

Sentron® Panelboards

Modifications and Additions

Selection

Type P4

When required, special constructions or additions to standard panelboards may be specified for all **factory-assembled** Power and Distribution Panelboards. Below and on the next page are listed many of those available for Type S4/F1/P4 panelboards. *In no case do these apply to **Narrow** (Column) Width Lighting Panelboards or **Unassembled** Panelboards.*

1. Type 3R/12

Description	List Price \$ 32"
Panelboard Construction: Single Door (Complete enclosure does not require a trim)	1175.

Description	List Price \$ All Panels

2. Painted Finish See page 10-71

3. Miscellaneous Accessories

Nameplate — laminated, engraved Tamper-Resistant Screws — per panel	50. 70.
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4. Devices Mounted on Gutter Cover — Includes Device, Mounting — Wired or Unwired See page 10-71

5. Increased Capacity Neutral

Ampere Rating		List Price \$
Phase	Neutral	
400	600	540.
400	800	560.
600	1200	795.
800	1200	850.

6. Subfeed or Feed-Thru Lugs (One Set Per Panel)

Subfeed Double Lugs (Main Lug Panels)

Ampere Rating	List Price \$		Unit Space (Additional Inches)
	3-Phase	1-Phase	MLO
400	245.	245.	—
600	455.	455.	—
800	NA	NA	NA
1200	NA	NA	NA

Feed-Thru Lugs

400	245.	245.	10
600	455.	455.	10
800	615.	615.	17.5
1200	765.	765.	17.5

7. Split Bus (Unit Space +1.25")

Phases	List Price \$			
	400A	600A	800A	1200A
1	350.	415.	570.	700.
3	415.	455.	655.	740.

8. MLO Compression Lugs — Aluminum Lugs for Use With Copper or Aluminum Cable see page 10-52.

9. Compression Lugs For Circuit Breakers see page Section 6.

10. Circuit Breaker Main — With Vacu-Break Branch Panelboards

Price appropriate main breaker panel, then add list prices of desired vacu-break branches and accessories.

11. Vacu-Break Main — With Circuit Breaker Branch Panelboards

Price appropriate main switch panel, then add list price of desired circuit breaker branches and accessories.

12. Grounding of Panelboards (No Brazed Ground Bus Offered)

Ground Bus ships with the interior as standard — **\$115.** list added for factory mounted.

Non-Insulated Equipment Ground Bar Including Ground Lug **Standard**
Insulated Equipment Ground Bar Including Ground Lug . . **\$395.** per panel

13. Fuse Clip Provisions (Add to 250 Volts or 600 Volts Unit Prices Per Switch)

Ampere Rating	List Price \$ Class J	List Price \$ Class R	List Price \$ Class T
30	55.①	55.②	N/A
60	55.①	55.	N/A
100	85.	85.	180.
200③	85.	85.	285.

14. Spanner Wrenches (for Vacu-Break Switches)

Ampere Rating	List Price \$
30-250	460.

15. Remote Control Switches

Switch Type	Modification
920	TAKES 20.0 unit space
911	≤ 800A 25" to unit space ≥ 800A 30" unit space
LEN	≤ 60 AMPS 10" unit space > 60 AMPS 15" unit space

16. Ground Fault on Main Breaker

Description	Ampere Rating	List Price \$
Conventional Ground Fault④ includes: Ground Fault Relay, Ground Sensor, CPT and Shunt Trip	400-600	6300.
Test and Monitor Panel⑤		1070.
Ground Fault add to Sensitrip III breaker price	400-600③	2500.

17. Time Clocks⑥

Sangamo, Tork or Paragon time clock can be supplied, mounted in panelboard cabinet. For required increase in enclosure dimensions, consult local sales office. Price appropriate panelboard, then add list price below.

Description	List Price \$
Time Clock (one or two pole, single or double throw contacts; three pole, . single throw) 277V maximum with plain dial	1070.
Add for —	
Astronomical dial	210.
An omitting device	75.
Reserve power or carryover	2450.
Space and mounting provisions only	540.

For inches / millimeters conversion, see Application Data section.

① At 250 Volts — available on 5" unit only.

