# Catalog 1100CT0501 **2007**

# QO<sup>®</sup> and Homeline<sup>®</sup> Load Centers and Enclosures

Class 1100



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NOTE: For information on Replacement Parts with specific part numbers, go to www.schneider-electric.us, click on Product FAQ's, enter the device catalog number, click SEARCH, then look for the information required.



QO<sup>®</sup> Circuit Breaker Load Center

# QO<sup>®</sup> and Homeline<sup>®</sup> Load Centers and Enclosures Product Description

# PRODUCT DESCRIPTION

QO<sup>®</sup> Circuit Breaker Load Centers from Square D<sup>®</sup> are Underwriters Laboratories (UL) Listed panelboards. They are designed to meet residential, commercial, and industrial requirements to protect electrical systems, equipment, and people.

#### Features

- Single- or three-phase construction
- 30 400 A main lug or main circuit breaker ratings
- 2 4 2 circuit indoor or outdoor versions
- Flush or surface mounting
- Aluminum bus construction on fixed mains panels
- Service entrance equipment capable panels
- Straight-in wiring to minimize service cable installation
- Convertible mains to meet changing job site requirements
- Standard 22/10 k AIR series rating on main circuit breaker panels, increasing application capability
- 65 k AIR ratings for main lugs panels for industrial applications
- 65 k AIR rating with optional main circuit breaker on three-phase panels for industrial applications
- Shielded one-piece plated copper bus construction on convertible mains panels, an industry exclusive for protection and performance
- Single captive screw interior mounting on indoor panels to ease removal Split branch neutral for clutter-free wiring
- Top or bottom feed by rotating convertible mains panels 180 degrees
- Top or bottom feed for three-phase convertible panels by removing main circuit breaker and rotating panel 180 degrees
- Combination slot/square drive neutral, ground, and cover screws for positive drive and improved torque
- Three grounding bar mounting locations for ease of wiring
- Automatic flush adjustment cover to speed installation
- Tangential main service knockouts that eliminate offsets
- Equipment grounding bar included with main lug load centers Covers sold separately
- Provisions for door lock on convertible mains panel covers
- Two branch circuit breaker twistouts that are factory removed for easier installation of circuit breakers
- Side hinge doors on outdoor convertible main panels
- Outdoor panel covers lockable with padlock
- Manual and automatic transfer switch capability

# $\mathbf{QO}^{\texttt{R}}$ and $\mathbf{Homeline}^{\texttt{R}}$ Load Centers and Enclosures Catalog Number Description

## **CATALOG NUMBER DESCRIPTION**

#### QO<sup>®</sup> Load Centers

Number Segment	Character	Description	QO®	1	3040	L	200	G	—	—
Load Center Family	QO <sup>®</sup>	UL and NOM Listed	-							
Load Center Family	CQO	CSA <sup>®</sup> Certified	-							
Phase	1	Blank or 1 = Single								
Fliase	I	3 = Three								
Spaces / Circuits	3040				-					
	М	Main circuit breaker				•				
Mains Type	MX	Main circuit breaker for Automatic Transfer Switch				-				
wains rype	L	Main lugs				-				
	U	Universal mains (studs only)				-				
Amperes							-			
	Blank	Purchase separately								
Grounding Bar	G	Included								
Grounding bai	Ν	Neutral installed								
	Т	Factory-installed								
	Blank	Purchase cover separately								
	С	Combination flush / surface indoor cover								
	DF	Flush cover with door								
Cover	DS	Surface cover with door								
Cover	F	Flush cover								
	R	Rainproof								
	RB	Rainproof for B hub								
	S	Surface cover							•	
	CU	Copper bussing								
	FT	Feed-thru lugs								
Special Construction	GP	Generator panel								
Special Construction	NM	Non-metallic enclosure								
	R Generator receptacle									
	WG	Wide gutter riser panel								

#### QO<sup>®</sup> Circuit Breakers

Number Segment	Character	Description	QO®	1	15	_
Brand	QO	Full Size	•			
branu	QOT	Tandem	-			
Number of Poles				-		
Amperes						
	Blank	10,000 AIR				
	EPD	30 mA equipment ground faul	t protection	on		-
	GFI	Ground fault circuit interruption				-
	HID	For use on high intensity disc	harge ligh	nting syste	ems	-
	HM	High magnetic trip circuit breakers are recommended for applications where high initial inrush current may occur				•
Device Name	К	Key operated				-
	PL	Remote control switching cap	ability			-
	SWN	Switch neutral common trip				-
	VH	22,000 AIR				
	AFI	Arc fault circuit interruption				-
	CAFI	Combination arc fault circuit interruption				



QO<sup>®</sup> Circuit Breaker Load Center

QO

2-Pole

QO-GFI

2-Pole

QO

3-Pole

QO-AFI 1-Pole

QO

1-Pole

QO-GFI

1-Pole

# QO<sup>®</sup> and Homeline<sup>®</sup> Load Centers and Enclosures General Information and Application Data GENERAL INFORMATION AND APPLICATION DATA

Circuit breaker load centers for use on electrical systems are UL Listed under File E-6294 (panelboards) and meet Federal Specifications W-P-115c, Type 1, Class 2 for use in government housing. Select from QO, QOT, QO-PL, QO-GFI (UL Class A ground fault protection), QO-AFI (arc fault circuit interrupter), QO-CAFI (combination arc fault interrupter), or QO-EPD (30 mA equipment ground fault protection) branch circuit breakers.

#### Service

120 Vac, 1¢2W 120/240 Vac, 1¢3W 240 Vac delta, 3¢3W 208Y/120 Vac, 3¢4W 240/120 Vac delta, 364W 240 Vac corner grounded delta, 363W 48 Vdc maximum (16 convertible main lug 12 4 2 circuit only)

#### Ratings

	Main Lugs	Main Circuit Breaker
Single-Phase	30 400 A	100 4 00 A
Three-Phase	60 225 A	100 2 25 A

**Branch Circuit Breakers** 



QO-EPD 1-Pole



QO-CAFI 1-Pole



QO-PL 2-Pole

1

# QO 1-pole, 10 70 A QO 2-pole, 10 12 5 A 3-pole, 10 10 0 A 3-pole, 10 10 0 A QOT 1-pole, 15 20 A QO-EPD 1-pole, 15 30 A QO-GFI 1-pole, 15 30 A QO-AFI 1-pole, 15 20 A QO-CAFI 1-pole, 15 20 A

10,000 AIR

QO-ATT	1-pole, 13 20 A			
QO-CAFI	1-pole, 15 20 A			
	1-pole, 15 50 A			
QO-HID	2-pole, 15 50 A			
	3-pole, 15 30 A			
	1-pole, 10 20 A, 30 A			
QO-PL QO-PLILC	2-pole, 10 60 A			
	3-pole, 15 60 A			
QO-SWN	2-wire, 10 50 A			
QO-3WN	3-wire, 10 50 A			
QOK	1-pole, 10 30 A			
22,000 AIR				
QO-VHGFI	1-pole, 15 30 A			
	1-pole, 15 30 A			
QO-VH	2-pole, 15 12 5 A			
	3-pole, 15 10 0 A			
QOB-VH	2-pole, 150 A <sup>1</sup>			
QOD-VII	3-pole, 110 150 A <sup>1</sup>			
42,000 AIR				
QOH	2-pole, 40 12 5 A			
65,000 AIR				
	1-pole, 15 30 A			
QH	2-pole, 15 30 A			

For use with 300 A and 400 A load centers only. Requires PK3CA mounting kit, ordered separately.

3-pole, 15 30 A

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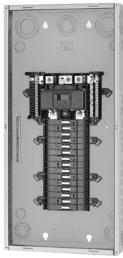
QO-SWN, 1-Pole

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QOK, 1-Pole



QO130M150



Indoor Cover



QO140M200RB



**Bolt-On Hubs** 

## Indoor Enclosures (Type 1)

Welded sheet steel with knockouts at top, bottom, back, and sides Finish: gray baked enamel, electrodeposited over cleaned, phosphatized steel

Most 100 225 A indoor enclosures are 14.25 in. (362 mm) wide (see Dimensions and Knockouts on page 26)

300 A and 400 A indoor enclosures are 20 in. (508 mm) wide Top or bottom feed by rotating enclosure

#### **Indoor Covers**

Doors to cover circuit breaker handles, except on 2 4, 4 8, 6 12 , and 8 16 circuit models

Shutter-type twistouts

Flush and surface covers available, sold separately

Flush covers have automatic flush adjustment

Field-installed door lock provisions available on most covers

QOFP filler plates available for all covers

QOM1FP filler plates available for 100 1 25 A convertible load center covers

QOM2FP filler plates available for 150 2 25 A convertible load center covers

Q2FP filler plates available for 3-phase load center covers

Triple lead cover screws for fast cover installation

# Rainproof Enclosures (Type 3R)

Complete enclosure includes interior trim and door

Welded, galvannealed steel

Finish: gray baked enamel, electrodeposited over cleaned, phosphatized, galvannealed steel

RB devices have provisions for interchangeable bolt-on hub

Top-centered rainproof mounting boss on the back of the enclosure simplifies installation and saves time

Stainless steel door latch on the enclosure provides secure closure and maximum durability

Convertible main panels are side-hinge door devices

Allow 1.25 in. (32 mm) on the left side for the door to open

Side-hinged door provides full wiring access without door removal

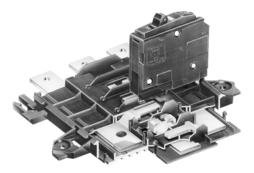
#### **Bolt-On Hubs**

Hubs available from 0.75 in. (19 mm) to 4 in. (102 mm) conduit size No gasket required with hubs from 0.75 in. (19 mm) to 2.50 in. (64 mm) when used on RB type load centers





Tandem circuit breaker mounts on rails.



**Branch Circuit Breaker** 

## Class CTL

Class CTL load centers are UL Listed

Circuit breaker mounting rails have slots to accept tandem circuit breakers, on specified load centers

Meets paragraph 408.35 of the 2005 National Electrical Code® (NEC®)

#### Phasing

Load centers have distributed phase bussing Most branch circuit breakers can be mounted in any position

#### Line Lugs

All lugs suitable for 75 °C copper or aluminum wires (see Main Lugs and Main Circuit Breaker Ratings on page 20)

Main lugs and main circuit breaker load centers have wire binding screw torque values on the wiring diagrams and circuit breaker labels

#### **Neutral Assemblies**

All lugs suitable for copper or aluminum wire (see Main Lugs and Main Circuit Breaker Ratings on page 20)

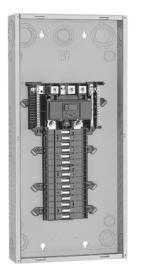
Branch neutral terminals suitable for one #14 #4 AWG copper or one #12 #4 AWG aluminum wire

Three #14 1/0 AWG copper or #14 #6 AWG aluminum terminals provided on 12 42 circuits, 100 225 A load centers

Suitable lugs provided on the neutrals for termination of the grounding conductor

All unused neutral terminals may be used to terminate bare or green equipment grounding conductors when the load center is used as service equipment:

one or two #14 # 12 AWG copper one or two #12 # 10 AWG aluminum





Neutral assemblies accept copper or aluminum wire.



QO24L70S



QO816L100DS



QO148L125GF

#### Single Phase, 2–16 Circuits, 30–125 A, Fixed Mains

#### UL Listed

File E-6294

Suitable for use as service equipment

75 °C wire rating (see Technical Information on page 20) Federal Specification W-P-115c, Type 1, Class 2

#### CSA Certified

File LL-89066-21

For other CSA certified load centers, see Supplemental Digest 174.

#### Short Circuit Current Rating

UL short circuit current rating depends on lowest interrupting rating of circuit breaker installed (see Technical Information on page 20)

#### Interior

Tin plated aluminum bus

Tin plated copper bus is an available option on 6 12 and 8 16 circuit load centers

Tin plated copper bus is standard on 4 8 circuit load centers

#### Mains

Factory-installed main lugs

Top mains positioning only

Top or bottom feed

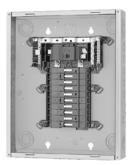
A backfed main circuit breaker can be field-installed in 4.8 ,  $6\;$  12 and 8.16 load centers using the PK2MB retaining kit

#### Cover

Flush- or surface-mounted cover included with load centers

A cover with a door is an available option on 6 1 2 and 8  $\,$  16 circuit load centers

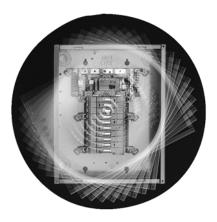
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Main Circuit Breaker



Main Lug



Top or bottom mains positioning. Rotate entire load center 180 degrees.

## Single-Phase, 12–42 Circuits, 100–225 A, Convertible Mains

UL Listed

File E-6294

Federal Specification W-P-115c, Type 1, Class 2

Suitable for use as service equipment

75 °C wire rating (see Technical Information on page 20)

#### Short Circuit Current Rating

Main lugs: up to 65,000 AIR (depends on lowest interrupting rating of branch circuit breakers installed)

Main circuit breaker: 22,000 AIR standard

22,000 AIR main circuit breaker kits (refer to page 10 and Technical Information on page 20)

#### Interior

Shielded, one-piece tin plated copper bus

Removable interior with single, captive mounting screw

- Split branch neutral with up to 50% more terminations than required
- Multiple mounting locations for equipment grounding bar kits: left, right, and bottom

Main lugs load centers have equipment grounding bar kits included (not factory-installed)

#### Mains

Factory-installed main lugs convertible to main circuit breaker

Load Center Amperage	Main Circuit Breaker Kit Amperage
125	50 125
150	100 15 0
200	100 20 0
225	100 22 5

Factory-installed main circuit breaker convertible to main lugs

Main Circuit Breaker Amperage	Main Lug Kit Amperage	Load Center Amperage
100	125	100
125	125	125
150	225	150
200	225	200
225	225	225



Cover





QOL225 Kit



QOM1 Main Frame Size 50–125 A



QOM2 Main Frame Size 100–225 A

# Single-Phase, 12–42 Circuits, 100–225 A, Convertible Mains, Continued

#### Covers

Flush and surface covers sold separately

Flush covers have spring-loaded interior trim for automatic flush adjustment

Positive action, easy-open door latch

#### Main Lugs Kits

Field-installable in main circuit breaker or main lugs load centers QOL125 kit for use in 100 125 A load centers QOL225 kit for use in 150 225 A load centers

#### Main Circuit Breaker Kits

Field-installable in main lugs or main circuit breaker load centers 50 2 25 A main circuit breaker kit is 22,000 AIR series rated with 10,000

AIR branch circuit breakers

#### Field-Installable Main Circuit Breaker (Convertible Main Load Centers Only)

Main Circuit	Use with	22,000 AIR	Lug Wire Size <sup>2</sup>	
Breaker Ampere Rating <sup>1</sup>	Convertible Load Center Mains Rating	Main Circuit Breaker	AWG/kcmil Al or Cu	Lug Torque Ib-in. / N•m
QOM1 Frame Siz	e			
50	100 125 A	QOM50VH		
60	100 125 A	QOM60VH		
70	100 125 A	QOM70VH		
80	100 125 A	QOM80VH	#12 2/0	50 lb-in.
90	100 125 A	QOM90VH	#12 2/0	(6 N•m)
100	100 125 A	QOM100VH		
110	125 A	QOM110VH		
125	125 A	QOM125VH		
QOM2 Frame Siz	e <sup>34</sup>			
100	150 225 A	QOM2100VH		
125	150 225 A	QOM2125VH		
150	150 225 A	QOM2150VH	#4 30 0	250 lb-in.
175	200 225 A	QOM2175VH		(28 N•m)
200	200 225 A	QOM2200VH	]	
225	225 A	QOM2225VH	1	

Do not exceed the load center mains rating.

<sup>2</sup> Wire range listed for QOM circuit breaker kits is the wire range of that circuit breaker. To find out maximum wire size permitted in a particular load center per UL, see Main Wire Size AWG/kcmil on page 20.

<sup>3</sup> Add suffix 1021 for shunt trip.

1

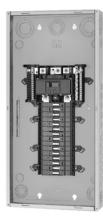
<sup>4</sup> Add suffix 8041 for control wire taps.

