BUYLOG SECTION 11

Panelboards

ENGINEERED
TO OUTRUN

Section Updated 10/2026

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ReliaGear® lighting panelboards

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ReliaGear lighting panelboards

Applications

Standards
All ABB lighting panelboards meet the latest revision of the following standards.

- National Electrical Code-Ref. Article 384
- UL67 panelboards: UL50 cabinets and boxes UL943 GFCI
- UL489 molded case circuit breakers
- cULus listing for ReliaGear lighting panelboards
- cULus listing for ReliaGear non-service entrance panelboards
- International Building Code Seismic Certification
- California Building Code Seismic Certification
- NEMA PB1
- Federal Specifications
    - Panelboards, W-P-115c
        Type 1—Circuit breaker equipped
        Class 1—Panelboards
        Class 2—Load centers
    - Molded case circuit breakers, WC-375B/GEN

Application
The following classifications and limitations of panelboards have been established by the Underwriters Laboratories and the National Electrical Code. Note— “an overcurrent protective device is a circuit breaker pole or single fuse”. Panelboards have no fire wall ratings. All 50/60 Hz rated. There is no limitation as to the number and rating of branch circuits, except as determined by available enclosures.

Interrupting ratings—circuit breakers
Panelboards have integrated short circuit ratings. When fully rated, the rating is that of the lowest rated device in the panelboard. When series connected rated, the rating is that of the main device in panel (or remote line side protected device) and branch-tested/UL Listed combination.

Short-circuit ratings—fusible switch units
The interrupting rating of the fuse must equal or exceed the short-circuit rating of the switch. If it is lower, then the interrupting rating of the switch is the same as the fuse. Switches have no short-circuit rating if renewable fuses are used.

Seismic ratings
All ReliaGear Lighting Panelboards have been tested and certified to meet the the seismic requirements of 2018 International Building Code (IBC) as well as the 2019 California Building Code (CBC)

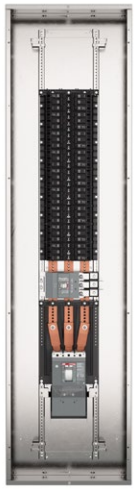
Selective coordination
NFPA 70, the National Electrical Code (NEC), requires overcurrent devices to be selectively coordinated when applied in emergency standby systems (Article 700), legally required standby systems (Article 701), Critical Power Systems (Article 708) and when supplying multiple elevator circuits (620.62). The NEC defines the performance standard of selective coordination in Article 100, Definitions. Beginning with the definition in effect with the 2014 NEC, the combinations of circuit breakers that can comply with this standard are limited. Those limitations include the number of circuit breaker poles, current ratings of either the line side or load side circuit breaker, and the maximum interrupting current that selective operation extends to. These limitations can affect the selection of circuit breakers used in a panelboard. ABB has documented selective pairs of their molded case circuit breakers in publication 1SDC210066D0201. This publication should be consulted when applying panelboards in the applications noted above.

Features

- Symmetrical design, no required top or bottom mountings
- Wide, easy-to-install galvanized enclosures with removable endwalls
- Flush or surface mounting for NEMA Type 1 enclosures
- Standard concealed mounting hardware and hinges
- Interiors that allow “straight-in” wiring
- Split neutral for 400A and higher panelboards
- Branch-bus direct connection
- Captive hardware on branch circuit breakers
- Short circuit ratings allow up to 100KA @ 480Y/277Vac; 200KA @ 240Vac (depending on type of panelboard)
- Main bus ratings of 125 to 800 amps copper, 125 to 600 amps aluminum
- Tmax XT vertically mounted main circuit breakers with fixed thermal magnetic and adjustable trip units available
- Bus-connected SPD for maximum surge protection
- Optional door-in-door or front-hinged-to-box door
- Enclosures available in NEMA Type 1, Type 3R/12, Type 4/4X painted galvanneal or 316 grade stainless steel
- Optional metering features
- Front options: stainless steel front
- Build America, Buy America, 2 CFR Part 184 options available
- Latch/lock options: best lock, national lock/corbin 60 key, corbin latch bolt 15767, yale lock, replacement locks

ReliaGear lighting panelboards

Types



Type RQ

TYPE RL

Service information:
1P, 3W-120/240 Vac
3P, 3W-240 Vac
3P, 4W-240/120 Vac, 208/120 Vac
Fully rated: 65kAIC at 240V
Series rated: 200kAIC at 240V

Main circuit breakers:
100A-THQB, THHQB, TEY
125A-XT1
225A-A2
250A-XT4
400A-XT5
600A-XT5
800A-XT6

Main lug:
125-800A

Branch circuit breakers (plug-in):
Amperage-15-100A
Poles-1, 2, 3
Types-THQL, THHQL, TXQL

Subfeeds:
Amperage-15-600A
Poles-2, 3
Types- A2, XT1, XT4, XT5

Enclosures
Height-25.5, 31.5, 37.5, 43.5, 49.5, 55.5, 64.5, 76.5, 82.5, 88.5
Width-20”
Depth-5.81”

Type RL

TYPE RQ

Service information:
1P, 3W-120/240 Vac
3P, 3W-240 Vac
3P, 4W-240/120 Vac, 208/120 Vac
Fully rated: 65kAIC at 240V
Series rated: 200kAIC at 240V

Main circuit breakers:
100A-THQB, THHQB, TEY
125A-XT1
225A-A2
250A-XT4
400A-XT5
600A-XT5
800A-XT6

Main lug:
125-800A

Branch circuit breakers (bolt-on):
Amperage-15-100A
Poles-1, 2, 3
Types-THQB, THHQB, TXQB

Subfeeds:
Amperage-15-600A
Poles-2, 3
Types- A2, XT1, XT4, XT5

Enclosures
Height-25.5, 31.5, 37.5, 43.5, 49.5, 55.5, 64.5, 76.5, 82.5, 88.5
Width-20”
Depth-5.81”

ReliaGear lighting panelboards

Types

Type RE

TYPE RE

Service information:
1P, 3W-120/240 Vac
3P, 3W-240 Vac
3P, 4W-480/277 Vac, 208/120 Vac, 240/120 Vac
Fully rated: 18kAIC at 480Y/277V, 65kAIC at 240V
Series rated: Reference panel configuration in empower or DET-008

Main circuit breakers:
100A-TEY, TEYF
125A-XT1
250A-XT4
400A-XT5
600A-XT5
800A-XT6

Main lug:
125-800A

Branch circuit breakers (bolt-on):
Amperage-15-100A
Poles-1, 2, 3
Types-TEY, TEYF

Subfeeds:
Amperage: 15-600A
Poles: 3*
Types: XT1, XT4, XT5
*3 poles can be used as 2 poles

Enclosures
Height-25.5, 31.5, 37.5, 43.5, 49.5, 55.5, 64.5, 76.5, 82.5, 88.5
Width-20”
Depth-5.81”

Type RS

TYPE RS

Service information:
1P, 3W-120/240 Vac
2P, 2W-125 Vdc, 250 Vdc
3P, 3W-240 Vac
3P, 4W-480/277 Vac, 125/250 Vdc, 208/120 Vac, 240/120 Vac
Fully rated: 18kAIC at 125/250 Vdc, 65kAIC at 480Y/277V, 100kAIC at 240V
Series rated: Reference panel configuration in empower or DET-008

Main circuit breakers:
100A-TEYD, TEYH, TEYL
125A-XT1
250A-XT4
400A-XT5
600A-XT5
800A-XT6

Main lug:
125-800A

Branch circuit breakers (bolt-on):
Amperage-15-125A
Poles- 1, 2, 3
Types- TEYD, TEYH, TEYL

Subfeeds:
Amperage: 15-600A
Poles: 3*
Types: XT1, XT4, XT5
*3 poles can be used as 2 poles

Enclosures
Height-25.5, 31.5, 37.5, 43.5, 49.5, 55.5, 64.5, 76.5, 82.5, 88.5
Width-20”
Depth-5.81”

Type RD

TYPE RD

Service information:
2P, 125 Vdc, 250 Vdc
3P, 3W-480 Vac, 600 Vac
3P, 4W-208/120 Vac, 125/250 Vdc, 480/277 Vac, 600/347 Vac
Fully rated: 35kAIC at 125/250 Vdc, 42kAIC at 240V, 42kAIC at 600Y/347V, 42kAIC at 480V
Series rated: Reference panel configuration in empower or DET-008

Main circuit breakers:
150A-XT4
225A-XT4
400A-XT5
600A-XT5

Main lug:
125-600A

Branch circuit breakers (bolt-on):
Amperage-15-100A (FB 1P, 2P, 3P)
200A Max. double branch
Types: FB

Subfeeds:
Amperage: 15-400A
Poles: 3
Types: XT2 (TMA, DIP, Hi-Touch), FB, XT4 (TMF, DIP, Hi-Touch), XT5 (DIP, Hi-Touch)

Enclosures
Height-31.5, 37.5, 43.5, 49.5, 55.5, 64.5, 76.5, 82.5, 88.5
Width-20”
Depth-5.81”

ReliaGear lighting panelboards

Types

PANELBOARD TYPES

Item	RL Page 11-7	RQ Page 11-7	RE Page 11-8	RS Page 11-8	ReliaGear RD Page 11-8
Max. voltage	240Vac	240Vac	480Y/277Vac	480Y/277Vac	600Vac
			125/250Vdc	125/250Vdc	
Max. main lug amperes	800A	800A	800A	800A	600A
Max. main circuit breaker or switch amperes	800A	800A	800A	800A	600A
Main devices	THQB, THHQB, TEY	THQB, THHQB, A2,TEY	TEY, TEYF	TEYD, TEYH, TEYL	XT4, XT5
	A2, XT1, XT4, XT5, XT6		XT1, XT4, XT5, XT6		–
Branches max. amps	100A	100A	100A	100A	100A-1 ph, 2ph
Branch devices	THQL, THHQL	THQB, THHQB, TXQB (Bolt-on)	TEY, TEYF	TEYD, TEYH, TEYL	FB
Subfeed circuit breaker types	A2, XT1, XT4, XT5	A2, XT1, XT4, XT5	XT1, XT4, XT5	XT1, XT4, XT5	XT2, XT4, XT5

RELIAGEAR STANDARD MAIN CIRCUIT BREAKER TYPES AND RATINGS

IC ratings	Voltage	RQ/RL 100A	RQ/RL 225A	RQ/RL 400A	RQ/RL 600A	RQ/RL 800A	RE/RS 100A	RE/RS 125A	RE/RS 225A	RE/RS 400A	RE/RS 600A	RE/RS 800A	Panel type RD 150A	RD 225A	RD 400A	RD 600A
18	125/250 Vdc	–	–	–	–	–	–	–	–	–	–	–	XT4N	XT4N	XT5N	XT5N
35	125/250 Vdc	–	–	–	–	–	–	–	–	–	–	–	XT4N	XT4N	XT5N	XT5N
10	240	THQB	A2A	–	–	XT6N	–	–	–	–	–	–	–	–	–	–
22	240	THHQB	A2N	–	XT5N	–	–	–	–	–	–	–	–	–	–	–
65	240	TEY/ XT1S	XT4N	XT5N	XT5N	–	–	–	XT4N	XT5N	XT5N	–	–	–	–	–
100	240	XT1H	XT4S	XT5S	XT5S	–	–	–	–	–	–	–	–	–	–	–
200	240	–	XT4L	XT5L	–	–	–	–	–	–	–	–	–	–	–	–
14	480Y/277	–	–	–	–	–	TEY	–	–	XT5N	XT5N	XT6N	XT4N	XT4N	XT5N	XT5N
35	480Y/277	–	–	–	–	–	–	–	–	–	–	–	XT4S	XT4S	XT5N	XT5N
18	480Y/277	–	–	–	–	–	–	–	–	–	–	–	XT4N	XT4N	XT5N	XT5N
25	480Y/277	–	–	–	–	–	–	XT1N/ TEYD	XT4N	–	–	–	XT4N	XT4N	XT5N	XT5N
65	480Y/277	–	–	–	–	–	–	XT1H/ TEYL	XT4H	XT5H	XT5H	–	–	–	–	–
42	480Y/277	–	–	–	–	–	–	–	–	–	–	–	XT4H	XT4H	XT5S	XT5S
100	480Y/277	–	–	–	–	–	–	XT1L	XT4L	–	–	–	–	–	–	–
14	480	–	–	–	–	–	–	–	–	–	–	–	XT4N	XT4N	XT5N	XT5N
42	480	–	–	–	–	–	–	–	–	–	–	–	XT4H	XT4H	XT5S	XT5S
18	600	–	–	–	–	–	–	–	–	–	–	–	XT4N	XT4N	XT5N	XT5N
25	600	–	–	–	–	–	–	–	–	–	–	–	XT4S	XT4S	XT5S	XT5S
42	600Y/347	–	–	–	–	–	TEYL	TEYL	XT4N	XT5N	XT5N	–	XT4L	XT4L	XT5L	XT5L

ReliaGear lighting panelboards

Terminal lugs

MOLDED CASE CIRCUIT BREAKERS

Frame	Poles	Lug kit number [1]	Cable(s) per lug	Cable Range
XT6	3	KXT6CUAL3X400K-3PC	3	Cu Al 3x2/0AWG-400kcmil
XT6 (750MCM)	3	KXT6CUAL2X750KCC-3	2	500kcmil - 750 kcmil [3]
XT5	3	KXT5CUAL2X500K-3PC	2	Cu Al 2x2/0AWG-500kcmil
XT5 (750MCM)	3	KXT5CUAL2X750KC-3	2	500kcmil - 750 kcmil [3]
XT4-250A	3	KXT4CUAL3-3PC	1	Cu Al 1x3/0 AWG-350 kcmil [2]
XT4 (<250A)	3	KXT4CUAL2-3PC	1	Cu Al 1x4 AWG-300 kcmil
XT1	3	KXT1CUAL1-3PC	1	Cu Al 1x14-2/0 AWG
A2	3	1SDA069983R1 (3pole – 3pcs lug)	1	Cu 1x1 AWG-250kcmil
				Al 1x2/0 AWG-300
A2	2	1SDA069982R1 (2pole – 2pcs lug)	1	Cu 1x1 AWG-250kcmil
				Al 1x2/0 AWG-300

[1] Kit contains 3pcs lug
[2] External solution: lugs to be mounted on EF terminals supplied in the kit
[3] The lug kit will come with 2 sets of cable set screws. One is for 600 MCM and smaller cable and the other is for cable greater than 600 MCM. Follow the instructions that are included with the kit. If you are upgrading the existing lugs to the 750 MCM lugs, the customer, AHJ (authority having jurisdiction) and/or inspector will need to make sure the panel is compliant with NEC and UL cable bending space. ABB is not responsible for the addition of these lugs in existing panels.

ReliaGear lighting panelboards

Enclosures

NEMA 1
Front options
sold separately

NEMA 3R

NEMA 4/4X/12
painted galvaneal

NEMA 4/4X/12
316 stainless steel

ENCLOSURE

Box Height	NEMA 1 20" Wide	NEMA 1 30" Wide	NEMA 3R 20" Wide	NEMA 3R 30" Wide	NEMA 4, 4X & 12 Painted Galvaneal 20" Wide	NEMA 4, 4X & 12 Painted Galvaneal 30" Wide	NEMA 4, 4X & 12 Stainless Steel 20" Wide	NEMA 4, 4X & 12 Stainless Steel 30" Wide
25.5"	–	–	–	–	–	–	AB254S	AB254DWS
31.5"	AB31B	AB31BW	AB313	AB313DW	AB314	AB314DW	AB314S	AB314DWS
37.5"	AB37B	AB37BW	AB373	AB373DW	AB374	AB374DW	AB374S	AB374DWS
43.5"	AB43B	AB43BW	AB433	AB433DW	AB434	AB434DW	AB434S	AB434DWS
49.5"	AB49B	AB49BW	AB493	AB493DW	AB494	AB494DW	AB494S	AB494DWS
55.5"	AB55B	AB55BW	AB553	AB553DW	AB554	AB554DW	AB554S	AB554DWS
64.5"	AB64B	AB64BW	AB643	AB643DW	AB644	AB644DW	AB644S	AB644DWS
76.5"	AB76B	AB76BW	AB763	AB763DW	AB764	AB764DW	AB764S	AB764DWS
82.5"	AB82B	AB82BW	AB823	AB823DW	AB824	AB824DW	AB824S	AB824DWS
88.5"	AB88B	AB88BW	AB883	AB883DW	AB884	AB884DW	AB884S	AB884DWS

Standard

Standard with
quarter turn lock

Door within door

Front hinged to Box

ENCLOSURE FRONT

Front Height	Standard (20" wide) Flush	Standard (20" wide) Surface	Door Within Door (20" wide) Flush	Door Within Door (20" wide) Surface	Front Hinged To Box (20" wide) Flush	Front Hinged To Box (20" wide) Surface	Standard (30" Wide) Flush	Standard (30" Wide) Surface
31.5"	AF31F	AF31S	AF31FP	AF31SP	AF31FD	AF31SD	AF31FW	AF31SW
37.5"	AF37F	AF37S	AF37FP	AF37SP	AF37FD	AF37SD	AF37FW	AF37SW
43.5"	AF43F	AF43S	AF43FP	AF43SP	AF43FD	AF43SD	AF43FW	AF43SW
49.5"	AF49F	AF49S	AF49FP	AF49SP	AF49FD	AF49SD	AF49FW	AF49SW
55.5"	AF55F	AF55S	AF55FP	AF55SP	AF55FD	AF55SD	AF55FW	AF55SW
64.5"	AF64F(T)	AF64S(T)	AF64FP(T)	AF64SP(T)	AF64FD(T)	AF64SD(T)	AF64FW(T)	AF64SW(T)
76.5"	AF76F(T)	AF76S(T)	AF76FP(T)	AF76SP(T)	AF76FD(T)	AF76SD(T)	AF76FW(T)	AF76SW(T)
82.5"	AF82F(T)	AF82S(T)	AF82FP(T)	AF82SP(T)	AF82FD(T)	AF82SD(T)	AF82FW(T)	AF82SW(T)
88.5"	AF88F(T)	AF88S(T)	AF88FP(T)	AF88SP(T)	AF88FD(T)	AF88SD(T)	AF88FW(T)	AF88SW(T)

(T) Fronts with quarter turn lock for applications with XT5 and/or XT6 circuit breakers. Applicable for NEMA 1 enclosures only.

ReliaGear lighting panelboards

Pricing and ordering through empower, distributors or sales

Information required to price and order a panelboard

- Short-circuit rating (10kA, 18kA, etc.)
- Service entrance label (Yes) or (No)
- Service (3-ph, 4-w 208Y/120; 3-ph, 3-w 480 volts, etc.)
- Entrance of incoming line (top) or (bottom). (Bottom supplied as standard)
- Trim (surface) or (flush)
- Incoming wire size (500kcmil, 250kcmil, etc.)
- Incoming number of wires per phase (1, 2, 3, etc.)
- Wire material (copper or aluminum)
- Main type (main lugs only, circuit breaker, fusible switch, etc.)
- Amperage of main bus
- Frame of main circuit breaker (XT5, XT6, etc.) (if applicable)
- Options to mains (shunt trip, lighting contactor, etc.)
- Equipment ground (optional)
- Branches
    - Amp rating (20, 30, 50, etc.)
    - Poles (1, 2, or 3)
    - Frame (THQB, TEY, etc.)
    - Quantity (1, 10, 15, etc.)
- Options:
    - Interior (copper bus, 200% rated neutral, etc.)
    - Box (painted, increased gutter, etc.)
    - Front (door in door, etc.)
    - Ground fault protection (yes) or (no)
- Type of panel (RQ, RE, etc.)

Pricing and layout for factory assembled and unassembled panelboards through empower.

https://empower.abb.com

How to select a ReliaGear® Merchandised, unassembled panelboard

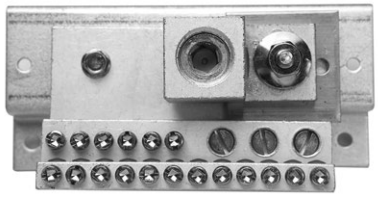
Total the following components:

Step 1: Select Interior
Step 2: Select Box
Step 3: Select Front
Step 4: Select main and/or sub-feed breaker kit(s)
Step 5: Select main and/or sub-feed breaker(s)
Step 6: Select main and/or feed-thru lug kit(s) and accessories
Step 7: Select accessories
Step 8: Select bolt-on branch circuit breakers

Please consult your local distributor for net pricing and current stock levels.

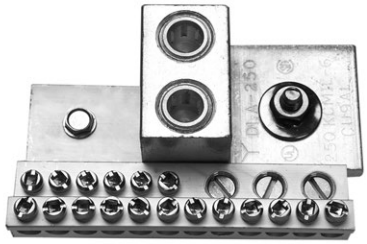
For additional details on selecting ReliaGear Merchandised panelboards, please refer to publication 1TQC173700E0051.

ReliaGear lighting panelboards
Product options

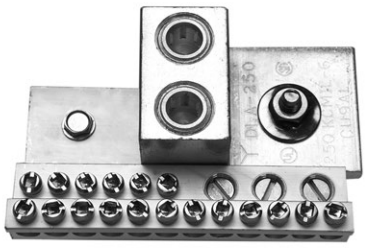


AEBG

AEBGC



AEIG



AEIGC

ASPGIBC

ENCLOSURE OPTIONS

Box extensions—For additional end gutter space or conduit skirt applications–see page 11-15.

EQUIPMENT GROUNDS—FACTORY SUPPLIED WITH PANELBOARD

Description	Product Number
Field installed kits Standard bonded to box-for each 12 branch positions	TGL2
Copper bonded to box-for each 12 branch positions	TGC2
Standard-isolated/insulated-for each 12 branch positions	EGS12
Copper-isolated/insulated-for each 12 branch positions	EGC12
Main lug for above terminal kits	TGL20

OPTIONAL EQUIPMENT GROUNDS

Description	Product Number
Aluminum Extruded Bonded	AEBG
Copper Extruded Bonded	AEBGC
Aluminum Extruded Isolated	AEIG
Copper Extruded Isolated	AEIGC
Copper Isolated/Bonded	ASPGIBC

THQB/THHQB/THQL/THHQL/TEY FILLER PLATES

Product Number
TQLFP1

FILLER PLATES

Description	Product Number
T(HE)D/SE/FB (for legacy A series panels)	TEDFP1
XT2/FB (for ReliaGear panels) (contains 10 filler plates)	XT2FBFP10

CIRCUIT BREAKER MOUNTING[1] HARDWARE KITS

Description	Product Number
Circuit breaker type TED/THED4/SE	ASPTED3P
Circuit breaker type FB	ASPFBRD3P
Circuit breaker type Formula A2	ASPA23P
Circuit breaker type Tmax XT1–for mounting 3 poles	ASPXT13P[2]
Circuit breaker type Tmax XT2–for mounting 3 poles	ASPXT23P[2]
Circuit breaker type Tmax XT4–for mounting 3 poles	ASPXT43P[2]

[1] Use to mount circuit breaker in existing space.
[2] Includes screws, washers and ReliaGear panelboard connectors.

