

BUYLOG SECTION 12

Switchboards

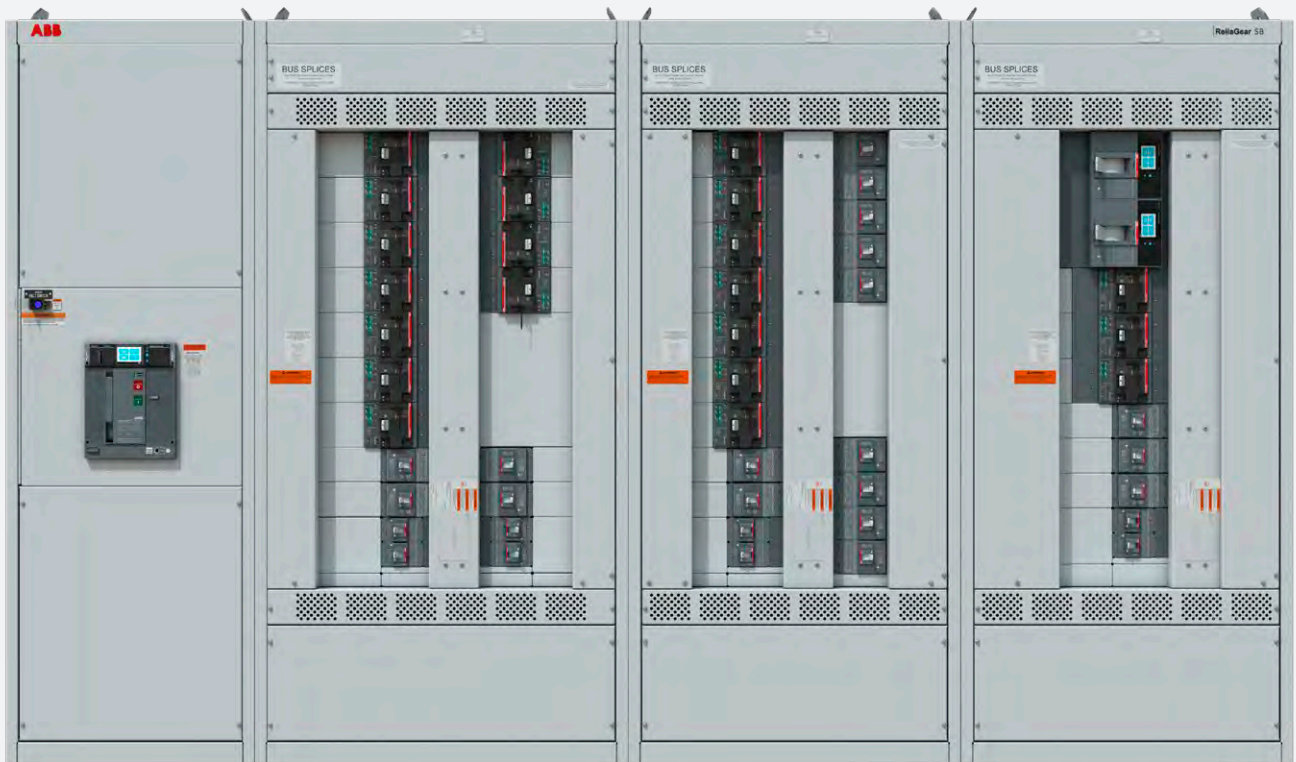


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Top switchboard publications

ReliaGear SB application guide	1VAL088301-TG
GenTower quick reference guide	DEA-504
Commercial metering	DEA-552
Selectivity tables	DET-760
ReliaGear SB installation, operations, and maintenance manual	1VAL088301-MB

Overview

ReliaGear SB Switchboards



ReliaGear® SB – Fast shipping options

Program	On demand	Merchandised	EV Grid-to-charger	EXcelerate	Configured
Lead time	2/10 weeks	7 weeks	15 weeks	🕒🕒	🕒🕒🕒
PFA (if needed)	not required	not required	not required	not required	not required
Type	SKU	SKU	SKU	Configured to order	Configured to order
Number of configurations	7	18	6	~6,000	~6,000
Current max (Amps)	4,000	4,000	4,000	4,000	4,000
Enclosure options (NEMA)	N1/N3R	N1/N3R	N3R	N1/N3R	N1/N3R
Interrupting rating	100kAIC	100kAIC	65kAIC	65/100kAIC	65/100kAIC
Voltage max (Volts)	480V AC	480V AC	480V AC	600V AC	600V AC
Utility sections	No	Yes ¹ (2000 & 4000A)	Yes ¹ (2000 & 4000A)	Yes	Yes

¹EUSERC utility only



ReliaGear® SB – Engineered and custom switchboards

Program	Engineered - Mid cycle	Engineered SB - Normal	Engineered SB - Normal +
Lead time	🕒🕒🕒	🕒🕒🕒🕒	🕒🕒🕒🕒🕒
PFA (if needed)	4 weeks	4 weeks	6 weeks
Type	Engineered to order (ETO)	Engineered to order (ETO)	Engineered to order (ETO)
Number of configurations	~10,000	Over 1M	Over 1M
Current max (Amps)	4,000	6,000	6,000
Enclosure options (NEMA)	N1/N3R	N1/N3R	N1/N3R
Interrupting rating	65/100kAIC	Up to 150kAIC ²	Up to 150kAIC ²
Voltage max (Volts)	600V AC	600V AC	600V AC
Utility sections	Yes	Yes	Yes

²200kAIC with fuses

ReliaGear SB Switchboards

Product introduction

Combining decades of GE switchboard experience with ABB's cutting edge Emax 2 and Tmax XT circuit breaker platforms, ReliaGear SB is truly the best of both worlds, providing reliability and flexibility unmatched in the industry.

Application

In response to customer demand for a safer, smarter, and more sustainable switchboard, ReliaGear SB is available to meet the ever expanding needs of the marketplace. ReliaGear SB features a safe, reliable design and groundbreaking Tmax XT plug-in circuit breakers to dramatically save time, labor, and cost, while helping to ensure greater energy efficiency and reliability. ReliaGear SB is available up to 6,000A and 600 VAC. Plug-in group-mounted distribution sections allow for devices, such as circuit breakers, to be installed anywhere on the bus stack.

