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Spacing Requirements for Power Distribution and Terminal Blocks

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New requirements in the 2005 NEC® for a marked short-circuit current rating on industrial control panels, industrial machinery, and commercial/industrial HVAC equipment have resulted in considerable attention being placed upon the proper selection and application of Power Distribution Blocks (PDBs) and Terminal Blocks. It is fairly well understood that if an assembly short-circuit current rating above 10,000 amperes is desired, a Power Distribution Block or a Terminal Block with a high short-circuit current rating must be utilized. However, there is great confusion concerning the spacing requirements of these devices. This paper focuses on proper applications, based upon these spacing requirements.

Proper Application

When applying Power Distribution Blocks (PDBs), there are various requirements that shall be satisfied, based upon different UL Standards, the NEC®, and the specific application. Some of the requirements and ratings include: voltage, continuous current, wire range (load and line side), short-circuit current rating or withstand rating (SCCR), type of upstream overcurrent protective device (fuse or circuit breaker) and spacing (between uninsulated live part and uninsulated grounded part or uninsulated live parts of opposite polarity). The requirements vary based on the application for industrial control panels (feeder circuit or branch circuit), field applications, or HVAC applications.

PDB Spacing Requirements for Equipment:

Depending upon the specific application and the standard to which the equipment is being designed, there are certain PDBs that can meet these spacing requirements, some with a high SCCR. The table below details the spacing requirements at 600V based upon the equipment standards.

UL Standard	Spacing between live parts of opposite polarity		Spacing between live parts and grounded parts or enclosure @600V
	Through air @600V	Over surface @600V	
508A Branch Circuits	⅜″	½″	½″
508A Feeder Circuits	1″	2″	1″
1995 HVAC	⅜″	½″	½″

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

UL1953 vs. UL1059

Most power distribution blocks available today are actually terminal blocks, and are recognized to UL 1059, the Terminal Block standard. Terminal blocks may or may not meet the spacing needed for OEM applications. Terminal blocks are marked with a UL recognition mark to ensure that the UL inspector checks, among other things, to make sure there is adequate spacing for the OEM application in which they are being applied.

Power Distribution blocks are evaluated to UL1953, the Power Distribution Block standard and are listed for general installation, meaning they have adequate spacing for most OEM and field applications. These Power Distribution Blocks are marked with a listing mark, which means that the inspector does not need to check ”conditions of acceptability” as would be needed with recognized products. As listed products, they are suitable for use in the field. For example, an electrical contractor may install them in a wireway, something that could not be done with a recognized product such as a terminal block.

Industrial Control Panels (UL508A):

UL508A contains two important requirements to consider when applying power distribution blocks.

- Spacing of 1″ through air, 2″ over surface (at 600V) is required when used in a feeder circuit (that’s everything ahead of or on the line side of the final branch circuit overcurrent protective device).
- An assumed short-circuit current rating of 10kA for blocks not marked with a higher short-circuit current rating, per UL508A Table SB4.1.

The following details the requirements regarding the use of power distribution blocks in industrial control panels.

Use of Power Distribution Blocks in Industrial Control Panel Feeder Circuits

- A Listed PDB (UL1953) can be used “as is” since it meets the 2″ and 1″ spacing requirements for feeder circuits in UL508A section 10.2 (see table 10.2) & 28.2.4.
- A Recognized Terminal Blocks (UL1059) can only be used if it meets the spacing requirements in 10.2 & 28.2.1 (see Table 10.1) and it is suitable for field wiring (use Group A, C or D of UL 1059).
  - Use Group A: Service — including dead-front switchboards, panelboards, service equipment, and the like.
  - Use Group B: Commercial appliances, including business equipment, electronic data processing equipment, and the like.
  - Use Group C: Industrial, general.
  - Use Group D: Industrial, devices having limited ratings. Such as where the load on any single circuit of the terminal block does not exceed 15 amperes at 51 — 150 volts, 10 amperes at 151 — 300 volts, 5 amperes at 301 — 600 volts, or the maximum ampere rating, whichever is less.

