

# Load Centers and Circuit Breakers

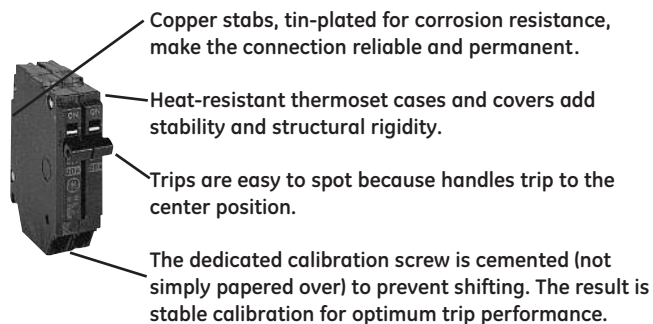
## Q-Line Circuit Breakers

Reliability and Economy

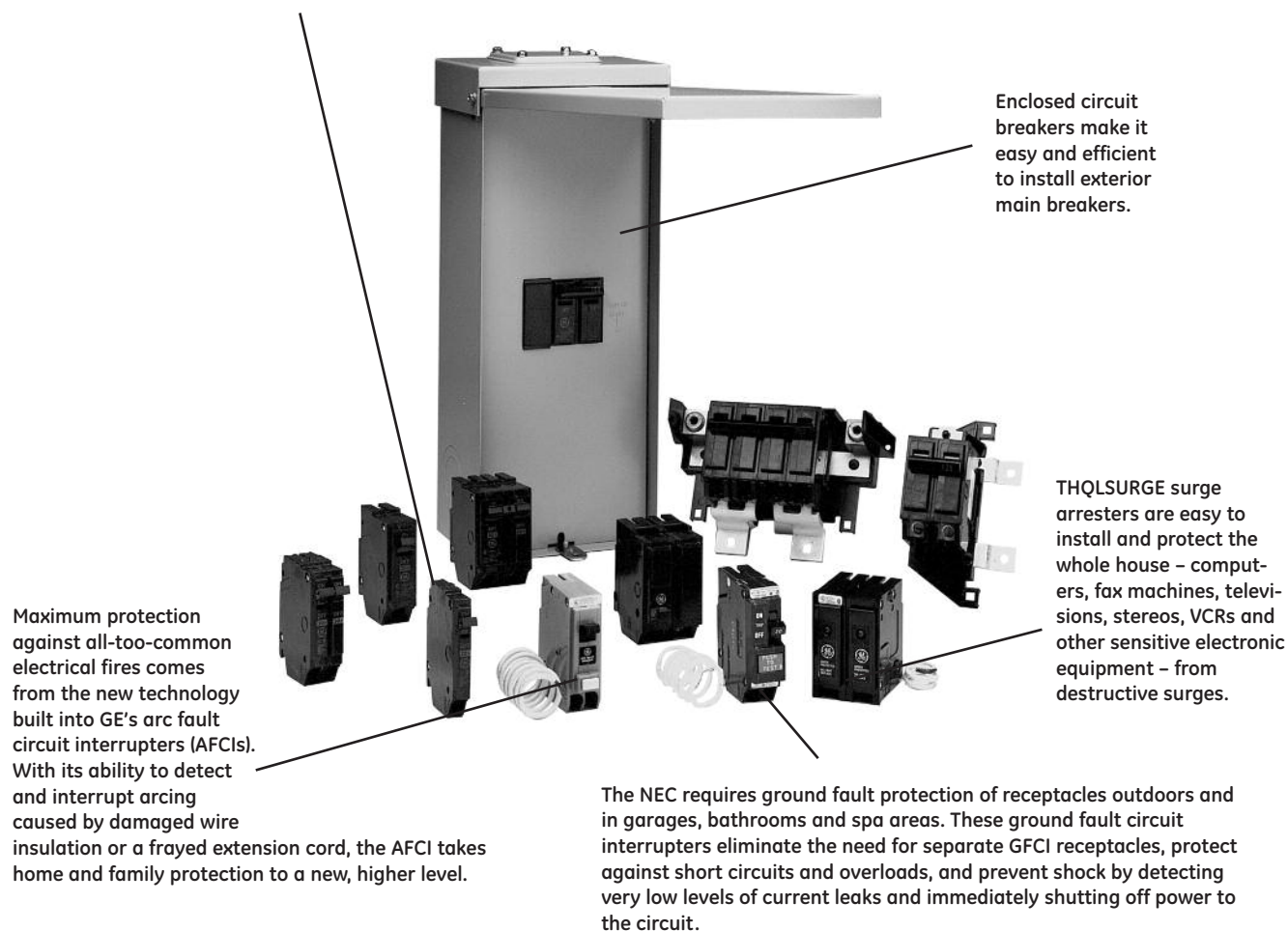
## Section 1

### Special Purpose Circuit Breakers

- PowerMark Gold Main Circuit Breakers
- Arc Fault Circuit Interrupter
- Dual Function GFCI/AFCI Ground Fault & Combination Arc Fault Circuit Breaker
- Ground Fault with Self-Test Feature
- Ground Fault with Equipment Protection
- Switching Neutral
- HID Lighting Breaker
- High Magnetic Breaker
- Molded Case Switch
- Surge Arrester
- TQ Breaker



At 1/2", THQP breakers are half the width of standard breakers, permitting the use of smaller load centers that save money and space in both new construction and service upgrades. They