1-800-633-0405

# **Edison Power Distribution Blocks**



### Short-Circuit Current Rated Power Distribution Blocks

We offer distinctly different styles of short-circuit current rated Power Distribution Blocks and Terminal Blocks to match different application needs.

- Enclosed style or Open style
- UL1953 Listed power distribution blocks or UL1059 Recognized terminal blocks, that have different minimum spacing requirements.

The table below can assist in the selection of the correct series for your application requirements.

#### Why are these important?

Assembly short-circuit current ratings (SCCRs) are now required in the 2005 NEC® and UL508A Listed industrial control panels.

Marking the SCCR on:

- Industrial Control Panels (NEC ® 409.110)
- Industrial Machinery Electrical Panels (NEC® 670.3(A))
- HVAC equipment (NEC ® 440.4(B)

The above sections are now required by the National Electrical Code. Power Distribution Blocks or Terminal Blocks not marked with an SCCR are typically one of the weakest links and may limit an assembly to no more than 10 kA SCCR per Table SB4.1 UL508A. The EPDB series and HPB series Power Distribution Blocks have increased spacing required where used in feeder circuits in equipment listed to UL508A. The PB series UL1059 Terminal Blocks must be evaluated for proper spacing. Also, for building wiring systems, the EPDB series and HPB series power distribution blocks can be used to meet the 2005 NEC ® requirements in section 376.56(B) for power distribution blocks in wireways.

	Edison Power Distribution Blocks Selection Guide*											
Series	UL	† Enclosed	High SCCR**	Spacing*** 1" Air 2" Surface	Industrial Control Panels UL 508A Branch Circuit	Industrial Control Panels UL 508A Feeder Circuit	HVAC UL 1995	Wireways NEC® 376.56(B) (Requires UL 1953)				
EPDB	UL 1953 Listed Power Distribution Blocks	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
HPB	UL 1953 Listed Power Distribution Blocks	No****	Yes	Yes	Yes	Yes Yes		Yes (with optional cover)				
PB	UL 1059 Recognized Terminal Blocks	No****	Yes	No*****	Yes	No*****	Yes	No				

† IP-20 finger-safe under specific conditions.

\*Refer to specific UL standards and NEC sections for a complete application guide.

\*\*When protected by proper fuse class with maximum ampere rating specified or smaller.

This does not apply to PB40, PB51 and PB71 series.

\*\*\*See Minimum Space Requirements for Equipment table below.

\*\*\*\*Optional covers are available. They are not IP-20 rated, but do provide additional protection against direct contact with Live Parts.

\*\*\*\*\* Exception: Yes, if single pole units installed with proper spacings.

Minimum Space Requirements for Equipment										
UL Standard	Pai	etween Live rts of e Polarity	Spacing Between Live Parts and Grounded Parts or Enclosures,							
	Through Air @ 600V	Over Surface @ 600V	Through Air and Over Surface @ 600V							
508A Feeder Circuits, Table 10.2	1"	2"	1"							
508A Branch Circuits, Table 10.1	3/8"	1/2"	1/2"							
UL 1995 HVAC	3/8"	1/2"	1/2"							

Note: Refer to specific UL standards for complete spacing details.

## **PB Series Edison Open-Style Terminal Blocks**

### Open-style terminal blocks for cable termination

Edison Open-style terminal blocks are a convenient way to manage your power distribution needs. They are engineered to maintain an SCCR rating of 200kA with copper conductors and an SCCR of 10 kA for aluminium conductors, making these distribution blocks the ideal solution to today's power circuit wiring needs.

### **Features**

- Used in UL508A panels for branch circuit applications
- Standard aluminum box connectors accommodate copper wire. PB401x, PB512x and PB712x series accommodate copper or aluminum wire.
- Tin-plated aluminum connectors suitable for copper conductors
- Available safety covers for greater protection (purchase separately)
- Suitable for both factory and field wiring

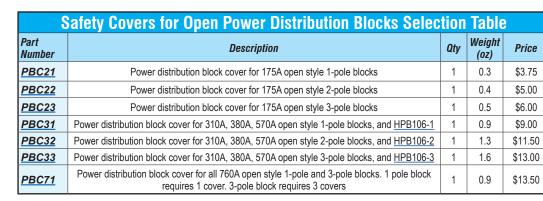
### Ratings

- Ampere ratings up to 760 Amps
- 600 VAC or VDC
- Short Circuit Current Rating (SCCR) 200kA with proper fusing
- Flammability: UL 94V0