Product highlights

Safe, smart, and sustainable

Safe

- Finger-safe bus stack that meets IP20 standards
- Reduced risk of contact with live parts when inserting and removing components
- Integrated Bluetooth® technology allows for viewing circuit breaker parameters from outside an arc-flash zone
- Optional SPD, Type 1 or Type 2 - 80 kA, 150 kA, 225 kA, and 300 kA for individually and group mounted

Smart

- Devices, such as circuit breakers, install anywhere on the bus stack
- Hinged gutter doors for quick, convenient cable access
- Captive, hinged splice plates for easy connections between sections
- Field upgradeable circuit breaker trip units
- Backup power transitions with Automatic Throwover (ATO) schemes available

Sustainable

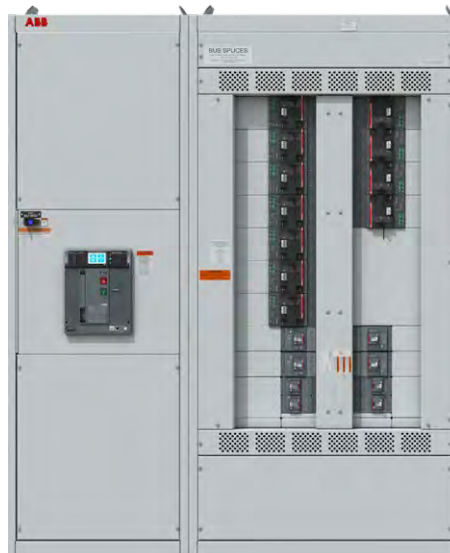
- Spring-loaded circuit breaker plug-in connectors
- Magnetic forces generated by a short circuit make an even tighter connection
- No more bolted joints that can become loose or require torque checks

Product characteristics

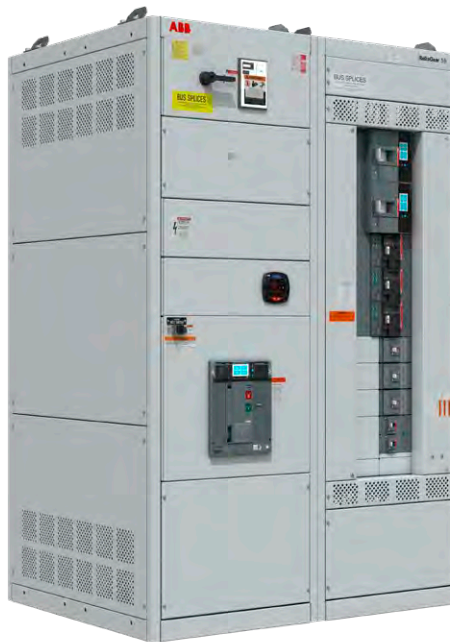
- 3P3W and 3P4W – 600/347V, 480/277V, 208/120V
- Fully rated 100 kAIC at 480V, 65 kAIC at 600V
- Main circuit breakers: up to 6000A
- Main lugs: up to 6000A
- Plug-in branch circuit breakers: 15-1200A
- NEMA 1 or 3R enclosures
- Utility CT compartments
- Seismic ratings: CBC-2019/IBC-2018 and OSHPD levels 2.5g SDS (z/h:0) and 2.0g SDS (z/h:1)
- Depths: 25-60 inches, widths: 30-60 inches, both in 5-inch increments
- Viewing window to check blade status on BPS (Bolted Pressure Switch), 800-4000A

Sales configurator

ReliaGear SB is part of the empower platform.



ReliaGear SB shown in offset configuration.



ReliaGear SB shown in one-sided configuration.

For more information refer to the following publications:

ReliaGear SB descriptive bulletin	1VAL088301-DB
ReliaGear SB installation, operations, and maintenance manual	1VAL088301-MB
ReliaGear SB application guide	1VAL088301-TG

ReliaGear SB Switchboards

Fast shipping options — Configured

ReliaGear SB – Configured

Fast lead time and great value with 5,000+ preconfigured options available in empower, ABB ReliaGear® SB – Configured switchboards use a Configured-to-Order approach that allows the customer to easily combine pre-engineered sub-assemblies to build switchboards up to six sections. The configured switchboard option in empower creates an unbeatable customer experience to deliver the right product at the right time for the right value.

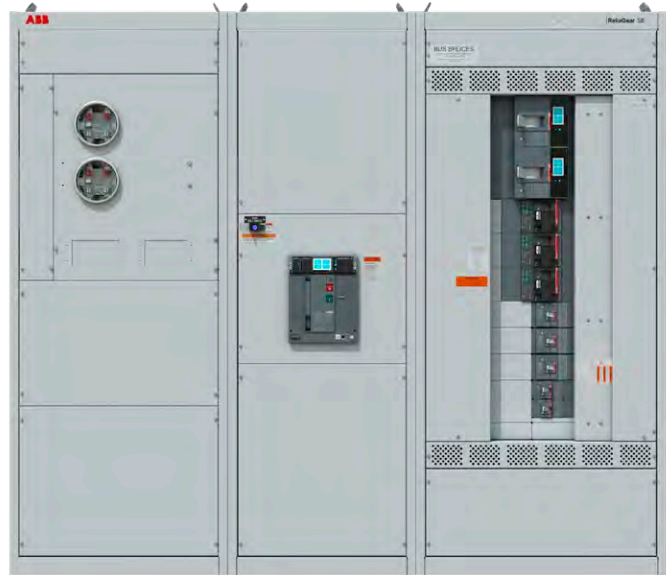
The switchboards are sent to manufacture at the moment of the order, removing engineering design time, and the drawings are immediately available in empower, making the project turnaround time fast and easy. ABB implemented the Configured switchboard option to speed up the quoting experience and improve value.

