Molded Case Circuit Breakers Industrial Circuit Breakers

Tri-Break® Line

-Integrally Fused Thermal Magnetic Circuit Breakers

—Integrally Fused Magnetic Circuit Breakers

—Integrally Fused Molded Case Switches

These breakers are available in three types. Type TB1 (15-100 amperes) product numbers include frame, trip, line and load lugs, and current limiters all factory assembled. TB6 (300 to 600 amperes) and TB8 (600 to 800 amperes) include frame, trip and limiters, factory assembled, but do not include line or load lugs. If line and load lugs are required, order separately. Unless otherwise noted, TB1, TB6, and TB8 breaker components are UL listed in File E–42263. Fused molded case switches are UL listed in File E–57546.

Mag-Break Line

-Magnetic only circuit breakers (motor circuit protectors)

These breakers are available only with noninterchangeable adjustable magnetic trip, in frame Types E, F, J, K, and Tri-Break[®]. All breakers are shipped factory assembled, complete with Cu/Al line and load lugs.

All magnetic only circuit breakers and limiters are UL Component Recognized in Files E–11592 and E–66390, respectively, unless otherwise noted.

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 3-46 to 3-54. For Spectra® breakers with MicroVersaTrip® Plus or MicroVersaTrip® PM Trip Units refer to pages 3-57 through 3-65. Select field-mounted internal accessory product numbers, if required, on pages 3-70 and 3-71. Select fieldmounted external accessory product numbers, if required, on pages 3-97 through 3-107 and pages 3-66 to 3-69 for Spectra® breakers with MicroVersaTrip® Plus or MicroVersaTrip® PM 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 3-73 through 3-75. 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 3-72. 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 MicroVersaTrip® Plus Trip Units and MicroVersaTrip® PM 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 3-39 to 3-45 and 3-97 to 3-107.
- -Spectra® RMS Breakers-pages 3-70 to 3-71 and 3-97 to 3-107.
- -Spectra® RMS Breakers with MicroVersaTrip® Plus Trip Units or MicroVersaTrip® PM Trip Units—pages 3-66 to 3-71, and 3-96 to 3-107.
- ¹Installation of accessories in molded case switches requires dummy trip; see page 3-45 for information. Dummy trip not required for Tri-Break® or Q-Line 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 3-101 and 3-102.

Breaker/Switch			Suffix		
Туре	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	_	_	_	_



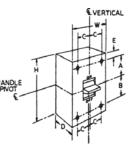
Molded Case Circuit Breakers

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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 lefthand 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)

			Maxim	um		UL Li	sted Int rms Sy			igs—	_									
Circuit Breaker	Ampere	No.	Voltage R			1	/ac				V	dc			Dime	ensions (i	n.)			Std.
Туре	Rating	Poles	ac	dc	120	120/240	240	277	480	600	125	250	н	W	D	A	В	С	E	Pack
то	15-50	1	120/240	_	_	10	-	_	_	_	_	_	3	3/4	2 3/8	_	_	_	_	10
TQ	15-60	2	120/240		_	10	-	-	_	_		_	3	1 1/2	2 3/0			_	_	5
1	ГНОР ¹ 15-50	1	120/240	_	_	10	_	_	_	_	_	_	3 9/32	1/2	2 3/8	_	_	_	_	100
THQP⁺	15-50	2		_	_	10	_	-	_	_	-	-	3 9/32	1	2 3/8	_	_	_	_	50
		1	120/240			5 ²	-							1						50
TQL/TQB/ TQC	10	2	120/240	-	-	5	5 ²	-	-	-	-	-	3 9/32	2	2 3/8	-	-	-	-	25
	15-70	3	240			-	5							3						15
THOL1	15-70	1	120/240			10	-							1						50
THQB1	15-125	2	120/240	-	-	10	10		-	-	-	-	3 9/32	2	2 3/8	-	-	-	-	25
THQC1	15-100	3	240			-	10							3						15
1	15-70	1	120/240			22	-							1						50
THHQB ¹ THHQC ¹	15-100	2	120/240	-	-		22	-	-	-	-	-	3 9/32	2	2 3/8	-	-	-	-	25
	15-100	3	240			-	~~~							3						15
	15-70	1	120/240			22	-		3 9/32 <u>2</u> 2 3/8		50									
THHQL ¹	15-125	2	120/240		-		22	-		-	-	-	3 9/32	2	2 3/8	-	_	-	-	25
	15-100	3	240			-								15						
TXOL1		1	120/240			65	_						1						50	
TXQB ¹	15-30	2	120/210	-	-		65	-	-	-	-	-	3 9/32	2	2 3/8	-	-	-	-	25
TXQC ¹		3	240			-								3						15
TQDL	125-200	2	120/240	_	-	10	-	-	-	-	-	-	6 1/16	2	2 3/8	-	-	-	-	12
THQDL	125-200	2	120/240	-	-	22	-	-	-	-	-	-	6 1/16	2	2 3/8	-	-	-	-	12
TOD1	100-225	2	240	_	_	10	10	_	_	_	_		- 6 9/16	2 3/4	2 5/8	2 7/16	2 7/16	_	- 27/32 -	1
TQD	100-225	3	240			-	10						0 5/10	4 1/8	2 3/0	2 // 10	2 1/ 10	11/16	21752	1
THOD ¹	100-225	2	240	_	_	22	22	_	_	_	_	_	6 9/16	2 3/4	2 5/8 2 7/16	27/16	2 7/16	-	27/32	1
ΠŲυ	100-225	3	240			-	22						0 5/ 10	4 1/8		2 1/10	2 1/ 10	11/16		1
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						10 1/0	0 1/4	5 15/10	5 15/10	5 15/ 10	1 5/0	1 5/ 10	1
CB3 Ground	Fault, Equip	ment Grou	nd Fault an	d Arc Fo	ult (UL F	ile E-51075;	Fixed T	hermal	Magnet	tic Trip L	Jnit)									
THQB THQC		1	120		10	_								1						10
THQL	15-30			-			-	-	-	-	-	-	3 9/32		2 3/8	-	-	-	-	
GF, GFEP, AF		2	120/240		-	1								2					10	
THHQL GF THHQB GF AF	15-30	1	120	_	22	_	_	_	_	_	-	_	3 9/32	1	2 3/8	_	_	_	-	10

