

Load Centers and Circuit Breakers

PowerMark Gold and Plus Load Centers

Section 1

Product Number Guides

Product Number Guide for Load Centers

(Product number for illustrative purposes only)

T	M	42	4	20	C	CU	B
GE Identification							
Type							
M = Main breaker							
L = Main lug							
LM = Convertible							
PL = Main lug (Thermoplastic)							
Maximum Number 1" Spaces							
2, 4, 6...42							
Insert for 3-Phase 4-Wire Load Centers							
						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	

Product Number Guide for Q-Line Plug-in Circuit Breakers

(Product number for illustrative purposes only)

T	H	QL	1	1*	15	GFT	
GE Identification							
Interrupting Rating							
H = 10kAIC							
HH = 22kAIC							
X = 65kAIC							
Type							
QL = 1" plug-in							
QP = 1/2" plug-in							
QB = 1" bolt-on							
Poles (1, 2, 3)							
						Ground Fault/Arc Fault Circuit Interrupter	
						AF2 = 1- & 2-pole Combination Arc Fault Circuit Interrupter	
						GFEP = 1- & 2-pole Ground Fault with Equipment Protection Interrupter-30 mA	
						GFT = 1- & 2-pole Ground Fault with Self-Test Feature Interrupter - 5 mA	
						DF = 1-pole Dual Function GFCI/AFCI Ground Fault & Combination Arc Fault Circuit Interrupter	
						Ampere Rating	
						Voltage	
						1 = 120/240V	
						2 = 240V	

*Omit character for THQP breakers, which are all 120/240V.



Spectra™ RMS

—Circuit Breakers

Determine the required breaker frame, IC rating, and load requirements. Select frame, trip unit (rating plug), and lug, if required, product numbers from the tables on pages 6-45 to 6-53. For Spectra™ breakers with *microEntelliGuard™* Trip Units refer to pages 6-54 through 6-61. Select field-mounted internal accessory product numbers, if required, on pages 6-67 and 6-68. Select field-mounted external accessory product numbers, if required, on pages 6-95 through 6-106 and pages 6-62 to 6-66 for Spectra™ breakers with *microEntelliGuard™* Trip Units. Order as separate items.

—Mag-Break Motor Circuit Protectors

Determine the required frame and ampere requirements. Select frame, trip unit (rating plug), and lug, if required, product numbers from the table on pages 6-91 through 6-92. Select accessories as noted above for circuit breakers. The same accessories are used with both circuit breakers and motor circuit protectors. Order as separate items.

—Molded Case Switches

Determine the required frame and ampere requirements. Select frame and lug, if required, product numbers from the table on page 6-90. Rating plugs are not used. Select accessories as noted above for circuit breakers. Internal accessories do not require dummy trips. The same accessories are used with both circuit breakers and molded case switches. Order as separate items.

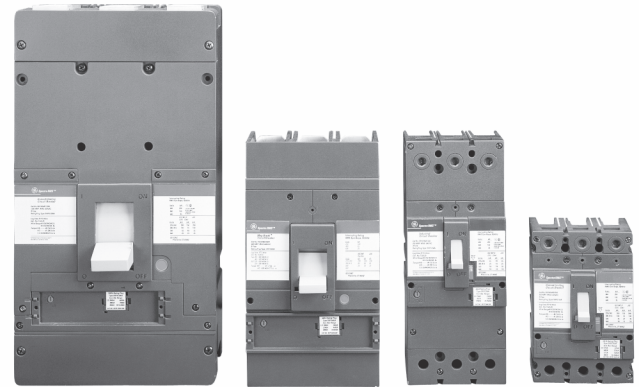
Unless otherwise noted, all circuit breakers are UL listed in File E-11592. Molded case switches are UL listed in File E-57546. Field-Installable Internal Accessories are UL listed in File E-57253. Distribution Cable Accessories for *microEntelliGuard™* Trip Units are UL listed in File E-57253.

Accessories

Order accessories from the appropriate table:

- Thermal Magnetic Circuit Breakers, Magnetic Circuit Breakers, and Molded Case Switches¹—pages 6-39 to 6-44 and 6-94 to 6-106.
- Spectra™ RMS Breakers—pages 6-66 to 6-67 and 6-94 to 6-106.
- Spectra™ RMS Breakers with *microEntelliGuard™* Trip Units—pages 6-62 to 6-68, and 6-94 to 6-106.

