## QO<sup>®</sup> Load Centers and Circuit Breakers

# Unsurpassed circuit protection and application flexibility





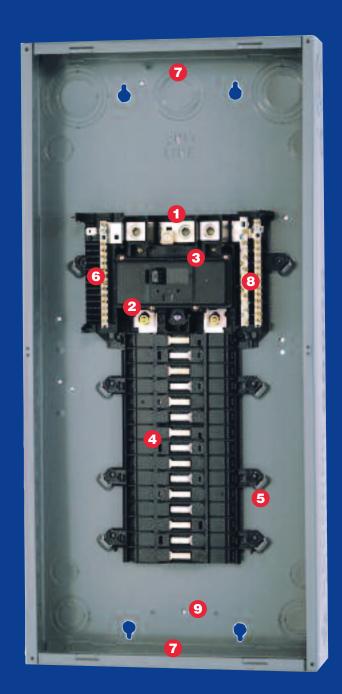




Square D° is the leader in circuit protection, a reputation QO° Load Centers helped to build. The widest range of application solutions. Superior reliability and durability. Exclusive performance innovations such as fast-acting Qwik-Open° protection and Visi-Trip° indication. Advanced technologies offering ground fault circuit interruption, arc fault circuit interruption and surge protection. Installation-simplifying innovations.



Main Lugs Load Center



Main Breaker Load Center

Note: Not all features apply to all units.

#### **QO Load Center Features**

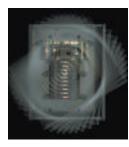
- 1. Straight-in wiring design helps minimize service cable bends, cutting waste and saving installation time.
- 2. Convertible mains let you meet changing job site requirements fast by field converting between main breaker and main lugs.
- 3. Standard 22,000/10,000 ampere series short circuit current rating on main breaker panels provides increased application capability without the time and expense of changing out the complete panel. Three-phase QO Main Circuit Breaker panels can be upgraded to 100,000A short circuit current rating.
- **4.** Shielded copper bus is an industry exclusive. We've sandwiched our plated copper bus between two rugged polymer shields to insulate and secure the interior in the box. The new design reduces the chance of accidental contact, and still accepts standard



QO Circuit
Breakers. The bus
is crafted from a
single piece of
copper to provide
excellent conductivity. The
copper bus is
then plated to
help prevent
corrosion and
ensure superior
performance and
durability.

- For the first seasily removed for painting or theft protection. Single, captive screw can't be lost; interior remounts quickly and easily (indoor only).
- **6.** Split branch neutral with up to 50% more terminations than required reduces clutter and simplifies wiring. Included are three 1/0 AWG terminations to accommodate larger wire without the expense and hassle of separate lugs.
- **7.** Top or bottom feed capability lets you rotate enclosure 180° to accommodate

top or bottom feed, saving expensive service cable. Covers include provisions for a door lock and have the top two branch circuit twistouts removed to speed installation.



- 8. Combination slot/square-drive neutral, ground, and cover screws let you use either standard flat-blade screwdriver or square-head driver for positive drive and improved torque.
- 9. Three ground bar mounting locations (left, right and bottom) let you pick the easiest spot to wire. Ground bars are included with most main lugs load centers.
- **10.** Automatic flush adjustment cover speeds installation, especially on uneven wall surfaces (below).



#### We've Got You Covered: Flush and Surface Covers

Indoor QO covers are available in flush or surface configurations to meet any mounting situation. All covers feature a floating, spring-mounted trim which provides automatic flush adjustment. This ensures proper alignment without manual adjustment and speeds final installation.







#### **Rainproof Enclosures**

QO Load Centers are available in a full line of NEMA Type 3R rainproof enclosures, with Square D type rain-tight bolted (RB) hub for fast and convenient top feed conduit connection. Side-opening devices feature a stainless steel door latch and rainproof center mounting boss on back.