Listed PDBs have adequate spacing for feeder circuit applications but most recognized terminal blocks don’t have the spacing required for use in feeder circuits

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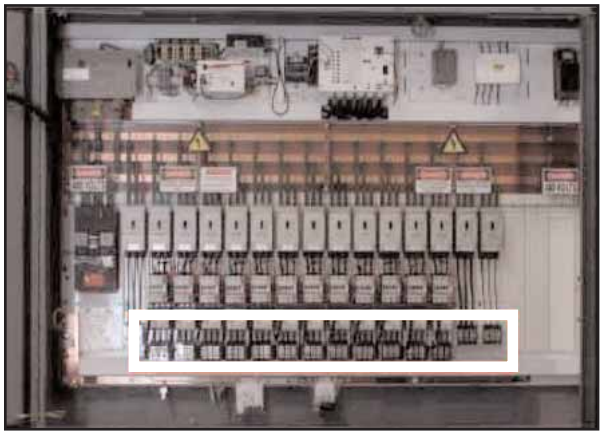
Use of Power Distribution Blocks in Industrial Control Panel Branch Circuits

- A Listed PDB (UL1953) can be used “as is” since it exceeds the spacing requirements for branch circuits in UL508A section 10.2 (see table 10.1) & 28.2.4.
- A Recognized Terminal Block (UL1059) can only be used if it meets the spacing requirements at the required voltage in UL 508A, section 10.2 & 28.2.1 (see Table 10.1) and it is suitable for field wiring (Use Group A, C or D of UL 1059).

Listed PDBs have adequate spacing for branch circuit applications and most recognized PDBs are also adequate for branch circuit applications

Power Distribution Block Application Examples – UL 508A

PDB in UL 508A, 480V Feeder Circuit must have spacing of 1″ through air and 2″ over surface. PDBs listed to UL 1953 meet these spacing requirements. Terminal Blocks recognized to UL1059 must be verified to have required spacing.



PDB in UL508A, 480V Branch Circuit must have spacing of ⅜″ through air and ½″ over surface. PDBs listed to UL 1953 meet these spacing as well as most terminal blocks recognized to UL 1059.

HVAC Equipment (UL1995):
The larger spacing that is mandated in UL508A is not present in UL1995. However, HVAC equipment utilizes control panels that are UL Listed 508A control panels. If the control panel for the HVAC equipment is a listed UL508A panel, the larger UL508A spacing is required.

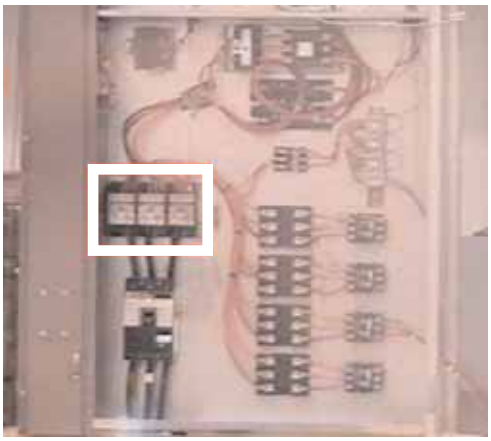
NEW 2005 NEC® Requirements For Wireways:
Listed power distribution blocks can be used to meet the new 2005 NEC® requirement in section 376.56(B) for wireways. Since terminal blocks are recognized products to UL1059, they are not allowed for use for field wiring in metal wireways

NATIONAL ELECTRICAL CODE®:

- 376.56(B) Power Distribution Blocks.
- (1) Installation. Power distribution blocks installed in metal wireways shall be listed.
- (4) Live Parts. Power distribution blocks shall not have exposed live parts in the wireway after installation.

The NEC® now requires a PDB listed to UL 1953, equipped with a cover to prevent exposure of live parts when installed in metal wireway

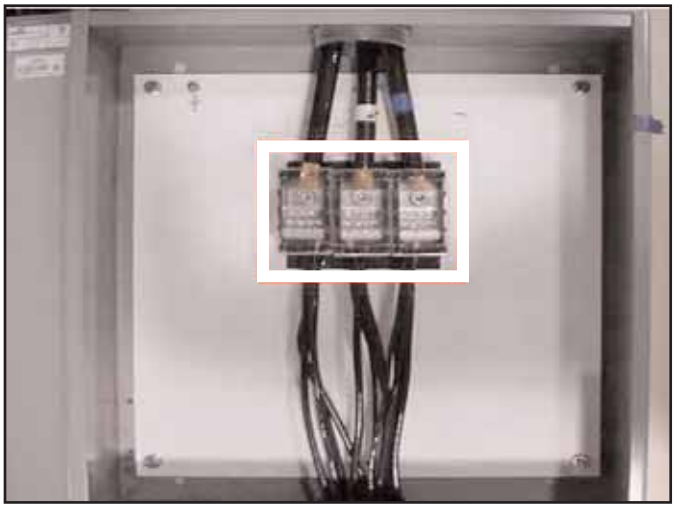
Power Distribution Block Application Examples – UL 1995 and NEC® 376.56(B)



PDB in 480V UL 1995 HVAC Equipment must have spacing of ⅜″ through air and ½″ over surface. PDBs listed to UL 1953 meet this spacing as well as most terminal blocks recognized to UL 1059.

