CATALOG

ReliaGear® lighting panelboards

A safe, smart, and sustainable way to power your projects with XTreme confidence and performance



ReliaGear® lighting panelboards are more than just electrical components — they're solutions designed with your peace of mind at heart. With features like XTremely easy installation, rapid availability, and robust safety, you gain not only tangible savings in time and labor but also the comfort of knowing you've chosen a product built to perform under pressure. The customizable configurations and smart monitoring options give you a sense of control and adaptability, while ABB's trusted reputation and expert support are with you every step of the way. Whether you're facing tight deadlines, complex specifications, or critical uptime needs, you can feel confident, empowered, and supported with ReliaGear® — a system built for your demands today and your challenges tomorrow.

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ReliaGear® lighting panelboards

A smart choice to deliver XTreme performance

ReliaGear® RS lighting panelboard
1. Load end neutral
2. (4) Tmax XT4 sub-feeds with a maximum of 5 sub-feeds
3. TEYL branch breakers
4. Main lug 600 A
5. Incoming line of a bottom feed panel
6. Ground bars (not shown) are enclosure mounted in either the top or bottom gutters



Over a century of research and experience results in highly reliable, top-level products that are ready to face all future challenges such as ReliaGear® lighting panelboards.

ReliaGear® lighting panelboards efficiently and safely distribute energy from the power source to the lighting branch circuits of commercial, light industrial or advanced heavy-duty applications up to 800 A.

By integrating FORMULA A2 and SACE® Tmax® XT circuit breakers as mains and sub-feeds in the RQ, RL, RE, RS and Reliagear® Merchandised panelboards, ABB reveals a new generation of lighting panelboards with increased breaker density and advanced features to deliver XTreme performance.

ReliaGear® lighting panelboards are the safe, smart and sustainable solution for small or complex large projects that demand quick delivery, ease of installation, design flexibility and greater versatility.



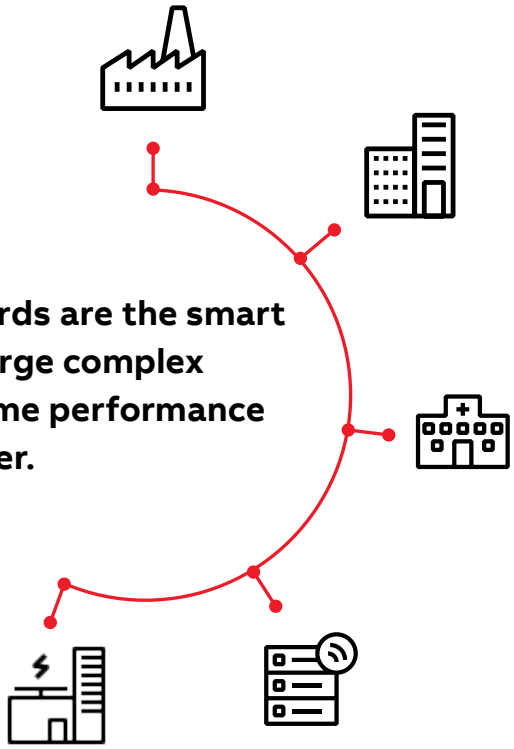
Take your projects to the XTreme

Consultants and end users
ReliaGear® lighting panelboards' state-of-the-art technology is backed by ABB's long history of success and innovation. Plus, our highly skilled and experienced engineers are at your service to support you before, during and beyond the product life cycle.

Contractors
The modular and versatile design helps speed installation and dramatically reduces labor costs.

Distributors
Same-day availability and exceptional lead times offer a competitive advantage to projects where time is critical.

OEMs and panel builders
Ease of installation, availability, commonality, functionality and XTreme performance make the ReliaGear® lighting panelboard a smart choice.



ReliaGear® panelboards are the smart choice for small or large complex projects where XTreme performance and protection matter.

Ideal for:
- Commercial and high-rise buildings
- Data centers
- Educational and institutional facilities
- Food and beverage facilities
- Health care facilities
- Infrastructure projects
- Large industrial complexes
- And more

Technologies that offer XTra value



Easy to install

XTremely easy installation
The extruded split neutrals simplify wiring and speed installation. NEMA enclosures offer ample gutter space for terminating wires and cables per the NEC. Moreover, only four mounting screws are required to mount the interior. These remarkable features help offer a time-saving and easy installation and minimize downtime.



Design flexibility

An advanced level of customization
ReliaGear® lighting panelboards feature a flexible design. Thousands of configurations are available to fit your application-specific needs. Plus, optional embedded SPD, main metering or branch circuit metering to create lighting panelboards to add an extra layer of protection and control.



Greater versatility

Breaking new ground by increasing sub-feed amperage
ReliaGear® lighting panelboards now offer increased amperages and sub-feed circuit counts to feed more downstream loads. When this is connected to advanced electronic trip units, it helps ensure continuity of service and equipment protection at all times.



Automated logistics

Exceptional lead times
The state-of-the-art automated ABB empower tool facilitates product ordering, helping users save time and money. ABB empower enables product configuration, drawings submittal, detailed quotes and order entry at any time.

Choosing the right panelboard

ReliaGear® lighting panelboards are factory assembled on rigid steel frames and equipped with circuit breakers from 15 A to 800 A. The maximum short circuit rating is equal to 65 kAIC at 240 V AC and 480/277 V AC with series rating of 100 kAIC at 480 V AC and 200 kAIC at 240 V AC.



ReliaGear® lighting panelboards can be used on the following system voltages:

United States and Canada
- 120/240 V AC; 1-phase, 3-wire
- 240 V AC; 3-phase, 3-wire
- 240/120V AC; 3-phase, 4 wire (B-phase hi-leg)
- 480 V AC; 3-phase, 3-wire
- 208Y/120 V AC; 3-phase, 4-wire
- 480Y/277 V AC; 3-phase, 4-wire
- 125/250 V DC
- 600/347 V

International
- 380 V AC, 3-phase, 3-wire
- 400 V AC, 3-phase, 3-wire
- 415 V AC, 3-phase, 3-wire
- 220Y/127 V AC, 3-phase, 4- wire
- 230Y/127 V AC, 3-phase, 4-wire
- 380Y/220 V AC, 3-phase, 4-wire
- 400Y/231V AC, 3-phase, 4-wire
- 415Y/240V AC, 3-phase, 4-wire

ReliaGear® lighting panelboards are available with multiple options.

All ReliaGear® lighting panelboards have dual-mounted feeders or single-mounted sub-feeds. The maximum ampacity of the breakers selected will determine the width of panelboard needed.



