

# Quik-Spec<sup>™</sup> Coordination Panelboard 30 - 400A fusible panelboards



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#### Catalog symbol:

· QSCP

#### **Description:**

A configurable fusible panelboard for commercial/industrial branch or service entrance applications on systems up through 600Vac.

The Quik-Spec Coordination Paneboard (QSCP) 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 to order for the application. To confirm availability of options and constructions, contact your Bussmann series representative.

#### Ratings

- · Volts:
  - 600Vac, 125Vdc ≤ 80A
- · Amns
  - · 30, 60, 100, 200, 225, 400A
- · 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
- Uniform Building Code (UBC) and California Building Code (CBC) Seismic Qualified, and IBC® 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 100A ampacity rejecting branch disconnects (see table on page 3 for details). Ampacity on 125Vdc panels ≤ 80A. Contact factory for details.

#### **Branch circuit positions**

· 18, 30 and 42

#### **Neutral options**

· Unbonded and bonded 200A, 400A and 800A

#### **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 (36kg)
30 circuit: 100 lbs (45kg)
42 circuit: 110 lbs (50kg)

#### **CCPB** horsepower ratings

	Amp_			Н	p rating	@ Vac
CCPB disconnect	rating	120	240*	240**	480	600
CCPB-(Poles)-15CF	15	0.5	1.5	3	5	7.5
CCPB-(Poles)-20CF	20	0.75	2	3	7.5	10
CCPB-(Poles)-30CF	30	1.5	3	5	15	10
CCPB-(Poles)-40CF	40	2	3	7.5	20	10
CCPB-(Poles)-50CF	50	3	5	7.5	20	10
CCPB-(Poles)-60CF	60	3	7.5	7.5	20	10
CCPB-(Poles)-70CF <sup>†</sup>	70	3	7.5	15	30	40
CCPB-(Poles)-90CF <sup>†</sup>	90	5	10	20	50	40
CCPB-(Poles)- 100CF <sup>†</sup>	100	5	10	20	50	40

<sup>\*</sup> Split-phase

#### Panelboard Short-Circuit Current Ratings (SCCRs)

	AC main opt	ions			DC
		70-200A	225-400A		
	Main Lug	main disc.	main disc.	CCP_CF	Main Lug
	Only	no fuses* or	no fuses* or	main disc.	Only
SCCR	(MLO)*	w/ Class J fuses	w/ Class J fuses	(≤ 60A)**	(MLO)*
High	200kA	200kA	100kA	200kA	100kA
Std.	50kA	50kA	50kA	50kA	20kA

<sup>\*</sup> 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.

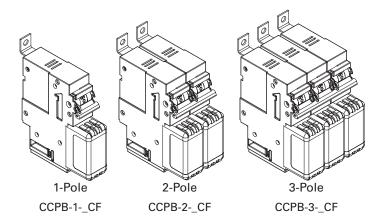
<sup>\*</sup> Weight varies by options chosen. If needed, consult factory for exact weight.

<sup>\*\*</sup>Three-phase

<sup>†</sup> Available for a bus rating of 225A or higher.

<sup>\*\*</sup> CUBEFuse disconnect.

#### **Branch disconnects:**



#### **Specifications**

Box lug loadside terminal:

- · 15 60A
  - 18-6AWG single and dual rated (same size wire), solid or stranded - 75°C, Cu only
  - 4AWG single 75°C, Cu only
- 100A
- 18-1AWG (1-45mm<sup>2</sup>) single, solid or stranded 75°C, Cu only and 6AWG dual 75°C, Cu only

Box lug loadside terminal torque:

- - · 18-10AWG 20 Lb-In (2.2 N•m)
  - 8-4AWG 35 Lb-In (3.9 Nom)
- - 18-10AWG 25 Lb-In (1-6mm<sup>2</sup>/2.82N•m
  - 8-1AWG 40 Lb-In (10-45mm<sup>2</sup>/4.52 N•m)
  - 6AWG 45 Lb-In (16mm<sup>2</sup>/5.08 N•m)

