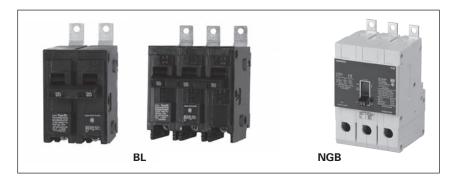
## What's **new** in molded case circuit breakers:

#### Siemens BL and NGB circuit breaker

families are now eligible to be marked "NAVAL" for use on non-combat vessels. These breakers meet the requirements of UL 489 Supplement SB. Consult your local sales office for availability.



Now available from stock Siemens offers distribution lugs for the NGG circuit breaker family for use in UL 508A control panels. These lugs will accept up to (6) copper wires from #14 to #4 gauge or aluminum wires from #6 to #4 gauge.

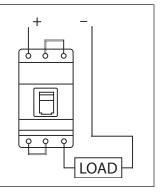




## **BQD** and **NGB** handle ties

are now released for use where single pole breakers are using shared neutrals and must be locked out simultaneously.

Siemens now offers a line of **VL circuit breakers** which are rated for use at **600VDC** with interrupting ratings between 42KAIC and 65KAIC.





# Circuit Breaker and Surge Protective Device (SPD)

By installing a Siemens Circuit Breaker and Surge Protective Device (SPD) in the load center of the residence, surge protection is provided for all branch circuits (1).

- UL and CSA, Meets UL 1449 3rd Edition
- Easy to install and perfect for retrofit
- Offer in 15 or 20 amps
- LEDs provide protection status
- (1) See warranty for detailed coverage information. www.usa.siemens.com/surge

## Ordering

In the FD through RD frames, you may order molded case circuit breakers three basic ways:

- As separately ordered frames, trip units and lugs
- As frame, trip unit and lugs ordered as one catalog number and shipped unassembled or assembled
- As Frame and Trip Unit shipped assembled and with the trip unit made non-removable, in compliance with UL 489 requirements that to be reverse fed the circuit breaker must not have an interchangeable trip unit.

These two options are described in the following:

### **Components Ordered Separately**

To get the components for a 3-pole, 400 Amp standard interrupting circuit breaker, you would order the frame (JD63F400), the trip unit (JD63T400) and six lugs (TA2J6500). This option is normally useful only if you stock and use large volumes of product and wish to reduce your inventory cost. You may stock, for example, a smaller number of frames (JD63F400) and a variety of trip units (JD63T300, JD63T350, etc.) and assemble breakers as you need them.

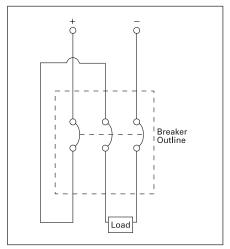
# Frame, Trip Unit and Lugs Ordered Together

If you order the catalog number JD63B400, you will receive a frame, a trip unit and 6 lugs in separate packages. By suffixing this number with "L" (e.g. JD63B400L), you will receive frame, trip unit and lugs assembled in one container. Pursuant to UL 489, a product ordered thus will have the markings "LINE" and "LOAD", and may not be "reverse fed" (with power flowing from the "OFF" end of the breaker toward the "ON" end).

### Non-Interchangeable Trip Breakers

If you place an "X" after the frame size designator (e.g. JXD63B400), you will receive a frame and trip unit assembled, with the trip unit made non-removable. If you suffix an "L" to this catalog number (e.g. JXD63B400L), you will receive the breaker, non-removable trip unit and lugs assembled. Unless you anticipate a specific need to change the breaker's ampere rating in the future, this is the preferred ordering method, as the products are assembled to Siemens' specifications in our factories. These breakers are suitable for use reverse fed according to UL 489, since the trip unit is not removable.

The smaller frames (QJ, ED and below) do not have removable trip units, and consequently are shipped only as assembled products. To add lugs, see the ordering instructions on each product's catalog page.



500V DC Wiring Configuration

# Connecting Breakers for DC Application

Most Siemens thermal magnetic trip MCCBs are applicable on direct current (dc) systems. Generally, for 250 V dc systems a two pole breaker is used, with one pole on each leg of the supply circuit. For three pole breakers applied on 500 V undergrounded DC systems, it is important to connect the power supply "zig-zag" through the breaker as shown in the figure below. This assures that the Voltage between phases on the breaker terminals is uniformly distributed.