Spacing Requirements for Power Distribution and Terminal Blocks

PDBs installed in wireways must be listed to UL1953 and provided with a cover per NEC® 376.56(B). Terminal blocks recognized to UL1059 are not permitted because they are recognized, not listed.



Note: Marking the equipment with its short-circuit current rating (SCCR) is another important consideration in the proper application of PDBs. Cooper Bussmann has a new line of PDBs with high short-circuit current ratings which makes it easier to achieve a high short-circuit current rating for the entire assembly, see the new Cooper Bussmann PDBs with High SCCR Datasheet (Reorder #3134). For more information on the topic of SCCRs for industrial control panels, see the new Cooper Bussmann Simplified Guide to Understanding Short-Circuit Current Rating (Reorder #7009).

For more information or questions, please contact Cooper Bussmann Application Engineering at (636) 527-1270 or fusetech@CooperBussmann.com.

Also visit us on the web at cooperbussmann.com.

UL 1953 LISTED HIGH SCCR POWER DISTRIBUTION BLOCK APPLICATION CHART @ 600V

Cooper Bussmann Part Number	Description	Max OCPD	SCCR (kA)	UL 508A Branch Circuit	UL 508A Feeder Circuit	UL 1995	NEC® 376.56(B)
PDB204-3	Line 2/0-8 Cu, Load 2/0-8 Cu, 3 Pole	200A Class J, T, CC or G	200	YES	YES	YES	YES*
PDB220-3	Line 2/0-8 Cu, Load (4) 4-12 Cu, 3 Pole	200A Class J, T, CC or G	200	YES	YES	YES	YES*
PDB220-3	Line 2/0-8 Cu, Load (4) 4-14 Cu, 3 Pole	175A Class J, T, CC or G	100	YES	YES	YES	YES*
PDB280-3	Line 2/0-8 Cu, Load 1/4 - 20 X 3/4 STUD, 3 Pole	200A Class J, T, CC or G	200	YES	YES	YES	YES*
PDB321-1	Line 2/0-8 Cu, Load (6) 4-12 Cu, 1 Pole	400A Class J, T, CC or G	200	YES	YES	YES	YES*
PDB321-1	Line 2/0-8 Cu, Load (6) 4-14 Cu, 1 Pole	175A Class J, T, CC or G	100	YES	YES	YES	YES*
PDB321-2	Line 2/0-8 Cu, Load (6) 4-12 Cu, 2 Pole	400A Class J, T, CC or G	200	YES	YES	YES	YES*
PDB321-2	Line 2/0-8 Cu, Load (6) 4-14 Cu, 2 Pole	175A Class J, T, CC or G	100	YES	YES	YES	YES*
PDB321-3	Line 2/0-8 Cu, Load (6) 4-12 Cu, 3 Pole	400A Class J, T, CC or G	200	YES	YES	YES	YES*
PDB321-3	Line 2/0-8 Cu, Load (6) 4-14 Cu, 3 Pole	175A Class J, T, CC or G	100	YES	YES	YES	YES*
PDB323-3	Line 350-4 Cu, Load (6) 4-8 Cu, 3 Pole	400A Class J, T, CC or G	200	YES	YES	YES	YES*
PDB323-3	Line 350-4 Cu, Load (6) 4-12 Cu, 3 Pole	175A Class J, T, CC or G	100	YES	YES	YES	YES*
PDB370-3	Line 350-4 Cu, Load (12) 4-8 Cu, 3 Pole	400A Class J, T, CC or G	200	YES	YES	YES	YES*
PDB370-3	Line 350-4 Cu, Load (12) 4-14 Cu, 3 Pole	175A Class J, T, CC or G	100	YES	YES	YES	YES*
PDB371-3	Line 350-4 Cu, Load (6) 2-6 Cu and (3) 1/0-6 Cu, 3 Pole	400A Class J, T, CC or G	200	YES	YES	YES	YES*
PDB371-3	Line 350-4 Cu, Load (9) 2-12 Cu, 3 Pole	175A Class J, T, CC or G	100	YES	YES	YES	YES*

*Optional covers required. For PDB204-1, -3, PDB220-1, -3, and PDB280-1, -3, Use CPB162-1 (One cover required per pole). For PDB321-1, -2, -3, Use CPB-1, -2, -3. For PDB323-1, -3, PDB370-1, -3, PDB371-1, -3, use CPDB-1 (One cover required per pole).