Configured highlights

- Fast lead times compared to engineered switchboards
- 5,000+ configurations of simple and mid-complexity switchboards available
- Configured-to-order (CTO) sub-assemblies reduce project cycle times
- Simple selection process results in no engineering interaction, immediate manufacturing and faster delivery
- Available in empower quote

Configured features and benefits

- 1200 to 4000 A 3P 4W
- 208Y/120, 480Y/277 and 600Y/347 V AC
- Indoor and outdoor enclosures (N1, N3R)
- Copper and aluminum bussing up to 100 kA
- Tmax XT1 to XT7 distribution circuit breakers (TMA and Ekip DIP, Touch for XT7 1200 A only)
- 100% fully rated on Tmax XT7 1200 A Ekip Touch models only
- Fixed section width (determined by amperage) and depth (front and rear aligned)
- Optional SPD Type 1 and 2, 150 kA and 225 kA for individually and group mounted
- Optional RGM meter 2200, 6000, 6010 and 7000
- Single section shipping split
- Cable in/cable out for main option
- Individually mounted feeders (IMF) Emax 2 (E2.2, E4.2, and E6.2)
- Individually mounted main (IMM)
- Group-mounted main (GMM)
- Main lug only (MLO) feeder only application
- Feeder sections can be spliced into existing Configured switchboard
- EUSERC and other utility sections up to 4000 A are available - scan QR code on following page
- BABA Build America, Buy America (2 CFR Part 184) options available



ReliaGear SB Switchboards

Fast shipping option - EXcelerate

ReliaGear SB - EXcelerate

Fast lead time and great flexibility with 5,000+ preconfigured options available in empower, ABB ReliGear SB – EXcelerate uses a configure-to-order approach that allows the customer to easily combine pre-engineered sub-assemblies to build switchboards up to six sections, thanks to the streamlined EXcelerate option in empower.

The switchboards are sent to manufacture at the moment of the order, eliminating the need for engineering, and the drawings are immediately available in empower, making the project turnaround time faster and easier.

EXcelerate highlights

- 2X faster lead times than engineered switchboards
- 5,000+ configurations of simple and mid-complexity switchboards available
- Sub-assemblies reduce project cycle times
- Simple selection process results in no engineering interaction, immediate manufacturing and faster delivery
- Available in empower quote

EXcelerate features and benefits

- 1200 to 4000 A 3P 4W
- 208Y/120, 480Y/277 and 600Y/347 V AC
- Indoor and outdoor enclosures (NEMA 1, NEMA 3R)
- Copper and aluminum bussing up to 100 kA
- Tmax® XT1 to XT7 distribution breakers (TMA and Ekip DIP, Touch for XT7 1200 A only)
- Fixed section width (determined by amperage) and depth (front and rear aligned)
- Optional SPD Type 1 and 2, 150 kA and 225 kA for individually and group mounted
- Optional RGM meter 2200, 6000, 6010 and 7000
- Single section shipping split
- Cable in / cable out for main option
- Individually mounted Emax 2 feeders (E2.2, E4.2, and E6.2)
- Individually mounted main
- Group mounted main (GMM)
- Main lug only (MLO) feeder only application
- Feeder sections can be spliced into existing EXcelerate switchboard
- EUSERC and other utility sections up to 4000 A are available - scan QR code

Utility Compartments for ReliaGear SB Switchboard



Scan the QR code to see several utility selections by filtering on utility company, state, and switchboard type.

ReliaGear SB Switchboards

Fast shipping option - Merchandised

ReliaGear SB - Merchandised

The Merchandised Switchboard is a preconfigured switchboard assembly available from inventory for immediate installation. SKU-based main breaker, distribution, and pull sections provide flexibility to select the configuration needed. Simply add breakers and accessories required for the project and you're ready to go.

Merchandised highlights

- Ready for shipment in as few as 7 weeks
- No lead time through distributor stock
- 18 Preconfigured designs with flexible breaker settings
- Catalog number driven for easy ordering

Merchandised features and benefits

- Main bus, 2000A or 4000A, silver-plated copper bus
- Emax 2 main device with GF and RELT
- 480Y/ 277V AC maximum @ 100kAIC
- Front access only with hinged doors
- Front and rear alignment for splicing sections
- Features XT dip trip units for maximum flexibility
- Qualified for seismic ratings per publication 9AKK108466A5933 and OSP-0044-10
- Enclosures available in NEMA Type 1 and 3R

Main breaker sections

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

EUSERC Main breaker sections

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

Distribution sections

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

Pull sections

Section type	Enclosure type	Dimensions (H x W x D inches) ¹	Catalog number
Blank pull	NEMA 1	90 x 15 x 35	RSBM4XXXXXN1XXP
	NEMA 3R	91 x 15 x 51	RSBM4XXXXX3RXXP

¹ NEMA 3R depth includes 5" overhang

For more information refer to the following publications:

[ReliaGear SB – On Demand Program](#)

ReliaGear SB Switchboards - Merchandised

Utility options



- EUSERC ordering codes RSBM42010CN1BEU (2000 A) and RSBM44010CN1BEU (4000 A) ship with door kit Group 1 as the standard.
- See table below for alternate door kits for other specific utilities to be ordered separately.
- Simple and fast field installation by removing the pin from the hinge and replacing with the door kit that matches the specific utility required.

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

Sampling of EUSERC utilities and associated door kits

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

¹ Group 1 door kits ship with switchboard

² If second socket is required, order 2 quantities

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

For more information refer to the following publications:

[ReliaGear SB – On Demand Program](#)

ReliaGear SB Switchboards

Fast shipping option - On Demand

ReliaGear SB Switchboard – On Demand program

The On Demand program builds on this reputation by providing customers the opportunity to easily order ReliaGear® SB switchboard in just two weeks (shipment lead times not included).

The On Demand program can potentially reduce project cycle times, helping customers gain a competitive advantage wherever 24/7 reliability is an absolute necessity.