				Ту	pical installed fuse amp r	ange	
CCPB* part number	Poles	Fuse amp range	Max CCPB ampacity	Time-delay non-indicating fuses	Time-delay indicating fuses**	Fast-acting non-indicating fuses	
CCPB-1-15CF	1	_		TCF1RN, TCF3RN,		FCF1RN, FCF3RN,	
CCPB-2-15CF	2	1 to 15	15	TCF6RN, TCF10RN,	TCF6, TCF10, TCF15	FCF6RN, FCF10RN,	
CCPB-3-15CF	3			TCF15RN		FCF15RN	
CCPB-1-20CF	1	_					
CCPB-2-20CF	2	1 to 20	20	TCF17-1/2RN, TCF20RN	TCF17-1/2, TCF20	FCF20	
CCPB-3-20CF	3						
CCPB-1-30CF	1	_					
CCPB-2-30CF	2	1 to 30	30	TCF25RN, TCF30RN	TCF25, TCF30	FCF25RN, FCF30RN	
CCPB-3-30CF	3						
CCPB-1-40CF	1						
CCPB-2-40CF	2	1 to 40	40	TCF35RN,TCF40RN	TCF35, TCF40	FCF35RN, FCF40RN	
CCPB-3-40CF	3						
CCPB-1-50CF	1	_					
CCPB-2-50CF	2	1 to 50	50	TCF45RN, TCF50RN	TCF45, TCF50	FCF45RN, FCF50RN	
CCPB-3-50CF	3						
CCPB-1-60CF	1	_					
CCPB-2-60CF	2	1 to 60	60	TCF60RN	TCF60	FCF60RN	
CCPB-3-60CF	3						
CCPB-1-70CF	<b>1</b> <sup>†</sup>						
CCPB-2-70CF	<b>2</b> <sup>†</sup>	1 to 70	70	TCF70RN	TCF70	FCF70RN	
CCPB-3-70CF	$3^{\dagger}$						
CCPB-1-90CF	<b>1</b> †						
CCPB-2-90CF	<b>2</b> <sup>†</sup>	1 to 90	90	TCF80RN,TCF90RN	TCF80, TCF90	FCF80RN, FCF90RN	
CCPB-3-90CF	3⁺						
CCPB-1-100CF	1 <sup>†</sup>	_					
CCPB-2-100CF	<b>2</b> <sup>†</sup>	1 to100	100	TCF100RN	TCF100	FCF100RN	
CCPB-3-100CF	3⁺	_					

<sup>\*</sup> CCPB disconnect can accept CUBEFuses with amp ratings less than or equal to the amp rating of the CCPB disconnect.

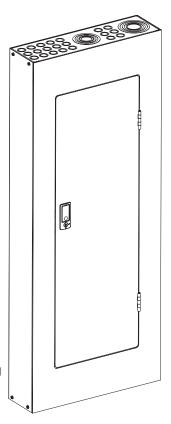
\*\* Correct fit with CCPB disconnect requires indicating CUBEFuses with date code R38 or later.

<sup>†</sup> Available for a bus rating of 225A or higher.

#### **Enclosure types:**

#### **NEMA 1**

- · 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



#### AC and DC voltages and system types:

#### **AC Voltages**

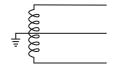
1-phase, 2 wire

· 120V, 240V

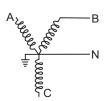


#### 1-phase, 3 wire

· 120/240V

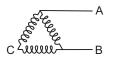


- · 1-phase, 2 wire, Wye
- · 277V



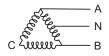
#### 1-phase, 2 wire, Delta

· 480V



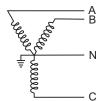
#### 1-phase, 3 wire, Delta

· 240/480V



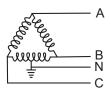
#### 3-phase, 4 wire, Wye

 208Y/120V, 480Y/277V, 600Y/347V



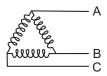
#### 3-phase, 4 wire, Delta

· 240/120V, 480/240V



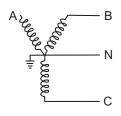
#### 3-phase, 3 wire, Delta

240V, 480V, 600V, 240V
 Grounded B, 480V Grounded
 B, 600V Grounded B



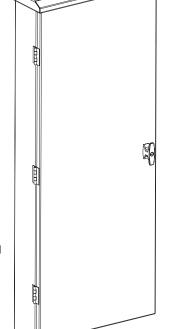
#### 1-phase, 3 wire, Wye

208Y/120V, 480Y/277V



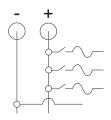
#### NEMA 3R

- · 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



#### **DC** Applications

Panel bus configured for DC applications, MLO option only, CCPB 125Vdc  $\leq$  80A

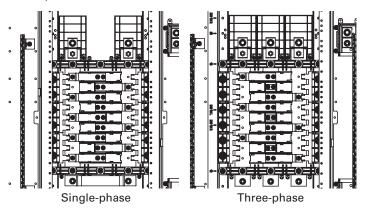


#### **Busing:**

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

Distributed 1- and 3-phase busing

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



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

#### Main mechanical lugs

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

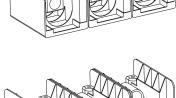
### Main sub-feed mechanical lugs

 ≤ 200A panels, 300kcmil - 6AWG, torque 275 Lb-In (31 N•m)

Smaller lugs for  $\leq$  60 amp panels not available.

