



POWER PANELBOARDS

# Take power panel innovation to the neXT level.

ReliaGear<sup>®</sup> neXT.



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**In our ongoing commitment to offer superior value at every touchpoint, from ordering to installation to maintenance, we have combined the best technology of ABB and GE Industrial Solutions to bring you a true breakthrough in power panels.**



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## Plug in and break out with ReliaGear neXT.

Ready to dramatically speed up field modifications and eliminate labor-intensive bolt-on components? Plug into what's next in power panels. ReliaGear neXT from ABB.

ReliaGear neXT features a modular, field-modifiable panel design and our groundbreaking Tmax XT plug-in circuit breakers to dramatically save time, labor and cost while helping to ensure greater energy efficiency and rock-solid reliability.



# Install components in seconds. Instill confidence for a lifetime.

—  
01 Improved finger-safe bus stack that meets IP20 standards in select models  
—

02 Spring-loaded circuit breaker plug-in connectors  
—

03 Bus stack can be flipped 180 degrees



## EASY TO INSTALL

### Modular, flexible, fast.

The ReliaGear neXT features a field-reversible bus stack that can be flipped 180 degrees to accommodate top or bottom feeds without extra parts. Ground and neutral locations are also field-swappable. These advantages plus plug-in, single-tool simplicity enable easy, fast component installation or replacement in the field. For even greater flexibility, circuit breakers can be installed anywhere on the bus stack.



## OUTSTANDING RELIABILITY

### Dependable connections.

Spring-loaded circuit breaker plug-in connectors with increased plating thickness for durability withstand repeated insertion and removal. Levering features further reduce installation and removal force. This plug-in connector design uses the magnetic forces generated by a short circuit to help make the connection even tighter and more reliable. There are fewer bolted joints that can become loose or require torque checks.



## ENHANCED SAFETY FEATURES

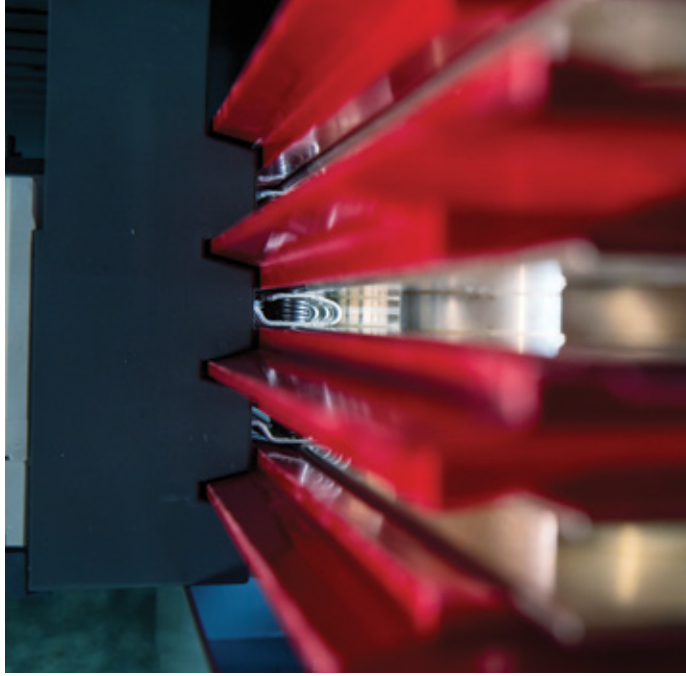
### The next level of protection.

ABB is passionate about safety. From the largest piece of arc-resistant switchgear down to the smallest arc fault and ground fault sensing circuit breaker, ABB is always designing ways to help keep personnel out of harm's way. ReliaGear neXT panelboard and switchboard designs come with an improved finger-safe bus stack that meets IP20 standards. Thanks to the breaker-integrated Bluetooth® technology, it is also possible to set parameters and check measurements directly from your smartphone from an arc-free zone.

