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Quik-Spec™ electrical gear

30-400A Quik-Spec<sup>™</sup> Coordination Panelboard (QSCP)

#### Specifications:

**Description:** Configurable fusible panelboard with 30-400A mains and branches from 1-100A rated 600Vac.

#### Ratings:

Volts: - 600Vac (or less), 125Vdc (or less)\*\*

Bus Amps: - 30, 60, 100, 200, 225 or 400A

#### **Options:**

- Main: MLO (main lug only)
  - Fused disconnect switch
  - Non-fused disconnect switch
- Enclosure: NEMA 1 or 3R
  - Standard size panelboard (20" W x 5" D x various heights)\*
  - For other ratings consult factory
  - Panel: Feed; Top & Bottom\*\*\*
    - Mounting; Surface or Flush\*\*\*\*
    - Door/Trim; Regular or Door-in-Door\*\*\*\*
  - Branch: Circuits; Up to 18, 30 and 42\*
  - Amps; Up to 100A
    - Type; 1-, 2- and 3-Pole
  - Fuse: Six-fuse spare fuse compartment — Time-delay or UPS/critical applications (fast-acting) CUBEFuse™

#### Assembly

SCCR:- 200kA, 100kA or 50kA AC,100kA or 20kA@125Vdc\*

Through-Lugs

#### & Loadside

- Disconnect: Feed-Through single and double
  - Fused loadside disconnect, ≥100A-≤200A (400A panels only)
  - Neutrals:- 200, 400 and 800A unbonded and bonded

Ground: - Non isolated or isolated

\*Depending on configuration

- \*\*125Vdc rating applicable to 80 amp or less CCPBs on MLO panels only.
- \*\*\* Top feed not available on NEMA 3R enclosure
- \*\*\*\*Flush mount and door-in-door not available with NEMA 3R enclosure





**Agency information:** UL Listed to UL 67, complies with NFPA 70 (NEC<sup>®</sup>; National Electrical Code).

#### Features and benefits:

- UL Listed and cULus to CSA Standard 22.2, No. 29-M1989 make it easy to address NEC<sup>®</sup> and CEC selective coordination requirements in an all fused system or upstream Eaton circuit breakers
- Value-engineered for greater flexibility with up to 400A mains, 200kA SCCR, 100A 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 ¾" D x various heights (depending on configuration)
- Increase safety with current-limiting finger-safe Class CF CUBEFuse that helps reduce arc flash hazard levels
- Quik-Quote online configurator makes specifying and ordering easy – delivers a full bill of material and submittal drawings for an entire project
- NEMA 1 version available for 10 day shipment with QuikShip<sup>™</sup> service

#### Ordering:

The QSCP is factory configured to the specific electrical system. Contact your Eaton distributor or representative to place your order. Have all relevant electrical and circuit information on hand.

QuikShip – 10 Business Day Shipment on all NEMA 1 configurations.

#### 600-1200A Quik-Spec<sup>™</sup> Coordination Panelboard (QSCP)

#### Specifications:

**Description:** Fusible panelboard with 600, 800 and 1200A mains and branches from 1-600A, rated 600Vac.

#### Ratings:

Volts: - 600Vac (or less), 125Vdc

Amps: - 600, 800 and 1200A

#### **Options:**

- Main: Main lug only
- Enclosure: NEMA 1 floor mount
  - Branch: 1-, 2- and 3-pole, 15-600A branch disconnect
    - Fuse: Time-delay, non-indicating (Class CF TCF\_R and/or Class J LPJ\_SP)
      - Time-delay, indicating (Class CF TCF\_ and/or Class J LPJ\_SPI)
      - Fast-acting, non-indicating (Class CF TCF\_RN and/or Class J JKS)
      - DFJ high speed Class J fuses

Agency information: Complies with NFPA 70 (NEC<sup>®</sup>; National Electrical Code<sup>®</sup>) UL Listed to UL 67, Features and benefits:

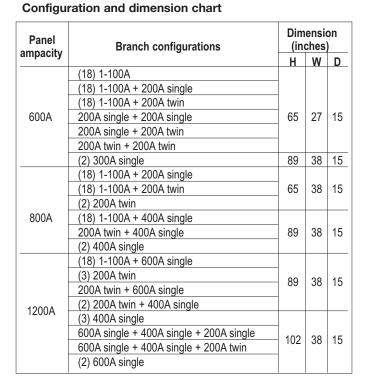
- Configurable panelboards with options for 600, 800 and 1200A mains and branches from 1-600A all rated 200kA SCCR at 600Vac
- Smallest standard fusible panelboards in the industry
- Featuring the finger-safe UL Class CF CUBEFuse with 1-100A ampacity rejection features that help prevent over fusing
- Available with time-delay or UPS/Critical application fast-acting fuses

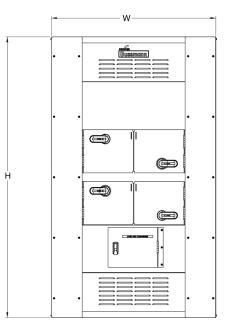


- UL listing makes it simple to address NEC<sup>®</sup> selective coordination system requirements in an all fused system
- Quik-Quote online configurator makes specifying and ordering easy – delivers a full bill of material and submittal drawings for an entire project

#### Ordering:

The QSCP is factory configured to the specific electrical system. Contact your Eaton distributor or representative to place your order. Have all relevant electrical and circuit information on hand.





Quik-Spe electric

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Quik-Spec<sup>™</sup> Power Module — all-in-one elevator disconnect

#### **PS and PMP**

#### **Bussmann series Quik-Spec Power Module**

#### Specifications:

**Description:** Fusible power switch or panel with shunt trip and fire safety interface to allow for single point tie in with fire alarm system.

#### **Ratings:**

Volts: - 600Vac, 3Ø

Amps: - 30-400A (PS)

- 30-200A (PMP feeder switches)

- 400-800A (PMP main switches\*)

Assembly

SCCR:- 200kA RMS

\*Contact Eaton for applications greater than 800A.

Agency information: Complies with NFPA 70 (NEC<sup>®</sup>; National Electrical Code<sup>®</sup>),

- Elevator shutdown ANSI/ASME A17.1, 2.8.3.3.2
  - NEC<sup>®</sup> 620.51(B) (elevator shutdown)
    - Shuldown
    - NEC<sup>®</sup> 240.12 (orderly shutdown)
- Shunt trip voltage monitoring NFPA 72, 6.16.4.4
- Selective coordination NEC<sup>®</sup> 620.62
- Auxiliary contact (hydraulic elevator) NEC<sup>®</sup> 620.91(C)
- 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.

\*\*NEMA 12, 3R, and 4 enclosures also available

Power Module Panel (PMP); UL 98 enclosed and deadfront switches.

#### Features and benefits:

- · Internally powered, relay activated shunt trip system
- Mechanically interlocked auxiliary contact
- Self-contained adherence to elevator consensus standards, NFPA 70 (NEC<sup>®</sup>). NFPA 72, ANSI/ASME A17.1
- Shunt trip capability
- · Selective coordination
- · Fire safety signal interface
- · Shunt trip voltage monitoring
- Component protection via Bussmann series Low-Peak™ Class J fuses
- UL 98 Listed for 200kA short-circuit current rating
- · 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

#### **Typical applications:**

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

#### Accessories:

• For added safety, use the Bussmann series SAMI<sup>™</sup> fuse covers to improve maintenance personnel protection (OSHA 1910.333, paragraph C)

#### Ordering:

The Quik-Spec<sup>™</sup> Power Module Switch and Panel are factory configured to the specific application. Contact your Eaton representative to place your order. Have all relevant electrical and circuit information on hand.

#### PS\*

The Quik-Spec<sup>™</sup> Power Module Switch (PS) for single elevator applications.



#### PMP\*

Power Module<sup>™</sup> Panel (PMP) for multiple elevator applications.