### **Agency Approvals**

- UL 1059 recognized File E62622 Guide XCFR2
- CSA Certified: Class 6228-01, File 700489
- CE

	Open	<b>Type Power Distribution</b>	<b>Blocks S</b>	election	Table	
Part Number	Amps	Description	SCCR Rating	Qty	Weight [oz]	Price
<u>PB1011</u>	175 max	1 pole distribution block, 1 in/1 out	200 kA	1	2.8	\$16.50
<u>PB1012</u>	175 max	2 pole distribution block, 1 in/1 out	200 kA	1	4.6	\$24.00
<u>PB1013</u>	175 max	3 pole distribution block, 1 in/1 out	200 kA	1	6.8	\$29.00
PB1041	175 max	1 pole distribution block, 1 in/4 out	200 kA	1	3.1	\$24.50
<u>PB1042</u>	175 max	2 pole distribution block, 1 in/4 out	200 kA	1	5.2	\$38.00
<u>PB1043</u>	175 max	3 pole distribution block, 1 in/4 out	200 kA	1	7.3	\$46.00
<u>PB3061</u>	310 max	1 pole distribution block, 1 in/6 out	200 kA	1	10.9	\$67.00
PB3062	310 max	2 pole distribution block, 1 in/6 out	200 kA	1	19.1	\$79.00
PB3063	310 max	3 pole distribution block, 1 in/6 out	200 kA	1	25.5	\$94.00
<u>PB3121</u>	310 max	1 pole distribution block, 1 in/12 out	200 kA	1	12.7	\$59.00
<u>PB3122</u>	310 max	2 pole distribution block, 1 in/12 out	200 kA	1	21.6	\$97.00
<u>PB3123</u>	310 max	3 pole distribution block, 1 in/12 out	200 kA	1	31.1	\$135.00
PB4011	380 max	1 pole distribution block, 1 in/stud	10 kA	1	11.9	\$46.50
PB4012	380 max	2 pole distribution block, 1 in/stud	10 kA	1	20.7	\$75.00
<u>PB4013</u>	380 max	3 pole distribution block, 1 in/stud	10 kA	1	29.1	\$105.00
<u>PB5121</u>	570 max	1 pole distribution block, 2 in/12 out	10 kA	1	13.8	\$68.00
<u>PB5122</u>	570 max	2 pole distribution block, 2 in/12 out	10 kA	1	24.4	\$108.00
PB5123	570 max	3 pole distribution block, 2 in/12 out	10 kA	1	34.7	\$155.00
<u>PB7121</u>	760 max	1 pole distribution block, 2 in/12 out	10 kA	1	17.0	\$115.00
PB7123	760 max	3 pole distribution block, 2 in/12 out	10 kA	1	44.0	\$192.00



Open Style	<b>Open Style Power Distribution Block General Specifications</b>									
Wire type	75°C* Copper									
Voltage	600 VAC or VDC maximum									
Mounting	Surface mount									

\*Note: Amp Rating based on NEC table 310.16 for 75°C copper wire.