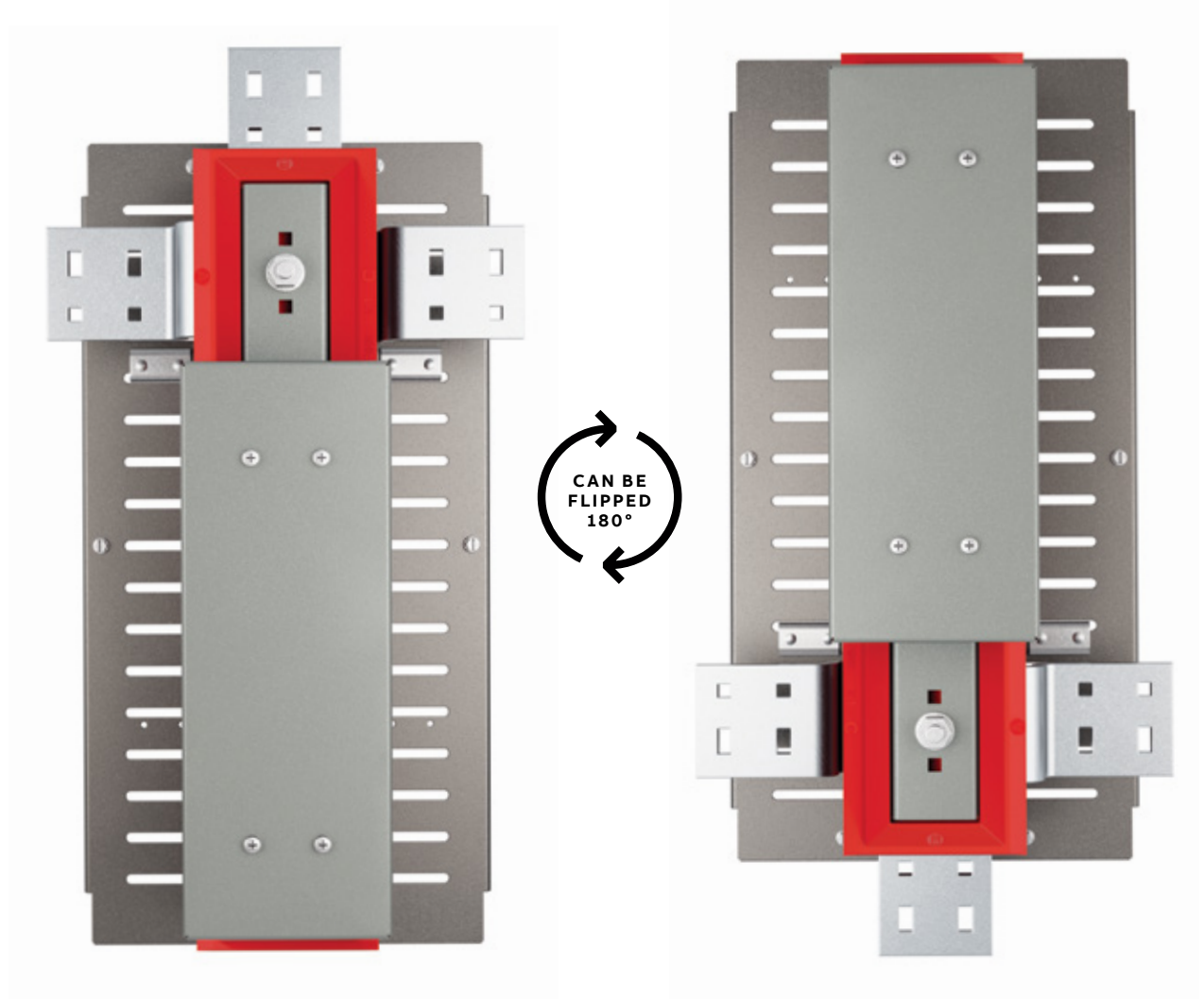
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01



