# Stud blocks

## Catalog symbols:

- 162__-(poles)
- 163__-(poles)
- 165__-(poles)

### Description:

Eaton's Bussmann™ series port-to-stud and stud-to-stud power terminal blocks are available with current ratings up to 760 A.

The stud connection is convenient for lug/ring wire terminals and allows for easy field wiring.

These blocks are UL® Recognized to UL 1059 and rated for use in UL 508A industrial control panels.

These blocks are factory configured from 1- to 3-poles (catalog number dependent) with optional covers available (order covers separately).

## Catalog number example:

### 16280-3 is a 3-pole 16280

Where:

- The prefix "16280" defines the block's lineside characteristics (i.e., one conductor port per pole that accepts 2/0 - #14 Cu/Al conductors) and the loadside characteristics (i.e., 1/4-20 x 3/4" stud).
- The suffix "3" in this example defines this as a three-pole block.
- See the catalog number tables for details on the available lineside/loadside characteristics.

## How to order:

From the catalog number tables, select the catalog number that defines the desired lineside/loadside port and conductor characteristics.

Add to the catalog number the suffix that defines the desired pole configuration. Note, you must select from the available number of poles for each catalog number. These appear in the second column of the catalog number tables.

## Specifications:

### Ratings

- Volts: 600 V
- Amps: 150 up to 760 A
- SCCR: up to 200 kA* (see table for SCCR by catalog number)

* Maximum SCCR contingent upon the application of an upstream current-limiting overcurrent protective device. See table for fusing requirements.

### Flammability rating

- UL 94 V0

### Storage and operating temperature range

- -4°F to 248°F (-20°C to 120°C)

### Agency information

- UL 1059 Recognized, Guide XCFR2, File E62622
- CSA® Certified, Class 6228-01, File 15364

### Conductors†

- Stranded 75°C copper and aluminum
- Higher temperature rated conductors permitted with appropriate derating

† As specified in the catalog number table.

### Optional covers

- See table for catalog numbers specific to each block

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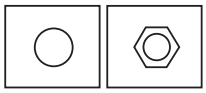
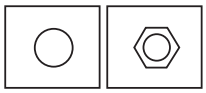
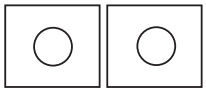
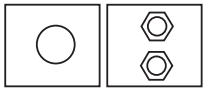
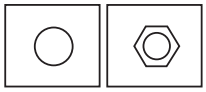
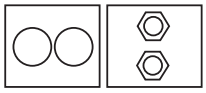
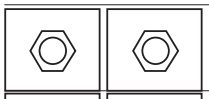
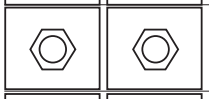
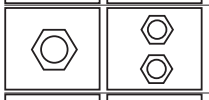
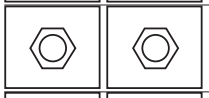
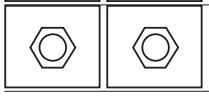
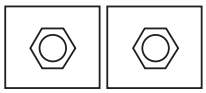
## Catalog numbers:

