Bussmann series Quik-Spec[™] Coordination Panelboard



Up to 200 kA SCCR in 40% less space than traditional solutions

Plus, the easiest way to achieve selective coordination

Contents

Description	Section page
Quik-Spec™ Coordination Panelboards	
QSCP Up to 400 A	2
QSCP 600 to 1200 A	3
Quik-Spec elevator disconnects	
Power Module™ switches and panels	4-5
HVAC disconnects	
Fused, non-fused, GFCI	6

12 — Quik-Spec[™] electrical gear

30-400A Quik-Spec[™] Coordination Panelboard (QSCP)

Configurable 600 Vac fused panelboard with from 30 to 400 amp mains, 15 to 100 amp 1-, 2- and 3-pole branch switches and 18, 30 or 42 branch circuit positions. Finger-safe fused branch circuit switches use the time-delay or fast-acting CUBEFuse available in ratings from 1 to 100 amps.

Ratings

- Volts
 - Up to 600 Vac
 - Up to 125 Vdc *
- Amps 30, 60, 100, 200, 225 or 400 A
- SCCR
 - 200 kA, 100 kA or 50 kA AC
 - 100 kA or 20 kA@125 Vdc*
- * Vdc rating applicable to MLO panels only. 50 and 60 amp switches are rated 125 Vdc for installed fuse amp ratings up to 40 A and 24 Vdc for installed fuse amp ratings from 45 to 60 A. 90 and 100 amp switches are rated 125 Vdc for installed fuse amp ratings up to 80 A and 24 Vdc for installed fuse amp ratings from 90 to 100 A.

Agency information

- UL Listed to UL 67
- Complies with NFPA 70

Mains

- MLO (main lug only)
- Fused disconnect
- Non-fused disconnect

Enclosure**

- NEMA 1 (top or bottom feed)
- NEMA 3R (bottom feed only)
- Consult factory for other ratings
- **Standard size 20° W x 5° D x various heights, depending on configuration. Flush mount and door-in-door not available with NEMA 3R enclosure.

Mounting

- Surface NEMA 1 and 3R
- Flush NEMA 1 only

Doors

- Single NEMA 1 and 3R
- Door-in-Door NEMA 1 only

Branch positions

• 18, 30 and 42 (factory configured)

Branch switches

- 1-, 2- and 3-pole amp rating rejecting CCP2B fused switches⁺ (field installable)
- Amp rejection breaks 15, 20, 30, 40, 50, 60, 70, 90, 100 A
- † CCP2Bs will not accept a fuse with a greater amp rating than the switch.





CCP2B 3-pole branch switch features lockout provision for 1/4" lock

Loadside lugs and disconnect

- Feed-through single and double
- Fused loadside disconnect, ≥100 to ≤200 amp (400 amp panels only)

Neutrals

• 200, 400 and 800 A unbonded and bonded

Ground

• Non-isolated or isolated

Features

- UL Listed and cULus to Canadian Standard 22.2, No. 29-M1989 make it easy to address NEC and CEC selective coordination requirements in an all fused system or upstream Eaton circuit breakers
- Value-engineered for greater flexibility with up to 400 amp mains, 200 kA SCCR, 100 A branches with 18, 30 and 42 branch positions
- Same size footprint as traditional circuit breaker panelboards and 40% smaller than standard fusible panelboards: 20" W x 5-3/4" D x various heights (depending on configuration)
- Increased safety with the current-limiting finger-safe Class CF
 CUBEFuse that helps reduce arc flash hazard levels

Optional surge protection

2017 NEC 700.8 requires a listed SPD to be installed in or on all emergency system panelboards.

Any QSCP intended for installation on an AC circuit can be ordered with an Surge Protective Device to comply with NEC 700.8.

The installed SPDs feature a remote Form C contact relay (rated at 250 Vac/0.5 A) for easy integration into a monitoring system.

Ordering

The QSCP is factory configured to the specific electrical system. To place your order, contact your Bussmann series product distributor or representative and provide the relevant electrical and circuit information for your installation.