feature the same high-performance design, and meet the same stringent standards as other Q-Line breakers. Our 1" THQL will remain the breaker of choice for many contractors. In applications where space and cost are not critical, they're an excellent choice. But when size and money are driving considerations, THQP breakers are the smart choice.



# Load Centers and Circuit Breakers

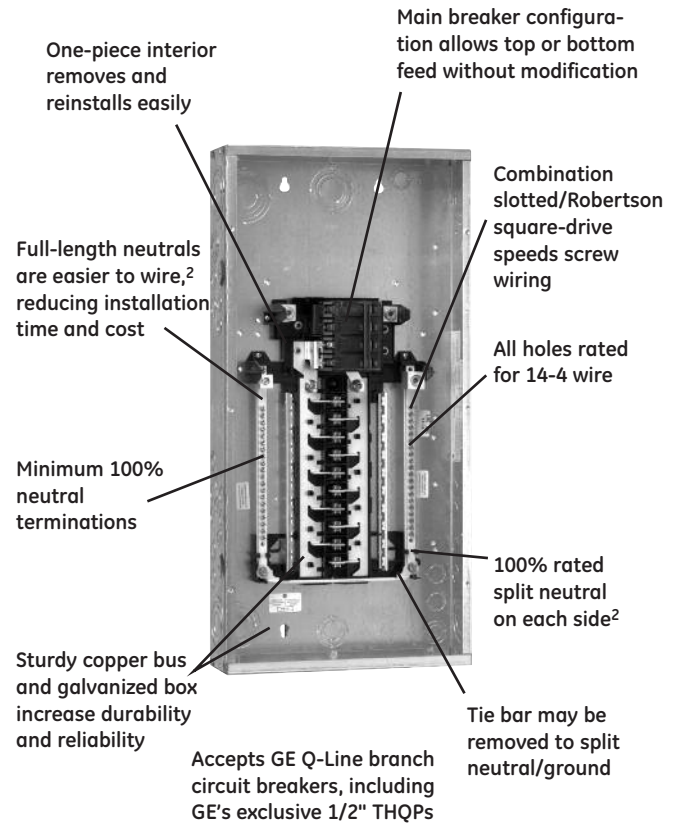
## PowerMark Gold Load Centers

Highest Quality and Convenience

## Section 1

PowerMark Gold load centers lower your costs by making installation faster and easier, increasing application flexibility and reducing inventory requirements. At the same time, they deliver obvious and significant advances in design, function and quality.

