

SELECTION GUIDE

MERCHANDISED SOLUTIONS

Merchandised Panelboards, Switchboards and ProS Enclosed Starters readily available from distributor inventory

**ENGINEERED
TO OUTFIT**



A panelboard, switchboard and NEMA enclosed starter offer for projects with quick turnaround times — ABB's Merchandised Solutions are engineered to be versatile, simple and readily available from distributor inventory.

Install quickly.

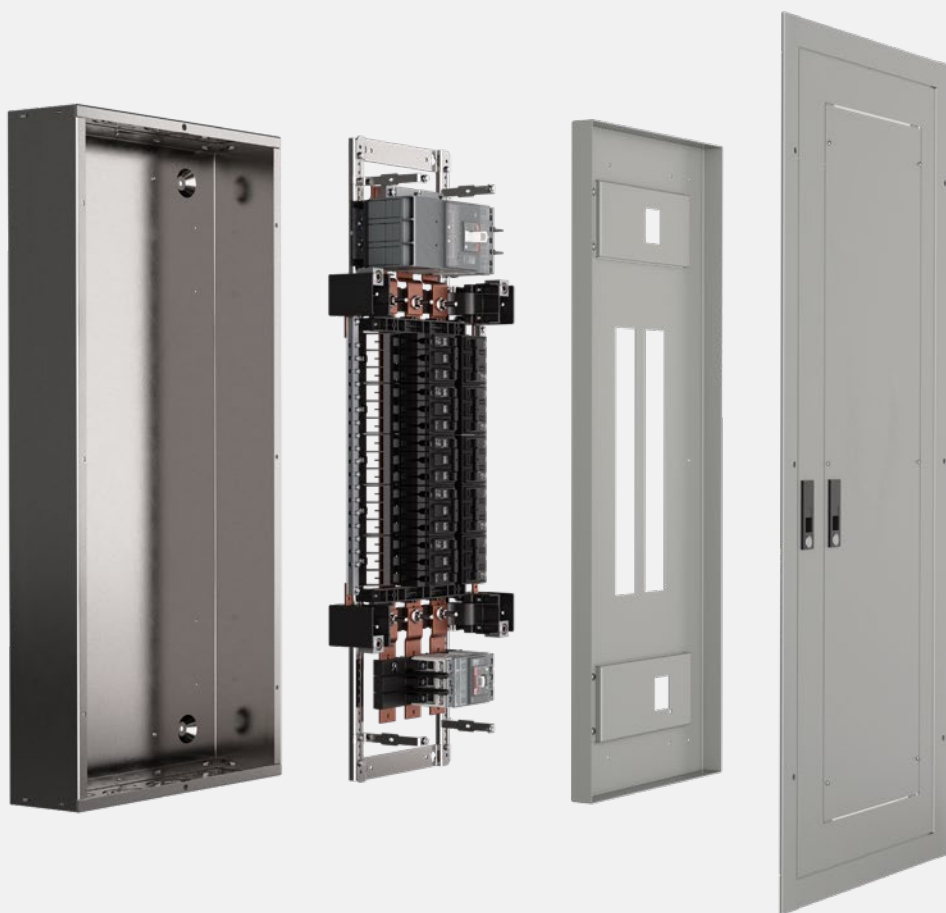
Install with confidence.

Table of contents

01. ReliaGear® Merchandised lighting panelboards	04
02. ReliaGear® Merchandised neXT SuperBox power panelboards	20
03. ReliaGear® Merchandised SB switchboards	42
04. Merchandised ProS enclosed starters	64

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ReliaGear® Merchandised
lighting panelboards



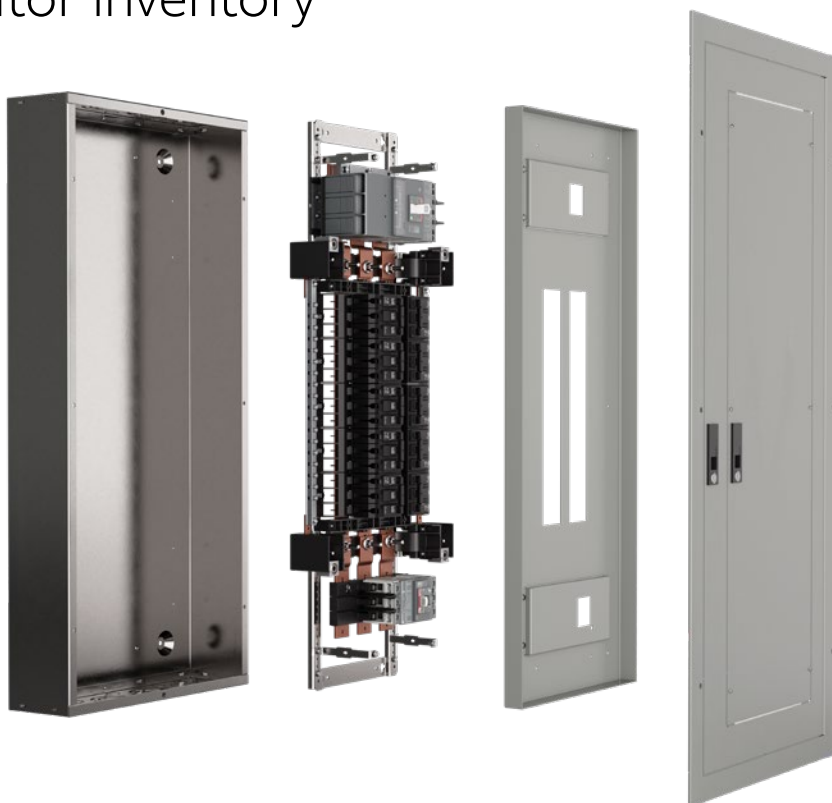
ReliaGear® Merchandised lighting panelboards

ReliaGear® Merchandised lighting panelboards

Product overview	6
Interior ordering code structure	7
Step-by-step selection	8
Enclosure drawings	15
Configuration examples	16

RELIAGEAR® MERCHANDISED LIGHTING PANELBOARDS

Versatile, simple and readily available
from distributor inventory



Projects with quick turnaround

Emergency situations,
commercial renovation,
schools or building expansions



No lead time

Quickly and efficiently
install these readily available
panelboards from distributor
inventory



Unassembled

Your local distributor stocks
unassembled, ready-to-go
panelboards to fit most
applications



Standard parts

8 steps to complete
your selection



Optimized offering

Streamlined SKU-based
components

ReliaGear® Merchandised lighting panelboards

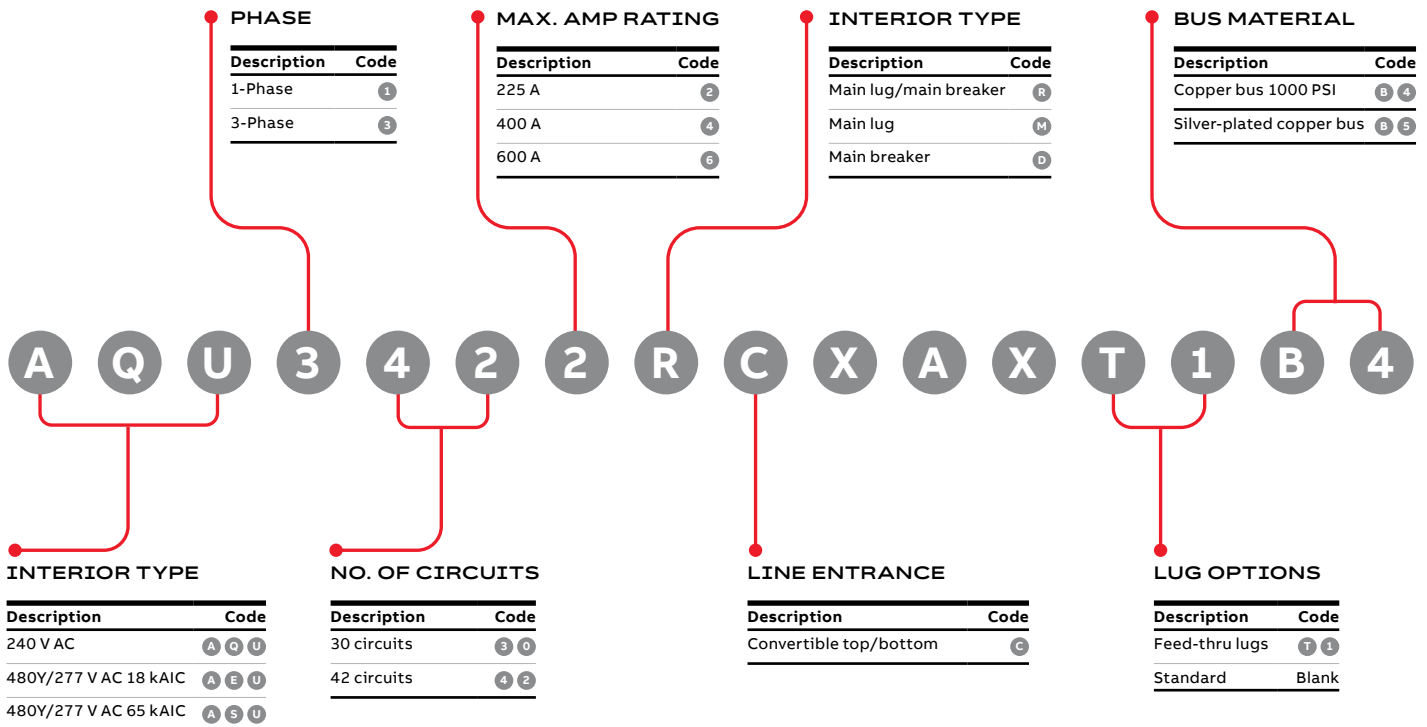
Interior ordering code structure

ReliaGear Merchandised lighting panelboards are engineered to be versatile, simple and readily available from distributor inventory for projects with quick turnaround. Whether it's an emergency situation or a project with standard technical requirements and a pressing deadline, you can install ReliaGear Merchandised lighting panelboards quickly and with confidence.

Lighting panelboards come unassembled, providing the flexibility to select interior, enclosure type, front, main and sub-breaker kit to meet most application requirements immediately.

Applications

- Emergency situations
- Commercial renovations
- Schools
- Building expansions



ReliaGear® Merchandised lighting panelboards

Step 1: Select interior

Select the interior by voltage, number of circuits and ampacity.
Identify the enclosure/front height for interior selected.

Voltage	Ampacity	No. of circuits	Ordering code ¹	Box/front height (in.)	No. of TGL2 ground bars required ²	Type
240 V AC, 1-Phase	100–225	30	AQU1302RCXAXT1B4	43.5	3	Main lug, feed-thru lug, main breaker, sub-feed breaker
		42	AQU1422RCXAXT1B4	49.5	4	
	400	42	AQU1424RCXAXT1B4	76.5	4	
		42	AQU1426RCXAXT1B4 ³	76.5	4	
208Y/120 V AC, 3-Phase	100–225	30	AQU3302RCXAXT1B4	43.5	3	
		42	AQU3422RCXAXT1B4	49.5	4	
	400	42	AQU3424RCXAXT1B4	76.5	4	
		42	AQU3426RCXAXT1B4 ³	76.5	4	
480Y/277 V AC, 3-Phase	100–225	30	AEU3302RCXAXT1B4	43.5	3	
		42	AEU3422RCXAXT1B4	49.5	4	
		42	AEU3424RCXAXT1B4	76.5	4	
		42	AEU3426RCXAXT1B4 ³	76.5	4	
	400	42	ASU3422MCXAXT1B4 ⁴	49.5	–	Main lug, feed-thru lug
		42	ASU3424MCXAXT1B4 ⁴	76.5	–	
		42	ASU3426MCXAXT1B4 ⁴	76.5	–	
		42	ASU3422DCXAXT1B4 ⁴	76.5	–	Main breaker, feed-thru lug
	600	42	ASU3424DCXAXT1B4 ⁴	76.5	–	
		42	ASU3426DCXAXT1B5 ⁴	76.5	–	
		42	ASU3422DCXAXB4 ⁴	76.5	–	Main breaker only
	400	42	ASU3424DCXAXB4 ⁴	76.5	–	
		42	ASU3426DCXAXB5 ⁴	76.5	–	
		42	ASU3422DCXAXB4 ⁴	76.5	–	
	600	42	ASU3424DCXAXB4 ⁴	76.5	–	
		42	ASU3426DCXAXB5 ⁴	76.5	–	
		42	ASU3422DCXAXB4 ⁴	76.5	–	
		42	ASU3424DCXAXB4 ⁴	76.5	–	

¹ See table below for TGL20 ground lug quantities.

² For isolated ground, use EGS12. When using EGS12, 5x and 7x ground lugs (TGL20) are required for the 30- and 42-circuit panels respectively.

³ 600 A available as main lug only.

⁴ ASU interiors come with factory-installed ground lugs and ground bars. Interior configurations with main lugs/feed-through lugs come factory installed. Quarter-turn front required.

TGL20 GROUND LUG QUANTITIES FOR AQU AND AEU INTERIORS

Interior type	100–225 A	400 A	600 A
Main lug only	1	1	2
Main lug and sub-feed	2	2	4
Main lug and feed-thru	2	2	4
Main breaker only	1	1	–
Main breaker and sub-feed	2	2	–
Main breaker and feed-thru	2	2	–

ReliaGear® Merchandised lighting panelboards

Steps 2–3: Select enclosure and front



NEMA 1



NEMA 3R

Select a 20" wide enclosure of correct height based on interior selected in Step 1.

- Enclosures come with blank endwalls.

Enclosure height (in.)	NEMA 1 ordering code	NEMA 3R ordering code
43.5	AB43B	AB433
49.5	AB49B	AB493
76.5	AB76B	AB763



Standard



Door within door



Standard with quarter-turn lock

For NEMA 1 enclosures only, select a 20" wide front of correct height based on interior selected in Step 1 and enclosure selected above.

- Standard fronts are equipped with concealed hinges and trim adjusting screws hinges, trim adjusting screws and quarter-turn locks.
- Door within door fronts are convenient for easy access to equipment from the front of the panel because they allow access to the gutters without removing the front.
- Front hinged to box fronts are similar to door within door fronts for convenient access to gutters, but four screws must be removed to access the outer door.

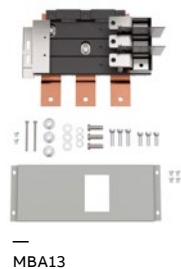
Front height (in.)	Ordering codes			
	Standard	Standard	Door within door	Front hinged to box
	Flush product number	Surface product number	Surface product number	Surface product number
43.5	AF43F	AF43S	AF43SP	AF43SD
49.5	AF49F	AF49S	AF49SP	AF49SD
	AF49FT ¹	AF49ST ¹	AF49SPT ¹	AF49SDT ¹
76.5	AF76FT ²	AF76ST ²	AF76SPT ²	AF76SDT ²

¹ Must be used with 225 A ASU interiors due to short circuit ratings; optional use on AQU or AEU interiors
² 76.5" fronts include quarter-turn lock, enabling applications with XT5 circuit breaker or ASU interiors due to short circuit ratings

ReliaGear® Merchandised lighting panelboards

Step 4: Select main and/or sub-feed breaker kit(s)

Select the main breaker kit appropriate for your interior type, amp rating and kAIC rating. If a sub-feed breaker is required, repeat the selection process. All 2-pole and 3-pole breaker kits can be used as either a main breaker or sub-feed breaker kit. 4-pole and 6-pole breaker kits can only be used as sub-feed.



MBA13

MAIN BREAKER KITS

Interior type	Bus rating	Breaker type	Amperage	# Poles	Ordering code¹
AQU1: 240 V AC, 1-Phase	225 A	THQB/THHQB	100	2	MB612
		XT1	125	2	MBC12
		A2	225	2	MBA12
		XT4	225	2	MBB12
	400 A	XT5	400	2	MBM324
AQU3: 208Y/120 V AC, 3-Phase	225 A	THQB/THHQB	100	3	MB613
		XT1	125	3	MBC33
		A2	225	3	MBA13
		XT4	225	3	MBB33
	400 A	XT5	400	3	MBM334
AEU3: 480Y/277 V AC, 3-Phase	225 A	TEY, TEYF	100	3	MB423
		XT1	125	3	MBC33
		XT4	225	3	MBB33
	400 A	XT5	400	3	MBM334
ASU3: 480Y/277 V AC, 3-Phase	225 A	XT1	125	3	MBC33
		XT4	225	3	MBB33
	400 A	XT5	400	3	MBM334
	600 A	XT5	600	3	MBM336¹

SUB-FEED BREAKER KITS

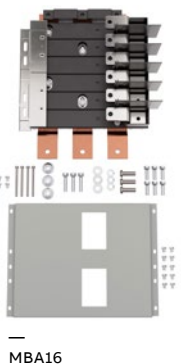
Interior type	Bus rating	Breaker type	Amperage	# Poles	Ordering code ¹
AQU1: 240 V AC, 1-Phase	225 A	THQB/THHQB	100	2	MB612
		THQB/THHQB	200 (2x 100)	4	MB614
		XT1	125	2	MBC12
		A2	225	2	MBA12
	400 A	XT4	225	2	MBB12
		XT5	400	2	MBM324
	600 A	XT5	400	2	MBM324
		XT5	400	2	MBM324
AQU3: 208Y/120 V AC, 3-Phase	225 A	XT1	125	3	MBC33
		A2	225	3	MBA13
		XT4	225	3	MBB33
		XT5	400	3	MBM334
	400 A	A2	400 ²	6	MBA16 ²
		XT4	400 ²	6	MBB36 ²
	600 A	XT5	400	3	MBM334
		XT4	450 ³	6	MBB36 ³
AEU3: 480Y/277 V AC, 3-Phase	225 A	XT1	125	3	MBC33
		XT4	225	3	MBB33
	400 A	XT5	400	3	MBM334
		XT4	400 ²	6	MBB36 ²
	600 A	XT5	400	3	MBM334
		XT4	450 ³	6	MBB36 ³

¹: Breaker not included

²: Total kit ampacity limited to 400 A; individual breaker limited to 225 A

³: XT4 breaker ampacity limited to 225 A

⁴: Can be used only with ASU main breaker interiors



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ReliaGear® Merchandised lighting panelboards

Step 5: Select main and/or sub-feed circuit breaker(s)

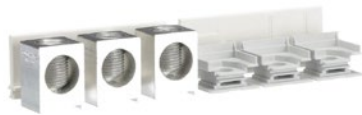
To correlate breaker types with the kAIC rating in specific panelboards, see the table for Step 4. For THQB and TEY main breakers, see branch breakers tables in Step 8.

TMAX® XT BREAKERS (3-POLE) FOR USE WITH APPROPRIATE MAIN BREAKER OR SUB-FEED BREAKER KIT.

240 V kAIC	480 V kAIC	Breaker description	Wire range (Cu/Al)	Cables per lug	Ordering code ¹
50	25	XT1N 125 TMF 60 A 3P	Cu Al 1x10–2/0 AWG	1	XT1NU3060AFF000XXX
50	25	XT1N 125 TMF 100 A 3P	Cu Al 1x10–2/0 AWG	1	XT1NU3100AFF000XXX
50	25	XT1N 125 TMF 125 A 3P	Cu Al 1x10–2/0 AWG	1	XT1NU3125AFF000XXX
100	65	XT1H 125 TMF 30 A 3P	Cu Al 1x10–2/0 AWG	1	XT1HU3030AFF000XXX
100	65	XT1H 125 TMF 100 A 3P	Cu Al 1x10–2/0 AWG	1	XT1HU3100AFF000XXX
100	65	XT1H 125 TMF 125 A 3P	Cu Al 1x10–2/0 AWG	1	XT1HU3125AFF000XXX
65	35	XT1S 125 TMF 100 A 3P	Cu Al 1x10–2/0 AWG	1	XT1SU3100AFF000XXX
65	25	XT4N 250 TMF 150 A 3P	Cu Al 1x4 AWG–300 kcmil	1	XT4NU3150AFF000XXX
65	25	XT4N 250 TMF 200 A 3P	Cu Al 1x4 AWG–300 kcmil	1	XT4NU3200AFF000XXX
65	25	XT4N 250 TMF 225 A 3P	Cu Al 1x4 AWG–300 kcmil	1	XT4NU3225AFF000XXX
150	65	XT4H 250 TMF 175 A 3P	Cu Al 1x4 AWG–300 kcmil	1	XT4HU3175AFF000XXX
150	65	XT4H 250 TMF 200 A 3P	Cu Al 1x4 AWG–300 kcmil	1	XT4HU3200AFF000XXX
150	65	XT4H 250 TMF 225 A 3P	Cu Al 1x4 AWG–300 kcmil	1	XT4HU3225AFF000XXX
65	25	XT4N 250 TMA 225 A 3P	Cu Al 1x4 AWG–300 kcmil	1	XT4NU3225BFF000XXX
65	25	XT4N 250 EKIP DIP LSI 250 A 3P	Cu Al 1x4 AWG–300 kcmil	1	XT4NU32501FF000XXX
150	65	XT4H 250 EKIP DIP LSI 250 A 3P	Cu Al 1x4 AWG–300 kcmil	1	XT4HU32501FF000XXX
65	35	XT5N 400 TMA 300 A 3P	Cu Al 2x2/0 AWG–500 kcmil	2	XT5NU330ABFF000XXX
65	35	XT5N 400 TMA 400 A 3P	Cu Al 2x2/0 AWG–500 kcmil	2	XT5NU340ABFF000XXX
150	65	XT5H 400 TMA 400 A 3P	Cu Al 2x2/0 AWG–500 kcmil	2	XT5HU340ABFF000XXX
65	35	XT5N 400 EKIP DIP LSI 400 A 3P	Cu Al 2x2/0 AWG–500 kcmil	2	XT5NU340AFF000XXX
150	65	XT5H 400 EKIP DIP LSI 400 A 3P	Cu Al 2x2/0 AWG–500 kcmil	2	XT5HU340AFF000XXX
65	35	XT5N 600 TMA 600 A 3P	Cu Al 2x2/0 AWG–500 kcmil	2	XT5NU360BFF000XXX
150	65	XT5H 600 TMA 600 A 3P	Cu Al 2x2/0 AWG–500 kcmil	2	XT5HU360BFF000XXX
65	35	XT5N 600 EKIP DIP LSI 600 A 3P	Cu Al 2x2/0 AWG–500 kcmil	2	XT5NU360BFF000XXX
150	65	XT5H 600 EKIP DIP LSI 600 A 3P	Cu Al 2x2/0 AWG–500 kcmil	2	XT5HU360BFF000XXX

¹ Breakers do not include lugs; they are supplied standard with front terminals and no lugs installed

² See Tmax XT breakers catalog for more options



BREAKER TERMINAL LUGS

Select terminal lugs for main breaker.

