

NF/NFOM Panelboards

Information Manual



Tableros de alumbrado y distribución NF y NFOM

Manual de información

Panneaux de distribution NF/NFOM

Directives d'utilisation

Instruction Bulletin

Boletín de instrucciones

Directives d'utilisation

80043-741-03 Rev. 05

07/2021

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by **Schneider** Electric

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Information Manual

Class 1670

ENGLISH

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Safety Information

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 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 personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

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

WARNING

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

CAUTION

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

NOTICE

NOTICE is used to address practices not related to physical injury. The safety alert symbol is not used with this signal word.

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.

A qualified person is one who has skills and knowledge related to the construction, installation, and operation of electrical equipment and has received safety training to recognize and avoid the hazards involved.

Introduction

This bulletin contains instructions for installing Square D™ brand NF and NFOM circuit breaker panelboards. These panelboards are Underwriters Laboratories (cULus) listed and accept ECB, EDB, EGB, and EJB branch circuit breakers.

NOTE: For technical support on the installation of this panelboard, contact the Schneider Electric Customer Information Center at 1-888-778-2733.

NOTE: 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

- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E, CSA Z462, or NOM-029-STPS.
- 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.
- 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.
- 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.



WARNING: This product can expose you to chemicals including Nickel compounds, which are known to the State of California to cause cancer, and Bisphenol A (BPA), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Installation

This section provides instructions for the following NF/NFOM panelboard procedures:

- Interior Mounting for Square D Brand Enclosures on page 6

- Neutral Bonding Strap Installation on page 9
- ECB, EDB, EGB, and EJB Circuit Breaker Installation and Removal on page 13
- Circuit Breaker Reset Instructions on page 15
- Deadfront Preparation on page 16

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.

NOTICE

HAZARD OF EQUIPMENT DAMAGE DUE TO LOOSE CONNECTIONS

- 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 NF panelboard, please refer to the NEMA PB 1.1 standards publication, and follow the instructions below for either Surface Mounting (Enclosure Mounted on Wall) on page 6 or Flush Mounting (Enclosure Recessed in Wall) on page 7.

Surface Mounting (Enclosure Mounted on Wall)

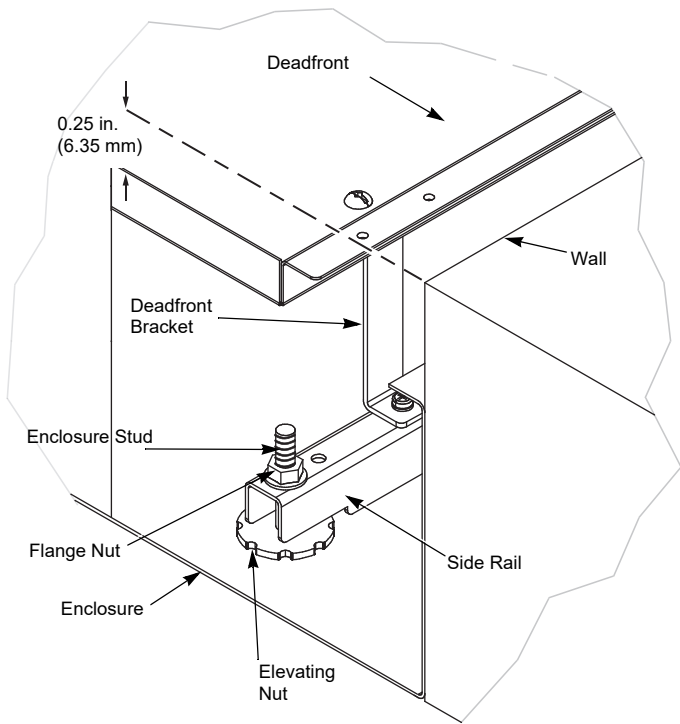
1. Mount the enclosure as instructed in the NEMA PB 1.1 standards publication.
2. Remove the deadfront from the deadfront brackets.

3. Install the interior as described below:
 - a. Set the interior on the enclosure studs. (See Figure 1, Interior Mounting of Square D Brand Enclosures on page 8).
 - b. Tighten the flange nuts against the interior side rails until the rails are against the back of the enclosure. Do not over tighten. Over tightening the flange nuts can cause the interior to bow out in the center.
 - c. Remount the deadfront after wiring.
4. If used as service entrance equipment, neutral bonding and a service entrance barrier may be required. Please consult local codes and standards. See the Neutral Bonding Strap Installation instructions on page 9, and Appendix 2: Accessory Kits.
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 deadfront from the deadfront brackets.
3. Install the interior as described below:
 - a. Thread the provided elevating nuts on the enclosure studs.
 - b. Set the interior on the enclosure studs (see Figure 1, Interior Mounting of Square D Brand Enclosures, on page 8). Place the flange nuts onto the enclosure studs, but do not tighten.
 - c. Adjust the elevating nuts so that the lip of the deadfront is approximately 0.25 inches (6.35 mm) from the wall line.
 - d. Tighten the flange nuts against the side rails.
 - e. Remount the deadfront after wiring.
4. If used as service entrance equipment, neutral bonding and a service entrance barrier may be required. Please consult local codes and standards. See the Neutral Bonding Strap Installation instructions, on page 9, and Appendix 2: Accessory Kits.
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 Installation

The neutral bonding strap 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 125 A or 250 A Maximum NF Panelboards, 400 A or 600 A Maximum NF Panelboards, or 800 A Maximum NF Panelboards below, and on pages 9–12.

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E, CSA Z462, or NOM-029-STPS.
- Turn off all power supplying this equipment before working on or inside the equipment.
- The main bonding strap should be used only when the panelboard is installed as service equipment.
- Do not mix the mounting screws with the deadfront screws.

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

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

125 A or 250 A Maximum NF Panelboards

To install a neutral bonding strap on a 125 A or 250 A maximum NF panelboard, refer to Figure 2, Bonding Strap Installation— 125 A or 250 A Maximum NF Panelboards, on page 10, and follow the instructions below.