### Main compression (crimp) lugs\*

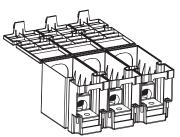
- · ≤60A panels, 8AWG-1/0
- · >60A panels, 300kcmil-4AWG



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

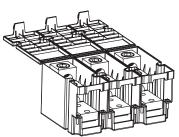
#### Main mechanical lugs

Main barrier cover open wire, 600kcmil-4AWG, torque 500 Lb-In (56 N•m)



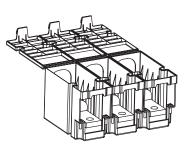
### Main sub-feed mechanical lugs

Main barrier cover open wire, 600kcmil-2AWG, torque 375 Lb-In (42 N•m)



### Main compression (crimp) lugs\*

Main barrier cover open wire, 600-250kcmil



#### Feed-through lugs

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

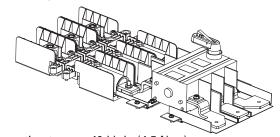
#### 225-400A loadside fused disconnect available on:

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

Switch amps: 200

Mechanical lugs

- 300kcmil-1AWG, torque 375 Lb-In (42 N•m)
- · 2-6AWG, torque 275 Lb-In (31 N•m)



Fuse mounting torque: 40 Lb-In (4.5 N•m)

<sup>\*</sup> Versa-Crimp® VC-6 crimp tool recommended for wire crimping.

<sup>\*\*</sup> Not available with Surge Protective Device (SPD) option.

#### Technical Data 1160

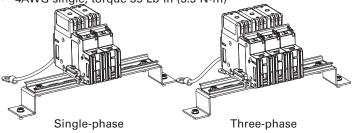
Effective June 2016

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

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

Not available with DC ratings

- 18-10AWG single and dual, torque 20 Lb-ln (2.2 N•m)
- · 8-6AWG single and dual, torque 35 Lb-In (3.9 N•m)
- · 4AWG single, torque 35 Lb-In (3.9 N•m)

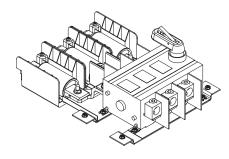


## 70-200A main disconnects for 75°C Cu conductors:

#### Fused main disconnect, 1- and 3-phase

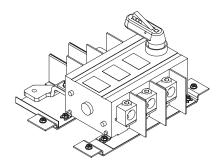
Not available with DC ratings

- · 300kcmil-4AWG, torque 200 Lb-In (23 N•m)
- Fuse mounting torque: 40 Lb-In (4.5 Nem)



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

Not available with DC ratings
300kcmil-4AWG, torque 200 Lb-In (23 N•m)

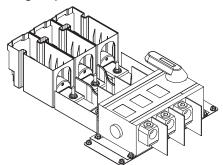


### 225-400A main disconnects for 75°C Cu conductors:

#### Fused main disconnect, 1- and 3-phase

Not available with DC ratings

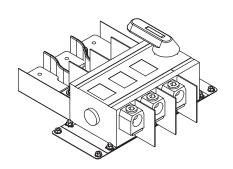
- · 600kcmil-2AWG, torque 375 Lb-In (42 N•m)
- · Fuse mounting torque: 40 Lb-In (4.5 N•m)



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

Not available with DC ratings

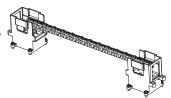
· 600kcmil-2AWG, torque 375 Lb-In (42 N•m)



#### Neutral assemblies for 60/75°C Cu/Al conductors:

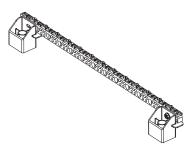
#### 200A Unbonded

- Main terminal 300kcmil-1AWG torque 375 Lb-In (42 N•m)
- Branch connections see table
- Bar material: aluminum



#### Isolated

Wire range and torque - see table Bar material: aluminum



#### 200A Bonded

- Main terminal 300kcmil-1AWG torque 375 Lb-In (42 N•m)
- Branch connections see table
- Bar material: aluminum