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UL 1059 Recognized High SCCR Power Terminal Block Application Chart @ 600V

Cooper Bussmann Part Number	Description	Max OCPD	SCCR (kA)	UL 508A Branch Circuit	UL 508A Feeder Circuit	UL 1995	NEC® 376.56(B)
14002-2UL	Line 2-14Cu, Load 2-8 Cu, 2-Pole	200A Class J, T, CC or G	200	YES	NO	YES	NO
14002-2UL	Line 2-14Cu, Load 2-14 Cu, 2-Pole	175A Class J, T, CC or G	100	YES	NO	YES	NO
14002-3UL	Line 2-14Cu, Load 2-8 Cu, 3-Pole	200A Class J, T, CC or G	200	YES	NO	YES	NO
14002-3UL	Line 2-14Cu, Load 2-14 Cu, 3-Pole	175A Class J, T, CC or G	100	YES	NO	YES	NO
14002-4UL	Line 2-14Cu, Load 2-8 Cu, 4-Pole	200A Class J, T, CC or G	200	YES	NO	YES	NO
14002-4UL	Line 2-14Cu, Load 2-14 Cu, 4-Pole	175A Class J, T, CC or G	100	YES	NO	YES	NO
16204-1	Line 2/0-8 Cu, Load 2/0-8 Cu, 1-Pole	200A Class J, T, CC or G	200	YES	NO*	YES	NO
16204-2	Line 2/0-8 Cu, Load 2/0-8 Cu, 2-Pole	200A Class J, T, CC or G	200	YES	NO	YES	NO
16204-3	Line 2/0-8 Cu, Load 2/0-8 Cu, 3-Pole	200A Class J, T, CC or G	200	YES	NO	YES	NO
16220-1	Line 2/0-8 Cu, Load (4) 4-12 Cu, 1-Pole	200A Class J, T, CC or G	200	YES	NO*	YES	NO
16220-1	Line 2/0-8 Cu, Load (4) 4-14 Cu, 1-Pole	175A Class J, T, CC or G	100	YES	NO*	YES	NO
16220-2	Line 2/0-8 Cu, Load (4) 4-12 Cu, 2-Pole	200A Class J, T, CC or G	200	YES	NO	YES	NO
16220-2	Line 2/0-8 Cu, Load (4) 4-14 Cu, 2-Pole	175A Class J, T, CC or G	100	YES	NO	YES	NO
16220-3	Line 2/0-8 Cu, Load (4) 4-12 Cu, 3-Pole	200A Class J, T, CC or G	200	YES	NO	YES	NO
16220-3	Line 2/0-8 Cu, Load (4) 4-14 Cu, 3-Pole	175A Class J, T, CC or G	100	YES	NO	YES	NO
16280-1	Line 2/0-8 Cu, Load 1/4-20 X 3/4 STUD, 1-Pole	200A Class J, T, CC or G	200	YES	NO*	YES	NO
16280-2	Line 2/0-8 Cu, Load 1/4-20 X 3/4 STUD, 2-Pole	200A Class J, T, CC or G	200	YES	NO	YES	NO
16280-3	Line 2/0-8 Cu, Load 1/4-20 X 3/4 STUD, 3-Pole	200A Class J, T, CC or G	200	YES	NO	YES	NO
16321-1	Line 2/0-8 Cu, Load (6) 4-12 Cu, 1-Pole	400A Class J, T, CC or G	200	YES	YES	YES	NO
16321-1	Line 2/0-8 Cu, Load (6) 4-14 Cu, 1-Pole	175A Class J, T, CC or G	100	YES	YES	YES	NO