ReliaGear lighting panelboards

Accessories

Field installed kits/replacement parts
Order by product number from factory

T-Handle Quarter Turn Kit

Corbin Lock

Fixed padlock in the open position – PLL

Replacement Lock with Standard Key – Black

Replacement Lock with ABB75 Key – Red

Handle locking THL103

ENDWALL KITS

Field installed. For standard 20"w x 5.81"d boxes.

Product Number	Description	Qty.
ABEW2	Blank	1
AKEW2	Knockout	1
ABEW3	Blank - 30" x 5 3/4"	1
AKEW3	Knockout - 30" W	1

PANELBOARD LOCKS

Description	Product Number
T-Handle Quarter Turn Kit[1]	ASPQTRT
Flush Quarter Turn Kit[1]	ASPQTRK
Replacement Lock with Std. Key	569B737P1
Additional Keys for Above Lock	569B737P5
Yale Lock Kit	ASPYALE47
Corbin Lock Kit	ASPCORBNTEU1
Replacement Lock with ABB75 Key	569B737P2

[1] The quarter turn kits are only compatible with factory-built quarter turn fronts. They cannot be used to convert other locks (standard, Corbin, etc.) to quarter turn. Keys are interchangeable with standard, Corbin, etc.

LOCKING DEVICES

Frame Style	Description	Product Number
Padlocking Device (single padlock)		
Q	THQB, THHQB, THQL, THHQL	THP100
Q	GFT2, GFEP, AF2, DF2	THP100E
E	TEY	TEYPLD1
Formula	Formula A2 3 pole	KA2LD
Formula	Formua A2 2 pole	KA2LDOR
Tmax XT	XT1	KXTBPLLOPCL
Tmax XT	XT2 and XT4	KXTCPLLOPCL
Tmax XT	XT5	KXT5PLLOPLC
Tmax XT	XT6	KXT6PLLOPLC
Handle Locking (nonpadlocking)		
Q	THQB, THHQB, THL, THHQL	THL103
E	TEY	TEYLD1
Q/E	Filler plate for Q and TEY breakers	TQLFP1
	Safety catch for trough covers	ACHK
	Gasketing Kit	AGSK

MAIN BREAKER SERVICE ENTRANCE LUG COVER KIT

Breaker Type	Poles	Product Number
Formula A2	2	A2P2SB1
Formula A2	3	A2P3SB1
Tmax XT1	3	XT1P3SB1
Tmax XT4	3	XT4P3SB1
Tmax XT5	3	XT5P3SB1

ReliaGear lighting panelboards

Accessories

Field installed kits/replacement parts
Order by product number from factory

PANELBOARDS PARTS

Description	Product Number
Directory Card	139C5612P3
Circuit Numbering Strips - 1-48	569B806G1
49-84	569B806G2
85-126	569B806G3
Adhesive Backed Lamicoid Nameplate 3/4 in. x 3 in.	315A7190P1
Metal Directory Card Holder	139C5491G1
Directory Card Holder	139C5491P4
Delta Hi-leg Conversion Kit, to Add B-Phase Plug on RL Panels	APHBL
Delta Hi-leg Conversion Kit, to Add B-Phase Bolt on RE/RQ Panels	APHBQ
NEMA 3R/12 Tamper Proof Tork Screw Kit	NEMATRX
RD 25 to 65 kAIC Barrier kit	ASP25AD65KA[1]
Service Entrance Kit	ASPSERENT
RQ/RL/RE Rail Bracket	ASPAQLEBKT
Front Flush Adjust Kit	ASPFLUSHADJ
RE Front Mounting Kit	139C5720G3
RQ/RL Front Mounting Kit	139C5720G6
RD Front Mounting Kit	139C5720G9
Front Hinge to Box Mounting Kit	139C5700G6
Front Extension Mounting Kit	139C5700G11

[1] Included in factory assembled panels—AD panels with Spectra branch circuit breakers.

PERMANENT CIRCUIT NUMBER KITS

Product Number		
RQ, RL, RE	AD	Description
APN48	APN48AD	No's 1-48
APN84	APN84AD	No's 43-84
APN126	APN126AD	No's 85-126

ACARE KIT[2]

Description	Product Number
ACARE spare parts kit for ReliaGear panelboard installation and maintenance	ACARE

[2] ACARE kit includes: (50) 1/4-20 philp HD THD form screw, (50) directory cards, (50) 1/4-20X1/2 phillips, (50) # 1 – 42 circuit marker strip, (50) # 43 – 84 circuit marker strip, (50) service disconnect labels, (25) 1/4-20 3/8 SLT. HD., (50) #10-32 X 7/16" slot hex wsh, (15) key # B-135A for black locks, (25) rating label books, (50) 1/4-20X1 1/2 phil thd roll, (50) 1/4-20 speed nut.

BOX EXTENSIONS

Bolts to ReliaGear box with or without box endwall in place. Extensions can be combined to obtain lengths greater than 18 and 24 inches.

Box Width and Depth	Box Mounting	Box Extension Length (Inches)	Box Extension Product Number
20 x 5.81	Flush	9	ABX2509F
		18	ABX2518F
		24	ABX2524F
	Surface	9	ABX2509S
		18	ABX2518S
		24	ABX2524S
		31	ABX2531S
		37	ABX2537S
		43	ABX2543S
		49	ABX2549S
		55	ABX2555S
		64	ABX2564S
		76	ABX2576S
30 x 5.81	Flush	18	ABX3518F
		24	ABX3524F
	Surface	18	ABX3518S
		24	ABX3524S
30 x 7.81	Flush	18	ABX3718F
		24	ABX3724F
	Surface	18	ABX3718S
		24	ABX3724S

Box Extensions Covers Only

10 covers per kit.

Description	Product Number
9" Covers Surface	ASPABX09S
9" Covers Flush	ASPABX09F
18" Covers Surface	ASPABX18S
18" Covers Flush	ASPABX18F
64" to 76" Covers Surface	ASPABX20S
64" to 76" Covers Flush	ASPABX20F

ReliaGear lighting panelboards

Branch circuit monitoring

The Branch Circuit Monitoring (BCM) unit offers a cost-effective, integrated solution for power monitoring and submetering in ReliaGear Lighting Panelboards. Featuring ANSI C12.20 0.5% revenue-grade metering accuracy, the BCM meter is suitable for tenant billing and cost allocation. With outstanding accuracy, the BCM unit monitors key electrical parameters of the various branch circuits within the panelboard. This data can be transmitted via multiple communication protocols to analyze usage, identify potential cost-saving measures, and improve load management. The BCM includes a local display with captive touch screen technology to provide faster startups and ease of access to critical information.

Features

- Solutions up to 800A
- Revenue grade, ANSI C12.20 0.5% accuracy
- Encapsulated Solid Core CT's that cover branch breakers from 1/2A -120A
- Ships fully assembled from the factory in the enclosure
- Solid Core monitors up to 84 circuits
- Configurable alarm thresholds improve load management
- Ability to set the orientation and numbering of the circuits
- 1-, 2-, 3-pole circuit breaker support
- Local display captive touch screen technology
- Front access via USB Micro B port
- Modbus RTU via 2-wire RS485 communications
- Modbus TCP, Bacnet IP (Ethernet RJ45 10/100 Mbs)

General measurements

- +/- kWh
- +/- kvarh
- kVAh
- Load curves/demand profiles

Multi-measurement

- I1, I2, I3, In
- ∑P, ∑Q, ∑S, ∑PF
- P, Q, S, PF per phase
- Current unbalance
- Phase angle
- Voltage measurement – phase to phase
- Ph/N unbalance, Ph/Ph unbalance
- Multi-load current measurement
- Operation across 4 quadrants
- Predictive power

Power quality

- THDi1, THDi2, THDi3, THDiN, THDisys and harmonics up to 63rd for voltage and current
- K-factor
- Crest factor I1, I2, I3
- Overcurrent

Alarms

- Measurement thresholds
- System alarms
- Boolean combination of alarms

Trends

- Average values

Advanced features

- Auto correct technology

References

1SQC173002B0201 for additional information
empower for configuration/quotation purposes

ReliaGear lighting panelboards

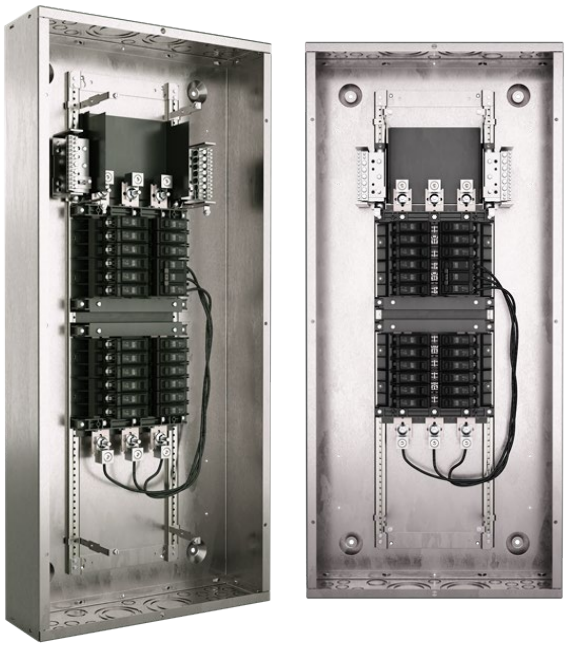
Title 24 solutions

California's Title 24, Part 6, Building Energy Efficiency Standards, §130.5(b) requires electrical systems are to be arranged to allow metering of electrical loads by load type or other classifications. While the meters themselves do not need to be installed, electrical equipment that is an intended location for this metering must be able to allow future current and voltage sensing. Section 130.5(b) applies to new electrical system installations or when complete electrical systems are replaced. The requirement does not apply to modifications made in existing electrical systems, such as adding a new circuit breaker to an electrical panel

Branch Circuit Monitoring (BCM) upgradable panels are a practical, cost effective way to meet Title 24 Part 6 §130.5(b) requirements. This method provides freedom to place branch devices anywhere in a panel regardless of load type. This means that panels can be installed with less labor since there is no further time dedicated to validating the construction of a complex layout.

Branch Circuit Monitoring (BCM) upgradable panelboards allow the ability to meter each branch circuit individually without the complexity and cost of physically grouping similar branch devices together within the panel. Title 24 compliance can be attained with BCM upgradable panels no matter where a branch device is located in the panel, provided a single load type is wired per branch. The BCM upgradable panelboards provide more installation flexibility and better density per panel than disaggregated load monitoring. The field upgrade kit can be installed after the panel is commissioned. The kit includes a meter and split core CTs. BCM upgradable panels retain density and flexibility when adding additional branch devices regardless if metering has been implemented.

Split bus panels are another cost-effective solution for disaggregating multiple type of loads that can be metered separately in the future using additive/subtractive current transformer wiring techniques. Up to seven sections can be configured in the panel, with space in between each section for future CTs. The quantity of the branches in each section is flexible and can be any multiple of six 1-pole branches.



Split Bus

Split bus configurations

- Incoming type:
  Lighting contactor, main lug or main breaker
- Panelboard selections
  - RQ/RL up to 225A main breaker or main lug, max 22 KAIC at 240V
  - RE up to 125A main breaker or 225A main lug, max 18 KAIC at 480V
- Main breakers:
  Formula A2, XT1, THQB, TEY, TEY(D/H/L)
  Feeders: THQB, TEY
- Sub-feeds:
  Formula A2, THQB, TEY, TEY(D/H/L) TED, XT1 Max rating of 22 KAIC at 240V and 208/120V and 18 KAIC @480V.
- 9 configurations available in empower

Features

- Solutions up to 800A
- Offers 3 solutions: BCM upgradable panels, field upgrade kits or split bus panels
- 1, 2, 3 pole circuit breaker support

ReliaGear® merchandised panelboards – unassembled

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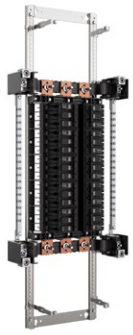
ReliaGear merchandised, unassembled lighting panels

Pricing and ordering through empower, distributors or sales

100-600A
240V AC 1-phase, 208Y/120V AC 3-phase, 480Y/277V AC 3-phase
Order by product number from the customer service center



Step 1: Select interior

Select the interior by voltage, number of circuits and ampacity. Identify the box/front height for interior selected in steps 2 and 3.

Voltage	Rating (amps)	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	
	600	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	
	600	42	AQU3426RCXAXT1B4[3]	76.5	4	
480Y/277 V AC, 3-Phase	100–225	30	AEU3302RCXAXT1B4	43.5	3	
		42	AEU3422RCXAXT1B4	49.5	4	
	400	42	AEU3424RCXAXT1B4	76.5	4	
	600	42	AEU3426RCXAXT1B4[3]	76.5	4	
	100-225	42	ASU3422MCXAXT1B4[4]	49.5	–	Main Lug, Feed-thru lug
	400	42	ASU3424MCXAXT1B4[4]	76.5	–	
	600	42	ASU3426MCXAXT1B4[4]	76.5	–	
	100-225	42	ASU3422DCXAXT1B4[4]	76.5	–	Main Breaker, Feed-thru lug
	400	42	ASU3424DCXAXT1B4[4]	76.5	–	
	600	42	ASU3426DCXAXT1B5[4]	76.5	–	
	100-225	42	ASU3422DCXAXB4[4]	76.5	–	Main Breaker only
	400	42	ASU3424DCXAXB4[4]	76.5	–	
	600	42	ASU3426DCXAXB5[4]	76.5	–	

[1] See table below for TGL20 ground lug quantities
[2] For isolated ground, use EGS12. When using the EGS12, 5x and 7x ground lugs (TGL20) are required for the 30 & 42 circuit panels respectively.
[3] 600 A available as main lug only.
[4] ASU Interiors come factory installed with ground lugs & 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, unassembled lighting panels

Pricing and ordering through empower, distributors or sales

Steps 2–3: Select box and front

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

- Boxes come with blank endwalls.

NEMA 1

NEMA 3R

	Ordering codes	
Box height (in.)	**NEMA 1**	**NEMA 3R**
43.5	AB43B	AB433
49.5	AB49B	AB493
76.5	AB76B	AB763

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

Standard

Door within door

Standard with quarter-turn lock

	Ordering codes			
	Standard	**Standard**	**Door within door**	**Front hinged to box**
Front height (in.)	**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 225A ASU interiors due to short circuit ratings. Optional use on AQU or AEU interiors

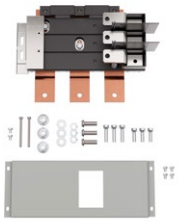
[2] 76.5" fronts include quarter-turn lock, enabling applications with XT5 circuit breaker or ASU interiors due to short circuit ratings

ReliaGear merchandised, unassembled lighting panels

Pricing and ordering through empower, distributors or sales

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

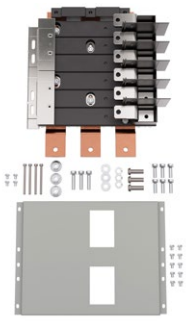
Select the main breaker kit appropriate for your interior type, amp rating and kAIC rating. If a sub-feed breaker is required, repeat the selection process. All 2-pole and 3-pole breaker kits can be used as either a main breaker or sub-feed breaker kit. 4-pole and 6-pole breaker kits can only be used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



MBA13

MAIN BREAKER KITS

Interior type	Bus rating	Breaker type	Amperage	# Poles	Ordering code[1]
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	MBM336[4]



MBA16

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
		XT4	225	2	MBB12
	400 A	XT5	400	2	MBM324
	600 A	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
	400 A	XT5	400	3	MBM334
		A2	400	6	MBA16[2]
		XT4	400	6	MBB36[2]
	600 A	XT5	400	3	MBM334
		XT4	450	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	6	MBB36[2]
	600 A	XT5	400	3	MBM334
		XT4	450	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] XT4 breaker ampacity limited to 225 A
[5] Can only be used with ASU Main breaker interiors

ReliaGear merchandised, unassembled lighting panels

Pricing and ordering through empower, distributors or sales

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 60A 3P	Cu Al 1x10–2/0 AWG	1	XT1NU3060AFF000XXX
50	25	XT1N 125 TMF 100A 3P	Cu Al 1x10–2/0 AWG	1	XT1NU3100AFF000XXX
50	25	XT1N 125 TMF 125A 3P	Cu Al 1x10–2/0 AWG	1	XT1NU3125AFF000XXX
100	65	XT1H 125 TMF 30A 3P	Cu Al 1x10–2/0 AWG	1	XT1HU3030AFF000XXX
100	65	XT1H 125 TMF 100A 3P	Cu Al 1x10–2/0 AWG	1	XT1HU3100AFF000XXX
100	65	XT1H 125 TMF 125A 3P	Cu Al 1x10–2/0 AWG	1	XT1HU3125AFF000XXX
65	35	XT1S 125 TMF 100A 3P	Cu Al 1x10–2/0 AWG	1	XT1SU3100AFF000XXX
65	25	XT4N 250 TMF 150A 3P	Cu Al 1x4 AWG–300 kcmil	1	XT4NU3150AFF000XXX
65	25	XT4N 250 TMF 200A 3P	Cu Al 1x4 AWG–300 kcmil	1	XT4NU3200AFF000XXX
65	25	XT4N 250 TMF 225A 3P	Cu Al 1x4 AWG–300 kcmil	1	XT4NU3225AFF000XXX
150	65	XT4H 250 TMF 175A 3P	Cu Al 1x4 AWG–300 kcmil	1	XT4HU3175AFF000XXX
150	65	XT4H 250 TMF 200A 3P	Cu Al 1x4 AWG–300 kcmil	1	XT4HU3200AFF000XXX
150	65	XT4H 250 TMF 225A 3P	Cu Al 1x4 AWG–300 kcmil	1	XT4HU3225AFF000XXX
65	25	XT4N 250 TMA 225A 3P	Cu Al 1x4 AWG–300 kcmil	1	XT4NU3225BFF000XXX
65	25	XT4N 250 EKIP DIP LSI 250A 3P	Cu Al 1x4 AWG–300 kcmil	1	XT4NU32501FF000XXX
150	65	XT4H 250 EKIP DIP LSI 250A 3P	Cu Al 1x4 AWG–300 kcmil	1	XT4HU32501FF000XXX
65	35	XT5N 400 TMA 300A 3P	Cu Al 2x2/0 AWG–500 kcmil	2	XT5NU330ABFF000XXX
65	35	XT5N 400 TMA 400A 3P	Cu Al 2x2/0 AWG–500 kcmil	2	XT5NU340ABFF000XXX
150	65	XT5H 400 TMA 400A 3P	Cu Al 2x2/0 AWG–500 kcmil	2	XT5HU340ABFF000XXX
65	35	XT5N 400 EKIP DIP LSI 400A 3P	Cu Al 2x2/0 AWG–500 kcmil	2	XT5NU340AFFF000XXX
150	65	XT5H 400 EKIP DIP LSI 400A 3P	Cu Al 2x2/0 AWG–500 kcmil	2	XT5HU340AFFF000XXX
65	35	XT5N 600 TMA 600A 3P	Cu Al 2x2/0 AWG–500 kcmil	2	XT5NU360BBFF000XXX
150	65	XT5H 600 TMA 600A 3P	Cu Al 2x2/0 AWG–500 kcmil	2	XT5HU360BBFF000XXX
65	35	XT5N 600 EKIP DIP LSI 600A 3P	Cu Al 2x2/0 AWG–500 kcmil	2	XT5NU360BFFF000XXX
150	65	XT5H 600 EKIP DIP LSI 600A 3P	Cu Al 2x2/0 AWG–500 kcmil	2	XT5HU360BFFF000XXX

[1] Breakers do not include lugs. They are supplied standard with front terminals and no lugs installed.

Select terminal lugs for main breaker.

BREAKER TERMINAL LUGS

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

Page 11–16 of the BuyLog

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

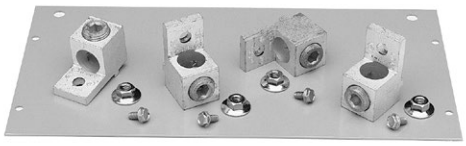
	2-pole		3-pole	
	10 kAIC	22 kAIC	10 kAIC	25 kAIC
Amp rating	Ordering code	Ordering code	Ordering code	Ordering code
125	A2A125TL-2	A2N125TL-2	A2A125TT	A2N125TT
150	A2A150TL-2	A2N150TL-2	A2A150TT	A2N150TT
175	A2A175TL-2	A2N175TL-2	A2A175TT	A2N175TT
200	A2A200TL-2	A2N200TL-2	A2A200TT	A2N200TT
225	A2A225TL-2	A2N225TL-2	A2A225TT	A2N225TT

ReliaGear merchandised, unassembled lighting panels

Pricing and ordering through empower, distributors or sales

Step 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, unassembled lighting panels

Pricing and ordering through empower, distributors or sales

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.
- TEYD, TEYH, and TEYL breakers are only compatible with RS panels.

