

# Section 4

## Square D QO™ Loadcentres

### The Choice of Professionals

Square D service entrance loadcentres feature the rugged design, high quality and proven performance that residential, multi-residential and commercial applications demand, making Square D circuit breakers and loadcentres, the electrical contractors' first choice.

Square D loadcentres offer unique features such as a shielded low profile copper bus bar that provides added electrical safety against incidental contact. Backed by an industry leading lifetime warranty, this Square D loadcentre offers the combination of a high quality loadcentre and branch breakers ready for any home.

#### Panel Features:

##### Quality and Safety

- Accepts QO™ breakers that trip within 1/60th of a second.
- Lifetime limited warranty. See page 67.
- Straight-in mains design minimized cable bends, cutting waste and saving time.
- Shielded low profile copper bus bar provides added electrical safety against incidental contact.

##### Innovation and Convenience

- Exclusive Visi-Trip® indicator to easily identify a tripped breaker.
- Tandem breakers allow you to easily expand the loadcentre capacity.
- Bolt-on main breaker comes standard on all residential Square D panel packages.
- Combination flush/surface cover with door included.
- CSA approved for vertical, horizontal or inverted mounting.
- Backed out neutral screws save labor and installation time.

# Square D loadcentres offer exclusive features with a long standing reputation for quality and reliability

## Key Features

- ✓ **Single teardrop positioning hole**  
Enables single-person installation. The loadcentre can be hung in position and is easily secured with the embossed mounting holes.



- ✓ **Bolt on main breaker** - all 100A and 200A panels have bolt on main breakers for solid connection. Straight-in wiring for main breaker connection saves wire and time - minimize service cable bends. New feature: Main breaker K.O. are now factory removed to save install time.



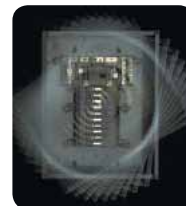
- ✓ **Plated copper bus** — one-piece copper bus provides exceptional conductivity and is plated to ensure superior performance and durability



- ✓ **Shield copper bus** — an industry first, reduces the chance of accidental contact with the bus



- ✓ **180° rotation** - for top, bottom or side feed — improves application flexibility



- ✓ **Backed out neutral screws** - save labor and installation time.



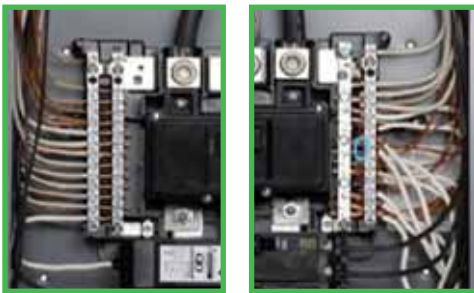
# Square D Plug-on Neutral Loadcentres

The Square D plug-on neutral loadcentres are designed to accept the plug-on (pigtail less) combination arc fault circuit breakers. The plug-on combination arc fault circuit breakers connect directly to the neutral bar of the loadcentre, eliminating the need to attached a separate neutral wire to the neutral bar. The Square D loadcentres features a fully distributed neutral bar that is versatile enough to accept either pigtail or pigtail less arc fault breaker or ground fault breaker.

- Distributed Neutral Bar**  
 Plug-on Neutral Square D service entrance loadcentres are engineered to accept the pigtail less arc fault circuit breaker.



## Compare the difference



Plug-on Neutral Connections

Pigtail Neutral Connections

- Faster Installation / Frees Gutter Space**  
 With the elimination of the pigtail wires in the panel the contractor has fewer connections which saves time and frees gutter space for a cleaner look.
- Easier Troubleshooting**  
 With a much cleaner look, tracing the destination of wires is easier and inspection of panels easier.
- TIME SAVER Diagnostics**  
 Simple 5 seconds test to assist in identifying the type of fault in a circuit.

