

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 | Spacing Between Live Parts of Opposite Polarity | | Spacing Between Live Parts and Grounded Parts or Enclosures, Through Air and Over Surface @ 600V |
|----------------------------------|---|---------------------|--|
| | Through Air @ 600V | 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 Type Power Distribution Blocks Selection Table | | | | | | |
|---|---------|--|-------------|-----|-------------|----------|
| Part Number | Amps | Description | SCCR Rating | Qty | Weight [oz] | Price |
| PB1011 | 175 max | 1 pole distribution block, 1 in/1 out | 200 kA | 1 | 2.8 | \$19.00 |
| PB1012 | 175 max | 2 pole distribution block, 1 in/1 out | 200 kA | 1 | 4.6 | \$27.50 |
| PB1013 | 175 max | 3 pole distribution block, 1 in/1 out | 200 kA | 1 | 6.8 | \$33.50 |
| PB1041 | 175 max | 1 pole distribution block, 1 in/4 out | 200 kA | 1 | 3.1 | \$28.00 |
| PB1042 | 175 max | 2 pole distribution block, 1 in/4 out | 200 kA | 1 | 5.2 | \$44.00 |
| PB1043 | 175 max | 3 pole distribution block, 1 in/4 out | 200 kA | 1 | 7.3 | \$53.00 |
| PB3061 | 310 max | 1 pole distribution block, 1 in/6 out | 200 kA | 1 | 10.9 | \$77.00 |
| PB3062 | 310 max | 2 pole distribution block, 1 in/6 out | 200 kA | 1 | 19.1 | \$91.00 |
| PB3063 | 310 max | 3 pole distribution block, 1 in/6 out | 200 kA | 1 | 25.5 | \$108.00 |
| PB3121 | 310 max | 1 pole distribution block, 1 in/12 out | 200 kA | 1 | 12.7 | \$68.00 |
| PB3122 | 310 max | 2 pole distribution block, 1 in/12 out | 200 kA | 1 | 21.6 | \$112.00 |
| PB3123 | 310 max | 3 pole distribution block, 1 in/12 out | 200 kA | 1 | 31.1 | \$156.00 |
| PB4011 | 380 max | 1 pole distribution block, 1 in/stud | 10 kA | 1 | 11.9 | \$54.00 |
| PB4012 | 380 max | 2 pole distribution block, 1 in/stud | 10 kA | 1 | 20.7 | \$86.00 |
| PB4013 | 380 max | 3 pole distribution block, 1 in/stud | 10 kA | 1 | 29.1 | \$121.00 |
| PB5121 | 570 max | 1 pole distribution block, 2 in/12 out | 10 kA | 1 | 13.8 | \$78.00 |
| PB5122 | 570 max | 2 pole distribution block, 2 in/12 out | 10 kA | 1 | 24.4 | \$125.00 |
| PB5123 | 570 max | 3 pole distribution block, 2 in/12 out | 10 kA | 1 | 34.7 | \$179.00 |
| PB7121 | 760 max | 1 pole distribution block, 2 in/12 out | 10 kA | 1 | 17.0 | \$133.00 |
| PB7123 | 760 max | 3 pole distribution block, 2 in/12 out | 10 kA | 1 | 44.0 | \$221.00 |

| Safety Covers for Open Power Distribution Blocks Selection Table | | | | |
|--|--|-----|-------------|---------|
| Part Number | Description | Qty | Weight (oz) | Price |
| PBC21 | Power distribution block cover for 175A open style 1-pole blocks | 1 | 0.3 | \$4.25 |
| PBC22 | Power distribution block cover for 175A open style 2-pole blocks | 1 | 0.4 | \$5.75 |
| PBC23 | Power distribution block cover for 175A open style 3-pole blocks | 1 | 0.5 | \$7.00 |
| PBC31 | Power distribution block cover for 310A, 380A, 570A open style 1-pole blocks, and HPB106-1 | 1 | 0.9 | \$10.50 |
| PBC32 | Power distribution block cover for 310A, 380A, 570A open style 2-pole blocks, and HPB106-2 | 1 | 1.3 | \$13.50 |
| PBC33 | Power distribution block cover for 310A, 380A, 570A open style 3-pole blocks, and HPB106-3 | 1 | 1.6 | \$15.00 |
| PBC71 | Power distribution block cover for all 760A open style 1-pole and 3-pole blocks. 1 pole block requires 1 cover. 3-pole block requires 3 covers | 1 | 0.9 | \$15.50 |

