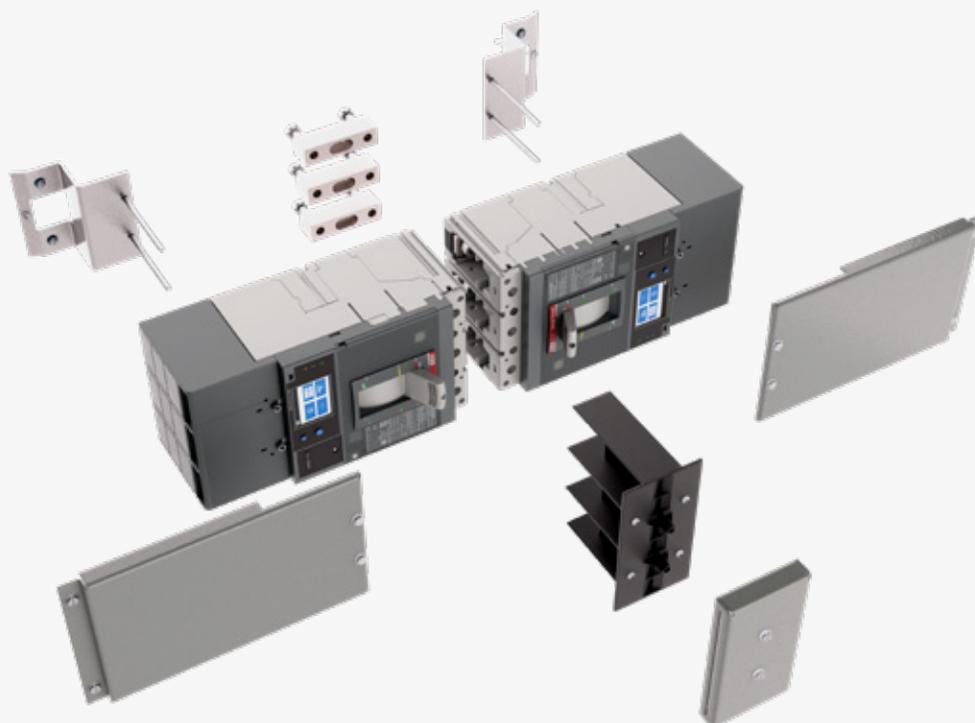


POWER PANELBOARDS AND SWITCHBOARDS

# **Tmax<sup>®</sup> XT retrofit kits for Spectra<sup>™</sup> plug-in panelboards and switchboards**

Extending the life of your installation



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# Your trusted partner



## KEEP RUNNING

Your operation is critical. Your goal is to extend the life of your installation. These Tmax<sup>®</sup> XT retrofit kits keep your Spectra<sup>™</sup> panelboards and switchboards operational and help to minimize costs due to down time.



## UPDATE YOUR INSTALLATION

Update your Spectra<sup>™</sup> panelboards and switchboards with the latest in circuit breaker technology. These retrofit kits enable the installation of the Tmax<sup>®</sup> XT family of molded case circuit breakers. You benefit by gaining the latest capability in circuit protection, communications and predictive maintenance technologies.



## GET WHAT YOU NEED WHEN YOU NEED IT

You run lean. You need replacement parts today. Our wide network of distributors gives you access to the products you need, when you need them.



## SUSTAINABILITY

Extend the lifespan of your electrical system, keeping it live and efficient for as long as possible. Minimize CO<sub>2</sub> emissions and natural resource usage.



## REDUCED PROJECT AND LABOR COSTS

Retains existing switchboard or panelboard structure, conduits, cabling and footprint. Maintains UL listings without additional charges.

