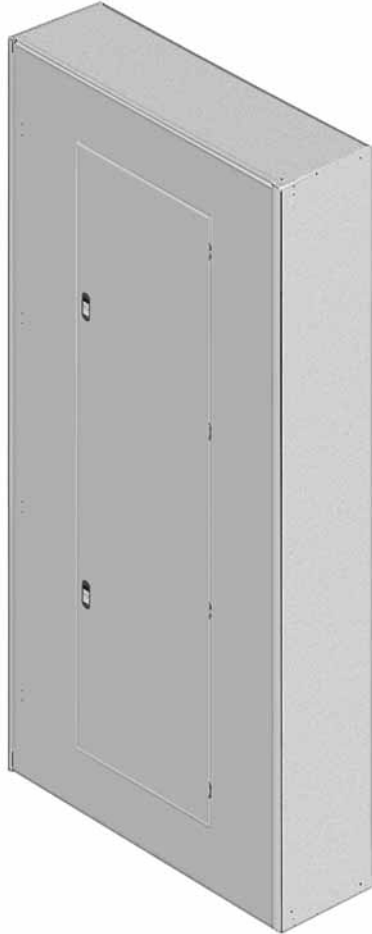


Lighting and Power Distribution Panelboards



Specifications

Main Breaker: 600A Maximum
Main Lugs only: 800A Maximum
Voltages: 600V AC Maximum
250V DC Maximum
1Ø2W, 1Ø3W,
3Ø3W, 3Ø4W

General — P3 panelboards comply the with following standards:

- NEMA Standards PB-1
- UL Standards
 - Enclosure — UL 50
 - Panelboards — UL 67
- National Electric Code (NFPA 70)
- Federal Specification W-P 115c

Main Lugs — Suitable for copper or aluminum wire.

Main Breakers — ① FXD6, FD6, HFD6 and HFXD6 main breakers are mounted horizontally. CFD6, JXD6, JD6, HJD6, HJXD6, SJD6, LXD6, LD6, HLD6 and HLXD6 are mounted vertically. CJD6, SCJD6, CLD6, SLD6, SHLD6 and SCLD6 must be mounted at top only.

Box — Fabricated from galvanized steel. Removable end walls.

Bussing — Busbars and breaker branch bus is tin-finished aluminum per UL 67 unless otherwise stated. See panel submittals for optional call outs. Copper bus is available as an option.

Front — Fabricated from cold rolled steel and equipped with the concealed hinges, flush lock and a holder for directory card. Trim screws are concealed behind a lockable door.

① All main and branch devices are bolted to the bars

type
P3

SIEMENS

Panel Unit Space To Box Height Requirements

"B" Dimension Box Height	P3 Panels With Standard Line Lugs. Unit Space (starting with 9" and adding 6" increments) "A" Dimension										
	Main Lugs				Main Breakers						
	250A	400A	600A	800A	250A Horiz. FD	250A Vert. FD	250A CFD	400A JD	400A CJD	600A LD	600A CLD
56	27	21	21	21	21	15	9	9	—	9	—
62	33	27	27	27	27	21	15	15	9	15	9
68	39	33	33	33	33	27	21	21	15	21	15
74	45	39	39	39	39	33	27	27	21	27	21
80	51	45	45	45	45	39	33	33	27	33	27

Main Breaker Selection ①

Ampere Rating	Breaker Type	Maximum Interrupting Rating (kA)			Lug Wire Range
		240V	480V	600V	
250	FD6, FXD6 (STD)	65	35	18	#6 AWG-350 Kcmil Cu or #4 AWG-30 Kcmil Al
	HFD6, HFXD6	100	65	25	
	CFD6	200	150	100	
400	JXD6 (STD), JD6	65	35	25	3/0-500 Kcmil Cu or 4/0-500 Kcmil Al
	HJD6, HJXD6	100	65	35	
	SJD6	65	35	25	
	CJD6, SCJD6	200	200	100	
600	LXD6 (STD)	65	35	25	3/0-500 Kcmil Cu or 4/0-500 Kcmil Al
	LD6	65	35	25	
	HLD6, HLXD6	100	65	35	
	SLD6,	65	35	25	
	SHLD6	100	65	35	
	CLD6, SCLD6	200	150	100	