| Line/load configuration | No. of poles | Current rating (A) | Lineside | | | | Loadside | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Wire/stud size (Str/ferrule unless noted)* | Wires per port | Torque N•m (Lb-in) | Ports/ pole | Stud/ connector size | Studs/ pole | SCCR (kA) | Catalog number |
| **Connector - to - stud** | | | | | | | | | | |
|  | 1, 2, 3 | 175 | 2/0 - #1 Cu/Al (Str)<br>#2 - #3 Cu/Al<br>#4 - #8 Cu/Al<br>#10 - #14 Cu | 1<br><br>1-2 | 13.6 (120) | 1 | 1/4-20 x 3/4″ stud | 1 | 200† | **16280-_-**** |
|  | 2, 3 | 175 | 2/0 - #1 Cu/Al (Str)<br>#2 - #3 Cu/Al<br>#4 - #8 Cu/Al<br>#10 - #14 Cu | 1<br><br>1-2 | 13.6 (120) | 1 | M6 x 1″ stud | 1 | 200† | **16280-_-M** |
|  | 1, 2, 3 | 175 | 2/0 - #1 Cu/Al (Str)<br>#2 - #3 Cu/Al<br>#4 - #8 Cu/Al<br>#10 - #14 Cu | 1<br><br>1-2 | 13.6 (120) | 1 | 1/4-20 tapped hole | 1 | 10 | **16281-_-**** |
|  | 1, 2, 3 | 380 | 500 kcmil - 4/0 Cu/Al (Str)<br>3/0 - 1/0 Cu/Al (Str)<br>#1 - #6 Cu/Al | 1<br><br>1-2 | 56.5 (500) | 1 | 1/4-20 x 1″ stud | 2 | 10 | **16378-_** |
|  | 1, 2, 3 | 380 | 500 kcmil - 4/0 Cu/Al (Str)<br>3/0 - 1/0 Cu/Al (Str)<br>#1 - #6 Cu/Al | 1<br><br>1-2 | 56.5 (500) | 1 | 3/8-16 x 1″ stud | 1 | 10 | **16383-_** |
|  | 1, 2, 3 | 760 | 500 kcmil - 4/0 Cu/Al (Str)<br>3/0 - 1/0 Cu/Al (Str)<br>#1 - #6 Cu/Al | 1<br><br>1-2 | 56.5 (500) | 2 | 3/8-16 x 1-5/8″ stud | 2 | 10 | **16582-_** |
| **Stud - to - stud** | | | | | | | | | | |
|  | 1, 2, 3 | 175 | 1/4-20 x 3/4″ stud | | | 1 | 1/4-20 x 3/4″ stud | 1 | 10 | **16290-_-**** |
|  | 1, 2, 3 | 250 | 3/8-16 x 1-1/8″ stud | | | 1 | 3/8-16 x 1-1/8″ stud | 1 | 10 | **16390-_** |
|  | 1, 2, 3 | 310 | 3/8-16 x 1-7/16″ stud | | | 1 | 1/4-20 x 9/16″ stud | 2 | 10 | **16395-_** |
|  | 1, 2, 3 | 400 | 3/8-16 x 1-1/8″ stud | | | 1 | 3/8-16 x 1-1/8″ stud | 1 | 10 | **16392-_-H††** |
|  | 1, 2, 3 | 400 | 1/2-13 x 1-1/16″ stud | | | 1 | 1/2-13 x 1-1/16″ stud | 1 | 10 | **16394-_** |
|  | 1, 2, 3 | 400 | 3/8-16 x 1-7/16″ stud | | | 1 | 3/8-16 x 1-7/16″ stud | 2 | 10 | **16591-_-**** |
|  | 1, 2, 3 | 600 | 1/2-13 x 1″ stud | | | 1 | 1/2-13 x 1″ stud | 1 | 10 | **16593-_** |

* 75°C wire (higher temperature rated wire acceptable with appropriate derating). Using a ferrule on a stranded conductor requires a correctly sized UL Listed ferrule (customer supplied) applied according to the manufacturer's specifications. Ferrule ratings apply to copper wire only.
** Not covered by CSA certification.
† See table on next page for the tested upstream overcurrent protective devices necessary for achieving this SCCR.
†† Configuration includes washers and hex nuts for each stud.

## Short-Circuit Current Rating (SCCR) data for block 16280-_:

| Catalog number | No. of poles | Conductors (AWG) | | Fuse class/Bussmann series symbol/ampacity | | | | SCCR |
|---|---|---|---|---|---|---|---|---|
| | | Lineside | Loadside | J LPJ | RK1 LPN-RK (250 V), LPS-RK (600 V) | RK5 FRN-R (250 V), FRS-R (600 V) | T JJN (300 V), JJS (600 V) | |
| 16280-_ | 1, 2, 3 | 2/0 - #8 | 1/4-20x3/4 stud | 200 | 200 | 60 | 200 | 200 kA |

### Dual wire port application

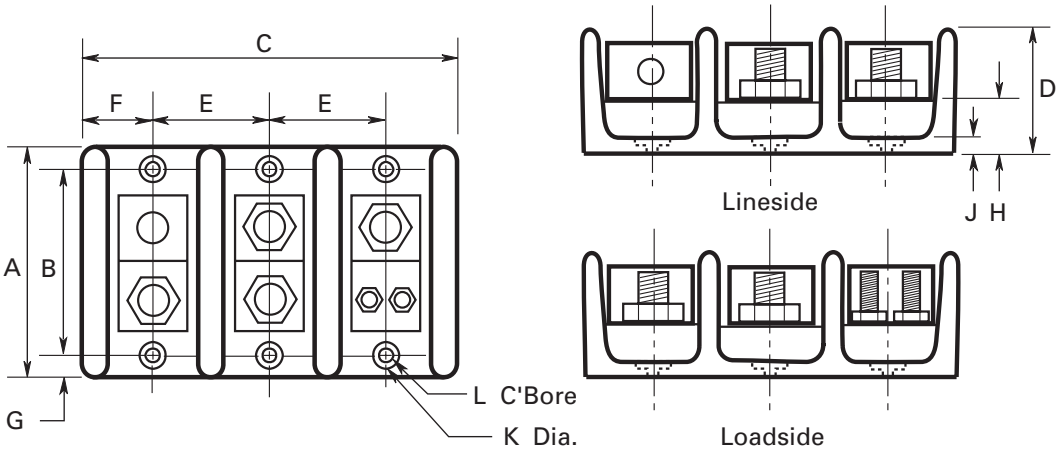
- Rated for dual wire port application to increase the possible number of lineside and loadside connections. E.g., 16280-1 can accept two wires into the lineside port (#4 - #8 Cu/Al, #10 - #14 Cu).
- Dual wire applications are only viable when using two wires of the same size, stranding, and insulating and conductor material in the same port.

