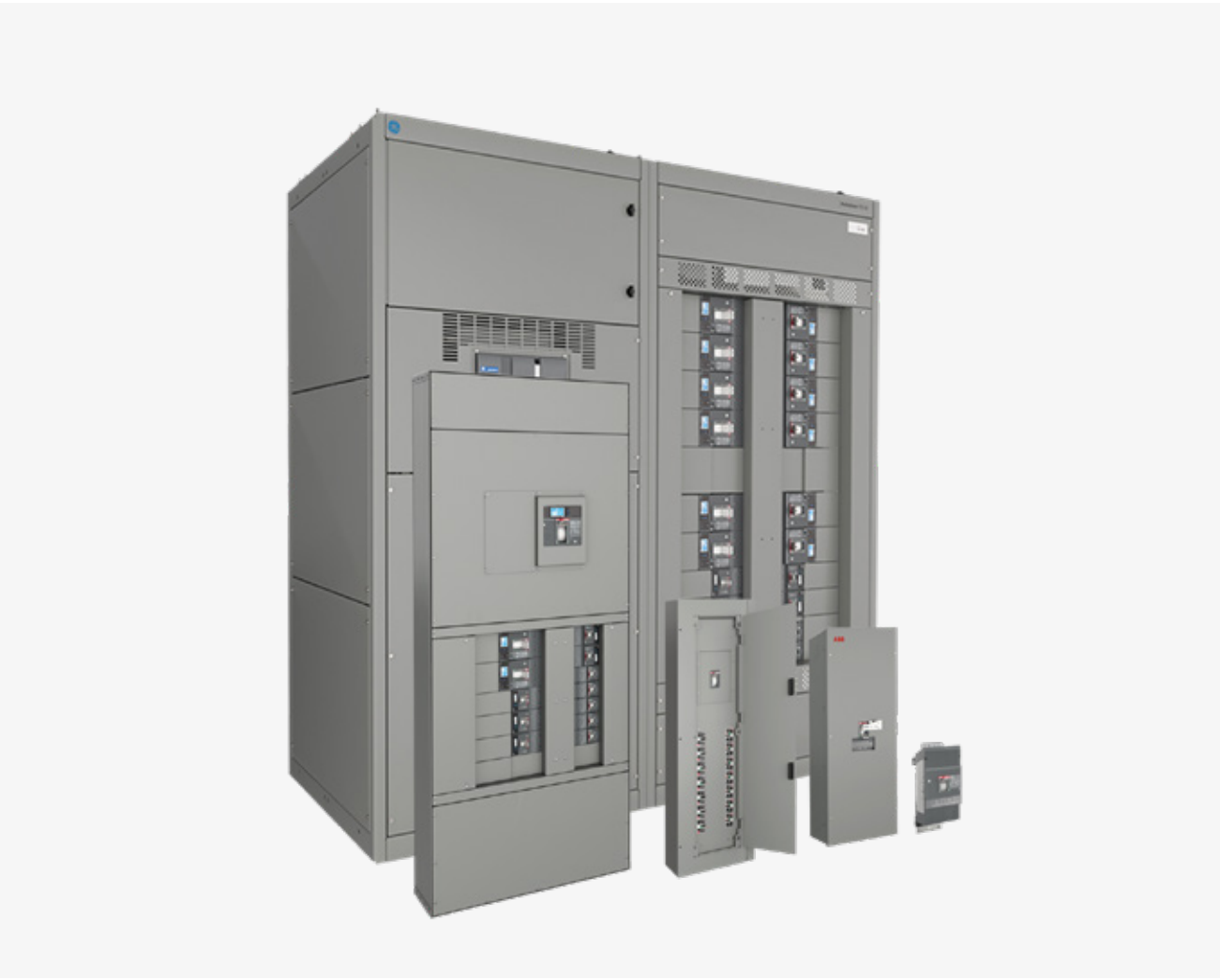
DISTRIBUTOR MIGRATION GUIDE

Spectra™ to SACE® Tmax® XT molded case circuit breakers



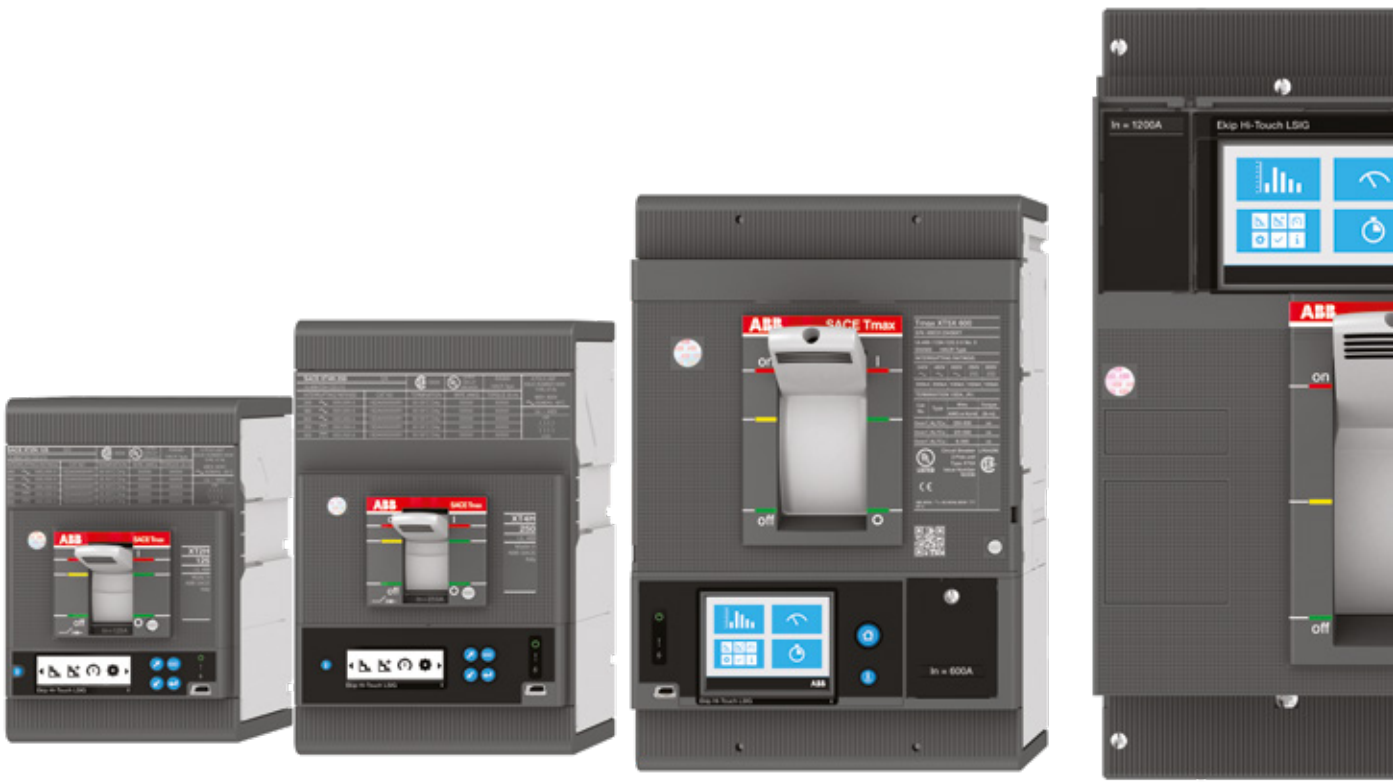
SACE® Tmax® XT overview
Break new ground

Help make your business more competitive with an innovative MCCB that allows you and your customer to save costs and time, from stocking to execution.