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02




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03

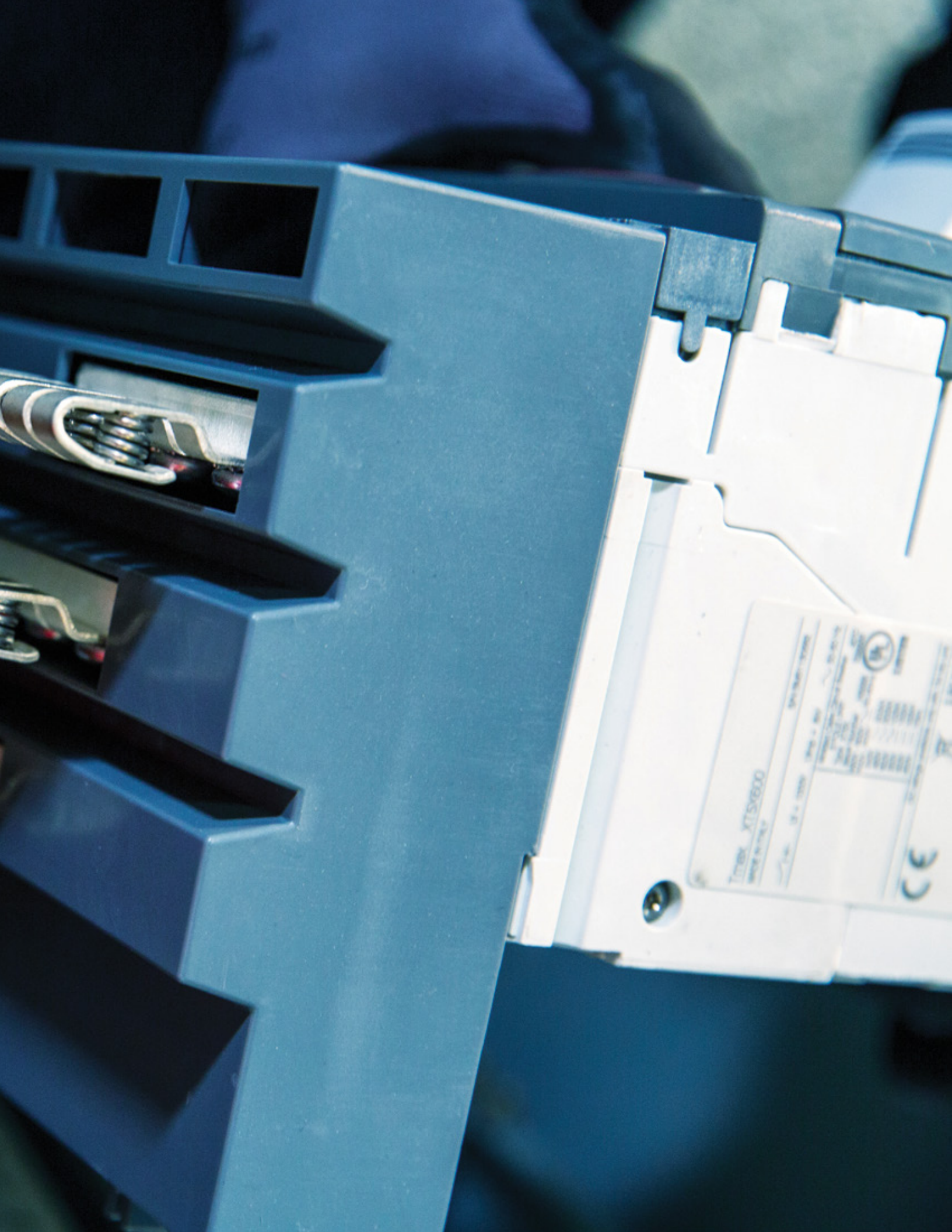


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Tmax XT plug-in circuit breakers feature spring-loaded primary disconnects, enabling fast installation, easy replacement and reliable connection to maximize your uptime.

A close-up photograph of Tmax XT plug-in circuit breakers. The image shows a red safety handle in the foreground, partially obscuring the view of the breakers. The breakers are mounted on a metal rail, and their spring-loaded primary disconnects are visible. The background is a blurred industrial setting with blue and grey tones.