Main Amp Rating	Number of QO Circuits		Catalogue Number	Main Wire Size AWG/kcmil AL/Cu	Product Dimensions					
	Standard	Tandem			Height		Width		Depth	
					Inches	mm	Inches	mm	Inches	mm
Main Lugs Loadcentre										
N/A	24	47	<b>CQO124L125GCPON</b>	#4-2/0	21.00	533	14.25	362	3.75	95
Main Breaker Loadcentre										
100 A	24	47	<b>CQO124M125C100PON</b>	#4-2/0	21.00	533	14.25	362	3.75	95
100 A	30	60	<b>CQO130M225C100PON</b>	#4-2/0	26.25	667	14.25	362	3.75	95
100 A	42	80	<b>CQO142M225C100PON</b>	#4-2/0	34.00	864	14.25	362	3.75	95
200 A	42	80	<b>CQO142M200CPON</b>	#4-250	34.00	864	14.25	362	3.75	95
200 A	60	80	<b>CQO160M200CPON</b>	#4-250	41.25	1048	14.25	362	3.75	95
100 A	24	47	<b>CQO124M125RB100PON</b> <sup>1</sup>	#4-2/0	22.06	560	14.75	375	4.12	105

<sup>1</sup> OUTDOOR rated

# Square D Qwikpak® Panel Packages

Square D Panel Packages combine a service entrance main breaker loadcentre and a selection of QO™ circuit breakers in a convenient package for quick installation. This panel package is ready to be installed as a replacement for an older fuse box or to upgrade from an older breaker panel.

For added protection from damage, the trim is packaged in a separate carton in the package.

## Qwikpak Panel Package Features:

- Expandable loadcentre capacity with the use of QO™ tandem breakers.
- CSA approved for vertical, horizontal or inverted mounting.
- Tin plated copper bus bars
- Accepts aluminum or copper conductors.
- Able to convert to distributed neutral bars with the use of Neutral Extension kit. See page 41.
- Lifetime limited Warranty. See page 67.



32 Circuit 100A Panel Package

## Square D Panel Package Selection (1 Phase, 3 Wire, 120/240 Vac)

Main Amp Rating	Number of QO Circuits		Catalogue Number	Main Wire Size AWG/kcmil AL/Cu	Product Dimensions					
	Standard	Tandem			Height		Width		Depth	
					Inches	mm	Inches	mm	Inches	mm
100 A	24	48	<b>QP24100</b>	#4-2/0	21.00	533	14.25	362	3.75	95
100 A	32	54	<b>QP32100</b>	#4-2/0	26.25	667	14.25	362	3.75	95
200 A	40	80	<b>QP40200</b>	#4-250	34.00	864	14.25	362	3.75	95
200 A	60	80	<b>QP60200</b> ⓘ	#4-300	41.25	1048	14.25	362	3.75	95

ⓘ Does not include a door. Order kit # QODK60-2 for door. Rated 200 A maximum with aluminum conductors, 225 A with copper conductors.

## Skid Quantities Available—SPECIAL ORDER PURCHASE

Skid quantities are available for any HomeLine panel package with tier pricing. Contact your local Schneider Electric Sales Person for more information and pricing.

Each Panel Package Includes:

- Main Breaker
- Tub, Trim and Interior
- Selection of breakers:
  - 10 - Single Pole 15A QO Breakers
  - 3 - Double Pole 15A QO Breakers
  - 1 - Double Pole 30A QO Breaker
  - 1 - Double Pole 40A QO Breaker



Each Panel Package includes 2 filler plates

# Square D Sub Panels

## QO™ Main Lugs Loadcentres Type 1 Indoor

Main lugs loadcentres are typically used as an add-on loadcentre and is connected to the service entrance loadcentre when spaces for more circuits are needed or when a main disconnect is located elsewhere. It does not contain a main breaker. Square D offers a variety of sizes to meet various applications within the home.

### Indoor Loadcentre Features:

- Expandable loadcentre capacity with the use of QO™ tandem breakers.
- CSA approved for vertical, horizontal or inverted mounting.
- Accepts aluminum or copper conductors.
- Lifetime limited Warranty. See page 67.



8 Space Sub Panel

### Main Lugs Loadcentre Selection (1 Phase, 3 Wire, 120/240 Vac)

Bus Amp Rating	Number of QO Circuits		Catalogue Number	Main Wire Size AWG/kcmil AL/Cu	Product Dimensions					
	Standard	Tandem			Height		Width		Depth	
					Inches	mm	Inches	mm	Inches	mm
30 A	2	4	<b>QO2L30SC</b> ①	#12-10Al/#14-10Cu	6.75	171	3.75	95	3.00	76
70 A	2	4	<b>QO2L70S</b> ②	#12-3Al/#14-4Cu	9.25	235	4.75	121	3.25	83
100 A	4	8	<b>QO4L100S</b> ②	#8-1	12.75	324	9.00	229	3.75	95
100 A	6	12	<b>QO6L100S</b> ②③	#8-1	12.75	324	9.00	229	3.75	95
100 A	8	15	<b>QO8L100S</b> ②③	#8-1	12.75	324	9.00	229	3.75	95
100 A	12	24	<b>CQO112L100GC</b>	#4-1	18.00	457	14.25	362	3.75	95
100 A	16	32	<b>CQO116L100GC</b>	#4-1	18.00	457	14.25	362	3.75	95
125 A	24	48	<b>CQO124L125GC</b>	#4-2/0	21.00	533	14.25	362	3.75	95

① Substitute "S" with "F" at end of part number for Flush cover panel.