- UL Listed (Panelboards No. 67)
- Suitable for Use as Service Entrance Equipment when installed in accordance with National Electrical Code
- 60°C/75°C Conductor Rating
- Single phase, 40-225A, 2-42 circuits
- Main lug models field convertible to main breaker
- Main breaker 22kAIC standard - factory installed
- All load centers top or bottom feed
- Indoor and outdoor rated enclosures
- Indoor fronts combination surface/flush
- Copper bus with tin plating standard<sup>1</sup>
- Split neutrals extend the full length of the interior for ease of wiring
- Entire main lug line converts easily to main breaker
- Combination surface/flush front with spring-reinforced pan
- Combination slotted/Robertson square-drive screws on neutral,<sup>2</sup> ground, front and breaker lugs
- Front packed in inner carton for added protection
- Field installable feed-through lugs up to 200A
- Straight-through main wiring
- Main breaker is clearly marked and circuit numbers are stamped on front
- Isolated ground bar is available
- Compact box maintains optimum wire-bending space



Packaging features comprehensive selection and application data. Fronts are packed in inner cartons for added protection during shipment and at the job site.

A complete family of meter socket load centers — ring style and ringless, wide and narrow, meter mains, farm panels and more — deliver specialized solutions for special situations.

Main lug load centers offer an economical solution for subpanels and similar applications. All main lug units 125A and above convert easily to main breaker.

The PowerMark Gold line includes a wide range of outdoor as well as indoor units.

GE's residential load centers reach into commercial applications as well, with riser panels, auxiliary gutters, three-phase units with standard 22kAIC ratings, and all the accessories needed to complete the job.

### Accessories and Options

- Door lock and handle
- Equipment ground kits
- Sub-feed and feed-thru lugs
- Front filler plates
- Handle lock and ties
- Hardware kits
- Main breaker retainers
- Neutral kits
- Universal raintight hubs

<sup>1</sup>Three-phase PowerMark Plus load centers have aluminum bus with copper breaker mounting stabs.

<sup>2</sup>16 circuit and above.

### Safety accessories – convenient and easy to install

- THQLSURGE whole house surge protector
- Arc fault circuit interrupter breaker, 1- or 2-pole
- Ground fault circuit interrupter breaker, 5mA and 30mA
- Generator transfer panel – 30A or 60A, indoor or outdoor
- GE AC disconnects



# Load Centers and Circuit Breakers

## PowerMark Gold and Plus Load Centers

Product Number Guides

## Section 1

### Product Number Guide for Load Centers

(Product number for illustrative purposes only)

T		M		42		4		20		C		CU		B	
GE Identification														Insert for Specials	
														G or T = Factory installed ground bar	
														B = Bottom feed main breaker	
														FL = Factory installed feed-through lugs	
														D = Optional door for 6-8 circuit panel. (Doors standard on all units 12 circuits or greater)	
														W = White Front	
														Insert for PowerMark Gold	
														CU = Copper Bus	
														42 = Copper Bus Full 42 circuit panel	
														Enclosure Type	
														C = Combination surface/flush	
														F = Flush	
														S = Surface	
														R = Outdoor	
														Bus Ampere Rating	
														40 = 40 Amps	
														20 = 200 Amps	
														70 = 70 Amps	
														22 = 225 Amps	
														10 = 100 Amps	
														30 = 300 Amps	
														12 = 125 Amps	
														40 = 400 Amps	
														15 = 150 Amps	
														60 = 600 Amps	

# Load Centers and Circuit Breakers

## Q-Line Plug-in Circuit Breakers

UL Listed (Molded Case Circuit Breakers No. 489)  
Federal Government Specification Qualified (WC-375B)  
60°C / 75°C Conductor Rating  
Quick Make, Quick Break  
Box Type Terminals

## Section 1

### Q-Line Plug-in Circuit Breakers Specifications

Breaker Type	Ampere Rating	Wire Size AWG/kcmil <sup>1</sup>	
		Cu	Al
THQP	15-25	14-8	12-8
	30-50	8-4	8-4
THQL	15-30	14-8	12-8
THHQL	35-60	8-3	8-3
TXQL	70-100	6-1/0	4-1/0
	110-125	2-2/0	2-2/0