Breaker	Terminal kit type	Cable type	# Cables and wire size	Wire size																Ordering code
				10	8	6	4	3	2	1	1/0	2/0	3/0	4/0	250	300	350	400	500	
XT1	Mechanical lug	Cu/Al	1x10–2/0 AWG	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	KXT1CUAL1-3PC
XT4	Mechanical lug	Cu/Al	1x4 AWG–300 kcmil				●	●	●	●	●	●	●	●	●	●	●	●	●	KXT4CUAL2-3PC
XT5	Mechanical lug	Cu/Al	2x2/0 AWG–500 kcmil									●	●	●	●	●	●	●	●	KXT5CUAL2X500K-3PC

Page 11–16 of the BuyLog Section 11 Panelboards

MAIN OR SUB-FEED BREAKERS FOR USE WITH RQ PANELS (208Y/120 V AC 3-PHASE OR 240 V AC 1-PHASE)

Amp rating	2-pole		3-pole	
	10 kAIC	22 kAIC	10 kAIC	22 kAIC
Ordering code	Ordering code	Ordering code	Ordering code	Ordering code
125	A2A125TL-2	A2N125TL-2	A2A125TT	A2N125TT
150	A2A150TL-2	A2N150TL-2	A2A150TT	A2N150TT
175	A2A175TL-2	A2N175TL-2	A2A175TT	A2N175TT
200	A2A200TL-2	A2N200TL-2	A2A200TT	A2N200TT
225	A2A225TL-2	A2N225TL-2	A2A225TT	A2N225TT

ReliaGear® Merchandised lighting panelboards

Steps 6–7: Select main and/or feed-thru lug kit(s) and accessories



Select lug kit(s) for main lug and/or feed-thru applications, if required.

MAIN LUG KITS

Lug type	Amp rating	Wire range	Ordering code	200% Neutral ordering code
Mechanical	225	Standard: 6–350 kcmil	MLA1	NKA
	225	Oversized: 1–600 kcmil or (2) 1/0–250 kcmil	MLA2	
	400	Standard: 2–600 kcmil or (2) 1/0–250 kcmil	MLA41	NK4A ¹
	400	Oversized: 3/0–800 kcmil	MLA62	
	600	Standard: (2) 2/0–500 kcmil	MLA61	–
	600	Oversized: 3/0–800 kcmil	MLA62	

¹ For 200% neutral feed-thru, order NKA4FT, (GO-101P). Wire range (2) 2/0–600 kcmil or (4) 4–250 kcmil.



ACCESSORIES

Service entrance kit ²	
Amp rating	Ordering code
225	BNDKT
400	BNDKT6
600	BNDKT6

² Service entrance kit includes a bonding strap with hardware and a service entrance label.

MAIN BREAKER SERVICE ENTRANCE LUG COVER KIT

Breaker type	Poles	Ordering code
Formula A2	2	A2P2SB1
Formula A2	3	A2P3SB1
Tmax XT1	3	XT1P3SB1
Tmax XT4	3	XT4P3SB1
Tmax XT5	3	XT5P3SB1

ReliaGear® Merchandised lighting panelboards

Step 8: Select bolt-on branch circuit breakers

Select branch circuit breakers from the tables below.

- THQB and THHQB breakers are only compatible with RQ panels.
- TEY and TEYF breakers are only compatible with RE panels.

BRANCH CIRCUIT BREAKERS FOR USE WITH RQ PANELS (208Y/120 V AC 3-PHASE OR 240 V AC 1-PHASE)

Amp rating	10 kAIC						22 kAIC
	1-pole	2-pole	3-pole	1-pole	2-pole	3-pole	
	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code
15	THQB1115 ^{1,2,3,5}	THQB2115 ^{1,5}	THQB32015	THHQB1115 ^{1,2,3,5}	THHQB2115 ^{1,5}	THHQB32015	
20	THQB1120 ^{1,2,4,5}	THQB2120 ^{1,5}	THQB32020	THHQB1120 ^{1,2,4,5}	THHQB2120 ^{1,5}	THHQB32020	
25	THQB1125 ¹	THQB2125 ¹	THQB32025	THHQB1125 ¹	THHQB2125 ⁵	THHQB32025	
30	THQB1130	THQB2130 ^{1,5}	THQB32030	THHQB1130 ^{1,5}	THHQB2130 ^{1,5}	THHQB32030	
35	THQB1135	THQB2135 ¹	THQB32035	THHQB1135	THHQB2135	THHQB32035	
40	THQB1140	THQB2140 ^{1,5}	THQB32040	THHQB1140	THHQB2140	THHQB32040	
45	THQB1145	THQB2145 ¹	THQB32045	THHQB1145	THHQB2145	THHQB32045	
50	THQB1150	THQB2150 ¹	THQB32050	THHQB1150	THHQB2150	THHQB32050	
60	THQB1160	THQB2160 ¹	THQB32060	THHQB1160	THHQB2160	THHQB32060	
70	THQB1170	THQB2170	THQB32070	THHQB1170	THHQB2170	THHQB32070	
80	-	THQB2180	THQB32080	-	THHQB2180	THHQB32080	
90	-	THQB2190	THQB32090	-	THHQB2190	THHQB32090	
100	-	THQB21100	THQB32100	-	THHQB21100	THHQB32100	

¹: For ground fault, add GFT2 suffix to breaker SKU

²: For AFCI, add AF2 suffix to breaker SKU

³: For AFCI/GFCI, add DX suffix to breaker SKU THQB1115 and THHQB1115

⁴: For AFCI/GFCI, add DF suffix to breaker SKU

⁵: For equipment ground fault, add GFEP2 suffix to breaker SKU

BRANCH CIRCUIT BREAKERS FOR USE WITH RE PANELS (480Y/277 V AC 3-PHASE)

Amp rating	14 kAIC						18 kAIC
	1-pole	2-pole	3-pole	1-pole	2-pole	3-pole	
	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code
15	TEY115	TEY215	TEY315	TEYF115	TEYF215	TEYF315	
20	TEY120	TEY220	TEY320	TEYF120	TEYF220	TEYF320	
25	TEY125	TEY225	TEY325	TEYF125	TEYF225	TEYF325	
30	TEY130	TEY230	TEY330	TEYF130	TEYF230	TEYF330	
35	TEY135	TEY235	TEY335	TEYF135	TEYF235	TEYF335	
40	TEY140	TEY240	TEY340	TEYF140	TEYF240	TEYF340	
45	TEY145	TEY245	TEY345	TEYF145	TEYF245	TEYF345	
50	TEY150	TEY250	TEY350	TEYF150	TEYF250	TEYF350	
60	TEY160	TEY260	TEY360	TEYF160	TEYF260	TEYF360	
70	TEY170	TEY270	TEY370	-	TEYF270	TEYF370	
80	TEY180	TEY280	TEY380	-	TEYF280	TEYF380	
90	TEY190	TEY290	TEY390	-	TEYF290	TEYF390	
100	TEY1100	TEY2100	TEY3100	-	TEYF2100	TEYF3100	

ReliaGear® Merchandised lighting panelboards

Step 8: Select bolt-on branch circuit breakers

Select branch circuit breakers from the tables below.

- STEY (TEYD, TEYH, TEYL) breakers are only compatible with RS panels.

BRANCH CIRCUIT BREAKERS FOR USE WITH RS PANELS (480Y/277 V AC 3-PHASE)

Amp rating	25 kAIC			35 kAIC			65 kAIC		
	1-pole	2-pole	3-pole	1-pole	2-pole	3-pole	1-pole	2-pole	3-pole
	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code
15	TEYD1015B	TEYD2015B	TEYD3015B	TEYH1015B	TEYH2015B	TEYH3015B	TEYL1015B	TEYL2015B	TEYL3015B
20	TEYD1020B	TEYD2020B	TEYD3020B	TEYH1020B	TEYH2020B	TEYH3020B	TEYL1020B	TEYL2020B	TEYL3020B
25	TEYD1025B	TEYD2025B	TEYD3025B	TEYH1025B	TEYH2025B	TEYH3025B	TEYL1025B	TEYL2025B	TEYL3025B
30	TEYD1030B	TEYD2030B	TEYD3030B	TEYH1030B	TEYH2030B	TEYH3030B	TEYL1030B	TEYL2030B	TEYL3030B
35	TEYD1035B	TEYD2035B	TEYD3035B	TEYH1035B	TEYH2035B	TEYH3035B	TEYL1035B	TEYL2035B	TEYL3035B
40	TEYD1040B	TEYD2040B	TEYD3040B	TEYH1040B	TEYH2040B	TEYH3040B	TEYL1040B	TEYL2040B	TEYL3040B
45	TEYD1045B	TEYD2045B	TEYD3045B	TEYH1045B	TEYH2045B	TEYH3045B	TEYL1045B	TEYL2045B	TEYL3045B
50	TEYD1050B	TEYD2050B	TEYD3050B	TEYH1050B	TEYH2050B	TEYH3050B	TEYL1050B	TEYL2050B	TEYL3050B
60	TEYD1060B	TEYD2060B	TEYD3060B	TEYH1060B	TEYH2060B	TEYH3060B	TEYL1060B	TEYL2060B	TEYL3060B
70	TEYD1070B	TEYD2070B	TEYD3070B	TEYH1070B	TEYH2070B	TEYH3070B	TEYL1070B	TEYL2070B	TEYL3070B
80	-	TEYD2080B	TEYD3080B	-	TEYH2080B	TEYH3080B	-	TEYL2080B	TEYL3080B
90	-	TEYD2090B	TEYD3090B	-	TEYH2090B	TEYH3090B	-	TEYL2090B	TEYL3090B
100	-	TEYD2100B	TEYD3100B	-	TEYH2100B	TEYH3100B	-	TEYL2100B	TEYL3100B
110	-	TEYD2110B	TEYD3110B	-	TEYH2110B	TEYH3110B	-	TEYL2110B	TEYL3110B
125	-	TEYD2125B	TEYD3125B	-	TEYH2125B	TEYH3125B	-	TEYL2125B	TEYL3125B

01

NEMA 3R enclosure — rear

ReliaGear® Merchandised lighting panelboards

Configuration example 1

Panel: RQ with (2) 200 A sub-feeds
Number of circuits: 42
Mounting: Bolt-on

Volts: 208Y/120 V AC
Phase: 3
Wires: 4
AIC rating: 10 kA

Main type: Main breaker
Mains rating: 400 A
Enclosure: NEMA 1
Front: Standard

Circuit	Circuit description	Trip (A)	Poles	A	B	C	Poles	Trip (A)	Circuit description	Circuit
1	Circuit 1	20	1				1	20	Circuit 2	2
3	Circuit 3	20	1				1	20	Circuit 4	4
5	Circuit 5	20	1				1	20	Circuit 6	6
7	Circuit 7	20	1				1	20	Circuit 8	8
9	Circuit 9	20	1				1	20	Circuit 10	10
11	Circuit 11	20	1				1	20	Circuit 12	12
13	Circuit 13	20	1				1	20	Circuit 14	14
15	Circuit 15	20	1				1	20	Circuit 16	16
17	Circuit 17	20	1				1	20	Circuit 18	18
19	Circuit 19	20	1				1	20	Circuit 20	20
21	Circuit 21	20	1				1	20	Circuit 22	22
23	Circuit 23	20	1				1	20	Circuit 24	24
25	Circuit 25	20	1				1	20	Circuit 26	26
27	Circuit 27	20	1				1	20	Circuit 28	28
29	Circuit 29	20	1				1	20	Circuit 30	30
31	Circuit 31	20	1				1	20	Circuit 32	32
33	Circuit 33	20	1				1	20	Circuit 34	34
35	Circuit 35	20	1				1	20	Circuit 36	36
37	Circuit 37	20	1				1	20	Circuit 38	38
39	Circuit 39	20	1				1	20	Circuit 40	40
41	Circuit 41	20	1				1	20	Circuit 42	42

Selection example:

Step 1: Select interior

Select the interior SKU for a 42-circuit lighting panelboard for 400 A with a 208/120 voltage. Take note that the interior enclosure/front height is 76.5". Ground bars and ground lugs are also selected in this step based on requirements.

- Qty (1) AQU3424RCXAXT1B4
- Qty (4) TGL2
- Qty (2) TGL20

Step 2: Select enclosure

The interior selected in Step 1 requires a 76.5" enclosure height. There is a single option for a NEMA 1 with this height.

- Qty (1) AB76B

Step 3: Select front

NEMA 1 enclosures require a front. The interior selected in Step 1 requires a 76.5" front, aligning with the enclosure height in Step 2. Since flush mounting was not specifically identified, select a surface-mount front.

- Qty (1) AF76ST

Step 4: Select main and/or sub-feed breaker kit(s)

In this example, we need a 400 A main breaker kit as well as sub-feed breakers kits for 2 200 A breakers. We will use a Tmax® XT5 for the main breaker and Formula A2 breakers for the sub-feed breakers.

- Qty (1) MBM334
- Qty (1) MBA16

Step 5: Select main and/or sub-feed breaker(s)

In this example, we will use a Tmax XT5 as the main and Formula A2 breakers as sub-feed breakers.

- Qty (1) XT5NU340ABFF000XXX
- Qty (2) A2A200TT

Steps 6 and 7: Select main and/or feed-thru lug kit(s) and accessories

- Qty (1) KXT5CUAL2X500K-3PC

Step 8: Select bolt-on branch circuit breakers

In this example, we need 42 20 A branch breakers with a 10 kAIC rating.

- Qty (42) THQB1120

ReliaGear® Merchandised lighting panelboards

Configuration example 2

Panel: RE with (2) 200 A sub-feeds
Number of circuits: 42
Mounting: Bolt-on

Volts: 480Y/277 V AC
Phase: 3
Wires: 4
AIC rating: 18 kA

Main type: Main lug
Mains rating: 600 A
Enclosure: NEMA 3R
Front: Standard

Circuit	Circuit description	Trip (A)	Poles	A	B	C	Poles	Trip (A)	Circuit description	Circuit
1	Circuit 1	20	1				1	20	Circuit 2	2
3	Circuit 3	20	1				1	20	Circuit 4	4
5	Circuit 5	20	1				1	20	Circuit 6	6
7	Circuit 7	20	1				1	20	Circuit 8	8
9	Circuit 9	20	1				1	20	Circuit 10	10
11	Circuit 11	20	1				1	20	Circuit 12	12
13	Circuit 13	20	1				1	20	Circuit 14	14
15	Circuit 15	20	1				1	20	Circuit 16	16
17	Circuit 17	20	1				1	20	Circuit 18	18
19	Circuit 19	20	1				1	20	Circuit 20	20
21	Circuit 21	20	1				1	20	Circuit 22	22
23	Circuit 23	20	1				1	20	Circuit 24	24
25	Circuit 25	20	1				1	20	Circuit 26	26
27	Circuit 27	20	1				1	20	Circuit 28	28
29	Circuit 29	20	1				1	20	Circuit 30	30
31	Circuit 31	20	1				1	20	Circuit 32	32
33	Circuit 33	20	1				1	20	Circuit 34	34
35	Circuit 35	20	1				1	20	Circuit 36	36
37	Circuit 37	20	1				1	20	Circuit 38	38
39	Circuit 39	20	1				1	20	Circuit 40	40
41	Circuit 41	20	1				1	20	Circuit 42	42

Selection example:

Step 1: Select interior

Select the interior SKU for a 42-circuit lighting panelboard for 600 A with a 480Y/277 voltage. Take note that the interior enclosure/front height is 76.5". Ground bars and ground lugs are also selected in this step based on requirements.

- Qty (1) AEU3426RCXAXT1B4
- Qty (4) TGL2
- Qty (2) TGL20

Step 2: Select enclosure

The interior selected in Step 1 requires a 76.5" enclosure height. There is a single option for a NEMA 3R with this height.

- Qty (1) AB763

Step 3: Select front

Not required for this example as front selection is only required with NEMA 1 enclosures.

Step 4: Select main and/or sub-feed breaker kit(s)

In this example, we need sub-feed breaker kits for two 200 A breakers. We will use Tmax® XT4 breakers for the sub-feed breakers.

- Qty (1) MBB36

Step 5: Select main and/or sub-feed breaker(s)

In this example, we will use Tmax XT4 as sub-feed breakers.

- Qty (2) XT4NU3200AFF000XXX

Steps 6 and 7: Select main and/or feed-thru lug kit(s) and accessories

In this example, we need a 600 A main lug kit.

- Qty (1) MLA61
- Qty (2) KXT4CUAL2-3PC

Step 8: Select bolt-on branch circuit breakers

In this example, we need 42 20 A branch breakers with an 18 kAIC rating.

- Qty (42) TEYF120

ReliaGear® Merchandised lighting panelboards

Configuration example 3

Panel: RE feed-thru
Number of circuits: 30
Mounting: Bolt-on

Volts: 480Y/277 V AC
Phase: 3
Wires: 4
AIC rating: 14 kA

Main type: Main breaker
Mains rating: 225 A
Enclosure: NEMA 1
Front: Door within door

Circuit	Circuit description	Trip (A)	Poles	A	B	C	Poles	Trip (A)	Circuit description	Circuit
1	Circuit 1	15	2				2	15	Circuit 2	2
3										4
5	Circuit 3	15	2				2	15	Circuit 4	6
7										8
9	Circuit 5	15	2				2	15	Circuit 6	10
11										12
13	Circuit 7	15	2				2	15	Circuit 8	14
15										16
17	Circuit 9	15	2				2	15	Circuit 10	18
19										20
21	Circuit 11	15	2				2	15	Circuit 12	22
23										24
25	Circuit 13	15	2				2	15	Circuit 14	26
27										28
29										30

Selection example:

Step 1: Select interior

Select the interior SKU for a 30-circuit lighting panelboard for 225 A with a 480Y/277 voltage. Take note that the interior enclosure/front height is 43.5". Ground bars and ground lugs are also selected in this step based on requirements.

- Qty (1) AEU3302RCXAXT1B4
- Qty (3) TGL2
- Qty (2) TGL20

Step 2: Select enclosure

The interior selected in Step 1 requires a 43.5" enclosure height. There is a single option for a NEMA 1 with this height.

- Qty (1) AB43B

Step 3: Select front

NEMA 1 enclosures require a front. The interior selected in Step 1 requires a 43.5" front and for this example, door within door is required.

- Qty (1) AF43SP

Step 4: Select main and/or sub-feed breaker kit(s)

In this example, we need a main breaker kit for a 225 A breaker. We will use a Tmax® XT4 breaker for the main breaker.

- Qty (1) MBB33

Step 5: Select main and/or sub-feed breaker(s)

In this example, we will use a Tmax XT4 as the main breaker.

- Qty (1) XT4HU3225AFF000XXX

Steps 6 and 7: Select main and/or feed-thru lug kit(s) and accessories

In this example, we need a feed-thru lug kit for 225 A.

- Qty (1) MLA41
- Qty (2) KXT4CUAL2-3PC

Step 8: Select bolt-on branch circuit breakers

In this example, we need 14 20 A 2-pole branch breakers with a 14 kAIC rating.

- Qty (14) TEY215

02

ReliaGear® Merchandised neXT
SuperBox power panelboards



ReliaGear® Merchandised neXT SuperBox power panelboards

ReliaGear® Merchandised neXT SuperBox power panelboards

Product overview	22
Step-by-step selection	26
Enclosure drawings	36
Configuration examples	37
Resources	40

RELIAGEAR® MERCHANDISED NEXT POWER PANELBOARDS

Plug in and break out

Take power panel innovations to the neXT level with modular, field-modifiable panel design and groundbreaking Tmax® XT plug-in circuit breakers.



Plug into the advantages of ReliaGear neXT

- IP20 finger-safe bus stack design on main breaker applications
- Easy and fast top/bottom feed changes in the field
- Ground and neutral locations easily moved
- Single-tool component installation
- Plug-in circuit breakers allow for quick location flexibility
- Easy gutter access with hinged trims as standard



ReliaGear® Merchandised neXT SuperBox power panelboards

Product overview

A fully assembled panelboard offer ready to go from inventory for projects with quick turnaround.



The SuperBox offer is a preconfigured combination of enclosure, interior, ground, neutral, front and fillers available from inventory for immediate installation. One SKU includes everything needed for the power panelboard selection. Simply fill with Tmax® XT plug-in circuit breakers and accessories required for the project, and you're ready to go.¹

¹ Other ReliaGear neXT configurations are available as factory-assembled, made-to-order items. Contact your local ABB sales team for more information.



Projects with quick turnaround

Emergency situations, property damage, EV, data centers, commercial renovation or building expansions



No lead time

Quickly and efficiently install these readily available panelboards from distributor inventory



Flexible Design

Easy top/bottom feed changes in the field, single-tool installation and plug-in breakers for quick location flexibility

ReliaGear® Merchandised neXT SuperBox power panelboards

General characteristics

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

Short circuit rating

Equal to 200 kAIC at 240 V, 200 kAIC at 480 V or 100 kAIC at 600 V, or the lowest current interruption rating of any device installed, except as noted in the series rating listed with an integral or remote main breaker or fusible switch installed ahead of the power panel.