② Class "J" clips not required on 600V twin 200A switch. Class "R" and "T" clips not available on this switch.

③ Integral ground fault not available on 600 amp 3-phase, 4-wire systems. Only 3-phase, 4-wire systems. Only 3-phase wire from 3-phase, 4-wire systems.

④ Available in 90" high enclosure only. Unit space is 42½" with Test and Monitor Panel; 45" without Test and Monitor Panel.

⑤ Not available on Sensitrip III.

⑥ For required unit space — consult local sales office. Price includes increased enclosure height if required.

⑦ No charge at time of order.

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Type S4/F1/P4

18. Circuit Breaker Accessories

Breaker Type	List Price \$
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Handle Blocking Device
Blocks handle in either the "ON" or "OFF" position See Page 10-73

Padlocking Device — Padlocks in "OFF" position See Page 10-73

19. Ground Fault Sensing Relay Kit Equipment Protection ED Frames (30 ma) See Section 6

20. Main Bus

Standard main bus and ground bus is tin plated aluminum. For copper main bus, neutral bus and ground bus add from the table for each panel. Copper Neutral Bar **\$115.** List Price.

Main Bus	Catalog Number ^①	List Price \$	
		400A	600-1200A
Silver Plated Cu	E	475.	1220.
1000A per sq. in Cu	D	540.	1230.
750A per sq. in Al	B	340.	645.

21. Copper Lugs — For Main Lug Only Panels

Standard main lugs and neutral lugs are tin plated aluminum, UL listed for use with aluminum/copper cables. Price below is for one panel and includes copper lugs for main lugs and neutral lugs, and must be used with copper cables.

Main Bus Ampere Rating	List Price \$
400	150.
600	190.
800-1200	260.

22. Shunt Trip on Main and Branches^②

See Breaker Section for list prices on this option.

23. Alternate Lugs Main Lug Only

Style	Amperage Rating	Alternate Connectors	Box Height Addition	Price Addition \$
400	N/A	(1)#3/0 AWG - 750 kcmil or (2)#3/0 AWG - 250 kcmil Cu or Al unit space	Deduct 2.5" Unit Space from available unit space	125.
600	N/A	(2)#3/0 AWG - 750 kcmil or (4)#3/0 - 350 kcmil	0	255.
MLO	800	(3)#3/0 AWG - 750 kcmil Cu or Al	Deduct 5.0" Unit Space from available unit space	390.
1000	N/A	(4)#3/0 AWG - 750 kcmil Cu or Al	Deduct 7.5" Unit Space from available unit space	510.

24. Compression Lugs

Style	Amp Rating	Breaker Type	Compression Connectors	Box Height Addition	Price Addition \$
MLO	400	N/A	(1)250-500 kcmil or (2)#2/0 AWG - 250 kcmil Cu or Al	Deduct 5.0" Unit Space from available unit space	3-Phase 4-Wire = \$150 3-Phase 3-Wire = \$115 1-Phase 3-Wire = \$115 2-Wire = \$115
	600	N/A	(2)#3/0 AWG - 500 kcmil	Deduct 5.0" Unit Space from available unit space	3-Phase 4-Wire = \$200 3-Phase 3-Wire = \$150 1-Phase 3-Wire = \$150 2-Wire = \$150
	800	N/A	(3)#3/0 AWG - 500 kcmil Cu or Al	Deduct 5.0" Unit Space from available unit space	3-Phase 4-Wire = \$255 3-Phase 3-Wire = \$190 1-Phase 3-Wire = \$190 2-Wire = \$190
	1000	N/A	(4)#3/0 AWG - 500 kcmil Cu or Al	Deduct 5.0" Unit Space from available unit space	3-Phase 4-Wire = \$350 3-Phase 3-Wire = \$255 1-Phase 3-Wire = \$255 2-Wire = \$255
	1200	N/A	(4)#3/0 AWG - 500 kcmil Cu or Al	Deduct 5.0" Unit Space from available unit space	3-Phase 4-Wire = \$350 3-Phase 3-Wire = \$255 1-Phase 3-Wire = \$255 2-Wire = \$255
Main Breaker	400	JD6, JXD6, HJD6, CJD6, SJD6, SHJD6, SCJD6	(2)#2/0 AWG - 500 kcmil Cu or Al	0	3-Phase 4-Wire = \$350 3-Phase 3-Wire = \$255 1-Phase 3-Wire = \$255 2-Wire = \$255

For inches / millimeters conversion, see Application Data section.