¹Installation of accessories in molded case switches requires dummy trip; see page 6-44 for information. Dummy trip not required for Tri-Break™ or Q-Line molded case switches.



**Spectra Circuit Breakers
and Molded Case Switches**

Molded Case Circuit Breaker and Switch Terminal Configuration Code

Order standard Cu/Al lugs by using suffix codes presented. Order lugs separately if special lugs are required. For optional lugs, see pages 6-103 and 6-104.

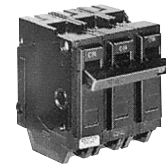
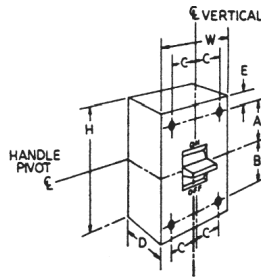
Breaker/Switch Type	Suffix				
	Blank	WL	XL	X2	LL
TQD/TJD	Load Lugs Only	Line and Load Lugs	—	Line Lugs Only	No Lugs
Molded Case Breakers, Thermal Magnetic	Load Lugs Only	Line and Load Lugs	—	Load Lugs Only	No Lugs
Molded Case Switch	Line and Load Lugs	—	No Lugs	Line Lugs Only	Load Lugs Only
Spectra RMS™ Breakers	No Lugs			Order Lugs Separately	
Mine Duty™ Breakers	No Lugs			Order Lugs Separately	
Mag-Break™ Breakers	Line and Load Lugs	—	—	—	—



Quick Reference Guide

Ratings do not apply to molded case switches.

The interruption ratings and voltages shown in the table are maximum ratings. A circuit breaker of the type given in the left-hand column may be applied at the given circuit voltage in any electrical distribution system where the available fault current at the load terminals of the breaker does not exceed the value in the table. That circuit breaker type may also be applied at intermediate values of circuit voltage provided the available fault current at the load terminals of the breaker does not exceed the value in the table for the higher value of voltage.



THQL 32015

Q-Line (UL file E-11592; Fixed Thermal Magnetic Trip Unit)

Circuit Breaker Type	Ampere Rating	No. Poles	Maximum Voltage Rating		UL Listed Interrupting Ratings—rms Symmetrical kA								Dimensions (in.)							Std. Pack			
					Vac						Vdc		H	W	D	A	B	C	E				
					ac	dc	120	120/240	240	277	480	600									125	250	
TQ	15-50	1	120/240	—	—	10	—	—	—	—	—	—	—	3	3/4	2 3/8	—	—	—	—	10		
	15-60	2	120/240	—	—	10	—	—	—	—	—	—	—	3	1 1/2	2 3/8	—	—	—	—	5		
THQP ¹	15-50	1	120/240	—	—	10	—	—	—	—	—	—	—	3 9/32	1/2	2 3/8	—	—	—	—	—	100	
		2													1							50	
TQL/TQB/ TQC	10	1	120/240	—	—	5 ²	—	—	—	—	—	—	—	3 9/32	1	2 3/8	—	—	—	—	—	—	50
		2													2								25
		3													3								15
THQL ¹ THQB ¹ THQC ¹	15-70	1	120/240	—	—	10	—	—	—	—	—	—	—	3 9/32	1	2 3/8	—	—	—	—	—	—	50
	15-125	2													2								25
	15-100	3													3								15
THHQB ¹ THHQC ¹	15-70	1	120/240	—	—	22	—	—	—	—	—	—	—	3 9/32	1	2 3/8	—	—	—	—	—	—	50
	15-100	2													2								25
	15-100	3													3								15
THHQL ¹	15-70	1	120/240	—	—	22	—	—	—	—	—	—	—	3 9/32	1	2 3/8	—	—	—	—	—	—	50
	15-125	2													2								25
	15-100	3													3								15
TXQL ¹ TXQB ¹ TXQC ¹	15-30	1	120/240	—	—	65	—	—	—	—	—	—	—	3 9/32	1	2 3/8	—	—	—	—	—	—	50
		2													2								25
		3													3								15
TQD ¹	100-225	2	240	—	—	10	10	—	—	—	—	—	—	6 9/16	2 3/4	2 5/8	2 7/16	2 7/16	—	27/32	—	1	
	100-225	3	240			—	10								—							—	—
THQD ¹	100-225	2	240	—	—	22	22	—	—	—	—	—	—	6 9/16	2 3/4	2 5/8	2 7/16	2 7/16	—	27/32	—	1	
	100-225	3	240			—	22								—							—	—
TJD	250-400	2	240	—	—	22	22	—	—	—	—	10	10 1/8	8 1/4	3 13/16	3 15/16	3 13/16	1 3/8	1 3/16	—	—	1	
		3	240			—	22															—	—

