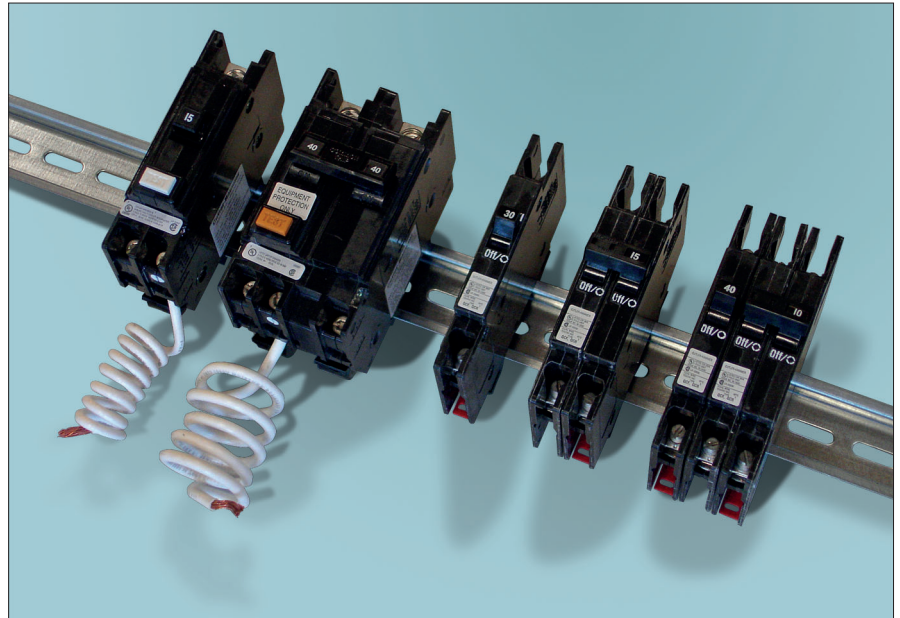


Eaton

Quicklag miniature circuit breakers & ground fault circuit interrupters



www.chscontrols.se

Eaton Quicklag Miniature Circuit Breakers offer overload and short circuit protection, "Branch Circuit Protection" in a compact format. Quicklag ground fault circuit interrupters combine MCB protection with earth fault protection - personal or equipment protection.

Quicklag miniature circuit breakers

Quicklag miniature circuit breakers (MCB) are UL 489 and CSA C22.2 No 5 listed devices. They meet the requirements for "Branch Circuit Protection" according to National Electrical Code (NEC) article 210. Branch circuit protection is required on all circuits utilizing equipment, for example a heater or a motor. On OEM products, circuits exiting the control panel must be considered as branch circuits as well as circuits supplying receptacles in the control panel.

Quicklag MCBs meet and exceed the requirements of NEC for use as disconnecting means.

15 and 20 A single pole MCBs are "Switching Duty" (SWD) rated for switching and protecting fluorescent lamp loads.

All Quicklag MCBs except 10 A are "Heating, Air Conditioning and Refrigeration" (HACR) rated and certified to be used to protect such loads.

Quicklag ground fault circuit interrupters

Quicklag ground fault circuit interrupters (GFCI) provide both overload, short circuit and earth fault protection. GFCIs for personal protection are UL 489/943 and CSA C22.2 No 144 listed. GFCIs for equipment protection are UL 489/1053 and CSA C22.2 No 144 listed.

GFCIs for personal protection have 5 mA earth fault trip sensitivity and meet the requirements for Class A GFCI. They have a built-in self-test feature. There are also duplex receptacles with built-in GFCI available, contact CHS Controls for more information.

GFCIs for equipment protection have 30 mA earth fault trip sensitivity.

GFCIs can be supplied with factory installed alarm switch or auxiliary switch.

Other Quicklag MCBs

Quicklag MCBs are also available as

- MCBs with shunt trip
- MCBs for remote control
- Arc Fault Circuit Interrupters (AFCI) that offers additional protection against arcing faults that may occur by damaged wire insulation or similar

Load Centers/Panelboards

Eaton also offers a complete line of load centers and panelboards, factory assembled or for local assembly. Contact CHS Controls for more information.

