



NQ/NQM Panelboards and QONQ Load Centers Information Manual

**Boletín de instrucciones para los
tableros de alumbrado NQ/NQM y
centros de carga QONQ**

**Directives d'utilisation pour
panneaux de distribution NQ/NQM et
centres de distribution QONQ**

Instruction Bulletin
Boletín de instrucciones
Directives d'utilisation

80043-712-03

Retain in the directory card
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utilisation future.



NQ/NQM Panelboards and QONQ Load Centers

Information Manual

Class 1640

Instruction Bulletin

80043-712-03

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HAZARD CATEGORIES AND SPECIAL SYMBOLS

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this bulletin or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of either symbol to a "Danger" or "Warning" safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, can result in death or serious injury.

CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, can result in minor or moderate injury.

CAUTION

CAUTION, used without the safety alert symbol, indicates a potentially hazardous situation which, if not avoided, can result in property damage.



Provides additional information to clarify or simplify a procedure.

PLEASE NOTE

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

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Introduction

This bulletin contains instructions for installing Square D® brand NQ circuit breaker panelboards and QONQ load centers. These panelboards and load centers are Underwriters Laboratories (cULus) listed and accept QO® and QOB branch circuit breakers.



For technical support on the installation of this panelboard, contact the Square D/Schneider Electric Customer Information Center at 1-888-SquareD (1-888-778-2733).



See the labels on the equipment for rating and safety information. Additional equipment labels are provided with this document.

Safety Precautions

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Read and understand this entire instruction bulletin and the included NEMA PB 1.1 standards publication before installing, operating, or maintaining this equipment.
- Local codes vary, but are adopted and enforced to promote safe electrical installations. A permit may be needed to do electrical work, and some codes may require an inspection of the electrical work.
- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E.
- This equipment must only be installed and serviced by qualified electrical personnel.
- Turn OFF all power supplying this equipment before working on or inside the equipment.
- Always use a properly-rated voltage sensing device to confirm all power is OFF.
- Replace all devices, doors and covers before turning ON power to this equipment.

Failure to follow these instructions will result in death or serious injury.

Installation

This section provides instructions for the following NQ panelboard and QONQ load center procedures:

- “Interior Mounting for Square D Brand Enclosures” on page 8
- “Neutral Bonding Strap/Cable Installation” on page 11
- “QO and QOB Circuit Breaker Installation and Removal” on page 14
- “Circuit Breaker Reset Instructions” on page 17
- “Interior Trim Preparation” on page 18

Interior Mounting for Square D Brand Enclosures

A separate standards publication, titled “General Instructions for Proper Installation, Operation, and Maintenance of Panelboards Rated 600 Volts or Less” (NEMA PB1.1), has been provided with this equipment. Familiarize yourself with the content of this document before proceeding with any of the following procedures.

If you did not receive a copy of this document, or if you have any questions regarding this equipment, contact your local distributor or Schneider Electric representative.

CAUTION

HAZARD OF EQUIPMENT DAMAGE

- Ensure all connections are properly tightened.
- Refer to the torque information label provided on the panelboard before tightening the connections.

Failure to follow these instructions can result in equipment damage.

To properly mount and install the NQ panelboard or QONQ load center interior, please refer to the NEMA PB 1.1 standards publication, and follow the instructions below for either “Surface Mounting (Enclosure Mounted on Wall)” or “Flush Mounting (Enclosure Recessed in Wall).”

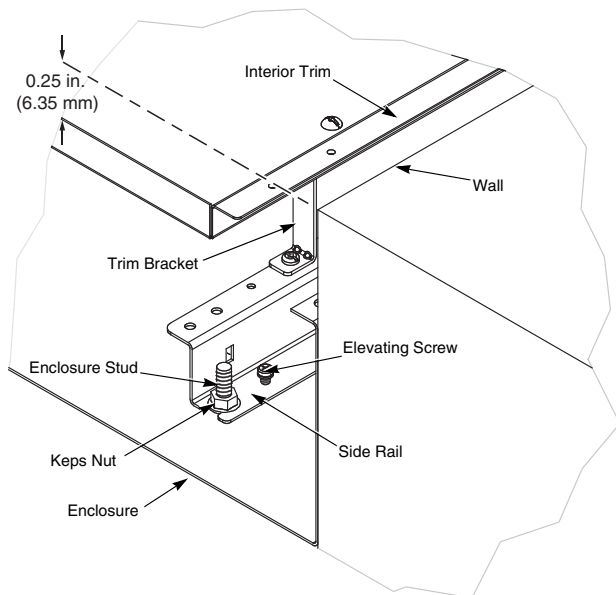
Surface Mounting (Enclosure Mounted on Wall)

1. Mount the enclosure as instructed in the NEMA PB 1.1 standards publication.
2. Remove the interior trim from the trim brackets.
3. Install the interior as described below:
 - a. Set the interior on the enclosure studs. An elevating screw is not required (See Figure 1 on page 10).
 - b. Tighten the keps nuts against the interior side rails until the rails are against the back of the enclosure.
 - c. Remount the interior trim after wiring.
4. If used as service entrance equipment, neutral bonding is required. See the "Neutral Bonding Strap/Cable Installation" instructions on page 11.
5. Apply equipment labels (located in the bag assembly) as directed by the instructions on the back of the equipment label sheet.

