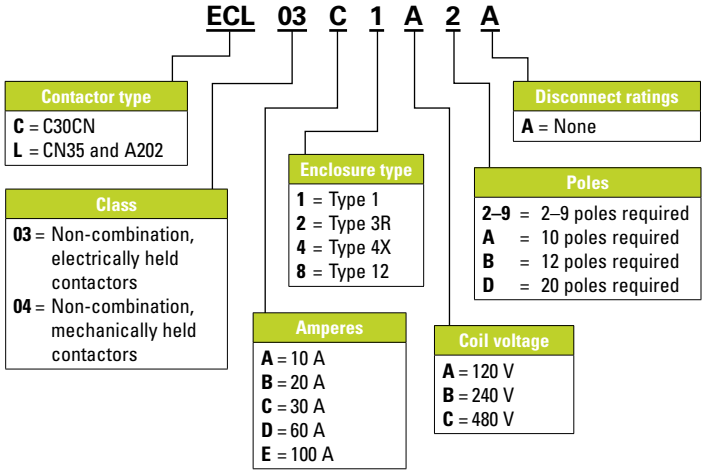
NEMA accessories—CPT and fuse kits

Description	Catalog number
100 VA CPT kit (208/277 V primary, 120 V secondary)	**C341CE**
100 VA CPT kit (240/480 V primary, 120 V secondary)	**C341CC**
Fuse clip kit for combination starter—30 A / 250 V	**C351KC21**
Fuse clip kit for combination starter—30 A / 600 V and 60 A / 250 V	**C351KD22-61**

NEMA accessories—cover control kits

	Catalog number		
Description	Non-combination Type 1, size 00–2	Non-combination Type 1, size 3–5	Combination Type 1 and all Type 3R, 12, 4X
STOP/START pushbuttons	**C600M1**	**C400GK1**	**C400T1**
STOP/START pushbuttons with red RUN light (85–264 Vac)	**C600M101A**	**C400GK12**	—
HAND/OFF/AUTO selector switch	**C600M12**	**C400GK3**	**C400T12**
HAND/OFF/AUTO selector switch with red RUN light (85–264 Vac)	**C600M121A**	**C400GK32**	—

Catalog numbering system—enclosed lighting contactors



Lighting contactors

Lighting non-combination contactors, Type 1

Contactor type	Number of poles	Ampere rating	Coil voltage	Catalog number
C30CN, electrically held	2	30	120	**ECC03C1A2A**
C30CN, electrically held	4	30	120	**ECC03C1A4A**
C30CN, electrically held	6	30	120	**ECC03C1A6A**
CN35, electrically held	2	20	120	**ECL03B1A2A**
CN35, electrically held	4	20	120	**ECL03B1A4A**
CN35, electrically held	6	20	120	**ECL03B1A6A**

Pushbutton stations and pushbuttons

Application considerations for proper selection

- Do you need an assembled pushbutton station or loose components in clam-shell packaging?
  - Assembled pushbutton station
  - Loose components in clam-shell package

For pushbutton stations

- What size pushbutton station do you need?
  - 22 mm
  - 30 mm
- How many elements (operators) do you want?
  - 1, 2, or 3

For loose components

- What type of operator do you need?
  - Emergency stop operator
  - Momentary pushbutton
  - Indicating light
  - Illuminated pushbutton
  - Selector switch

30 mm pushbutton stations

Description	Catalog number
Single-element	
Emergency Off—break glass pushbutton station, NC	**10250TGR**
Man-Off-Auto selector switch pushbutton station, 2NO	**10250T3524**
Stop mushroom head pushbutton station, 1NC	**10250T3519**
Two-element	
Start-Stop pushbutton station, 1NO-2NC	**10250T3525**
Start-Stop rectangular pushbutton station, 1NO-1NC	**10250H5200**
Three-element	
Open-Close-Stop pushbutton station, 2NO-3NC	**10250T3614**
Up-Down-Stop rectangular pushbutton station, 2NO-1NC	**10250H5301**

22 mm pushbutton stations

Description	Catalog number
Single-element	
40 mm mushroom head push-pull emergency stop operator, NC	**M22-C1-M1H**
40 mm illuminated mushroom head push-pull emergency stop operator, 85–264 Vac, NO-NC	**M22-C1-M2H**
Two-element	
Flush pushbutton, Start-Stop, NO-NC	**M22-C2-M2V**
Flush pushbutton, Forward-Reverse, 2NO	**M22-C2-M3V**
Three-element	
Flush pushbutton, Open-Stop-Close, 2NO-1NC	**M22-C3-M4V**
Flush pushbutton, Forward-Stop-Reverse, 2NO-1NC	**M22-C3-M5V**
Flush pushbutton, Up-Stop-Down, 2NO-NC	**M22-C3-M6V**

Pushbutton components

Individually packaged 30 mm pushbuttons and operators NEMA 4, 4X, 12 13

Description	Catalog number
Emergency stop operator	
Red non-illuminated push-pull, 1NO-1NC, includes 2 legend plates: EMERG. STOP and STOP	**10250T5B62-1-POP**
Jumbo mushroom pushbutton, 1NO-1NC, button engraved EMERG. STOP (button is engraved—no legend plate provided)	**10250T33-POP**
Red mushroom pushbutton engraved EMERG. STOP, 1NO-1NC, includes 2 legend plates: EMERG. STOP and STOP	**10250T32R-POP**
Momentary pushbutton	
Black flush pushbutton, 1NO-1NC, includes 2 legend plates: START and JOG	**10250T30B-POP**
Red extended pushbutton, 1NO-1NC, includes 1 legend plate: STOP	**10250T31R-POP**
Indicating light	
Red indicating light transformer 120 Vac with two extra lenses (green and amber), 1NO-1NC, includes 2 legend plates: RUN and JOG	**10250T34R-POP**
Illuminated pushbutton	
Red illuminated pushbutton (120 Vac/Vdc),with 2 extra lenses (green and amber), 1NO-1NC, includes 1 legend plate: Power On	**10250T411C21-1-POP**
Selector switch	
Two-position selector switch, 1NO-1NC, includes 3 legend plates: Off/On, Hand/Auto and Run/Jog	**10250T20KB-POP**
Three-position selector switch, 2NO-2NC, includes 1 legend plate: Hand/Off/Auto	**10250T22KB-POP**
Three-position selector switch, 1NO-1NC, includes 1 legend plate: Hand/Off/Auto	**10250T21KB-POP**

