

# Load Centers and Circuit Breakers

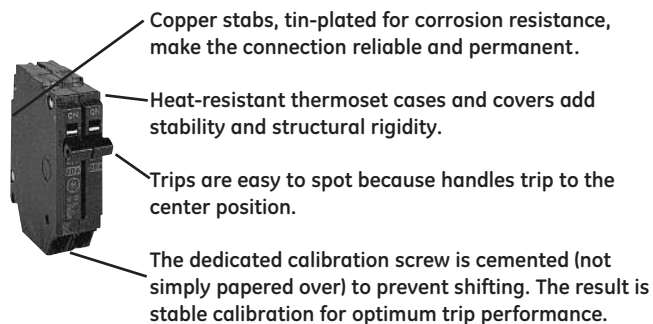
## Q-Line Circuit Breakers

Reliability and Economy

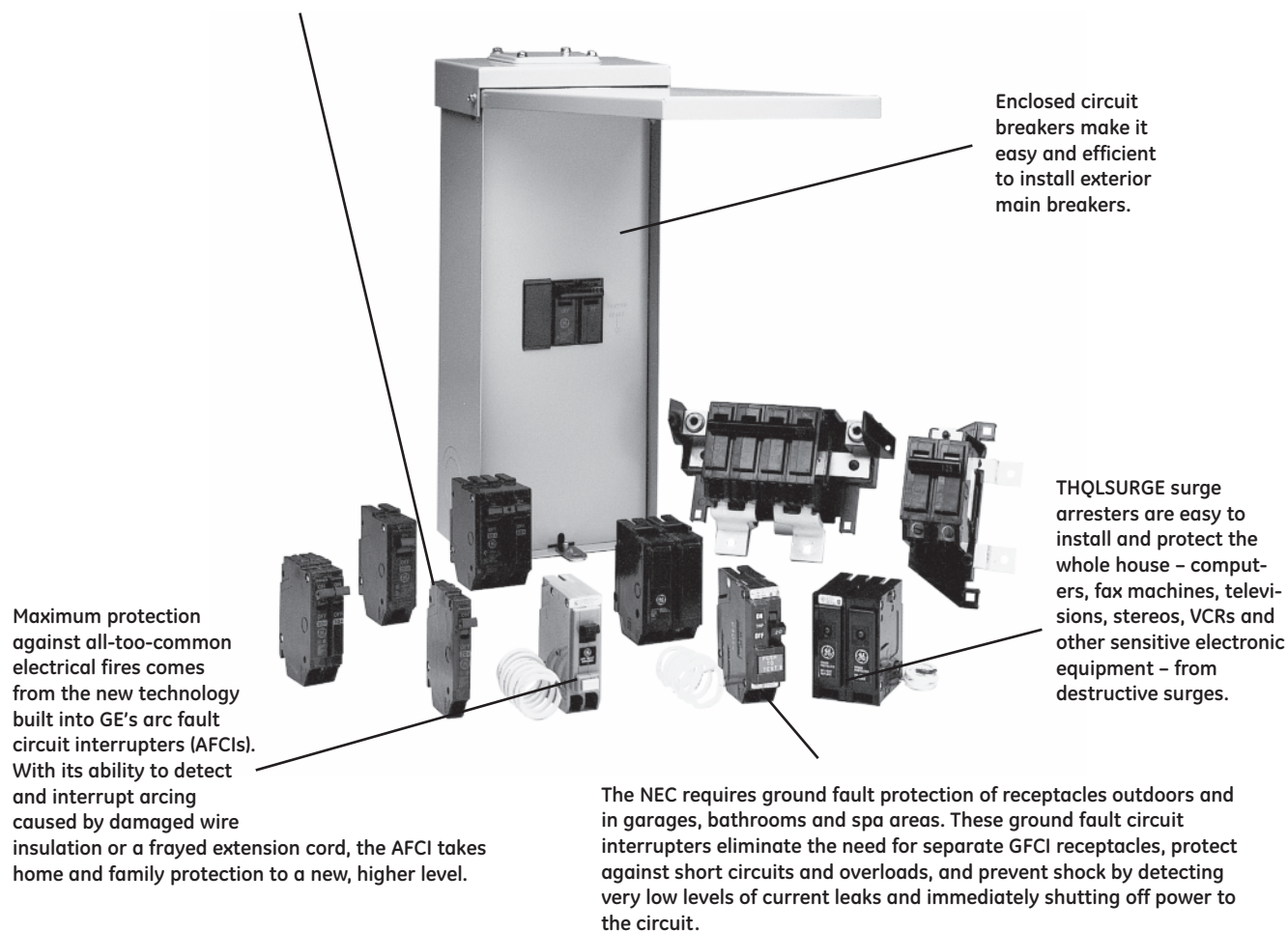
## Section 1

### 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

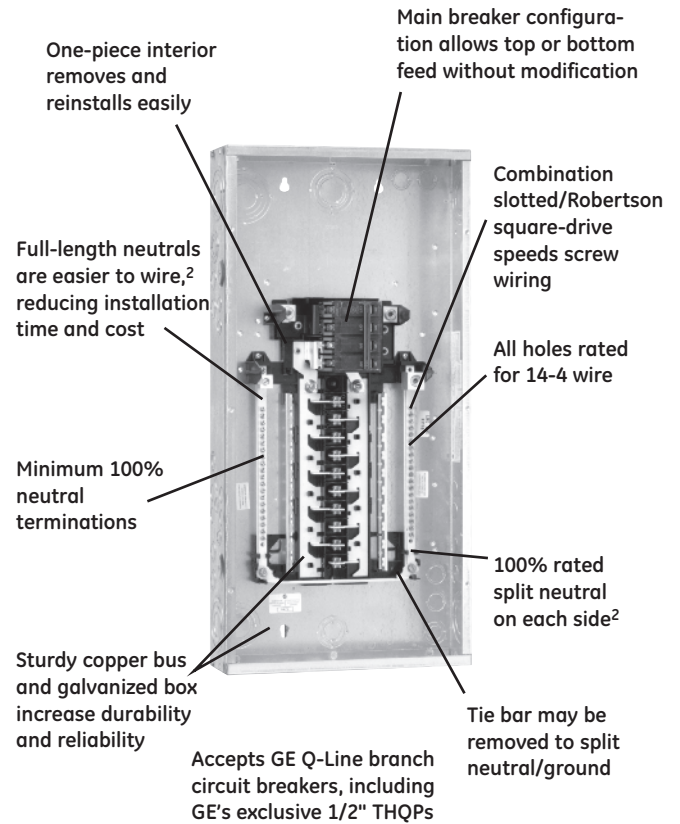
## PowerMark Gold Load Centers

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	
Type														Insert for PowerMark Gold	
M = Main breaker														CU = Copper Bus	
L = Main lug														42 = Copper Bus Full 42 circuit panel	
LM = Convertible															
PL = Main lug (Thermoplastic)															
Maximum Number 1" Spaces														Enclosure Type	
2, 4, 6...42														C = Combination surface/flush	
														F = Flush	
														S = Surface	
														R = Outdoor	
Insert for 3-Phase 4-Wire															
Load Centers															
														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

## PowerMark Gold and Plus Load Centers

### Single-Phase, Three-Wire, 120/240 Vac

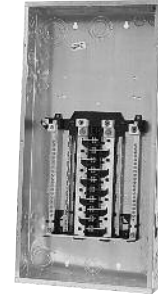
Main Lugs Convertible to Main Breaker

## Section 1

Load Center  
1PH  
Main Lug  
Indoor NEMA 1

### Product Features

- UL Listed (Panelboards No. 67)
- 60°/75°C Conductor Rating
- Suitable for Use as Service Entrance Equipment when Installed in Accordance with the National Electrical Code
- 22kAIC RMS symmetrical, Except Where Noted
- 6-42 circuit devices UL Listed for bottom mounted lugs by installing complete unit (box, interior and front) upside down.
- For a listing of CSA Listed load centers, visit [geindustrial.com](http://geindustrial.com).