16321-2	Line 2/0-8 Cu, Load (6) 4-12 Cu, 2-Pole	400A Class J, T, CC or G	200	YES	YES	YES	NO
16321-2	Line 2/0-8 Cu, Load (6) 4-14 Cu, 2-Pole	175A Class J, T, CC or G	100	YES	YES	YES	NO
16321-3	Line 2/0-8 Cu, Load (6) 4-12 Cu, 3-Pole	400A Class J, T, CC or G	200	YES	YES	YES	NO
16321-3	Line 2/0-8 Cu, Load (6) 4-14 Cu, 3-Pole	175A Class J, T, CC or G	100	YES	YES	YES	NO
16323-1	Line 350-4 Cu, Load (6) 4-8 Cu, 1-Pole	400A Class J, T, CC or G	200	YES	NO*	YES	NO
16323-1	Line 350-4 Cu, Load (6) 4-12 Cu, 1-Pole	175A Class J, T, CC or G	100	YES	NO*	YES	NO
16323-2	Line 350-4 Cu, Load (6) 4-8 Cu, 2-Pole	400A Class J, T, CC or G	200	YES	NO	YES	NO
16323-2	Line 350-4 Cu, Load (6) 4-12 Cu, 2-Pole	175A Class J, T, CC or G	100	YES	NO	YES	NO
16323-3	Line 350-4 Cu, Load (6) 4-8 Cu, 3-Pole	400A Class J, T, CC or G	200	YES	NO	YES	NO
16323-3	Line 350-4 Cu, Load (6) 4-12 Cu, 3-Pole	175A Class J, T, CC or G	100	YES	NO	YES	NO
16370-1	Line 350-4 Cu, Load (12) 4-8 Cu, 1-Pole	400A Class J, T, CC or G	200	YES	NO*	YES	NO
16370-1	Line 350-4 Cu, Load (12) 4-14 Cu, 1-Pole	175A Class J, T, CC or G	100	YES	NO*	YES	NO
16370-2	Line 350-4 Cu, Load (12) 4-8 Cu, 2-Pole	400A Class J, T, CC or G	200	YES	NO	YES	NO
16370-2	Line 350-4 Cu, Load (12) 4-14 Cu, 2-Pole	175A Class J, T, CC or G	100	YES	NO	YES	NO
16370-3	Line 350-4 Cu, Load (12) 4-8 Cu, 3-Pole	400A Class J, T, CC or G	200	YES	NO	YES	NO
16370-3	Line 350-4 Cu, Load (12) 4-14 Cu, 3-Pole	175A Class J, T, CC or G	100	YES	NO	YES	NO
16371-1	Line 350-4 Cu, Load (6) 2-6 and (3) 1/10-6 Cu, 1-Pole	400A Class J, T, CC or G	200	YES	NO*	YES	NO
16371-1	Line 350-4 Cu, Load (9) 2-12 Cu, 1-Pole	175A Class J, T, CC or G	100	YES	NO*	YES	NO
16371-2	Line 350-4 Cu, Load (6) 2-6 and (3) 1/10-6 Cu, 2-Pole	400A Class J, T, CC or G	200	YES	NO	YES	NO
16371-2	Line 350-4 Cu, Load (9) 2-12 Cu, 2-Pole	175A Class J, T, CC or G	100	YES	NO	YES	NO
16371-3	Line 350-4 Cu, Load (6) 2-6 and (3) 1/10-6 Cu, 3-Pole	400A Class J, T, CC or G	200	YES	NO	YES	NO
16371-3	Line 350-4 Cu, Load (9) 2-12 Cu, 3-Pole	175A Class J, T, CC or G	100	YES	NO	YES	NO

