

Quik-Spec[™] Coordination Panelboard 30 - 400A fusible panelboards



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CUBEFuse™ fuse specifications



Catalog symbol:

QSCP

Description:

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

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 to order for the application. To confirm availability of options and constructions, contact your Bussmann series product representative.

Ratings

Volts: 600Vac, 125Vdc ≤ 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 125Vdc panels ≤ 80A. Contact factory for details.

Branch circuit positions

• 18, 30 and 42

Neutral options

• Unbonded and bonded 200 A, 400 A 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)

CCPB horsepower ratings

	Amp .		Нр і	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 [†]	70	3	7.5	15	30	40
CCPB-(Poles)-90CF [†]	90	5	10	20	50	40
CCPB-(Poles)-100CF [†]	100	5	10	20	50	40

^{*} Split-phase

Panelboard Short-Circuit Current Ratings (SCCRs)

	AC main options							
SCCR	Main Lug Only (MLO)*	70-200A main disc. no fuses* or w/ Class J fuses	225-400A main disc. no fuses* or w/ Class J fuses	CCP_CF main disc. (≤ 60A)**	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 feedthrough lugs, Class J, T, or R fuses are required upstream - max amps = panel

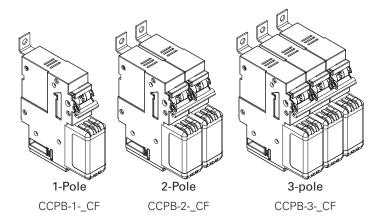
^{*} Weight varies by options chosen. If needed, consult factory for exact weight.

^{**} Three-phase

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

^{**} CUBEFuse™ disconnect.

Branch disconnects:



Specifications

Box lug loadside terminal:

- 15 60 A
 - 18-6 AWG single and dual rated (same size wire), solid or stranded – 75°C, Cu only
 - 4 AWG single 75°C, Cu only
- 100 A
 - 18-1 AWG (1-45mm²) single, solid or stranded 75°C, Cu only and 6 AWG dual 75°C, Cu only

Box lug loadside terminal torque:

- 15 60 A
 - 18-10 AWG 20 lb-in (2.2 N•m)
 - 8-4 AWG 35 lb-in (3.9 N•m)
- 100 A
 - 18-10 AWG 25 lb-in (1-6mm²/2.82 N•m
 - 8-1 AWG 40 lb-in (10-45mm²/4.52 N•m)
 - 6 AWG 45 lb-in (16mm²/5.08 N•m)

				Typical installed fuse amp range				
CCPB* part number	Poles	Fuse amp range	Max CCPB amps	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	RN 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	1†	_						
CCPB-2-70CF	2†	1 to 70	70	TCF70RN	TCF70	FCF70RN		
CCPB-3-70CF	3†							
CCPB-1-90CF	1†	_						
CCPB-2-90CF	2†	1 to 90	90	TCF80RN, TCF90RN	TCF80, TCF90	FCF80RN, FCF90RN		
CCPB-3-90CF	3†							
CCPB-1-100CF	1†	_						
CCPB-2-100CF	2†	1 to100	100	TCF100RN	TCF100	FCF100RN		
CCPB-3-100CF	3†							

^{*} 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.

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

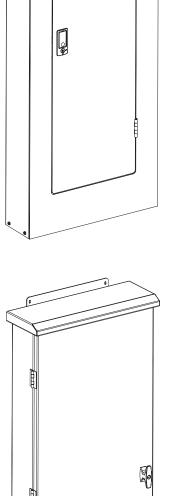
Enclosure types:

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

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



AC and DC voltages and system types:

AC Voltages

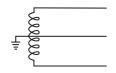
1-phase, 2 wire

• 120V, 240V

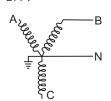


1-phase, 3 wire

120/240V

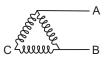


- · 1-phase, 2 wire, Wye
- 277V



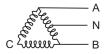
1-phase, 2 wire, Delta

480V



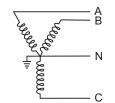
1-phase, 3 wire, Delta

• 240/480V



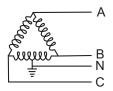
3-phase, 4 wire, Wye

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



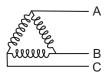
3-phase, 4 wire, Delta

240/120V, 480/240V



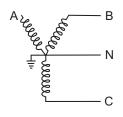
3-phase, 3 wire, Delta

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



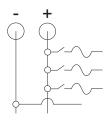
1-phase, 3 wire, Wye

208Y/120V, 480Y/277V



DC Applications

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

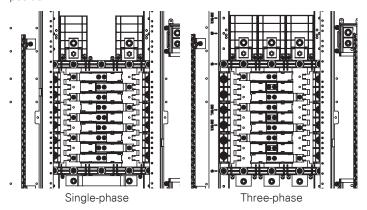


Busing:

