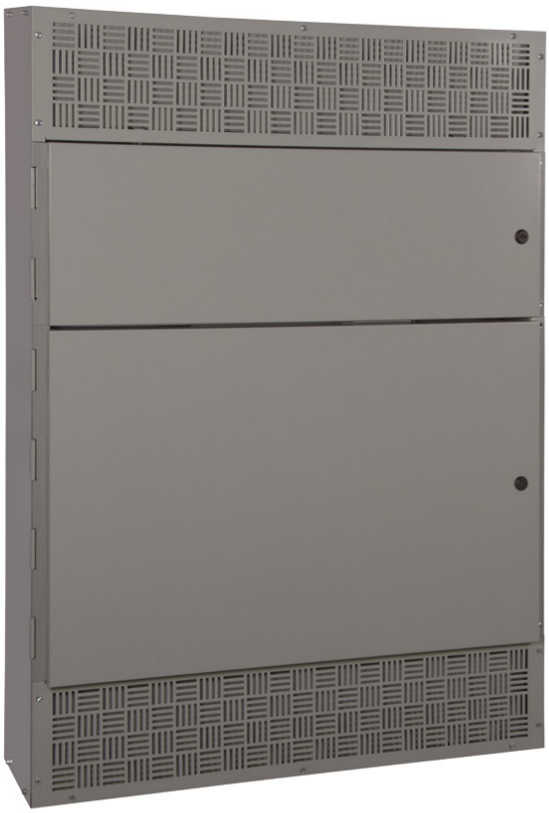
TECHNICAL CATALOG

ReliaGear® SafeT™ Panelboard

Low voltage distribution panelboards for UL67 Standards



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General characteristics
Introduction

ABB has long been the global leader in low voltage switchgear and motor control centers. This strong heritage of innovation, technological excellence and commitment to safety was the basis for ABB's new line of UL67 certified low voltage distribution panelboards, ReliaGear SafeT Panelboard. ReliaGear is ABB's growing family of electrical distribution equipment, and SafeT Panelboard represents the first significant change to the panelboard market place in decades.

In today's competitive market place meeting standards is not enough. The SafeT Panelboard has gone through extensive testing and evaluation, making great strides in the advancements of safety without sacrificing ease of use and installation.

All panelboards are available rated up to 600V and up to a maximum of 1200A. The SafeT Bus Stack is IP20[1], finger-safe with the front cover removed, an industry exclusive feature. In addition, the front cover design incorporates safety and convenience features that are not standard or available in the market today.

The ReliaGear SafeT Panelboard contains ABB SACE's "best in class" Tmax and Tmax XT UL489 molded case circuit breakers complete with a newly designed SafeT Bus Side Connector (BSC) for easy installation and interchangeability. The BSCs are available up to and including 1200A branch devices.

The SafeT BSC allows for easy installation and connection of branch devices to the IP20[1] SafeT Bus Stack with only a screw driver and captive hardware.

[1] Per IEC Standard 60529

General characteristics
Features and benefits

Exclusive IP20 Bus Stack shroud features:
- Insulating, non-flammable, non-hydroscopic housing for main panelboard bus
- Finger safe barrier between the front accessible areas of the panelboard and main bus
- Designed specifically for breaker plug on connector (BSC)
- Simple levering action installation with no additional hardware
- A common point of panelboard failures and potential accidents is reduced

The front cover system of the ReliaGear SafeT Panelboard provides another industry exclusive feature—both the incoming and group-mounted covers are hinged to the box as standard. This allows access to areas of the panelboard interior with no heavy cover to remove.

SafeT Panelboard was designed and tested to meet all applicable UL50, UL67 and UL489 requirements and is available in both factory installed and merchandised programs. Combining experience with innovation, SafeT Panelboard offers the marketplace a level of unmatched performance and safety for technology based installations.

SafeT Panelboard represents ABB's commitment to providing products and solutions that meet and exceed customer expectations, delivering reliable performance in the most challenging industrial environments with superior quality.

General characteristics

Construction

Enclosure

- NEMA 1 compliant
- Entire enclosure constructed of code gauge steel
- Back box—unfinished galvanized steel
- Interior and back pan—unfinished galvanized steel
- End walls—removable to facilitate cable entry cutouts
- Front cover—ANSI 61 finished code gauge steel
- Circuit breaker covers and filler plates—ANSI 61 finished code gauge steel
- All ANSI 61 painted surfaces are electrostatic powder texture coated, complying with UL50 standards

Main bus bars

- Aluminum bus bars are tin plated
- Copper bus bars are silver plated
- Optional copper bus bars available with tin plating

Neutral and ground bars

- Neutral and ground bus bars are copper with Cu/Al lugs as standard

General characteristics

Standards and certifications

The ReliaGear SafeT Panelboard with Tmax molded case circuit breakers are designed, tested, and built in accordance with the following industry standards:

Conformity with standards

- UL67—standard for panelboards
- UL File #E475757
- UL 50—standard for enclosures for electrical equipment
- cULus—CSA C22.2, No. 29-15 standard for panelboards and enclosed panelboards
- NFPA 70 & NEC 408—national electric code
- W-P 115C Type 1 Class 1—federal specification for circuit breaker panelboards

Tmax molded case circuit breakers are designed, tested, and built in accordance with the following standards:

Conformity with standards

- UL489—standard for molded case circuit breakers and enclosures
- CSA C22.2, No. 5-16—standard for molded case circuit breakers
- NEMA AB-1—molded case circuit breakers and molded case switches
- UL943—ground fault circuit interrupters
- UL1053—ground fault sensing and relaying equipment
- IEC 60947-2—standard for LV circuit breakers
- ABS—American bureau of shipping

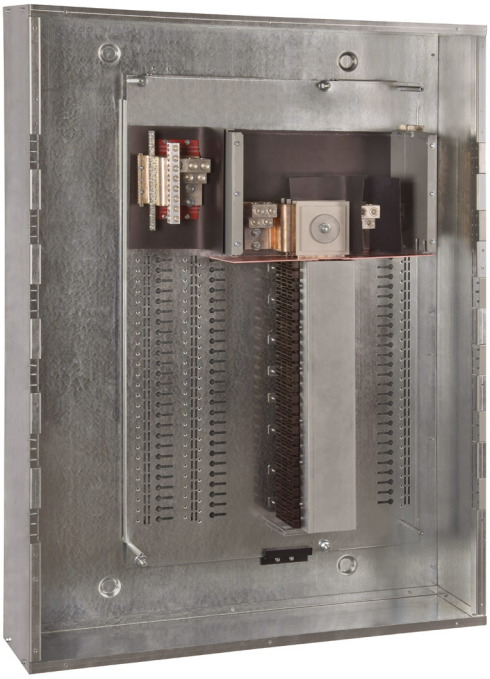
Panelboard details
Enclosure and interior