Save money by selecting only what you need for your application:

- Thermomagnetic trip units up to 800 A
- Advanced features and protections
- Embedded functionalities and accessories that help reduce the number of external components
- 10+ native communications protocols
- Connectivity to ABB Ability™ Energy and Asset Manager

With seven frame sizes and a comprehensive trip unit offering, SACE Tmax XT MCCBs are designed for flexibility, integration and connectivity. Select and order the right products for your application with this quick reference table.



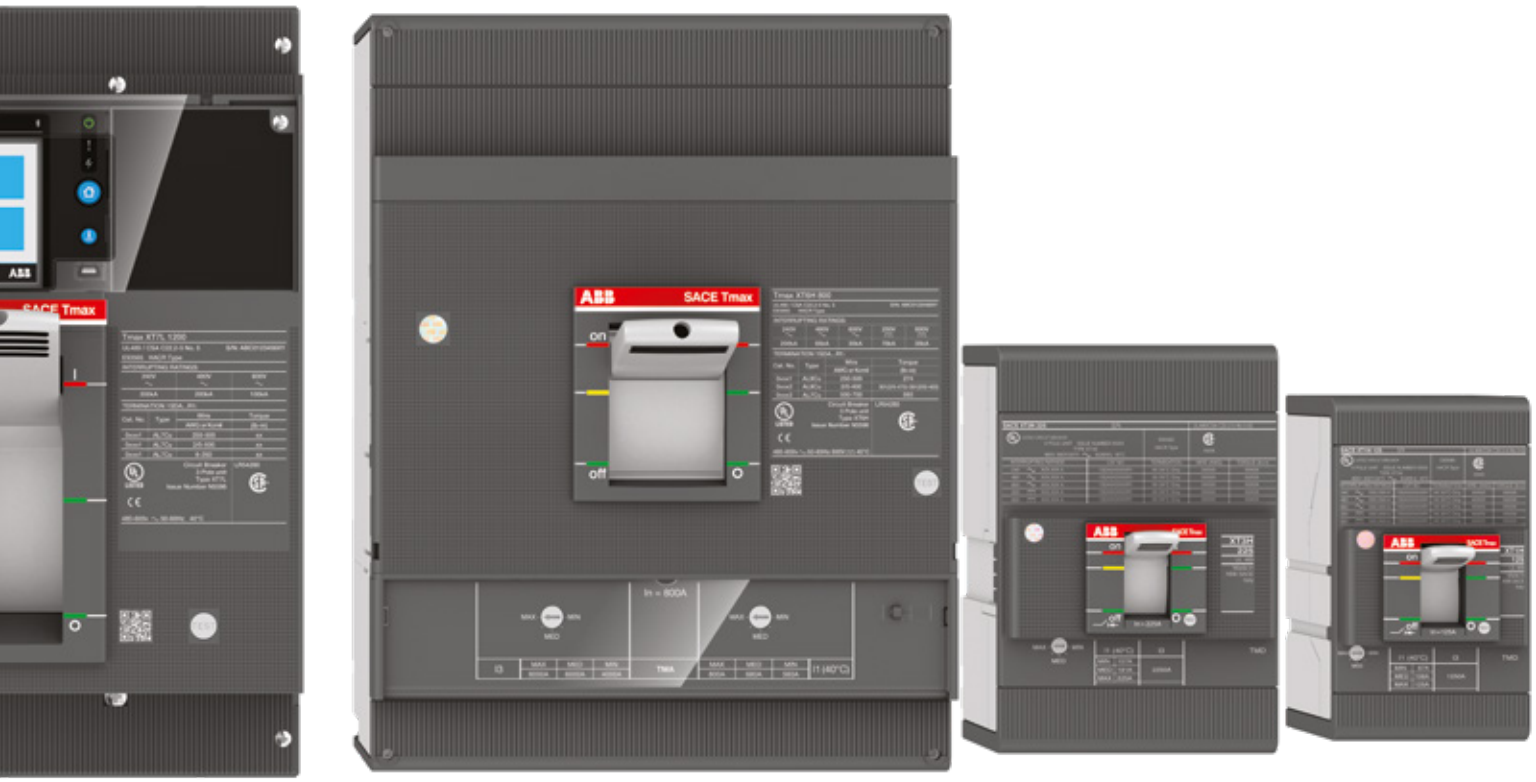
—

SACE® Tmax® XT application guide

Common applications	Available SACE Tmax XT frames	SACE Tmax XT breaker	ReliaGear neXT breaker	Line side connection / termination	Load side connection / termination	Enclosure	Tips
Enclosed circuit breakers	All frames	✓	–	Lugs	Lugs	✓	Fully assembled enclosed breaker also available in empower configurator.
ReliaGear™ lighting panel	XT1, XT4, XT5, XT6 (XT2 coming soon)	✓	–	Breaker kit	Lugs	–	Line vs load side lugs dictated by panel top/bottom feed.
ReliaGear™ neXT power panel	XT1*, XT4, XT5, XT6, XT7 (XT2 coming soon)	–	✓	–	–	–	ReliaGear neXT breakers come with factory-installed plug-in line side connectors; load side lugs; and required filler plates. You must purchase this version for use in ReliaGear neXT power panelboard and ReliaGear SB switchboard feeders.
ReliaGear® SB switchboard feeder	XT1*, XT4, XT5, XT6, XT7 (XT2 coming soon)	–	✓	–	–	–	
Spectra™ bolt-on panelboard or switchboard	XT1, XT4, XT5, XT7**	✓	–	SBO retrofit kit	Lugs	–	Designed to help extend the life of your Spectra bolt-on panelboard or switchboard.
OEM business	All frames	✓	–	Per application	Per application	–	–

