

62000-69000 SERIES POWER DISTRIBUTION BLOCKS



VERSATILE POWER DISTRIBUTION BLOCKS FOR CABLE TERMINATIONS

Ferraz Shawmut Power Distribution Blocks afford a safe, convenient way of splicing cables, splitting primary power into a variety of secondary circuits or providing a fixed junction tap-off point. Power block options include single or dual primary connections with up to 30 secondary connections.

Features/Benefits

➤ Adder Poles

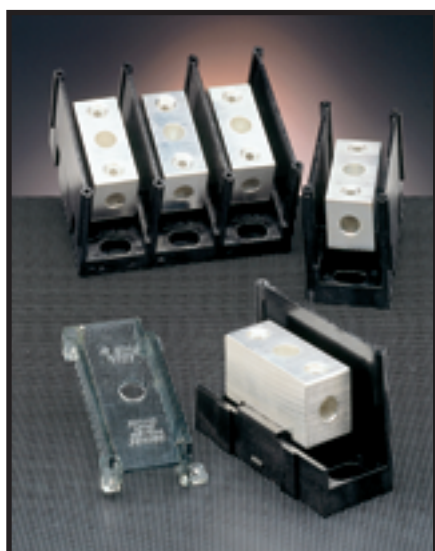
All series have optional adder poles which snap onto the 1, 2 or 3- pole blocks and lock together to form as many total poles as required. Adder poles with a variety of terminations can be combined to match special wire size combinations.

➤ Wire Connectors

Standard aluminum box connectors accommodate aluminum and copper wire, 1 conductor per opening. Standard copper box connections are for copper wire only, 1 conductor per opening. Connector bars are all 1 piece and tin plated.

➤ Insulators

Insulators are virtually unbreakable, glass-filled polycarbonate on all series. "See-Through" Safety Covers are available which give greater safety and provide Service Entrance ratings for large and intermediate series blocks.



Ratings

- Ampere ratings from 90 to 2660
- 600V rated

Approvals

- Most sizes are UL Recognized Component - Guide XCFR2, File E73571
- Most sizes are CSA Certified:
Series 62, 63, 66, 68 - Class 6228, File 69363
Series 67, 69 - Class 3211, File 15469

HIGHLIGHTS:

- **Large -**
68000 and 69000 Series
- **Intermediate -**
66000 and 67000 Series
- **Mini -**
62000 and 63000 Series

APPLICATIONS:

- Box, stud and quick-connect terminations for copper and/or aluminum cables



LARGE 68000-69000 SERIES / POWER DISTRIBUTION BLOCKS

Sizes, Ratings, Catalog Numbers – Large Series 68000 and 69000

Ampere rating based on NEC Table 310-16 for 75° copper wire.