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

Distributed 1- and 3-phase busing

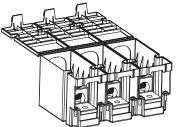
All CCPB branch disconnects can be mounted in any branch circuit position.



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

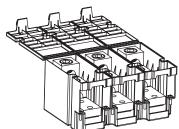
Main mechanical lugs

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



Main sub-feed mechanical lugs

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

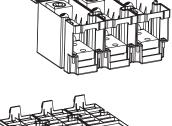


Main compression (crimp)

Main barrier cover open wire,

lugs*

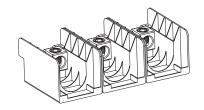
600-250 kcmil



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

Main mechanical lugs

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



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.

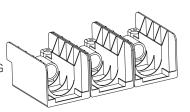
Main sub-feed mechanical lugs

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

Smaller lugs for ≤ 60 amp panels not available.

Main compression (crimp) lugs*

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



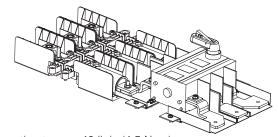
225-400 A loadside fused disconnect available on:

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

Switch amps: 200

Mechanical lugs

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



Fuse mounting torque: 40 lb-in (4.5 Nom)

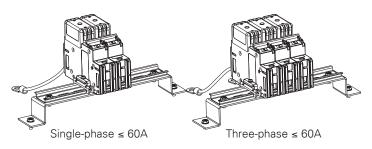
^{*} Versa-Crimp® VC-6 crimp tool recommended for wire crimping.

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

30-60 A main disconnects for 75°C Cu conductors: 30-60A fused main disconnects (CCP), 1- and 3-phase

Not available with DC ratings

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

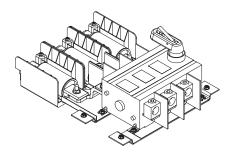


70-200 A main disconnects for 75°C Cu conductors:

Fused main disconnect, 1- and 3-phase

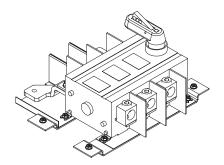
Not available with DC ratings

- 300 kcmil-4 AWG, torque 200 lb-in (23 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 300 kcmil-4 AWG, torque 200 lb-in (23 N•m)

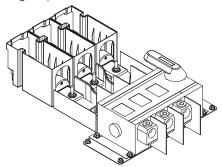


225-400 A main disconnects for 75°C Cu conductors:

Fused main disconnect, 1- and 3-phase

Not available with DC ratings

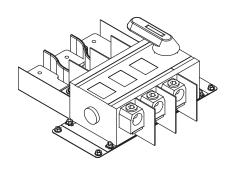
- 600 kcmil-2 AWG, torque 375 lb-in (42 N•m)
- Fuse mounting torque: 40 lb-in (4.5 N•m)



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

Not available with DC ratings

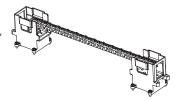
• 600 kcmil-2 AWG, torque 375 lb-in (42 N•m)



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

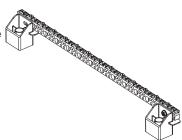
200 A Unbonded

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



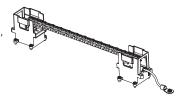
Isolated

Wire range and torque - see table Bar material: aluminum



200 A Bonded

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



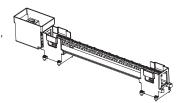
Non-isolated

Wire range and torque - see table Bar material: aluminum



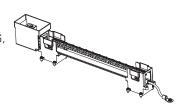
400 A Unbonded

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



400 A Bonded

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



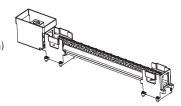
Neutral and Ground Assembly Installation:

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:

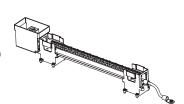
800 A Unbonded

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



800 A Bonded

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



Ground and neutral bar wire connections:

Wire	Torque	Maximum number of wires per openi			
AWG*	lb-in (N•m)	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.

