

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.

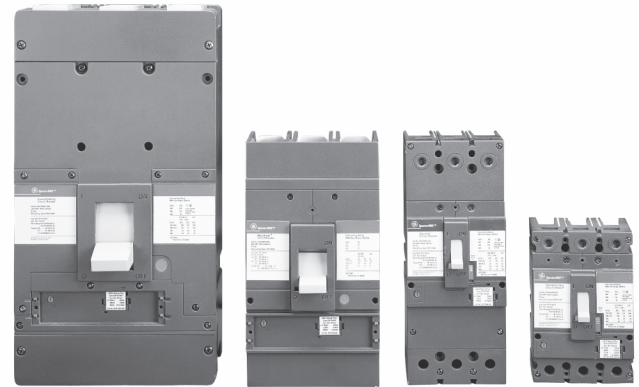
Unless otherwise noted, all circuit breakers are UL listed in File E-11592. Molded case switches are UL listed in File E-57546. Field-Installable Internal Accessories are UL listed in File E-57253. Distribution Cable Accessories for *microEntelliGuard™* Trip Units are UL listed in File E-57253.

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	—	—	—	—



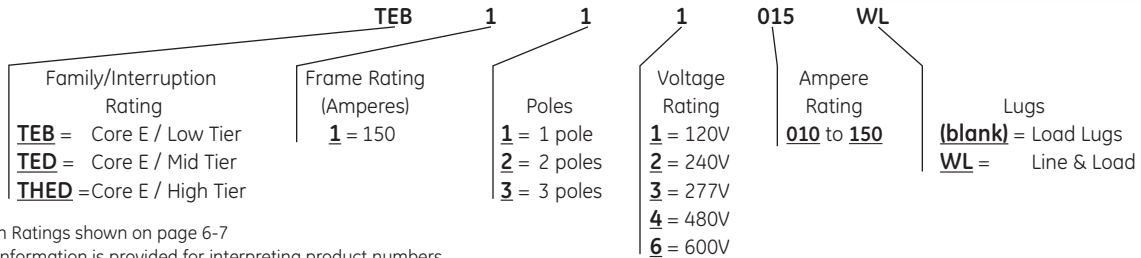
Molded Case Circuit Breakers

Industrial Circuit Breakers

10-150A Circuit Breakers
 Thermal-Magnetic Trip
 E150 Line Circuit Breakers
 Types TEB, TED, THED
 Noninterchangeable Trip



Product Number Structure



Interruption Ratings shown on page 6-7
 Note: This information is provided for interpreting product numbers (it should not be used to build product numbers).

Single Pole – Includes Cu/Al load lugs only. If line lugs are required, add suffix “WL” to Product Number.

Ampere Rating	Type TEB	Type TED		Type THED	
	120 Vac 125 Vdc	277 Vac 125 Vdc	347 Vac ¹	277 Vac	347 Vac ¹
	Product Number	Product Number	Product Number	Product Number	Product Number
10	TEB111010 ^{2,4}	TED113010 ^{2,4}			
15	TEB111015 ^{3,4}	TED113015 ^{3,4}	TED114015 ^{3,4}	THED113015 ⁴	THED114015 ^{3,4}
20	TEB111020 ^{3,4}	TED113020 ^{3,4}	TED114020 ^{3,4}	THED113020 ⁴	THED114020 ^{3,4}
25	TEB111025 ⁴	TED113025 ⁴	TED114025 ⁴	THED113025 ⁴	THED114025 ⁴
30	TEB111030 ⁴	TED113030 ⁴	TED114030 ⁴	THED113030 ⁴	THED114030 ⁴
35	TEB111035 ⁴	TED113035 ⁴	—	—	—
40	TEB111040 ⁴	TED113040 ⁴	—	—	—
45	TEB111045 ⁴	TED113045 ⁴	—	—	—
50	TEB111050 ⁴	TED113050 ⁴	—	—	—
60	TEB111060	TED113060	—	—	—
70	TEB111070	TED113070	—	—	—
80	TEB111080	TED113080	—	—	—
90	TEB111090	TED113090	—	—	—
100	TEB111100	TED113100	—	—	—

Two Pole – Includes Cu/Al line and load lugs. For optional lugs, see page 6-103 and 6-105.

