P3 PANELBOARDS

Type P3 Panelboards

Another innovation from Siemens is the P3 panel. It is a smaller, footprint distribution panel to fit a large number of applications that require more (or larger) branch devices than the lighting panel class offer. This panel offers a wide array of factory-assembled options, and has the ability to mix breaker frames in unit space up to 250 amps. Bussing options for the P3 vary from the standard temperature aluminum to temperature rated copper, 750 A/Si aluminum, and 1000A/Si copper designs. All bussing in the P3 panel is tin-plated as a standard. Silver-plated copper is offered as an option on a copper bus. Integrated time clocks, bus mounted contactors, as mains or sub mains, split bus and subfeed lugs (up to 400 amp) are just a few of the options of this unique panel.

The P3 panel configurations, defined by the unit space, allow for a given amperage, main device, and box height. The P3 panel starts with a 56" high box. Breaker unit space can be mixed and matched to meet customer requirements. All 1" pole breakers (BL, BQD, ED frames) are mounted in 3" or 6" pole increments. Breakers frames, above 125 amps, are mounted in 6" single or twin breaker mountings. As an example panel, FD 250 amp and JD 400 amp breakers are mounted as subfeed breakers outside of unit space.

Like other distribution panels, the P3 panel can have blank space added into the panel to allow for future expansions or modifications. Any expansions or modifications must be in 3" increments. BL, BQD and ED frame breakers have 3" or 6-pole kits and can be mixed in unit space by these increments. Breakers of the same frame can cross from one mounting to another if contiguous. QJ frame breakers are mounted in 6" increments for two and three pole single and twin mounted units. Changes in the unit space length for BL, BQD, or ED frame breakers require an additional deadfront center strip kit. Check with sales or the factory for additional unit space kits.

Main Lug / Main Breaker

Enclosure – Standard Type 1 enclosure is 24" wide x 7.75" deep. X Box Height is determined by main device and unit space. See charts for box height.

Voltage – 600 Vac Max.
250 Vdc Max.

Amperage – 800 amp Max.

Short Circuit Rating – 200 KAIC Max. symmetrical or equal to the lowest rated device installed unless a series rating is indicated. Panels with subfeed or feed-thru lugs without a main device, circuit breaker or fusible unit, are limited to a three-cycle rating. The three-cycle rating for the P3 panel is limited to 22 KAIC. Note that the main device may be mounted remote from the panel.

Bussing – The P3 panel has more options to meet market requirements. The standard bussing is temperature rated aluminum. The rating is per the requirements of UL 67 – the standard for panelboards. All aluminum bussing is tin-plated. Optional bussing for the P3 panel is: 750 A/si aluminum, temperature rated copper, and 1000 A/si copper. The copper bus option for this panel is tin-plated.

Weight – Approximate
Total panelboard weight when filled with a normal quantity of breakers and accessories is about 5 lbs. (1 kg) per inch (54g per mm) of box height.

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

Selection and Application

1) To specify a particular panelboard, first determine voltage, system, amperage and type main, amperage and type of branch devices, and modifications, if any. (Step 1)

2) List branch devices and modifications requiring space additions. List unit space requirements of each.

Note: Some units are twin mounted meaning two breakers occupy the same unit space.

Select appropriate enclosure height from selection chart on page 3-3, based on unit space requirements. (Step 2)

3) Select panelboard catalog number from appropriate table based upon voltage, system, amperage and unit space requirements. (Step 3)

Step #1

Amperage	400
Voltage	208Y/120
System	3 Phase, 4 wire
Main	Main Lug
Bus	Standard Aluminum
Branches	6-20A13, 2-225/3,
Modifications	None
Feed	Top
Mounting	Surface

Step #2

6-120/3 BL 3x3" = 6 poles = 9"
2-225/3 QJ2 6" = 6"
15"

Enclosure is 56" from Table P3-2 (24" wide, 56" high, 67.75" deep).