Back box
- Galvanized steel housing for panelboard interior and mounting of the panelboard
- Includes four threaded studs for mounting and height adjustment of interior
- Removable end walls standard
- Includes a support bracket (black piece at bottom of back box in picture) that aids in installation of the interior

SafeT Bus Stack
- Complete assembly of bus bars, insulators, and IP20 shrouds, and mounting plate
- Installed on the back pan

Panelboard details

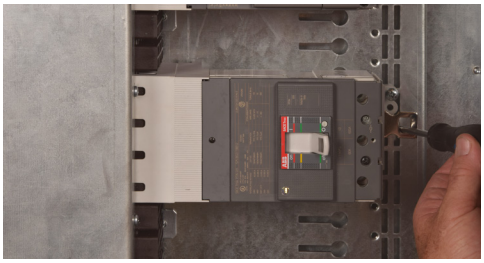
Enclosure and interior



Interior

- Consists of back pan, bus stack, and additional accessories such as a solid neutral and surge protection devices
- When specified, fixed mounted incoming mains are mounted directly on the interior

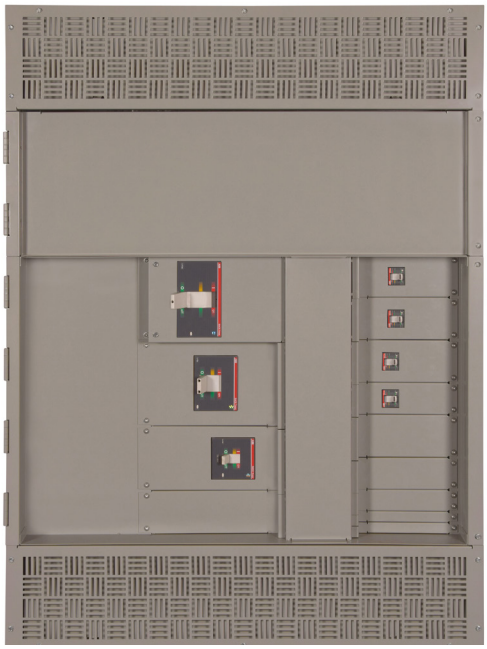
Note: Interior is shown mounted in back box



SafeT Bus Side Connector (BSC) and insertion tab

- Integral accessory for mating Tmax circuit breakers and plug on lugs with the bus stack
- The bus side connector contains the current carrying phase connectors and is designed to create a protected area where the phase jaws and main bus bars connect

Panelboard details
Enclosure and interior



Enclosure front
- Consists of top and bottom ventilation covers, and front frame sections
- Separate “hinged to box” frames are standard, allowing independent access to either the incoming section or the branch distribution section

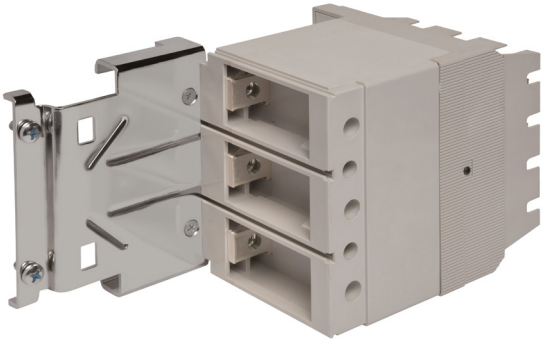
Circuit breaker covers
- Individual front covers for Tmax circuit breakers or unused mounting positions
- Unique cover for each Tmax frame size

Panelboard details
Enclosure and interior

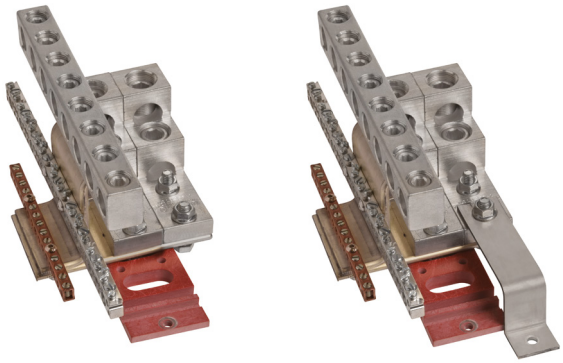
Split deadfront open
- Main incoming section can be opened independently from distribution section

Optional lockable front door

Panelboard details
Additional components



Plug-on lug (POL)
- Molded thermoset plastic plug-on branch device
- For use as back feed main lugs, sub feed lugs, or feed through lugs
- 400A, 800A, and 1200A frames



Solid neutral
- Neutral with lug sizes ranging from #10 AWG max to 500 MCM max
- Bonding strap available for service entrance applications
- All lugs accept copper and aluminum wire

Joslyn® JSPR SPD
- Surge protection device for internal installation in the panelboard
- Available at all panelboard voltages at 120kA or 160kA

ReliaGear SafeT Panelboard types and ranges

ReliaGear SafeT Panelboard is available in four basic configurations: vertically mounted fixed main circuit breaker (PPM), vertically mounted fixed main lugs only (PPL), universal back-fed mains (PPU), and single row universal back-fed mains (PPS). Suitable for service entrance applications, SafeT Panelboard can be either top or bottom feed incoming, and is field reversible.

Fixed main, vertically mounted, double side panelboards: 28.5", 34" and 45" widths
Fixed main circuit breaker (PPM) and fixed main lugs only (PPL) panelboards are both available with 400A, 600A, and 800A main bus sizes. PPL also offers a 1200A main bus configuration. SafeT Panelboard is available in both aluminum and copper bus bars. All fixed mounted Main Circuit Breakers (MCB) and main lug only (MLO) panelboards are supplied with double side construction for the mounting of outgoing branch devices on either side of the SafeT Bus Stack. They are available in several height and width combinations to accommodate the required quantity of different sized branch devices. Generally:

- The taller the panelboard, the more space there is available for installing branch breakers.
- The wider the panelboard, the larger the frame size of branch devices can be mounted in it.

The 28.5" back box can accommodate the same sized branch devices on either side of SafeT Bus Stack. Either side can accept branch devices up to 250A (XT4) frame branch devices.

The 34" and 45" wide back boxes have different mounting capabilities on each side of the SafeT Bus Stack as the panelboard interior will have a narrow side and a wide side. The following restrictions allow conformance with wire bending space per UL 67 Table 15.2.

- In all configurations, the narrow side accepts only Tmax XT branch devices up to 250A (XT4) frame branch devices.
- The wide side of the bus stack can accept the larger T5, T6, and T7 frame branch devices.
- 34" width has provisions to mount up to a 400A T5 branch circuit breaker on the wide side of the bus stack.
- 45" width has provisions to mount up to a 1200A T7 branch circuit breaker on the wide side of the bus stack.

Universal back-fed, double side panelboards: 45" width
Universal back-fed double side (PPU) panelboards are available with main bus sizes up to 1200A. Aluminum and copper bus bars are available. These panelboards have no fixed main incoming provisions, but are instead designed for a branch-mounted device to back-fed incoming power to the SafeT Bus Stack.