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

Data Sheets: 1145 (PS), 1146 (PMP)

PS Data Sheet: 1145 PMP Data Sheet: 1146

#### 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 auxillary 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 disconnects
Power failure	Yes	Need to lower elevator to allow passengers to exit.	Yes	Yes
Fire in shaft or		Recall is initiated by smoke detector and lowers elevator to		
machine room	No	a safe floor. Battery not needed.	Yes	Yes
Disconnect manually		Worker to perform maintenance. Elevator must remain		
opened	No	stationary to prevent injury.	Yes	Yes
Fault on loadside of disconnect	Yes	Need to lower elevator to allow passengers to exit.	Yes	No

#### Quik-Spec<sup>™</sup> Power Module Switch catalog numbering system

Power Module Switch catalog number system			PS	1 T48	R1 K	G	N1	В	F1	U
PS = Power Modu	le Switch ——					T		Т		
<b>Amp rating</b> <sup>†</sup> 3 = 30A 6 = 60A	1 = 100A	4 = 400A								
<b>Control transform</b> T20 = 208 volt T24 = 240 volt	T48 = 480 volt									
Fire safety interfa		10A, 12V) <sup>+</sup>								
<b>Optional key test</b> K = Key	switch									
<b>Optional pilot ligh</b> G = Green	R = Red	W = White								
<b>Optional neutral I</b> N6 = 30-60A N1 = 100A	N2 = 200A									
Auxiliary contacts B = 2 NO/NC	<b>5</b> <sup>†</sup>									
	F3 = Three-pole**	ay (to monitor shunt	trip voltage)							
<b>Optional NEMA e</b>	nclosures (Type	1 standard with no	suffix designation	ation requi	red)					

Z = Type 12Y = Type 4 U = Type 3R

\* 100Va with primary and secondary fusing (120V secondary) + Required equipment.

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\*\* Only for use with R1 option

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

Quik Ship program: switch - 3 days, panel - 10 days! 🛛 🛛	Power module	Power module panel**			
Ship-direct service within three business days for Power Module Switches	Cat numbers	Amps	Volts	Cat. numbers	Amps
	PS6T48R1KGBF3-X	60A	480V	PMP-400-X	400A
PS_) and 10 business days for Power Module Panels (PMP_).	PS1T48R1KGBF3-X	100A	480V	PMP-600-X	600A
	PS1T20R1KGBF3-X	100A	208V	PMP-800-X	800A
** 10 day PMP_ shipment covers NEMA 1 enclosures with the ampacities shown and all requirements for relay type (AC or DC), accessory options and number of switches. To order PMP_, contact your	PS2T48R1KGBF3-X	200A	480V		
Eaton representative with all relevant electrical and circuit information, we do the rest.	PS2T20R1KGBF3-X	200A	208V		

Quik-Spec<sup>™</sup> DC safety switch

#### Isolating DC circuits has never been easier or safer

- Flexibility of application
- Enhanced finger-safe design
- Flange handle operation
- Current-limiting fuses reduce arc flash hazard
- Meets UL and NEC<sup>®</sup> requirements

#### NEC 690.17 compliant label

Warns that the switch terminals may be energized in the open position



#### NEMA 3R, 12 and 4X enclosures

Meet many application requirements. 3R and 4X stainless steel well suited for isolating outdoor solar power installations

#### Type 3R dimensions

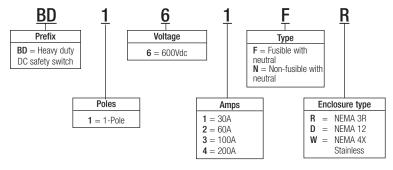
Amps	Α	В	C	Main lug capacity	Neutral lug capacity	I <sub>SC</sub>
30	16.35	8.87	9.89	#2 AWG - #14 AWG AI/Cu	#4 AWG - #14 AWG AI/Cu	19.2
60	16.35	8.87	9.89	#2 AWG- #14 AWG AI/Cu	#4 AWG - #14 AWG AI/Cu	38.4
100	22.15	11.84	9.89	1/0 AWG- #14 AWG AI/Cu	#4 AWG - #14 AWG Al/Cu	64.0
200	28.27	16.66	11.26	250kcmil - #6 AWG Al/Cu	#2 AWG - #14 AWG AI/Cu	128.0