PRIMARY		SECONDARY		AMPERE RATING	CATALOG NUMBER								
WIRE RANGE AWG/kcmil	OPENINGS PER POLE	WIRE RANGE AWG/kcmil	OPENINGS PER POLE		ALUMINUM (90° C Cu/Al wire)				COPPER (75° C Cu wire only)				
					ADDER	1 POLE	2 POLE	3 POLE	ADDER	1 POLE	2 POLE	3 POLE	
Box to Box													
350-#6	1	2/0-#14 #4-14 #10-14*	6 12 20	310	69170 69150 69630**	69171 69151 69631**	69172 69152 69632**	69173 69153 69633**	68170 68150 68630**	68171 68151 68631**	68172 68152 68632**	68173 68153 68633**	
500-#4	1	500-#4 350-#6	1 2	380	69050 69060	69051 69061	69052 69062	69053 69063	68050 68060	68051 68061	68052 68062	68053 68063	
		4/0-#6 4/0-#10	4 4		69510** -	69511** -	69512** -	69513** -	- 68510**	- 68511**	- 68512**	- 68513**	
		2/0-#14 #4-14	6 12		69070 69080	69071 69081	69072 69082	69073 69083	68070 68080	68071 68081	68072 68082	68073 68083	
600-#2	1	600-#2	1	420	69640	69641	69642	69643	68640	68641	68642	68643	
1000-250	1	1000-250 500-#4 350-#6 4/0-#6	1 2 2 4	545	69000 69010 69020 69300**	69001 69011 69021 69301**	69002 69012 69022 69302**	69003 69013 69023 69303**	68000 68010 68020 -	68001 68011 68021 -	68002 68012 68022 -	68003 68013 68023 -	
		4/0-#10 2/0-#14 #2-14 #4-14	4 6 10 12		- 69030 69530** 69040	- 69031 69531** 69041	- 69032 69532** 69042	- 69033 69533** 69043	68300** 68030 68530** 68040	68301** 68031 68531** 68041	68302** 68032 68532** 68042	68303** 68033 68533** 68043	
		#4-14	2		#4-14	12	170	69180	69181	69182	69183	68180	68181
2/0-#14	2	#4-14 #10-14*	12 20	350	69160 69600	69161 69601	69162 69602	69163 69603	68160 68600	68161 68601	68162 68602	68163 68603	
350-#6	2	350-#6 4/0-#6 4/0-#10 2/0-#14 #4-14	2 4 4 6 12	620	69120 69320** - 69130 69140	69121 69321** - 69131 69141	69122 69322** - 69132 69142	69123 69323** - 69133 69143	68120 - 68320** 68130 68140	68121 - 68321** 68131 68141	68122 - 68322** 68132 68142	68123 - 68323** 68133 68143	
		500-#4 4/0-#6 4/0-#10 2/0-#14 2/0-#14 #4-14	2 4 4 6 8 12		760	69090 69310 - 69100 69350** 69110	69091 69311 - 69101 69351** 69111	69092 69312 - 69102 69352** 69112	69093 69313 - 69103 69353** 69113	68090 - 68310 68100 68350** 68110	68091 - 68311 68101 68351** 68111	68092 - 68312 68102 68352** 68112	68093 - 68313 68103 68353** 68113
		600-#2 #14-4 & 3/0-#10	2 4		840	69650 69540**	69651 69541**	69652 69542**	69653 69543**	- 68540**	- 68541**	- 68542**	- 68543**
1000-250	2	500-#4	4	1090	-	69561**†	-	-	-	68561**†	-	-	
600-#2	3	600-#2	3	1260	-	69331**†	-	-	-	-	-	-	
500-#4	4	#6-14 #6-14 & 2/0-#14	30 22 4	1520	- -	69191**† 69521**†	- -	- -	- -	68191**† 68521**†	- -	- -	
600-#2	4	600-#2	4	1680	-	69341**†	-	-	-	-	-	-	
500-#4	3	4/0-#10	6	1140	-	-	-	-	-	800011**†	-	-	
500-#4	7	500-#4	7	2660	-	-	-	-	-	800061***	-	-	
500-#4	3	2/0-#14	8	1140	-	900061**†	-	-	-	-	-	-	
500-#4	4	500-#4	4	1520	-	900071**†	-	-	-	800031**†	-	-	
500-#4	4	2/0-#12	6	1050	-	900121†	-	-	-	800121**†	-	-	

*Copper wire only

**Not UL Recognized or CSA Certified

†These 1 pole blocks are double width (5.31")

***These pole blocks are triple width (7.81")

LARGE 68000-69000 SERIES / POWER DISTRIBUTION BLOCKS

Sizes, Ratings, Catalog Numbers – Large Series 68000 and 69000 (continued)

Ampere rating based on NEC Table 310-16 for 75° copper wire.