Universal double side construction is offered only in 45" width.

Similar to fixed mains versions, they have different mounting provisions on either side of the SafeT Bus Stack, and the same rules apply for branch device mounting.

The narrow side of the SafeT Bus Stack is also limited to up to 250A (XT4) frame branch devices, while the wide side has provisions to accept larger T5, T6, and T7 frame branch circuit breakers. All plug-on lugs must mount on the wide side of the SafeT Bus Stack.

- 45" width has interiors available to mount up to 1200A (T7) branch circuit breakers on the wide side of the bus stack.

Universal back-fed, single side panelboards: 34" widths
The universal back-fed (PPS) panelboard is unique to the industry, and has provisions to mount both back-fed main and outgoing branch devices on only one side of the SafeT Bus Stack.

- 34" width has interiors available[1] to mount up to 800A (T6) branch circuit breakers on the SafeT Bus Stack.

[1] Refer to layout section for more details.

Molded Case Circuit Breakers

Tmax XT general characteristics

SACE Tmax XT molded case circuit breakers are the ideal solution for all distribution levels—from the main low voltage switchboard to panelboards throughout the installation. They feature high specific let-through current peak and energy limiting characteristics that allow the circuits and equipment on the load side to be sized in an optimum way. SACE Tmax XT circuit breakers with appropriately configured thermomagnetic and electronic trip units, protect against overloads, short-circuits, earth faults and indirect contacts in low voltage distribution networks.

The SACE Tmax XT family of molded case circuit breakers can be equipped with:

- Thermal magnetic trip units for alternating current network protection, using the physical properties of a bimetal and an electromagnet to detect overloads and short-circuits.
- Electronic trip units, for alternating current network protection. Releases with microprocessor technology obtain protection functions that make the operations extremely reliable and accurate. The power required for operating them is supplied straight from the current sensors of the releases.

This ensures that they trip even in single-phase conditions and with the minimum setting. The electronic protection trip unit consists of:

- 3 or 4 current sensors (current transformers)
- A protection unit
- An opening solenoid (built into the electronic trip unit)

Molded Case Circuit Breakers

Tmax XT1—XT4 characteristics and ratings

Conformity with standards

SACE Tmax XT circuit breakers and their accessories are constructed in conformity with:

- UL 489
- CSA C22.2 No. 5
- EC Low Voltage Directive (LVD) N° 2006/95/EC (in replacement of 73/23/EEC and subsequent amendments)
- EC Electromagnetic Compatibility Directive (EMC) 2004/108/CE
- ABS

For complete technical Information, including accessories, please refer to technical document: 1SXU200095C0201

Frame		**XT1**			**XT2**						**XT3**		**XT4**					
Size	[A]	125			125						225		250					
Rated service voltage	(AC) 50-60Hz [V]	600Y/347			600						600Y/347		600					
Mechanical life																		
	[No. operations]	25000			25000						25000		25000					
	[No. hourly operations]	240			240						240		240					
Short circuit ratings																		
Versions		**N**	**S**	**H**	**N**	**S**	**H**[1]	**L**[1]	**V**[1]	**X**[2]	**N**	**S**	**N**	**S**	**H**[1]	**L**[1]	**V**[1]	**X**[2]
240V AC	[kAIC]	50	65	100	65	100	150	200	200	200	50	65	65	100	150	200	200	200
480Y/277V AC	[kAIC]	25	35	65	25	35	65	100	150	200	25	35	25	35	65	100	150	200
480V AC	[kAIC]	25	35	65	25	35	65	100	150	200	—	—	25	35	65	100	150	200
600Y/347V AC	[kAIC]	18	22	25	18	22	25	35	42	—	—	—	18	22	25	50	—	—
600V AC	[kAIC]	—	—	—	18	22	25	35	42	—	—	—	18	22	25	50	—	—
Trip units																		
TMF	Ratings offered [A]	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 110, 125[3]			15, 20, 25, 30, 35, 40, 45, 50, 60, 70						60, 70, 80, 90, 100, 110, 125, 150, 175, 200, 225		25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 110, 125, 150, 175, 200, 225, 250[4]					
TMA	Ratings offered [A]	—			80, 90, 100, 110, 125						—		80, 90, 100, 110, 125, 150, 175					
Ekip LS/I	Ratings offered [A]	—			10, 25, 60, 100, 125						—		40, 60, 100, 150, 225, 250					
Ekip I	Ratings offered [A]	—			10, 25, 60, 100, 125						—		40, 60, 100, 150, 225, 250					
Ekip LSI	Ratings offered [A]	—			10, 25, 60, 100, 125						—		40, 60, 100, 150, 225, 250					
Ekip LSIG	Ratings offered [A]	—			10, 25, 60, 100, 125								40, 60, 100, 150, 225, 250					
Ekip E-LSIG	Ratings offered [A]	—			—						—		40, 60, 100, 150, 225, 250					

[1] XT2 and XT4 in the H, L, and V versions are current limiting breakers
[2] X version only available in TMA trip unit
[3] 100% rating only available up to 100A
[4] 100% rating only available up to 200A

Molded Case Circuit Breakers

Tmax T5—T7 characteristics and ratings

For complete technical information including accessories, please refer to technical document: 1SXU21023D0201

Frame					**T5**					**T6**			**T7**	
Size	[A]				300, 400					600, 800			1000, 1200	
Rated service voltage	(AC) 50-60Hz [V]				600					600			600	
Mechanical life														
	[No. operations]				20000					20000			20000	
Short circuit ratings														
Versions		**N**	**S**	**H**	**L**	**V**	**N**	**S**	**H**	**L**	**V**	**S**	**H**	**L**
240V AC	[kAIC]	65	100	150	200	200	35	100	150	200	200	65	100	150
480Y/277V AC	[kAIC]	25	35	65	100	150	25	35	65	100	150	50	65	100
480V AC	[kAIC]	25	35	65	100	150	25	35	65	100	150	50	65	100
600Y/347V AC	[kAIC]	18	25	35	62	100	18	25	34	42	—	25	50	65
600V AC	[kAIC]	18	25	35	62	100	18	25	34	42	—	25	50	65
Trip units														
TMF	Ratings offered [A]					—					—			—
TMA	Ratings offered [A]					300, 400					600, 800			—
LS/I	Ratings offered [A]					300, 400					600, 800			1000, 1200
I	Ratings offered [A]					300, 400					600, 800			—
Ekip LSI	Ratings offered [A]					300, 400					600, 800			1000, 1200
Ekip LSIG	Ratings offered [A]					300, 400					600, 800			1000, 1200

Molded Case Circuit Breakers

Tmax XT1—XT4 and Tmax T5—T7 standard lug sizes

Screw type lugs

For other lug options, refer to Tmax technical catalog documents 1SDC210059D0201 and 1SXU210023D0201.