Enclosures

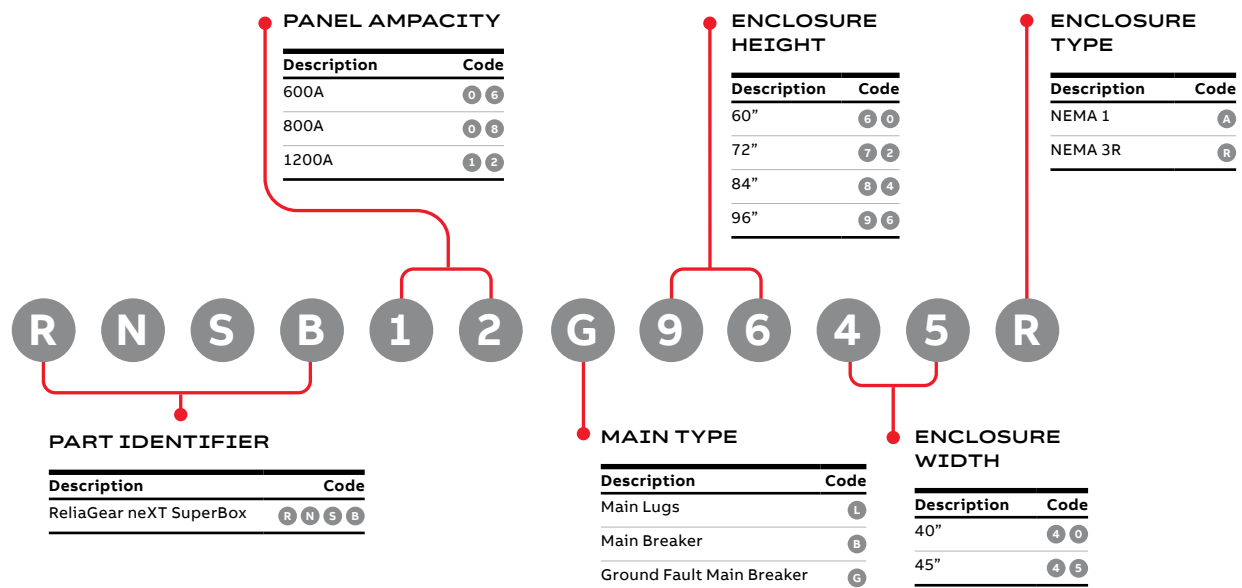
- NEMA 1 — For indoor use to provide a degree of protection to personnel against access to hazardous parts and to provide a degree of protection against ingress of solid foreign objects (falling dirt).
- NEMA 3R — For either indoor or outdoor use to provide a degree of protection to personnel against access to hazardous parts, falling dirt and harmful effects on the equipment due to the ingress of water (rain, sleet and snow); and that will be undamaged by the external formation of ice and snow with no damage to the external enclosure.

Bussing

Silver-plated copper

Certifications

- ANSI/NEMA PB 1, panelboards
- ANSI/NFPA 70, National Electrical Code
- Federal specification W-C-375, rev. B, amend. 1, circuit breakers, molded case; branch circuit and service
- Federal specification W-P 115, rev. C, panel, power distribution
- UL 489, molded case circuit breakers
- CSA 22.2 No. 5-13, molded case circuit breakers
- UL 50, enclosures for electrical equipment
- UL 67, panelboards
- cUL listed, low-voltage modular power panels
- Seismic certification according to ICC-ES AC15



ReliaGear® Merchandised neXT SuperBox power panelboards

Selection

1

Select main and branch feeder circuit breakers

2

Select the required accessories

3

Determine the X-space required to meet main and branch feeder circuit breaker selection

4

Select the SuperBox required based on maximum ampacity, main type, enclosure type, and bus X-space required



ReliaGear® Merchandised neXT SuperBox power panelboards

Step 1: Select main and branch feeder circuit breakers (XT1–XT2)^{1,2}



Frame	Int. rating at 480 V AC	Trip unit	Poles	Amps	Load side lugs (AWG or kcmil)	Ordering code
XT1 ³	N (25 kA)	TMF	3	15	1x #10-2/0	XT1NU3015AYD000XXX
XT1 ³	N (25 kA)	TMF	3	20	1x #10-2/0	XT1NU3020AYD000XXX
XT1 ³	N (25 kA)	TMF	3	30	1x #10-2/0	XT1NU3030AYD000XXX
XT1 ³	N (25 kA)	TMF	3	40	1x #10-2/0	XT1NU3040AYD000XXX
XT1 ³	N (25 kA)	TMF	3	50	1x #10-2/0	XT1NU3050AYD000XXX
XT1 ³	N (25 kA)	TMF	3	60	1x #10-2/0	XT1NU3060AYD000XXX
XT1 ³	N (25 kA)	TMF	3	70	1x #10-2/0	XT1NU3070AYD000XXX
XT1 ³	N (25 kA)	TMF	3	100	1x #10-2/0	XT1NU3100AYD000XXX
XT1 ³	N (25 kA)	TMF	3	125	1x #10-2/0	XT1NU3125AYD000XXX
XT1 ³	S (35 kA)	TMF	3	15	1x #10-2/0	XT1SU3015AYD000XXX
XT1 ³	S (35 kA)	TMF	3	20	1x #10-2/0	XT1SU3020AYD000XXX
XT1 ³	S (35 kA)	TMF	3	30	1x #10-2/0	XT1SU3030AYD000XXX
XT1 ³	S (35 kA)	TMF	3	40	1x #10-2/0	XT1SU3040AYD000XXX
XT1 ³	S (35 kA)	TMF	3	50	1x #10-2/0	XT1SU3050AYD000XXX
XT1 ³	S (35 kA)	TMF	3	60	1x #10-2/0	XT1SU3060AYD000XXX
XT1 ³	S (35 kA)	TMF	3	70	1x #10-2/0	XT1SU3070AYD000XXX
XT1 ³	S (35 kA)	TMF	3	100	1x #10-2/0	XT1SU3100AYD000XXX
XT1 ³	S (35 kA)	TMF	3	125	1x #10-2/0	XT1SU3125AYD000XXX
XT1 ³	H (65 kA)	TMF	3	15	1x #10-2/0	XT1HU3015AYD000XXX
XT1 ³	H (65 kA)	TMF	3	20	1x #10-2/0	XT1HU3020AYD000XXX
XT1 ³	H (65 kA)	TMF	3	30	1x #10-2/0	XT1HU3030AYD000XXX
XT1 ³	H (65 kA)	TMF	3	35	1x #10-2/0	XT1HU3035AYD000XXX
XT1 ³	H (65 kA)	TMF	3	40	1x #10-2/0	XT1HU3040AYD000XXX
XT1 ³	H (65 kA)	TMF	3	50	1x #10-2/0	XT1HU3050AYD000XXX
XT1 ³	H (65 kA)	TMF	3	60	1x #10-2/0	XT1HU3060AYD000XXX
XT1 ³	H (65 kA)	TMF	3	70	1x #10-2/0	XT1HU3070AYD000XXX
XT1 ³	H (65 kA)	TMF	3	80	1x #10-2/0	XT1HU3080AYD000XXX
XT1 ³	H (65 kA)	TMF	3	90	1x #10-2/0	XT1HU3090AYD000XXX
XT1 ³	H (65 kA)	TMF	3	100	1x #10-2/0	XT1HU3100AYD000XXX
XT1 ³	H (65 kA)	TMF	3	110	1x #10-2/0	XT1HU3110AYD000XXX
XT1 ³	H (65 kA)	TMF	3	125	1x #10-2/0	XT1HU3125AYD000XXX
XT2	H (65 kA)	TMA	3	80	1x #10-2/0	XT2HU3080BYD000XXX
XT2	H (65 kA)	TMA	3	100	1x #10-2/0	XT2HU3100BYD000XXX
XT2	H (65 kA)	TMA	3	125	1x #10-2/0	XT2HU3125BYD000XXX
XT2	L (100 kA)	TMA	3	100	1x #10-2/0	XT2LU3100BYD000XXX
XT2	N (25 kA)	Ekip DIP LSI	3	125	1x #10-2/0	XT2NU31251YD000XXX
XT2	H (65 kA)	Ekip DIP LSI	3	60	1x #10-2/0	XT2HU30601YD000XXX
XT2	H (65 kA)	Ekip DIP LSI	3	100	1x #10-2/0	XT2HU31001YD000XXX
XT2	H (65 kA)	Ekip DIP LSI	3	125	1x #10-2/0	XT2HU31251YD000XXX
XT2	L (100 kA)	Ekip DIP LSI	3	60	1x #10-2/0	XT2LU30601YD000XXX
XT2	L (100 kA)	Ekip DIP LSI	3	100	1x #10-2/0	XT2LU31001YD000XXX
XT2	L (100 kA)	Ekip DIP LSI	3	125	1x #10-2/0	XT2LU31251YD000XXX

¹Additional Tmax® XT plug-in circuit breakers and accessories are available. Contact your local ABB sales team for more information.

²All breakers are standard rated (standard circuit breakers design considers 80% of the rated load). In case a 100% rated breaker is needed, a factory assembled ReliaGear neXT configuration will be required.

³Separate mounting rail required. See details in accessories table.

⁴Breakers installed in panel must adhere to UL/NEC WBS requirements.

ReliaGear® Merchandised neXT SuperBox power panelboards

Step 1: Select main and branch feeder circuit breakers (XT4)^{1,2}



Frame	Int. rating at 480 V	Trip unit	Poles	Amps	Load side lugs (AWG or kcmil)	Ordering code
XT4	N (25 kA)	TMF	3	150	1x 3/0-350	XT4NU3150AY8000XXX
XT4	N (25 kA)	TMF	3	175	1x 3/0-350	XT4NU3175AY8000XXX
XT4	N (25 kA)	TMF	3	200	1x 3/0-350	XT4NU3200AY8000XXX
XT4	N (25 kA)	TMF	3	225	1x 3/0-350	XT4NU3225AY8000XXX
XT4	N (25 kA)	TMF	3	250	1x 3/0-350	XT4NU3250AY8000XXX
XT4	S (35 kA)	TMF	3	150	1x 3/0-350	XT4SU3150AY8000XXX
XT4	S (35 kA)	TMF	3	175	1x 3/0-350	XT4SU3175AY8000XXX
XT4	S (35 kA)	TMF	3	200	1x 3/0-350	XT4SU3200AY8000XXX
XT4	S (35 kA)	TMF	3	225	1x 3/0-350	XT4SU3225AY8000XXX
XT4	S (35 kA)	TMF	3	250	1x 3/0-350	XT4SU3250AY8000XXX
XT4	H (65 kA)	TMF	3	150	1x 3/0-350	XT4HU3150AY8000XXX
XT4	H (65 kA)	TMF	3	175	1x 3/0-350	XT4HU3175AY8000XXX
XT4	H (65 kA)	TMF	3	200	1x 3/0-350	XT4HU3200AY8000XXX
XT4	H (65 kA)	TMF	3	225	1x 3/0-350	XT4HU3225AY8000XXX
XT4	H (65 kA)	TMF	3	250	1x 3/0-350	XT4HU3250AY8000XXX
XT4	N (25 kA)	TMA	3	150	1x 4-300	XT4NU3150BYJ000XXX
XT4	N (25 kA)	TMA	3	175	1x 4-300	XT4NU3175BYJ000XXX
XT4	N (25 kA)	TMA	3	200	1x 4-300	XT4NU3200BYJ000XXX
XT4	N (25 kA)	TMA	3	225	1x 4-300	XT4NU3225BYJ000XXX
XT4	N (25 kA)	TMA	3	250	1x 3/0-350	XT4NU3250BY8000XXX
XT4	H (65 kA)	TMA	3	125	1x 4-300	XT4HU3125BYJ000XXX
XT4	H (65 kA)	TMA	3	150	1x 4-300	XT4HU3150BYJ000XXX
XT4	H (65 kA)	TMA	3	175	1x 4-300	XT4HU3175BYJ000XXX
XT4	H (65 kA)	TMA	3	200	1x 4-300	XT4HU3200BYJ000XXX
XT4	H (65 kA)	TMA	3	225	1x 4-300	XT4HU3225BYJ000XXX
XT4	H (65 kA)	TMA	3	250	1x 3/0-350	XT4HU3250BY8000XXX
XT4	L (100 kA)	TMA	3	100	1x 4-300	XT4LU3100BYJ000XXX
XT4	L (100 kA)	TMA	3	150	1x 4-300	XT4LU3150BYJ000XXX
XT4	L (100 kA)	TMA	3	175	1x 4-300	XT4LU3175BYJ000XXX
XT4	L (100 kA)	TMA	3	200	1x 4-300	XT4LU3200BYJ000XXX
XT4	L (100 kA)	TMA	3	225	1x 4-300	XT4LU3225BYJ000XXX
XT4	L (100 kA)	TMA	3	250	1x 3/0-350	XT4LU3250BY8000XXX
XT4	H (65 kA)	Ekip DIP LS/I	3	150	1x 4-300	XT4HU3150EYJ000XXX
XT4	H (65 kA)	Ekip DIP LS/I	3	225	1x 4-300	XT4HU3225EYJ000XXX
XT4	N (25 kA)	Ekip DIP LSI	3	100	1x 4-300	XT4NU31001YJ000XXX
XT4	N (25 kA)	Ekip DIP LSI	3	225	1x 4-300	XT4NU32251YJ000XXX
XT4	N (25 kA)	Ekip DIP LSI	3	250	1x 3/0-350	XT4NU32501Y8000XXX
XT4	S (35 kA)	Ekip DIP LSI	3	100	1x 4-300	XT4SU31001YJ000XXX
XT4	S (35 kA)	Ekip DIP LSI	3	250	1x 3/0-350	XT4SU32501Y8000XXX
XT4	H (65 kA)	Ekip DIP LSI	3	100	1x 4-300	XT4HU31001YJ000XXX
XT4	H (65 kA)	Ekip DIP LSI	3	150	1x 4-300	XT4HU31501YJ000XXX
XT4	H (65 kA)	Ekip DIP LSI	3	225	1x 4-300	XT4HU32251YJ000XXX
XT4	H (65 kA)	Ekip DIP LSI	3	250	1x 3/0-350	XT4HU32501Y8000XXX
XT4	L (100 kA)	Ekip DIP LSI	3	40	1x 14-1/0	XT4LU30401YG000XXX
XT4	L (100 kA)	Ekip DIP LSI	3	60	1x 14-1/0	XT4LU30601YG000XXX
XT4	L (100 kA)	Ekip DIP LSI	3	100	1x 4-300	XT4LU31001YJ000XXX
XT4	L (100 kA)	Ekip DIP LSI	3	150	1x 4-300	XT4LU31501YJ000XXX
XT4	L (100 kA)	Ekip DIP LSI	3	250	1x 3/0-350	XT4LU32501Y8000XXX

¹Additional Tmax® XT plug-in circuit breakers and accessories are available. Contact your local ABB sales team for more information.

²All breakers are standard rated (standard circuit breakers design considers 80% of the rated load). In case a 100% rated breaker is needed, a factory assembled ReliaGear neXT configuration will be required.

³Breakers installed in panel must adhere to UL/NEC WBS requirements

ReliaGear® Merchandised neXT SuperBox power panelboards

Step 1: Select main and branch feeder circuit breakers (XT5–XT7)^{1,2}



Frame	Int. rating at 480 V	Trip unit	Poles	Amps	Load side lugs (AWG or kcmil)	RELT compatible	Ordering code
XT5	N (35 kA)	TMA	3	300	2x 2/0-500	No	XT5NU330ABYN000XXX
XT5	N (35 kA)	TMA	3	400	2x 2/0-500	No	XT5NU340ABYN000XXX
XT5	N (35 kA)	TMA	3	500	2x 2/0-500	No	XT5NU350BBYN000XXX
XT5	N (35 kA)	TMA	3	600	2x 2/0-500	No	XT5NU360BBYN000XXX
XT5	S (50 kA)	TMA	3	300	2x 2/0-500	No	XT5SU330ABYN000XXX
XT5	S (50 kA)	TMA	3	400	2x 2/0-500	No	XT5SU340ABYN000XXX
XT5	S (50 kA)	TMA	3	600	2x 2/0-500	No	XT5SU360BBYN000XXX
XT5	H (65 kA)	TMA	3	300	2x 2/0-500	No	XT5HU330ABYN000XXX
XT5	H (65 kA)	TMA	3	400	2x 2/0-500	No	XT5HU340ABYN000XXX
XT5	H (65 kA)	TMA	3	500	2x 2/0-500	No	XT5HU350BBYN000XXX
XT5	H (65 kA)	TMA	3	600	2x 2/0-500	No	XT5HU360BBYN000XXX
XT5	L (100 kA)	TMA	3	300	2x 2/0-500	No	XT5LU330ABYN000XXX
XT5	L (100 kA)	TMA	3	400	2x 2/0-500	No	XT5LU340ABYN000XXX
XT5	L (100 kA)	TMA	3	600	2x 2/0-500	No	XT5LU360BBYN000XXX
XT5	N (35 kA)	Ekip DIP LSI	3	400	2x 2/0-500	No	XT5NU340AFYN000XXX
XT5	N (35 kA)	Ekip DIP LSI	3	600	2x 2/0-500	No	XT5NU360BFYN000XXX
XT5	S (50 kA)	Ekip DIP LSI	3	400	2x 2/0-500	No	XT5SU340AFYN000XXX
XT5	S (50 kA)	Ekip DIP LSI	3	600	2x 2/0-500	No	XT5SU360BFYN000XXX
XT5	H (65 kA)	Ekip DIP LSI	3	400	2x 2/0-500	No	XT5HU340AFYN000XXX
XT5	H (65 kA)	Ekip DIP LSI	3	600	2x 2/0-500	No	XT5HU360BFYN000XXX
XT5	L (100 kA)	Ekip DIP LSI	3	400	2x 2/0-500	No	XT5LU340AFYN000XXX
XT5	L (100 kA)	Ekip DIP LSI	3	600	2x 2/0-500	No	XT5LU360BFYN000XXX
XT6	N (35 kA)	TMA	3	800	3x 2/0-400	No	XT6NU3800BYU000XXX
XT6	S (50 kA)	TMA	3	800	3x 2/0-400	No	XT6SU3800BYU000XXX
XT6	H (65 kA)	TMA	3	800	3x 2/0-400	No	XT6HU3800BYU000XXX
XT6	N (35 kA)	Ekip DIP LSI	3	800	3x 2/0-400	No	XT6NU3800FYU000XXX
XT6	H (65 kA)	Ekip DIP LSI	3	800	3x 2/0-400	No	XT6HU3800FYU000XXX
XT7	S (50 kA)	Ekip DIP LSI	3	1000	4x 4/0-500	No	XT7SU310DFYW000XXX
XT7	S (50 kA)	Ekip DIP LSI	3	1200	4x 4/0-500	No	XT7SU312EFYW000XXX
XT7	H (65 kA)	Ekip DIP LSI	3	800	4x 4/0-500	No	XT7HU380CFYW000XXX
XT7	H (65 kA)	Ekip DIP LSI	3	1000	4x 4/0-500	No	XT7HU310DFYW000XXX
XT7	H (65 kA)	Ekip DIP LSI	3	1200	4x 4/0-500	No	XT7HU312EFYW000XXX
XT7	S (50 kA)	Ekip Touch LSI	3	1000	4x 4/0-500	Yes	XT7SU310DPYW000XRR
XT7	S (50 kA)	Ekip Touch LSI	3	1200	4x 4/0-500	Yes	XT7SU312EPYW000XRR
XT7	H (65 kA)	Ekip Touch LSI	3	1000	4x 4/0-500	Yes	XT7HU310DPYW000XRR
XT7	H (65 kA)	Ekip Touch LSI	3	1200	4x 4/0-500	Yes	XT7HU312EPYW000XRR
XT7	L (100 kA)	Ekip Touch LSI	3	1200	4x 4/0-500	Yes	XT7LU312EPYW000XRR
XT7	S (50 kA)	Ekip Touch LSI	3	1200	4x 4/0-500	Yes	XT7SU312EQYW000XRR
XT7	H (65 kA)	Ekip Touch LSI	3	1200	4x 4/0-500	Yes	XT7HU312EQYW000XRR
XT7	L (100 kA)	Ekip Touch LSI	3	1200	4x 4/0-500	Yes	XT7LU312EQYW000XRR

¹Additional Tmax® XT plug-in circuit breakers and accessories are available. Contact your local ABB sales team for more information.

²All breakers are standard rated (standard circuit breakers design considers 80% of the rated load). In case a 100% rated breaker is needed, a factory assembled ReliaGear neXT configuration will be required.

³Breakers installed in panel must adhere to UL/NEC WBS requirements.

ReliaGear® Merchandised neXT SuperBox power panelboards

Step 1: Select main and branch feeder circuit breakers (TEY–FB)^{1,2}



1-pole FB



2-pole FB



1-pole TEY



2-pole TEY

Frame	Int. rating at 480 V	Trip unit	Poles	Amps	Phase	Load side lugs (AWG or kcmil)	Ordering code
TEY	D (25 kA)	TMF	1	20	A	#14–#10 (Cu), #12–#10 (Al)	TEYADED0AAXXXXXX
TEY	D (25 kA)	TMF	1	20	B	#14–#10 (Cu), #12–#10 (Al)	TEYADED0BAXXXXXX
TEY	D (25 kA)	TMF	1	20	C	#14–#10 (Cu), #12–#10 (Al)	TEYADED0CAXXXXXX
TEY	H (35 kA)	TMF	1	20	A	#14–#10 (Cu), #12–#10 (Al)	TEYAHED0AAXXXXXX
TEY	H (35 kA)	TMF	1	20	B	#14–#10 (Cu), #12–#10 (Al)	TEYAHED0BAXXXXXX
TEY	H (35 kA)	TMF	1	20	C	#14–#10 (Cu), #12–#10 (Al)	TEYAHED0CAXXXXXX
TEY	L (65 kA)	TMF	1	20	A	#14–#10 (Cu), #12–#10 (Al)	TEYALED0AAXXXXXX
TEY	L (65 kA)	TMF	1	20	B	#14–#10 (Cu), #12–#10 (Al)	TEYALED0BAXXXXXX
TEY	L (65 kA)	TMF	1	20	C	#14–#10 (Cu), #12–#10 (Al)	TEYALED0CAXXXXXX
TEY	D (25 kA)	TMF	2	40	AB	#10–#6 (Cu), #8–#4 (Al)	TEYADFHABXXXXXX
TEY	D (25 kA)	TMF	2	100	AB	#4–#1 (Cu), #2–1/0 (Al)	TEYADFQABDXXXXXX
TEY	D (25 kA)	TMF	2	40	BC	#10–#6 (Cu), #8–#4 (Al)	TEYADFHBCBXXXXXX
TEY	D (25 kA)	TMF	2	100	BC	#4–#1 (Cu), #2–1/0 (Al)	TEYADFQBCDXXXXXX
TEY	D (25 kA)	TMF	2	40	AC	#10–#6 (Cu), #8–#4 (Al)	TEYADFHACBXXXXXX
TEY	D (25 kA)	TMF	2	100	AC	#4–#1 (Cu), #2–1/0 (Al)	TEYADFQACDXXXXXX
FB	V (35 kA) ³	TMF	1	20	A	#14–#10	NEFBV16TE020R2A
FB	V (35 kA) ³	TMF	1	20	B	#14–#10	NEFBV16TE020R2B
FB	V (35 kA) ³	TMF	1	20	C	#14–#10	NEFBV16TE020R2C
FB	N (65 kA) ³	TMF	1	20	A	#14–#10	NEFBN16TE020R2A
FB	N (65 kA) ³	TMF	1	30	A	#10–4	NEFBN16TE030R2A
FB	N (65 kA) ³	TMF	1	20	B	#14–#10	NEFBN16TE020R2B
FB	N (65 kA) ³	TMF	1	30	B	#10–4	NEFBN16TE030R2B
FB	N (65 kA) ³	TMF	1	20	C	#14–#10	NEFBN16TE020R2C
FB	N (65 kA) ³	TMF	1	30	C	#10–4	NEFBN16TE030R2C
FB	V (35 kA)	TMF	2	100	AB	#4–1/0	NEFBV26TE100R2AB
FB	V (35 kA)	TMF	2	100	BC	#4–1/0	NEFBV26TE100R2BC
FB	V (35 kA)	TMF	2	100	AC	#4–1/0	NEFBV26TE100R2AC
FB	N (65 kA)	TMF	2	20	AB	#14–#10	NEFBN26TE020R2AB
FB	N (65 kA)	TMF	2	30	AB	#10–4	NEFBN26TE030R2AB
FB	N (65 kA)	TMF	2	40	AB	#10–4	NEFBN26TE040R2AB
FB	N (65 kA)	TMF	2	50	AB	#10–4	NEFBN26TE050R2AB
FB	N (65 kA)	TMF	2	60	AB	#10–4	NEFBN26TE060R2AB
FB	N (65 kA)	TMF	2	100	AB	#4–1/0	NEFBN26TE100R2AB
FB	N (65 kA)	TMF	2	20	BC	#14–#10	NEFBN26TE020R2BC
FB	N (65 kA)	TMF	2	30	BC	#10–4	NEFBN26TE030R2BC
FB	N (65 kA)	TMF	2	40	BC	#10–4	NEFBN26TE040R2BC
FB	N (65 kA)	TMF	2	50	BC	#10–4	NEFBN26TE050R2BC
FB	N (65 kA)	TMF	2	60	BC	#10–4	NEFBN26TE060R2BC
FB	N (65 kA)	TMF	2	100	BC	#4–1/0	NEFBN26TE100R2BC
FB	N (65 kA)	TMF	2	20	AC	#14–#10	NEFBN26TE020R2AC
FB	N (65 kA)	TMF	2	30	AC	#10–4	NEFBN26TE030R2AC
FB	N (65 kA)	TMF	2	40	AC	#10–4	NEFBN26TE040R2AC
FB	N (65 kA)	TMF	2	50	AC	#10–4	NEFBN26TE050R2AC
FB	N (65 kA)	TMF	2	60	AC	#10–4	NEFBN26TE060R2AC
FB	N (65 kA)	TMF	2	100	AC	#4–1/0	NEFBN26TE100R2AC

¹Additional TEY and FB plug-in circuit breakers and accessories are available. Contact your local ABB sales team for more information.