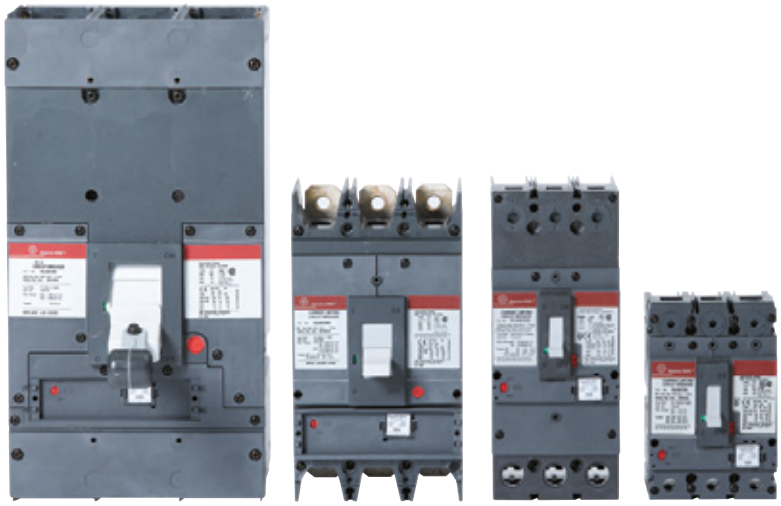
* Tmax XT1 circuit breakers require a rail for installation in ReliaGear neXT power panelboards and ReliaGear SB switchboards if not already installed in your existing ReliaGear neXT or SB equipment:
  - SR1XBF for 1 single XT1
  - SR2XBF for 2 adjacent XT1
  - SR5XBF for 5 adjacent XT1

** All frames require SBO retrofit kit



Migration from Spectra™ to SACE® Tmax® XT

Combining ABB and GE Industrial Solutions leading-edge technologies offers you a new, comprehensive, one-line construction package.



As part of ABB's continuing development of a new, leading-edge and comprehensive one-line construction package, the Spectra RMS and RMS with microEntelliGuard® technology will be retired and replaced by SACE Tmax XT circuit breakers.

To help you use Tmax XT breaker capabilities within ABB's distribution equipment, this document will guide you through the Tmax XT frames and common accessories and explain how they compare to Spectra; highlight the frames and other details for common applications; and provide guidance on initial stocking options. Stocking suggestions were defined based on national average consumption rates; therefore, adjustments to the recommended amperages, trip units, interrupt ratings or other parameters may be needed for your market.

Selecting the right SACE® Tmax® XT frame based on your Spectra™ frame

Select what you need, skip what you don't

Most economical path
(Thermomagnetic trip units and dedicated 480 V AC frames XT1 and XT3)

High-end features and adjustability path
(Basic and advanced electronic trip units on 600 V AC frames with increased interrupt rating capabilities)

SE 150 (125 A and below)

XT1
125 A

SE 150 (above 125 A)

XT2
125 A

SF 250 A

XT3
225 A

XT4
250 A

SG 600 A

XT5
600 A

XT5
600 A

SK 1200 A

XT6
800 A

XT7
1200 A

Notes: Always consider which rating plug you would use with Spectra in your application. There may be opportunities to reduce a frame size with SACE Tmax XT.

SACE® Tmax® XT circuit breakers
Stocking strategies

The electrical distribution market can be very competitive. It takes the right balance of value, inventory cost and customer service to be successful. To help you succeed in the market you serve, following are different paths for stocking strategies from which to choose.

Competitive price-focused stocking strategy

Pros: Most competitive price to market circuit breakers. Overall reduction in the number of stocking part numbers (SKUs) compared to Spectra breakers and rating plugs.

Cons: Increased number of full breaker frames means slightly more shelf space than Spectra breakers and rating plugs.

Suggested SACE Tmax XT stock to support ReliaGear™ lighting panelboards, enclosed circuit breakers, enclosed starters and control products along with OEM business, Spectra™ bolt-on power panelboards and switchboards

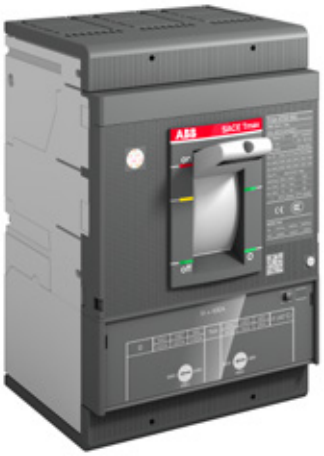
Catalog number[1]	Int. rating[2] (kA) at 480 V AC	Rated current (A)	Trip unit[3]	Overload (L) adjustability[3]	Inventory carrying cost reference
XT1HU3015AFF000XXX	65	15	TMF	Non-adjustable	$
XT1HU3020AFF000XXX	65	20	TMF	Non-adjustable	$
XT1HU3025AFF000XXX	65	25	TMF	Non-adjustable	$
XT1HU3030AFF000XXX	65	30	TMF	Non-adjustable	$
XT1HU3035AFF000XXX	65	35	TMF	Non-adjustable	$
XT1HU3040AFF000XXX	65	40	TMF	Non-adjustable	$
XT1HU3045AFF000XXX	65	45	TMF	Non-adjustable	$
XT1HU3050AFF000XXX	65	50	TMF	Non-adjustable	$
XT1HU3060AFF000XXX	65	60	TMF	Non-adjustable	$
XT1HU3070AFF000XXX	65	70	TMF	Non-adjustable	$
XT1HU3080AFF000XXX	65	80	TMF	Non-adjustable	$
XT1HU3090AFF000XXX	65	90	TMF	Non-adjustable	$
XT1HU3100AFF000XXX	65	100	TMF	Non-adjustable	$
XT1HU3125AFF000XXX	65	125	TMF	Non-adjustable	$
XT4HU3150AFF000XXX	65	150	TMF	Non-adjustable	$
XT4HU3175AFF000XXX	65	175	TMF	Non-adjustable	$
XT4HU3200AFF000XXX	65	200	TMF	Non-adjustable	$
XT4HU3225AFF000XXX	65	225	TMF	Non-adjustable	$
XT4HU3250AFF000XXX	65	250	TMF	Non-adjustable	$
XT5HU340ABFF000XXX	65	400	TMA	280...400 A / via rotary switches	$
XT5HU360BBFF000XXX	65	600	TMA	420...600 A / via rotary switches	$
XT6HU3800BFF000XXX	65	800	TMA	560...800 A / via rotary switches	$
XT7HU312EQFF940XXX[4]	65	1200	Ekip Touch LSIG	480...1200 A / via touch screen	$$$

[1] Breakers do not include line/load connections. Please see table on page 3 outlining suggested connections per application

