

SIEMENS

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Type BQD/CQD Molded Case Circuit Breakers

Product Guide

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General information

The BQD and CQD type circuit breakers are 1 inch pole width similar to the BQ, BL and EL type circuit breakers. They are available in 1, 2, or 3 pole configurations, with voltage ratings of 120, 240, 277 and 480/277V AC and interruption ratings up to 65,000 amperes.

Due to their compact size, the BQD/CQD type circuit breakers are well suited for OEM designed equipment in both light commercial and industrial applications.

Specifications

BQD/CQD breaker

1, 2, 3 poles
15-100 amperes, 120, 240, 277, 480/277V AC 50, 60 Hz
125, 125/250V DC

BQD6/CQD6 breaker (CSA only)

1, 2, 3 poles
15-70 amperes, 600/347V AC 50/60 Hz
125, 125/250V DC

Application

- 1, 2, 3 poles 15-100 amperes are HCAR marked
- 1 pole 15-20 amperes SWD marked for fluorescent lighting applications
- 15-30A BQD/CQD are IEC 60947-2 (CE mark)
- 1 pole 15-50 amperes tested and marked HID
- Suitable for reverse feed applications
- CQD/CQD6 – Independently mounted on customer supplied DIN rail or bolted directly to surface
- Not suitable for 3 phase delta 480V AC grounded "B" phase applications

Interrupting ratings (max. RMS symmetrical amperes kA)

Breaker Type	Number of poles	UL								IEC 947-2 ⁶			
		Volts AC						Volts DC		Volts AC			
		120	240	277	480/277	347	600/347	125	125/250	220/240	380/415	I _{cu}	I _{cs}
BQD	1-pole	65	—	14	—	—	—	14	—	18	9	—	—
	2-pole	—	65	—	14	—	—	—	14	65	33	18	9
	3-pole	—	65	—	14	—	—	—	14	65	33	18	9
		CSA											
BQD6 ⁷	1-pole	—	—	—	—	10	—	14	—				
	2-pole	—	—	—	—	—	10	—	14				
	3-pole	—	—	—	—	—	10	—	—				

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

3 Not suitable for 3-phase delta 480V applications.
4 HACR rated.

5 HID rated at 480Y/277V AC.
6 Applicable for 15-30A breakers only.
7 BQD6/CQD6 are CSA only – not UL listed.

Ordering information

Terminal connectors UL listed for 60/75 CU AL

BQD/BQD6 load end only	
CQD/CQD6 line and load ends	
15-40 amperes	#14 - #6 AWG CU
	#12 - #6 AWG AL
45-100 amperes	#8 - #1 AWG CU
	#6 - #1/0 AWG AL

BQD catalog numbers⁴

Maximum continuous current rating @40C	1 pole 120V AC 125V DC catalog number	2 pole ³ 480Y/277V AC 125/250V DC catalog number	3 pole ³ 480Y/277V AC catalog number
15	BQD115 ^{1 2}	BQD215 ⁵	BQD315 ⁵
20	BQD120 ^{1 2}	BQD220 ⁵	BQD320 ⁵
25	BQD125 ²	BQD225 ⁵	BQD325 ⁵
30	BQD130 ²	BQD230 ⁵	BQD330 ⁵
35	BQD135 ²	BQD235 ⁵	BQD335 ⁵
40	BQD140 ²	BQD240 ⁵	BQD340 ⁵
45	BQD145 ²	BQD245 ⁵	BQD345 ⁵
50	BQD150 ²	BQD250 ⁵	BQD350
60	BQD160	BQD260	BQD360
70	BQD170	BQD270	BQD370
80	BQD180	BQD280	BQD380
90	BQD190	BQD290	BQD390
100	BQD1100	BQD2100	BQ3100

BQD6 catalog numbers (CSA only)