Flush Mounting (Enclosure Recessed in Wall)

1. Mount the enclosure as instructed in the NEMA PB 1.1 standards publication.
2. Remove the interior trim from the trim brackets.
3. Install the interior as described below:
 - a. Thread the (4) 10-32 x .875 in. self-tapping, elevating screws provided with the flush trim into the side rails.
 - b. Set the interior on the enclosure studs (see Figure 1 on page 10). Place the keps nuts onto the enclosure studs, but do not tighten.
 - c. Adjust the screws so that the lip of the interior trim is approximately 0.25 inches (6.35 mm) from wall line.
 - d. Tighten the keps nuts against the side rails.
 - e. Remount the interior trim after wiring.
4. If used as service entrance equipment, neutral bonding is required. See the "Neutral Bonding Strap/Cable Installation" instructions on page 11.
5. Apply equipment labels (located in the bag assembly) as directed by the instructions on the back of the equipment label sheet.

Figure 1: Interior Mounting of Square D Brand Enclosures



Neutral Bonding Strap/Cable Installation

The neutral bonding strap/cable should be used only when the panelboard is **installed** as service equipment.

To properly bond the neutral to the panelboard, follow the instructions for either “100 or 250 A Maximum NQ Panelboards” or “400 or 600 A Maximum NQ Panelboards and QONQ Load Centers” below and on page 13, respectively.

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Turn OFF all power supplying this equipment before working on or inside the equipment.
- The main bonding strap/cable should be used only when the panelboard is installed as service equipment.
- Do not mix the mounting screws with the interior trim screws.

Failure to follow these instructions will result in death or serious injury.

NOTE: The bonding strap/cable parts are found in the bag assembly provided with the interior.

100 or 250 A Maximum NQ Panelboards

To install a neutral bonding strap on a 100 or 250 A maximum NQ panelboard, refer to Figure 2 and follow the instructions below.

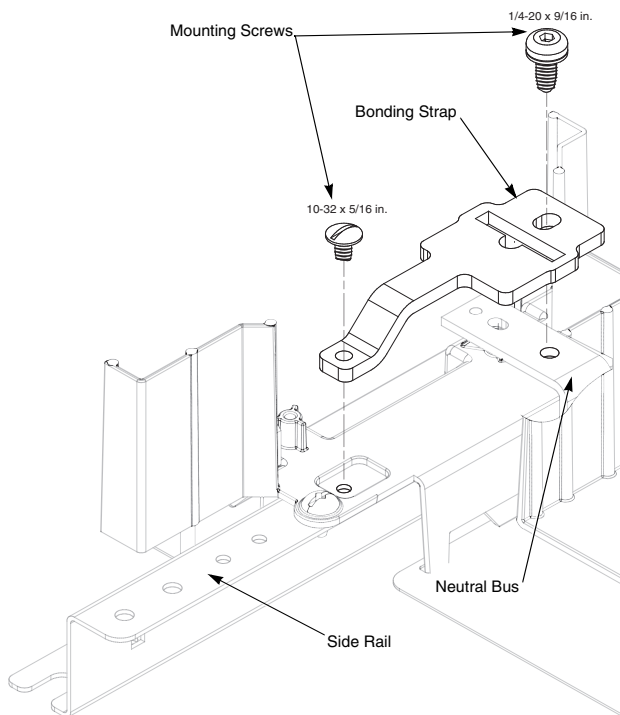
1. Align the bonding strap on the side rail, as pictured.

NOTE: For some applications, it may be necessary to remove the lug (not pictured) before installing the bonding strap.

2. Insert the two mounting screws, as pictured. Tighten the 10-32 screw to 10–12 lb-in (1.1–1.4 N•m) and the 1/4-20 to 25–30 lb-in (2.8–3.4 N•m).

NOTE: If the lug was removed in Step 1 above, reinstall it on top of the bonding strap. Use the 1/4-20 x 1 1/16 in. mounting screw with feed-through lug, sub-feed lug, sub-feed breaker, or 200% neutral applications. Use the 1/4-20 x 7/8 in. lug mounting screw with 200% neutral on 225 A applications with feed-through lug, sub-feed lug, or sub-feed breaker applications. Lug mounting screws are provided in the bonding strap bag assembly.

**Figure 2: Bonding Strap Installation —
100 or 250 A Maximum NQ Panelboards**

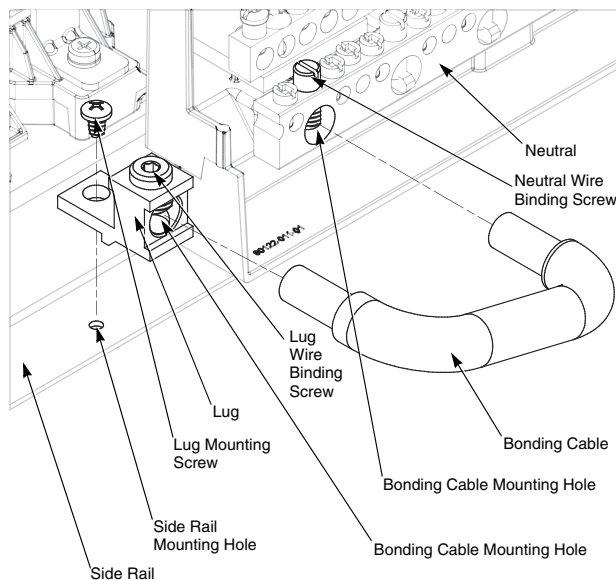


400 or 600 A Maximum NQ Panelboards and QONQ Load Centers

To install a neutral bonding cable on a 400 or 600 A maximum NQ panelboard and QONQ load center, refer to Figure 3 and follow the instructions below.