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

			10 kAIC			22 kAIC
	1-pole	2-pole	3-pole	1-pole	2-pole	3-pole
Amp rating	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 & 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)

			14 kAIC			18 KAIC
	1-pole	2-pole	3-pole	1-pole	2-pole	3-pole
Amp rating	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

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

			25 kAIC			35 kAIC			65 kAIC
	1-pole	2-pole	3-pole	1-pole	2-pole	3-pole	1-pole	2-pole	3-pole
Amp rating	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

ReliaGear merchandised, unassembled lighting panels

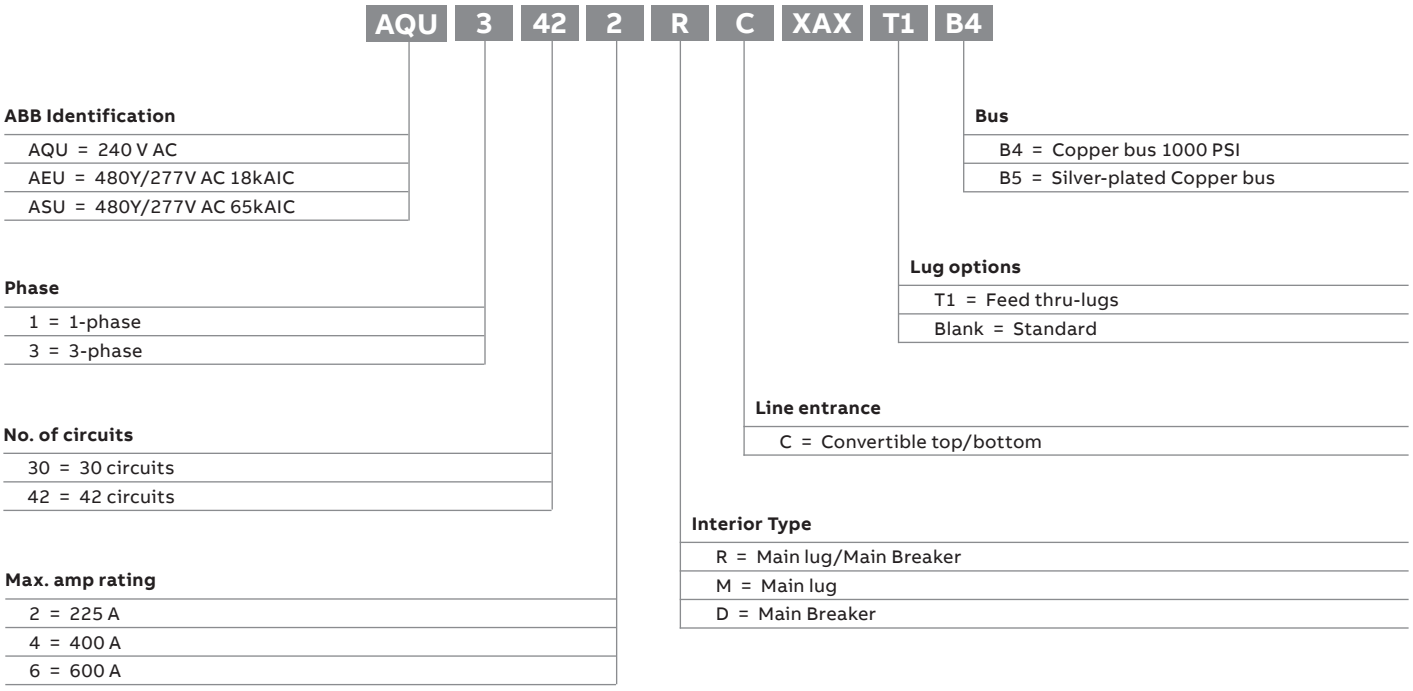
Product number nomenclature

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



ProLine panelboard and breakers

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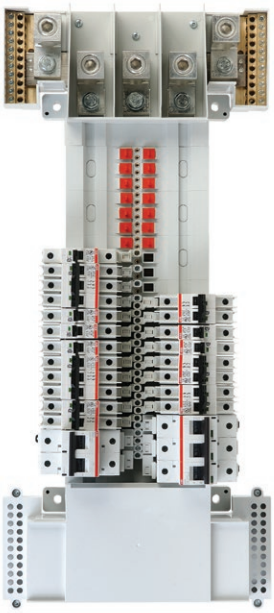
ProLine panelboard and breakers

Product overview

THE PROLINE PANELBOARD SETS A NEW STANDARD IN SAFETY AND INNOVATION WITH A UNIQUE TOUCH-SAFE DESIGN AND CUTTING-EDGE BREAKER TECHNOLOGY.



Electrical

- UL File #E499134
- UL 67
- 225 A and 400 A
- 42 and 84 circuits
- Panelboard rating 480Y/277 V AC, branch breaker rating 480Y/277 V AC up to 40 A and 240 V AC up to 100 A
- Up to 35 kAIC series rating @240 V AC
- Up to 30 kAIC series rating @480Y/277 V AC
- Single- or double-ended (feed-through)
- 1 A to 100 A branch breakers
- Fully rated sub-fed lugs or breaker

Features

- Current-limiting breakers
- Fully coordinated
- IP20 touch-safe
- Pluggable breaker with non-energized bolt-on screw

THE PROLINE BRANCH CIRCUIT BREAKERS ARE THE INDUSTRY'S FIRST UL LISTED CURRENT-LIMITING BREAKERS TO BE USED IN A PANELBOARD APPLICATION.

Electrical

- Current-limiting breaker technology
- Up to 240 V and 480Y/277 V AC
- Stand-alone rating up to 50 kA (depending on breaker type)
- K and C trip curves
- 1 A to 100 A

Features

- Contact position window
- Independent thermal and magnetic trip units
- Branch breakers with separated electrical (plug-in) and mechanical (bolt-on) connection

ProLine panelboard

Product number nomenclature

Product prefix

PL = Proline

Phases

3 = 3-phase

No. of circuits

42 = 30 circuits
84 = 42 circuits

Incoming

S = Single
D = Double (= feed-through)

Main

L = Main lugs
S = Studs

Ampacity

225 = 225 amps
400 = 400 amps

Type

T = Integrated N/G lug (also includes ground terminal bar)
S = Standard (no ground terminal bar)

Neutral

0 = B5 = Silver-plated Copper bus
1 = 100%
2 = 200%

Enclosure

NC = Open style

ProLine panelboard

Standard order codes

Description	Catalog number
225 A ProLine panelboard — 42 circuits, open style	
Single incomer, main lugs, 225 A, 100% neutral	PL342SL225T1NC
Single incomer, main lugs, 225 A, 200% neutral	PL342SL225T2NC
Double incomer, main lugs, 225 A, 100% neutral	PL342DL225T1NC
Double incomer, main lugs, 225 A, 200% neutral	PL342DL225T2NC
Single incomer, main studs, 225 A, 100% neutral	PL342SS225T1NC
Single incomer, main studs, 225 A, 200% neutral	PL342SS225T2NC
Double incomer, main studs, 225 A, 100% neutral	PL342DS225T1NC
Double incomer, main studs, 225 A, 200% neutral	PL342DS225T2NC
225 A ProLine panelboard — 84 circuits, open style	
Single incomer, main lugs, 225 A, 100% neutral	PL384SL225T1NC
Single incomer, main lugs, 225 A, 200% neutral	PL384SL225T2NC
Single incomer, main studs, 225 A, 100% neutral	PL384SS225T1NC
Single incomer, main studs, 225 A, 200% neutral	PL384SS225T2NC
400 A ProLine panelboard — 42 circuits, open style	
Single incomer, main lugs, 400 A, 100% neutral	PL342SL400T1NC
Single incomer, main lugs, 400 A, 200% neutral	PL342SL400T2NC
Double incomer, main lugs, 400 A, 100% neutral	PL342DL400T1NC
Double incomer, main lugs, 400 A, 200% neutral	PL342DL400T2NC
Single incomer, main studs, 400 A, 200% neutral	PL342SS400T2NC
Double incomer, main studs, 400 A, 100% neutral	PL342DS400T1NC
Double incomer, main studs, 400 A, 200% neutral	PL342DS400T2NC
Single incomer, main studs, 400 A, 100% neutral	PL342SS400T1NC
400 A ProLine panelboard — 84 circuits, open style	
Single incomer, main studs, 400 A, 200% neutral	PL384SS400T2NC
Single incomer, main lugs, 400 A, 100% neutral	PL384SL400T1NC
Single incomer, main lugs, 400 A, 200% neutral	PL384SL400T2NC
Single incomer, main studs, 400 A, 100% neutral	PL384SS400T1NC
ProLine panelboard — 3-phase, open style, no neutral assembly, no ground bar	
42 circuits, single incomer, MLO*, 225 A	PL342SL225S0NC
42 circuits, single incomer, MLO, 400 A	PL342SL400S0NC
42 circuits, single incomer, studs, 225 A	PL342SS225S0NC
42 circuits, single incomer, studs, 400 A	PL342SS400S0NC
42 circuits, feed-through, MLO, 225 A	PL342DL225S0NC
42 circuits, feed-through, MLO, 400 A	PL342DL400S0NC
42 circuits, feed-through, studs, 225 A	PL342DS225S0NC
42 circuits, feed-through, studs, 400 A	PL342DS400S0NC
84 circuits, single incomer, MLO[1], 225 A	PL384SL225S0NC
84 circuits, single incomer, MLO, 400 A	PL384SL400S0NC
84 circuits, single incomer, studs, 225 A	PL384SS225S0NC
84 circuits, single incomer, studs, 400 A	PL384SS400S0NC

[1] MLO = main lugs only

ProLine panelboard

Standard order codes

Description	Catalog number
ProLine panelboard — 3-phase, open style, 100% neutral, no ground bar	
42 circuits, single incomer, MLO*, 225 A	PL342SL225S1NC
42 circuits, single incomer, MLO, 400 A	PL342SL400S1NC
42 circuits, single incomer, studs, 225 A	PL342SS225S1NC
42 circuits, single incomer, studs, 400 A	PL342SS400S1NC
42 circuits, feed-through, MLO, 225 A	PL342DL225S1NC
42 circuits, feed-through, MLO, 400 A	PL342DL400S1NC
42 circuits, feed-through, studs, 225 A	PL342DS225S1NC
42 circuits, feed-through, studs, 400 A	PL342DS400S1NC
84 circuits, single incomer, MLO*, 225 A	PL384SL225S1NC
84 circuits, single incomer, MLO, 400 A	PL384SL400S1NC
84 circuits, single incomer, studs, 225 A	PL384SS225S1NC
84 circuits, single incomer, studs, 400 A	PL384SS400S1NC
ProLine panelboard — 3-phase, open style, 200% neutral, no ground bar	
42 circuits, single incomer, MLO*, 225 A	PL342SL225S2NC
42 circuits, single incomer, MLO, 400 A	PL342SL400S2NC
42 circuits, single incomer, studs, 225 A	PL342SS225S2NC
42 circuits, single incomer, studs, 400 A	PL342SS400S2NC
42 circuits, feed-through, MLO, 225 A	PL342DL225S2NC
42 circuits, feed-through, MLO, 400 A	PL342DL400S2NC
42 circuits, feed-through, studs, 225 A	PL342DS225S2NC
42 circuits, feed-through, studs, 400 A	PL342DS400S2NC
84 circuits, single incomer, MLO[1], 225 A	PL384SL225S2NC
84 circuits, single incomer, MLO, 400 A	PL384SL400S2NC
84 circuits, single incomer, studs, 225 A	PL384SS225S2NC
84 circuits, single incomer, studs, 400 A	PL384SS400S2NC

[1] MLO = main lugs only

UL CERTIFIED CONNECTION KIT TO MAKE CONNECTION WITH INCOMER TMAX® XT4 AND XT5 CIRCUIT BREAKERS

Description	Catalog number
Connection Kit XT4	2CCG002481R0001
Connection Kit XT5	2CCG002482R0001

NOTE: Connection Kit XT5 will be available starting end of Q2'2026

Technical specifications
PLU700M

Item	PLU700M (based on SUP200M)	PLU700M (L) PLU700M (R) (based on S800U)
UL standard	489	489
Number of poles	1, 2, 3	1, 2, 3
Tripping characteristic	K, C	K
Rated currents	1 A to 60 A	25 A to 70 A[1], 80 A to 100 A[2]
Minimum operating voltage	12 V	12 V
Stand-alone interrupting rating	14 kA	30 kA
Frequency	50/60 Hz	50/60 Hz
Rated voltage	K: 480Y/277 V AC up to 35 A, 240 V AC up to 60 A C: 480Y/277 V AC up to 40 A, 240 V AC up to 60 A	240 V AC
Protection category	IP 20	IP 20
Main terminals **Wire size**	18–4 AWG	8–1 AWG (above 30 A) 14–2 AWG (up to 30 A)
Torque	25 in-lbs/2.8 Nm	31 in-lbs./3.5 Nm
Tool	#2 Posidrive	#2 Posidrive
Service life at rated load	6,000 operations (electrical)	6,000 operations
	20,000 operations (mechanical)	—
Ambient temperatures		
Minimum	-25 °C -13 °F	-25 °C -13 °F
Maximum	+55 °C 131 °F	60 °C 140 °F
Storage temperatures		
Minimum	-40 °C -40 °F	-40 °C -40 °F
Maximum	70 °C 158 °F	70 °C 158 °F
Shock resistance according to IEC 60068-2-27	25 g minimum of 2 impacts, shock duration of 13 ms	5g, shock duration 30 ms
Vibration resistance according to IEC 60068-2-6	5 g, 20 cycles, 5 Hz, 150 Hz at 0.8 In	0.7 g; 13-2-100 Hz; at 0.8 In

[1] 60 A/70 A have different dimensions.
[2] 80 A/90 A/100 A available as “R” only and have double stab adapters.

ProLine breakers
PLU700M[1]

PLU701M

PLU703M

PLU702M-K60L

PLU703M-K100R

K curve, 1-pole		K curve, 2-pole		K curve, 3-pole	
Rated current (A)	Catalog number	Rated current (A)	Catalog number	Rated current (A)	Catalog number
1	PLU701M-K1	1	PLU702M-K1	1	PLU703M-K1
2	PLU701M-K2	2	PLU702M-K2	2	PLU703M-K2
3	PLU701M-K3	3	PLU702M-K3	3	PLU703M-K3
4	PLU701M-K4	4	PLU702M-K4	4	PLU703M-K4
5	PLU701M-K5	5	PLU702M-K5	5	PLU703M-K5
6	PLU701M-K6	6	PLU702M-K6	6	PLU703M-K6
7	PLU701M-K7	7	PLU702M-K7	7	PLU703M-K7
8	PLU701M-K8	8	PLU702M-K8	8	PLU703M-K8
10	PLU701M-K10	10	PLU702M-K10	10	PLU703M-K10
13	PLU701M-K13	13	PLU702M-K13	13	PLU703M-K13
15	PLU701M-K15	15	PLU702M-K15	15	PLU703M-K15
16	PLU701M-K16	16	PLU702M-K16	16	PLU703M-K16
20	PLU701M-K20	20	PLU702M-K20	20	PLU703M-K20
25	PLU701M-K25	25	PLU702M-K25	25	PLU703M-K25
30	PLU701M-K30	30	PLU702M-K30	30	PLU703M-K30
32	PLU701M-K32	32	PLU702M-K32	32	PLU703M-K32
35	PLU701M-K35	35	PLU702M-K35	35	PLU703M-K35
40	PLU701M-K40	40	PLU702M-K40	40	PLU703M-K40
50	PLU701M-K50	50	PLU702M-K50	50	PLU703M-K50
60	PLU701M-K60	60	PLU702M-K60	60	PLU703M-K60
25	PLU701M-K25L	25	PLU702M-K25L	25	PLU703M-K25L
30	PLU701M-K30L	30	PLU702M-K30L	30	PLU703M-K30L
40	PLU701M-K40L	40	PLU702M-K40L	40	PLU703M-K40L
50	PLU701M-K50L	50	PLU702M-K50L	50	PLU703M-K50L
60	PLU701M-K60L	60	PLU702M-K60L	60	PLU703M-K60L
70	PLU701M-K70L	70	PLU702M-K70L	70	PLU703M-K70L
25	PLU701M-K25R	25	PLU702M-K25R	25	PLU703M-K25R
30	PLU701M-K30R	30	PLU702M-K30R	30	PLU703M-K30R
40	PLU701M-K40R	40	PLU702M-K40R	40	PLU703M-K40R
50	PLU701M-K50R	50	PLU702M-K50R	50	PLU703M-K50R
60	PLU701M-K60R	60	PLU702M-K60R	60	PLU703M-K60R
70	PLU701M-K70R	70	PLU702M-K70R	70	PLU703M-K70R
80	PLU701M-K80R	80	PLU702M-K80R	80	PLU703M-K80R
90	PLU701M-K90R	90	PLU702M-K90R	90	PLU703M-K90R
100	PLU701M-K100R	100	PLU702M-K100R	100	PLU703M-K100R

[1] ProLine branch breakers utilize ABB SUP200M and S800U MCB technology.

Notes:
- PLU70xM-R and L have different dimensions (see dimension drawings)
- PLU70xM-K...R 80 A/90 A/100 A
  - Have double stab adapters
  - Are available as R only

ProLine breakers
PLU700M[1]

PLU701M

PLU703M

C curve, 1-pole		C curve, 2-pole		C curve, 3-pole	
Rated current (A)	Catalog number	Rated current (A)	Catalog number	Rated current (A)	Catalog number
1	PLU701M-C1	1	PLU702M-C1	1	PLU703M-C1
2	PLU701M-C2	2	PLU702M-C2	2	PLU703M-C2
3	PLU701M-C3	3	PLU702M-C3	3	PLU703M-C3
4	PLU701M-C4	4	PLU702M-C4	4	PLU703M-C4
5	PLU701M-C5	5	PLU702M-C5	5	PLU703M-C5
6	PLU701M-C6	6	PLU702M-C6	6	PLU703M-C6
7	PLU701M-C7	7	PLU702M-C7	7	PLU703M-C7
8	PLU701M-C8	8	PLU702M-C8	8	PLU703M-C8
10	PLU701M-C10	10	PLU702M-C10	10	PLU703M-C10
13	PLU701M-C13	13	PLU702M-C13	13	PLU703M-C13
15	PLU701M-C15	15	PLU702M-C15	15	PLU703M-C15
16	PLU701M-C16	16	PLU702M-C16	16	PLU703M-C16
20	PLU701M-C20	20	PLU702M-C20	20	PLU703M-C20
25	PLU701M-C25	25	PLU702M-C25	25	PLU703M-C25
30	PLU701M-C30	30	PLU702M-C30	30	PLU703M-C30
32	PLU701M-C32	32	PLU702M-C32	32	PLU703M-C32
35	PLU701M-C35	35	PLU702M-C35	35	PLU703M-C35
40	PLU701M-C40	40	PLU702M-C40	40	PLU703M-C40
50	PLU701M-C50	50	PLU702M-C50	50	PLU703M-C50
60	PLU701M-C60	60	PLU702M-C60	60	PLU703M-C60

[1] ProLine branch breakers utilize ABB SUP200M and S800U MCB technology.

UL series ratings

Series rating as present in UL file E499134 with upstream main breaker ABB MCCBs Tmax® series XT4 and XT5.
Full selectivity up to series rating values, ensuring the upstream MCCB is not tripping, helping avoid downtime.

Upstream device		Downstream device					
Type	Ampere rating	Type	Tripping char.	Poles	Ampere rating [A]	AC voltage [V]	Series rating [kA]
XT4	225	PLU700M (SUP200M)	K, C	1	1–50	240	35
			K, C	1	60	240	14
			K	1	1–35	277	14
			C	1	1–40	277	14
			K, C	3	1–20	240	35
			K, C	3	25–50	240	30
			K, C	3	60	240	14
			K	3	1–35	480Y/277	30
			C	3	1–40	480Y/277	30
		PLU700M (S800U)	K	1, 2, 3	25–100	240	35
XT5	400	PLU700M (SUP200M)	K	1	1–35	277	14
			C	1	1–40	277	14
			K, C	1	1–50	240	35
			K, C	1	60	240	14
			K	3	1–35	480Y/277	14
			C	3	1–40	480Y/277	14
			K, C	3	1–50	240	30
			K, C	3	60	240	14

ReliaGear® OEM lighting panelboards

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ReliaGear OEM lighting panelboards

Product overview

ReliaGear OEM lighting panelboards are assembled on rigid steel frames and feature branch circuit breakers from 15 A to 125 A. The maximum short circuit rating is equal to 65 kAIC at 240 V AC and 480/277 V AC.

ReliaGear OEM lighting panelboards are available as Type L or Type M:

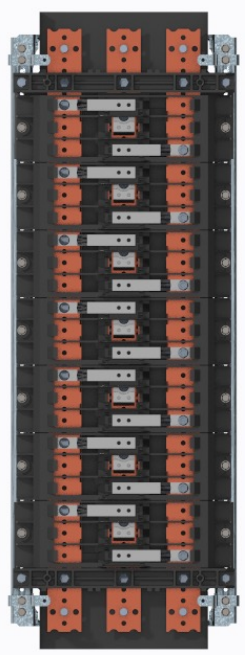
Type L — ReliaGear OEM Type L panelboards feature interior construction only and do not include branch circuit breakers or neutral assembly.

Type M — ReliaGear OEM Type M panelboards include the interior with breakers, integrated neutral assembly and deadfront shield.

Both ReliaGear OEM lighting panelboards Type L and Type M incorporate the best features you find in the ReliaGear AQ, AL, AE and AS lighting panelboards from 125 A to 800 A.

Advanced FORMULA A2 and SACE Tmax® XT circuit breakers as mains and sub-feeds are in charge of protecting against destructive overloads or short circuits.

High-strength, impact-resistant bus supports provide both isolation and structural durability.



Type L
AQL, 42 circuits, main lug

Type M
AQM, 42 circuits, Tmax XT2 main breaker

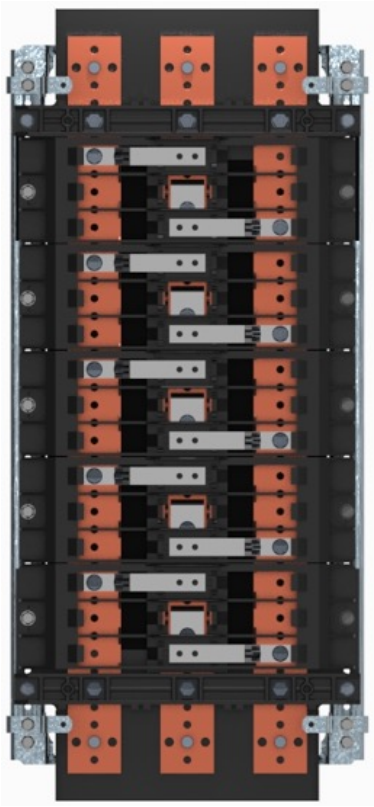
ReliaGear OEM lighting panelboards

Type L interior applications

ReliaGear OEM Type L provides the interior construction, which is the core component for any power distribution solution. This UL recognized interior is the perfect choice for OEMs who desire to incorporate ReliaGear interiors in their electrical distribution equipment.

Originally designed for power conditioning equipment,
Type L can be used anywhere mounting space is at a premium and wiring terminations will be made at the factory.

Type L interiors are furnished without a neutral or deadfront shield and do not include the enclosure or front. They are available from 125 A to 600 A in main stud, main lug and main breaker configurations. Developed with customer input, the new Type L shorter rail alternative provides a smaller footprint by shortening the side rails, thereby reducing the total height of the interior. This provides even more flexibility, allowing OEMs to optimize the final design/solution.



Features

- Panel performance options: AQ/AE/AS[1]
- Single-phase and three-phase
- 125 A, 225 A, 400 A, 600 A
- SCCR: 65 kAIC at 240V AC, up to 65 kA at 480Y/277 V; for series rating, reference configuration in empower or DET-008
- Main stud, main lug, main breaker
- 30 or 42 circuits
- Bus options: Heat-rated aluminum, heat-rated bare copper, silver-plated density-rated copper
- Optional: Box-mounted neutral available

[1] 2-pole, 2-wire 125 V DC, 250 V DC

Standards and certifications

- UL 489 molded case circuit breakers
- Unless noted otherwise in BuyLog, all circuit breakers and accessories are listed in UL file number E115

ReliaGear OEM lighting panelboards

Type L selection

ReliaGear OEM lighting panelboard interiors are designed for seamless integration into your custom solutions, offering a compact footprint. ABB has tools to support you in this journey. ReliaGear components are product number driven, and ABB has configurators that help get you started.

Step 1
Select the interior by voltage, amperage, number of circuits, bus material and main configuration (lug or breaker).