Frame	Rated current	Wire size	Number of cables per lug	Control tap	Catalog number (set of 3)
XT1	125A	14-1/0 AWG	1	No	KXT1CU-3PC[1]
XT2	125A	14-1/0 AWG	1	No	KXT2CUAL1-3PC
XT3	100A	14-1/0 AWG	1	No	KXT3CUAL1-3PC
	100A	14-1/0 AWG	1	Yes	KXT3CUAL1C-3PC
	225A	4 AWG -300 kcmil	1	No	KXT3CUAL2-3PC
	225A	4 AWG -300 kcmil	1	Yes	KXT3CUAL2C-3PC
XT4	100A	14-1/0 AWG	1	No	KXT4CUAL1-3PC[2]
	100A	14-1/0 AWG	1	Yes	KXT4CUAL1C-3PC[2]
	225A	4 AWG -300 kcmil	1	No	KXT4CUAL2-3PC[2]
	225A	4 AWG -300 kcmil	1	Yes	KXT4CUAL2C-3PC[2]
	250A	250 -350 kcmil	1	No	KXT4CUAL3-3PC[3]
T5	300A	250 -500 kcmil	1	No	KT5300-3
	300A	250 -500 kcmil	1	Yes	KT5300-3C
	400A	2/0 AWG -250 kcmil	2	No	KT5400-3
	400A	2/0 AWG -250 kcmil	2	Yes	KT5400-3C
T6	600A	250 -500 kcmil	2	No	K6TH
	600A	250 -500 kcmil	2	Yes	K6THC
	800A	2/0 AWG -400 kcmil	3	No	K6TJ
	800A	2/0 AWG -400 kcmil	3	Yes	K6TJC
T7	1200A	4/0 AWG -500 kcmil	4	No	KT7X1200-3
	1200A	4/0 AWG -500 kcmil	4	Yes	KT7X1200-3C

[1] FC Cu Terminals for copper cables only
[2] Not available for XT4 X up to 150A
[3] For use with the XT4 X version up to 150A only. Note: XT4 X from 175-250A uses the standard 250A CU lugs

Panelboard selection guide

Interior catalog numbering system

ReliaGear SafeT Panelboard interior code explanation

P	P	L	0	8	C	S	T	6	0	5	2
1	2	3	4	5	6	7	8	9	10	11	12

Catalog number guide			
1 2	Panelboard interior prefix	PP	Power panelboard
3	Panelboard interior type	L	Fixed vertical main lug only (1200A MAX)
		M	Vertical main circuit breaker (800A MAX)
		U	Universal back feed double side (1200A MAX)
		S	Universal back feed single side (1000A MAX)
4 5	Main bus ampacity	04	400A
		06	600A
		08	800A
		10	1000A
		12	1200A
6 7	Main bus material	AT	Aluminum—tin plated
		CS	Copper—silver plated
		CT	Copper—tin plated
8 9	Largest branch breaker or back feed device allowed[1]	T4	XT4—250A
		T5	T5—400A
		T6	T6—800A
		T7	T7—1200A
			Total mounting positions
10 11 12	Branch mounting positions[2]	026	26
		039	39
		052	52
		065	65
		078	78
		104	104
		130	130

[1] All backfeed MCB or MLO devices must be mounted on interior with equal or greater ampacity.
[2] Total numbers of circuit breaker mounting positions counting both wide and narrow sides of the bus stack.

Panelboard selection guide

Enclosure catalog numbering system

ReliaGear SafeT Panelboard back box code explanation

B	B	4	5	6	2
1	2	3	4	5	6

Catalog number guide			
1 2	Panelboard back box prefix	BB	Back box
3 4	Box width	28	28.5 inches
		34	34 inches
		45	45 inches
5 6	Box height	62	62 inches
		76	76 inches
		90	90 inches

ReliaGear SafeT Panelboard dead front order code explanation

P	P	F	M	L	O	4	5	6	2
1	2	3	4	5	6	7	8	9	10

Catalog number guide			
1 2 3	Panelboard dead front prefix	PPF	Power panelboard front
4 5 6	Mains type	MLO	Main lug only (fixed vertically mounted
		T6M	T6 main circuit breaker (fixed vertically mounted)
		T5M	T5 main circuit breaker (fixed vertically mounted)
		UDS	Universal back feed double side
		USS	Universal back feed single side
7 8	Box width	28	28.5 inches
		34	34 inches
		45	45 inches
9 10	Box height	62	62 inches
		76	76 inches
		90	90 inches

Panelboard selection guide

General procedure

ReliaGear SafeT Panelboard is available with different sized SafeT Bus Stack configurations. Once the main bus ampacity is determined, the height of the bus determines both the height of the panelboard and the maximum number of available outgoing branch Tmax circuit breaker mounting positions. As shown in the Circuit Breaker Mounting Position Requirement Table, different circuit breaker frame sizes require different numbers of mounting positions on the SafeT Bus Stack.

General procedure

First, determine if a fixed main breaker, fixed main lug only, universal back-fed double row, or universal back-fed single row interior is required.

Second, determine the size of the largest branch device to be installed, which is the determining factor when choosing the appropriate interior width. Generally, pick the narrowest interior needed, while making sure to plan for future needs.

Finally, after totaling up the total number of required mounting positions for all branch devices, choose the appropriate interior, back box, and front from the Catalog Number Tables.

Color key for panelboard types			
Color	**Max branch breaker size**	**Min / max panel width**	**Min / max panel height**
	T7 - 1200A	45"	62" / 90"
	T6 - 800A	34"[1] / 45"	62" / 90"
	T5 - 400A	34"	62" / 90"
	XT4 - 250A	28.5" / 45"	62" / 90"
	SafeT Bus Stack		

[1] Available in 34" wide PPS (single sided) panel only

Panelboard selection guide

Double side interiors

45" wide enclosure—double side

Double side interiors[1] with a 45" wide back boxes have up to a 1200A maximum SafeT Bus Stack and will accept up to 1200A maximum branch outgoing device.

All configurations accept all XT1, XT2, XT3 and XT4 circuit breaker frames on the narrow side of the bus, and accept those plus T5, T6 & T7 on the other, or wide side, depending on the main bus rating.

[1]Refer to Figures A and B for more details

Figure A. 45" Wide back box, double side, 1200A MAX branch

Panelboard selection guide

Double side interiors

34" wide enclosure—double side

All double side interiors with a 34" wide back box have up to a 600A maximum SafeT Bus Stack will accept 400A maximum branch outgoing devices.

Accepts all XT1, XT2, XT3 and XT4 circuit breaker frames on the narrow side of the bus, and accepts those plus T5 on the other, or wide side.