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QO2L30TTS



QO130M150



QO24L60NRNM



QO1816M200FTRB

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Recreational Vehicle and Manufactured Housing Load Centers

UL Listed (File E-6294) and CSA Certified (LL89066-14) Single-phase, 2- and 3-wire Factory-installed equipment grounding bar Covers included with load centers

Load Centers with Covers

**Special Purpose** 

Combination flush/surface cover included with load centers Equipment grounding bar included on main lug load centers Top or bottom feed on incoming service by rotating complete load center 180 degrees Convertible main load centers

Non-Metallic Load Center

UL Listed Suitable for use as service equipment Side-hinge door device 10,000 AIR rating Single-phase, 2- and 3-wire Factory-installed grounding bar Cover included with load center Knockouts in bottom endwall, side and back

Main Circuit Breaker with Feed-Thru Lugs

Available rainproof enclosure only

Side hinge door devices

Allow 1.25 in. (32 mm) on the left side for the door to open

- 125, 150, and 200 A mains rating
- 125, 150, and 200 A feed-thru lugs

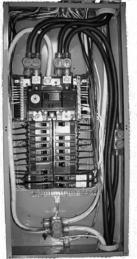
Space for up to 8 single-pole circuit breakers



QO48M60DSGP



QO<sup>®</sup> Intelligent Load Center



Wide Gutter

#### **Generator Panels**

Generator Panel Manu al Transfer

Connects utility and standby power to installed branch circuits Includes two factory-installed 2-pole main circuit breakers tied together with a mechanical interlock

30 A and 60 A main circuit breaker versions

Supply up to 8 branch circuits using tandem circuit breakers

Available indoor enclosure only

Cover with door included

Generator Panel Automatic Transfer

QO<sup>®</sup> load center platform construction

Automatic transfer from utility to back-up power source

Transfer cycle less than 10 seconds

Indoor and outdoor enclosures

120 / 240 Vac single-phase

150, 200 and 225 A main circuit breaker

42 circuit maximum construction, indoor, 28 circuit maximum outdoor

125 A maximum branch feeder connection to an alternative energy source Service entrance rated

Manual override capability

Easy removal of interior and transfer switch for rough in wiring 5-year limited warranty

Compatible with standard load center field-installable accessories

**Riser Panels** 

Offset interior provides ample wire gutter space for high rise applications Factory-installed main lugs (125 A), convertible to main circuit breaker with standard QOC cover and optional Mono-Flat cover

Factory-installed main lugs (200 A), convertible to main circuit breaker when used with QOC cover only

Available in 12 to 40 circuits

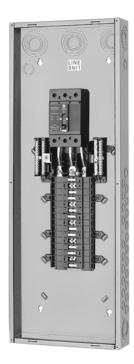
Indoor only

Optional Mono-Flat  $^{\ensuremath{\mathbb{S}}}$  cover available for both 125 A and 200 A panels (sold separately)





QO330L200G



QO330MQ150

#### Three-Phase, 3–42 Circuits, 60–225 A, Convertible or Fixed Mains

#### UL Listed

File E-6294

Suitable for use as service equipment

75 °C wire rating (see Technical Information on page 19)

#### Short Circuit Current Rating

Main lugs: up to 65,000 AIR (depends on lowest interrupting rating of branch circuit breakers installed)

Main circuit breaker up to 225 A: 22,000 AIR standard; optional up to 65,000 AIR for 100 A to 225 A main circuit breakers

#### Mains

Factory-installed main lugs or main circuit breaker

Main neutral terminal located next to the phase terminals on 125 2 25 A main circuit breaker devices

Top or bottom feed (see Technical Information on page 24)

Fully convertible from main circuit breaker to main lugs (100 225 A)

100 A maximum back-fed main  $\mathrm{QO}^{\$}$  circuit breaker; requires the use of retaining kit PK3MB

#### Cover

Flush- and surface-mount covers sold separately

Flush covers have spring-loaded interior trim for automatic flush adjustment

Positive action, easy-to-open door latch

#### Interior

Shielded one-piece plated copper bus on 100 2 25 A

Removable interior with single, captive mounting screw on 100 22 5 A (indoor only)

Main lugs load centers have equipment grounding bar kits included (not factory-installed)

**Branch Neutral Termination** 

Suitable for copper or aluminum wire

Terminals suitable for one #14 #4 AWG coppe r or one #12 #4 AWG aluminum wire

Positioned on both sides of the mains compartment

Slot/square drive wire binding screws

Three (3) #14 1 /0 AWG copper or #14 # 6 AWG aluminum terminations standard on 12 4 2 circuits, 100 22 5 A load centers





QOL3225 Main Lugs Kit



QDL Circuit Breaker 70–225 A

# Three-Phase, 3–42 Circuits, 60–225 A, Convertible or Fixed Mains (Continued)

#### Main Lugs Kits

Field-installable in main circuit breaker or main lugs load centers QOL3125 kit for use in 100 125 A load centers

QOL3225 kit for use in 150 225 A load centers

#### Main Circuit Breakers

Field-installable in main circuit breaker load centers

25,000 AIR QDL main circuit breakers series rated with 10,000 AIR  $QO^{\ensuremath{\mathbb{R}}}$  branch circuit breakers

100 225 A main circuit breakers are series rated up to 100,000 AIR (see table below) with 10,000 AIR branch circuit breakers in 30 circuit or larger main circuit breaker load centers with optional QJL main circuit breaker

Back-fed QO-VH (100 A maximum) main circuit breaker may be field installed in main lugs and main circuit breaker load centers (requires PK3MB retaining kit)

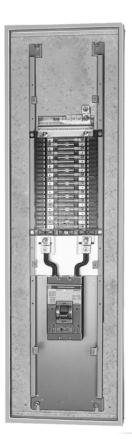
27 circuit, 100 A main circuit breaker load center includes factoryinstalled back-fed QO-VH main circuit breaker

Electrical accessories are not available on QDL, QGL, or QJL circuit breakers

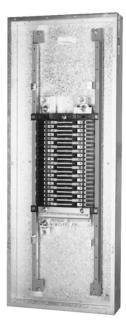
30 4 2 circuit, 125 22 5 A main circuit breaker load centers include integral QDL circuit breakers. Optional QGL and QJL circuit breakers available as shown:

Amperage	25,000 AIR	65,000 AIR	100,000 AIR <sup>1</sup>
70	QDL32070	QGL32070	QJL32070
80	QDL32080	QGL32080	QJL32080
90	QDL32090	QGL32090	QJL32090
100	QDL32100	QGL32100	QJL32100
110	QDL32110	QGL32110	QJL32110
125	QDL32125	QGL32125	QJL32125
150	QDL32150	QGL32150	QJL32150
175	QDL32175	QGL32175	QJL32175
200	QDL32200	QGL32200	QJL32200
225	QDL32225	QGL32225	QJL32225

<sup>1</sup> When these 3-pole circuit breakers are used as the main circuit breaker of a three-phase load center, the maximum AIR rating is 65,000 at 240 Vac and 100,000 at 208 Vac.



QON42MS400 and MH68



QON42LS400 and MH53

#### Single-Phase, 12–42 Circuits, 300–400 A, Fixed Mains

#### UL Listed

File E-6294

Suitable for use as service equipment

75 °C wire rating (see Technical Information on page 20)

#### Short Circuit Current Rating

Main lugs: up to 65,000 AIR

Main circuit breaker: 42,000 AIR fully rated (see Technical Information on page 20)

#### Mains

Factory-installed main lugs and main circuit breaker

Multiple wire terminals for phases and neutral

Top or bottom mains positioning (see Technical Information on page 20)

#### Cover

Flush- and surface-mount covers sold separately

#### Interior

Available in single-phase construction

Interiors accept QO<sup>®</sup> and QOB-VH 110 150 A maximum circuit breakers (QOB-VH circuit breakers require connector kit PK3CA)

Tin plated aluminum bus

Tin plated copper connector fingers

Neutral assemblies positioned opposite the mains compartment

#### Enclosures

20 in. (508 mm) wide galvanized steel

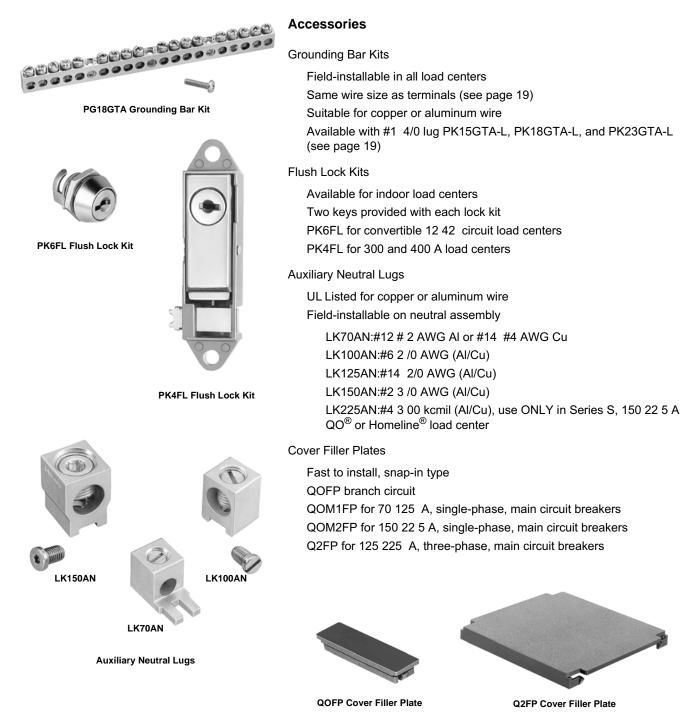
Embossed 0.25 in. (6 mm) standoffs

End walls, one blank and one with knockouts, are standard; both are removable and interchangeable

Embossed keyholes centered at both ends and in visual positioning Multiple grounding bar mounting locations

Wire management braces

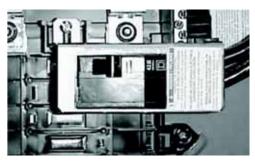
# QO<sup>®</sup> Circuit Breaker Load Centers—Class 1130 General Information and Application Data



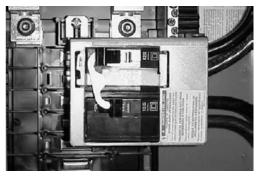
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QO2175SB



Back-fed Main Circuit Breaker Retaining Kit (PK4MB2LA)



QO Manual Transfer Equipment Kit (PK4DTIM4HA)



Generator Interlock Kit Installed

03/2007

**Accessories (Continued)** 

Surgebreaker<sup>®</sup> Secondary Surge Arrester

QO2175SB UL Listed secondary surge arrester

Easy plug-on installation for QO<sup>®</sup> load centers

LED indicates operational status

Plug-on design requires two pole spaces

Designed to protect electrical service and major household appliances , excluding electronic devices

Back-Fed Main Circuit Breaker Retaining Kits

Back-fed main circuit breaker retaining kits secure 2-pole, 10 125 A circuit breakers to single-phase or three-phase mains interiors when used as back-fed main circuit breakers. Mounting of retaining kits is based on top-feed applications.

Catalog No.	Description
PK2MB	QO 6 1 2, 4 8, and 8 16 loa d centers
PK3MB	Three-phase load centers
PK4MB2LA	Mounts on the right side of QO single-phase, 100 125 A convertible main load center, series S01 and S02. Retains one 2-pole QO circuit breaker with or without electrical accessories.
PK4MB2HA	Mounts on the right side of QO single-phase, 150 225 A convertible main load center, series S01 and S02. Retains one 2-pole QO circuit breaker with or without electrical accessories.

#### UL Listed Manual Transfer Equipment Kits

Manual transfer equipment kits secure two 2-pole, 10 125 A circuit breakers.

Catalog No.	Description
QO2DTI	For interlocking the handles of two 2-pole or one 2-pole and one 1-pole QO and Q1 circuit breakers mounted side-by-side so that only one circuit breaker can be ON at a time.
QO2DTIM	QO2DTI mechanical interlock attachment with retaining kits for securing two adjacent back-fed circuit breakers in dual power supply applications. Can be used with two 2-pole or one 2-pole and one 1-pole QO circuit breakers in QO816L100 load centers.
PK4DTIM4LA	Mounts on the right side of QO single-phase, 100 125 A convertible main load center, series S01 and S02. Retains two 2-pole QO circuit breakers with a QO2DTI kit included for dual power supply applications.
PK4DTIM4HA	Mounts on the right side of QO single-phase, 150 225 A convertible main load center, series S01 and S02. Retains two 2-pole QO circuit breakers with a QO2DTI kit included for dual power supply applications.
PK4DTIM4LAL	Mounts on the left side of QO single-phase, 100 1 25 A convertible main load center, series S01 and S02. Retains two 2-pole QO circuit breakers with a QO2DTI kit included for dual power supply applications.

#### Generator Circuit Breaker Interlock Kit

Catalog No.	Description
QOCRBGK1	For use on "G" and "S" Series NEMA Type 1 and "G", "S1" and "S2" Series NEMA Type 3R load centers. Interlocks a QOM1, 2-pole main circuit breaker of a load center (100-125 A) with a QO, 2-pole (15-125 A) branch circuit breaker. Includes a retaining kit.
QOCGK2	For use on G and S Series NEMA Type 1 and G and S1 Series NEMA Type 3R load centers. Interlocks a QOM2, 2-pole main circuit breaker of a load center (150 22 5 A) with a QO 2-pole (15 12 5 A) branch circuit breaker. Includes a retaining kit.
QORBGK2	For use on S2 Series NEMA Type 3R load centers. Interlocks a QOM2 2-pole main circuit breaker of a load center (150 225 A) with a QO 2-pole (15 1 25 A) branch circuit breaker. Includes a retaining kit.

BGUARE D

# QO<sup>®</sup> Circuit Breaker Load Centers—Class 1130 General Information and Application Data



SDAG26 With Tap Kits Installed





Tap Kit with Mechanical Lugs

Tap Kit for Crimp Lugs



RB Hub



**BC200 Enclosure Coupling** 

**Accessories (Continued)** 

#### Auxiliary Gutters and Tap Kits

Field-installable on the left or right side of load centers

- Auxiliary gutters are 13.50 in. wide x 26.12 in. height x 3.75 in. deep Conduit riser sizes: 1-3/4, 2, 2-1/2 or 3 in. (3 in. requires use of B300 bolt-on hubs)
  - Flush cover included with auxiliary gutter
  - Tap kits required for each riser wire to be tapped (see below for tap kits)
  - Wire range on tap kits is #4 AWG to 300 kcmil copper or aluminum Tap kits include mechanical-type lugs or studs for crimp-type lugs
- Crimp-type lugs not included in tap kits (order separately)

#### Auxiliary Gutter (SDAG26) to Load Center Catalog Number Reference

QO <sup>®</sup> Single-Phase	Q0112L125G Q011224L125G Q0112L125GC Q0112L125GC Q0116L125G Q0116L125G Q0120L125G Q012024L125G Q012024L125G Q0124L125G Q0120L125GC	QO112M100 QO116M100 QO120M100 QO124M100 QO124M125 QO112M100C QO11220M100C QO116M100C QO120M100C
QO <sup>®</sup> Three-Phase	QO312L125G QO320L125G QO324L125G	

#### Tap Kits

#### UL Listed for Use with Auxiliary Gutter SDAG26 Tap Off Wire **Riser Wire Catalog Number** Wire Size Lug Type Wire Size Lug Type SDGT30020 Mechanical (2) #6 AWG 3 00 kcmil Mechanical (1) #6 AWG 2 /0 AWG SDGT300300 Mechanical (2) #6 AWG 3 00 kcmil Mechanical (1) #6 AWG 30 0 kcmil SDGT300C10C Crimp (2) #4 AWG 3 00 kcmil Crimp (1) #8 AWG 1 /0 AWG SDGT300C300C Crimp (2) #4 AWG 3 00 kcmil Crimp (1) #4 AWG 30 0 kcmil QOGL20 Mechanical (2) #6 AWG 2/0 AWG (grounding lugs)

#### Auxiliary Gutter

UL Listed for Use with Standard Load Centers for Riser Applications

	SDAG26	Flush	No	N/A	See Tap Kit			No
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#### Bolt-On Hubs

Equipment with an RB suffix, meaning Rainproof Type 3R construction, uses the bolt-on hubs listed below. RB devices will accept 0.75 in. (19 mm) through 2.50 in. (64 mm) bolt-on hubs without the use of reducers. Off-center conduit thread openings and elongated mounting holes provide quick and easy adjustment to eliminate costly conduit offsets and bends. Hubs are suitable for use with conduit having ANSI standard taper pipe thread.