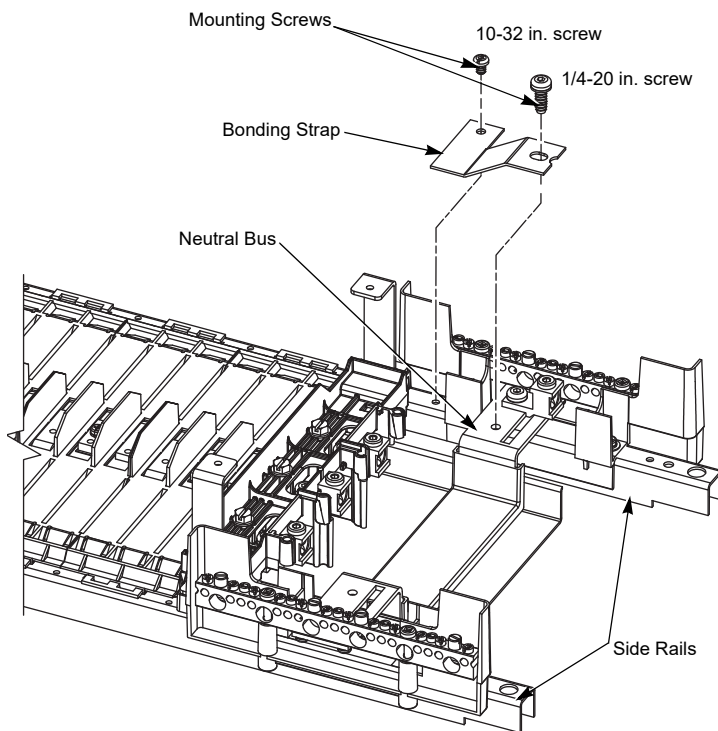
1. Align the bonding strap on the side rail, as pictured.

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 screw to 25–30 lb-in (2.8–3.4 N•m).

NOTE: If the lug was removed in Step 1, reinstall it on top of the bonding strap. Use the 1/4-20 x 3/4 in. mounting screw. Lug mounting screws are provided in the bonding strap bag assembly.

**Figure 2: Bonding Strap Installation—
125 A or 250 A Maximum NF Panelboards**



400 A or 600 A Maximum NF Panelboards

To install a neutral bonding strap on a 400 A or 600 A maximum NF panelboard, refer to Figure 3, Bonding Strap Installation—400 A or

600 A Maximum NF Panelboards, on page 11, and follow the instructions below.

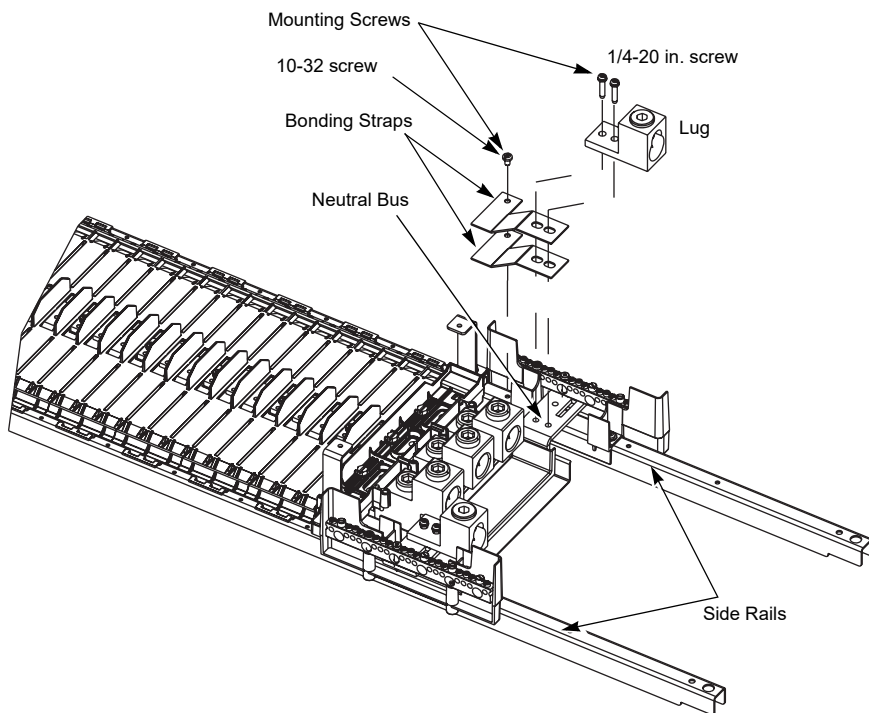
1. Align the two bonding straps on the side rail, as pictured.

NOTE: For some applications, it may be necessary to remove the lug before installing the bonding strap.

2. Insert the three mounting screws, as pictured. Tighten the 10-32 screw to 10–12 lb-in (1.1–1.4 N•m) and the two 1/4-20 screws to 60–65 lb-in (6.8–7.3 N•m).

NOTE: If the lug was removed in Step 1 above, reinstall it on top of the bonding straps. Use the 1/4-20 x 1 1/8 in. mounting screws. Lug mounting screws are provided in the bonding strap bag assembly.