Continuous current rating @40C	1 pole 347V AC catalog number	2 pole ³ 600Y/347V AC catalog number	3 pole ³ 600Y/347V AC catalog number
15	BQD6115 ¹	BQD6215	BQD6315
20	BQD6120 ¹	BQD6220	BQD6320
25	BQD6125	BQD6225	BQD6325
30	BQD6130	BQD6230	BQD6330
35	BQD6135	BQD6235	BQD6335
40	BQD6140	BQD6240	BQD6340
45	BQD6145	BQD6245	BQD6345
50	BQD6150	BQD6250	BQD6350
60	BQD6160	BQD6260	BQD6360
70	BQD6170	BQD6270	BQD6370



Ordering information

CQD catalog numbers ³

Maximum continuous current rating @40C	1 pole 120V AC 125V DC catalog number	2 pole 480Y/277V AC 125/250V DC catalog number	3 pole 480Y/277V AC catalog number
15	CQD115 ^{1 2}	CQD215 ²	CQD315 ²
20	CQD120 ^{1 2}	CQD220 ²	CQD320 ²
25	CQD125 ²	CQD225 ²	CQD325 ²
30	CQD130 ²	CQD230 ²	CQD330 ²
35	CQD135 ²	CQD235 ²	CQD335 ²
40	CQD140 ²	CQD240 ²	CQD340 ²
45	CQD145 ²	CQD245 ²	CQD345 ²
50	CQD150 ²	CQD250 ²	CQD350 ²
60	CQD160	CQD260	CQD360
70	CQD170	CQD270	CQD370
80	CQD180	CQD280	CQD380
90	CQD190	CQD290	CQD390
100	CQD1100	CQD2100	CQD3100

CQD6 catalog numbers (CSA only)

Continuous current rating @40C	1 pole 347V AC catalog number	2 pole 600Y/347V AC catalog number	3 pole 600Y/347V AC catalog number
15	—	CQD6215	CQD6315
20	CQD6120	CQD6220	CQD6320
25	CQD6125	CQD6225	CQD6325
30	CQD6130	CQD6230	CQD6330
35	CQD6135	CQD6235	CQD6335
40	CQD6140	CQD6240	CQD6340
45	CQD6145	CQD6245	CQD6345
50	CQD6150	CQD6250	CQD6350
60	CQD6160	CQD6260	CQD6360
70	CQD6170	CQD6270	—

Interrupting ratings (max. RMS symmetrical amperes kA)

Breaker Type	Number of poles	UL								IEC 947-2 ⁴			
		Volts AC						Volts DC		Volts AC			
		120	240	277	480/277	347	600/347	125	125/250	220/240	380/415	I _{cu}	I _{cs}
CQD	1-pole	65	—	14	—	—	—	14	—	18	9	—	—
	2-pole	—	65	—	14	—	—	—	14	65	33	18	9
	3-pole	—	65	—	14	—	—	—	14	65	33	18	9
		CSA											
CQD6 ⁵	1-pole	—	—	—	—	10	—	14	—	—	—	—	—
	2-pole	—	—	—	—	—	10	—	14	—	—	—	—
	3-pole	—	—	—	—	—	10	—	—	—	—	—	—

¹ SWD rated.

Note: CQD breakers are UL Listed for reverse feed applications.

² HID rated.

³ HACR rated

⁴ Applicable for 15-30A breakers only.

⁵ BQD6/CQD6 are CSA only – not UL listed.

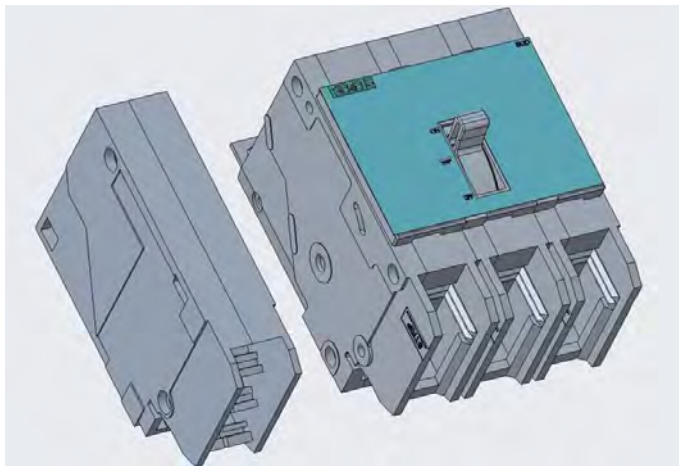
Internal accessories

Shunt trip, auxiliary switches, and alarm switches are operational devices that are contained within an add-on module for the BQD/CQD frame circuit breakers. One module can be attached to the left side only of the circuit breaker. Each module can be installed in the field.

