Maximize short-circuit current rating up to 200 kA

with Bussmann series finger-safe power distribution fuse blocks

Contents

Simplify your panel design

To save panel space and reduce component count, Bussmann series power distribution fuse blocks combine circuit protection and power distribution into one unit. Available in Class H(K), and R up to 60 amps and Class J up to 400 amps, with up to a high 200 kA withstand rating. See these cost and space saving products in Section 8, *Fuse blocks and holders*.

Selecting SCCR power distribution blocks and terminal blocks

Short-circuit current rated power distribution blocks

Bussmann series power distribution blocks have three distinct styles to match different application needs. There are the PDBFS_ and PDB_ high short-circuit current rated power distribution blocks and the 16_ power terminal blocks. The differences are whether the power distribution blocks are enclosed or not, and whether they are UL 1953 Listed power distribution blocks or UL 1059 Recognized power terminal blocks, which have different minimum spacing requirements. The table on this page will assist you in selecting which block is right for your application.

Why these are important

Per the NEC and OSHA, equipment cannot be installed in an electrical system at a location where the available fault (short-circuit) current is greater than the equipment's SCCR.

Further, equipment SCCRs are required in the 2014 NEC and for UL 508A Listed control panels. Marking the equipment SCCR on control panels (NEC 409.110), industrial machinery electrical panels (NEC 670.3(A)), and HVAC equipment (NEC 440.4(B)) is required by the NEC.

Power distribution and terminal blocks not marked with a component SCCR are typically one of the weakest links in a control panel's equipment SCCR and may limit the equipment SCCR to no more than 10 kA. The PDBFS_ and PDB_ products have the increased spacing required for use in feeder circuits of equipment listed to UL 508A (UL 1059 terminal blocks must be evaluated for proper spacings). Also, for building wiring systems, the PDBFS_ and PDB_ power distribution blocks can be used to meet the 2014 NEC requirements in section 376.56(B) for power distribution blocks in wireways.

Selection table

The table below provides an overview of the three Bussmann series power distribution and terminal blocks mentioned above. For details on the PDB_ blocks, see data sheet number 10537. For the 16_ blocks, see data sheet numbers 10533 (UL Recognized power distribution blocks), 10534 (splicer blocks) and 10535 (stud blocks).

Catalog symbol	UL status	Enclosed	High SCCR*	Spacing ** 1" air, 2" surface	UL 508A panel branch circuit	UL 508A panel feeder circuit	HVAC UL 1995	Wireways NEC 376.56(B) (requires UL 1953)
PDBFS_	UL 1953 Listed power distribution blocks	Yes***	Yes	Yes	Yes	Yes	Yes	Yes
PDB_	UL 1953 Listed power distribution blocks	No†	Yes	Yes	Yes	Yes	Yes	Yes, with optional cover
16_	UL 1059 Recognized terminal blocks	No†	Yes	No††	Yes	No††	Yes	No

* When protected by proper fuse class with maximum ampere rating specified or smaller.
** For details, see PDB and TB minimum spacing requirements for equipment table below.
*** IP20 finger-safe under specific conditions, see data sheet 10536.
† Optional covers are available. Not IP20, but provide a safety benefit.
†† No, except if single pole units installed with proper spacings.

Power distribution and terminal block minimum spacing requirements for equipment

UL standard	Spacing between live parts of opposite polarity		Spacing between live parts and grounded parts or enclosure @ 600 V
	Through air @ 600 V	Over surface @ 600 V	
508A feeder circuits	1"	2"	1"
508A branch circuits	3/8"	1/2"	1/2"
1995 HVAC	3/8"	1/2"	1/2"

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

PDBFS UL Listed finger-safe, high SCCR power distribution blocks

These single pole, small footprint, high Short-Circuit Current Rating (SCCR) power distribution blocks provide IP20* finger-safe protection in a modular design that permits dovetailing together the required number of poles and still meet the UL 1953 minimum 1" and 2" spacing required per UL 508A for feeder circuit applications and per NEC for field installations.

With SCCRs up to 200 kA, these blocks help achieve compliance with NEC and OSHA requirements by resolving a common SCCR "weak link" in industrial control panels.

To increase application flexibility, these blocks feature dual-wire rated ports that accept copper or aluminum conductors while retaining a UL Listed status.

RoHS 2011/65/EU

With panel or 35mm DIN-Rail** mounting these blocks are suitable for installation in wireways and industrial control panel feeder and branch circuits.

* See table on page 9-5.
**PDFFS504 panel mount only.

Ratings

- Volts
  - 600 V (UL)
  - 690 V (IEC)
  - 1000 V (self-certified)
- Amps 175 to 760 A
- SCCR Up to 200 kA (see table for circuit protection details)

Conductors†

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

† As specified in the catalog number table.

Agency information

- UL 1953 Listed, Guide QPQS, File E256146
- CSA Certified, Class 6228-01, File 47235
- RoHS compliant
- CE

Flammability rating

- UL 94 V0

How to order

- From the catalog number table, select the catalog number that defines the desired lineside/loadside port and conductor characteristics
- Order one block per pole for the application
- Multiple single-pole blocks can be ganged together via the dovetailing feature to form multi-pole configurations

Catalog number example — PDBFS204 is a 1-pole block

Where:

- The catalog symbol "PDBFS" defines the block as a finger-safe design
- The catalog number ending "204" in this example defines this block's lineside and loadside characteristics covering the amp rating, number of ports and wire sizes, etc.
- See the catalog number table for details on the available lineside/loadside characteristics.

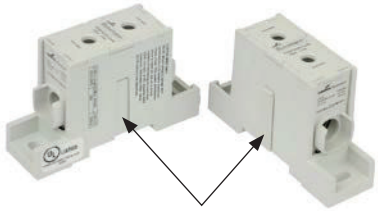
Features

- IP20 finger-safe under specified conditions increases safety by isolating energized connections
- Wire-ready captive termination screws cannot be misplaced and are shipped "backed out" to save time on conductor installation
- Sliding DIN-Rail latch provides easy block mounting
- For multiple pole applications, all single-pole units can be gang mounted by using the interlocking dovetail pins that are pre-installed on the side of the blocks
- Elongated panel-mounting holes provide greater flexibility and installation ease when matching up with drilled panel holes

Dual wire port application

- Rated for dual wire port application to increase the possible number of lineside and loadside connections. E.g., PDBFS220 can accept two wires into the lineside port (4 - 14 Cu, 4 - 8 Al) and two wires per port (eight connections total) on the loadside lug (8 - 14 Cu, 8 Al).
- Dual wire applications are only viable when using two wires of the same size, stranding, and insulating and conductor material.
- Ferrule terminal application
- Bussmann series PDBFS power distribution blocks are rated for use with UL Listed ferrules (see catalog number table for details).
- Ferrule applications allow for the use of a broader range of conductor stranding and simulate a more efficient, solid wire connection with the PDBFS terminal port.
- Always use UL Listed ferrules in accordance with the manufacturer's specifications and instructions.

Multi-pole block ganging



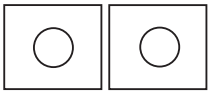
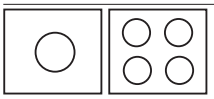
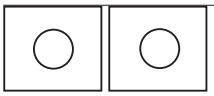
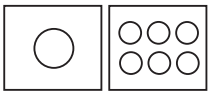
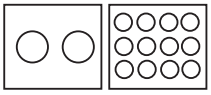
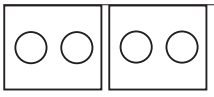
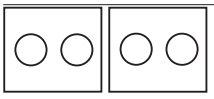
Dovetail feature permits easy ganging for multi-pole applications

PDBFS blocks can be ganged for the required number of poles.

To gang two or more blocks for DIN-Rail or panel mounting, place them side-by-side and slide the dovetail pin of one block into the reciprocal slot on the other until fully seated and both blocks are coplanar.

Note: Dissimilar PDBFS blocks can be ganged. E.g., a PDBFS204 can be ganged with a PDBFS220. Ganging with a PDBFS504 (non-DIN Rail mount version) will prevent DIN-Rail mounting.