1. Align the lug on the side rail mounting hole, as pictured.
2. Tighten the lug mounting screw against the side rail to 10–12 lb-in (1.1–1.4 N•m).
3. Align the bonding cable, as pictured, and insert it into the lug and neutral mounting holes.
4. Tighten both the lug wire binding screw and the neutral wire binding screw to 45–50 lb-in (5.1–5.6 N•m).

Figure 3: Bonding Cable Installation — 400 or 600 A Maximum NQ Panelboards and QONQ Load Centers



QO and QOB Circuit Breaker Installation and Removal

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E.
- This equipment must only be installed and serviced by qualified electrical personnel.
- Turn OFF all power supplying this equipment before working on or inside equipment.
- Always use a properly-rated voltage sensing device to confirm that all power is OFF.
- All unused spaces must be filled with blank fillers.
- Replace all devices, doors and covers before turning ON power to this equipment.

Failure to follow these instructions will result in death or serious injury.

QO and QOB Breaker Installation

Refer to Figure 4 on page 16 for the following instructions:

1. Turn OFF all power to the panelboard.
2. Turn the breaker OFF.
3. Remove the interior trim.
4. Snap the wire terminal end of the circuit breaker onto the mounting rail.
5. Engage the branch connector.

For QO Circuit Breakers:

- a. Push inward until the plug-on jaws fully engage the branch connector.

For QOB Circuit Breakers:

- a. Push inward until the breaker connector is centered on the branch connector mounting hole. Engage the screw into the branch connector hole and tighten it to the torque values shown on the interior wiring and torque diagram.

6. Install the load wire.
7. Reinstall the interior trim.

QO and QOB Breaker Removal

Refer to Figure 4 on page 16 for the following instructions:

1. Turn OFF all power to the panelboard.
2. Remove the load wire.
3. Remove the interior trim.
4. Disengage the branch connector.

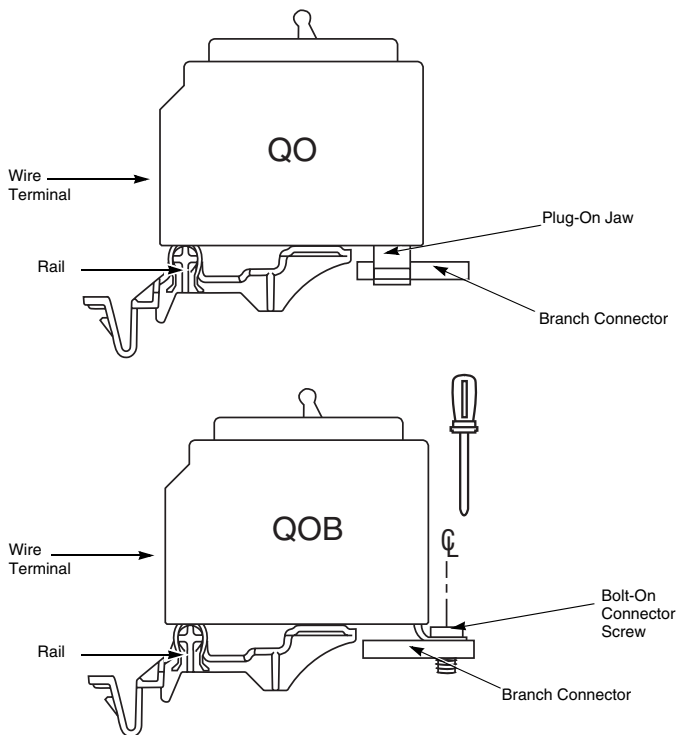
For QO Circuit Breakers:

- a. Pull outward until the plug-on jaws fully disengage the branch connector.

For QOB Circuit Breakers:

- a. Loosen the screw in the breaker connector and pull the breaker off of the branch connector.
5. Snap the wire terminal end of the circuit breaker off of the mounting rail.
 6. Reinstall the interior trim.

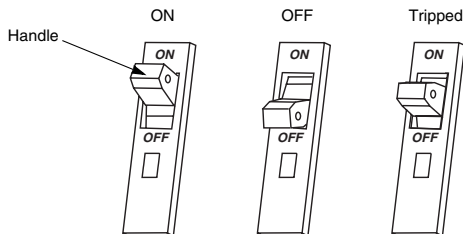
Figure 4: QO and QOB Circuit Breaker Installation and Removal



Circuit Breaker Reset Instructions

If the circuit breaker is tripped, the handle will be at the mid-position between ON and OFF. To reset the circuit breaker, push the handle to the OFF position, then to the ON position.