²All breakers are standard rated (standard circuit breakers design considers 80% of the rated load). In case a 100% rated breaker is needed, a factory assembled ReliaGear neXT configuration will be required.

³Interrupt rating at 240 V AC.

⁴ Breakers installed in panel must adhere to UL/NEC WBS requirements.

ReliaGear® Merchandised neXT SuperBox power panelboards

Step 1: Select main and branch feeder circuit breakers (Formula A2)^{1,2,3}



2-pole Formula A2

Frame	Int. rating at 240 V	Trip unit	Poles	Amps	Phase	Cu load side lugs (AWG or kcmil)	Al load side lugs (AWG or kcmil)	Ordering code
A2	A (10 kA)	TMF	2	125	AB	1x 1–250	1x 2/0–300	A2A2125ABDXXXX
A2	A (10 kA)	TMF	2	125	AC	1x 1–250	1x 2/0–300	A2A2125ACDXXXX
A2	A (10 kA)	TMF	2	150	AB	1x 1–250	1x 2/0–300	A2A2150ABDXXXX
A2	A (10 kA)	TMF	2	150	AC	1x 1–250	1x 2/0–300	A2A2150ACDXXXX
A2	A (10 kA)	TMF	2	200	AB	1x 1–250	1x 2/0–300	A2A2200ABDXXXX
A2	A (10 kA)	TMF	2	200	AC	1x 1–250	1x 2/0–300	A2A2200ACDXXXX
A2	A (10 kA)	TMF	2	125	AB	1x 1–250	1x 2/0–300	A2N2125ABDXXXX
A2	N (25 kA)	TMF	2	125	AC	1x 1–250	1x 2/0–300	A2N2125ACDXXXX
A2	N (25 kA)	TMF	2	150	AB	1x 1–250	1x 2/0–300	A2N2150ABDXXXX
A2	N (25 kA)	TMF	2	150	AC	1x 1–250	1x 2/0–300	A2N2150ACDXXXX
A2	N (25 kA)	TMF	2	200	AB	1x 1–250	1x 2/0–300	A2N2200ABDXXXX
A2	N (25 kA)	TMF	2	200	AC	1x 1–250	1x 2/0–300	A2N2200ACDXXXX
A2	N (25 kA)	TMF	2	250	AB	1x 1–250	—	A2N2250ABDXXXX

¹ Additional Formula A2 plug-in circuit breakers are available. Contact your local ABB sales team for more information.

² All breakers are standard rated (standard circuit breakers design considers 80% of the rated load). In case a 100% rated breaker is needed, a factory-assembled ReliaGear neXT configuration will be required.

³ 250 A Formula A2 plug-in breakers with 350 kcmil Al load side lugs available. Contact your local ABB sales team for more information.

⁴ Breakers installed in panel must adhere to UL/NEC WBS requirements.

ReliaGear® Merchandised neXT SuperBox power panelboards

Step 2: Select the required accessories³



Auxiliary contacts



Shunt trip



Fixed padlock



RELT



Mounting rail

Group	Type	Volts AC	XT1	XT2	XT4	XT5 ²	XT6	XT7	TEY	FB	A2
Auxiliary contacts Q = Indication of the status of the circuit breaker SY = Bell alarm	AUX-C 1 Q + 1 SY	250					KXTAAXCQSYFP	-	-	-	-
	AUX-C 2 Q + 1 SY	250					KXTAAXC2QSYFP	-	-	-	-
	AUX-C 1 Q + 1 SY	24					KXTAAXCDQSYFP	-	-	-	-
	AUX-C 3 Q + 1 SY	24	-				KXTDAXCD3QSYFP	-	-	-	-
	AUX 4Q	24					-	ZE1AUX4D	-	-	-
	AUX 4Q	400					-	ZE1AUX4	-	-	-
	AUX 1 SY	24					-	ZE1BAD	-	-	-
Shunt trip	AUX 1 SY	250					-	ZE1BA	-	-	-
	Pre-cabled (except for XT7)	24			KXTASORCFPB		KXTFYOCFPD	ZEZSZ	-	-	-
	Pre-cabled (except for XT7)	110			KXTASORCFPD		KXTFYOCFPD	ZEASE	-	-	-
Undervoltage release	Pre-cabled (except for XT7)	220			KXTASORCFPE			ZEASG	-	-	-
	Pre-cabled (except for XT7)	24			KXTAUVRFCF1		KXTFYUC1	ZEUAU	-	-	-
	Pre-cabled (except for XT7)	110			KXTAUVRFCF4		KXTFYUC4	ZEUAU	-	-	-
Fixed padlock ¹	Pre-cabled (except for XT7)	220			KXTAUVRFCF5		KXTFYUC5	ZEUAU	-	-	-
	Open position	-	KXTBPLLOP		KXTCPLLOP	KXT5PLLOP	KXT6PLLOP	KXT7PLLOP	-	-	-
	Open/closed position	-	KXTBLLLOPL		KXTCPLLOPL	KXT5PLLOPLC	KXT6PLLOPLC	-	TEYXPLD1	FB1PF	-
Removable padlock	Open position: KA2LD	-	-		-	-	-	-	-	-	KA2LDOR
RELT	RELT kit ⁴	120/240	-	-	-	-	-	RT04A	-	-	-
	RELT kit ⁴	480	-	-	-	-	-	RT04B	-	-	-
	RELT kit ⁴	600	-	-	-	-	-	RT04C	-	-	-
	RELT wire connector for XT7 2K-3	-	-	-	-	-	-	CN004 ⁵	-	-	-
Mounting rail	1 single Tmax® XT1	-	SR1XBF	-	-	-	-	-	-	-	-
	2 adjacent Tmax® XT1	-	SR2XBF	-	-	-	-	-	-	-	-
	5 adjacent Tmax® XT1	-	SR5XBF	-	-	-	-	-	-	-	-
Blank and fillers	1X blank + filler	-	-	-	-	-	-	-	-	-	SR01BF
	1X blank only	-	-	-	-	-	-	-	-	-	SR01BB
	2X blank + filler	-	-	-	-	-	-	-	-	-	SR02BF
	2X blank only	-	-	-	-	-	-	-	-	-	SR02BB
	3X blank + filler	-	-	-	-	-	-	-	-	-	SR03BF
	3X blank only	-	-	-	-	-	-	-	-	-	SR03BB
Service entrance barriers	XT1 blank only	-	SRT1BB	-	-	-	-	-	-	-	-
	3-pole breakers	-	SBX1W02P3	SBX2WT2P3 ⁶ SBX2WE2P3 ⁶	SBX4W30P3 ⁷ SBX4W35P3 ⁷	SBX5W50P3	SBX6W40P3	SBX7W50P3	-	-	-

¹ Padlocks are not included in the kit.² Tmax XT5 electrical accessories require 1 (one) extra X-space for installation.³ Additional Tmax XT accessories are available. Contact your local ABB sales team for more information.⁴ Requires XT7 equipped with Ekip Touch or above trip unit, 3 X-space factor required.⁵ CN004 includes Ekip 2K-3 signaling and Ekip supply. CN004 is ONLY compatible with firmware version 3.10.00 or higher. Refer to 9AKK107991A2520 to validate firmware version.⁶ SBX2WT2P3 for XT2 thermo mag, SBX2WE2P3 for XT2 Ekip⁷ SBX4W30P3 for 300 kcmil, SBX4W35P3 for 350 kcmil

ReliaGear® Merchandised neXT SuperBox power panelboards

Step 2: Select the required accessories



Surge protective device

TYPE 2 SURGE PROTECTIVE DEVICES¹

Voltage	Impulse current (kA)	Ordering code
480Y / 277 V	80	RGPPSP277Y08T2
	150	RGPPSP277Y15T2
	225	RGPPSP277Y22T2
	300	RGPPSP277Y30T2
208Y / 120 V	80	RGPPSP120Y08T2
	150	RGPPSP120Y15T2
	225	RGPPSP120Y22T2
	300	RGPPSP120Y30T2

¹ RGPP series SPD with MCB disconnect requires 9 (nine) X-spaces

RGM40 METERING²



RGM40 meter

Function	Communication protocol	Ordering code for 480Y/277 V and 208Y/120 V	Ordering code for 480 V and 240 V
Standard	Modbus RTU	RGM40V1MX	RGM40V1MT
	Modbus TCP	RGM40V1TX	RGM40V1TT
	BACnet	RGM40V1BX	RGM40V1BT
Standard + basic datalog	Modbus RTU	RGM40V2MX	RGM40V2MT
	Modbus TCP	RGM40V2TX	RGM40V2TT
	BACnet	RGM40V2BX	RGM40V2BT
Advanced datalog, PQ, waveform	Modbus RTU	RGM40V6MX	RGM40V6MT
	Modbus TCP	RGM40V6TX	RGM40V6TT
	BACnet	RGM40V6BX	RGM40V6BT

² RGM40 meter requires 4 X-spaces

ReliaGear® Merchandised neXT SuperBox power panelboards

Step 3: Determine the **X-space** required

Each circuit breaker frame has specific requirements for the number of mounting positions (**X-spaces**). Thanks to the optimized dimensions of the XT1, the mounting positions required are lower when two or five breakers are mounted close to one another.

RELT, RGM40 and SPDs also require **X-space**, since they are plugin modules. Refer to the table below and add up the number of **X-spaces** required for each plug-in device.

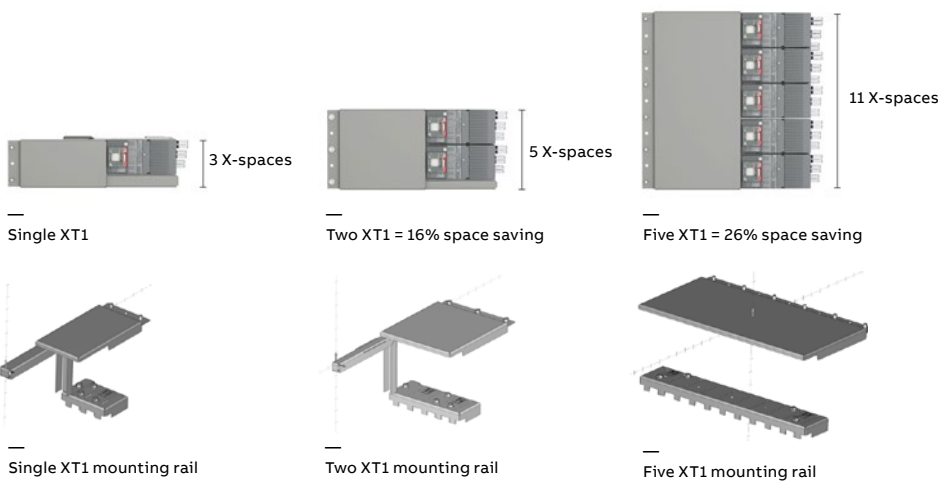
Frame	Max. ampacity (A)	Poles	X-spaces
Single XT1	125	3	3
Two XT1	125	3	5
Five XT1	125	3	11
XT2 ¹	125	3	3
XT4 ²	250	3	3
XT5 ³	600	3	4
XT6	800	3	6
XT7	1200	3	6
FB	100	1	1
FB	100	2	2
TEY	70	1	1
TEY	125	2	2
A2	250	2	2
RELT	–	–	3
Main metering (RGM40)	–	–	4
SPD ⁴	–	–	6

¹ Tmax® XT2 with COMs requires 1 (one) additional X-space.

² Tmax XT4 with COMs requires 2 (two) additional X-spaces.

³ Tmax XT5 with electrical accessories requires 1 (one) additional X-space.

⁴ RGPP series SPD with MCB disconnect requires 3 (three) additional X-spaces.



The small footprint of the XT1 allows this panel to offer multiple options to improve circuit breaker density. As you configure and order ReliaGear neXT panelboards, you'll notice that XT1 are grouped in quantities of one, two or five. As part of this feature, unique mounting brackets are required when adding XT1 breaker assemblies. See above for X-space and mounting brackets required. These additional rails are not included with SuperBox configurations and must be ordered as accessories.

Order codes for XT1 mounting rails

- SR1XBF for 1 single XT1 breaker
- SR2XBF for 2 adjacent XT1 breakers
- SR5XBF for 5 adjacent XT1 breakers

ReliaGear® Merchandised neXT SuperBox power panelboards

Step 4: Select the SuperBox required

Description	Amps	Enclosure type	Main	Ground fault on main compatible	Dimensions (H x W x D inches)	X-space left	X-space right	Ordering code
600A MLO NEMA 1 60 x 40 16X no breakers	600 A	NEMA 1	Main lugs (2x #2–600 kcmil)	No	60.3 x 40.7 x 11	12	12	RNSB06L6040A
600A MCB NEMA 1 60 x 40 16X no breakers	600 A	NEMA 1	Main breaker ¹	No	60.3 x 40.7 x 11	16	16	RNSB06B6040A
600A MLO NEMA 3R 60 x 40 16X no breakers	600 A	NEMA 3R	Main lugs (2x #2–600 kcmil)	No	61 x 43.5 x 16.7 ²	12	12	RNSB06L6040R
600A MCB NEMA 3R 60 x 40 16X no breakers	600 A	NEMA 3R	Main breaker ¹	No	61 x 43.5 x 16.7 ²	16	16	RNSB06B6040R
800A MLO NEMA 1 72 x 45 24X no breakers	800 A	NEMA 1	Main lugs (4x #2–600 kcmil)	No	72.3 x 45.7 x 11	20	20	RNSB08L7245A
800A MCB NEMA 1 72 x 45 24X no breakers	800 A	NEMA 1	Main breaker ¹	No	72.3 x 45.7 x 11	24	24	RNSB08B7245A
800A MLO NEMA 3R 72 x 45 24X no breakers	800 A	NEMA 3R	Main lugs (4x #2–600 kcmil)	No	73 x 48.5 x 16.7 ²	20	20	RNSB08L7245R
800A MCB NEMA 3R 72 x 45 24X no breakers	800 A	NEMA 3R	Main breaker ¹	No	73 x 48.5 x 16.7 ²	24	24	RNSB08B7245R
1200A MLO NEMA 1 84 x 45 32X no breakers	1200 A	NEMA 1	Main lugs (4x #2–600 kcmil)	No	84.3 x 45.7 x 11	28	28	RNSB12L8445A
1200A MCB NEMA 1 84 x 45 32X no breakers	1200 A	NEMA 1	Main breaker ¹	No	84.3 x 45.7 x 11	32	32	RNSB12B8445A
1200A MCB GF NEMA 1 96X45 32X no breakers	1200 A	NEMA 1	Main breaker ¹	Yes ⁴	96.3 x 45.7 x 11	28	28	RNSB12G9645A
1200A MLO NEMA 3R 84 x 45 32X no breakers	1200 A	NEMA 3R	Main lugs (4x #2–600 kcmil)	No	85 x 48.5 x 16.7 ²	28	28	RNSB12L8445R
1200A MCB NEMA 3R 84 x 45 32X no breakers	1200 A	NEMA 3R	Main breaker ¹	No	85 x 48.5 x 16.7 ²	32	32	RNSB12B8445R
1200A MCB GF NEMA 3R 96X45 32X no breakers	1200 A	NEMA 3R	Main breaker ¹	Yes ⁴	97 x 48.5 x 16.7 ²	32	32	RNSB12G9645R

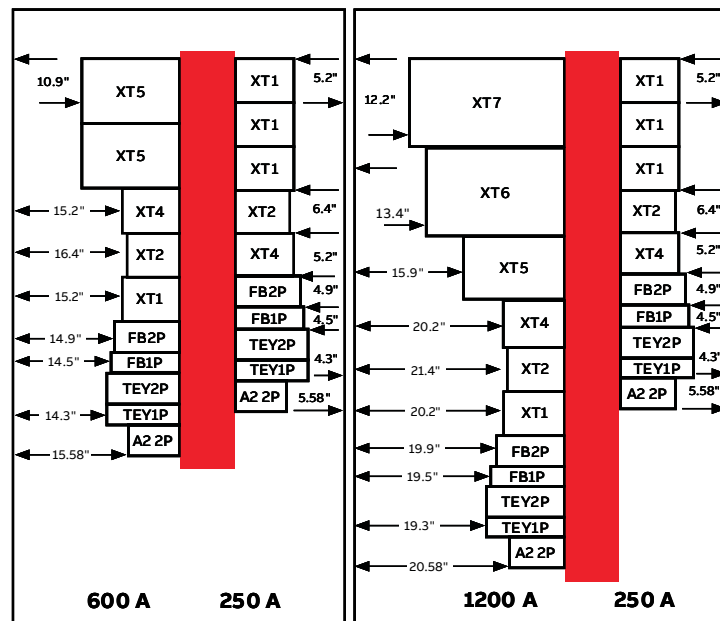
¹ X-space required for main breaker must be accounted for based on specific breaker selected.

² Depth includes 0.9" of hanger bracket.

³ Breakers installed in panel must adhere to UL/NEC wire bending space requirements.

⁴ Compatible with XT7 Ekip Touch LSIG or higher.

Available configurations and wire bending space



— 40" offset enclosure

— 45" offset enclosure

All ReliaGear Merchandised neXT panelboards are double sided. Wire bending space requirements restrict XT5–XT7 mounting to the left side of the interior.

WIRE BEND SPACE

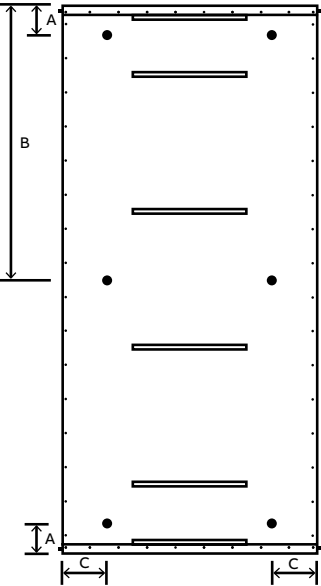
Breaker	Left mount space (in)	Right mount space (in)
40" offset enclosure		
XT5	10.9	–
XT4	15.2	5.2
XT2	16.4	6.4
XT1	15.2	5.2
FB 1-pole	14.5	4.5
FB 2-pole	14.9	4.9
TEY 1-pole	14.3	4.3
TEY 2-pole	14.3	4.3
A2 2-pole	15.58	5.58
45" offset enclosure		
XT7	12.2	–
XT6 with 400 kcmil lug	13.4	–
XT5	15.9	–
XT4	20.2	5.2
XT2	21.4	6.4
XT1	20.2	5.2
FB 1-pole	19.5	4.5
FB 2-pole	19.9	4.9
TEY 1-pole	19.3	4.3
TEY 2-pole	19.3	4.3
A2 2-pole	20.58	5.58

02

ReliaGear® Merchandised neXT SuperBox

power panelboards

Enclosure drawings

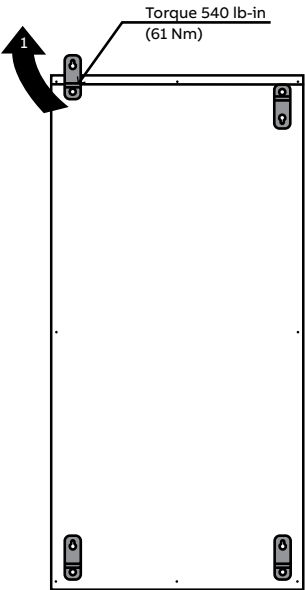


NEMA 1 enclosure

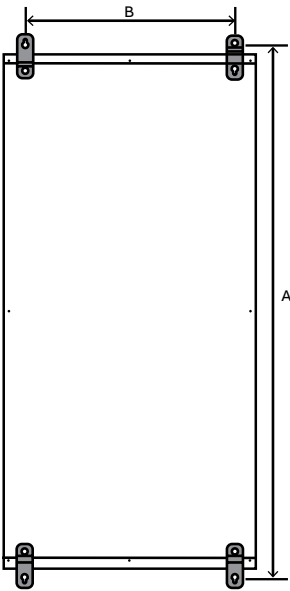
ENCLOSURE MOUNTING HOLES

Plate hole distance from edges

Height	Holes	A	B	C
60"	4	5"	–	8"
72"	4	5"	–	8"
84"	6	5"	42"	8"



NEMA 3R enclosure



ENCLOSURE DIMENSIONS

Enclosure exterior size (in)	A (height)	B (width)	Depth
60 (61.0) H x 40 (43.5) W	65.97	34.47	16.70
72 (73.0) H x 45 (48.5) W	77.97	39.47	16.70
84 (85.0) H x 45 (48.5) W	89.97	39.47	16.70

Note: Values in parentheses are overall enclosure dimensions. For more details on hinges and swing dimensions, refer to document 1SQC900008M0201

ReliaGear® Merchandised neXT SuperBox power panelboards

Configuration example 1

Panel:	Volts: 480Y/277 V AC	Main type: Main breaker
Location:	Phase: 3	Mains rating: 800 A
Mounting: Plug-on	Wires: 4	
Enclosure: NEMA 1	AIC rating: 35 kA	

Circuit	Circuit description	Trip (A)	Poles	A	B	C	Poles	Trip	Circuit description	Circuit
1	Circuit 1	400	3				3	100	Circuit 2	2
3	(110 V — shunt trip)	400	3				3	100		4
5		400	3				3	100		6
7	Circuit 3	200	3				3	100	Circuit 4	8
9		200	3				3	100		10
11		200	3				3	100		12
13	Circuit 5	200	3				3	100	Prepared space	14
15		200	3				3	100		16
17		200	3				3	100		18
19	Prepared space	200	3				3	100	Prepared space	20
21		200	3				3	100		22
23		200	3				3	100		24
25	—	—	—				—	—	—	26
27	—	—	—				—	—	—	28
29	—	—	—				—	—	—	30

Selection example:

Step 1: Select main and branch feeder circuit breakers

Main breakers are not included in the SuperBox and must be ordered separately. XT1 mounting rails are not included with breakers and must be selected to accommodate one, two or five XT1 circuit breakers. In this step, you must also take note of any prepared space requirements.