Figure 3: Bonding Strap Installation—400 A or 600 A Maximum NF Panelboards

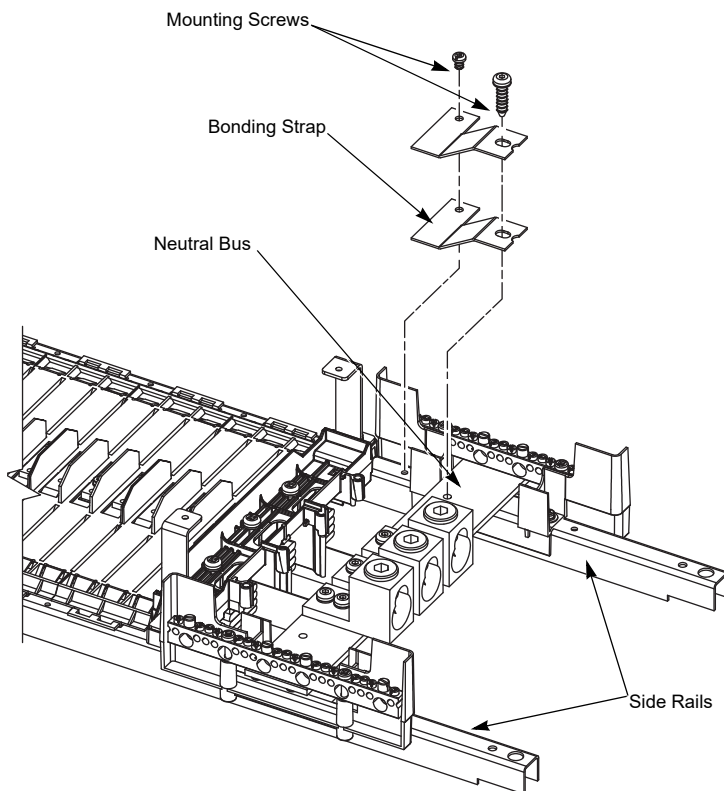


800 A Maximum NF Panelboards

To install a neutral bonding strap on an 800 A maximum NF panelboard, refer to Figure 4, Bonding Strap Installation—800 A Maximum NF Panelboards, on page 12, and follow the instructions below.

1. Align the two bonding straps on the side rail, as pictured.
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 screw to 60–65 lb-in (6.8–7.3 N•m).

Figure 4: Bonding Strap Installation—800 A Maximum NF Panelboards



ECB, EDB, EGB, and EJB 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, CSA Z462, or NOM-029-STPS.
- 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 filler plates.
- 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.

ECB, EDB, EGB, and EJB Circuit Breaker Installation

Refer to Figure 5, ECB, EDB, EGB, and EJB Circuit Breaker Installation and Removal, on page 14, for the following instructions:

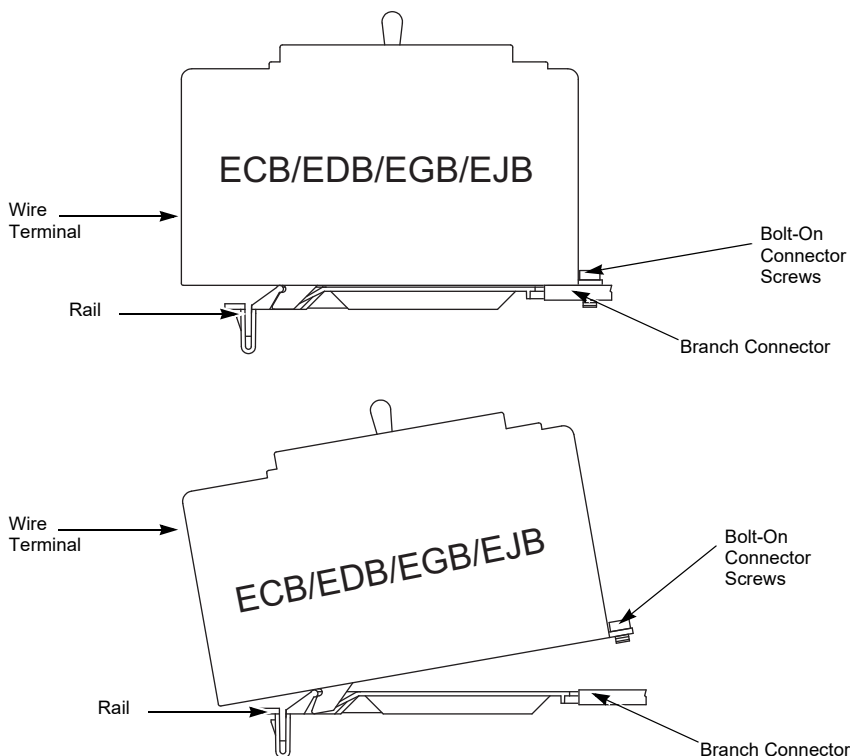
1. Turn off all power to the panelboard.
2. Turn the circuit breaker off.
3. Remove the deadfront.
4. With the bolt-on connector end of the circuit breaker slightly elevated, insert the mounting foot into the slot in the phase cover.
5. Rotate the circuit breaker down and back until the captive screw(s) align with the tapped holes in the circuit breaker connectors.
6. Engage the screw into the branch connector hole and tighten it to the torque values shown on the interior wiring and torque label.
7. Install the load wire.
8. Reinstall the deadfront.
9. Install a filler plate in all branch circuit breaker spaces not used.

ECB, EDB, EGB, and EJB Circuit Breaker Removal

Refer to Figure 5, ECB, EDB, EGB, and EJB Circuit Breaker Installation and Removal, on page 14, for the following instructions:

1. Turn off all power to the panelboard.
2. Remove the deadfront.
3. Turn the circuit breaker off.
4. Remove the load wire.
5. Loosen the screw(s) in the circuit breaker connector and lift the circuit breaker off of the panelboard.
6. Reinstall the deadfront.
7. Install a filler plate in all branch circuit breaker spaces not used.

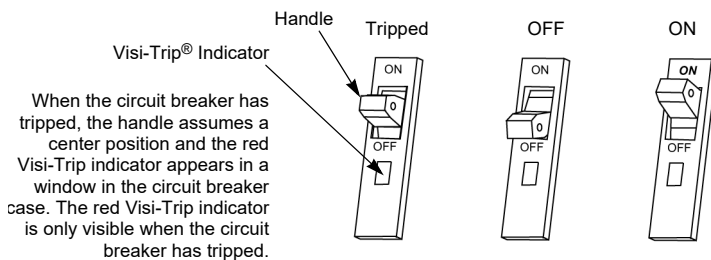
Figure 5: ECB, EDB, EGB, and EJB Circuit Breaker Installation and Removal



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 6: Circuit Breaker Handle Positions



Deadfront Preparation

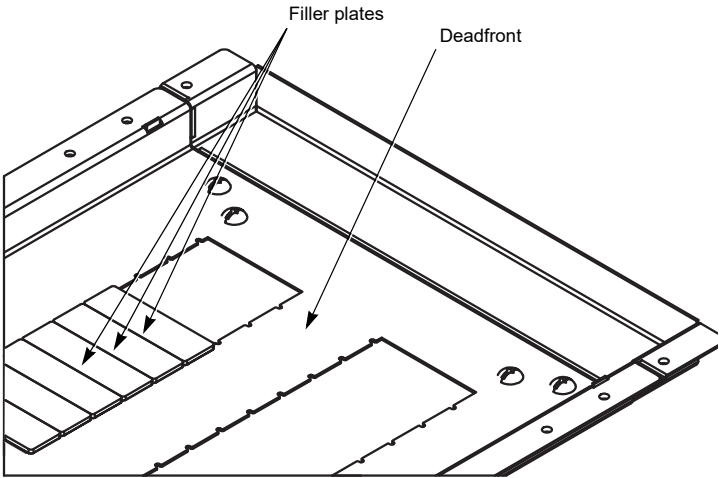
⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E, CSA Z462 or, NOM-029-STPS.
- Before energizing the panelboard, all unused spaces must be filled with filler plates.
- Replace all devices, doors, and covers before energizing this equipment.