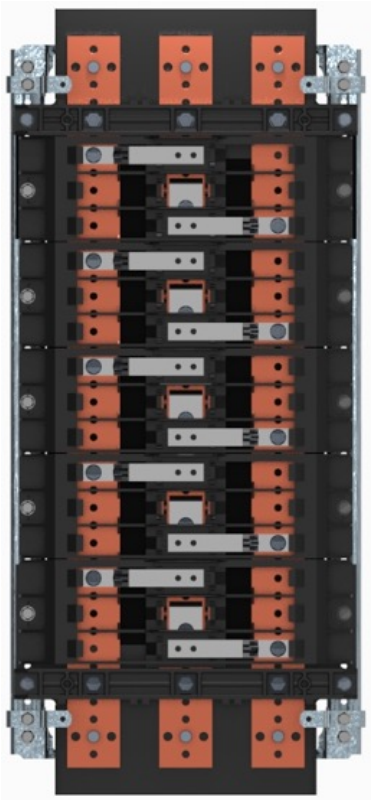
Step 2
Select main breaker or main lug hardware kit, if required based upon interior selected.

Step 3
Select corresponding branch breakers.

Step 4
Select additional accessories (optional).

Step 5
After selections, visit www.empower.com to place your order.

Step 6
Assemble your solutions and deliver value to your customers.



ReliaGear OEM lighting panelboards

Type L selection

Step 1: Select interior

Select the interior by voltage, amperage, number of circuits, bus material and main configuration (lug or breaker).

AEL main lug interior

INTERIOR SELECTION

			Heat-rated aluminum		Heat-rated copper	
Voltage type	**Rating (amps)**	**No. of circuits**	**Main lug catalog number**	**Main breaker catalog number**	**Main lug catalog number**	**Main breaker catalog number**
240 V AC, 1-phase	125 A	30	AQL1301NCXAXRO	AQL1301RCXAXRO	AQL1301NCXAXB7RO	AQL1301RCXAXB7RO
		42	AQL1421NCXAXRO	AQL1421RCXAXRO	AQL1421NCXAXB7RO	AQL1421RCXAXB7RO
	225 A	30	AQL1302NCXAXRO	AQL1302RCXAXRO	AQL1302NCXAXB7RO	AQL1302RCXAXB7RO
		42	AQL1422NCXAXRO	AQL1422RCXAXRO	AQL1422NCXAXB7RO	AQL1422RCXAXB7RO
		84	–	–	AQL1842NCXAXB7RO	AQL1842RCXAXB7RO
	400 A	30	AQL1304NCXAXRO	AQL1304RCXAXRO	AQL1304NCXAXB7RO	AQL1304RCXAXB7RO
		42	AQL1424NCXAXRO	AQL1424RCXAXRO	AQL1424NCXAXB7RO	AQL1424RCXAXB7RO
		84	–	–	AQL1844NCXAXB7RO	AQL1844RCXAXB7RO
240 V AC, 3-phase	125 A	30	AQL3301NCXAXRO	AQL3301RCXAXRO	AQL3301NCXAXB7RO	AQL3301RCXAXB7RO
		42	AQL3421NCXAXRO	AQL3421RCXAXRO	AQL3421NCXAXB7RO	AQL3421RCXAXB7RO
	225 A	30	AQL3302NCXAXRO	AQL3302RCXAXRO	AQL3302NCXAXB7RO	AQL3302RCXAXB7RO
		42	AQL3422NCXAXRO	AQL3422RCXAXRO	AQL3422NCXAXB7RO	AQL3422RCXAXB7RO
		84	–	–	AQL3842NCXAXB7RO	AQL3842RCXAXB7RO
	400 A	30	AQL3304NCXAXRO	AQL3304RCXAXRO	AQL3304NCXAXB7RO	AQL3304RCXAXB7RO
		42	AQL3424NCXAXRO	AQL3424RCXAXRO	AQL3424NCXAXB7RO	AQL3424RCXAXB7RO
		84	–	–	AQL3844NCXAXB7RO	AQL3844RCXAXB7RO
	600 A	30	AQL3306NCXAXRO	–	AQL3306NCXAXB5RO[1]	AQL3306RCXAXB5RO[1]
		42	AQL3426NCXAXRO	–	AQL3426NCXAXB5RO[1]	AQL3426RCXAXB5RO[1]
		84	–	–	AQL3846NCXAXB5RO[1]	AQL3846RCXAXB5RO[1]
480Y/277 V AC, 3-phase, 18 kA	125 A	30	AEL3301NCXAXRO	AEL3301RCXAXRO	AEL3301NCXAXB7RO	AEL3301RCXAXB7RO
		42	AEL3421NCXAXRO	AEL3421RCXAXRO	AEL3421NCXAXB7RO	AEL3421RCXAXB7RO
	225 A	30	AEL3302NCXAXRO	AEL3302RCXAXRO	AEL3302NCXAXB7RO	AEL3302RCXAXB7RO
		42	AEL3422NCXAXRO	AEL3422RCXAXRO	AEL3422NCXAXB7RO	AEL3422RCXAXB7RO
		84	–	–	AEL3842NCXAXB7RO	AEL3842RCXAXB7RO
	400 A	30	AEL3304NCXAXRO	AEL3304RCXAXRO	AEL3304NCXAXB7RO	AEL3304RCXAXB7RO
		42	AEL3424NCXAXRO	AEL3424RCXAXRO	AEL3424NCXAXB7RO	AEL3424RCXAXB7RO
		84	–	–	AEL3844NCXAXB7RO	AEL3844RCXAXB7RO
	600 A	30	AEL3306NCXAXRO	–	AEL3306NCXAXB5RO[1]	AEL3306RCXAXB5RO[1]
		42	AEL3426NCXAXRO	–	AEL3426NCXAXB5RO[1]	AEL3426RCXAXB5RO[1]
		84	–	–	AEL3846NCXAXB5RO[1]	AEL3846RCXAXB5RO[1]
480Y/277 V AC, 3-phase, 65 kA	125 A	30	ASL3301NCXAXRO	ASL3301RCXAXRO	ASL3301NCXAXB7RO	ASL3301RCXAXB7RO
		42	ASL3421NCXAXRO	ASL3421RCXAXRO	ASL3421NCXAXB7RO	ASL3421RCXAXB7RO
	225 A	30	ASL3302NCXAXRO	ASL3302RCXAXRO	ASL3302NCXAXB7RO	ASL3302RCXAXB7RO
		42	ASL3422NCXAXRO	ASL3422RCXAXRO	ASL3422NCXAXB7RO	ASL3422RCXAXB7RO
		84	–	–	ASL3842NCXAXB7RO	ASL3842RCXAXB7RO
	400 A	30	ASL3304NCXAXRO	ASL3304RCXAXRO	ASL3304NCXAXB7RO	ASL3304RCXAXB7RO
		42	ASL3424NCXAXRO	ASL3424RCXAXRO	ASL3424NCXAXB7RO	ASL3424RCXAXB7RO
		84	–	–	ASL3844NCXAXB7RO	ASL3844RCXAXB7RO
	600 A	30	ASL3306NCXAXRO	–	ASL3306NCXAXB5RO[1]	ASL3306RCXAXB5RO[1]
		42	ASL3426NCXAXRO	–	ASL3426NCXAXB5RO[1]	ASL3426RCXAXB5RO[1]
		84	–	–	ASL3846NCXAXB5RO[1]	ASL3846RCXAXB5RO[1]

[1] 600 A copper interiors supplied with silver-plated density-rated copper in lieu of heat-rated copper.

ReliaGear OEM lighting panelboards

Type L selection

Step 2: Select line device type kit (main breaker or lugs)

Select main breaker hardware kit if required based on interior selected in Step 1.

- Amperage of main breaker strap kit must match amperage of interior.
- Main breaker strap kits are not furnished with circuit breakers. Required breaker must be ordered separately.

Main breaker kit

MAIN BREAKER KITS

Amperage	Breaker type	No. of poles	Description	Product number
125 A	XT1	2	XT1 2-pole strap kit	MBC12
		3	XT1 3-pole strap kit	MBC33
225 A	A2	2	A2 2-pole strap kit	MBA12
		3	A2 3-pole strap kit	MBA13
	XT4	2	XT4 2-pole strap kit	MBB12
		3	XT4 3-pole strap kit	MBB33
400 A	XT5	2	XT5 2-pole strap kit	MBM324
		3	XT5 3-pole strap kit	MBM334
600 A	XT5	2	XT5 600 A 2-pole strap kit	MBM326
		3	XT5 600 A 3-pole strap kit	MBM336

Select lug kit(s) for main lug application if required based on interior selection in Step 1. Kits applicable to feed-through applications, if required.

Main lug kit

MAIN/FEED-THROUGH LUG KITS: MECHANICAL

Max. amperage	Lug material	Lug size	Wire size	Product number
225 A	Aluminum	Standard	(1) 6–350 kcmil	MLA1
		Oversized	1–600 kcmil or (2) 1/0–250 kcmil	MLA2
	Copper	Standard	4–450 kcmil	MLR1
		Oversized	1–600 kcmil	MLR2
400 A	Aluminum	Standard	2–600 kcmil or (2) 1/0–250 kcmil	MLA41
		Oversized	(1) 3/0–800 kcmil	MLA62
	Copper	Standard	1–600 kcmil	MLR41
		Oversized	(2) 2/0–500 kcmil	MLR61
600 A	Aluminum	Standard	(2) 2/0–500 kcmil	MLA61
		Oversized	3/0–800 kcmil	MLA62
	Copper	Standard	(2) 2/0–300 kcmil	MLR61

MAIN/FEED-THROUGH LUG KITS: COMPRESSION

Amperage	Lug material	Lug size	Wire size	Product number
225 A	Aluminum	Standard	(1) 2/0–300 kcmil	MLT1
		Oversized	(1) 4/0–500 kcmil	MLT2
400 A	Aluminum	Standard	(1) 250–600 kcmil	MLT42
		Oversized	500–750[1] kcmil	MLT41

[1] 500 kcmil Cu, 750 kcmil Al

ReliaGear OEM lighting panelboards

Type L selection

Step 3: Select branch devices

THQB and THHQB circuit breakers are intended for use in 208Y/120 V AC systems with the AQ panelboard. All THQB breakers are HACR rated. Note: Branch circuit breakers installed across from each other shall not exceed 180 A in the AQ panel.

Refer to the BuyLog for molded case circuit breakers to see the full offering of available branch circuit breakers.

3-pole THQB breaker

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

			10 kAIC			22 kAIC
Amp rating	1-pole product number	2-pole product number	3-pole product number	1-pole product number	2-pole product number	3-pole product number
15	THQB1115	THQB2115	THQB32015	THHQB1115	THHQB2115	THHQB32015
20	THQB1120	THQB2120	THQB32020	THHQB1120	THHQB2120	THHQB32020
25	THQB1125	THQB2125	THQB32025	THHQB1125	THHQB2125	THHQB32025
30	THQB1130	THQB2130	THQB32030	THHQB1130	THHQB2130	THHQB32030
35	THQB1135	THQB2135	THQB32035	THHQB1135	THHQB2135	THHQB32035
40	THQB1140	THQB2140	THQB32040	THHQB1140	THHQB2140	THHQB32040
45	THQB1145	THQB2145	THQB32045	THHQB1145	THHQB2145	THHQB32045
50	THQB1150	THQB2150	THQB32050	THHQB1150	THHQB2150	THHQB32050
60	THQB1160	THQB2160	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

TXQB circuit breakers are intended for use in 240 V systems with the RQ panelboard. All TXQB breakers are HACR rated.

3-pole TXQB breaker

			65 kAIC
Amp rating	1-pole product number	2-pole product number	3-pole product number
15	TXQB1115[2]	TXQB2115[1]	TXQB3115[1]
20	TXQB1120[2]	TXQB2120[1]	TXQB3120[1]
25	TXQB1125	TXQB2125[1]	TXQB3125[1]
30	TXQB1130	TXQB2130[1]	TXQB3130[1]

[1] Internal common trip
[2] UL listed as SWD (switching duty) rated; suitable for switching 120 V AC fluorescent lighting loads

ReliaGear OEM lighting panelboards

Type L selection

Step 3: Select branch devices (continued)

TEY and TEYF breakers are one-inch wide per pole, compact, bolt-on circuit breakers for use on grounded 480Y/277 V AC systems with the RE panelboard. All TEY/TEYF branch breakers listed are HACR rated.

Refer to the BuyLog for molded case circuit breakers to see the full offering of available branch circuit breakers.

1-, 2- and 3-pole
TEY/TEYF breakers

BRANCH CIRCUIT BREAKERS FOR USE WITH RE/RS PANELS (240 V AC OR 277 V AC 1-PHASE OR 480Y/277 V AC 3-PHASE)

			14 kAIC			18 kAIC
Amp rating	1-pole product number	2-pole product number	3-pole product number	1-pole product number	2-pole product number	3-pole product number
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	TEYF3100B
110	–	–	–	–	TEYF2110B	TEYF3110B
125	–	–	–	–	TEYF2125B	TEYF3125B

ReliaGear OEM lighting panelboards

Type L selection

Step 3: Select branch devices (continued)

TEYD/TEYH/TEYL breakers are one-inch wide per pole, compact, bolt-on circuit breakers for use on grounded 480Y/277 V AC systems with the RS panelboard.

Refer to the BuyLog for molded case circuit breakers to see the full offering of available branch circuit breakers.

1-, 2- and 3-pole
TEYD/TEYH/TEYL breakers

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

	25 kAIC			35 kAIC		
Amp rating	1-pole product number	2-pole product number	3-pole product number	1-pole product number	2-pole product number	3-pole product number
15	TEYD1015B	TEYD2015B	TEYD3015B	TEYH1015B	TEYH2015B	TEYH3015B
20	TEYD1020B	TEYD2020B	TEYD3020B	TEYH1020B	TEYH2020B	TEYH3020B
25	TEYD1025B	TEYD2025B	TEYD3025B	TEYH1025B	TEYH2025B	TEYH3025B
30	TEYD1030B	TEYD2030B	TEYD3030B	TEYH1030B	TEYH2030B	TEYH3030B
35	TEYD1035B	TEYD2035B	TEYD3035B	TEYH1035B	TEYH2035B	TEYH3035B
40	TEYD1040B	TEYD2040B	TEYD3040B	TEYH1040B	TEYH2040B	TEYH3040B
45	TEYD1045B	TEYD2045B	TEYD3045B	TEYH1045B	TEYH2045B	TEYH3045B
50	TEYD1050B	TEYD2050B	TEYD3050B	TEYH1050B	TEYH2050B	TEYH3050B
60	TEYD1060B	TEYD2060B	TEYD3060B	TEYH1060B	TEYH2060B	TEYH3060B
70	TEYD1070B	TEYD2070B	TEYD3070B	TEYH1070B	TEYH2070B	TEYH3070B
80	–	TEYD2080B	TEYD3080B	–	TEYH2080B	TEYH3080B
90	–	TEYD2090B	TEYD3090B	–	TEYH2090B	TEYH3090B
100	–	TEYD2100B	TEYD3100B	–	TEYH2100B	TEYH3100B
110	–	TEYD2110B	TEYD3110B	–	TEYH2110B	TEYH3110B
125	–	TEYD2125B	TEYD3125B	–	TEYH2125B	TEYH3125B

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

			65 kAIC
Amp rating	1-pole product number	2-pole product number	3-pole product number
15	TEYL1015B	TEYL2015B	TEYL3015B
20	TEYL1020B	TEYL2020B	TEYL3020B
25	TEYL1025B	TEYL2025B	TEYL3025B
30	TEYL1030B	TEYL2030B	TEYL3030B
35	TEYL1035B	TEYL2035B	TEYL3035B
40	TEYL1040B	TEYL2040B	TEYL3040B
45	TEYL1045B	TEYL2045B	TEYL3045B
50	TEYL1050B	TEYL2050B	TEYL3050B
60	TEYL1060B	TEYL2060B	TEYL3060B
70	TEYL1070B	TEYL2070B	TEYL3070B
80	–	TEYL2080B	TEYL3080B
90	–	TEYL2090B	TEYL3090B
100	–	TEYL2100B	TEYL3100B
110	–	TEYL2110B	TEYL3110B
125	–	TEYL2125B	TEYL3125B

ReliaGear OEM lighting panelboards

Type L selection

Step 4: Select additional accessories

Select ground and neutrals for OEM application. Please refer to main lug section for feed-through lug options.

Equipment ground

Neutrals

EQUIPMENT GROUND LUG

Item	Description	Wire size	Product number
Equipment ground	Bonded	#14–#8, #12–#8 #14–#4 Cu, #6–#4 Al	TGL2
Ground lug	–	#6–2/0	TGL20

NEUTRALS

Amperage	Circuit count	Neutrals per kit	Wire size per neutral	Material	Product number
600 A max.	42	2	6) #14–2/0 (15) #14–#4	Aluminum	NT64A1NM
				Copper	NT64C1NM
	84	2	(2) #14-2/0 (40) #14-#4	Aluminum	NT68A1NM
				Copper	NT68C1NM

ReliaGear OEM lighting panelboards

Type M interior applications

ReliaGear OEM Type M provides an interior with pre-installed breakers, integrated neutral and deadfront shield. Lighting panelboard interiors for Type M include AQ, AL, AE, AS and AD. Type M is available in main lug or main breaker and gives you the same features and capabilities of the factory-assembled panelboard offering, delivering the compact size and flexibility you need to seamlessly integrate into your custom solution.

Features

- Panel performance options: AQ/AL/AE/AS/AD
- Single-phase and three-phase
- 125 A, 225 A, 400 A, 600 A, 800 A
- SCCR: 65 kAIC at 240 V AC, 18 kAIC at 480 V AC or 65 kAIC at 480 V AC; for series rating, refer to DET-008
- Main breaker or main lug
- 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72, 78, 84 or 96 circuits (not all circuit offerings available)
- Bus options: Heat-rated aluminum, density-rated aluminum, heated-rated bare copper, density-rated copper, silver-plated density-rated copper, tin-plated copper
- Note: Type M does not include a box or front

Standards and certifications

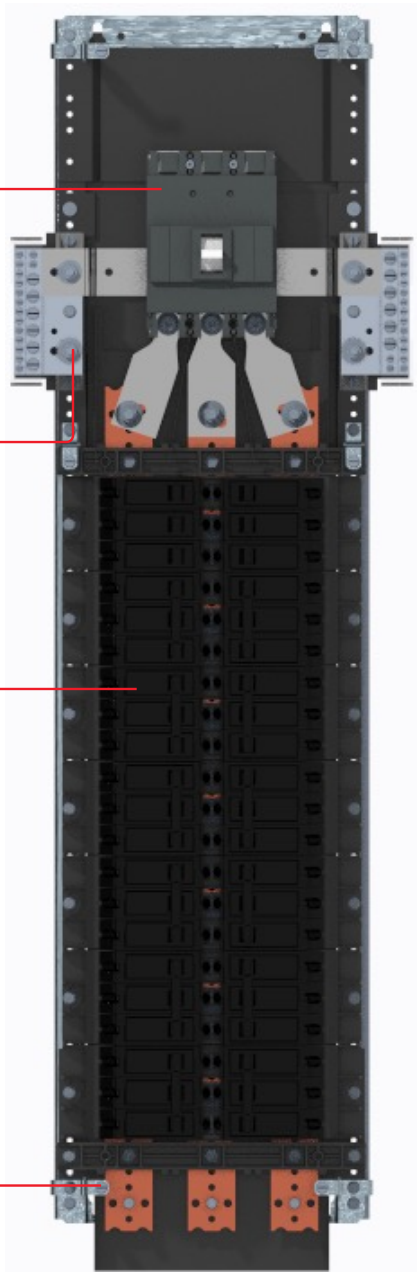
- UL 489 molded case circuit breakers
- Unless noted otherwise in BuyLog, all circuit breakers and accessories are listed in UL file number E11592.

ReliaGear OEM lighting panelboards

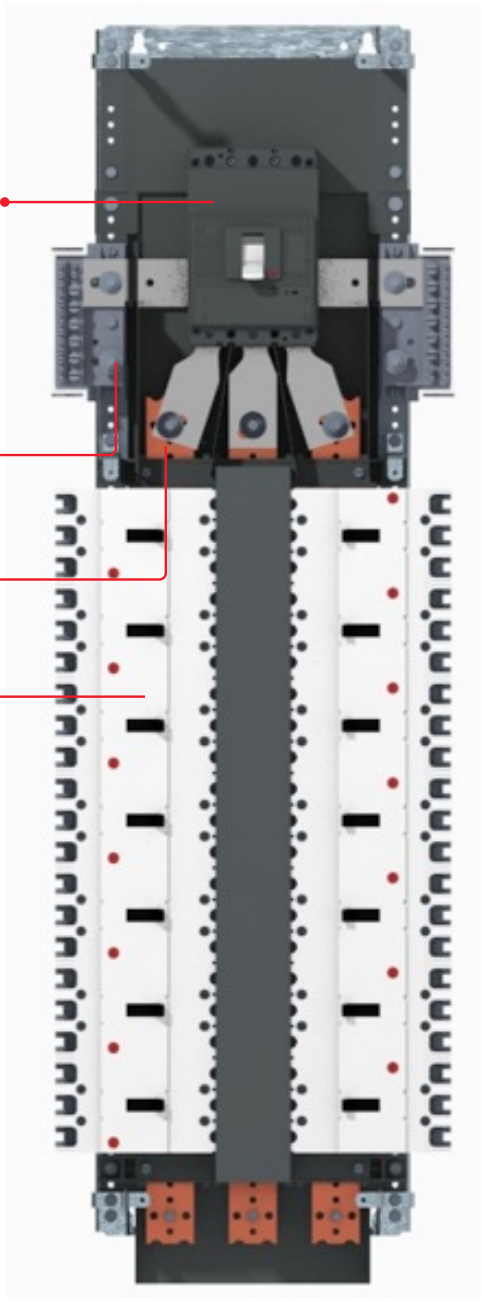
Type M interior applications

ReliaGear AQ lighting panelboard
240 V max., 1- or 3-phase,
125–800 A, 10–65 kAIC
AQ: Bolt-on THQB breakers

ReliaGear AS lighting panelboard
480Y/277 V max., 1- or 3-phase,
125–600 A, 100 kAIC at 240 V, 65 kA at 480 V
AS: Bolt-on TEY(D/H/L) breakers
Main lugs 125–800 A up to 250 V DC and main breaker
125 A at 250 V DC



AQM, 42 circuits, FORMULA A2 main breaker
(deadfront shield hidden for clarity)



AQM, 42 circuits, Tmax XT5 main breaker
(deadfront shield hidden for clarity)

ReliaGear OEM lighting panelboards

Product number nomenclature

Interior type

- AQ = 65 kA 240 V
- AE = 18 kA 480 V
- AS = 65 kA 480 V

Family

- L = Type L

Phase

- 1 = 1-phase
- 3 = 3-phase

Circuits

- 30 = 30 circuits
- 42 = 42 circuits

Amperage

- 1 = 125 A
- 2 = 225 A
- 4 = 400 A
- 6 = 600 A

Main type

- N = Main stud
- R = Main breaker

Orientation

- C = Convertible

Bus

- Blank = Heat-rated aluminum
- B7 = Heat-rated copper
- B5 = Silver-plated density-rated copper

OEM special designation

- RO = Short rails

This information is provided for interpreting product codes. It should not be used to build an interior.