TLM2020CCU



TPL412R

### Main Lugs Factory Installed (TLM units convertible to main breaker), Indoor (NEMA 1) Enclosure

Main Ampere Rating	1 Pole, 1" Spaces	2 Pole, 1" Spaces	1 Pole, 1/2" Spaces	2 Pole, 1/2" Spaces	Total 1-pole Spaces	Front Type	Feed Type <sup>1</sup>	Box Number	Main Wire Size (AWG/kcmil) Cu-Al	Equipment Ground Kit	Product Number
40	2	1	4	1	4	Surface	Top Bottom	1A	14-4	TGK4 (order separately)	TL240SCU <sup>1,8</sup>
70	2	1	4	1	4	Surface	Top Bottom	1A	6-3	TGK4 (order separately)	TL270SCU <sup>1,8</sup>
125	4	2	8	3	8	Combination Flush/Surface	Top Bottom	2A	1-2/0	TGL1 (order separately)	TL412C <sup>1,2,8</sup>
125	4	2	8	3	8	Combination Flush/Surface	Top Bottom	2A	1-2/0	TGL1 installed	TL412CT <sup>1,2,3,8</sup>
125	4	2	8	3	8	Thermoplastic	Top Bottom	2	1-2/0	TGL1 (order separately)	TPL412C <sup>1,2,3,8</sup>
125	4	2	8	3	8	Thermoplastic	Top Bottom	2	1-2/0	TGL1 installed	TPL412CT <sup>1,2,3,8</sup>
125	6	3	12	4	12	Flush	Top Bottom	3A	6-1	TGL2 (order separately)	TLM612FCU <sup>4,8</sup>
125	6	3	12	4	12	Flush	Top Bottom	3A	6-1	TGL2 (order separately)	TLM612FCUD <sup>4,8</sup>
125	6	3	12	4	12	Flush	Top Bottom	3A	6-1	TGL2 installed	TLM612FCUDG <sup>4,8</sup>
125	6	3	12	4	12	Surface	Top Bottom	3A	6-1	TGL2 (order separately)	TLM612SCU <sup>4,8</sup>
125	6	3	12	4	12	Surface	Top Bottom	3A	6-1	TGL2 (order separately)	TLM612SCUD <sup>4,8</sup>
125	6	3	12	4	12	Surface	Top Bottom	3A	6-1	TGL2 installed	TLM612SCUDG <sup>4,8</sup>
125	8	4	16	8	16	Flush	Top Bottom	3A	6-1	TGL2 (order separately)	TLM812FCU <sup>4,8</sup>
125	8	4	16	8	16	Flush	Top Bottom	3A	6-1	TGL2 (order separately)	TLM812FCUD <sup>4,8</sup>
125	8	4	16	8	16	Flush	Top Bottom	3A	6-1	TGL2 (order separately)	TLM812FCUDG <sup>4,8</sup>
125	8	4	16	8	16	Surface	Top Bottom	3A	6-1	TGL2 (order separately)	TLM812SCU <sup>4,8</sup>
125	8	4	16	8	16	Surface	Top Bottom	3A	6-1	TGL2 (order separately)	TLM812SCUD <sup>4,8</sup>
125	8	4	16	8	16	Surface	Top Bottom	3A	6-1	TGL2 installed	TLM812SCUDG <sup>4,8</sup>
125	14	6	20	8	24	Combination Flush/Surface	Top Bottom	18	6-2/0	Included <sup>10</sup>	TLM1212CCU <sup>7,8</sup>
125	14	6	20	8	24	White Combo Flush/Surface	Top Bottom	18	6-2/0	Included <sup>10</sup>	TLM1212CCUW <sup>7,8,9</sup>

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# Load Centers and Circuit Breakers

