

Low Ampere QOU Miniature Circuit Breakers

QOU unit mount miniature circuit breakers (cable-in/cable-out) are ideal for OEM applications. They have Square D's unique Visi-Trip feature and can be DIN rail-mounted or surface- or flush-mounted using mounting feet.



Low Ampere QOU

General Specifications Common to All Low Ampere QOU Circuit Breakers

- For convenient flush mount, surface mount or DIN mount (symmetrical rail 35 x 7.5 DIN/EN 50 022)
- Single handle with internal common trip
- Terminal lug wire size (1) 14–2 AWG Cu or Al
- Reversible line and load lugs
- Field-installable quick connectors
- UL Listed 48 Vdc (5 k AIR)
- UL Listed as HACR Type—10–70 A
- High magnetic trip circuit breakers (QOU-HM) are recommended for applications where high initial inrush may occur and for individual dimmer applications.
- For DIN mounting rails, see IEC Starters and Relays, Section 18

Table 7.20: QOU Low Ampere Miniature Circuit Breakers

Ampere Rating	1P 120/240 Vac		2P 120/240 Vac		2P 240 Vac		3P 240 Vac	
	Cat. No.		Cat. No.		Cat. No.▲		Cat. No.	
10 k AIR								
10 A	QOU110		QOU210		QOU210H		QOU310	
15 A	QOU115		QOU215		QOU215H		QOU315	
20 A	QOU120		QOU220		QOU220H		QOU320	
25 A	QOU125		QOU225		QOU225H		QOU325	
30 A	QOU130		QOU230		QOU230H		QOU330	
35 A	QOU135		QOU235		—	—	QOU335	
40 A	QOU140		QOU240		—	—	QOU340	
45 A	QOU145		QOU245		—	—	QOU345	
50 A	QOU150		QOU250		—	—	QOU350	
60 A	QOU160		QOU260		—	—	QOU360	
70 A	QOU170		QOU270		—	—	QOU370	
22 k AIR								
15 A	QOU115VH		QOU215VH		—	—	QOU315VH	
20 A	QOU120VH		QOU220VH		—	—	QOU320VH	
25 A	QOU125VH		QOU225VH		—	—	QOU325VH	
30 A	QOU130VH		QOU230VH		—	—	QOU330VH	
35 A	QOU135VH		QOU235VH		—	—	—	
40 A	QOU140VH		QOU240VH		—	—	—	
45 A	QOU145VH		QOU245VH		—	—	—	
50 A	QOU150VH		QOU250VH		—	—	—	
60 A	QOU160VH		QOU260VH		—	—	—	

▲ QOU-H interrupting rating is 10 kA at 240 Vac.

Table 7.21: QOU-HM Miniature Circuit Breakers (10 k AIR)

Ampere Rating	1P 120/240 Vac		2P 120/240 Vac		2P 240 Vac		3P 240 Vac	
	Cat. No.		Cat. No.		Cat. No.		Cat. No.	
15 A	QOU115HM		—	—	—	—	—	—
20 A	QOU120HM		—	—	—	—	—	—

Table 7.22: QYU UL1077 Recognized Supplementary Protectors (5 k AIR)

Ampere Rating	1P 277 Vac		2P 120/240 Vac		2P 240 Vac		3P 240 Vac	
	Cat. No.		Cat. No.		Cat. No.		Cat. No.	
15 A	QYU115		—	—	—	—	—	—
20 A	QYU120		—	—	—	—	—	—
25 A	QYU125		—	—	—	—	—	—
30 A	QYU130		—	—	—	—	—	—

High Ampere QOU Circuit Breakers

General Specifications Common to All High Ampere QOU Circuit Breakers

- Flush mount, surface mount, and DIN rail mount.
- Internal common trip.
- Non-reversible line and load lugs.
- Terminal lug wire size (1) 12–2/0 AWG Cu or Al.
- UL Listed 60 Vdc per pole (5 k AIR). (**Note:** except switches)
- UL Listed as HACR type, 80–125 A.
- Non-automatic switches have the same physical packaging as miniature circuit breakers, but provide no overcurrent or short circuit protection. They are UL Listed per UL1087 and are CSA certified.