On Demand program highlights

- Ready for shipment in as few as two weeks
- On Demand Mid-Cycle available in 10 weeks
- Seven pre-configured designs with flexible breaker settings
- Catalog number driven for easy ordering
- Potentially reduces project cycle times

On Demand features and benefits

- Main bus, 2000 A or 4000 A, copper bus
- Emax 2 main device with GF and RELT
- 480/277V AC maximum @ 100 kAIC
- ReliaGear plug-in panel type for easy installation of breakers
- Fully rated bus with provision for future extensions
- Front access only with hinged doors
- Front and rear alignment for splicing sections
- Features XT dip trip units for maximum flexibility
- RGM 2200 (2000 A) and RGM 6000 (4000 A) digital power meter provided
- Qualified for seismic ratings per publication 9AKK108466A5933 and OSP-0044-10
- Enclosures available in NEMA Type 1 and 3R

2-week cycle

	Catalog number	Current (A)	Voltage (V)	Bus bracing/ Interrupting rating (kA)	Enclosure rating	Dimensions (WxHxD - inches)	Feeder circuit breakers				Feeder circuit breakers spaces
							XT4-250 A	XT5-600 A	XT7-1000 A	XT7-1200 A	
Full switchboards	SWBSTS20E	2000	480Y/277	100	NEMA 1	70x90x35	8	2	–	–	2
	SWBSTS40E	4000	480Y/277	100	NEMA 1	90x90x35	3	2	–	2	5
	SWBSTS20EN3R	2000	480Y/277	100	NEMA3R	70x90x40 ¹	8	2	–	–	2
	SWBSTS40EN3R	4000	480Y/277	100	NEMA3R	90x90x40 ¹	3	2	–	2	5
Add-on feeder sections	SWBSTS20EDIST	2000	480Y/277	100	NEMA 1	40x90x35	8	2	–	–	2
	SWBSTS40EDIST	4000	480Y/277	100	NEMA 1	50x90x35	3	2	2	–	5
	SWBSTS40EDISTN3R	4000	480Y/277	100	NEMA3R	50x90x40 ¹	3	2	2	–	5

¹ +5" overhang

10-week cycle

	Catalog number	Current (A)	Voltage (V)	Bus bracing/ Interrupting rating (kA)	Enclosure rating	Dimensions (WxHxD - inches)	Feeder circuit breakers				Feeder circuit breakers spaces
							XT4-250 A	XT5-600 A	XT7-1000 A	XT7-1200 A	
Full switchboards	SWBSTS20E-M	2000	480Y/277	100	NEMA 1	70x90x35	8	2	–	–	2
	SWBSTS40E-M	4000	480Y/277	100	NEMA 1	90x90x35	3	2	–	2	5
	SWBSTS20EN3R-M	2000	480Y/277	100	NEMA3R	70x90x40 ¹	8	2	–	–	2
	SWBSTS40EN3R-M	4000	480Y/277	100	NEMA3R	90x90x40 ¹	3	2	–	2	5
Add-on feeder sections	SWBSTS20EDIST-M	2000	480Y/277	100	NEMA 1	40x90x35	8	2	–	–	2
	SWBSTS40EDIST-M	4000	480Y/277	100	NEMA 1	50x90x35	3	2	2	–	5
	SWBSTS40EDISTN3R-M	4000	480Y/277	100	NEMA3R	50x90x40 ¹	3	2	2	–	5

¹ +5" overhang

For more information refer to the following publications:

[ReliaGear SB – On Demand Program](#)

ReliaGear SB Switchboards – EV Grid-to-Charger

ReliaGear SB – EV Grid-to-Charger

The EV Grid-to-Charger program for ReliaGear SB low voltage switchboard from ABB allows customers to meet deadlines, mitigate supply chain risks, and adapt easily to future charger growth demands. With fast lead times, this standardized EV Grid-to-Charger offering takes the guesswork out of deployments. The program offers six pre-configured designs with flexible breaker settings, helping customers gain a competitive edge by reducing project cycle times with cost-effective designs. Future-proof designs give customers peace of mind to easily accommodate additional charger and communication expansion.

EV Grid-to-Charger highlights

- Reduce project cycle time with pre-configured designs
- Future-proof design, easy to expand
- Flexible breaker settings
- Utility designed for EUSERC applications with door kit options
- Easy to order with empower

Features and benefits

- 1200A to 4000A, 3P 4W, 480/277V AC, 65kA
- Aluminum bussing
- Outdoor enclosures (NEMA 3R) with rodent barriers
- Space heaters with thermostat
- Large hinged covers with DIN rail backplate to allow for easy field upgrades such as communications and remote control
- SACE Emax 2 main device with touch trip unit, GF and RELT
- SACE Tmax XT Dip trip units on feeders for maximum ampacity flexibility
- ReliaGear SB plug-in panel type for easy breaker installation and removal
- Fully rated bus with provision for future extensions
- Front access only with hinged doors
- Front and rear alignment for splicing sections
- Qualified for seismic ratings per publication 9AKK108466A5933 and OSP-0044-10
- Surge protection included in each board (SPD Type 2, 200kA)
- Service release open coil pre-installed on Emax 2



ReliaGear SB Switchboards – EV Grid-to-Charger

Catalog numbers

EV Grid-to-Charger switchboard¹

Catalog number	Current (A)	Voltage (V)	Bus bracing/ Interrupting rating (kA)	Enclosure rating	Dimensions (WxHxD - inches)	Main breaker	Feeder breaker (Qty)		EV charger power (kW) ²	EV charger (Qty)
							XT5H-400 A	XT5H-600 A		
RSBG4126A3RBBA	1200	480Y/277	65	NEMA 3R	45x91x30 ³	XT7H-1200	4	–	150 - 180	4
RSBG4206A3RBBA	2000	480Y/277	65	NEMA 3R	70x91x40 ³	E2.2SF	–	4	150 - 350	4
RSBG4306A3RBBA	3000	480Y/277	65	NEMA 3R	85x91x40 ³	E4.2SF	–	6	150 - 350	6
RSBG4406A3RBBA	4000	480Y/277	65	NEMA 3R	120x91x55 ³	E6.2HF	–	8	150 - 350	8

EV Grid-to-Charger (EUSERC) switchboard¹

Catalog number	Current (A)	Voltage (V)	Bus bracing/ Interrupting rating (kA)	Enclosure rating	Dimensions (WxHxD - inches)	Main breaker	Feeder breaker (Qty)		EV charger power (kW) ²	EV charger (Qty)
							XT5H-400 A	XT5H-600 A		
RSBG4206A3RBBE	2000	480Y/277	65	NEMA 3R	105x91x51 ⁴	E2.2SF	–	4	150 - 350	4
RSBG4406A3RBBE	4000	480Y/277	65	NEMA 3R	220x91x61 ⁴	E6.2HF	–	8	150 - 350	8

¹ Surge protection included in each board (SPD Type 2, 200kA)

² Level 3 chargers

³ +5" overhang

⁴ +4" overhang

For more information refer to the following publications:

[ReliaGear SB EV Grid-to-Charger brochure](#)

ReliaGear SB Switchboards – EV Grid-to-Charger

Utility options

EUSERC utilities — hard bussed

For switchboards requiring EUSERC utility sections there are two preconfigured options available.

