

Quik-Spec™ Coordination Panelboard (QSCP) fusible 30-400 A panelboards



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Catalog symbol

- QSCP

Description

The Bussmann™ series Quik-Spec™ Coordination Panelboard (QSCP) is a configurable fusible panelboard for commercial/industrial branch or service entrance applications on systems up through 600 Vac.

This panelboard is especially designed to address the NEC® selective coordination requirements for emergency, legally required standby, critical operations data systems and Critical Operation Power Systems (COPS) per NEC 700.28, 701.27, 645.27 and 708.54. The QSCP is configured in order for the application. To confirm availability of options and constructions, contact your Bussmann series product representative.

Ratings

Volts: 600 Vac, 125 Vdc ≤ 80 A

Amps: 30, 60, 100, 200, 225, 400 A

SCCR: See Panelboard Short-Circuit Current Ratings table

Agency information

- UL® 67 – standard for panelboards
- UL 50/UL 50E – enclosures for electrical equipment
- cULus to CSA® Standard 22.2, No. 29-M1989 – panelboards and enclosed panelboards
- UL Listed, Class CTL panelboard
- U.B.C. and C.B.C. Seismic Qualified, and I.B.C. Approved

Main options

- Main Lug Only (MLO)
- Non-fused main disconnect
- Fused main disconnect

Branch disconnect options

- 1-, 2- and 3-pole 15, 20, 30, 40, 50, 60, 70, 90 and 100 amp rating rejection branch disconnects (see table on page 3 for details). Amp rating on 125 Vdc panels ≤ 80A. Contact factory for details.

Branch circuit positions

- 18, 30 and 42

Neutral options

- Unbonded and bonded 200, 400 and 800 A

Ground options

- Isolated and non-isolated

Enclosures

- NEMA® 1 and NEMA 3R

Spare fuse compartment

- Six space spare fuse compartment standard on all models

Average NEMA 1 QSCP weights*

- 18 circuit: 80 lbs (36 kg); 30 circuit: 100 lbs (45 kg); 42 circuit: 110 lbs (50 kg)

* Weight varies by options chosen. If needed, consult factory for exact weight.

CCP2B horsepower ratings

| Branch disconnect | Amp rating | Hp rating @ Vac | | | | |
|----------------------|------------|-----------------|------|-------|-----|-----|
| | | 120 | 240* | 240** | 480 | 600 |
| CCP2B-(poles)-15CF | 15 | 0.5 | 1.5 | 3 | 5 | 7.5 |
| CCP2B-(poles)-20CF | 20 | 0.75 | 2 | 3 | 7.5 | 10 |
| CCP2B-(poles)-30CF | 30 | 1.5 | 3 | 5 | 15 | 10 |
| CCP2B-(poles)-40CF | 40 | 2 | 3 | 7.5 | 20 | 10 |
| CCP2B-(poles)-50CF | 50 | 3 | 5 | 7.5 | 20 | 10 |
| CCP2B-(poles)-60CF | 60 | 3 | 7.5 | 7.5 | 20 | 10 |
| CCP2B-(poles)-70CF† | 70 | 3 | 7.5 | 15 | 30 | 40 |
| CCP2B-(poles)-90CF† | 90 | 5 | 10 | 20 | 50 | 40 |
| CCP2B-(poles)-100CF† | 100 | 5 | 10 | 20 | 50 | 40 |

* Split-phase

** Three-phase

† Available for a bus rating of 225 A or higher.

AC and DC voltages and system types

AC Voltages

1-phase, 2 wire
• 120V, 240V

1-phase, 3 wire
• 120/240V

• 1-phase, 2 wire, Wye
• 277V

1-phase, 2 wire, Delta
• 480V

1-phase, 3 wire, Delta
• 240/480V
3-phase, 4 wire, Wye

• 208Y/120V, 480Y/277V, 600Y/347V

3-phase, 4 wire, Delta
• 240/120V, 480/240V

3-phase, 3 wire, Delta
• 240V, 480V, 600V,
240V Gnd B, 480V Gnd B, 600V Gnd B

1-phase, 3 wire, Wye
• 208Y/120V, 480Y/277V

DC Applications
Panel bus configured for DC applications, MLO option only, CCP2B 125Vdc ≤ 80A

Panelboard Short-Circuit Current Ratings (SCCRs)

| SCCR | AC main options | | | | DC |
|------|----------------------|--|---|-----------------------------------|----------------------|
| | Main Lug Only (MLO)* | 70-200 A main disc. no fuses* or w/ Class J fuses | 225-400 A main disc. no fuses* or w/ Class J fuses | CCP2_CF main disc. (≤ 100 A)** | Main Lug Only (MLO)* |
| High | 200 kA | 200 kA | 100 kA | 200 kA | 100 kA |
| Std. | 50 kA | 50 kA | 50 kA | 50 kA | 20 kA |

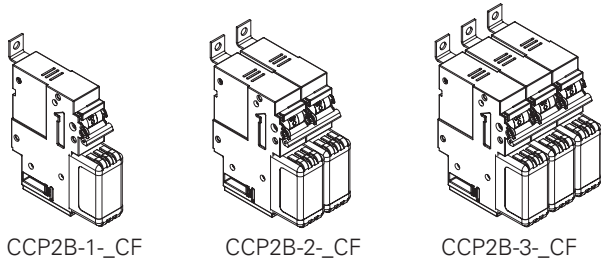
* For panelboards with subfeed main lugs, or panelboards with optional feed-through lugs, Class J, T, or R fuses are required upstream - max amps = panel amps.
** CUBEFuse™ disconnect.

Configuration table

| Enclosure height | Panel amps | Branch positions | Available configurations | |
|------------------|------------|------------------|---|---|
| 33" | 30-200 | 18 | - main lug only, with or without feed-through lugs - non-fused disconnect, no loadside options | |
| | | 30 | - main lug only, no loadside options | |
| | 30-60 | 18 | - 30 through 60A fused main disconnect | |
| | | 30 | - 30 through 60A fused main disconnect, | |
| | | 42 | - 30 through 60A fused main disconnect | |
| | | 18 | - 70 through 200A fused main disconnect | |
| 50" | 70-200 | 30 | - 70 through 200A fused main disconnect, with or without feed-through lugs | |
| | | 18 | - main lug only - non-fused disconnect | |
| | 30-200 | 30 | - main lug only - non-fused disconnect | |
| | | 42 | - main lug only - non-fused disconnect | |
| | | 225-400 | 18 | - main lug only - non-fused disconnect |
| | | | 30 | - main lug only - 70 through 200A fused main disconnect |
| | 59" | 225-400 | 30 | - 70 through 200A fused main disconnect - 70 through 200A fused main disconnect |
| | | | 42 | - non-fused disconnect |
| | | 30-200 | 18 | - main lug only with loadside disconnect - non-fused disconnect - 225 through 400A fused disconnect |
| | | | 30 | - main lug only - 225 through 400A fused disconnect, with no loadside options |
| | | | 42 | - main lug only - non-fused disconnect, with no loadside options |
| | | | 18 | - non-fused disconnect, with loadside disconnect - main lug only, with loadside disconnect |
| 69" | 225-400 | 30 | - 225 through 400A fused disconnect | |
| | | 42 | - non-fused disconnect - 225 through 400A fused main disconnect | |

Other enclosures available. Consult factory for details.