ReliaGear® neXT panelboards

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ReliaGear® neXT panelboards

Applications

Standards
All ABB power panelboards meet the latest revision of the following standards.

- National Electrical Code-Ref. Article 384
- UL67 panelboards: UL50 cabinets and boxes UL943 GFCI
- UL489 molded case circuit breakers
- cUL listing
- International Building Code Seismic Certification
- NEMA PB1

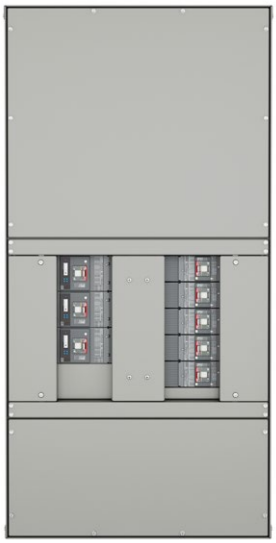
Application
The following classifications and limitations of panelboards have been established by the Underwriters Laboratories and the National Electrical Code. Note— “an overcurrent protective device is a circuit breaker pole or single fuse”.
Panelboards have no fire wall ratings. All 50/60 Hz rated. There is no limitation as to the number and rating of branch circuits, except as determined by available enclosures.

Interrupting ratings—circuit breakers
Panelboards have integrated short circuit ratings. When fully rated, the rating is that of the lowest rated device in the panelboard. When series connected rated, the rating is that of the main device in panel (or remote line side protected device) and branch-tested/UL Listed combination.

Short-circuit ratings—fusible switch units
The interrupting rating of the fuse must equal or exceed the short-circuit rating of the switch. If it is lower, then the interrupting rating of the switch is the same as the fuse. Switches have no short-circuit rating if renewable fuses are used.

Seismic ratings
All ReliaGear neXT and Spectra™ Panelboards have been tested and certified to meet the the seismic requirements of International Building Code (IBC)

Selective coordination
NFPA 70, the National Electrical Code (NEC), requires overcurrent devices to be selectively coordinated when applied in emergency standby systems (Article 700), legally required standby systems (Article 701), Critical Power Systems (Article 708) and when supplying multiple elevator circuits (620.62). The NEC defines the performance standard of selective coordination in Article 100, Definitions. Beginning with the definition in effect with the 2014 NEC, the combinations of circuit breakers that can comply with this standard are limited. Those limitations include the number of circuit breaker poles, current ratings of either the line side or load side circuit breaker, and the maximum interrupting current that selective operation extends to. These limitations can affect the selection of circuit breakers used in a panelboard. ABB has documented selective pairs of their molded case circuit breakers in publication 1SDC210066D0201. This publication should be consulted when applying panelboards in the applications noted above.



ReliaGear neXT

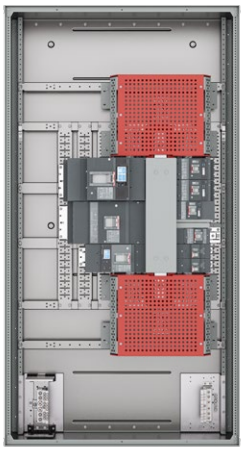
ReliaGear neXT features

- Completely field modifiable
- Quick connect component design that creates fast and secure connection
- IP20 interior features
- Factory assembled interior and bulk pack interior options
- Build America, Buy America, 2 CFR Part 184 options available
- Tmax XT vertically mounted main circuit breakers with fixed thermal magnetic and adjustable trip units available
- ABB Ability™

ReliaGear neXT panelboards

Types

ReliaGear neXT



ReliaGear neXT with IP20 finger safe barrier shown

RELIAGEAR NEXT

Service information:
240 V AC; 3-phase, 3-wire
240/120 V AC Delta Hi-Leg; 3-phase, 4-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
125 V DC; 2-wire
250 V DC; 2-wire
Fully rated: 50kAIC at 250V DC
Fully rated: 200KAIC at 480/277V AC
Fully rated: 100kAIC at 600V AC

Main circuit breakers:
250A XT4
600A XT5
800A XT6
1200A XT7

Main lug:
250A - 1200A

Branch circuit breakers (plug-in):
Amperage - 15-1200A
Poles - 1, 2, 3
Types - Tmax XT1, XT2, XT4, XT5, XT6, XT7, Record Plus FB, TEY and Formula A2

Enclosures
Heights - 60", 72", 84", 96"
Widths - 30", 40", 45"
Depths - 10.8" for NEMA 1 and 14.5" for all other NEMA types

Features
- Main bus is IP20 compliant, 250-1200 amp, copper or aluminum
- Enclosures available in NEMA Type 1, Type 3R/12, Type 4 and Type 4X 316 stainless steel
- Power supply module for self powered XT breaker communications and monitoring
- 3 box widths simplify installation and design
- Panelboard is modular and completely field modifiable
- Hinged gutter covers standard for easy access to wire way
- Circuit breakers have small form factor and enable increased density within the panelboard
- Circuit breakers and accessories plug in quickly with line side connector and secure with bolted connection.
- Vertically mounted main circuit breakers available
- Captive hardware on branch circuit breakers
- Front accessible main lug assembly
- 100% rated circuit breakers available
- Individual circuit breaker cover plates
- IP20 finger safe barrier for main lugs and feed-through lugs

ReliaGear neXT panelboards

Pricing and ordering through empower, distributors or sales

Information required to price and order a panelboard

- Short-circuit rating (KAIC)
- Service entrance (Yes) or (No)
- Mark(s) (LPA, MDP, RPC, etc.)
- Service (3-ph, 4-w 600 volts; 3-ph, 3-w 480 volts, etc.)
- Entrance of incoming line (top) or (bottom)
- Interiors can arrive assembled (Factory Assembled) or can be assembled on the job site (Bulk Pack). Bulk Pack is the default.
- Incoming wire size (500kcmil, 750 kcmil, etc.)
- Incoming number of wires per phase (1, 2, 3, etc.)
- Wire material (copper or aluminum)
- Main type (main lugs only, circuit breaker, fusible switch, etc.)
- Amperage of main bus
- Frame of main circuit breaker (XT5, XT6, etc.) (if applicable)
- Main circuit breaker options (shunt trip, pad lock, etc.)
- ABB Ability (EKIP signaling and Cloud gateway)
- Equipment ground (optional)
- Branches
  - Amp rating (20, 30, 50, etc.)
  - Poles (1, 2, or 3)
  - Frame (FB, TEY, A2, XT1, XT2, XT4, XT5, XT6, XT7)
  - Quantity (1, 10, 15, etc.)
- Options:
  - Interior (bus material, neutral rating, etc.)
  - Front (door in door, etc.)
  - Ground fault protection (yes) or (no)
- Type of panel (ReliaGear neXT, Spectra ADS, etc.)

Pricing and layout for factory assembled and unassembled panelboards through empower.

- Collect the information required to price and order a panelboard
- Have your distributor, sales or customer service contact visit **empower.abb.com** to configure.
- Configure and price your power panel
- View Bill of Material, Drawing, and relevant submittals documentation
- Select factory assembled or bulk pack interiors before creating your new order
- For additional details on selecting ReliaGear next panelboards, please refer to publication **1SQC900001C0201.**

ReliaGear neXT panelboards

Pricing and ordering through empower, distributors or sales

The following provides useful information about design logic driving the configurations in empower.

1. Interior configurations

Interior generated by bus type, material, panel rating and X space.

POSSIBLE COMBINATIONS OF BUS STACK AND ENCLOSURES

Bus height			16X			24X			32X			40X
Bus type	**NN**	**BL**	**BF**	**NN**	**BL**	**BF**	**NN**	**BL**	**BF**	**NN**	**BL**	**BF**
Enclosure height (in.)												
60	•	•		•								
72	•	•		•	•		•					
84		•	•	•	•	•	•	•		•		
96					•	•	•	•	•	•	•	

NN: clean bus, no lug pads
BF: feedthrough, 2 sets of lug pads
BL: bolted lug pad

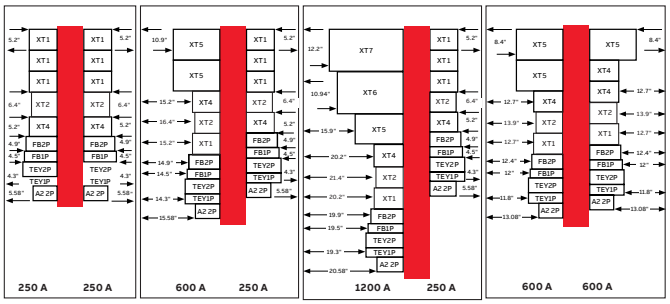
2. Panel configurations

Once the main bus ampacity is determined, the height of the bus determines both the height of the panelboard and the maximum number of available outgoing branch Tmax XT, Record Plus® FB, TEY and Formula A2 circuit breaker X-spaces. Different circuit-breaker frame sizes require different numbers of mounting positions on the bus stack.

Main lugs and main circuit breaker options are both available up to 1200 A. The main circuit breaker can be either vertically or horizontally mounted. For vertical circuit-breaker mounting, XT5 or XT7 mounting kits are required.

All ReliaGear neXT panelboards are double sided, with branch circuit breakers that can fit on both the left and right sides of the bus stack. The maximum ampacity of the circuit breakers selected will determine the width of the panelboard needed.

The bus stack can either be mounted in the center of the box or be offset to the right (default) or to the left. With an offset configuration, the maximum ampacity of the branch circuit breakers mounted on the narrow and wide sides is different. This allows the panelboard to comply with the wire-bending space requirements per UL 67.



30" center box | 40" offset box | 45" offset box | 45" center box

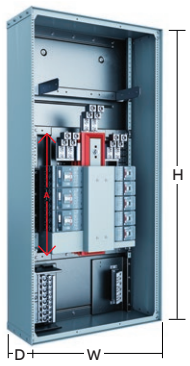
AVAILABLE ORIENTATIONS

Panelboard width (in.)	Bus stack position inside the box	Max. branch circuit breaker ampacity on wide side (A)	Max. branch circuit breaker ampacity on narrow side (A)
30	Center	250 (XT4)	250 (XT4)
40	Offset	600 (XT5)	250 (XT4)
45	Center	600 (XT5)	600 (XT5)
45	Offset	1200 (XT7)	250 (XT4)

Horizontally mounted XT5 with 750 MCM lugs can fit only in 45" offset box
250A for XT4 available on the narrow side only with 350 MCM internal lugs (breaker digit 12 = "8")

3. Enclosure configurations

empower defaults to smallest enclosure. Manually adjust by adding circuit breaker spaces.



PANELBOARD DIMENSIONS

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

[1] DiD and drip hood usable conduit space is 11".
[2] Depth for NEMA 3R/4/4X/12 does not include 0.9" of hanger bracket.
Refer to instruction sheet **1SQC900008M0201** for conduit space and detailed enclosure dimensions.
Enclosure dimensions can also be found on empower drawing. Dimensions above are general.

ReliaGear neXT panelboards

Pricing and ordering through empower, distributors or sales

4. Tmax XT main and feeder configuration

Select main circuit breaker kit appropriate for your application, amp rating and kAIC rating.

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

MOLDED CASE CIRCUIT BREAKERS (MCCB)

			XT1			XT2						XT4					
Frame size		**[A]**	**125**			**125**						**250**					
Poles		[No.]	3			3						3					
Rated voltage	(AC) 50–60 Hz	[V]	480 V Δ[2]			600						600					
Versions			Fixed			Fixed						Fixed					
			N	S	H	N	S	H[1]	L[1]	V[1]	X	N	S	H[1]	L[1]	V[1]	X
Interrupting ratings	240 V (AC)	[kA]	50	65	100	65	100	150	200	200	200	65	100	150	200	200	200
	480 V (AC)	[kA]	25	35	65	25	35	65	100	150	200	25	35	65	100	150	200
	600Y/347 V (AC)	[kA]	18	22	25	-	-	-	-	-	-	–	–	–	–	–	–
	600 V (AC)	[kA]	–	–	–	18	22	25	35	42	42	18	22	25	50	65	100
Mechanical life		[No. operations]	25,000			25,000						25,000					
		[No. hourly operations]	240			240						240					
Dimensions – fixed (width x depth x height)[3]	3 poles	[mm]/[in]	[76.2 x 70 x 130] / [3 x 2.75 x 5.12]			[90 X 83.56 X 131.1] / [3.54 X 3.29 X 5.16]						[105 x 82.5 x 160] / [4.13 x 3.25 x 6.3]					
Weight[3]	Fixed 3 poles	[kg]/[lb]	[1.1] / [2.43]			[2.2] / [4.9]						[2.5] / [5.51]					

TRIP UNITS FOR POWER DISTRIBUTION

TMF	•	•	•
TMA		•	
Ekip DIP		•	•
Ekip Touch		•	•

[1] Current-limiting circuit breaker in 480 V AC and 600 V AC
[2] 600Y/347
[3] Without line-side connectors

Table continued on next page.

ReliaGear neXT panelboards

Pricing and ordering through empower, distributors or sales

4. Tmax XT main and feeder configuration continued

MOLDED CASE CIRCUIT BREAKERS (MCCB)

			XT5						XT6			XT7		
Frame size		**[A]**	**400–600**						**800**			**800–1000–1200**		
Poles		[No.]	3						3			3		
Rated voltage	(AC) 50–60 Hz	[V]	600						600			600		
Versions			Fixed						Fixed			Fixed		
			N	S	H[1]	L[1]	V	X	N	S	H	S	H	L
Interrupting ratings	240 V (AC)	[kA]	65	100	150	200	200	200	65	100	200	65	100	200
	480 V (AC)	[kA]	35	50	65	100	150	200	35	50	65	50	65	100
	600Y/347 V (AC)	[kA]	–	–	–	–	–	–	–	–	–	–	–	–
	600 V (AC)	[kA]	18	25	35	65	100	100	20	25	35	25	50	65
Mechanical life		[No. operations]	20,000						20,000			10,000		
		[No. hourly operations]	240						240			240		
Dimensions – fixed (width x depth x height)[3]	3 poles	[mm]/[in]	[140 x 103 x 205] / [5.51 x 4.05 x 8.07]						[210 x 103.5 x 268] / [8.27 x 4.07 x 10.55]			[210 x 167 x 268] / [8.27 x 6.57 x 10.55]		
Weight[3]	Fixed 3 poles	[kg]/[lb]	–						–			–		

TRIP UNITS FOR POWER DISTRIBUTION

TMF			
TMA	•	•	
Ekip DIP	•	•	•
Ekip Touch	•		•

[1] Current-limiting circuit breaker in 480 V AC and 600 V AC
[2] 600Y/347
[3] Without line-side connectors

ReliaGear neXT panelboards

Pricing and ordering through empower, distributors or sales

4. Tmax XT main and feeder configuration continued

100% rated circuit breakers

All Tmax XT circuit breakers are available both as standard versions and as 100% rated versions. Because of the additional heat generated at 100% of continuous current rating, the use of specific 90 °C rated wires sized per 75 °C ampacity maybe required.

Frame	Max. ampacity (A)	Wires
XT4	200	75 °C
XT5	400	75 °C
XT7	800	75 °C
XT7	1000/1200	90 °C

ReliaGear neXT panelboards

Pricing and ordering through empower, distributors or sales

4. Tmax XT main and feeder configuration continued

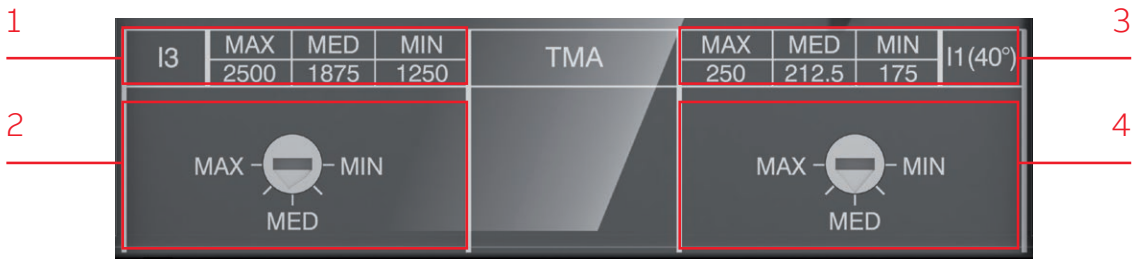
Tmax XT trip unit types
SACE Tmax XT trip units represent a new benchmark for molded case circuit breakers, being able to satisfy any performance requirement.

The Tmax XT trip units are designed to be used in a wide range of applications. These complete, flexible protection trip units can be adapted to the actual level of protection required, independently of the complexity of the system.

The range is available for three levels of performance to meet any requirement, from simple to advanced applications:

- TM thermal-magnetic trip unit
- Ekip DIP electronic trip unit
- Ekip Touch/Hi-Touch electronic trip units

THERMAL MAGNETIC TRIP UNIT



Key:
1. Current threshold for short-circuit protection.
2. Rotary switch for short-circuit protection.
3. Current threshold for overload protection.
4. Rotary switch for overload threshold setting.

The thermal-magnetic trip unit is an easy solution for protection against overloads and short circuits. Overload protection is ensured by the ABB thermal device, based on a temperature-dependent bimetal heated by current. Protection against short-circuit is realized with a magnetic device.

Rotary switch
Depending on the version, it is possible to set the desired thresholds for protection by turning the front rotary switch.

		L – overload protection		I – short-circuit protection	
Field of application	**Trip unit**	**Current threshold**	**Trip time**	**Current threshold**	**Trip time**
Power distribution protection	TMF	Fixed	Fixed	Fixed	Fixed instantaneous
	TMA	Adjustable	Fixed	Adjustable	Fixed instantaneous

TMF

In [A]	**15**	**20**	**25**	**30**	**35**	**40**	**45**	**50**	**60**	**70**	**80**	**90**	**100**	**110**	**125**	**150**	**175**	**200**	**225**	**250**
XT1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•					
XT2	•	•	•	•	•	•		•	•	•										
XT4			•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•

TMA

In [A]	**80**	**90**	**100**	**110**	**125**	**150**	**175**	**200**	**225**	**250**	**300**	**400**	**500**	**600**	**800**
XT2	•	•	•	•	•										
XT5											•	•	•	•	
XT6														•	•

ReliaGear neXT panelboards

Pricing and ordering through empower, distributors or sales

4. Tmax XT main and feeder configuration continued

Tmax XT trip unit types
The first level of electronic trip units, Ekip DIP trip units, are based on microprocessor technologies and guarantee high reliability, protection adjustability and coordination.

They provide protection against overloads, selective short circuits, short circuits and ground faults. The power required for their operation is provided directly from the current sensors.

Key:
1. DIP switches for overload-protection setting.
2. DIP switches for short-circuit and time-delayed short-circuit.
3. Slot for lead seal.
4. Test connector.
5. Power-on LED.

			L – overload protection		S – selective short-circuit protection		I – short-circuit protection	
Field of application	**Trip unit**		**Current threshold**	**Trip time**	**Current threshold**	**Trip time**	**Current threshold**	**Trip time**
Power distribution protection	Ekip DIP	LSI	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Fixed

In [A]	**25**	**40**	**60**	**100**	**125**	**150**	**250**	**400**	**600**	**800**	**1000**	**1200**
XT2	•		•		•							
XT4		•	•	•		•	•					
XT5							•	•	•			
XT6										•		
XT7									•	•	•	•

Breaker frame	**Sensor**	**Minimum trip amps**
XT2 - 125A	25A	10A
	60A	24A
	125A	50A
XT4 - 250A	40A	16A
	60A	24A
	100A	40A
	150A	60A
	250A	100A
XT5 - 400A	250A	100A
	400A	160A
XT5 - 600A	600A	240A
XT6 - 800A	800A	320A
XT7 - 800A	600A	240A
	800A	320A
XT7 - 1000A	1000A	400A
XT7 - 1200A	1200A	480A

ReliaGear neXT panelboards

Pricing and ordering through empower, distributors or sales

4. Tmax XT main and feeder configuration continued

Tmax XT trip unit types

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

Key:
1. Power-on LED; pre-alarm LED; alarm LED.
2. Test and programming connector.
3. Display.
4. Home pushbutton to return to homepage.
5. Pushbutton for testing and tripping information.

Trip unit	Current measurement and protection	Voltage, power, energy measurements	Voltage, power, energy protections	Embedded functions[1]
Ekip Touch LSI	●	○	○	○
Ekip Touch LSIG	●	○	○	○
Ekip Touch Measuring LSI	●	●	○	○
Ekip Touch Measuring LSIG	●	●	○	○
Ekip Hi-Touch LSI	●	●	●	●
Ekip Hi-Touch LSIG	●	●	●	●

● Default available
○ Additional features
[1] Please refer to the Tmax XT catalog 1SDC210200D0206 for more details.
Note: LSIG trip units not available for single phase applications

In [A]	40	100	125	150	250	400	600	800	1000	1200
XT2	●	●	●							
XT4		●		●	●					
XT5					●	●	●			
XT7							●	●	●	●

Breaker frame	Sensor	Minimum trip amps
XT2 - 125A	40A	16A
	100A	40A
	125A	50A
XT4 - 250A	100A	40A
	150A	60A
	250A	100A
XT5 - 400A	250A	100A
	400A	160A
XT5 - 600A	600A	240A
XT7 - 800A	600A	240A
	800A	320A
XT7 - 1000A	1000A	400A
XT7 - 1200A	1200A	480A

ReliaGear neXT panelboards

Pricing and ordering through empower, distributors or sales

5. Select main and/or feeder circuit breaker – Record Plus FB, TEY and Formula A2

Record Plus FB, TEY and Formula A2 circuit breakers complete the circuit breakers offering for the ReliaGear neXT panelboard.

The Record Plus FB line features true one- and two-pole construction, has a double-break contact system for fast response and current limitation to help with arc flash and coordination. This non-adjustable thermal-magnetic circuit breaker up to 100 A offers four interrupt tiers — through 50 kA at 125/250V DC, 100 kA at 480 V AC and 35 kA at 600/347 V AC.

TEY also offers true one-pole construction up to 70A and two-pole construction up to 125A. This line offers non-adjustable thermal-magnetic trip units with three interrupt tiers - through 42kA at 125V DC, 18kA at 250V DC, 100 kA at 240 V AC and 65 kA at 480/277 V AC.

The Formula A2 line features true two-pole breaker construction from 125A to 250A. This line offers fixed (non-adjustable) thermal-magnetic trip units with two interrupt tiers - 10 kA and 25 kA at 240 V AC and 250V DC.