② Accepts maximum 70A branch breaker.

③ Accepts maximum 20A GFI or AFI breaker.

④ Will not accept QO-GFI or QO-EPD breakers.

## QO™ Main Lugs Loadcentres Type 3R Outdoor

### Outdoor Loadcentre Features:

- Type 3 outdoor enclosure.
- Enclosures are CSA certified for vertical mounting only.
- Lifetime limited Warranty. See page 67.
- Additional hubs on page 41.



2 Space Outdoor Panel

### Outdoor Main Lugs Loadcentre Selection (1 Phase, 3 Wire, 120/240 Vac)

Bus Amp Rating	Number of QO Circuits		Catalogue Number	Main Wire Size AWG/kcmil AL/Cu	Product Dimensions					
	Standard	Tandem			Height		Width		Depth	
					Inches	mm	Inches	mm	Inches	mm
70 A	2	4	<b>QO2L70RB</b> ④	#12-3Al/#14-4Cu	9.50	241	5.00	127	4.00	102
100 A	6	12	<b>QO6L100RB</b>	#8-1	12.75	324	9.00	229	4.25	108
100 A	8	15	<b>QO8L100RB</b>	#8-1	12.75	324	9.00	229	4.25	108
100 A	16	32	<b>CQO116L100GRB</b>	#4-1	22.25	565	14.25	362	4.50	114

④ Accepts maximum 20A GFI or AFI breaker.

# Square D Main Breaker Only Loadcentres

This service entrance panel is connected to the electrical meter and distributes electricity throughout the home. Each is equipped with a factory installed main circuit breaker, which serves as the main disconnect to turn off power to the loadcentre, as well as to protect the load center from an overload or short circuit.


## Main Breaker Loadcentre Features:

- Factory installed 60 A, 100 A or 200 A main breaker.
- Suitable for surface or flush mounting.
- CSA approved for vertical, horizontal or inverted mounting.
- Tin plated copper bus bars
- Tandem breakers allow you to easily expand the loadcentre capacity.
- Lifetime limited Warranty. See page 67.



16 Circuit Main Breaker Only Panel

## Main Breaker Loadcentre Selection (1 Phase, 3 Wire, 120/240 Vac)

Main Amp Rating	Number of QO Circuits		Catalogue Number	Main Wire Size AWG/kcmil AL/Cu	Product Dimensions					
	Standard	Tandem			Height		Width		Depth	
					Inches	mm	Inches	mm	Inches	mm
60 A	12	24	<b>CQO112M100C60</b>	#4-1	15.00	381	14.25	362	3.75	95
60 A	16	32	<b>CQO116M100C60</b>	#4-1	18.00	457	14.25	362	3.75	95
60 A	24	48	<b>CQO124M125C60</b>	#4-2/0	21.00	533	14.25	362	3.75	95
100 A	16	32	<b>CQO116M100C100</b>	#4-1	18.00	457	14.25	362	3.75	95
100 A	24	48	<b>CQO124M125C100</b>	#4-2/0	21.00	533	14.25	362	3.75	95
100 A	32	54	<b>CQO132M125C100</b>	#4-2/0	26.25	667	14.25	362	3.75	95
100 A	40	80	<b>CQO140M125C100</b>	#4-2/0	34.00	864	14.25	362	3.75	95
125 A	32	54	<b>CQO132M125C125</b>	#4-2/0	26.25	667	14.25	362	3.75	95
150 A	32	54	<b>CQO132M150</b>	#4-250	26.25	667	14.25	362	3.75	95
150 A	40	80	<b>CQO140M150C</b>	#4-250	34.00	864	14.25	362	3.75	95
150 A	60	80	<b>CQO160M150C</b>	#4-250	41.25	1048	14.25	362	3.75	95
175 A	40	80	<b>CQO140M175C</b>	#4-250	34.00	864	14.25	362	3.75	95
200 A	32	54	<b>CQO132M200</b>	#4-250	26.25	667	14.25	362	3.75	95
200 A	40	80	<b>CQO140M200C</b>	#4-250	34.00	864	14.25	362	3.75	95
200 A	60	80	<b>CQO160M200C</b> 	#4-300	41.25	1048	14.25	362	3.75	95

 Does not include a door. Order kit # QODK60-2 for door. Rated 200A maximum with aluminum conductors, 225 A with copper conductors.