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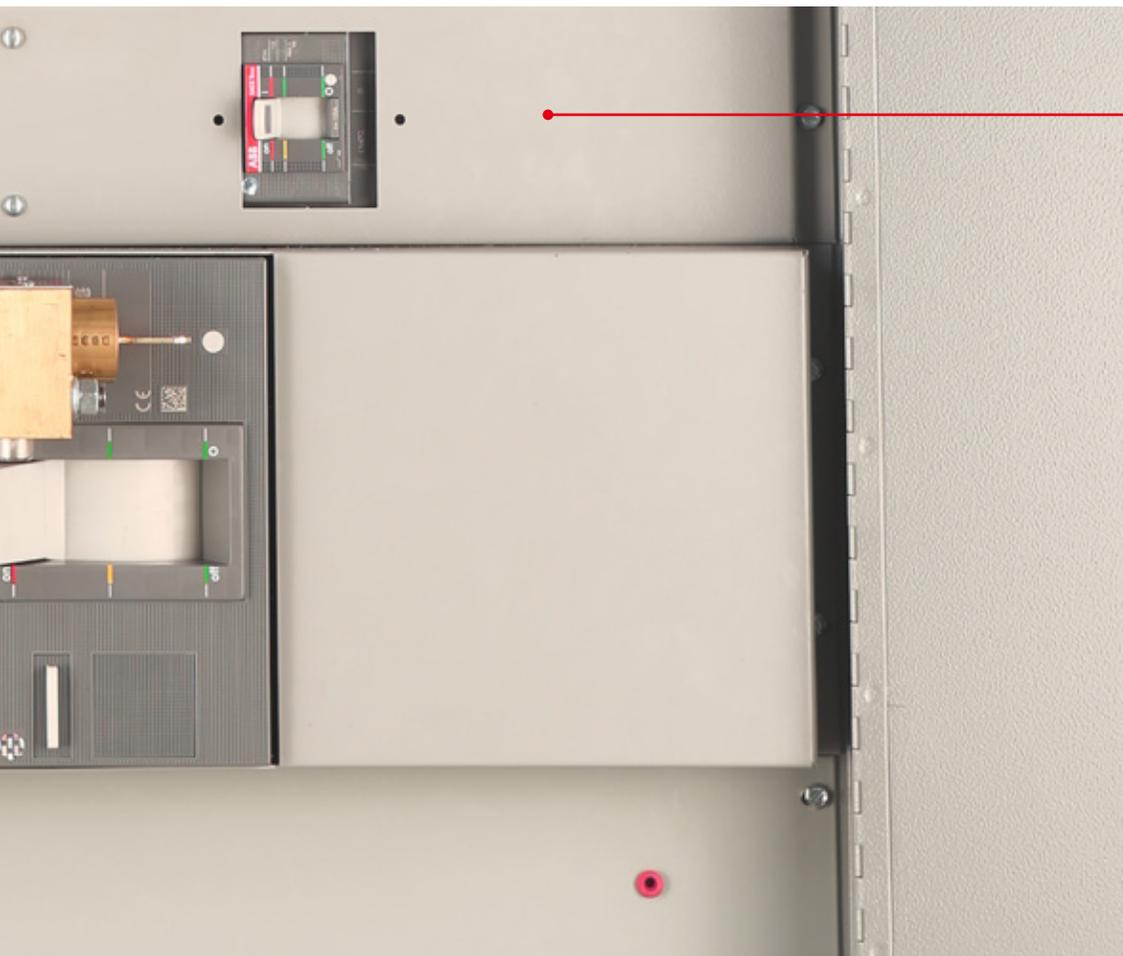
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# Tmax® XT retrofit kits for Spectra™ plug-in panelboards and switchboards