#### UL Listed Bolt-On Hubs for RB Devices

Conduit Size	0.75 in.	1.00 in.	1.25 in.	1.50 in.	2.00 in.	2.50 in.
	19 mm	25 mm	32 mm	38 mm	51 mm	64 mm
Hub Cat. No.	B075	B100	B125	B150	B200	B250

NOTE: Closing cap (catalog number B-CAP) is provided factory-installed on each device having the RB suffix.

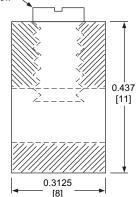
#### UL Listed Enclosure Coupling for RB Devices

	Designed for connecting wireway or other enclosures to units having RB bolt-on conduit provisions. Provides a bushed opening equal to 2 inch conduit.
BC200	Eliminates the need for conduit nippling.

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BQUARE D

Slot / Robertson screw -



Cross Section of Size 1 Ground Bar

Dimensions: in. [mm]

#### **Grounding Bar Kits**

All PK equipment grounding kits are supplied with mounting screws, necessary installation instructions, and an Equipment Grounding Terminal self-adhesive label.

			Т	erm	inal	s		Appro	vimato	Dista	ance		
Catalog Number	Total Qty.		ee '	ʻŴir	Eac e R bel	ang		Overall Length		Between Mounting Holes		Mounting	
		I	II	ш	IV	v	VI	in.	mm	in.	mm		
PK0GTA2 <sup>1</sup>	2						2	1.75	44	One hole	One hole	Тор	
PK0GTA6 <sup>2</sup>	6					6		4.61	117	1.69	43	Тор	
PK3GTA1 <sup>3</sup>	3	3						1.38	35	One hole	One hole	Тор	
PK4GTA <sup>3</sup>	4	4						1.63	41	One hole	One hole	Тор	
PK5GTA <sup>4</sup>	5	5						2.25	57	1.25	32	Тор	
PK7GTA <sup>3</sup>	7	7						2.88	73	1.25	32	Top or side	
PK9GTA1 <sup>3</sup>	9	9						3.25	83	One hole	One hole	Тор	
PK9GTA <sup>3</sup>	9	9						3.78	96	3.13	80	Тор	
PK12GTA <sup>3</sup>	12	12						4.70	119	3.13	80	Тор	
PK15GTA <sup>3</sup>	15	15						5.63	143	3.13	80	Тор	
PK15GTAL <sup>5</sup>	16	15	1					8.13	207	3.13	80	Тор	
PK15GTA6 <sup>6</sup>	21	15			6			5.88	149	7	7	Тор	
PK18GTA <sup>3</sup>	18	18						6.56	167	3.13	80	Тор	
PK18GTAL <sup>5</sup>	19	18	1					8.81	224	3.13	80	Тор	
PK23GTA <sup>3</sup>	23	23						8.11	206	3.13	80	Тор	
PK23GTAL <sup>5</sup>	24	23	1					9.44	240	3.13	80	Тор	
PK27GTA <sup>38</sup>	27 or 26	27 26		1				9.36	238	3.13	80	Тор	

<sup>1</sup> Mounting screw 40205-065-01 (one required).

<sup>2</sup> Mounting screw 21922-18360 (two required).

<sup>3</sup> Mounting screw 21594-14220 (two required).

<sup>4</sup> Mounting screw 21594-14241 (two required).

<sup>5</sup> Mounting screw 21594-14302 (two required).

<sup>6</sup> Mounting screws 21594-14241(two required) and 21594-17121(two required).

<sup>7</sup> 3.13 in. (80 mm) on small terminals; 5.25 in. (133 mm) on large terminals.

<sup>8</sup> PK27GTA includes one main grounding lug that mounts with two terminal screws and requires three terminals for mounting.

Size	Cu (AWG)	AI (AWG)
I	(1) #14 # 4 or (2) #14 or #12	(1) #12 #4 or (2) #12 or #10
П	(1) #1 4/ 0	(1) #1 4/0
Ш	(1) #6 2/ 0	(1) #6 2/0
IV	(1) #6 3/ 0	(1) #6 3/0
V	(1) #14 1 /0	(1) #14 1/0
VI	(1) #10 2/0	(1) #6 2 /0

# QO<sup>®</sup> Circuit Breaker Load Centers—Class 1130 Technical Information

# Main Lugs and Main Circuit Breaker Ratings

Single-Phase, Three-Wire, 120/240 Vac; Main Lugs Indoor

Mains Rating in Amps	Load Center Catalog Number	Load Center Cover Catalog Number	UL Listed Service Equipment (See notes)	Maximum UL Short Circuit Rating <sup>1</sup>	Main Wire Size AWG/kcmil Al/Cu	Enclosure No. (Page 26)	Top or Bottom Mains Position	UL Listed fo Corner Grounded Delta Systems
ixed Mains	- Factory-Installed Main L	ugs					•	
30	QO2L30S	Included	No	10,000 A	#12 10 Al #14 10 Cu	1	Тор	No
70	QO24L70F/S	Included	В	10,000 A	#12 3 Al #14  4 Cu	2	Тор	No
	QO612L100F/S	Included	B, C	10,000 A	#8 1	4	Тор	
100	QO612L100DF/S	Included	B, C	10,000 A	#8 1	4	Тор	No
	QO612L100DFCU/SCU	Included	B, C	10,000 A	#8 1	4	Тор	
	QO816L100F/S	Included	B, C	10,000 A	#8 1	4	Тор	
100	QO816L100DF/S	Included	B, C	10,000 A	#8 1	4	Тор	No
	QO816L100DFCU/SCU	Included	B, C	10,000 A	#8 1	4	Тор	
125	QO148L125GF/S	Included	B, C	10,000 A	#12 2 /0 Al #14 2/ 0 Cu	21	Тор	No
	Mains – Factory-Installed I Frame Size – Convertible t		aker – Copper B					
	QO112L125G	QOC16UF/S	B, C	65,000 A <sup>2 3</sup>	#6 2/ 0	6	Both	
	QO11224L125G	QOC16UF/S	B, C	65,000 A <sup>2 3</sup>	#6 2/ 0	6	Both	
	QO116L125G	QOC24UF/S	B, C	65,000 A <sup>2 3</sup>	#6 2/ 0	7	Both	
125	QO11624L125G	QOC24UF/S	B, C	65,000 A <sup>2 3</sup>	#6 2/ 0	7	Both	Yes
120	QO120L125G	QOC24UF/S	В	65,000 A <sup>2 3</sup>	#6 2/ 0	7	Both	165
	QO12024L125G	QOC24UF/S	В	65,000 A <sup>2 3</sup>	#6 2/ 0	7	Both	
	QO124L125G	QOC24UF/S	В	65,000 A <sup>2 3</sup>	#6 2/ 0	7	Both	
	QO132L125G	QOC32UF/S	В	65,000 A <sup>2 3</sup>	#6 2/ 0	8	Both	
	Mains – Factory-Installed I Frame Size – Convertible t		aker – Copper B					
	QO12030L125G	QOC30UF/S	B, C	65,000 A <sup>2 3</sup>	#6 25 0	9	Both	
150	QO124L150G	QOC30UF/S	B, C	65,000 A <sup>2 3</sup>	#6 25 0	9	Both	Yes
	QO130L150G	QOC30UF/S	B, C	65,000 A <sup>2 3</sup>	#6 25 0	9	Both	
	QO112L200G	QOC30UF/S	B, C	65,000 A <sup>2 3</sup>	#6 25 0	9	Both	
	QO12436L200TFT	QOC40UF/S	B, C	65,000 A <sup>2 3</sup>	#6 25 0	10	Both	
200	QO130L200G	QOC30UF/S	B, C	65,000 A <sup>2 3</sup>	#6 25 0	9	Both	Yes
	QO13040L200G	QOC30UF/S	B, C	65,000 A <sup>2 3</sup>	#6 25 0	9	Both	
	QO140L200G	QOC40UF/S	B, C	65,000 A <sup>2 3</sup>	#6 25 0	10	Both	
225	QO142L225G	QOC42UF/S	В	65,000 A <sup>2 3</sup>	#6 30 0	11	Both	Yes
ixed Mains	<ul> <li>Factory-Installed Main L</li> </ul>	ugs						
	QON12LS400 (Interior)	MHC50VF/S	С	65.000 A <sup>4</sup>	(1)1/0 750	15	Both	Yes
	MH50 (Enclosure)	WI 1030 VT /3	0	00,000 A	(2)1/0 300	15	DOIII	163
400	QON30LS400 (Interior)	MHC50QVF/S	No	65,000 A <sup>4</sup>	(1)1/0 750	15	Both	Yes
	MH50 (Enclosure)			00,000 A	(2)1/0 300	15	DOIII	163
400			+					n Yes
400	QON42LS400 (Interior)	MHC53QVF/S	No	65,000 A <sup>4</sup>	(1)1/0 750	17	Both	

<sup>2</sup> UL Listed for 5000 A rms symmetrical short circuit rating when used in 3-phase, 240 Vac, corner grounded Delta systems, when used as main lugs load center only. Use 240 Vac circuit breakers only.

<sup>3</sup> 22,000 A rms symmetrical maximum when supplied by integral type QOM-VH main circuit breaker from Square D<sup>®</sup> with 22,000 A rms symmetrical minimum interrupting rating and when all installed QO<sup>®</sup> branch circuit breakers have 10,000 A rms symmetrical minimum interrupting rating.

<sup>4</sup> UL Listed for 5000 A rms symmetrical short circuit rating when used on 3-phase, 240 Vac, corner grounded Delta systems. Use 240 Vac circuit breakers only.

B UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) with field-installed service disconnect.

C UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) when not more than six service disconnecting means are provided and when not used as a lighting and appliance branch circuit panelboard.

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BGUARE D

Mains Rating in Amps	Load Center Catalog Number	Load Center Cover Catalog Number	UL Listed Service Equipment (See Notes)	Maximum UL Short Circuit Rating <sup>1</sup>	MainWireSize AWG/kcmil Al/Cu	Enclosure No. (Page 26)	Top or Bottom Mains Position	UL Listed for Corner Grounded Delta Systems
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#### Single-Phase, Three-Wire, 120/240 Vac; Main Circuit Breaker Ind oor

#### Convertible Mains – Factory-Installed Main Circuit Breaker

QOM1 Main Frame Size - Convertible to Main Lugs or Lower Amperage Main Circuit Breaker - Copper Bus

	QO112M100	QOC12UF/S	A, B	22,000 A <sup>2</sup>	#4 1	5	Both	
	QO116M100	QOC20U100F/S	А, В	22,000 A <sup>2</sup>	#4 1	6	Both	
100	QO120M100	QOC20U100F/S	А, В	22,000 A <sup>2</sup>	#4 1	6	Both	No
	QO124M100	QOC24UF/S	A, B	22,000 A <sup>2</sup>	#4 1	7	Both	
	QO132M100	QOC32UF	A, B	22,000 A <sup>2</sup>	#4 1	8	Both	
125	QO124M125	QOC24UF/S	A, B	22,000 A <sup>2</sup>	#4 2/0	7	Both	No
120	QO132M125	QOC32UF	A, B	22,000 A <sup>2</sup>	#4 2/0	8	Both	

#### Convertible Mains – Factory-Installed Main Circuit Breaker

QOM2 Main Frame Size - Convertible to Main Lugs or Lower Amperage Main Circuit Breaker - Copper Bus

	QO12030M150	QOC30UF/S	A, B	22,000 A <sup>2</sup>	#4 250	9	Both	
150	QO124M150	QOC30UF/S	A, B	22,000 A <sup>2</sup>	#4 250	9	Both	No
150	QO130M150	QOC30UF/S	A, B	22,000 A <sup>2</sup>	#4 250	9	Both	INO
	QO132M150	QOC40UF/S	A, B	22,000 A <sup>2</sup>	#4 250	10	Both	
	QO12040M200	QOC30UF/S	А, В	22,000 A <sup>2</sup>	#4 250	9	Both	No
200	QO124M200	QOC30UF/S	А, В	22,000 A <sup>2</sup>	#4 250	9	Both	
	QO130M200	QOC30UF/S	А, В	22,000 A <sup>2</sup>	#4 250	9	Both	
	QO13040M200	QOC30UF/S	A, B	22,000 A <sup>2</sup>	#4 250	9	Both	
	QO140M200	QOC40UF/S	A, B	22,000 A <sup>2</sup>	#4 250	10	Both	
	QO142M200	QOC42UF/S	A, B	22,000 A <sup>2</sup>	#4 250	11	Both	
225	QO140M225	QOC42UF/S	А, В	22,000 A <sup>2</sup>	#4 300	11	Both	No
225	QO142M225	QOC42UF/S	A, B	22,000 A <sup>2</sup>	#4 300	11	Both	NO

#### Fixed Mains – Factory-Installed Main Circuit Breaker

300	300 QON42MS300	MHC68VF/S	۵	42.000 A <sup>3</sup>	(1)#4 500	16	Both	Yes
300	MH68 (Enclosure)			42,000 A	(2)#4 3 /0	10	Bour	100
400	QON42MS400	MHC68VF/S	A	42,000 A <sup>3</sup>	(1)#4 600	- 16	Both	Yes
	MH68 (Enclosure)				(2)#4 250			

<sup>1</sup> Short circuit current rating depends on lowest AIR rating of main or branch circuit breaker installed.

<sup>2</sup> 22,000 A rms symmetrical maximum when supplied by integral type QOM-VH main circuit breaker from Square D<sup>®</sup> with 22,000 A rms symmetrical minimum interrupting rating and when all installed QO<sup>®</sup> branch circuit breakers have 10,0000 A rms symmetrical minimum interrupting rating. 65,000 A rms symmetrical maximum when main lugs kits are installed.

<sup>3</sup> UL Listed for 5000 A rms symmetrical short circuit current rating when used in 3-phase, 240 Vac, corner grounded Delta systems. Use 240 Vac circuit breakers only.

A UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) with factory-installed service disconnect.

B UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) with field installed main lugs when not more than six disconnecting means are provided and when not used as a lighting and appliance branch circuit panelboard. See NEC Article for Lighting and Appliance Branch Circuit Panelboard.

Single-Phase, Three-Wire, 120/240 Vac; Main Lugs Rainproof

Mains Ratingin Amps	Load Center Catalog Number	Load Center Cover Catalog Number <sup>1</sup>	UL Listed Service Equipment (See Notes)	Maximum UL Short Circuit Rating <sup>2</sup>	Main Wire Size AWG/kcmil Al/Cu	Enclosure No. (Page 27)	Top or Bottom Mains Position	UL Listed for Corner Grounded Delta Systems	
Fixed Ma	Fixed Mains – Factory-Installed Main Lugs								

40	QO2L40RB	Included	В	10,000 A	#12 6 #14 10	1R	Тор	No
60	QO24L60NRNM	Included	В	10,000 A	#14 4	1NM	Тор	No
70	QO24L70RB	Included	В	10,000 A	#12 3 #14 4	1R	Тор	No
	QO612L100RB	Included	B, C	10,000 A	#8 1	2R	Тор	
100	QO612L100TRB	Included	B, C	10,000 A	#8 1	2R	Тор	No
	QO612L100RBCU	Included	B, C	10,000 A	#8 1	2R	Тор	
100	QO816L100RB	Included	B, C	10,000 A	#8 1	2R	Тор	No
100	QO816L100RBCU	Included	B, C	10,000 A	#8 1	2R	Тор	INO
125	QO148L125GRB	Included	B, C	10,000 A	#12 2/ 0 #14 2/ 0	15R	Тор	No

#### **Convertible Mains – Factory-Installed Main Lugs**

QOM1 Main Frame Size - Convertible to Main Circuit Breaker - Copper Bus

	QO112L125GRB	Included	B, C	65,000 A <sup>3 4</sup>	#6 2 /0	3R	Тор	
125	QO11224L125GRB	Included	B, C	65,000 A <sup>3 4</sup>	#6 2 /0	3R	Тор	Yes
125	QO11624L125GRB	Included	B, C	65,000 A <sup>3 4</sup>	#6 2 /0	4R	Тор	163
	QO124L125GRB	Included	B, C	65,000 A <sup>3 4</sup>	#6 2 /0	4R	Тор	

#### **Convertible Mains – Factory-Installed Main Lugs** QOM2 Main Frame Size - Convertible to Main Circuit Breaker - Copper Bus

150	QO130L150GRB	Included	B, C	65,000 A <sup>3 4</sup>	#6 250	6R	Тор	Yes
	QO112L200GRB	Included	B, C	65,000 A <sup>3 4</sup>	#6 250	5R	Тор	
200	QO130L200GRB	Included	B, C	65,000 A <sup>3 4</sup>	#6 250	6R	Тор	Yes
200	QO13040L200GRB	Included	B, C	65,000 A <sup>3 4</sup>	#6 250	6R	Тор	
	QO140L200GRB	Included	B, C	65,000 A <sup>3 4</sup>	#6 250	7R	Тор	Yes
225	QO142L225GRB	Included	B, C	65,000 A <sup>3 4</sup>	#6 300	8R	Тор	Yes

1 Convertible mains load center has a side-hinge door. Allow 1.25 in. (32 mm) on the left side for the door to open.

2 Short circuit current rating depends on lowest AIR rating of main or branch circuit breaker installed.

3 UL Listed at 5000 A rms symmetrical short circuit current rating when used in 3-phase, corner grounded, Delta systems, when used as main lugs load center only. Use 240 Vac circuit breakers only.