Figure 5: Circuit Breaker Handle Positions



Interior Trim Preparation

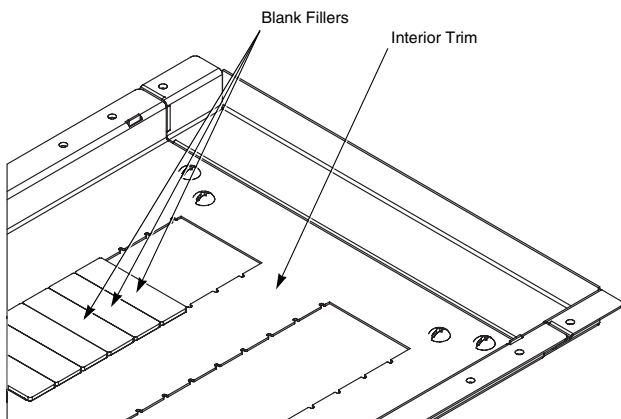
⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Before energizing the panelboard, all unused spaces must be filled with blank fillers.
- Replace all devices, doors, and covers before energizing this equipment.

Failure to follow this instruction will result in death or serious injury.

Figure 6: Interior Trim Diagram



NOTE: The back of the interior trim lists the catalog number for its corresponding compatible blank fillers.

Appendix 1: Specifications

Typical Wiring

Table 1: Panelboard Typical Wiring¹

Voltage AC	1-Phase Panelboards		3-Phase Panelboards	
	Phase	Wires	Phase	Wires
208Y/120	—	—	3	4
120/240	1	3	—	—
240 ²	1	2	3	3
240 ³	3	3	—	—
240/120 ⁴	—	—	3	4 Delta

¹ Additional information is provided on the panelboard. See the main circuit breaker rating, if used.

² For this system, the neutral is not used and only circuit breakers rated 240 V AC minimum should be used. Do not use circuit breakers rated 120 V or 120/240 V AC.

³ For a grounded "B" phase system, only circuit breakers rated 240 V AC minimum should be used. Do not use circuit breakers rated 120 V or 120/240 V AC.

⁴ When wiring for a delta system, phases "A" and "C" must be 120 V to neutral, phase "B" 208 V to neutral. Connect only circuit breakers rated 240 V AC minimum. Do not use circuit breakers rated 120 V or 120/240 V to "B" phase.

Integral Main or Sub-Feed:

DJ, FI, KI, H, J, LA, LC, LH, QB, QD, QG, QJ, QO(B)VH

Figure 7: NQ/NQM 100-225 A Main Lugs or 100-250 A Main Breaker Diagram

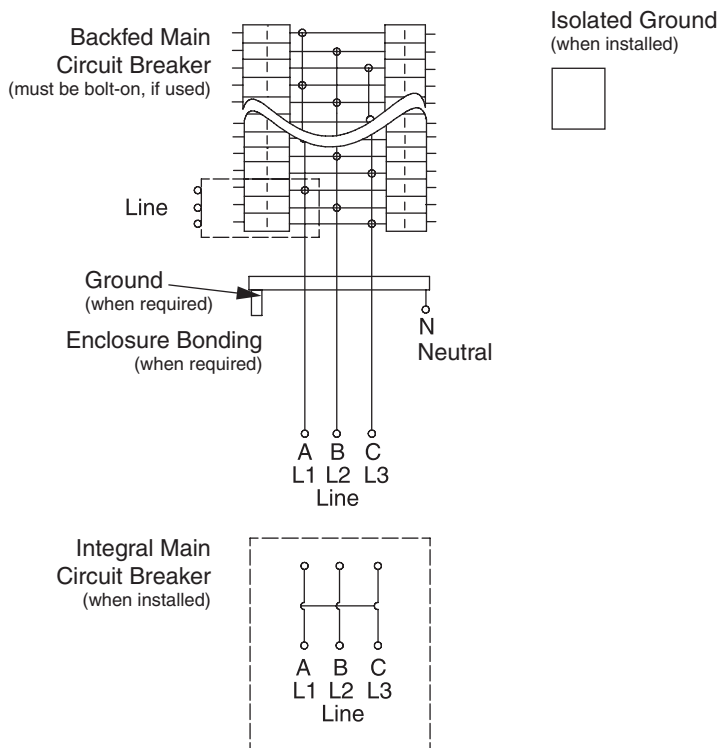


Figure 8: NQ Panelboard or QONQ Load Center 400–600 A Main Lugs or Main Circuit Breaker with or without Feed-Through Lugs Diagram