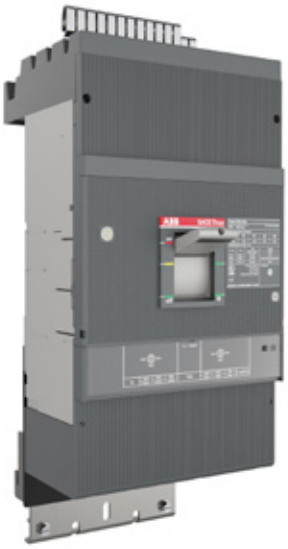
[2] 65 kA at 480 V AC has been selected to align with the most commonly ordered Spectra across the USA. If your specific needs require a higher or lower interrupt rating, please update the fourth digit from "H" to reflect the desired level, as explained in Table 4 on page 14

[3] For more details on trip unit features and adjustability, please refer to “SACE Tmax XT range trip unit capabilities” table on page 12 or SACE Tmax XT Technical Catalog

[4] RELT module and 24–48 V DC power supply already included. 110–240 V AC/DC power supply also available; please refer to empower configurator



SACE Tmax XT breaker



ReliaGear neXT breaker

Suggested ReliaGear neXT breaker stock to support ReliaGear neXT power panelboards and ReliaGear SB switchboards

Catalog number	Int. rating[1] (kA) at 480 V AC	Rated current (A)	Trip unit[2]	Overload (L) adjustability[2]	Inventory carrying cost reference
XT1HU3015AYD000XXX	65	15	TMF	Non-adjustable	$
XT1HU3020AYD000XXX	65	20	TMF	Non-adjustable	$
XT1HU3025AYD000XXX	65	25	TMF	Non-adjustable	$
XT1HU3030AYD000XXX	65	30	TMF	Non-adjustable	$
XT1HU3035AYD000XXX	65	35	TMF	Non-adjustable	$
XT1HU3040AYD000XXX	65	40	TMF	Non-adjustable	$
XT1HU3045AYD000XXX	65	45	TMF	Non-adjustable	$
XT1HU3050AYD000XXX	65	50	TMF	Non-adjustable	$
XT1HU3060AYD000XXX	65	60	TMF	Non-adjustable	$
XT1HU3070AYD000XXX	65	70	TMF	Non-adjustable	$
XT1HU3080AYD000XXX	65	80	TMF	Non-adjustable	$
XT1HU3090AYD000XXX	65	90	TMF	Non-adjustable	$
XT1HU3100AYD000XXX	65	100	TMF	Non-adjustable	$
XT4HU3150BYJ000XXX	65	150	TMA	105...150 A / via rotary switches	$$
XT4HU3250BYL000XXX	65	250	TMA	175...250 A / via rotary switches	$$
XT5HU340ABYN000XXX	65	400	TMA	280...400 A / via rotary switches	$
XT5HU360BBYN000XXX	65	600	TMA	420...600 A / via rotary switches	$
XT7HU380CFYX000XXX	65	800	Ekip DIP LSI	320...800 A / via DIP switches	$$
XT7HU312EPYX940XXX[3]	65	1200	Ekip Touch LSI	480...1200 A / via touch screen	$$$

[1] 65 kA at 480 V AC has been selected to align with the most commonly ordered Spectra across the USA. If your specific needs require a higher or lower interrupt rating, please update the fourth digit from "H" to reflect the desired level, as explained in Table 4 on page 14

[2] For more details on trip unit features and adjustability, please refer to “SACE Tmax XT range trip unit capabilities” table on page 12 or SACE Tmax XT Technical Catalog

[3] RELT module and 24–48 V DC power supply already included. 110–240 V AC/DC power supply also available; please refer to empower configurator

SACE® Tmax® XT circuit breakers
Stocking strategies

Maximum flexibility stocking strategy

Pros: Circuit breakers with a wide range of adjustability to fit many applications, including advanced customer requirements. The adjustable trip units eliminate the need for rating plugs and reduce the number of circuit breakers you need to carry, which significantly reduces the number of different SKUs on your list and resulting inventory carrying costs.
Cons: In some cases, individual circuit breaker pricing may be higher than the direct cross from Spectra.

Suggested SACE Tmax XT stock to support ReliaGear™ lighting panelboards, enclosed circuit breakers, enclosed starters and control products along with OEM business, Spectra™ bolt-on power panelboards and switchboards

Catalog number[1]	Int. rating[2] (kA) at 480 V AC	Rated current (A)	Trip unit[3]	Overload (L) adjustability[3]	Inventory carrying cost reference
XT4HU3040FFF000XXX	65	40	Ekip DIP LSI	16...40 A / via DIP switches	$$
XT4HU3100FFF000XXX	65	100	Ekip DIP LSI	40...100 A / via DIP switches	$$
XT4HU3250FFF000XXX	65	250	Ekip DIP LSI	100...250 A / via DIP switches	$$
XT5HU360BFFF000XXX	65	600	Ekip DIP LSI	240...600 A / via DIP switches	$$
XT7HU312EQFF940XXX[4]	65	1200	Ekip Touch LSIG	480...1200 A / via touch screen	$$$

[1] Breakers do not include line/load connections. Please see table on page 3 outlining suggested connections per application
[2] 65 kA at 480 V AC has been selected to align with the most commonly ordered Spectra across the USA. If your specific needs require a higher or lower interrupt rating, please update the fourth digit from "H" to reflect the desired level, as explained in Table 4 on page 14
[3] For more details on trip unit features and adjustability, please refer to “SACE Tmax XT range trip unit capabilities” table on page 12 or SACE Tmax XT Technical Catalog
[4] RELT module and 24–48 V DC power supply already included. 110–240 V AC/DC power supply also available; please refer to empower configurator

Suggested ReliaGear neXT breaker stock to support ReliaGear neXT power panelboards and ReliaGear SB switchboards

Catalog number	Int. rating[1] (kA) at 480 V AC	Rated current (A)	Trip unit[2]	Overload (L) adjustability[2]	Inventory carrying cost reference
XT4HU3040FYG000XXX	65	40	Ekip DIP LSI	16...40 A / via DIP switches	$$
XT4HU3100FYJ000XXX	65	100	Ekip DIP LSI	40...100 A / via DIP switches	$$
XT4HU3250FYL000XXX	65	250	Ekip DIP LSI	100...250 A / via DIP switches	$$
XT5HU360BFYN000XXX	65	600	Ekip DIP LSI	240...600 A / via DIP switches	$$
XT7HU312EPYX940XXX$_4$	65	1200	Ekip Touch LSI	480...1200 A / via touch screen	$$$

[1] 65 kA at 480 V AC has been selected to align with the most commonly ordered Spectra across the USA. If your specific needs require a higher or lower interrupt rating, please update the fourth digit from "H" to reflect the desired level, as explained in Table 4 on page 14
[2] For more details on trip unit features and adjustability, please refer to “SACE Tmax XT range trip unit capabilities” table on page 12 or SACE Tmax XT Technical Catalog
[3] RELT module and 24–48 V DC power supply already included. 110–240 V AC/DC power supply also available; please refer to empower configurator

Optimized stocking strategy

By mixing the previous two stocking strategies, you can enjoy the advantages of both, helping to ensure competitiveness at lower amperage frames where you have most of the volume, and simultaneously helping to meet advanced customer requirements and ensure flexibility and reduced SKUs.