# **Molded Case Circuit Breakers**

## **Federal Specification Classification**

Reference

W-C-375C/GEN

	Interrupting Rating				Breaker Type	
Class	Symmetrical Amperes <sup>①</sup>	Volts AC 60HZ	Poles	Range of Current Trip <sup>®</sup>	(All Circuit Breakers Meet or Exceed the Indicated Class Level)	
10a <sup>②</sup>	5,000	120/240	1 or 2	15–100	QP, BQ, QT, BL	
10b	5,000	240	2 or 3	15–100	QP, BQ, BQD, CQD, BL	
11a	7,500	120	1	15–100	QP, BQ, BQD, CQD, BL	
11b	7,500	240	2 or 3	15–100	QP, BQ, BQD, CQD, BL	
12a <sup>②</sup>	10,000	120/240	1 or 2	15–100	QP, BQ, QT, ED2, BL	
12b	10,000	240	2 or 3	15–225	QP, BQ, QJ2, ED2, BQD, CQD, BL	
12c	10,000	277	1	15–100	BQD, CQD, NGG, NGB, NEG, NEB	
13a	14,000	277	1	15–100	ED4, BQD, CQD, NGG, NGB, NEG, NEB	
13b	14,000	277/480	1, 2, or 3	15–100	ED4, BQD, CQD	
14a	22,000	120/240	1 or 2	15–100	QPH, BQH, BLH	
14b	22,000	240	2 or 3	70–400	QJH2, QJ2-H, BQH, BQD, CQD, BLH	
15a	65,000	120/240	1 or 2	15–100	HQP, HBQ, ED4, HED4, NGG, NGB, NEG, NEB	
15b	65,000	240	2 or 3	15–225	ED6, ED4, FXD6, FD6, HED4, BQD, CQD, HQJ2 NGG, NGB, NEG, NEB	
16a	100,000	480	2 or 3	15–225	CFD6, CED6	
16b	100,000	600	2 or 3	15–600	CED6, CFD6, CJD6, SCJD6, CLD6, SCLD6	
17a	200,000	600	2 or 3	70–2000	_	
18a	18,000 14,000 14,000	240 480 600	2 or 3	15–125	ED6, HED6, HHED6	
19a	22,000 18,000 14,000	240 480 600	2 or 3	70–225	FXD6, FD6, CFD6, HFD6	
20a	25,000 22,000 22,000	240 480 600	2 or 3	70–225	FXD6-A, FD6-A, CFD6, HFD6	
21a	42,000 30,000 22,000	240 480 600	2 or 3	70–800	HFD6, CFD6, JXD6(A), JD6(A), SJD6(A), HJD(A HJXD6(A), HHJD6, SHJD6(A), CJD6, SCJD6, LXD6(A), LD6(A), SLD6(A), HLD6(A), HLXD6(A) HHLD6, SLD6(A), SHLD6(A), CLD6, SCLD6, LMD6, LMXD6, HLMD6, HLMXD6, MD6, MXD6 SMD6, HMD6, HMXD6, SHMD6, CMD6, SCMD	
22a	65,000 25,000 18,000	240 480 600	2 or 3	15–125	CED6, ED6, HED6, HHED6, FXD6-A, FD6-A	
23a	65,000 35,000 25,000	240 480 600	2 or 3	70–1200	HHED6, FXD6-A, FD6-A, HFD6, HHFD6, CFD6, JD6(A), JXD6(A), SJD6(A), HJD6(A), HJXD6(A), SHJD6(A), HHJXD6, CJD6, SCJD6, LXD6(A), LD6(A), SLD6(A), HLD6(A), HLXD6(A), SHLD6(A), HHLD6, HHLXD6, CLD6, SCLD6, LMD6, LMXD6, HLMD6, HLMXD6, MD6, MXD6 SMD6, HMD6, HMXD6, SHMD6, CMD6, SCMD ND6, NXD6, SND6, HND6, HNXD6, SHND6, CND6, SCND6,	
24a	65,000 50,000 42,000	240 480 600	2 or 3	1200–2000	PD6, PXD6, HPD6, HPXD6, CPD6 RD6, RXD6, HRD6, HRXD6, SPD6, SHPD6	
25a	125,000 80,000 60,000	240 480 600	2 or 3	600–4000	HHLD6, CLD6, CMD6, CND6 SCLD6, SCMD6, SCND6, CPD6	

### **Applicable Standards**

UL489 — Molded Case Circuit Breakers and Circuit Breaker Enclosures.

