
TECHNICAL BROCHURE

ReliaGear® SafeT™ Panelboard

LV power distribution panelboards for
UL67 and CSA C22.2 No. 29 standards



ABB's strong heritage of innovation, technology excellence, and commitment to safety inspired the development of the new ReliaGear SafeT Panelboard. Built around an industry exclusive finger-safe IP20 bus stack with plug-on branch devices, the SafeT Panelboard is the new benchmark for safety and ease of use. And with ABB's Tmax molded case circuit breakers, the SafeT Panelboard provides complete protection and versatility for any application.

ReliaGear SafeT Panelboard

LV power distribution panelboards for UL67 and CSA C22.2 No. 29 standards

ReliaGear SafeT Panelboard was designed to fulfill the basic specifications for a typical power distribution panelboard with mains up to 1200A, 600V, and 200k AIC. It also offers versatility in main breaker, main lug, universal, and single sided narrow configurations. However, where SafeT Panelboard sets itself apart is in innovations for safety and ease of use that are long overdue in the low voltage electrical distribution industry. Meet the new panel that can finally provide increased safety and efficiency:



Basic specifications

- Bus ratings from 400A to 1200A
- Breakers available from 15A to 1200A
- 600V AC max, 3P3W/4W
- Short circuit ratings up to 200k AIC at 480V¹
- Main circuit breaker (MCB), main lug only (MLO), and universal (back fed MCB or MLO) configurations
- UL, CSA

¹ See technical data for more information.

Popular features and innovations

- New and exclusive features like finger-safe IP20 SafeT Bus Stack pave the way for increased workplace safety
- Easy-to-understand “speaking” catalog code scheme
- Versatility with enclosures in only 3 widths and 3 heights for any application
- Innovative labor saving enclosure eases installation and maintenance with features like hinged dead front
- Field reversible interiors make job site corrections easy
- Tmax XT breakers occupy up to 30% less mounting space than the competition—reducing panel enclosure size and saving wall space
- Flexible device mounting with minimum location restrictions for 100% rated breakers

Product overview

Smarter, smaller, safer, more reliable

ABB provides low voltage power distribution technology built to improve your business, whether you are a contractor, supplier, or end user. How? SafeT Panelboard and Tmax MCCBs deliver solutions that are smarter, smaller, safer, and more reliable.

Smarter

1 Split-access dead front.

In addition to being hinged, the dead front is split to allow separate access to incoming and distribution sections.

2 ABB SACE Tmax and Tmax XT breaker technology.

Only 7 frames, and trip units from basic to advanced with more imbedded features.

3 Plug-on style branch devices.

Install any branch device using no more than two screwdrivers.

Field reversible interior.

Interior can be flipped 180 degrees on site with no extra parts.

Smaller

Breakers occupy up to 30% less¹ mounting space.

Fit more devices into a smaller panel.

Safer

4 Exclusive SafeT Bus Stack with IP20 shroud.

A finger-safe IP20 shroud encloses the main bus, preventing accidental contact with the main bus or connections.

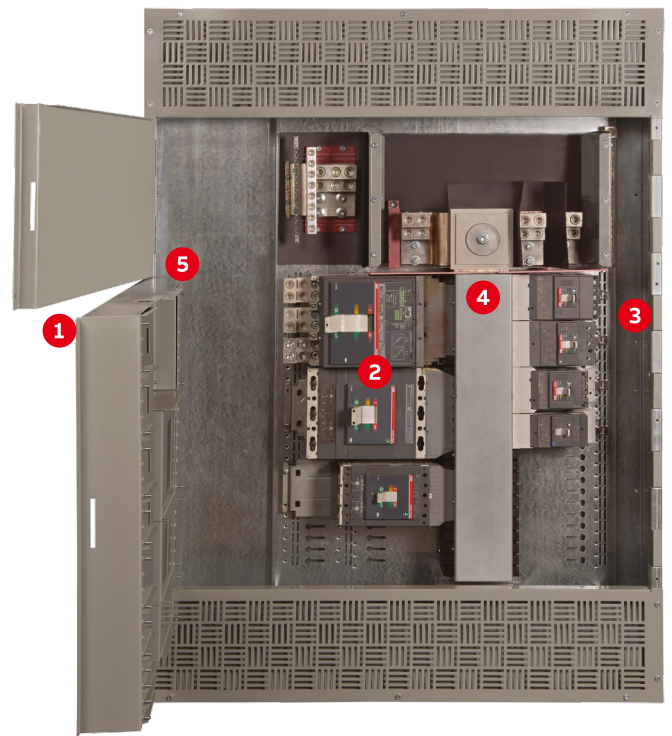
5 Standard hinged dead front.