Surge Protection Devices (SPDs):









Factory installed BSPMA_ three module SPD

Local, visual status indication



Remote Form C contact signaling



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 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 status indication and 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 or Type 2 BSPA (from 50 kA to 200 kA I $_{\rm max}$ surge current capacity) or the Type 1 or Type 2 BSPD (from 120 kA up to 400 kA I $_{\rm max}$ surge current capacity) SPDs.

Care should be taken to specify the correct BSPA or 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
- 200 kA Short-Circuit Current Rating (SCCR) make higher assembly SCCR ratings possible
- 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

Remote contact signaling

Remote contact signaling proovides 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	BSPMA1120S2GR	10771
Three-phase Wye, 208/120	BSPMA4208WYNGR	10772
Three-phase Wye, 480/277	BSPMA4480WYNGR	10773
Delta, 480	BSPMA3480DLGR	10774

See data sheets for specifications.

Optional field-installable SPDs





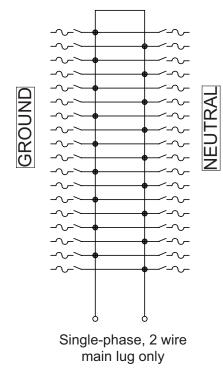
BSPA is a Type 1 or Type 2 UL Listed SPD with from 50 kA to 200 kA surge current capacity. Field installed device, does not ship with QSCP. Must be ordered separately.

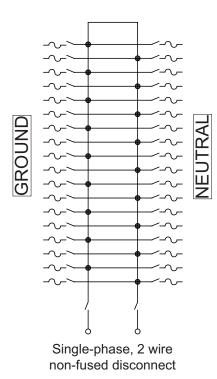


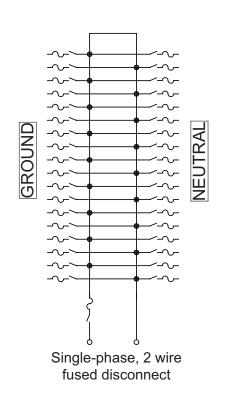
BSPD

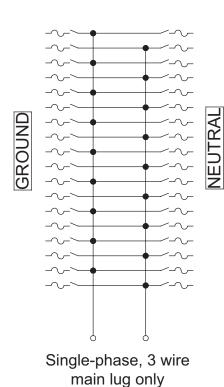
BSPD includes UL Listed Type 1 or Type 2 SPDs (depending on the configuration ordered) with surge current capacities from 120 kA to 400 kA and are configurable for Wye (120/208, 277/480, 600) and Delta (240, 480, 600) systems. Field installed device, does not ship with QSCP. Must be ordered separately.

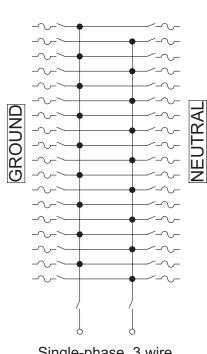
Typical QSCP wiring:

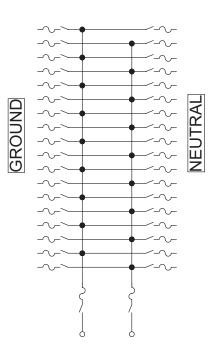








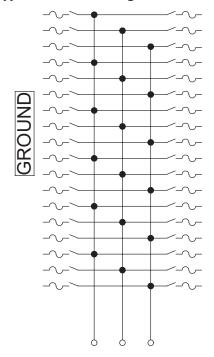




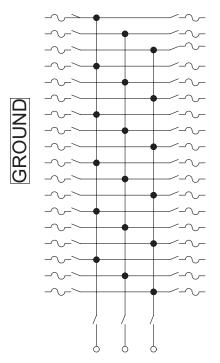
Single-phase, 3 wire non-fused main disconnect