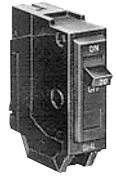
<sup>1</sup>Solid or stranded for 14-10 AWG



THQP130



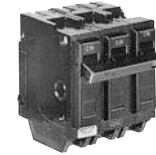
THQP230



THQL1120



THQL2140



THQL32015

### Q-Line Plug-in Circuit Breakers

	10,000AIC			22,000AIC		65,000AIC
	Type THQP 1/2-inch Module	Type THQL 1-inch Module		Type THHQL 1-inch Module		Type TXQL 1-inch Module
	120/240 Vac	120/240 Vac	240 Vac	120/240 Vac	240 Vac	120/240 Vac
Ampere Rating	Product Number	Product Number	Product Number	Product Number	Product Number	Product Number
Single Pole <sup>1</sup>						
15 <sup>2</sup>	THQP115	THQL1115	-	THHQL1115	-	TXQL1115
20 <sup>2</sup>	THQP120	THQL1120	-	THHQL1120	-	TXQL1120
25	THQP125	THQL1125	-	THHQL1125	-	TXQL1125
30	THQP130	THQL1130	-	THHQL1130	-	TXQL1130
35	THQP135	THQL1135	-	THHQL1135	-	-
40	THQP140	THQL1140	-	THHQL1140	-	-
45	THQP145	THQL1145	-	THHQL1145	-	-
50	THQP150	THQL1150	-	THHQL1150	-	-
Std. Pkg.	5 cartons of 20	5 cartons of 10		5 cartons of 10		5 cartons of 10

#### Two-Pole<sup>3</sup>: Incorporates Internal Common Trip Bar

15	THQP215	THQL2115	THQL22015 <sup>4</sup>	THHQL2115	THHQL22015 <sup>4</sup>	TXQL2115
20	THQP220	THQL2120	THQL22020 <sup>4</sup>	THHQL2120	THHQL22020 <sup>4</sup>	TXQL2120
25	THQP225	THQL2125	THQL22025 <sup>4</sup>	THHQL2125	THHQL22025 <sup>4</sup>	TXQL2125
30	THQP230	THQL2130	THQL22030 <sup>4</sup>	THHQL2130	THHQL22030 <sup>4</sup>	TXQL2130
35	THQP235	THQL2135	THQL22035 <sup>4</sup>	THHQL2135	THHQL22035 <sup>4</sup>	-
40	THQP240	THQL2140	THQL22040 <sup>4</sup>	THHQL2140	THHQL22040 <sup>4</sup>	-
45	THQP245	THQL2145	THQL22045 <sup>4</sup>	THHQL2145	THHQL22045 <sup>4</sup>	-
50	THQP250	THQL2150	THQL22050 <sup>4</sup>	THHQL2150	THHQL22050 <sup>4</sup>	-
60	-	THQL2160	THQL22060 <sup>4</sup>	THHQL2160	THHQL22060 <sup>4</sup>	-
70	-	THQL2170	THQL22070 <sup>4</sup>	THHQL2170	THHQL22070 <sup>4</sup>	-
80	-	THQL2180	THQL22080 <sup>4</sup>	THHQL2180	THHQL22080 <sup>4</sup>	-
90	-	THQL2190	THQL22090 <sup>4</sup>	THHQL2190	THHQL22090 <sup>4</sup>	-
100	-	THQL21100	THQL22100 <sup>4</sup>	THHQL21100	THHQL22100 <sup>4</sup>	-
110	-	THQL21110	-	THHQL21110	-	-
125	-	THQL21125	-	THHQL21125	-	-
Std. Pkg.	5 cartons of 10	5 cartons of 5	5 cartons of 5	5 cartons of 5	5 cartons of 5	5 cartons of 5