Step #3

Panel - **P3C56ML800ATS**
Box - **24WD56**
Trim - **P3S56**

Application

Type P3 Panelboards

Table P3-2 – 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

Table P3-3 – Main Breaker Wire Bending (Fig. P3-1)

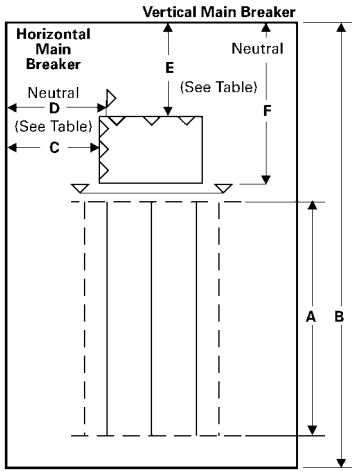
Breaker Frame	C	E	F
FD Horiz.	7.25	—	20.13
FD Vert.	—	12.25	25.38
CFD	—	13.63	31.38
JD	—	15.63	29.38
CJD	—	14.75	35.38
LD	—	14.75	29.38
CLD	—	14.00	35.38

Table P3-4 – Main Lug Wire Bending (Fig. P3-2)

Panel Amps	Standard Connectors	C	D
250	(1) #6 AWG - 350 Kcmil	10.75 ①	13.50
400	(2) #3/0 AWG - 250 Kcmil or (1) 600 Kcmil	16.00	17.88
600	(2) #3/0 AWG - 500 Kcmil	16.00	17.88
800	(2) 600 Kcmil	16.00	17.88

① This lug is removable.

Fig. P3-1



Box depth = 7.75 in. (197 mm)
Box width = 24 in. (610 mm)

Table P3-5 – Branch Breaker Side Gutters Inches (mm) (Fig. P3-3)

Reference Letter	Panel Width 24" (609)
A	7.750 (197)
B	7.125 (181)
C	6.000 (152)
D ①	7.000 (178)
E	5.000 (127)

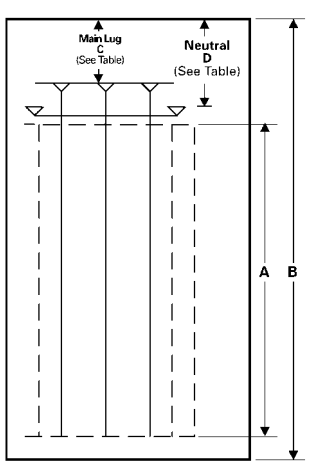
① Single branch mounting construction.

Fig. P3-3

← A →	BL, BLH, HBL	BL, BLH, HBL	← A →
	BLF, BLFH	BLF, BLFH	
← B →	BQD, BQD6	BQD, BQD6	← B →
← C →	ED, ED4, ED6	ED, ED4, ED6	← C →
	HED4, HHED6	HED4, HHED6	
← D →	QJ2, QJH2, QJ2-H, HQJ2H	QJ2, QJH2, QJ2-H, HQJ2H	← D →

Panel Width
24 in. (610 mm)

Fig. P3-2



Box depth = 7.75 in. (197 mm)
Box width = 24 in. (610 mm)

Application

Type P3 Panelboards

Table P3-6 – Main Breaker Selection ①

Ampere Rating	Breaker Type	Maximum Interrupting Rating (kA)			
		240V	480V	600V	Available Trip Values
250	FD6, FXD6 (STD)	65	35	18	70, 80, 90. 100, 110, 125, 150, 200, 225, 250
	HFD6, HFXD6	100	65	25	
	CFD6	200	150	100	
400	JXD6 (STD), JD6	65	35	25	200, 225, 250, 300, 350, 400
	HJD6, HJXD6	100	65	35	200, 225, 250, 300, 350, 400
	SJD6	65	35	25	200, 300, 400
	CJD6,SCJD6	200	200	100	200, 300, 400
600	LXD6 (STD)	65	35	25	450, 500, 600
	LD6	65	35	25	250, 300, 350, 400, 450, 500, 600
	HLD6, HLXD6	100	65	35	250, 300, 350, 400, 450, 500, 600
	SLD6,	65	35	25	300, 400, 500, 600
	SHLD6	100	65	35	300, 400, 500, 600
	CLD6, SCLD6	200	150	100	300, 400, 500, 600

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

Table P3-7 – Subfeed Breakers

Breaker Type	Mounting Position When Used As Subfeed Breaker	Maximum Interrupting Rating (kA) Symmetrical			
	Vertical	Ampere Ratings For Load	240V AC	480V AC	600V DC
FD6①, FXD6	Twin	70 - 250	65	35	18
HFD6①, HFXD6	Twin	70 - 250	100	65	25
JD6②, JXD6	Single	200 - 400	65	35	25
HJD6②, HJXD6	Single	200 - 400	100	65	35

① Twin mounted subfeed breakers are mounted at bottom of panelboard only and add 24" to panel height.
② Subfeed breaker is mounted at bottom of panelboard only and adds 30" to panel height.