CB3 Ground Fault, Equipment Ground Fault and Arc Fault (UL File E-51075; Fixed Thermal Magnetic Trip Unit)

THQL THQB THQC ...GF, GFEP	15-30	1	120	—	10	—	—	—	—	—	—	—	3 9/32	1	2 3/8	—	—	—	—	—	—	—	10
		2	120/240											—									10
THHQL THHQB ...GF	15-30	1	120	—	22	—	—	—	—	—	—	—	—	3 9/32	1	2 3/8	—	—	—	—	—	—	10
THQL THQB THQC ...AF	15-20	1	120/240	—	—	10	—	—	—	—	—	—	—	3 9/32	1	2 3/8	—	—	—	—	—	—	10
THHQL THHQB ...AF	15-20	1	120/240	—	—	22	—	—	—	—	—	—	—	3 9/32	1	2 3/8	—	—	—	—	—	—	10

¹ UL listed as HACR (heating, air conditioning and refrigeration).

² Not UL listed.



Molded Case Circuit Breakers Q-Line Circuit Breakers

Cable-in Cable-out (lug-lug)
240V Class

Section 6

TQC, THQC, THHQC 120/240 Vac

# of Poles	Ampere Rating	Wire Range ¹	120/240 Vac Interrupting Rating	Product Number ²	120/240 Vac Interrupting Rating	Product Number ²
1	10	14-4 Cu/12-2 Al	5kA	TQC1110WL		
1	15	14-8 Cu/12-8 Al	10kA	THQC1115WL ^{3,4}	22kA	THHQC1115WL ³
1	20	14-8 Cu/12-8 Al	10kA	THQC1120WL ^{3,4}	22kA	THHQC1120WL ³
1	25	14-8 Cu/12-8 Al	10kA	THQC1125WL ³	22kA	THHQC1125WL ³
1	30	14-8 Cu/12-8 Al	10kA	THQC1130WL ³	22kA	THHQC1130WL ³
1	35	8-3 Cu/8-3 Al	10kA	THQC1135WL ³	22kA	THHQC1135WL ³
1	40	8-3 Cu/8-3 Al	10kA	THQC1140WL ³	22kA	THHQC1140WL ³
1	45	8-3 Cu/8-3 Al	10kA	THQC1145WL ³	22kA	THHQC1145WL ³
1	50	8-3 Cu/8-3 Al	10kA	THQC1150WL ³	22kA	THHQC1150WL ³
1	60	8-3 Cu/8-3 Al	10kA	THQC1160WL ³	22kA	THHQC1160WL ³
1	70	6-1/0 Cu/4-1/0 Al	10kA	THQC1170WL	22kA	THHQC1170WL

TQC, THQC, THHQC 120/240 Vac, Internal Common Trip

# of Poles	Ampere Rating	Wire Range ¹	120/240 Vac Interrupting Rating	Product Number ²	120/240 Vac Interrupting Rating	Product Number ²
2	10	14-4 Cu/12-2 Al	5kA	TQC2110WL		
2	15	14-8 Cu/12-8 Al	10kA	THQC2115WL ³	22kA	THHQC2115WL ³
2	20	14-8 Cu/12-8 Al	10kA	THQC2120WL ³	22kA	THHQC2120WL ³
2	25	14-8 Cu/12-8 Al	10kA	THQC2125WL ³		
2	30	14-8 Cu/12-8 Al	10kA	THQC2130WL ³	22kA	THHQC2130WL ³
2	35	8-3 Cu/8-3 Al	10kA	THQC2135WL ³	22kA	THHQC2135WL ³
2	40	8-3 Cu/8-3 Al	10kA	THQC2140WL ³	22kA	THHQC2140WL ³
2	45	8-3 Cu/8-3 Al	10kA	THQC2145WL ³	22kA	THHQC2145WL ³
2	50	8-3 Cu/8-3 Al	10kA	THQC2150WL ³	22kA	THHQC2150WL ³
2	60	8-3 Cu/8-3 Al	10kA	THQC2160WL ³	22kA	THHQC2160WL ³
2	70	6-1/0 Cu/4-1/0 Al	10kA	THQC2170WL	22kA	THHQC2170WL
2	80	6-1/0 Cu/4-1/0 Al	10kA	THQC2180WL	22kA	THHQC2180WL
2	90	6-1/0 Cu/4-1/0 Al	10kA	THQC2190WL	22kA	THHQC2190WL
2	100	6-1/0 Cu/4-1/0 Al	10kA	THQC21100WL	22kA	THHQC21100WL