Single-mount kits available for 250 A, 600 A and 1200 A frames





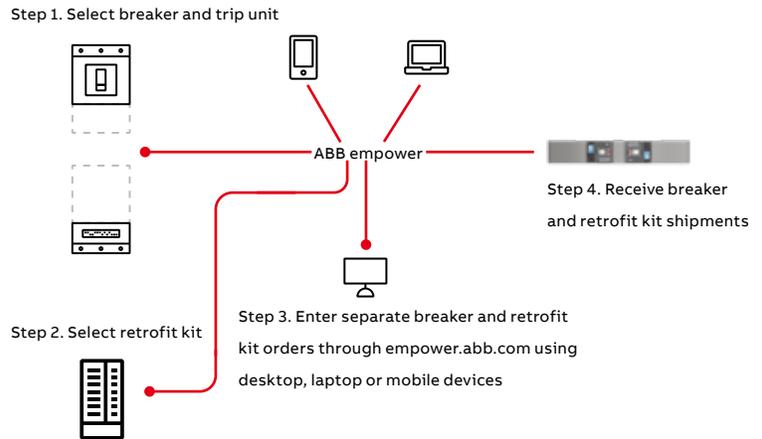
**Dual-mount kits available  
for 125 A, 150 A, 250 A and  
600 A frames**

# Choosing the right retrofit has never been so easy

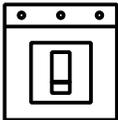
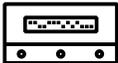
You consider what you need.  
We will show you what's possible.

The world of electrical distribution is a complex one, yet choosing the right device for your individual needs has never been simpler, thanks to this Tmax® XT retrofit<sup>01</sup> offering for Spectra™ panelboards and switchboards. Maybe you are looking for a basic protection device for a standard distribution system.

Or perhaps you need something more complex, such as locking mechanisms or devices that integrate protection, automation, measuring and communication into a cloud-based supervision system. Follow the flowchart when placing an order. All mounting kits, filler plates and hardware required are included under a single part number. Spectra plug-in modules, if required, and Tmax® XT circuit breakers are ordered separately.



## Possible combinations within the range

<b>Legacy Spectra™ breaker</b>	 Spectra™ E Frame	 Spectra™ F Frame	 Spectra™ G Frame	 Spectra™ K Frame
<b>Tmax® XT breaker</b>	 Tmax® XT1/ Tmax® XT4	 Tmax® XT4	 Tmax® XT5	 Tmax® XT7
 Industrial applications		•	•	•
 Commercial and industrial applications	•	•	•	•
Thermal-magnetic trip units	•	•	•	
Electronic trip units		•	•	•

<sup>01</sup> Maximum of two Tmax® XT4, XT5 or XT7 retrofit kits can be installed, side by side, in an existing Spectra™ panelboard installation.

# Tmax® XT ordering requirements

Instructions for ensuring compatibility with your retrofit kit.

**Tmax® XT example catalog code:**

**XT5SU325APFN000XXX**

Example:	<b>XT5S</b>	<b>U</b> UL rating	<b>3</b> Poles	<b>25AP</b> Ratings	<b>F</b> Terminals	<b>N</b> Load-side terminals	<b>000XXX</b>
		UL 80% rating required (coded "U"). Consult with ABB if replacing UL 100% rated legacy breaker	3-pole breaker required	These options must match legacy breaker ratings	Must select front terminals, no lugs (coded "F")	D = (XT1) FC CuAl 1x10–2/0 AWG G = (XT4 with SE legacy breaker) FC CuAl 1x14–1/0 AWG 8 = (XT4 with SF legacy breaker) FC CuAl 1x350 kcmil internal N = (XT5) FC CuAl 2x2/0 AWG–500 kcmil W = (XT7) FC CuAl 4x4/0 AWG–500 kcmil	

**Additional ordering notes:**

- Padlocks: Fixed padlock devices can be selected. Removable padlock for XT1 cannot be selected.
- Do not select Kirk lock options on breaker – Kirk lock provisions should be selected with the retrofit kit.
- Signaling and communication options
  - XT1: Not available.
  - XT4 and XT5: Require a 1X minimum space on the right side of the breaker to allow clearance for signaling and communication wire routing. For 6p installations this means a 1X space on both sides of the breakers is required. For basic electrical functions (i.e., shunt trip, undervoltage, aux contacts), no panel blank is necessary.
  - XT7: All signaling and communication options are available without the need for panel blanks.
- 3-phase 4-wire external ground fault not available on XT5 (available on 3-phase 3-wire only).