Feed location
Top or bottom

Incoming type
Main lug only (MLO), main circuit breaker (MCB, either vertically or horizontally mounted) and with feed-through lugs or sub-feed breakers

Busbar ratings
125 A, 225 A, 250 A, 400 A, 600 A, 800 A

Busbar material
Bare, silver-plated or tin-plated copper, tin-plated aluminum, heat-rated or density-rated (fully)

Available environmental enclosure types
- NEMA 1
- NEMA 3R
- NEMA 4/4X
- NEMA 12

Key features
- 30" wide options for increased access to gutter space
- Blank end walls are standard; end walls with knockouts available as an option
- NEMA 4/4X/12 enclosures made of 316 stainless steel or painted galvaneal for harsh indoor/outdoor conditions (corrosion-resistant, water-tight and dust-proof)
- Optional locks, Yale, Best, quarter-turn or Corbin, corrosion-resistant catch and locking door latch offering (doors over 48" high provide two latches)
- Optional field-installable metal directory frames available
- Lighting contactor and stud-only options are available



Do you need your lighting panelboard now?

ASK FOR RELIAGEAR® MERCHANDISED

Molded case circuit breakers

From design to manufacturing, FORMULA A2 and SACE® Tmax® XT circuit breakers set the standard for edge technologies to deliver XTreme performance. With superior quality and advanced features such as higher interrupt ratings (up to 200 kA), Ekip DIP, Ekip Hi-Touch, thermal -magnetic trip units, FORMULA A2 and Tmax XT circuit breakers support commercial, light industrial or advanced heavy-duty applications.



SACE® Tmax® XT, FORMULA A2 and legacy GE circuit breakers

			FORMULA A2	Tmax XT1	Tmax XT4	Tmax XT5	Tmax XT6
Frame size		(A)	225	125	250	400 and 600	800
Poles			2, 3	3[1]	3[1]	3[1]	3[1]
Amperage		(A)	125–225	15–125	25–250	250–600	600–800
Max. rated voltage		(V)	240	480	600	600	600
Trip units			Thermal magnetic fixed (TMF)	Thermal magnetic fixed (TMF)	Thermal magnetic fixed (TMF)	Thermal magnetic adjustable (TMA)	Thermal magnetic adjustable (TMA)
					Ekip DIP LSI	Ekip DIP LSI	Ekip DIP LSI
					Ekip Hi-Touch	Ekip Hi-Touch	
Max. interrupting rating	240 V AC	(kA)	10	100[3]	200[3]	200[3]	100[3]
	480 V AC		–	65	100	65	50

[1] 3-pole can be used in a 2-pole application
[2] 1-pole rated 15–70 A
[3] ReliaGear® lighting panelboard is rated up to 65 kAIC.
‡1-pole rated 15–60 A
†1-pole max. (kA) 14

Note: FORMULA A2 replaces TQD and THQD | XT1 or XT4 replaces SE | XT4 replaces SF | XT5 replaces SG | XT6 replaces SK
TMF: Thermo-mag fixed: No adjustments possible
TMA: Thermo-mag adjustable: Adjustable thermal (L) and magnetic (I)

SACE® Tmax® XT trip units — thermal-magnetic adjustable and Ekip DIP LSI

Thermal magnetic adjustable

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.

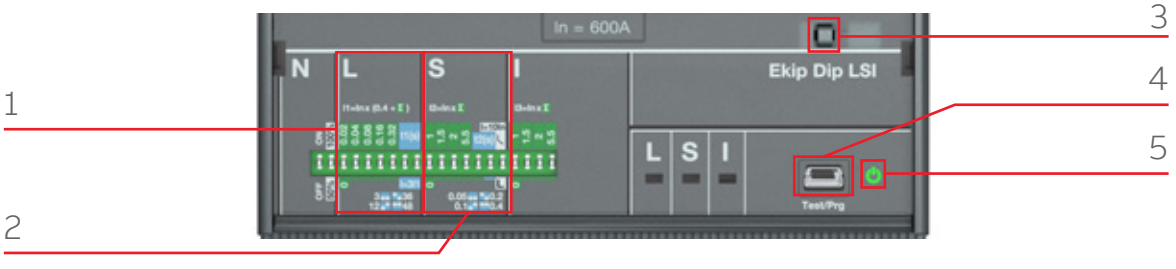




THQB (bolt-on) THQL (plug-on)	THHQB (bolt-on) THHQL (plug-on)	TEY	TEYF	TEYD	TEYH	TEYL
100	100	100	100	100	100	100
1, 2, 3	1, 2, 3	1[†],2, 3	1[†], 2, 3	1, 2, 3	1, 2, 3	1, 2, 3
15–100[(2)]	15–100[(2)]	15–100	15–100[‡]	15–125[(2)]	15–125[(2)]	15–125[(2)]
240	240	480	480	480	480	480
Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
10	22	65	65	65	65	100[(3)]
–	–	14	18	25	35	65

—

Ekip DIP LSI or adjustable L, S and I



—

Key

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

Product details

RQ

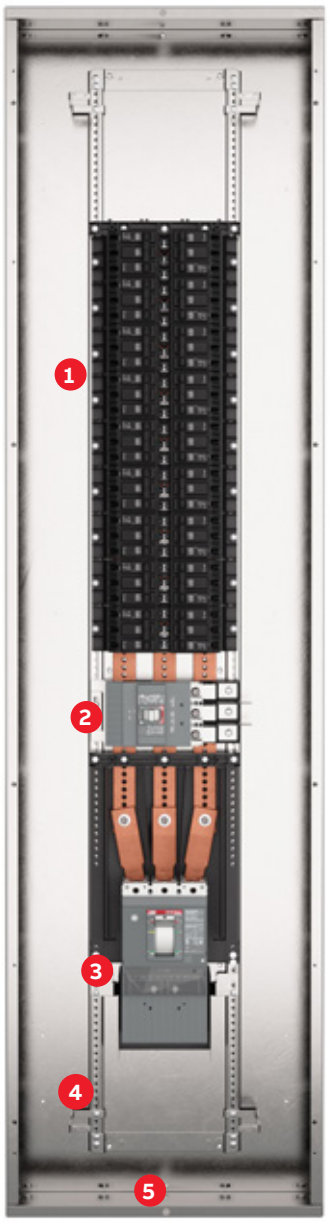
- 240 V max., 1- or 3-phase
- 125–800 A; 10–65 kAIC
- RQ: Bolt-on THQB breakers
- GFCI/GFEP up to 60 A 2P

RL

- 240 V max., 1- or 3-phase
- 125–800 A; 10–65 kAIC
- RL: Plug-in THQL breakers
- GFCI/GFEP up to 60 A 2P