Fig. P3-1

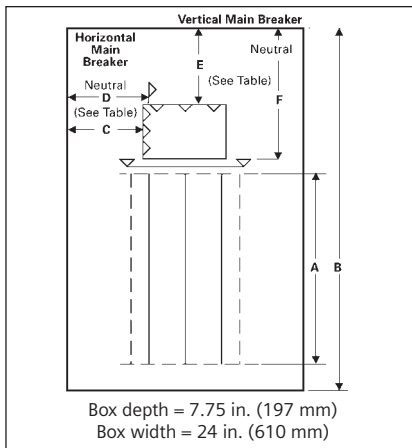
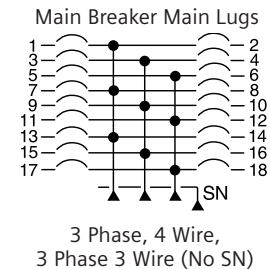
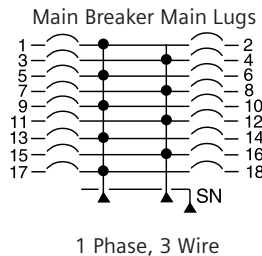


Table P3-1 – Gauge Steel of Boxes Fronts, Surface & Flush

Dimensions in inches (mm)		Gauge Steel	
Width	Height	Box	Front
24" (610)	56 - 80 (1422, 2032)	#16	#14

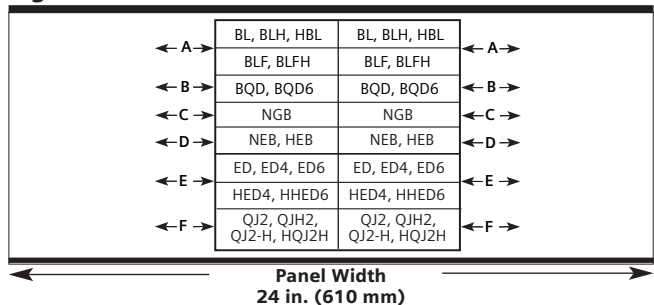
Typical Panelboard Wiring Diagrams



Branch Breaker Side Gutters Inches (mm) (Fig. P3-2)

Reference Letter	Panel Width 24" (609)
A	7.750 (197)
B	7.125 (181)
C	6.620 (168)
D	6.440 (164)
E	6.000 (152)
F	7.000 (178)

Fig. P3-2



Standard Enclosures

Box Height (in.)	Catalog Number				
	Type 1 Standard Trim			Type 3R	Type 3R/12
	Box	Surface	Flush		
56	24WD56	P3S56	P3F56	24NRD56	24WPD56
62	24WD62	P3S62	P3F62	24NRD62	24WPD62
68	24WD68	P3S68	P3F68	24NRD68	24WPD68
74	24WD74	P3S74	P3F74	24NRD74	24WPD74
80	24WD80	P3S80	P3F80	24NRD80	24WPD80

Options For Type 1 Trims

Items must be ordered as manual line item on factory.

Hinged trim – Add "H" suffix

Door-in-door – Add "D" suffix

Metal card holder – Add "M" suffix

① Interchangeable trip main breakers are mounted at top of panel only.

Breaker Kits and Accessories

Kit No.	Description	Contents
BBKB32	BL/BQD 6-pole 3" branch breaker kit	Kit contains top barrier, (3) A/C connectors, (1) B connector, hardware
BBKNB32	NGB 6-pole 3" branch mounting kit	Kit contains breaker support, interphase barriers (3) A/C connectors, (1) B phase connector, hardware
BBKEB32	NEB/HEB 6 pole 3" branch breaker kit	Kit contains breaker support, interphase barriers (3) A/C connectors, (1) B phase connector, hardware
BBKED32	ED 6-pole 3" branch breaker kit	Kit contains breaker support, inter-phase barriers, (3) A/C connectors, (1) B connector, hardware
BBKQ1	QJ branch breaker kit for 2 and 3-pole single mount	Kit to contain all connectors and cover plates necessary to mount both 2 and 3-pole breakers
BBKQ2	Branch breaker kit for 2 and 3-pole QJ twin mount	Kit to contain all connectors and cover plates necessary to mount both 2 and 3-pole breakers
DFFP3	Deadfront filler 3"	3" empty space filler and hardware
DFFP6	Deadfront filler 6"	6" empty space filler and hardware
P3BK1	P3 bonding kit	Bonding strap and hardware
QF3	Filler plate for BL, BQD, ED frame branch breaker provisions	1" filler plate
EBF1	Filler plate for NEB/HEB branch breaker provision content	1" filler plate