The suggested list below was chosen to align with the most commonly ordered rating plugs across the USA. Make sure to add and/or remove breakers to match your market and application needs.

For alternate interrupt rating options and other breakers and accessories, please consult ABB's stocking guide.

—

Suggested SACE Tmax XT stock to support ReliaGear lighting panels, enclosed circuit breakers, enclosed starters and control products along with OEM business, Spectra bolt-on power panelboards and switchboards

Catalog number[1]	Int. rating[2] (kA) at 480 V AC	Rated current (A)	Trip unit[3]	Overload (L) adjustability[3]	Inventory carrying cost reference
XT1HU3015AFF000XXX	65	15	TMF	Non-adjustable	$
XT1HU3020AFF000XXX	65	20	TMF	Non-adjustable	$
XT1HU3030AFF000XXX	65	30	TMF	Non-adjustable	$
XT1HU3050AFF000XXX	65	50	TMF	Non-adjustable	$
XT1HU3060AFF000XXX	65	60	TMF	Non-adjustable	$
XT1HU3100AFF000XXX	65	100	TMF	Non-adjustable	$
XT1HU3125AFF000XXX	65	125	TMF	Non-adjustable	$
XT4HU3150BFF000XXX	65	150	TMA	105…150 A / via rotary switches	$$
XT4HU3250BFF000XXX	65	250	TMA	175…250 A / via rotary switches	$$
XT5HU340ABFF000XXX	65	400	TMA	280…400 A / via rotary switches	$
XT5HU360BBFF000XXX	65	600	TMA	420…600 A / via rotary switches	$
XT7HU312EQFF940XXX[4]	65	1200	Ekip Touch LSIG	480…1200 A / via touch screen	$$$

[1] Breakers do not include line/load connections. Please see table on page 3 outlining suggested connections per application
[2] 65 kA at 480 V AC has been selected to align with the most commonly ordered Spectra across the USA. If your specific needs require a higher or lower interrupt rating, please update the fourth digit from "H" to reflect the desired level, as explained in Table 4 on page 14
[3] For more details on trip unit features and adjustability, please refer to “SACE Tmax XT range trip unit capabilities” table on page 12 or SACE Tmax XT Technical Catalog
[4] RELT module and 24–48 V DC power supply already included. 110–240 V AC/DC power supply also available; please refer to empower configurator

—

Suggested ReliaGear neXT breaker stock to support ReliaGear neXT power panelboards and ReliaGear SB switchboards

Catalog number	Int. rating[1] (kA) at 480 V AC	Rated current (A)	Trip unit[2]	Overload (L) adjustability[2]	Inventory carrying cost reference
XT1HU3015AYD000XXX	65	15	TMF	Non-adjustable	$
XT1HU3020AYD000XXX	65	20	TMF	Non-adjustable	$
XT1HU3030AYD000XXX	65	30	TMF	Non-adjustable	$
XT1HU3050AYD000XXX	65	50	TMF	Non-adjustable	$
XT1HU3060AYD000XXX	65	60	TMF	Non-adjustable	$
XT1HU3100AYD000XXX	65	100	TMF	Non-adjustable	$
XT4HU3150BYJ000XXX	65	150	TMA	105…150 A / via rotary switches	$$
XT4HU3250BYL000XXX	65	250	TMA	175…250 A / via rotary switches	$$
XT5HU340ABYN000XXX	65	400	TMA	280…400 A / via rotary switches	$
XT5HU360BBYN000XXX	65	600	TMA	420…600 A / via rotary switches	$
XT7HU312EPYX940XXX[4]	65	1200	Ekip Touch LSI	480…1200 A / via touch screen	$$$

[1] 65 kA at 480 V AC has been selected to align with the most commonly ordered Spectra across the USA. If your specific needs require a higher or lower interrupt rating, please update the fourth digit from "H" to reflect the desired level, as explained in Table 4 on page 14
[2] For more details on trip unit features and adjustability, please refer to “SACE Tmax XT range trip unit capabilities” table on page 12 or SACE Tmax XT Technical Catalog
[3] RELT module and 24–48 V DC power supply already included. 110–240 V AC/DC power supply also available; please refer to empower configurator

Accessories

Common Spectra accessories

Provided here for reference only to support selection of proper SACE Tmax XT accessory (Spectra series is retiring).

	Group	Type	Voltage	SE	SF
	Lugs	1-piece kit	–	TCAL18 (12–3/0 AWG Cu/Al)	TCAL29 (8 AWG–350 kcmil Cu/Al)
	Auxiliary contacts	Bell alarm	120–240 V AC / 48–125 V DC	SABAP1	SABAP1
		1 AB element	120–240 V AC / 48–125 V DC	SAUXPAB1	SAUXPAB1
		2 AB elements	120–240 V AC / 48–125 V DC	SAUXPAB2	SAUXPAB2
	Shunt trip	Pre-cabled	120 V AC / 125 V DC	SAST1	SAST1
		Pre-cabled	240 V AC / 250 V DC	SAST2	SAST2
		Pre-cabled	24 V DC	SAST3	SAST3
	Undervoltage release	Pre-cabled	120 V AC / 125 V DC	SAUV1	SAUV1
		Pre-cabled	240 V AC / 250 V DC	SAUV2	SAUV2
		Pre-cabled	24 V DC	SAUV3	SAUV3
	Fixed padlock	Open/closed position	–	SEPLD	SEPLD
	Mounting hardware	Mounting hardware for Spectra™ bolt-on power panelboards	–	AMCB6EBFP	AMCB6FJFP
			–	–	AMCB3FJFP