Data sheet no. 10536

Line/load port configuration	Current rating (A)	Lineside: Wire size (Str/ferrule unless noted)*	Lineside: Wires per port	Lineside: Torque N•m (lb-in)	Lineside: Ports/ pole	Loadside: Wire size (Str/ferrule unless noted)*	Loadside: Wires per port	Loadside: Torque N•m (lb-in)	Loadside: Ports/ pole	Max SCCR (kA)**	Catalog no.
	175	2/0 - 1 Cu/Al (Str)	1	12.4 (110)††	1	2/0 - 1 Cu/Al (Str)	1	12.4 (110)††	1	200	PDBFS204
		2 - 3 Cu/Al	1			2 - 3 Cu/Al	1				
		4 - 8 Cu/Al	1			4 - 8 Cu/Al	1				
		10 - 12 Al (Str)	1	4.0 (35)		10 - 12 Al (Str)	1	4.0 (35)			
		10 - 14 Cu	1			10 - 14 Cu	1				
		4 - 8 Cu/Al	2	13.6 (120)		4 - 8 Cu/Al	2	13.6 (120)			
		10 - 14 Cu	2			10 - 14 Cu	2				
	175	2/0 - 1 Cu/Al (Str)	1	13.6 (120)	1	4 - 6 Cu/Al (Str)	1	4.0 (35)	4	200	PDBFS220
		2 - 3 Cu/Al	1			8 Cu	1	2.8 (25)			
		4 - 8 Cu/Al	1-2			8 Al (Str)	1-2				
		10 - 14 Cu	1-2			10 - 14 Cu	1-2	2.3 (20)			
	310	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)†	1	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)†	1	200	PDBFS303
		1/0 Cu/Al (Str)	1-2			1/0 Cu/Al (Str)	1-2				
		1 - 6 Cu/Al	1-2			1 - 6 Cu/Al	1-2				
	380	500kcmil - 4/0 Cu/Al (Str)	1	56.5 (500)	1	2 - 3 Cu/Al (Str)	1	5.6 (50)	6	200	PDBFS330
						4 Cu/Al	1	5.1 (45)			
		3/0 - 1/0 Cu/Al (Str)	1-2			6 Cu/Al	1-2				
		1 - 6 Cu/Al	1-2			8 Cu/Al	1-2	4.5 (40)			
						10 - 14 Cu	1-2	4.0 (35)			
	570	300kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)†	2	4 - 6 Cu/Al (Str)	1	4.0 (35)	12	200	PDBFS377
		1/0 Cu/Al (Str)	1-2			8 Cu	1	2.8 (25)			
		1 - 2 Cu/Al	1-2			8 Al (Str)	1-2				
		4 Cu/Al (Str)	1-2			10 - 12 Al (Str)	1	2.3 (20)			
						10 - 14 Cu	1-2				
	620	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)†	2	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)†	2	200	PDBFS500
		1/0 Cu/Al (Str)	1-2			1/0 Cu/Al (Str)	1-2				
		1 - 4 Cu/Al	1-2			1 - 4 Cu/Al	1-2				
		6 Cu/Al	2			6 Cu/Al	2				
	760	500kcmil - 4/0 Cu/Al (Str)	1	56.5 (500)	2	500kcmil - 4/0 Cu/Al (Str)	1	56.5 (500)	2	200	PDBFS504
		3/0 - 1/0 Cu/Al (Str)	1-2			3/0 - 1/0 Cu/Al (Str)	1-2				
		1 - 6 Cu/Al	1-2			1 - 6 Cu/Al	1-2				

* 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.
**See pages 9-4 and 9-5 for the tested upstream overcurrent protective devices necessary for achieving these SCCRs.
† Torque rating for dual wire and ferrule application is 30.5 N•m (270 lb-in).
††Torque rating for ferrule application is 13.6 N•m (120 lb-in).

Upstream fusing for SCCR and minimum enclosure data

This table contains the tested SCCR levels for each PDBFS power distribution block using the specified lineside and loadside conductors and Bussmann series Class J, RK1, RK5 and T fuses. Using these tested SCCR levels also requires the power distribution block be installed in an enclosure with the minimum size indicated for each catalog number.

	Conductors (AWG/kcmil)		Fuse class and maximum amps*					
Catalog no.	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)	SCCR (kA)	Min. enclosure size (in)
PDBFS204	2/0 - 8	2/0 - 8	200	100	60	200	200	16 x 16 x 6.75
PDBFS220	2/0 - 8	4 - 12	200	100	60	200	200	16 x 16 x 6.75
		4 - 14	175	100	30	175	100	
			200	100	60	200	50	
PDBFS303	350 - 6	350 - 6	400	200	100	400	200	36 x 30 x 12.625
PDBFS330	500 - 6	2 - 6	400	200	100	400	200	24 x 20 x 6.75
		6 - 14	200	100	60	200	50	
			175	100	30	175	100	
PDBFS377	300 - 4	4	600	400	200	600	200	24 x 20 x 6.75
			400	200	100	400	100	
		4 - 14	200	100	60	200	50	
	4	4	600	400	200	600	50	
PDBFS500	350	350	600	400	200	600	200	36 x 30 x 12.625
	350 - 4	350 - 4	600	400	200	600	100	
PDBFS504	500	500	600	600	200	800**	200	36 x 30 x 12.625
	500 - 6	500 - 6	600	400	200	600	100	

Ampacities 75°C per NEC® Table 310.16 and UL 508A Table 28.1.
* Class G 60 A (SC-60) or less or Class CC 30 A (LP-CC-30, FNQ-R-30, KTK-R-30) or less are suitable for all SCCRs in this table.
**Class L 800 A (KRP-C 800_SP) or less fuses suitable for this particular SCCR case.

Data sheet no. 10536

Upstream circuit breakers for SCCR and minimum enclosure data

This table contains the tested SCCR levels for each PDBFS power distribution block using the specified lineside and loadside conductors and Eaton and General Electric circuit breakers. Using these tested SCCR levels also requires the power distribution block be installed in an enclosure with the minimum size indicated for each catalog number.

PDBFS SCCR as rated with Eaton circuit breakers

Catalog no.	Suitable Cu conductors kcmil/AWG		SCCR, RMS		Overcurrent protection circuit breaker required		Min. enclosure size
	Lineside	Loadside	Sym. (kA)	Volts max	Type	Max amp	(in.)
PDBFS204	2/0 - 8	2/0 - 8	65	480	EGC125, E125C, EGH125, E125H	125	16 x 16 x 6.75
PDBFS330	500 - 3	2 - 8	14	480	LGH400, L400H, LGE400, L400E, LGS400, L400S	400	24 x 20 x 6.75
			25		LGC400, L400C, LGU400, L400U, LGX400, L400X		
PDBFS377	(2) 300 - 2	4	30	480	LGH600, L600H, LGE600, L600E, LGS600, L600S	600	24 x 20 x 6.75
		6	18				
		8	14				
		4	42		LGC600, L600C, LGU600, L600U, LGX600, L600X		
		6	35				
		8	14				

PDBFS SCCR as rated with General Electric circuit breakers

Catalog no.	Suitable Cu conductors kcmil/AWG		SCCR, RMS		Overcurrent protection circuit breaker required		Min. enclosure size
	Lineside	Loadside	Sym. (kA)	Volts max	Type	Max amp	(in.)
PDBFS204	2/0 - 8	2/0 - 8	65	480	SELA	150	16 x 16 x 6.75
			25		SEHA	150	
PDBFS220	2/0 - 8	4 - 12	65	480	SELA	150	16 x 16 x 6.75
			25		SEHA	150	
PDBFS303	250 - 6	350 - 6	65	480	SFLA	250	24 x 20 x 6.75
	250 - 6	250 - 6	35		SFHA	250	
	3/0 - 6	350 - 6	65		SELA	150	
			25		SEHA	150	
PDBFS330	250 - 6	2 - 12	65	480	SFLA	250	24 x 20 x 6.75
			35		SFHA	250	
	3/0 - 6		65		SELA	150	
			25		SEHA	150	

Specified installation conditions for IP20 finger-safe ratings

This table contains the installed wire and trim lengths, and other conditions the PDBFS power distribution blocks need in order to be compliant with IP20 specifications. IP20 compliance status is indicated in the lineside and loadside wire port and terminal screw opening columns.