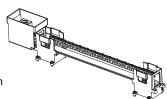
#### Non-isolated

Wire range and torque - see table Bar material: aluminum



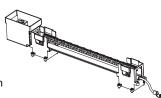
#### 400A Unbonded

- Main terminal 600kcmil-4AWG, torque 500 Lb-In (56 Nem)
- Branch connections see table
- Bar and lug material: aluminum



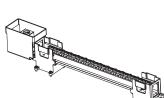
#### 400A Bonded

- Main terminal 600kcmil-4AWG, torque 500 Lb-In (56 Nem)
- Branch connections see table
- Bar and lug material: aluminum



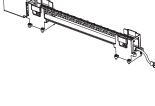
#### 800A Unbonded

- Main terminal (2) 600kcmil-4AWG, torque 375 Lb-In (42
- Branch connections see table
- Bar and lug material: aluminum



#### 800A Bonded

- Main terminal (2)600kcmil-4AWG, torque 375 Lb-In (42
- Branch connections see table
- Bar and lug 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 25 Lb-In (2.8 N•m)

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

#### Ground and neutral bar wire connections:

Wire	Torque	Maximum number of	of wires per opening
AWG*	Lb-In ( N•m)	Neutral	Ground
Small or	pening		
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 op	pening		
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

<sup>\* 60/75°</sup>C, Cu/AI.

#### **Surge Protection Devices (SPDs):**









Factory installed BSPM\_ three module SPD





Optional remote Form C contact signaling available



#### Description

Factory installed SPDs are the Bussmann® series 3-pole UL modular surge arresters for 240 and 480 3-phase Delta, and 120/208, 277/480 and 347/600Vac 3-phase Wye systems feature local, *easy*ID™ visual indication and optional remote contact signaling. The unique module locking system fixes the protection module to the base. Modules can be easily replaced without tools by simply depressing the release buttons. Integrated mechanical coding between the base and protection module ensures against installing an incorrect replacement module.

#### **Code requirement for Surge Protective Devices**

2014 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 three-module SPDs feature local, visual *easy*ID™ status indication and can be specified with a remote Form C contact relay for integration into a monitoring system. The relay is rated to 250Vac/0.5A and 250Vdc/0.1A, 125Vdc/0.2A, 75Vdc/0.5A to accommodate many signaling needs.

Although a Type 1 SPD may be retrofitted and added externally to meet the NEC® 2014 700.8 or other surge suppression needs, it is recommended to factory order the SPD to assure correct specification for the system voltage and type, as well as proper installation.

If an SPD is required after the QSCP is installed (for surface mount QSCPs only), Eaton recommends installing the external-mount Type 1 SurgePOD  $^{\rm TM}$  HEAVY DUTY (50kA  $\rm I_{max}$  surge current capacity) or the Type 1 or Type 2 BSPD (from 120kA up to 400kA  $\rm I_{max}$  surge current capacity) SPDs.

Care should be taken to order the correct SurgePOD HEAVY DUTY catalog number or specify the correct BSPD (from the catalog number system) to match the electrical system type and voltage.

#### **Features**

- · Heavy-duty zinc oxide varistors for high discharge capacity
- Module locking system with module release button make module replacement easy without tools
- Up to 200kA Short-Circuit Current Rating (SCCR) make higher assembly SCCR ratings possible
- Optional remote signaling of all protection modules make status monitoring easy and accurate in any monitoring scheme
- Vibration and shock tested according to EN 60068-2 to withstand harsh environments

#### Optional remote contact signaling

The remote contact signaling versions have 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.

Available factory installed SPDs:

System and voltage	Catalog number	Data sheet No.
Single-phase, 120/240	BSPM2240S3G	2150
Three-phase Wye, 208/120	BSPM4208WYNG	2152
Three-phase Wye, 480/277	BSPM4480WYNG	2152
Delta, 480	BSPM3480DLG	2151

See data sheets for specifications.

#### Optional field-installable SPDs





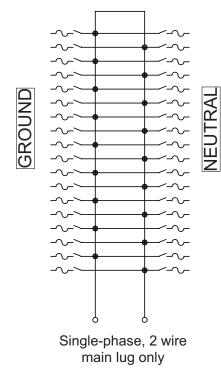
SurgePOD HEAVY DUTY is a Type 1 UL Listed SPD with a 50kA surge current capacity. Field installed device, does not ship with QSCP. Must be ordered separately.