Data sheet no. 1160

12-2

FAT-N BUSSMANN SERIES

ETON BUSSMANN SERIES

600-1200A Quik-Spec Coordination Panelboard (QSCP)

Configurable fused panelboard with 600, 800 and 1200 amp MLO mains and branch switches up to 600 amps.

Ratings

- Volts
 - Up to 600 Vac
- Up to 125 Vdc
- Amps 600, 800, 1200 A
- SCCR 200 kA

Agency information

- UL Listed to UL 67
- Complies with NFPA 70

Assembly

- · Main lug only
- Floor mount NEMA 1 enclosure
- Branch switches 1-, 2- and 3-pole, 15 to 600 A

Available branch switch fuses

- Fast-acting or time-delay Class J (time-delay LPJ or fast-acting JKS) non-CCP2B disconnects only
- High speed DFJ Class J fuses (non-CCPB disconnects only)
- Fast-acting or time-delay Class CF (time-delay TCF or fast-acting FCF) CCP2B disconnects only

Features

- Configurable panelboards with options for 600, 800 and 1200 A MLO mains and branches from 15-600 A all rated 200 kA SCCR at 600 Vac
- The CCP2B finger-safe branch switches (utilizing the UL Class CF CUBEFuse up to 100 A) features amp rating rejection to help prevent overfusing
- Fused switches make it simple to address NEC selective coordination system requirements in an all fused system or qwith upstream Eaton circuit breakers.

Ordering

The QSCP is factory configured to the specific electrical system. To place your order, contact your Bussmann series product distributor or representative and provide the relevant electrical and circuit information for your installation.