ReliaGear® RQ lighting panelboard (as shown on left)

1. Bolt-on THQB branch breakers
2. FORMULA A2 horizontal sub-feed breaker
3. Main breaker: Tmax XT5, Tmax XT trip unit: thermal-mag adjustable (TMA)
4. Bottom feed



ReliaGear® RL lighting panelboard (as shown on right)

1. NEMA 1 enclosure —surface mounted
2. Plug-in THQL branch breakers
3. Sub-feed branch mounted breaker: FORMULA A2, FORMULA A2 trip unit: thermal-mag fixed (TMF)
4. Main breaker: Tmax XT5 Tmax XT trip unit: thermal-mag adjustable (TMA)
5. Bottom feed



RE

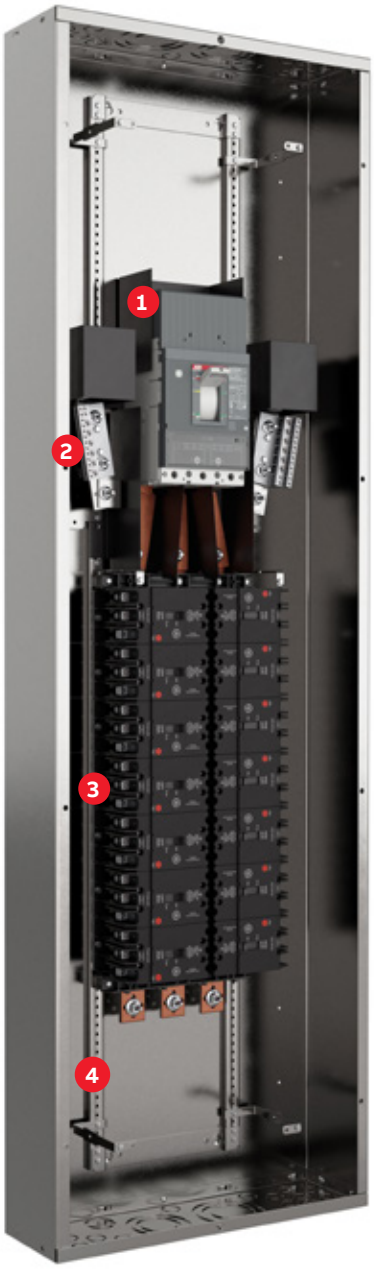
- 480Y/277 V max., 3-phase
- 125–800 A
- RE: 18 kAIC at 480Y/277 V; 65 kAIC at 240 V
- RE: Bolt-on TEY(F) breakers
- Main lugs 125–800 A up to 250 V DC and main breaker 600 A at 250 V DC max.

RS

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

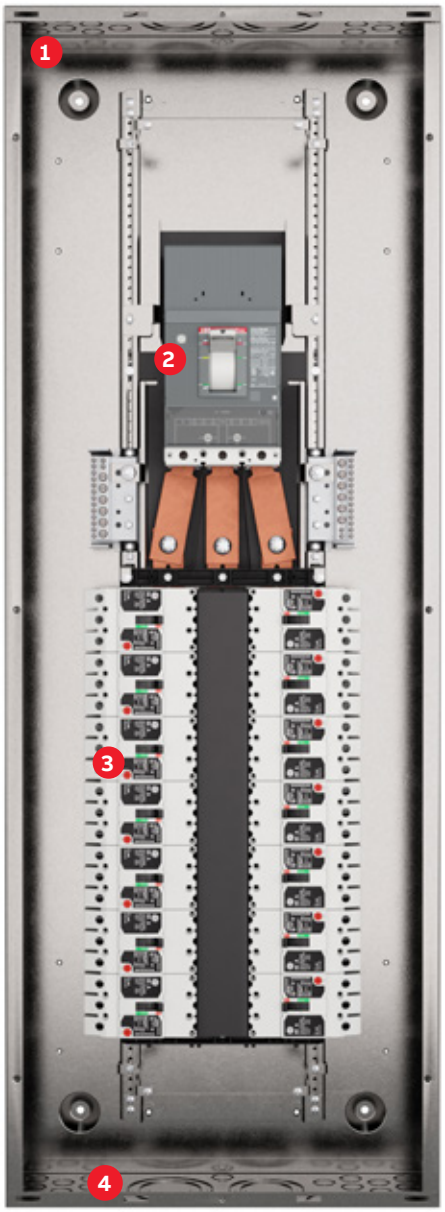
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ReliaGear® RE lighting panelboard (as shown on left)

1. Main breaker: Tmax XT5, Tmax XT trip unit: thermal-mag adjustable (TMA)
2. Skewed neutrals for 200% neutral or feed-thru lugs at 600 A
3. Bolt-on TEYF branch breakers
4. Optional feed-thru lugs require extended bus bar



—
ReliaGear® RS lighting panelboard (as shown on right)

1. Incoming cable gutter space
2. Main breaker: Tmax XT5, Tmax XT trip unit: thermal-mag adjustable (TMA)
3. Bolt-on TEYL branch breakers
4. End walls with knockouts available as an option in NEMA 1 enclosures



NEMA enclosures for ReliaGear® lighting panelboards

All NEMA enclosures are built with high-quality materials and designed to last. They all are UL/cULus listed (UL file #E21789). Plus, deep and wide options are available for 800 A panels (add “DW” suffix to catalog number, 600 A max. for Canada). The three categories below group the enclosures based on their remarkable characteristics.



NEMA 1



NEMA 3R



NEMA 4/4X/12 painted galvaneal, 30" wide



NEMA 4/4X/12 stainless steel

NEMA 1 enclosures with three fronts
NEMA 1 enclosures are available with three fronts. Blank end walls are standard, and knockouts are available optionally.

NEMA 3R
The NEMA 3R galvanealed steel enclosure is designed for indoor or outdoor conditions to provide a degree of protection against access to hazardous parts. The NEMA 3R enclosure features a gasketed door, three-point catch and padlockable handle for an extra level of protection and safety.

NEMA 4/4X/12 painted
The NEMA 4/4X/12 galvanealed steel coated enclosure includes a standard padlockable feature with one or two single-point latches depending on the enclosure size.

NEMA 4/4X/12 stainless steel
The NEMA 4/4X/12 stainless steel enclosure is rated corrosion resistant. This enclosure also includes a standard padlockable feature with one or two single-point latches depending on the enclosure size.

Note
Padlocks are not included with enclosures.