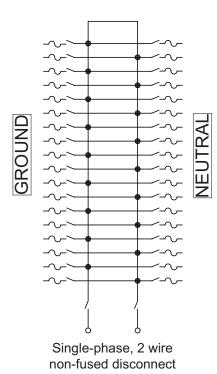


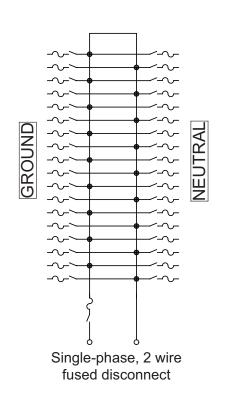
**BSPD** 

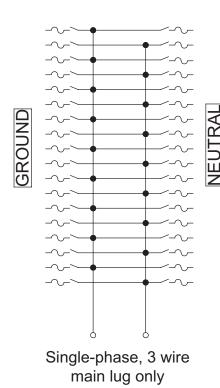
BSPD includes UL Listed Type 1 or Type 2 SPDs (depending on the configuration ordered) with surge current capacities from 120kA to 400kA and are configurable for Wye (120/208, 277/480, 600) and Delta (240, 480, 600) systems. Field installed device, does not ship with QSCP. Must be ordered separately.

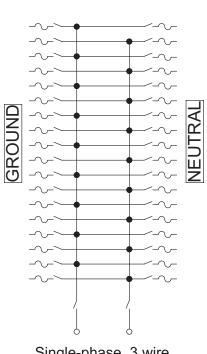
### **Typical QSCP wiring:**

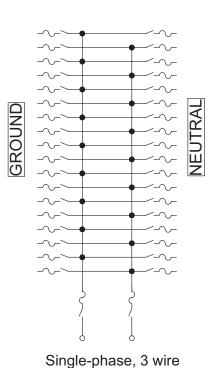






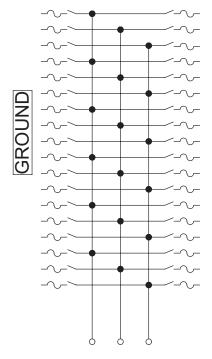




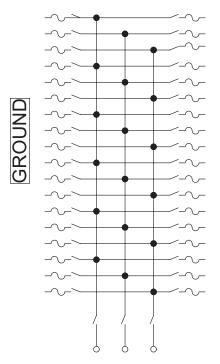


fused main disconnect

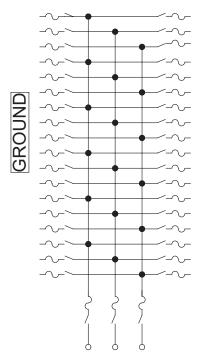
#### **Typical QSCP wiring:**



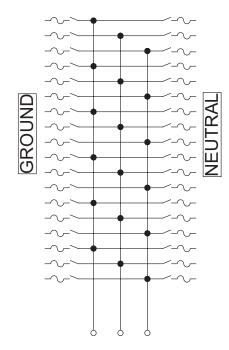
Three-phase, 3 wire main lug only



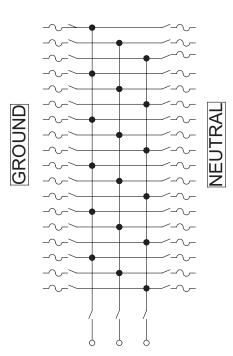
Three-phase, 3 wire non-fused main disconnect



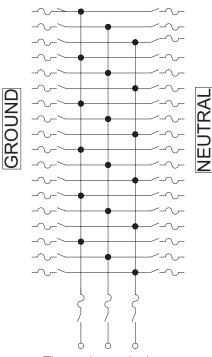
Three-phase, 3 wire fused main disconnect



Three-phase, 4 wire main lug only



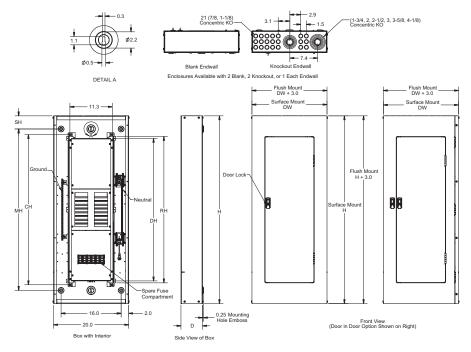
Three-phase, 4 wire non-fused main disconnect