Shunt trip – A shunt trip is used to trip the breaker remotely. It is operated by providing voltage to the shunt trip coil. The coil in this device is designed to be energized only momentarily, so included is a built-in limit switch which opens the coil circuit after the breaker trips. With the circuit breaker in the tripped position, voltage cannot be applied through the coil circuit due to the open contacts in the limit switch. The operational range of this device is (70 to 110%) of the marked voltage rating.

Auxiliary switches – Auxiliary switches are used for remote indication of breaker contact position (ON or OFF). Each switch consists of "A" (normally open) and "B" (normally closed) contact with a common connection. These devices are typically used for signaling purposes.

Alarm switch – The alarm switch provides indication of breaker tripping. Alarm contacts operate off of the tripping mechanism of the circuit breaker and only change state when the breaker is tripped. Each alarm switch consists of 1 "A" (normally open) and 1 "B" (normally closed) contact, with a common connection. Sometimes these are also called Bell Alarms.

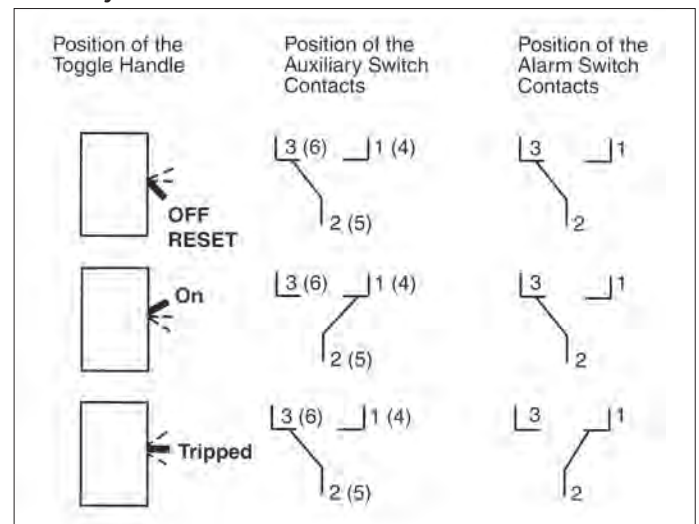


Mounted left side only, not available on single pole breakers.

Available accessory combinations

Shunt trip	Auxiliary switch	Alarm contact
1	0	0
0	1	0
0	2	0
1	1	0
0	0	1
0	1	1

Auxiliary and alarm switch contacts

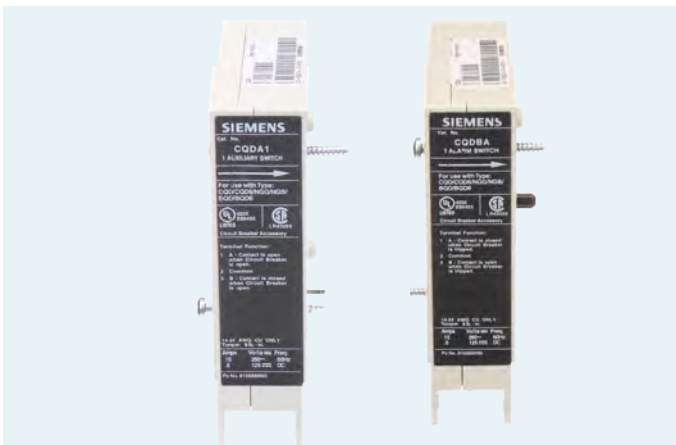


Accessories

BQD



CQD



Handle Padlocking Device
BQDHBD



Handle Blocking Device
BQDPLD

Shunt trip

Control voltage		BQD, BQD6, CQD, CQD6 catalog number	Current draw
V AC	V DC		
120		CQDST120	.09A
240		CQDST240	.50A
277		CQDST277	.55A
480		CQDST480	.45A
600		CQDST600	.50A
	12	CQDST12	1.20A
	24	CQDST24	.80A
	48	CQDST48	.80A
	125	CQDST125	.35A