[1] Refer to Figure C for more details

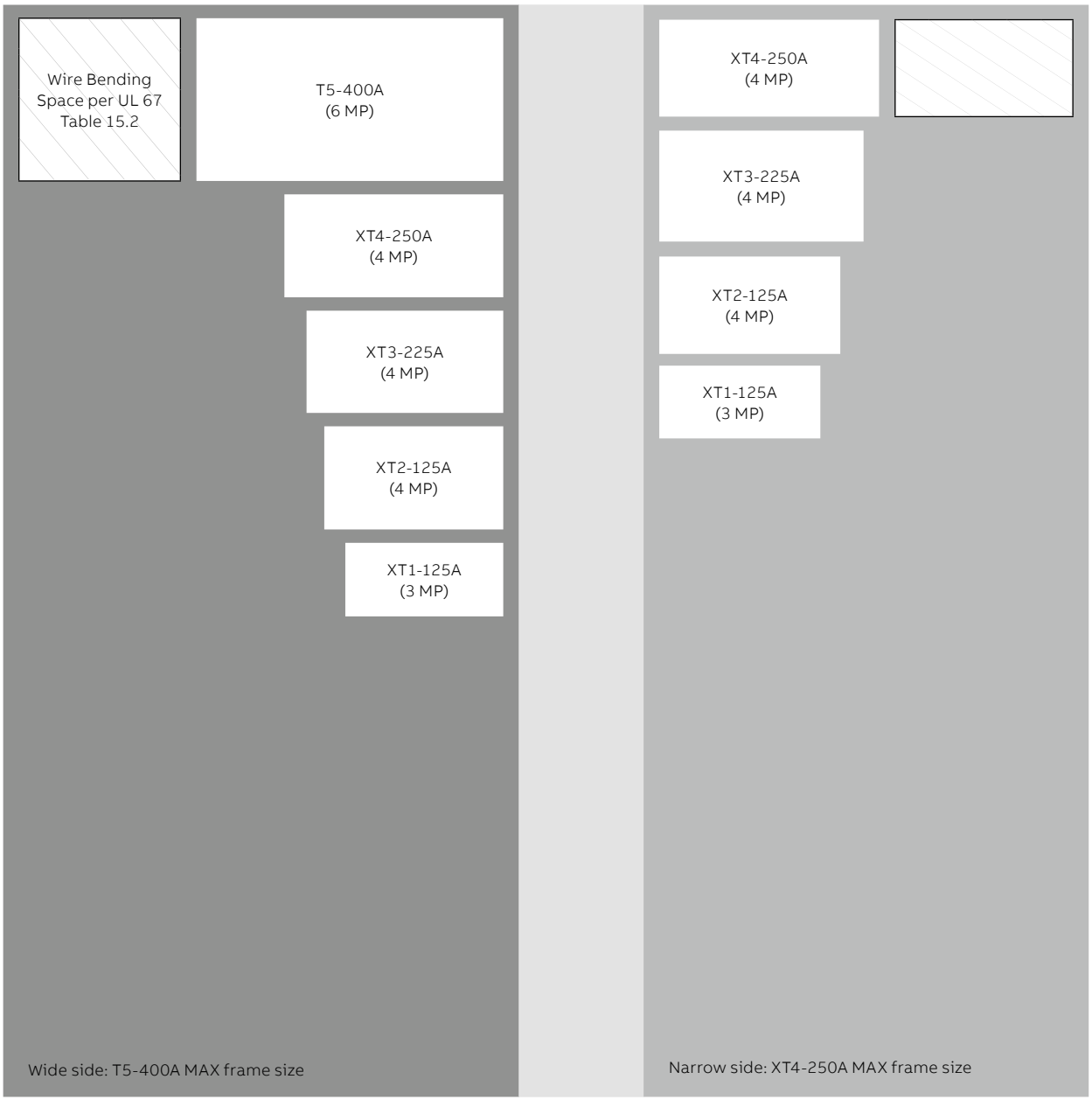


Figure A. 34" Wide back box, double side, 400A MAX branch

Panelboard selection guide

Double side interiors

28.5" wide enclosure—double side

All double side interiors with a 28.5" wide back box have up to a 600A maximum SafeT Bus Stack and will accept 250A maximum branch outgoing devices.

Accepts all XT1, XT2, XT3 and XT4 circuit breakers.