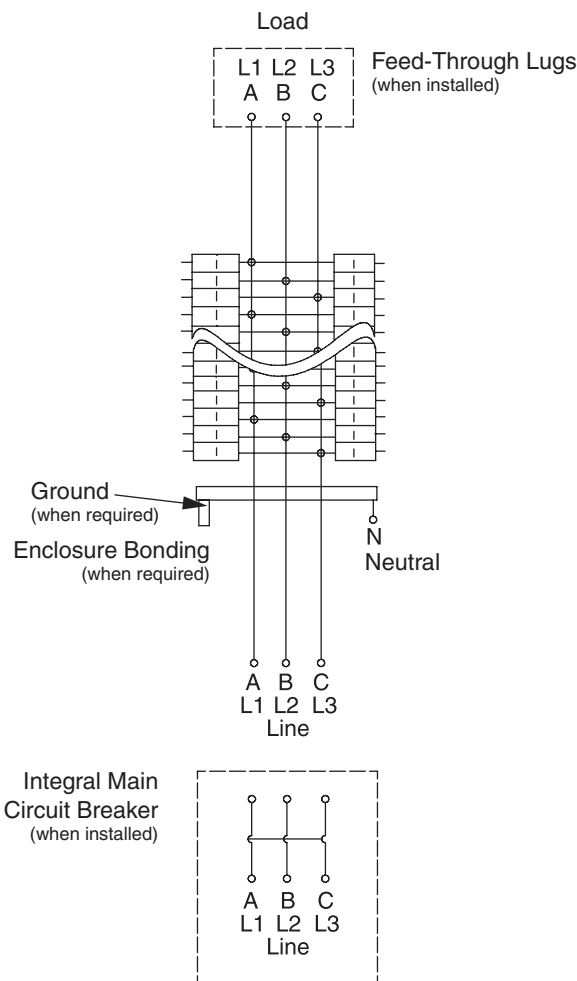


Figure 9: NQ Panelboard or QONQ Load Center 400–600 A Main Circuit Breaker with Feed-Through Lugs or Sub-Feed Circuit Breakers Diagram

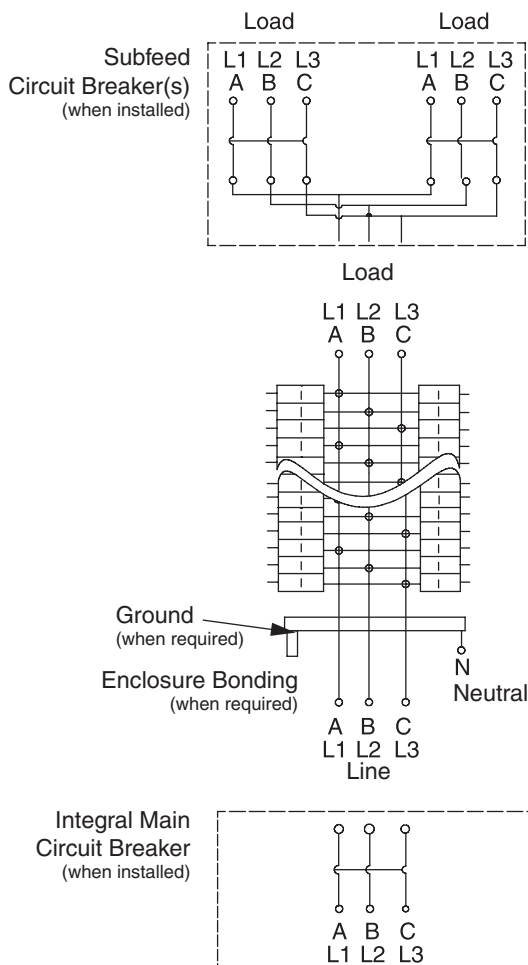
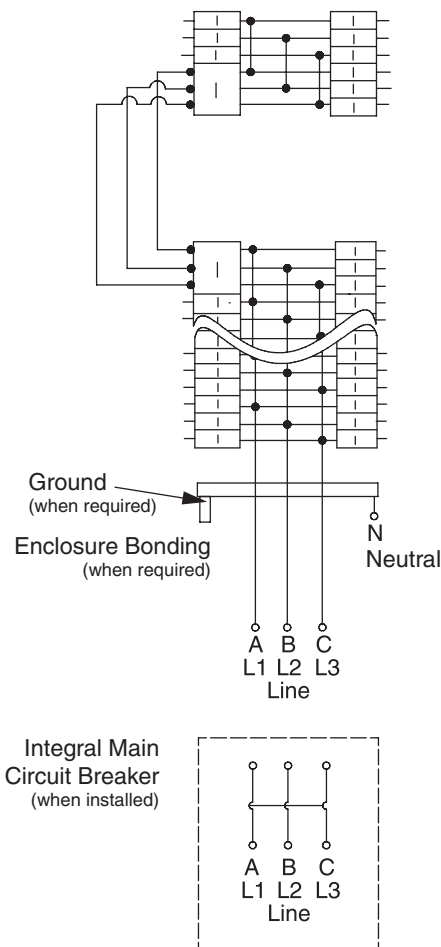


Figure 10: Typical NQ Panelboard with Split Bus Diagram



Panelboard Ratings

Refer to NEC section 110-22 and CEC rule 14-014 for more information. The series rated system label is located in the bag assembly.