ReliaGear® lighting panelboard fronts for NEMA 1 enclosures

The robust and convenient ReliaGear® lighting panelboard fronts for NEMA 1 enclosures are available as standard, door within door and front-hinged door. They include director holders as an option to mount to the door for availability to panelboard configurations. Lighting contactor and stud-only are also available as options.



Standard



Door within door



Front hinged to box



Standard with quarter turn lock

Standard
The standard front finish with ANSI gray polyester-coded paints. This front is equipped with concealed hinges and trim adjusting screens.

Door within door
Convenient for contractors to gain easy access to equipment from the front of the panel, the inner door allows servicing of the breaker without removing the front to access the gutters for infrared scans and pulling new wires for circuits.

Front hinged to box
Front hinged to box fronts are a cost-effective option for small projects. This door allows removing just four screws to get to the outer door for gutter access. Likewise, the inner door opens to the breaker.

Optional features

RGM40 integrated power and energy meter
The RGM40 integrated power and energy meter monitors key electrical parameters of the main power coming into the panelboard. The factory-installed RGM40 meter is a completely integrated solution, ideal for tenant billing and cost allocation.

Key features
- Meets ANSI C12.20 0.2 CL and IEC 62053-22 0.2S classes
- Stores up to 2048 power quality event logs
- Easy commissioning and faster startups via micro USB port
- LED display for high visibility
- Easily configure parameters and change settings with intuitive local control
- Up to 800 A at 480/277 V

Branch circuit monitoring (BCM)
Branch circuit monitoring (BCM) helps deliver valuable and precise branch usage data on each individual branch circuit, enabling users to analyze and identify potential cost-saving actions.

Key features
- Solid-core branch circuit monitoring for 42 or 84 circuits with optional mains
- Meets IEC 61557-12, Title 24, ASHRAE 90.1, UL 61010 and ANSI C12.20
- Communicates with Modbus RTU via RS485, Modbus TCP and BACnet IP (Ethernet RJ45 10/100 Mbps)
- Encapsulated solid-core CT strips installed by the factory
- Local display captive touchscreen technology
- Included startup software



Surge protective device (SPD)
The ReliaGear® lighting panelboard offers integrated SPDs with ratings of 100 kA, 80 kA and 65 kA per mode. Box extension SPDs are also offered in the ReliaGear® lighting panelboards for new or aftermarket installations. The box extension can be attached precisely to a standard panel at the top or bottom without creating additional width or depth, satisfying customer project requirements.

Key features
- 10 modes of protection (L-N, L-G, N-G, L-L)
- Green status indicating lights, red service light
- Audible alarm with test/disable feature



ReliaGear® Merchandised lighting panelboards

For projects with short turnaround

Engineered for projects with short turn around, ReliaGear Merchandised lighting panelboards are a smart investment when operational downtime cannot be afforded. Merchandised lighting panelboards are delivered unassembled providing the flexibility to select interior, enclosure type, front, main, and sub-breaker kit to meet most application requirements immediately.

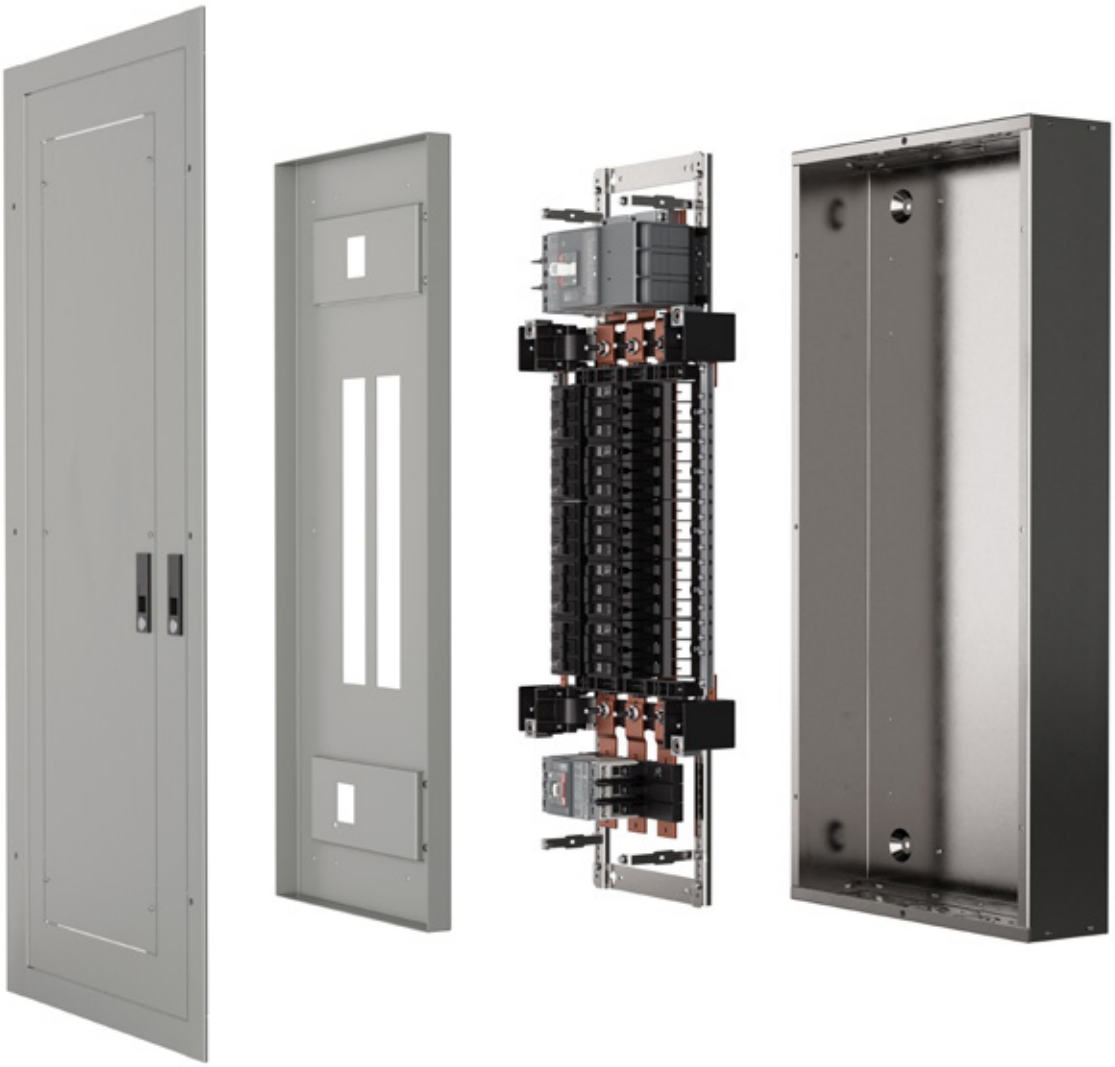
Key features

- All panels are convertible between main lugs or main breaker
- Main bus ratings of 225 A, 400 A and 600 A available
- 100–600 A available
- 240 V AC 1- or 3-phase or 480Y/277 V AC 3-phase

Applications

ReliaGear Merchandised lighting panelboards are used for small projects and non-specific applications that are needed fast.