# Square D Hot Tub/Pool/Spa Pack

Selecting an outdoor loadcentre for a hot tub, pool or spa has never been easier. Choose any of the Square D QO™ Hot Tub/Pool/Spa Packs that includes a QO™ Type 3R non-metallic loadcentre and a 20, 30, 40, 50 A or 60 A GFCI.

These GFI products provide protection and switching for outdoor circuits such as hot tubs, fountains, swimming pools or spas. For contractors, remodelers and homeowners requiring a durable outdoor loadcentre and GFCI, the Square D Hot Tub/Pool/Spa Pack will meet their needs.

## QO™ Spa Features:

- Includes 20 - 60 Amp 2-pole QO™ GFCI.
- Exclusive VISI-TRIP® Indicator quickly identifies tripped circuit breaker.
- Polymer, compact Type 3R outdoor enclosure will not rust.
- Side hinged door for easy access.
- Lockable door.
- 10,000 ampere short circuit current rating.
- Ideal for indoor or outdoor applications.



50 A Spa Pack

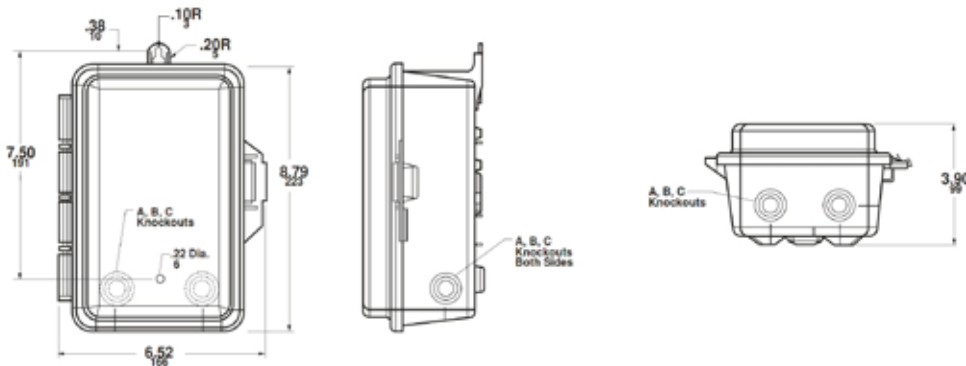
## Spa Pack Selection (1 Phase, 3 Wire, 120/240 Vac)

Amp Rating	Catalogue Number	Weight (lbs.)	Box Dimensions					
			Height		Width		Depth	
			Inches	mm	Inches	mm	Inches	mm
20 A	CQOE220GFINM	2.7	9.80	245	6.52	165	3.90	99
30 A	CQOE230GFINM							
40 A	CQOE240GFINM							
50 A	CQOE250GFINM							
60 A	CQOE260GFINM①							

① 2 Wire 240 V only. No neutral connection on GFI breaker.

Enclosure only part number: CQO24L60NRNM

## Dimensions



## FAST FACTS

Spa Packs must be located at least 3m (10ft.) away from the hot tub, pool or spa.

# Square D Generator Panels

The Square D generator panels allows you to permanently connect a standby power source to specific circuits, such as lighting, heating, refrigerator, freezer, and sump pump. You can easily switch the power supply to branch circuits by turning off the utility main breaker and turning on the main breaker connected to the generator.

For added safety, an easy to use rotating interlock bracket allows only one main breaker to be on the "ON" position at the same time. Ideally suited for residential, rural, commercial applications requiring a quick and easy switch over from utility power to standby generator power.

## Generator Panel Features:

- Large circuit breaker capacity. Accepts up to 18 standard or 36 QO™ tandem circuits.
- Includes two factory installed 30 A or 60 A 3 pole main breakers.
- Ease of use from our patented rotating interlock bracket design.
- Manually switch from utility power to stand-by generator power in seconds.
- Suitable for generators having either bonded or unbonded neutral conductors.
- 30 A or 60 A 3-pole utility/generator circuit breakers switch both line & neutral conductors in accordance with the Canadian Electrical Code.
- Type 1 Indoor Enclosure with surface/flush mounted trim.