#### **Complete Line of Accessories**

A complete line of QO accessories maximizes application flexibility. From ground bar kits to bolt-on rainproof hubs, filler plates, door locks, manual transfer kits, and more, QO Load Centers can satisfy almost any residential, commercial or industrial installation requirement.



For most people, the home is an investment of a lifetime. It's no place to compromise on electrical protection. That's why nearly 40 years ago QO® Load Centers and Circuit Breakers changed the way homes were protected...replacing fuses with the convenience and safety of modern circuit breakers.

Today, Square D® Load Centers are the most preferred brand of builders and electrical contractors.

#### QO Arc-D-tect® Arc Fault Circuit Interrupter



Utilizing advanced technology, the exclusive Square D Arc-D-tect Arc Fault Circuit Interrupter provides the highest level of circuit protection available today - designed to detect dangerous arc faults as well as provide traditional overload and short circuit protection. This single-pole breaker installs as easily as our GFCI breaker.





## **QO Circuit Breaker and Surgebreaker® Features**

#### Unsurpassed Qwik-Open® Protection

**OO** Circuit Breakers provide the high level of protection vou expect from Square D. Single-pole 15A and 20A Qwik-Open Circuit Breakers trip within 1/60th of a second. When it comes to electrical protection, fast response is critical and QO Circuit Breakers can trip faster than the blink of an eve.

#### Visi-Trip®

The exclusive Visi-Trip indicator provides clear and instant identification of a tripped circuit breaker. The highly visible indicator helps prevent unnecessary service calls and reduces the chance that other circuits will be turned off accidentally.

### **Ground Fault Protection**

Square D introduced the first ground fault circuit interrupter (GFCI) in 1967. It was such a good idea, electrical codes now require ground fault protection for bathrooms, pools, spas and other applications. We've continued that leadership, expanding our offering through two-pole 60A circuit breakers for whirlpool and hot tub applications.

#### Surgebreaker Secondary Surge Arrester

The Surgebreaker Secondary Surge Arrester plugs on like a circuit breaker to help protect the home's electrical system and hardwired appliances from surges up to 20,000 volts. Downstream point-of-use surge suppressors normally only handle surges up to 6,000 volts, and only protect the products plugged directly into them. For complete protection of sensitive electronics like computers, you need both levels of protection.

#### Surgebreaker Plus Multi-Path Surge Arrester

The latest innovation in surge protection from Square D, the Surgebreaker Plus, provides whole house protection for up to four telephone lines, two coax cable lines and is hard-wired to protect the entire panel and home wiring.

#### **USE CIRCUIT BREAKERS PROPERLY**

Electrical protection requires that circuit breakers be used properly. To maintain the integrity and safety intended, install only breakers marked on the load center label and/or wiring diagram. QO Load Centers are marked to accept only genuine QO Circuit Breakers. QO Circuit Breakers should only be used in panels marked to accept them. Any other use voids your warranty and may reduce protection, increase liability risks and violate the National Electrical Code.