RECORD PLUS FB

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

AC INTERRUPTING RATINGS

				UL listed interrupting rating rms symmetrical kA AC voltage				
Ampere rating	**Maximum voltage**	**Type**	**Poles**	**240 V**	**277 V**	**347 V**	**480 V**	**600 V**
15-100	600Y/347 V AC	FBV	1	35	35	22	–	–
			2	65	–	–	35	22
		FBN	1	65	65	25	–	–
			2	150	–	–	65	25
		FBH	1	100	100	35	–	–
			2	200	–	–	100	35
		FBL	1	100	150	42	–	–
			2	–	–	–	150	42

DC INTERRUPTING RATINGS

			UL listed interrupting rating ka DC voltage	
Ampere rating	**Type**	**Poles**	**125 V DC, 2-wire**	**250 V DC, 2-wire**
15-100	FBV	2	25	25
	FBN	2	30	30
	FBH	2	42	42
	FBL	2	50	50

TEY

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

AC INTERRUPTING RATINGS

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

DC INTERRUPTING RATINGS

			UL listed interrupting rating ka DC voltage	
Ampere rating	**Type**	**Poles**	**125 V DC, 2-wire**	**250 V DC, 2-wire**
15-70 (1-pole)	TEYL	1	14	-
15-125 (2-pole)	TEYL	2	42	18

ReliaGear neXT panelboards

Pricing and ordering through empower, distributors or sales

FORMULA A2

Poles	2
Amperes	125, 150, 175, 200, 225, 250
Trip unit	Fixed thermal-magnetic

AC INTERRUPTING RATINGS

				UL listed interrupting rating rms symmetrical kA AC voltage
Ampere rating	**Maximum voltage**	**Type**	**Poles**	**240 V**
125-250	240V	A2A	2	10
		A2N	2	25

DC INTERRUPTING RATINGS

			UL listed interrupting rating ka DC voltage
Ampere rating	**Type**	**Poles**	**250 V DC, 2-wire**
125-250	A2A	2	10
	A2N	2	25

ReliaGear neXT panelboards

Pricing and ordering through empower, distributors or sales

6. Mounting space requirements, accessories and connection options

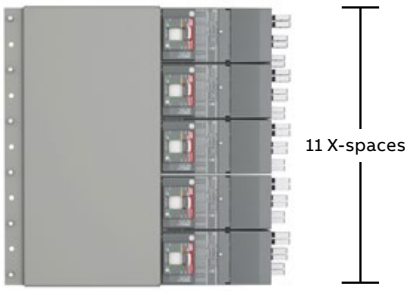
For molded case circuit breakers

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 circuit breakers are mounted close to one another. SPD, metering and RELT also require X-space, since they are plug-in modules. Refer to the table below. In main lugs configuration, each set of lug pads occupies 4 X-spaces. A set of lug pads is needed also with a vertical main circuit breaker.

Frame	Max. ampacity (A)	Poles	X-spaces
Single XT1	125	3	3
Two XT1	125	3	5
Five XT1	125	3	11
XT2	125	3	3
XT4	250	3	3
XT5	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
SPD	–	–	9
RELT	–	–	3
Power supply module	–	–	3
Main metering	–	–	4
Submetering	–	–	9 / 14

Single XT1

Two XT1
16% space saving



Five XT1
26% space saving

X-SPACE FILLERS

Space to be filled	30" center	40" offset left	40" offset right	45" center	45" offset left	45" offset right
1X	SR01BB	SR01BF	SR01BB	SR01BF	SR01BF	SR01BB
2X	SR02BB	SR02BF	SR02BB	SR02BF	SR02BF	SR02BB
3X	SR03BB	SR03BF	SR03BB	SR03BF	SR03BF	SR03BB

ReliaGear neXT panelboards

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Submetering

Empower selects the appropriate metering module based on:

- Number of metered breakers
- 2/3 pole breaker selection
- Voltage

Number of meters	Maximum number of 2 pole metered breakers1	Maximum number of 3 pole metered breakers	Maximum number of circuits	X-space required
1	6	4	12	9X
2	12	8	24	9X
3	18	12	36	14X
4	24	16	48	14X

[1] 2-pole available up to 240V
All modules include display for local monitoring
Available in 40" and 45" wide enclosures

For more information on submetering in ReliaGear neXT, refer to submetering brochure **1SQC900005B0201**

Each circuit breaker frame and current transformers in combination have specific requirements for the number of mounting positions (X-spaces).

Breaker frame	CT current rating (A)	Ampacity (A)	X- space required
FB 2P	50	0-50	2X
TEY 2P			2X
XT1			3X
XT2			3X
FB 2P	100	51-100	2X
TEY 2P			2X
XT1			3X
XT2			3X
TEY 2P	200	101-125	2X
A2		125-200	2X
XT2		101-125	3X
XT4		101-200	3X
A2	400	201-250	4X
XT4			5X
XT5		250-400	4X
XT5	800	401-600	6X
XT6/XT7		601-800	6X
XT7	1200	801-1200	10X

ReliaGear neXT panelboards

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Line-side connectors
Each circuit breaker horizontally mounted on the bus stack is provided with a line-side connector (LSC) and a mounting bracket. The LSC is designed to ensure an easy and accurate connection between the circuit breakers and the conductive busbars. A patented clip design with a loaded spring ensures full contact in any circumstance. Each circuit breaker frame has a specific LSC with the right number of clips to ensure the highest performance.

Circuit breaker lugs offering
All ReliaGear neXT circuit breakers are provided with a set of lugs on the load side. All lugs accept either copper or aluminum wires.

CIRCUIT BREAKER LUGS

Frame	Ampacity (A)	Wire size (AWG or kcmil) Cu or Al	Number of cables per lug	Installation
XT1	125	#10–2/0	1	Horizontal
XT2	25	#14-1/0 (Cu)	1	Horizontal
XT2	125	#10-2/0	1	Horizontal
XT4	25–70	#14–1/0	1	Horizontal
XT4	80–225	#4–300	1	Horizontal
XT4	250	3/0–350	1	Horizontal
XT5	600	2/0–500	2	Horizontal/vertical
XT5	600	500–750[2]	2	Horizontal/vertical
XT6	800	2/0-400	3	Horizontal
XT6	800	500–750	2	Horizontal
XT7	1200	4/0–500	4	Horizontal/vertical
XT7	1200	500–750	2[1]/3	Horizontal/vertical
STEY	70-125	#4-2/0	1	Horizontal
FB	15–20	#14–#10	1	Horizontal
FB/TEY	25–60	#10–#4	1	Horizontal
FB/TEY	70–100	#1–1/0	1	Horizontal
A2	125–250	#1–250, 2/0–300	1	Horizontal
A2	250	350 (Al)	1	Horizontal

[1] Max. two 750 kcmil cables allowed in horizontal installation due to wire-bending space limitation.
[2] XT5 with 750 kcmil lugs must go in 45" offset enclosure

Internal accessories
Common internal accessories (shunt trips, undervoltage releases, auxiliary switches, etc.) are available in common voltage ratings and are UL listed for field assembly.

Auxiliary contacts — AUX
The SACE Tmax XT, Record Plus FB, TEY and Formula A2 circuit breakers can be equipped with auxiliary contacts that signal the status of the circuit breaker and can be routed outside the circuit breaker itself. The following information is available:

- Open/closed (Q): indication of the status of the circuit-breaker power contacts
- Options for 1 or 2 aux on XT1-XT2-XT4-XT5-XT6; 4 aux on XT7; 1 aux on 2-pole FB and TEY, and 2 aux on A2
- Trip (SY): signals that the circuit breaker is opening due to the intervention of the trip unit, or to the opening of undervoltage/shunt opening releases, or to the use of the test button

Shunt opening release — SOR/YO
This allows the circuit breaker to open by means of a non-permanent electrical control. Release operation is guaranteed for voltage between 70% and 110% of the rated power supply voltage (Un), in both alternating and direct current. The SOR is equipped with a built-in limit contact to shut off the power supply in the open position with the trip unit tripped. A remote-controlled emergency opening command can be generated by connecting an opening button to the SOR.

Frame			Voltage
XT1-XT2-XT4–XT5 -XT6	24–30 V AC/DC	110–127 V AC/ 110–125 V DC	220–240 V AC/ 220–250 V DC
XT7	24 V AC/DC	110–120 V AC	220–240 V AC
FB (2-pole only)	24 V AC/DC	110–130 V AC 110–125 V DC	220–240 V AC/ 250 V DC
TEY (2-pole only)	24V AC	120V AC	240V AC
A2	–	110-127 V AC/ 110-125 V DC	–

ReliaGear neXT panelboards

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Undervoltage release — UVR/YU
This allows the circuit breaker to open when the release is subject either to a power failure or a voltage drop. As prescribed in the standards, opening is guaranteed when the voltage is between 70% to 35% Un. After tripping, the circuit breaker can be closed again if the voltage exceeds 85% of Un. When the undervoltage release is not energized, neither the circuit breaker nor the main contacts can be closed. A remote-controlled emergency opening command can be generated by connecting an opening button to the UVR.

Frame			Voltage
XT1-XT2-XT4–XT5 -XT6	24–30 V AC/DC	110–127 V AC/ 110–125 V DC	220–240 V AC/ 220–250 V DC
XT7	24 V AC/DC	110-120 V AC	220–240 V AC
FB (2-pole only)	24 V AC/DC	110–130 V AC/ 110–125 V DC	220–240 V AC/ 250 V DC

Padlocks and key locks
Padlocks or key locks prevent the circuit breaker from being closed and/or opened. Maximum number of padlocks (PLL) and maximum stem dimensions are the following:

Frame	Padlocks[1]	Stem min.-max.
XT1-XT2-XT4	3	Ø 0.24"-0.275" / Ø 6-7 mm
XT5-XT7	3	Ø 0.24-0.315" / Ø 6-8 mm
XT6	3	Ø 0.20-0.31" / Ø 5-8 mm
FB / TEY	1	Ø 0.25" / Ø 6.35 mm
A2	3	Ø 0.24-0.275" / Ø 6-7 mm

[1]Padlocks are not included in the kits.

Multiple models of keylock provisions are offered: Kirk KCAM00010 / KCAM00010S (XT5-XT7), Ronis 1228 (XT1-XT2-XT4-XT5-XT7) and Castell (XT7). Kirk and Castell locks are at customer expense and not provided in the kit. Two options are available for Ronis: same keys (type A) and different keys. This allows the customer to create interlocking logics.

Internal modules
Available with several different communication protocols, the Ekip Com internal module is installed directly inside the circuit breaker. It allows the circuit breaker to be integrated in a communication network for supervision and control. Ekip Com internal modules can be used for XT4 and XT5. They can be connected to the trip unit when Ekip Touch is used. Protocols supported include:

- Modbus RTU
- Modbus TCP/IP
- Profinet
- EthernNet/IP
- IEC 61850

Cartridge modules
Cartridge Ekip Com modules, along with the internal modules, allow integration in any communication network. They can be used only on the XT7 circuit breaker equipped with an Ekip Touch/Hi-Touch trip unit, mounted directly on the terminal box.

Several modules can be used simultaneously, enabling systems with different protocols. Modbus RTU, Profibus-DP and DeviceNet modules contain a terminating resistor and two DIP switches for optional activation to terminate the serial network or bus. The Profibus-DP module also contains a polarization resistor and two DIP switches for its activation.

- Modbus RTU
- Modbus TCP/IP
- Profinet
- Profibus
- EthernNet/IP
- DeviceNet
- IEC 61850

Ekip Com hub
The Ekip Com hub is the new communication module for cloud connectivity. A circuit breaker equipped with the Ekip Com hub can establish a connection with the ABB Ability Electrical Distribution Control System (EDCS) for the low-voltage power distribution panel. This dedicated module is available for the XT7 circuit breaker even when other modules are present.

For further information on ABB Ability EDCS, please visit new.abb.com/low-voltage/launches/abb-ability-edcs.

Signalling modules
The Ekip 2K signalling cartridge modules, available for XT7, supply two input and two output contacts for control and remote signalling of alarms and circuit breaker trips.

The Ekip 1K signalling module, available for the XT5, supplies one input contact and one output contact for control and remote signalling. It is installed inside the circuit breaker in the housing provided on the left down side of the circuit breaker and can be used when an Ekip Touch/Hi-Touch trip unit is present.

Ekip signalling modules can be programmed from the trip unit display or via the Ekip Connect software and app. When using Ekip Connect, combinations of events can be freely configured.

Ekip power supply
The Ekip power supply module supplies all Ekip trip units and modules present on the XT7 with several auxiliary power sources (in AC or DC). The cartridge module permits the installation of other advanced modules. It can be field installed at any time. Two versions are available according to the control voltage:

- Ekip supply 110–240 V AC/DC
- Ekip supply 24–48 V DC

This module is always needed with any Ekip Com module or the signalling 2K module.

ReliaGear® neXT SuperBox power panelboards

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ReliaGear® neXT SuperBox power panelboards

Product overview

ReliaGear® neXT power panelboards, featuring ABB's Tmax® XT plug-in circuit breakers, are now ready to go!

The SuperBox offer is a preassembled combination of enclosures, interiors, ground, neutral, fronts 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.

ReliaGear® 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, 100 kAIC at 480 V or 65 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® neXT SuperBox power panelboards

Selection

1

Select main and branch feeder circuit breakers

Select the required accessories

2

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

3

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

4

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

ReliaGear® neXT SuperBox power panelboards

Selection

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

[1] Additional Tmax® XT plug-in circuit breakers and accessories 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] Separate mounting rail required. See details in accessories table.
[4] Breakers installed in panel must adhere to UL/NEC WBS requirements.

ReliaGear® neXT SuperBox power panelboards

Selection

Step 1: Select main and branch feeder circuit breakers (XT4)[1,2,3]

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

[1] Additional Tmax® XT plug-in circuit breakers and accessories 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] Breakers installed in panel must adhere to UL/NEC WBS requirements

ReliaGear® neXT SuperBox power panelboards

Selection

Step 1: Select main and branch feeder circuit breakers (XT5–XT7)[1,2,3]

Frame	Int. rating at 480 V	Trip unit	Poles	Amps	Load side lugs (AWG or kcmil)	RELT compatible	Product number
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 (35 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	XT7SU310DPYW000XXR
XT7	S (50 kA)	Ekip Touch LSI	3	1200	4x 4/0-500	Yes	XT7SU312EPYW000XXR
XT7	H (65 kA)	Ekip Touch LSI	3	1000	4x 4/0-500	Yes	XT7HU310DPYW000XXR
XT7	H (65 kA)	Ekip Touch LSI	3	1200	4x 4/0-500	Yes	XT7HU312EPYW000XXR
XT7	L (100 kA)	Ekip Touch LSI	3	1200	4x 4/0-500	Yes	XT7LU312EPYW000XXR
XT7	S (50 kA)	Ekip Touch LSIG	3	1200	4x 4/0-500	Yes	XT7SU312EQYW000XXR
XT7	H (65 kA)	Ekip Touch LSIG	3	1200	4x 4/0-500	Yes	XT7HU312EQYW000XXR
XT7	L (100 kA)	Ekip Touch LSIG	3	1200	4x 4/0-500	Yes	XT7LU312EQYW000XXR

[1] Additional Tmax® XT plug-in circuit breakers and accessories 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] If 750 kcmil lugs are needed, a factory assembled ReliaGear neXT configuration will be required.
[4] Breakers installed in panel must adhere to UL/NEC WBS requirements.

ReliaGear® neXT SuperBox power panelboards

Selection

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

Product number	Frame	Int. rating at 480 V	Trip unit	Poles	Amps	Phase	Load side lugs (AWG or kcmil)
TEYADED0AAXXXXXX	TEY	D (25 kA)	TMF	1	20	A	1x #14–10
TEYADED0BAXXXXXX	TEY	D (25 kA)	TMF	1	20	B	1x #14–10
TEYADED0CAXXXXXX	TEY	D (25 kA)	TMF	1	20	C	1x #14–10
TEYAHED0AAXXXXXX	TEY	H (35 kA)	TMF	1	20	A	1x #14–10
TEYAHED0BAXXXXXX	TEY	H (35 kA)	TMF	1	20	B	1x #14–10
TEYAHED0CAXXXXXX	TEY	H (35 kA)	TMF	1	20	C	1x #14–10
TEYALED0AAXXXXXX	TEY	L (65 kA)	TMF	1	20	A	1x #14–10
TEYALED0BAXXXXXX	TEY	L (65 kA)	TMF	1	20	B	1x #14–10
TEYALED0CAXXXXXX	TEY	L (65 kA)	TMF	1	20	C	1x #14–10
TEYADFDABAXXXXXX	TEY	D (25 kA)	TMF	2	20	AB	1x #14–10
TEYADFHABBXXXXXX	TEY	D (25 kA)	TMF	2	40	AB	1x #10–4
TEYADFQABDXXXXXX	TEY	D (25 kA)	TMF	2	100	AB	1x #4–2/0
TEYADFSABDXXXXXX	TEY	D (25 kA)	TMF	2	125	AB	1x #4–2/0
TEYADFDBCAXXXXXX	TEY	D (25 kA)	TMF	2	20	BC	1x #14–10
TEYADFHBCBXXXXXX	TEY	D (25 kA)	TMF	2	40	BC	1x #10–4
TEYADFQBCDXXXXXX	TEY	D (25 kA)	TMF	2	100	BC	1x #4–2/0
TEYADFSBCDXXXXXX	TEY	D (25 kA)	TMF	2	125	BC	1x #4–2/0
TEYADFDACAXXXXXX	TEY	D (25 kA)	TMF	2	20	AC	1x #14–10
TEYADFHACBXXXXXX	TEY	D (25 kA)	TMF	2	40	AC	1x #10–4
TEYADFQACDXXXXXX	TEY	D (25 kA)	TMF	2	100	AC	1x #4–2/0
TEYADFSACDXXXXXX	TEY	D (25 kA)	TMF	2	125	AC	1x #4–2/0
NEFBV16TE020R2A	FB	V (35 kA)[3]	TMF	1	20	A	1x #14–10
NEFBV16TE020R2B	FB	V (35 kA)[3]	TMF	1	20	B	1x #14–10
NEFBV16TE020R2C	FB	V (35 kA)[3]	TMF	1	20	C	1x #14–10
NEFBN16TE020R2A	FB	N (65 kA)[3]	TMF	1	20	A	1x #14–10
NEFBN16TE020R2B	FB	N (65 kA)[3]	TMF	1	20	B	1x #14–10
NEFBN16TE020R2C	FB	N (65 kA)[3]	TMF	1	20	C	1x #14–10
NEFBH16TE020R2A	FB	H (100 kA)[3]	TMF	1	20	A	1x #14–10
NEFBH16TE020R2B	FB	H (100 kA)[3]	TMF	1	20	B	1x #14–10
NEFBH16TE020R2C	FB	H (100 kA)[3]	TMF	1	20	C	1x #14–10
NEFBV26TE100R2AB	FB	V (35 kA)	TMF	2	100	AB	1x #1–1/0
NEFBV26TE100R2AC	FB	V (35 kA)	TMF	2	100	AC	1x #1–1/0
NEFBV26TE100R2BC	FB	V (35 kA)	TMF	2	100	BC	1x #1–1/0

[1]Additional TEY and FB plug-in circuit breakers and accessories 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]Interrupt rating at 240 V AC.

ReliaGear® neXT SuperBox power panelboards
Selection

Step 1: Select main and branch feeder circuit breakers (Formula A2)[1,2,3]

2-pole Formula A2

Product number	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)
A2A2125ABDXXXX	A2	A (10 kA)	TMF	2	125	AB	1x 1–250	1x 2/0–300
A2A2125ACDXXXX	A2	A (10 kA)	TMF	2	125	AC	1x 1–250	1x 2/0–300
A2A2150ABDXXXX	A2	A (10 kA)	TMF	2	150	AB	1x 1–250	1x 2/0–300
A2A2150ACDXXXX	A2	A (10 kA)	TMF	2	150	AC	1x 1–250	1x 2/0–300
A2A2200ABDXXXX	A2	A (10 kA)	TMF	2	200	AB	1x 1–250	1x 2/0–300
A2A2200ACDXXXX	A2	A (10 kA)	TMF	2	200	AC	1x 1–250	1x 2/0–300
A2N2125ABDXXXX	A2	A (10 kA)	TMF	2	125	AB	1x 1–250	1x 2/0–300
A2N2125ACDXXXX	A2	N (25 kA)	TMF	2	125	AC	1x 1–250	1x 2/0–300
A2N2150ABDXXXX	A2	N (25 kA)	TMF	2	150	AB	1x 1–250	1x 2/0–300
A2N2150ACDXXXX	A2	N (25 kA)	TMF	2	150	AC	1x 1–250	1x 2/0–300
A2N2200ABDXXXX	A2	N (25 kA)	TMF	2	200	AB	1x 1–250	1x 2/0–300
A2N2200ACDXXXX	A2	N (25 kA)	TMF	2	200	AC	1x 1–250	1x 2/0–300
A2N2250ABDXXXX	A2	N (25 kA)	TMF	2	250	AB	1x 1–250	–

[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.

ReliaGear® neXT SuperBox power panelboards
Selection

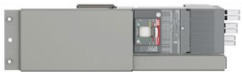
Step 2: Select the required accessories[3]

Auxiliary contacts

Shunt trip

Fixed padlock

RELT


Mounting rail

Group	Type	Volts AC	XT1	XT2	XT4	XT52	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	–	–	–
	AUX 1 SY	250					–	ZE1BA	–	–	–
Shunt trip	Pre-cabled (except for XT7)	24			KXTASORCFPB		KXTFYOCFPD	ZEZSZ	–	–	–
	Pre-cabled (except for XT7)	110			KXTASORCFPD		KXTFYOCFPD	ZEASE	–	–	–
	Pre-cabled (except for XT7)	220			KXTASORCFPE			ZEASG	–	–	–
Undervoltage release	Pre-cabled (except for XT7)	24			KXTAUVRCFP1		KXTFYUC1	ZEAUA	–	–	–
	Pre-cabled (except for XT7)	110			KXTAUVRCFP4		KXTFYUC4	ZEAUE	–	–	–
	Pre-cabled (except for XT7)	220			KXTAUVRCFP5		KXTFYUC5	ZEAUG	–	–	–
Fixed padlock[1]	Open position	–	KXTBPLLOP		KXTCPLLOP	KXT5PLLOP	KXT6PLLOP	KXT7PLLOP	–	–	–
	Open/closed position	–	KXTBLLOPL		KXTCPLLOPCL	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
	XT1 blank only	–	SRT1BB	–	–	–	–	–	–	–	–
Service entrance barriers	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® neXT SuperBox power panelboards
Selection

Step 2: Select the required accessories

Surge protective device

TYPE 2 SURGE PROTECTIVE DEVICES[1]

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 meter

RGM40 METERING[2]

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® neXT SuperBox power panelboards

Selection

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. RELTs also require **X-space**, since they are plug-in modules. Refer to the table below and add up the number of **X-spaces** required for each breaker frame.