60 A Generator Panel

## Generator Panel Selection (1 Phase, 3 Wire, 120/240 Vac)

Main Amp Rating	Number of QO Circuits		Catalogue Number	Main Wire Size AWG/kcmil AL/Cu	Product Dimensions					
	Standard	Tandem			Height		Width		Depth	
					Inches	mm	Inches	mm	Inches	mm
30 A	18	36	<b>QOGP3P3036</b>	#14-8	15.00	381	14.25	362	3.75	95
60 A	18	36	<b>QOGP3P6036</b>	#8-2	15.00	381	14.25	362	3.75	95



Patented Easy to use Rotating Interlock Bracket



# Square D All-in-one Generator Panels

The Square D All-in-one Generator Panels offer the best solution for new installations with a easy to use back up power. The entire unit is in a single enclosure with a pre-wired service entrance loadcentre and generator.

This All-in-one Generator Panel offers plenty of space for any application in the home with a total of 80 circuits using tandem breakers and a total of 36 circuits using tandem breakers for backup purposes.

This panel offers the same patented rotating interlock bracket as the Square D stand alone generator panels.

## Generator Panel Features:

- Large circuit breaker capacity.
- Includes two factory installed 60 A 3 pole main breakers.
- Ease of use from our patented rotating interlock bracket design.
- Manually switch from utility power to stand-by generator power in seconds.
- Suitable for generators having either bonded or unbonded neutral conductors.
- 60 A 3-pole utility/generator circuit breakers switch both line & neutral conductors in accordance with the Canadian Electrical Code.
- Includes cover with door.



200 A All-in-one Generator Panel

## Combination Generator Panel Selection (1 Phase, 3 Wire, 120/240 Vac)

Main Amp Rating	Number of QO Circuits		Number of QO Circuits (Generator)		Catalogue Number	Product Dimensions					
	Standard	Tandem	Standard	Tandem		Height		Width		Depth	
						Inches	mm	Inches	mm	Inches	mm
100 A	40	80	18	36	<b>QOGP3P604436100</b>	38.00	965	14.25	362	3.75	95
125 A	40	80	18	36	<b>QOGP3P604436125</b>	38.00	965	14.25	362	3.75	95
150 A	40	80	18	36	<b>QOGP3P604436150</b>	38.00	965	14.25	362	3.75	95
200 A	40	80	18	36	<b>QOGP3P604436200</b>	38.00	965	14.25	362	3.75	95

All-in-one Generator Panels have a main wire size of #4-250

## FAST FACTS

Not using a generator panel with a generator for home back up power can be dangerous. Without a generator panel you can accidentally back feed power back to the grid.

# Square D Recreational Vehicle Park Loadcentre

Square D Servicepak® loadcentres provide electrical power to individual recreational vehicle park sites. They are available with a variety of receptacle configurations to meet different job requirements.

## Power Outlet Panel Features:

- Type 3R weatherproof enclosure.
- Each receptacle protected by appropriate GFI or standard QO™ circuit breaker.
- Pedestal and non-pedestal mounted versions.
- All receptacles and circuit breakers are factory installed and pre wired.
- 10,000 RMS symmetrical ampere short circuit rating.
- No neutral bonding provisions.
- Loop-feed provisions, 2 wires per phase, neutral and equipment ground.
- Not suitable for use as service equipment.



50 A Recreational Vehicle Park Loadcentre

## SERVICEPAK® Selection

Amp Rating		Spaces	Power Outlet Config.	Service Voltage	Catalogue Number	Product Dimensions					
Mains	Sub Feed					Height		Width		Depth	
						Inches	mm	Inches	mm	Inches	mm
Underground or Overhead Loop-Feed Terminals - Non-Pedestal Mounted <sup>1</sup>											
40 A	40 A	2	A	1Ø 2W	QO2RV40A <sup>3</sup>	8.50	216	7.75	197	5.80	147
50 A	50 A	2	B	1Ø 2W	QO2RV50B <sup>3,4</sup>	8.50	216	7.75	197	5.80	147
75 A	75 A	3	C	1Ø 2W	QO3RV75C <sup>3,4</sup>	16.40	417	7.75	197	5.80	147
Underground Loop-feed Terminals - Pedestal Mounted <sup>2</sup> Add Pedestal Size (50.9" H x 7.6" W x 3.5" D)											
50 A	200 A	2	B	1Ø 2W	QO2RVP50B <sup>3,4</sup>	8.50	216	7.75	197	5.80	147
75 A	200 A	3	C	1Ø 2W	QO3RVP75C <sup>3,4</sup>	16.40	417	7.75	197	5.80	147
100 A	200 A	4	D	1Ø 2W	QO4RVP100D <sup>3,4</sup>	16.40	417	7.75	197	5.80	147