- ReliaGear SB 2000A — EUSERC: RSBG4206A3RBBE
- ReliaGear SB 4000A — EUSERC: RSBG4406A3RBBE

Each option offers the utility section hard bussed, and it is delivered with pre-mounted Group 1 door kit (see table below). If the required utility is in Groups 2, 3 or 4, then the customer can purchase a dedicated door kit and replace the factory installed Group 1 door kit.

EUSERC utility door kits

- EUSERC catalog numbers ship with door kit Group 1 as the standard.
- For other Groups 2, 3, and 4, order door kits separately
- Simple and fast field installation by removing the pin from the hinge
- Replace with the door kit that matches the specific utility required
- See the next page for sampling of EUSERC utility list by company name for Group number



EUSERC switchboard with pre-mounted Group 1 door kit



Door kit groups

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

¹ Group 1 door kits ship factory installed in EUSERC switchboards

ReliaGear SB Switchboards – EV Grid-to-Charger

Utility options

Sampling of EUSERC utilities and associated door kits

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

¹ Electrical service assumes 3-phase, 4-wire wye configuration

² Group 1 door kits ship with switchboard

³ If second socket is required, order 2 quantities

Non-EUSERC utilities — cable connected

For non-EUSERC utility, the utility section can be cable connected to the Grid-to-Charger switchboard. When paired with an order for an EV Grid-to-Charger switchboard, a special fast track cycle can be requested when a single utility section is ordered. The process is as follows:

1. Design the utility section desired in empower Quote.
2. Add the Reference Sales Order Number in the Drawing Notes section of empower.
3. Select Short Cycle or “S” in the drop-down menu in the pricing tab to activate the fast cycle.

If a utility section is ordered together with an EV Grid-to-Charger switchboard, skip step 2 and select the Short Cycle as per step 3.



Non-EUSERC switchboard with utility section ordered separately

Commercial metering Switchboards

EUSERC West Coast utility applications

NON-EUSERC utility applications

Lever bypass

ABB commercial metering switchboards are designed specifically to serve the EUSERC market in the western United States. In addition, they serve the NON-EUSERC markets with a lever by-pass arrangement. They are UL listed and labeled and offer a wide range of installation and performance features that simplify any project.

Metering sections are assembled with two sockets pre-wired on the line and load sides. All sockets are 200A continuous duty. A full selection of tenant mains are available including circuit breakers, fusible switches and T-fuse pullouts.

Standards

Switchboard

- UL 891
- NEMA PB-2

Meter sockets

- UL 414
- ANSI C12.7

Circuit breakers

- UL 489

Fused switches

- UL 98

Other key features

- 4000 main service, 480V maximum
- Aluminum or copper bus
- 65,000A symmetrical bracing standard; 200K available
- 200A continuous duty sockets
- Hot and cold sequencing is available
- Type 3R construction available

Available sections

- Underground pull sections
- Underground pull section with main switch
- Underground pull section with main circuit breaker
- Overhead sections with main switch or circuit breaker
- CT meter sections with main switch
- CT meter sections with main switch and distribution
- CT meter sections with main circuit breaker
- CT main sections with main circuit breaker and distribution
- CT meter sections with main lugs
- Auxiliary sections (wireways, corner sections)
- Multi meter sections with fusible pullout mains
- Multi meter sections with circuit breaker mains
- Distribution sections



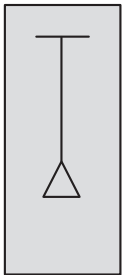
For application and size information, refer to publication DEA-552, electrification.us.abb.com, or contact your local sales office.

Commercial metering Switchboards

Section types

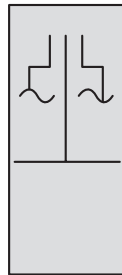
- UL Listed, EUSERC, Louisville Gas and Electric, KY Approved
- 208Y/120V, 240Y/120V or 480Y/277V
- 100 kAIC, 150 kAIC up to 4000A, 200 kAIC at 3000A and 4000A
- 400, 600, 800, 1000, 1200, 2000, 3000, 4000A
- NEMA 1 or 3R enclosure
- Bottom feed, center feed, and top busway
- Cu or Al bus
- Refer to empower for all sizing

Underground pull sections



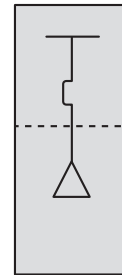
- 100 kAIC
- Bottom feed
- Cu or Al bus
- NEMA 1 or 3R

Top incoming busway



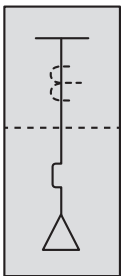
- 400A-4000A
- NEMA 1 or 3R

Half height pull sections with single main circuit breaker



- 400A-2000A
- Power Break II and Tmax XT5 and XT7 circuit breakers
- HPC and BPS fused switches
- Device padlocking
- SE barriers
- Equipment ground fault protection on 1200A-2000A (optional on 400A-1000A)
- Front access

Large tenant metering



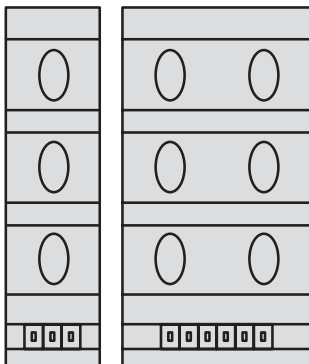
- Hot sequence metering
- XT5, XT7, PBII, BPS, HPC
- Bottom or top exit
- Device padlocking
- Equipment ground fault protection
- Mounting provisions for CTs
- Isolating barriers
- Hinged sealable cover
- Transformer rated meter socket
- Front access
- Middle or bottom mounted neutral
- Lever bypass meter sockets available
- Submains
- Rear load wire way spacing 8" minimum