Catalog no.	Lineside		IP20 status		Loadside		IP20 status	
	Installed wire/state	Wire trim length - in (mm)	Wire port opening	Terminal screw opening	Installed wire/state	Wire trim length - in (mm)	Wire port opening	Terminal screw opening
PDBFS204	2/0 - 8	0.85 (22)	Yes	Yes	2/0 - 8	0.97 (25)	Yes	Yes
PDBFS220	2/0 - 8	0.75 (19)	Yes	Yes	4 - 14	Top row 0.55 (14), Bottom row 0.85 (22)	Yes	Yes
					Screws fully opened		N/A	Yes
					No wire in hole		No	N/A
PDBFS303	350kcmil - 2/0	1.35 (34)	Yes	Yes	350kcmil - 2/0	1.25 (32)	Yes	Yes
	1/0 - 6		No	Yes	1/0 - 6		No	Yes
PDBFS330	500 - 250kcmil	1.25 (32)	Yes	Yes	2 - 14	Top row 0.59 (15), Bottom row 1.2 (30)	Yes	Yes
	4/0 - 6		No	Yes	Screws fully opened		N/A	Yes
					No wire in hole		Yes	N/A
PDBFS377	300kcmil - 4/0	Top row 1.15 (29) bottom row 1.4 (36)	Yes	Yes	4 - 14	Top row 0.55 (14), Middle row 1.00 (35), Bottom row 1.22 (31)	Yes	Yes
	3/0 - 4		No	Yes	Screws fully open		N/A	Yes
	Screws fully open		N/A	No	No wire in port		Yes	N/A
	No wire in port		No	N/A				
PDBFS500	350kcmil - 2/0	1.25 (32)	No	Yes	350kcmil - 2/0	1.25 (32)	Yes	Yes
	1/0 - 4		No	Yes	1/0 - 4		No	Yes
	Screws fully opened		N/A	No	Screws fully open		N/A	No
	No wire in port		No	N/A	No wire in port		No	N/A
PDBFS504	500 - 350kcmil	1.25 (32)	Yes	Yes	500 - 350kcmil	1.25 (32)	Yes	Yes
	300 - 6		No	Yes	300 - 6		No	Yes
	Screws fully open		N/A	No	Screws fully opened		N/A	No
	No wire in port		No	N/A	No wire in port		No	N/A

Data sheet no. 10536

PDB UL Listed high SCCR open power distribution blocks

High Short-Circuit Current Rating (SCCR) power distribution blocks provide up to 200 kA SCCR and help achieve compliance with NEC and OSHA requirements by resolving a common SCCR "weak link" in industrial control panels.

Available in 1-, 2- and 3-pole panel mount versions with popular lineside and loadside port configurations, these blocks are UL Listed with the requisite spacing between uninsulated opposite polarities or ground by meeting the UL 1953 1" through air and 2" over surface spacings required per UL 508A for feeder circuit applications and per NEC for field installations.

To increase application flexibility, these blocks feature dual-wire rated ports that accept copper or aluminum conductors while retaining a UL Listed status.

Optional covers are available to enhance electrical safety.

Ratings

- Volts 600 V
- Amps 175 to 310 A
- SCCR 200 kA (see table for circuit protection details)

Conductors†

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

† As specified in the catalog number table.

Agency information

- UL 1953 Listed, Guide QPQS, File E256146
- CSA Certified, Class 6228-01, File 47235
- CE

Flammability rating

- UL 94 V0

How to order

From the catalog number table, 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.

Catalog number example — PDB323-3 is a 3-pole PDB323

Where:

- The prefix "PDB323" defines the block's lineside characteristics (i.e., one conductor port per pole that accepts 350kcmil-6 Cu/Al conductors) and the loadside characteristics (i.e., six (6) conductor ports per pole that each accepts 4-14 Cu or 4-12 Al conductors)
- The suffix "3" in this example defines this as a three-pole block
- See the catalog number table for details on the available lineside/loadside characteristics

Data sheet no. 10537

Features

- High SCCRs up to 200 kA, assist in achieving high SCCR for a control panel per NEC and UL 508A requirements
- In compliance with UL 1953 minimum spacing requirements for industrial control panel feeder and branch circuits
- Optional covers available to reduce the risk of accidental contact with energized components

Dual wire port application

- Rated for dual wire port application to increase the possible number of lineside and loadside connections. E.g., PDB220 can accept two wires into the lineside port (4-14 Cu, 4-8 Al) and two wires per port (eight connections per pole total) on the loadside lug (8-14 Cu, 8 Al).
- 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 PDB power distribution blocks are rated for use with UL Listed ferrules (see catalog number table for details)
- Ferrule applications allow for the use of a broader range of conductor stranding and simulate a more efficient, solid wire connection with the PDB terminal port
- Always use UL Listed ferrules in accordance with the manufacturer's specifications and instructions

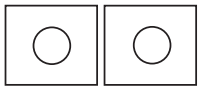
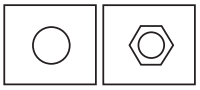
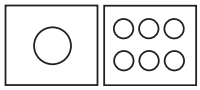
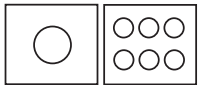
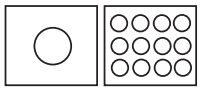
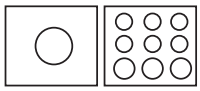
Optional covers

Electrical safety can be enhanced by installing optional covers.

From the table below, order the cover catalog number that matches the block catalog number. Order the quantity indicated in the "order quantity" column. E.g., the 3-pole block PDB204-3 requires ordering three CPB162-1 covers (one cover for each pole).

Block catalog no.	Poles	Cover catalog no.	Order quantity
PDB204-1	1	CPB162-1	1
PDB204-3	3	CPB162-1	3
PDB220-1	1	CPB162-1	1
PDB220-3	3	CPB162-1	3
PDB280-1	1	CPB162-1	1
PDB280-3	3	CPB162-1	3
PDB323-1	1	CPDB-1	1
PDB323-3	3	CPDB-1	3
PDB370-1	1	CPDB-1	1
PDB370-3	3	CPDB-1	3
PDB371-1	1	CPDB-1	1
PDB371-3	3	CPDB-1	3
PDB321-1	1	CPDB-1*	1
PDB321-2	2	CPDB-2*	1
PDB321-3	3	CPDB-3*	1

* For the PDB321-_ blocks, order one cover for each block (not per pole).