- Qty (1) XT6NU3800BYU000XXX
- Qty (1) XT5NU360BBYN000XXX
- Qty (2) XT4SU3200AY8000XXX
- Qty (1) XT4 prepared space
- Qty (2) XT1SU3100AYD000XXX
- Qty (2) XT1 prepared space

Step 2: Select the required accessories

In this case, we see that the XT5 requires a shunt trip. As indicated in the footnote, all XT5 electrical accessories require one additional X-space. Accessories listed are ordered separately and are UL certified for field installation.

- Qty (1) KXTFYOCFPD

Step 3: Determine the X-space required to meet main and branch feeder circuit breaker selection

In this example, we need X-space for (1) XT6, (1) XT5, (3) XT4 and (4) XT1.

Each XT6 requires 6 X-spaces; each XT5 requires 4 X-spaces plus 1 X-space for the shunt trip; each XT4 requires 3 X-spaces;

a single XT1 requires 3 X-spaces; two XT1s require 5 X-spaces; five XT1s require 11 X-spaces depending on the mounting rail(s) selected.

For the XT1s, we can use a five-unit mounting rail, which will require 11 X-spaces and will leave an additional future space, or we could use (2) two-unit mounting rails, which will require 10 X-spaces, or we could use four single-unit mounting rails, which will require 12 X-spaces. For this exercise, we will use (2) two-unit mounting rails requiring 10 X-spaces.

Total X space required = XT6 (6 spaces) + XT5 (4 spaces + 1 space) + XT4 (9 spaces) + XT1 (10 spaces) = 30 spaces in total.

Note that XT6s and XT5s can only be mounted on the left side of the bus stack. In this example, we need to ensure we have 11 X-spaces available on the left side.

- Qty (2) SR2XBF

Step 4: Select the SuperBox required based on maximum ampacity, main type, enclosure type and bus X-space required

In this example, we need an 800 A main breaker interior, in a NEMA 1 enclosure. Using the SuperBox selection table, we find that the 800 A main breaker panel has a total of 48 X-spaces available, with 24 X-spaces on the left side and 24 X-spaces available on the right side. Blanks and filler plates are included in the SuperBox so all future spaces will be covered. No additional items required.

- Qty (1) RNSB08B7245A

ReliaGear® Merchandised neXT SuperBox power panelboards

Configuration example 2

Panel:
Location:
Mounting: Plug-on
Enclosure: NEMA 3R

Volts: 240 V AC
Phase: 3
Wires: 3
AIC rating: 65 kA

Main type: Main lugs
Mains rating: 1200 A

Circuit	Circuit description	Trip (A)	Poles	A	B	C	Poles	Trip (A)	Circuit description	Circuit
1	Circuit 1 (240 V	1000	3				3	200	Circuit 2	2
3	REL T + shunt	1000	3				3	200		4
5	trip)	1000	3				3	200		6
7	Circuit 3	600	3				3	100	Circuit 4	8
9		600	3				3	100		10
11		600	3				3	100		12
13	Circuit 5	400	3				3	100	Circuit 6	14
15		400	3				3	100		16
17		400	3				3	100		18
19	Circuit 7	400	3				3	100	Circuit 8	20
21		400	3				3	100		22
23		400	3				3	100		24
25	Circuit 9	70	3				3	125	Prepared	26
27		70	3				3	125	space	28
29		70	3				3	125		30

Selection example:

Step 1: Select main and branch feeder circuit breakers

Main breakers are not included in the SuperBox and must be ordered separately. XT1 mounting rails are not included with breakers and must be selected to accommodate one, two or five XT1 circuit breakers. In this step, you must also take note of any prepared space requirements.

- Qty (1) XT7HU310EPYW000XXX
- Qty (1) XT5HU360BBYN000XXX
- Qty (2) XT5HU340ABYN000XXX
- Qty (1) XT4HU3200AY8000XXX
- Qty (3) XT1HU3100AYD000XXX
- Qty (1) XT1HU3070AYD000XXX
- Qty (1) XT1 prepared space

Step 2: Select the required accessories

In this case, we see that the XT7 requires RELT and a shunt trip. As indicated in the footnote, RELT requires an XT7 equipped with Ekip Touch or above trip unit, and requires 3 additional X-spaces.

- Qty (1) RT04A
- Qty (1) CN003

Step 3: Determine the X-space required to meet main and branch feeder circuit breaker selection

In this example, we need X-space for (1) XT7, (2) XT5, (1) XT4 and (5) XT1.

Each XT7 requires 6 X-spaces plus 3 X-spaces for RELT; each XT5 requires 4 X-spaces; each XT4 requires 3 X-spaces; a single XT1 requires 3 X-spaces; two XT1s require 5 X-spaces; five XT1s require 11 X-spaces depending on the mounting rail(s) selected.

For this exercise, we will use (1) five-unit mounting rail for the XT1s, which requires 11 X-spaces.

Total X-space required = XT7 (6 spaces + 3 spaces) + XT5 (12 spaces) + XT4 (3 spaces) + XT1 (11 spaces) = 35 spaces in total.

Note that XT7s and XT5s can only be mounted on the left side of the bus stack. In this example, we need to ensure we have 21 X-spaces available on the left side.

- Qty (1) SR5XBF

Step 4: Select the SuperBox required based on maximum ampacity, main type, enclosure type and bus X-space required

In this example, we need a 1200 A main lug interior, in a NEMA 3R enclosure. Using the SuperBox selection table, we find that the 1200 A main lug panel has a total of 56 X-spaces available, with 28 X-spaces on the left side and 28 X-spaces available on the right side. Blanks and filler plates are included in the SuperBox so all future spaces will be covered. No additional items required.

- Qty (1) RNSB12L8445R

ReliaGear® Merchandised neXT SuperBox power panelboards

Configuration example 3

Panel:	Volts: 480Y/277 V AC	Main type: Main breaker
Location:	Phase: 3	Mains rating: 800 A
Mounting: Plug-on	Wires: 4	
Enclosure: NEMA 1	AIC rating: 35 kA	

Circuit	Circuit description	Trip (A)	Poles	A	B	C	Poles	Trip (A)	Circuit description	Circuit
1	Circuit 1 (110 V	400	3				3	100	Circuit 2	2
3	shunt trip)	400	3				3	100		4
5		400	3				3	100		6
7	Circuit 3 (110 V	300	3				3	100	Circuit 4	8
9	shunt trip)	300	3				3	100		10
11		300	3				3	100		12
13	Circuit 5 (110 V	300	3				2	100	Circuit 6	14
15	shunt trip)	300	3				2	100		16
17		300	3				2	100	Circuit 8	18
19	Circuit 7 (110 V	300	3				2	100		20
21	shunt trip)	300	3							22
22		300	3							24

Selection example:

Step 1: Select main and branch feeder circuit breakers

Main breakers are not included in the SuperBox and must be ordered separately. XT1 mounting rails are not included with breakers and must be selected to accommodate one, two or five XT1 circuit breakers. In this step, you must also take note of any prepared space requirements.

- Qty (1) XT6NU3800BYU000XXX
- Qty (1) XT5NU340ABYN000XXX
- Qty (3) XT5NU330ABYN000XXX
- Qty (2) XT1SU3100AYD000XXX
- Qty (1) NEFBV26TE100R2AB
- Qty (1) NEFBV26TE100R2AC

Step 2: Select the required accessories

In this case, we see that four XT5s require a 110 V shunt trip. As indicated in the footnote, electrical accessories for XT5 breakers require 1 additional X-space.

- Qty (4) KXTFYOCFPD

Step 3: Determine the X-space required to meet main and branch feeder circuit breaker selection

In this example, we need X-space for (1) XT6, (4) XT5, (2) XT1 and (2) FB.

Each XT6 requires 6 X-spaces; each XT5 requires 4 X-spaces plus 1 X-space for a shunt trip; a single XT1 requires 3 X-spaces; two XT1s require 5 X-spaces; five XT1s require 11 X-spaces depending on the mounting rail(s) selected.

For this exercise, we will use (1) two-unit mounting rail for the XT1s, which requires 5 X-spaces.

Total X-space required = XT6 (6 X-spaces) + XT5 (16 spaces + 4 spaces) + XT1 (5 spaces) + FB (4 spaces) = 35 spaces in total.

Note that XT6s and XT5s can only be mounted on the left side of the bus stack. In this example, we need to ensure we have 26 X-spaces available on the left side.

- Qty (1) SR2XBF

Step 4: Select the SuperBox required based on maximum ampacity, main type, enclosure type and bus X-space required

In this example, we need an 800 A main breaker interior, in a NEMA 1 enclosure. Using the SuperBox selection table, we find that the 800 A main breaker panel has a total of 48 X-spaces available, with 24 X-spaces on the left side and 28 X-spaces available on the right side.

In this example, the 24 X-spaces available on the left side of the 800 A main breaker panel is insufficient for the breakers required. Moving to the next larger SuperBox, the 1200 A main breaker interior in a NEMA 1 enclosure has 64 X-spaces available, with 32 X-spaces on each side. This larger SuperBox must be used. Blanks and filler plates are included in the SuperBox so all future spaces will be covered. No additional items required.

- Qty (1) RNSB08B7245R

02

ReliaGear® Merchandised neXT SuperBox power panelboards

Resources for easy installation

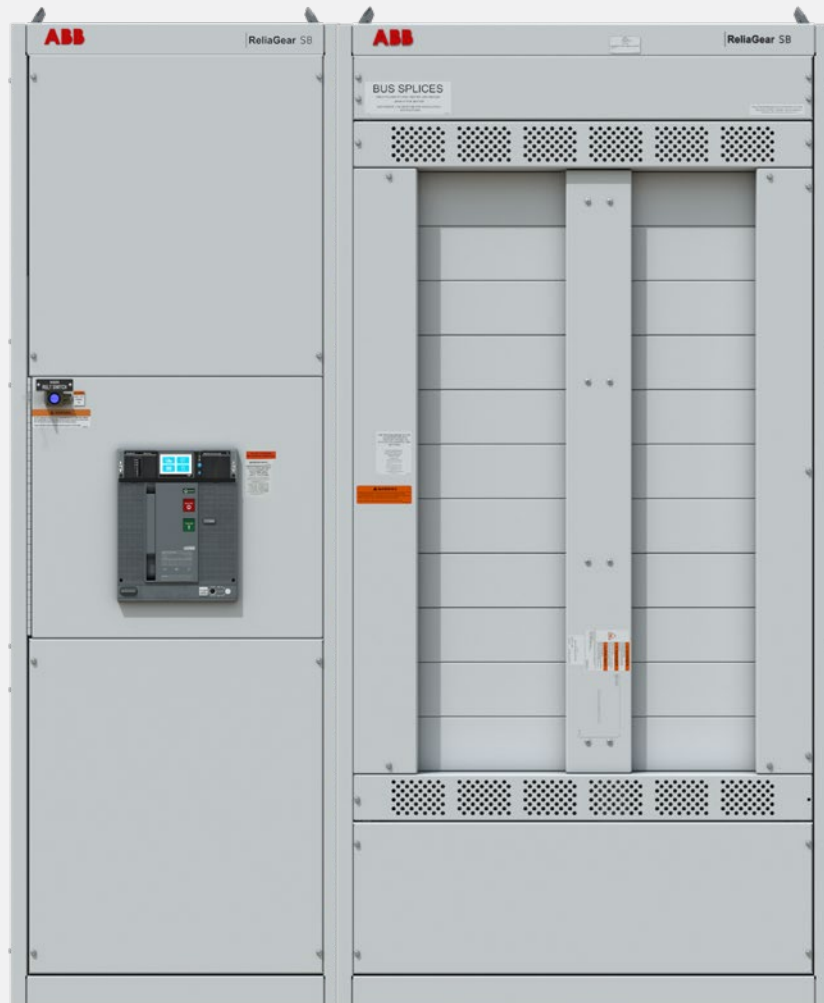
INSTALLATION VIDEOS AND DOCUMENTS

Product installation videos
ReliaGear neXT — Bus stack installation
ReliaGear neXT — Fronts and gutter doors installation
ReliaGear neXT — Branch circuit breaker installation
ReliaGear neXT — Ground and neutral installation
ReliaGear neXT — Interior frame installation
ReliaGear neXT — Field modification — top feed to bottom
ReliaGear neXT — Lug wire post installation
Resource documents
Brochure — 1SQC900001B0201
Catalog — 1SQC900001C0201
Technical brochure — 1SXU900300G0201
White paper — 1SQC900001G0201
Instruction sheet — RELT — 1SQC900005M0201
Instruction sheet — Grounds and neutral — 1SQC900007M0201
Instruction sheet — ReliaGear neXT SuperBox panelboard — 1SQC900014M0201
RGM40 meter installation instructions — 1SQC900021M0201
SPD installation instructions — 1SQC900006M0201



03

ReliaGear® Merchandised SB switchboards



ReliaGear® Merchandised SB switchboards

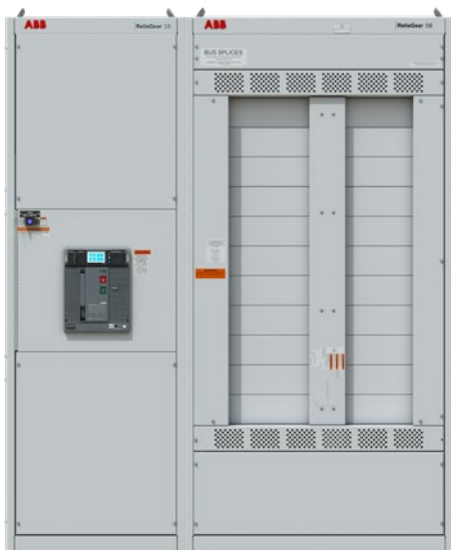
ReliaGear® Merchandised SB switchboards

Product overview	44
Step-by-step selection	46
Configuration examples	60
Resources	62

RELIAGEAR® MERCHANDISED SB SWITCHBOARDS

The road to reliability

Preconfigured ReliaGear® Merchandised SB Switchboards offer easy selection, modular flexibility, and are readily available from local distributor inventory for immediate installation on projects with quick turnaround.



Modular SKU-based main breaker, distribution and pull sections enable flexible switchboard configuration. Simply add circuit breakers and accessories required for the project, and you're ready to go.



Projects with quick turnaround

Emergency situations, property damage, data centers, commercial renovation or building expansions



No lead time

Quickly and efficiently install these readily available switchboards from distributor inventory



Smart technology

Plug-in circuit breaker technology to speed up and simplify installation, plus enhanced circuit breaker and bus stack technology to promote safety



Flexible design

Interchangeable sections to meet project requirements

ReliaGear® Merchandised SB switchboards

General characteristics

System voltages

- 208Y/120 V AC; 3-phase, 4-wire
- 480Y/277 V AC; 3-phase, 4-wire

Short circuit rating

- 100 kAIC up to 480Y/277 V AC max.

Enclosures

- NEMA 1 — For indoor use to provide a degree of protection to personnel against access to hazardous parts and to provide a degree of protection against ingress of solid foreign objects (falling dirt).
- NEMA 3R — For either indoor or outdoor use to provide a degree of protection to personnel against access to hazardous parts, falling dirt and harmful effects on the equipment due to the ingress of water (rain, sleet and snow); and that will be undamaged by the external formation of ice and snow with no damage to the external enclosure.

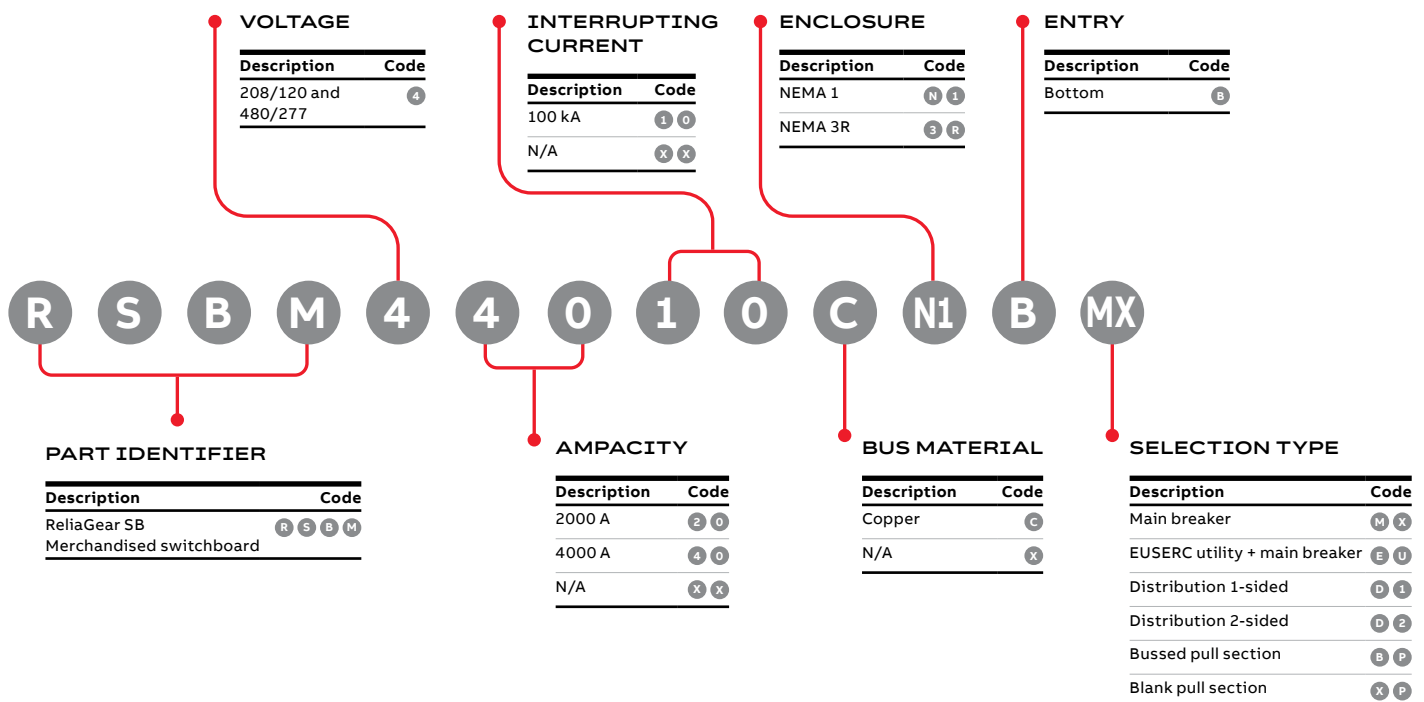
Bussing

Silver-plated copper

Certifications

- ANSI/NFPA 70, National Electrical Code
- UL 891, switchboards
- UL 489, molded case circuit breakers
- CSA 22.2 No. 5-13, molded case circuit breakers
- UL 50, enclosures for electrical equipment
- Seismic IBC-2021/CBC-2022

Ordering code structure



ReliaGear® Merchandised SB switchboards

Selection

03
1

Select main circuit breaker section

2

Select distribution section(s)

3

Select pull sections (optional)

4

Select branch feeder circuit breakers

5

Select required accessories



ReliaGear® Merchandised SB switchboards

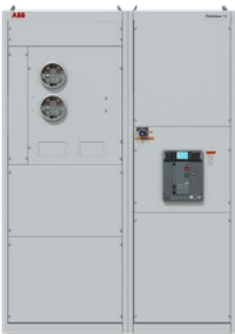
Step 1: Select main breaker section



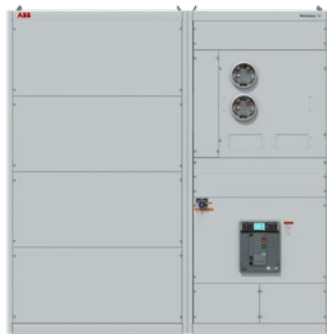
Main breaker

MAIN BREAKER SECTIONS

Section type	Amps	Enclosure type	Main breaker	Dimensions (H x W x D inches) ¹	Ordering code
Main breaker	2000	NEMA 1	Emax 2.2	90 x 30 x 35	RSBM42010CN1BMX
		NEMA 3R	Emax 2.2	91 x 30 x 51	RSBM42010C3RBMX
	4000	NEMA 1	Emax 6.2	90 x 40 x 35	RSBM44010CN1BMX
		NEMA 3R	Emax 6.2	91 x 40 x 51	RSBM44010C3RBMX



2000 A EUSERC utility
+ main breaker



4000 A EUSERC utility + main breaker

EUSERC UTILITY + MAIN BREAKER SECTIONS

Section type	Amps	Enclosure type	Main breaker	Dimensions (H x W x D inches) ¹	Ordering code
EUSERC utility + main breaker	2000	NEMA 1	Emax 2.2	90 x 70 x 35	RSBM42010CN1BEU
		NEMA 3R	Emax 2.2	91 x 70 x 51	RSBM42010C3RBEU
	4000	NEMA 1	Emax 6.2	90 x 100 x 35	RSBM44010CN1BEU
		NEMA 3R	Emax 6.2	91 x 100 x 51	RSBM44010C3RBEU

¹ NEMA 3R depth includes 5" overhang

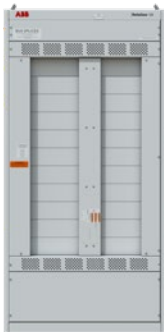
EUSERC utility sections are hard bussed and are delivered with a pre-mounted Group 1 door kit (see page 52). If the required utility is in Groups 2, 3 or 4, the customer can purchase a dedicated door kit and replace the factory-installed Group 1 door kit.