Table 2: Series Connected Breaker Ratings (RMS Symmetrical)

Max. System Voltage AC ^{1 2}	Max. Short Circuit Current Rating	Square D Brand Integral or Remote Main Circuit Breakers and Remote Main Fuses	Square D Brand Branch Circuit Breaker Catalog Designation and Allowable Ampere Ranges ^{3 4 5 6}			
			Type	1 Pole	2 Pole	3 Pole
120/240 1PH	22,000	MG	QO (B)	15–30A	—	—
	42,000	HD, JD	QO (B) PL		15–60 A	15–30 A
	65,000	HG, JG	QO (B) PL			
	100,000	HJ, JJ	QO (B) PL			
	125,000	HL, JL	QO (B) PL			
120/240 1PH 208Y/120	100,000	DJ 400A	QO (B)	15–70 A	15–125 A	—
			QO (B) GFI	15–30 A	40–60 A	—
			QO (B) AFI	15–20 A	—	—
			QO (B) VH	—	150 A	15–150 A
	100,000	QJ	QO (B)	15–70 A	15–125 A	15–30 A
			QO (B) AS	15–30 A	15–30 A	15–30 A
			QO (B) GFI	15–30 A	15–60 A	—
			QO (B) VH	—	150 A	35–150 A
			QO (B) PL	15–30 A	15–60 A	15–30 A
			QO (B) AFI	15–20 A	—	—
208Y/120	18,000	LA/LH (L) 34200MC	QO (B)	15–30A	15–30 A	15–30 A
		LA/LH (L) 34225MC				
		LA/LH (L) 34250MC				
		LA/LH (L) 34400MC				

Continued on next page

Table 2: Series Connected Breaker Ratings (RMS Symmetrical) (continued)

Max. System Voltage AC ^{1 2}	Max. Short Circuit Current Rating	Square D Brand Integral or Remote Main Circuit Breakers and Remote Main Fuses	Square D Brand Branch Circuit Breaker Catalog Designation and Allowable Ampere Ranges ^{3 4 5 6}			
			Type	1 Pole	2 Pole	3 Pole
240	22,000	QO (B) VH	QO (B)	15–70 A	15–125 A	15–100 A
			QO (B) AS	15–30 A	15–30 A	15–30 A
			QO (B) GFI	15–30 A	15–60 A	—
			QO (B) PL	15–30 A	15–30 A	—
			QO (B) AFI	15–20 A	—	—
		Q2-H	QO (B)	15–70 A	15–100 A	15–30 A
			QO (B) GFI	15–30 A	15–30 A	—
			QO (B) AFI	15–20 A	—	—
		QD	QO (B)	15–70 A	15–125 A	15–30 A
			QO (B) AS	15–30 A	15–30 A	15–30 A
			QO (B) GFI	15–30 A	15–60 A	—
			QO (B) VH	—	150 A	35–150 A
			QO (B) PL	15–30 A	15–60 A	15–30 A
			QO (B) AFI	15–20 A	—	—
	25,000	ED, FD	QO (B)	15–70 A	15–125 A	15–100 A
			QO (B) GFI	15–30 A	15–60 A	—
			QO (B) AFI	15–20 A	—	—
		KD	QO (B)	15–70 A	15–125 A	15–100 A
			QO (B) AS	15–30 A	15–30 A	15–30 A
			QO (B) GFI	15–30 A	15–60 A	—
			QO (B) AFI	15–20 A	—	—
		HD, JD	QO (B)	15–70 A	15–125 A	15–100 A
			QO (B) VH	—	—	35–150 A
			QO (B) GFI	15–30 A	15–60 A	—
			QO (B) AFI	15–20 A	—	—
			QO (B) H	—	15–100 A	—
			QOB 2150VH	—	150 A	—

Continued on next page

Table 2: Series Connected Breaker Ratings (RMS Symmetrical) (continued)

Max. System Voltage AC ^{1 2}	Max. Short Circuit Current Rating	Square D Brand Integral or Remote Main Circuit Breakers and Remote Main Fuses	Square D Brand Branch Circuit Breaker Catalog Designation and Allowable Ampere Ranges ^{3 4 5 6}			
			Type	1 Pole	2 Pole	3 Pole
240	42,000	LA, MA	Q2L-H	—	100–225 A	100–225 A
			QDL	—	70–225 A	70–225 A
		LC400A	QO (B)	15–70 A	—	—
			QO (B) VH	15–30 A	15–125 A	15–100 A
			QOBVH	—	150 A	—
			QO (B) GFI	15–30 A	15–60 A	—
			QO (B) AFI	15–20 A	—	—
		LC600A	QO (B) VH	15–30 A	15–125 A	15–100 A
			QOBVH	—	150 A	—
			QO (B) GFI	—	15–60 A	—
			QO (B) AFI	15–20 A	—	—
		MG	QO (B) VH	15–30 A	15–30 A	15–30 A
		HD, JD	QO (B) PL	15–30 A	15–60 A	15–30 A
	65,000	LC400A	QO (B)	15–30 A	—	—
			QO (B) VH	15–30 A	15–125 A	15–100 A
			QOBVH	—	150 A	—
			QO (B) GFI	15–30 A	—	—
			QO (B) AFI	15–20 A	—	—
		LC600A	QO (B) VH	15–30 A	15–125 A	35–100 A (3P208 V max) 15–30 A (3P240 V max)
			QOBVH	—	150 A	—
			QO (B) GFI	—	—	—
			QO (B) AFI	15–20 A	—	—
		DJ 400A	QO (B)	15–70 A	15–125 A	—
			QO (B) VH	—	150 A	15–150 A
			QO (B) H	—	15–100 A	—
		EG, FG, KG	QO (B)	15–70 A	15–125 A	15–100 A
			QO (B) GFI	15–30 A	15–60 A	—
			QO (B) AFI	15–20 A	—	—