## PowerMark Gold and Plus Load Centers

### Single-Phase, Three-Wire, 120/240 Vac

Main Lugs Convertible to Main Breaker

## Section 1

Load Center  
1PH  
Main Lug  
Indoor NEMA 1

### Main Lugs Factory Installed (TLM units convertible to main breaker), Indoor (NEMA 1) Enclosure

Main Ampere Rating	1 Pole, 1" Spaces	2 Pole, 1" Spaces	1 Pole, 1/2" Spaces	2 Pole, 1/2" Spaces	Total 1-pole Spaces	Front Type	Feed Type	Box Number	Main Wire Size (AWG/kcmil) Cu-Al	Equipment Ground Kit	Product Number
125	16	8	16	6	24	Combination Flush/Surface	Top Bottom	4	6-2/0	TGK12 and TGK24 (order separately)	TLM1612CCU <sup>5</sup>
125	16	8	16	6	24	Combination Flush/Surface	Top Bottom	4	6-2/0	TGK12 and TLK20 installed	TLM1612CCUG <sup>7</sup>
125	24	12	0	0	24	Combination Flush/Surface	Top Bottom	7	6-2/0	TGK24 and TGK32 (order separately)	TLM2412CCU <sup>5</sup>
125	24	12	0	0	24	White Combo Flush/Surface	Top Bottom	7	6-2/0	TGK24 and TGK32 (order separately)	TLM2412CCUW <sup>5,9</sup>
125	24	12	0	0	24	Combination Flush/Surface	Top Bottom	7	6-2/0	TGK24 and TLK20 installed	TLM2412CCUG <sup>7</sup>
200	16	8	32	14	32	Combination Flush/Surface	Top Bottom	7	6-250	TGK32 (order separately)	TLM1620CCU <sup>6</sup>
200	16	8	32	14	32	White Combo Flush/Surface	Top Bottom	7	6-250	TGK32 (order separately)	TLM1620CCUW <sup>6,9</sup>
200	16	8	32	14	32	Combination Flush/Surface	Top Bottom	7	6-250	TGK32 installed	TLM1620CCUG <sup>6</sup>
200	20	10	40	18	40	Combination Flush/Surface	Top Bottom	8	6-250	TGK32 (order separately)	TLM2020CCU <sup>6</sup>
200	20	10	40	18	40	White Combo Flush/Surface	Top Bottom	8	6-250	TGK32 (order separately)	TLM2020CCUW <sup>6,9</sup>
200	20	10	40	18	40	Combination Flush/Surface	Top Bottom	8	6-250	TGK42 installed	TLM2020CCUG <sup>6</sup>
200	24	12	36	18	42	Combination Flush/Surface	Top Bottom	9	1-3/0 (Cu), 2/0-3/0 (Al)	TGK24 and TLK32 (order separately)	TLM2420C42 <sup>6</sup>
200	32	16	20	8	42	Combination Flush/Surface	Top Bottom	11	1-250 (Cu), 2/0-250 (Al)	TGK32 and TLK20 (order separately)	TLM3220C42 <sup>6</sup>
200	32	16	16	6	40	Combination Flush/Surface	Top Bottom	11	6-250	TGK32 (order separately)	TLM3220CCU <sup>6</sup>
200	32	16	16	6	40	White Combo Flush/Surface	Top Bottom	11	6-250	TGK32 (order separately)	TLM3220CCUW <sup>6,9</sup>
200	40	20	0	0	40	Combination Flush/Surface	Top Bottom	13	6-250	TGK42 (order separately)	TLM4020CCU <sup>6</sup>
200	40	20	0	0	40	White Combo Flush/Surface	Top Bottom	13	6-250	TGK42 (order separately)	TLM4020CCUW <sup>6,9</sup>
200	42	20	0	0	42	Combination Flush/Surface	Top Bottom	14	1-300 (Cu), 2/0-300 (Al)	TGK42 (order separately)	TLM4220CCU <sup>6</sup>
225	42	20	0	0	42	Combination Flush/Surface	Top Bottom	14	1-300 (Cu), 2/0-300 (Al)	TGK42 (order separately)	TLM4222CCU <sup>6</sup>

<sup>1</sup>No door

<sup>2</sup>10 kAIC

<sup>3</sup>125 amp maximum branch capacity.

<sup>4</sup>For main breaker, order THQLRK2 retainer kit plus 2-pole circuit breaker. See page 1-28, 100 amp max.