*May be possible to use if spaced as required per UL 508A Standard
UL Recognized to Use Group C

Spacing Requirements for Power Distribution and Terminal Blocks

UL 1059 Recognized Power Terminal Block Application Chart @ 600V

Cooper Bussmann Part Number	Description	Max OCPD	SCCR (kA)	UL 508A Branch Circuit	UL 508A Feeder Circuit	UL 1995	NEC® 376.56(B)
14002-2	Line 2-14 Cu, Load 2-8 Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
14002-3	Line 2-14 Cu, Load 2-8 Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
14002-4	Line 2-14 Cu, Load 2-8 Al, 4-Pole	Size per NEC®	10	YES	NO	YES	NO
16021-2	Line 2/0-14 Cu or 2/0-8 Al, Load (6) 4-14 Cu or (6) 4-8 Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16021-3	Line 2/0-14 Cu or 2/0-8 Al, Load (6) 4-14 Cu or (6) 4-8 Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16021-4	Line 2/0-14 Cu or 2/0-8 Al, Load (6) 4-14 Cu or (6) 4-8 Al, 4-Pole	Size per NEC®	10	YES	NO	YES	NO
16023-2	Line 350-6 Cu/Al, Load (6) 4-14 Cu or (6) 4-12 Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16023-3	Line 350-6 Cu/Al, Load (6) 4-14 Cu or (6) 4-12 Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16023-4	Line 350-6 Cu/Al, Load (6) 4-14 Cu or (6) 4-12 Al, 4-Pole	Size per NEC®	10	YES	NO	YES	NO
16204-1**	Line 2/0-8 Cu/Al, Load 2/0-8 Cu/Al, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16204-2**	Line 2/0-8 Cu/Al, Load 2/0-8 Cu/Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16204-3**	Line 2/0-8 Cu/Al, Load 2/0-8 Cu/Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16220-1**	Line 2/0-14 Cu or 2/0-8 Al, Load (4) 14-4 Cu or (4) 4-8 Al, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16220-2**	Line 2/0-14 Cu or 2/0-8 Al, Load (4) 14-4 Cu or (4) 4-8 Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16220-3**	Line 2/0-14 Cu or 2/0-8 Al, Load (4) 14-4 Cu or (4) 4-8 Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16280-1**	Line 2/0-14 Cu/Al, Load 1/4-20 X 3/4 STUD, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16280-2**	Line 2/0-14 Cu/Al, Load 1/4-20 X 3/4 STUD, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16280-3**	Line 2/0-14 Cu/Al, Load 1/4-20 X 3/4 STUD, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16301-1	Line 250-6 Cu, Load 250-6 Cu, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16301-2	Line 250-6 Cu, Load 250-6 Cu, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16301-3	Line 250-6 Cu, Load 250-6 Cu, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16303-1	Line 350-6 Cu/Al, Load 350-6 Cu/Al, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16303-2	Line 350-6 Cu/Al, Load 350-6 Cu/Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16303-3	Line 350-6 Cu/Al, Load 350-6 Cu/Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16306-1	Line 500-6 Cu/Al, Load 500-6 Cu/Al, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16306-2	Line 500-6 Cu/Al, Load 500-6 Cu/Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16306-3	Line 500-6 Cu/Al, Load 500-6 Cu/Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16321-1**	Line 2/0-14 Cu or 2/0-8 Al, Load (6) 4-14 Cu or (6) 4-8 Al, 1-Pole	Size per NEC®	10	YES	YES	YES	NO
16321-2**	Line 2/0-14 Cu or 2/0-8 Al, Load (6) 4-14 Cu or (6) 4-8 Al, 2-Pole	Size per NEC®	10	YES	YES	YES	NO
16321-3**	Line 2/0-14 Cu or 2/0-8 Al, Load (6) 4-14 Cu or (6) 4-8 Al, 3-Pole	Size per NEC®	10	YES	YES	YES	NO
16323-1**	Line 350-6 Cu/Al, Load (6) 4-14 Cu or (6) 4-12 Al, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16323-2**	Line 350-6 Cu/Al, Load (6) 4-14 Cu or (6) 4-12 Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16323-3**	Line 350-6 Cu/Al, Load (6) 4-14 Cu or (6) 4-12 Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16325-1	Line 2/0-14 Cu or 2/0-8 Al, Load (6) 4-14 Cu or (6) 4-8 Al, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16325-2	Line 2/0-14 Cu or 2/0-8 Al, Load (6) 4-14 Cu or (6) 4-8 Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16325-3	Line 2/0-14 Cu or 2/0-8 Al, Load (6) 4-14 Cu or (6) 4-8 Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16330-1	Line 500-6 Cu/Al, Load (6) 2-14 Cu or 2-12 Al, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16330-2	Line 500-6 Cu/Al, Load (6) 2-14 Cu