Model: YTS1600  
MADE IN CHINA

SPECIFICATIONS	
Input Voltage	100-240VAC
Output Voltage	5VDC
Output Current	1.5A
Power	7.5W
Efficiency	>80%
Protection	Over Voltage, Over Current, Short Circuit
Dimensions	40mm x 40mm x 25mm
Weight	10g

CE

# Even more advantages.

—  
01 Components can be installed in as little as 20 seconds  
—

—  
02 Remote access to accurate information anywhere, anytime  
—



## REDUCED COSTS

### Speed up your project.

Reducing labor and saving time is crucial for electrical contractors. In fact, an 8% savings in labor costs for a typical large project can mean 133% more profit for the contractor.\* ReliaGear neXT's intuitive single-person installation enables components to be installed in as few as 20 seconds, dramatically saving skilled-labor costs, reducing downtime and lowering the risk of mistakes.

\*From "How to Make a Good Estimate Even Better" by Don Kiper, EC&M, 2017.



## ADVANCED CONNECTIVITY

### Link to data analysis in real time.

Give facility managers the ability to reduce operational cost with ABB Ability™ Energy and Asset Manager cloud solution. The Tmax XT circuit breakers of ReliaGear neXT put facility managers in control when equipped with the snap-in cloud module. The extreme precision of the data measured means users have access to accurate information making it easier to monitor resources and identify savings opportunities.

For more info, visit <https://new.abb.com/about/our-businesses/electrification/abb-ability/energy-and-asset-manager>