22,000 A rms symmetrical maximum when supplied by integral type QOM-VH main circuit breaker from Square D® with 22,000 A rms symmetrical minimum interrupting rating and when all QO® installed branch circuit breakers have 10,000 A rms symmetrical minimum interrupting rating.

B UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) with field-installed service disconnect.

C UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) when not more than six service disconnecting means are provided and when not used as a lighting and appliance branch circuit panelboard. See NEC Article for Lighting and Appliance Branch Circuit Panelboard.

Mains Rating in Amps	Load Center Catalog Number	Load Center Cover Catalog Number <sup>1</sup>	UL Listed Service Equipment (See Notes)	Maximum UL Short Circuit Rating <sup>2</sup>	Main Wire Size AWG/kcmil AI/Cu	Enclosure No. (Page 27)	Top or Bottom Mains Position	UL Listed for Corner Grounded Delta Systems	
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#### Single-Phase, Three-Wire, 120/240 Vac; Main Circuit Breaker Rainproof

#### Convertible Mains – Factory-Installed Main Circuit Breaker

QOM1 Main Frame Size - Convertible to Main Lugs or Lower Amperage Main Circuit Breaker - Copper Bus

	QO112M100RB	Included	A, D	22,000 A <sup>3</sup>	#6 2/0	3R	Тор	
100	QO116M100RB	Included	A, D	22,000 A <sup>3</sup>	#6 2/0	4R	Тор	No
	QO120M100RB	Included	A, D	22,000 A <sup>3</sup>	#6 2/0	4R	Тор	
125	QO124M125RB	Included	A, D	22,000 A <sup>3</sup>	#6 2/0	4R	Тор	No

#### Convertible Mains – Factory-Installed Main Circuit Breaker

#### QOM2 Main Frame Size – Convertible to Main Lugs or Lower Amperage Main Circuit Breaker – Copper Bus

150	QO12030M150RB	Included	A, D	22,000 A <sup>3</sup>	#4 250	5R	Тор	No
150	QO130M150RB	Included	A, D	22,000 A <sup>3</sup>	#4 250	6R	Тор	INU
	QO12040M200RB	Included	A, D	22,000 A <sup>3</sup>	#4 250	5R	Тор	
200	QO130M200RB	Included	A, D	22,000 A <sup>3</sup>	#4 250	6R	Тор	No
	QO140M200RB	Included	A, D	22,000 A <sup>3</sup>	#4 250	7R	Тор	

#### Convertible Mains – Factory-Installed Main Circuit Breaker with Feed-Thru Lugs QOM1/QOM2 Frame Size – Convertible to Main Lugs or Lower Amperage Main Circuit Breaker – Copper Bus

125	QO1612M125FTRB <sup>4</sup>	Included	A, D	22,000 A <sup>3</sup>	#4 2/0	3R	Тор	No
150	QO1816M150FTRB <sup>4</sup>	Included	A, D	22,000 A <sup>3</sup>	#4 250	6R	Тор	No
200	QO1816M200FTRB <sup>4</sup>	Included	A, D	22,000 A <sup>3</sup>	#4 250	6R	Тор	No

<sup>1</sup> Convertible mains load center has a side-hinge door. Allow 1.25 in. (32 mm) on the left side for the door to open.

<sup>2</sup> Short circuit current rating depends on lowest AIR rating of main or branch circuit breaker installed.

<sup>3</sup> 22,000 A rms symmetrical maximum when supplied by integral type QOM-VH main circuit breaker from Square D<sup>®</sup> with 22,000 A rms symmetrical minimum interrupting rating and when all installed QO<sup>®</sup> branch circuit breakers have 10,000 A rms symmetrical minimum interrupting rating. 65,000 A rms symmetrical maximum when main lug kits installed.

<sup>4</sup> QO1612M125FTRB provided with QOM1 frame main circuit breaker. QO1816M150/200FTRB provided with QOM2 frame main circuit breaker.

A UL Listed as suitable for use as service equipment (neutral bonded at time of installation) with factory-installed service disconnect.

D UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) with field-installed main lugs when not more than six service disconnecting means are provided and when not used as a lighting and appliance branch circuit panelboard. See NEC Article for Lighting and Appliance Branch Circuit Panelboard.

# QO<sup>®</sup> Circuit Breaker Load Centers—Class 1130 **Technical Information**

3-Phase, 4-Wire, 208Y/120 Vac; 3-Phase, 4-Wire, 240/120 Vac, Delta; 3-Phase, 3-Wire, 240 Vac, Delta; Main Lugs, Main Circuit Breaker In door

Mains Rating in Amps	Load Center Catalog Number	Load Center Cover Catalog Number	UL Listed Service Equipment (See Notes)	Maximum UL Short Circuit Rating <sup>1</sup>	AWG	Main Wire Size AWG/kcmil Al/Cu		AWG/kcmil No.		Top or Bottom Mains Position	UL Listed for Corner Grounded Delta Systems
Fixed Ma	ains – Factory-Instal	led Main Lugs –	Copper Bus								
60	QO403L60NF/S	Included	В	22,000 A <sup>1</sup>		#10-6	13	Тор	No		
	QO312L125G <sup>2</sup>	QOC16UF/S	B, C	65,000 A <sup>1</sup>	#6 2 /0	#6 2/ 0	6	Both			
125	QO320L125G <sup>2</sup>	QOC24UF/S	B, C	65,000 A <sup>1</sup>	#6 2 /0	#6 2/ 0	7	Both	No		
	QO324L125G <sup>2</sup>	QOC24UF/S	B, C	65,000 A <sup>1</sup>	#6 2 /0	#6 2/ 0	7	Both			
200	QO318L200G <sup>2</sup>	QOC30UF/S	B, C	65,000 A <sup>1</sup>	#6 250	#6 2 50	9	Both	No		
200	QO330L200G <sup>2</sup>	QOC30UF/S	B, C	65,000 A <sup>1</sup>	#6 250	#6 2 50	9	Both	NO		
225	QO342L225G <sup>2</sup>	QOC42UF/S	В	65,000 A <sup>1</sup>	#6 300	#6 3 00	11	Both	No		
Converti	ble Mains – Factory	-Installed QDL M	ain Circuit Br	eaker – Copper	Bus						
100	QO327M100 <sup>3</sup>	QOC30UF/S	A, D	22,000 A	#4 2 /0	#4 2/ 0	9	Both	No		
125	QO330MQ125 <sup>2 4</sup>	QOC342MQF/S	A, D	100,000 A <sup>56</sup>	#4 300	#4 3 00	12	Н	No		
150	QO330MQ150 <sup>24</sup>	QOC342MQF/S	A, D	100,000 A <sup>56</sup>	#4 300	#4 3 00	12	Н	Ne		
150	QO342MQ150 <sup>2 4</sup>	QOC342MQF/S	A, D	100,000 A <sup>56</sup>	#4 300	#4 3 00	12	Н	No		
200	QO330MQ200 <sup>24</sup>	QOC342MQF/S	A, D	100,000 A <sup>5 6</sup>	#4 300	#4 3 00	12	Н	Ne		
200	00040140000 24	0000401405/0	A D	400,000 4 56	114 000	114.0.00	10		No		

QOC342MQF/S 1 Short circuit current rating depends on lowest AIR rating of branch circuit breaker installed.

QOC342MQF/S

2 Certified to IEC 60439-1 for use on 415Y/240 Vac 3-phase 4-wire, 3,000 SCCR when QODX ... branch circuit breakers are used and 10,000 SCCR when QO...VS branch circuit breakers are used. CE marked.

56

#4 300

#4 300

#4 3 00

#4 3 00

12

12

Н

Н

No

100,000 A

100,000 A 5 6

3 Includes factory-installed back-fed QO3100VH main circuit breaker.

QO342MQ200<sup>24</sup>

QO342MQ225 <sup>2 4</sup>

225

4 Mains positioning from top to bottom feed: first rotate the main circuit breaker 180 degrees, then rotate the complete load center 180 degrees.

5 100,000 A rms at 208 Vac symmetrical maximum when type QJL main circuit breaker from Square D® with 100,000 A rms minimum interrupting rating is installed and when all installed QO® and Q1 branch circuit breakers have 10,000 A rms symmetrical minimum interrupting rating.

25,000 A rms symmetrical maximum when supplied by integral type QDL main circuit breaker from Square D® with 25,000 A rms minimum interrupting rating and when all installed QO® and Q1 branch circuit breakers have 10,000 A rms symmetrical minimum interrupting rating.

Α UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) with factory-installed service disconnect.

B UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) with field-installed service disconnect.

A, D

A, D

UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) when not more than six service disconnecting means are provided and С when not used as a lighting and appliance branch circuit panelboard. See NEC Section 384-14.

UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) with field-installed main lugs, when not more than six service D disconnecting means are provided and when not used as a lighting and appliance branch circuit panelboard. See NEC Article for Lighting and Appliance Branch Circuit Panelboard.

Mains Rating in Amps	Load Center Catalog Number	Load Center Cover Catalog Number	UL Listed Service Equipment (See Notes)	Maximum UL Short Circuit Rating <sup>1</sup>	MainWireSize AWG/kcmil AI/Cu	Enclosure No. (Pages 26 and 27)	Top or Bottom Mains Position	UL Listed for Corner Grounded Delta Systems
Load Ce	nter with Cover – 1-Ph	ase, 3-Wire, 12	0/240 Vac – UL Liste	ed; Complete QO <sup>®</sup>	Load Center – Bo	x, Interior and (	Combination Cove	er (in one package
Converti	ble Mains – Factory-In	stalled Main Lu	ıgs; QOM1 Main Fra	me Size – Conver	tible to Main Circu	it Breaker – Co	pper Bus	
	QO112L125GC	Included	B, C	65,000 A <sup>2 3</sup>	#4 2 /0	6	Both	Yes
125	QO11224L125GC	Included	B, C	65,000 A <sup>2 3</sup>	#4 2 /0	6	Both	Yes
	QO120L125GC	Included	B, C	65,000 A <sup>2 3</sup>	#4 2 /0	7	Both	Yes
Converti	ble Mains – Factory-In	stalled Main Lu	ugs; QOM2 Main Fra	me Size – Conver	tible to Main Circu	it Breaker – Co	pper Bus	
150	QO130L150TC	Included	B, C	65,000 A <sup>2 3</sup>	#4 2 50	9	Both	Yes
200	QO13040L200GC	Included	B, C	65,000 A <sup>2 3</sup>	#4 2 50	9	Both	Yes
	ble Mains – Factory-In ain Frame Size – Conv				cal Amperes Shor	t Circuit Curren	t Rating	
	QO112M100C	Included	A, D	22,000 A <sup>2</sup>	#4-1/0	5	Both	Yes
100	QO11220M100C	Included	A, D	22,000 A <sup>2</sup>	#4-1/0	5	Both	Yes
100	QO116M100C	Included	A, D	22,000 A <sup>2</sup>	#4-1/0	6	Both	Yes
	QO120M100C	Included	A, D	22,000 A <sup>2</sup>	#4-1/0	6	Both	Yes
	ble Mains – Factory-In ain Frame Size – Conv				eres Short Circuit	t Current Rating	I	
150	QO12030M150C	Included	A, D	22,000 A <sup>2</sup>	#4 2 50	9	Both	No
150	QO130M150C	Included	A, D	22,000 A <sup>2</sup>	#4 2 50	9	Both	No
	QO12040M200C	Included	A, D	22,000 A <sup>2</sup>	#4 2 50	9	Both	No
200 A	QO130M200C	Included	A, D	22,000 A <sup>2</sup>	#4 2 50	9	Both	No
200 A	QO13040M200C	Included	A, D	22,000 A <sup>2</sup>	#4 2 50	9	Both	No
	QO140M200C	Included	A, D	22,000 A <sup>2</sup>	#4 2 50	10	Both	No
Non-Met	allic 1-Phase, 3-Wire,	120/240 Vac – N	lain Lugs Only					
60	QO24L60NRNM	Included	B, C	10,000 A	#14 4	1NM	Bottom	No
Riser , 1-P	hase, 3-Wire, 120/240 Vac -	- Factory-Installed	Main Lugs – Offset Inter	ior Wide Gutter QOM	1/QOM2 <sup>4</sup> Main Frame	Size – Convertible	to Main Circuit Breal	ker – Copper Bus <sup>3</sup>
	QO11224L125WG		B, C	65,000 A <sup>2</sup>	#4 2 /0	14	Both	
125	QO12030L125WG	QOC20UFWG	В	65,000 A <sup>2</sup>	#4 2 /0	14	Both	Yes
200	QO13040L200WG	QOC30UFW	B, C	65,000 A	#4 2 50	23	Both	Yes
Generate	or Panel, 1-Phase, 3-W	/ire, 120/240 Va	c – Factory-Installed	Main Circuit Brea	kers with Mechan	ical Interlock		•
30	QO48M30DSGP	la shada d	No	10,000 A	#14 8	4	Bottom	N
60	QO48M60DSGP	Included	A	10,000 A	#8 2	4	Bottom	No
	or Panel - Use with Au MS Sym. Amperes Sh			3-Wire, 120 / 240 V	ac, Factory- / Field	d-Installed Main	Circuit Breaker -	-
150	QO13842MX150		A	22,000 A	#4-250	12	Both	No
200	QO13842MX200	QOC38MXUF	A	22,000 A	#4-250	12	Both	No
225	QO13842MX225		A	22,000 A	#4-250	12	Both	No
220	QO13842UX225		В	22,000 A	#4-250	12	Both	No
150	QO11428MX150FTRB <sup>6</sup>	Included	A	22,000 A	#4-250	7R	Both	No
200	QO11428MX200FTRB <sup>6</sup>	Included	A	22,000 A	#4-250	7R	Both	No
200	QO11428UX200FTRB <sup>6</sup>	Included	В	22,000 A	#4-250	7R	Both	No
22,000 and wh UL Liste	ircuit current rating depen A rms symmetrical maxin en all installed QO <sup>®</sup> bran ed for 5000 A rms symme /ac circuit breakers only.	num when supplie ch circuit breakers	ed by integral type QOM s have 10,000 A rms sy	I-VH main circuit bre mmetrical minimum	aker from Square D <sup>®</sup> interrupting rating.			

<sup>4</sup> QOM2 Load Center is ONLY convertible to main circuit breaker when used with QOC cover.

<sup>5</sup> One main circuit breaker is included with panel. Alternate source main circuit breaker (QO 125 A max.) must be ordered separately. Automatic transfer switch and generator kit for secondary power sources are ordered through a Kohler<sup>®</sup> authorized dealer or contractor.

<sup>6</sup> Side-hinge door device allow 1.25 in. (32mm) on the left side for the door to open.

A UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) with factory-installed service disconnect.