Table 7.23: QOU High Ampere Miniature Circuit Breakers (10 k AIR)

Ampere Rating	1P 120/240 Vac		2P 120/240 Vac		2P 240 Vac		3P 240 Vac	
	Cat. No.		Cat. No.		Cat. No.		Cat. No.	
80 A	QOU180		QOU280		—	—	QOU380	
90 A	QOU190		QOU290		—	—	QOU390	
100 A	QOU1100		QOU2100		—	—	QOU3100	
125 A	—	—	QOU2125		—	—	—	

Table 7.24: QOU Non-Automatic Switches

Ampere Rating	1P 120 Vac		2P 120/240 Vac		2P 240 Vac		3P 240 Vac	
	Cat. No.		Cat. No.		Cat. No.		Cat. No.	
60 A	—	—	—	—	QOU200		QOU300	
100 A	—	—	—	—	QOU2000		QOU3000	
125 A	—	—	—	—	QOU20001		QOU30001	

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7 MINIATURE AND MOLDED CASE CIRCUIT BREAKERS



High Ampere QOU

Push Buttons & Operator Interface - XB4 22 mm Die Cast Chrome Plated Contact Blocks

Contact Blocks (Mounting Base with Contact Blocks)



ZB4BZ101



ZB4BZ102



ZBE101



ZBE102



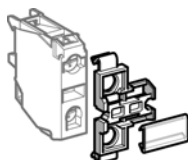
ZBE203



ZBE204



ZB4BZ009



ZBZ001

Description	Type of Contact		Catalog Number
	N/O	N/C	
Screw clamp terminal connections	1	–	ZB4BZ101
	–	1	ZB4BZ102
	2	–	ZB4BZ103
	–	2	ZB4BZ104
	1	1	ZB4BZ105
Gold-Flashed Low Power Switching (5 - 24 V, 0.1 - 100 mA) Dust Protected (IP5x per IEC 60529) ▲	1	2	ZB4BZ141
	1	–	ZB4BZ1016
	–	1	ZB4BZ1026
	2	–	ZB4BZ1036
	–	2	ZB4BZ1046
Quick-Connect (1 x 0.250" or 2 x 0.110")	1	1	ZB4BZ1056
	1	–	ZB4BZ1013
	–	1	ZB4BZ1023
	2	–	ZB4BZ1033
	–	2	ZB4BZ1043
Ring Tongue Compatible (# 8 stud, ≤ 5.8 mm width)	1	1	ZB4BZ1053
	1	–	ZB4BZ1019
	–	1	ZB4BZ1029

Add-On Contact Block (with screw clamp terminal connections) ■

Description	Type of Contact		Catalog Number
	N/O	N/C	
Standard single contact blocks	1	–	ZBE101
	–	1	ZBE102
Standard double contact blocks	2	–	ZBE203
	–	2	ZBE204
	1	1	ZBE205
Special contact blocks (for low power switching and dust protected) ▲	1	–	ZBE1016
	–	1	ZBE1026

Specialty Add-On Contact Blocks ■

Quick-Connect (1 x 0.250" or 2 x 0.110")	1	–	ZBE1013
	–	1	ZBE1023
Ring tongue Compatible (# 8 stud, ≤ 5.8 mm width)	1	–	ZBE1019
	–	1	ZBE1029

Body/Mounting Collar

For use with	Catalog Number
Electrical block (contact or light module)	ZB4BZ009

Clip-on Legend Holders for Electrical Blocks (Contact Blocks and Light Modules) (with screw clamp terminal connections)

Identification of an XB4B control or signalling unit	ZBZ001
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- The contact blocks enable variable composition of body sub-assemblies and can be stacked to 3 rows, either: 3 rows of 3 single contacts or 1 row of 3 double contacts + 1 row of 3 single contacts (double contact blocks occupy 2 rows).
- ▲ Cannot stack additional contact blocks onto these blocks.

Table 1.1: Non-Illuminated Selector Switches ■



ZB4BD4
Standard Lever



ZB4BJ3
Extended Lever

Color	Number and Type of Positions			
			Standard Lever ▲	Extended Lever
Catalog Number				
Black	2-maintained		ZB4BD2	ZB4BJ2
Black	2-momentary from right to left		ZB4BD4	ZB4BJ4
Black	3-maintained		ZB4BD3	ZB4BJ3
Black	3-momentary to center		ZB4BD5	ZB4BJ5
Black	3-momentary from left to center		ZB4BD7	ZB4BJ7
Black	3-momentary from right to center		ZB4BD8	ZB4BJ8

▲ For colored lever, add the following code to the end of part number: 01—white, 03—green, 04—red, 05—yellow, 06—blue (Example: ZB4BD204).