UL486A — Wire Connectors and Solderless Lugs for use with copper wire

UL486B — Wire Connectors and Solderless Lugs for use with aluminum wire

UL943 — Ground Fault Interrupters (for personnel protectors)

UL1087 — Molded Case Switches

UL50 — Cabinets and Boxes
UL869 — Service Equipment
NEMA AB-1 — Molded Case Circuit
Breakers and Molded Case Switches
CSA-C22.2 No. 5, C22.2 No. 14

#### Note:

(A) Molded case circuit breakers are designed and tested in accordance to applicable portions of UL489 and meet application requirements of the National Electric Code. Unless marked otherwise, circuit breakers are 80% duty rated. (B) Molded case circuit breakers are to be connected with 60 or

<sup>75°</sup>C wire for circuit breakers having a rated ampacity of 100 amperes or less. Circuit breakers having a rated ampacity greater than 100 amperes shall only be cabled with 75°C cable unless otherwise indicated on the circuit breaker label. Exceptions to this rule are outlined in the article 110-14 C(1)(2) of the 2005 National Electric Code.

Olnterrupting ratings are not limited to the values or groups of values listed. However, the values listed are minimum values for the class specified.

<sup>&</sup>lt;sup>2</sup>Single-unit or duplex construction must be specified.

<sup>3</sup> Use minimum frame size for ampere rating.