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

Figure 7: Deadfront Diagram



NOTE: The back of the deadfront lists the catalog number for the corresponding compatible filler plates.

Panelboards Equipped with Motor Operators for PowerPacT H and J Frame Circuit Breakers

DANGER

HAZARD OF ELECTRICAL SHOCK, EXPLOSION, OR ARC FLASH

- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E, CSA Z462 or, NOM-029-STPS.
- This equipment must be installed and serviced only by properly trained qualified electrical personnel according to OSHA 1910.331 through 1910.335.
- Turn off all power sources supplying this equipment and de-energize all primary and secondary circuits before working on or inside equipment.
- Locking the manual operation or locking the motor cover does not disconnect the secondary motor circuit.
- Always use a properly rated voltage-sensing device to confirm equipment is de-energized.
- Always practice lock-out tag-out procedures according to OSHA requirements.
- Do not disable, remove, or modify any mechanical, electrical interlock or safety feature.

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

Appendix 1: Specifications

Typical Wiring

NOTE: Do not use on 600 V or 480 V, 3-phase 3-wire delta systems.

Table 1: Panelboard Typical Wiring¹

Voltage AC	1-Phase Panelboards		3-Phase Panelboards	
	Phase	Wires	Phase	Wires
600Y/347	1	3	3	4
480Y/277	1	3	3	4
208Y/120	1	3	3	4
120/240	1	3	—	—
240 ²	1	2	3	3
240	1	3	—	—
240/120 ³	—	—	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.

³ When wiring for a delta system, phases “A” and “C” must be 120 V to neutral, phase “B” 208 V to neutral.

Integral Main or Sub-Feed
(FI, KI, H, J, LA, LC, LH, EDB, EGB, EJB)

Figure 8: NF/NFOM 125–250 A Main Lugs or Main Circuit Breaker Diagram

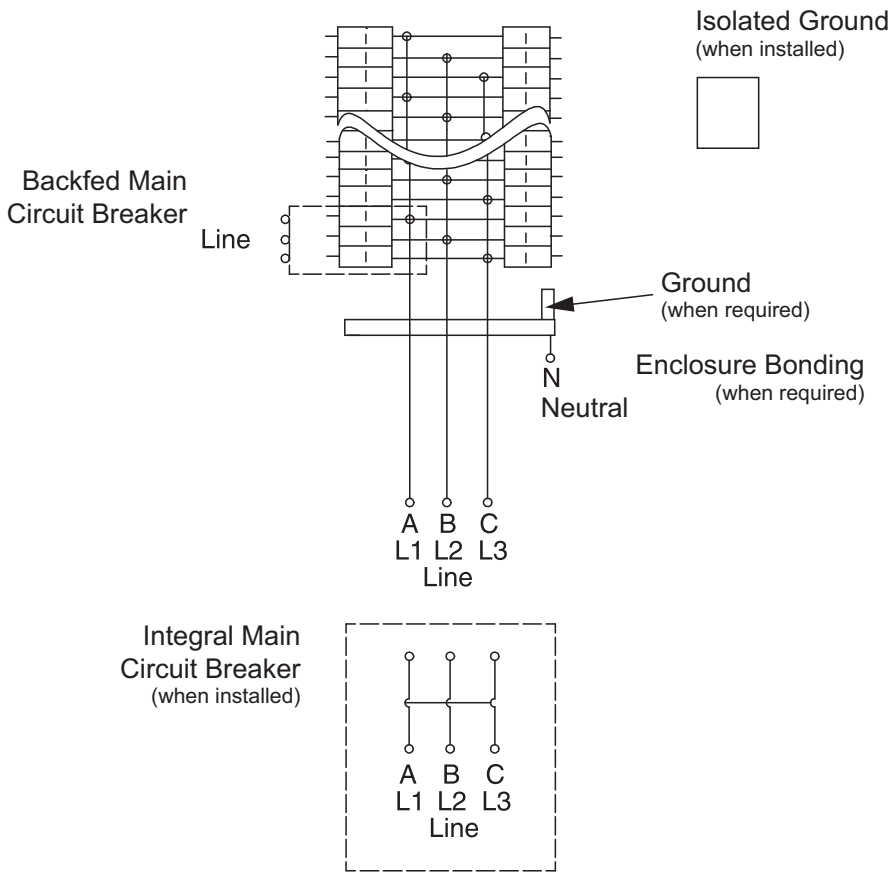


Figure 9: NF 400–800 A Main Lugs or Main Circuit Breaker with or without Feed-Through Lugs Diagram