or 2-12 Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16332-3	Line 350-6 Cu/Al, Load (3) 2-14 Cu or 2-8 Al and (2) 1/0-14 Cu or 1/10-8 Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16335-1	Line 500-6 Cu/Al, Load (3) 2-14 Cu or 2-8 Al and (2) 1/0-14 Cu or 1/10-8 Al, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16335-2	Line 500-6 Cu/Al, Load (3) 2-14 Cu or 2-8 Al and (2) 1/0-14 Cu or 1/10-8 Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16335-3	Line 500-6 Cu/Al, Load (3) 2-14 Cu or 2-8 Al and (2) 1/0-14 Cu or 1/10-8 Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16370-1**	Line 350-6 Cu/Al, Load (12) 4-14 Cu or (12) 4-12 Al, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16370-2**	Line 350-6 Cu/Al, Load (12) 4-14 Cu or (12) 4-12 Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16370-3**	Line 350-6 Cu/Al, Load (12) 4-14 Cu or (12) 4-12 Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16371-1**	Line 350-6 Cu/Al, Load (6) 2-14 Cu or (6) 2-14 Cu or (6) 2-8 Al and (3) 1/0-14 Cu or (3) 1/0-8 Al, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16371-2**	Line 350-6 Cu/Al, Load (6) 2-14 Cu or (6) 2-14 Cu or (6) 2-8 Al and (3) 1/0-14 Cu or (3) 1/0-8 Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16371-3**	Line 350-6 Cu/Al, Load (6) 2-14 Cu or (6) 2-14 Cu or (6) 2-8 Al and (3) 1/0-14 Cu or (3) 1/0-8 Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16372-1	Line 350-6 Cu/Al, Load (21) 10-14 Cu or 10 Al, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16372-2	Line 350-6 Cu/Al, Load (21) 10-14 Cu or 10 Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16372-3	Line 350-6 Cu/Al, Load (21) 10-14 Cu or 10 Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16373-1	Line 350-6 Cu/Al, Load (14) 10-14 Cu or 10 Al and (3) 1/0-14 Cu/Al, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16373-2	Line 350-6 Cu/Al, Load (14) 10-14 Cu or 10 Al and (3) 1/0-14 Cu/Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16373-3	Line 350-6 Cu/Al, Load (14) 10-14 Cu or 10 Al and (3) 1/0-14 Cu/Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16375-1	Line 600-2 Cu/Al, Load (12) 4-14 Cu or 4-12 Al, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16375-2	Line 600-2 Cu/Al, Load (12) 4-14 Cu or 4-12 Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16375-3	Line 600-2 Cu/Al, Load (12) 4-14 Cu or 4-12 Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16376-1	Line 600-2 Cu/Al, Load (6) 2-14 Cu or 2-8 Al and (3) 1/0-14 Cu or 1/10-8 Al, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16376-2	Line 600-2 Cu/Al, Load (6) 2-14 Cu or 2-8 Al and (3) 1/0-14 Cu or 1/10-8 Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16376-3	Line 600-2 Cu/Al, Load (6) 2-14 Cu or 2-8 Al and (3) 1/0-14 Cu or 1/10-8 Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16377-1	Line (2) 300-4 Cu/Al, Load (12) 4-14 Cu or 4-12 Al, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16377-2	Line (2) 300-4 Cu/Al, Load (12) 4-14 Cu or 4-12 Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16377-3	Line (2) 300-4 Cu/Al, Load (12) 4-14 Cu or 4-12 Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16528-1	Line (2) 600-2 Cu/Al, Load (4) 3/0-6 Cu/Al and (4) 4-14 Cu/Al, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16528-2	Line (2) 600-2 Cu/Al, Load (4) 3/0-6 Cu/Al and (4) 4-14 Cu/Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16528-3	Line (2) 600-2 Cu/Al, Load (4) 3/0-6 Cu/Al and (4) 4-14 Cu/Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16530-1	Line (2) 500-6 Cu/Al, Load (12) 4-14 Cu/Al, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16530-2	Line (2) 500-6 Cu/Al, Load (12) 4-14 Cu/Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16530-3	Line (2) 500-6 Cu/Al, Load (12) 4-14 Cu/Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO
16541-1	Line 500-6 Cu/Al, Load (21) 6-14 Cu/Al, 1-Pole	Size per NEC®	10	YES	NO*	YES	NO
16541-2	Line 500-6 Cu/Al, Load (21) 6-14 Cu/Al, 2-Pole	Size per NEC®	10	YES	NO	YES	NO
16541-3	Line 500-6 Cu/Al, Load (21) 6-14 Cu/Al, 3-Pole	Size per NEC®	10	YES	NO	YES	NO

*May be possible to use if spaced as required per UL 508A Standard
** SCCR with up to 200kA
UL Recognized to Use Group C