Branch Device Limitations

For panels applied on systems requiring neutral connections, some limitations apply. By application rule (NEC 480.14), lighting and appliance panels are limited to 42 circuit installed. Each overcurrent device pole counts as a circuit. Additional limitations for these panels are based on available neutral connections.

Table P3-8 – Neutral Connectors

Wire Range	Max. Number of Connections	Max. Amps ①
#14-#1/0	44	125
#14-3/0	12	200
#4 - 350 Kcmil	6	250
(1)#4 - 600 Kcmil or (2)#6 - 250 Kcmil	1	400

① Based on 75 degree copper.

Application

Type P3 Panelboards

Table P3-9 – Branch Circuit Breakers

Maximum Ampere Rating	Bolt-on Breaker Type	Number of Poles	Amp Rating	Maximum Interrupting Rating (kA)						
				Volts – AC						DC
				120	120/240	240	277	480	600	250
100	BL	1	15 - 70	10	—	—	—	—	—	—
		2	15 - 100	—	10	—	—	—	—	—
		3	15 - 100	—	—	10	—	—	—	—
	BL HID	1	15 - 30	10	—	—	—	—	—	—
		2	15 - 30	—	10	—	—	—	—	—
	BLR	2	15 - 100	—	—	10	—	—	—	—
	BLE	1	15 - 30	10	—	—	—	—	—	—
		2	15 - 60	—	10	—	—	—	—	—
	BLEH	1	15 - 30	22	—	—	—	—	—	—
		2	15 - 60	—	22	—	—	—	—	—
	BLF	1	15 - 30	10	—	—	—	—	—	—
		2	15 - 60	—	10	—	—	—	—	—
	BLHF	1	15 - 30	22	—	—	—	—	—	—
		3	15 - 60	—	22	—	—	—	—	—
	BGL ①	2	15 - 30	10	—	—	—	—	—	—
		3	15 - 30	—	10	—	—	—	—	—
	BAF	1	15, 20	10	—	—	—	—	—	—
	BAFH	1	15, 20	22	—	—	—	—	—	—
	BLH	1	15 - 70	—	22	—	—	—	—	—
		2	15 - 100	—	22	—	—	—	—	—
		3	15 - 100	—	—	22	—	—	—	—
	HBL	1	15 - 70	—	65	—	—	—	—	—
		2	15 - 100	—	65	—	—	—	—	—
		3	15 - 100	—	—	65	—	—	—	—
	BQD	1		—	65	—	14	—	—	14
		2	15 - 100	—	65	—	—	14	—	14
		3		—	—	65	—	14	—	14
125	ED4	1	15 - 125	65	—	—	22	—	—	—
		2		—	—	65	—	18	—	30
		3		—	—	65	—	18	—	—
	ED6	2	15 - 125	—	—	65	—	25	18	30
		3		—	—	65	—	25	18	—
	HED4 HHED6	1		100	—	—	—	—	—	—
		2	15 - 125	—	—	—	65	—	—	—
		3		—	—	100	42	42	—	30
				—	—	100	—	42	—	—
225	QJ2	2	60 - 225	—	—	10	—	—	—	—
		3		—	—	10	—	—	—	—
	QJH2	2	60 - 225	—	—	22	—	—	—	—
		3		—	—	22	—	—	—	—
	QJ2-H	2	60 - 225	—	—	42	—	—	—	—
		3		—	—	42	—	—	—	—
	HQJ2H	2	100 - 225	—	—	100	—	—	—	—
		3		—	—	100	—	—	—	—

① BGL 2-pole is (1) phase and neutral 3-pole is (2) phases and neutral.
NOTE: QJ Breakers are twin mounted in unit space and take 6" of unit space. Limited to (6) per panel max. BL, HBL, BLH and BQD breakers are mounted in common mountings in 3" or (6) pole increments. ED2, ED4, ED6, HED4 and HHED6 breakers are mounted in common mountings in 3" or (6) pole increments.