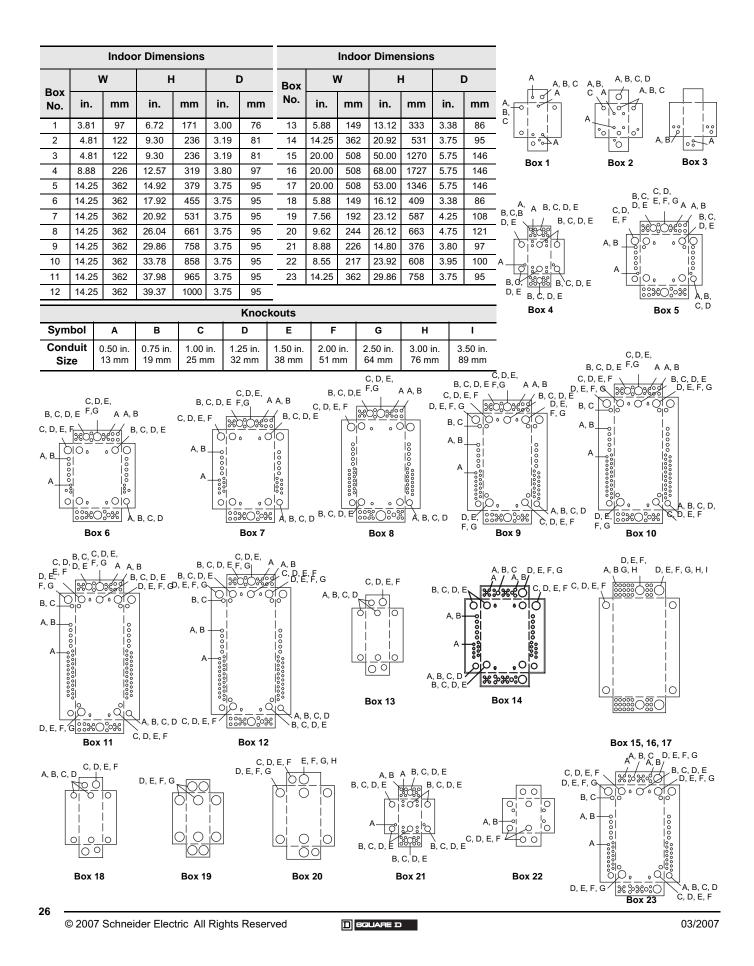
B UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) with field-installed service disconnect.

C UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) when not more than six service disconnecting means are provided and when not used as a lighting and appliance branch circuit panelboard. See NEC Article for Lighting and Appliance Branch Circuit Panelboard.

D UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) with field-installed main lugs and not more than six service disconnecting means are provided and when not used as a lighting and appliance branch circuit panelboard. See NEC Article for Lighting and Appliance Branch Circuit Panelboard.

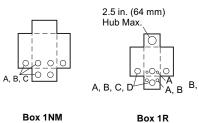
03/2007

# QO<sup>®</sup> Circuit Breaker Load Centers—Class 1130



# $\mathbf{QO}^{\mathbb{R}}$ and $\mathbf{Homeline}^{\mathbb{R}}$ Load Centers and Enclosures **Outdoor Dimensions and Knockouts**

## OUTDOOR DIMENSIONS AND KNOCKOUTS

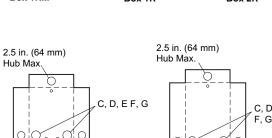




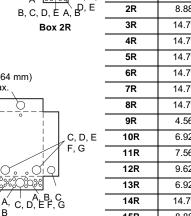
Box 5R

2.5 in. (64 mm)

Hub Max.



C, D, E



√<u>в</u>, с,

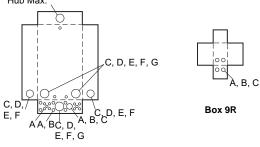
		Outd	oor Dimen	sions		
Box No.	v	v	ŀ	4	I	D
BOX NO.	in.	mm	in.	mm	in.	mm
1NM	6.52	166	8.79	223	3.90	99
1R <sup>1</sup>	4.88	124	9.38	238	4.00	102
2R	8.88	226	12.65	321	4.27	108
3R	14.75	375	18.92	481	4.52	115
4R	14.75	375	22.06	560	4.52	115
5R	14.75	375	26.04	661	4.52	115
6R	14.75	375	29.86	758	4.52	115
7R	14.75	375	33.78	858	4.52	115
8R	14.75	375	37.98	965	4.52	115
9R	4.56	116	6.50	165	3.88	99
10R	6.92	176	13.18	335	4.12	105
11R	7.56	192	192	590	4.75	121
12R	9.62	244	26.24	666	5.50	140
13R	6.92	176	16.18	411	4.12	105
14R	14.75	375	39.37	1000	4.52	115
15R	8.88	226	14.80	376	4.27	108
16R	8.55	217	24.75	629	4.16	106

2.5 in. (64 mm) Hub Max.

A A, C, D, À, B, C Β E, F,

G Box 3R, 4R

C, D, E, F 08



C, D, E, F

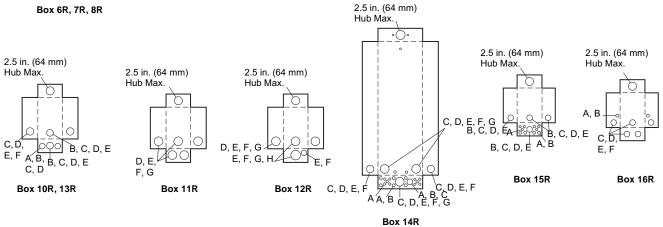
Knockouts Symbol Α R С р Е F G Conduit 0.50 in. 0.75 in. 1.00 in. 1.25 in. 1.50 in. 2.00 in. 2.50 in. 25 mm 38 mm 51 mm 64 mm

32 mm

<sup>1</sup> HOME250SPA top endwall has no hub opening.

19 mm

13 mm



Size

27

н

3.00 in.

76 mm

# QO<sup>®</sup> Circuit Breaker Load Centers—Class 1130 QO Single-Phase Labels

# **QO SINGLE-PHASE LABELS**

The labels below represent typical labels. Information may not be applicable or may change without notice. See the actual label in the load center for the latest information.

#### **QO Single-Phase Box Label Sample**

Number of circuits maximum. Enclosure catalog number. Catalog number of covers; flush or surface. See panelboard interior for the catalog number. Voltage ratings. Amperage rating.	Wire range	ə for lug torqı	ue data table.	          	Short circ nort circuit rating replacement d	s and ad	ditional of	          UL Listing. 
QO <sup>®</sup> LOAD CENTER See Panelboard interior for Catalog No. Box Cat. No. / Caja No. de Catalogo: BX18C	See circ units	UG TORQUE cuit breakers and for wire binding so ire Range (AWG/kcmil 4 - 2/0 CU/AL	field installed crew torque	RMS Panel Rating *65,000	SHORT CIR( Symmetrical Ampere Remote Main			Underwriter's Laboratories, Inc.® LiSTED Electric Cabinet Box Issue No. V-2813
Use Cover Cat. No. / Utilice la Cubierta No. de Catalogo: QOC16US or/or QOC16UF Mains 125A max. Lina principal de 125A maximo. See main or service disconnect rating if installed. 240 V - Max. 10, 50 / 60 Hz. 24 circuit max. / 24 circuitos maximo. Type 1 Enclosure Gabinete Tipo 1 For installation, repairs or alterations, Call an electrical contractor or electrician.	Main Lug Alternate Main Breaker Branch Ne Wire Range (AWG) 1/0 - 3 CU / AL 4 CU / AL 6 CU / AL 8 CU / AL 10-14 CU, 10-12 AL	Large 45 5 Large 45 5 Large 40 5 Large 35 5 Dement Ground Cou U, Two 12 AL	Ibs.)     Bar with 1       w sizes     screw size       Small     35       Small 25     35       Small 10     25       Small 10     20	breakers. * The ratin installed. F replaceme MUST hav circuit brea		errupting ratin r individual rati , main breaker jual to or great	g of any circuit breaker ings. Additional or r, or service disconnect ter than that of the	Issue No. V-2813 Install loose label with Spanish translation on back of cover. Achiera la eliqueta suelta con las traduccione: en espanol en la parte posterior del frente. Please read information before installing Por favor lea la informacion antes de instalar.  SQUARE D COMPANY Output 15 40265-381-03

#### **QO Single-Phase Wiring Diagram Sample**

Service Equipment marking. Ise of unused neutral branch terminal fo quipment grounding, service equipmen application only.	·	in this          Load center accessories.                  may be used in this            Neutral lug for 1/0 AWG or larger wire.         panelboard.
Suitable for use with 75°C Copper or Aluminum main conductors. See branch breakers for branch wire ratings. * Suitable for use as service equipment when service disconnect (main breaker) is installed. * Suitable for use as service equipment when not more than six main disconnecting means are provided and when not used as a lighting and appliance branch circuit panelboard. See Article 384-14 of the NEC. * When used as service equipment, all unused neutral terminals may be used for terminating equipment ground wires.	UN N O Cuando fuese	Two single poles. One plug on space or may use one lingle pole. One two pole single pole. One two pole lingle pole. One two pole single pole. One two pole lingle pole. One two pole single pole. One two pole single pole. One two pole lingle pole lingle pole. One two pole lingle pole. One two pole lingle pole lingle pole. One two pole. One two pole lingle pole. One

# QO<sup>®</sup> and Homeline<sup>®</sup> Load Centers and Enclosures QO Three-Phase Label Samples

#### **QO THREE-PHASE LABEL SAMPLES**

The labels below represent typical labels. Information may not be applicable or may change without notice. See the actual label in the load center for the latest information.

#### **QO Three-Phase Box Label Sample**

Number of circuits maximum. Enclosure catalog number. Catalog number of covers; flush or surface. See panelboard interior for the catalog number. Voltage ratings.	Wire ran		erque dat		                	Short ci	rcuit ratir	0	ır — —       	
Amperage rating.	Wire range for lug torque data table.					replacemen		UL Listing.		
QO <sup>®</sup> LOAD CENTER See Panelboard interior for Catalog No. Box Cat. No. / Caja No. de Catalogo:	LUG TORQUE DATA See circuit breakers and field installed units for wire binding screw torque				SHORT CIRCUIT RATING RMS Symmetrical Amperes at 120 / 240 V ~ Maximum Panel Remote Integral Branch (min. / Rating Main Cat. prefix			Underwriter's Laboratories, Inc.®		
BX338C Use Cover Cat. No. / Utilice la Cubierta No. de Catalogo: QOC42US or/or QOC42UF	Line Neutral Lug Main Lug	Wire Range (AWG/I 4 - 300 CU/AL 4 - 300 CU/AL		rque (in/lbs.) 250 250	*65,000 *42,000 *22,000 *10,000		Lugs Lugs Lugs Lugs Lugs	65,000 / QH 42,000 / QOH 22,000 / OQ.VH 10,000 / OQ&Q1,QQH		LISTED Electric Cabinet Box Issue No. V-2813
Mains 225A / Lina principal de 225A maximo. See main or service disconnect rating if installed.	Alternate Main Breaker Branch Wire Range (AW		ipment Grou (in./lbs.) screw sizes	See Main Breaker und Bar Bar with 1 screw size	**5,000 100,000 22,000 22,000	 100-200A,300V T Fuse KD, QOVH Q2H	Lugs Lugs Lugs Lugs Lugs	5,000 / QOH(2 POLE) 10,000 / QO 10,000 / QO 10,000 / QO 10,000 / QO	Call an electrica II Install loose lab	repairs or alterations, al contractor or electrician. el with Spanish translation
240 V ~ Max. 3Ø, 50 / 60 Hz. 42 circuit max. / 42 circuitos maximo. Type 1 Enclosure Gabinete Tipo 1 240V, 3PH, 3W: For this system neutral is not	1/0 - 3 CU / A 4 CU / AL 6 CU / AL 8 CU / AL	L Large 50 Large 45 Large 45 Large 40	Small Small Small 25 Small 10	35 35 25	65,000 65,000 22,000 22,000 ** 240 v ~ 3	KG   2Ph. 3W. Grounded "B" p	Lugs KG KD QOVH bhase requires	10,000 / QO 10,000 QO&Q1 10,000 QO&Q1 10,000 / QO \$ 240 V ~ branch	en Español en I Please read infe	r. leta sauelat con la traduccion a parte posterior de la cubierta ormation before installing. informácion antes de instalor.
used and only breakers rated 240V are to be used 240V, 3PH, 4W: When wired for delta system, phase "B" must be 208V to neutral. Breaker poles connected to phase "B" must be rated 240V 1PH: Single pole breakers can not be connected to phase B.	Equipment Ground Combinations Two 14 or 12 CU, Two 12 AL 35 10 25					breakers. The rating is equal to the lowest interrupting rating of any circuit breaker installed. Refer to branch breaker for individual ratings. Additional or replacement branch circuit breakers, main breaker, or service disconnect MUST have an interrupting rating equal to or greater than that of the circuit breaker with the lowest interrupting rating presently installed. See panelboard interior for breaker types.				E D COMPANY ®

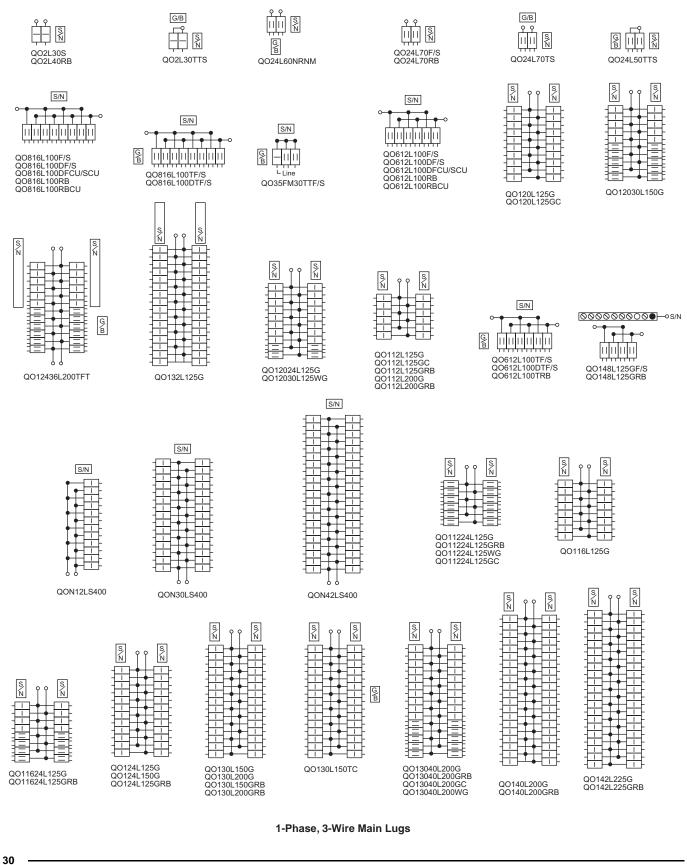
#### **QO Three-Phase Wiring Diagram Sample**

Service Equipment marking. Use of unused neutral branch terminal for equipment grounding, service equipment application only.	Alternate wiring diagram for main circuit breaker or main lug. Installation of back-fed main circuit breaker and required kit.	      Type of circuit breakers from Square D that    may be used in this panelboard.	
Suitable for use with 75°C Copper or Aluminum main conductors. See branch breakers for branch wire ratings. * Suitable for use as service equipment when service disconnect (main breaker) is installed. * Suitable for use as service equipment when not more than six main disconnecting means are provided and when not used as a lighting and appliance branch circuit panelboard. See Article 384-14 of the NEC. * When used as service equipment, all unused neutral terminals may be used for terminating equipment ground wires.	<ul> <li>Box bonding when required. / Conexion a la caja cuando fuese necesario.</li> <li>Service ground when required. / Tierra de acometida cuando fuese necesario.</li> <li>Service ground when required. / Tierra de acometida cuando fuese necesario.</li> <li>Main lugs kit no: QOL3225. / No. de accesorio de las zapatas principales: QOL3225.</li> <li>Main lugs kit no: Accesorio de la zapata, cuando se instala.</li> <li>Back fed main circuit breaker utomático principal de alimentacion nstalled. / Interruptor automático integral principal, cuando se instala.</li> </ul>	One single pole. One plug on space. One two pole requires two plug on spaces. One three pole requires three plug on spaces. Torque Note: When main breaker or main lug connector mounting nuts are loosened or removed, retighten to 75 lbs./in. torque.  Equipment Grounding Terminals	May plug on two adjacent spaces.     May plug on two adjacent spaces.     Torque Note: When interior or main breaker     mounting screws are loosened or removed,     retighten to 35 lbs./in.