- ① Replace "A" in position 11 of catalog number.
- ② Shunt Trip on 100A frame breakers increases mounting height to 6.25" for twin mounting.

- ③ Must price "D" for "B" main bus from item #20 above.
- ④ See section (6) circuit breakers for 100% rated circuit breaker requirements.

Sentron® Panelboards

Type 1 Enclosure Modifications and Additions

Selection

Catalog Number	Description	Panel Adder \$	After Market Price \$
Boxes			
PB60	P4 box 32 W X 10 Dp X 60 Ht.	Standard	595.
PB75	P4 box 32 W X 10 Dp X 75 Ht.	Standard	595.
PB90	P4 box 32 W X 10 Dp X 90 Ht.	Standard	595.
WP260	P4 Nema 3R/12 32W X 10 Dp X 60 Ht.	1175.	2255.
WP275	P4 Nema 3R/12 32W X 10 Dp X 75 Ht.	1175.	2255.
WP290	P4 Nema 3R/12 32W X 10 Dp X 90 Ht.	1175.	2255.

Trims

P460V	P4 Std (4 piece trim) vented 60"	Standard	615.
P475V	P4 Std (4 piece trim) vented 75"	Standard	645.
P490V	P4 Std (4 piece trim) vented 90"	Standard	670.
P460NV	P4 Std (4 piece trim) unvented 60"	①	615.
P475NV	P4 Std (4 piece trim) unvented 75"	①	645.
P490NV	P4 Std (4 piece trim) unvented 90"	①	670.
P460VHG	P4 Std (4 piece trim) vented 60" w/Hinged gutter covers	290.	910.
P475VHG	P4 Std (4 piece trim) vented 75" w/Hinged gutter covers	290.	935.
P490VHG	P4 Std (4 piece trim) vented 90" w/Hinged gutter covers	290.	965.
P460NVHG	P4 Std (4 piece trim) unvented 60" w/Hinged gutter covers	290.②	910.
P475NVHG	P4 Std (4 piece trim) unvented 75" w/Hinged gutter covers	290.②	935.
P490NVHG	P4 Std (4 piece trim) unvented 90" w/Hinged gutter covers	290.②	965.
P460VD	P4 Std (1 PC. Door) vented 60"	③	730.
P475VD	P4 Std (1 PC. Door) vented 75"	③	755.
P490VD	P4 Std (1 PC. Door) vented 90"	③	785.
P460NVD	P4 Std (1 PC. Door) unvented 60"	②③	730.
P475NVD	P4 Std (1 PC. Door) unvented 75"	②③	755.
P490NVD	P4 Std (1 PC. Door) unvented 90"	②③	785.
P460VDD	P4 Std (1 PC. Door in door) vented 60"	360.	1090.
P475VDD	P4 Std (1 PC. Door in door) vented 75"	360.	1115.
P490VDD	P4 Std (1 PC. Door in door) vented 90"	360.	1140.
P460NVDD	P4 Std (1 PC. Door in door) unvented 60"	360.②	1090.
P475NVDD	P4 Std (1 PC. Door in door) unvented 75"	360.②	1115.
P490NVDD	P4 Std (1 PC. Door in door) unvented 90"	360.②	1140.

Flush Mounting Kits

F60	Flush kit for P4 60" Ht.	③	145.
F75	Flush kit for P4 75" Ht.	③	145.
F90	Flush kit for P4 90" Ht.	③	145.

Type 3R/12 Enclosures

WP260	P4 3R/12 Enclosures 60"	1175.	2255.
WP275	P4 3R/12 Enclosures 75"	1175.	2255.
WP290	P4 3R/12 Enclosures 90"	1175.	2255.

For inches / millimeters conversion, see Application Data section.

① No price adder. Note as Mod.

② Note as Mod.

③ No charge if noted at time of order.