Requires only one installer, and eliminates the danger and pains of lifting and aligning the dead front.

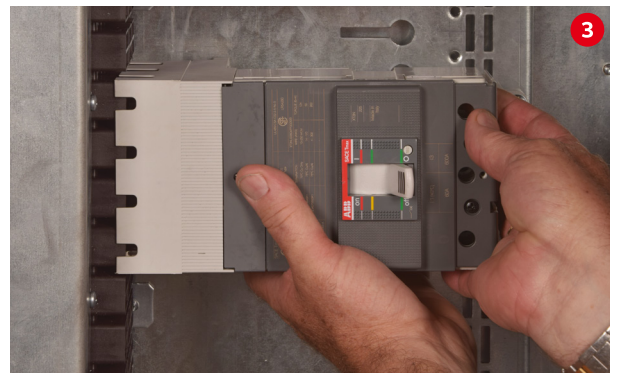
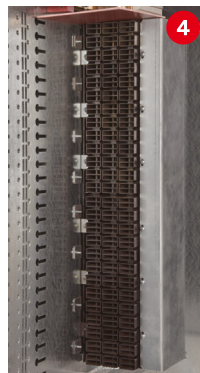
More reliable

6 ABB breakers are built to last.

Up to 6x more mechanical life [no. operations] per breaker compared to competition.



Schneider H-Frame	4000	6
Eaton F-Frame	6000	
ABB Tmax XT1	25000	
Mechanical Life (No. Operations)		



¹ Best case of 30% space savings is a comparison of ABB XT1 (125A) to Schneider FA and H frames.

Product overview

Top-of-the-line ABB SACE Tmax breakers and accessories

Tmax XT

- Modern lineup of molded case circuit breakers up to 250A, 600V, and 200k AIC maximum short circuit rating
- Value-based frames at 125A (XT1) and 225A (XT3) with ultra-compact design up to 30% narrower than competitors
- Full range of electronic trip units provide advanced protections and functionality, or standard thermal fixed or adjustable trip units
- Performance based frames at 125A (XT2) and 250A (XT4) provide higher ratings and more advanced trip units
- Embedded features like metering, communications, shunt trip, and aux contacts means no add-ons or wiring

Tmax

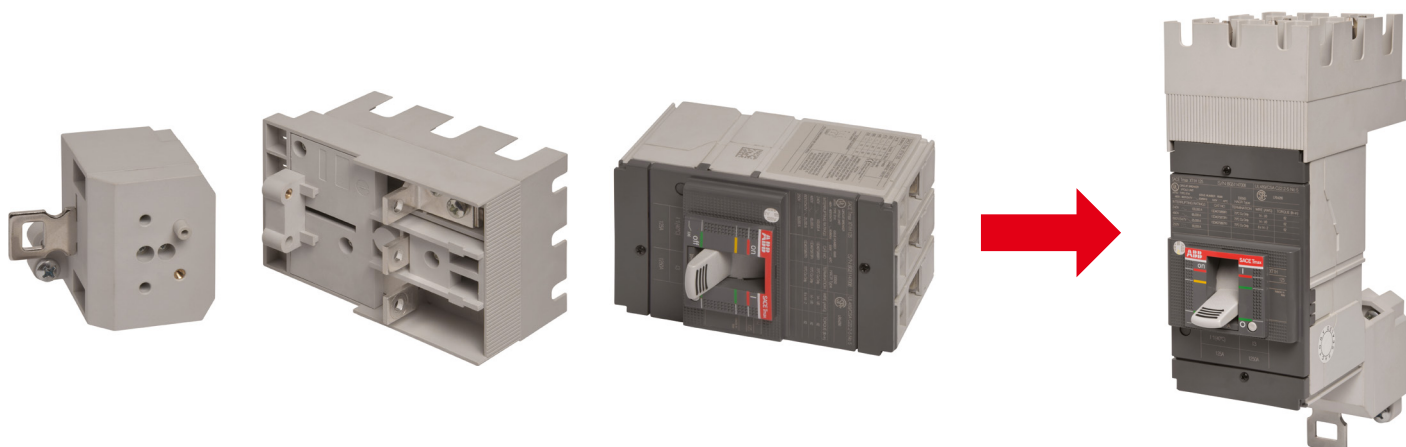
- Proven lineup of molded case circuit breakers up to 1200A, 600V, and 200k AIC maximum short circuit rating
- Three frames offered at 400A (T5), 800A (T6), and 1200A (T7)
- Thermal magnetic trip units available up to 800A