# PB Series Edison Open-Style Terminal Blocks Specifications

	х	UL Se	ries Wire	and To	orque Range Specif	ications		
Part		Line				Load		
Number	CU Wire Range Torque Trim Length Ib·in [N·m] Ib in [mm] Hex Key		CU Wire Range*	Torque Ib∙in [N∙m]	Trim Length in [mm]	Hex Key, Slot, Stud		
<u>PB1011</u> PB1012	2/0 to 8 AWG	110 [12.4]	0.70 [17.8]	3/16"	2/0 to 8 AWG	110 [12.4]	0 70 [17 9]	2/16" Hox
<u>PB1012</u> PB1013	70 to 10 mm <sup>2</sup>	110 [12.4]	0.70[17.0]	3/10	70 to 10 mm <sup>2</sup>	110 [12.4]	0.70 [17.8]	3/16" Hex
PB1041					4 to 6 AWG, 25 to 16 mm <sup>2</sup>	35 [4.0]		
<u>PB1042</u>	2/0 to 8 AWG 70 to 10 mm <sup>2</sup>	120 [13.6]	0.670 [17.0]	3/16"	8 AWG, 10 mm <sup>2</sup>	25 [2.8]	0.470 [11.9] top row, 0.780 [19.8] bottom row	Slot
<u>PB1043</u>	70101011111				10 to 14 AWG, 6 to 2.5 mm <sup>2</sup>	20 [2.3]	0.700 [19.0] Dottom Tow	
PB3061	0501 114 4 0000				4 to 6 AWG, 25 to 16 mm <sup>2</sup>	35 [4.0]	4 00 005 414	
PB3062	350 kcmil to 4 AWG 185 to 25 mm <sup>2</sup>	275 [31.1]	0.90 [22.9]	5/16"	8 AWG, 10 mm <sup>2</sup>	25 [2.8]	1.00 [25.4] top row 0.45 [11.43] bottom row	Slot
<u>PB3063</u>	100 10 20 1111				10 to 12 AWG, 6 to 4 mm <sup>2</sup>	20 [2.3]	0.40[11.40]0000000000	
<u>PB3121</u>					4 to 6 AWG, 25 to 16 mm <sup>2</sup>	35 [4.0]	0.450 [11.4] top row,	
<u>PB3122</u>	350 kcmil to 4 AWG 185 to 25 mm <sup>2</sup>	275 [31.1]	0.90 [22.9]	5/16"	8 AWG, 10 mm <sup>2</sup>	25 [2.8]	0.630 [16.0] middle row,	Slot
<u>PB3123</u>	100 10 20 1111				10 to 14 AWG, 6 to 2.5 mm <sup>2</sup>	20 [2.3]	0.920 [23.4] bottom row	
<u>PB4011</u>	5001 111 0 0000							
<u>PB4012</u>	500 kcmil to 6 AWG 300 to 16 mm <sup>2</sup>	500 [56.5]	-	-	-	-	-	Stud
<u>PB4013</u>								
<u>PB5121</u>								
<u>PB5122</u>	2 300 kcmil to 4 AWG 185 to 25 mm <sup>2</sup>	275 [31.1]		-	4 to 14 AWG 25 mm <sup>2</sup> to 2.5 mm <sup>2</sup>	20 [2.3]	_	-
<u>PB5123</u>								
<u>PB7121</u>	500 kcmil to 6 AWG	500 I56 51	F1		4 to 14 AWG	25 [4 0]		
<u>PB7123</u>	300 to 16 mm <sup>2</sup>	500 [56.5]	_	_	25 mm <sup>2</sup> to 2.5 mm <sup>2</sup>	35 [4.0]	_	_

\* Wire Range shown is divided based on torque rating. The full range capability spans smallest to largest listed.

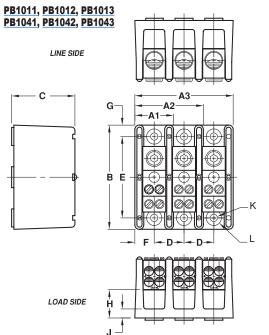
				Short-Cir	cuit Currei	nt Ratin	g Data					
			Line	Load	Configuration	Cond	uctors		Maximum	Fuse Class a	nd Amp**	
Part Number	Number of Poles	Capacity*	Wire Range	Wire Range	Openings per Pole	Line AWG or kcmil	Load AWG or kcmil	Class J (JDL)	Class T (A3T/ A6T)	Class RK1 (LENRK/ LESRK)	Class RK5 (ECNR/ ECSR)	SCCR
<u>PB1011</u>	1											
<u>PB1012</u>	2	175A	2/0 to 8 AWG 70 to 10 mm <sup>2</sup>	2/0 to 8 AWG 70 to 10 mm <sup>2</sup>	1/1	2/0 to 8	2/0 to 8	200	200	200	60	200 kA
<u>PB1013</u>	3											
<u>PB1041</u>	1						4 to 12	200	200	200	60	200 kA
<u>PB1042</u>	2	175A	2/0 to 8 AWG 70 to 10 mm <sup>2</sup>	4 to 14 AWG 25 to 2.5 mm <sup>2</sup>	1/4	2/0 to 8	4 to 14	175	175	100	60	100 kA
<u>PB1043</u>	3						4 (0 14	200	200	100	60	50 kA
PB3061	1		350 kcmil to 4	4 to 12 AWG 25 to 4 mm <sup>2</sup>			4 to 8	400	400	200	100	200 kA
<u>PB3062</u>	2	310A	AWG		1/6	350 to 4	4100	400	400	400	100	100 kA
<u>PB3063</u>	3		185 to 25 mm <sup>2</sup>				4 to 12	175	175	100	60	100 kA
<u>PB3121</u>	1		350 kcmil to 4	4 to 14 AWG 25 to 2.5 mm <sup>2</sup>	1/12	350 to 4	4 to 8	400	400	200	100	200 kA
<u>PB3122</u>	2	310A	AWG				4 to 14	175	175	100	60	100 kA
<u>PB3123</u>	3		185 to 25 mm <sup>2</sup>	20 10 2.0 1111			4 (0 14	175	175	100	60	100 kA
<u>PB4011</u>	1		500 kcmil to 6	One	One	500	One	***	***	***	***	
<u>PB4012</u>	2	380A	AWG	3/8" - 16 x 1	3/8" - 16 x 1	500 to 6	3/8" -	***	***	***	***	10 kA
PB4013	3		240 to 16 mm <sup>2</sup>	stud	stud	500 10 6	16 x 1 stud	***	***	***	***	
PB5121	1		300 kcmil to 4			200	1 to 14	***	***	***	***	
PB5122	2	570A	AWG	4 to 14 AWG 25 to 2.5 mm <sup>2</sup>	2/12	300	4 to 14	***	***	***	***	10 kA
PB5123	3		150 to 25 mm <sup>2</sup>	20 10 2.0 11111		300 to 4	4 to 14	***	***	***	***	
PB7121	1		500 kcmil to 6	4 to 14 AWG				***	***	***	***	
<u>PB7123</u>	3	760A	AWG 240 to 16 mm <sup>2</sup>	25 to 2.5 mm <sup>2</sup>	2/12	500 to 6	4 to 14	***	***	***	***	10 kA