Auxiliary switch

Maximum voltage		Number of contacts	BQD, BQD6, CQD, CQD6 catalog number
AC	DC		
240	125	1A-1B	CQDA1
240	125	2A-2B	CQDA2

Alarm switch

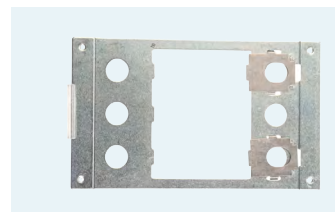
Maximum voltage		BQD, BQD6, CQD, CQD6 catalog number
AC	DC	
240	125	CQDBA

Shunt trip and auxiliary switch combinations

Shunt trip voltage		BQD, BQD6, CQD, CQD6 catalog number
AC	DC	
24	—	CQDST24AAS
120	—	CQDST120AAS
240	—	CQDST240AAS
277	—	CQDST277AAS
480	—	CQDST480AAS
600	—	CQDST600AAS
—	12	CQDST12DAS
	24	CQDST24DAS
	48	CQDST48DAS
	125	CQDST125DAS

Alarm and auxiliary switch combinations

For breaker	Catalog number
BQD, BQD6, CQD, CQD6	CQDA18A



Face mounting plate
1 pole CQDFMB1
2-pole CQDFMB2 3-pole CQDFMB3



Mounting Hardware Kit
CQDSMK

Accessories

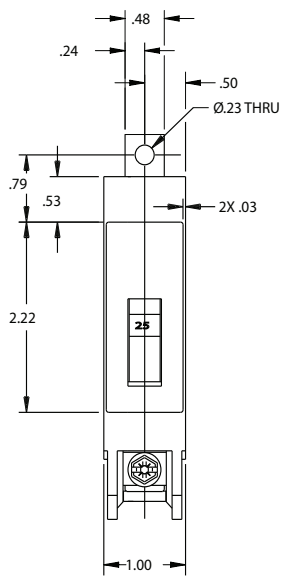
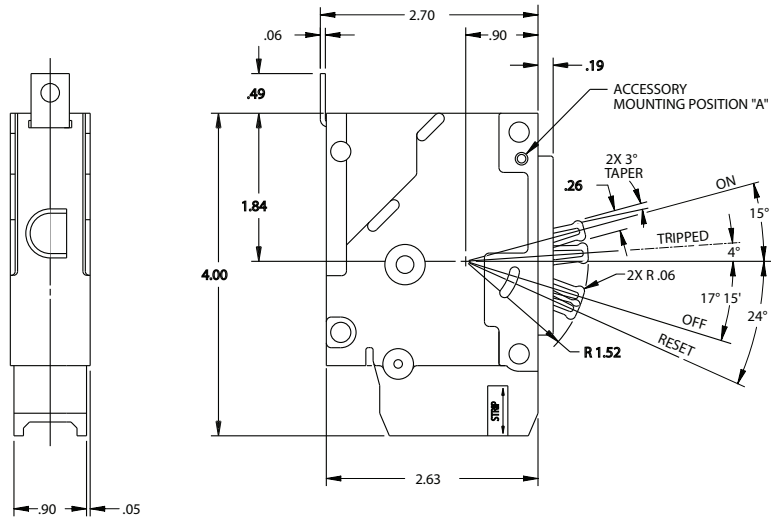
Strap kits

Catalog number	Description	Panelboard type
MBKBC3	Main/Subfeed strap kit for BQD breakers – 3-phase	Original P1
MBKBC3NBA		Revised P1
BBKB32	BDQ 6-pole 3" branch breaker kit – P2/P3	P2, P3
SBL	Twin mounting panel branch kit	P4
SBLBD	Twin mounting panel branch kit	P5