Ouik-Spec Electrical gear

Configuration and dimensions — in

Panel amps	Branch configurations	н	w	D
	(18) 1-100 A			
600	(18) 1-100 A + 200 A single		27	15
	(18) 1-100 A + 200 A twin	65		
	200 A single + 200 A single	05	27	10
	200 A single + 200 A twin			
	200 A twin + 200 A twin			
	(2) 300 A single	89	38	15
	(18) 1-100 A + 200 A single			
	(18) 1-100 A + 200 A twin	65	38	15
~~~	(2) 200 A twin			
000	(18) 1-100 A + 400 A single			
	200 A twin + 400 A single	89	38	15
	(2) 400 A single			
	(18) 1-100 A + 600 A single			
	(3) 200 A twin	00	38	15
1200	200 A twin + 600 A single	89		
	(2) 200 A twin + 400 A single			
	(3) 400 A single			
	600 A single + 400 A single + 200 A single	102	20	15
	600 A single + 400 A single + 200 A twin	102	30	
	(2) 600 A single			

12-3

## **12** — Quik-Spec[™] electrical gear

### **Quik-Spec Power Module switch and panel** all-in-one elevator disconnects

Fused power switch (PS) or panel (PMP) with shunt trip and fire safety interface provide a single point tie in with fire alarm systems.

#### Ratings

- Volts 600 Vac, 3Ø
- Amps*
  - 30-400 A (PS)
  - 30-200 A (PMP feeder switches)
- 400-800 A (PMP main switches)
- SCCR 200 kA RMS
- Contact your Bussmann series product representative for applications greater than 800 amps.

#### Agency information

- Power Module switch (PS) UL Listed (UL 98) enclosed and dead front switch Guide 96NK3917, File E182262, NEMA 1, UL 50 Listed enclosure**, cUL per Canadian Standards C22.2, No. 0-M91-CAN/CSA C22.2, No. 4-M89 Enclosed switch.
- Power Module Panel (PMP) UL 98 enclosed and deadfront switches, complies with NFPA 70
- **NEMA 12, 3R, and 4 enclosures also available.

#### **Elevator shutdown**

- ANSI/ASME A17.1, 2.8.3.3.2
- NEC 620.51(B) (elevator shutdown)
- NEC 240.12 (orderly shutdown)
- Shunt trip voltage monitoring
- NFPA 72, 6.16.4.4

#### Selective coordination

• NEC 620.62

#### Auxiliary contact (hydraulic elevator)

• NEC 620.91(C)

#### Features

- · Internally powered, relay activated shunt trip system
- Mechanically interlocked auxiliary contact
- Self-contained adherence to elevator consensus standards, NFPA 70, NFPA 72, ANSI/ASME A17.1
- Shunt trip capability
- · Fire safety signal interface
- Shunt trip voltage monitoring
- Component protection with Low-Peak™ Class J fuses
- · Lockable in the open position with three-lock capability
- · Optional key-test switch and optional pilot light for easy inspection
- No annual calibration or testing of overcurrent protection required
- · Padlockable for service-work safety and open-door "override" for troubleshooting

PS[†] Power Module Switch for single elevator applications.



PMP⁺ Power Module Panel for multiple elevator applications.

† Fused main disconnect requires Class J fuses, not supplied with switch.

#### **Typical applications**

- · Elevator disconnects
- · Computer room shunt trip disconnect
- · Fire safety interface relay

#### Accessories

• For added safety, use the Bussmann series SAMI[™] fuse covers to improve maintenance personnel protection (OSHA 1910.333, Paragraph C)

#### Ordering

 The Quik-Spec Power Module Switch and Panel are factory configured. To place your order, have all relevant electrical and circuit information contact your Bussmann series product representative.

### Data sheet no. 1145 (switch) 1146 (panel)

12-4

BUSSMANN SERIES FULL LINE CATALOG 1007 - OCTOBER 2018

## Eaton.com/bussmannseries

Courtesy of Steven Engineering, Inc - (800) 258-9200 - sales@steveneng.com - www.stevenengineering.com





#### **ETON** BUSSMANN SERIES

## Hydraulic elevators

Hydraulic elevators need battery backup to help prevent stranding passengers. To keep the elevator from moving when it's been manually shut down for maintenance, the NEC requires battery backup be connected to the elevator disconnecting means through an auxiliary contact.

However, an unintended consequence can be passengers getting stranded because of devices that open automatically (circuit breakers and disconnects utilizing a molded case switch with a trailing fuse block) will operate with a fault on their loadside. That operation also disables the battery backup and strands passengers. That's why the Power Module has a non-automatic fusible shunt trip switch. If the Power Module has a fault on its loadside, the fuses open and the battery stays enabled. Thus the Power Module ensures that battery power is enabled when the passengers need it to exit - and disabled to allow safe maintenance of the elevator and hoistway.

Scenario	Battery lowering required	Reason	Offered by Power Module	Offered by other elevator discon- nects
Power failure	Yes	Need to lower elevator and allow passengers to exit.	Yes	Yes
Fire in shaft or machine room	No	Recall is initiated by smoke detector and lowers elevator to a safe floor. Battery not needed.	Yes	Yes