\*Amp ratings are based on NEC® Table 310.16 for 75°C copper wire and UL508A Table 28.1 \*\*Class G 60A or less or Class CC 30A or less fuses are suitable for all SCCRs in this table. \*\*\*Not High SCCR rated. Refer to UL508A Table SB4.1.

# PB Series Edison Open-Style Terminal Blocks Dimensions

		Ed	ison (	pen-S	tyle P	ower	Distrib	ution	Blocks	s Dime	ension	S	
Dort Number	Width			Length	Height								
Part Number	A1	A2	A3	В	C	D	Ε	F	G	H	J	K	L
<u>PB1011</u>													
<u>PB1012</u>													
<u>PB1013</u>	1.06	1.88	2.60	2.85	1.75	0.81	2.25	0.53	0.31	0.84	0.31	0.20	0.42
<u>PB1041</u>	[26.92]	[47.75]	[66.04]	[72.39]	[44.45]	[20.57]	[57.15]	[13.46]	[7.87]	[21.34]	[7.87]	[5.08]	[10.67]
<u>PB1042</u>													
<u>PB1043</u>													
<u>PB3061</u>													
<u>PB3062</u>													
<u>PB3063</u>													
<u>PB3121</u>													
<u>PB3122</u>												Slot	Slot
<u>PB3123</u>	1.96	3.58	5.20	4.0	3.32	1.62	3.37	0.985	0.310	0.780	0.250	0.20 [5.08] (w)	0.42 [10.67] (w)
<u>PB4011</u>	[49.78]	[90.93]	[132.08]	[101.60]	[84.33]	[41.15]	[85.60]	[25.02]	[7.87]	[19.81]	[6.35]	X	x
<u>PB4012</u>												0.41 [10.41] (I)	0.62 [15.75] (l)
<u>PB4013</u>													
<u>PB5121</u>	_												
<u>PB5122</u>													
<u>PB5123</u>													

Note: Dimensions are in inches [millimeters]



-	
Part Number	Minimum Enclosure Size in[mm]*
PB1011, PB1012, PB1013	16 x 16 x 6.75 [406.4 x 406.4 x 171.45]
<u>PB1041, PB1042, PB1043</u>	16 x 16 x 6.75 [406.4 x 406.4 x 171.45]
PB3061, PB3062, PB3063	24 x 20 x 6.75 [609.6 x 508 x 171.45]
<u>PB3121, PB3122, PB3123</u>	24 x 20 x 6.75 [609.6 x 508 x 171.45]
PB4011, PB4012, PB4013	N/A
PB5121, PB5122, PB5123	N/A
<u>PB7121, PB7123</u>	N/A

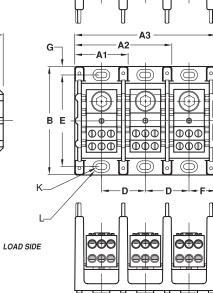
\*Note: Terminal block SCCR determined based on testing in minimum-size enclosure

<u>PB3061, PB3062, PB3063</u> PB3121, PB3122, PB3123

PB4011, PB4012, PB4013 PB5121, PB5122, PB5123

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LINE SIDE



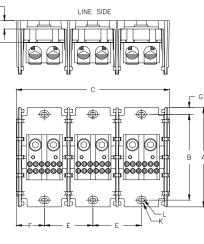
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#### For the latest prices, please check AutomationDirect.com.