**Neutral CT kits — type SRFN**

Example:	<b>SRFN</b>	<b>400</b> Ampere rating	<b>GF</b> Modification code
		400 = 400A Tmax® XT XT5 600 = 600A Tmax® XT XT5 800 = 800A Tmax® XT XT7 100 = 1000A Tmax® XT XT7 120 = 1200A Tmax® XT XT7	GF = Tmax® XT Spectra™ panel neutral CT kit

# Retrofit kit ordering requirements

## Plug-in retrofit kits — type SRFP

Example:	SRFP	6 Poles	XT4 Tmax XT frame	FPX Accessory code	2 Panel width	E Other
		3 6	XT1 = Tmax® XT XT1 XT4 = Tmax® XT XT4 XT5 = Tmax® XT XT5 XT7 = Tmax® XT XT7	FPX = With filler plate kit (full width plates with cutouts for handles, etc.) FPK = With filler plate kit and Kirk lock provision	2 = 27/31" Spectra™ panel 3 = 36/40" Spectra™ panel 4 = 44" Spectra™ panel	E = Include only on Spectra E to XT4 kits [blank] = all other kits

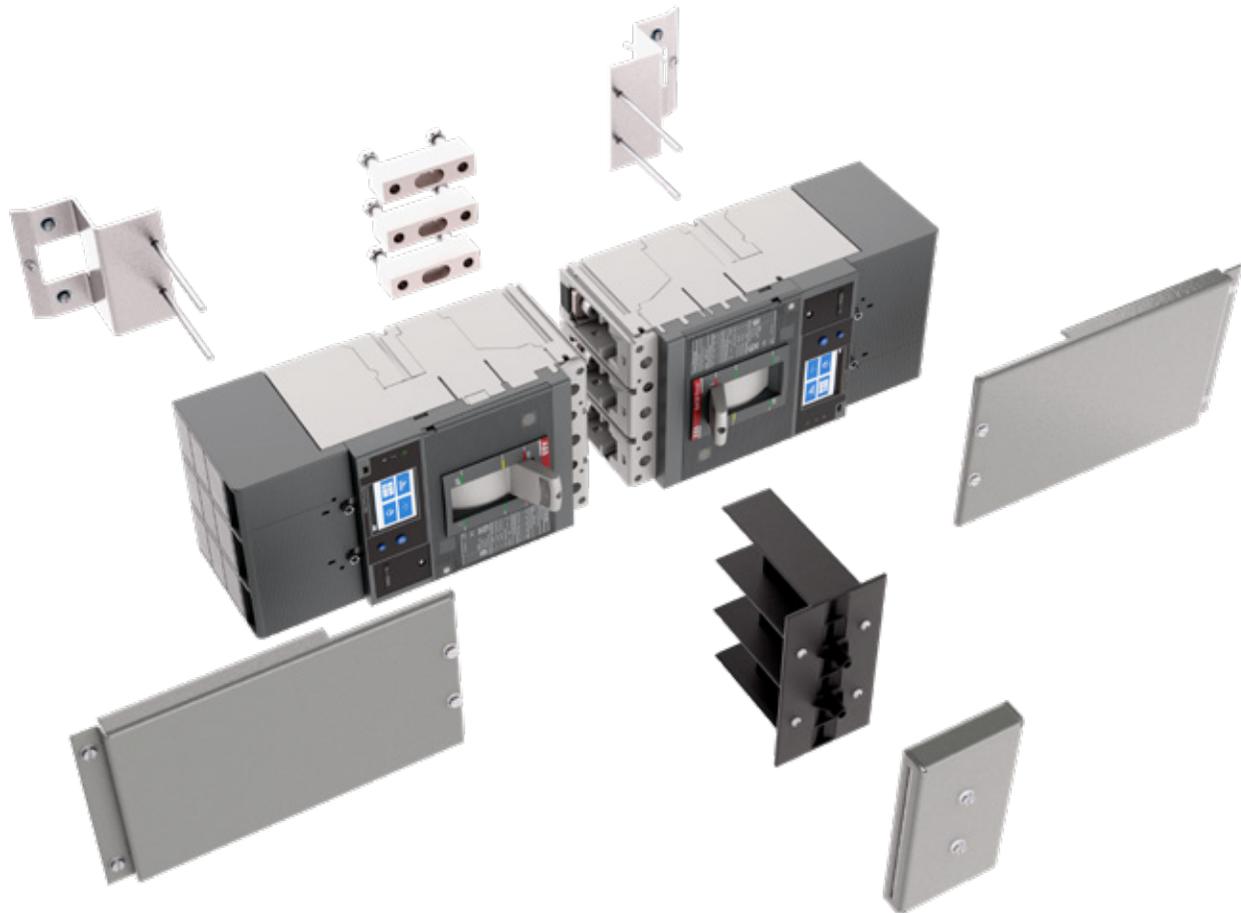
	125 A dual mounted			150 A dual mounted			250 A dual mounted		
	Catalog number	Box width (in)	X Height	Catalog number	Box width (in)	X Height	Catalog number	Box width (in)	X Height
Legacy Spectra™ plug-in module <sup>01</sup>	AMC6EB			AMC6EB			AMC6FJ		
Tmax® XT kit	SRFP6XT1FPX2	27/31		SRFP6XT4FPX2E	27/31		SRFP6XT4FPX2	27/31	
	SRFP6XT1FPX3	36/40	3X	SRFP6XT4FPX3E	36/40	3X	SRFP6XT4FPX3	36/40	3X
	SRFP6XT1FPX4	44		SRFP6XT4FPX4E	44		SRFP6XT4FPX4	44	
Tmax® XT kit with Kirk lock provisions	SRFP6XT1FPK2	27/31		SRFP6XT4FPK2E	27/31		SRFP6XT4FPK2	27/31	
	SRFP6XT1FPK3	36/40	4X	SRFP6XT4FPK3E	36/40	4X	SRFP6XT4FPK3	36/40	4X
	SRFP6XT1FPK4	44		SRFP6XT4FPK4E	44		SRFP6XT4FPK4	44	