Continued on next page

Table 2: Series Connected Breaker Ratings (RMS Symmetrical) (continued)

Max. System Voltage AC ^{1 2}	Max. Short Circuit Current Rating	Square D Brand Integral or Remote Main Circuit Breakers and Remote Main Fuses	Square D Brand Branch Circuit Breaker Catalog Designation and Allowable Ampere Ranges ^{3 4 5 6}			
			Type	1 Pole	2 Pole	3 Pole
240	65,000	QG	QO (B)	15–70 A	15–125 A	15–30 A
			QO (B) AS	15–30 A	15–30 A	15–30 A
			QO (B) VH	—	150 A	35–150 A
		QG, HG, JG	QO (B) GFI	15–30 A	15–60 A	—
			QO (B) PL	15–30 A	15–60 A	15–30 A
			QO (B) AFI	15–20 A	—	—
		HG, JG	QO (B)	15–70 A	15–125 A	15–100 A
			QO (B) VH	—	—	35–150 A
			QO (B) H	—	15–100 A	—
			QO B2150VH	—	150 A	—
		FC_ or KC_22_	QO (B)	15–70 A	15–100 A	15–100 A
		FC_ or KC_32_	QO (B) AS	15–30 A	15–30 A	15–30 A
	100,000	FC_ or KC_24_	QO (B) GFI	15–30 A	15–30 A	—
		FC_ or KC_34_	QO (B) AFI	15–20 A	—	—
		EJ, FJ	QO (B)	15–70 A	15–125 A	15–100 A
			QO (B) GFI	15–30 A	15–60 A	—
			QO (B) AFI	15–20 A	—	—
		HJ, JJ	QO (B)	15–70 A	15–125 A	15–100 A
			QO (B) VH	—	—	35–150 A
			QO (B) GFI	15–30 A	15–60 A	—
		125,000	HL, JL	QO (B) PL	15–30 A	15–60 A
	QO (B) AFI			15–20 A	—	—
	QO (B) H			—	15–100 A	—
	QOB 2150VH			—	150 A	—
	200,000	FI, KI	QO (B)	15–70 A	15–125 A	15–100 A
			QO (B) AS	15–30 A	15–30 A	15–30 A
			QO (B) GFI	15–30 A	15–60 A	—
			QO (B) AFI	15–20 A	—	—

Continued on next page

Table 2: Series Connected Breaker Ratings (RMS Symmetrical) (continued)

Max. System Voltage AC ^{1 2}	Max. Short Circuit Current Rating	Square D Brand Integral or Remote Main Circuit Breakers and Remote Main Fuses	Square D Brand Branch Circuit Breaker Catalog Designation and Allowable Ampere Ranges ^{3 4 5 6}			
			Type	1 Pole	2 Pole	3 Pole
240	65,000	400 A Max. Class J or T6 Fuses	QO (B) VH	15–30 A	15–125 A	15–100 A
			QOB-VH	—	150 A	—
			QO (B) AFI	15–20 A	—	—
	100,000	200 A Max. Class T3 Fuses	QO (B) AFI	15–20 A	—	—
	200,000	200 A Max. Class J or T6 Fuses and 400 A Max. Class T3 Fuses	QO (B)	15–70 A	15–125 A	15–100 A
			QO (B) AS	15–30 A	15–30 A	15–30 A
			QO (B) GFI	15–30 A	15–60 A	—

¹ For shown circuit breakers rated less than this maximum voltage, the indicated short circuit current rating also applies, but at the voltage rating of the circuit breaker.

² Short circuit tests are conducted at 100–105% of the maximum rated voltage of the panelboard.

³ Suffixes HID, SWD, and SWN may also be applied to the applicable branch circuit breakers shown above. Suffix SWN may **not** be applied in combination with LC main breakers.

⁴ Where QO (B) circuit breakers are shown above, QO (B) H, QO (B) VH, and QH (B) circuit breakers may also be used.

⁵ Where QO (B) GFI circuit breakers are shown above, QO (B) EPD circuit breakers may also be used.

⁶ Where QO (B) AFI circuit breakers are shown above, QO (B) CAFI circuit breakers may also be used.

Table 3: Short Circuit Current Rating¹ for Main Lug Interiors with Sub-Feed or Feed-Through Lugs

Maximum System Voltage AC	Maximum Current Rating	Branch Circuits	Application	Adder ²	Maximum Short Circuit Current Rating ³
240	100	18, 30	SFL and FTL	—	10,000
	225	30, 42, 54, 72, 84	SFL	6 inches (152.4 mm)	
		42	FTL	—	
		30, 54, 72, 84		6 inches (152.4 mm)	
	400	30, 42, 54, 72, 84	SFL	—	25,000
		30, 84	FTL	—	
		42, 54, 72		6 inches (152.4 mm)	
		30, 42, 54, 72, 84	FTL	12 inches (304.8 mm)	

¹ This rating applies to main lug interiors, equipped with sub-feed or feed-through lugs, where the device feeding the interior is unknown or not a Square D brand device. Use of a Square D brand main circuit breaker ahead of these lugs will result in a rating equal to the rating of the breaker. Short circuit tests are conducted at 100–105% of the maximum rated voltage of the panelboard.