| Open Style Power Distribution Block General Specifications | |
|--|------------------------|
| 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

| UL Series Wire and Torque Range Specifications | | | | | | | | |
|--|---|--------------------|---------------------|---------|--|--------------------|--|---------------------|
| Part Number | Line | | | | Load | | | |
| | CU Wire Range | Torque lb-in [N·m] | Trim Length in [mm] | Hex Key | CU Wire Range* | Torque lb-in [N·m] | Trim Length in [mm] | Hex Key, Slot, Stud |
| PB1011 | 2/0 to 8 AWG 70 to 10 mm ² | 110 [12.4] | 0.70 [17.8] | 3/16" | 2/0 to 8 AWG 70 to 10 mm ² | 110 [12.4] | 0.70 [17.8] | 3/16" Hex |
| PB1012 | | | | | | | | |
| PB1013 | | | | | | | | |
| PB1041 | 2/0 to 8 AWG 70 to 10 mm ² | 120 [13.6] | 0.670 [17.0] | 3/16" | 4 to 6 AWG, 25 to 16 mm ² | 35 [4.0] | 0.470 [11.9] top row, 0.780 [19.8] bottom row | Slot |
| PB1042 | | | | | 8 AWG, 10 mm ² | 25 [2.8] | | |
| PB1043 | | | | | 10 to 14 AWG, 6 to 2.5 mm ² | 20 [2.3] | | |
| PB3061 | 350 kcmil to 4 AWG 185 to 25 mm ² | 275 [31.1] | 0.90 [22.9] | 5/16" | 4 to 6 AWG, 25 to 16 mm ² | 35 [4.0] | 1.00 [25.4] top row 0.45 [11.43] bottom row | Slot |
| PB3062 | | | | | 8 AWG, 10 mm ² | 25 [2.8] | | |
| PB3063 | | | | | 10 to 12 AWG, 6 to 4 mm ² | 20 [2.3] | | |
| PB3121 | 350 kcmil to 4 AWG 185 to 25 mm ² | 275 [31.1] | 0.90 [22.9] | 5/16" | 4 to 6 AWG, 25 to 16 mm ² | 35 [4.0] | 0.450 [11.4] top row, 0.630 [16.0] middle row, 0.920 [23.4] bottom row | Slot |
| PB3122 | | | | | 8 AWG, 10 mm ² | 25 [2.8] | | |
| PB3123 | | | | | 10 to 14 AWG, 6 to 2.5 mm ² | 20 [2.3] | | |
| PB4011 | 500 kcmil to 6 AWG 300 to 16 mm ² | 500 [56.5] | — | — | — | — | — | Stud |
| PB4012 | | | | | | | | |
| PB4013 | | | | | | | | |
| PB5121 | 300 kcmil to 4 AWG 185 to 25 mm ² | 275 [31.1] | — | — | 4 to 14 AWG 25 mm ² to 2.5 mm ² | 20 [2.3] | — | — |
| PB5122 | | | | | | | | |
| PB5123 | | | | | | | | |
| PB7121 | 500 kcmil to 6 AWG 300 to 16 mm ² | 500 [56.5] | — | — | 4 to 14 AWG 25 mm ² to 2.5 mm ² | 35 [4.0] | — | — |
| PB7123 | | | | | | | | |