Technical data



Quicklag miniature circuit breakers

Quicklag ground fault circuit interrupters

Electrical data

Rated voltage	120/240 VAC ¹⁾ , 240 VAC, 50-60 Hz 62 VDC, 130 VDC with 2 poles in series	120 VAC, 120/240 VAC, 60 Hz
Current range	10-60 A	15-40 A
Interrupting rating, 240 VAC	10/22 kA	10/22 kA
Interrupt. rating 62,5 VDC/130 VDC, 2 poles in series	3 kA	

Terminals

Line/load side	Box terminal, AWG 14-4	Box terminal, AWG 14-4
Neutral		Pigtail wire, 609 mm long, AWG 12-8 depending on rated current
Alarm/auxiliary contact		Pigtail wire, 355 mm long, AWG 18

Environmental data

Temperature range, operation	0 - +40°C	0 - +40°C
Humidity, non condensing	5-95%	5-95%

Standards, approvals

Standard	UL 489 CSA C22.2 No 5	UL 489, UL 943, UL 1053 CSA C22.2 No 5, C22.2 No 144
Approvals	UL file E7819 CSA file LR48907	UL file E7819 CSA file LR48907

¹ 120/240 V rated MCBs, not to be used in a 3 phase system ie with 240 V between phases. Only for 240 V single phase applications.

Miniature circuit breakers, UL 489

Rated current A	Catalogue numbers, 35 mm DIN rail mounting 120/240 VAC ¹⁾			Weight g/pole	Packing size
	1 pole	2 pole	240 VAC 2 pole		
10 kA interrupting rating					
10	QCR1010	QCR2010		100	1
15	QCR1015 ²⁾	QCR2015	QCR2015H	100	1
20	QCR1020 ²⁾	QCR2020	QCR2020H	100	1
25	QCR1025	QCR2025	QCR2025H	100	1
30	QCR1030	QCR2030	QCR2030H	100	1
35	QCR1035	QCR2035		100	1
40	QCR1040	QCR2040		100	1
45	QCR1045	QCR2045		100	1
50	QCR1050	QCR2050		100	1
55	QCR1055	QCR2055		100	1
60	QCR1060	QCR2060		100	1
22 kA interrupting rating					
15	QCRH1015 ²⁾	QCRH2015		100	1
20	QCRH1020 ²⁾	QCRH2020		100	1

Ground fault circuit interrupters, UL 489/943/1053

Rating current A	Catalogue numbers Personal protection, Class A, UL 943, 5 mA sensitivity		Catalogue numbers Equipment protection, UL 1053, 30 mA sensitivity		Weight g/pole	Packing size
	1 pole, 120 VAC	2 pole, 120/240 VAC	1 pole, 120 VAC	2 pole, 120/240 VAC		
10 kA interrupting rating						
15	QCGFT1015 ²⁾	QCGFT2015	QCGFEP1015 ²⁾	QCGFEP2015	250	1
20	QCGFT1020 ²⁾	QCGFT2020	QCGFEP1020 ²⁾	QCGFEP2020	250	1
25	QCGFT1025	QCGFT2025	QCGFEP1025	QCGFEP2025	250	1
30	QCGFT1030	QCGFT2030	QCGFEP1030	QCGFEP2030	250	1
40	QCGFT1040	QCGFT2040	QCGFEP1040	QCGFEP2040	250	1
50		QCGFT2050		QCGFEP2050	250	1
10 kA interrupting rating, ground fault circuit interrupters with factory installed changeover alarm contact³⁾						
15	QCGFT1015W1 ²⁾	QCGFT2015W1	QCGFEP1015W1 ²⁾	QCGFEP2015W1	250	1
20	QCGFT1020W1 ²⁾	QCGFT2020W1	QCGFEP1020W1 ²⁾	QCGFEP2020W1	250	1
25	QCGFT1025W1	QCGFT2025W1	QCGFEP1025W1	QCGFEP2025W1	250	1
30	QCGFT1030W1	QCGFT2030W1	QCGFEP1030W1	QCGFEP2030W1	250	1
40		QCGFT2040W1		QCGFEP2040W1	250	1
50		QCGFT2050W1		QCGFEP2050W1	250	1
22 kA interrupting rating						
15	QCHGFT1015 ²⁾	QCHGFT2015	QCHGFEP1015 ²⁾	QCHGFEP2015	250	1
20	QCHGFT1020 ²⁾	QCHGFT2020	QCHGFEP1020 ²⁾	QCHGFEP2020	250	1
25	QCHGFT1025	QCHGFT2025	QCHGFEP1025	QCHGFEP2025	250	1
30	QCHGFT1030	QCHGFT2030	QCHGFEP1030	QCHGFEP2030	250	1