	250 A single mounted			600 A dual mounted			600 A single mounted		
	Catalog number	Box width (in)	X Height	Catalog number	Box width (in)	X Height	Catalog number	Box width (in)	X Height
Legacy Spectra™ plug-in module <sup>01</sup>	AMC3FJ			AMC6GB			AMC3GM		
Tmax® XT kit	SRFP3XT4FPX2	27/31		SRFP6XT5FPX3	40		SRFP3XT5FPX2	27/31	
	SRFP3XT4FPX3	36/40	3X	SRFP6XT5FPX4	44	4X	SRFP3XT5FPX3	36/40	4X
	SRFP3XT4FPX4	44					SRFP3XT5FPX4	44	
Tmax® XT kit with Kirk lock provisions	SRFP3XT4FPK2	27/31		SRFP6XT5FPK3	40		SRFP3XT5FPK2	27/31	
	SRFP3XT4FPK3	36/40	4X	SRFP6XT5FPK4	44	5X	SRFP3XT5FPK3	36/40	5X
	SRFP3XT4FPK4	44					SRFP3XT5FPK4	44	

	1200 A single mounted		
	Catalog number	Box width (in)	X Height
Legacy Spectra™ plug-in module <sup>01</sup>	AMC3KM		
Tmax® XT kit	SRFP3XT7FPX3	40	6X
	SRFP3XT7FPX4	44	
Tmax® XT kit with Kirk lock provisions	SRFP3XT7FPK3	40	6X
	SRFP3XT7FPK4	44	



<sup>01</sup> Not included in retrofit kit. Order separately only if being added to an existing application.



# The Tmax® XT range at a glance

The world of breaking capability in your hands. According to UL 489 and CSA C22.2 standards.