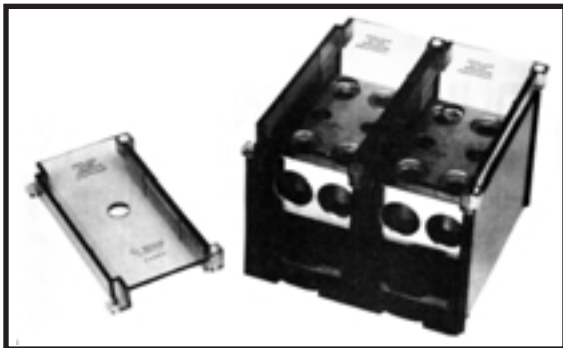


PRIMARY		SECONDARY		AMPERE RATING	CATALOG NUMBER							
WIRE RANGE AWG/kcmil or STUD SIZE*	OPENINGS or STUDS PER POLE	WIRE RANGE AWG/kcmil or STUD SIZE	OPENINGS or STUDS PER POLE		ALUMINUM (90° C Cu/Al wire)				COPPER (75° C Cu wire only)			
					ADDER	1 POLE	2 POLE	3 POLE	ADDER	1 POLE	2 POLE	3 POLE
Box to Stud												
500-#4	1	3/8-16 x 1	1	Cu 380	69210	69211	69212	69213	68210	68211	68212	68213
500-#4	2	3/8-16 x 1	2	Al 310	69270	69271	69272	69273	68270	68271	68272	68273
1000-250	1	3/8-16 x 1	2	Cu 380	-	69221	-	-	-	68221	-	-
		1/2-13 x 1-3/16	1	Al 310								
1000-250	1	3/8-16 x 1	2	Cu 545	69280	69281	69282	69283	68280	68281	68282	68283
		3/8-16 x 1	2	Al 445	69240	69241	69242	69243	68240	68241	68242	68243
1/2-13 x 1	1	2/0-#14	4	545	69260	69261	69262	69263	-	-	-	-
		#4-14	12	545	69290	69291	69292	69293	-	-	-	-
		2/0-#14	4	1000	-	-	-	-	68260	68261	68262	68263
		#4-14	12	1000	-	-	-	-	68290	68291	68292	68293
500-#4	4	3/8-16 x 1	4	1520	-	900091†	-	-	-	-	-	-
Stud to Stud												
1/2-13 x 1-3/8	1	1/2-13 x 1-3/8	1	400	-	-	-	-	68200**	68201**	68202**	68203**

*Stud type connectors are furnished with nuts and washers. Recommended stud torque: (3/8-16) - 228 in. lbs; (1/2-13) - 496 in. lbs.

**Not UL Recognized or CSA Certified

† These 1 pole blocks are double width (5.31")



08590 cover and 69092 PDB with 2-08590 covers installed

SAFETY COVER - Catalog number 08590

Polycarbonate safety cover provides dead-front protection to 68000 and 69000 series power distribution blocks. One cover is needed for each pole (1-pole block requires 1 cover, 3-pole requires 3 covers, etc.) Each cover has a test prod hole in the center for circuit checking and each is marked with the reminder "REPLACE AFTER SERVICING EQUIPMENT". Mounting screws are supplied with cover.

To order, simply determine the total number of poles to be protected and specify the same number of 08590 safety covers.

Recommended mounting screws for all 68000-69000 series: 1/4" (.250 dia.).

END BARRIER - Catalog number U09911

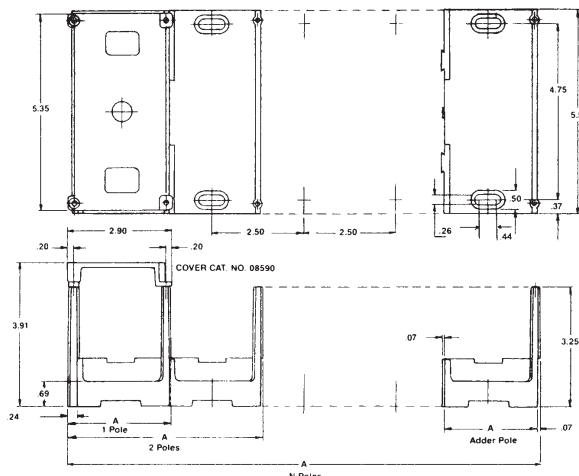
Polycarbonate end barriers snap on to PDB Adder blocks to form 1-pole blocks. Use one barrier per block.