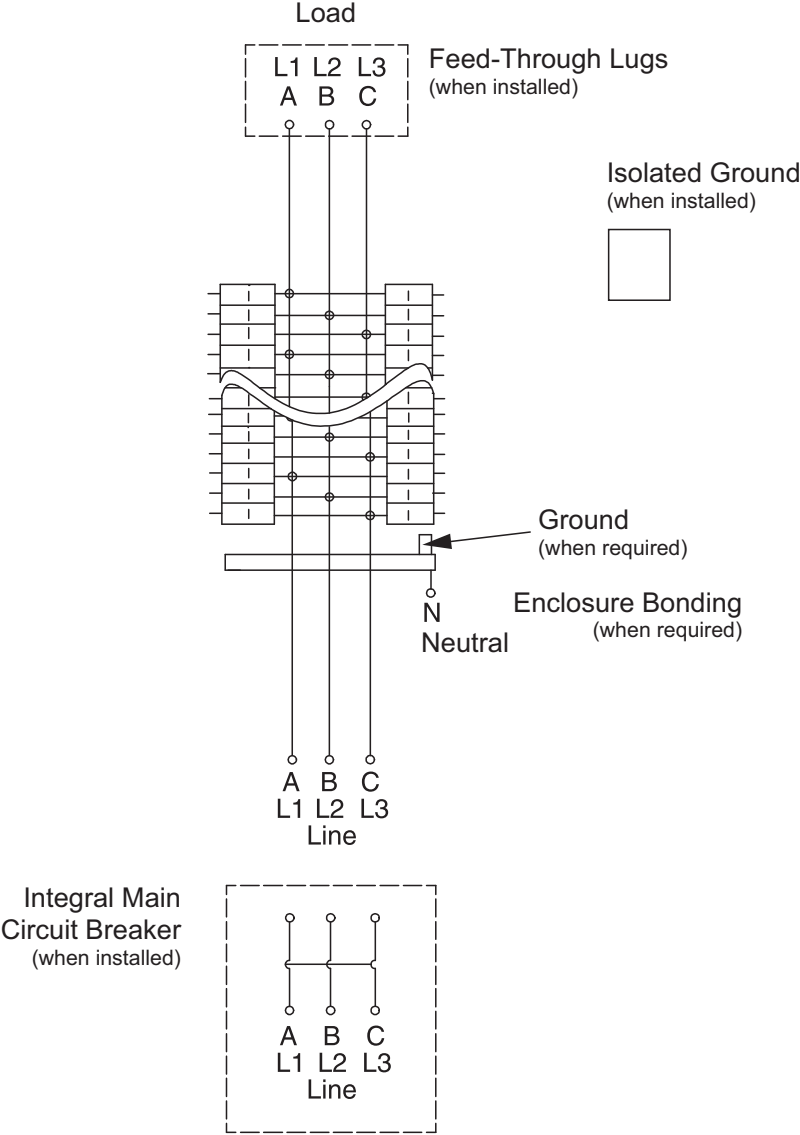


Figure 10: NF 400–800 A Main Circuit Breaker with Feed-Through Lugs or Sub-Feed Circuit Breakers Diagram

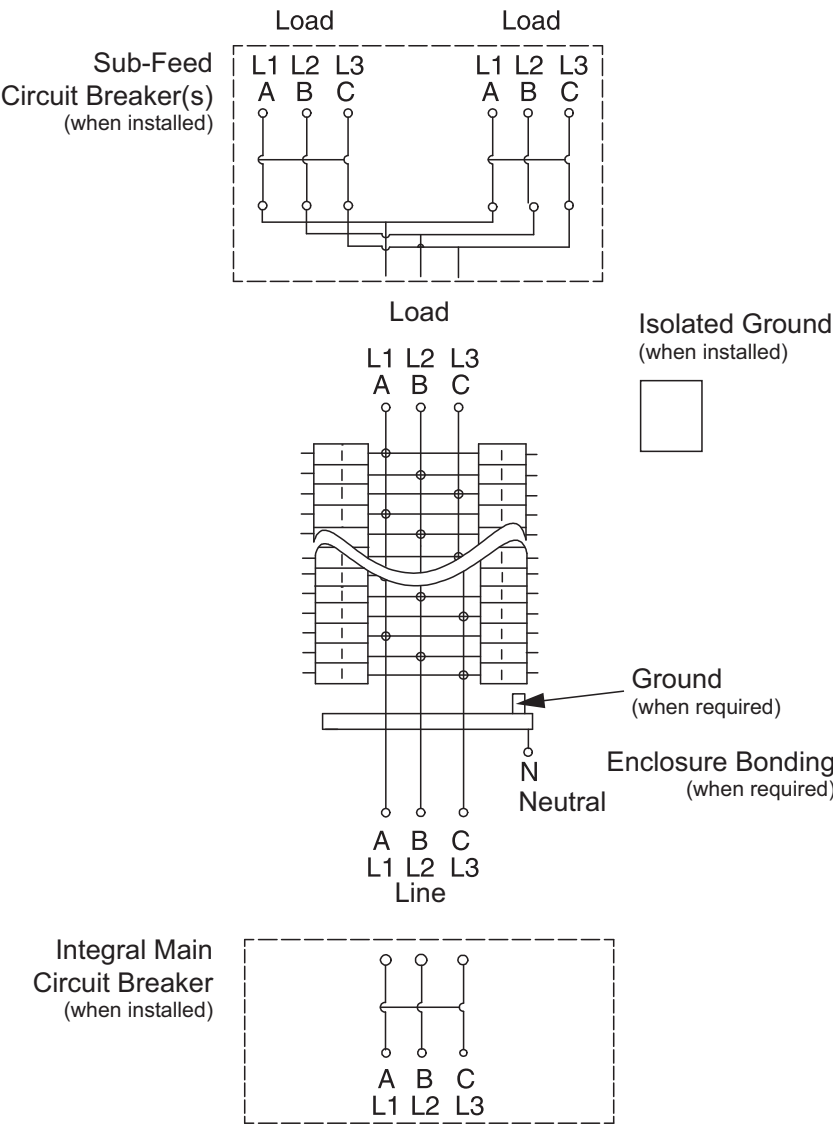
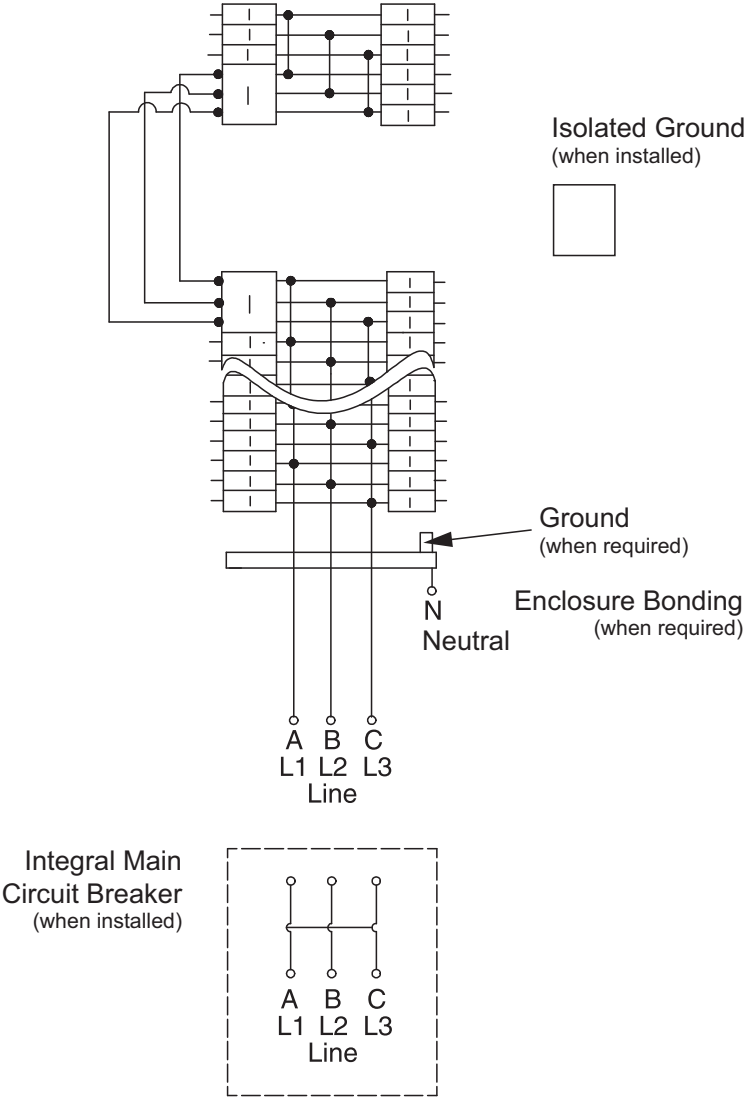