Line/load port configuration	No. of poles	Current rating (A)	Lineside				Loadside				Max SCCR (kA)**	Catalog no.
			Wire size (Str/ferrule unless noted)*	Wires per port	Torque N•m (lb-in)	Ports/ pole	Wire size (Str/ferrule unless noted)*	Wires per port	Torque N•m (lb-in)	Ports/ pole		
	1, 3	175	2/0 - 1 Cu/Al (Str)	1	12.4 (110)††	1	2/0 - 1 Cu/Al (Str)	1	12.4 (110)††	1	200	PDB204-_
			2 - 3 Cu/Al	1			2 - 3 Cu/Al	1				
			4 - 8 Cu/Al	1			4 - 8 Cu/Al	1				
			10 - 12 Al (Str)	1	4.0 (35)		10 - 12 Al (Str)	1	4.0 (35)			
			10 - 14 Cu	1			10 - 14 Cu	1				
			4 - 8 Cu/Al	2	13.6 (120)		4 - 8 Cu/Al	2	13.6 (120)			
			10 - 14 Cu	2			10 - 14 Cu	2				
	1, 3	175	2/0 - 1 Cu/Al (Str)	1	13.6 (120)	1	4 - 6 Cu/Al (Str)	1	4.0 (35)	4	200	PDB220-_
			2 - 3 Cu/Al	1			8 Cu	1	2.8 (25)			
			4 - 8 Cu/Al	1-2			8 Al (Str)	1-2				
			10 - 14 Cu	1-2			10 - 14 Cu	1-2	2.3 (20)			
	1, 3	175	2/0 - 1 Cu/Al (Str)	1	13.6 (120)	1	1/4-20 x 3/4" Stud	—	—	1	200	PDB280-_
			2 - 3 Cu/Al	1								
			4 - 8 Cu/Al	1-2								
			10 - 14 Cu	1-2								
	1, 2, 3	175	2/0 - 1 Cu/Al (Str)	1	13.6 (120)	1	4 - 6 Cu/Al (Str)	1	4.0 (35)	6	200	PDB321-_
			2 - 3 Cu/Al	1			8 Al (Str)	1-2				
			4 - 8 Cu/Al	1-2			8 Cu	1	2.8 (25)			
			10 - 12 Al (Str)	1			10 - 12 Al (Str)	1	4.0 (35)			
			10 - 14 Cu	1-2			10 - 14 Cu	1-2	2.3 (20)			
	1, 3	310	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)†	1	4 - 6 Cu/Al (Str)	1	4.0 (35)	6	200	PDB323-_
							8 Al (Str)	1-2				
			1/0 Cu/Al (Str)	1-2			8 Cu	1	2.8 (25)			
							10 - 12 Al (Str)	1	4.0 (35)			
			1 - 6 Cu/Al	1-2			10 - 12 Cu	1	2.3 (20)			
							10 - 14 Cu	2				
	1, 3	310	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)†	1	4 - 6 Cu/Al (Str)	1	4.0 (35)	12	200	PDB370-_
							8 Al (Str)	1-2				
			1/0 Cu/Al (Str)	1-2			8 Cu	1	2.8 (25)			
							10 - 12 Al (Str)	1	4.0 (35)			
			1 - 6 Cu/Al	1-2			10 - 14 Cu	1-2	2.3 (20)			
	1, 3	310	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)†	1	2 - 3 Cu/Al (Str)	1	5.6 (50)	6	200	PDB371-_
							4 - 8 Al (Str)	1				
							6 - 8 Al (Str)	2				
							4 Cu	1	5.1 (45)			
							6 Cu	1-2				
							8 Cu	1-2	4.5 (40)			
			1/0 Cu/Al (Str)	1-2			10 - 12 Cu	1-2	4.0 (35)			
							14 Cu	2				
							1/0 - 3 Cu/Al (Str)	1	5.6 (50)	3		
							4 - 6 Cu/Al	1	5.1 (45)††			
							8 Cu/Al	1	4.5 (40)††			
			1 - 6 Cu/Al	1-2			10 - 12 Cu	1	4.0 (35)††			
							6 - 14 Cu	2	13.6 (120)			
							4 - 6 Al (Str)	2				

* 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.
**See page 9-8 for the tested upstream overcurrent protective devices necessary for achieving these SCCRs.
† Torque rating for dual wire and ferrule application is 30.5 N•m (270 lb-in).
††Torque rating for ferrule application is 13.6 N•m (120 lb-in).

Data sheet no. 10537

Upstream fusing for SCCR and minimum enclosure data

This table contains the tested SCCR levels for each PDBFS power distribution block using the specified lineside and loadside conductors and Bussmann series Class J, RK1, RK5 and T fuses. Using these tested SCCR levels also requires the power distribution block be installed in an enclosure with the minimum size indicated for each catalog number.

	Conductors (AWG/kcmil)		Fuse class and maximum amps*						
Catalog no.	Lineside	Loadside	G — SC (480 V)	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)	SCCR (kA)	Min. enclosure size (in)
PDB204-1, -3	2/0 - 8	2/0 - 8	—	200	100	60	200	200	16 x 16 x 6.75
PDB220-1, -3	2/0 - 8	4 - 12	—	200	100	60	200	200	16 x 16 x 6.75
		4 - 14	60	175	100	30	175	100	
PDB280-1, -3	2/0 - 8	Stud	—	200	100	60	200	200	16 x 16 x 6.75
PDB321-1, -2, -3	2/0 - 8	4 - 12	—	400	200	100	400	200	24 x 20 x 6.75
		4 - 14	60	175	100	30	175	100	
PDB323-1, -3	350 - 4	4 - 8	—	400	200	100	400	200	24 x 20 x 6.75
		4 - 12	60	175	100	30	175	100	
PDB370-1, -3	350 - 4	4 - 8	—	400	200	100	400	200	24 x 20 x 6.75
		4 - 14	60	175	100	30	175	100	
PDB371-1, -3	350 - 4	1/0 - 6	—	400	200	100	400	200	24 x 20 x 6.75
		1/0 - 12	60	175	100	30	175	100	

Ampacities 75°C per NEC Table 310.16 and UL 508A Table 28.1.
* Class CC 30 A (LP-CC-30, FNQ-R-30, KTK-R-30) or less are suitable for all SCCRs in this table.

Upstream circuit breakers for SCCR and minimum enclosure data

This table contains the tested SCCR levels for each PDB power distribution block using the specified lineside and loadside conductors and Eaton circuit breakers. Using these tested SCCR levels also requires the power distribution block be installed in an enclosure with the minimum size indicated for each catalog number.

PDB_ SCCR as rated with Eaton circuit breakers

	Suitable Cu conductors kcmil/AWG				Overcurrent protection circuit breaker required		Min. enclosure size (in.)
Catalog no.	Lineside	Loadside	SCCR, RMS Sym. (kA)	Volts max	Type	Max amp	
PDB220	2/0 - 8	4 - 10	65	480	EGC125, E125C, EGH125, E125H	125	16 x 16 x 6.75
	2/0 - 8	12	22	480	EGC125, E125C, EGE125, E125E, EGS125, E125S, EGH125, E125H	125	
	2/0 - 8	14	14	480	EGC125, E125C, EGB125, E125B, EGE125, E125E, EGS125, E125S, EGH125, E125H	125	
PDB321	2/0 - 8	4 - 10	65	480	EGC125, E125C, EGH125, E125H	125	24 x 20 x 6.75
	2/0 - 8	12	22	480	EGC125, E125C, EGE125, E125E, EGS125, E125S, EGH125, E125H	125	
	2/0 - 8	14	14	480	EGC125, E125C, EGB125, E125B, EGE125, E125E, EGS125, E125S, EGH125, E125H	125	
PDB323	350 - 4	4 - 6	65	480	JGH250, J250H	250	24 x 20 x 6.75
	350 - 4	8	42	480	JGH250, J250H	250	
	350 - 4	10	14	480	JGH250, J250H, JGE250, J250E, JGS250, J250S,	250	
	350 - 4	4 - 6	65	480	JGC250, J250C, JGU250, J250U, JGX250, J250X	250	
		8	42				
		10	25				
		8	50				
		10	25				
PDB370	350 - 4	4 - 6	65	480	JGH250, J250H	250	24 x 20 x 6.75
	350 - 4	8	42	480	JGH250, J250H	250	
	350 - 4	10	14	480	JGH250, J250H, JGE250, J250E, JGS250, J250S,	250	
	350 - 4	4 - 6	65	480	JGC250, J250C, JGU250, J250U, JGX250, J250X	250	
		8	42				
		10	25				
PDB371	350 - 4	4 - 6	50	480	JGH250, J250H	250	24 x 20 x 6.75
	350 - 4	8	42	480	JGH250, J250H	250	
	350 - 4	10	14	480	JGH250, J250H, JGE250, J250E, JGS250, J250S,	250	
	350 - 4	4 - 6	65	480	JGC250, J250C, JGU250, J250U, JGX250, J250X	250	
		8	50				
		10	25				

Data sheet no. 10537

160, 162, 163, 164 and 165 UL Recognized open power distribution blocks

UL Recognized power distribution blocks offer a variety of lineside and loadside port configurations for greater flexibility in panel wiring and wire management.

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

Blocks are factory configured in 1-, 2 and 3-pole versions, and have optional covers to enhance safety (order covers separately).