SACE® Tmax® XT takes circuit breaking to the next level. Designed to perform at extremely high levels, simple to install and able to provide a higher level of safety, there's a frame to meet each of your requirements. From a basic solution for commercial and light industrial applications to advanced, heavy-duty applications with cloud connectivity, SACE Tmax XT has you covered — securely, professionally and reliably.



**SACE® Tmax® XT1**  
"The Founder"

Small, reliable, versatile. Your dependable partner for all standard applications.

**At a glance:**

- 125 A frame available up to 480 V Delta UL
- Thermal-magnetic, MCS and MCP trip units
- Max. interrupt rating of 65 kA at 480 V
- Offers savings versus 600 V-rated systems in most distribution applications



**SACE® Tmax® XT4**  
"The Entrepreneur"

Capable of supporting both simple and extremely complex operations.

**At a glance:**

- 250 A frame available up to 600 V UL
- Thermal-magnetic, MCS, MCP, basic and advanced electronic trip units
- Max. interrupt rating of 200 kA at 480 V, 100 kA at 600 V
- Advanced electronic trip units offer embedded Bluetooth® communication for interaction without direct contact



### SACE® Tmax® XT5

"The Gamechanger"

Compact, powerful and flexible. Shows the world what a circuit breaker of the future can do.

#### At a glance:

- 600 A frame available up to 600 V UL
- Thermal-magnetic, MCS, MCP, basic and advanced electronic trip units
- Max. interrupt rating of 200 kA at 480 V, 100 kA at 600 V
- Advanced electronic trip units are future-ready with the ability to download additional measurements and logic in the field from the ABB Marketplace™



### SACE® Tmax® XT7

"The Superhero"

The ultimate choice. Deals with heavy-duty demands effortlessly.

#### At a glance:

- 1200 A frame available up to 600 V UL
- MCS, MCP, basic and advanced electronic trip units
- Max. interrupt rating of 100 kA at 480 V, 65 kA at 600 V
- A powerful package capable of monitoring and controlling distribution

# Electronic trip units

## Ekip Dip and Ekip Touch

### The network under control

When it comes to accurate protection of the network, you cannot go wrong with Ekip Dip and Touch technology.

#### Trip unit range

The protection units available for the SACE® Tmax® XT range is organized in three layers, characterized by increasing performance, interfaces, information sets and integration functions.

Each layer includes several trip unit versions, designed to match specific application needs such as distribution or generator protection.

	Applications			Advanced functionalities			
	Distribution		Generator	Selectivity	Metering	Communication	ABB Ability Marketplace™
	DC	AC					
Touch		•	•	•	•	•	•
Dip		•	•	•			
TM	•	•	•				

#### Thermal-magnetic trip units

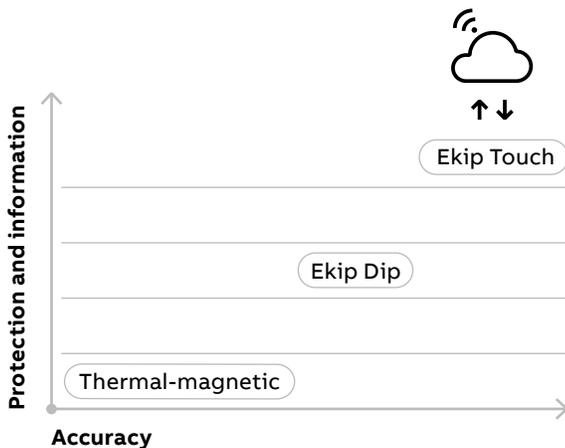
Thermal-magnetic trip units are intended for the protection of AC and DC networks. They are a solution for basic protection such as overloads and short circuits.

#### Ekip Dip trip units

Ekip Dip trip units represent the first level of electronic trip unit and are used to protect AC networks. Compared to thermal-magnetic trip units, they can provide increased accuracy, a wider regulation range, delayed short circuit protection, individual trip information and test capability.