Dimensions – 68000 and 69000 Series PDB

NUMBER OF POLES	DIMENSION A (Inches)
ADDER	2.50
1	2.81
2	5.31
3	7.81
N	(2.50 x N) + .31

Example for 10 poles:

$$A = (2.50 \times 10) + .31 = 25.31$$



INTERMEDIATE 66000-67000 SERIES / POWER DIST. BLOCKS

Sizes, Ratings, Catalog Numbers – Intermediate Series 66000 and 67000

Ampere rating based on NEC Table 310-16 for 75° copper wire.

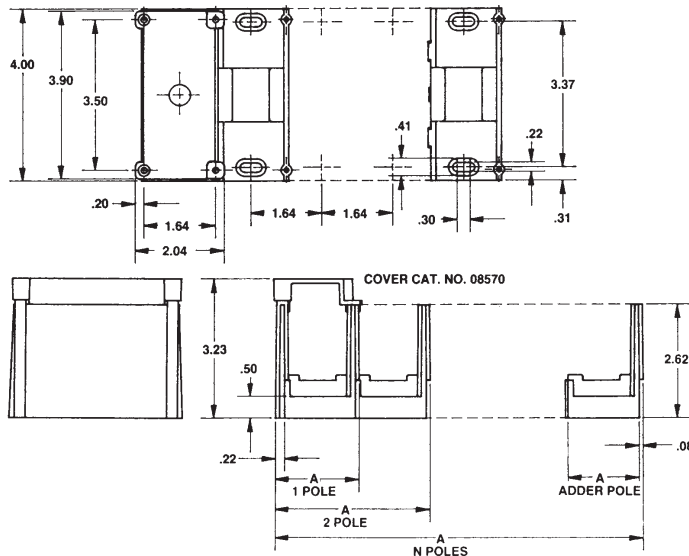


PRIMARY		SECONDARY		AMPERE RATING	CATALOG NUMBER							
WIRE RANGE AWG/kcmil or STUD SIZE	OPENINGS or STUDS PER POLE	WIRE RANGE AWG/kcmil or STUD SIZE	OPENINGS or STUDS PER POLE		ALUMINUM (90° C Cu/Al wire)				COPPER (75° C Cu wire only)			
					ADDER	1 POLE	2 POLE	3 POLE	ADDER	1 POLE	2 POLE	3 POLE
Box to Box												
2/0-#14	1	2/0-#14	1	175	67050	67051	67052	67053	66050	66051	66052	66053
		#2-14	4		67570	67571	67572	67573	66570	66571	66572	66573
		#2-14	6		67560	67561	67562	67563	66560	66561	66562	66563
		#2-14	8		67580	67581	67582	67583	66580	66581	66582	66583
		#6-14	10		67590	67591	67592	67593	66590	66591	66592	66593
		#10-14*	12		67110	67111	67112	67113	66110	66111	66112	66113
		350-#6	1		350-#6	1	310	67000	67001	67002	67003	66000
2/0-#14	2			67010	67011	67012		67013	66010	66011	66012	66013
#2-14	4			67670	67671	67672		67673	66670	66671	66672	66673
#2-14	6			67660	67661	67662		67663	66660	66661	66662	66663
#2-14	8			67630	67631	67632		67633	66630	66631	66632	66633
#6-14	10			67650	67651	67652		67653	66650	66651	66652	66653
#10-14*	15			67620	67621	67622		67623	66620	66621	66622	66623
500-#4	1	500-#4	1	380	67400	67401	67402	67403	66400	66401	66402	66403
		4/0-#6	2		67420	67421	67422	67423	-	-	-	-
		4/0-#10	2		-	-	-	-	66420	66421	66422	66423
		2/0-#14	4		67410	67411	67412	67413	66410	66411	66412	66413
		#2-14	6		67460	67461	67462	67463	66460	66461	66462	66463
		#2-14	8		67430	67431	67432	67433	66430	66431	66432	66433
		#6-14	10		67480	67481	67482	67483	66480	66481	66482	66483
		#10-14*	18		67490	67491	67492	67493	66490	66491	66492	66493
		350-#6	1									
		& #2-14	3		67450	67451	67452	67453	66450	66451	66452	66453
2/0-#14	2	2/0-#14	2	350	67020	67021	67022	67023	66020	66021	66022	66023
		#2-14	6		67510	67511	67512	67513	66510	66511	66512	66513