Figure 11: Typical NF Panelboard with Split Bus Diagram



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.

NOTE: 125 A ED/EG/EJ circuit breakers are 480Y/277 Vac maximum only.

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

Max. System Voltage AC ¹	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			
			Circuit Breaker Abbreviation ²	1 Pole	2 Pole	3 Pole
120 120/240 240	65,000	EG, BG, HG, JG, LG, DG, LH, MH	EDB	15–70 A	15–125 A	15–125 A
		FG	EDB	15–70 A	15–110 A	15–110 A
		FH	EDB	15–70 A	15–100 A	15–100 A
		KH	EDB	15–70 A	—	15–125 A
		EG	EDB-G3	15–30 A	15–30 A	15–30 A
	100,000	EJ, BJ, HJ, JJ, LJ, DJ	EDB, EGB	15–70 A	15–125 A	15–125 A
		FC	EDB, EGB	15–70 A	15–100 A	15–100 A
		FJ	EDB	15–70 A	15–110 A	15–110 A
		KC, LC, LE, LX	EDB, EGB	15–70 A	15–125 A	15–125 A
		EJ, BJ, HJ, JJ, FC, KC	ECB-G3	15–30 A	15–30 A	15–30 A
	125,000	HL, JL	EDB, EGB, EJB	15–70 A	15–125 A	15–125 A
		HL, JL	ECB-G3	15–30 A	15–30 A	15–30 A
	200,000	HR, JR, LR	EDB, EGB, EJB	15–70 A	15–125 A	15–125 A
		KI	EDB, EGB	—	15–125 A	—
		LXI, LI	EDB	15–70 A	15–125 A	—
		FI	EDB	—	15–100 A	—
		HR, JR, FI, KI	ECB-G3	15–30 A	15–30 A	15–30 A
		Class J or T (600 V) 200 A Max Fuses	ECB-G3	15–30 A	15–30 A	15–30 A
277 480Y/277	35,000	EG, BG, HG, JG, LG, DG, LH	EDB	15–70 A	15–125 A	15–125 A
		FG	EDB	15–70 A	15–110 A	15–110 A
		KH	EDB	15–70 A	15–125 A	—
		EG, BG, HG, JG, LG, DG, KH, LH	EDB-EPD	15–50 A	—	—
		EG, BG, HG, JG	ECB-G3	15–30 A	15–30 A	15–20 A

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

Max. System Voltage AC ¹	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			
			Circuit Breaker Abbrevi-ation ²	1 Pole	2 Pole	3 Pole
277 480Y/277	65,000	EJ, BJ, HJ, JJ, LJ, DJ, KC, LC, LE, LX	EDB, EGB	15–70 A	15–125 A	15–125 A
		FC	EDB, EGB	15–70 A	15–100 A	15–100 A
		FJ	EDB	15–70 A	15–110 A	15–110 A
		EJ, BJ, HJ, JJ, LJ, LL, DJ, DL, FC, KC, LC, LE, LX	EDB-EPD, EGB-EPD	15–50 A	—	—
		EJ, BJ, HJ, JJ, FC, KC	ECB-G3	15–30 A	15–30 A	15–20 A
	100,000	HL, JL, LL, DL	EDB, EGB, EJB	15–70 A	15–125 A	15–125 A
		HL, JL, LL	EDB-EPD, EGB- EPD, EJB-EPD	15–50 A	—	—
		Class J or T (600 V) 400 A Max Fuses	EDB, EGB, EJB	15–70 A	15–125 A	15–125 A
		Class J or T (600 V) 400 A Max Fuses	EDB-EPD, EGB- EPD, EJB-EPD	15–50 A	—	—
	200,000	HR, JR, LR, KI, LI, LXI	EDB, EGB, EJB	15–70 A	15–125 A	15–125 A
		FI	EDB, EGB, EJB	15–70 A	15–100 A	15–100 A
		HR, JR, LR, FI, KI, LI, LXI	EDB-EPD, EGB- EPD, EJB-EPD	15–50 A	—	—
		HR, JR, FI, KI	ECB-G3	15–30 A	15–30 A	15–20 A
		Class J or T (600 V) 200 A Max Fuses	EDB, EGB, EJB	15–70 A	15–125 A	15–125 A
		Class J or T (600 V) 200 A Max Fuses	EDB-EPD, EGB- EPD, EJB-EPD	15–50 A	—	—
		Class J or T (600 V) 200 A Max Fuses	ECB-G3	15–30 A	15–30 A	15–20 A
	347 600Y/347	18,000 HG, BG, JG, LG	EDB	15–70 A	15–100 A	15–100 A
		25,000 EJ, BJ, HJ, JJ, LJ, KH, LH	EDB, EGB	15–70 A	15–100 A	15–100 A
			FJ	EDB, EGB	—	—
		35,000 LC, LE, LX	EDB, EGB, EJB	15–70 A	15–100 A	15–100 A
		50,000 HL, JL, LL	EDB, EGB, EJB	15–70 A	15–100 A	15–100 A