Distribution panel



- Interior 2000A, Cu bus, 100 kAIC
- 13, 18x distribution space
- Bolt-on and plug-in
- 3Ph 4W
- Spectra main circuit breaker or main lug only interior
- CT compartment up to 2000A
- Front neutral access - Submains

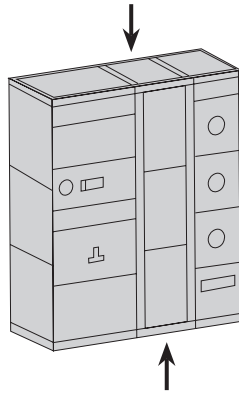
Small tenant metering



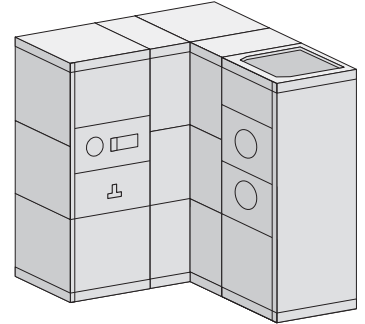
- Cold and hot sequences
- Tenant disconnects Tmax XT4, T-fuse pullout J fuse constructions:
 - Tmax XT4 (100A, 200A)
 - T-fuse pull out (100A, 200A)
- 3Ph 4W service
- 3 pole, 2 pole disconnects
- 600A-4000A horizontal bus
- 3-pack 20" width, 6-pack 35" width
- 25" minimum depth for top or bottom exit - to 60"
- Provisions for field installable socket and circuit breaker additions
- Front access
- 100% rated neutral; standard ground rating
- Middle or bottom mounted neutral
- Ringless style meter sockets
- Lever bypass meter sockets available
- Service entrance barriers
- 100 kAIC
- Top and bottom feed exit
- Test bypass block meter socket available
- Ringless cover - NO hinge (ST only)
- 5, 7, 13 jaw sockets
- Locking jaws
- Flash shields
- Line lugs at top, customer load connection at bottom
- Small tenant meters; 3- or 6-pack
- All disconnects lockable in OFF position
- Rear load wire way spacing 3" minimum

Commercial metering Switchboards

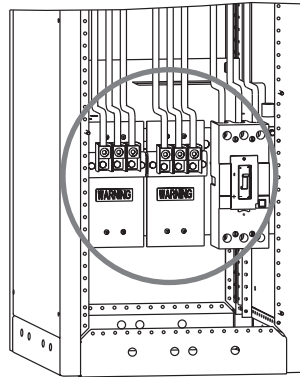
- Side load wireway**
- 15" minimum width, copper or aluminum bus



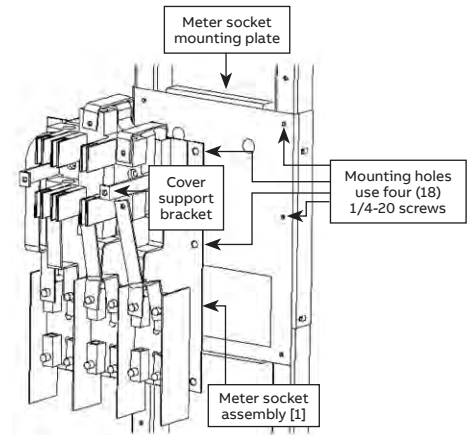
- Corner section**
- Copper or aluminum bus
 - Available in Speedi
 - In most cases a 15" section will be added on each side of the corner



- UL Approved field-installable small tenant kits**
- Prewired sections meet UL



Meter spaces



Meter socket with device space field kit

Disconnect	Rating	Product number
35 kAIC circuit breaker	277/480V, 200A	CM 203M SB600V
	277/480V, 100A	CM 103M SB600V
65 kAIC circuit breaker	277/480V, 200A	CM 203M SB600VH
	277/480V, 100A	CM 103M SB600VH
	120/208V, 200A	CM 203M SB240V
	120/208V, 100A	CM 103M SB240V
	120/240V, 200A	CM 203M SSB240V
	120/240V, 100A	CM 103M SSB240V
T-fuse pullout	277/480V, 200A	CM 203M STF600V
	120/208V, 200A	CM 203M STF240V
	120/240V, 200A	CM 201M STF240V
FD1 Switch	277/480V, 200A	CM 200M SJF600V
	120/480V, 100A	CM 200M SJF240V

Meter socket space with device space field kit

Disconnect	Rating	Product number
35 kAIC circuit breaker	277/480V, 200A	CM200A35K480V
	277/480V, 100A	CM100A35K480V
65 kAIC circuit breaker	277/480V, 200A	CM200A65K480V
	277/480V, 100A	CM100A65K480V
	120/208V, 200A	CM200A65K208V
	120/208V, 100A	CM100A65K208V
	120/240V, 200A	CM200A65K240V
	120/240V, 100A	CM100A65K240V
T-fuse pullout	277/480V, 200A	CM200ATF280V
	120/208V, 200A	CM200ATF208V
	120/240V, 200A	CM200ATF240V

Notes:

- Small tenant “spaces” do not get a meter socket nor any wiring
- “Provisions” do not get a meter socket but they do get wiring

ABB GenTower

Generator Switchboards

Product introduction

For customers who wish to provide their facility with power assurance in the event of a utility failure or onsite generator failure, the ABB GenTower offers a stand alone, permanent solution. It provides end customers the ability to easily connect a mobile generator to feed the main power distribution system in the event of a total power failure. Because the board is permanently installed to the system, there is no need to make emergency modifications to the building or main distribution board to connect a generator during the crisis or outage. This saves the building owner both labor costs and costs associated with down time at the facility.

The GenTower disconnect can be rated up to 4000 amps and it can be connected to the existing equipment either by cabling to the lugs on the main board (provided tap connections are in place), with hard bus connection (to an approved existing ABB switchboard) or through a feeder circuit breaker in the main board. The stand-alone version comes standard with a NEMA 3R enclosure, which offers the flexibility to install it at any location that may be easily accessed by a mobile generator. It meets UL 891 requirements, and in new installs it can be included as a section within a standard Spectra Series switchboard line-up. It is a logical solution for any commercial or industrial installation where the customer needs the ability to easily connect a portable generator during a prolonged power outage, or at a time when the on site generator is out of service for maintenance.