Typical Catalog Numbers

Type P3 Panelboards

Table P3-10 – Main Lugs Only – shown with aluminum bus, top fed, and surface trims

Maximum Panel Amp Rating	Unit Space (inches)	208Y/120V 3 Phase, 4 Wire Catalog Number	240/120V 3 Phase, 4 Wire Catalog Number	120/240V or 250 Vdc Max 1 Phase, 3 Wire Catalog Number
250	27	P3C56ML250ATS	P3B56ML250ATS	P3A56ML250ATS
	33	P3C62ML250ATS	P3B62ML250ATS	P3A62ML250ATS
	39	P3C68ML250ATS	P3B62ML250ATS	P3A62ML250ATS
	45	P3C74ML250ATS	P3B74ML250ATS	P3A74ML250ATS
	51	P3C80ML250ATS	P3B80ML250ATS	P3A80ML250ATS
400	21	P3C56ML400ATS	P3B56ML400ATS	P3A56ML400ATS
	27	P3C62ML400ATS	P3B62ML400ATS	P3A62ML400ATS
	33	P3C68ML400ATS	P3B68ML400ATS	P3A68ML400ATS
	39	P3C74ML400ATS	P3B74ML400ATS	P3A74ML400ATS
	45	P3C80ML400ATS	P3B80ML400ATS	P3A80ML400ATS
600	21	P3C56ML600ATS	P3B56ML600ATS	P3A56ML600ATS
	27	P3C62ML600ATS	P3B62ML600ATS	P3A62ML600ATS
	33	P3C68ML600ATS	P3B68ML600ATS	P3A68ML600ATS
	39	P3C74ML600ATS	P3B74ML600ATS	P3A74ML600ATS
	45	P3C80ML600ATS	P3B80ML600ATS	P3A80ML600ATS
800	21	P3C56ML800ATS	P3B56ML800ATS	P3A56ML800ATS
	27	P3C62ML800ATS	P3B62ML800ATS	P3A62ML800ATS
	33	P3C68ML800ATS	P3B68ML800ATS	P3A68ML800ATS
	39	P3C74ML800ATS	P3B74ML800ATS	P3A74ML800ATS
	45	P3C80ML800ATS	P3B80ML800ATS	P3A80ML800ATS
Maximum Panel Amp Rating	Unit Space (inches)	240V 3 Phase, 3 Wire Catalog Number	408Y/277V 3 Phase, 4 Wire Catalog Number	480V ① 1 Phase, 3 Wire Catalog Number
250	27	P3D56ML250ATS	P3E56ML250ATS	P3F56ML250ATS
	33	P3D62ML250ATS	P3E62ML250ATS	P3F62ML250ATS
	39	P3D68ML250ATS	P3E68ML250ATS	P3F68ML250ATS
	45	P3D74ML250ATS	P3E74ML250ATS	P3F74ML250ATS
	51	P3D80ML400ATS	P3E80ML250ATS	P3F80ML250ATS
400	21	P3D56ML400ATS	P3E56ML400ATS	P3F56ML400ATS
	27	P3D62ML400ATS	P3E62ML400ATS	P3F62ML400ATS
	33	P3D68ML400ATS	P3E68ML400ATS	P3F68ML400ATS
	39	P3D74ML400ATS	P3E74ML400ATS	P3F74ML400ATS
	45	P3D80ML400ATS	P3E80ML400ATS	P3F80ML400ATS
600	21	P3D56ML600ATS	P3E56ML600ATS	P3F56ML600ATS
	27	P3D62ML600ATS	P3E62ML600ATS	P3F62ML600ATS
	33	P3D68ML600ATS	P3E68ML600ATS	P3F68ML600ATS
	39	P3D74ML600ATS	P3E74ML600ATS	P3F74ML600ATS
	45	P3D80ML600ATS	P3E80ML600ATS	P3F80ML600ATS
800	21	P3D56ML800ATS	P3E56ML800ATS	P3F56ML800ATS
	27	P3D62ML800ATS	P3E62ML800ATS	P3F62ML800ATS
	33	P3D68ML800ATS	P3E68ML800ATS	P3F68ML800ATS
	39	P3D74ML800ATS	P3E74ML800ATS	P3F74ML800ATS
	45	P3D80ML800ATS	P3E80ML800ATS	P3F80ML800ATS

① For 600V, change "F" in position 3 to "G." Price only branch breakers with 600V ratings.

Typical Catalog Numbers

Type P3 Panelboards

Table P3-11 – Main Circuit Breaker – shown with aluminum bus, top fed and surface trims.