Branch disconnects



70 to 100 amp switch box lug conductor data, 75°C Cu

| AWG range | Class | Quantity | Torque N·m (lb-in) |
|-----------|---------------------------------|----------|--------------------|
| 12-18 | | | 2.26 (20) |
| 10 | | | 2.82 (25) |
| 8 | Stranded, Class B to K | Single | 4.52 (40) |
| 4-6 | | | 5.08 (45) |
| 1-3 | | | 6.21 (55) |
| 3-12 | Stranded, Class B to K | Dual | 3.95 (35) |
| 12-18 | | | 2.26 (20) |
| 10 | | Single | 3.95 (35) |
| 1-8 | Stranded, UL ferrule, Class B/C | | 4.52 (40) |
| 10-18 | | Twin† | 2.26 (20) |
| 6-8 | | | 2.82 (25) |
| 10-18 | Solid | Single | 2.26 (20) |
| 10-18 | | Dual | 2.26 (20) |
| 8-18 | | Single | 2.26 (20) |
| 1-6 | Class K | | 3.39 (30) |
| 3-10 | | Dual | 5.08 (45) |
| 8-18 | | Single | 2.26 (20) |
| 1-6 | Class K, UL ferrule | | 3.39 (30) |
| 6-18 | | Twin | 2.26 (20) |

15 to 60 amp switch box lug conductor data, 75°C Cu

| AWG range | Class | Quantity | Torque N·m (lb-in) |
|-----------|---------------------------------|-------------|--------------------|
| 4-6 | | | 3.95 (35) |
| 8-18 | Stranded, Class B to K | Single | 2.26 (20) |
| 6-8 | Stranded, Class B/C | | 3.39 (30) |
| 6-8 | Stranded, Class K | Dual | 2.26 (20) |
| 10-18 | Stranded, Class B to K | | 2.26 (20) |
| 10-18 | Solid | Single/dual | 2.26 (20) |
| 4-18 | | Single | 3.39 (30) |
| 6-18 | Stranded, UL ferrule, Class B/C | Twin† | 2.26 (20) |
| 4-18 | | Single | 2.82 (25) |
| 6-18 | Stranded, UL ferrule, Class K | Twin† | 2.26 (20) |

† Two stranded conductors placed in one UL Listed twin ferrule.

† Two stranded conductors placed in one UL Listed twin ferrule.

Available Bussmann series CUBEFuse

| CCP2B* cat. no. | Poles | Fuse amp range | Max CCP2B amps | Typical installed fuse amp range | | |
|-----------------|-------|----------------|----------------|--|-------------------------------|--|
| | | | | Time-delay non-indicating fuses | Time-delay indicating fuses** | Fast-acting non-indicating fuses |
| CCP2B-1-15CF | 1 | | | TCF1RN, TCF3RN, TCF6RN, TCF10RN, TCF15RN | TCF6, TCF10, TCF15 | FCF1RN, FCF3RN, FCF6RN, FCF10RN, FCF15RN |
| CCP2B-2-15CF | 2 | 1 to 15 | 15 | | | |
| CCP2B-3-15CF | 3 | | | | | |
| CCP2B-1-20CF | 1 | | | TCF17-1/2RN, TCF20RN | TCF17-1/2, TCF20 | FCF20 |
| CCP2B-2-20CF | 2 | 1 to 20 | 20 | | | |
| CCP2B-3-20CF | 3 | | | | | |
| CCP2B-1-30CF | 1 | | | TCF25RN, TCF30RN | TCF25, TCF30 | FCF25RN, FCF30RN |
| CCP2B-2-30CF | 2 | 1 to 30 | 30 | | | |
| CCP2B-3-30CF | 3 | | | | | |
| CCP2B-1-40CF | 1 | | | TCF35RN, TCF40RN | TCF35, TCF40 | FCF35RN, FCF40RN |
| CCP2B-2-40CF | 2 | 1 to 40 | 40 | | | |
| CCP2B-3-40CF | 3 | | | | | |
| CCP2B-1-50CF | 1 | | | TCF45RN, TCF50RN | TCF45, TCF50 | FCF45RN, FCF50RN |
| CCP2B-2-50CF | 2 | 1 to 50 | 50 | | | |
| CCP2B-3-50CF | 3 | | | | | |
| CCP2B-1-60CF | 1 | | | TCF60RN | TCF60 | FCF60RN |
| CCP2B-2-60CF | 2 | 1 to 60 | 60 | | | |
| CCP2B-3-60CF | 3 | | | | | |
| CCP2B-1-70CF | 1† | | | TCF70RN | TCF70 | FCF70RN |
| CCP2B-2-70CF | 2† | 1 to 70 | 70 | | | |
| CCP2B-3-70CF | 3† | | | | | |
| CCP2B-1-90CF | 1† | | | TCF80RN, TCF90RN | TCF80, TCF90 | FCF80RN, FCF90RN |
| CCP2B-2-90CF | 2† | 1 to 90 | 90 | | | |
| CCP2B-3-90CF | 3† | | | | | |
| CCP2B-1-100CF | 1† | | | TCF100RN | TCF100 | FCF100RN |
| CCP2B-2-100CF | 2† | 1 to 100 | 100 | | | |
| CCP2B-3-100CF | 3† | | | | | |

* CCP2B disconnect can accept CUBEfuses with amp ratings less than or equal to the amp rating of the CCP2B disconnect.

** Correct fit with CCP2B disconnect requires indicating CUBEfuses with date code R38 or later.

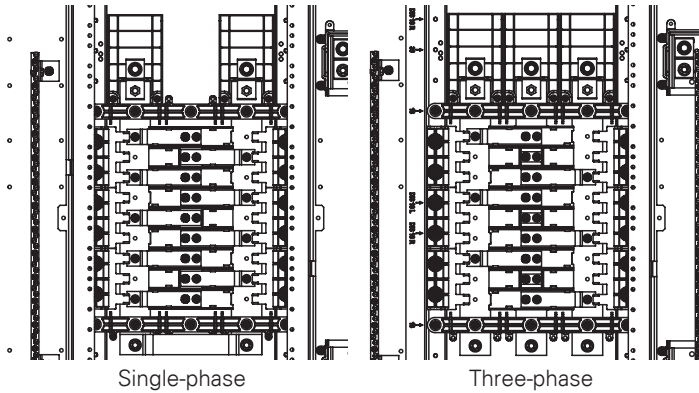
† Available for a bus rating of 225 A or higher.

Busing

The busing features tin-plated copper with sufficient cross section to meet UL 67 temperature rise requirements.

Distributed 1- and 3-phase busing

All CCP2B branch disconnects can be mounted in any branch circuit position.

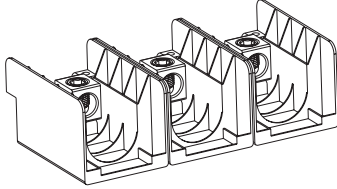


Single-phase

Three-phase

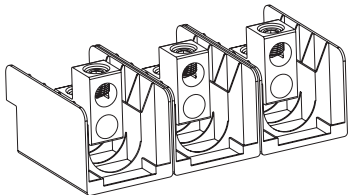
≤ 200 A main lugs for 60/75° Cu-Al conductors

Main mechanical lugs



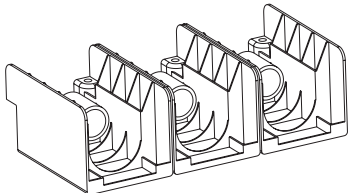
- ≤ 60 A panels
 - 2-4 AWG / 5.6 N•m (50 lb-in)
 - 6-10 AWG / 4.5 N•m (40 lb-in)
 - 12-14 AWG / 1.7 N•m (15 lb-in)
- > 60 to 200 A panels
 - 300 kcmil-1 AWG / 42 N•m (375 lb-in)
 - 2-6 AWG / 31 N•m (275 lb-in)

Main sub-feed mechanical lugs



- ≤ 200 A panels, 300 kcmil - 6 AWG / 31 N•m (275 lb-in)
- Smaller lugs for ≤ 60 amp panels not available.