Ratings

- Volts 600 V
- Amps 175 to 1520 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.

Conductors†

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

† As specified in the catalog number table.

Agency information

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

Flammability rating

- UL 94 V0

Optional covers

- See table for catalog numbers and ordering details

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.

Catalog number example — 16220-3 is a 3-pole 16220

Where:

- The prefix "16220" defines the block's lineside characteristics (i.e., one conductor port per pole that accepts 2/0 - 14 Cu, or 2/0 - 8 Al conductors) and the loadside characteristics (i.e., four conductor ports per pole that each accepts 4 - 14 Cu or 4 - 8 Al conductors)
- 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

Dual wire port application

- Rated for dual wire port application to increase the possible number of lineside and loadside connections. E.g., 16220-1 can accept two wires into the lineside port (4 - 14 Cu, 4 - 8 Al) and two wires per port (eight connections total) on the loadside lug (8 - 14 Cu, 8 Al).
- Dual wire applications are only viable when using two wires of the same size, stranding, and insulating and conductor material.

Ferrule terminal application

- Bussmann series UL Recognized power distribution blocks are rated for use with UL Listed ferrules (see catalog number table for details).
- 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.

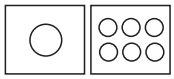
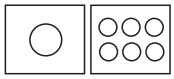
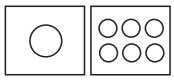
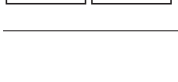
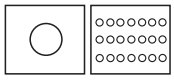
Optional covers

For block catalog number starting	Order cover catalog number
160__	CPB160-(poles)*
162__	CPB162-(poles)*
163__	CPDB-(poles)*
165__	CPDB165**

* Order one cover for each block by specifying the number of poles in the catalog number suffix. E.g., For the block catalog number 16021-4, order the cover catalog number CPD160-4.

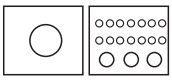
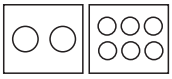
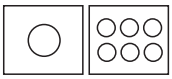
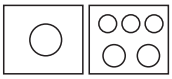
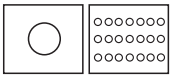
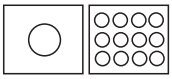
** Order one cover for each of the block's poles. E.g., For block catalog number 16530-3, order three of cover catalog number CPDB165.

Data sheet no. 10533

Line/load port configuration	No. of poles	Current rating (A)	Lineside				Loadside				Max SCCR (kA)†	Catalog no.
			Wire size (Sol/ferrule unless noted)*	Wires per port	Torque N•m (lb-in)	Ports/ pole	Wire size (Sol/ferrule unless noted)*	Wires per port	Torque N•m (lb-in)	Ports/ pole		
	2, 3, 4	175	2/0 - 1 Cu/Al (Str)	1	13.6 (120)	1	4 - 6 Cu/Al (Str)	1	4.0 (35)	6	10	16021-_
			2 - 3 Cu/Al	1			8 Cu	1	2.8 (25)			
			4 - 8 Cu/Al	1-2			8 Al (Str)	1-2				
			10 - 14 Cu	1-2			10 - 14 Cu	1-2	2.3 (20)			
	1, 2, 3	175	2/0 - 1 Cu/Al (Str)	1	13.6 (120)	1	4 - 6 Cu/Al (Str)	1	4.0 (35)	4	200	16220-_
			2 - 3 Cu/Al	1			8 Cu	1	2.8 (25)			
			4 - 8 Cu/Al	1-2			8 Al (Str)	1-2				
			10 - 14 Cu	1-2			10 - 14 Cu	1-2	2.3 (20)			
	1, 2, 3	175	2/0 - 1 Cu/Al (Str)	1	13.6 (120)	1	4 - 6 Cu/Al (Str)	1	4.0 (35)	4	200	16220-_H†††
			2 - 3 Cu/Al	1			8 Cu	1	2.8 (25)			
			4 - 8 Cu/Al	1-2			8 Al (Str)	1-2				
			10 - 14 Cu	1-2			10 - 14 Cu	1-2	2.3 (20)			
	1, 2, 3	175	2/0 - 1 Cu/Al (Str)	1	13.6 (120)	1	4 - 6 Cu/Al (Str)	1	4.0 (35)	6	200	16321-_
			2 - 3 Cu/Al	1			8 Cu	1	2.8 (25)			
			4 - 8 Cu/Al	1-2			8 Al (Str)	1-2				
			10 - 14 Cu	1-2			10 - 14 Cu	1-2	2.3 (20)			
	2,3,4	310	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)††	1	4 - 6 Cu/Al (Str)	1	4.0 (35)	6	10	16023-_
			1/0 Cu/Al (Str)	1-2			8 Cu	1	2.8 (25)			
							8 Al (Str)	1-2				
			1 - 6 Cu/Al	1-2			10 - 12 Al (Str)	1	2.3 (20)			
							10 - 14 Cu	1-2				
	1, 2, 3	310	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)††	1	4 - 6 Cu/Al (Str)	1	4.0 (35)	6	200	16323-_
			1/0 Cu/Al (Str)	1-2			8 Cu	1	2.8 (25)			
							8 Al (Str)	1-2				
			1 - 6 Cu/Al	1-2			10 - 12 Al (Str)	1	2.3 (20)			
							10 - 14 Cu	1-2				
	1, 2, 3	310	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)††	1	2 - 3 Cu/Al (Str)	1	5.6 (50)	3	10	16332-_
							4 Cu/Al	1	5.1 (45)			
							6 Cu/Al	1-2				
							8 Cu/Al	1-2	4.5 (40)			
			1/0 Cu/Al (Str)	1-2			10 - 14 Cu	1-2	4.0 (35)			
							1/0 - 3 Cu/Al (Str)	1	13.6 (120)	2		
							4 Cu	1				
			1 - 6 Cu/Al	1-2			4 - 8 Al (Str)	1-2				
							6 - 14 Cu	1-2				
	1, 2, 3	310	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)††	1	4 - 6 Cu/Al (Str)	1	4.0 (35)	12	200	16370-_
			1/0 Cu/Al (Str)	1-2			8 Cu	1	2.8 (25)			
							8 Al (Str)	1-2				
			1 - 6 Cu/Al	1-2			10 - 12 Al (Str)	1	2.3 (20)			
							10 - 14 Cu	1-2				
	1, 2, 3	310	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)††	1	2 - 3 Cu/Al (Str)	1	5.6 (50)	6	200	16371-_
							4 - 6 Cu/Al (Str)	1	5.1 (45)			
							8 Cu/Al (Str)	1	4.5 (40)			
							10 - 14 Cu (Str)	1	4.0 (35)			
			1/0 Cu/Al (Str)	1-2			1/0 - 3 Cu/Al (Str)	1	13.6 (120)	3		
							4 - 8 Cu/Al	1				
							10 - 14 Cu	1				
			1 - 6 Cu/Al	1-2			6 - 14 Cu	2				
							4 - 8 Al (Str)	2				
	1, 2, 3	310	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)††	1	10 Cu/Al	1	0.8 (7)	21	10	16372-_
			1/0 Cu/Al (Str)	1-2			12 - 14 Cu	1				
			1 - 6 Cu/Al	1-2								

* 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 Short-Circuit Current Ratings table for the tested upstream overcurrent protective devices necessary for achieving these SCCRs.
†† Torque rating for dual wire and ferrule application is 30.5 N•m (270 lb-in).
††† Configuration includes hex screws.