[1] Refer to Figure D for more details

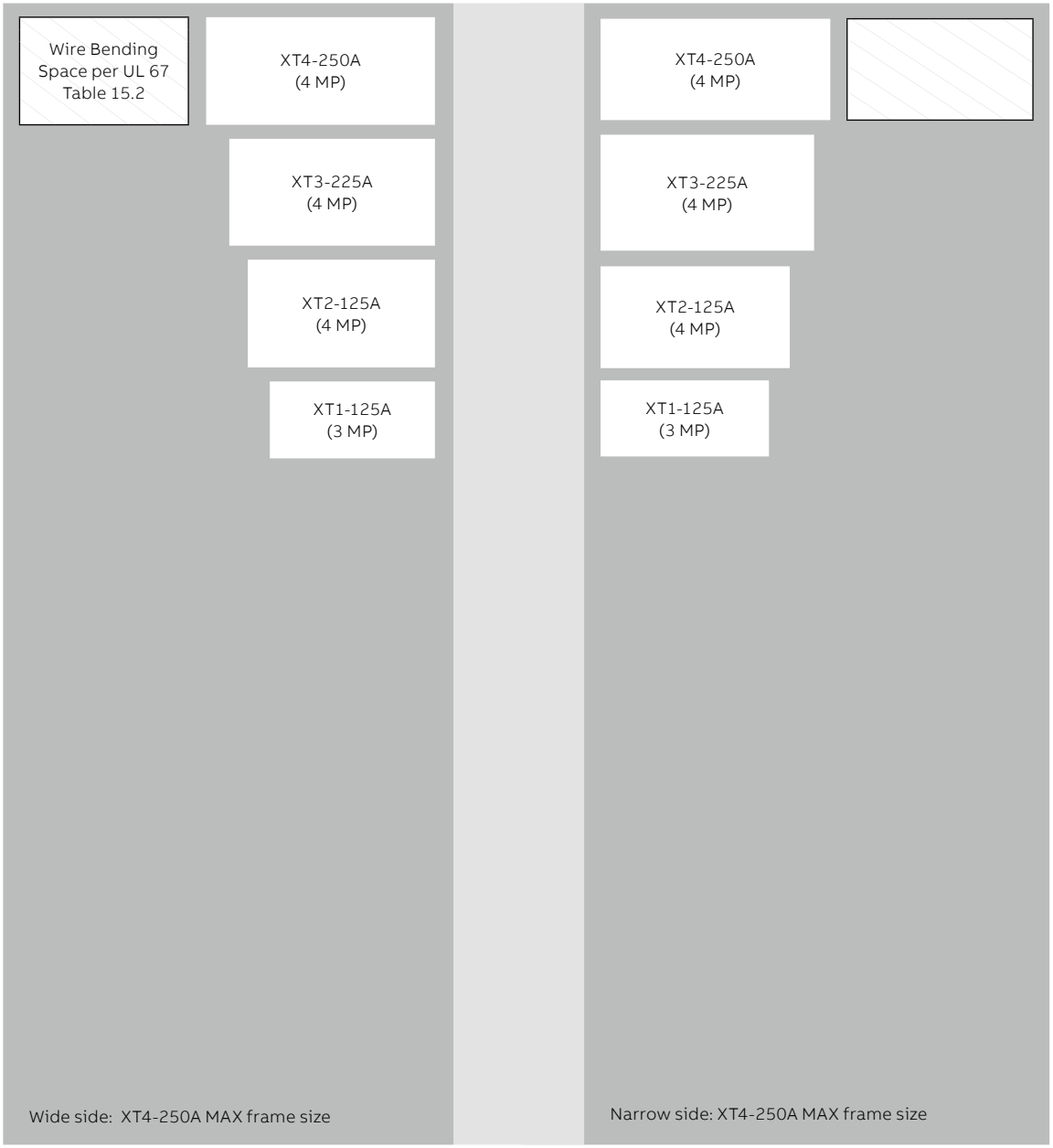


Figure A. 28.5" Wide back box, double side, 250A MAX branch

Panelboard selection guide

Single side interiors

34" wide enclosure—single side

Single side interiors[1] with a 34" wide back boxes have up to an 800A maximum SafeT Bus Stack and will accept up to 800A maximum branch outgoing devices.

[1]Refer to Figure E for more details

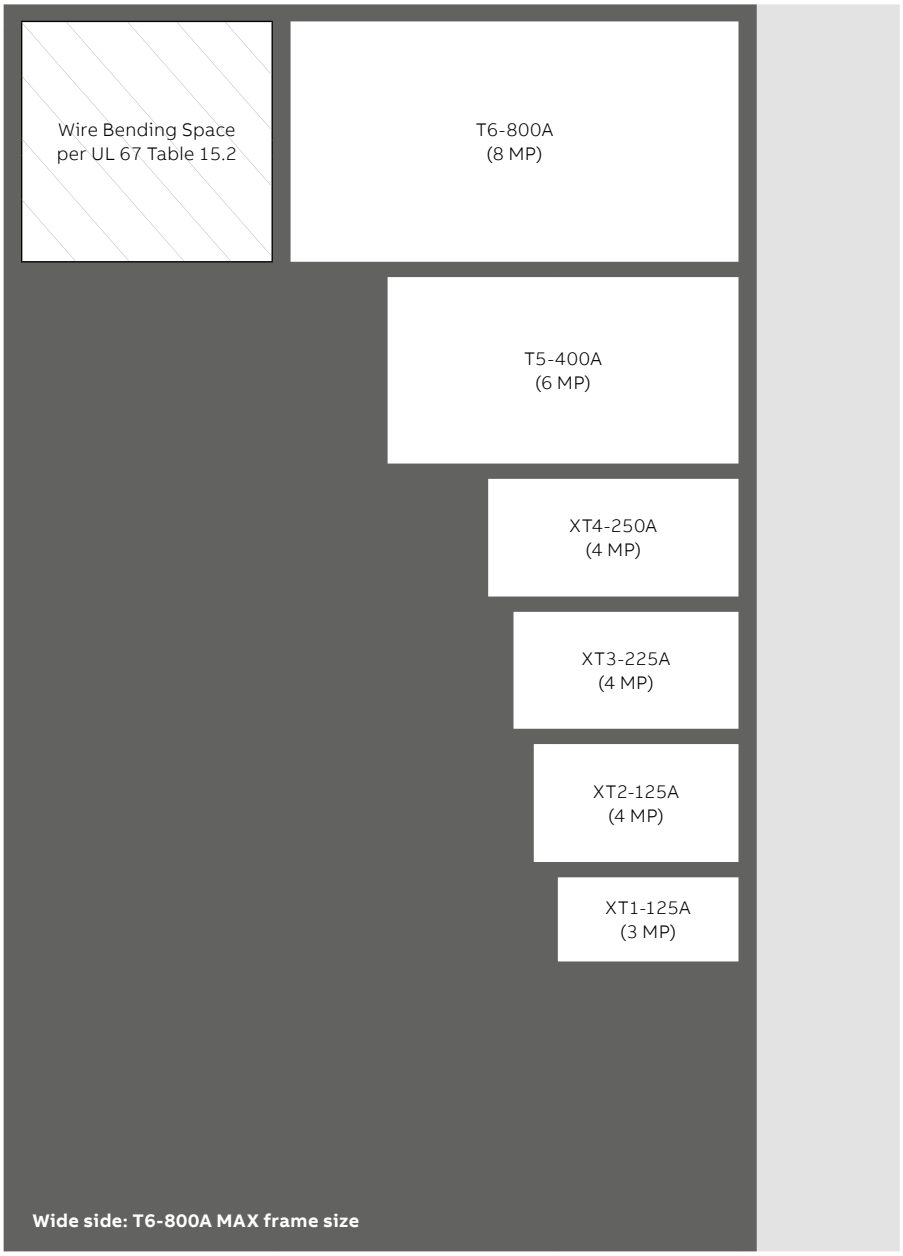
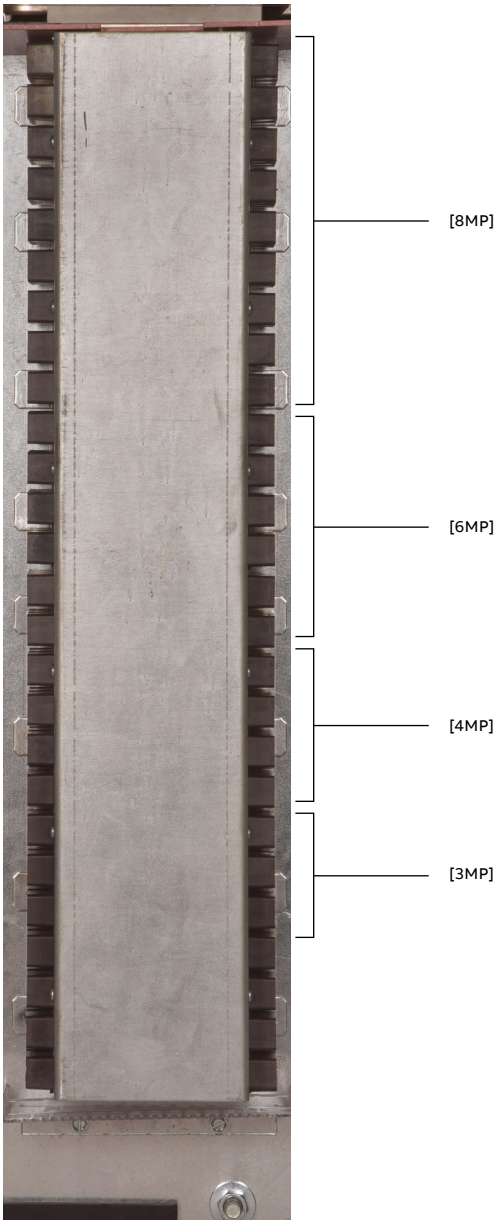
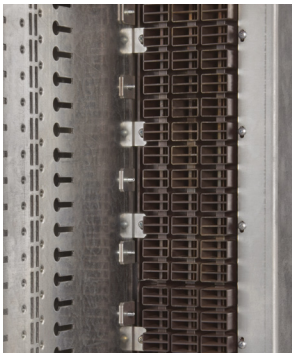