Main compression (crimp) lugs*



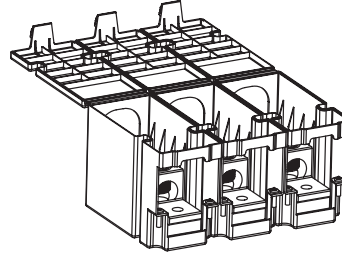
- ≤ 60 A panels, 8 AWG-1/0
- > 60 A panels, 300 kcmil-4 AWG

* Versa-Crimp® VC-6 crimp tool recommended for wire crimping.

** Not available with Surge Protective Device (SPD) option.

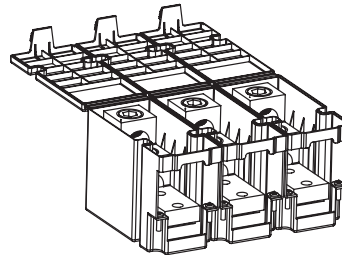
225-400 A main lugs for 60/75° Cu-Al conductors

Main mechanical lugs



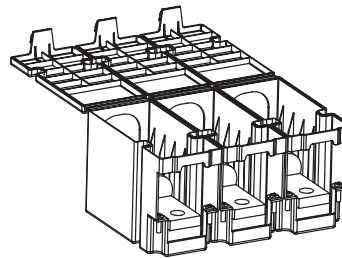
Main barrier cover open wire, 600 kcmil-4 AWG / 56 N•m (500 lb-in)

Main sub-feed mechanical lugs



Main barrier cover open wire, 600 kcmil-2 AWG / 42 N•m (375 lb-in)

Main compression (crimp) lugs*



Main barrier cover open wire, 600-250 kcmil

Feed-through lugs

Compression, mechanical and double (sub-feed) lugs are all available as feed-through lugs except if the Surge Protective Device (SPD) or loadside disconnect options are chosen. Lug amp ratings will be based upon panelboard amp rating.

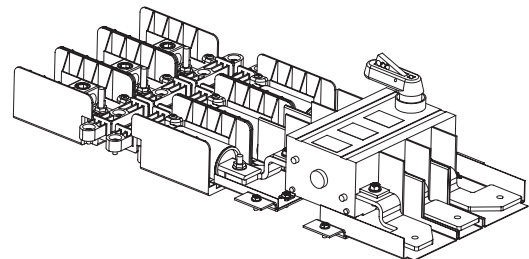
225-400 A loadside fused disconnect available on

- 18 and 30 branch position MLO
- 18 branch position non-fused main disconnect

Switch amps: 200

Mechanical lugs

- 300 kcmil-1 AWG / 42 N•m (375 lb-in)
- 2-6 AWG / 31 N•m (275 lb-in)



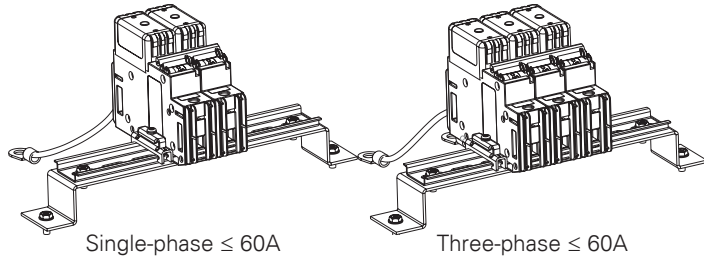
Fuse mounting torque: 4.5 N•m (40 lb-in)

30-100 A main disconnects for 75°C Cu conductors

30-100A fused main disconnects (CCP2), 1- and 3-phase

Not available with DC ratings

- 10-18 AWG single and dual / 2.2 N•m (20 lb-in)
- 6-8 AWG single and dual / 3.9 N•m (35 lb-in)
- 4 AWG single / 3.9 N•m (35 lb-in)

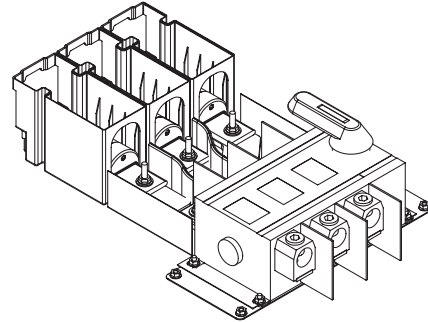


225-400 A main disconnects for 75°C Cu conductors

Fused main disconnect, 1- and 3-phase

Not available with DC ratings

- 600 kcmil-2 AWG / 42 N•m (375 lb-in)
- Fuse mounting torque: 4.5 N•m (40 lb-in)

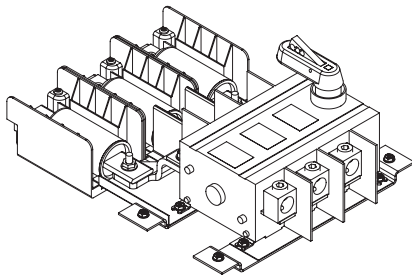


70-200 A main disconnects for 75°C Cu conductors:

Fused main disconnect, 1- and 3-phase

Not available with DC ratings

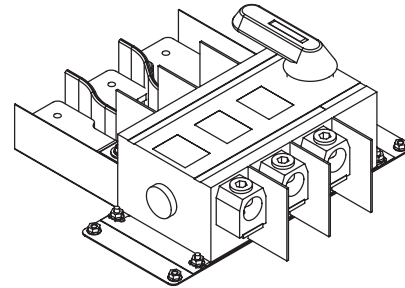
- 300 kcmil-4 AWG / 23 N•m (200 lb-in)
- Fuse mounting torque 4.5 N•m (40 lb-in)



Non-fused main disconnect, 1- and 3-phase

Not available with DC ratings

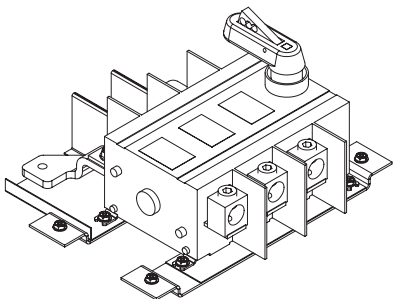
- 600 kcmil-2 AWG / 42 N•m (375 lb-in)



Non-fused main disconnect, 1- and 3-phase

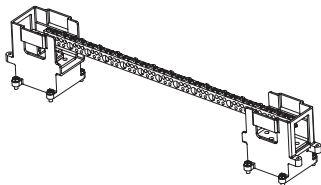
Not available with DC ratings

300 kcmil-4 AWG / 23 N•m (200 lb-in)



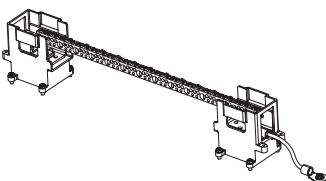
Neutral assemblies for 60/75°C Cu-Al conductors

200 A Unbonded



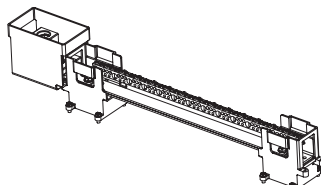
- Main terminal 300 kcmil-1 AWG / 42 N•m (375 lb-in)
- Branch connections - see table
- Bar material: aluminum