Single-phase, 3 wire fused main disconnect

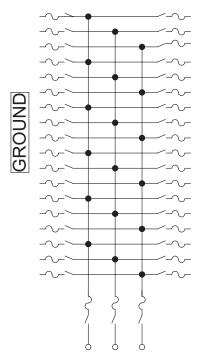
Typical QSCP wiring:



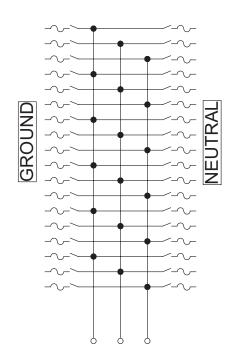
Three-phase, 3 wire main lug only



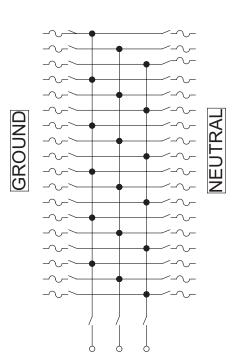
Three-phase, 3 wire non-fused main disconnect



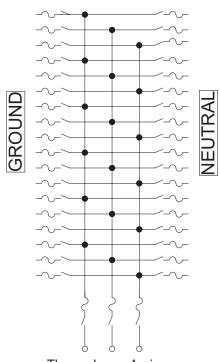
Three-phase, 3 wire fused main disconnect



Three-phase, 4 wire main lug only



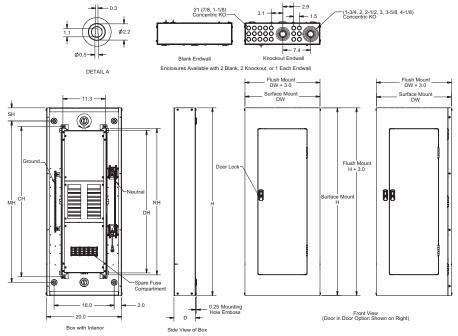
Three-phase, 4 wire non-fused main disconnect



Three-phase, 4 wire fused main disconnect

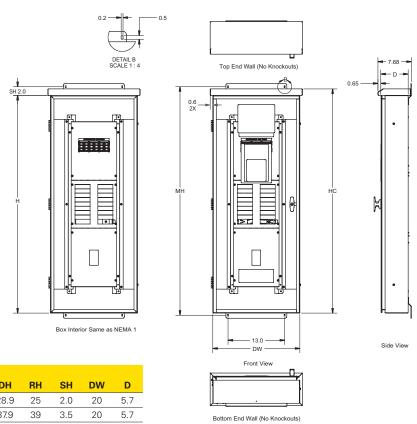
Enclosure dimensions - in:

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
NEIVIA 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
	33	33	34.5	35.5	26	28.9	25	2.0	20	6.3
NEMA 3R	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.

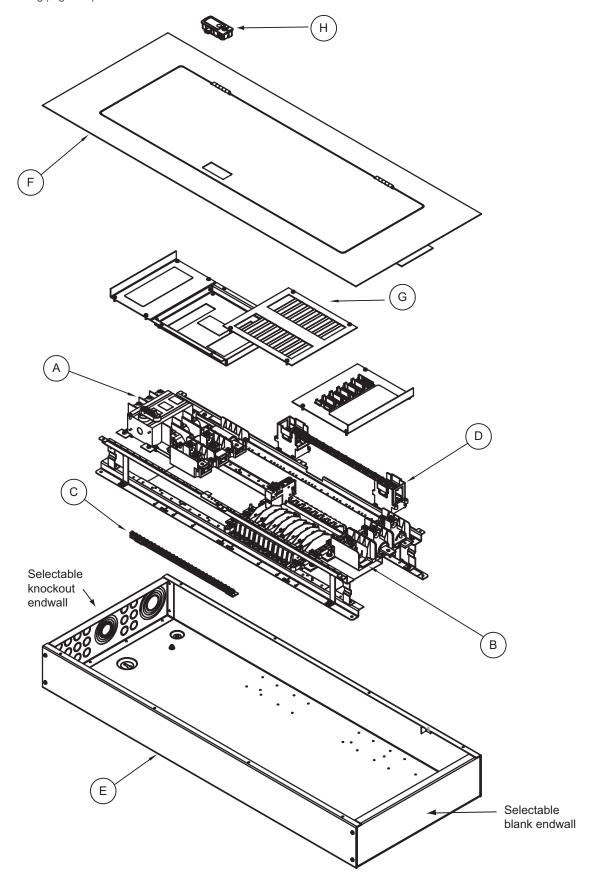
Available panelboard configurations:

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

nclosure 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	
		18	- 30 through 60 A fused main disconnect, with or without feed-through lugs or SPD	
	30 - 60	30	- 30 through 60 A fused main disconnect, with or without feed-through lugs or SPD	
		42	- 30 through 60 A fused main disconnect, with or without feed-through lugs or SPD	
50"	70 - 200	18	- 70 through 200A fused main disconnect, with or without feed-through lugs or SPD	
	70 - 200	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 - 400	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	
		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 - 400	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 - 400	30	- main lug only, with loadside disconnect - 225 through 400A fused disconnect, with feed-through lugs or SPD	
		42	- non-fused disconnect, with or without feed-through lugs or SPD - 225 through 400A fused main disconnect, with or without feed-through lugs or SPI	

Replacement parts:

See list on following page for part numbers.



Replacement parts:

A and B - main devices and feed-through lugs

* Also for use as	feed-through lugs based upon panelboard ampacity rating
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 70-200 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, 3 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

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
2A2129-5	Kit, 800 A unbonded
2A2129-6	Kit, 800 A bonded

E - enclosures and boxes

XX in th	a n/n	denotes	endwall	choices	R -	hlank a	nd K -	knockout
$\Delta\Delta$ III III	וו/ע שו	uenotes	eriuvvaii	CHOICES	D =	DIALIK A	11U N =	KIIOCKOUL

λλ III tile μ/II	denotes endival choices D = blank and K = knocke
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
2A1649-4	NEMA 3R enclosure, 34.5" tall

F - enclosure doors

2A1667-1 2A1667-2 2A1667-3 2A1667-4 2A1667-5 2A1667-6 2A1667-7 2A1667-8 2A1667-9 2A1667-10 2A1667-11 2A1667-12 2A1667-13 2A1667-14 2A1667-15	Door, surface for 50" box Door, surface for 59" box Door, flush for 50" box Door, flush for 59" box Door-in-door, surface for 50" box Door-in-door, surface for 59" box Door-in-door, flush for 50" box Door-in-door, flush for 59" box Door, surface for 69" box Door, flush for 69" box Door-in-door, surface for 69" box Door-in-door, flush for 69" box Door, surface for 33" box Door, flush for 33" box Door-in-door, surface for 33" box Door-in-door, surface for 33" box
ZA 1007-10	Door-in-door, hash for 55 box

G - dead fronts - branch enclosure

For QSCP4 model number panelboards

Kit, branch enclosure 18 position
Kit, branch enclosure 30 position
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)

Lockout/tagout devices

2A1912-1	Kit, lockout 70-400 A main disconnect
2A1912-2	Kit, lockout 30-60 A 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

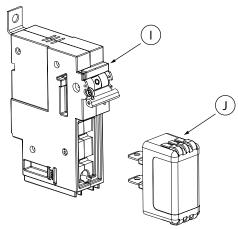
Kit, circuit directory card and sleeve

Miscellaneous

2A1914

2A1915	Kit, circuit number and fuse rating labels
2A1917-1	Kit, panelboard hardware
2A1917-2	Kit, CCPB hardware (10 screws)
2A1918-1	≤ 60 A 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

CCPB disconnects and CUBEFuse replacement parts:



I - CCPB branch disconnects

Poles	Amps	Part number
1	15A, 20A, 30A, 40A, 50A, 60A, 70A, 90A, 100A	CCPB-1-(amp)CF
2		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 [†]	TCF70RN	TCF70	FCF70RN
CCPB-(# of Poles)-90CF [†]	TCF80RN, TCF90RN	TCF80, TCF90	FCF80RN, FCF90RN
CCPB-(# of Poles)-100CF [†]	TCF100RN	TCF100	FCF100RN

^{*} 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:

- Application note (<u>www.cooperbussmann.com/QSCP</u>)
- 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)
 - 1-100 fast-acting (non-indicating version)
- IR
 - 300 kA RMS Sym. (UL)
 - 200 kA RMS. Sym (CSA)
 - 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

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	_	_

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

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

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