#### Type 12 and 4X dimensions

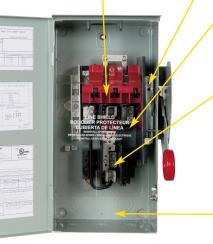
Amps	Α	В	С	Main lug capacity	Neutral lug capacity	I <sub>SC</sub>
30 and 60 Non-fusible		8.76	10.22	#2 AWG - #14 AWG AI/Cu	#4 AWG - #14 AWG AI/Cu	19.2
30 and 60	19.08	8.76	10.22	#2 AWG - #14 AWG AI/Cu	#4 AWG - #14 AWG AI/Cu	19.2
Fusible	15.00	0.70	10.22			15.2
100	24.95	11.79	10.22	1/0 AWG- #14 AWG AI/Cu	#4 AWG - #14 AWG AI/Cu	64.0
200	35.38	16.95	11.63	250kcmil - #6 AWG Al/Cu	#2 AWG - #14 AWG AI/Cu	128.0

#### DC safety switch catalog numbering system

Use this build-a-code to specify the exact Quik-Spec DC safety switch you need.







#### Door interlock

Prevents opening door while energized, but can be manually overridden for testing or inspection.

#### Clear polycarbonate deadfront

Covers energized parts to provide added protection against electrical hazards. Lineside stays in place during fuse servicing.

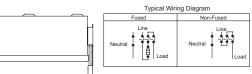
#### Fused version for added protection

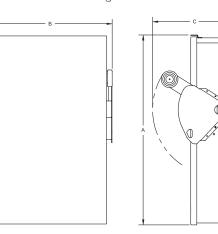
Fuse clips located on switch center pole to ensure both clips are de-energized in OFF position. Meets NEC® Article 690.16 that requires isolating the fuse from all potential supply sources. Eaton recommends using the Limitron fast-acting, current limiting PVS-R Class RK5 fuse (order separately.)

#### Conduit knockouts

For easy conductor installation

#### **Dimensions - in**





# High visibility padlockable handle Visible switch contacts

Positive visual identification of switch state

### CUBEFuse<sup>™</sup> safety switch

#### CUBEFuse<sup>™</sup> safety switch



#### **Specifications:**

**Description:** The Bussmann series CUBEFuse <sup>™</sup> Safety Switch equipped with finger-safe CUBEFuse provides superior safety and reliability for industrial customers.

Utilizing the Bussmann series Class CF time-delay and fast-acting CUBEFuse, the CUBEFuse Safety Switch provides Class J fuse performance characteristics that can help mitigate incident energy and arc flash hazard, and offers excellent component protection.

The finger-safe Bussmann series CUBEFuse requires no tools to install or replace.

#### **Agency Information:**

- UL 98 standard for enclosed deadfront switches.
- UL 50 standard for enclosures for electrical equipment.
- NEMA KS 1.
- UL Listed, File E5239.
- cUL Listed to C22.2 No.4-M89.

#### Standard features:

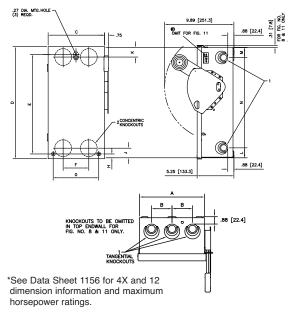
- Extended line terminal shield and finger-safe 30, 60, or 100A Bussmann series CUBEFuse™
- · 200kA short-circuit current rating
- Visible double break quick-make, quick-break rotary blade mechanism
- Triple padlocking capability
- · Mechanically interlocked door
- · 600Vac/250Vdc maximum