#### Three-Pole<sup>3</sup>: Incorporates Internal Common Trip Bar

15	-	-	THQL32015	-	THHQL32015	TXQL32015
20	-	-	THQL32020	-	THHQL32020	TXQL32020
25	-	-	THQL32025	-	THHQL32025	TXQL32025
30	-	-	THQL32030	-	THHQL32030	TXQL32030
35	-	-	THQL32035	-	THHQL32035	-
40	-	-	THQL32040	-	THHQL32040	-
45	-	-	THQL32045	-	THHQL32045	-
50	-	-	THQL32050	-	THHQL32050	-
60	-	-	THQL32060	-	THHQL32060	-
70	-	-	THQL32070	-	THHQL32070	-
80	-	-	THQL32080	-	THHQL32080	-
90	-	-	THQL32090	-	THHQL32090	-
100	-	-	THQL32100	-	THHQL32100	-
Std. Pkg.			5 cartons of 3		5 cartons of 3	5 cartons of 3

<sup>1</sup>UL Listed as HACR (heating, air conditioning and refrigeration).

<sup>2</sup>UL Listed as SWD (switching duty). Suitable for 120 volts ac fluorescent lighting loads.

<sup>3</sup>15-100 amp UL Listed as HACR (heating air conditioning and refrigeration).

<sup>4</sup>Required for three-phase and High Leg Delta Systems only.

### References:

Accessories Pages	1-24 thru 1-29
Auxiliary Switches and Shunt Trips	BuyLog pages 6-40 thru 6-42



# Load Centers and Circuit Breakers

## Special Purpose Circuit Breakers

60°C / 75°F Conductor Rating

Box Type Terminals

Quick-Make, Quick-Break

Multi-pole Breakers Incorporate Internal Common Trip

## Section 1

### Arc Fault<sup>2</sup>

UL Listed  
Arc-Fault Circuit Interrupters No. 1699

		1 Pole, 120/240 Volts ac <sup>1</sup>
Ampere Rating		Product Number
10,000 AIC	15	THQL1115AF2
	20	THQL1120AF2
22,000 AIC	15	THHQL1115AF2
	20	THHQL1120AF2
Std. Pkg.		10 Cartons of 1

As of Jan. 1, 2008, 2005 NEC™ requires combination AFCI.

<sup>1</sup>Combination AFCI compliant with 2008 NEC™ and later

<sup>2</sup>For 2-Pole shared neutral applications use two 1-pole circuit breakers with a handle tie. See DET-719 for more details on our Arc Fault products.



Arc Fault

### Dual Function GFCI/AFCI Ground Fault & Combination Arc Fault Circuit Breaker

UL Listed (Available December 2014)

		1 Pole, 120 Volts ac
Ampere Rating		Product Number
10,000 AIC	15	THQL1115DF
	20	THQL1120DF
22,000 AIC	15	THHQL1115DF
	20	THHQL1120DF
Std. Pkg.		10 Cartons of 1



THQL1115DF

### Ground Fault with Self-Test Feature

cULus  
Ground Fault Circuit Interrupters UL943 ed5 (5 milliamperes)

		1-Pole, 120 Volts ac	2-Pole, 120/240 Volts ac
Ampere Rating		Product Number	Product Number
10,000 AIC	15	THQL1115GFT	THQL2115GFT
	20	THQL1120GFT	THQL2120GFT
	25	THQL1125GFT	THQL2125GFT
	30	THQL1130GFT	THQL2130GFT
	40	-	THQL2140GFT <sup>3</sup>
	50	-	THQL2150GFT <sup>3</sup>
22,000 AIC	15	THHQL1115GFT	-
	20	THHQL1120GFT	-
	25	THHQL1125GFT	-
	30	THHQL1130GFT	-

<sup>3</sup> UL & CSA



THQL2120GFT

### PowerMark Gold Main Circuit Breakers for use with 150A-225A PowerMark Gold Load Centers (Includes mounting base)

UL Listed.