Disconnect manually opened	No	Worker to perform maintenance. Elevator must remain stationary to prevent injury.	Yes	Yes
Fault on loadside of disconnect	Yes	Need to lower elevator and allow passengers to exit.	Yes	No

# QuikShip service program, 3 days for switches and 10 days for panels!

Ship-direct service within three business days for Power Module switches (PS_) and 10 business days for Power Module panels (PMP_).

Power Module switch*						
Catalog no.	Amps	Volts				
PS6T48R1KGBF3-X	60	480				
PS1T48R1KGBF3-X	100	480				
PS1T20R1KGBF3-X	100	208				
PS2T48R1KGBF3-X	200	480				
PS2T20R1KGBF3-X	200	208				
Power Module panel**						
Catalog no.	Amj	os				
PMP-400-X	400	)				
PMP-600-X	600	)				
PMP-800-X	800	)				

* Three day PS_ shipment requires ordering from catalog numbers shown, limit three units or less per order.

*10 day PMP_ shipment covers NEMA 1 enclosures with the amp ratings shown and all requirements for relay type (AC or DC), accessory options and number of switches. To order PMP_, contact your Bussmann series product representative with all relevant electrical and circuit information.

## Power Module Switch catalog number system

To order, use this build-a-code to specify your Power Module switch.



## Auxiliary contacts[†]

• B = 2 NO/NC

Fire alarm voltage monitoring relay (to monitor shunt trip voltage)

• F1 = Single-pole, F3 = Three-pole**

#### Optional NEMA enclosures (Type 1 standard with no suffix designation required)

- U = Type 3R, Y = Type 4, Z = Type 12
- * 100 Va with primary and secondary fusing (120 V secondary).
- **Only for use with R1 option.

† Required equipment.

t†Neutral lug rating should be equal to or greater than the switch amp rating.

#### Data sheet no. 1145 (switch) 1146 (panel)

BUSSMANN SERIES FULL LINE CATALOG 1007 — OCTOBER 2018 Eaton.com/bussmannseries Courtesy of Steven Engineering, Inc - (800) 258-9200 - sales@steveneng.com - www.stevenengineering.com



## Fused and non-fused AC disconnects

Fused and non-fused pullout AC disconnects in NEMA 3R enclosures. Fused versions are available in 30 and 60 amp ratings with or without selftesting GFCI receptacles. Nonfused versions are available in 60 amp versions with or without self-testing GFCI receptacles.

• 120 Vac single-phase

• 240 Vac split-phase

• Amps 30 or 60 A

Conductors

• 3-14 AWG Cu/Al

**Agency Information** 

• UL Listed to UL 1429, cUL Certified, UL Guide WGEW

Ratings

• Volts





Fused disconnect

Non-fused disconnect



with GFCI receptacle

#### Enclosure

· Metallic NEMA 3R housing with weather resistant coating

#### **Dimensions**

· See catalog numbers table

#### **Features**

- AC disconnects meet NEC Code requirements under article 440.14
- Self-testing GFCI units meet NEC Code requirements under articles 210.63, 210.8, and 406.8(B)(1)
- NEMA 3R enclosures withstand outdoor environment
- · Padlockable with two-position pullout handle to lock safety shield when in the ON position. (Not available on GFCI or 60 A switched units.) For added safety, pullout handle can be stored in the compartment in the OFF position

#### **Typical applications**

- Residential, light industrial/commercial AC and heat pump service
- Spas/whirlpools, swimming pools, pump houses
- Suitable for use as service entrance equipment with field-installed ground bar. Order catalog number DPFG

		Amp	Max Hp rating		x Hp rating Fuse Approximate dimension		sions (in)	
Catalog no.	Description	rating	120 V	240 V	class	Height	Width	Depth
Fused disconnects								
B221-30F	Pullout disconnect					8-3/4	5-3/8	2-7/8
B221-30FGFST	Pullout disconnect with GFCI	30	15	3	H or B			
B221-30FGFWTST	Pullout disconnect with weather-resistant/tamper- resistant rated GFCI			0		13	7-1/2	4-3/4
B222-60F	Pullout disconnect					8-3/4	5-3/8	2-7/8
B222-60FGFST	Pullout disconnect with GFCI	60	3	10	H or B			
B222-60FGFWTST	Pullout disconnect with weather-resistant/tamper- resistant rated GFCI		0			13	7-1/2	4-3/4
Non-fused disconnects								
B222-60NF	Pullout disconnect					8-3/4	5-3/8	2-7/8
B222-60NFGFST	Pullout disconnect with GFCI		З					
B222-60NFGFWTST	Pullout disconnect with weather-resistant/tamper- resistant rated GFCI	60	Ũ	10	*	11-3/4	6-1/2	4-1/2
B222-60NFNA	Disconnect switch		_		-	8-3/4	5-3/8	3-5/8

* Upstream overcurrent protective device (OPCD) not to exceed 60 A.

For a 30 and 60 amp pullout replacement handle, order catalog number 96-3258-4.

#### **Recommended Bussmann series fuses**

Fuse class	Catalog symbol	Operation	Available amps	Data sheet no.
н	NON-(amp)	One time, general purpose	Up to 60	1030
R	FRN-R-(amp)		Lip to 60	1019
	LPN-RK-(amp)SP (non-indicating)	Dual element, time-delay	00 10 00	1003
	LPN-RK-(amp)SPI (indicating	_	35 to 60	1003

#### Data sheet no. 1143