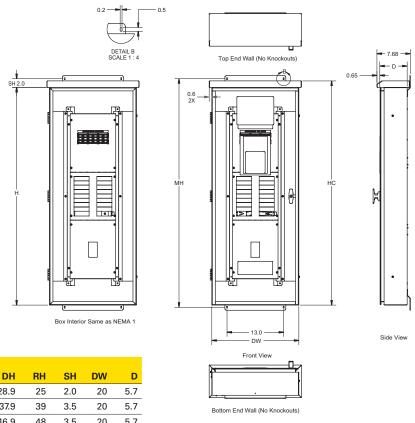
Three-phase, 4 wire fused main disconnect

#### **Enclosure dimensions - in:**

#### **NEMA 1 enclosures and interior**



# NEMA 3R enclosures Interior same as NEMA 1



Enclosure										
type	Height	Н	HC	MH	CH	DH	RH	SH	DW	D
	33	33	N/A	29.0	26	28.9	25	2.0	20	5.7
NEMA 1	50	50	N/A	43.0	40	37.9	39	3.5	20	5.7
INCIVIA I	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.

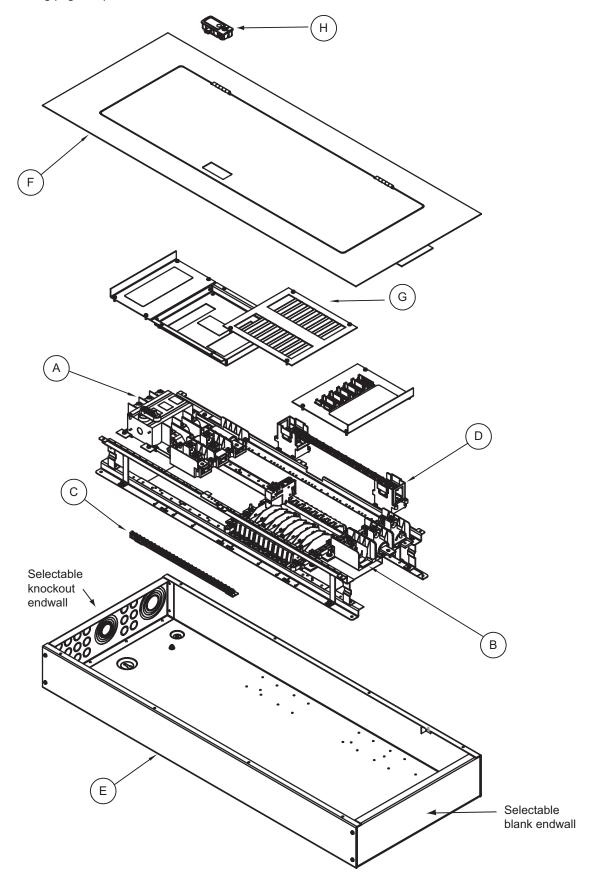
#### Available panelboard configurations:

Based upon enclosure height, panel amp rating and number of branch circuit positions.

<b>Enclosure height</b>	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
		18	- 30 through 60A fused main disconnect, with or without feed-through lugs or SPD
	30 - 60	30	- 30 through 60A fused main disconnect, with or without feed-through lugs or SPD
		42	- 30 through 60A fused main disconnect, with or without feed-through lugs or SPD
	70 - 200	18	- 70 through 200A fused main disconnect, with or without feed-through lugs or SPD
50"		30	- 70 through 200A fused main disconnect, with or without feed-through lugs
		18	- main lug only with SPD - non-fused disconnect, with feed-through lugs or SPD
	30 - 200	30	- main lug only, with feed-through lugs or SPD - non-fused disconnect, with or without feed-through lugs
		42	- main lug only, with or without feed-through lugs or SPD - non-fused disconnect, with or without feed-through lugs
	225 - 400A	18	- main lug only, with or without feed-through lugs or SPD - non-fused disconnect, with or without feed-through lugs
		30	- main lug only, with or without feed-through lugs
	70 - 200	30	- 70 through 200A fused main disconnect, with SPD
	70 200	42	- 70 through 200A fused main disconnect, with or without feed-through lugs or SPD
	30 - 200	42	- non-fused disconnect with SPD
59"		18	- main lug only with loadside disconnect - non-fused disconnect, with SPD - 225 through 400A fused disconnect, with or without feed-through lugs or SPD
	225 - 400A	30	- main lug only, with SPD - 225 through 400A fused disconnect, with no loadside options
		42	- main lug only, with or without feed-through lugs or SPD - non-fused disconnect, with no loadside options
		18	- non-fused disconnect, with loadside disconnect
69"	225 - 400A	30	- main lug only, with loadside disconnect - 225 through 400A fused disconnect, with feed-through lugs or SPD
	220 - 400A	42	<ul> <li>non-fused disconnect, with or without feed-through lugs or SPD</li> <li>225 through 400A fused main disconnect, with or without feed-through lugs or SPD</li> </ul>

#### Replacement parts:

See list on following page for part numbers.