Description	Ampere Rating	Product Number	Lug Size
Main Circuit Breaker Kits 22,000 AIC	100	THQMV100D	1-300 (cu), 2/0-300
	125	THQMV125D	
	150	THQMV150D	
	175	THQMV175D	
	200	THQMV200D	
	225	THQMV225D	

**Note:** Wire bending rules affect allowed wire sizes when THQMV breakers are installed in an enclosure. For load centers, the wire range will be on the rating label. In addition, refer to the specifications for the main breaker versions of the load center you are considering to review allowed wire ranges when a TLMXX20 load center is converted to main breaker.



THQMV100D with filler plates



# Load Centers and Circuit Breakers

## Special Purpose Circuit Breakers

60°C / 75°F Conductor Rating

Box Type Terminals

Quick-Make, Quick-Break

Multi-pole Breakers Incorporate Internal Common Trip

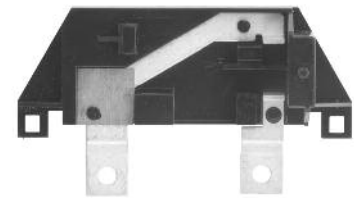
## Section 1

### PowerMark Gold Main Circuit Breaker Kit

For use with 125A PowerMark Gold load Centers; 22kAIC RMS symmetrical.

Description	Product Number
Main Circuit Breaker Kit - Order appropriate THQL 10kAIC or THHQL 22kAIC breakers separately	TQMH000 <sup>1</sup>

<sup>1</sup>Please review the footnotes listed with the individual Load Center product numbers for proper parts needed to convert to a main circuit breaker. This main breaker base is only applicable for 16 circuit and larger 125 amp load centers, 12 circuit load centers with A C24 suffix, and the TLM812RCU2.



TQMH000

### Ground Fault with Equipment Protection

cULus

Ground Fault Circuit Interrupters No. 943 30 milliampere ground fault trip level

Ampere Rating	1-Pole, 120 Volts ac	2-Pole, 120/240 Volts ac
	Product Number	Product Number
10,000 AIC	15	THQL1115GFEP
	20	THQL1120GFEP
	30	THQL1130GFEP
Std. Pkg.	10 Cartons of 1	10 Cartons of 1

### Switching Neutral

UL Listed. 10kAIC RMS symmetrical.

Standard 1- or 2-pole automatic breaker plus one fully-rated, non-automatic pole.

Ampere Rating	1-Pole Plus Switching Neutral 120/240 Volts ac	2-Pole Plus Switching Neutral 120/240 Volts ac
	Product Number	Product Number
15	THQL21WY15	THQL31WY15
20	THQL21WY20	THQL31WY20
25	THQL21WY25	THQL31WY25
30	THQL21WY30	THQL31WY30
Std. Pkg.	5 cartons of 5	5 cartons of 3



THQL21WY30

### "HID" Lighting

UL Listed as HID. HID breakers have been designed to handle the current and voltage spikes that result when gaseous discharge lamps, including fluorescent and HID lamps, are switched on and off.

Ampere Rating	1-Pole, 120/240 Volts ac	2-Pole, 120/240 Volts ac
	Product Number	Product Number
10,000 AIC	15	THQL1115HID <sup>2</sup>
	20	THQL1120HID <sup>2</sup>
	30	THQL1130HID
22,000 AIC	15	THHQL1115HID <sup>2</sup>
	20	THHQL1120HID <sup>2</sup>
	30	THHQL1130HID
Std. Pkg.	5 cartons of 10	5 cartons of 5

<sup>2</sup>UL Listed as SWD (switching duty). Suitable for 120 volts ac fluorescent lighting loads.



THQL2120HID

### High Magnetic

UL Listed. 10kAIC RMS symmetrical

High short circuit setting suitable for circuits with inherent high-inrush load currents.

Ampere Rating	1-Pole, 120/240 Volts ac
	Product Number
15	THQL1115HM
20	THQL1120HM
25	THQL1125HM
30	THQL1130HM
40	THQL1140HM
50	THQL1150HM
Std. Pkg.	5 cartons of 10



THQL1140HM