- Emergency situations like
  - Natural disasters or
  - Property damage
- Storage units
- Strip malls
- Subways
- Small businesses
- Small buildings, and more




Engineered for projects with short turnaround, ReliaGear® Merchandised lighting panelboards are a smart investment when you can’t afford operational downtime.



Projects with short turnaround

Emergency situations, property damage, strip malls, subways, small business or buildings

XTra value at every level

A smart investment when operational downtime cannot be afforded

Unassembled

Assemble and install on site in about 30 minutes

+1K configurations

XTreme flexibility to meet your application requirements

No lead time

Available immediately on your distributors' shelves

Standard parts

7 parts to complete your selection

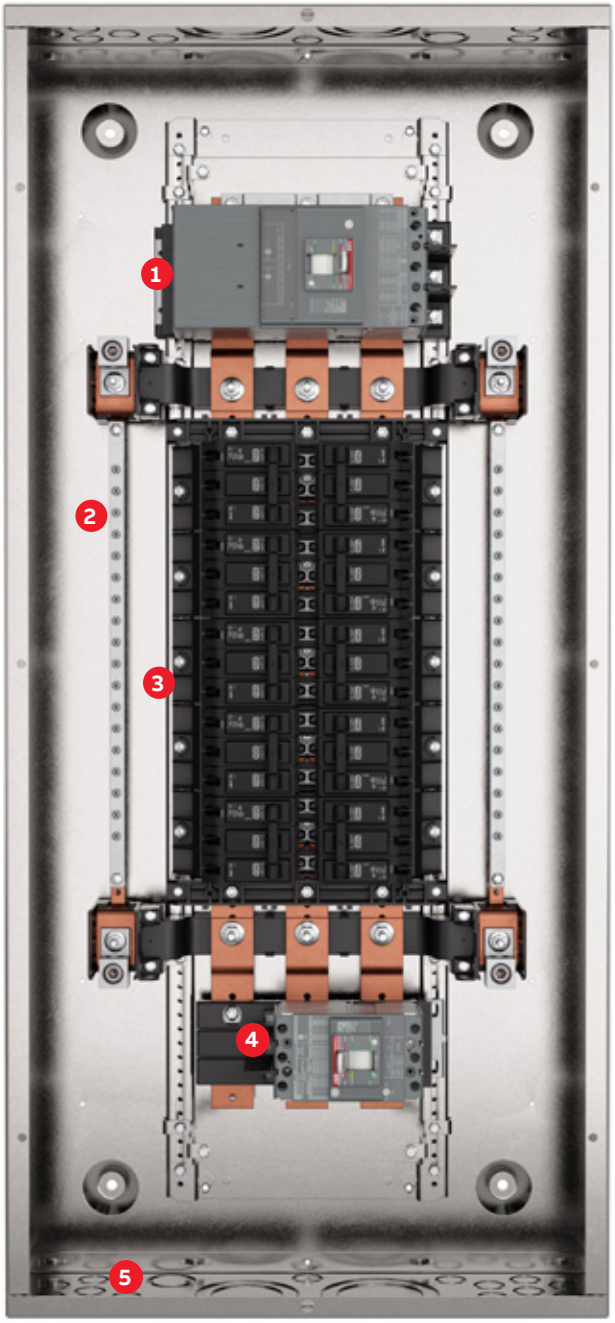
ReliaGear® Merchandised lighting panelboards

Unassembled lighting panelboards

Full-panel height neutral bar connections for point-of-ease installations with improvements in wire bending space and ease of connections to breakers.

ReliaGear® Merchandised lighting panel

1. Horizontal-mounted main breaker: Tmax XT4, Tmax XT thermal-mag adjustable (TMA) trip unit
2. Full-panel height neutral bar connections (on the right and left)
3. THQB branch breakers
4. Horizontal-mounted sub-feed breaker: FORMULA A2
5. End walls with knockouts available as an option in NEMA 1 enclosures



Product configuration



ReliaGear® Merchandised lighting panelboards offer a symmetrical design for top or bottom feed with main breaker or main lugs. With a reversible interior, there is no need to specify top or bottom feed. Modular kits are available from inventory for immediate availability to your customers in over 1,500 panel designs.

Using the empower configuration tool, follow the steps below to build a ReliaGear® Merchandised lighting panelboard:

1. Select interior
Select the interior by bus type, panel rating and number of circuits. Identify the box/front height for use in steps 2 and 3.

Copper bus

			Feed-thru		Non feed-thru		
Voltage	**Rating (amps)**	**No. of circuits**	**Product number[1]**	**Box/front height (in.)**	**Product number[1]**	**Box/front height (in.)**	**TGL2 ground bars[1,2]**
240 V AC, 1-Phase	100–225[3]	18	AQU1182RCXAXT1B4	37.5	AQU1182RCXAXB4	31.5	2
		30	AQU1302RCXAXT1B4	43.5	AQU1302RCXAXB4	37.5	3
		42	AQU1422RCXAXT1B4	49.5	AQU1422RCXAXB4	43.5	4
	400	18	AQU1184RCXAXT1B4	64.5	–	–	2
		42	AQU1424RCXAXT1B4	76.5	AQU1424RCXAXB4	64.5	4
	600	18	AQU1186RCXAXT1B4	64.5	–	–	2
		42	AQU1426RCXAXT1B4	76.5	AQU1426RCXAXB4	64.5	4
208/120 V AC, 3-Phase	100–225[3]	18	AQU3182RCXAXT1B4	37.5	AQU3182RCXAXB4	31.5	2
		30	AQU3302RCXAXT1B4	43.5	AQU3302RCXAXB4	37.5	3
		42	AQU3422RCXAXT1B4	49.5	AQU3422RCXAXB4	43.5	4
	400	18	AQU3184RCXAXT1B4	64.5	–	–	2
		42	AQU3424RCXAXT1B4	76.5	AQU3424RCXAXB4	64.5	4
	600	18	AQU3186RCXAXT1B4	64.5	–	–	2
		42	AQU3426RCXAXT1B4	76.5	AQU3426RCXAXB4	64.5	4
480/277 V AC, 3-Phase	100–225[3]	18	AEU3182RCXAXT1B4	37.5	AEU3182RCXAXB4	31.5	2
		30	AEU3302RCXAXT1B4	43.5	AEU3302RCXAXB4	37.5	3
		42	AEU3422RCXAXT1B4	49.5	AEU3422RCXAXB4	43.5	4
	400	18	AEU3184RCXAXT1B4	64.5	–	–	2
		42	AEU3424RCXAXT1B4	76.5	AEU3424RCXAXB4	64.5	4
	600	18	AEU3186RCXAXT1B4	64.5	–	–	2
		42	AEU3426RCXAXT1B4	76.5	AEU3426RCXAXB4	64.5	4