Manual starters

Application considerations for proper selection

- What is the motor nameplate information?
  - System (AC or DC) and voltage?
  - If AC, is the motor single-phase or three-phase?
  - What is the motor horsepower?
- What type of enclosure is needed?
  - No enclosure (will be mounted in separate enclosure)
  - NEMA 1 enclosure
- Is overload protection required?
  - No
  - Yes. If yes, what is the motor full load amperes (FLA)?
- What type of operator does the customer want?
  - Button
  - Toggle

Manual starters

Manual motor switches without overload

Type	Pole config.	Maximum motor (hp) 120 V	240 V	480 V	230 V	Catalog number Open	Enclosed
B230A	Two-pole	2	5	—	—	**B230AN**	**B230AG**
B230B	Two-pole	2	5	10	15	**B230BND**	**B230BGD**
	Three-pole	3	7.5	15	20	**B330AND**	**B330AGD**

Single-phase manual starters with overload protection—Type MS series starters ❶

Pole config.	Maximum motor (hp) AC voltage 120 Vac	240 Vac	277 Vac	DC voltage 120 Vdc	240 Vdc	32 Vdc	Catalog number Open	Enclosed ❷
Single-pole	1	1	1	1/4	1/4	1/4	**MST01**	**MST01SN1P**
Two-pole	1	1	1	1/4	1/4	1/4	**MST02**	**MST02SN1P**

❶ Use MSH heaters for MS series starters.

❷ With pilot light.

Single-phase and three-phase manual starters with overload protection—Type B100 ❶

Pole config.	NEMA size	Maximum motor (hp) AC voltage 120 Vac	208–240 Vac	480–600 Vac	DC voltage 115 Vdc	230 Vdc	Catalog number Open	Enclosed ❷
Two-pole (single-phase)	0	1	2	—	1	1-1/2	**B100M0B**	**B100S0B**
	1	2	3	—	1-1/2	2	**B100M1B**	**B100S1B**
Three-pole (three-phase)	0	2	3	5	—	—	**B100M0C**	**B100S0C**
	1	3	7-1/2	10	—	—	**B100M1C**	**B100S1C**

❶ Use FH heaters for Type B100 starters.

❷ NEMA 1.

Three-phase loadcenters

Application considerations for proper selection

Select an interior

- What is the number of branch circuits/poles?
  - 30
  - 42

Enclosure type

- What enclosure is required?
  - NEMA 1 indoor
  - NEMA 3R outdoor
- Is aluminum or copper bus required?
  - Aluminum
  - Copper

Main device

- Main lugs only (MLO) or main circuit breaker
  - MLO
  - MCB (choose amperage)

CH legacy loadcenters

CH 42 B 3 200 L

Number of circuits
Selection circuits
42 = 42 circuits

Main device
B = Main breaker
L = Main lug only

Bus amperes
125 = 125 A
150 = 150 A
200 = 200 A
225 = 225 A

Loadcenter type
Type CH 3/4-in (19.1 mm) branch circuit breakers

Phases
Blank = Single-phase
3 = Three-phase

Box sizes
L = 39 inches
R = Outdoor (no cover)
G = 34 1/8 inches

CH legacy indoor covers (ordered separately)

CH 8 L F

Type CH

Loadcenter cover series

Mounting
F = Combination flush/surface
S = Surface

Box size
Indicated in loadcenter catalog number
G = 34 1/8" H
L = 39" H

Single-phase and three-phase legacy loadcenters

3 BR 30 42 B 200 _

Eaton's type BR loadcenter

Phase
Blank = Single-phase
3 = Three-phase

Maximum number of circuits

Main device
B = Main breaker
L = Main lug

Amperes
125 = 125 A
150 = 150 A
200 = 200 A

Number of 1-inch (25.4 mm) spaces
30 = 30 spaces
42 = 42 spaces

Enclosure type
Blank = NEMA 1 indoor combination trim
R = NEMA 3R rainproof

120/208 Vac three-phase, four-wire applications

Aluminum bus					Copper bus
BR style	**Spaces**	**Main**	**Ampere rating**	**Enclosure type**	**BR style**
3BR3042B125	30	Main breaker	125	Indoor	—
3BR3042B150	30	Main breaker	150	Indoor	—
3BR3042B200	30	Main breaker	200	Indoor	—
3BR4242B200	42	Main breaker	200	Indoor	**CH42B3200L**
3BR4242B225	42	Main breaker	225	Indoor	—
3BR3042B200R	30	Main breaker	200	Outdoor	—
3BR4242B200R	42	Main breaker	200	Outdoor	**CH42B3200R**
3BR3042L200	30	Main lug	200	Indoor	—
3BR4242L200	42	Main lug	200	Indoor	—
3BR4242L225	42	Main lug	225	Indoor	**CH42L3225G**

Note: All combinations are not valid, refer to the catalog section.