### Ferrule terminal application

- Bussmann series stud blocks are rated for use with UL Listed ferrules (see catalog number table for details). Ferrule ratings apply to copper wire only.
- Ferrule applications allow for the use of a broader range of conductor stranding and simulate a more efficient, solid wire connection with the terminal port.
- Always use UL Listed ferrules in accordance with the manufacturer's specifications and instructions.

## Dimensions — in

### 162_, 163_ and 165_ blocks




Note: lineside and loadside connections vary by part number

| Catalog number prefix | A | B | C1 | C2 | C3 | D | E | F | G | H | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 162_ | 2.88 | 2.25 | 1.07 | 1.88 | 2.70 | 1.75 | 0.82 | 0.54 | 0.32 | 0.84 | 0.31 | 0.20 | 0.41 |
| 163_ | 4.0 | 3.38 | 1.98 | 3.60 | 5.21 | 3.32 | 1.62 | 0.99 | 0.31 | 0.88 | 0.35 | Slot 0.20" wide x 0.41" long | Slot 0.42" wide x 0.62" long |
| 165_ | 5.5 | 4.75 | 3.11 | 5.76 | 8.48 | 2.94 | 2.69 | 1.55 | 0.36 | 1.19 | 0.44 | Slot 0.20" wide x 0.33" long | Slot 0.41" wide x 0.53" long |

## Optional covers

From the table below, order the cover catalog number that matches the block catalog number.

| Block catalog number | Poles | Cover catalog number |
|---|---|---|
| 16280-1 | 1 | CPB162-1* |
| 16280-2 | 2 | CPB162-2* |
| 16280-3 | 3 | CPB162-3* |
| 16280-2-M | 2 | CPB162-2* |
| 16280-3-M | 3 | CPB162-3* |
| 16281-1 | 1 | CPB162-1* |
| 16281-2 | 2 | CPB162-2* |
| 16281-3 | 3 | CPB162-3* |
| 16290-1 | 1 | CPB162-1* |
| 16290-2 | 2 | CPB162-2* |
| 16290-3 | 3 | CPD162-3* |
| 16378-1 | 1 | CPDB-1* |
| 16378-2 | 2 | CPDB-2* |
| 16378-3 | 3 | CPDB-3* |
| 16383-1 | 1 | CPDB-1* |
| 16383-2 | 2 | CPDB-2* |
| 16383-3 | 3 | CPDB-3* |
| 16390-1 | 1 | CPDB-1* |
| 16390-2 | 2 | CPDB-2* |
| 16390-3 | 3 | CPDB-3* |
| 16392-1-H | 1 | CPDB-1* |
| 16392-2-H | 2 | CPDB-2* |
| 16392-3-H | 3 | CPDB-3* |
| 16394-1 | 1 | CPDB-1* |
| 16394-2 | 2 | CPDB-2* |
| 16394-3 | 3 | CPDB-3* |
| 16395-1 | 1 | CPDB-1* |
| 16395-2 | 2 | CPDB-2* |
| 16395-3 | 3 | CPDB-3* |
| 16582-1 | 1 | CPDB165** |
| 16582-2 | 2 | CPDB165** |
| 16582-3 | 3 | CPDB165** |
| 16591-1 | 1 | CPDB165** |
| 16591-2 | 2 | CPDB165** |
| 16591-3 | 3 | CPDB165** |
| 16593-1 | 1 | CPDB165** |
| 16593-2 | 2 | CPDB165** |
| 16593-3 | 3 | CPDB165** |

* Cover catalog number provides one individual cover for each block.

** Order one cover for each pole.



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