

Quik-Spec™ Coordination Panelboard



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Category Winner

Frequently Asked Questions

Panel Questions

1. What is the difference between the new Quik-Spec™ Coordination Panelboard and the current Coordination Module?

The new Coordination Panelboard has a number of improvements:

- Significant price reduction
- Innovative branch circuit fusible disconnect;
 - o Up to 100 amps per circuit
 - o Fuse amp rating rejection feature
 - o Fuse/CCPB disconnect interlock prevents fuse removal while energized
 - o More listed on the Data Sheet #1159
- Narrower width - 20" versus 28"
- Up to 200kA Short-Circuit Current Rating (SCCR) versus 100kA
- Higher UL Listed 600Vac rating versus 480Vac
- UL Listed 125Vdc rating with 20kA SCCR for 40 amp or less CCPBs on MLO panels only
- Fused main disconnect option of 60A, 100A or 200A
- Advanced one-week shipment of cans
- Online configurator for specifying/pricing
- Surface and flush mounting options
- Door-in-door option
- Ability to specify spaces in the branch positions
- Spare fuse holder with spare fuses shipped with every panelboard
- NEMA 1 and 3R enclosures

2. Can the Quik-Spec Coordination Panelboard be installed to meet the mandatory NEC® Selective Coordination requirements?

The Coordination Panelboard is the last piece for providing selectively coordinated circuit paths for supplying vital loads. Typically, there will be feeder and main fuses upstream. As such, the entire circuit path needs to be selectively coordinated. Thus, the Quik-Spec Coordination Panelboard by itself is not the full solution. Fuses should be specified and installed, that are selectively coordinated, for each of the circuit paths. The other fusible gear necessary (switchboards, power distribution panelboards, etc.) are readily available from other manufacturers.

3. Will the branch circuit fuses of the Main Lug Only (MLO) Quik-Spec Coordination Panelboard selectively coordinate with an external upstream feeder circuit breaker?

Cooper Bussmann® can not make selective coordination claims with upstream circuit breakers. To do so would require extensive and costly testing of each circuit breaker type and amp rating. For the entire circuit path to achieve selective coordination, the external upstream overcurrent protective devices must be Cooper Bussmann fuses that conform to our Selectivity Guide Ratios.

4. What are the key physical dimensions of the Coordination Panelboard?

Key dimensions are the same as standard branch panelboards, with a 20" width and depth of 5 fl". Height is either 50" or 59", depending on MLO versus disconnect and the number of branch positions.

5. What main disconnect types are available and what are the amp rating options?

A 200A main disconnect, with or without trailing fuse option, can be ordered. If ordered with fuses, either 100A or 200A main LPJ_SPI fuses can be specified as the factory-installed main fuses. An optional 100A main disconnect uses a 3-pole or 2-pole CCP (CCP-3-100CF or CCP-2-100CF) with 100A CUBEFuses.

6. What are the amp rating options on the Quik-Spec Coordination Panelboard?

The Quik-Spec Coordination Panelboard is available in 60A, 100A or 200A ratings.

7. What are the amp rating options for the branch circuit positions?

The CCPB branch device is available in 1-, 2-, and 3-pole amp rating rejecting configurations up to 100A (15A, 20A, 30A, 40A, 50A, 60A, 70A, 90A & 100A breaks). The Cooper Bussmann® Class CF CUBEFuse® with Class J performance branch fuses can be specified from 1-100A. CCPBs 40 amp or less have 125Vdc rating.

8. Can I specify Class CC fuses in the branch?

No, only the Class CF CUBEFuse with Class J performance is used for branch fusing in this panelboard. This allows the amp rating rejection feature to be implemented at key breaks of 15A, 20A, 30A, 40A, 50A, 60A, 70A, 90A & 100A. Also, using a Class CC fuse would limit the circuit to 30 amps. With the CUBEFuse, we can go up to 100A. For most motor branch circuit applications, the CUBEFuse offers superior time-delay compared to the Class CC fuses and therefore can be sized closer than the Class CC fuses. This may permit a lower rated CCPB and fuse amp rating as well as provide better short-circuit protection.