TQC, THQC, THHQC 240 Vac, Internal Common Trip

# of Poles	Ampere Rating	Wire Range ¹	240 Vac Interrupting Rating	Product Number ²	240 Vac Interrupting Rating	Product Number
2	10	14-4 Cu/12-2 Al	5kA	TQC22010WL		
2	15	14-8 Cu/12-8 Al	10kA	THQC22015WL	22kA	THHQC22015WL
2	20	14-8 Cu/12-8 Al	10kA	THQC22020WL	22kA	THHQC22020WL
2	25	14-8 Cu/12-8 Al	10kA	THQC22025WL	22kA	THHQC22025WL
2	30	14-8 Cu/12-8 Al	10kA	THQC22030WL	22kA	THHQC22030WL
2	35	8-3 Cu/8-3 Al	10kA	THQC22035WL	22kA	THHQC22035WL
2	40	8-3 Cu/8-3 Al	10kA	THQC22040WL	22kA	THHQC22040WL
2	45	8-3 Cu/8-3 Al	10kA	THQC22045WL	22kA	THHQC22045WL
2	50	8-3 Cu/8-3 Al	10kA	THQC22050WL	22kA	THHQC22050WL
2	60	8-3 Cu/8-3 Al	10kA	THQC22060WL	22kA	THHQC22060WL
2	70	6-1/0 Cu/4-1/0 Al	10kA	THQC22070WL	22kA	THHQC22070WL
2	80	6-1/0 Cu/4-1/0 Al	10kA	THQC22080WL	22kA	THHQC22080WL
2	90	6-1/0 Cu/4-1/0 Al	10kA	THQC22090WL	22kA	THHQC22090WL
2	100	6-1/0 Cu/4-1/0 Al	10kA	THQC22100WL	22kA	THHQC22100WL
3	10	14-4 Cu/12-2 Al	5kA	TQC32010WL		
3	15	14-8 Cu/12-8 Al	10kA	THQC32015WL	22kA	THHQC32015WL
3	20	14-8 Cu/12-8 Al	10kA	THQC32020WL	22kA	THHQC32020WL
3	25	14-8 Cu/12-8 Al	10kA	THQC32025WL	22kA	THHQC32025WL
3	30	14-8 Cu/12-8 Al	10kA	THQC32030WL	22kA	THHQC32030WL
3	35	8-3 Cu/8-3 Al	10kA	THQC32035WL	22kA	THHQC32035WL
3	40	8-3 Cu/8-3 Al	10kA	THQC32040WL	22kA	THHQC32040WL
3	45	8-3 Cu/8-3 Al	10kA	THQC32045WL	22kA	THHQC32045WL
3	50	8-3 Cu/8-3 Al	10kA	THQC32050WL	22kA	THHQC32050WL
3	60	8-3 Cu/8-3 Al	10kA	THQC32060WL	22kA	THHQC32060WL
3	70	6-1/0 Cu/4-1/0 Al	10kA	THQC32070WL	22kA	THHQC32070WL
3	80	6-1/0 Cu/4-1/0 Al	10kA	THQC32080WL	22kA	THHQC32080WL
3	90	6-1/0 Cu/4-1/0 Al	10kA	THQC32090WL	22kA	THHQC32090WL
3	100	6-1/0 Cu/4-1/0 Al	10kA	THQC32100WL	22kA	THHQC32100WL

¹Solid or stranded for 14-10 AWG.

²Use additional suffix "BP" (THQC32020WLBP) for bulk pack of 48 poles. Carton weight 20 lbs. 15-60 ampere breakers only.

³Suitable for mounting on standard 35mm DIN Rail. Refer to table on page 6-27 for termination options.

⁴UL listed as SWD (switching duty) rated. Suitable for switching 120 Vac fluorescent lighting loads.

UL listed HACR (heating, air conditioning and refrigeration). Refer to Q-Line accessories listed on pages 6-30 to 6-31.