#### **Optional features:**

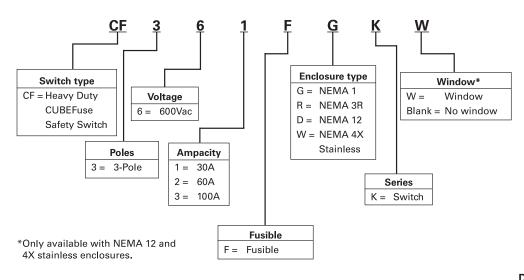
- · Viewing window for visible blades and open fuse indication
- NEMA 1, 3R, 12, 4X (stainless)
- · Suitable for use as service equipment (with neutral kit)

#### Dimensions - inches (mm)\*

#### NEMA 1 and 3R



#### **CUBEFuse Safety Switch Catalog Numbering System**



Data Sheet: 1156

#### Series B22\_\_\_

#### **Specifications:**

**Description:** Fused and non-fused rainproof pullout air conditioner units.

Dimensions: See catalog numbers table.

**Construction:** NEMA 3R metal housing with weather resistant coating.

Wire Range: 14-3 AWG, Al/Cu

#### **Ratings:**

Phase: - Single, 2-wire

Volts: - 240Vac

Amps: - 30-60A

Agency information: UL Listed to UL 1429, cUL Certified, UL Guide WGEW

#### Features and benefits:

- A/C disconnects meet NEC<sup>®</sup> requirements under articles 440.14. GFCI units meet NEC<sup>®</sup> requirements under articles 210.63, 210.8, and 406.8(B)(1).
- NEMA 3R rainproof enclosures withstand outdoor environment.
- Padlockable with two-position pullout handle to lock safety shield when in the ON position. (Not available on GF or NA units.) For added safety, pullout handle can be stored in the compartment in the off position.

#### **Typical applications:**

- · Residential, light industrial/commercial A/C and heat pump service.
- · Spas/whirlpools, swimming pools, pump houses.
- Suitable for service entrance equipment applications with field installable ground bar, kit number DPFG.

#### **Catalog numbers**

#### Fused

Fusea										
		Disconnect	Disconnect Max Hp rating		Wire range Enclosure		Fuse	Approx. dimensions (in)		
Catalog numbers	Description	rating	120V	240V	60 or 75°C Cu/Al	type	Class	Height	Width	Depth
B221-30F	30A, Pullout	30A	1.5	3	#14-3	NEMA 3R	H or R	8 3/4	5 %	2 %
B221-30FGF	30A, Pullout w/ GFCI	30A	1.5	3	#14-3	NEMA 3R	H or R	13	7 ½	4 ¾
B221-30FGFWRTR	30A, Pullout w/ WRTR- Rated GFCI	30A	1.5	3	#14-3	NEMA 3R	H or R	13	7 ½	4 ¾
B222-60F	60A, Pullout	60A	3	10	#14-3	NEMA 3R	H or R	8 3/4	5 %	2 %
B222-60FGF	60A, Pullout w/ GFCI	60A	3	10	#14-3	NEMA 3R	H or R	13	7 ½	4 ¾
B222-60FGFWRTR	60A, Pullout w/ WRTR- Rated GFCI	60A	3	10	#14-3	NEMA 3R	H or R	13	7 ½	4 ¾
Non-fused										
B222-60NF	60A, Pullout	60A	3	10	#14-3	NEMA 3R	*	8 3/4	5 %	2 %
B222-60NFGF	60A, Pullout w/ GFCI	60A	3	10	#14-3	NEMA 3R	*	11 ¾	6 ½	4 ½
B222-60NFGFWRTR	60A, Pullout w/ WRTR- Rated GFCI	60A	3	10	#14-3	NEMA 3R	*	11 ¾	6 ½	4 ½
B222-60NFNA	60A, Switch	60A	_	10	#14-3	NEMA 3R	*	8 ¾	5 %	3 %

30 and 60A pullout replacement handle: 96-3258-4.

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



Metallic fused disconnect

Metallic non-fused disconnect

Metallic non-fused disconnect with weather resistanttamper resistant GFCI receptacle.