9. Do I have to specify/populate all the branch circuit positions?

No, whether ordering an 18, 30 or 42 position panelboard, after specifying the number of positions to be filled on the chassis, the online configurator then requires inputting what goes into each branch position, including open-space options for adding more CCPBs later. If "spaces" are selected, the metal knockouts for those branch positions are left in place. Should a branch position be eliminated or moved, a plastic cover is available to fill the void left by the removed CCPB branch device.

10. Can the bus be extended in the field to allow additional branch positions?

No, the total number of branch circuits must be decided at time of ordering. If more branch circuits are needed, feed-through-lugs can be specified (or added in the field) to allow feeding conductors to another panelboard or safety switch. This is also a way to accommodate a branch circuit ampacity requirement greater than the 100A limit of the Quik-Spec Coordination Panelboard. The conductors connecting the two panels must have the same ampacity as the feeder circuit, or must terminate within 10 feet to one set of fuses having an ampacity not greater than the connecting conductors. (Note: When a surge protection device (TVSS) is applied to the panelboard, there is no option for feed-through lugs.)

11. Can feed-through lugs be added in the field?

Yes, the bus bars on all panelboards are able to accept the addition of feed-through lugs. Service kits are available from Cooper Bussmann. (Note: When a surge protection device (TVSS) is applied to the panelboard, there is no option for feed-through lugs.)

12. Will you offer more than 42 branch circuit positions, as this is now allowed with the changes to the 2008 NEC®?

No, currently only 42 branch circuit positions are available. A feed-through lug option is available for tying multiple panels together.

13. Can a chassis be swapped in the field?

A chassis of similar size can be swapped out in the field. A chassis of larger size cannot be retrofitted into a can of a smaller chassis.

14. What if I need more than 100 amps on a branch circuit position?

Feed-through or sub-feed lugs can be specified to tie the panel to a higher rated safety switch, such as the Cooper Bussmann® Quik-Spec™ Safety Switch. The safety switch must be installed within 10 feet of conductor length from the Quik-Spec Coordination Panelboard if the conductors are less than the ampacity of the feeder to the Quik-Spec Coordination Panelboard. Another alternative is to run branch circuits that are greater than 100A from the power distribution panelboard.

15. Can I install a circuit breaker in a branch circuit position?

No, only the CCPB branch device can be used in this panelboard. Rejection features in the design do not allow installing circuit breakers.

16. Is a 200% neutral an option?

Yes, a 200% neutral can be specified for nonlinear load applications.

17. Is a Surge Protection Device (TVSS) an option?

Yes, a surge protection device can be applied on panels without feed-through lugs, up to 480Vac. For further details on the TVSS option, see the Quik-Spec Coordination Panelboard Data Sheet #1160. Not available on 600Vac and 125Vdc panels.

18. Is the main disconnect field replaceable?

Yes, main disconnects can be replaced in an installation and are stocked by Cooper Bussmann. You cannot replace a fused disconnect with a non-fused disconnect or vice-versa.

19. Can you change a panelboard in the field from an MLO to a main disconnect and vice-versa?

No.

20. Is the panel rated for service entrance?

Yes, when properly specified, configured and sold in the United States, our UL file lists the Quik-Spec Coordination Panelboard as being rated for service entrance.

21. Are both flush and surface mount panelboards available?

Either flush or surface mount can be specified on a NEMA 1 panelboard. Whether a panelboard is flush or surface mount is defined by the door. The enclosures, chassis and other components remain the same. The NEMA 3R enclosure is surface mount only.

22. Can a panelboard be converted between flush and surface mount in the field?

Yes, service kits will be stocked by Cooper Bussmann to allow a field change from flush to surface mount and vice-versa. However, if changing from surface to flush mounting, attention must be given to finished wall thickness when mounting the enclosure.

23. Will the Quik-Spec Coordination Panelboard be supplied with the fuses installed?

- Branch Circuits: The CUBEFuse branch circuit fuses will not be installed, but will be shipped with the chassis for installation at the jobsite. Fuses have to be removed to wire each CCPB branch device. There is no time savings if they are preinstalled.
- Fused Main Disconnect: 100A and 200A fused main disconnects will have fuses installed prior to shipment, saving installation time. The fuses are installed under Cooper Bussmann controlled and monitored conditions, and packed to meet ISTA (International Safe Transit Association) shipping standards. Fuses on the 100A CCP fused main disconnect will not be installed, and will ship with the chassis for installation at the jobsite.