# **Molded Case Circuit Breakers**

Revised 07/20/14

## **Reference Guide**

## Selection/Application

Thermal-Magnetic Trip Breakers

THOTHIA		agilo		5 5.00		Plug-In Breakers				Panelboard Breakers								
						QΤ	ΩP, ΩPP <sup>②</sup>	<b>ΩΡΗ,</b> <b>ΩΡΡΗ</b> <sup>②</sup>	HQP, HQPP <sup>②</sup>	Н <b>Q</b> РРН <sup>②</sup>	QPJ <sup>®</sup>	BL	BLH	HBL	BQD, BQD6	NGB	NEB	HEB
Page				7-21	7-22, 7-24	7-22, 7-24	7-20, 7-24	7-20, 7-24	7-24	7-29	7-29	7-29	7-32	7-33	7-35	7-35		
		Poles				1, 2	1, 2, 3	1, 2, 3	1, 2, 3 <sup>⑦</sup>	2	2, 3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3
		Amperes				15-50	10-125 <sup>34</sup>	10-125 <sup>34</sup>	10-125 <sup>③⑦</sup>	100-225	150-200	10-125	15-125	15-100	15-100	15-125	15-125	15-125
					1 Pole	120/240	120/240	120/240	120/240	120/240	120/240	120/240	120/240	120/240	277	347	347	347
		Volts (50/	60 Hz)		2 Pole	120/240	120/240	120/240	120/240	120/240	120/240	120/240	120/240	120/240	480/277	600/347	600/347	600/347
					3 Pole		240	240	240	240	240	240	240	240	480/277	600/347	600/347	600/347
					120V	10,000	10,000	22,000	65,000	_	_	10000	22000	65000	65000	_	_	_
					240V	10,000	10,000	22,000	65,000	100,000	10,000	10000	22000	65000	65000	100000	85000	100000
					277V	_	_	_	_	_	_	_	_	_	14000	_	_	_
			UL		347V	_	_	_	_	_	_	_	_	_	10000	_	_	_
	AC		OL.		480/277V	_	_	_	_	_	_	_	_	_	14000	25000	_	_
Ratings					480V	_	_	_	_	_	_	_	_	_	_	_	35000	65000
		Interrupt			600/347V	_	_	_	_	-	_		_	_	10000	14000	_	_
		Ratings			600V	-	_	_	_	_	_	_	_	_	_	_	22000	25000
				220/240\/	I <sub>cu</sub>	_	_	_	_	_	_	_	_	_	_	65000	85000	100000
				220/240V	I <sub>cs</sub>	_	_	_	_	-	_		_	_	_	32000	42000	50000
			IEC 947-2 50/60 Hz		I <sub>cu</sub>		_	_	_	_	_	_	_	_	_	25000	40000	70000
					I <sub>cs</sub>	_	_	_	_	_	_	_	_	_	_	12000	20000	35000
				500V	I <sub>cu</sub>	_	_	_	_	_	_	_	_	_	_	_	_	_
				500 V	I <sub>cs</sub>	_	_	_	_	_	_	_	_	_	_	_	_	_
	DC	C Rating 2-Pole 3-Pole		2-Pole	_	_	_	_	_	_	_	_	_	14000	14000	35000	42000	
	DC			3-Pole	_	_	_	_	_	_	_	_	_	_	_	35000	42000	
	10-50A Height 10-60A 55-125A			10-50A	_	2.87	2.87	_	_	_	3.56	3.56	3.75	4.50	5.00	5.50	5.50	
				10-60A	3.12	_	_	_	_	_	_	_	_	_	_		_	
D:				55-125A	_	3.12	3.12	3.12	3.12	3®	3.75	3.75	3.75	4.50	5.00	5.50	5.50	
Dimensions in Inches	1-Pole			1-Pole	1.00	1.00	1.00	1.00	_	_	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
III IIIciico	Wid	th			2-Pole	2.00①	2.00②	2.00②	2.00	4.00②	9	2.00	2.00	2.00	2.00	2.00	2.00	2.00
		3-Pole			3-Pole	2.00 <sup>①</sup>	3.00	3.00	3.00	_	3.00®	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	Depth				2.06	2.37	2.37	2.37	2.37	2.34	2.37	2.37	2.37	2.69	2.71	3.00	3.00	
	The	rmal and f	Fixed mag	netic Trip		/	/	/	/	√	√	$\sqrt{}$	$\checkmark$	/	<b>√</b>	√	$\checkmark$	/
0	The	rmal and A	Adjustable	Magnetic	trip	_	_	_	_	_	_			_		_		_
Overcurrent Devices	Adju	ustable Ma	agnetic trip	only		_	_	_	_	_	_	_	_	_	_			
201.000	Mot	or Circuit	Protector			_	_	_	_	_	_	_	_	_	_	_		_
	Mol	ded Case	Switch	_		_	√⊚	_	_	_	_	_		_	_	_	$\checkmark$	/
	Und	lervoltage	Trip			_	_	_	_	_	_	_	_	_	√		√	/
	Shu	nt Trip				_	√⊚	√⊚	è	è	_	√	$\checkmark$	/	√	√	√	√
Accessories &	Aux	ilary Swite	ch			_	_	_	_	√8	_	$\checkmark$	$\checkmark$	√	√	√	√	/
Modifications	Alar	m Switch				_	_	_	_	_	_	_	_	_	<b>√</b>	√	$\checkmark$	/
	Med	hanical In	terlock			_	_		_		_	_		_	_		$\checkmark$	/
	Fun	gus Proofi	ing (ref. pa	ge 7-91)		_	_	_	_		_	√	√	/	√	/	$\checkmark$	/
La de Cala de	Тур	e 1 - Indoc	or Surface			/	√	/	/	√								
Individual Enclosures	Тур	e 1 - Indoo	or, Flush				√	√	/	√								
Linciosures	Тур	e 3R - Out	door-Rain	oroof		<u> </u>	/	/	/	√	_							
	Type 3R - Outdoor-Rainproof					1.*	1.*											











For inches / millimeters conversion, see Application Data section. For Plug-in Breakers, see Load Centers & Circuit Breakers section.

- ①BQD6 CSA certified 10,000A @ 600Y/347V 15-70A only.
- ©Types QPP, QPPH, HQPP and HQPPH are special 2-pole configurations for metering equipment. Amperage range = 125–225A, width = 4 in.
- 3 Single pole breakers available in ratings 10-70A only.
- 4 125A, 2-pole 120/240V AC only.
- Not applicable to types QPP and QPPH.
   Single pole circuit breakers available in ratings 15-70A only,
- 125A available as a 2-pole only.
- ® Not applicable to type HQPP and HQPPH.
- ® Fits only Siemens EQIII load centers. Breaker is 2 or 3 poles wide.