#### Replacement parts:

A and B - main devi	ces and feed-through lugs

* Also for use a	s feed-through lugs based upon panelboard ampacity rating
2A1909-1*	Kit, compression lug 3-phase, 70-200A
2A1909-2*	Kit, mechanical lug 3-phase, 70-200A
2A1909-3*	Kit, double/sub-feed lug 3-phase, 30-200A
2A1909-4	Kit, main disconnect 70-200A
2A1909-5*	Kit, compression lug 1-phase, 3 wire, 70-200A
2A1909-6*	Kit, mechanical lug 1-phase, 3 wire, 70-200A
2A1909-7*	Kit, double/sub-feed lug 1-phase, 3 wire, 30-200A
2A1909-8	Kit, main disconnect 30-60A 1-phase, 3 wire,
2A1909-9	Kit, main disconnect 30-60A 3-phase,
2A1909-10*	Kit, compression lug 3-phase, 30-60A
2A1909-11*	Kit, mechanical lug 3-phase, 30-60A
2A1909-12*	Kit, compression lug 1-phase, 3 wire, 30-60A
2A1909-13*	Kit, mechanical lug 1-phase, 3 wire, 30-60A
2A1909-14*	Kit, compression lug 1-phase, 2 wire, 70-200A
2A1909-15*	Kit, mechanical lug 1-phase, 2 wire, 70-200A
2A1909-16*	Kit, double/sub-feed lug 1-phase, 2 wire, 30-200A
2A1909-17*	Kit, compression lug 1-phase, 2 wire, 30-60A
2A1909-18*	Kit, mechanical lug 1-phase, 3 wire, 30-60A
2A1909-19	Kit, main disconnect 30-60A 1-phase, 2 wire,
2A1909-20*	Kit, compression lug 3-phase, 225-400A
2A1909-21*	Kit, mechanical lug 3-phase, 225-400A
2A1909-22*	Kit, double/sub-feed lug 3-phase, 225-400A
2A1909-23*	Kit, compression lug 1-phase, 3 wire, 225-400A
2A1909-24*	Kit, mechanical lug 1-phase, 3 wire, 225-400A
2A1909-25*	Kit, double/sub-feed lug 1-phase, 3 wire, 225-400A
2A1909-26*	Kit, compression lug 1-phase, 2 wire, 225-400A
2A1909-27*	Kit, mechanical lug 1-phase, 2 wire, 225-400A
2A1909-28*	Kit, double/sub-feed lug 1-phase, 2 wire, 225-400A
2A1909-29	Kit, main disconnect 225-400A

#### C - ground bars

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

#### D - neutral bars

2A1908-1	Kit, 200A unbonded
2A1908-2	Kit, 400A unbonded
2A1908-3	Kit, 200A bonded
2A1908-4	Kit, 400A bonded
2A2129-5	Kit, 800A unbonded
2A2129-6	Kit, 800A bonded

#### E - enclosures and boxes

XX in the p/n denotes endwall choices B = blank and K = knockout

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
2A1916-1	Kit, blank enclosure endwall (set of 2)
2A1916-2	Kit, knockout enclosure endwall (set of 2)
2A1649-1	NEMA 3R enclosure, 51.5" tall
2A1649-2	NEMA 3R enclosure, 60.5" tall
2A1649-3	NEMA 3R enclosure, 70.5" tall

NEMA 3R enclosure, 34.5" tall

#### F - enclosure doors

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
2A1667-9	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
2A1667-13	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

#### G - dead fronts - branch enclosure

#### For QSCP4 model number panelboards

2A1960-1	Kit, branch enclosure 18 position
2A1960-2	Kit, branch enclosure 30 position
2A1960-3	Kit, branch enclosure 42 position

#### For QSCP model number panelboards

2A1906-1	Kit, branch enclosure 18 positions
2A1906-2	Kit, branch enclosure 30 positions
2A1906-3	Kit, branch enclosure 42 positions

#### H - keys and locks

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

#### Lockout/tagout devices

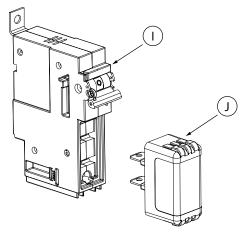
2A1912-1	Kit, lockout 70-400A main disconnect
2A1912-2	Kit, lockout 30-60A main disconnect
2A1912-3	Kit, branch lockout (3M Panelsafe) 18 position
2A1912-4	Kit, branch lockout (3M Panelsafe) 30 position
2A1912-5	Kit, branch lockout (3M Panelsafe) 42 position