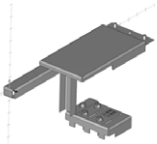
Frame	Max. ampacity (A)	Poles	X-spaces
Single XT1	125	3	3
Two XT1	125	3	5
Five XT1	125	3	11
XT2[2]	125	3	3
XT4[3]	250	3	3
XT5[3]	600	3	4
XT6	800	3	6
XT7	1200	3	6
FB	100	1	1
FB	100	2	2
TEY	70	1	1
TEY	125	2	2
A2	250	2	2
RELT	–	–	3
SPD[4]	–	–	6

[1] Tmax® XT2 with COMs requires 1 (one) additional X-space.
[2] Tmax XT4 with COMs requires 1 (one) additional X-space.
[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.

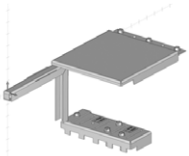
Single XT1

Two XT1 = 16% space saving

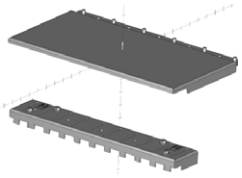
Five XT1 = 26% space saving



Single XT1 mounting rail



Two XT1 mounting rail



Five XT1 mounting rail

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® neXT SuperBox power panelboards

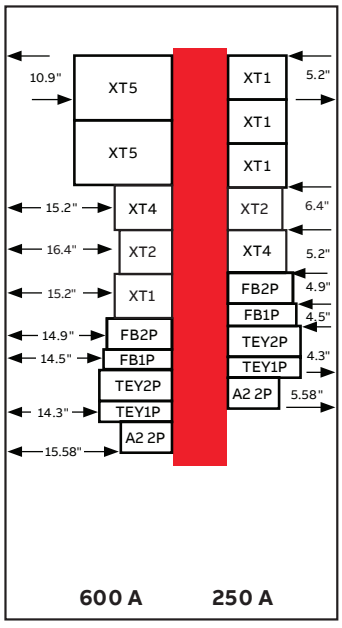
Selection

Step 4: Select the SuperBox required

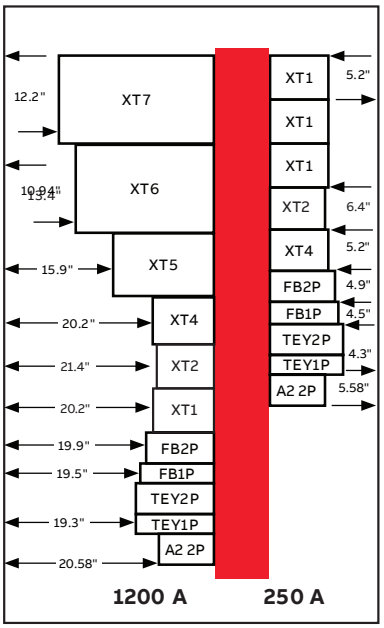
Description	Amps	Enclosure type	Main	Ground fault on main compatible	Dimensions (H x W x D inches)	X-space left	X-space right	Product number
600A MLO NEMA 1 60 x 40 16X no breakers	600 A	NEMA 1	Main lugs (2x #2–600 kcmil)	No	60.3 x 40.7 x 11	12	12	RNSB06L6040A
600A MCB NEMA 1 60 x 40 16X no breakers	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

ReliaGear neXT product number nomenclature

XT CIRCUIT BREAKERS

XT	1	N	U	3	015	A	Y	D	00	X	X	X	X

Part identifier

XT = Circuit breaker family

Frame

1 = XT1
2 = XT2
4 = XT4
5 = XT5
6 = XT6
7 = XT7

Interrupting rating

N = N
S = S
H = H
L = L
V = V
X = X

kAIC rating depending on voltage level; refer to performance table.

Standard

U = UL 80% rated
Q = UL 100% rated

Poles

3 = 3 poles

Trip unit

A = TMF	
B = TMA	
C = Ekip DIP LIG	
D = Molded Case Switch	
E = Ekip DIP LS/I	
F = Ekip DIP LSI (XT5, XT6 and XT7)	
G = Ekip DIP LSIG (XT5, XT6 and XT7)	
P = Ekip Touch LSI	
Q = Ekip Touch LSIG	
R = Ekip Touch Measuring LSI	
S = Ekip Touch Measuring LSIG	
T = Ekip Hi-Touch LSI	
U = Ekip Hi-Touch LSIG	
1 = Ekip DIP LSI (XT2 and XT4)	
2 = Ekip DIP LSIG (XT2 and XT4)	

Frame amps

015 = 15A	080 = 80A	25A = 250A (XT5)
020 = 20A	090 = 90A	30A = 300A
025 = 25A	100 = 100A	40A = 400A
030 = 30A	110 = 110A	50B = 500A
035 = 35A	125 = 125A	60B = 600A (XT5)
040 = 40A	150 = 150A	600 = 600A (XT6)
045 = 45A	175 = 175A	80C = 800A (XT7)
050 = 50A	200 = 200A	800 = 800A (XT6)
060 = 60A	225 = 225A	10E = 1000A
070 = 70A	250 = 250A (XT4)	12E = 1200A

Note: Tmax XT1 circuit breakers require a rail for installation in ReliaGear neXT power panelboards and ReliaGear SB switchboards if not already installed in your existing ReliaGear neXT or SB equipment.

	30" center	40" offset left	40" offset right	45" center	45" offset left	45" offset right
Single XT1	SR1XBR	SR1XBF	SR1XBR	SR1XBF	SR1XBF	SR1XBR
Two XT1 group mount	SR2XBR	SR2XBF	SR2XBR	SR2XBF	SR2XBF	SR2XBR
Five XT1 group mount	SR5XBR	SR5XBF	SR5XBR	SR5XBF	SR5XBF	SR5XBR

ReliaGear neXT product number nomenclature

XT CIRCUIT BREAKERS (CONTINUED)

XT	1	N	U	3	015	A	Y	D	00	0	X	X	X

Line-side terminals (top)

Y = Line-side connectors

Load-side terminal (bottom)

A = XT2 14-1/0 AWG (CU), 25A	O = XT6 2x500-750 kcmil
D = XT1 10–2/0 AWG XT2 10–2/0 AWG	S = XT5 2x500-750 kcmil
G = XT4 14-1/0 AWG, 70A	U = XT6 3x2/0 AWG-400 kcmil
J = XT4 4 AWG– 300 kcmil, 225A	W = XT7 4x4/0 AWG-500 kcmil
L = XT4 3/0 AWG–350 kcmil, 250A	X = XT7 3x500-750 kcmil
N = XT5 2x2/0 AWG-500 kcmil	

Accessories combination

00 = None
Aux.
Bell alarm
Shunt opening release
Undervoltage release
Communication modules

Front accessories

0 = None
G = Padlock

Key locks

X = None
A = Ronis key lock – A type key
E = Ronis key lock – Different keys
G = Kirk key lock XT5-XT7
K = Castell key lock XT5-XT7

Advanced functionalities

X = None

Additional certifications

X = None

Please refer to Tmax XT technical catalog for more information.

Note: Tmax XT1 circuit breakers require a rail for installation in ReliaGear neXT power panelboards and ReliaGear SB switchboards if not already installed in your existing ReliaGear neXT or SB equipment. See table on previous page for rail product numbers.

ReliaGear neXT product number nomenclature

FB CIRCUIT BREAKERS

NEFB	V	1	6	TE	015	R2A

Part identifier

NEFB = neXT FB circuit breakers

Interrupting rating

V = V
N = N
H = H
L = L

kAIC rating depending on voltage level; refer to performance table.

Poles

1 = 1 pole
2 = 2 poles

Voltage rating

6 = 600/347 V

Trip unit

TE = Fixed thermal magnetic

Phase

R2A = A phase (1p)
R2B = B phase (1p)
R2C = C phase (1p)
R2AB = AB phases (2p)
R2AC = AC phases (2p)
R2BC = BC phases (2p)

Rated current

015 = 15A	050 = 50A
020 = 20A	060 = 60A
025 = 25A	070 = 70A
030 = 30A	080 = 80A
035 = 35A	090 = 90A
040 = 40A	100 = 100A
045 = 45A	

ReliaGear neXT product number nomenclature

TEY CIRCUIT BREAKERS

Part identifier

TEYA = neXT TEY circuit breakers

Interrupting rating

D = D
H = H
L = L

kAIC rating depending on voltage level; refer to performance table.

Poles

E = 1 pole
F = 2 poles

Rated Current

C = 15A	L = 60A
D = 20A	M = 70A
E = 25A	N = 80A
F = 30A	P = 90A
G = 35A	Q = 100A
H = 40A	R = 110A
J = 45A	S = 125A
K = 50A	

Phase

0A = A phase (1p)	AB = AB phases (2p)
0B = B phase (1p)	AC = AC phases (2p)
0C = C phase (1p)	BC = BC phases (2p)

Load lug

A = (1) #14-10, 15-20A
B = (1) #10-4, 25-60A
D = (1) 4-1/0 AWG, 70-100A
(1) 1-3/0 AWG Al or
(1) 3-3/0 AWG Cu, 110A-125A

Shunt trip

X = None	M = 120V
K = 24V	N = 240V

Aux

X = None D = 277V

Bell alarm

X = None A = Bell alarm

Other

X = None

PDL

X = None C = Padlock

Other

X = None

ReliaGear neXT product number nomenclature

FORMULA A2 CIRCUIT BREAKERS

Part identifier

A2 = neXT A2 circuit breakers

Interrupting rating

A = 10 kA
N = 25 kA

Poles

2 = 2 poles

Frame amps

125 = 125A
150 = 150A
175 = 175A
200 = 200A
225 = 225A
250 = 250A

Phase

AB = AB phases
AC = AC phases
BC = BC phases

Lug size

D = 300 MCM
L = 350 MCM (250A only)

Padlock

X = None
P = Padlock

Shunt trip

X = None
S = Shunt trip

Aux/Bell alarm

X = None
A = Aux/bell alarm

Service entrance

X = None
E = Service entrance barriers

ReliaGear neXT product number nomenclature

ENCLOSURES

ER	60	30	A

Part identifier

ER = Enclosure

Height

60 = 60"
72 = 72"
84 = 84"
96 = 96"

Width

30 = 30"
40 = 40"
45 = 45"

NEMA type

A = NEMA 1
H = NEMA 2
R = NEMA 3R
C = NEMA 4
S = NEMA 4X 316 stainless steel
D = NEMA 12

BUS STACK

IN	16	02	BL	3	H1

Part identifier

IN = Interior

X height

16 = 16X
24 = 24X
32 = 32X
40 = 40X

Ampacities

02 = 250A	08 = 800A
04 = 400A	10 = 1000A
06 = 600A	12 = 1200A

Type

BL = Bolted lug pad
BF = Bolted feed-through
NN = Clean bus

Number of phases

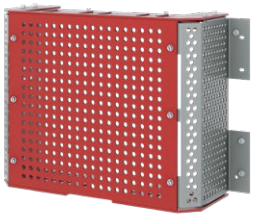
1 = 1
3 = 3

Bus material

B3 = 1000 PSI rated copper
B4 = Tin density-rated copper
H1 = Heat-rated aluminum
H2 = Heat-rated copper
H3 = Tin heat-rated aluminum
H4 = Tin heat-rated copper

ReliaGear neXT product number nomenclature

IP20 MAIN LUG AND FEED-THROUGH LUG BARRIER



IP20B **ML**

Part identifier

IP20B = IP20 barrier

Type

ML = Main lug

IP20 MAIN LUG AND FEED-THROUGH LUG MOUNTING RAIL[1]

HMR **30** **C**

Part identifier

HMR = Horizontal mounting rail

Width

30 = 30"

40 = 40"

45 = 45"

Orientation

C = Center

F = Offset

[1] This rail kit is required to mount the IP20 main lug or feed-through lug barrier.

ReliaGear neXT product number nomenclature

INTERIOR FRAME

IF	16	30	C

Part identifier

IF = Interior frame

X-Spaces

16 = 16X
24 = 24X
32 = 32X
40 = 40X

Width

30 = 30"
40 = 40"
45 = 45"

Orientation

C = Center
F = Offset

MAIN LUGS – MECHANICAL

LG	ML2	75	A

Part identifier

LG = Main lug

Lug type and number of wires

ML2 = Standard mechanical 2 wire lug

Wire size

60 = 600 MCM
75 = 750 MCM

Material

A = Aluminum
C = Copper

Note: * Each catalog contains a single lug. The quantity should be multiplied by the number of phases (2X for single phase, 3X for 3 phase, and the quantity is doubled if feedthrough is needed). Also, this total quantity should be multiplied by 2 if there are 2 lugs needed per phase.

ReliaGear neXT product number nomenclature

MAIN LUGS – COMPRESSION

LG	CL	2	75	A

Part identifier

LG = Main lug

Lug type

CL = Compression standard

Number of wires

1 = 1 wire lug
2 = 2 wire lug
4 = 4 wire lug

Material

A = Aluminum

Dual rated for copper and aluminum cables

Wire size

01 = 1/0	30 = 350 MCM
02 = 2/0	40 = 400 MCM
03 = 3/0	50 = 500 MCM
04 = 4/0	60 = 600 MCM
25 = 250 MCM	75 = 750 MCM

Note: * Each catalog generally contains the lugs for a single phase. The quantity should be multiplied by the number of phases (2X for single phase, 3X for 3 phase, and the quantity is doubled if feedthrough is needed).

MAIN LUGS – DUAL

LG	M	D	4	75	A

Part identifier

LG = Main lug

Lug type

M = Mechanical
C = Compression

Configuration

D = Dual main, 3 phase, silver plated
P = Dual main, 1 phase, silver plated
T = Dual main , 3 phase, tin plated
S = Dual main , 1 phase, tin plated

Material

A = Aluminum
C = Copper

Wire size

25 = 250 MCM	50 = 500 MCM
30 = 350 MCM	60 = 600 MCM
40 = 400 MCM	75 = 750 MCM

Number of wires

4 = 4 wire lug

Note: * Each catalog contains all lugs/components needed for dual main lugs. Quantity should always be 1.

ReliaGear neXT product number nomenclature

GUTTER COVERS

GC	30C	16	BL	A

Part identifier

GC = Gutter cover

Width and orientation

30C = 30" center
40F = 40" offset
45C = 45" center
45F = 45" offset

X height

16 = 16X
24 = 24X
32 = 32X
40 = 40X

Type

BL = Bolted lug pad
BF = Bolted feed-through
NN = Clean bus

NEMA type

A = NEMA 1 with no locking covers
S = NEMA 1 with locking covers, standard lock

FRONTS

FT	30	S	0	0	7	5

Part identifier

FT = Front

Width

30 = 30"
40 = 40"
45 = 45"

Category

S = Standard
VM = Vertical main
VF = Vertical filler

Type

0 = Standard front
1 = Vented front

Height
Last three digits in inches with a decimal before last digit, i.e. 155 is 15.5 inches tall.

Note: Vented fronts to be used with 100% rated circuit breakers

ReliaGear neXT product number nomenclature

FILLERS AND BLANKS

SR 01BF

Part identifier

SR = Spacer

Breaker frame	Filler needed
TEY 1-pole	SR01EF
FB 1-pole	SR01EF
TEY 2-pole	SR02EF
FB 2-pole	SR02EF
Single XT1	SR1XEF
Two XT1 group mount	SR2XEF
Five XT1 group mount	SR5XEF
XT2	SR03EF
XT4	SR03EF
XT5	SR04EF
XT6	SR06EF
XT7	–
RELT	SR06RF
SPD (RGPP Series)	SR06SF
SPD (legacy SP series)	SR10SF
Metering	SR04EF
Submetering 9X	SR09MF
Submetering 14X	SR14MF

Note: Tmax XT1 circuit breakers require a rail for installation in ReliaGear neXT power panelboards and ReliaGear SB switchboards if not already installed in your existing ReliaGear neXT or SB equipment. This rail and associated hardware comes standard with the different spacer options.

X height and filler

- 01AF = 1X Accessory blank and filler XT4
- 01AB = 1X Accessory blank XT4
- 01BF = 1X Blank and filler
- 01BB = 1X Blank only
- 01CF = 1X Accessory blank and filler XT2
- 01CB = 1X Accessory blank XT2
- 01EF = 1X Filler only
- 02BF = 2X Blank and filler
- 02BB = 2X Blank only
- 02EF = 2X Filler only
- 03BF = 3X Blank and filler
- 03BB = 3X Blank only
- 03EF = 3X Filler only
- 04EF = 4X Filler only
- 06RF = 3X RELT filler
- 06EF = 6X Filler only
- 06SF = 6X SPD Filler (RGPP series)
- 10SF = 10X SPD filler (legacy SP series)
- T1BB = XT1 blank only
- 1XBB = Single XT1 spacer blank only
- 1XBF = Single XT1 spacer blank, rail and filler
- 1XBR = Single XT1 spacer blank and rail
- 1XEF = Single XT1 spacer filler only
- 2XBB = Two XT1 spacer blank only
- 2XBF = Two XT1 spacer blank, rail and filler
- 2XBR = Two XT1 spacer blank and rail
- 2XEF = Two XT1 spacer filler only
- 5XBF = Five XT1 spacer blank, rail and filler
- 5XBR = Five XT1 spacer blank and rail
- 5XEF = Five XT1 spacer filler only

Note:
Blank = A spacer to fill the area occupied by a circuit breaker when plugged-in to the interior bus stack.
Filler = A spacer to fill the area between a plugged-in circuit breaker and the gutter.

XT1 RAIL TABLE

	30" center	40" offset left	40" offset right	45" center	45" offset left	45" offset right
Single XT1	SR1XBR	SR1XBF	SR1XBR	SR1XBF	SR1XBF	SR1XBR
Two XT1 group mount	SR2XBR	SR2XBF	SR2XBR	SR2XBF	SR2XBF	SR2XBR
Five XT1 group mount	SR5XBR	SR5XBF	SR5XBR	SR5XBF	SR5XBF	SR5XBR

X-SPACE FILLERS

Space to be filled	30" center	40" offset left	40" offset right	45" center	45" offset left	45" offset right
1X	SR01BB	SR01BF	SR01BB	SR01BF	SR01BF	SR01BB
2X	SR02BB	SR02BF	SR02BB	SR02BF	SR02BF	SR02BB
3X	SR03BB	SR03BF	SR03BB	SR03BF	SR03BF	SR03BB

ReliaGear neXT product number nomenclature

BARRIER POST

BP 30 C

Part identifier

BP = Barrier post

Width

30 = 30"
40 = 40"
45 = 45"

Orientation

C = Center
F = Offset

VERTICAL MAIN KITS

VM XT7 3P S

Part identifier

VM = Vertical main kit

Frame

XT5 = XT5
XT7 = XT7

Plating type

S = Silver
T = Tin

Poles

3P = 3-phase
2P = 1-phase

Note: If you need full kit, you should order both the vertical main kit and the vertical main rail kit.

VERTICAL MAIN RAIL KITS

VMR 45 F

Part identifier

VMR = Vertical main rail kit

Width

30 = 30"
40 = 40"
45 = 45"

Orientation

C = Center
F = Offset

ReliaGear neXT product number nomenclature

DOOR-IN-DOOR

DD	30	60	AH	C	S

Part identifier

DD = Door in door

Enclosure width

30 = 30"
40 = 40"
45 = 45"

Enclosure height

60 = 60"
72 = 72"
84 = 84"
96 = 96"

Type

AH = NEMA 1 hinged cover

Orientation

C = Center
F = Offset

Lock type

S = Standard

DOOR-IN-DOOR FILLER

DD	FIL	30	XX	03	SC

Part identifier

DD = Door in door
FIL = Filler

Width

30 XX = 30" center
40 XX = 40" offset with vertical main circuit breaker
45 XX = 45" center
40 45 = 40" or 45" offset

Height

03 = 3X
09 = 9X
15 = 15X
21 = 21X
27 = 27X
33 = 33X
39 = 39X

Main/orientation

SC = Standard center
SF = Standard offset
VC = Vertical center
VF = Vertical offset

ReliaGear neXT product number nomenclature

DOOR-IN-DOOR FILLER SUPPORT

DD SUP 08

Part identifier

DD = Door in door

Support prefix

SUP = Support

X Length

08 = 8"
12 = 12"
16 = 16"
20 = 20"
24 = 24"
32 = 32"
36 = 36"
40 = 40"

GROUNDS

GD BG 10 AL

Part identifier

GD = Ground

Bonded or isolated

BG = Bonded
IG = Isolated

Material

AL = Aluminum
A7 = Aluminum (750 MCM max.)
CU = Copper

The material of the ground must match the cable.

Number of wires

10 = 10
47 = 47
49 = 49

ReliaGear neXT product number nomenclature

NEUTRALS

NL	04	I	0	N	STND	AL

Part identifier

NL = Neutral

Ampacity

02 = 250A	08 = 800A
04 = 400A	10 = 1000A
06 = 600A	12 = 1200A

Isolation

I = Isolated neutral with grounding kit

Number of GF feeders

0 = 0

Main GF

N = No ground fault
G = With ground fault

Note 1: All neutrals include a bonding kit
Note 2: Neutral compression lugs required

Material

AL = Aluminum
A7 = Aluminum (750 MCM max.)
CU = Copper

The material of the neutral must match the cable.

Main type

STND = Standard neutral
ST12 = Standard neutral, 12" lug
ST15 = Standard neutral, 15" lug
ST21 = Standard neutral, 21" lug
7X7X = 750 kcmil lugs, no GF
COMP = Comp main lugs
DCOM = Dual mech lugs, 500 kcmil
D5X7 = Dual mech lugs, 750 kcmil
XT4T/B = XT4 main (GF) top/ bottom
XT5T/B = XT5 main (GF) top/bottom
5X7T/B = XT7 main, 500 kcmil (GF) top/bottom
7X7T/B = XT7 main, 750 kcmil (GF) top/bottom
V47T/B = Vert. main, 750 kcmil (no GF) top/bottom
D240 = 200% dual main lugs, 40" wide panel
D245 = 200% dual main lugs, 45" wide panel
M240 = 200% main lugs, 40" wide panel
M245 = 200% main lugs, 45" wide panel

ReliaGear neXT product number nomenclature

GROUND FAULT NEUTRALS

NL	04	I	0	N	DH40	AL

Part identifier

NL = Neutral

Ampacity

02 = 250A	08 = 800A
04 = 400A	10 = 1000A
06 = 600A	12 = 1200A

Isolation

I = Isolated neutral with grounding kit

Number of GF feeders

0 = 0
4 = 4
6 = 6

Main GF

N = No ground fault
G = With ground fault

Material

AL = Aluminum
A7 = Aluminum (750 MCM max.)
CU = Copper

The material of the neutral must match the cable.