Filler plate replacement kits

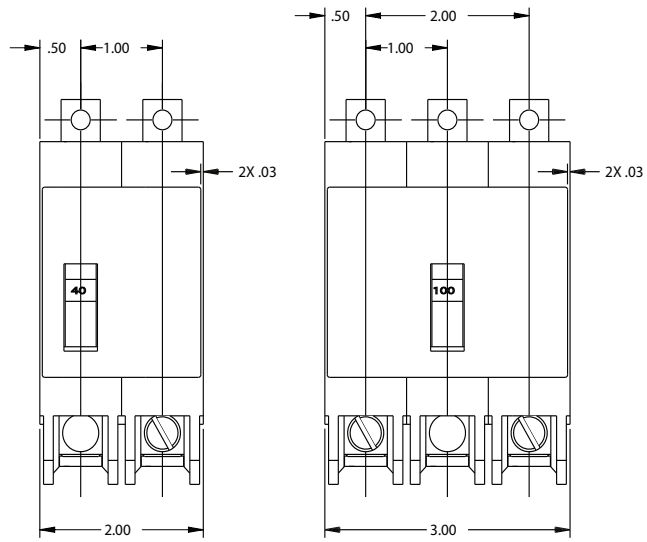
Catalog number	Description	Panelboard type
DFFFP1	Branch and Main – 1" Blank filler – Horizontal or vertical as needed	P1 and RP1, P2, P3, C1, C2