Branch Circuit Breakers

Max. Amp Rating	Bolt-On Breaker Type	No. of Poles	Amp Rating	Maximum Interrupting Rating (kA)							DC	Load Connectors
				Volts - AC								
				120	120/240	240	277	480	600	250		
100	BL ①	1	15 - 70	10	—	—	—	—	—	—	15-20A #14-#10 AWG Cu #12-#10 AWG Al 25-35A #8-#6 AWG Cu #8-#6 AWG Al 40-50A #8-#6 AWG Cu #8-#4 AWG Al 55-70A #8-#4 AWG Cu #8-#2 AWG Al 80-100A #4-#1/0 AWG Cu #2-#1/0 AWG Al	
		2	15 - 100	—	10	—	—	—	—	—		
		3	15 - 100	—	—	10	—	—	—	—		
	BL HID	1	15 - 30	10	—	—	—	—	—	—		
		2	15 - 30	—	10	—	—	—	—	—		
	BLR	2	15 - 100	—	—	10	—	—	—	—		
		1	15 - 30	10	—	—	—	—	—	—		
	BLE	2	15 - 60	—	10	—	—	—	—	—		
		1	15 - 30	22	—	—	—	—	—	—		
	BLEH	2	15 - 60	—	22	—	—	—	—	—		
		1	15 - 30	10	—	—	—	—	—	—		
	BLF	2	15 - 60	—	10	—	—	—	—	—		
		1	15 - 30	22	—	—	—	—	—	—		
	BLHF	3	15 - 60	—	22	—	—	—	—	—		
		2	15 - 30	10	—	—	—	—	—	—		
		3	15 - 60	—	22	—	—	—	—	—		
BGL	2	15 - 30	10	—	—	—	—	—	—			
	3	15 - 30	—	10	—	—	—	—	—			
BAF	1	15, 20	10	—	—	—	—	—	—			
	1	15, 20	22	—	—	—	—	—	—			
BLH ①	1	15 - 70	—	22	—	—	—	—	—			
	2	15 - 100	—	22	—	—	—	—	—			
	3	15 - 100	—	—	22	—	—	—	—			
HBL ①	1	15 - 70	—	65	—	—	—	—	—			
	2	15 - 100	—	65	—	—	—	—	—			
	3	15 - 100	—	—	65	—	—	—	—			
BQD ①③	1	—	—	65	—	14	—	—	14			
	2	15 - 100	—	65	—	—	14	—	14			
	3	—	—	—	65	—	14	—	14			
125	NGB ②③	1	—	100	—	—	25	—	—	14		
		2	15 - 125	—	100	100	—	25	—	—		
		3	—	—	100	100	—	25	—	—		
	NEB ③④	1	—	85	—	—	35	—	—	—		
		2	15 - 125	—	85	85	—	35	—	—		
		3	—	—	85	85	—	35	—	—		
	HEB ③④	1	—	100	—	—	65	—	—	—		
		2	15 - 125	—	100	100	—	65	—	—		
		3	—	—	100	100	—	65	—	—		
	ED4 ⑤	1	15 - 125	65	—	—	22	—	—	—		
		2	—	—	—	65	—	18	—	30		
		3	—	—	—	65	—	18	—	—		
ED6 ⑤	2	15 - 125	—	—	65	—	25	18	30			
	3	—	—	—	65	—	25	18	—			
	1	—	100	—	—	—	—	—	—			
HED4 ⑥ HHED6 ⑥	2	15 - 125	—	—	—	65	—	—	—			
	3	—	—	—	—	100	42	42	30			
	1	—	—	—	—	—	—	—	—			
225	QJ2 ⑥	2 & 3	60 - 225	—	—	10	—	—	—			
	QJH2 ⑥	2 & 3	60 - 225	—	—	22	—	—	—			
	QJ2-H ⑥	2 & 3	60 - 225	—	—	42	—	—	—			
	HQJ2H ⑥	2 & 3	100 - 225	—	—	100	—	—	—			

① BL, HBL, BLH and BQD breakers are mounted in common mountings in 3" or 6 pole increments.

② NGB breakers are counted in common mountings of 3" or 6 pole increments.

③ For use on 480Y/277 volt systems. Not suitable for 480 Delta 3 phase 3 wire systems.

④ NEB/HE breakers are counted in common mountings of 3" or 6 pole increments.