24. How many branch circuit spare fuses are included with the panel?

As a part of the total configured price, 10% or a minimum of three extra spare fuses are specified at time of order and included with the shipment. This aligns with bid requirements for providing spares. For example: 3 spares for an 18-position, 3 for a 30-position and 4 for a 42-position panelboard. The spare fuse holder has capacity for six spare branch circuit fuses. Additional spare fuses can be purchased through normal Cooper Bussmann distribution channels. Emergency fuse orders can be placed through Customer Satisfaction.

Device Questions

25. How does the CCPB handle an overcurrent? Does the CCPB trip from the overcurrent? How does the CCPB replace the two devices used in traditional fused/circuit breaker panelboards?

The CCPB branch device (fuse holder and switch) and CUBEFuse work independently to disconnect the circuit and interrupt an overcurrent event. The CCPB is a manual disconnect switch (UL 98) that does not trip during an overcurrent event. In addition to being a disconnect, the CCPB has an indication light to signal an open fuse. (Note: Illumination requires the panelboard bus be energized, the circuit closed and a minimum of 90Vac.) The Class CF CUBEFuse with Class J performance is a fuse that interrupts the overcurrent event. Although they work independently, they are interlocked to ensure an extra degree of safety. The CCPB branch device must be turned OFF before the CUBEFuse can be removed. The traditional fused/circuit breaker panelboards, with a combination fuse holder and circuit breaker in each branch are not interlocked and permit removing the fuse while energized.

26. How does the CCPB branch device prevent overfusing?

The CCPB branch device and Class CF CUBEFuse with Class J performance fuses are designed with cooperative ampacity rejection features implemented at the key breaks of 15A, 20A, 30A, 40A, 50A, 60A, 70A, 90A & 100A. These match the key standard fuse sizes and copper conductor ampacities. This ensures proper circuit protection at these ampacity breaks. For example, the CCPB40 will accept up to a 40 amp CUBEFuse (TCF40RN), but not a 50A or 60A CUBEFuse.

27. Can the CCPB branch device switch be locked in the ON or OFF positions?

Yes, however, the hardware items are different for each:

- Lockout/Tagout requires using a 4mm shank lock or standard lock with a “pin-out” device. Cooper Bussmann recommends either the Brady pin-out wide device P/N 90850 or Ideal P/N 44-784
- Lock-On (for emergency circuits) requires 1/16” safety wire braid.

28. How do I get the Lockout/Tagout accessories for the CCPB?

You will need to order the Cooper Bussmann recommended lock out devices:

- Brady Pin out device: P/N 90850
- Ideal: P/N 44-784

29. If a CUBEFuse opens, and the CCPB is turned to the “OFF” position, will the indication light still be visible?

The CCPB branch device indication light will turn off when the switch is turned OFF. If a contactor or starter downstream drops out on loss-of-power, the CCPB indicating light will also turn off. If an indicating CUBEFuse is used, it will still indicate when the CCPB branch device is turned OFF.

30. Can the CUBEFuse branch fuse be removed under load?

No, the CCPB branch device and CUBEFuse are interlocked to ensure an extra degree of safety. The CCPB branch device switch must be turned OFF to remove or install the CUBEFuse. Today's standard fusible panelboards (with a combination fuse holder and circuit breaker in each branch) are not interlocked and allow the fuse to be removed while energized.

Service/Support Questions

31. Will cans be shipped in advance? Is there an additional fee for this option?

Yes, cans may be specified for advance shipment without an additional charge. They will go out within one week of order receipt. This is standard practice within the panelboard industry.

32. How are the fuses shipped?

When a 100A or 200A fused main disconnect is specified, main fuses are installed and shipped with the chassis. The fuses for the 100A CCP fused main disconnect will not be installed, but will ship with the chassis for installation at the jobsite. CUBEFuse branch circuit fuses are also boxed separately and shipped with the interior for convenient installation at the jobsite.

33. How are replacement CUBEFuse fuses obtained?

Replacement CUBEFuse fuses are available through any Cooper Bussmann distributor. Emergency orders can be placed directly with Cooper Bussmann through Customer Satisfaction.