Aluminum bus

			Feed-thru		
Voltage	**Rating (amps)**	**No. of circuits**	**Product number**	**Box/front height (in.)**	**TGL2 ground bars[1,2]**
240 V AC, 1-Phase	100–225[3]	18	AQU1182RCXAXT1	37.5	2
		30	AQU1302RCXAXT1	43.5	3
		42	AQU1422RCXAXT1	49.5	4
208/120 V AC, 3-Phase	100–225[3]	18	AQU3182RCXAXT1	37.5	2
		30	AQU3302RCXAXT1	43.5	3
		42	AQU3422RCXAXT1	49.5	4
480/277 V AC, 3-Phase	100–225[3]	18	AEU3182RCXAXT1	37.5	2
		30	AEU3302RCXAXT1	43.5	3
		42	AEU3422RCXAXT1	49.5	4

TGL20 ground lug quantities

	No. of TGL20s required by panel rating		
Interior type	**100–225 A**	**400 A**	**600 A**
Main lug only	1	1	2
Main lug and feed-thru	2	2	4
Main breaker only	1	1	1
Main breaker and sub-feed	1	1	1
Main breaker and feed-thru	2	2	3

[1] For TGL20 ground lug quantities, see TGL20 ground lug quantities table above.
[2] For isolated ground, use EGS12. When using the EGS12, 3, 5 and 7 ground lugs (TGL20s) are required for 18, 30 and 42 circuits respectively.
[3] Main bus rating of 250 A for main breaker interiors and a bus rating of 225 A for main lug interiors.

2. Choose box

Select a box of the correct height (see step 1). Boxes come with blank end walls.
If end walls with knockouts are required, also order knockout end wall kit AKEW2.

Note: This is only available for 20" wide NEMA 1 enclosures.



NEMA 1



NEMA 3R



NEMA 4/4X/12 stainless steel

	NEMA 1	NEMA 3R	NEMA 4, 4X and 12 painted galvaneal	NEMA 4, 4X and 12 stainless steel
Box height (in.)	**20" Wide**	**20" Wide**	**20" Wide**	**20" Wide**
31.5	AB31B	AB313	AB314	AB314S
37.5	AB37B	AB373	AB374	AB374S
43.5	AB43B	AB433	AB434	AB434S
49.5	AB49B	AB493	AB494	AB494S
64.5	AB64B	AB643	AB644	AB644S
76.5	AB76B	AB763	AB764	AB764S

3. Add a front

Add a front of the correct height (available for NEMA 1 enclosures only)



Standard



Door within door



Front hinged to box



Standard with quarter-turn lock

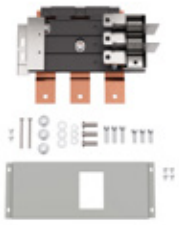
- Standard fronts are equipped with concealed hinges and trim adjusting screws hinges, trim adjusting screws and quarter turn locks.
- The door-in-door is convenient for contractors to gain easy access to equipment from the front of the panel. Door-in-door allows a contractor access to the gutters without removing the front.
- Front hinged to box is similar to door-in-door for convenient access to gutters, but a contractor must remove four screws to access the outer door.

	Standard (20" wide)		Door within door (20" wide)		Front hinged to box (20" wide)	
Front height (in.)	**Flush**	**Surface**	**Flush**	**Surface**	**Flush**	**Surface**
31.5	AF31F	AF31S	AF31FP	AF31SP	AF31FD	AF31SD
37.5	AF37F	AF37S	AF37FP	AF37SP	AF37FD	AF37SD
43.5	AF43F	AF43S	AF43FP	AF43SP	AF43FD	AF43SD
49.5	AF49F	AF49S	AF49FP	AF49SP	AF49FD	AF49SD
64.5	AF64F (T)	AF64S (T)	AF64FP (T)	AF64SP (T)	AF64FD (T)	AF64SD (T)
76.5	AF76F (T)	AF76S (T)	AF76FP (T)	AF76SP (T)	AF76FD (T)	AF76SD (T)

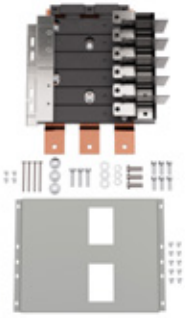
(T) Fronts with quarter-turn lock for applications with XT5 circuit breakers

4. Select main and/or sub-feed breaker kit

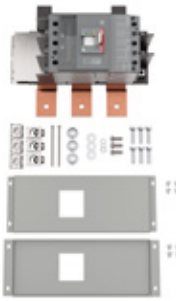
Select the main breaker kit appropriate for your interior type (see step 1), amp rating and kAIC rating.
If a sub-feed breaker is required, repeat the selection process.



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MBA13



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MBA16



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MBB33WB

Cat. no.	Breaker type
MBM124WB	XT5NU340ABFN000XXX
MBB13WB	XT4NU3225AFJ000XXX
MBB16WB	XT4NU3225AFJ000XX (2)
MBB134WB	XT5NU340ABFN000XXX
MBC33WB	XT1HU3125AFD000XXX
MBB33WB	XT4HU3225AFJ000XXX
MBB36WB	XT4HU3200AFJ000XXX (2)
MBB334WB	XT5HU340ABFN000XXX
MBM324WB	XT5HU340ABFN000XXX