03/2007

# QO<sup>®</sup> Circuit Breaker Load Centers—Class 1130 Wiring Diagrams

## WIRING DIAGRAMS

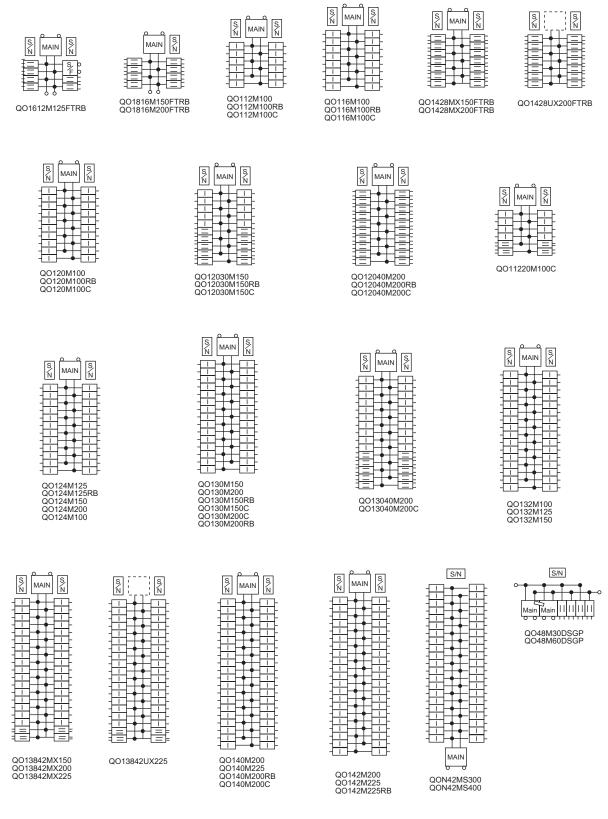


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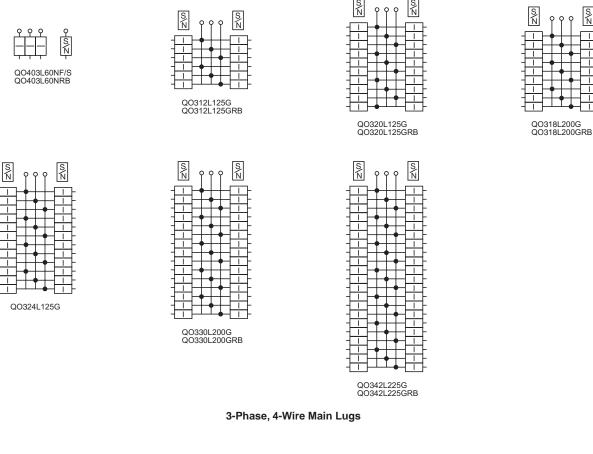
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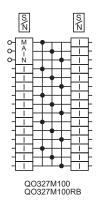
# **QO<sup>®</sup>** and Homeline<sup>®</sup> Load Centers and Enclosures Wiring Diagrams

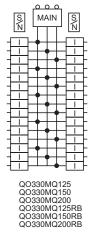


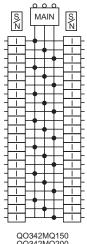
1-Phase, 3-Wire Main Circuit Breakers

# QO<sup>®</sup> Circuit Breaker Load Centers—Class 1130 Wiring Diagrams









QO342MQ150 QO342MQ200 QO342MQ225 QO342MQ200RB QO342MQ225RB

3-Phase, 4-Wire Main Circuit Breakers

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#### **Dimensions and Knockouts 37**

NOTE: For information on Replacement Parts with specific part numbers, go to www.schneider-electric.us, click on Product FAQ's, enter the device catalog number, click SEARCH, then look for the information required.

# QO<sup>®</sup>, QOM2 and Q-Frame Enclosed Circuit Breakers—Class 1131 General Information and Application Data





QO2100BNS

QO2100BNRB



QOM22225NRB



Q22200NS With Cover Removed (Order Q-Frame Circuit Breaker Separately)

#### **GENERAL INFORMATION AND APPLICATION DATA**

#### Туре

Enclosed molded case circuit breakers are  $UL^{\textcircled{R}}$  Listed; File E136861, for enclosures and File E10027 for circuit breakers.

Molded case circuit breakers meet Federal Specifications W-C-375-B.

Enclosed molded case switches are UL Listed under File E59921.

#### Service

120/240 Vac, 1¢3W 240 Vac, 1¢2W 240 Vac, 1¢3W 240/120 Vac, 3¢4W 208Y/120 Vac, 3¢4W

#### Ratings

Enclosed Molded Case Circuit Breakers						
QO	10,000 A					
QOM2	22,000 A					
QB	10,000 A					
QD	25,000 A					
QG	65,000 A					
QJ	65,000 A @ 240 V or 100,000 A @ 208Y / 120					

#### Enclosure

Type 1 indoor general purpose

Welded sheet steel with knockouts at top, bottom, back and sides Finish: gray baked enamel, electrodeposited over cleaned,

phosphatized steel

Padlock provisions for locking circuit breaker handle in ON (I) or OFF (O) position

Flush or surface mount covers

#### Type 3R Rainproof

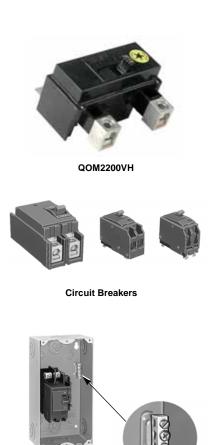
Welded, galvannealed sheet steel

Finish: gray baked enamel, electrodeposited over cleaned, phosphatized, galvannealed steel

Provisions to padlock cover closed

RB devices have provisions for interchangeable bolt-on hubs

# QO<sup>®</sup>, QOM2 and Q-Frame Enclosed Circuit Breakers—Class 1131 **General Information and Application Data**



Factory-installed equipment grounding bar.



PKOGTA2 field installed.

**Circuit Breakers** 

Visi-Trip<sup>®</sup> indication (QO<sup>®</sup> circuit breakers) Lugs suitable for aluminum or copper wire (refer to catalog sections listed below:)

QO	Class 730
QB, QD, QG and QJ	Class 734
QOM2	Class 736
Molded-case switches	Class 601

#### **Knockouts**

Located in back, side and bottom of all devices

#### **Equipment Grounding Bar**

Field-installable PKOGTA2 Suitable for #6 AWG 2/0 aluminum or #10 AWG 2/0 AWG copper wire

#### **Neutral Assemblies**

Insulated, groundable (except QO2TR) Suitable for aluminum or copper wire Grounding terminal provided

#### **Bolt-On Hubs**

Hubs available from 0.75 in. (19 mm) to 2.50 in. (64 mm) conduit size Off-center thread openings keep conduit close to wall No gasket required with hubs







QOM2 Base









Hubs

03/2007

# QO<sup>®</sup>, QOM2 and Q-Frame Enclosed Circuit Breakers—Class 1131 Technical Information

#### **TECHNICAL INFORMATION**

#### **Enclosed Molded-Case Circuit Breaker Ratings**

	Rating in Amperes	Enclosure			Circuit Breaker <sup>1</sup>			Neutral Assembly		
Service		Type 1 Catalog	Type 3R	Enclosure No.	Catalog	UL <sup>®</sup> Listed Interrupting Rating	Terminal Lug Wire	Terminal Wire Size AWG/kcmil		
		Number	Catalog Number	(Page 37)	Number	in RMS Amps Symmetrical	Size AWG/kcmil	Neutral Terminals	Grounding Terminals	
Enclosed Circuit Breaker Mounting Base										
240 Vac	60 A <sup>2</sup>		QO2TR <sup>3</sup>	1R	QO210 to QO260	10,000 AIR	#14 4 Al or Cu <sup>4</sup>		#14	
Enclosed	Circuit Bre	akers								
	100 A	QO2100BNF/S <sup>5</sup>	QO2100BNRB <sup>5</sup>	1, 2R	QO QO-PL QO-GFI	10,000 AIR	#12 1 Al or #14 1 Cu	#12 1 Al or #14 1 Cu	#12 2 Al or #14 2 Cu	
					QO-VH	22,000 AIR				
5 N 120/240 Vac	125 A	QO2125BNF/S <sup>5</sup>	QO2125BNRB <sup>5</sup>	2, 3R	QO QO-PL QO-GFI	10,000 AIR	#12 2/ 0 Al - #14 2/0 Cu	#12 2/0 Al #14 2 /0 Cu		
					QO-VH	22,000 AIR				
	100-225 A	QOM22225NF/S	QOM22225NRB 6	6, 6R	QOM2-VH	22,000 AIR	4 - #4 2 50 kcmil Al/Cu	2 - #4 25 0 kcmil 4 - #14 2/ 0 Al or Cu	2 - #6 2 /0 Al 2 - #10 2/0 Cu	
240 Vac	100 A	00 A QO3100BNF/S <sup>5</sup> QO	QO3100BNRB <sup>5</sup>	1, 2R	QO QO-PL QO-GFI	10,000 AIR	#12 1 Al or	#12 1 Al or #14 1 Cu	#12 2 Al or #14 2 Cu	
					QO-VH	22,000 AIR	#14 1 Cu			
2-pole 240 Vac Max.	100-225 A	Q22200NS <sup>7 8</sup>	Q22200NRB <sup>7 8</sup>	3, 4R	QBL QDL	.,	#4 300	#4 2 50 Al or Cu	#12 1/ 0 AI or #14 1/0 Cu	
		Q23225NF/S <sup>8</sup>	Q23225NRB <sup>8</sup>	4, 5R				#4 3 00 Al or Cu		
3-pole 240 Vac	100-225 A	Q23225NF/S <sup>8</sup>	Q23225NRB <sup>8</sup>	4, 5R	QBL QDL QGL QJL	10,000 AIR 25,000 AIR 65,000 AIR 100,000 AIR <sup>9</sup>	Al or Cu	#4 3 00 Al or Cu		

<sup>1</sup> Order circuit breaker separately.

<sup>2</sup> Not suitable for service equipment.

<sup>3</sup> Top endwall has no hub opening; back and bottom feed only.

<sup>4</sup> Load terminals use #6 maximum.

<sup>5</sup> Enclosures will accept QO circuit breakers with factory-installed accessories.

<sup>6</sup> Enclosure will accept QOM2 circuit breaker with factory-installed accessories.

<sup>7</sup> Accepts 200 A maximum, 2-pole Q-frame circuit breakers.

<sup>8</sup> Equipment grounding kit factory-installed.

<sup>9</sup> When these 3-pole circuit breakers are mounted in an enclosure, the maximum AIR rating is 65,000 at 240 Vac and 100,000 at 208 Vac.

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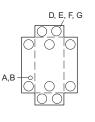
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### QO<sup>®</sup>, QOM2 and Q-Frame Enclosed Circuit Breakers—Class 1131 Dimensions and Knockouts

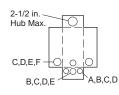
### DIMENSIONS AND KNOCKOUTS

		Dime	ensions				
Enclosure No.	l v	V	I	1	D		
Eliciosure No.	in.	mm	in.	mm	in.	mm	
1	5.88	149	13.12	333	3.38	86	
2	5.88	149	16.12	409	3.38	86	
1R	4.56	116	6.50	165	3.88	99	
2R	6.92	176	13.12	333	4.12	105	
3R	6.92	176	16.12	409	4.12	105	
3	7.56	192	23.12	587	4.25	108	
4	9.62	244	26.12	663	4.75	121	
4R	7.56	192	23.24	590	4.75	121	
5R	9.62	244	26.24	666	5.50	140	
6	8.55	217	23.92	608	3.95	100	
6R	8.55	217	24.75	629	4.16	106	

Knockouts										
Symbol A B C D E F G H										
Conduit Size	0.50 in.	0.75 in.	1.00 in.	1.25 in.	1.50 in.	2.00 in.	2.50 in.	3.00 in.		
Conduit Size	13 mm	19 mm	25 mm	32 mm	38 mm	51 mm	64 mm	76 mm		



Box 3







C,D,E,F A,B,C,D 000

Box 1, 2

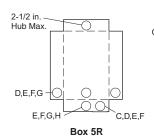
2-1/2 in.

Hub Max.

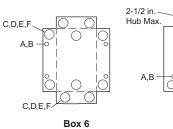
A,B

D,E,F,G -

Box 4R



Box 1R



Hub Max. A,B ol o C,D,E,F Box 6R

**Outdoor Dimensions and Knockouts** 

E,F,G,H

Box 4

C,D,E,F

D,E,F,G

### Homeline<sup>®</sup> Circuit Breakers and Load Centers—Class 1170 Table of Contents

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### Homeline<sup>®</sup> Circuit Breakers and Load Centers—Class 1170 Product Description



Homeline<sup>®</sup> Circuit Breaker Load Center

#### **PRODUCT DESCRIPTION**

Homeline<sup>®</sup> circuit breaker load centers from Square D<sup>®</sup> are UL Listed panelboards. They are designed to meet residential, commercial, and industrial requirements to protect electrical systems, equipment, and people.

#### Features

Single-phase construction

30 2 25 A main lug or main circuit breaker ratings

2 42 circuit indoor or outdoor versions

Combination cover for flush or surface mounting

Aluminum bus construction on main lug or main circuit breaker panels

Service entrance equipment capable panels

Straight-in wiring to help minimize service cable installation

Convertible mains meet changing job site requirements

Standard 22/10 k AIR series rating on main circuit breaker panels increases application capability

Single captive screw interior mounting on indoor panels to ease removal Split branch neutral for clutter-free wiring

Top or bottom feed by rotating convertible mains panels 180 degrees Combination slot/square drive neutral, ground, and cover screws for positive drive and improved torque

Three ground bar mounting locations for ease of wiring

Automatic flush adjustment cover speeds installation

Tangential main service knockouts eliminate offsets

Equipment grounding bar included with main lug load centers Cover supplied with load center

Provisions for door lock on convertible mains panel covers

Two branch circuit breaker twistouts are factory removed for easier installation of circuit breakers

New side hinge doors on outdoor convertible main panels

Outdoor panel covers are lockable with padlock

## Homeline<sup>®</sup> Circuit Breakers and Load Centers—Class 1170 Product Description

#### Homeline<sup>®</sup> Load Centers

Number Segment	Character	Description	ном	3040	L	200		—	С
Load Center Family	НОМ	UL Listed							
Spaces / Circuits	3040								
	М	Main circuit breaker							
Mains Type	L	Main lugs							
	U	Universal mains							
Amps						-			
	G	Factory included					-		
Ground Bar	Т	Factory-installed					_		
	Blank	Purchase separately					-		
Special Construction	FT	Feed-thru							
	С	Combination flush / surface indoor cover							
Cover	F	Flush							
Cover	RB	Rainproof							
	S	Surface							

#### Homeline<sup>®</sup> Circuit Breakers

Number Segment	Character	Description	ном	1	15	_			
Brand	HOM	Full Size	-						
Dianu	HOMT	Tandem							
Number of Poles									
Amps									
	AFI	Arc fault circuit interruption							
	Blank	10,000 AIR							
Device Name	CAFI	Combination arc fault circ	cuit inter	ruption					
Device Name	EPD	Equipment protection dev	vice						
	GFI	Ground fault circuit interruption							
	НМ	High magnetic trip							



HOM24M125C



HOM 1-Pole 1 space required.



HOMT 1-Pole Tandem 1 space required.





HOM 1-Pole GFI with ground fault circuit interrupter; 1 space required.



HOM 2-Pole 2 spaces required.



**HOMT Quad Circuit Breaker** 2 spaces required.



HOM 2-Pole GFI with ground fault circuit interrupter; 2 space required.

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#### **GENERAL INFORMATION AND APPLICATION DATA**

#### Type

Circuit breaker load centers for use on ac systems. They are UL Listed under file E-6294 (panelboards) and meet Federal Specifications W-P-115b NEMA Type 1, Class 2.