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

²Not UL listed.



Molded Case Circuit Breakers Q-Line Circuit Breakers

Section 3

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

TQC, THQC, THHQC 120/240 Vac

# of Ampere			120/240 Vac		List Price	120/240 Vac		List Price
Poles	Rating	Wire Range ¹	Interrupting Rating	Product Number ²	GO-135B	Interrupting Rating	Product Number ²	GO-135B
L	10	14-4 Cu/12-2 Al	5kA	TQC1110WL	\$20.25			
	15	14-8 Cu/12-8 Al	10kA	THQC1115WL ^{3,4}	\$20.25	22kA	THHQC1115WL3	\$35.50
	20	14-8 Cu/12-8 Al	10kA	THQC1120WL ^{3,4}	\$20.25	22kA	THHQC1120WL ³	\$35.50
	25	14-8 Cu/12-8 Al	10kA	THQC1125WL3	\$20.25	22kA	THHQC1125WL3	\$40.50
	30	14-8 Cu/12-8 Al	10kA	THQC1130WL ³	\$20.25	22kA	THHQC1130WL ³	\$40.50
	35	8-3 Cu/8-3 Al	10kA	THQC1135WL ³	\$20.25	22kA	THHQC1135WL ³	\$40.50
	40	8-3 Cu/8-3 Al	10kA	THQC1140WL ³	\$20.25	22kA	THHQC1140WL ³	\$40.50
	45	8-3 Cu/8-3 Al	10kA	THQC1145WL ³	\$20.25	22kA	THHQC1145WL ³	\$40.50
	50	8-3 Cu/8-3 Al	10kA	THQC1150WL ³	\$20.25	22kA	THHQC1150WL ³	\$40.50
	60	8-3 Cu/8-3 Al	10kA	THQC1160WL3	\$20.25	22kA	THHQC1160WL3	\$40.50
	70	6-1/0 Cu/4-1/0 Al	10kA	THOC1170WL	\$39.00	22kA	THHOC1170WL	\$52.00

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

# of	Ampere		120/240 Vac		List Price	120/240 Vac		List Price
oles	Rating	Wire Range ¹	Interrupting Rating	Product Number ²	GO-135B	Interrupting Rating	Product Number ²	GO-135B
	10	14-4 Cu/12-2 Al	5kA	TQC2110WL	\$46.50			
	15	14-8 Cu/12-8 Al	10kA	THQC2115WL3	\$43.50	22kA	THHQC2115WL ³	\$83.50
	20	14-8 Cu/12-8 Al	10kA	THQC2120WL ³	\$43.50	22kA	THHQC2120WL ³	\$83.50
	25	14-8 Cu/12-8 Al	10kA	THQC2125WL ³	\$43.50			
	30	14-8 Cu/12-8 Al	10kA	THQC2130WL ³	\$43.50	22kA	THHQC2130WL ³	\$83.50
	35	8-3 Cu/8-3 Al	10kA	THQC2135WL ³	\$43.50	22kA	THHQC2135WL ³	\$83.50
	40	8-3 Cu/8-3 Al	10kA	THQC2140WL ³	\$43.50	22kA	THHQC2140WL ³	\$83.50
	45	8-3 Cu/8-3 Al	10kA	THQC2145WL ³	\$43.50	22kA	THHQC2145WL ³	\$83.50
	50	8-3 Cu/8-3 Al	10kA	THQC2150WL ³	\$43.50	22kA	THHQC2150WL ³	\$83.50
	60	8-3 Cu/8-3 Al	10kA	THQC2160WL ³	\$43.50	22kA	THHQC2160WL ³	\$83.50
	70	6-1/0 Cu/4-1/0 Al	10kA	THQC2170WL	\$83.50	22kA	THHQC2170WL	\$129.00
	80	6-1/0 Cu/4-1/0 Al	10kA	THQC2180WL	\$116.00	22kA	THHQC2180WL	\$188.00
	90	6-1/0 Cu/4-1/0 Al	10kA	THQC2190WL	\$116.00	22kA	THHQC2190WL	\$188.00
	100	6-1/0 Cu/4-1/0 Al	10kA	THQC21100WL	\$116.00	22kA	THHQC21100WL	\$188.00