# **BQD 100A Frame Panelboard Mounting Circuit Breakers**

## BQD<sup>4</sup>

	1-Pole	2-Pole <sup>®</sup>	3-Pole <sup>®</sup>
		480Y/277V AC-	
Continuous Current	277V AC-125V DC	125/250V DC	480Y/277V AC
Rating @ 40°C	Catalog Number	Catalog Number	Catalog Number
15	BQD115 <sup>①②</sup>	BQD215 <sup>©</sup>	BQD315 <sup>®</sup>
20	BQD120 <sup>①②</sup>	BQD220 <sup>⑤</sup>	BQD320 <sup>⑤</sup>
25	BQD125 <sup>2</sup>	BQD225 <sup>®</sup>	BQD325 <sup>®</sup>
30	BQD130 <sup>2</sup>	BQD230 <sup>⑤</sup>	BQD330 <sup>©</sup>
35	BQD135 <sup>2</sup>	BQD235 <sup>©</sup>	BQD335 <sup>®</sup>
40	BQD140 <sup>2</sup>	BQD240 <sup>⑤</sup>	BQD340 <sup>®</sup>
45	BQD145 <sup>©</sup> ■	BQD245 <sup>©</sup>	BQD345 <sup>®</sup>
50	BQD150 <sup>©</sup>	BQD250 <sup>©</sup>	BQD350 <sup>©</sup>
60	BQD160	BQD260	BQD360
70	BQD170■	BQD270	BQD370
80	BQD180■	BQD280	BQD380
90	BQD190■	BQD290	BQD390
100	BQD1100■	BQD2100	BQD3100

### **BQD6 CSA Certified**

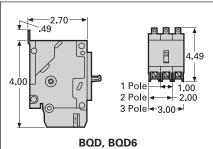
	1-Pole	2-Pole <sup>®</sup>	3-Pole <sup>®</sup>
Continuous Current	347V AC	600/347V AC	600/347V AC
Rating @ 40°C	Catalog Number	Catalog Number	Catalog Number
15	BQD6115 <sup>①</sup>	BQD6215	BQD6315
20	BQD6120 <sup>①</sup>	BQD6220	BQD6320
25	BQD6125■	BQD6225■	BQD6325 <b>■</b>
30	BQD6130	BQD6230	BQD6330
35	BQD6135■	BQD6235■	BQD6335 <b>■</b>
40	BQD6140■	BQD6240■	BQD6340
45	BQD6145■	BQD6245■	BQD6345 <b>■</b>
50	BQD6150■	BQD6250■	BQD6350
60	BQD6160■	BQD6260■	BQD6360
70	BQD6170■	BQD6270■	BQD6370

## Interrupting Ratings

	RMS Symmetrical Amperes (KA)									
		Number	Volts /	Volts [	C					
	Breaker Type	of Poles	120	240	277	480/ 277	347	600/ 347	125	125/ 250
Г	BQD	1	65	_	14	_	_	_	14	_
	(UL)	2	_	65	_	14	_	_	_	14
	(OL)	3	_	65	_	14	_	_	_	_
	BQD6	1	65	_	_	_	10	_	14	_
	(CSA)	2	_	65	_	_	_	10	_	14
Į	(CSA)	3	_	65	_	_	_	10	_	_

## **Selection/Dimensions**





## Shipping Weights

Number of Poles	Number per Carton	Shipping Weight (lbs.) (ea.)
1	1/12/48	.6
2	1/6/24	1.2
3	1/4/16	2.0

## Lugs For 60/75°C Wire

•	
BQD - Load	End Only
15–40	#14-#6 AWG Cu
45–100	#12–#6 AWG AI #8–#1 AWG Cu
45-100	#6-#1/0 AWG AI

For inches / millimeters conversion,

see Application Data section.
■ Built to order. Allow 2–3 weeks for delivery.

①SWD rated for switching fluorescent lighting. @HID rated at 277V AC.