200 A Bonded



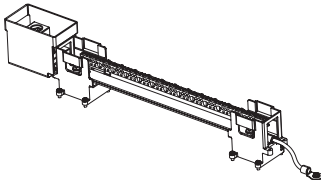
- Main terminal 300 kcmil-1 AWG / 42 N•m (375 lb-in)
- Branch connections - see table
- Bar material: aluminum

400 A Unbonded



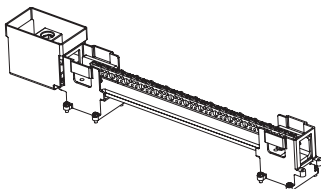
- Main terminal 600 kcmil-4 AWG / 56 N•m (500 lb-in)
- Branch connections - see table
- Bar and lug material: aluminum

400 A Bonded



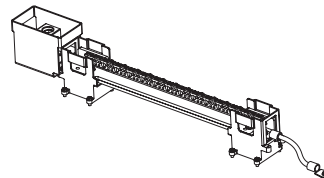
- Main terminal 600 kcmil-4 AWG / 56 N•m (500 lb-in)
- Branch connections - see table
- Bar and lug material: aluminum

800 A Unbonded



- Main terminal (2) 600 kcmil-4 AWG / 42 N•m (375 lb-in)
- Branch connections - see table
- Bar and lug material: aluminum

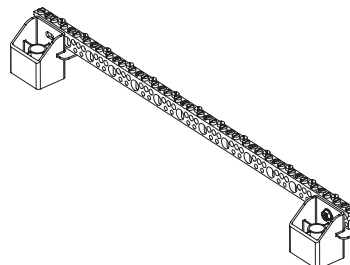
800 A Bonded



- Main terminal (2)600 kcmil-4 AWG / 42 N•m (375 lb-in)
- Branch connections - see table
- Bar and lug material: aluminum

Ground assemblies for 60/75°C Cu-Al conductors

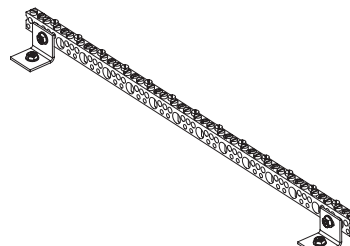
Isolated



Wire range and torque - see table

Bar material: aluminum

Non-isolated



Wire range and torque - see table

Bar material: aluminum

Neutral and Ground Assembly Installation

To facilitate installation and wiring, both neutral and ground assemblies can be installed on either side of the chassis with the desired orientation using the supplied screws. Assembly torque 2.8 N•m (25 lb-in)

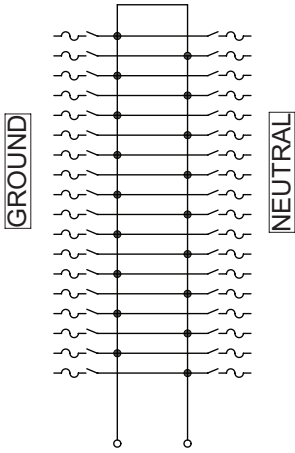
Ground and neutral bar wire connections

| Wire AWG* | Torque lb-in (N•m) | Maximum number of wires per opening | |
|----------------------|---------------------|-------------------------------------|--------|
| | | Neutral | Ground |
| Small opening | | | |
| 14 | 25-35 (2.8-3.9) | 2 | 2 |
| 12 | 25-35 (2.8-3.9) | 2 | 2 |
| 10 | 25-35 (2.8-3.9) | 2 | 2 |
| 8 | 30-40 (3.4-4.5) | 1 | 1 |
| 6-4 | 35-40 (3.9-4.5) | 1 | 1 |
| Large opening | | | |
| 14 | 25-35 (2.8-3.9) | 3 | 3 |
| 12 | 25-35 (2.8-3.9) | 3 | 3 |
| 10 | 35 (3.9) | 3 | 3 |
| 8 | 30-40 (3.4-4.5) | 1 | 1 |
| 6-4 | 35-40 (3.9-4.5) | 1 | 1 |
| 3-1/0 | 40-50 (4.5-5.6) | 1 | 1 |

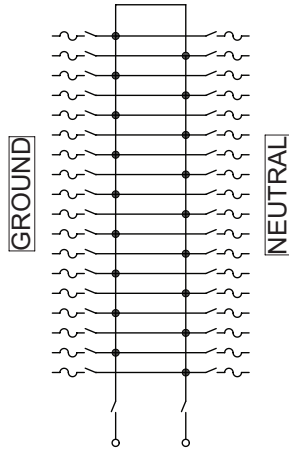
* 60/75°C, Cu-Al.

Typical schematics

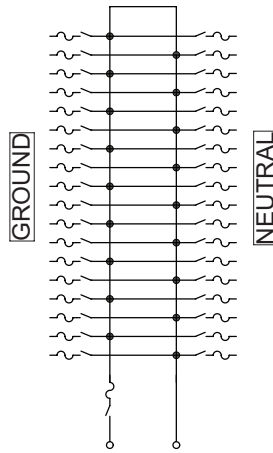
See main fused disconnect switch rating, if used.



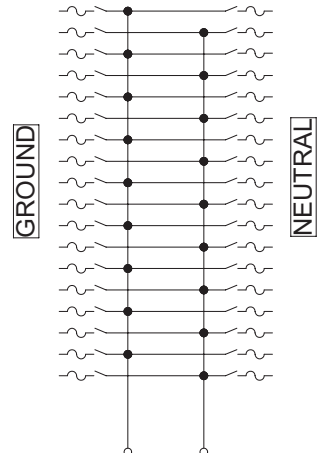
Single-Phase, 2 Wire
Main Lug Only



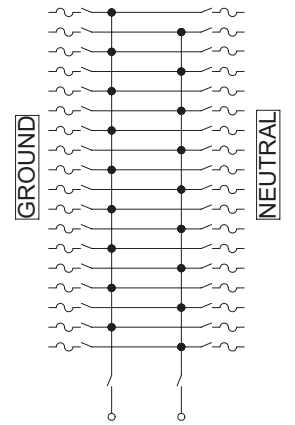
Single-Phase, 2 Wire
Non-Fused Disconnect



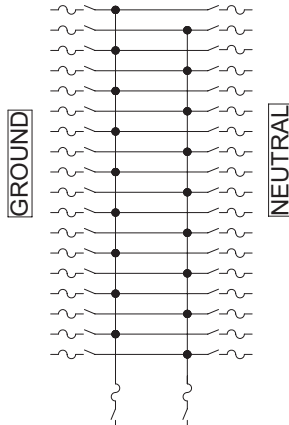
Single-Phase, 2 Wire
Fused Disconnect



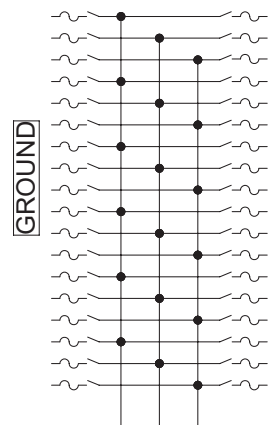
Single-Phase, 3 Wire
Main Lug Only



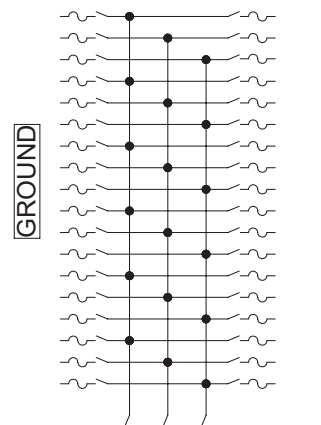
Single-Phase, 3 Wire
Non-Fused Main Disconnect