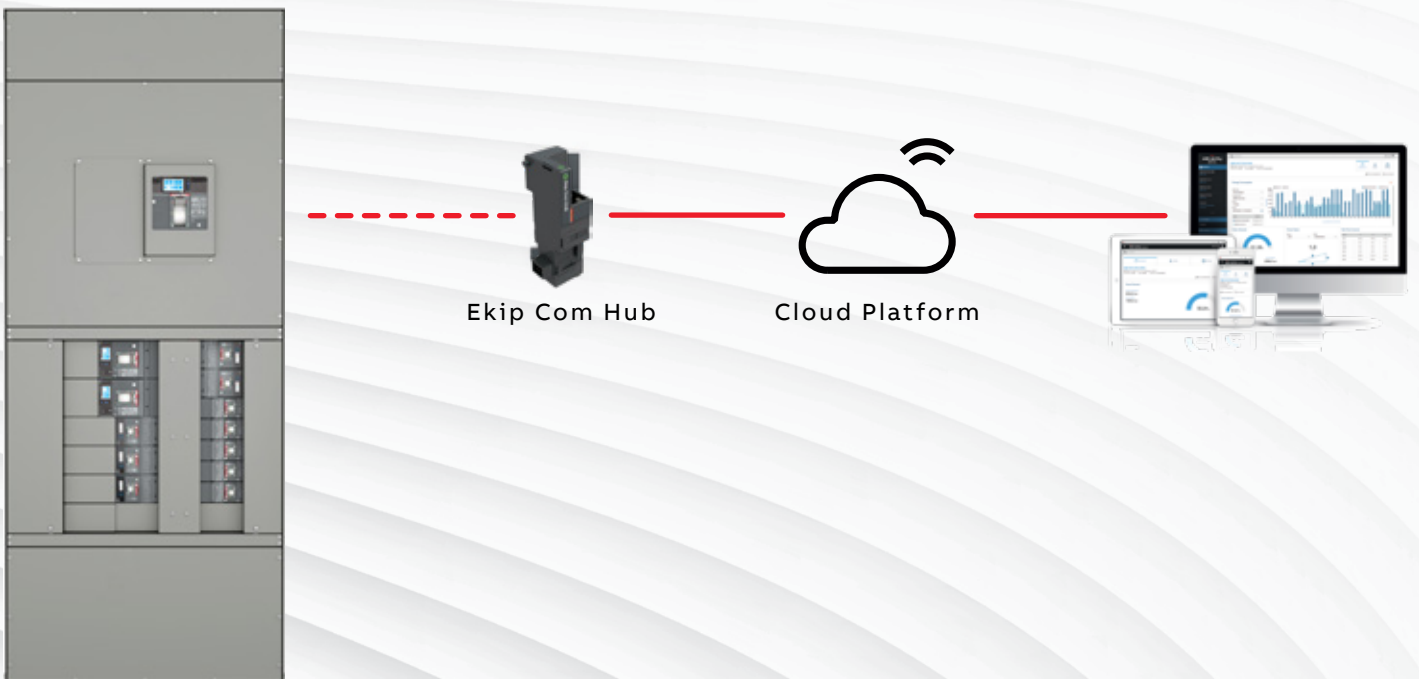


## ORDERING AND LOGISTICS

### Easy to stock.

With ReliaGear neXT, you have a single catalog number for all circuit breaker installation kits, convenient ordering with the **empower** configurator tool, and Pro stock options for quick deliveries. Power panels are available unassembled or with factory-assembled interior.

The **empower** tool provides a new PanelScan feature in addition to customizable dashboards, templates, product configurations and more to help users save time and reduce the risk of error.



# Take your performance to the neXT level.

**ReliaGear neXT — a go-to power panel for professionals looking to gain the competitive edge:**

## **Contractors**

For contractors, time is money. And traditional bolt-on power panels that require highly skilled labor and take hours to install or modify in-field can cost you big. But now there's ReliaGear neXT. It works harder, so you don't have to.

## **Distributors**

Smart, optimized, simplified design helps distributors maximize stock inventory. The user-friendly and intuitive **empower** tool minimizes the configuration process time by providing product drawings, bills of materials and technical documentation.

## **Consultants and Engineers**

ReliaGear neXT adds value to any job, giving consultants the power to influence customer specifications, helping to make life easier, providing safety features for installers and significantly reducing downtime for end users. The broad offering allows ABB to provide the right product for the right application.

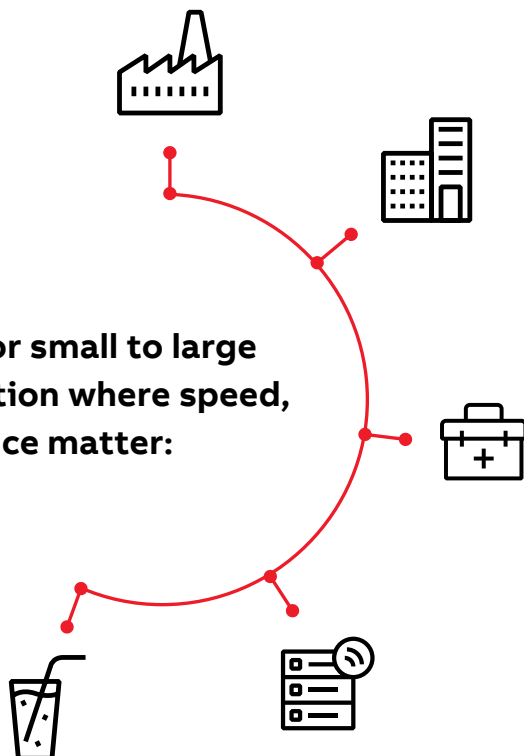
## **OEMs and Panel Builders**

Versatility, easy installation and performance make ReliaGear neXT a perfect match for quality panels and any type of equipment.

## **Facility Managers**

ReliaGear neXT enables fast component installation or replacement, reducing downtime and cost. And its connectivity helps managers monitor resources and identify savings opportunities.

**ReliaGear neXT is ideal for small to large projects and any application where speed, reliability and performance matter:**



- Industrial complexes
- Commercial buildings
- Residential developments
- Health care facilities
- Data centers
- Food and beverage facilities
- Infrastructure projects
- And more



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SUPERIOR PROTECTION FOR CIRCUITS, PEOPLE AND PRODUCTIVITY

Take your business to the neXT level. Plug in and break out with the value, safety, versatility and cost savings of ReliaGear neXT. To learn more, contact your ABB representative or visit [solutions.abb/reliagearnext](http://solutions.abb/reliagearnext).