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

| Short-Circuit Current Rating Data | | | | | | | | | | | | | |
|-----------------------------------|-----------------|-----------|-------------------------------------|------------------------------|------------------------|-------------------|------------------------|------------------------------|--------------------|--------------------------|------------------------|--------|--|
| | | | Line | Load | Configuration | Conductors | | Maximum Fuse Class and 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 | |
| PB1011 | 1 | 175A | 2/0 to 8 AWG 70 to 10 mm² | 2/0 to 8 AWG 70 to 10 mm² | 1/1 | 2/0 to 8 | 2/0 to 8 | 200 | 200 | 200 | 60 | 200 kA | |
| PB1012 | 2 | | | | | | | | | | | | |
| PB1013 | 3 | | | | | | | | | | | | |
| PB1041 | 1 | 175A | 2/0 to 8 AWG 70 to 10 mm² | 4 to 14 AWG 25 to 2.5 mm² | 1/4 | 2/0 to 8 | 4 to 12 | 200 | 200 | 200 | 60 | 200 kA | |
| PB1042 | 2 | | | | | | 4 to 14 | 175 | 175 | 100 | 60 | 100 kA | |
| PB1043 | 3 | | | | | | | 200 | 200 | 100 | 60 | 50 kA | |
| PB3061 | 1 | 310A | 350 kcmil to 4 AWG 185 to 25 mm² | 4 to 12 AWG 25 to 4 mm² | 1/6 | 350 to 4 | 4 to 8 | 400 | 400 | 200 | 100 | 200 kA | |
| PB3062 | 2 | | | | | | 4 to 12 | 400 | 400 | 400 | 100 | 100 kA | |
| PB3063 | 3 | | | | | | | 175 | 175 | 100 | 60 | 100 kA | |
| PB3121 | 1 | 310A | 350 kcmil to 4 AWG 185 to 25 mm² | 4 to 14 AWG 25 to 2.5 mm² | 1/12 | 350 to 4 | 4 to 8 | 400 | 400 | 200 | 100 | 200 kA | |
| PB3122 | 2 | | | | | | 4 to 14 | 175 | 175 | 100 | 60 | 100 kA | |
| PB3123 | 3 | | | | | | | 175 | 175 | 100 | 60 | 100 kA | |
| PB4011 | 1 | 380A | 500 kcmil to 6 AWG 240 to 16 mm² | One 3/8" - 16 x 1 stud | One 3/8" - 16 x 1 stud | 500 | One 3/8" - 16 x 1 stud | *** | *** | *** | *** | 10 kA | |
| PB4012 | 2 | | | | | 500 to 6 | | *** | *** | *** | *** | | |
| PB4013 | 3 | | | | | | | *** | *** | *** | *** | | |
| PB5121 | 1 | 570A | 300 kcmil to 4 AWG 150 to 25 mm² | 4 to 14 AWG 25 to 2.5 mm² | 2/12 | 300 | 4 to 14 | *** | *** | *** | *** | 10 kA | |
| PB5122 | 2 | | | | | 300 to 4 | 4 to 14 | *** | *** | *** | *** | | |
| PB5123 | 3 | | | | | | | *** | *** | *** | *** | | |
| PB7121 | 1 | 760A | 500 kcmil to 6 AWG 240 to 16 mm² | 4 to 14 AWG 25 to 2.5 mm² | 2/12 | 500 to 6 | 4 to 14 | *** | *** | *** | *** | 10 kA | |
| PB7123 | 3 | | | | | | | *** | *** | *** | *** | | |

*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 SCCR in this table.