Common SACE Tmax XT accessories

	Group	Type	Voltage	XT1	XT2
	Lugs	3-piece kits	-	KXT1CU-3PC (14–1/0 AWG Cu) KXT1CUAL1-3PC (10–2/0 AWG Cu/Al)	KXT2CUAL1-3PC (14–1/0 AWG Cu/Al) KXT2CUAL2-3PC (10–2/0 AWG Cu/Al)
	Auxiliary contacts	AUX-C 1 Q +1 SY[1]	250 V	KXTAAXCQSYFP	KXTAAXCQSYFP
		AUX-C 2 Q +1 SY[1]	250 V	KXTAAXC2QSYFP	KXTAAXC2QSYFP
		AUX-C 1 Q +1 SY[1]	24 V DC	KXTAAXCDQSYFP	KXTAAXCDQSYFP
		AUX-C 3 Q + 1 SY[1]	24 V DC	–	KXTDAXCD3QSYFP
		AUX 4Q[1]	24 V DC	–	–
		AUX 4Q[1]	400 V	–	–
		AUX 1 SY[1]	24 V DC	–	–
		AUX 1 SY[1]	250 V	–	–
	Shunt trip	Pre-cabled (except for XT7)	24 V DC	KXTASORCFPB	KXTASORCFPB
		Pre-cabled (except for XT7)	110 V	KXTASORCFPD	KXTASORCFPD
		Pre-cabled (except for XT7)	220 V	KXTASORCFPE	KXTASORCFPE
	Undervoltage release	Pre-cabled (except for XT7)	24 V DC	KXTAUVRCFP1	KXTAUVRCFP1
		Pre-cabled (except for XT7)	110 V	KXTAUVRCFP4	KXTAUVRCFP4
		Pre-cabled (except for XT7)	220 V	KXTAUVRCFP5	KXTAUVRCFP5
	Fixed padlock	Open position	–	KXTBPLLOP	KXTCPLLOP
		Open/closed position	–	KXTBPLLOPCL	KXTCPLLOPCL
	Retrofit kit[2]	Tmax® XT retrofit kit for Spectra™ bolt-on panelboards[3]	–	SRFB6XT1FPX	–
			–	–	–

[1] Q = indication of the status of the circuit-breaker power contacts
SY = bell alarm
[2] Maximum of two SACE Tmax XT4, XT5 or XT7 retrofit kits can be installed side by side in an existing Spectra power panelboard installation
[3] If Kirk provisions are required, replace the "X" (last digit) with "K" (example: SRFB6XT1FPX becomes SRFB6XT1FPK)
[4] XT7 breaker handle extension included in this kit

SG	SK
TCLK365 (2/0 AWG–500 kcmil Cu/Al) 3-piece kit	TCAL81 (3x 3/0 AWG–500 kcmil Cu/Al) TCAL125 (4x 250–500 kcmil Cu/Al)
SABAP1	SABAP1
SAUXPAB1	SAUXPAB1
SAUXPAB2	SAUXPAB2
SAST1	SAST1
SAST2	SAST2
SAST3	SAST3
SAUV1	SAUV1
SAUV2	SAUV2
SAUV3	SAUV3
SGPLD	SKPLD
AMCB6GBFP	AMCB3KMFP
AMCB3GMFP	–

XT3	XT4	XT5	XT6	XT7
KXT3CUAL1-3PC (14–1/0 AWG Cu/Al) KXT3CUAL2-3PC (4 AWG–300 kcmil Cu/Al)	KXT4CUAL1-3PC (14–1/0 AWG Cu/Al) KXT4CUAL2-3PC (4 AWG–300 kcmil Cu/Al) KXT4CUAL3-3PC (3/0 AWG–350 kcmil Cu/Al)	KXT5CUAL350K-3PC (6 AWG–350 kcmil Cu/Al) KXT5CUAL500K-3PC (250–500 kcmil Cu/Al) KXT5CUAL2X500K-3PC (2x 2/0 AWG–500 kcmil Cu/Al)	KXT6CUAL2X500K-3PC (2x 250–500 kcmil Cu/Al) KXT6CUAL3X400K-3PC (3x 2/0 AWG–400 kcmil Cu/Al)	KXT7CUAL4X500K-3PC (4x 4/0 AWG–500 kcmil Cu/Al) KXT7CUAL3X750KC-3 (3x 500–750 kcmil Cu/Al)
KXTAAXCQSYFP	KXTAAXCQSYFP	KXTAAXCQSYFP	KXTAAXCQSYFP	–
KXTAAXC2QSYFP	KXTAAXC2QSYFP	KXTAAXC2QSYFP	KXTAAXC2QSYFP	–
KXTAAXCDQSYFP	KXTAAXCDQSYFP	KXTAAXCDQSYFP	KXTAAXCDQSYFP	–
–	KXTDAXCD3QSYFP	KXTDAXCD3QSYFP	KXTDAXCD3QSYFP	–
–	–	–	–	ZE1AUX4D
–	–	–	–	ZE1AUX4
–	–	–	–	ZE1BAD
–	–	–	–	ZE1BA
KXTASORCFPB	KXTASORCFPB	KXTASORCFPB	KXTASORCFPB	ZEASA
KXTASORCFPD	KXTASORCFPD	KXTFYOCFPD	KXTFYOCFPD	ZEASE
KXTASORCFPE	KXTASORCFPE			ZEASG
KXTAUVRCFP1	KXTAUVRCFP1	KXTFYUC1	KXTFYUC1	ZEAUA
KXTAUVRCFP4	KXTAUVRCFP4	KXTFYUC4	KXTFYUC4	ZEAUE
KXTAUVRCFP5	KXTAUVRCFP5	KXTFYUC5	KXTFYUC5	ZEAUG
KXTBPLLOP	KXTCPLLOP	KXT5PLLOP	KXT6PLLOP	KXT7PLLOP
KXTBPLLOPCL	KXTCPLLOPCL	KXT5PLLOPLC	KXT6PLLOPLC	–
–	SRFB6XT4FPX	SRFB6XT5BFPX	–	SRFB3XT7MFPX0[4]
–	SRFB3XT4FPX	SRFB3XT5MFPX	–	–

SACE® Tmax® XT MCCBs main characteristics

SACE Tmax XT range performance

		XT1	XT2	XT3	XT4	XT5	XT6	XT7
Frame size (A)		125	125	225	250	600	800	1200
Poles		3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4
Interrupt rating (kA)	240 V AC	50, 65, 100	65, 100, 150, 200	50, 65	65, 100, 150, 200	65, 100, 150, 200	65, 100, 200	65, 100, 200
	480 V AC	25, 35, 65	25, 35, 65, 100, 150 200	25, 35	25, 35, 65, 100, 150, 200	35, 50, 65, 100, 150, 200	35, 50, 65	50, 65, 100
	600 V AC	–	18, 22, 25, 35, 42	–	18, 22, 25, 50, 65, 100	18, 25, 35, 65, 100	20, 25, 35	25, 50, 65
Dimensions (in.) (W x D x H)	3-poles breaker	3 x 2.75 x 5.12	3.54 x 3.25 x 5.12	4.13 x 2.75 x 5.90	4.13 x 3.25 x 6.3	5.51 x 4.07 x 8.07	8.27 x 4.07 x 10.55	8.27 x 6.57 x 10.55
	Packaging	5.04 x 5.63 x 5.31	5.12 x 5.71 x 8.19	6.10 x 7.48 x 7.48	5.71 x 6.61 x 8.27	9.76 x 11.22 x 9.45	12.01 x 14.57 x 11.22	11.02 x 14.17 x 13.78
Trip units	TMF	✓	✓	✓	✓	–	–	–
	TMA	–	✓	–	✓	✓	✓	–
	Ekip DIP	–	✓	–	✓	✓	✓	✓
	Ekip Touch	–	✓	–	✓	✓	–	✓