ReliaGear® Merchandised SB switchboards

Step 2: Select distribution section(s)



1-sided distribution



2-sided distribution

DISTRIBUTION SECTIONS

Section types	Amps	Enclosure type	Dimensions (H x W x D inches) ¹	X-space left	X-space right	Ordering code
1-sided	2000	NEMA 1	90 x 40 x 35	40X	–	RSBM42010CN1BD1
		NEMA 3R	91 x 40 x 51	40X	–	RSBM42010C3RBD1
	4000	NEMA 1	90 x 40 x 35	40X	–	RSBM44010CN1BD1
		NEMA 3R	91 x 40 x 51	40X	–	RSBM44010C3RBD1
2-sided	2000	NEMA 1	90 x 50 x 35	40X	28X	RSBM42010CN1BD2
		NEMA 3R	91 x 50 x 51	40X	28X	RSBM42010C3RBD2
	4000	NEMA 1	90 x 50 x 35	40X	22X	RSBM44010CN1BD2
		NEMA 3R	91 x 50 x 51	40X	22X	RSBM44010C3RBD2

¹ NEMA 3R depth includes 5" overhang

ReliaGear® Merchandised SB switchboards

Step 3: Select pull sections (optional)



Bussed or blank pull

PULL SECTIONS

Section type	Amps	Enclosure type	Dimensions (H x W x D inches) ¹	Ordering code
Bussed pull	2000 A	NEMA 1	90 x 35 x 35	RSBM42010CN1BBP
		NEMA 3R	91 x 35 x 51	RSBM42010C3RBBP
	4000 A	NEMA 1	90 x 35 x 35	RSBM44010CN1BBP
		NEMA 3R	91 x 35 x 51	RSBM44010C3RBBP
Blank pull		NEMA 1	90 x 15 x 35	RSBM4XXXXXN1XXP
		NEMA 3R	91 x 15 x 51	RSBM4XXXXX3RXXP

¹ NEMA 3R depth includes 5" overhang

ReliaGear® Merchandised SB switchboards

Step 4: Select branch feeder circuit breakers (XT1–XT2)^{1,2}



Frame	Int. rating at 480 V AC	Trip unit	Poles	Amps	Load side lugs (AWG or kcmil)	Ordering code
XT1 ²	N (25 kA)	TMF	3	15	1x #10-2/0	XT1NU3015AYD000XXX
XT1 ²	N (25 kA)	TMF	3	20	1x #10-2/0	XT1NU3020AYD000XXX
XT1 ²	N (25 kA)	TMF	3	30	1x #10-2/0	XT1NU3030AYD000XXX
XT1 ²	N (25 kA)	TMF	3	40	1x #10-2/0	XT1NU3040AYD000XXX
XT1 ²	N (25 kA)	TMF	3	50	1x #10-2/0	XT1NU3050AYD000XXX
XT1 ²	N (25 kA)	TMF	3	60	1x #10-2/0	XT1NU3060AYD000XXX
XT1 ²	N (25 kA)	TMF	3	70	1x #10-2/0	XT1NU3070AYD000XXX
XT1 ²	N (25 kA)	TMF	3	100	1x #10-2/0	XT1NU3100AYD000XXX
XT1 ²	N (25 kA)	TMF	3	125	1x #10-2/0	XT1NU3125AYD000XXX
XT1 ²	S (35 kA)	TMF	3	15	1x #10-2/0	XT1SU3015AYD000XXX
XT1 ²	S (35 kA)	TMF	3	20	1x #10-2/0	XT1SU3020AYD000XXX
XT1 ²	S (35 kA)	TMF	3	30	1x #10-2/0	XT1SU3030AYD000XXX
XT1 ²	S (35 kA)	TMF	3	40	1x #10-2/0	XT1SU3040AYD000XXX
XT1 ²	S (35 kA)	TMF	3	50	1x #10-2/0	XT1SU3050AYD000XXX
XT1 ²	S (35 kA)	TMF	3	60	1x #10-2/0	XT1SU3060AYD000XXX
XT1 ²	S (35 kA)	TMF	3	70	1x #10-2/0	XT1SU3070AYD000XXX
XT1 ²	S (35 kA)	TMF	3	100	1x #10-2/0	XT1SU3100AYD000XXX
XT1 ²	S (35 kA)	TMF	3	125	1x #10-2/0	XT1SU3125AYD000XXX
XT1 ²	H (65 kA)	TMF	3	15	1x #10-2/0	XT1HU3015AYD000XXX
XT1 ²	H (65 kA)	TMF	3	20	1x #10-2/0	XT1HU3020AYD000XXX
XT1 ²	H (65 kA)	TMF	3	30	1x #10-2/0	XT1HU3030AYD000XXX
XT1 ²	H (65 kA)	TMF	3	35	1x #10-2/0	XT1HU3035AYD000XXX
XT1 ²	H (65 kA)	TMF	3	40	1x #10-2/0	XT1HU3040AYD000XXX
XT1 ²	H (65 kA)	TMF	3	50	1x #10-2/0	XT1HU3050AYD000XXX
XT1 ²	H (65 kA)	TMF	3	60	1x #10-2/0	XT1HU3060AYD000XXX
XT1 ²	H (65 kA)	TMF	3	70	1x #10-2/0	XT1HU3070AYD000XXX
XT1 ²	H (65 kA)	TMF	3	80	1x #10-2/0	XT1HU3080AYD000XXX
XT1 ²	H (65 kA)	TMF	3	90	1x #10-2/0	XT1HU3090AYD000XXX
XT1 ²	H (65 kA)	TMF	3	100	1x #10-2/0	XT1HU3100AYD000XXX
XT1 ²	H (65 kA)	TMF	3	110	1x #10-2/0	XT1HU3110AYD000XXX
XT1 ²	H (65 kA)	TMF	3	125	1x #10-2/0	XT1HU3125AYD000XXX
XT2	H (65 kA)	TMA	3	80	1x #10-2/0	XT2HU3080BYD000XXX
XT2	H (65 kA)	TMA	3	100	1x #10-2/0	XT2HU3100BYD000XXX
XT2	H (65 kA)	TMA	3	125	1x #10-2/0	XT2HU3125BYD000XXX
XT2	L (100 kA)	TMA	3	100	1x #10-2/0	XT2LU3100BYD000XXX
XT2	N (25 kA)	Ekip DIP LSI	3	125	1x #10-2/0	XT2NU31251YD000XXX
XT2	H (65 kA)	Ekip DIP LSI	3	60	1x #10-2/0	XT2HU30601YD000XXX
XT2	H (65 kA)	Ekip DIP LSI	3	100	1x #10-2/0	XT2HU31001YD000XXX
XT2	H (65 kA)	Ekip DIP LSI	3	125	1x #10-2/0	XT2HU31251YD000XXX
XT2	L (100 kA)	Ekip DIP LSI	3	60	1x #10-2/0	XT2LU30601YD000XXX
XT2	L (100 kA)	Ekip DIP LSI	3	100	1x #10-2/0	XT2LU31001YD000XXX
XT2	L (100 kA)	Ekip DIP LSI	3	125	1x #10-2/0	XT2LU31251YD000XXX

¹Additional Tmax® XT plug-in circuit breakers and accessories are available. Contact your local ABB sales team for more information.

²Separate mounting rail required. See details in accessories table.

³Breakers installed in panel must adhere to UL/NEC WBS requirements.

ReliaGear® Merchandised SB switchboards

Step 4: Select branch feeder circuit breakers (XT4)¹



Frame	Int. rating at 480 V	Trip unit	Poles	Amps	Load side lugs (AWG or kcmil)	Ordering code
XT4	N (25 kA)	TMF	3	150	1x 3/0-350	XT4NU3150AY8000XXX
XT4	N (25 kA)	TMF	3	175	1x 3/0-350	XT4NU3175AY8000XXX
XT4	N (25 kA)	TMF	3	200	1x 3/0-350	XT4NU3200AY8000XXX
XT4	N (25 kA)	TMF	3	225	1x 3/0-350	XT4NU3225AY8000XXX
XT4	N (25 kA)	TMF	3	250	1x 3/0-350	XT4NU3250AY8000XXX
XT4	S (35 kA)	TMF	3	150	1x 3/0-350	XT4SU3150AY8000XXX
XT4	S (35 kA)	TMF	3	175	1x 3/0-350	XT4SU3175AY8000XXX
XT4	S (35 kA)	TMF	3	200	1x 3/0-350	XT4SU3200AY8000XXX
XT4	S (35 kA)	TMF	3	225	1x 3/0-350	XT4SU3225AY8000XXX
XT4	S (35 kA)	TMF	3	250	1x 3/0-350	XT4SU3250AY8000XXX
XT4	H (65 kA)	TMF	3	150	1x 3/0-350	XT4HU3150AY8000XXX
XT4	H (65 kA)	TMF	3	150	1x 4-300	XT4HU3150AYJ000XXX
XT4	H (65 kA)	TMF	3	175	1x 3/0-350	XT4HU3175AY8000XXX
XT4	H (65 kA)	TMF	3	200	1x 3/0-350	XT4HU3200AY8000XXX
XT4	H (65 kA)	TMF	3	225	1x 3/0-350	XT4HU3225AY8000XXX
XT4	H (65 kA)	TMF	3	250	1x 3/0-350	XT4HU3250AY8000XXX
XT4	N (25 kA)	TMA	3	150	1x 4-300	XT4NU3150BYJ000XXX
XT4	N (25 kA)	TMA	3	175	1x 4-300	XT4NU3175BYJ000XXX
XT4	N (25 kA)	TMA	3	200	1x 4-300	XT4NU3200BYJ000XXX
XT4	N (25 kA)	TMA	3	225	1x 4-300	XT4NU3225BYJ000XXX
XT4	N (25 kA)	TMA	3	250	1x 3/0-350	XT4NU3250BY8000XXX
XT4	H (65 kA)	TMA	3	125	1x 4-300	XT4HU3125BYJ000XXX
XT4	H (65 kA)	TMA	3	150	1x 4-300	XT4HU3150BYJ000XXX
XT4	H (65 kA)	TMA	3	175	1x 4-300	XT4HU3175BYJ000XXX
XT4	H (65 kA)	TMA	3	200	1x 4-300	XT4HU3200BYJ000XXX
XT4	H (65 kA)	TMA	3	225	1x 4-300	XT4HU3225BYJ000XXX
XT4	H (65 kA)	TMA	3	250	1x 3/0-350	XT4HU3250BY8000XXX
XT4	L (100 kA)	TMA	3	100	1x 4-300	XT4LU3100BYJ000XXX
XT4	L (100 kA)	TMA	3	150	1x 4-300	XT4LU3150BYJ000XXX
XT4	L (100 kA)	TMA	3	175	1x 4-300	XT4LU3175BYJ000XXX
XT4	L (100 kA)	TMA	3	200	1x 4-300	XT4LU3200BYJ000XXX
XT4	L (100 kA)	TMA	3	225	1x 4-300	XT4LU3225BYJ000XXX
XT4	L (100 kA)	TMA	3	250	1x 3/0-350	XT4LU3250BY8000XXX
XT4	H (65 kA)	Ekip DIP LS/I	3	150	1x 4-300	XT4HU3150EYJ000XXX
XT4	H (65 kA)	Ekip DIP LS/I	3	225	1x 4-300	XT4HU3225EYJ000XXX
XT4	N (25 kA)	Ekip DIP LSI	3	100	1x 4-300	XT4NU31001YJ000XXX
XT4	N (25 kA)	Ekip DIP LSI	3	225	1x 4-300	XT4NU32251YJ000XXX
XT4	N (25 kA)	Ekip DIP LSI	3	250	1x 3/0-350	XT4NU32501Y8000XXX
XT4	S (35 kA)	Ekip DIP LSI	3	100	1x 4-300	XT4SU31001YJ000XXX
XT4	S (35 kA)	Ekip DIP LSI	3	250	1x 3/0-350	XT4SU32501Y8000XXX
XT4	H (65 kA)	Ekip DIP LSI	3	100	1x 4-300	XT4HU31001YJ000XXX
XT4	H (65 kA)	Ekip DIP LSI	3	150	1x 4-300	XT4HU31501YJ000XXX
XT4	H (65 kA)	Ekip DIP LSI	3	225	1x 4-300	XT4HU32251YJ000XXX
XT4	H (65 kA)	Ekip DIP LSI	3	250	1x 3/0-350	XT4HU32501Y8000XXX
XT4	L (100 kA)	Ekip DIP LSI	3	40	1x 14-1/0	XT4LU30401YG000XXX
XT4	L (100 kA)	Ekip DIP LSI	3	60	1x 14-1/0	XT4LU30601YG000XXX
XT4	L (100 kA)	Ekip DIP LSI	3	100	1x 4-300	XT4LU31001YJ000XXX
XT4	L (100 kA)	Ekip DIP LSI	3	150	1x 4-300	XT4LU31501YJ000XXX
XT4	L (100 kA)	Ekip DIP LSI	3	250	1x 3/0-350	XT4LU32501Y8000XXX

¹Additional Tmax® XT plug-in circuit breakers and accessories are available. Contact your local ABB sales team for more information.

²Breakers installed in panel must adhere to UL/NEC WBS requirements

ReliaGear® Merchandised SB switchboards

Step 4: Select branch feeder circuit breakers (XT5–XT7)¹



Frame	Int. rating at 480 V	Trip unit	Poles	Amps	Load side lugs (AWG or kcmil)	RELT compatible	Ordering code
XT5	N (35 kA)	TMA	3	300	2x 2/0-500	No	XT5NU330ABYN000XXX
XT5	N (35 kA)	TMA	3	400	2x 2/0-500	No	XT5NU340ABYN000XXX
XT5	N (35 kA)	TMA	3	500	2x 2/0-500	No	XT5NU350BBYN000XXX
XT5	N (35 kA)	TMA	3	600	2x 2/0-500	No	XT5NU360BBYN000XXX
XT5	S (50 kA)	TMA	3	300	2x 2/0-500	No	XT5SU330ABYN000XXX
XT5	S (50 kA)	TMA	3	400	2x 2/0-500	No	XT5SU340ABYN000XXX
XT5	S (50 kA)	TMA	3	600	2x 2/0-500	No	XT5SU360BBYN000XXX
XT5	H (65 kA)	TMA	3	300	2x 2/0-500	No	XT5HU330ABYN000XXX
XT5	H (65 kA)	TMA	3	400	2x 2/0-500	No	XT5HU340ABYN000XXX
XT5	H (65 kA)	TMA	3	500	2x 2/0-500	No	XT5HU350BBYN000XXX
XT5	H (65 kA)	TMA	3	600	2x 2/0-500	No	XT5HU360BBYN000XXX
XT5	L (100 kA)	TMA	3	300	2x 2/0-500	No	XT5LU330ABYN000XXX
XT5	L (100 kA)	TMA	3	400	2x 2/0-500	No	XT5LU340ABYN000XXX
XT5	L (100 kA)	TMA	3	600	2x 2/0-500	No	XT5LU360BBYN000XXX
XT5	N (35 kA)	Ekip DIP LSI	3	400	2x 2/0-500	No	XT5NU340AFYN000XXX
XT5	N (35 kA)	Ekip DIP LSI	3	600	2x 2/0-500	No	XT5NU360BFYN000XXX
XT5	S (50 kA)	Ekip DIP LSI	3	400	2x 2/0-500	No	XT5SU340AFYN000XXX
XT5	S (50 kA)	Ekip DIP LSI	3	600	2x 2/0-500	No	XT5SU360BFYN000XXX
XT5	H (65 kA)	Ekip DIP LSI	3	400	2x 2/0-500	No	XT5HU340AFYN000XXX
XT5	H (65 kA)	Ekip DIP LSI	3	600	2x 2/0-500	No	XT5HU360BFYN000XXX
XT5	L (100 kA)	Ekip DIP LSI	3	400	2x 2/0-500	No	XT5LU340AFYN000XXX
XT5	L (100 kA)	Ekip DIP LSI	3	600	2x 2/0-500	No	XT5LU360BFYN000XXX
XT6	N (35 kA)	TMA	3	800	3x 2/0-400	No	XT6NU3800BYU000XXX
XT6	S (50 kA)	TMA	3	800	3x 2/0-400	No	XT6SU3800BYU000XXX
XT6	H (65 kA)	TMA	3	800	3x 2/0-400	No	XT6HU3800BYU000XXX
XT6	N (35 kA)	Ekip DIP LSI	3	800	3x 2/0-400	No	XT6NU3800FYU000XXX
XT6	H (65 kA)	Ekip DIP LSI	3	800	3x 2/0-400	No	XT6HU3800FYU000XXX
XT7	S (50 kA)	Ekip DIP LSI	3	1000	4x 4/0-500	No	XT7SU310DFYW000XXX
XT7	S (50 kA)	Ekip DIP LSI	3	1200	4x 4/0-500	No	XT7SU312EFYW000XXX
XT7	H (65 kA)	Ekip DIP LSI	3	800	4x 4/0-500	No	XT7HU380CFYW000XXX
XT7	H (65 kA)	Ekip DIP LSI	3	1000	4x 4/0-500	No	XT7HU310DFYW000XXX
XT7	H (65 kA)	Ekip DIP LSI	3	1200	4x 4/0-500	No	XT7HU312EFYW000XXX
XT7	S (50 kA)	Ekip Touch LSI	3	1000	4x 4/0-500	Yes	XT7SU310DPYW000XRR
XT7	S (50 kA)	Ekip Touch LSI	3	1200	4x 4/0-500	Yes	XT7SU312EPYW000XRR
XT7	H (65 kA)	Ekip Touch LSI	3	1000	4x 4/0-500	Yes	XT7HU310DPYW000XRR
XT7	H (65 kA)	Ekip Touch LSI	3	1200	4x 4/0-500	Yes	XT7HU312EPYW000XRR
XT7	L (100 kA)	Ekip Touch LSI	3	1200	4x 4/0-500	Yes	XT7LU312EPYW000XRR
XT7	S (50 kA)	Ekip Touch LSI	3	1200	4x 4/0-500	Yes	XT7SU312EQYW000XRR
XT7	H (65 kA)	Ekip Touch LSI	3	1200	4x 4/0-500	Yes	XT7HU312EQYW000XRR
XT7	L (100 kA)	Ekip Touch LSI	3	1200	4x 4/0-500	Yes	XT7LU312EQYW000XRR

¹Additional Tmax® XT plug-in circuit breakers and accessories are available. Contact your local ABB sales team for more information.

² Breakers installed in panel must adhere to UL/NEC WBS requirements.

ReliaGear® Merchandised SB switchboards

Step 4: Select branch feeder circuit breakers (TEY–FB)^{1,2}



1-pole FB



2-pole FB



1-pole TEY



2-pole TEY

Frame	Int. rating at 480 V	Trip unit	Poles	Amps	Phase	Load side lugs (AWG or kcmil)	Ordering code
TEY	D (25 kA)	TMF	1	20	A	#14–#10 (Cu), #12–#10 (Al)	TEYADED0AAXXXXXX
TEY	D (25 kA)	TMF	1	20	B	#14–#10 (Cu), #12–#10 (Al)	TEYADED0BAXXXXXX
TEY	D (25 kA)	TMF	1	20	C	#14–#10 (Cu), #12–#10 (Al)	TEYADED0CAXXXXXX
TEY	H (35 kA)	TMF	1	20	A	#14–#10 (Cu), #12–#10 (Al)	TEYAHED0AAXXXXXX
TEY	H (35 kA)	TMF	1	20	B	#14–#10 (Cu), #12–#10 (Al)	TEYAHED0BAXXXXXX
TEY	H (35 kA)	TMF	1	20	C	#14–#10 (Cu), #12–#10 (Al)	TEYAHED0CAXXXXXX
TEY	L (65 kA)	TMF	1	20	A	#14–#10 (Cu), #12–#10 (Al)	TEYALEDOAAXXXXXX
TEY	L (65 kA)	TMF	1	20	B	#14–#10 (Cu), #12–#10 (Al)	TEYALEDOBAXXXXXX
TEY	L (65 kA)	TMF	1	20	C	#14–#10 (Cu), #12–#10 (Al)	TEYALEDOCAXXXXXX
TEY	D (25 kA)	TMF	2	40	AB	#10–#6 (Cu), #8–#4 (Al)	TEYADFHABXXXXXX
TEY	D (25 kA)	TMF	2	100	AB	#4–#1 (Cu), #2–1/0 (Al)	TEYADFQABDXXXXXX
TEY	D (25 kA)	TMF	2	40	BC	#10–#6 (Cu), #8–#4 (Al)	TEYADFHBBCXXXXXX
TEY	D (25 kA)	TMF	2	100	BC	#4–#1 (Cu), #2–1/0 (Al)	TEYADFQBCDXXXXXX
TEY	D (25 kA)	TMF	2	40	AC	#10–#6 (Cu), #8–#4 (Al)	TEYADFHACBXXXXXX
TEY	D (25 kA)	TMF	2	100	AC	#4–#1 (Cu), #2–1/0 (Al)	TEYADFQACDXXXXXX
FB	V (35 kA) ²	TMF	1	20	A	#14–#10	NEFBV16TE020R2A
FB	V (35 kA) ²	TMF	1	20	B	#14–#10	NEFBV16TE020R2B
FB	V (35 kA) ²	TMF	1	20	C	#14–#10	NEFBV16TE020R2C
FB	N (65 kA) ²	TMF	1	20	A	#14–#10	NEFBN16TE020R2A
FB	N (65 kA) ²	TMF	1	30	A	#10–4	NEFBN16TE030R2A
FB	N (65 kA) ²	TMF	1	20	B	#14–#10	NEFBN16TE020R2B
FB	N (65 kA) ²	TMF	1	30	B	#10–4	NEFBN16TE030R2B
FB	N (65 kA) ²	TMF	1	20	C	#14–#10	NEFBN16TE020R2C
FB	N (65 kA) ²	TMF	1	30	C	#10–4	NEFBN16TE030R2C
FB	V (35 kA)	TMF	2	100	AB	#4–1/0	NEFBV26TE100R2AB
FB	V (35 kA)	TMF	2	100	BC	#4–1/0	NEFBV26TE100R2BC
FB	V (35 kA)	TMF	2	100	AC	#4–1/0	NEFBV26TE100R2AC
FB	N (65 kA)	TMF	2	20	AB	#14–#10	NEFBN26TE020R2AB
FB	N (65 kA)	TMF	2	30	AB	#10–4	NEFBN26TE030R2AB
FB	N (65 kA)	TMF	2	40	AB	#10–4	NEFBN26TE040R2AB
FB	N (65 kA)	TMF	2	50	AB	#10–4	NEFBN26TE050R2AB
FB	N (65 kA)	TMF	2	60	AB	#10–4	NEFBN26TE060R2AB
FB	N (65 kA)	TMF	2	100	AB	#4–1/0	NEFBN26TE100R2AB
FB	N (65 kA)	TMF	2	20	BC	#14–#10	NEFBN26TE020R2BC
FB	N (65 kA)	TMF	2	30	BC	#10–4	NEFBN26TE030R2BC
FB	N (65 kA)	TMF	2	40	BC	#10–4	NEFBN26TE040R2BC
FB	N (65 kA)	TMF	2	50	BC	#10–4	NEFBN26TE050R2BC
FB	N (65 kA)	TMF	2	60	BC	#10–4	NEFBN26TE060R2BC
FB	N (65 kA)	TMF	2	100	BC	#4–1/0	NEFBN26TE100R2BC
FB	N (65 kA)	TMF	2	20	AC	#14–#10	NEFBN26TE020R2AC
FB	N (65 kA)	TMF	2	30	AC	#10–4	NEFBN26TE030R2AC
FB	N (65 kA)	TMF	2	40	AC	#10–4	NEFBN26TE040R2AC
FB	N (65 kA)	TMF	2	50	AC	#10–4	NEFBN26TE050R2AC
FB	N (65 kA)	TMF	2	60	AC	#10–4	NEFBN26TE060R2AC
FB	N (65 kA)	TMF	2	100	AC	#4–1/0	NEFBN26TE100R2AC

¹Additional TEY and FB plug-in circuit breakers and accessories are available. Contact your local ABB sales team for more information.