#### Miscellaneous

2A1914	Kit, circuit directory card and sleeve
2A1915	Kit, circuit number and fuse rating labels
2A1917-1	Kit, panelboard hardware
2A1917-2	Kit, CCPB hardware (10 screws)
2A1918-1	≤ 60A Kit, branch knockout covers (10 covers)
2A1918-2	70-100A Kit, branch knockout covers (10 covers)
2A1919	Kit, touch-up paint
2A1961-1	Kit, spare branch circuit fuse compartment, 1-100A
3A1072	Nameplate

2A1649-4

### CCPB disconnects and CUBEFuse replacement parts:



#### I - CCPB branch disconnects

Poles	Ampacity	Part number
1	454 004 004 404 504 004 704	CCPB-1-(amp)CF
2	- 90A, 100A -	CCPB-2-(amp)CF
3		CCPB-3-(amp)CF

#### J - CUBEFuse™ fuses

Typical installed amp range			
For CCPB* part number	Non-indicating time-delay TCF(amps)RN	Indicating** time-delay TCF(amps)	Fast-acting non-indicating FCF(amps)RN
CCPB-(# of poles)-15CF	TCF1RN, TCF3RN, TCF6RN, TCF10RN, TCF15RN	TCF6, TCF10, TCF15	FCF1RN, FCF3RN, FCF6RN, FCF10RN, FCF15RN
CCPB-(# of poles)-20CF	TCF17-1/2RN, TCF20RN	TCF17-1/2, TCF20	FCF20RN
CCPB-(# of poles)-30CF	TCF25RN, TCF30RN	TCF25, TCF30	FCF25RN, FCF30RN
CCPB-(# of poles)-40CF	TCF35RN, TCF40RN	TCF35, TCF40	FCF35RN, FCF40RN
CCPB-(# of poles)-50CF	TCF45RN, TCF50RN	TCF45, TCF50	FCF45RN, FCF50RN
CCPB-(# of poles)-60CF	TCF60RN	TCF60	FCF60RN
CCPB-(# of poles)-70CF <sup>†</sup>	TCF70RN	TCF70	FCF70RN
CCPB-(# of poles)-90CF <sup>†</sup>	TCF80RN, TCF90RN	TCF80, TCF90	FCF80RN, FCF90RN
CCPB-(# of Poles)- 100CF <sup>†</sup>	TCF100RN	TCF100	FCF100RN

 <sup>\*</sup> CCPB disconnect can accept CUBEFuses with amp ratings less than or equal to the amp rating of the CCPB disconnect.

#### Fuse and disconnect performance data:

For details and specifications, access the listed data sheets online at www.cooperbussmann.com/DatasheetsEle.

Product	Data sheet No.
Low-Peak™ time-delay CUBEFuse™	9000
Fast-acting CUBEFuse	2147
Low-Peak LPJSPI Class J fuses	1063
CCP main disconnect	1157
CCPB branch disconnect	1161

#### **Additional references:**

- · Website (www.cooperbussmann.com/QSCP)
- Selective coordination (www.cooperbussmann.com/SelectiveCoordination)

#### **CUBEFuse specifications:**

Catalog symbols	Description	
TCF_	6-100A, time-delay, indicating version	
TCF_RN	1-100A, time-delay, non-indicating version)	
FCF_RN	1-100A, 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)

1-100A, Fast-acting, (non-indicating version)

IR: 300kA RMS Sym. (UL)

200kA RMS. Sym (CSA)

100kA DC (UL and CSA), (time-delay) 50kA DC (UL and CSA), (fast-acting)

#### Agency information

- UL Listed, Guide JFHR, File E56412 (time-delay), File E4273 (fast-acting)
- · CSA Certified Class 1422- 02, File 53787
- · CE compliance for the European Union low voltage directive

#### Watts loss at rated current

Time-delay	Watts loss	Fast-acting	Watts loss
TCF30	3.99W	FCF30RN	5.45W
TCF60	6.23W	FCF60RN	7.27W
TCF100	9.51W		

<sup>\*\* 1</sup> and 3 amp indicating CUBEFuse not available. Correct fit with CCPB disconnect requires indicating CUBEFuse with date code R38 or later.

<sup>†</sup> Available for a bus rating of 225A or higher.

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