Accessory for ground fault circuit interrupters

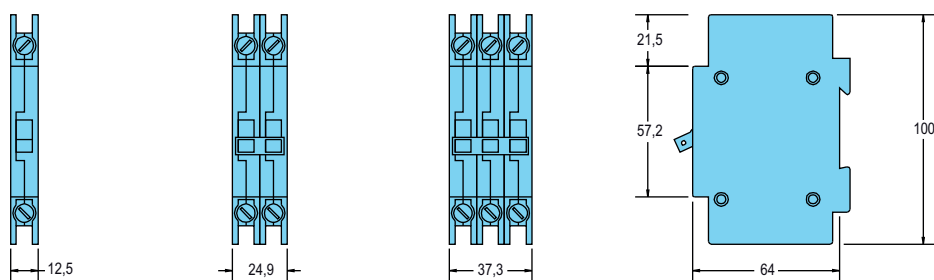
Description	Catalogue number	Weight g each	Packing size
Adapter for 35mm DIN rail mounting, 1 per pole	QCDINADAPT	10	1

1 120/240 V rated MCBs, not to be used in a 3 phase system ie with 240 V between phases. Only for 240 V single phase applications.

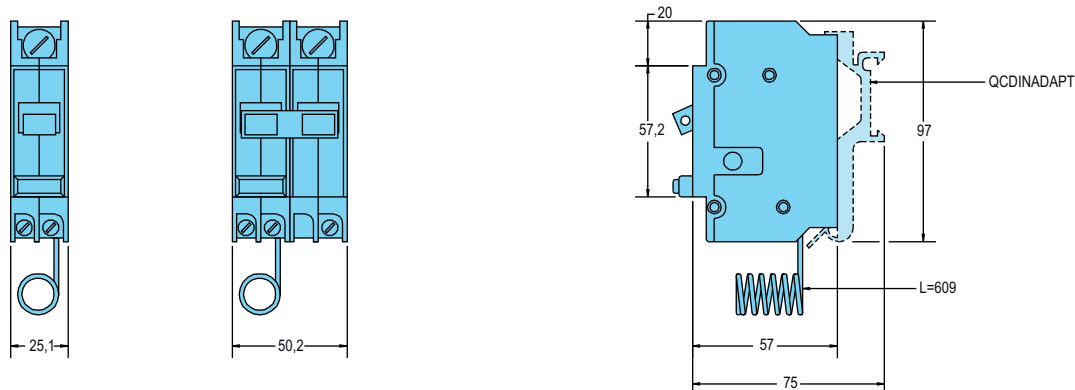
2 15 - 20 A 1 pole breakers are Switching Duty (SWD) rated for fluorescent lighting applications.

3 15 - 30 A 1 pole GFICs are also available with co aux. contact, change W1 in the catalogue no. to W2. Example QCGF1015W1 will be QCGF1015W2.

Dimensions, miniature circuit breakers, mm

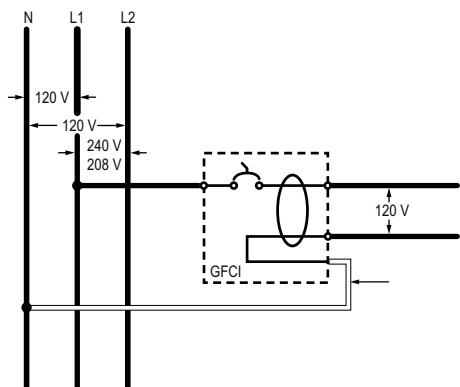


Dimensions, ground fault circuit interrupters, mm

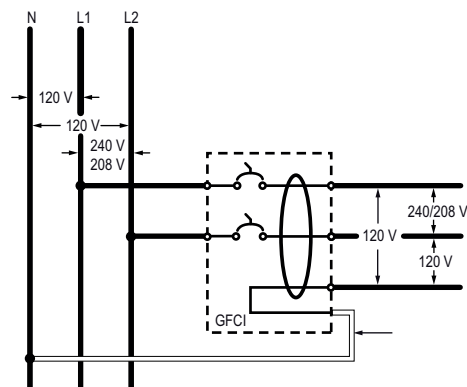


Wiring diagram for ground fault circuit interrupters

1-pole GFCI



2-pole GFCI



GFCI with factory installed alarm or auxiliary contact



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