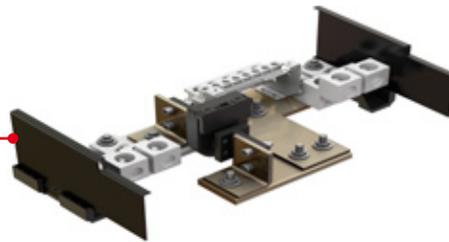
#### Ekip Touch trip units

Ekip Touch trip units offer state-of-the-art technology for AC network protection. These trip units integrate a great number of protection and automation functionalities, performed with best-in-class accuracy. Measurement and supervision data can be transmitted both on the local communication network (the most popular communication protocols are available) or directly over the Internet. Configuration of the trip unit is extremely user-friendly, mainly on the sizes where a color touchscreen display is available. Furthermore, as operational requirements evolve, for the first time ever, customers can download new functions from the ABB Marketplace, choosing among more than 50 different protection, metering and automation functionalities.

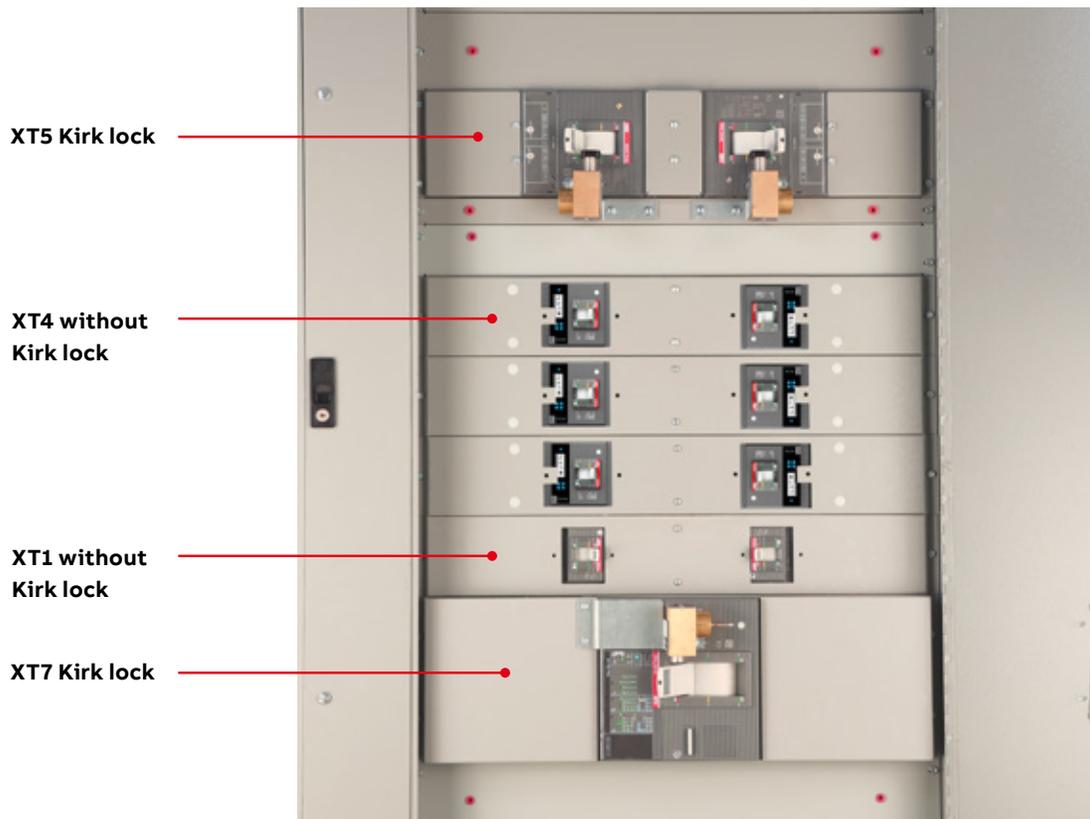


## Accessories for retrofit kits

The items you might need for your installation



Neutral current transformers for XT5 and XT7









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**ABB Inc.**

1555 Scott Street  
Senatobia MS 38668  
USA

**[electrification.us.abb.com](http://electrification.us.abb.com)**

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