Continued on next page

Continued on next page

Table 2:

Series Connected Circuit Breaker Ratings (RMS Symmetrical)

(continued)

Max. System Voltage AC ¹	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			
			Circuit Breaker Abbrevi-ation ²	1 Pole	2 Pole	3 Pole
347 600Y/347	65,000	HR, JR, KI	EDB, EGB, EJB	15–70 A	15–100 A	15–100 A
		FI	EDB, EGB, EJB	15–70 A	15–100 A	15–100 A
		LR, LI, LXI	EJB	15–70 A	15–100 A	15–100 A
	200,000	Class J or T (600 V) 200 A Max Fuses	EDB, EGB, EJB	15–70 A	15–100 A	15–100 A

¹ Short circuit tests are conducted at 100-105% of the maximum rated voltage of the panelboard.

² EDB-EPD, EGB-EPD and EJB-EPD suitable for 480Y/277Vac or 277 Vac ONLY.

Table 3:

NF Panel Mission Critical Breaker Selectivity

Maximum SCCR (RMS Symmetrical)	Integral or Remote Main Circuit Breakers	Branch Circuit Breakers			
		Type ¹	1-pole	2-pole	3-pole
Series Rated and Selective to 18 kA at 240 Vac	J-W, 250 A	ED, EG, EJ	15–70	15–125	15–125
Series Rated and Selective to 7 kA at 480Y/277 Vac	J-W, 250 A	ED, EG, EJ	15–70	70–125	70–125
Series Rated and Selective to 10 kA at 480Y/277 Vac	J-W, 250 A	ED, EG, EJ	15–60	15–60	15–60
Series Rated and Selective to 30 kA at 480Y/277 Vac or at 240 Vac	L-W, 250 A L-W, 400 A L-W, 600 A	ED, EG, EJ	15–70	15–125	15–125

¹ Including EPD circuit breakers

Short Circuit Current Rating for Main Lug Interiors with Sub-Feed or Feed-Through Lugs

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, are rated to 25,000 RMS symmetrical amperes at 600Y/347 Vac maximum for three cycles. Use of one of the Square D brand circuit breakers of the correct ampere rating, listed as main circuit breakers on page 19, ahead of these lugs will result in a rating equal to that of the circuit breaker.

CE Marking

- Interiors with the "CE" mark meet the IEC 61439-1 and IEC 61439-2 standards.
- Main lug interiors with the "CE" mark have been tested to withstand 10,000 RMS symmetrical amperes for 30 cycles.
- Interiors with the "CE" mark must be used with ED circuit breakers that have been tested to IEC standards. This limits the circuit breakers used to the single pole EDB circuit breaker (see Digest for details).
- Main circuit breaker interiors with the "CE" mark are limited to a maximum short circuit rating equal to the IEC rating of the main circuit breaker (see Digest for details). Main circuit breakers must be series rated with the EDB single pole circuit breakers.

Three-Point Latch Trim Front for NF Panelboard

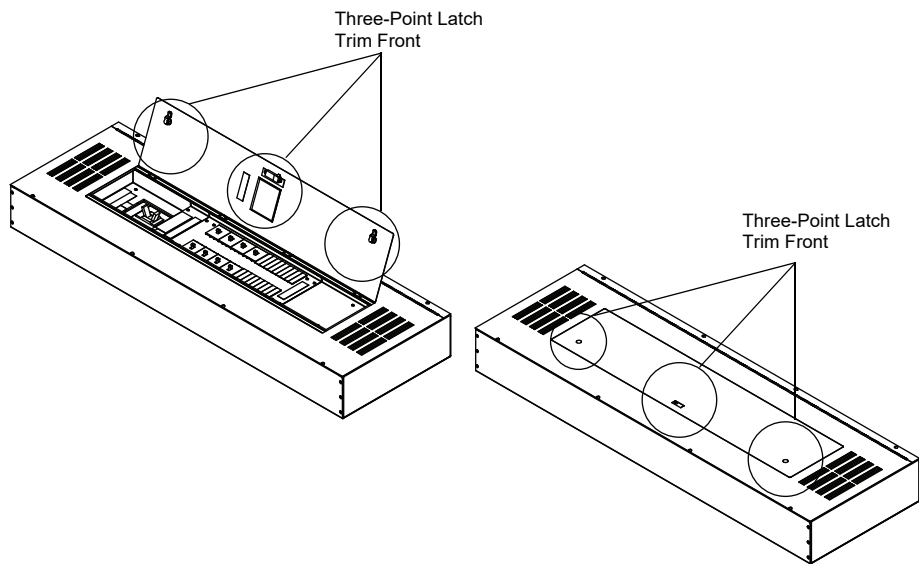
NOTICE
HAZARD OF EQUIPMENT DAMAGE For PowerPacT L-, M- and P-Frame Circuit Breakers install three-point latch trims. Failure to follow this instruction can result in equipment damage.