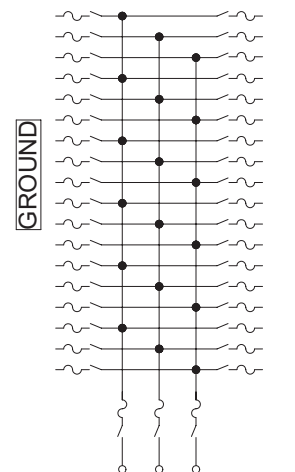
Single-Phase, 3 Wire
Fused Main Disconnect



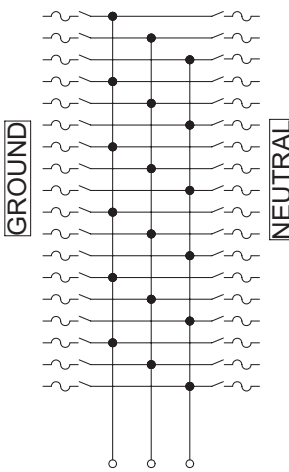
Three-Phase, 3 Wire
Main Lug Only



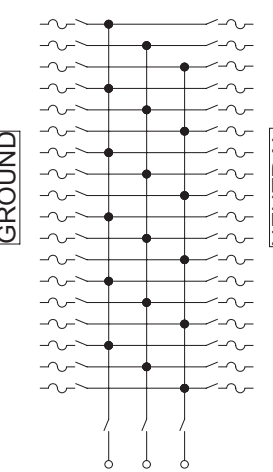
Three-Phase, 3 Wire
Non-Fused Main Disconnect



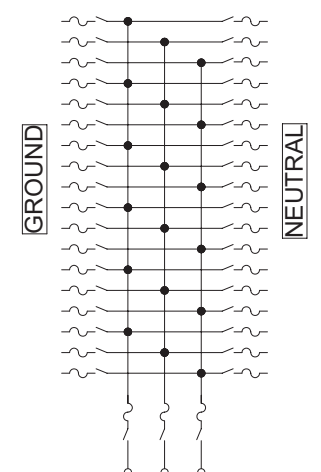
Three-Phase, 3 Wire
Fused Main Disconnect



Three-Phase, 4 Wire
Main Lug Only



Three-Phase, 4 Wire
Non-Fused Main Disconnect

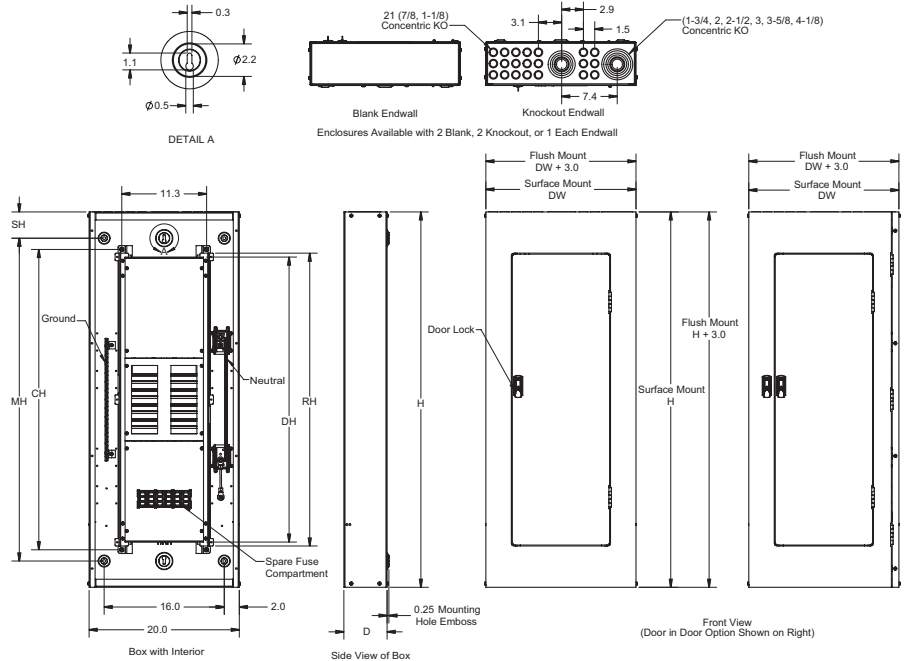


Three-Phase, 4 Wire
Fused Main Disconnect

Enclosures

NEMA 1 enclosures and interior

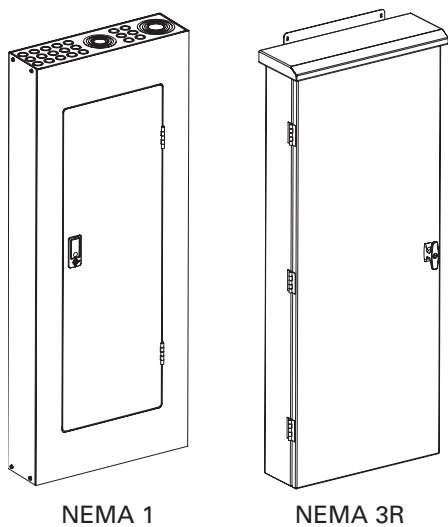
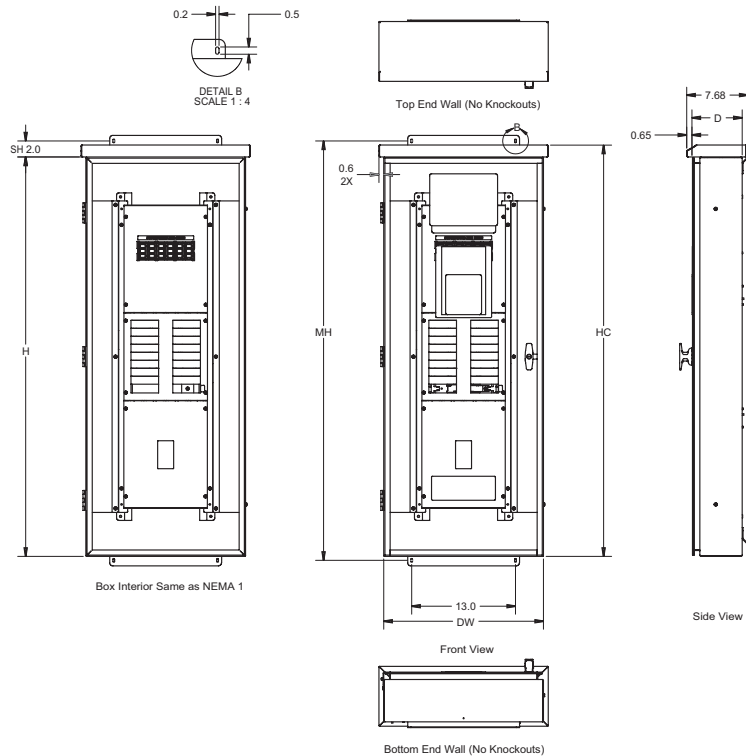
- Flush or surface mount
- Galvanized steel with removable end walls - blank or with knockouts to order
- Box sizes: 20" W x 5.75" D x 33", 50", 59" or 69" H (510 W x 145 D x 838, 1270, 1500 or 1753mm H). Box can be rotated 180° to accommodate conduit feed
- Enclosure and chassis mounting instructions are found in supplied literature
- Chassis mounts directly onto studs in the enclosure
- Trim finished with gray powder coat paint over phosphatized steel (ANSI 61)
- Door and door-in-door configurations with locks
- Door locks use key #2A1910-2
- Circuit directory card is located on the inside of the door
- Trim screws are concealed