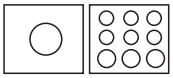
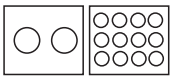
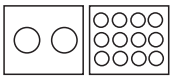
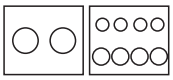
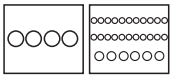
Data sheet no. 10533

Line/load port configuration	No. of poles	Current rating (A)	Lineside				Loadside				Max SCCR (kA)†	Catalog no.
			Wire size (Sol/ferrule unless noted)*	Wires per port	Torque N•m (lb-in)	Ports/ pole	Wire size (Sol/ferrule unless noted)*	Wires per port	Torque N•m (lb-in)	Ports/ pole		
	1, 2, 3	310	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)††	1	10 Cu/Al	1	0.8 (7)	14	10	16373-_
							12 - 14 Cu	1				
			1/0 Cu/Al (Str)	1-2			1/0 - 3 Cu/Al (Str)	1	13.6 (120)	3		
							4 Cu	1				
			1 - 6 Cu/Al	1-2			6 - 14 Cu	1-2				
							4 - 8 Al (Str)	1-2				
							10 - 14 Al (Str)	1				
	1, 2, 3	350	2/0 - 1 Cu/Al (Str)	1	13.6 (120)	2	4 - 6 Cu/Al (Str)	1	4.0 (35)	6	10	16325-_
			2 - 3 Cu/Al	1			8 Cu	1	2.8 (25)			
			4 - 8 Cu/Al	1-2			8 Al (Str)	1-2				
			10 - 14 Cu	1-2			10 - 14 Cu	1-2	2.3 (20)			
	1, 2, 3	380	500kcmil - 4/0 Cu/Al (Str)	1	56.5 (500)	1	2 - 3 Cu/Al (Str)	1	5.6 (50)	6	10	16330-_
							4 Cu/Al	1	5.1 (45)			
			3/0 - 1/0 Cu/Al (Str)	1-2			6 Cu/Al	1-2				
							8 Cu/Al	1-2	4.5 (40)			
			1 - 6 Cu/Al	1-2			10 - 12 Al (Str)	1	4.0 (35)			
							10 - 14 Cu	1-2				
	1, 2, 3	380	500kcmil - 4/0 Cu/Al (Str)	1	56.5 (500)	1	2 - 3 Cu/Al (Str)	1	5.6 (50)	3	10	16335-_
							4 Cu/Al	1	5.1 (45)			
			3/0 - 1/0 Cu/Al (Str)	1-2			6 Cu/Al	1-2				
							8 Cu/Al	1-2	4.5 (40)			
							10 - 14 Cu	1-2	4.0 (35)			
			1 - 6 Cu/Al	1-2			1/0 - 3 Cu/Al (Str)	1	13.6 (120)	2		
							4 Cu	1				
							4 - 8 Al (Str)	1-2				
							6 - 14 Cu	1-2				
	1, 2, 3	380	500kcmil - 4/0 Cu/Al (Str)	1	56.5 (500)	1	6 Cu/Al (Str)	1	4.0 (35)	21	10	16541-_
			3/0 - 1/0 Cu/Al (Str)	1-2			8 Cu	1	2.8 (25)			
							8 Al (Str)	1-2				
			1 - 6 Cu/Al	1-2			10 - 14 Al (Str)	1	2.3 (20)			
							10 - 14 Cu	1-2				
	1, 2, 3	420	600kcmil - 2 Cu/Al (Str)	1	56.5 (500)	1	4 - 6 Cu/Al (Str)	1	4.0 (35)	12	10	16375-_
							8 Cu	1	2.8 (25)			
							8 Al (Str)	1-2				
							10 - 12 Al (Str)	1	2.3 (20)			
							10 - 14 Cu	1-2				

* 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.
† See Short-Circuit Current Ratings table for the tested upstream overcurrent protective devices necessary for achieving these SCCRs.
††Dual wire and ferrule application torque rating = 30.5 N•m (270 lb-in).

Short-Circuit Current Rating (SCCR) data

Catalog no.	No. of poles	Conductors (AWG/kcmil)		Fuse Class/Bussmann series symbol/amp rating				SCCR (kA)
		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)	
16220-_	1, 2, 3	2/0 - 8	4 - 12	200	200	60	200	200
			4 - 14	175	100	60	175	100
16321-_	1, 2, 3	2/0 - 8	4 - 12	400	200	100	400	200
				175	100	60	175	100
16323-_	1, 2, 3	350 - 4	4 - 8	400	200	100	400	200
			4 - 12	175	100	60	175	100
16370-_	1, 2, 3	350 - 4	4 - 8	400	200	100	400	200
			4 - 14	175	100	60	175	100
16371-_	1, 2, 3	350 - 4	1/0 - 6	400	200	100	400	200
			1/0 - 12	175	100	60	175	100

Line/load port configuration	No. of poles	Current rating (A)	Lineside				Loadside				Max SCCR (kA)†	Catalog no.
			Wire size (Str/ferrule unless noted)*	Wires per port	Torque N•m (lb-in)	Ports/ pole	Wire size (Str/ferrule unless noted)*	Wires per port	Torque N•m (lb-in)	Ports/ pole		
	1, 2, 3	420	600kcmil - 2 Cu/Al (Str)	1	56.5 (500)	1	2 - 3 Cu/Al (Str)	1	5.6 (50)	6	10	16376-_
							4 Cu/Al	1	5.1 (45)			
							6 Cu/Al	1-2				
							8 Cu/Al	1-2	4.5 (40)			
							10 - 14 Cu	1-2	4.0 (35)			
							1/0 - 3 Cu/Al (Str)	1	13.6 (120)	3		
							4 Cu	1				
							6 - 14 Cu	1-2				
							4 - 8 Al (Str)	1-2				
	1, 2, 3	570	300kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)††	2	4 - 6 Cu/Al (Str)	1	4.0 (35)	12	10	16377-_
			1/0 Cu/Al (Str)	1-2			8 Cu	1	2.8 (25)			
			1 - 2 Cu/Al	1-2			8 Al (Str)	1-2				
			4 Cu/Al (Str)	1-2			10 - 12 Al (Str)	1	2.3 (20)			
							10 - 14 Cu	1-2				
	1, 2, 3	760	500kcmil - 4/0 Cu/Al (Str)	1	56.5 (500)	2	4 - 6 Cu/Al (Str)	1	4.0 (35)	12	10	16530-_
			3/0 - 1/0 Cu/Al (Str)	1-2			8 Cu	1	2.8 (25)			
							8 Al (Str)	1-2				
			1 - 6 Cu/Al	1-2			10 - 14 Al (Str)	1	2.3 (20)			
							10 - 14 Cu	1-2				
	1, 2, 3	840	600kcmil - 2 Cu/Al	1	56.5 (500)	2	3/0 - 6 Cu/Al (Str)	1	13.6 (120)	4	10	16528-_
							4 - 6 Cu/Al (Str)	1	4.0 (35)			
							8 Cu	1	2.8 (25)	4		
							8 Al (Str)	1-2				
							10 - 14 Al (Str)	1	2.3 (20)			
							10 - 14 Cu	1-2				
	1	1520	500kcmil - 4/0 Cu/Al (Str)	1	56.5 (500)	4	2 - 3 Cu/Al (Str)	1	5.6 (50)	22	10	16400
							4 Cu/Al	1	5.1 (45)			
							6 Cu/Al	1-2				
							8 Cu/Al	1-2	4.5 (40)			
			3/0 - 1/0 Cu/Al (Str)	1-2			10 - 14 Cu	1-2	4.0 (35)			
							1/0 - 3 Cu/Al (Str)	1	13.6 (120)	6		
							4 Cu	1				
			1 - 6 Cu/Al	1-2			4 - 8 Al (Str)	1-2				
							6 - 14 Cu	1-2				

* 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.
† See Short-Circuit Current Ratings table for the tested upstream overcurrent protective devices necessary for achieving these SCCRs.
††Dual wire and ferrule application torque rating = 30.5 N•m (270 lb-in).

Data sheet no. 10533

162, 163 and 165 UL Recognized stud power terminal blocks

Port-to-stud and stud-to-stud power terminal blocks are available with current ratings up to 760 A. These blocks provide a convenient stud connection means for lug/ring wire terminals.

Factory configured from 1- to 3-poles (catalog number dependent) with optional covers to enhance safety (order covers separately), these blocks are UL Recognized to UL 1059 and rated for use in UL 508A industrial control panels.

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.

Conductors†

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

† As specified in the catalog number table.

Agency information

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

Flammability rating

- UL 94 V0

Optional covers

- See table for catalog numbers specific to each block

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.