#### Service

120 Vac, 162W

120/240 Vac, 1ø3W

#### Ratings

Main lugs: 70 2 25 A Main circuit breaker: 50 2 25 A

#### **UL Listed**

File E-6294 (panelboards) Suitable for use as service equipment 75 °C wire rating

### **Class CTL**

UL Listed Class CTL load centers

Meets the National Electrical Code® (NEC®) article for Lighting and Appliance Branch Circuit panelboards.

#### **Branch Circuit Breakers**

	10,000 AIR
НОМ	1-pole, 15 5 0 A
HOM	2-pole, 15 1 25 A
HOMT	1-pole, 15 3 0 A
HOMI	2-pole, 15 5 0 A
HOM-GEI	1-pole, 15 2 0 A
HOM-GFI	2-pole, 15, 20, 30, 40, 50 A
HOM-AFI	1-pole, 15 2 0 A
HOM-CAFI	1-pole, 15 2 0 A

#### **Main Circuit Breaker Kits**

50 225 A main circuit breaker kit is 22,000 AIR series rated with 10,000 AIR branch circuit breakers

Refer to Main Circuit Breaker Kits on page 10 for listing.

HOM-CAFI



HOM-AFI 1 space required. 1 space required.





QOM2 Frame Size 100-225 A



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#### Indoor Enclosures (NEMA Type 1)

HOM40M200C With Cover







Bolt-On Hubs

Welded sheet steel with knockouts at top, bottom, back and sides Finish: gray baked enamel electrodeposited over cleaned, phosphatized steel

Most indoor enclosures are 14.25 in (362 mm) wide

Top or bottom feed by rotating enclosure

#### Indoor Covers

Doors to cover circuit breaker handles, except on 2 4 , 4 8 and 6 1 2 circuit models

Combination flush and surface cover with latch opening door included with load centers

Automatic flush adjustment is standard

Triple lead cover screws for fast cover installation

Shutter-type twistouts

HOMFP snap-in style filler plates available for all covers

QOM1FP filler plates available for 100 12 5 A convertible load center covers

QOM2FP filler plates available for 150 22 5 A convertible load center covers

#### Rainproof Enclosures (NEMA Type 3R)

Complete enclosure includes interior trim and door

Welded galvannealed steel

Finish: gray baked enamel electrodeposited over cleaned, phosphatized, galvannealed steel

RB devices have provisions for interchangeable bolt-on hub

Top centered rainproof mounting boss on the back of the enclosure simplifies installation and saves time

Stainless steel door latch on the enclosure provides a secure closure and maximum durability

Convertible main panels are side-hinge door devices

Side-hinged door provides full wiring access without door removal Allow 1.25 in (32 mm) on the left side for the door to open

#### **Bolt-On Hubs**

Hubs available for 0.75 in (19 mm) to 4 in (102 mm) conduit size (see page 46)

No gasket required with hubs from 0.75 in (19 mm) to 2.50 in (64 mm) when used on RB type load centers



HOM612L100F



Flush Cover



**Combination Cover with Door** 

#### Single-Phase, 2–12 Circuits, 70–125 A, Fixed Mains

**UL** Listed

File E-6294

Suitable for use as service equipment

75 °C wire rating (see Technical Information on page 49)

Short Circuit Current Rating Main lugs: up to 10,000 AIR (see Technical Information on page 49)

Interior Tin plated aluminum bus

#### Mains

Factory-installed fixed main lugs

Top mains positioning only

Top or bottom feed (see Technical Information on page 49)

A backfed main circuit breaker can be field installed in a 6 12 load center using the HOM1RK retaining kit

Cover

Combination flush and surface cover

#### Single-Phase, 12–42 Circuits, 100–225 A, Convertible Mains

#### UL Listed

File E-6294

Suitable for use as service equipment 75 °C wire rating (see Technical Information on page 48)

#### Short Circuit Current Rating

Main lugs: up to 10,000 AIR

Main circuit breaker: 22,000 AIR standard (see Technical Information on page 48)

#### Interior

Tin plated aluminum bus

Removable interior with single, captive mounting screw

Split branch neutral with up to 50% more terminations than required Multiple mounting locations for equipment ground bar kits: left, right, bottom

#### Mains

	lled Main Lugs ain Circuit Breaker	Factory-Installed Main Circuit Breaker Convertible to Main Lugs					
Load Center Amperage	Main Circuit Breaker Kit Amperage	Main Circuit Breaker Amperage	Breaker Kit				
125	50 - 125	100	125	100			
150	100 - 150	125	125	125			
200	100 - 200	150	225	150			
225	100 - 225	200	225	200			
		225	225	225			

Top or bottom mains positioning, by rotating the complete indoor load center 180 degrees. (see Technical Information on page 48)

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# Single-Phase, 12–42 Circuit, 100–225 A, Convertible Mains, Continued

#### Cover

Combination flush and surface cover included with load centers Optional door lock kit for indoor load centers Positive action, easy open door latch

#### Main Circuit Breaker with Feed-Thru Lugs

Rainproof only, side hinged 150 and 200 A mains rating Space for up to 8 single-pole circuit breakers Factory-installed main circuit breaker Factory-installed feed-thru lugs

Universal Mains Load Centers, Studs Only

No factory-installed main circuit breaker or main lugs 200 A mains rating Indicated by a U in the catalog number Purchase main lug kit or main circuit breaker kit and field install Combination flush / surface cover included with indoor load center Factory-installed ground bar kit

Universal Mains Load Center with Feed-Thru Lugs

No factory-installed main circuit breaker or main lugs

200 A mains rating

- Feed-thru lugs are factory-installed
- Rainproof only, side hinged
- Space for up to 8 single-pole circuit breakers
- Purchase main lug kit or main circuit breaker kit and field install

Main Circuit Breaker Mobile Home Load Centers

Covers included with load centers

Factory-installed grounding bar, indicated by a T in the catalog number Top or bottom feed on incoming service by rotating the complete load center 180 degrees



HOM816M200FTRB



HOM816U200FTRB

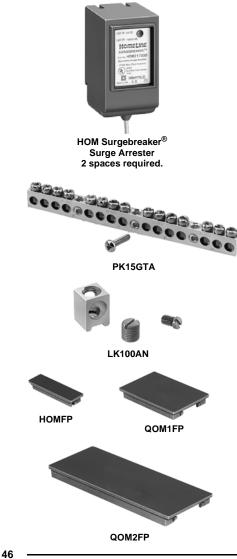


HOM3040U200TC

RB Hub



#### BC200 Enclosure Coupling



Accessories

#### Bolt-On Hubs

Equipment with an RB suffix, meaning Rainproof NEMA Type 3R construction, uses the bolt-on hubs listed below. RB devices will accept 0.75 in (19 mm) through 2.50 in (64 mm) bolt-on hubs without the use of reducers.

Off-center conduit thread openings and elongated mounting holes provide quick and easy adjustment to eliminate costly conduit offsets and bends. Hubs are suitable for use with conduit having ANSI standard taper pipe thread.

#### UL Listed Bolt-On Hubs for RB Devices

Conduit Size	duit Size         0.75 in         1.0         9 mm         25		1.25 in 32 mm	1.50 in 38 mm	2.00 in 51 mm	2.50 in 64 mm
Hub Cat. No.	B075	B100	B125	B150	B200	B250

NOTE: Closing cap (catalog number B-CAP) is provided factory-installed on each device having the RB suffix.

#### UL Listed Enclosure Coupling for RB Devices

Designed for connecting wireway or other enclosures to units having RB bolt-on conduit provisions. Provides a bushed opening equal to 2 in conduit.
Eliminates the need for conduit nippling.

### Surgebreaker<sup>®</sup> Secondary Surge Arrester

HOM2175SB UL Listed secondary surge arrester

Easy plug-on installation for Homeline® load center

LED indicates operational status

Plug-on design requires two pole spaces

Designed to protect electrical service and major household appliances , excluding electronic devices

Grounding Bar Kits

Field installable in all load centers

Wire size of terminals (see Technical Information on page 48)

Suitable for copper or aluminum wire

Available with #1 4/0 AWG lug PK15GTA-L, PK18GTA-L and PK23GTA-L (see Technical Information on page 48)

#### Auxiliary Neutral Lugs

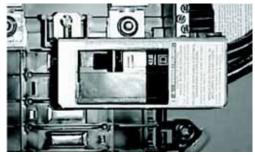
UL Listed for copper or aluminum wire Field installable on neutral assembly

LK70AN: #12 2 Al or #14 4 Cu AWG LK100AN: #6 2/0 Al/Cu AWG LK125AN: #14 2/0 Al/Cu AWG

Cover Filler Plates

Fast to install; snap-in type HOMFP branch circuit QOM1FP 50 1 25 A main circuit breaker QOM2FP 150 225 A main circuit breaker

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Back-Fed Main Circuit Breaker Retaining Kit



**Cutaway Showing Installed Generator Interlock Kit** 



PK6FL







Back-Fed Main Circuit Breaker Retaining Kits

- HOM1RK: secures circuit breaker to interior when used as back-fed main for HOM612L100F/S and RB load centers
- HOM4RK2LA: mounts on the right side of HOM 100 125 A convertible main load centers, series S01 and S02 (retains one 2-pole HOM circuit breaker)
- HOM4RK2HA: mounts on the right side of HOM 150 2 25 A convertible main load centers, series S01 and S02 (retains one 2-pole HOM circuit breaker)

Generator Circuit Breaker Interlock Kit

HOMCRBGK1: interlocks a QOM1 2-pole main circuit breaker of a load center (100 125 A) with a Homeline<sup>®</sup> 2-pole (15 125 A) branch circuit breaker, "S" series NEMA Type 1 and "S1" and "S2" series NEMA type 3R load centers

HOMCGK2: interlocks a QOM2 2-pole main circuit breaker of a load center (150 225 A) with a Homeline 2-pole (15 125 A) branch circuit breaker, S series NEMA Type 1 and S01 series NEMA Type 3R load centers

HOMRBGK2: interlocks a QOM2 2-pole main circuit breaker of a load center (150 225 A) with a Homeline 2-pole (15 125 A) branch circuit breaker, S02 series NEMA Type 3R load centers

#### Flush Lock Kits

Available for indoor load centers

Two keys provided with each lock kit

PK6FL for single-phase convertible 8 42 circuit load centers

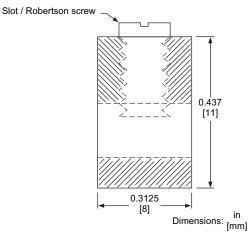
#### Main Lugs Kits

Field installable in main circuit breaker or main lugs load centers 125 A kit usable in 100 125 A load centers, QOL125 225 A kit usable in 150 225 A load centers, QOL225

#### Main Circuit Breaker Kits

Field installable in main lugs or main circuit breaker load centers 50 225 A main circuit breaker kit with 22,000 AIR usable with 10,000 AIR branch circuit breakers (see page 10)

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Cross Section of Size 1 Ground Bar

All PK equipment grounding bar kits are supplied with mounting screws, necessary installation instructions and an Equipment Grounding Terminal self-adhesive label.

**TECHNICAL INFORMATION** 

**Grounding Bar Kits** 

			•	Term	ninal	s		Approximate			ance			
Catalog Number	Total Qty.	C		tity "Wi ble"	re R	ange		Overall Length		Overall		Mounting		Mounting
		I	=	≡	IV	v	VI	in	[mm]	in	[mm]			
PK0GTA2 <sup>1</sup>	2						2	1.75	[44]	One hole	One hole	Тор		
PK0GTA6 <sup>2</sup>	6					6		4.61	[117]	1.69	[43]	Тор		
PK3GTA1 <sup>3</sup>	3	3						1.38	[35]	One hole	One hole	Тор		
PK4GTA <sup>3</sup>	4	4						1.63	[41]	One hole	One hole	Тор		
PK5GTA <sup>4</sup>	5	5						2.25	[57]	1.25	[32]	Тор		
PK7GTA <sup>3</sup>	7	7						2.88	[73]	1.25	[32]	Top or Side		
PK9GTA1 <sup>3</sup>	9	9						3.25	[83]	One hole	One hole	Тор		
PK9GTA <sup>3</sup>	9	9						3.78	[96]	3.13	[80]	Тор		
PK12GTA <sup>3</sup>	12	12						4.70	[119]	3.13	[80]	Тор		
PK15GTA <sup>3</sup>	15	15						5.63	[143]	3.13	[80]	Тор		
PK15GTAL <sup>5</sup>	16	15	1					8.13	[207]	3.13	[80]	Тор		
PK15GTA6 <sup>6</sup>	21	15			6			5.88	[149]	7	7	Тор		
PK18GTA <sup>3</sup>	18	18						6.56	[167]	3.13	[80]	Тор		
PK18GTAL <sup>5</sup>	19	18	1					8.81	[224]	3.13	[80]	Тор		
PK23GTA <sup>3</sup>	23	23						8.11	[206]	3.13	[80]	Тор		
PK23GTAL <sup>5</sup>	24	23	1					9.44	[240]	3.13	[80]	Тор		
PK27GTA <sup>38</sup>	27 or 26	27 or 26		1				9.36	[238]	3.13	[80]	Тор		

1 Mounting screw 40205-065-01 (one required).

2 Mounting screw 21922-18360 (two required).

3 Mounting screw 21594-14220 (two required).

4 Mounting screw 21594-14241 (two required).

5 Mounting screw 21594-14302 (two required).

6 Mounting screws 21594-14241(two required) and 21594-17121(two required).

7 3.13 in. (80 mm) on small terminals; 5.25 in. (133 mm) on large terminals.

8 PK27GTA includes one main grounding lug that mounts with two terminal screws and requires three terminals for mounting.

#### Wire Range Table

Size	Cu (AWG)	AI (AWG)
I	(1) #14 #4 or (2) #14 or #12	(1) #12 #4 or (2) #12 or #10
П	(1) #1 4 /0	(1) #1 4 /0
Ш	(1) #6 2 /0	(1) #6 2 /0
IV	(1) #6 3 /0	(1) #6 3 /0
V	(1) #14 1/0	(1) #14 1 /0
VI	(1) #10 2/0	(1) #6 2 /0

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### Homeline<sup>®</sup> Circuit Breakers and Load Centers—Class 1170 Main Lugs and Main Circuit Breakers Ratings

#### MAIN LUGS AND MAIN CIRCUIT BREAKERS RATINGS

Single-Phase, Three-Wire, 120/240 Vac Main Lugs Indoor

Mains Rating in Amps	Load Center Catalog Number	LoadCenter Cover Catalog Number	UL Listed Service Equipment (See Notes)	Maximum UL Short Circuit Rating <sup>1</sup>	MainWireSize AWG/kcmil Al/Cu	Enclosure No. (Page 27)	Top or Bottom Mains Position	UL Listed for Corner Grounded Delta Systems
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#### Fixed Mains – Factory-Installed Main Lugs

70	HOM24L70F/S	Included	В	10,000 A	#12 3 #14 4	2	Тор	No
100	HOM612L100F/S	Included	B, C	10,000 A	#8 1	4	Тор	No
125	HOM48L125GC	Included	B, C	10,000 A	#4 2/ 0	21	Тор	No

#### Convertible Mains – Factory-Installed Main Lugs

#### QOM1 Main Frame Size - Convertible to 22,000 AIR Main Circuit Breaker

125	HOM816L125C	Included	B, C	10,000 A	#6 2/ 0	6	Both	
	HOM816L125TC	Included	B, C	10,000 A	#6 2/ 0	6	Both	
	HOM12L125C	Included	B, C	10,000 A	#6 2/ 0	6	Both	
	HOM1224L125TC	Included	B, C	10,000 A	#6 2/ 0	6	Both	No
	HOM1624L125C	Included	B, C	10,000 A	#6 2/ 0	8	Both	NO
	HOM20L125C	Included	B, C	10,000 A	#6 2/ 0	8	Both	
	HOM20-24L125TC	Included	B, C	10,000 A	#6 2/ 0	8	Both	
	HOM24L125TC	Included	B, C	10,000 A	#6 2/ 0	8	Both	

#### Convertible Mains – Factory-Installed Main Lugs QOM2 Main Frame Size – Convertible to 22,000 AIR Main Circuit Breaker

150	HOM30L150C	Included	B, C	10,000 A	#4 250	10	Both	
150	HOM30L150TC	Included	B, C	10,000 A	#6 250	10	Both	
	HOM1632L200TC	Included	B, C	10,000 A	#4 250	9	Both	
	HOM1632L200TCFT <sup>2</sup>	Included	B, C	10,000 A	#6 250	10	Both	
	HOM2040L200TC	Included	B, C	10,000 A	#6 250	9	Both	
200	HOM30L200C	Included	B, C	10,000 A	#6 250	10	Both	No
200	HOM30L200TC	Included	B, C	10,000 A	#6 250	9	Both	
	HOM3040L200TC	Included	B, C	10,000 A	#6 250	10	Both	
	HOM40L200C	Included	B, C	10,000 A	#6 250	12	Both	
	HOM40L200TC	Included	B, C	10,000 A	#6 250	12	Both	
225	HOM42L225C	Included	B, C	10,000 A	#6 250	10	Both	

<sup>1</sup> UL short circuit rating with optional QOM-VH main circuit breaker, 22,000 AIR.