# Panelboard details

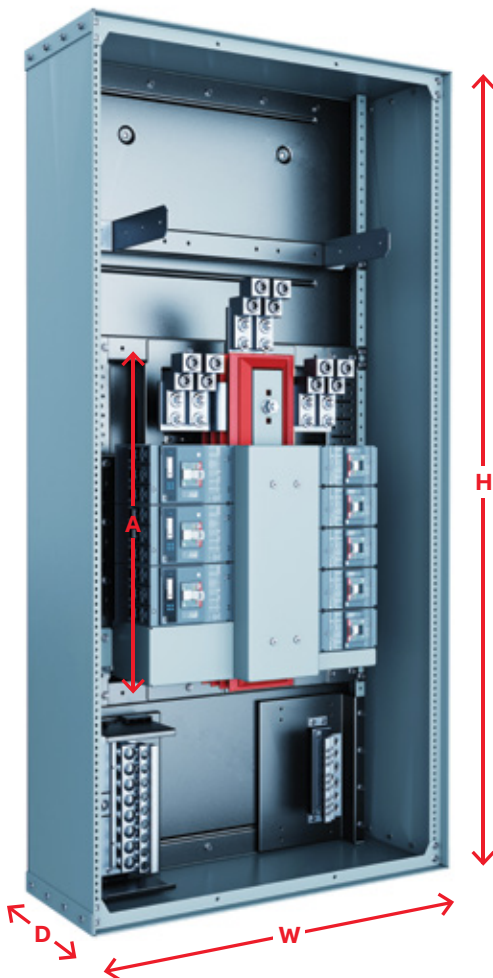
The ReliaGear neXT power panelboard can be equipped with circuit breakers from 15 A to 1200 A with options of 100% rated breakers up to 1000 A. The maximum short circuit rating is equal to 100kAIC at 480V or 65kAIC at 600V, or the lowest current interruption rating of any device installed.

**The ReliaGear neXT power panelboards can be used on the following system voltages:**

- 240 V AC; 3-phase, 3-wire
- 480 V AC; 3-phase, 3-wire
- 600 V AC; 3-phase, 3-wire
- 208Y/120 V AC; 3-phase, 4-wire
- 480Y/277 V AC; 3-phase, 4-wire
- 600Y/347 V AC; 3-phase, 4-wire
- 240/120 V AC Delta hi-leg; 3-phase, 4-wire
- 120/240 V AC; 1-phase, 3-wire

**Available environmental enclosure types:**

- NEMA 1
- NEMA 2
- NEMA 3R
- NEMA 4/4X
- NEMA 12



**Panelboard dimensions**

H	60"	72"	84"	96"
A	16X	24X	32X	40X
W		30"	40"	45"
D				11" NEMA 1
				11" NEMA 1 + DiD or drip hood <sup>1</sup>
				11" NEMA 2 <sup>1</sup>
				14.5" NEMA 3R <sup>2</sup>
				14.8" NEMA 4/4X/12 <sup>2</sup>

<sup>1</sup> Door In door and drip hood increase the total dept to 14.5" but the usable conduit space remains 11".

<sup>2</sup> Depth for NEMA 3R/4/4X/12 does not include 0.9" of hanger bracket.



## The ReliaGear neXT panelboard is available with multiple options.

**Feed location:** top or bottom.

**Incoming type:** main lug only (MLO), main circuit breaker (MCB, either vertically or horizontally mounted) and with feed-through lug pads.

**Bus stack ratings:** 250A, 400A, 600A, 800A, 1000A and 1200A.

**Bus stack material:** copper or aluminum, heat-rated or density-rated.

All ReliaGear neXT panelboards are double sided, with branch breakers that can fit on both left and right side of the bus stack. The maximum ampacity of the breakers selected will determine the width of panelboard needed. The bus stack can be either mounted in the center of the box or offset to the right (default) or to the left.

Panelboard width (in.)	Bus stack position inside the box	Max. branch breaker ampacity on width side (A)	Max. branch breaker ampacity on narrow side (A)
30	Center	225 (XT4)	225 (XT4)
40	Offset	600 (XT5)	225 (XT4)
45	Center	600 (XT5)	600 (XT5)
45	Offset	1200 (XT7)	225 (XT4)



# Tmax XT range

## Molded case circuit breakers

The SACE Tmax XT range offers higher performance, better protection and more precise metering than equivalent units and can handle from 15 A up to 1200 A.