Product features and benefits

- Provides a permanent connection point for a portable emergency generator
- Generator disconnect device ratings up to 4000 amps at 65k AIC
- Connection options include color-coded, cam-lock quick connects and traditional lugs
- Cable supports help maintain proper connection of cables to quick connects
- NEMA 3R enclosure is standard for stand-alone units, optional for integral units
- A hinged trap door allows NEMA 3R protection while cables are connected to the board
- GenTower can be cabled to main switchboard (provided tap connections are in place) or direct bus-connected in certain applications
- GenTower can be offered as a section in a new Spectra Series switchboard to provide an integral solution
- Sequence of operation clearly displayed on front cover
- Can be installed anywhere space allows, providing options to choose the best location for mobile generator access
- Reduces cost and inconvenience associated with providing temporary generator power such as: modifying the existing switchboard and/or the building, and running cable from the generator to the main board



- Reduced down time provides quantifiable productivity savings for the customer
- For safety, the generator disconnect is furnished with provisions to be key interlocked with the main circuit breaker on the typical switchboard line-up
- Voltages include 120/208V or 480/277V
- Rear access versions: 800A, 1000A, 1200A, 1600A, 2000A and 2500A
- Front access versions: 800A, 1000A, 1200A, 1600A, 2000A, 2500A, 3000A and 4000A
- Single section 30"-40"W x 45"-60"D x 90"H (approx. weight 1,115 lbs)
- Double section 75"-80"W x 40"-50"D x 90"H (approx. weight 3,400 lbs)
- Available 10" front extension

For more information refer to the following publications:

GenTower generator connection switchboards and panelboards

DEA-504

ABB GenTower

Generator Switchboards

Rear connected, cable only models

Enclosure	Voltage	Amperage	Bus material	Description	Product number	Dimensions (inches)			Approx. weight
						W	D	H	(lbs.)
NEMA 3R	208/120	800	Cu	GQC SWBD 208/120V 800A R N3R	GQC208800R3R	30	60	90	1300
NEMA 3R	480/277	800	Cu	GQC SWBD 480/277V 800A R N3R	GQC480800R3R	30	60	90	1300
NEMA 3R	208/120	1000	Cu	GQC SWBD 208/120V 1000A R N3R	GQC208100R3R	30	60	90	1300
NEMA 3R	480/277	1000	Cu	GQC SWBD 480/277V 1000A R N3R	GQC480100R3R	30	60	90	1300
NEMA 3R	208/120	1200	Cu	GQC SWBD 208/120V 1200A R N3R	GQC208120R3R	30	60	90	1300
NEMA 3R	480/277	1200	Cu	GQC SWBD 480/277V 1200A R N3R	GQC480120R3R	30	60	90	1300
NEMA 3R	208/120	1600	Cu	GQC SWBD 208/120V 1600A R N3R	GQC208160R3R	30	60	90	1300
NEMA 3R	480/277	1600	Cu	GQC SWBD 480/277V 1600A R N3R	GQC480160R3R	30	60	90	1300
NEMA 3R	208/120	2000	Cu	GQC SWBD 208/120V 2000A R N3R	GQC208200R3R	30	60	90	1525
NEMA 3R	480/277	2000	Cu	GQC SWBD 480/277V 2000A R N3R	GQC480200R3R	30	60	90	1525
NEMA 3R	208/120	2500	Cu	GQC SWBD 208/120V 2500A R N3R	GQC208250R3R	40	60	90	1775
NEMA 3R	480/277	2500	Cu	GQC SWBD 480/277V 2500A R N3R	GQC480250R3R	40	60	90	1775

Front connected, cable only models

Enclosure	Voltage	Amperage	Bus material	Description	Product number	Dimensions (inches)			Approx. weight
						W	D	H	(lbs.)
NEMA 3R	480/277	800	Cu	GQC SWBD 480/277V 800A F N3R	GQC480800F3R	30	45	90	1200
NEMA 3R	208/120	800	Cu	GQC SWBD 208/120V 800A F N3R	GQC208800F3R	30	45	90	1200
NEMA 3R	480/277	1000	Cu	GQC SWBD 480/277V 1000A F N3R	GQC480100F3R	30	45	90	1200
NEMA 3R	208/120	1000	Cu	GQC SWBD 208/120V 1000A F N3R	GQC208100F3R	30	45	90	1200
NEMA 3R	480/277	1200	Cu	GQC SWBD 480/277V 1200A F N3R	GQC480120F3R	30	45	90	1200
NEMA 3R	208/120	1200	Cu	GQC SWBD 208/120V 1200A F N3R	GQC208120F3R	30	40	90	1200
NEMA 3R	480/277	1600	Cu	GQC SWBD 480/277V 1600A F N3R	GQC480160F3R	30	40	90	1200
NEMA 3R	208/120	1600	Cu	GQC SWBD 208/120V 1600A F N3R	GQC208160F3R	30	50	90	1200
NEMA 3R	480/277	2000	Cu	GQC SWBD 480/277V 2000A F N3R	GQC480200F3R	30	45	90	1424
NEMA 3R	208/120	2000	Cu	GQC SWBD 208/120V 2000A F N3R	GQC208200F3R	30	45	90	1424
NEMA 3R	480/277	2500	Cu	GQC SWBD 480/277V 2500A F N3R	GQC480250F3R	75	45	90	3656
NEMA 3R	208/120	2500	Cu	GQC SWBD 208/120V 2500A F N3R	GQC208250F3R	75	45	90	3656
NEMA 3R	480/277	3000	Cu	GQC SWBD 480/277V 3000A F N3R	GQC480300F3R	75	45	90	3701
NEMA 3R	208/120	3000	Cu	GQC SWBD 208/120V 3000A F N3R	GQC208300F3R	75	40	90	3701
NEMA 3R	480/277	4000	Cu	GQC SWBD 480/277V 4000A F N3R	GQC480400F3R	80	40	90	3945
NEMA 3R	208/120	4000	Cu	GQC SWBD 208/120V 4000A F N3R	GQC208400F3R	80	50	90	3945

Jiffy III Switchboards

Product introduction

The ABB Jiffy III utility service entrance switchboard is designed especially to address the Canadian market. The compact unit combines the electrical distribution panel, the main service disconnect and the utility metering compartment into one space-saving unit, delivering maximum installation opportunities.