⑤ ED4, ED6, HED4 and HHED6 breakers are mounted in common mountings in 3" or (6) pole increments.

⑥ QJ Breakers are single mounted in unit space and take 6" of unit space. Limited to (3) per panel max.

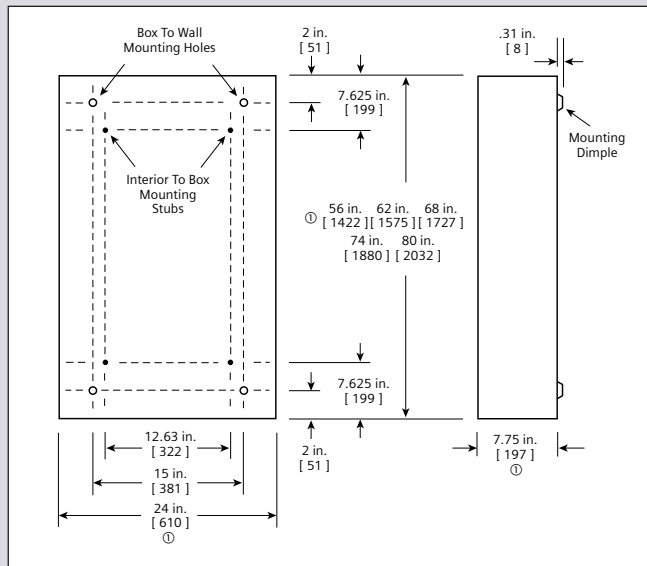
Modifications and Dimensions

Panel Options, Enclosures

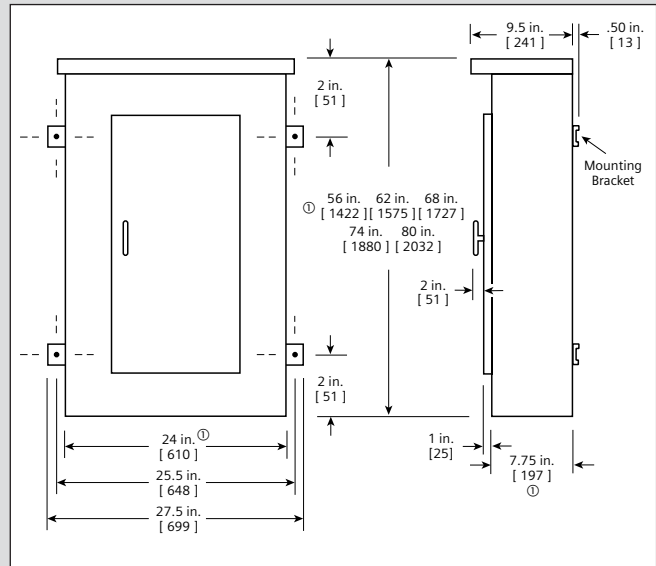
- Extra gutter to sides or ends of the can
- 24" wide boxes
- Hinged trims
- Door-in-door trims
- Screw to the box trims
- Trim mounted devices (Devices mounted and wired to the trim should also have hinged trim specified.)
 - Pilot lights
 - Toggle switches
 - Push buttons
- Painted boxes
- Custom colors
- Increase gauge trims and boxes
- Stainless steel trims and boxes, Type 1
- Aluminum trims and boxes, Type 1
- NEMA 3R enclosures
- NEMA 3R/12 enclosures
- NEMA 4 enclosures
- NEMA 4X enclosures
- Special keyed locks
 - TEY
 - TEU1
 - Cat 60
 - LL803
 - LL806
 - Yale
- Gaskets between trim and box
- Meters (Contact application engineering for space requirements.)
- Panel skirts

Type P1 Dimensions

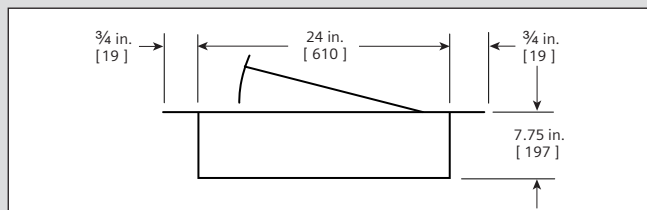
Type 1 Box (Box is Symmetrical)



Type 3R and 3R/12 Box



Flush Mounting



① Dimensions are interior of the box. Add 5/8" to width for absolute dimension. Add 1/8" to height for absolute dimension. Dimensions shown in inches and millimeters [].