<sup>1</sup>Non-Pedestal devices are supplied with main entry hole cut in top end wall and have closing cap (BCAP) installed. Hole accepts 3/4 in. to 2 1/2 in. hubs. Gasket not required. Non-Pedestal devices have provisions to field install a Type "B" bolt-on hub on the bottom endwall. For bottom feed from a conduit riser, order Type "B" hub and two mounting screws p/n: 8002505501 and two hex nuts p/n 2340102000.

<sup>2</sup>For Pedestal devices, a stabilizer foot is available for use in unstable ground, p/n: HNP-SF

<sup>3</sup>Add letter G at end of part number for standard circuit breaker and GFI breaker mix.

<sup>4</sup>Add letters GFI at end of part number for all GFI breaker mix.

## Power Outlet Configurations

A	B	C	D
2 x 15A, 120Vac duplex receptacle and ground  Circuit breakers included: 2 x QO115 breakers 3 2 x QO115GFI	1 x 15A, 120Vac duplex receptacle and ground 1 x 30A, 120Vac receptacle and ground  Circuit breakers included: 1 x QO115 breaker & 1 x QO130 3 1 x QO130 & 1 x QO115GFI 4 1 x QO130GFI & 1 x QO115GFI	1 x 15A, 120Vac duplex receptacle and ground 2 x 30A, 120Vac receptacle and ground  Circuit breakers included: 1 x QO115 breaker & 2 x QO130 3 2 x QO130 & 1 x QO115GFI 4 2 x QO130GFI & 1 x QO115GFI	1 x 15A, 120Vac duplex receptacle and ground 1 x 30A, 120Vac receptacle and ground 1 x 50A, 120/240Vac receptacle and ground  Circuit breakers included: 1 x QO115 breaker & 1 x QO130 & 1 x QO250 3 1 x QO130 & 1 x QO250 & 1 x QO115GFI 4 1 x QO130GFI & 1 x QO250 & QO115GFI

# Square D Loadcentres Accessories

## Accessory Selection

Accessory	Description	Catalogue Number	Catalogue Number
Filler Plates	Fills branch breaker openings in cover	<b>QOFPCP</b>	
Lock Kits	Converts door latch from spring catch to lock type	<b>PK6FL</b>	
Interchangeable Hubs	Conduit Size	Type B Hub	Type MH Hub
	Closing Plate	<b>BCAP</b>	<b>MHC</b>
	3/4"	<b>B-075</b>	<b>MH75</b>
	1"	<b>B-100</b>	<b>MH100</b>
	1 1/4"	<b>B-125</b>	
	1 1/2"	<b>B-150</b>	<b>MH150</b>
Neutral Extension Kit	Loadcentre	Description	Catalogue Number
	24 Circuit Panels 32 Circuit Panels 42 Circuit Panels	14 Neutral Ports x 2	<b>QONK1</b>
	40 Circuit Panels 60 Circuit Panels	22 Neutral Ports x 2	<b>QONK2</b>
	42 Circuit Panels 60 Circuit Panels	34 Neutral Ports x 2	<b>QONK3</b>
	60 Circuit Panels	41 Neutral Ports x 2	<b>QONK4</b>



QOFPCP



PK6FL



BCAP



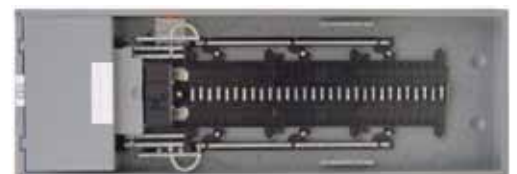
B-100



B-150



QONK2



Neutral Extension Kit installed in a Square D panel

QO Neutral Extension kits:  
Increase installation flexibility.  
Multiple length available.  
Kit includes a left and right side neutral bar.  
Left side or right side installation option.