Figure D. 34" Wide back box, universal single side, 800A MAX branch

Panelboard selection guide

Mounting space requirements





The current carrying bus bars of the SafeT Bus Stack are encased behind an IP20 shroud. Each set of openings in the IP20 shroud, oriented from the front of the panelboard to the rear back pan, represent one (1) mounting position. Each mounting position contains access to all three bus bars; phases A, B and C. Each circuit breaker frame and plug-on lug has specific requirements for the number of mounting positions it will occupy in the bus stack. Refer to the table below.

Circuit breaker mounting position [MP] requirements

Frame	Frame ampacity	Poles	No. of MP
XT1	125A	3	3
XT2	125A	3	4
XT3	250A	3	4
XT4	250A	3	4
T5	400A	3	6
T6	800A	3	8
T7	1200A	3	8

Plug-on lug mounting position [MP] requirement1

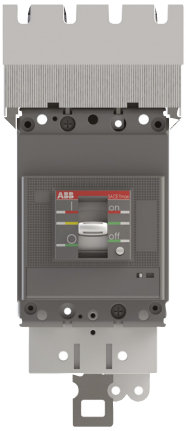
Frame	Frame ampacity	Poles	No. of MP
POL04	400A	3	6
POL08	800A	3	8
POL12	1200A	3	8

[1] Plug-on lugs mount only on wide side of panelboard.

Panelboard selection guide

Tmax and Tmax XT frames

XT1-125A



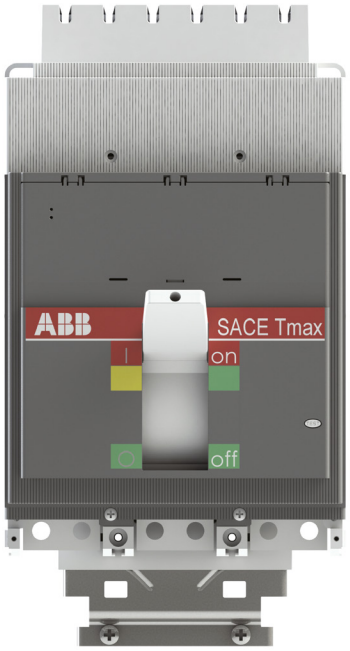
XT2-125A

XT3-225A

XT4-250A

T5-400A

T6-800A/600A



T7-1200A/1000A

Panelboard selection guide

Sizing tables

PPL - Fixed vertical main lug only (MLO) interiors

Catalog number	Type	Ampacity (A)	Bus material	Maximum branch	Mounting positions	Height (in)	Interior Width (in)	Back box Catalog number	Front Catalog number
PPL04ATT4052	PPL	400	AT	XT4	52	62	28	BB2862	PPFMLO2862
PPL04ATT5052	PPL	400	AT	T5	52	62	34	BB3462	PPFMLO3462
PPL04ATT4078	PPL	400	AT	XT4	78	76	28	BB2876	PPFMLO2876
PPL04ATT5078	PPL	400	AT	T5	78	76	34	BB3476	PPFMLO3476
PPL04CST4052	PPL	400	CS	XT4	52	62	28	BB2862	PPFMLO2862
PPL04CST5052	PPL	400	CS	T5	52	62	34	BB3462	PPFMLO3462
PPL04CST4078	PPL	400	CS	XT4	78	76	28	BB2876	PPFMLO2876
PPL04CST5078	PPL	400	CS	T5	78	76	34	BB3476	PPFMLO3476
PPL06ATT6052	PPL	600	AT	T6	52	62	45	BB4562	PPFMLO4562
PPL06ATT6078	PPL	600	AT	T6	78	76	45	BB4576	PPFMLO4576
PPL06ATT6104	PPL	600	AT	T6	104	90	45	BB4590	PPFMLO4590
PPL06CST4052[1]	PPL	600	CS	XT4	52	62	28	BB2862	PPFMLO2862
PPL06CST5052[1]	PPL	600	CS	T5	52	62	34	BB3462	PPFMLO3462
PPL06CST4078[1]	PPL	600	CS	XT4	78	76	28	BB2876	PPFMLO2876
PPL06CST5078[1]	PPL	600	CS	T5	78	76	34	BB3476	PPFMLO3476
PPL06CST4104[1]	PPL	600	CS	XT4	104	90	28	BB2890	PPFMLO2890
PPL06CST5104[1]	PPL	600	CS	T5	104	90	34	BB3490	PPFMLO3490
PPL08CST6052	PPL	800	CS	T6	52	62	45	BB4562	PPFMLO4562
PPL08CST6078	PPL	800	CS	T6	78	76	45	BB4576	PPFMLO4576
PPL08CST6104	PPL	800	CS	T6	104	90	45	BB4590	PPFMLO4590
PPL10CST7052	PPL	1000	CS	T7	52	62	45	BB4562	PPFMLO4562
PPL10CST7078	PPL	1000	CS	T7	78	76	45	BB4576	PPFMLO4576
PPL10CST7104	PPL	1000	CS	T7	104	90	45	BB4590	PPFMLO4590
PPL12CST7052	PPL	1200	CS	T7	52	62	45	BB4562	PPFMLO4562
PPL12CST7078	PPL	1200	CS	T7	78	76	45	BB4576	PPFMLO4576
PPL12CST7104	PPL	1200	CS	T7	104	90	45	BB4590	PPFMLO4590