34. How are replacement CCPB branch devices obtained?

Replacement Compact Circuit Protectors (CCPBs) are available through any Cooper Bussmann distributor. Emergency orders can be placed directly with Cooper Bussmann through Customer Satisfaction.

35. What type of standard and extended warranty is available with this panelboard? What are the terms and prices?

Cooper Bussmann warrants to each original buyer of products manufactured by Cooper Bussmann that such products are, at the time of delivery to the buyer, free of material and workmanship defects for a period of 18 months from the date of shipment, or 12 months from the date of first use, whichever occurs first. The extended warranty of 24, 30 or 36 months, must be purchased in advance of product shipment, and it should be included in the purchase order placed for items to be warranted.

36. Will standard Coordination Panelboards be stocked at Cooper Bussmann or at local distributors?

No, it is not industry practice to stock completed panelboards, as each is a custom-configured product. All base components (cans, doors, chassis, CCPB branch devices, CUBEFuse fuses, etc.) will be stocked by Cooper Bussmann. This allows replacement components to be shipped out next day in service kits, and one week deliveries on enclosures.

37. Are the components stocked?

Yes, all panelboard components are stocked by Cooper Bussmann.

38. What are the lead times for cans, chassis and complete panelboards?

Enclosures are available for advanced shipment within one week from order receipt. Chassis and completed panelboards ship within four weeks of order receipt.

Application/Standards Questions

39. What is the Short-Circuit Current Rating (SCCR) of the Coordination Panelboard?

Depending on the configuration that's ordered, the panelboard's SCCR will be 50kA, 100kA or 200kA. This is a fusible solution (no series ratings permitted). The panelboard's SCCR rating must be equal to or greater than the available fault current where it is installed.

40. If a non-fused main disconnect is specified, what impact does that have on the coordination of the circuit?

For upstream Cooper Bussmann fuses, it is a simple matter of using the Cooper Bussmann Selectivity Ratio Guide and ensuring the type fuses and amp rating ratios comply. If upstream competitor fuses or circuit breakers are used, then no selective coordination claim can be made. For more details on how to do the analysis, see the Application Note, our Selecting Protective Devices publication, or other related materials at www.cooperbussmann.com covering Selective Coordination.

41. Is the Quik-Spec Coordination Panelboard certified for installation in areas subject to seismic rating requirements?

Yes, this panelboard has Uniform Building Code (U.B.C.) and California Building Code (C.B.C.) Seismic Qualifications and is approved by the International Building code (I.B.C.).

42. How is the Quik-Spec Coordination Panelboard better than a breaker solution for meeting the Selective Coordination requirements of the NEC®?

First, a fusible solution is easier to specify for selective coordination. Just follow the Selectivity Ratio Guide and it is not necessary to plot curves or (in most cases) do extensive short-circuit current studies. Molded case circuit breakers used in lighting panels can typically only achieve selective coordination for low magnitude, short-circuit currents. If standard molded case circuit breakers can not achieve the required selective coordination, then more sophisticated and costly circuit breakers are likely needed on the feeder circuit and further upstream. Additional details on this subject are available in the Application Note and at www.cooperbussmann.com under Selective Coordination.

The Quik-Spec Coordination Panelboard, as part of a fusible system, has features and benefits that only fusible solutions provide. This new fusible panelboard now eliminates the objections that circuit breaker specifiers have raised in the past. In addition, the Quik-Spec Coordination Panelboard has equivalent features of standard circuit breaker panels, yet is smaller and easier to specify than an equivalently-rated circuit breaker solution.

43. Where in the NEC® does it call out the Selective Coordination requirements?

The 2008 and 2005 versions of the NEC® detail the mandatory selective coordination requirements in sections 700.27 Emergency Systems, 701.18 Legally Required Standby Systems, and 517.26 Healthcare Essential Electrical Systems. In addition, section 708.54 Critical Power Systems is new per the 2008 NEC®. Some jurisdictions have not yet adopted the 2008 NEC®. These are the systems in which the Quik-Spec Coordination Panelboard would be used as a branch panelboard. NEC® Article 620 for elevator circuits also contains requirements for selective coordination in section 620.62. Cooper Bussmann offers the Quik-Spec Power Module Disconnect and Power Distribution Panelboard for elevator circuit applications.