®Not suitable for 3-phase delta 480V applications.

®HID rated at 480Y/277V AC.

For external accessories, please refer to pages 7-95 to 7-100 For internal accessories, please refer to page 7-34

# **Lug information**

# • Revised • 08/02/13

Mechanical Lug Selection

For Use With Type(s)	Circuit Breaker Ampere Rating	Cables Per Lug	Lug Wire Range	Catalog Number				
	Line Side							
	15–40	1 1	#14-#6 AWG Cu #12-#6 AWG AI	TC1Q1 <sup>©</sup>				
BQ, BQH,	45–125	1 1	#8-#1 AWG Cu #6-#1/0 AWG AI	TA1Q1®				
BQHF BQE,	Load Side							
BQF, BQF, BL, BLH,	15–20	1 1	#14-#10 AWG Cu #12-#10 AWG AI					
HBL, HBQ	25–35	1 1	#14-#6 AWG Cu #12-#6 AWG AI					
Switching Neutrals	40–50	1 1	#8-#6 AWG Cu #8-#4 AWG AI	Lugs are integral to Circuit Breaker				
BG, BLG	55–70	1 1	#8-#4 AWG Cu #8-#2 AWG AI					
	80–100	1 1	#4-#1/0 AWG Cu #2-#1/0 AWG AI					
	110–125	-125 1 #2-#1/0 1 #1/0-#2						
	Line Side (CQD, CQD6) & Load Side							
BQD, CQD BQD6, CQD6	15–40	1	#14-#6 AWG Cu #12-#6 AWG AI	Integral				
	45–100	1	#8-#1 AWG Cu #6-#1/0 AWG AI	Integral				
	15–30	1	#14-#6 AWG Cu #12-#6 AWG AI	TC1Q1				
NGG, HGG,	15–30	1	#14-#6 AWG Cu #12-#6 AWG AI	<b>3TC1Q1</b> (pkg. of 3)				
LGG	35–125	1	#8-#1/0 AWG Cu #8-#2/0 AWG AI	<b>3TC1GG20</b> (pkg. of 3)				
	15–125	_	NUT KEEPER PLATE	TNKG3 <sup>®</sup> (pkg. of 3)				
	15-125	1	#14-3/0 AWG Cu	3TW1EG30 (pkg. of 3)				
	15-125	1	#14-1/0 AWG Cu/AI	<b>3TA1EG10</b> (pkg. of 3)				
NEG, HEG	15-125	5-125 1 #6-3/0 AWG Cu/AI		<b>3TA1EG30</b> (pkg. of 3)				
	15-125	_	Nut Keeper Kit (3-pole)	TNKE3 (pkg. of 3)				
	15-125	-	Nut Keeper Kit (4-pole)	TNKE4 (pkg. of 4)				

Connector wire ranges and cavities are established in conjunction with Table 6.1.4.2.1 of UL 489 standards.

### Note:

- (A) Molded case circuit breakers having a rated ampacity of 125 amperes or less are to be connected with 60 or 75°C wire. Circuit breakers having a rated ampacity greater than 125 amperes shall only be cabled with 75°C cable unless otherwise indicated on the circuit breaker label. Exceptions to this rule are outlined in article 110-14 C(1)(2) of the 2005 National Electrical Code.
- (B) Connector wire ranges and cavities are established in conjunction with Table 6.1.4.2.1 of UL 489 standards.
- ① Lug is steel.
- @ Sold in package of six.
- One nut keeper plate is required with each lug on the NGG breaker.

# **Panelboards**

#### **General Specifications** General

### **Bussing Sequence**

Interiors are designed to accommodate top or bottom feed. Regardless of which is specified, the uppermost pole is always on "A" phase; the second pole down is always on "B" phase, and the third pole down is always on "C" phase (assuming 30 panel).

As standard, branch breakers shall be mounted at the top of the panel with "spaces" at the bottom, regardless of the direction panel is fed.

All breakers have bolted connections except plug-in type. The panel design provides bracing up to 200,000A IR UL short circuit rating. Case-hardened, high performance, thread rolling screws are used on branch bus.