TQC, THQC, THHQC 240 Vac, Internal Common Trip

# of	Ampere		240 Vac		List Price	240 Vac		List Price
Poles	Rating	Wire Range ¹	Interrupting Rating	Product Number ²	GO-135B	Interrupting Rating	Product Number	GO-135B
2	10	14-4 Cu/12-2 Al	5kA	TQC22010WL	\$116.00			
	15	14-8 Cu/12-8 Al	10kA	THQC22015WL	\$116.00	22kA	THHQC22015WL	\$159.00
	20	14-8 Cu/12-8 Al	10kA	THQC22020WL	\$116.00	22kA	THHQC22020WL	\$159.00
	25	14-8 Cu/12-8 Al	10kA	THQC22025WL	\$116.00	22kA	THHQC22025WL	\$159.00
	30	14-8 Cu/12-8 Al	10kA	THQC22030WL	\$116.00	22kA	THHQC22030WL	\$159.00
	35	8-3 Cu/8-3 Al	10kA	THQC22035WL	\$116.00	22kA	THHQC22035WL	\$159.00
	40	8-3 Cu/8-3 Al	10kA	THQC22040WL	\$116.00	22kA	THHQC22040WL	\$159.00
	45	8-3 Cu/8-3 Al	10kA	THQC22045WL	\$116.00	22kA	THHQC22045WL	\$159.00
	50	8-3 Cu/8-3 Al	10kA	THQC22050WL	\$116.00	22kA	THHQC22050WL	\$159.00
	60	8-3 Cu/8-3 Al	10kA	THQC22060WL	\$116.00	22kA	THHQC22060WL	\$159.00
	70	6-1/0 Cu/4-1/0 Al	10kA	THOC22070WL	\$152.00	22kA	THHOC22070WL	\$200.00
	80	6-1/0 Cu/4-1/0 Al	10kA	THQC22080WL	\$173.00	22kA	THHQC22080WL	\$240.00
	90	6-1/0 Cu/4-1/0 Al	10kA	THQC22090WL	\$173.00	22kA	THHQC22090WL	\$240.00
	100	6-1/0 Cu/4-1/0 Al	10kA	THOC22100WL	\$173.00	22kA	THHOC22100WL	\$240.00
	10	14-4 Cu/12-2 Al	5kA	TQC32010WL	\$141.00			
	15	14-8 Cu/12-8 Al	10kA	THQC32015WL	\$141.00	22kA	THHQC32015WL	\$216.00
	20	14-8 Cu/12-8 Al	10kA	THQC32020WL	\$141.00	22kA	THHQC32020WL	\$216.00
	25	14-8 Cu/12-8 Al	10kA	THQC32025WL	\$141.00	22kA	THHQC32025WL	\$216.00
	30	14-8 Cu/12-8 Al	10kA	THQC32030WL	\$141.00	22kA	THHQC32030WL	\$216.00
	35	8-3 Cu/8-3 Al	10kA	THQC32035WL	\$141.00	22kA	THHQC32035WL	\$216.00
	40	8-3 Cu/8-3 Al	10kA	THQC32040WL	\$141.00	22kA	THHQC32040WL	\$216.00
	45	8-3 Cu/8-3 Al	10kA	THQC32045WL	\$141.00	22kA	THHQC32045WL	\$216.00
	50	8-3 Cu/8-3 Al	10kA	THQC32050WL	\$141.00	22kA	THHQC32050WL	\$216.00
	60	8-3 Cu/8-3 Al	10kA	THQC32060WL	\$141.00	22kA	THHQC32060WL	\$216.00
	70	6-1/0 Cu/4-1/0 Al	10kA	THQC32070WL	\$178.00	22kA	THHQC32070WL	\$267.00
	80	6-1/0 Cu/4-1/0 Al	10kA	THQC32080WL	\$202.00	22kA	THHQC32080WL	\$314.00
	90	6-1/0 Cu/4-1/0 Al	10kA	THQC32090WL	\$202.00	22kA	THHQC32090WL	\$314.00
	100	6-1/0 Cu/4-1/0 Al	10kA	THOC32100WL	\$202.00	22kA	THHOC32100WL	\$314.00

 $^1\mathrm{Solid}$ 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 3-23 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 3-26 to 3-27.

(ge)

Publications and Reference: See Section 22 for a complete list of additional product-related publications