Table 1.2: Non-Illuminated Key Switches ■



ZB4BG8

Shape of Head	Type of Operator	Number and Type of Positions		Catalog Number
	Key (No. 455) ◆ Note: The symbol indicates the key withdrawal position(s).	2-maintained		ZB4BG2
				ZB4BG4
		2-momentary from right to left		ZB4BG6
				ZB4BG0
		3-maintained		ZB4BG3
				ZB4BG03
				ZB4BG5
				ZB4BG9
				ZB4BG09
				ZB4BG1
				ZB4BG7
		3-momentary from left to center		ZB4BG8
				ZB4BG08

■ See Table 1.3 for contact configurations.

◆ Other key numbers: —key no. 421E: add the suffix 12 to the catalog number. —key no. 520E: add the suffix 14 to the catalog number.
—key no. 458A: add the suffix 10 to the catalog number. —key no. 3131A: add the suffix 20 to the catalog number.

Example: The catalog number for a head with key no. 421E for a 2 position maintained, lockable selector switch, with key withdrawal from the left-hand position, becomes: ZB4BG212.

Table 1.3: Sequence of Contacts on Selector Switch Bodies

Unit Type	Selector Switches															
	2-position						3-position									
	315°			45°			315°			0°			45°			
Operator Plunger Position	Up															
	Down															
Contact Block Location	L	C	R	L	C	R	L	C	R	L	C	R	L	C	R	
Contacts	N/O	O	O	O	X	X	X	X	X	O	O	O	O	O	X	X
	N/C	X	X	X	O	O	O	O	O	X	X	X	X	X	O	O

Note: L=Left, C=Center, R=Right, O=Open, X=Closed

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When ordering, please specify:


- Quantity
- Catalog Number

Push Buttons & Operator Interface - XB4 22 mm Die Cast Chrome Plated Complete Devices

Pilot Lights with Protected LED (screw clamp terminal connections)





XB4BV85

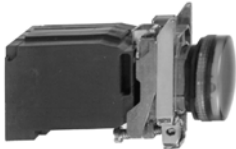
Shape of Head	Supply Voltage	Color	Catalog Number
	24 Vac/Vdc	White	XB4BVB1 (ZB4BVB1 + ZB4BV013)
		Green	XB4BVB3 (ZB4BVB3 + ZB4BV033)
		Red	XB4BVB4 (ZB4BVB4 + ZB4BV043)
		Yellow	XB4BVB5 (ZB4BVB5 + ZB4BV053)
		Blue	XB4BVB6 (ZB4BVB6 + ZB4BV063)
	110-120 Vac	White	XB4BVG1 (ZB4BVG1 + ZB4BV013)
		Green	XB4BVG3 (ZB4BVG3 + ZB4BV033)
		Red	XB4BVG4 (ZB4BVG4 + ZB4BV043)
		Yellow	XB4BVG5 (ZB4BVG5 + ZB4BV053)
		Blue	XB4BVG6 (ZB4BVG6 + ZB4BV063)

Pilot lights for BA 9s Bulb (screw clamp terminal connections)



XB4BV64

Shape of Head	Supply Voltage	Color	Catalog Number
Direct supply, for BA 9s (incandescent, LED, neon) V ≤ 250 V, 2.4 W bulb (bulb not included)			
	≤ 250 Vac/Vdc	White	XB4BV61 (ZB4BV6 + ZB4BV01)
		Green	XB4BV63 (ZB4BV6 + ZB4BV03)
		Red	XB4BV64 (ZB4BV6 + ZB4BV04)
		Yellow	XB4BV65 (ZB4BV6 + ZB4BV05)
		Transformer type with 1.2 VA, 6 V secondary. BA 9s incandescent bulb included	
	110-120 Vac 50/60 Hz	White	XB4BV31 (ZB4BV3 + ZB4BV01)
		Green	XB4BV33 (ZB4BV3 + ZB4BV03)
		Red	XB4BV34 (ZB4BV3 + ZB4BV04)
		Yellow	XB4BV35 (ZB4BV3 + ZB4BV05)



XB4BV33