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

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

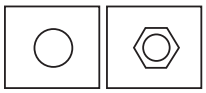
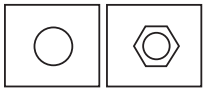
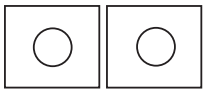
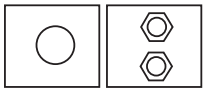
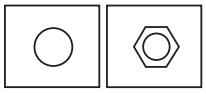
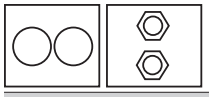
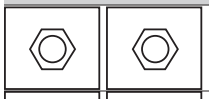
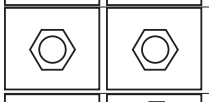
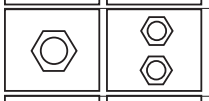
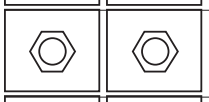
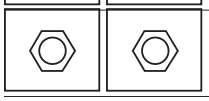
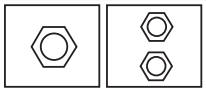
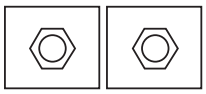
Optional covers

Electrical safety can be enhanced by installing optional covers. From the table below, order the cover catalog number that matches the block catalog number.

Block catalog no.	Poles	Cover catalog no.
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.

Data sheet no. 10535

Line/load configuration	No. of poles	Current rating (A)	Lineside: Wire/stud size (Str/ferrule unless noted)*	Lineside: Wires per port	Lineside: Torque N•m (lb-in)	Lineside: Ports/ pole	Loadside: Stud/ connector size	Loadside: Studs/ pole	SCCR (kA)	Catalog no.
Connector - to - stud										
	1, 2, 3	175	2/0 - 1 Cu/Al (Str) 2 - 3 Cu/Al 4 - 8 Cu/Al 10 - 14 Cu	1 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) 2 - 3 Cu/Al 4 - 8 Cu/Al 10 - 14 Cu	1 1-2 	13.6 (120)	1	M6 x 1″ stud	1	200†	16280-_-M
	1, 2, 3	175	2/0 - 1 Cu/Al (Str) 2 - 3 Cu/Al 4 - 8 Cu/Al 10 - 14 Cu	1 1-2 	13.6 (120)	1	1/4-20 tapped hole	1	10	16281-_**
	1, 2, 3	380	500kcmil - 4/0 Cu/Al (Str) 3/0 - 1/0 Cu/Al (Str) 1 - 6 Cu/Al	1 1-2 	56.5 (500)	1	1/4-20 x 1″ stud	2	10	16378-_
	1, 2, 3	380	500kcmil - 4/0 Cu/Al (Str) 3/0 - 1/0 Cu/Al (Str) 1 - 6 Cu/Al	1 1-2 	56.5 (500)	1	3/8-16 x 1″ stud	1	10	16383-_
	1, 2, 3	760	500kcmil - 4/0 Cu/Al (Str) 3/0 - 1/0 Cu/Al (Str) 1 - 6 Cu/Al	1 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 below 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 no.	No. of poles	Conductors (AWG): Lineside	Conductors (AWG): Loadside	Fuse class/Bussmann series symbol/amp rating: Class J LPJ	Class RK1 LPN-RK (250 V) LPS-RK (600 V)	Class RK5 FRN-R (250 V) FRS-R (600 V)	Class T JJN (300 V) JJS (600 V)	SCCR (kA)
16280-_	1, 2, 3	2/0 - 8	1/4-20x3/4 stud	200	200	60	200	200

Data sheet no. 10535

160, 162, 163 and 165 UL Recognized power splicer blocks

Splicer blocks allow for increasing or decreasing wire size within a circuit to accommodate different connections from the power source to the branch load.

These blocks are factory configured from 1- to 4-poles (catalog number dependent) for wire sizes up to 500kcmil and amp ratings up to 760 A. Optional covers are available to enhance safety (order covers separately).

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

Ratings

- Volts 600 V
- Amps 115 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.

Conductors†

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

† As specified in the catalog number table.

Agency information

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

Flammability rating

- UL 94 V0

Optional covers

- See table for catalog numbers specific to each block

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.

Catalog number example — 16204-3 is a 3-pole 16204

Where:

- The prefix "16204" defines the block's lineside and loadside characteristics (i.e., conductor port per pole that accepts 2/0 - #14 Cu, or 2/0 - #12 Al conductors)
- 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

Dual wire port application

- Rated for dual wire port application to increase the possible number of lineside and loadside connections. E.g., 16303-1 can accept two wires into the lineside port (1/0 - #6 Cu/Al) and two wires per port (2 connections per pole total) on the loadside lug (1/0 - #6 Cu/Al).
- 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 splicer 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 PDB terminal port
- Always use UL Listed ferrules in accordance with the manufacturer's specifications and instructions

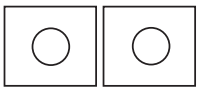
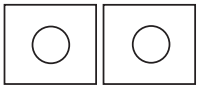
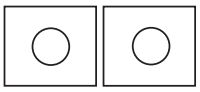
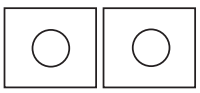
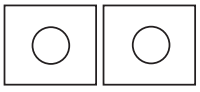
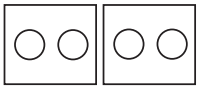
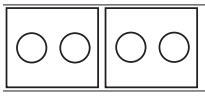
Optional covers

Electrical safety can be enhanced by installing optional covers. From the table below, order the cover catalog number that matches the block catalog number.

Block catalog no.	Poles	Cover catalog no.
16000-2	2	CPB160-2*
16000-3	3	CPB160-3*
16000-4	4	CPB160-4*
16003-2	2	CPB160-2*
16003-3	3	CPB160-3*
16003-4	4	CPB160-4*
16005-2	2	CPB160-2*
16005-3	3	CPB160-3*
16005-4	4	CPB160-4*
16200-1	1	CPB162-1*
16200-2	2	CPB162-2*
16200-3	3	CPB162-3*
16201-1	1	CPB162-1*
16201-2	2	CPB162-2*
16201-3	3	CPB162-3*
16204-1	1	CPB162-1*
16204-2	2	CPB162-2*
16204-3	3	CPD162-3*
16301-1	1	CPDB-1*
16301-2	2	CPDB-2*
16301-3	3	CPDB-3*
16303-1	1	CPDB-1*
16303-2	2	CPDB-2*
16303-3	3	CPDB-3*
16306-1	1	CPDB-1*
16306-2	2	CPDB-2*
16306-3	3	CPDB-3*
16500-1	1	CPDB165**
16500-2	2	CPDB165**
16500-3	3	CPDB165**
16504-1	1	CPDB165**
16504-2	2	CPDB165**
16504-3	3	CPDB165**