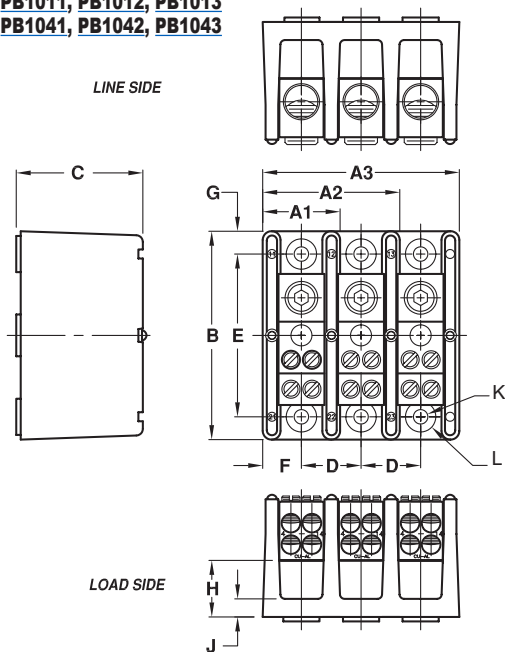
***Not High SCCR rated. Refer to UL508A Table SB4.1.

PB Series Edison Open-Style Terminal Blocks Dimensions

| Edison Open-Style Power Distribution Blocks Dimensions | | | | | | | | | | | | | |
|--|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|------------------|-----------------|--|---|
| Part Number | Width | | | Length | Height | | | | | | | | |
| | A1 | A2 | A3 | B | C | D | E | F | G | H | J | K | L |
| PB1011 | 1.06 [26.92] | 1.88 [47.75] | 2.60 [66.04] | 2.85 [72.39] | 1.75 [44.45] | 0.81 [20.57] | 2.25 [57.15] | 0.53 [13.46] | 0.31 [7.87] | 0.84 [21.34] | 0.31 [7.87] | 0.20 [5.08] | 0.42 [10.67] |
| PB1012 | | | | | | | | | | | | | |
| PB1013 | | | | | | | | | | | | | |
| PB1041 | | | | | | | | | | | | | |
| PB1042 | | | | | | | | | | | | | |
| PB1043 | 1.96 [49.78] | 3.58 [90.93] | 5.20 [132.08] | 4.0 [101.60] | 3.32 [84.33] | 1.62 [41.15] | 3.37 [85.60] | 0.985 [25.02] | 0.310 [7.87] | 0.780 [19.81] | 0.250 [6.35] | Slot 0.20 [5.08] (w) x 0.41 [10.41] (l) | Slot 0.42 [10.67] (w) x 0.62 [15.75] (l) |
| PB3061 | | | | | | | | | | | | | |
| PB3062 | | | | | | | | | | | | | |
| PB3063 | | | | | | | | | | | | | |
| PB3121 | | | | | | | | | | | | | |
| PB3122 | | | | | | | | | | | | | |
| PB3123 | | | | | | | | | | | | | |
| PB4011 | | | | | | | | | | | | | |
| PB4012 | | | | | | | | | | | | | |
| PB4013 | | | | | | | | | | | | | |
| PB5121 | | | | | | | | | | | | | |
| PB5122 | | | | | | | | | | | | | |
| PB5123 | | | | | | | | | | | | | |

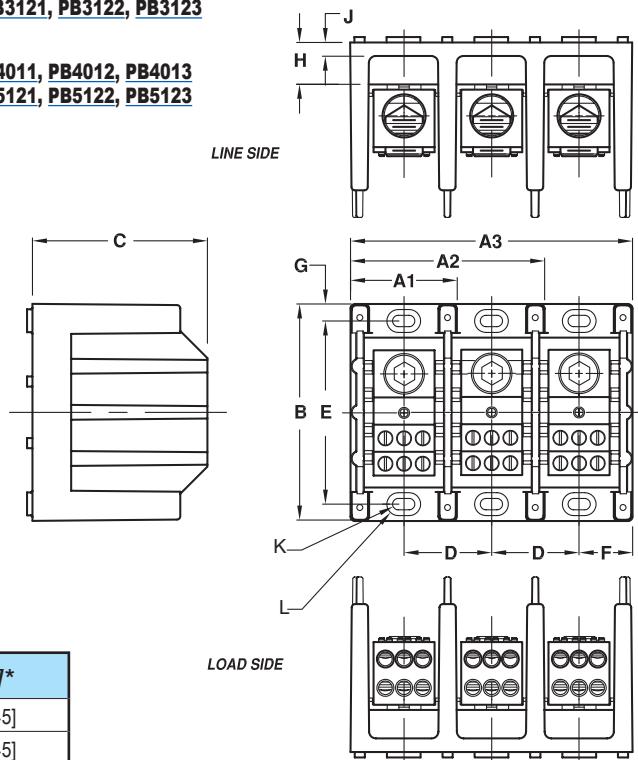
Note: Dimensions are in inches [millimeters]