BQD outline drawings

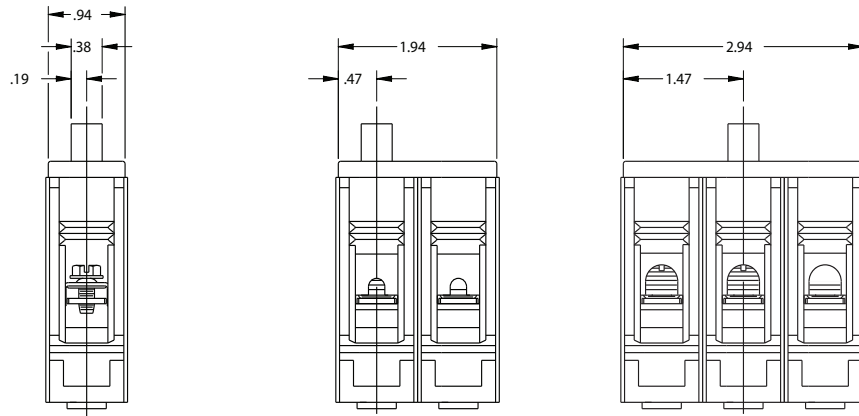


WIRE CLAMP
TYPICAL
15-20A

LINE



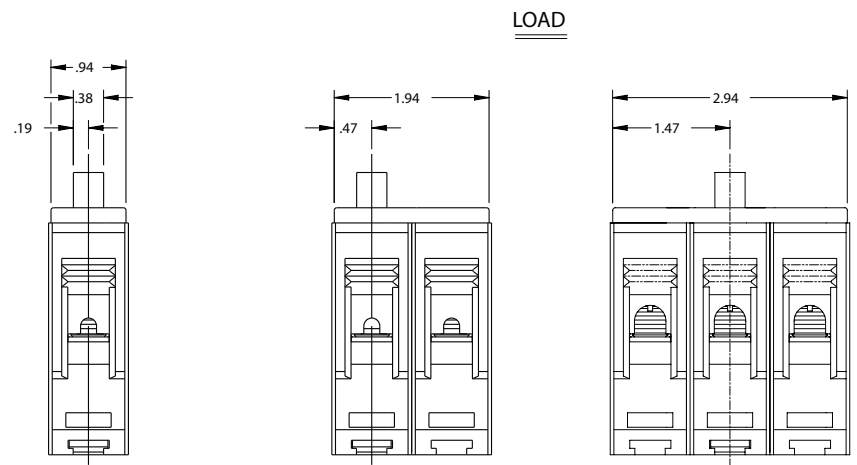
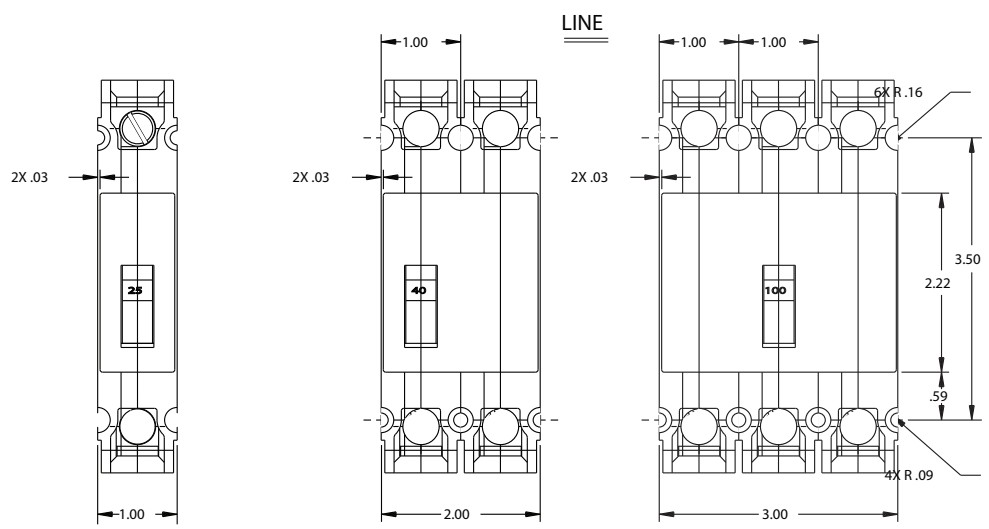
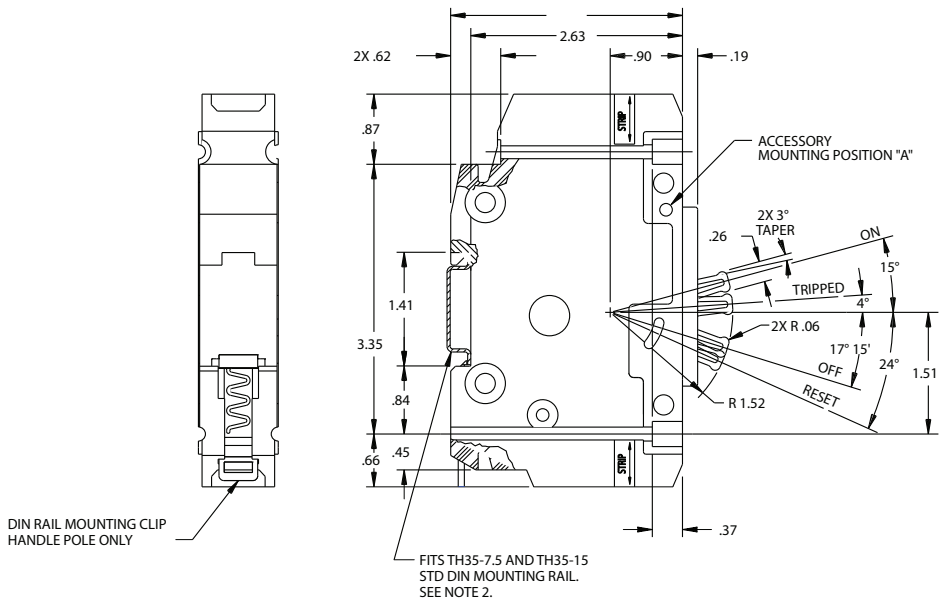
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LUG STYLE
TYPICAL
25-40A

LUG STYLE
TYPICAL
45-100A

CQD outline drawings



LUG STYLE TYPICAL 15-40A

LUG STYLE TYPICAL 45-100A

NOTES

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