Combined with precise electronic trip units in small frames, the new range delivers significant time savings and enhances installation quality. Reliability is further increased, and speed of installation reduced, thanks to Bluetooth and Ekip connectivity for mobile devices. Tmax XT circuit breakers and their accessories are constructed in compliance with UL 489 and CSA C22.2 standards.



### Molded case circuit breakers (MCCB)

			XT1		
Frame size		[A]	125		
Poles		[No.]	3		
Rated voltage	(AC) 50–60 Hz	[V]	480 V Δ <sup>(2)</sup>		
Versions			Fixed		
Interrupting ratings			N	S	H
	240 V (AC)	[kA]	50	65	100
	480 V (AC)	[kA]	25	35	65
	600Y/347 V (AC)	[kA]	18	22	25
	600 V (AC)	[kA]	–	–	–

### Trip units for power distribution

TMF	•
TMA	
Ekip DIP	
Ekip Touch	

(1) Current-limiting circuit breaker in 480 V AC and 600 V AC

(2) 600Y/347

(3) Without line-side connectors

### Record Plus FB

Poles	1, 2
Amperes	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100
Trip unit	Fixed thermal-magnetic

### Interrupting ratings

Ampere rating	Maximum voltage	Type	Poles	UL listed interrupting rating rms symmetrical kA AC voltage				
				240 V	277 V	347 V	480 V	600 V
15–100	600Y/347 V AC	FBV	1	35	35	22	–	–
			2	65	–	–	35	22
		FBN	1	65	65	25	–	–
			2	150	–	–	65	25
		FBH	1	100	100	35	–	–
			2	200	–	–	100	35



XT4					XT5				XT6			XT7		
250					400-600				800			800-1000-1200		
3					3				3, 4			3		
600					600				600			600		
Fixed					Fixed				Fixed, withdrawable			Fixed		
N	S	H <sup>(1)</sup>	L <sup>(1)</sup>	V <sup>(1)</sup>	N	S	H <sup>(1)</sup>	L <sup>(1)</sup>	N	S	H	S	H	L
65	100	150	200	200	65	100	150	200	65	100	200	65	100	200
25	35	65	100	100	35	50	65	100	35	50	65	50	65	100
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	22	25	50	65	18	25	35	65	20	25	35	25	50	65

—  
**TEY**

Poles	1, 2
Amperes	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 110, 125
Trip unit	Fixed thermal-magnetic

—  
**Interrupting ratings**

Ampere rating	Maximum voltage	Type	Poles	UL listed interrupting rating rms symmetrical kA AC voltage	
				120/240 V	480/277 V
15-70 (1-pole)	277 V AC (1-pole)	TEYD	1-2	65	25
15-125 (2-pole)	480Y/277 V AC (2-pole)	TEYH	1-2	65	35
		TEYL	1-2	100	65

# Tmax XT range

## Trip units

SACE Tmax XT trip units represent a new benchmark for molded case circuit breakers, able to satisfy any performance requirement. These complete, flexible protection trip units can be adapted to the level of protection required, independently of the complexity of the system. The range is available for three levels of performance to meet any requirement, from simple to advanced applications.

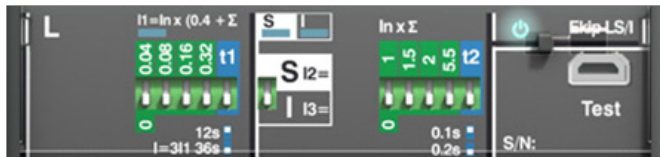
### Thermal-magnetic trip unit

An easy solution for protection against overloads and short circuits.



### Ekip Dip

The first level of electronic trip units: Ekip Dip trip units are based on microprocessor technologies designed for high reliability and tripping precision.



### Ekip Touch/Hi-Touch

The Ekip Touch/Hi-Touch trip units provide a complete series of protections and high accuracy measurements of all electrical parameters. They are intended to integrate seamlessly with most common automation and supervision systems.





**Additional information**

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