Table 4: Three-Point Latch Trims—Catalog Number

Type	Surface Mounted	Flush Mounted
Standard	NC62VS3PNF	NC62VF3PNF
	NC68VS3PNF	NC68VF3PNF
	NC74VS3PNF	NC74VF3PNF
	NC80VS3PNF	NC80VF3PNF
	NC86VS3PNF	NC86VF3PNF
	NC92VS3PNF	NC92VF3PNF
Hinged	NC62VS3PNFHR	NC62VF3PNFHR
	NC68VS3PNFHR	NC68VF3PNFHR
	NC74VS3PNFHR	NC74VF3PNFHR
	NC80VS3PNFHR	NC80VF3PNFHR
	NC86VS3PNFHR	NC86VF3PNFHR
	NC92VS3PNFHR	NC92VF3PNFHR

V=Vented
HR= Hinged Right
3P= Three Point

Figure 12: Three-Point Latch Trim Front



Appendix 2: Accessory Kits

An assortment of field-installable accessory kits is available for NF panelboards:

- Equipment Ground Bar Kits, on page 29
- Sub-Feed Lug Kits 125–400 A Panelboards, on page 29
- Main Lug Kits
 - Mechanical Lug Kits — Aluminum, on page 30
 - Mechanical Lug Kits — Copper, on page 30
 - Versa-Crimp® Compression Lug Kits — Aluminum — on page 31
 - Versa-Crimp Compression Lug Kits — Copper, on page 31
- Oversized Neutral Lug Kits for 125–800 A Panelboards Specifications, on page 31


Equipment Ground Bar Kits

Equipment ground bar kits, suitable for copper or aluminum wire, meet the grounding needs of NF panelboards.

Table 5: Equipment Ground Bar Kits Specifications

Panelboard		Use Ground Bar Kit Catalog Number	
Branch Circuit	Mains Rating	Aluminum ¹	Copper ²
1–42	800 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.

Ground bar mounting locations are identified by the ground symbol  stamped into the back wall of the enclosure.

Sub-Feed Lug Kits 125–400 A Panelboards

Sub-feed main lugs are available for 125, 250, or 400 A applications.

Table 6: Sub-Feed Lugs kits for 125–400 A Panelboard Applications

Main Amps	Kit Catalog Number	Maximum Circuits
125	NF125SFL	18, 30
250	NF250SFL	30, 42, 54, 66, 84
400	NF400SFL	30, 42, 54, 66, 84

Main Lug Kits

Table 7: Mechanical Lug Kits — Aluminum

Panelboard Amps	Kit Catalog Number	Wire Size Al/Cu (mm ²)
125	Standard	#6 AWG–350 kcmil (13.3–177.3 mm ²)
250	Standard	
400	Standard	(1) 1/0 AWG–750 kcmil (2) 1/0 AWG–350 kcmil ([1] 53.48–380 mm ²) ([2] 53.48–177.3 mm ²)
600	Standard	(2) 1/0 AWG–750 kcmil ([2] 53.48–380 mm ²)
800	Standard	(3) 1/0 AWG–750 kcmil ([3] 53.48–380 mm ²)

Table 8: Mechanical Lug Kits — Copper

Panelboard Amps	Kit Catalog Number	Wire Size Al/Cu (mm ²)
125	NFCUM1	#6 AWG–350 kcmil (13.3–177.3 mm ²)
250	NFCUM2	
400	NFCUM4	(1) 1/0 AWG–750 kcmil (2) 1/0 AWG–350 kcmil ([1] 53.48–380 mm ²) ([2] 53.48–177.3 mm ²)
600	NFCUM6	(2) 1/0 AWG–750 kcmil ([2] 53.48–380 mm ²)

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

Panelboard Amps	Kit Catalog Number	Wire Size Al/Cu (mm ²)	Crimp Tool
125	NFALV1	#4 AWG–300 kcmil (21.15–152 mm ²)	VC6
250	NFALV2	250–350 kcmil (126.7–177.3 mm ²)	
400	NFALV4	(2) 2/0 AWG–500 kcmil ([2] 67.43–253.4 mm ²)	
600	NFALV6		

Table 10: Versa-Crimp Compression Lug Kits — Copper

Panelboard Amps	Kit Catalog Number	Wire Size Al/Cu (mm²)	Crimp Tool
125	NFCUV1	#6 AWG–1/0 kcmil (13.30–53.48 mm²)	VC6-3
250	NFCUV2	(1) 2/0 AWG–300 kcmil ([1] 67.43–152 mm²)	VC6-FT, VC7, VC7-FT, VC8
400	NFCUV4	(1) 400–750 kcmil ([1] 202.7–380 mm²)	
600	NFCUV6	(2) 250–500 kcmil ([2] 126.7–253.4 mm²)	VC6 Series

Oversized Neutral Lug Kits for 125–800 A Panelboards

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

Table 11: Oversized Neutral Lug Kits for 125–800 A
Panelboards Specifications

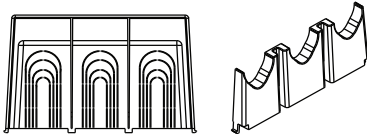
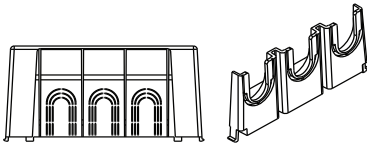
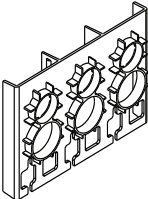
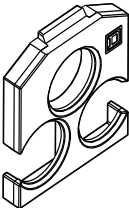
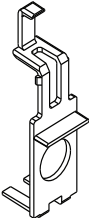
Circuit Breaker Rating	Kit Catalog Number	Wire Size AWG Al/Cu (mm²)
70 A	QO70AN	(1) #12–#2 Al ([1] 3.3–33.6 mm²) (1) #14–#4 Al/Cu ([1] 2.1–21.2 mm²)
80–100 A	QO1100AN ¹	(1) #4–#2 Al/Cu ([1] 21.2–33.6 mm²)

¹ Use only use #3 (26.7 mm²) copper wire for 100 A branch circuit breaker applications.

Lug Cover Kits for U.S. Service Entrance

Panelboards intended for use as service equipment, require a barrier over live field connected load terminals. Please select the appropriate barrier from the table below, based upon the main circuit breaker.

Table 12: U.S. Service Entrance Barriers (required by the U.S. National Electrical Code)

Catalog Number	Contents	Description
LALLC		LA/LH Line Lug Cover
HJQLLC		H/J/Q Line Lug Cover
PPLLC		PowerPacT L Line Lug Cover
PPPLC		PowerPacT P Line Lug Cover
EDBS		E Frame Line Lug Cover

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