## QO® Load Centers, QO® Circuit Breakers and Sur

## SINGLE PHASE LOAD CENTERS – INDOOR MAIN LUGS

Mains Rating		Max Branch Circuits	Load Center Catalog Number	Cover Cat. No. F=Flush S=Surface	Ground Bar
30	2	2	Q02L30S		PK3GTA-1
70	2	4	Q024L70 (F/S)		PK4GTA
	6	12	Q0612L100 (F/S)		
	6	12	Q0612L100D (F/S)		
100	8	16	Q0816L100 (F/S)	Included	PK7GTA
	8	16	Q0816L100D (F/S)		
	6	12	Q0612L100D (F/S) CU		
	8	16	Q0816L100D (F/S) CU		
125	4	8	Q0148L125G (F/S)		Included
Conve	rtible N	lain Lu	qs		
	12	12	Q0112L125G	Q0C16U (F/S)	
	12	24	Q011224L125G	Q0C16U (F/S)	
	16	16	Q0116L125G	Q0C24U (F/S)	
	16	24	Q011624L125G	Q0C24U (F/S)	
125	20	20	Q0120L125G	Q0C24U (F/S)	Included
	20	24	Q012024L125G	Q0C24U (F/S)	
	24	24	Q0124L125G	Q0C24U (F/S)	
	32	32	Q0132L125G	Q0C32U (F/S)	
	20	30	Q012030L150G	Q0C30U (F/S)	
150	24	24	Q0124L150G	Q0C30U (F/S)	Included
	30	30	Q0130L150G	Q0C30U (F/S)	
	12	12	Q0112L200G	Q0C30U (F/S)	
	24	36	Q012436L200TFT	Q0C40U (F/S)	
200	30	30	Q0130L200G	Q0C30U (F/S)	Included
	30	40	Q013040L200G	Q0C30U (F/S)	
	40	40	Q0140L200G	Q0C40U (F/S)	
225	42	42	Q0142L225G	Q0C42U (F/S)	Included

#### SINGLE PHASE LOAD CENTERS – OUTDOOR MAIN LUGS

Mains Rating	Branch Spaces	Max Branch Circuits	Load Center Catalog Number	Ground Bar	
Fixed Mair	Fixed Main Lugs				
40	2	2	Q02L40RB	PK3GTA1	
70	2	4	Q024L70RB	PK4GTA	
	6	12	Q0612L100RB	PK7GTA	
	6	12	Q0612L100TRB	Included	
100	6	12	Q0612L100RBCU		
	8	16	Q0816L100RB	PK7GTA	
	8	16	Q0816L100RBCU		
125	4	8	Q0148L125GRB	Included	
Convertible	e Main Lugs				
	12	12	Q0112L125GRB		
125	12	24	Q011224L125GRB		
123	16	24	Q011624L125GRB		
	24	24	Q0124L125GRB		
150	30	30	Q0130L150GRB	Included	
	12	12	Q0112L200GRB		
200	30	30	Q0130L200GRB		
200	30	40	Q013040L200GRB		
	40	40	Q0140L200GRB		
225	42	42	Q0142L225GRB		

## SINGLE PHASE LOAD CENTERS – INDOOR CONVERTIBLE MAIN BREAKER

Max Load Center Cover Cat. No.					
Mains Rating	Branch Spaces	Branch Circuits	Catalog Number	F=Flush S=Surface	Ground Bar
	12	12	Q0112M100	Q0C12U (F/S)	PK9GTA
	16	16	Q0116M100	Q0C20U100 (F/S)	PK12GTA
100	20	20	Q0120M100	Q0C20U100 (F/S)	PK15GTA
	24	24	Q0124M100	Q0C24U (F/S)	PK15GTA
	32	32	Q0132M100	QOC32UF	PK18GTA
125	24	24	Q0124M125	Q0C24U (F/S)	PK15GTA
123	32	32	Q0132M125	QOC32UF	PK18GTA
	20	30	Q012030M150	Q0C30U (F/S)	PK18GTA
150	24	24	Q0124M150	Q0C30U (F/S)	PK15GTA
130	30	30	Q0130M150	Q0C30U (F/S)	PK18GTA
	32	32	Q0132M150	Q0C40U (F/S)	PK18GTA
	20	40	Q012040M200	Q0C30U (F/S)	PK23GTA
	24	24	Q0124M200	Q0C30U (F/S)	PK15GTA
	30	30	Q0130M200	Q0C30U (F/S)	PK18GTA
200	30	40	Q013040M200	Q0C30U (F/S)	PK23GTA
	40	40	Q0140M200	Q0C40U (F/S)	PK23GTA
	42	42	Q0142M200	Q0C42U (F/S)	PK23GTA
	40	40	Q0140M225	Q0C42U (F/S)	PK23GTA
225	42	42	Q0142M225	Q0C42U (F/S)	PK23GTA