NEMA 3R enclosures

Interior same as NEMA 1

- Surface mount only
- Finished with gray powder coat paint over phosphatized steel (ANSI 61)
- Bottom feed only, no knockouts
- Box sizes: 20" W x 7.7" D x 34.5", 51.5", 60.5" or 70.5 H (510 W x 195 D x 876, 1310, 1535 or 1791mm H)
- Enclosure and chassis mounting instructions are found in supplied literature
- Chassis mounts directly onto studs in the enclosure
- Gasketed door has vault handle with lock
- Door locks use key #2A1910-1
- Circuit directory card is located on the inside of the door



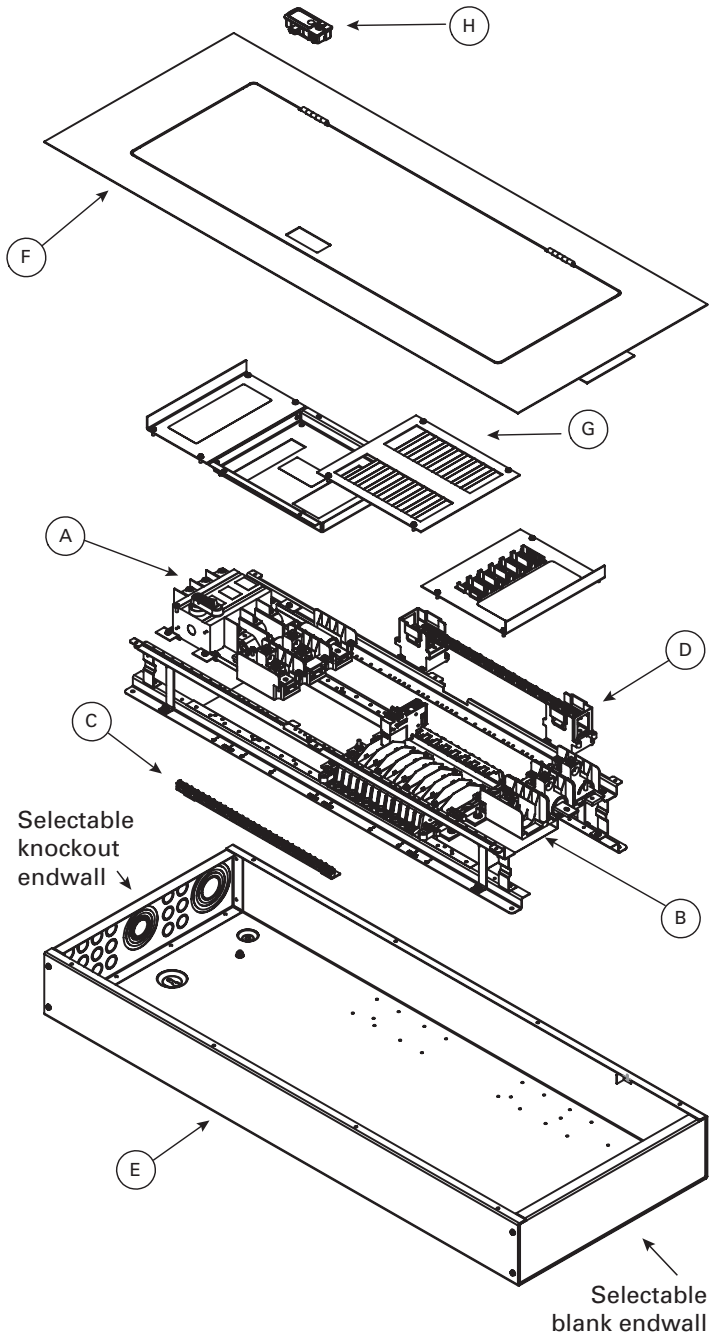
Enclosure dimensions — in

| Enclosure type | Height | H | HC | MH | CH | DH | RH | SH | DW | D |
|----------------|--------|----|------|------|----|------|----|-----|----|-----|
| NEMA 1 | 33 | 33 | N/A | 29.0 | 26 | 28.9 | 25 | 2.0 | 20 | 5.7 |
| | 50 | 50 | N/A | 43.0 | 40 | 37.9 | 39 | 3.5 | 20 | 5.7 |
| | 59 | 59 | N/A | 52.0 | 49 | 46.9 | 48 | 3.5 | 20 | 5.7 |
| | 69 | 69 | N/A | 62.0 | 59 | 56.9 | 58 | 3.5 | 20 | 5.7 |
| NEMA 3R | 33 | 33 | 34.5 | 35.5 | 26 | 28.9 | 25 | 2.0 | 20 | 6.3 |
| | 50 | 50 | 51.5 | 52.5 | 40 | 37.9 | 39 | 2.0 | 20 | 6.3 |
| | 59 | 59 | 60.5 | 61.5 | 49 | 46.9 | 48 | 2.0 | 20 | 6.3 |
| | 69 | 69 | 70.5 | 71.5 | 59 | 56.9 | 58 | 2.0 | 20 | 6.3 |

Other enclosures available. Consult factory for details.

Panelboard replacement parts

See list for part numbers.



A and B - main devices and lugs

| | |
|------------|---|
| 2A1909-1* | Kit, compression lug 3-phase, 70-200 A |
| 2A1909-2* | Kit, mechanical lug 3-phase, 70-200 A |
| 2A1909-3* | Kit, double/sub-feed lug 3-phase, 30-200 A |
| 2A1909-4 | Kit, main disconnect 200 A |
| 2A1909-5* | Kit, compression lug 1-phase, 3 wire, 70-200 A |
| 2A1909-6* | Kit, mechanical lug 1-phase, 3 wire, 70-200 A |
| 2A1909-7* | Kit, double/sub-feed lug 1-phase, 3 wire, 30-200 A |
| 2A1909-8 | Kit, main disconnect 30-60 A 1-phase, 3 wire |
| 2A1909-9 | Kit, main disconnect 30-60 A 3-phase |
| 2A1909-10* | Kit, compression lug 3-phase, 30-60 A |
| 2A1909-11* | Kit, mechanical lug 3-phase, 30-60 A |
| 2A1909-12* | Kit, compression lug 1-phase, 3 wire, 30-60 A |
| 2A1909-13* | Kit, mechanical lug 1-phase, 3 wire, 30-60 A |
| 2A1909-14* | Kit, compression lug 1-phase, 2 wire, 70-200 A |
| 2A1909-15* | Kit, mechanical lug 1-phase, 2 wire, 70-200 A |
| 2A1909-16* | Kit, double/sub-feed lug 1-phase, 2 wire, 30-200 A |
| 2A1909-17* | Kit, compression lug 1-phase, 2 wire, 30-60 A |
| 2A1909-18* | Kit, mechanical lug 1-phase, 2 wire, 30-60 A |
| 2A1909-19 | Kit, main disconnect 30-60 A 1-phase, 2 wire, |
| 2A1909-20* | Kit, compression lug 3-phase, 225-400 A |
| 2A1909-21* | Kit, mechanical lug 3-phase, 225-400 A |
| 2A1909-22* | Kit, double/sub-feed lug 3-phase, 225-400 A |
| 2A1909-23* | Kit, compression lug 1-phase, 3 wire, 225-400 A |
| 2A1909-24* | Kit, mechanical lug 1-phase, 3 wire, 225-400 A |
| 2A1909-25* | Kit, double/sub-feed lug 1-phase, 3 wire, 225-400 A |
| 2A1909-26* | Kit, compression lug 1-phase, 2 wire, 225-400 A |
| 2A1909-27* | Kit, mechanical lug 1-phase, 2 wire, 225-400 A |
| 2A1909-28* | Kit, double/sub-feed lug 1-phase, 2 wire, 225-400 A |
| 2A1909-29 | Kit, main disconnect 225-400 A |
| 2A1909-30 | Kit, main disconnect 3-phase, 100 A |
| 2A1909-31 | Kit, main disconnect 1-phase, 3 wire, 100 A |
| 2A1909-32 | Kit, main disconnect 1-phase, 2 wire, 100 A |