²Interrupt rating at 240 V AC.

³Breakers installed in panel must adhere to UL/NEC WBS requirements.

ReliaGear® Merchandised SB switchboards

Step 4: Select branch feeder circuit breakers (Formula A2)^{1,2}



2-pole Formula A2

Frame	Int. rating at 240 V	Trip unit	Poles	Amps	Phase	Cu load side lugs (AWG or kcmil)	Al load side lugs (AWG or kcmil)	Ordering code
A2	A (10 kA)	TMF	2	125	AB	1x 1–250	1x 2/0–300	A2A2125ABDXXXX
A2	A (10 kA)	TMF	2	125	AC	1x 1–250	1x 2/0–300	A2A2125ACDXXXX
A2	A (10 kA)	TMF	2	150	AB	1x 1–250	1x 2/0–300	A2A2150ABDXXXX
A2	A (10 kA)	TMF	2	150	AC	1x 1–250	1x 2/0–300	A2A2150ACDXXXX
A2	A (10 kA)	TMF	2	200	AB	1x 1–250	1x 2/0–300	A2A2200ABDXXXX
A2	A (10 kA)	TMF	2	200	AC	1x 1–250	1x 2/0–300	A2A2200ACDXXXX
A2	A (10 kA)	TMF	2	125	AB	1x 1–250	1x 2/0–300	A2N2125ABDXXXX
A2	N (25 kA)	TMF	2	125	AC	1x 1–250	1x 2/0–300	A2N2125ACDXXXX
A2	N (25 kA)	TMF	2	150	AB	1x 1–250	1x 2/0–300	A2N2150ABDXXXX
A2	N (25 kA)	TMF	2	150	AC	1x 1–250	1x 2/0–300	A2N2150ACDXXXX
A2	N (25 kA)	TMF	2	200	AB	1x 1–250	1x 2/0–300	A2N2200ABDXXXX
A2	N (25 kA)	TMF	2	200	AC	1x 1–250	1x 2/0–300	A2N2200ACDXXXX
A2	N (25 kA)	TMF	2	250	AB	1x 1–250	—	A2N2250ABDXXXX

¹ Additional Formula A2 plug-in circuit breakers are available. Contact your local ABB sales team for more information.
² 250 A Formula A2 plug-in breakers with 350 kcmil Al load side lugs available. Contact your local ABB sales team for more information.
³ Breakers installed in panel must adhere to UL/NEC WBS requirements.

ReliaGear® Merchandised SB switchboards

Step 5: Select required accessories



Auxiliary contacts



Shunt trip



Fixed padlock



RELT



Mounting rail

Group	Type	Volts AC	XT1	XT2	XT4	XT5 ²	XT6	XT7	TEY	FB	A2
Auxiliary contacts Q = Indication of the status of the circuit breaker SY = Bell alarm	AUX-C 1 Q + 1 SY	250					KXTAAXCQSYFP	-	-	-	-
	AUX-C 2 Q + 1 SY	250					KXTAAXC2QSYFP	-	-	-	-
	AUX-C 1 Q + 1 SY	24					KXTAAXCDQSYFP	-	-	-	-
	AUX-C 3 Q + 1 SY	24	-				KXTDAXCD3QSYFP	-	-	-	-
	AUX 4Q	24					-	ZE1AUX4D	-	-	-
	AUX 4Q	400					-	ZE1AUX4	-	-	-
	AUX 1 SY	24					-	ZE1BAD	-	-	-
Shunt trip	AUX 1 SY	250					-	ZE1BA	-	-	-
	Pre-cabled (except for XT7)	24		KXTASORCFPB			KXTFYOCFPD	ZEZSZ	-	-	-
	Pre-cabled (except for XT7)	110		KXTASORCFPD			KXTFYOCFPD	ZEASE	-	-	-
Undervoltage release	Pre-cabled (except for XT7)	220		KXTASORCFPE				ZEASG	-	-	-
	Pre-cabled (except for XT7)	24		KXTAUVRCP1			KXTFYUC1	ZEUAU	-	-	-
	Pre-cabled (except for XT7)	110		KXTAUVRCP4			KXTFYUC4	ZEUAU	-	-	-
Fixed padlock ¹	Pre-cabled (except for XT7)	220		KXTAUVRCP5			KXTFYUC5	ZEUAU	-	-	-
	Open position	-	KXTBPLLOP		KXTCPLLOP	KXT5PLLOP	KXT6PLLOP	KXT7PLLOP	-	-	-
	Open/closed position	-	KXTBLLLOPL		KXTCPLLOPL	KXT5PLLOPLC	KXT6PLLOPLC	-	TEYXPLD1	FB1PF	-
Removable padlock	Open position: KA2LD	-	-	-	-	-	-	-	-	-	KA2LDOR
RELT	RELT kit ⁴	120/240	-	-	-	-	-	RT04A	-	-	-
	RELT kit ⁴	480	-	-	-	-	-	RT04B	-	-	-
	RELT kit ⁴	600	-	-	-	-	-	RT04C	-	-	-
	RELT wire connector for XT7 2K-1	-	-	-	-	-	-	CN003 ⁵	-	-	-
	RELT wire connector for XT7 2K-3	-	-	-	-	-	-	CN004 ⁵	-	-	-
Mounting rail	1 single Tmax® XT1	-	SR1XBF	-	-	-	-	-	-	-	-
	2 adjacent Tmax® XT1	-	SR2XBF	-	-	-	-	-	-	-	-
	5 adjacent Tmax® XT1	-	SR5XBF	-	-	-	-	-	-	-	-
Blank and fillers	1X blank + filler	-	-	-	-	-	-	-	-	-	SR01BF
	1X blank only	-	-	-	-	-	-	-	-	-	SR01BB
	2X blank + filler	-	-	-	-	-	-	-	-	-	SR02BF
	2X blank only	-	-	-	-	-	-	-	-	-	SR02BB
	3X blank + filler	-	-	-	-	-	-	-	-	-	SR03BF
	3X blank only	-	-	-	-	-	-	-	-	-	SR03BB
Service entrance barriers	XT1 blank only	-	SRT1BB	-	-	-	-	-	-	-	-
	3-pole breakers	-	SBX1W02P3	SBX2WT2P3 ⁶ SBX2WE2P3 ⁶	SBX4W30P3 ⁷ SBX4W35P3 ⁷	SBX5W50P3	SBX6W40P3	SBX7W50P3	-	-	-

¹ Padlocks are not included in the kit.

² Tmax XT5 electrical accessories require 1 (one) extra X-space for installation.

³ Additional Tmax XT accessories are available. Contact your local ABB sales team for more information.

⁴ Requires XT7 equipped with Ekip Touch or above trip unit, 3 X-space factor required.

⁵ CN004 includes Ekip 2K-3 signaling and Ekip supply. CN004 is ONLY compatible with firmware version 3.10.00 or higher. Refer to 9AKK107991A2520 to validate firmware version.

⁶ SBX2WT2P3 for XT2 thermo mag, SBX2WE2P3 for XT2 Ekip

⁷ SBX4W30P3 for 300 kcmil, SBX4W35P3 for 350 kcmil

ReliaGear® Merchandised SB switchboards

Step 5: Select required accessories



Surge protective device

TYPE 2 SURGE PROTECTIVE DEVICES¹

Voltage	Impulse current (kA)	Ordering code
480 V/277 V	80	RGPPSP277Y08T2
	150	RGPPSP277Y15T2
	225	RGPPSP277Y22T2
	300	RGPPSP277Y30T2
208 V/120 V	80	RGPPSP120Y08T2
	150	RGPPSP120Y15T2
	225	RGPPSP120Y22T2
	300	RGPPSP120Y30T2

¹ RGPP series SPD with MCB disconnect requires 9 (nine) X-spaces

RGM40 METERING^{2, 3}

Function	Communication protocol	Ordering code for 480Y/277 V and 208Y/120 V
Standard	Modbus RTU	RGM40V1MX
	Modbus TCP	RGM40V1TX
	BACnet	RGM40V1BX
Standard + basic datalog	Modbus RTU	RGM40V2MX
	Modbus TCP	RGM40V2TX
	BACnet	RGM40V2BX
Advanced datalog, PQ, waveform	Modbus RTU	RGM40V6MX
	Modbus TCP	RGM40V6TX
	BACnet	RGM40V6BX

² RGM40 meter requires 4 X-spaces

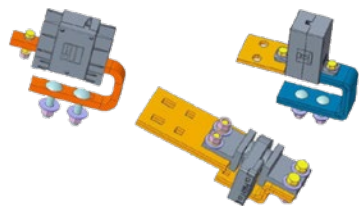
³ CTs for RGM40 main metering applications must be split-core, with a minimum window size of 2.50" x 6.00", an output voltage of 333 mV and a maximum exterior dimension of 10.5"



RGM40 meter

GROUND FAULT NEUTRAL SENSORS

Type	Tmax® XT plug-in breaker	Description	Ordering code
Neutral current sensors	XT2	Ekip Touch, ≤ 60 A	KXCT2CTUTCHV60
		Ekip Touch, ≥ 100 A	KXCT2CTUTCHV100
	XT4	Ekip Touch, all ampacities	KXT4CTUTCHV
	XT5	Ekip Touch, all ampacities	KXT5CTUTCHV
	XT7	Ekip Touch, all ampacities	ZE1NCT
Neutral current cables	XT2	4-meter cable	1SQA015612R0001
		6-meter cable	ISQA015614R0001
	XT4	4-meter cable	ISQA015612R0001
		6-meter cable	1SQA015614R0001
	XT5	4-meter cable	ISQA015613R0001
		6-meter cable	ISQA015615R0001
	XT7	4-meter cable	1SQA015619R0001
		6-meter cable	1SOA015620R0001
Neutral current sensors	XT2	Ekip Touch	31019314586A001KIT
	XT4	Ekip Touch	
	XT5	Ekip Touch	310193145BSA001KIT
	XT7	Ekip Touch	31019914266AKIT



Neutral current assembly

ReliaGear® Merchandised SB switchboards

EUSERC utility door kits



- See table below for alternate door kits for other specific utilities to be ordered separately
- Simple and fast field installation by removing the pin from the hinge and replacing with the door kit that matches the specific utility required

Group	Part number for 2000 A	Part number for 4000 A	Door kit description
1 ¹	1SQA013209R0001	1SQA014377R0001	15 clip sockets — one 30" cover with 2 sockets
2 ²	1SQA013210R0001	1SQA014378R0001	13 clip sockets — one 15" blank cover, one 15" cover with 13 clips, screws
3	1SQA013211R0001	1SQA014379R0001	15 clip sockets — one 15" blank cover, one 15" cover with 15 clips, screws
4	1SQA013212R0001	1SQA014380R0001	Remote sockets — two 15" blank covers, screws

SAMPLING OF EUSERC UTILITIES AND ASSOCIATED DOOR KITS

Number	EUSERC utility list ³	Door kit group	Min. height lugs	Sockets	Number of clips	EUSERC page	Meter page	Door kit part number — 2000 A	Door kit part number — 4000 A
1	Southern California Edison	Group 1 ¹	42	2	15	322	332	1SQA013209R0001	1SQA014377R0001
2	Pacific Gas & Electric Co		42	2	15	322	332	1SQA013209R0001	1SQA014377R0001
3	Arizona Public Service	Group 2 ²	42	1	13	322	332	1SQA013210R0001	1SQA014378R0001
4	Portland General Electric		42	1	13	322	332	1SQA013210R0001	1SQA014378R0001
5	Seattle City Light		42	1	13	322	332	1SQA013210R0001	1SQA014378R0001
6	NV Energy		42	1	13	322	332	1SQA013210R0001	1SQA014378R0001
7	Hawaiian Electric Company Inc		42	1	13	322	332	1SQA013210R0001	1SQA014378R0001
8	Burbank Water & Power		42	1	13	322	332	1SQA013210R0001	1SQA014378R0001
9	Snohomish Country Pud		42	1	13	322	332	1SQA013210R0001	1SQA014378R0001
10	Public Service Co of NM		42	1	13	322	332	1SQA013210R0001	1SQA014378R0001
11	Puget Sound Energy		42	1	13	322	332	1SQA013210R0001	1SQA014378R0001
12	Los Angeles Department of Water and Power	Group 3	42	1	15	322	332	1SQA013211R0001	1SQA014379R0001
13	San Diego Gas & Electric		42	1	15	322	332	1SQA013211R0001	1SQA014379R0001
14	Pacificorp	Group 4	42	Remote	13	322	332	1SQA013212R0001	1SQA014380R0001
15	Pacific Power & Light		42	Remote	13	322	332	1SQA013212R0001	1SQA014380R0001
16	Rocky Mountain Power		42	Remote	13	322	332	1SQA013212R0001	1SQA014380R0001

¹ Group 1 door kit ships with EUSERC utility + main breaker switchboard section.

² If second socket is required, order quantity of 2.

³ Electrical service assumes 3-phase, 4-wire wye configuration.

ReliaGear® Merchandised SB switchboards

Determine X-space required

Each circuit breaker frame has specific requirements for the number of mounting positions (**X-spaces**). Thanks to the optimized dimensions of the XT1, the mounting positions required are lower when two or five breakers are mounted close

to one another. RELT, RGM40 and SPDs also require **X-space**, because they are plug-in modules. Refer to the table below and add up the number of **X-spaces** required for each plug-in device.

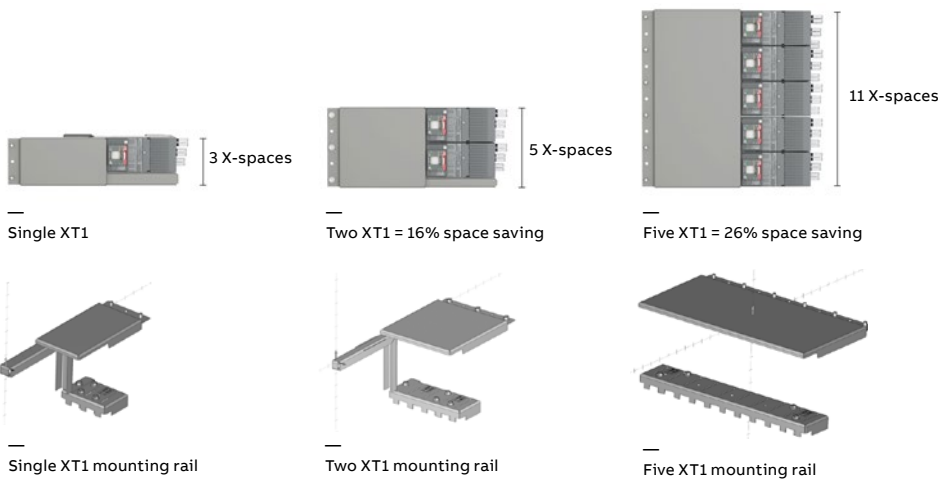
Frame	Max. ampacity (A)	Poles	X-spaces
Single XT1	125	3	3
Two XT1	125	3	5
Five XT1	125	3	11
XT2 ¹	125	3	3
XT4 ²	250	3	3
XT5 ³	600	3	4
XT6	800	3	6
XT7	1200	3	6
FB	100	1	1
FB	100	2	2
TEY	70	1	1
TEY	125	2	2
A2	250	2	2
RELT	–	–	3
Main metering (RGM40)	–	–	4
SPD ⁴	–	–	6

¹ Tmax® XT2 with COMs requires 1 (one) additional X-space.

² Tmax XT4 with COMs requires 2 (two) additional X-spaces.

³ Tmax XT5 with electrical accessories requires 1 (one) additional X-space.

⁴ RGPP series SPD with MCB disconnect requires 3 (three) additional X-spaces.



The small footprint of the XT1 allows this panel to offer multiple options to improve circuit breaker density. As you configure and order ReliaGear SB switchboards, you'll notice that XT1 are grouped in quantities of one, two or five. As part of this feature, unique mounting brackets are required when adding XT1 breaker assemblies. See above for X-space and mounting brackets required.

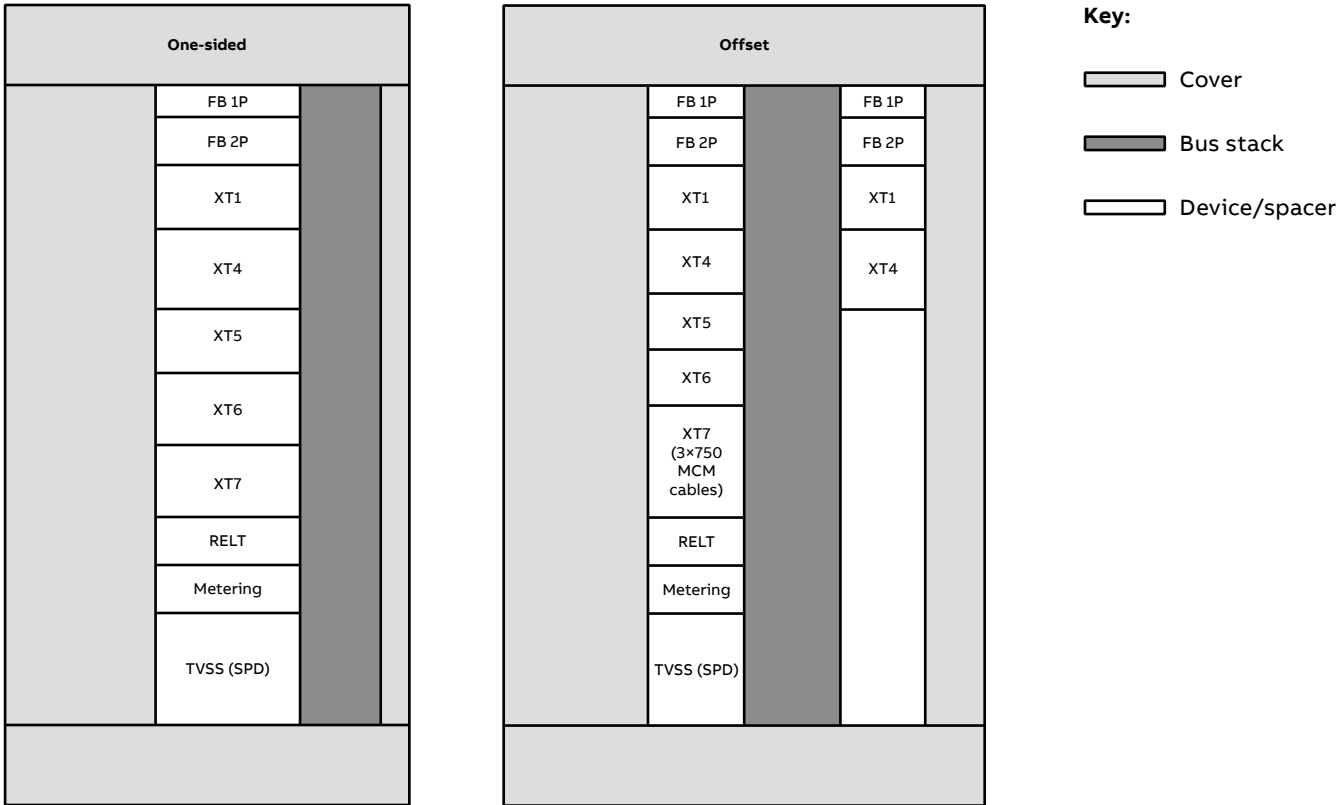
The additional rails are not included with switchboard configurations and must be ordered as accessories.