		#2-14	8		67610	67611	67612	67613	66610	66611	66612	66613
		#6-14	10		67530	67531	67532	67533	66530	66531	66532	66533
		#10-14*	15		67550	67551	67552	67553	66550	66551	66552	66553
4/0-#10	2	4/10-#10	2	460	-	-	-	-	66520	66521	66522	66523
4/0-#6	2	4/0-#6 #2-14	2 6	460 460	67520 67540	67521 67541	67522 67542	67523 67543	- 66540	- 66541	- 66542	- 66543
Box to Stud												
350-#6	1	3/8-16 x 1	1	310	67250	67251	67252	67253	66250	66251	66252	66253
500-#4	1	3/8-16 x 1-1/16	1	380	67220	67221	67222	67223	66220	66221	66222	66223
		1/4-20 x 1-1/16	2	380	67240	67241	67242	67243	66240	66241	66242	66243
Stud to Stud												
1/4-20 x 1-5/16	1	1/4-20 x 1-5/16	1	155	-	-	-	-	66270	66271	66272	66273
3/8-16 x 1-5/16	1	1/4-20 x 1-5/16	1	155	-	-	-	-	66210	66211	66212	66213
		3/8-16 x 1-5/16	1	155	-	-	-	-	66200	66201	66202	66203
3/8-16 x 1-1/8	1	3/8-16 x 1-1/8	1	400	-	-	-	-	66260	66261	66262	66263
		1/4-20 x 1-1/8	2	400	-	-	-	-	66230	66231	66232	66233

*Copper wire only

Stud type connectors are furnished with nuts and washers. Recommended stud torque: (1/4-20) - 72 in. lbs.; (3/8-16) - 228 in. lbs.

INTERMEDIATE 66000-67000 SERIES / POWER DIST. BLOCKS



Dimensions – 66000 and 67000 Series Power Distribution Blocks

NUMBER OF POLES	DIMENSION A (Inches)
ADDER	1.64
1	1.94
2	3.57
3	5.20
N	$(1.635 \times N) + .30$

Example for 10 poles:

$$A = (1.635 \times 10) + .30 = 16.65 \text{ inches}$$

SAFETY COVER - CATALOG NUMBER 08570

Polycarbonate safety cover provides dead-front protection to 66000 and 67000 series power distribution blocks. One cover is needed for each pole (1-pole block requires 1 cover, 3-pole requires 3 covers, etc.) Each cover has a test prod hole in the center for circuit checking and each is marked with the reminder "REPLACE AFTER SERVICING EQUIPMENT". Mounting screws are supplied with cover.

To order, simply determine the total number of poles to be protected and specify the same number of 08570 safety covers.

Recommended mounting screws for all 66000-67000 series: #10 (.190 diameter).

END BARRIER - Catalog number U09705

Polycarbonate end barriers snap on to PDB Adder blocks to form 1-pole blocks. Use one barrier per block.