* Also for use as feed-through lugs based upon panelboard amp rating

C - Ground bars

| | |
|----------|-------------------|
| 2A1907-1 | Kit, non-isolated |
| 2A1907-2 | Kit, isolated |

D - Neutral bars

| | |
|----------|---------------------|
| 2A1908-1 | Kit, 200 A unbonded |
| 2A1908-2 | Kit, 400 A unbonded |
| 2A1908-3 | Kit, 200 A bonded |
| 2A1908-4 | Kit, 400 A bonded |
| 2A1908-5 | Kit, 800 A unbonded |
| 2A1908-6 | Kit, 800 A bonded |

E - Enclosures and boxes

| | |
|-------------|--|
| 2A1690-1XX† | NEMA 1 box, 50" tall |
| 2A1690-2XX† | NEMA 1 box, 59" tall |
| 2A1690-3XX† | NEMA 1 box, 69" tall |
| 2A1690-4XX† | NEMA 1 box, 33" tall |
| 2A1649-1 | NEMA 3R enclosure, 51.5" tall |
| 2A1649-2 | NEMA 3R enclosure, 60.5" tall |
| 2A1649-3 | NEMA 3R enclosure, 70.5" tall |
| 2A1649-4 | NEMA 3R enclosure, 34.5" tall |
| 2A1916-1 | Kit, blank enclosure endwall (set of 2) |
| 2A1916-2 | Kit, knockout enclosure endwall (set of 2) |

† XX in the part number denotes endwall choices B = Blank and K = Knockout

F - Enclosure doors

200 amp models

| | |
|-----------|-----------------------------------|
| 2A1667-1 | Door, surface for 50" box |
| 2A1667-2 | Door, surface for 59" box |
| 2A1667-3 | Door, flush for 50" box |
| 2A1667-4 | Door, flush for 59" box |
| 2A1667-5 | Door-in-door, surface for 50" box |
| 2A1667-6 | Door-in-door, surface for 59" box |
| 2A1667-7 | Door-in-door, flush for 50" box |
| 2A1667-8 | Door-in-door, flush for 59" box |
| 2A1667-13 | Door, surface for 33" box |
| 2A1667-14 | Door, flush for 33" box |
| 2A1667-15 | Door-in-door, surface for 33" box |
| 2A1667-16 | Door-in-door, flush for 33" box |

400 amp models

| | |
|-----------|-----------------------------------|
| 2A1667-9 | Door, surface for 69" box |
| 2A1667-10 | Door, flush for 69" box |
| 2A1667-11 | Door-in-door, surface for 69" box |
| 2A1667-12 | Door-in-door, flush for 69" box |
| 2A1667-17 | Door, surface for 50" box |
| 2A1667-18 | Door, flush for 50" box |
| 2A1667-19 | Door-in-door, surface for 50" box |
| 2A1667-20 | Door-in-door, flush for 50" box |
| 2A1667-21 | Door, surface for 59" box |
| 2A1667-22 | Door, flush for 59" box |
| 2A1667-23 | Door-in-door, surface for 59" box |
| 2A1667-24 | Door-in-door, flush for 59" box |

G - Deadfronts - branch enclosure

| | |
|----------|------------------------------|
| 2A1906-1 | Kit, single KO, 18 positions |
| 2A1906-2 | Kit, single KO, 30 positions |
| 2A1906-3 | Kit, single KO, 42 positions |
| 2A1960-1 | Kit, double KO, 18 positions |
| 2A1960-2 | Kit, double KO, 30 positions |
| 2A1960-3 | Kit, double KO, 42 positions |

H - Keys and locks

| | |
|----------|-----------------------------------|
| 2A1910-1 | Kit, NEMA 3R replacement keys (2) |
| 2A1910-2 | Kit, NEMA 1 door lock and 2 keys |
| 2A1910-3 | Kit, NEMA 3R door lock and 2 keys |
| 2A1910-4 | Kit, NEMA 1 replacement keys (2) |

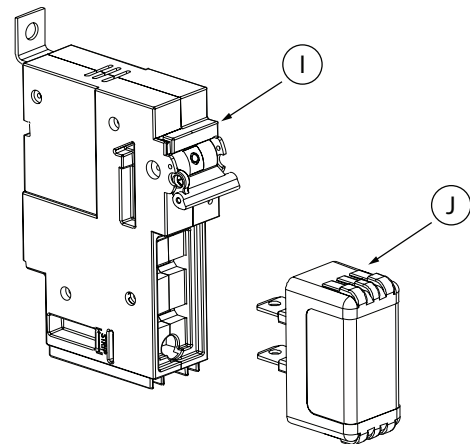
Lockout/tagout devices

| | |
|----------|--|
| 2A1912-1 | Kit, lockout 70-400 A main |
| 2A1912-2 | Kit, lockout 30-60 A main |
| 2A1912-3 | Kit, branch (3M Panelsafe) 18 position |
| 2A1912-4 | Kit, branch (3M Panelsafe) 30 position |
| 2A1912-5 | Kit, branch (3M Panelsafe) 42 position |

Miscellaneous

| | |
|----------|--|
| 2A1914 | Kit, circuit directory card and sleeve |
| 2A1918-1 | ≤ 60 A Kit, branch knockout covers |
| 2A1915 | Kit, circuit number and fuse rating labels |
| 2A1918-2 | 70-100 A Kit, branch knockout covers |
| 2A1917-1 | Kit, panelboard hardware |
| 2A1919 | Kit, touch-up paint |
| 2A1917-2 | Kit, CCP2B hardware (10 screws) |
| 2A1961-1 | Kit, Spare Fuse Compart. TCF 1-100A |

CCP2B disconnects and CUBEFuse replacement parts



I - CCP2B branch disconnects

| Catalog symbol | Poles | Available switch amp ratings |
|-----------------|-------|-------------------------------------|
| CCP2B-1-(amp)CF | 1 | |
| CCP2B-2-(amp)CF | 2 | 15, 20, 30, 40, 50, 60, 70, 90, 100 |
| CCP2B-3-(amp)CF | 3 | |

J - time-delay and fast-acting CUBEFuse

| For CCP2B* cat. no. | Time-Delay | | Fast-Acting |
|----------------------|--|---------------------------------|--|
| | Non-indicating cat. no. TCF(amps) RN | Indicating** cat. no. TCF(amps) | Non-Indicating cat. no. FCF(amps) RN |
| CCP2B-(poles)-15CF | TCF1RN, TCF3RN, TCF6RN, TCF10RN, TCF15RN | TCF6, TCF10, TCF15 | FCF1RN, FCF3RN, FCF6RN, FCF10RN, FCF15RN |
| CCP2B-(poles)-20CF | TCF17-1/2RN, TCF20RN | TCF17-1/2, TCF20 | FCF20RN |
| CCP2B-(poles)-30CF | TCF25RN, TCF30RN | TCF25, TCF30 | FCF25RN, FCF30RN |
| CCP2B-(poles)-40CF | TCF35RN, TCF40RN | TCF35, TCF40 | FCF35RN, FCF40RN |
| CCP2B-(poles)-50CF | TCF45RN, TCF50RN | TCF45, TCF50 | FCF45RN, FCF50RN |
| CCP2B-(poles)-60CF | TCF60RN | TCF60 | FCF60RN |
| CCP2B-(poles)-70CF† | TCF70RN | TCF70 | FCF70RN |
| CCP2B-(poles)-90CF† | TCF80RN, TCF90RN | TCF80, TCF90 | FCF80RN, FCF90RN |
| CCP2B-(poles)-100CF† | TCF100RN | TCF100 | FCF100RN |

* CCP2B disconnect can accept any CUBEFuse with an amp rating less than or equal to its amp rating.