				Breaker short circuit rating (kAIC)								
Interior type	Cat. no.[1]	Rating (Amps)	No. of poles	10	14	22	25	35	50	65	100	150	200
AQU1: 240 V AC 1-Phase	MB612	100	2	THQB	–	THHQB	–	–	–	–	–	–	–
	MB614	100	4	(x2) THQB	–	(x2) THHQB	–	–	–	–	–	–	–
	MBA12	225	2	A2A	–	A2N[2]	–	–	–	–	–	–	–
	MBM324	400	2	–	–	–	–	–	–	XT5N	XT5S	XT5H	XT5L
	MBM124WB	400	2[3]	–	–	–	–	–	–	XT5N	–	–	–
AQU3: 208/120 V AC, 3-Phase	MB613	100	3	THQB	–	THHQB	–	–	–	–	–	–	–
	MB616[6]	100	6	(x2) THQB	–	(x2) THHQB	–	–	–	–	–	–	–
	MBA13	225	3	A2A	–	A2N[2]	–	–	–	–	–	–	–
	MBA16	400	6	(x2) A2A	–	(x2) A2N[2]	–	–	–	–	–	–	–
	MBB33	150	3	–	–	–	–	–	–	XT4N	XT4S	XT4H	XT4L
	MBB33	225	3	–	–	–	–	–	–	XT4N	XT4S	XT4H	XT4L
	MBB13WB	225	3	–	–	–	–	–	–	XT4N	–	–	–
	MBB36[5]	400	6[5]	–	–	–	–	–	–	(x2) XT4N	(x2) XT4S	(x2) XT4H	(x2) XT4L
	MBB16WB[5]	400	6[5]	–	–	–	–	–	–	(x2) XT4N	–	–	–
	MBM334	400	3	–	–	–	–	–	–	XT5N	XT5S	XT5H	XT5L
	MBM134WB	400	3	–	–	–	–	–	–	XT5N	–	–	–
	MBM124WB[4]	400	2[3]	–	–	–	–	–	–	XT5N	–	–	–
AEU3; 480/277 V AC, 3-Phase	MB423	100	3	–	TEY	–	–	–	–	–	–	–	–
	MB426	100	6	–	(x2) TEY	–	–	–	–	–	–	–	–
	MBC33	125	3	–	–	–	XT1N	XT1S	–	XT1H	–	–	–
	MBC33WB	125	3	–	–	–	–	–	–	XT1H	–	–	–
	MBB33	150	3	–	–	–	XT4N	XT4S	–	XT4H	XT4L	XT4V	XT4X
	MBB33	225	3	–	–	–	XT4N	XT4S	–	XT4H	XT4L	XT4V	XT4X
	MBB33WB	225	3	–	–	–	–	–	–	XT4H	–	–	–
	MBB36[5]	400	6[5]	–	–	–	(x2) XT4N	(x2) XT4S		(x2) XT4H	(x2) XT4L	(x2) XT4V	(x2) XT4X
	MBB36WB[5]	400	6[5]	–	–	–	–	–	–	(x2) XT4H	–	–	–
	MBM334	400	3	–	–	–	–	XT5N	XT5S	XT5H	XT5L	XT5V	XT5X
	MBM334WB	400	3	–	–	–	–	–	–	XT5H	–	–	–
	MBM324WB[4]	400	2[3]	–	–	–	–	–	–	XT5H	–	–	–

[1] Breaker not included except for "WB" kits (where product number ends in "WB"). "WB" kits include a breaker, mounting kit and load-side lugs.
[2] Actual breaker short circuit rating is 25 kAIC.
[3] Use 2 outer poles for 3-pole applications
[4] For sub-feed application only.
[5] 6 poles of sub-feed applies only to 400 A and 600 A interiors.
[6] Can use (2) 3 pole devices only, no 2 pole allowed

5. Select alternative main breakers

- Skip step 5 if you selected a main breaker kit ending in “WB” — no breaker is required.
- To correlate breaker types with the kAIC rating in specific panelboards, see the table for step 4. For more rating details, see ReliaGear® lighting panels rating series labels (1TQC173100E0001).
- Tmax® XT5 breakers require both line and load side lug options
- Use 2 outer poles for 3-pole applications
- For TEY and THQB main breakers, see branch breakers tables in step 7.

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SACE® Tmax® XT breakers (3-pole) for use with appropriate main breaker kit (see step 4).

240 V KAIC	480 V KAIC	Breaker description	US product number	Wire range (Cu/Al)	Cables per lug
65	65	XT1H 125 TMF 30 AMPS 3P	XT1HU3030AFD000XXX	Cu Al 1x14–2/0 AWG	1
65	65	XT1H 125 TMF 60 AMPS 3P	XT1HU3060AFD000XXX	Cu Al 1x14–2/0 AWG	1
65	65	XT1H 125 TMF 100 AMPS 3P	XT1HU3100AFD000XXX	Cu Al 1x14–2/0 AWG	1
65	65	XT1H 125 TMF 125 AMPS 3P	XT1HU3125AFD000XXX	Cu Al 1x14–2/0 AWG	1
65	35	XT1S 125 TMF 100 AMPS 3P	XT1SU3100AFD000XXX	Cu Al 1x14–2/0 AWG	1
65	65	XT1N 125 TMF 125AMPS 3P	XT1NU3125AFD000XXX	Cu Al 1x14–2/0 AWG	1
65	65	XT4H 250 TMF 150 AMPS 3P	XT4HU3150AFJ000XXX	Cu Al 1x4 AWG–300 kcmil	1
65	65	XT4H 250 TMF 200 AMPS 3P	XT4HU3200AFJ000XXX	Cu Al 1x4 AWG–300 kcmil	1
65	65	XT4H 250 TMF 225 AMPS 3P	XT4HU3225AFJ000XXX	Cu Al 1x4 AWG–300 kcmil	1
65	35	XT4S 250 TMF 175 AMPS 3P	XT4SU3175AFJ000XXX	Cu Al 1x4 AWG–300 kcmil	1
65	35	XT4N 250 TMF 200AMPS 3 P	XT4NU3200AFJ000XXX		
65	35	XT4S 250 TMF 200 AMPS 3P	XT4SU3200AFJ000XXX	Cu Al 1x4 AWG–300 kcmil	1
65	35	XT4S 250 TMF 225 AMPS 3P	XT4SU3225AFJ000XXX	Cu Al 1x4 AWG–300 kcmil	1
65	35	XT4S 250 TMF 250 AMPS 3P	XT4SU3250AFL000XXX	Cu Al 1x4 AWG–300 kcmil	1
65	65	XT5H 400 TMA 400 AMPS 3P	XT5HU340ABFN000XXX	Cu Al 2x2/0 AWG–500 kcmi	2
65	25	XT4N 250 60-150 AMPS 3P ekip DIP	XT4NU3150FFJ000XXX	Cu Al 1x4 AWG–300 kcmil	1
65	50	XT5S 400 TMA 300 AMPS 3P	XT5SU330ABFN000XXX	Cu Al 2x2/0 AWG–500 kcmi	2
65	50	XT5S 400 TMA 400 AMPS 3P	XT5SU340ABFN000XXX	Cu Al 2x2/0 AWG–500 kcmi	2
65	35	XT4S 250 ekip DIP 100-250 AMPS 3P	XT4SU3250FFL000XXX	Cu Al 1x4 AWG–300 kcmil	1
65	65	XT4H 250 ekip DIP 100-250 AMPS 3P	XT4HU3250FFL000XXX	Cu Al 1x4 AWG–300 kcmil	1
65	35	XT5N 400 ekip DIP 16-400 AMPS 3P	XT5NU340AFFN000XXX	Cu Al 2x2/0 AWG–500 kcmi	2
65	65	XT5H 400 ekip DIP 16-400 AMPS 3P	XT5HU340AFFN000XXX	Cu Al 2x2/0 AWG–500 kcmi	2

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Main or sub-feed breakers for use with RQ panelboards (208/120 V AC 3-phase or 240 V AC single-phase). See step 4.