Ampere Rating	Type TEB	Type TED	Type THED, Hi-Break ⁵
	240 Vac, 250 Vdc	480 Vac, 250 Vdc	480 Vac, 250 Vdc
	Product Number	Product Number	Product Number
10	TEB122010WL ^{2,4}	TED124010WL ^{2,4}	—
15	TEB122015WL ⁴	TED124015WL ⁴	THED124015WL ⁴
20	TEB122020WL ⁴	TED124020WL ⁴	THED124020WL ⁴
25	TEB122025WL ⁴	TED124025WL ⁴	THED124025WL ⁴
30	TEB122030WL ⁴	TED124030WL ⁴	THED124030WL ⁴
35	TEB122035WL ⁴	TED124035WL ⁴	THED124035WL ⁴
40	TEB122040WL ⁴	TED124040WL ⁴	THED124040WL ⁴
45	TEB122045WL ⁴	TED124045WL ⁴	THED124045WL ⁴
50	TEB122050WL ⁴	TED124050WL ⁴	THED124050WL ⁴
60	TEB122060WL	TED124060WL	THED124060WL
70	TEB122070WL	TED124070WL	THED124070WL
80	TEB122080WL	TED124080WL	THED124080WL
90	TEB122090WL	TED124090WL	THED124090WL
100	TEB122100WL	TED124100WL	THED124100WL
110	—	TED124110WL	—
125	—	TED124125WL	—
150	—	TED124150WL	—

¹Suitable for 10 kAIC at 480 Vac, but not labeled or UL listed.

²Not UL listed, rated 5kA @ 120V, 240V and 480V.

³Single-pole, 15- and 20-ampere breakers are also UL listed as switching duty breakers, suitable for switching 120 Vac (TEB), 277, 347 Vac (TED, THED) fluorescent lighting loads.

⁴UL listed for HID (high intensity discharge).

⁵Two-pole breaker is furnished in three-pole case.

Notes: All TEB, TED, THED breakers UL listed as HACR type except 10 ampere.
 All TEB, TED, THED breakers suitable for reverse feed.
 60/75°C rating through 100 amperes, 75°C rating above 100 amperes.



Molded Case Circuit Breakers

Industrial Circuit Breakers

Section 6

10-150A Circuit Breakers
 Thermal-Magnetic Trip
 E150 Line Circuit Breakers
 Types TEB, TED, THED
 Noninterchangeable Trip

Three Pole — Includes Cu/Al line and load lugs. For optional lugs, see page 6-103 and 6-105.

Ampere Rating	Type TEB	Type TED		Type THED, Hi-Break
	240 Vac	480 Vac	600 Vac	600 Vac
	Product Number	Product Number	Product Number	Product Number
10	TEB132010WL ^{1,3}	TED134010WL ^{1,3}	—	—
15	TEB132015WL ³	TED134015WL ³	—	—
20	TEB132020WL ³	TED134020WL ³	TED136020WL ³	THED136020WL ³
25	TEB132025WL ³	TED134025WL ³	TED136025WL ³	THED136025WL ³
30	TEB132030WL ³	TED134030WL ³	TED136030WL ³	THED136030WL ³
35	TEB132035WL ³	TED134035WL ³	TED136035WL ³	THED136035WL ³
40	TEB132040WL ³	TED134040WL ³	TED136040WL ³	THED136040WL ³
45	TEB132045WL ³	TED134045WL ³	TED136045WL ³	THED136045WL ³
50	TEB132050WL ³	TED134050WL ³	TED136050WL ³	THED136050WL ³
60	TEB132060WL	TED134060WL	TED136060WL	—
70	TEB132070WL	TED134070WL	TED136070WL	THED136070WL
80	TEB132080WL	TED134080WL	TED136080WL	—
90	TEB132090WL	TED134090WL	TED136090WL	THED136090WL
100	TEB132100WL	TED134100WL	TED136100WL	THED136100WL
110	—	TED134110WL	TED136110WL	THED136110WL
125	—	TED134125WL	TED136125WL	THED136125WL
150	—	TED134150WL	TED136150WL	THED136150WL
100NA	—	TED134YT100 ²	TED136YT100 ²	—
150NA	—	TED134YT150 ²	TED136YT150 ²	—

¹Not UL listed, rated 5kA @ 120V, 240V and 480V.

²Includes factory-installed dummy trip.

³UL listed for HID (high intensity discharge).

Notes: All TEB, TED, THED breakers UL listed as HACR type except 10 ampere.
 All TEB, TED, THED breakers suitable for reverse feed.
 60/75°C rating through 100 amperes, 75°C rating above 100 amperes.

Accessories: See pages 6-39 to 6-44 and 6-94 to 6-106.

Add-on Current Limiter — UL Listed 100 kAIC at 480 and 600 VAC⁴

Ampere Rating	Product Number
15	TEDL36015
20	TEDL36020
30 and 60	TEDL36060
100	TEDL36100

⁴For use with 3 Pole TED/THED only

E150 Reference Publications

TDR Operating Mechanism	GEH-2994
Shunt Trip	GEH-3416
Undervoltage Release	GEH-3417
Auxiliary Switch	GEH-3418
Three Coil Shunt Trip	GEH-3434
Mechanical Interlock	GEH-4310
TDM Operating Mechanism	GEH-4335
Bell Alarm	GEH-4576
Plug-in Mounting Base	GEH-4610
STDA Flange Handle	GEH-5314
STDA Operating Mechanism	GEH-5684
Cable Operator Mechanism	GEH-6290
Motor Operator	GEH-6500
Back Connected Studs	GEJ-3609
Padlocking Device - Standard	GEJ-5143
E150 Outline Drawing	139C3643SH1, 2, 4