<sup>5</sup>For main breaker, order TQMH000. See page 1-24. Also order 2-pole THQL, THHL, or TXQL circuit breaker. See page 1-5.

<sup>6</sup>For main breaker, order THQMVXXD circuit breaker from page 1-6.

<sup>7</sup>For main breaker applications, use reverse feed THQL breaker or THHL circuit breaker (see page 1-5) and THQLRK3 breaker retainer (see page 1-28).

<sup>8</sup>No lock provision available. Use next size larger load center such as TLM1612CCU with a TDL106 accessory if locking provision is required.

<sup>9</sup>Minimum order QTY is 40 for below 24 circuits; QTY 24 for 24 circuits and above. (See DEE-590)

<sup>10</sup>Load center includes a factory installed ground bar and add-a-lug. See wiring diagram on page 1-30. A separate TGL2 can be added in the unlikely event that another ground bar is required.

**Note:** See page 11-4, AL Series Lighting Panelboards as replacements for 300-600A load centers.



# Load Centers and Circuit Breakers

## PowerMark Gold and Plus Load Centers

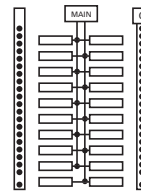
### Circuit Breakers

Wiring Diagrams

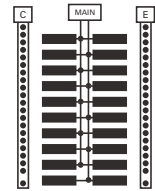
## Section 1

Breaker Symbol	Breaker Fill	
	1" THQL	1/2" THQP
	1	—
	1	2

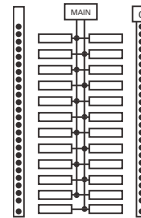
Terminal Symbol	Wire Range (AWG/kcmil)	
	Cu	Al
o	14-8	12-8
•	14-4	12-4
A	6-2	6-2
B	14-1/0	12-1/0
C	6-2/0	6-2/0
D	1-300	2/0-300
E	1-300	1-300
F	6-1	6-1
G	6-3	6-3



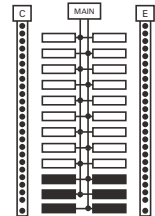
TM2010CCU, TM2010RCU



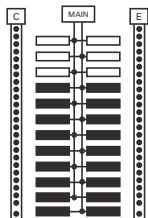
TM2020CCU, TM2020RCU  
TLM2020CCU, TLM2020RCU



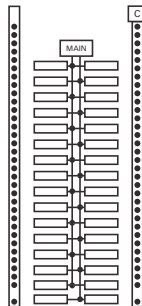
TM2410CCU, TM2412CCU  
TM2412RCU, TLM2412CCU, TLM2412RCU



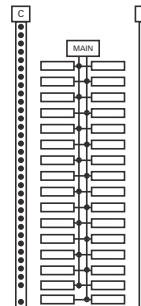
TM2415RCU, TLM2415RCU



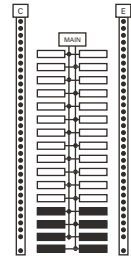
TLM2420C42, TM2415C42



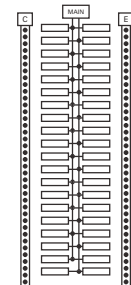
TM3210CCU



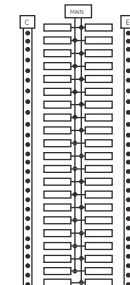
TM3215CCU, TM3215RCU



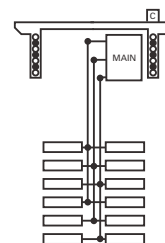
TM3220CCU, TM3220RCU,  
TLM3220CCU, TLM3220RCU



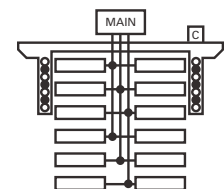
TM4020CCU, TM4020RCU  
TLM4020CCU, TLM4020RCU



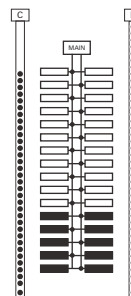
TM4222RCU, TLM4222CCU  
TLM4222RCU, TM4222CCU



TM12410



TL12412



TM3215C42, TLM3220C42, TM3220C42