<sup>2</sup> Supplied with feed-thru lugs.

B UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) with field-installed service disconnect.

C UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) when not more than six service disconnecting means are provided and when not used as a lighting and appliance branch circuit panelboard.

### Homeline<sup>®</sup> Circuit Breakers and Load Centers—Class 1170 Main Lugs and Main Circuit Breakers Ratings

Single-Phase, Three-Wire, 120/240 Vac Main Circuit Breaker Indoor

Mains Rating in Amps	Load Center Catalog Number	Load CenterCover Catalog Number	UL Listed Service Equipment (See Notes)	Maximum UL Short Circuit Rating <sup>1</sup> ▲	Main Wire Size AWG/kcmil Al/Cu	Enclosure No. (Page 27)	Top or Bottom Mains Position	UL Listed for Corner Grounded Delta Systems
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Convertible Mains – Factory-Installed Main Circuit Breaker QOM1 Main Frame Size – Convertible to Main Lugs

			-					
	HOM816M100C	Included	A, C	22,000 A	#6 1	5	Both	
	HOM816M100TC	Included	A, C	22,000 A	#6 1	5	Both	
	HOM12M100C	Included	A, C	22,000 A	#4 2 /0	6	Both	
100	HOM1224M100TC	Included	A, C	22,000 A	#4 2 /0	6	Both	No
	HOM20M100C	Included	A, C	22,000 A	#4 2 /0	8	Both	
	HOM24M100C	Included	A, C	22,000 A	#4 2 /0	8	Both	
	HOM30M100C	Included	A, C	22,000 A	#4 2 /0	10	Both	
	HOM1224M125C	Included	A, C	22,000 A	#4 2 /0	6	Both	
105	HOM1224M125TC	Included	A, C	22,000 A	#4 2 /0	6	Both	No
125	HOM24M125C	Included	A, C	22,000 A	#4 2 /0	8	Both	
	HOM30M125C	Included	A, C	22,000 A	#4 2 /0	10	Both	

#### Convertible Mains – Factory-Installed Main Circuit Breaker QOM2 Main Frame Size – Convertible to Main Lugs

150	HOM1632M150TC	Included	A, C	22,000 A	#4 250	9	Both	
	HOM2030M150TC	Included	A, C	22,000 A	#4 250	9	Both	No
	HOM30M150C	Included	A, C	22,000 A	#4 250	10	Both	
	HOM1224M200TC	Included	A, C	22,000 A	#4 250	9	Both	No
	HOM1632M200TC	Included	A, C	22,000 A	#4 250	9	Both	
	HOM2040M200C	Included	A, C	22,000 A	#4 250	9	Both	
200	HOM2040M200TC	Included	A, C	22,000 A	#4 250	9	Both	
200	HOM30M200C	Included	A, C	22,000 A	#4 250	10	Both	
	HOM3040M200TC	Included	A, C	22,000 A	#4 250	10	Both	
	HOM40M200C	Included	A, C	22,000 A	#4 250	12	Both	
	HOM42M200C	Included	A, C	22,000 A	#4 250	12	Both	
225	HOM42M225C	Included	A, C	22,000 A	#4 250	12	Both	No

#### Universal Mains – No Factory-Installed Main Circuit Breaker or Main Lugs QOM2 Main Frame Size – Field-Installed Main Lugs or 22,000 AIR Main Circuit Breaker

	HOM1632U200TC	Included	B, C	10,000 A	#4 250	9	Both	
200	HOM2040U200TC	Included	B, C	10,000 A	#4 250	9	Both	No
	HOM3040U200TC	Included	B, C	10,000 A	#4 250	10	Both	1

<sup>1</sup> UL short circuit rating with optional QOM-VH main circuit breaker, 22,000 AIR.

A UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) with a factory-installed service disconnect.

B UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) with field-installed service disconnect.

C UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) with field-installed main lugs when not more than six disconnecting means are provided and when not used as lighting and appliance branch circuit panelboard.

### Homeline<sup>®</sup> Circuit Breakers and Load Centers—Class 1170 Main Lugs and Main Circuit Breakers Ratings

#### Single-Phase, Three-Wire, 120/240 Vac Main Lugs Rainproof

70 H 100 H 125 H Convertibl	ns – Factory-Installed HOM24L70RB HOM612L100RB HOM48L125GRB	Included	В					
100 H 125 H Convertibl	HOM612L100RB		В	T				
125 F Convertibl		la alc. 1. 1	1	10,000 A	#12 3 Al #14 4 Cu	1R	Тор	No
Convertib	HOM48L125GRB	Included	B, C	10,000 A	#8 1	2R	Тор	No
F		Included	B, C	10,000 A	#12 2/ 0 Al #14 2/0 Cu	16R	Тор	No
	le Mains – Factory-Ins	stalled Main Lug	s – QOM1 Mair	n Frame Size	e – Convertible to	22,000 AIR	Main Circui	t Breaker
	HOM816L125RB	Included	B, C	10,000 A	#6 2 /0	3R	Тор	
	HOM12L125RB	Included	B, C	10,000 A	#6 2 /0	3R	Тор	
125 F	HOM1224L125RB	Included	B, C	10,000 A	#6 2 /0	3R	Тор	No
F	HOM20L125RB	Included	B, C	10,000 A	#6 2 /0	4R	Тор	
onvertib	le Mains – Factory-Ins	stalled Main Lug	s – QOM2 Mair	n Frame Size	e – Convertible to	22,000 AIR	Main Circui	t Breaker
F	HOM12L200RB	Included	B, C	10,000 A	#6 250	5R	Тор	
	HOM2040L200RB	Included	B, C	10,000 A	#6 250	6R	Тор	
200 F	HOM30L200RB	Included	B, C	10,000 A	#6 250	7R	Тор	No
F	HOM40L200RB	Included	B, C	10,000 A	#6 250	8R	Тор	
OM1 Mai	le Mains – Factory-Ins in Frame Size – Conve	ertible to Main Lu	ugs or Lower A				_	
	HOM816M100RB	Included	A, C	22,000 A	#4 2 /0	3R	Тор	
100	HOM12M100RB		A, C	22,000 A	#4 2 /0	3R	Тор	No
	HOM20M100RB	Included	A, C	22,000 A	#4 2 /0	4R	Тор	
	HOM24M100RB HOM24M125RB	Included	A, C A, C	22,000 A	#4 2 /0	6R 6R	Тор	No
onvertib	le Mains – Factory-Ins in Frame Size – Conve		uit Breaker	22,000 A Amperage Ma	#4 2 /0 ain Circuit Break	I I	Тор	NO
150 H	HOM30M150RB	Included	A, C	22,000 A	#4 250	7R	Тор	No
F	HOM2040M200RB	Included	A, C	22,000 A	#4 250	6R	Тор	
200	HOM30M200RB	Included	A, C	22,000 A	#4 250	7R	Тор	No
	HOM3040M200RB	Included	A, C	22,000 A	#4 250	7R	Тор	110
F	HOM40M200RB	Included	A, C	22,000 A	#4 250	8R	Тор	
⊦ 225	HOM1624M225RB	Included	A, C	22,000 A	#4-250		Тор	No
F	HOM42M225RB	Included	A, C	22,000 A	#4-250		Тор	
actory-In	stalled Main Circuit B	reaker with Feed	J-Thru Lugs					
150 H	HOM816M150FTRB	Included	A, C	22,000 A	#4 250	6R	Тор	No
200	HOM816M200FTRB	Included	A, C	22,000 A	#4 250	6R	Тор	No
200 F		with Food-Thru	uas					
	Main Circuit Breaker		Lugo					

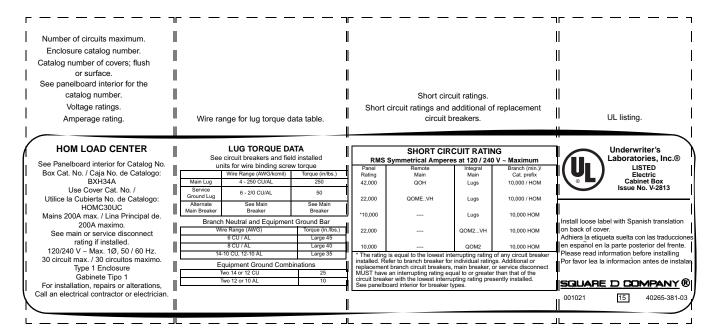
C UL Listed as suitable for use as service equipment (neutral bonded at the time of installation) with field-installed main lugs when not more than six service disconnecting means are provided and when not used as a lighting and appliance branch circuit panelboard.

### Homeline<sup>®</sup> Circuit Breakers and Load Centers—Class 1170 Homeline Label Samples

#### HOMELINE LABEL SAMPLES

For information on two-tier and three-tier series ratings, see Data Bulletin number 4100DB0301, Square D<sup>®</sup> Load Center Short Circuit Current Ratings, located on the Technical Library at www.SquareD.com.

#### **Homeline Box Label Sample**



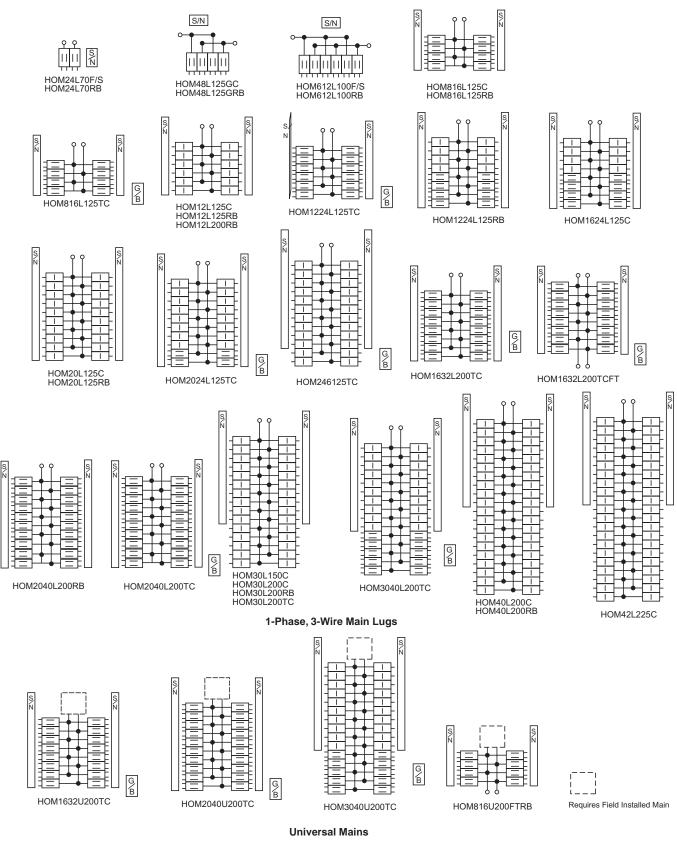
#### **Homeline Wiring Diagram Sample**

Service Equipment marking. Use of unused neutral branch terminal for equipment grounding, service equipment application only.	Installation of back-fed main circuit breaker and required kit. Alternate wiring diagram for main circuit breaker or main lug.	Type of circuit breakers from Square D that may be used in this panelboard.	Load center accessories. Neutral lug for 1/0 AWG or larger wire.
Suitable for use with 75°C Copper or Aluminum main conductors. See branch breakers for branch wire ratings. * Suitable for use as service equipment when service disconnect (main breaker) is installed. * Suitable for use as service equipment when not more than six main disconnecting means are provided and when not used as a lighting and appliance branch circuit panelboard. See Article 384-14 of the NEC. * When used as service equipment, all unused neutral terminals may be used for terminating equipment ground wires.	<ol> <li>Box bonding when required. / Conexion a la caja cuando fuese necesario.</li> <li>Main breaker type: QOM1 or QOM1A. / Interruptor automatico principal tipo: QOM1 o QOM1A.</li> <li>Ture / Lines</li> <li>Unit of the principal tipo: QOM1 or QOM1A.</li> <li>Service ground when required. / Tierra de acometida cuando fuese necesario</li> <li>Main Luga diagam</li> <li>Main Breaker diagram</li> </ol>	One single pole. One plug on space. One two pole requires two plug on spaces.	Load Center Accessories - Kits HOM4K2LA Back-fed Main Circuit Brkr. Retaining HOM2175SB Plug-Gn Surge Arrestor * SDSA1175 1 Phase Surge Arrestor QOSAMK SDSA1175 Mounting Bracket HOML2125 1 Phase Plug-on Subfeed Lugs * PKG-27GTA(L) Equipment Ground Bar PKGTAB Equipment Ground Bar INK0TAN 70A Max. Neutral Lug UK100AN 125A Max. Neutral Lug UK100AN 125A Max. Neutral Lug OUL125 Main Lugs PK6FL Indoor Cover Lock * May plug on two adjacent spaces. Torque Note: When interior mounting screw is loosened or removed, retighten to 35 lbs./in. SCILARE D COMPANY ® Made in U.S.A. 15 40265-668-02

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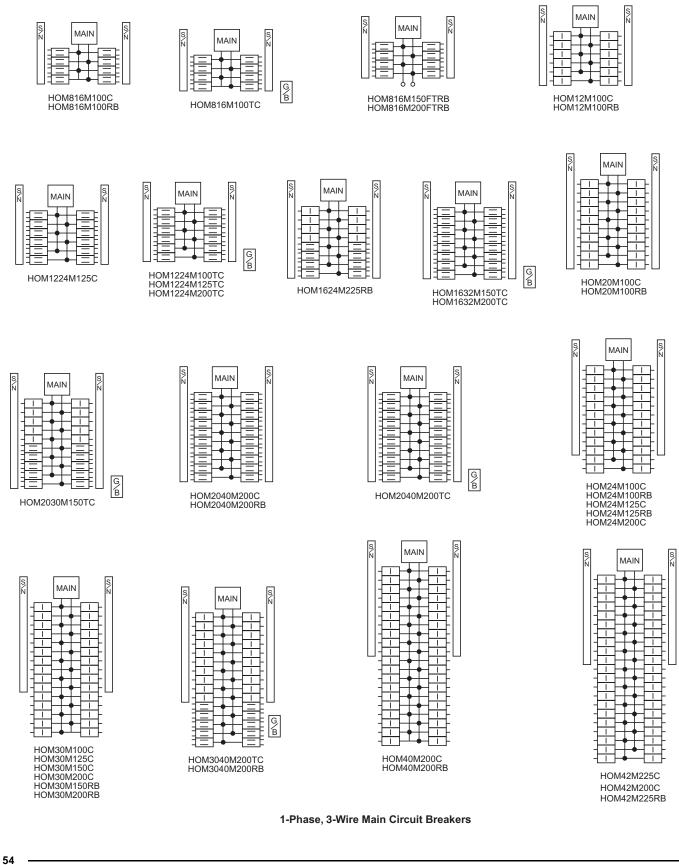
### Homeline<sup>®</sup> Circuit Breakers and Load Centers—Class 1170 Wiring Diagrams

#### WIRING DIAGRAMS



BQUARE D

### Homeline<sup>®</sup> Circuit Breakers and Load Centers—Class 1170 Wiring Diagrams



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NOTE: For information on Replacement Parts with specific part numbers, go to www.schneider-electric.us, click on Product FAQ's, enter the device catalog number, click SEARCH, then look for the information required.  $\mathbf{QO}^{\texttt{®}}$  and  $\mathbf{Homeline}^{\texttt{®}}$  Circuit Breaker Load Centers and Enclosures Catalog

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