

Panelboards

Pow-R-Line C Panelboards

Product Selection

Type PRL1a

Table 2.1 Base Configurations - PRL1a

Ampere Rating	Interrupting Rating (kA Sym.) 240Vac	Breaker Type
Main Lug Only		
100	—	—
225	—	—
400	—	—
600	—	—
Main Breaker		
100	10	BAB
100	18	EDH/FDB
100	22	QBHW
100	65	ED
100	65	FD
100	100	EDH
100	100	HFD
225	65	ED
225	100	EDH
400	65	DK
400	65	KD
400	100	HKD
400	200	KDC

Table 2.2 Bolt-on BAB, QBHW, QBGF, QBHGF, QBGFEP, QBHGFEP, QBAF, QBAG

Ampere Rating	Interrupting Rating (kA Sym.) 240Vac ^{①②}	Breaker Type
15-30	10	DNBA(twin)
15-60	10	BAB [Ⓢ]
70	10	BAB
80-100	10	BAB
125	10	BAB (2-Pole)
15-50 ^③	10	QBGF ^④
15-50 ^③	10	QBGFEP ^⑤
15-20	10	QBCAF ^⑥
15-60	10	BAB-D ^⑦
15-30	10	BAB-C ^⑧
15-30	10	BABRSP ^⑨
15-60	22	QBHW
70	22	QBHW
80-100	22	QBHW
125	22	QBHW (2 Pole)
15-30	22	QBHGF ^④
15-30	22	QBHGFEP ^⑤

① 1-pole breakers are rated 120Vac maximum.

② 240 volt breakers must be used on 3-phase, 3-wire, 240 volt delta systems or on the high leg of a midpoint delta grounded system.

③ 50 ampere devices are available as 2-pole only.

④ GFCI for 5 mA personnel protection.

⑤ GFP for 30 mA equipment protection.

⑥ Combination arc fault circuit breaker.

⑦ HID (High Intensity Discharge) rated breaker.

⑧ Switching Neutral Breaker. 1-pole device requires 2-pole space, 2-pole device requires 3-pole space.

⑨ Solenoid operated breaker.

Ⓢ BAB breakers are not DC rated.

Box Sizing and Selection

Assembled Circuit Breaker Panelboards

Box size and box and trim catalogue numbers for all standard panelboard types are found in **Table 2-5**.

Instructions:

- Using description of the required panelboard, select the rating and type of main required.
- Count the total number of branch circuit poles, including provisions, required in the panelboard. Do not count main breaker poles. Convert 2- or 3-pole branch breaker to single-poles, i.e., 3-pole breaker, count as 3 poles.

Determine sub-feed breaker or through-feed lug requirements.
- Select the main ampere rating section from **Table 2-5**.
- Select panelboard type from first column, main breaker frame from second column.
- From Step #2, determine the number of branch circuits in Column 3.
- Read box size, box and trim catalogue numbers across columns to the right. Specify surface or flush mounting on the order.

Cabinets

Fronts are code-gauge steel, ASA-61 light gray painted finish.

Boxes are code-gauge galvanized steel without knockouts. Standard depth is 5-3/4 inches (146.1 mm). Standard width is 20 inches (508.0 mm). An optional 28-inch (711.2 mm) wide box is available.

Top and Bottom Gutters

5-1/2 inches (139.7 mm) minimum.

Table 2.5 PRL1a Panelboard Sizing

Ampere Rating	Main Breaker Types and Positions	Number Branch Cct. Spaces	Box Dimensions (Inches)			Box Catalogue Number	Trim Catalogue Number
			H	W	D		
100	BAB, QBHW (Horizontal)	15, 21, 27	30	20	5.75	EZB2030RC	EZT2030 S or F
100/225	EHD, ED, EDH, FD (Vertical)	18, 24	36	20	5.75	EZB2036RC	EZT2036 S or F
		30	42	20	5.75	EZB2042RC	EZT2042 S or F
		42	48	20	5.75	EZB2048RC	EZT2048 S or F
		60	60	20	5.75	EZB2060RC	EZT2060 S or F
		72, 84	72	20	5.75	EZB2072RC	EZT2072 S or F
400	DK, KD, HKD, KDC (Vertical)	24	48	20	5.75	EZB2048RC	EZT2048 S or F
		30	54	20	5.75	EZB2054RC	EZT2054 S or F
		42	60	20	5.75	EZB2060RC	EZT2060 S or F
		60, 72	72, 90	20	5.75	EZB2072RC	EZT2072 S or F
		Main Breaker with Through-Feed Lugs					
100	BAB, QBHW (Horizontal)	15, 21, 27	30	20	5.75	EZB2030RC	EZT2030 S or F
100/225	EHD, HFD, FD (Vertical)	18	36	20	5.75	EZB2036RC	EZT2036 S or F
		24, 30	42	20	5.75	EZB2042RC	EZT2042 S or F
		42	54	20	5.75	EZB2054RC	EZT2054 S or F
		60	60	20	5.75	EZB2060RC	EZT2060 S or F
		72	72	20	5.75	EZB2072RC	EZT2072 S or F
400	DK, KD, HKD, KDC (Vertical)	24	60	20	5.75	EZB2060RC	EZT2060 S or F
		30	72	20	5.75	EZB2072RC	EZT2072 S or F
		42	72	20	5.75	EZB2072RC	EZT2072 S or F
		Main Breaker with Surge Protection Device					
100	BAB, QBHW (Horizontal)	15, 21, 27	42	20	5.75	EZB2042RC	EZT2042 S or F
100/225	EHD, ED, EDH, FD (Vertical)	18	48	20	5.75	EZB2048RC	EZT2048 S or F
		24	48	20	5.75	EZB2048RC	EZT2048 S or F
		30	54	20	5.75	EZB2054RC	EZT2054 S or F
		42	60	20	5.75	EZB2060RC	EZT2060 S or F
		60	72	20	5.75	EZB2072RC	EZT2072 S or F
		72	72	20	5.75	EZB2072RC	EZT2072 S or F
400	DK, KD, HKD, KDC (Vertical)	24	48	20	5.75	EZB2048RC	EZT2048 S or F
		30, 42	54	20	5.75	EZB2054RC	EZT2054 S or F
		60	90	20	5.75	EZB2090RC	EZT2090 S or F
		72, 90	90	20	5.75	EZB2090RC	EZT2090 S or F

Note: Depending on the panel configuration, 72/84 cct interiors fit into a 90" H box.

Table 2.6 Metric box dimensions:

Box Catalogue Number	Height	Width	Depth
EZB2030RC	762	508.0	146
EZB2036RC	914	508.0	146
EZB2042RC	1067	508.0	146
EZB2048RC	1219	508.0	146
EZB2054RC	1372	508.0	146
EZB2060RC	1524	508.0	146
EZB2072RC	1828	508.0	146
EZB2090RC	2286	508.0	146