Maximum Panel Amp Rating	Unit Space (inches)	208Y/120V 3 Phase, 4 Wire Catalog Number	240/120V 3 Phase, 4 Wire Catalog Number	120/240V or 250V dc Max 1 Phase, 3 Wire Catalog Number
250	21	P3C56FD250ATS	P3B56FD250ATS	P3A56FD250ATS
	27	P3C62FD250ATS	P3B62FD250ATS	P3A62FD250ATS
	33	P3C68FD250ATS	P3B68FD250ATS	P3A68FD250ATS
	39	P3C74FD250ATS	P3B74FD250ATS	P3A74FD250ATS
	45	P3C80FD250ATS	P3B80FD250ATS	P3A80FD250ATS
400	9	P3C56JD400ATS	P3B56JD400ATS	P3A56JD400ATS
	15	P3C62JD400ATS	P3B62JD400ATS	P3A62JD400ATS
	21	P3C68JD400ATS	P3B68JD400ATS	P3A68JD400ATS
	27	P3C74JD400ATS	P3B74JD400ATS	P3A74JD400ATS
	33	P3C80JD400ATS	P3B80JD400ATS	P3A80JD400ATS
600	9	P3C56LD600ATS	P3B56LD600ATS	P3A56LD600ATS
	15	P3C62LD600ATS	P3B62LD600ATS	P3A62LD600ATS
	21	P3C68LD600ATS	P3B68LD600ATS	P3A68LD600ATS
	27	P3C74LD600ATS	P3B74LD600ATS	P3A74LD600ATS
	33	P3C80LD600ATS	P3B80LD600ATS	P3A80LD600ATS
Maximum Panel Amp Rating	**Unit Space (inches)**	**240V 3 Phase, 3 Wire Catalog Number**	**408Y/277V 3 Phase, 4 Wire Catalog Number**	**480V ① 1 Phase, 3 Wire Catalog Number**
250	21	P3D56FD250ATS	P3E56FD250ATS	P3F56FD250ATS
	27	P3D62FD250ATS	P3E62FD250ATS	P3F62FD250ATS
	33	P3D68FD250ATS	P3E62FD250ATS	P3F62FD250ATS
	39	P3D74FD250ATS	P3E74FD250ATS	P3F74FD250ATS
	45	P3D80FD250ATS	P3E80FD250ATS	P3F80FD250ATS
400	9	P3D56JD400ATS	P3E56JD400ATS	P3F56JD400ATS
	15	P3D62JD400ATS	P3E62JD400ATS	P3F62JD400ATS
	21	P3D68JD400ATS	P3E68JD400ATS	P3F68JD400ATS
	27	P3D74JD400ATS	P3E74JD400ATS	P3F74JD400ATS
	33	P3D80JD400ATS	P3E80JD400ATS	P3F80JD400ATS
600	9	P3D56LD600ATS	P3E56LD600ATS	P3F56LD600ATS
	15	P3D62LD600ATS	P3E62LD600ATS	P3F62LD600ATS
	21	P3D68LD600ATS	P3E68LD600ATS	P3F68LD600ATS
	27	P3D74LD600ATS	P3E74LD600ATS	P3F74LD600ATS
	33	P3D80LD600ATS	P3E80LD600ATS	P3F80LD600ATS

① For 600V, change "F" in position 3 to "G." Price only branch breakers with 600V ratings.

Standard Modifications

Type P3 Panelboards

P3 Panel Options

Enclosures

- Extra gutter to sides or ends of the can
- 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
- Meters (Contact application engineering for space requirements)
- Panel Skirts
- Gasketing between trim and box (Type 1)
- Name Plates

Panel Modifications

- Main Bus
  Standard main bus in tin-plated aluminum. For copper main bus, add from the table for each panel. Includes copper neutral cross bar. For copper neutral branch lugs, see miscellaneous.
- Split bus requires 6" of unit space.
- Compression lug for MLO
- Compression lugs on Main breaker (may require extra width or length on enclosure).
- Contactor mains or submain
  - Asco 920 through 225 amps - Adds 12" unit space as main, 15" unit space as submain
  - Asco 911 through 150 amps - Adds 21" unit space.
  - Siemens LEN through 30 amps - Adds 12" unit space. Makes box 10" deep.
- Control power transformers (contact engineering for extra gutter requirements)
- Branch and main breaker accessories
  - Handle blocks
  - Handle locks
  - Aux. Contacts ①
  - UVR ①
- Feed-thru lugs
  Cannot be used in conjunction with TVSS or sub-feed breakers. See Page 3-10 for unit space impact. Wire ranges are the same as main lug.
- 200% neutral
- Copper lugs, mechanical
- Bus mounted TVSS
- Service Entrance Label
  Type P3 Panelboards are factory labeled suitable for use as service entrance equipment when NEC requirements are met. A panelboard cannot have more than six main disconnects, unless it is a lighting and appliance branch panelboard. Lighting and appliance branch panelboards are limited to two main disconnects.
- Grounding of Panelboards
  Ground Bars except for brazed to box are shipped with the panel interior factory mounted.
  - Non-Insulated Equipment Ground Bar – Standard
  - Copper Non-Insulated Ground Bar
  - Al Insulated Equipment Ground Bar
  - Cu Insulated Equipment Ground Bar
  - Ground Bar Brazed to Box (recommended for painted boxes)
- Shunt Trip on Main or Branch
  BL, BLH, HBL, BQD, ED2, ED4, HED4, ED6, HED6, HHED6, QJ2, QJ2H, QJH2, HQJ2H as branch only. BL, BLH, HBL, ED2, ED4, HED4, ED6, HED6, HHED6 uses 1" unit space for shunt trip. All others may be used on mains or subfeeds.