#### SINGLE PHASE LOAD CENTERS – OUTDOOR MAIN BREAKER

Mains Rating	Branch Spaces	Max Branch Circuits	Load Center Catalog Number	Ground Bar	
Main Brea	ker				
	12	12	Q0112M100RB	PK9GTA	
100	16	16	Q0116M100RB	PK12GTA	
	20	20	Q0120M100RB	PK15GTA	
125	24	24	Q0124M125RB	PK18GTA	
150	20	30	Q012030M150RB		
130	30	30	Q0130M150RB		
	20	40	Q012040M200RB	PK23GTA	
200	30	30	Q0130M200RB	PK18GTA	
	40	40	Q0140M200RB	PK23GTA	
Feed Thru	Feed Thru Lugs				
125	6	12	Q01612M125FTRB	PK12GTA	
150	8	16	Q01816M150FTRB	PK15GTAL	
200	8	16	Q01816M200FTRB	TRIBUIAL	

#### MAIN CIRCUIT BREAKER KITS

Main Circuit Breaker Rating (A)	Use With Convertible Load Center Mains Rating	22,000 AIR Main Circuit Breaker	Lug Wire Size AWG/kcmil Al or Cu		
QOM1 Frame Siz	ze				
50	100-125	QOM50VH			
60	100-125	QOM60VH			
70	100-125	QOM70VH			
80	100-125	QOM80VH	#10.0/0		
90	100-125	QOM90VH	#12–2/0		
100	100-125	QOM100VH			
110	125	QOM110VH			
125	125	QOM125VH			
QOM2 Frame Siz	QOM2 Frame Size				
100	150-225	Q0M2100VH			
125	150-225	Q0M2125VH			
150	150-225	Q0M2150VH	#4 200		
175	200-225	Q0M2175VH	#4–300		
200	200-225	QOM2200VH			
225	225	Q0M2225VH			

## gebreaker® Products

#### THREE PHASE LOAD CENTERS - OUTDOOR

Mains	Branch	Load Center	Ground
Rating	Spaces	Catalog Number	Bar
Fixed Main Lu	ıgs, 65,000A S	hort Circuit Current Ra	ting
60	3	Q0403L60NRB	P4GTA
125	12	Q0312L125GRB	
123	20	Q0320L125GRB	
200	18	Q0318L200GRB	Included
200	30	Q0330L200GRB	
225	42	Q0342L225GRB	
Convertible Ma	ain Breaker, Q	03100VH 22,000A Sho	rt Current Rating
100	27	Q0327M100RB	PK15GTA
Convertible Ma	ain Breaker, Ql	D, 25,000A Short Circu	it Current Rating
125	30	Q0330MQ125RB	
150	30	Q0330MQ150RB	PK18GTA
200	30	Q0330MQ200RB	
200	42	Q0342MQ200RB	PK23GTA
225	42	Q0342MQ225RB	FRESUIA

#### THREE PHASE LOAD CENTERS - INDOOR

Mains Rating	Branch Spaces	Load Center Catalog Number	Cover Cat. No. F=Flush S=Surface	Ground Bar
Fixed I	Main Lugs	, 65,000A Short Circu	it Current Rating	
60	3	Q0403L60N (F/S)	Included	PK4GTA
	12	Q0312L125G	Q0C16U (F/S)	
125	20	Q0320L125G	Q0C24U (F/S)	
	24	Q0324L125G	Q0C24U (F/S)	Included
200	18	Q0318L200G	Q0C30U (F/S)	IIICIUUGU
200	30	Q0330L200G	Q0C30U (F/S)	
225	42	Q0342L225G	Q0C42U (F/S)	
Conve	rtible Maiı	n Breaker, QO3100VH	22,000A Short Cu	rrent Rating
100	27	Q0327M100	Q0C30U (F/S)	PK15GTA
Conve	rtible Maiı	n Breaker, QD 25,000	<b>Short Circuit Curre</b>	nt Rating
125	30	Q0330MQ125		PK18GTA
150	30	Q0330MQ150		PK18GTA
130	42	Q0342MQ150	Q0C342Q (F/S)	PK23GTA
200	30	Q0330MQ200	4000-124 (170)	PK18GTA
200	42	Q0342MQ200		PK23GTA
225	42	Q0342MQ225		PK23GTA