PB1011, PB1012, PB1013
PB1041, PB1042, PB1043



PB3061, PB3062, PB3063
PB3121, PB3122, PB3123

PB4011, PB4012, PB4013
PB5121, PB5122, PB5123



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

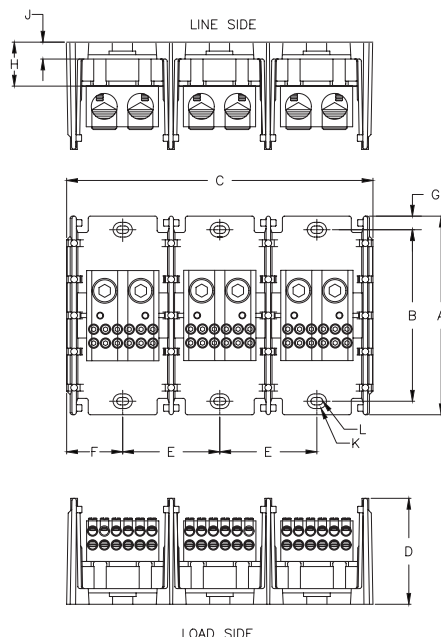
*Note: Terminal block SCCR determined based on testing in minimum-size enclosure

PB Series Edison Open-Style Terminal Blocks Dimensions

| Edison Open-Style Power Distribution Blocks Dimensions | | | | | | | | | | | | | |
|--|---------|---------|---------|---------|----------|---------|---------|---------|--------|---------|---------|---|---|
| Part Number | Width | Length | Height | | | | | | | | | | |
| | A | B | C1 | C2 | C3 | D | E | F | G | H | J | K | L |
| PB7121 | 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) x 0.33 [8.38] (l) | Slot: 0.41 [10.41] (w) x 0.53 [13.46] (l) |
| PB7123 | [139.7] | [120.7] | [78.74] | [147.1] | [215.39] | [74.42] | [68.33] | [39.37] | [9.65] | [30.23] | [11.18] | | |

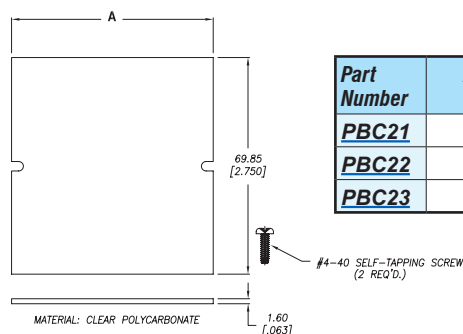
Note: Dimensions are in inches [millimeters]

PB7121, PB7123



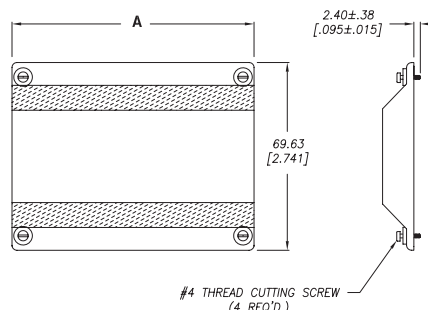
Covers

Optional Cover for
PB1011, PB1012, PB1013
PB1041, PB1042, PB1043



| Part Number | A Dimension in [mm] |
|--------------|---------------------|
| PBC21 | 0.94 [23.88] |
| PBC22 | 1.75 [44.45] |
| PBC23 | 2.56 [65.02] |