[1] Pending availability - consult factory

PPM - Vertical main circuit breaker (MCB) interiors

Catalog number	Type	Ampacity (A)	Bus material	Maximum branch	Mounting positions	Height (in)	Interior Width (in)	Backbox Catalog number	Front Catalog number
PPM04ATT4052	PPM	400	AT	XT4	52	76	28	BB2876	PPFT5M2876
PPM04ATT5052	PPM	400	AT	T5	52	76	34	BB3476	PPFT5M3476
PPM04ATT4078	PPM	400	AT	XT4	78	90	28	BB2890	PPFT5M2890
PPM04ATT5078	PPM	400	AT	T5	78	90	34	BB3490	PPFT5M3490
PPM04CST4052	PPM	400	CS	XT4	52	76	28	BB2876	PPFT5M2876
PPM04CST5052	PPM	400	CS	T5	52	76	34	BB3476	PPFT5M3476
PPM04CST4078	PPM	400	CS	XT4	78	90	28	BB2890	PPFT5M2890
PPM04CST5078	PPM	400	CS	T5	78	90	34	BB3490	PPFT5M3490
PPM06ATT6026	PPM	600	AT	T6	26	62	45	BB4562	PPFT6M4562
PPM06ATT6052	PPM	600	AT	T6	52	76	45	BB4576	PPFT6M4576
PPM06ATT6078	PPM	600	AT	T6	78	90	45	BB4590	PPFT6M4590
PPM06CST4026[1]	PPM	600	CS	XT4	26	62	28	BB2862	PPFT5M2862
PPM06CST5026[1]	PPM	600	CS	T5	26	62	34	BB3462	PPFT5M3462
PPM06CST4052[1]	PPM	600	CS	XT4	52	76	28	BB2876	PPFT5M2876
PPM06CST5052[1]	PPM	600	CS	T5	52	76	34	BB3476	PPFT5M3476
PPM06CST4078[1]	PPM	600	CS	XT4	78	90	28	BB2890	PPFT5M2890
PPM06CST5078[1]	PPM	600	CS	T5	78	90	34	BB3490	PPFT5M3490
PPM08CST6026	PPM	800	CS	T6	26	62	45	BB4562	PPFT6M4562
PPM08CST6052	PPM	800	CS	T6	52	76	45	BB4576	PPFT6M4576
PPM08CST6078	PPM	800	CS	T6	78	90	45	BB4590	PPFT6M4590

[1] Pending availability - consult factory

Panelboard selection guide

Sizing tables

PPS—Universal back feed single side interiors

							Interior	Backbox	Front
Catalog number	Type	Ampacity (A)	Bus material	Maximum branch	Mounting positions	Height (in)	Width (in)	Catalog number	Catalog number
PPS06ATT6039[1]	PPS	600	AT	T6	39	62	34	BB3462	PPFUSS3462
PPS06ATT6065[1]	PPS	600	AT	T6	65	90	34	BB3490	PPFUSS3490
PPS08CST6039[1]	PPS	800	CS	T6	39	62	34	BB3462	PPFUSS3462
PPS08CST6065[1]	PPS	800	CS	T6	65	90	34	BB3490	PPFUSS3490
PPS10CST7039[1]	PPS	1000	CS	T7	39	62	34	BB3462	PPFUSS3462
PPS10CST7065[1]	PPS	1000	CS	T7	65	90	34	BB3490	PPFUSS3490

[1] Pending availability - consult factory

PPU—Universal back feed double side interiors

							Interior	Backbox	Front
Catalog number	Type	Ampacity (A)	Bus material	Maximum branch	Mounting positions	Height (in)	Width (in)	Catalog number	Catalog number
PPU06ATT6078	PPU	600	AT	T6	78	62	45	BB4562	PPFUDS4562
PPU06ATT6130	PPU	600	AT	T6	130	90	45	BB4590	PPFUDS4590
PPU08CST6078	PPU	800	CS	T6	78	62	45	BB4562	PPFUDS4562
PPU08CST6130	PPU	800	CS	T6	130	90	45	BB4590	PPFUDS4590
PPU10CST7078	PPU	1000	CS	T7	78	62	45	BB4562	PPFUDS4562
PPU10CST7130	PPU	1000	CS	T7	130	90	45	BB4590	PPFUDS4590
PPU12CST7078	PPU	1200	CS	T7	78	62	45	BB4562	PPFUDS4562
PPU12CST7130	PPU	1200	CS	T7	130	90	45	BB4590	PPFUDS4590

Panelboard selection guide

Accessories

Plug-on lugs			
Rated current	**Wire size**	**Number of cables per lug**	**Catalog number**
400	3/0-250 kcmil	2	POL0400
800	2/0-400 kcmil	3	POL0800
1200	4/0-500 kcmil	4	POL1200

Note: See max short circuit ratings for POLs when used as a back feed MLO in combination with a sub feed or feed-thru lug

Breaker covers			
Circuit breaker frame	**Required mounting positions**	**Branch circuit side**	**Catalog number**
XT1	3	narrow	BCNXT1
XT2	4	narrow	BCNXT2
XT3	4	narrow	BCNXT3
XT4	4	narrow	BCNXT4
XT1	3	wide	BCWXT1
XT2	4	wide	BCWXT2
XT3	4	wide	BCWXT3
XT4	4	wide	BCWXT4
T5	6	wide	BCWT5
T6	8	wide	BCWT6
T7	8	wide	BCWT7

Filler plates			
Circuit breaker frame equivalent space	**Required mounting positions**	**Branch circuit side**	**Catalog number**
n/a	1	narrow	FPN1MP
n/a	2	narrow	FPN2MP
XT1	3	narrow	FPN3MP
XT2, XT3, XT4	4	narrow	FPN4MP
n/a	6	narrow	FPN6MP
n/a	8	narrow	FPN8MP
n/a	1	wide	FPW1MP
n/a	2	wide	FPW2MP
XT1	3	wide	FPW3MP
XT2, XT3, XT4	4	wide	FPW4MP
T5	6	wide	FPW6MP
T6, T7	8	wide	FPW8MP

Solid neutral				
Rated current	**Bus material**	**Lug material**	**Panelboard type**	**Catalog number**
400	Aluminum	Aluminum	MCB/MLO	SNM04AlAl
800	Copper	Aluminum	MCB/MLO	SNM08CUAl
800	Copper	Aluminum	Universal	SNU08CUAl
1200	Copper	Aluminum	MLO	SNM12CUAl
1200	Copper	Aluminum	Universal	SNU12CUAl

Note: All lugs accept copper and aluminum wire

Neutral CT	
Rated current	**Catalog number**
400-1200[1]	KT7NCT

[1] Required for service entrance equipment with mains ≥ 1000A

Joslyn JSPR surge protection device[1]		
Voltage	**Rating**	**Catalog number**
208/120V	120 kA	PPJSPR1203Y208
240V	120 kA	PPJSPR1203D240
240V high leg	120 kA	PPJSPR1203H240
480/277V	120 kA	PPJSPR1203Y480
480V	120 kA	PPJSPR1203D480
600/347V	120 kA	PPJSPR1203Y600
600V	120 kA	PPJSPR1203D600
208/120V	160 kA	PPJSPR1603Y208
240V	160 kA	PPJSPR1603D240
240V high leg	160 kA	PPJSPR1603H240
480/277V	160 kA	PPJSPR1603Y480
480V	160 kA	PPJSPR1603D480
600/347V	160 kA	PPJSPR1603Y600
600V	160 kA	PPJSPR1603D600

[1] All SPDs require a 30A (XT1 or XT2) breaker

Notes

Notes

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