Plug-on circuit breaker benefits

- Standard Tmax or Tmax XT MCCBs are adapted into plug-on branch devices using the factory assembled or field installable bus side connector (BSC)
- No restrictions when mounting different frame sizes opposite each other on the SafeT Bus Stack
- Branch devices use a captive screw to fix into place - no hardware to lose on the job site
- The back pan carries the weight of the breaker during install before it is fully fastened
- User-friendly intelligent part numbers make ordering components easy

Additional options and accessories

- Plug-on lugs up to 1200A for back-feed, sub-feed, and feed-through applications
- Joslyn® JSPR surge protection devices
- Optional locking front doors
- In addition to the standard IP20 plug-on bus stack, terminal covers and special shielding are optional for a completely finger-safe (IP20) interior
- SUSE—Suitable for Use as Service Equipment



Technical data

Technical data		
Standards and compliance	UL 67	Standard for panelboards
	UL 489	Standard for molded-case circuit breakers, molded-case switches and circuit-breaker enclosures
	CSA C22.2, No. 29-15	Standard for panel boards and enclosed panel boards - Canadian market
	CSA C22.2, No. 5-16	Standard for molded case circuit breakers - Canadian market
Panelboard ratings	Rated voltage	600V AC, 3-phase 3-wire/4-wire
	Rated frequency	50/60Hz
	Rated current	1200A maximum main bus
	Short circuit rating	200kA maximum with ABB breaker, 65kA main bus withstand
Circuit breaker ratings	Neutral	100% or 200% rated
	Tmax XT1	Up to 125A, 65kA @480V, 25kA @600/347V, requires 3 mounting positions ¹
	Tmax XT2	Up to 125A, 200kA @480V, 42kA @600V, requires 4 mounting positions
	Tmax XT3	Up to 225A, 35kA @480/277V, requires 4 mounting positions
	Tmax XT4	Up to 250A, 200kA @480V, 50kA @600V, requires 4 mounting positions
	Tmax T5	Up to 400A, 150kA @480V, 100kA @600V, requires 6 mounting positions
	Tmax T6	Up to 800A, 150kA @480V, 42kA @600V, requires 8 mounting positions
	Tmax T7	Up to 1200A, 100kA @480V, 65kA @600V, requires 8 mounting positions
Panelboard types	Fixed main lug only (MLO)	1200A maximum, up to 104 mounting positions
	Fixed main circuit breaker (MCB)	800A maximum, up to 78 mounting positions
	Universal double side (back fed)	1200A maximum, up to 130 mounting positions
	Universal single side (back fed)	1000A ² maximum, up to 65 mounting positions
Panelboard dimensions	Width	28.5, 34, or 45 inches
	Height	62, 76, or 90 inches
	Depth	10 inches
Environment	Enclosure rating	NEMA 1
	Altitude	6600 ft (2000 m)
Other documentation	1SXU400211C0201	ReliaGear SafeT Panelboard technical catalog
	1SXU900290G0201	ReliaGear SafeT Panelboard installation and maintenance guide
	1SXU200095C0201	SACE Tmax XT UL/CSA technical catalog
	1SXU210023D0201	SACE Tmax T UL/CSA technical catalog

¹ One mounting position is equal to 1.06 inches in bus stack height used

² Configuration not yet available - contact factory for details

ABB Inc.

Electrification Products

8155 T&B Boulevard

Memphis, TN 38125

abb.com/lowvoltage

Technical Support: 888-385-1221

7:00 a.m. - 5:00 p.m., CST, Monday-Friday

ABB

Electrification Products

800 Hymus Boulevard

Saint-Laurent, Quebec, Canada

H4S 0B5

abb.ca/lowvoltage

Phone: 514-856-6266

Toll Free: 888-856-6266

ep.support@ca.abb.com

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