The switchboard is floor mounted and rated up to a maximum 1200A, 42 kAIC @ 600V. At 15" (381 mm) deep, the electrical distribution board easily fits into the tightest areas where space is typically limited. The Jiffy III is UL and cUL¹ approved and meets the seismic requirements of IBC Zone 4 and CBC Zone 4.

Designed and approved specifically for the Canadian Utility Market², the Jiffy III is available with mains rated at 800A, 1000A and 1200A; 80% and 100% rated (with the exception of 1200A, which is 80% rated only); and with or without ground fault protection. A full line of field installable digital solid state electronic trip molded-case circuit breakers is also available. With a combination of superior features and options, the ABB Jiffy III utility service entrance switchboard not only meets your space-saving needs, but also offers total flexibility in design to meet the requirements of the project.



Features

- Switchboard styled, Type 1 indoor enclosure with driphood (NEMA 1)
- 1200A–heat rated bus max., 65kAIC @ 600V max.
- 80% and 100% rated main (1200A rated at 80% only)
- Ground fault protection optional
- Left or right hand pull sections–dependent on region
- Top or bottom feed main–dependent on region
- UL, cUL approved
- 23X of device space for feeder circuit breakers, bolt-on construction
- Seismic IBC Zone 4, CBC Zone 4, UBC Zone 4
- Heat rated aluminum bus bar standard with copper main device straps
- Accepts aluminum or copper incoming cable
- 40" W (1016 mm) x 90" H (2286 mm) x 15" D (381 mm) (main only)
- 25" W (635 mm) x 90" H (2286 mm) x 15" D (381 mm) (bussed pull section)
- 15" W (381 mm) x 90" H (2286 mm) x 15" D (381 mm) (blank pull section)
- Branch feed–MCCB 15-1200A

¹ cUL certified to meet CSA 22.2 No. 31.

² Non-BC Hydro Utilities. Contact your local ABB sales engineer for your utility requirements.

Jiffy III Switchboards

Switchboard with bussed section¹–left to right feed

Max. Amp	Main circuit breaker rating	Ground fault protection	Product number
800	80%	No	ACJ208080LR
800	80%	Yes	ACJ208080GLR
800	100%	No	ACJ208100LR
800	100%	Yes	ACJ208100GLR
1000	100%	No	ACJ210100LR
1000	100%	Yes	ACJ210100GLR
1200	80%	No	ACJ212080LR
1200	80%	Yes	ACJ212080GLR

Switchboard without bussed pull section¹– top feed

Max. Amp	Main circuit breaker rating	Ground fault protection	Product number
800	80%	No	ACJ108080T
800	80%	Yes	ACJ108080GT
800	100%	No	ACJ108100T
800	100%	Yes	ACJ108100GT
1000	100%	No	ACJ110100T
1000	100%	Yes	ACJ110100GT
1200	80%	No	ACJ112080T
1200	80%	Yes	ACJ112080GT

Switchboard with bussed section¹– right to left feed

Max. Amp	Main circuit breaker rating	Ground fault protection	Product number
800	80%	No	ACJ208080RL
800	80%	Yes	ACJ208080GRL
800	100%	No	ACJ208100RL
800	100%	Yes	ACJ208100GRL
1000	100%	No	ACJ210100RL
1000	100%	Yes	ACJ210100GRL
1200	80%	No	ACJ212080RL
1200	80%	Yes	ACJ212080GRL

Switchboard without bussed pull section¹– bottom feed

Max. Amp	Main circuit breaker rating	Ground fault protection	Product number
800	80%	No	ACJ108080B
800	80%	Yes	ACJ108080GB
800	100%	No	ACJ108100B
800	100%	Yes	ACJ108100GB
1000	100%	No	ACJ110100B
1000	100%	Yes	ACJ110100GB
1200	80%	No	ACJ112080B
1200	80%	Yes	ACJ112080GB

¹ Bus material– aluminum with copper main device straps. Bussed pull sections are not convertible from left to right or right to left. Main circuit breaker included in section.

Jiffy III Switchboards

Specifications

Product capability/specification	Jiffy III switchboard	Additional information
Enclosure type	NEMA 1	NEMA 1 with driphood
Section dimensions	40" W x 90" H x 15" D (1016 mm x 2286 mm x 381 mm) (main only) 25" W x 90" H x 15" D (635 mm x 2286 mm x 381 mm) (bussed pull section) 15" W x 90" H x 15" D (381 mm x 2286 mm x 381 mm) (blank pull section)	
Voltage	600V Max.	
Amperage	1200A - heat rated	
Bus bar	Aluminum with copper main device straps	
80% rating	800A to 1200A	
100% rating	800A to 1000A	
Standards	cUL, NEMA, NEC, PB II	
Seismic rating	IBC Zone 4, CBC Zone 4, UBC Zone 4	
Entry	Cable or bussed pull section	
Top or bottom feed	Top and bottom feed	
Lug type	Mechanical aluminum	
Incoming cable	Copper or aluminum	
Max. bus kA rating	65kAIC	
Neutral rating	100% - heat rated	
Main devices	1200A Manually operated Stationary	
Main device accessories	UV ² , ST ² , aux contact, bell alarm	Field installed
Utility CT provision	Bar type CT	
Utility PT provision	Yes	
Branch/Feeder switches	MCCB 15 – 1200A	TEY, TED, TED6CL, THED, TEDL, SFHA, SGLA, SFDA, SFHA, SKHA, SKLA Field installed
Branch accessories	UV ¹ , ST ¹ , aux contact, bell alarm	Field installed
Branch mounting	23x bolt-on construction	
Delivery time	2 weeks to ship - 3 weeks on-site	
Accessories available	Jiffy and Spectra bolt-on device mounting hardware Full filler plates for Jiffy and Spectra Jiffy and Spectra bolt-on device filler plate kit Padlocking devices for Jiffy and Spectra Load lugs	

¹ Shunt trip or UV cannot be installed in same circuit breakers.