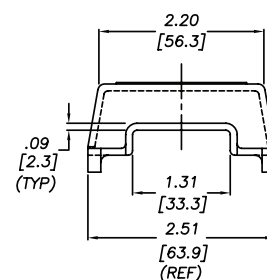
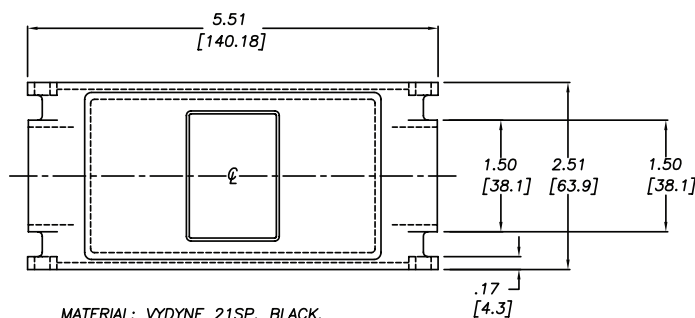
Optional Cover for
PB3061, PB3062, PB3063
PB3121, PB3122, PB3123



PB4011, PB4012, PB4013
PB5121, PB5122, PB5123

| Part Number | A Dimension in [mm] |
|--------------|---------------------|
| PBC31 | 2.10 [53.34] |
| PBC32 | 3.72 [94.49] |
| PBC33 | 5.34 [135.64] |

PBC71
Optional Cover for
PB7121 and PB7123



METRIC ±.13mm
INCHES ±.005"

Edison Open-Style Power Distribution Blocks Quick Reference

| Edison Power Distribution Blocks Quick Reference | | | | | | |
|--|---------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Openings per pole | Type | 175 amps | 310 amps | 380 amps | 570 amps | 760 amps |
| 1 in 1 out | Open UL1059 | PB101x | NO | NO | NO | NO |
| | Open UL1953 Listed | HPB101-x | HPB101-x | NO | NO | NO |
| | Finger Safe UL1953 Listed | EPDB101 | EPDB301 | NO | NO | NO |
| 1 in 1 stud out | Open UL1059 | NO | NO | PB401x | NO | NO |
| | Open UL1953 Listed | HPB10S-x | NO | NO | NO | NO |
| | Finger Safe UL1953 Listed | NO | NO | NO | NO | NO |
| 2 in 2 out | Open UL1059 | NO | NO | NO | NO | NO |
| | Open UL1953 Listed | NO | NO | NO | NO | NO |
| | Finger Safe UL1953 Listed | NO | NO | NO | NO | EPDB702 |
| 1 in 4 out | Open UL1059 | PB104x | NO | NO | NO | NO |
| | Open UL1953 Listed | HPB104-x | HPB104-x | NO | NO | NO |
| | Finger Safe UL1953 Listed | EPDB104 | NO | NO | NO | NO |
| 1 in 6 out | Open UL1059 | NO | PB306x | NO | NO | NO |
| | Open UL1953 Listed | HPB106-x | HPB306-x | NO | NO | NO |
| | Finger Safe UL1953 Listed | NO | NO | EPDB306 | NO | NO |
| 1 in 9 out | Open UL1059 | NO | NO | NO | NO | NO |
| | Open UL1953 Listed | NO | HPB309-x | NO | NO | NO |
| | Finger Safe UL1953 Listed | NO | NO | NO | NO | NO |
| 1 in 12 out | Open UL1059 | NO | PB312x | NO | NO | NO |
| | Open UL1953 Listed | NO | HPB312-x | NO | NO | NO |
| | Finger Safe UL1953 Listed | NO | NO | NO | NO | NO |
| 2 in 12 out | Open UL1059 | NO | NO | NO | PB512x | PB712x |
| | Open UL1953 Listed | NO | NO | NO | NO | NO |
| | Finger Safe UL1953 Listed | NO | NO | NO | EPDB512 | NO |