QJ2, QJ2-H, QJH2, HQJ2H, ED2, ED4, ED6, HED4, HED6, HHED6, FXD6, HFD6, JXD6, JD6, HJD6, HJXD6

- Remote control switches – 480V AC max. mounted in a 23" enclosure to be cable connected to the panel.
- Time Clocks – mounted in a 23" enclosure to be cable connected to the panel. Sangamo, Tork or Paragon time clock can be supplied and mounted in panelboard cabinet.

Description
Time Clock (1-or 2-Pole, Single or Double Throw Contacts; 3-Pole Single Throw)
277V Maximum with Plain Dial
Options:
Astronomical Dial
An Omitting Device
Reserve Power or Carryover
Space and Mounting Provisions Only

① Accessories on 1" pole breakers (BL, BQD, ED) will take unit space.

Standard Modifications

Type P3 Panelboards

Table P3-12 – Option Combinations

Amps	Incoming	Subfeed Lugs	Feed-thru Lugs	FD ① Subfeed	JD ① Subfeed	FD ② Subfeeds	200% Neutral	Min. Box Size (in.)	Unit Space (in.)
250A	Main Lug Only		•	—	—	—	•	56	27
		—	—	•	—	—	•	56	15
			—	—	—	•	•	56	9
	Main Lugs w/Subfeed Lugs	•	•	—	—	—	•	56	21
			—	•	—	—	•	56	21
			—	—	—	•	•	62	9
	Main Breaker (Horiz. FD)	—	•	—	—	—	•	56	21
			—	•	—	—	•	56	9
	Main Breaker (Vert. FD)	None Std.	•	—	—	—	•	56	15
	Main Breaker (CFD)	None Std.	•	—	—	—	•	56	9
			—	•	—	—	•	68	9
400A ②③	Main Lug Only	•	—	—	—	—	•	56	21
		—	•	—	—	—	•	56	15
		—	—	•	—	—	•	56	9
		—	—	—	•	—	•	56	9
		—	—	—	—	•	•	62	9
	Main Breaker (JD)	None Std.	—	—	—	—	•	56	9
			•	—	—	—	•	62	9
			—	•	—	—	•	68	9
			—	—	•	—	•	68	9
			—	—	—	•	•	74	9
	Main Breaker (CJD)	None Std	—	—	—	—	•	62	9
			•	—	—	—	•	74	9
			—	•	—	—	•	74	9
			—	—	•	—	•	74	9
			—	—	—	•	•	80	9
600A ②③	Main Lug Only	—	—	—	—	—	•	56	21
			•	—	—	—	•	56	15
			—	•	—	—	•	56	9
			—	—	•	—	—	56	9
			—	—	—	•	•	62	9
	Main Breaker LD	—	—	—	—	—	•	56	9
			—	—	—	—	•	62	9
			—	•	—	—	•	68	9
			—	—	•	—	—	68	9
			—	—	—	•	•	74	9
	Main Breaker CLD	—	—	—	—	—	•	62	9
			•	—	—	—	•	68	9
			—	•	—	—	•	74	9
			—	—	•	—	—	74	9
			—	—	—	•	•	80	9
800A ②③	Main Lug Only	—	—	—	—	—	•	56	21
			•	—	—	—	•	56	9
			—	•	—	—	•	56	9
			—	—	•	—	—	56	9
			—	—	—	•	•	62	9

① Subfed lugs are currently not offered as a standard with main circuit breakers.
② Subfeed lugs on panels above 400A are not standard.
③ 200% neutral cannot be provided along with a 400A subfeed breaker or 600A Main Breaker because the breaker blocks the 4th lug site.