Circuit Breaker Lighting Panel Type P1



Circuit Breaker Lighting or Distribution Panel Types P2/P3



Circuit Breaker Distribution Panel Type P4/P5



Fusible Switch Distribution Panel Type P4/P5

### **Panelboard Ratings**

Description	P1	P2	P3	P4	P5
Max. Voltage	480Y/277V AC Max. 250V DC Max	600V AC Max. 500V DC Max.	600V AC Max. 500V DC Max.	600V AC Max. 500V DC Max.	600V AC Max. 500V DC Max.
System	1-Phase, 2-wire 1-Phase, 3-wire 3-Phase, 3-wire 3-Phase, 4-wire	1-Phase, 2-wire 1-Phase, 3-wire 3-Phase, 3-wire 3-Phase, 4-wire	1-Phase, 2-wire 1-Phase, 3-wire 3-Phase, 4-wire 3-Phase, 3-wire	1-Phase, 3-wire 3-Phase, 4-wire 3-Phase, 3-wire	1-Phase, 3-wire 3-Phase, 4-wire 3-Phase, 3-wire
Mains					
Main Lugs Main Breaker Main Switch	125A-400A 100A-400A —	125A-600A 100A-600A —	250A-800A 225A-600A —	400A-1200A 400A-800A —	800A-1200A 800A-1200A 200A-1200A
Circuits	18, 30, 42	18, 30, 42, 54, 66 78, 90 <sup>①</sup>	_	_	
Branch Ratings	15-125A <sup>②</sup>	15-400A	15-400A	15-800A MCCB 30-200A Fusible	15-1200A MCCB 30-1200 Fusible
Branch Disconnect Devices	BL, BLH, HBL, BQD, BQD6, BLE, BLEH, BLF, BLHF, BAF, BAFH, BGL, NGB ®	BL, BLH, HBL, BQD, BQD6, QJ2, HQJ2, QJ2H, HQJ2H <sup>®</sup> , ED2, ED4, HED4, ED6, HHED6, BLE, BLEH, BLF, BLHF, BAF, BAFH, BGL, NGB	BL, BLH, HBL, BQD, BQD6, QJ2, HQJ2, QJ2H, HQJ2H <sup>®</sup> , ED2, ED4, HED4, ED6, BLHF, BAF, BAFH, BGL, NGB, NEB, HEB	All 15-1200A MCCBs, VL MG at 800A and 30-200A VB switches	All 15-1200A MCCBs, 30-600A VB switches and 400-1200A HCP switches
Subfeed Circuit Breakers 23	ED2, ED4, ED6, HED4, HED6, QJ2, QJH2, QJ2-H, FD6, HFD6, FXD6, HFXD6	JD6, HJD6, JXD6, HJXD6, FD6, HFD6, FXD6, HFXD6	JD6, HJD6, JXD6, FD6, HFD6, FXD6, HFXD6	_	-
Enclosure Heights Inches – (mm)	32, 38, 44 @250 A (813, 965, 1118) 56, 62, 68 @400 A (1422, 1575, 1727)	26, 32, 38, 44, 50, 56, 62, 68, 74 (660-1880)	56, 62, 68, 74, 80 (1422-2032)	60, 75, 90 (1524, 1905, 2286)	60, 75, 90 (1524, 1905, 2286)
Standard Trims	Fas-Latch – 1 Piece Surface or Flush	Fas-Latch – 1 Piece Surface or Flush	Fas-Latch – 1 Piece Surface or Flush	Four Piece <sup>®</sup> Surface or Flush	Four Piece® Surface or Flush

① Functional pricing is based on circuits shown. However, the panel can be figured with less circuits.

<sup>®</sup> P1 can have 1 subfeed breaker. P2 and P3 can have up to (2) FD subfeed breakers.

<sup>3</sup> JD and FD breakers are mounted vertical. Limitations

<sup>(</sup>a) Trim ring provided for flush applications.
(b) A maximum of (4) QJ breakers may be mounted in a P2 Panel and are single mounted.

<sup>®</sup> A maximum of (6) QJ breakers may be mounted in a P3 panel and are twin mounted.

<sup>&</sup>lt;sup>®</sup> P1 panels with NGB breakers are limited to NGB branch devices only. BL and BQD frames may not be mixed in this panel type.