SACE Tmax XT range trip units capabilities

	Thermomagnetic trip units		Electronic trip units	
				
Features	**TMF**	**TMA**	**Ekip DIP (LS/I, LIG, LSI and LSIG)**	**Ekip Touch, Touch measuring and Hi-Touch (LSI and LSIG)**
Overload (L) and Instantaneous (I) protection	✓	✓	✓	✓
Ground fault protection (G)	–	–	X (with LSIG)	X (with LSIG)
Selective short circuit protection (S)	–	–	X (with LS/I [1], LSI or LSIG)	✓
L protection adjustability (I1)	Fixed	0.7–1 x In*	0.4…1.0 x In	0.4…1.0 x In
			Steps of 0.04 (LS/I) or 0.02 (LSI/LSIG)	Steps of 0.001 x In
S protection adjustability (I2) [2]	–	–	Off, 1…10 x In	Off, 0.6…10 x In
			Steps of 0.5 x In [3]	Steps of 0.1 x In
I protection adjustability (I3) [2]	Fixed	5–10 x In	1…10 x In	1.5…10 x In (15 x In for XT7)
			Steps of 0.5 x In [3]	Steps of 0.1 x In
G protection adjustability (I4) [2]	–	–	Off, 0.2, 0.25, 0.45, 0.55, 0.75, 0.80 and 1 x In)	Off, 0.1…1 x In
				0.001 x In
Communication	–	–	O	O
Cloud connectivity	–	–	–	O
Bluetooth [4] connectivity	–	–	–	✓
Current measurements	–	–	–	✓
Voltage, power and energy measurements	–	–	–	X (with Ekip Touch measuring)
Voltage, power and energy measurements and protections	–	–	–	X (with Ekip Hi-Touch)
Embedded functions	–	–	–	O
RELT (reduced energy let-through feature)	–	–	–	O
Event recorder, contact wear information and self-diagnosis	–	–	–	✓

Legend

– Not a possible feature
✓ Included
O Optional
* In = Trip unit sensor
[1] Either S or I must be selected during comissioning
[2] Valid for Tmax XT1-6. For Tmax XT7, please refer to Tech Catalog
[3] 4, 5, 6 and 9.5 x In not available
[4] Bluetooth is a trademark of Bluetooth SIG, Inc.

Spectra™ MCCBs main characteristics
For reference (Spectra is retiring)

Spectra range performance

		SE frame	SF frame	SG frame	SK frame
Frame size (A)		150	250	600	1200
Poles		2, 3	2, 3	2, 3	2, 3
Interrupt ratings (kA)	240 V AC	18, 65, 100, 200	65, 100, 200	65, 100, 200	65, 100, 200
	480 V AC	18, 25, 65, 100	35, 65, 100	35, 65, 100	50, 65, 100
	600 V AC	14, 18, 25	22, 25, 25	25, 65	25, 42, 65
Dimensions (in.) (W x D x H)	3-pole breaker	4.12 x 3.38 x 6.31	4.12 x 3.81 x 10.12	5.5 x 3.81 x 10.09	8.25 x 5.5 x 15.5
	Packaging Spectra™ RMS	6.63 x 6.19 x 7.13	7.06 x 7.38 x 10.63	9.5 x 8.13 x 11.13	11.19 x 9 x 17
	Packaging Spectra™ MET	–	–	9.5 x 8.13 x 15.31	11.19 x 9 x 23.88
Trip units	RMS	✓	✓	✓	✓
	microEntelliGuard®	–	–	✓	✓

Spectra trip unit capabilities

Features	RMS	microEntelliguard®
Overload (L) and Instantaneous (I) protection	✓	✓
Ground fault protection (G)	–	O
Selective short circuit protection (S)	✓	✓
L protection adjustability (C)	As per available rating plugs (RP)	0.5…1.0 x RP
		Steps of 0.05 x RP
S protection adjustability	Tracking short-time proportional to I, starting at around 60% x I	Off, 1.5…9.0 x C
		Steps of 0.5 x C
I protection adjustability	SE: 2.9, 3.7, 4.7, 5.9, 7.7, 9.9 or 12.5 x RP [1]	SG: 2.0…10.0 x breaker sensor
	SF: 3.0, 3.8, 4.8, 6.0, 7.8 or 10 x RP [1]	SK: 2.0…17.0 x breaker sensor
	SG: 3.0, 3.8, 4.8, 6.0, 7.8 or 10.1 x RP [1]	Steps of 0.5 x breaker sensor
	SK: 3.1, 3.8, 4.8, 6.1, 8.0 or 10.1 x RP [1]	
G protection adjustability	–	0.4…1.0 x breaker sensor
		Steps of 0.01 x breaker sensor
Communication	–	O (Modbus RTU only)
Cloud connectivity	–	–
Bluetooth [3] connectivity	–	–
Current measurements	–	✓
Voltage, power and energy measurements	–	O [2]
Voltage, power and energy measurements and protections	–	–
Embedded functions	–	–
RELT (reduced energy let-through feature)	–	O
Event recorder, contact wear information and self-diagnosis	–	–

Legend
– Not a possible feature
✓ Included
O Optional
[1] Values may vary depending on rating plug and frame rating
[2] Proper operation of the advanced metering function requires multiple system accessories including power supplies, voltage conditioners, junction boxes and interconnect cables
[3] Bluetooth is a trademark of Bluetooth SIG, Inc.