Order codes for XT1 mounting rails

- SR1XBF for 1 single XT1 breaker
- SR2XBF for 2 adjacent XT1 breakers
- SR5XBF for 5 adjacent XT1 breakers

ReliaGear® Merchandised SB switchboards

Distribution section breaker configurations



Key:

Cover

Bus stack

Device/spacer

1-sided device mounting configurations 40" W

2-sided device mounting configurations 50" W

ReliaGear® Merchandised SB switchboards

Configuration example 1

Enclosure: NEMA 1
 Main type: EUSERC utility main breaker
 Ampacity: 4000 A
 Voltage: 480 V AC
 Phase: 3
 Wires: 4
 AIC rating: 100 kAIC

The customer has load requirements of 1x 1200 A 3p with RELT capability, 1x 800 A 3p, 2x 3p 400 A with shunt trips, 1x 225 A, 5x 70 A 3p breakers and 3x 70 A prepared spaces for future add-ons.

Step 1: Determine which sections are required in the switchboard.
 Various configurations can be brought together with each section. For this example, the customer has requested a EUSERC utility main breaker section with a distribution section. Add more distribution sections based on breaker X-space requirements from breakers and accessories

- 4000 A EUSERC utility main breaker N1: **RSBM44010CN1BEU**

Step 2: Select distribution section(s)

To select the correct distribution section, calculate the total X-space of the breakers and accessories that will be used. In this example, we will need X-space for (1) XT7, (1) XT6, (2) XT5, (1) XT4, (5) XT1, (1) RELT module, (2) shunt trips and (3) prepared spaces for XT1. Reference the X-spaces table to calculate the total X-space needed to determine if a 1-sided or 2-sided distribution section will be needed.

- (1) XT7 and (1) XT6 both require 6 X-spaces each, equaling **12 X-spaces**. (1) RELT module requires **3 X-spaces**.
- XT5 requires 4 X-spaces each plus an extra X-space for each shunt trip. We have (2) XT5 breakers and (2) shunt trips, so we need **10 X-spaces**.
- (1) XT4 require **3 X-spaces**.
- (5) XT1 require 3 X-spaces each. Remember, XT1 can be group mounted in groups of one, two or five to save space using the group-mounting bracket, which is **11 X-spaces**.
- (3) XT1 prepared spaces require 3 X-space each for a total of **9 X-spaces**.

6X (XT7) + 6X (XT6) + 3X (RELT)+ 10X (XT5 + shunt trips) + 3X (XT4) + 11X (XT1 group mounted) + 9X (prepared spaces) = **47 X-spaces total**.

A 2-sided distribution section will be required to accommodate 47 X-spaces worth of breakers and accessories.

4000 A 2-sided distribution section N1: **RSBM44010CN1BD2**

Step 3: Select breakers and accessories

Breakers and accessories are not included in the distribution sections and must be ordered separately. XT1 mounting rails are not included with the breakers and must be selected to accommodate one, two, or five XT1 circuit breakers.

- Qty (1) XT7HU312EQYW000XXR
- Qty (1) XT6NU3800FYU000XXX
- Qty (2) XT5NU360BFYN000XXX
- Qty (1) XT4NU3225FYJ000XXX
- Qty (5) XT1NU3070AYD000XXX
- Qty (3) XT1 prepared spaces
- Qty (1) RT04B (RELT module)
- Qty (1) CN0045 (RELT wire connector)
- Qty (2) KXTFYOCFPD (shunt trip)
- Qty (1) SR5XBF (XT1 group-mounting rail)

ReliaGear® Merchandised SB switchboards

Configuration example 2

Enclosure: NEMA 3R
Main type: Main breaker
Ampacity: 2000 A
Voltage: 208Y/120 V AC
Phase: 3
Wires: 4
AIC rating: 100 kAIC

The customer has load requirements of 3x 400 A 3p with auxiliary contacts, 2x 225 A 3p, 2x 60 A 3p and 6x 20 A 1p breakers.

Step 1: Determine which sections are required in the switchboard.
Various configurations can be brought together with each section. For this example, the customer has requested a EUSERC utility main breaker section with a distribution section. Add more distribution sections based on breaker X-space requirements from breakers and accessories

- 2000 A main breaker section N3R: **RSBM42010C3RBMX**

Step 2: Select distribution section(s)

To select the correct distribution section, calculate the total X-space of the breakers and accessories that will be used. In this example, we will need X-space for (3) XT5, (2) XT4, (2) XT1, (3) auxiliary contacts and (6) TEYs. Reference the X-spaces table to calculate the total X-space needed to determine if a 1-sided or 2-sided distribution section will be needed.

- XT5 requires 4 X-spaces each plus an extra X-space for each auxiliary contact. Since we have (3) XT5 breakers and (3) shunt trips, we will need **15 X-spaces**.
- (2) XT4 require 3 X-spaces each for a total of **6 X-spaces**.
- (2) XT1 require 3 X-spaces each. Remember, XT1 can be group mounted in groups of one, two or five to save space using the group-mounting bracket, which is **5 X-spaces**.
- (6) TEY 1-pole breakers require 1 X-space each for a total of **6 X-spaces**.

15X (XT5 + auxiliary contacts) + 6X (XT4) + 5X (XT1 group mounted) + 6X (TEY 1p) = **32 X-spaces total**.

A 1-sided distribution section will be enough to accommodate 32 X-spaces worth of breakers and accessories.

2000 A 1-sided distribution section N3R: **RSBM42010C3RBD1**

Step 3: Select breakers and accessories

Breakers and accessories are not included in the distribution sections and must be ordered separately. XT1 mounting rails are not included with the breakers and must be selected to accommodate one, two or five XT1 circuit breakers. Note the phases on TEY 1p breakers as they have an A, B and C phase proponent.

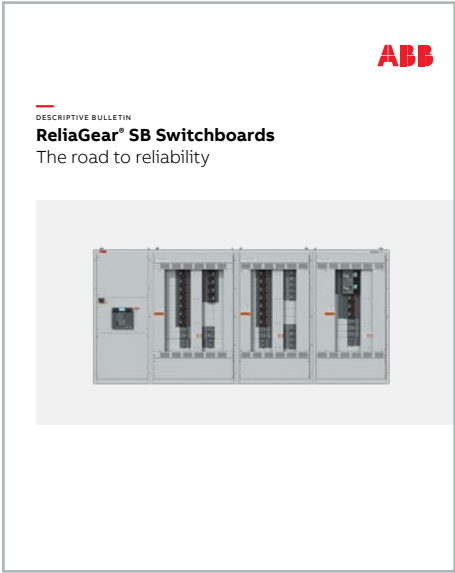
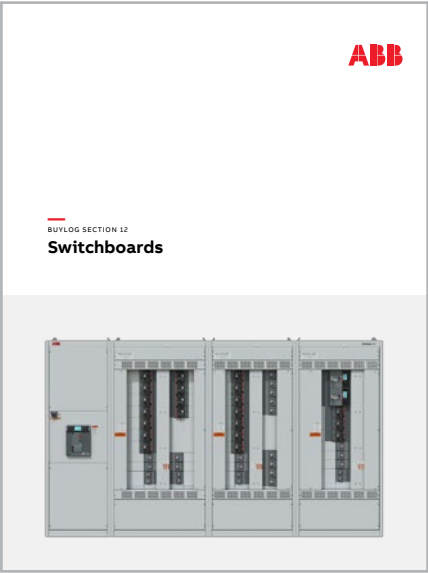
- Qty (3) XT5NU360BFYN000XXX
- Qty (2) XT4NU3225FYJ000XXX
- Qty (2) XT1NU3070AYD000XXX
- Qty (2) TEYADED0AAXXXXXX
- Qty (2) TEYADED0BAXXXXXX
- Qty (2) TEYADED0CAXXXXXX
- Qty (2) KXTDAXCD3QSYFP (auxiliary contacts)
- Qty (1) SR2XBF (XT1 group-mounting rail)

ReliaGear® Merchandised SB switchboards

Resources for easy installation

RESOURCE DOCUMENTS

Resource documents
ABB Switchboard BuyLog
ReliaGear® SB Switchboard descriptive bulletin
ReliaGear Merchandised SB Switchboard ground fault feeder accessory information
RGM40 Meter user manual
RGM40 Meter quick start guide
ReliaGear Merchandised SB Switchboard submittal drawings
ReliaGear® Merchandised SB Switchboard installation instructions
RGM40 meter installation instructions
Ground fault feeder breakers brochure





04

Merchandised ProS
enclosed starters





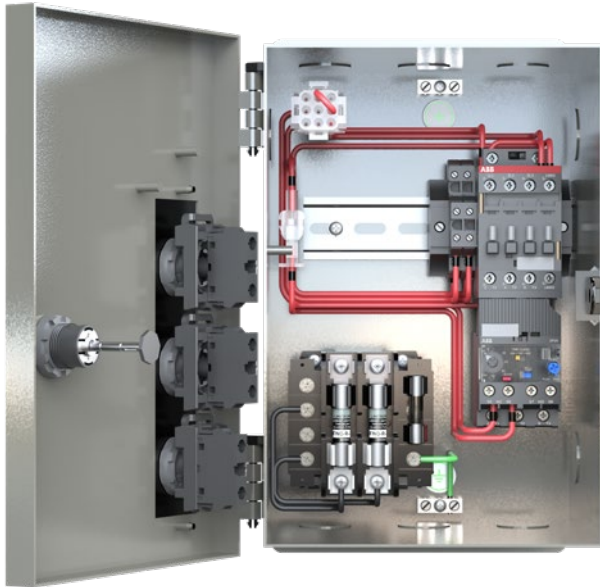
Merchandised ProS enclosed starters

Merchandised ProS enclosed starters

Product overview	66
Step-by-step selection	67
Dimensions	73

MERCHANDISED PROS ENCLOSED STARTERS

Plug and play, control made simple



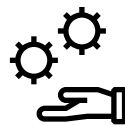
Merchandised ProS enclosed starters are designed for dependable motor control applications in both commercial and industrial environments. With plug-and-play simplicity, they offer a streamlined, flexible platform that eases installation and is suitable for environments requiring non-combination and combination enclosed starters.

- HVAC motors and fan systems
- Pump control (water, wastewater, irrigation, booster, sump)
- Conveyor and material-handling equipment
- Compressors and blowers
- Industrial machinery motors
- Manufacturing process equipment
- OEM equipment



Plug and play

Enables fast connections with pre-tested solutions for quick assembly and installation



Flexible design

Add and install components to customize and tailor your solution to meet your application requirements



No lead time

Quickly and efficiently install readily available components from distributor inventory

Merchandised ProS enclosed starters

Selection

1

Select your basic starter's column type, enclosure and system voltage



2

Select your overload relay



3

Select your control transformer kit



4

Select your pilot device kit



5

Select auxiliary contacts

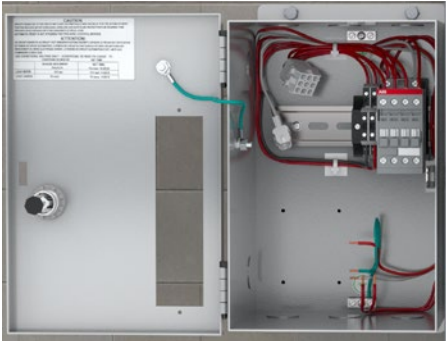


All selections are sold separately and must be selected and installed by the customer.



Merchandised ProS enclosed starters

Step 1: Select your basic starter’s type, enclosure and NEMA size



TYPE, ENCLOSURE AND NEMA SIZE

	NEMA size	Max. motor HP	Non-combination across-the-line starter		Combination across-the-line starter with non-fusible disconnect switch		Combination across-the-line starter with fusible disconnect switch		Combination across-the-line starter with circuit breaker	
			Type 1	Type 4/12	Type 1	Type 4/12	Type 1	Type 4/12	Type 1	Type 4/12
200 V AC, 230 V AC, 460/575 V AC	00	1.5, 1.5, 2	PSN-AFSX13	PSN-AFSX43	PSN-AFSN13	PSN-AFSN43	PSN-AFSF13	PSN-AFSF43	PSN-AFSB13	PSN-AFSB43
	0	3, 3, 5	PSN-OFSX13	PSN-OFSX43	PSN-OFSN13	PSN-OFSN43	PSN-OFSF13	PSN-OFSF43	PSN-OFSB13	PSN-OFSB43
	1	7.5, 7.5, 10	PSN-1FSX13	PSN-1FSX43	PSN-1FSN13	PSN-1FSN43	PSN-1FSF13	PSN-1FSF43	PSN-1FSB13	PSN-1FSB43
	2	10, 15, 25	PSN-2FSX13	PSN-2FSX43	PSN-2FSN13	PSN-2FSN43	PSN-2FSF13	PSN-2FSF43	PSN-2FSB13	PSN-2FSB43
	3	25, 30, 50	PSN-3FSX13	PSN-3FSX43	PSN-3FSN13	PSN-3FSN43	PSN-3FSF13	PSN-3FSF43	PSN-3FSB13	PSN-3FSB43
	4	40, 50, 100	PSN-4FSX13	PSN-4FSX43	PSN-4FSN13	PSN-4FSN43	PSN-4FSF13	PSN-4FSF43	PSN-4FSB13	PSN-4FSB43

Merchandised ProS enclosed starters

Step 2: Select overload relay

OVERLOAD RELAYS

	Three-phase				Part number (ampere range)	These 11 part numbers cover the entire chart
	208 V	240 V	460/ 480 V	575/ 600 V		
This table is to be used as a guideline based on cULus 508 A	-	-	-	-	EF19-0.32 (0.10 ... 0.13)	EF19-0.32 (0.10 ... 0.32 A)
	-	-	-	-	EF19-0.32 (0.13 ... 0.17)	
	-	-	-	-	EF19-0.32 (0.17 ... 0.23)	
	-	-	-	-	EF19-0.32 (0.23 ... 0.32)	
	-	-	-	-	EF19-1.0 (0.30 ... 0.41)	EF19-1.0 (0.30 ... 1.0 A)
	-	-	-	-	EF19-1.0 (0.41 ... 0.55)	
	-	-	-	-	EF19-1.0 (0.55 ... 0.74)	
	-	-	-	½	EF19-1.0 (0.74 ... 1.0)	EF19-2.7 (0.80 ... 2.7 A)
	-	-	½	¾	EF19-2.7 (0.8 ... 1.3)	
	-	-	¾	1	EF19-2.7 (1.3 ... 1.7)	
Actual motor FLA will vary depending on manufacturer	-	½	1	-	EF19-2.7 (1.7 ... 2.7)	EF19-6.3 (1.9 ... 6.3 A)
	½	-	1.5	1.5, 2	EF19-6.3 (1.9 ... 3.1)	
	¾	1	2	3	EF19-6.3 (3.1 ... 4.2)	
	1	-	3	-	EF19-6.3 (4.2 ... 6.3)	EF19-18.9 (5.7 ... 18.9 A)
	1.5, 2	1.5, 2	5	5	EF19-18.9 (5.7 ... 7.6)	
	-	3	-	7.5	EF19-18.9 (7.6 ... 10)	
	3	-	7.5	10	EF19-18.9 (10 ... 13)	
	-	5	10	-	EF19-18.9 (13 ... 18.9)	EF45-30 (9.0 ... 30.0 A)
	5	-	-	-	EF45-30 (9 ... 20)	
	7.5	7.5	-	-	EF45-30 (20 ... 24)	
	-	-	-	-	EF45-30 (24 ... 30)	EF45-45 (15 ... 45 A)
	-	-	-	-	EF45-45 (15 ... 45)	
	-	-	15	20	EF65-56 (20 ... 28)	EF65-56 (20 ... 53 A)
	10	10	20	25	EF65-56 (25 ... 33)	
	-	15	25	-	EF65-56 (30 ... 40)	
	-	-	-	40	EF65-56 (36 ... 48)	EF65-70 (25 ... 70 A)
	-	-	-	50	EF65-56 (44 ... 53)	
	-	-	-	-	EF65-70 (50 ... 60)	
	-	-	-	-	EF65-70 (57 ... 70)	EF96-100 (36 ... 100 A)
	15	15	30	40	EF96-100 (36 ... 51)	
	-	20	40	50	EF96-100 (48 ... 60)	
	20	-	50	-	EF96-100 (57 ... 68)	EF146-150 (54 ... 150 A)
	25	25	-	-	EF96-100 (65 ... 78)	
	-	30	-	-	EF96-100 (75 ... 87)	
	-	-	-	-	EF96-100 (84 ... 100)	
	30	-	60	60, 75	EF146-150 (54 ... 90)	
	-	40	75	100	EF146-150 (80 ... 110)	
	40	50	-	-	EF146-150 (100 ... 135)	
	-	-	100	-	EF146-150 (110 ... 150)	
	-	-	-	-		



Merchandised ProS enclosed starters

Step 3: Select control power transformer kit

CONTROL POWER TRANSFORMER KITS

	Primary voltage	Secondary voltage	Part number
50 VA	208 V	120 V	PS-50-208/120
	240 V	120 V	PS-50-240/120
For contactor sizes:	480 V	120 V	PS-50-480/120
PSN-Axxxx	600 V	120 V	PS-50-600/120
PSN-0xxxx			
PSN-1xxxx			
PSN-2xxxx			
PSN-3xxxx			
100 VA	208 V	120 V	PS-100-208/120
	240 V	120 V	PS-100-240/120
For contactor sizes:	480 V	120 V	PS-100-480/120
PSN-4xxxx	600 V	120 V	PS-100-600/120



Control power transformer kit

Merchandised ProS enclosed starters

Step 4: Select pilot device kit

PILOT DEVICE KITS

	Pilot device type	Description	Part number
1 pilot device	2-position switch	OFF-ON	PS-SL2
	3-position switch	HANDS-OFF-AUTO	PS-SL3
	Pilot light	Green LED pilot light "ON"	PS-PL
	Pilot light	Red LED pilot light "ON"	PS-PLR
	Pilot light	Green LED pilot light "OFF"	PS-PLG
2 pilot devices	Pushbuttons	Green pushbutton "START" Red pushbutton "STOP"	PS-SS
	Pushbuttons	Green pushbutton "START" Red "EMERGENCY STOP"	PS-SE
	2-position switch + pilot light	Selector switch "OFF-ON" Green LED pilot light "ON"	PS-SL2I
	3-position switch + pilot light	Selector switch "HAND-OFF-AUTO" Green LED pilot light "ON"	PS-SL3I
	Pilot lights	Red LED pilot light "ON" Green LED pilot light "OFF"	PS-PLRG
3 pilot devices	Pushbuttons + pilot lights	Green pushbutton "START" Red pushbutton "STOP" Green LED pilot light "ON"	PS-SSI
	2-position switch + pilot lights	Selector switch "OFF-ON" Green LED pilot light "ON" Yellow LED pilot light "FAULT"	PS-SL2IO
	3-position switch + pilot lights	Selector switch "HAND-OFF-AUTO" Green LED pilot light "ON" Yellow LED pilot light "FAULT"	PS-SL3IO

NOTE: All kits with pilot lights include 120 V AC LED



Pilot device kit

Merchandised ProS enclosed starters

Step 5: Select auxiliary contacts

AUXILIARY CONTACTS

Type	Used with size	Part number
1 NO	PSN-A, 0, 1, 2, 3	CA4-10
1 NC	PSN-A, 0, 1, 2, 3	CA4-01
2 NO/2 NC	PSN-A, 0	CA4-22M
2 NO/2 NC	PSN-1, 2, 3	CA4-22E
1 NO/1 NC	PSN-4	CAL19-11



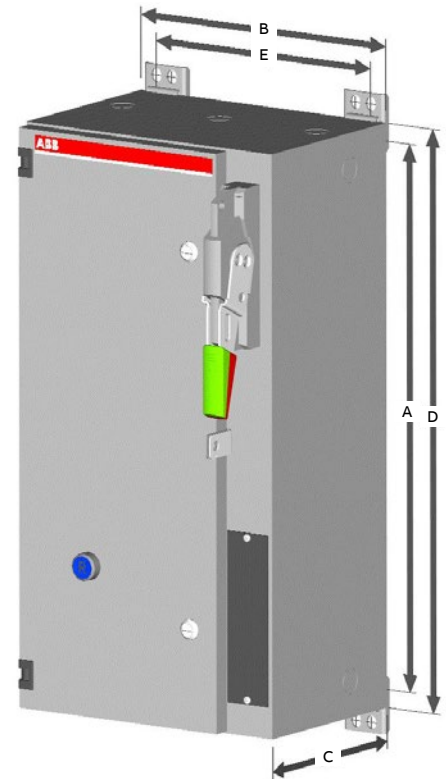
Auxiliary contacts

Merchandised ProS enclosed starters

Dimensions

TYPE 1 ENCLOSURE FOR NEMA-RATED COMBINATION STARTERS

		Dimension				
Starter type		A	B	C	D	E
PSN-AFS	N	24"	12"	8"	25½"	10½"
PSN-AFC	F	(610 mm)	(305 mm)	(204 mm)	(647.7 mm)	(266.7 mm)
PSN-AFR	N	28"	18"	8"	29½"	16½"
PSN-AFK	F	(712 mm)	(458 mm)	(204 mm)	(749.3 mm)	(419.1 mm)
PSN-AFA						
PSN-AFB						
PSN-AFT						
PSN-AFV						
PSN-0FS	N	24"	12"	8"	25½"	10½"
PSN-0FC	F	(610 mm)	(305 mm)	(204 mm)	(647.7 mm)	(266.7 mm)
PSN-0FR	N	28"	18"	8"	29½"	16½"
PSN-0FK	F	(712 mm)	(458 mm)	(204 mm)	(749.3 mm)	(419.1 mm)
PSN-0FA						
PSN-0FB						
PSN-0FT						
PSN-0FV						
PSN-1FS	N	24"	12"	8"	25½"	10½"
PSN-1FC	F	(610 mm)	(305 mm)	(204 mm)	(647.7 mm)	(266.7 mm)
	L					
PSN-1FR	N	28"	18"	8"	29½"	16½"
PSN-1FK	F	(712 mm)	(458 mm)	(204 mm)	(749.3 mm)	(419.1 mm)
PSN-1FA	L					
PSN-1FB						
PSN-1FT						
PSN-1FV						
PSN-2F_	N	28"	18"	8"	29½"	16½"
	F	(712 mm)	(458 mm)	(204 mm)	(749.3 mm)	(419.1 mm)
	L					
PSN-3F_	N	28"	18"	8"	29½"	16½"
	F	(712 mm)	(458 mm)	(204 mm)	(749.3 mm)	(419.1 mm)
	L					
PSN-4F_	N	48"	24"	8"	49½"	22½"
	F	(1220 mm)	(610 mm)	(204 mm)	(1257.3 mm)	(571.5 mm)



For a list of full options available for ProS enclosed starters beyond the Merchandised offer, please visit the following:



[ProS Starters Home](#)



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