Connector Modifications

Type P3 Panelboards

Compression Lugs

Table P3-13 – Lugs

Style	Amp Rating	Breaker Type	Compression Connectors	Box Height Addition
MLO	250	N/A	(1)#6 AWG - 350 Kcmil	—
	400	N/A	(1) 250 - 500 Kcmil or	—
			(2)# 1/0 AWG - 250 Kcmil	—
	600	N/A	(2)#3/0 AWG - 500 Kcmil	—
	800	N/A	(2) 400-750 Kcmil Cu only	—
Main Breaker	250	FXD6, HFD6, CFD6	(1)#6 AWG - 350 Kcmil Cu or Al	CFD6 requires an additional 6.0" box height
	400	JD6, JXD6, HJD6, CJD6, SJD6, SHJD6, SCJD6	(2)#1/0 AWG - 500 Kcmil Cu or Al	6
	600	LD6, LXD6, HLD6, CJD6, SLD6, SHLD6, SCLD6	(2)#2/0 AWG - 500 Kcmil Cu or Al	6

Table P3-14 – Alternate Lugs

Style	Amp Rating	Breaker Type	Compression Connectors	Box Height Addition
MLO	400	N/A	(1) 250 - 750 Kcmil or	6
			(2)#3/0 AWG - 250 Kcmil Cu or Al	
	800	N/A	(2) 600 Kcmil	6
Main Breaker	400	JD6, JXD6, HJD6, CJD6, SJD6, SHJD6, SCJD6	(1)#4/0 AWG - 750 Kcmil Cu or Al	6

Enclosure Modifications

NEMA-4 For Type P3
Water Tight, Dust Tight, Steel Enclosure
(consult plant for actual enclosure size)

Table P3-15

Box Height Inches	Enclosure Size		
	H	W	D
56	60	36	8
62	66	36	8
68	72	36	8
74	78	36	8
80	84	36	8

NEMA-4X For Type P3
Water Tight, Dust Tight and Corrosion Resistant
(consult plant for actual enclosure size)

Table P3-16

Box Height Inches	Enclosure - Stainless Steel and Steel with Epoxy Coating			Enclosure - Fiberglass Size (inches)		
	H	W	D	H	D	W
56	60	36	12	60	36	12
62	66	36	8	66	36	8
68	72	36	8	72	36	8
74	78	36	8	78	36	8
80	84	36	8	84	36	8

Remote Switch Modifications

Table P3-17 – Control Power Transformer

Size	VA
0,1	50
2	75
3	150
4	250

Table P3-18 – Application For Remote Switch

Switch Type	Modification
920	Adds 12" to unit space
911	≤ 225A Adds 21" unit space >225 ≤400 Amps Add 10" to width and 8" DP minimum and 24" to height
LEN	30A Adds 15" to unit space >30A ≤ 100 Adds 12" to unit space 100 A ≤ 200 Adds 12" to unit space and 10" Dp. min.