SACE® Tmax® XT molded case circuit breakers
Product ordering number structure

Accessories digits. For accessorized Tmax XT, please use our empower configurator

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
X	T									**							

1 & 2 Version

Digit
XT

3 Frame

Digit
1 2 3 4 5 6 7

4 Interrupting ratings – 480 V AC*

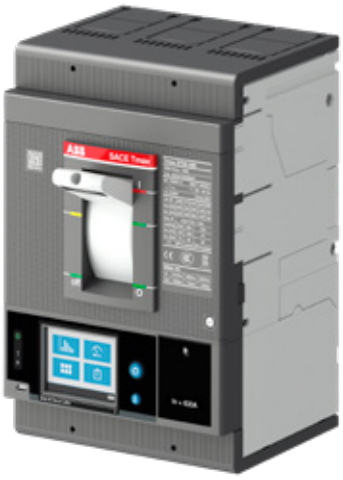
Digits	XT1	XT2	XT3	XT4	XT5	XT6	XT7
N	25	25	25	25	35	35	–
S	35	35	35	35	50	50	50
H	65	65	–	65	65	65	65
L	–	100	–	100	100	–	100
V	–	150	–	150	150	–	–
X	–	200	–	200	200	–	–

5 Standard UL and IEC

Digit	
U	UL 80%
Q	UL 100%
C	UL 80% + CCC
D	UL 100% + CCC
E	IEC only
S	IEC 50 °C

6 Number of poles

Digit	
2	2 Poles
3	3 Poles
4	4 Poles 100%
N	4 Poles 50% (IEC only)



7, 8, 9 Frame amps

XT1–4		XT5–7	
Digits	Amps	Digits	Amps
0 1 0	10	2 5 A	250 (XT5)
0 1 5	15	3 0 A	300 (XT5)
0 2 0	20	3 2 A	320 (XT5 IEC[1])
0 2 5	25	4 0 A	400 (XT5)
0 3 0	30	5 0 B	500 (XT5)
0 3 5	35	6 0 B	600 (XT5)
0 4 0	40	6 0 0	600 (XT6)
0 4 5	45	6 0 C	600 (XT7)
0 5 0	50	6 3 B	630 (XT5 IEC[1])
0 6 0	60	6 3 0	630 (XT6 IEC[1])
0 7 0	70	8 0 0	800 (XT6)
0 8 0	80	8 0 C	800 (XT7)
0 9 0	90	1 K 0	1000 (XT6 IEC[1])
1 0 0	100	1 0 D	1000 (XT7)
1 1 0	110	1 2 E	1200/1250 (XT7)
1 2 5	125	1 6 F	1600 (XT7 IEC[1])
1 5 0	150		
1 7 5	175		
2 0 0	200		
2 2 5	225		
2 5 0	250		

10 Trip unit

Digit	
A	TMF/TMD
B	TMA
C	Ekip DIP LIG
D	MCS
E	Ekip DIP LS/I
F	Ekip DIP LSI
G	Ekip DIP LSIG
J	Ekip DIP I
K	Ekip DIP M-I
L	Ekip DIP M-LIU
M	MA (MCP)
N	TMG
P	Ekip Touch LSI
Q	Ekip Touch LSIG
R	Ekip Touch Measuring LSI
S	Ekip Touch Measuring LSIG
T	Ekip Hi-Touch LSI
U	Ekip Hi-Touch LSIG
W	Ekip M Touch LRIU
X	Ekip G DIP LS/I
Y	Ekip G Touch LSIG
Z	Ekip G Hi-Touch LSIG

** Must be "Y" for ReliaGear neXT breakers, used in ReliaGear neXT power panelboards and ReliaGear SB switchboards.
* For 240 V AC and 600 V AC ratings, refer to Tmax XT UL Technical Catalog.
[1] IEC only.
This ordering code structure is meant for field identification of a SACE Tmax XT. For a breaker selection, please refer to Buylog, Technical Catalog or empower configurator.

Spectra™ RMS and RMS with microEntelliGuard® molded case circuit breakers

Product ordering number structure (retiring)

Interruption rating — 480 V AC

Digit		Digit	
D	18 kA (65 kA[2])	L	65 kA
H	25[3]/35 kA	R	100 kA

Poles

Digit	
2	2 poles
3	3 poles

Trip unit

Digit	
A	RMS[1]

Sensor (max. amps)

Digit		
0030	0150	0600
0060	0250	0800
0100	0400	1200

S F H A 2 4 A T 0 2 5 0

Family

Digit	
S	Spectra™

Frame rating

Digit	
E	150 A
F	250 A
G	600 A
K	1200 A

Continuous load rating

Digit	
A	Standard
H	100%
L	100%
R	100%

Voltage rating

Digit	
2	240 V
4	480 V
6	600 V

Trip function

Digit	
T	LSI[1]

[1]Adjustable instantaneous with tracking short time (long time established via interchangeable rating plugs)
[2] SGD rated 65 kA for 240 V (SG frame)
[3] 25 kA for SE frame

Family

Digit	
S	Spectra™

Interruption rating

Digit	
H	35/50[1] kA
L	65 kA
P	100 kA
T	65 kA extended instantaneous (selective)[5]
S	100 kA extended instantaneous (selective)

Max. amps

Digit	
01	150 A
04	400 A
06	600 A
08	800 A
10	1000 A[2]
12	1200 A

Advanced protection functions

Digit		Digit	
X	None	M	ZSI (ST+GF) + neutral protection
K	Neutral protection	N	ZSI (ST+GF) + RELT + neutral protection
Z	ZSI (ST/GF)	V	RELT + neutral protection
T	ZSI (ST/GF/INST)	P	ZSI (ST/GF/INST) + RELT
R	RELT	S	ZSI (ST/GF/INST) + neutral protection
L	ZSI (ST+GF) + RELT	W	ZSI (ST/GF/INST) + RELT + neutral protection

S G H C 3 6 0 1 L 3 X X

Frame

Digit	
G	600 A
K	1200 A

Continuous load rating

Digit	
C	Standard
H	100%
L	100%
P	100%
S	100%
T	100%

Poles

Digit	
3	3 poles

Voltage rating

Digit	
6	600 V
4	480 V[5]

Trip function

Digit	
L3	LSI[3]
L4	LSIG
L5	LSIA
L7	LSI-CP[4]

Advanced features and metering

Digit	
X	Metering (basic)
2	Metering (basic) + Modbus
6	Metering (adv.) + Modbus
8	Metering (adv.) + Modbus

[1]50 kA for SK frames
[2]Max amps option 10 only available on 100% rated breakers
[3]Without a control power connection, unless required by advanced protection functions or advanced features and communication
[4]With a control power connection. The only valid trailing product digits for L7 are XX.
[5]SC, SS, TC and TT catalog codes are optimized for selectivity (extended instantaneous) and will carry a 480 V AC max voltage rating

ABB Inc.
305 Gregson Drive
Cary, NC 27511

electrification.us.abb.com

Customer Service:
888-862-3290
abbinsidesalessupport@us.abb.com
Monday–Friday, 7am–5:30pm, Central Time

Technical Support:
888-437-3765
Monday–Friday, 7am–5pm, Central Time

1SXU210262B0201 3.2021