#### **BRANCH CIRCUIT BREAKERS 10,000 AIR**

Ampere Rating	One Pole	Two Pole Common Trip	Three Pole Common Trip
10	Q0110	Q0210	Q0310
15	Q0115	Q0215	Q0315
20	Q0120	Q0220	Q0320
25	Q0125	Q0225	Q0325
30	Q0130	Q0230	Q0330
35	Q0135	Q0235	Q0335
40	Q0140	Q0240	Q0340
45	Q0145	Q0245	Q0345
50	Q0150	Q0250	Q0350
60	Q0160	Q0260	Q0360
70	Q0170	Q0270	Q0370
80		Q0280	Q0380
90		Q0290	Q0390
100		Q02100	Q03100
110		Q02110	
125		Q02125	
150		Q02150	
175		Q02175	
200		Q02200	

#### THREE PHASE MAIN CIRCUIT BREAKERS

Amperage	25k AIR	65k AIR	100k AIR
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

#### TANDEM CIRCUIT BREAKERS

Ampere Rating	QOT One Pole	Replacement for Non-Class CTL One Pole
15 & 15	Q0T1515	Q01515
15 & 20	Q0T1520	Q01520
20 & 20	Q0T2020	Q02020

## GROUND FAULT CIRCUIT INTERRUPTERS 10,000 AIR

Ampere Rating	One Pole	Two Pole	Three Pole
15	Q0115GFI	Q0215GFI	
20	Q0120GFI	Q0220GFI	
25	Q0125GFI	Q0225GFI	
30	Q0130GFI	Q0230GFI	
40		Q0240GFI	
50		Q0250GFI	
60		Q0260GFI	

For bolt-on breakers, change QO to QOB

#### ARC FAULT CIRCUIT INTERRUPTERS 10,000 AIR

Ampere Rating	One Pole
15	QO115AFI
20	Q0120AFI

#### SURGEBREAKER® SECONDARY SURGE ARRESTER

Catalog	Clamping Voltage at Surge Currents of:		
Number	1,500A	5,000A	10,000A
Q02175SB	500V	625V	750V

## SURGEBREAKER® PLUS WHOLE HOUSE SURGE PROTECTOR

Туре	Catalog Number	
Indoor	SDSB1175C	

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Square D° QO° Load Centers and Circuit Breakers are part of a comprehensive family of circuit protection solutions.

Like all Square D products from Schneider Electric, these innovative protective devices come built for easy installation and reliable operation. And they're designed to stand the test

For more information on our circuit protection products or other solutions, please call your local Square D distributor or sales office.

Or visit our website at www.SquareD.com.

of time.



#### **QO 4-8 Circuit Load Center**

Ideal for indoor and outdoor sub-feed applications, such as dual-zone HVAC, hot tubs and pools. These 125A main lug panels accommodate up to 8 circuits when QO tandem breakers are installed.



#### **QO 32-Circuit Space Load Center**

Ideal for new construction, service upgrades or remodels, these new QO 100A and 125A single-phase load centers offer 32 circuit spaces to meet a growing need in the residential market for increased circuit space.



#### Non-Metallic QO 2-4 Circuit Load Center

Corrosion-resistant enclosure is ideal for accommodating GFCI protection and switching for outdoor circuits, such as hot tubs, fountains and swimming pools.



#### **Generator Panel**

If you live where power outages are frequent, or potentially dangerous, the Square D generator panel is the ideal way to safely connect specific circuits in the home to an alternate power source.

National Electrical Code is a registered trademark of the National Fire Protection Association.

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