Table P3-19 – Remote Control Switch Modification

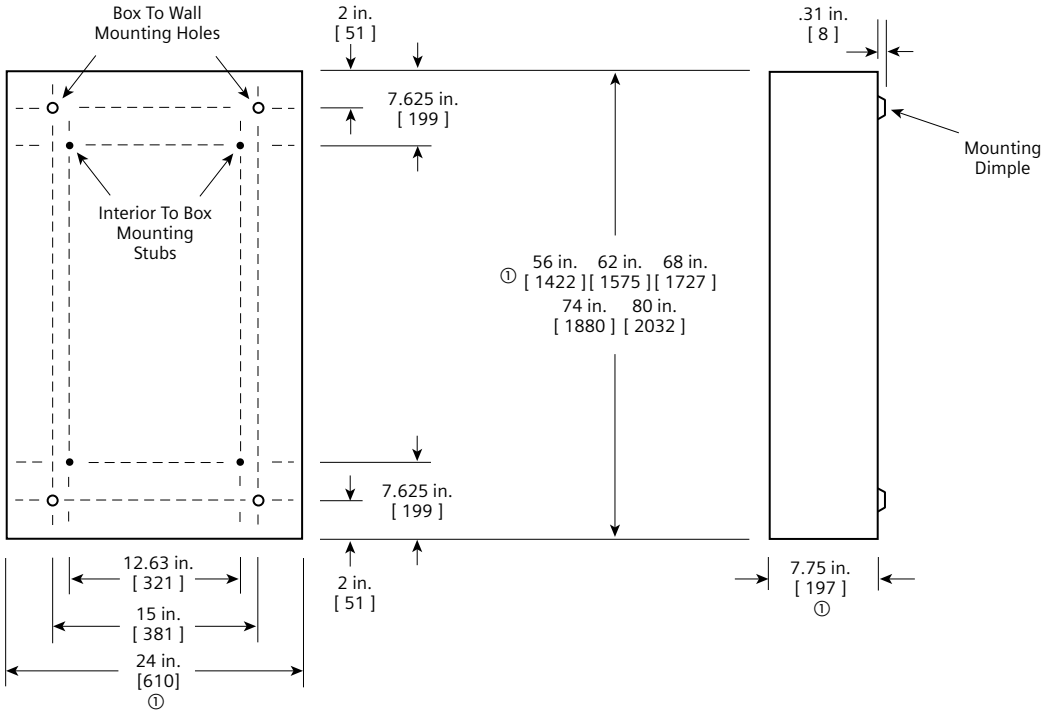
Description
Auxiliary Contacts (Mounted Not Wired) Ea.
2-Wire Control

Dimensions

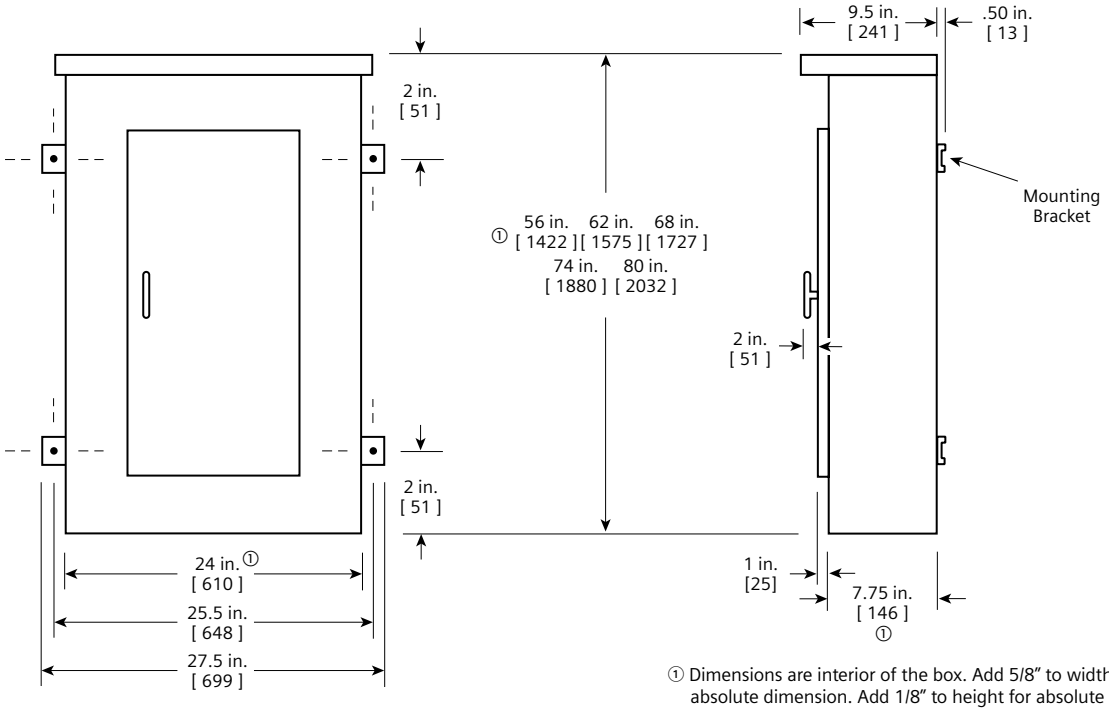
Type P3 Panelboards

Type 1 Box

Box is symmetrical



Type 3R and 3R/12 Box



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 [ ].

Kits and Accessories

Type P3 Panelboards

Table P3-20 – 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

Table P3-21 – 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
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 contains all connectors and cover plates necessary to mount 2 and 3 pole breakers
BBKQ2	Branch breaker kit for 2 and 3 pole QJ twin mount	Kit contains 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