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

Data sheet no. 10534

Line/load port configuration	No. of poles	Current rating (A)	Lineside Wire size (Str/ferrule unless noted)*	Lineside Wires per port	Lineside Torque N•m (lb-in)	Lineside Ports/ Pole	Loadside Wire size (Str/ferrule unless noted)*	Loadside Wires per port	Loadside Torque N•m (lb-in)	Loadside Ports/ pole	SCCR (kA)	Catalog no.
	1, 2, 3	115	2 - 3 Cu/Al (Str)	1	5.6 (50)	1	2 - 3 Cu/Al (Str)	1	5.6 (50)	1	10	16200-_**
			4 - 6 Cu/Al (Str)	1	5.1 (45)		4 - 6 Cu/Al (Str)	1	5.1 (45)			
			8 Cu/Al (Str)	1	4.5 (40)		8 Cu/Al (Str)	1	4.5 (40)			
			10 - 14 Cu (Str)	1	4.0 (35)		10 - 14 Cu (Str)	1	4.0 (35)			
	1, 2, 3	150	1/0 - 3 Cu (Str)	1	5.6 (50)	1	1/0 - 3 Cu (Str)	1	5.6 (50)	1	10	16201-_
			4 - 6 Cu (Str)	1	5.1 (45)		4 - 6 Cu (Str)	1	5.1 (45)			
			8 Cu (Str)	1	4.5 (40)		8 Cu (Str)	1	4.5 (40)			
			10 - 14 Cu (Str)	1	4.0 (35)		10 - 14 Cu (Str)	1	4.0 (35)			
	2, 3, 4	175	2/0 - 1 Cu/Al (Str)	1	12.4 (110)	1	2/0 - 1 Cu/Al (Str)	1	12.4 (110)	1	10	16000-_**
			2 - 8 Cu/Al	1			2 - 8 Cu/Al	1				
			10 - 12 Al (Str)	1	4.0 (35)		10 - 12 Al (Str)	1	4.0 (35)			
			10 - 14 Cu	1			10 - 14 Cu	1				
			4 - 8 Cu/Al	2	13.6 (120)		4 - 8 Cu/Al	2	13.6 (120)			
			10 - 14 Cu	2			10 - 14 Cu	2				
	1, 2, 3	175	2/0 - 1 Cu/Al (Str)	1	12.4 (110)	1	2/0 - 1 Cu/Al (Str)	1	12.4 (110)	1	200†	16204-_
			2 - 8 Cu/Al	1			2 - 8 Cu/Al	1				
			10 - 12 Al (Str)	1	4.0 (35)		10 - 12 Al (Str)	1	4.0 (35)			
			10 - 14 Cu	1			10 - 14 Cu	1				
			4 - 8 Cu/Al	2	13.6 (120)		4 - 8 Cu/Al	2	13.6 (120)			
			10 - 14 Cu	2			10 - 14 Cu	2				
	2, 3, 4	255	250kcmil - 6 Cu	1	42.4 (375)	1	250kcmil - 6 Cu	1	42.4 (375)	1	10	16003-_**
	1, 2, 3	255	250kcmil - 6 Cu	1	42.4 (375)	1	250kcmil - 6 Cu	1	42.4 (375)	1	10	16301-_
	2, 3, 4	310	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)††	1	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)††	1	10	16005-_**
			1/0 Cu/Al (Str)	1-2			1/0 Cu/Al (Str)	1-2				
			1 - 6 Cu/Al	1-2			1 - 6 Cu/Al	1-2				
	1, 2, 3	310	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)††	1	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)††	1	10	16303-_
			1/0 Cu/Al (Str)	1-2			1/0 Cu/Al (Str)	1-2				
			1 - 6 Cu/Al	1-2			1 - 6 Cu/Al	1-2				
	1, 2, 3	380	500kcmil - 4/0 Cu/Al (Str)	1	56.5 (500)	1	500kcmil - 4/0 Cu/Al (Str)	1	56.5 (500)	1	10	16306-_
			3/0 - 1/0 Cu/Al (Str)	1-2			3/0 - 1/0 Cu/Al (Str)	1-2				
			1 - 6 Cu/Al	1-2			1 - 6 Cu/Al	1-2				
	1, 2, 3	620	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)††	2	350kcmil - 2/0 Cu/Al (Str)	1	31.1 (275)††	2	10	16500-_
			1/0 Cu/Al (Str)	1-2			1/0 Cu/Al (Str)	1-2				
			1 - 4 Cu/Al	1-2			1 - 4 Cu/Al	1-2				
			6 Cu/Al	2			6 Cu/Al	2				
	1, 2, 3	760	500kcmil - 4/0 Cu/Al (Str)	1	56.5 (500)	2	500kcmil - 4/0 Cu/Al (Str)	1	56.5 (500)	2	10	16504-_
			3/0 - 1/0 Cu/Al (Str)	1-2			3/0 - 1/0 Cu/Al (Str)	1-2				
			1 - 6 Cu/Al	1-2			1 - 6 Cu/Al	1-2				

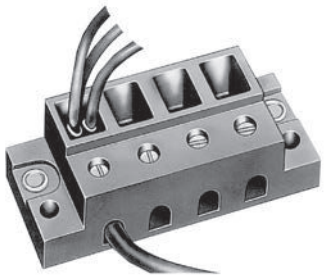
* 75°C wire (higher temperature rated wire acceptable with appropriate derating). Using a ferrule on a stranded conductor requires a correctly sized UL Listed ferrule (customer supplied) applied according to the manufacturer's specifications. Ferrule ratings apply to copper wire only.
**Not covered by CSA certification.
† See table below for the tested upstream overcurrent protective devices necessary for achieving this SCCR.
††Torque rating for dual wire and ferrule application is 30.5 N•m (270 lb-in).

Short-Circuit Current Rating (SCCR) data for block 16204-_

Catalog no.	No. of poles	Conductors (AWG) Lineside	Conductors (AWG) Loadside	Fuse class/Bussmann series symbol/amp rating Class J LPJ	Class RK1 LPN-RK (250 V) LPS-RK (600 V)	Class RK5 FRN-R (250 V) FRS-R (600 V)	Class T JJN (300 V) JJS (600 V)	SCCR (kA)	Min. enclosure size
16204-_	1, 2, 3	2/0 - 8	2/0 - 8	200	200	60	200	200	16 x 16 x 6.75

Data sheet no. 10534

11675 250 V screw/quick connect power terminal block



Lineside screw connection, loadside 0.250" quick-connect (3 per pole) power terminal block available from 2 to 6 poles (see catalog number table).

Ratings

- Volts 250 Vac/dc
- Amps Up to 40 A
- SCCR 10 kA per UL 508A, Table SB4.1

Agency information

- UL Recognized, Guide XCFR2, File E62622, CSA 47235, CE

Conductors/torque ratings

- 8-14 AWG Cu.
- 9 lb-in (1.0 N•m) max.

Catalog no. (poles)			
11675-2	11675-3	11675-4	11675-6

14002 600 V barrier terminal block

Barrier terminal block available from 2 to 6 poles with box lug terminals. 2- and 3-pole versions available with loadside 0.25" quick-connect terminals (4 per pole). See catalog numbers table.

Ratings

- Volts 600 Vac/dc
- Amps 115 A
- SCCR 10 kA per UL 508A Table SB4.1

Agency information

- UL Recognized, Guide XCFR2, File E62622, CSA 47235, CE

Conductors/torque ratings*

- Wire; 2 – 14 AWG Cu, 8 AWG Al.
- Torque; 2-3 AWG 50 (5.6 N•m), 4-6 AWG 45 (5.1 N•m), 8 AWG 40 (4.5 N•m), 10-14 AWG 35 (3.9 N•m)

* Consult factory for torque ratings on "Q" quick-connect terminal option.

Marking

- Marking strip optional on 2- and 3-pole configurations. See catalog numbers table.

Catalog no. (poles)			
Standard		**Loadside quick-connect terminals**	**Standard with marking strip**
14002-2	14002-5	Q14002-2	14002-2A
14002-3	14002-6	Q14002-3	14002-3A
14002-4			

11725 600 V screw/quick connect power terminal block

Lineside screw connection, loadside 0.250" quick-connect (4 per pole) power terminal block available in 2, 3 or 4 poles (see catalog number table).

Ratings

- Volts 600 Vac/dc
- Amps up to 70 A
- SCCR 10 kA per UL 508A Table SB4.1

Agency Information

- UL Recognized, Guide XCFR2, File E62622, CSA 47235, CE

Conductors/torque ratings

- 2 – 14 AWG Cu
- 8 AWG Al.
- 45 lb-in (5.1 N•m) max.

Catalog no. (poles)		
11725-2	11725-3	11725-4

14004 600 V dead front terminal block

Dead front terminal block available from 2 to 12 poles (see catalog number table).

Ratings

- Volts 600 Vac/dc
- Amps 90 A
- SCCR 10 kA per UL 508A Table SB4.1

Agency information

- UL Recognized, Guide XCFR2, File E62600, CSA 47235, CE

Conductors

- 4 – 14 AWG Cu
- 8 AWG Al

Marking

- Numeral marking molded into the top of the block is standard

Catalog no. (poles)			
14004-2	14004-5	14004-8	14004-12
14004-3	14004-6	14004-9	
14004-4	14004-7	14004-10	