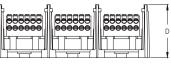
## Por the latest prices, please check PB Series Edison Open-Style Terminal Blocks Dimensions

	Edison Open-Style Power Distribution Blocks Dimensions												
	Width	Length	Height										
Part Number	A	В	C1	C2	C3	D	Ε	F	G	H	J	K	L
<u>PB7121</u>	5.5	4.75	3.10	5.79	8.48	2.93	2.69	1.55	0.38	1.19	0.44	Slot: 0.20 [5.08] (w)	Slot: 0.41 [10.41](w)
<u>PB7123</u>	[139.7]	[120.7]	[78.74]	[147.1]	[215.39]	[74.42]	[68.33]	[39.37]	[9.65]	[30.23]	[11.18]	0.33 [8.38](I)	0.53 [13.46](I)

Note: Dimensions are in inches [millimeters]



<u>PB7121, PB7123</u>

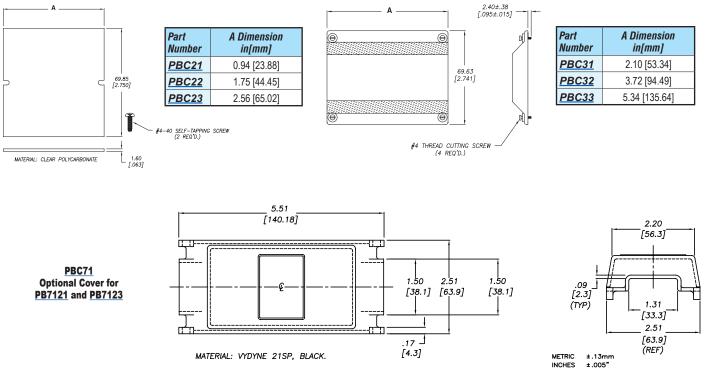


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### Covers

Optional Cover for <u>PB1011, PB1012, PB1013</u> <u>PB1041, PB1042, PB1043</u> Optional Cover for <u>PB3061, PB3062, PB3063</u> PB3121, PB3122, PB3123





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#### 1-800-633-0405

## **Edison Open-Style Power Distribution Blocks Quick Reference**

	Edison Pow	er Distribution B	locks Quick	Reference		
Openings per pole	Туре	175 amps	310 amps	380 amps	570 amps	760 amps
	Open UL1059	PB101x	NO	NO	NO	NO
1 in 1 out	Open UL1953 Listed	HPB101-x	HPB101-x	NO	NO	NO
, out	Finger Safe UL1953 Listed	EPDB101	EPDB301	NO	NO	NO
	Open UL1059	NO	NO	PB401x	NO	NO
1 in 1 stud out	Open UL1953 Listed	HPB10S-x	NO	NO	NO	NO
	Finger Safe UL1953 Listed	NO	NO	NO	NO	NO
	Open UL1059	NO	NO	NO	NO	NO
2 in 2 out	Open UL1953 Listed	NO	NO	NO	NO	NO
2 001	Finger Safe UL1953 Listed	NO	NO	NO	NO	EPDB702
	Open UL1059	PB104x	NO	NO	NO	NO
1 in 4 out	Open UL1953 Listed	HPB104-x	HPB104-x	NO	NO	NO
4 001	Finger Safe UL1953 Listed	EPDB104	NO	NO	NO	NO
	Open UL1059	NO	PB306x	NO	NO	NO
1 in 6 out	Open UL1953 Listed	HPB106-x	HPB306-x	NO	NO	NO
0.001	Finger Safe UL1953 Listed	NO	NO	EPDB306	NO	NO
	Open UL1059	NO	NO	NO	NO	NO
1 in 9 out	Open UL1953 Listed	NO	HPB309-x	NO	NO	NO
5001	Finger Safe UL1953 Listed	NO	NO	NO	NO	NO
	Open UL1059	NO	PB312x	NO	NO	NO
1 in 12 out	Open UL1953 Listed	NO	HPB312-x	NO	NO	NO
12 000	Finger Safe UL1953 Listed	NO	NO	NO	NO	NO
	Open UL1059	NO	NO	NO	PB512x	PB712x
2 in 12 out	Open UL1953 Listed	NO	NO	NO	NO	NO
12 001	Finger Safe UL1953 Listed	NO	NO	NO	EPDB512	NO