Main type

DH40 = Dual mech main/horizontal main breaker, 40" W
MH40 = Main lug/horizontal main breaker, 40" W
DH45 = Dual mech main/horizontal main breaker, 45" W
MH45 = Main lug/horizontal main breaker, 45" W
X440 = XT4 main (GF), 40" W
X445 = XT4 main (GF), 45" W
5540 = XT5 main, 500 MCM (GF), 40" W
5545 = XT5 main, 500 MCM (GF), 45" W
7540 = XT5 main, 750 MCM (GF), 40" W
7545 = XT5 main, 750 MCM (GF), 45" W
5745 = XT7 main, 500 MCM (GF), 45" W
7745 = XT7 main, 750 MCM (GF), 45" W

GROUND FAULT ON FEEDER NEUTRAL CURRENT SENSOR KITS

NL	CT	XT2	60

Part identifier

NL = Neutral

Current sensor

CT = Current sensor

Note: These ground fault on feeder neutral current sensor kits are not orderable as loose units, only factory assembled

Number of poles

60 = XT2 ≤ 60 A sensor
100 = XT2 ≥ 100 A sensor
350 = XT4 350 kcmil
500 = XT5 500 kcmil
750 = XT5 750 kcmil

Breaker frame

XT2 = XT2
XT4 = XT3
XT5 = XT5

ReliaGear neXT product number nomenclature

NEUTRAL COMPRESSION LUGS

LGN **750**

Part identifier

LGN = Neutral compression lug

Wire size

010 = 1/0	350 = 350 kcmil
020 = 2/0	400 = 400 kcmil
030 = 3/0	500 = 500 kcmil
040 = 4/0	600 = 600 kcmil
250 = 250 kcmil	750 = 750 kcmil
300 = 300 kcmil	

Dual rated for copper and aluminum cables

SERVICE ENTRANCE BARRIER

SB **X4** **W35** **P3**

Part identifier

SB = Service entrance barrier

Number of poles

P2 = 2
P3 = 3

Circuit breaker frame

X1 = XT1
X2 = XT2
X4 = XT4
X5 = XT5
X6 = XT6
X7 = XT7

Wire size

W02 = 2/0 AWG
WT2 = 2/0 AWG XT2 Thermo Mag
WE2 = 2/0 AWG XT2 Electronic
W30 = 300 kcmil
W35 = 350 kcmil
W40 = 400 kcmil
W50 = 500 kcmil
W75 = 750 kcmil

ReliaGear neXT product number nomenclature

SURGE PROTECTION DEVICE (RGPP SERIES SPD)

RGPPSP	120Y	08	T1

Part identifier

RGPPSP = SPD

Voltage

120Y = 120V AC Wye
240Y = 240 V AC Wye
277Y = 277 V AC Wye
347Y = 347 V AC Wye
480D = 480 V AC Delta

Impulse current

08 = 80 kA
15 = 150 kA
22 = 225 kA
30 = 300 kA

Type

T1 = Type 1
T2 = Type 2

Note: SPD's come with filler plate SR06SF when ordered as a component

SURGE PROTECTION DEVICE (LEGACY SP SERIES SPD)

SP	120	Y	06	X4	01

Part identifier

SP = SPD

Voltage type

120 Y = 120 V AC Wye
277 Y = 277 V AC Wye
347 Y = 347 V AC Wye
480 Y = 480 V AC Delta

Impulse current

06 = 65 kA	15 = 150 kA
08 = 80 kA	20 = 200 kA
12 = 125 kA	30 = 300 kA

Disconnect device

X4 = XT4

SPD type

01 = Type 1
02 = Type 2

ReliaGear neXT product number nomenclature

RELT

RT 04 A

Part identifier

RT = RELT

Enclosure width

04 = 40"–45"

Voltage

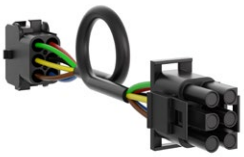
A = 120/240 V, 208/120 V and 240 V Delta
B = 480 V, 480 V Delta and 480/277
C = 600 V, 600 V Delta and 600/347

Notes:
RELT is available for the 40"W and 45"W enclosures only.
When RELT is ordered separately:
- For XT7, Ekip supply and Ekip signalling 2k are also needed — see wire connector kits for RELT module.
- RELT comes with filler plate.

When RELT is ordered with configured panel:
- For XT7, Ekip supply and Ekip signaling 2k are also supplied in a CN series wire connector kit.

WIRE CONNECTOR KIT FOR RELT MODULE

CN 001



Part identifier

CN = Wire connector kit

For use with

001 = XT7 connector extension kit
003 = XT7 2k-1 kit
004 = XT7 2k-3 kit

Notes:
For replacement wire connector kits, an exact replacement must be used (i.e., a 2K-1 kit must be used to replace an existing 2K-1 kit). Failure to do so may result in incorrect RELT functionality or require the breaker to be re-programmed. Refer to 9AKK107991A2520 and 1SQC900005M0201 for more information.

CN003 includes Ekip 2K-1 signaling and Ekip supply.

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.

CN001 is a cable extension for use with XT7 vertical mains. When vertical main is used, you must order CN001 and CN003 or CN001 and CN004.

ReliaGear neXT product number nomenclature

SINGLE-POINT METERING – RGM40

RGM40	V1	1	X

Part identifier

RGM40 = Main meter

Version

V1 = Standard
V2 = Standard + basic datalog
V6 = Advanced: datalog, PQ, waveform

Advanced: data logging, harmonic analysis, 512 samples per cycle waveform recorder.

Note: Please also select a current transformer kit and a mounting kit.

Meter options

M = Modbus RTU
T = Modbus TCP
B = BacNet

Voltage

X = Transformer 120/240 V single phase, 120/240V Delta high-leg, 208/120 V Wye, 480/277 V Wye
T = With transformer 240c 480, 600 V Delta, 600/347 V Wye

POWER SUPPLY MODULE

PSM	04	A

Part identifier

PSM = Power supply module

Enclosure width

04 = 40"-45"

Notes:
PSM is only available for the wide side of the 40"W and 45"W enclosures

PSM supports up 10 XT breakers

XT2/XT4/XT5 breakers require additional blanks for COM wiring

Voltage

A = 120/240 V, 208/120 V and 240 V Delta
B = 480 V, 480 V Delta and 480/277

ReliaGear neXT product number nomenclature

METER CURRENT TRANSFORMER KIT

MT | A | 03 | 02 | CT

Part identifier

MT = Meter current transformer kit

Meter used

A = RGM40

Phase

03 = 3-phase

Ampacity

02 = 250A
04 = 400A
06 = 600A
08 = 800A
10 = 1000A
12 = 1200A

Wire size

For CTs only

METER CTS MOUNTING KIT

MT | 40F | M | MK

Part identifier

MT = Meter CTs mounting kit

Enclosure width and orientation

40F = 40" offset
45C = 45" center
45F = 45" offset

Meter type

M = Main

Designation

MK = Mounting kit only

DRIP HOOD

DH | 030

Part identifier

DH = Drip hood

Width

030 = 30" wide
040 = 40" wide
045 = 45" wide

ReliaGear neXT product number nomenclature

SUBMETERING MODULES

RGM 4500Q 1X6DU X

Part identifier

RGM = RGM

Model

4500Q = 4500 Qbrick

[1] Qbrick 6 can only be used on 240V and lower circuits.
Note: Submetering modules are not orderable as loose units, only available through factory assembled option.

Voltage

X = Without transformer (≤240V)
T = With current transformer (>240V)

Circuits

1X6DU = One Qbrick 6[1] with display unit
2X6DU = Two Qbrick 6[1] with display unit
3X6DU = Three Qbrick 6[1] with display unit
4X6DU = Four Qbrick 6[1] with display unit
1X4DU = One Qbrick 4 with display unit
2X4DU = Two Qbrick 4 with display unit
3X4DU = Three Qbrick 4 with display unit
4X4DU = Four Qbrick 4 with display unit

SUBMETERING CTS

RGMSCT 0050 C1 SO

Part identifier

RGMSCT = RGMSCT

Breaker amps served (max.)

0050 = 0-50A
0100 = 51-100A
0200 = 101-200A
0400 = 201-400A
0800 = 401-800A
1200 = 801-1200A

Note: Submetering CTs are not orderable as loose units, only available through factory assembled option.

Core type

SO = Solid core

Accuracy

C1 = 0.1% accuracy class
S2 = 0.2% accuracy class

ReliaGear neXT product number nomenclature

REPLACEMENT PARTS

RGRP RGRS

Part identifier

RGRP = ReliaGear replacement parts

Note: For additional information, please refer to the replacement parts instruction sheet **1SQC900015M0201**

Replacement part type

RGRS = Rheolube 368 50ml - clip grease – 1pc
Grease used to apply on breaker clips to plug into bus stack

DPIN = Door hinge pins – 6pcs
Door hinge pins used to secure gutter doors and standard locking doors to enclosure

TSCR = 1/4-20 thread-forming screws – 20pcs
Standard panel screws that come in two lengths, qty 10 of 3/8", qty 10 of 1.25"

SKEY = Standard C135 key – DID and SLD – 1pc
Standard key for door within door and standard locking doors

ReliaGear neXT panelboards

Available publications

Additional technical information, instructions and installation manuals can be found in the following documents:

Power panelboard

1SQC900003M0201	Low-voltage power panel installation manual – Bulk pack
1SQC900004M0201	Low-voltage power panel installation manual – Assembled interior

Accessories

1SQC900002M0201	Door-in-door front
1SQC900005M0201	RELT unit
1SQC900006M0201	SPD unit
Link Pending	Installation instructions
1SQC900008M0201	Enclosures (NEMA 1, 3R, 4/4X, 12)
1SQC900009M0201	Dual main lug
1SQC900010M0201	Service entrance kit
1SQC900013M0201	Drip hood installation
1SQC900015M0201	Replacement part kits
1SQC900016M0201	Submetering
1SQC900017M0201	Lifting bar instructions
1SQC900021M0201	RGM40 main circuit breaker meter
1SQC900024M0201	IP20 main lug barrier
1SQC900027M0201	Power supply module

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
ReliaGear neXT — IP20 promotional video

RESOURCE DOCUMENTS

Brochure — 1SQC900001B0201
Catalog — 1SQC900001C0201
Typicals brochure — 1SXU900300G0201
White paper — 1SQC900001G0201
White paper — IP20 — 9AKK108470A2364
Instruction sheet — RELT — 1SQC900005M0201
Instruction sheet — Grounds and neutral — 1SQC900007M0201
Instruction sheet — ReliaGear® neXT SuperBox panelboard — 1SQC900014M0201

ReliaGear® neXT OEM power panelboards

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ReliaGear neXT OEM power panelboards

Codes and standards application information

Your customers have unique requirements that get passed to you. ABB partners with you to make sure the end results satisfy both. Choose your level of support from ABB — your design, your business defines the model.

Option 1 — Maximum ABB support
You purchase everything from ABB. Everything is UL listed or recognized and provided for you to assemble into assemblies at your convenience. No UL file extensions to obtain, no design work required.

Option 2 — Minimum ABB support
You purchase the bus stack and plug-in circuit breakers from ABB and install them into an assembly of your design. ABB's UL listed/ recognized components are available to be incorporated into your design and your UL file. Your product, built on ABB's neXT plug-in technology, can be as unique as you are.

ReliaGear distribution panelboards are designed, tested and constructed in accordance with the following industry standards:

- Underwriters Laboratories UL®: UL 67, File # E2366
- Canadian Standards Association (CSA®): CSA C22.2 No. 29

ReliaGear switchboard interiors are designed, tested and constructed in accordance with the following industry standards:

- Underwriters Laboratories UL®: UL 891, File # E466042
- Canadian Standards Association (CSA®): CSA C22.2 No. 244

ReliaGear neXT OEM power panelboards

Product design and selection

Getting started
Would you like to build UL 67 and UL 891 distribution products with ABB's ReliaGear design? Wondering where to begin? ABB has tools to support you in this journey. ReliaGear components are product number driven, and ABB has configurators that help get you started.

1 **Step 1**
Compile pertinent information about the lineup or section such as incoming service, voltage, panel ampacity and main/feeder information.

2 **Step 2**
Use the Quote feature of empower.abb.com to configure a panelboard or switchboard. If you have a panel schedule, you can use the "panel scan" feature of empower for quick entry and configuration. Once configured in the quote feature of empower.abb.com, navigate to the BOM or Drawing tabs to retrieve information such as standard enclosure dimensions, frame mounting locations and a list of product numbers in the BOM.

3 **Step 3**
Navigate to the Flow feature of empower.com, or the empower home screen. Use the product numbers from the BOM to enter an order for the components you require.

4 **Step 4**
Navigate to http://reliagear-drawingselector.com/. Download any required STP models.

5 **Step 5**
Ensure that codes and standards requirements are met. Purchase ReliaGear components from ABB. Begin assembly.

Spectra (obsoleted) bolt-on panelboard mounting hardware

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Spectra (obsoleted) bolt-on panelboard mounting hardware

Renewal Parts 11-112

Spectra (obsoleted) bolt-on panelboard mounting hardware

Renewal parts

Mounting hardware
Order from the customer service center

MOUNTING HARDWARE BOLT-ON SPECTRA

- Mounting kit includes: hardware, straps, and brackets
- Filler Plate includes: filler plate and associated hardware
- Please order (1) Mounting kit & (1) Filler Plate per installation

Mounting Arrangement	Circuit Breaker	Poles	Box Width Range	X Height	Mounting Kit	Filler Plate
Dual Mounted	TEB, TED	2-pole	27"-44"	2X	AMCB4EB	AFP2TED
Dual Mounted	TEY	2-pole	27"-44"	3X	AMCB4EY	AFP3EYD
Dual Mounted	FBV, FBN, FBH, or FBL	2-pole	27"-44"	2X	AMCB4FB	AFP2FBD
Dual Mounted	THED, SED, SEH, SEL, SEP	2-pole	27"-44"	3X	AMCB4SE	AFP3SED
Dual Mounted	TEB, TED, THED, SED, SEH, SEL, SEP	3-pole	27"-44"	3X	AMCB6EB	AFP3SED
Dual Mounted	TEY	3-pole	27"-44"	3X	AMCB6EY	AFP3EYD
Dual Mounted	FBV, FBN, FBH, or FBL	3-pole	27"-44"	3X	AMCB6FB	AFP3FBD

MOUNTING HARDWARE WITH FILLER PLATE, STRAPS AND BRACKETS BOLT-ON SPECTRA™

- Mounting kit with filler plate includes hardware straps, brackets and filler plate.
- Filler plate kit includes filler plate and associated hardware only.

Mounting Arrangement	Breaker Frame	Number of Poles	Box Width Range	X Height	Product Number
Dual Mounted	TEB, TED	2-pole	27"-44"	2X	AMCB4EBFP
Dual Mounted	TEY	2-pole	27"-44"	3X	AMCB4EYFP
Dual Mounted	FBV, FBN, FBH, or FBL	2-pole	27"-44"	2X	AMCB4FBFP
Dual Mounted	THED, SED, SEH, SEL, SEP	2-pole	27"-44"	3X	AMCB4SEFP
Dual Mounted	TEB, TED, THED, SED, SEH, SEL, SEP	3-pole	27"-44"	3X	AMCB6EBFP
Dual Mounted	XT1 (125A)	3-pole	27"-44"	3X	SRFB6XT1FPX
Dual Mounted	XT1 (125A)	3-pole	27"-44"	3X	SRFB6XT1FPK
Dual Mounted	TEY	3-pole	27"-44"	3X	AMCB6EYFP
Dual Mounted	FBV, FBN, FBH, or FBL	3-pole	27"-44"	3X	AMCB6FBFP
Dual Mounted	XT4 (250A)	3-pole	31"-44"	3X	SRFB6XT4FPX[1]
Dual Mounted	XT4 (250A)	3-pole	31"-44"	3X	SRFB6XT4FPK[1]
Dual Mounted	XT5 (400A)	3-pole	40"-44"	4X	SRFB6XT5BFPX[1]
Dual Mounted	XT5 (400A)	3-pole	40"-44"	4X	SRFB6XT5BFPK[1]
Single Mounted	XT4 (250A)	3-pole	27"-44"	3X	SRFB3XT4FPX[1]
Single Mounted	XT4 (250A)	3-pole	27"-44"	3X	SRFB3XT4FPK[1]
Single Mounted	XT5 (600A)	3-pole	27"-44"	4X	SRFB3XT5MFPX[1]
Single Mounted	XT5 (600A)	3-pole	27"-44"	4X	SRFB3XT5MFPK[1]
Single Mounted	XT7 (1200A)	3-pole	40"-44"	6X	SRFB3XT7MFPX[1]
Single Mounted	XT7 (1200A)	3-pole	40"-44"	6X	SRFB3XT7MFPK[1]

[1]Maximum of two XT4, XT5, XT7 kits may be stacked beside each other.

NOTE: Spectra has been obsoleted but these kits are still available to support existing installations.

Spectra (obsoleted) bolt-on panelboard mounting hardware

Renewal parts

Mounting hardware
Order from the customer service center

FILLER PLATES BOLT-ON SPECTRA™

- Filler plate kit includes filler plate and associated hardware only.

Mounting Arrangement	Breaker Frame	Number of Poles	Box Width Range	X Height	Product Number
Dual Mounted	TQD, THQD	2-pole	27"-44"	2X	AFP2QDD
Dual Mounted	TEB, TED	2-pole	27"-44"	2X	AFP2TED
Dual Mounted	TEY	2-, 3-pole	27"-44"	3X	AFP3EYD
Dual Mounted	FBV, FBN, FBH, or FBL	2-pole	27"-44"	2X	AFP2FBD
Dual Mounted	FBV, FBN, FBH, or FBL	3-pole	27"-44"	3X	AFP3FBD
Dual Mounted	TQD, THQD	3-pole	27"-44"	3X	AFP3QDD
Dual Mounted	TEB, TED, THED,SED, SEH, SEL, SEP	2-, 3-pole	27"-44"	3X	AFP3SED
Dual Mounted	SFH, SFL, SFP	2-, 3-pole	31"-44"	3X	AFP3SFD
Dual Mounted	TFJ, TFK, THFK	2-, 3-pole	36"-44"	2X, 3X	AFP3TFD
Dual Mounted	FGV, FGN, FGH or FGP	3-pole	40",44"	4X	AFP4FGD
Dual Mounted	SGH, SGL, SGP	2-, 3-pole	40"-44"	4X	AFP4SGD
Single Mounted	SFH, SFL, SFP	2-, 3-pole	27"-44"	3X	AFP3SFS
Single Mounted	TFJ, TFK, THFK	2-, 3-pole	27"-44"	3X	AFP3TFS
Single Mounted	FGV, FGN, FGH or FGP	2-, 3-pole	27", 31", 36", 40", 44"	4X	AFP4FGS
Single Mounted	SGH, SGL, SGP	2-, 3-pole	27"-44"	4X	AFP4SGS
Single Mounted	SKP	2-pole	27"-44"	6X	AFP5LCS
Single Mounted	SKP, SKH, SKL, TKM, THKM	3-pole	44"-44"	6X	AFP6SKS

Notes: 1X = 1 3/8" vertical space. THLC 1/2/4 breaker no longer available.

FILLER PLATES PLUG-IN OR BOLT-ON SPECTRA™

Use to cover unused spaces.
Includes filler plate support brackets and hardware.

Space X Height[1]	Box Width Range	Switchboard Section Widths	Product Number
1X	27", 31"	35	APP1S
2X	27", 31"	35	APP2S
3X	27", 31"	35	APP3S
4X	27", 31"	35	APP4S
5X	27", 31"	35	APP5S
6X	27", 31"	35	APP6S
1X	36", 40"	40	APP1
2X	36", 40"	40	APP2
3X	36", 40"	40	APP3
4X	36", 40"	40	APP4
5X	36", 40"	40	APP5
6X	36", 40"	40	APP6
1X	44"	45	APP1W
2X	44"	45	APP2W
3X	44"	45	APP3W
4X	44"	45	APP4W
5X	44"	45	APP5W
6X	44"	45	APP6W

[1]X-height: 1X = 1 3/8"

NOTE: Spectra has been obsoleted but these kits are still available to support existing installations.

Spectra (obsoleted) bolt-on panelboard mounting hardware

Renewal parts

Mounting hardware
Order from the customer service center

MOUNTING HARDWARE PLUG-IN OR BOLT-ON SPECTRA™ ADS SWITCH REPLACEMENT LOAD BASE KITS

Includes load base, clips and lugs.

Replacement for Load Base Part Number	Load Base Ampere Rating	Load Base - No. of Poles	Load Base Voltage	Product Number
ADS22030HD	–	–	–	331A1519G1
ADS32030HD	–	–	–	331A1519G2
ADS322060HD	–	–	–	331A1519G3
ADS32060HD	–	–	–	331A1519G4
ADS26030HD	–	–	–	331A1519G5
ADS36030HD	–	–	–	331A1519G6
ADS26060HD	–	–	–	331A1519G7
ADS36060HD	–	–	–	331A1519G8
ADS36200JD	–	–	–	331A1519G12
ADS26200JD	–	–	–	331A1519G16
ADS36200JM	–	–	–	331A1519G20
ADS26200JM	–	–	–	331A1519G22
–	100A	2-pole	240V & 600V	331A1519G9
–	100A	3-pole	240V & 600V	331A1519G10
–	100A	3-pole	240V & 600V	331A1519G14
–	100A	2-pole	240V & 600V	331A1519G18
–	200A	3-pole	240V & 600V	331A1519G11
–	200A	2-pole	240V & 600V	331A1519G13
–	200A	2-pole	240V & 600V	331A1519G15
–	200A	2-pole	240V & 600V	331A1519G17
–	200A	3-pole	240V & 600V	331A1519G19
–	200A	2-pole	240V & 600V	331A1519G21
–	400A	2-pole	240V & 600V	331A1545G1
–	400A	3-pole	240V & 600V	331A1545G3
–	400A	2-pole	240V & 600V	331A1545G5
–	400A	3-pole	240V & 600V	331A1545G7
–	600A	2-pole	240V & 600V	331A1545G2
–	600A	3-pole	240V & 600V	331A1545G4
–	600A	2-pole	240V & 600V	331A1545G6
–	600A	3-pole	240V & 600V	331A1545G8
–	400-1200A	–	–	331A1543G1

MOUNTING HARDWARE SINGLE CIRCUIT BREAKER PLUG-IN SPECTRA™

Included when ordering AMC module. Only required when mounting circuit breaker on existing module.

Kit contains screws and washers to mount one circuit breaker on AMC circuit breaker mounting module.

Circuit Breaker Mounting Module Part Number	Product Number
AMC6EB AMC4SE AMC4EB AMC6EBS	AHKE1
AMC6EL	AHKEL1
AMC2FLS AMC6FJ AMC4FJ AMC3FJ AMC2FJ AMC6FLS AMC3FLS AMC4FLS	AHKF1
AMC2GM AMC6GB AMC4GB AMC3GM	AHKG1
AMC2JK AMC6JK AMC4JK AMC3JK	AHKJ1
AMC3LB AMC6LB	AHKLB1

MOUNTING HARDWARE—HARDWARE ONLY; NO BRACKETS OR STRAPS BOLT-ON SPECTRA™

Circuit Breaker Mounting Module Part Number	Product Number
FB	AHKBFB1

NOTE: Spectra has been obsoleted but these kits are still available to support existing installations.