Properties of Materials Used in Power Distribution Blocks

PROPERTY	UNITS	ASTM TEST	POLYCARBONATE
Specific Gravity		D792	1.21
IZOD	ft-lb/in	D256	4-6
Flexural Strength	psi	D790	13,200
Flexural Modulus	psi	D790	325,000
Tensile Strength	psi	D638	9,000
Compressive Strength	psi	D695	12,500
Water Absorption	24 hrs-%	D570	.15
Hardness	Rockwell	D785	M-85
Dielectric Strength		D149	
60 hertz, 25°C, s/t	vpm		425
60 hertz, 25°C, s/s	vpm		425
Dielectric constant		D150	
60Hz-dry			3.01
1 Mhz-dry			2.96
Volume resistivity	ohm-cm	D257	$> 10^{16}$
Heat deflecting (°F@264 psi)	°F	D648	270
Flammability (UL 94)			94 V-0

Note: Above data represents approximate values and are for reference only.

MINI 62000-63000 SERIES / POWER DISTRIBUTION BLOCKS

Sizes, Ratings, Catalog Numbers – Mini Series 62000 and 63000

Ampere rating based on NEC Table 310-16 for 90° copper wire.



PRIMARY		SECONDARY		AMP RATING		CATALOG NUMBER							
WIRE RANGE AWG/kcmil or STUD SIZE*	OPENINGS or STUDS PER POLE	WIRE RANGE AWG/kcmil or STUD SIZE*	OPENINGS or STUDS PER POLE			ALUMINUM (90° C Cu/Al wire)				COPPER (90° C Cu wire only)			
						ADDER	1 POLE	2 POLE	3 POLE	ADDER	1 POLE	2 POLE	3 POLE
Box to Box													
#4-14	1	#4-14	1 4	90	95	63100 63160	63101 63161	63102 63162	63103 63163	62100 62160	62101 62161	62102 62162	62103 62163
2/0-#14	1	2/0-#14 #2-14 #4-14	1 2 4	185	195	63150 63190 63130	63151 63191 63131	63152 63192 63132	63153 63193 63133	62150 62190 62130	62151 62191 62131	62152 62192 62132	62153 62193 62133
Box to Stud													
2/0-#14	1 1	1/4-20 x 5/8 1/4-20 x 1/2 Tapped hole	1 1	185	195	63140	63141	63142	63143	62140 62170	62141 62171	62142 62172	62143 62173
Stud to Stud													
1/4-20 x 5/8	1	1/4-20 x 5/8	1	240	240	-	-	-	-	62200	62201	62202	62203
Box to Quick Connect													
#4-14	1	1/4 x .032QC	4	90	95	-	-	-	-	62210†	62211†	62212†	62213†

*Studs are furnished with nuts and washers. Recommended stud torque: (1/4-20) - 72 in. lbs.

†Quick connector, not CSA Certified.

Note: Blocks for 5, 6 and 10 poles are also available. To order, simply modify the Adder catalog number. Example: 63100 becomes 63106 for 6 poles.

Dimensions – 62000 and 63000 Series Power Distribution Blocks

NUMBER OF POLES	DIMENSION A (Inches)
ADDER	.812
1	1.09
2	1.90
3	2.71
N	$(.812 \times N) + .273$

Example for 10 poles:
 $A = (.812 \times 10) + .273 = 8.39$

SAFETY COVER - Catalog number 08530

Polycarbonate safety cover provides dead-front protection to 62000 and 63000 series power distribution blocks. One cover is needed or each pole (1-pole block requires 1 cover, 3-pole requires 3 covers, etc.) Each cover has a test prod hole in the center for circuit checking and each is marked with the reminder "REPLACE AFTER SERVICING EQUIPMENT".

To order, simply determine the total number of poles to be protected and specify the same number of 08530 safety covers. Mounting screws are supplied with cover.

Recommended mounting screws for all 62000-63000 series: #10 (.190" diameter).

END BARRIER - Catalog number U09311

Polycarbonate end barriers snap on to PDB Adder blocks to form 1-pole blocks. Use one barrier per block.