² The adder is the additional length of the enclosure.

³ RMS symmetrical amperes, for three cycles.

CE Marking

Interiors with the “CE” mark meet the IEC 60439-1 standard.

Appendix 2: Accessory Kits

An assortment of field-installable accessory kits are available for NQ panelboards:

- Equipment Ground Bar Kits
- Oversized Lug Kits for 100–250 A Panelboards
- Sub-Feed Lug Kits for 100–400 A Panelboards
- Main Lug Kits
 - Mechanical Lug Kits — Aluminum
 - Mechanical Lug Kits — Copper
 - Versa-Crimp® Compression Lug Kits — Aluminum
 - Versa-Crimp Compression Lug Kits — Copper

Equipment Ground Bar Kits

Equipment ground bar kits, suitable for copper or aluminum wire, meet the grounding needs of NQ panelboards and QONQ load centers.

Table 4: Equipment Ground Bar Kits Specifications

Panelboard		Use Ground Bar Kit Catalog Number	
Branch Circuit	Mains Rating	Aluminum ¹	Copper ²
1–42	600 A Maximum	(1) PK27GTA	(1) PK27GTACU
54–84		(2) PK27GTA	(2) PK27GTACU

¹ Aluminum bars suitable for 60° C or 75° C Copper or Aluminum conductors.

² Copper bars suitable for 60° C or 75° C Copper conductors.

NOTE: Ground bar mounting locations are identified by the ground symbol  stamped into the backwall of the enclosure.

Oversized Lug Kits for 100–250 A Panelboards

Oversized lug kits are available for applications where termination conductors of 3 AWG or larger are required for the neutral.

Table 5: Oversized Lug Kits for 100–250 A Panelboards Specifications

Circuit Breaker Rating	Kit Catalog Number	Wire Range
70 A	QO70AN	(1) 10–2 Al (1) 5.76–33.6 mm ² (1) 14–4 Cu (1) 2.08–21.1 mm ²
80–125 A	Q1100AN	(1) 4–1/0 Al/Cu (1) 42.4–53.5 mm ²
125–150 A	Q1150AN	(1) 1–4/0 Al/Cu (1) 42.4–107 mm ²
150–225 A	Q1250AN	(2) 4–300 Al/Cu

Sub-Feed Lug Kits for 100–400 A Panelboards

Sub-feed main lugs are available for 100, 225, or 400 A applications.

Table 6: Sub-Feed Lug Kits for 100–400 A Panelboards Specifications

Main Amps	Kit Catalog Number	Maximum Circuits
100	NQSFL1	18, 30
225	NQSFL2	30 ¹ , 42 ¹ , 54 ¹ , 72 ¹ , 84 ¹
400	NQSFL4	30, 42, 54, 72, 84

¹ These panels require an additional 6 inches (152.4 mm) for the box and trim, for proper wire bending space.

Main Lug Kits

Table 7: Mechanical Lug Kits — Aluminum

Panelboard Amps	Kit Catalog Number	Wire Range
100	Standard	#6–2/0 AWG 13.3–67.43 mm ²
225	Standard	#6–350 kcmil 13.3–177.3 mm ²
400	Standard	(1) 1/0–750 kcmil (2) 1/0–350 kcmil (1) 53.48–380 mm ² (2) 53.48–177.3 mm ²
600	Standard	(2) 1/0–750 kcmil (2) 53.48–380 mm ²
	NQALM6A	(3) #6–250 kcmil (3) 13.3–127 mm ²

Table 8: Mechanical Lug Kits — Copper

Panelboard Amps	Kit Catalog Number	Wire Range
100	NQCUM1	#6–2/0 AWG 13.3–67.43 mm ²
225	NQCUM2	#6–250 kcmil 13.3–127 mm ²
400	NQCUM4	(1) 1/0–750 kcmil (2) 1/0–350 kcmil
600	NQCUM6	(1) 53.48–380 mm ² (2) 53.48–177.3 mm ²

Table 9: Versa-Crimp® Compression Lug Kits — Aluminum

Panelboard Amps	Kit Catalog Number	Wire Range	Crimp Tool
100	NQALV1	#8–1/0 AWG 8.36–53.48 mm ²	VC6 (All)
225	NQALV2	#4–300 kcmil 21.15–152 mm ²	
400	NQALV4	(2) 2/0–500 kcmil	VC6-3, VC6-FT
600	NQALV6	(2) 67.43–253.4 mm ²	

Table 10: Versa-Crimp® Compression Lug Kits — Copper

Panelboard Amps	Kit Catalog Number	Wire Range	Crimp Tool
100	NQCUV1	#6–1/0 AWG 13.30–53.48 mm ²	VC6 (All), VC7 (All)
225	NQCUV2	2/0–300 kcmil 67.43–152 mm ²	VC6-3, VC7, VC6-FT, VC7-FT
400	NQCUV4	400–750 kcmil 202.7–380 mm ²	VC6-FT, VC7-FT, VC8
600	NQCUV6	(2) 250–500 kcmil (2) 126.7–253.4 mm ²	VC6-3, VC7, VC6-FT, VC7-FT

**NQ/NQM Panelboards and QONQ Load Centers Information Manual
Instruction Bulletin**

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