** 1 and 3 amp indicating CUBEFuse not available. Correct fit with CCP2B disconnect requires indicating CUBEFuse with date code R38 or later.

† Available for a bus rating of 225 A or higher.

Fuse and disconnect performance data:

For details and specifications, see these data sheets online at Eaton.com/bussmannseries.

| Product | Data sheet no. |
|------------------------------------|----------------|
| Low-Peak™ time-delay CUBEFuse | 9000 |
| Fast-acting CUBEFuse | 2147 |
| Low-Peak LPJ_SPI Class J fuses | 1006 and 1007 |
| CCP2 main disconnect (up to 100 A) | 10801 |
| CCP2B branch disconnect | 1161 |

Additional references:

- Application note no. 3148

CUBEFuse specifications

| Cat. symbols | Amp range | Description |
|--------------|-----------|-------------------------------------|
| TCF_ | 6-100 | Time-delay, indicating version |
| TCF_RN | 1-100 | Time-delay, non-indicating version |
| FCF_RN | 1-100 | Fast-acting, non-indicating version |

Description

The CUBEfuse is a finger-safe, dual-element, time-delay or fast-acting UL Class CF power fuse with Class J electrical performance characteristics.

Ratings

- Volts
 - 600Vac/300Vdc (TCF_ and TCF_RN)
 - 600Vac/dc (FCF_RN)
- Amps
 - 1-100 time-delay (non-indicating version)
 - 6-100 time-delay (indicating version)
 - 1-100 fast-acting (non-indicating version)
- IR
 - 300 kA RMS Sym. (UL up to 60 A)
 - 200 kA RMS. Sym (CSA all ratings, UL 70 to 100 A)
 - 100 kA DC (UL and CSA), (time-delay)
 - 50 kA DC (UL and CSA), (fast-acting)

Agency information

- UL Listed, Guide JDDZ, File E4273 (time-delay and fast-acting)
- CSA Certified Class 1422- 02, File 53787
- CE compliance for the European Union low voltage directive
- RoHS compliant

Watts loss at rated current

| Catalog no. | Watts loss |
|--------------------|------------|
| Time-dealy | |
| TCF30 | 3.99W |
| TCF60 | 6.23W |
| TCF100 | 9.51W |
| Fast-acting | |
| FCF30RN | 5.45W |
| FCF60RN | 7.27W |
| FCF100 | N/A |

Surge Protection Devices (SPDs)



Factory installed BSPMA_ three module SPD

Description

Factory installed SPDs are Bussmann series UL Listed open Type 1 arresters with local visual indication and remote contact signaling. Modules are easily replaced without tools with a mechanical keying between the base and module that ensures against installing an incorrect replacement.

Code requirement for Surge Protective Devices

NEC 700.8 requires a listed SPD to be installed in or on all emergency system switchboards and panelboards. All configurations of the QSCP intended for installation on an AC circuit can be ordered with an optional SPD to comply with this requirement.

The factory installed SPDs features a Form C contact relay rated to 250Vac/0.5A and 250Vdc/0.1A, 125Vdc/0.2A, 75Vdc/0.5A for easy integration into a monitoring system.

Although an external Type 1 SPD may be retrofitted to meet NEC 700.8 or other surge suppression needs, it's recommended to factory order the SPD to ensure the correct SPD type for the system voltage, as well as proper installation.

If an SPD is required after installation (surface mount QSCPs only), Eaton recommends installing the Type 1 or Type 2 BSPA (from 50 to 200 kA I_{max} surge current capacity) or the Type 1 or Type 2 BSPD (from 120 kA to 400 kA I_{max} surge current capacity).

Care should be taken to specify, from the catalog number system, the correct BSPA or BSPD for the electrical system's type and voltage.

Features

- Module locking system with module release button make module replacement easy without tools
- 200 kA Short-Circuit Current Rating (SCCR) make higher assembly SCCR ratings possible
- Remote signaling of all protection modules makes status monitoring easy and accurate in any monitoring scheme
- Remote contact signaling provides a floating changeover contact for use as a break or make contact, according to circuit concept.

Surge protection option precludes feed-through lug and loadside disconnect options.

| System voltage/type | Catalog Number | Data sheet no. |
|-------------------------|----------------|----------------|
| 120/240 Vac split-phase | BSPMA2240S3GR | 10772 |
| 347/600 Vac 3-phase Wye | BSPMA3600WYGR | |
| 240 Vac 3-phase Delta | BSPMA3240DLGR | 10773 |
| 480 Vac 3-phase Delta | BSPMA3480DLGR | |
| 120/208 Vac 3-phase Wye | BSPMA4208WYNGR | |
| 277/480 Vac 3-phase Wye | BSPMA4480WYNGR | 10774 |

See data sheets for specifications.

Advanced and integrated surge protection

Eaton surge protective devices (SPDs) are used to protect equipment from damage caused by surge events. They protect critical electrical and electronic equipment from damage by power surges. This is done by shunting high energy lightning surges (and other transient disturbances) away from the equipment being protected. It does this in nanoseconds by providing a low impedance surge path to ground while supporting power frequency voltage.

Eaton SPD series surge protective devices are the latest and most advanced UL 1449 4th Edition certified surge protectors. SPD series units are available in all common voltages and configurations and also in a variety of surge current capacity ratings from 50 to 400 kA.

All Eaton SPD units (Basic, Standard, and Standard With Surge Counter) use a display panel to indicate system status. The display panel is slightly different for each feature package. Each display has both green and red light emitting diodes (LEDs) to indicate the status of the protection on each phase. Green indicates the phase is fully protected. Red indicates a loss of protection. Wye, Split Phase and High-Leg Delta units have an additional set of green/red LEDs to indicate status of Neutral/Ground protection. When the LEDs turn red, an audible alarm sounds.

Remote display mounting option

The SPD series units offer the option of mounting its display remotely from the device. This is useful for applications where OEMs or other integrators would like to embed the unit within a piece of equipment and still be able to view its display.

Please see instruction manual IM01005019E for complete details.

Optional field-installable SPDs



BSPA_

BSPA is a Type 1 or Type 2 UL Listed SPD with from 50 kA to 200 kA surge current capacity. Field installed device, does not ship with QSCP. Must be ordered separately.



BSPD_

BSPD includes UL Listed Type 1 or Type 2 SPDs (depending on the configuration ordered) with surge current capacities from 120 kA to 400 kA and are configurable for Wye (120/208, 277/480, 600) and Delta (240, 480, 600) systems. Field installed device, does not ship with QSCP. Must be ordered separately.

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Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
Eaton.com

Bussmann Division
114 Old State Road
Ellisville, MO 63021
United States
Eaton.com/bussmannseries

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