	2-pole		3-pole	
	10 kAIC	22 kAIC	10 kAIC	22 kAIC
Amp rating	Product[3] number	Product number	Product number	Product number
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



6. Select main lug kit and accessories

Select lug kit(s) for main lug and/or feed-through applications, if required. All lugs are suitable for interiors with either copper or aluminum bus. Also select any accessories required.

Main lug kits

		Standard		Oversized		200% Neutral
Lug type	**Amp rating**	**Product number**	**Wire range**	**Product number**	**Wire range**	**Product number**
Pressure	225	MLA1	6–350 kcmil	MLA2	1-600 kcmil or (2) 1/0–250 kcmil	NKA
	400	MLA41	2–600 kcmil or (2) 1/0–250 kcmil	MLA62	3/0–800 kcmil	NKA4[2]
	600	MLA61	(2) 2/0–500 kcmil	MLA62	3/0–800 kcmil	–
Copper	225	MLR1	4–450 kcmil	MLR2	1–600 kcmil	NKR
	400	MLR41	1–600 kcmil	MLR61	(2) 2/0–500 kcmil	NKR4
	600	MLR61	(2) 2/0–500 kcmil	–	–	–
Compression	225	MLT1	2/0–300 kcmil	MLT2	4/0–500 kcmil	NKT
	400	MLT42	250–600 kcmil	MLT41	500–750 kcmil[1]	NKT4
Dual	225	MLA2	2–600 kcmil or (2) 1/0–250 kcmil	–	–	–
Main	400	MLA61	(2) 2/0–500 kcmil	–	–	–

[1] 500 kcmil Cu, 750 kcmil Al.
[2] For 200% neutral feed-thru, order NKA4FT, (GO-101P). Wire range (2) 2/0–600 kcmil or (4) 4–250 kcmil.

Accessories

Service entrance[3]	
Amp rating	**Product number**
225	BNDKT
400	BNDKT6
600	BNDKT6

[3] Service entrance kit includes a bonding strap with hardware and a service entrance label.

ProCare kit[4]	
Description	**Product number**
ProCare Kit for Merchandised panelboard installation and maintenance	PROCARE

[4] ProCare Kit includes: (5) filler plate hardware kits, (9) bus stud nuts, (5) MLA1 filler plates, (2) 225A-phase barriers, (2) feed-thru barriers, (1) 400/600A-phase barrier, (50) directory cards/rating books, (50) circuit number strips (1–48), (50) circuit number strips (43–84), (5) standard locks and keys, (50) deadfront screws, (10) RQ/RE front hardware kits, (10) AD front hardware kits, (50) service disconnect labels, (50) main labels.

Spare lugs		
Frame	**Poles**	**Cat. No**
FORMULA A2	2	1SDA069983R1[5]
FORMULA A2	3	1SDA069982R1[5]
Tmax XT1	3	1SDA075837R1[5]
Tmax XT4-250A	3	1SDA075865R1[5]
Tmax XT4 (<250A)	3	1SDA075861R1[5]
Tmax XT5	3	1SDA113066R1[5]

[5] Kits include 3pcs lug

Wire-Cu-Al (Unless otherwise specified)	
Per Lug	**Range**
1	Cu 1x1 AWG-250kcmil Al 1x2/0 AWG- 300
1	Cu 1x1 AWG-250kcmil Al 1x2/0 AWG- 300
1	Cu Al 1x14-2/0 AWG
1	Cu Al 1x3/0 AWG-350kcmil[6]
1	Cu Al 1x4 AWG-300kcmil
2	Cu Al 2x2/0 AWG-500kcmil

[6] External solution: lugs to be mounted on EF terminals in the kit

7. Select bolt-on branch breakers

The tables below show standard branch breakers.

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Branch circuit breakers for use with RQ panelboards (208/120 V AC 3-phase or 240 V AC single-phase)

			10 kAIC			22 kAIC
	1-pole	2-pole	3-pole	1-pole	2-pole	3-pole
Amp rating	Product number	Product number	Product number	Product number	Product number	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

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Branch circuit breakers for use with RE panelboards (480/277 V AC 3-phase)

			14 kAIC				18 kAIC
	1-pole	2-pole	3-pole		1-pole	2-pole	3-pole
Amp rating	Product number	Product number	Product number	Amp Rating	Product number	Product number	Product number
15	TEY115	TEY215	TEY315	15	TEYF115	TEYF215	TEYF315
20	TEY120	TEY220	TEY320	20	TEYF120	TEYF220	TEYF320
30	TEY130	TEY230	TEY330	25	TEYF125	TEYF225	TEYF325
40	TEY140	TEY240	TEY340	30	TEYF130	TEYF230	TEYF330
50	TEY150	TEY250	TEY350	35	TEYF135	TEYF235	TEYF335
60	TEY160	TEY260	TEY360	40	TEYF140	TEYF240	TEYF340
70	TEY170	TEY270	TEY370	45	TEYF145	TEYF245	TEYF345
80	TEY180	TEY280	TEY380	50	TEYF150	TEYF250	TEYF350
90	TEY190	TEY290	TEY390	55	TEYF155	TEYF255	TEYF355
100	TEY1100	TEY2100	TEY3100	60	TEYF160	TEYF260	TEYF360
				65	–	TEYF265	TEYF365
				70	–	TEYF270	TEYF370
				75	–	TEYF275	TEYF375
				80	–	TEYF280	TEYF380
				85	–	TEYF285	TEYF385
				90	–	TEYF290	TEYF390
				95	–	TEYF295	TEYF395
				100	–	TEYF2100	TEYF3100

8. The selection is completed, now submit your order

For more information or support, please contact your ABB local representative or visit ReliaGear lighting panelboards product page.

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1TQC173600E0001 PG REV.Q July 2025