

Bolt-On Ground Fault and Equipment Protectors, Types QBGF, QBHGF, QBGFEP, QBHGFEP



QUICKLAG Type QBGF 1-Pole Ground Fault Circuit Breaker

Product Description

- Built and listed to UL 489

QUICKLAG Ground Fault Circuit Breakers, Class A GFCI

- Built and tested to UL 943
- 5 mA trip sensitivity

QUICKLAG Ground Fault Equipment Protectors

- Built and tested to UL 1053
- 30 mA trip sensitivity

Technical Data and Specifications

Shipping Data

Table 11-8. Shipping Data

Carton Quantity	Approximate Weight Lbs. (Kg)	Dimensions in Inches (mm)
1-Pole		
20	11.00 (5.0)	12.50 x 6.50 x 5.00 (317.5 x 165.1 x 127.0)
2-Pole		
5	5.00 (2.3)	15.50 x 6.00 x 4.50 (393.7 x 152.4 x 114.3)

Instruction Leaflets

- Ground Fault Circuit Breaker and Equipment Protector Installation Instructions: FRED 255

Time/Current Curves

- 1-Pole: FRED 350077
- 2-Pole: FRED 350177
- 3-Pole: FRED 350277

Dimension Sheets

- FRED Index 206

Wiring Diagram

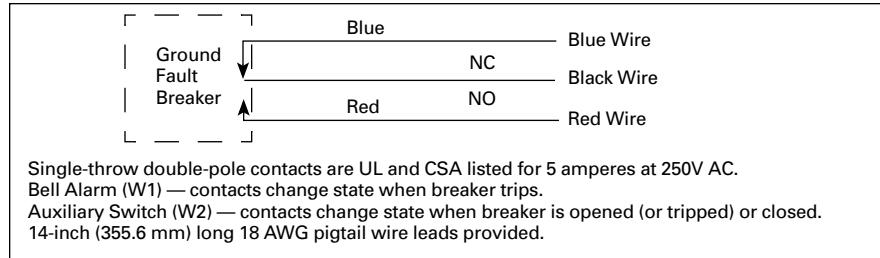


Figure 11-2. Bell Alarm and Auxiliary Contact Schematic

Product Selection

Table 11-9. Breaker Catalog Numbers

Continuous Ampere Rating @ 40°C	1-Pole		2-Pole	
	120V AC		120/240V AC	
	Catalog Number	Price U.S. \$	Catalog Number	Price U.S. \$

Ground Fault Circuit Breakers — 5 mA Sensitivity

QUICKLAG Type: QBGF 10,000 Ampere I.C. Thermal-Magnetic Breakers

15	QBGF1015	201.	QBGF2015	323.
20	QBGF1020	201.	QBGF2020	323.
25	QBGF1025	201.	QBGF2025	323.
30	QBGF1030	201.	QBGF2030	323.
40	QBGF1040	224.	QBGF2040	350.
50	—	—	QBGF2050	350.

QUICKLAG Type: QBHGF 22,000 Ampere I.C. Thermal-Magnetic Breakers

15	QBHGF1015	370.	QBHGF2015	585.
20	QBHGF1020	370.	QBHGF2020	585.
25	QBHGF1025	370.	QBHGF2025	585.
30	QBHGF1030	370.	QBHGF2030	585.

Ground Fault Equipment Protectors — 30 mA Sensitivity

QUICKLAG Type: QBGFEP 10,000 Ampere I.C. Thermal-Magnetic Breakers

15	QBGFEP1015	327.	QBGFEP2015	444.
20	QBGFEP1020	327.	QBGFEP2020	444.
25	QBGFEP1025	327.	QBGFEP2025	444.
30	QBGFEP1030	327.	QBGFEP2030	444.
40	QBGFEP1040	327.	QBGFEP2040	487.
50	—	—	QBGFEP2050	487.

QUICKLAG Type: QBHGFEP 22,000 Ampere I.C. Thermal-Magnetic Breakers

15	QBHGFEP1015	392.	QBHGFEP2015	805.
20	QBHGFEP1020	392.	QBHGFEP2020	805.
25	QBHGFEP1025	392.	QBHGFEP2025	805.
30	QBHGFEP1030	392.	QBHGFEP2030	805.

Special Application Ground Fault Circuit Protectors — 5 mA Sensitivity

QUICKLAG Type: QBGF 10,000 Ampere I.C. with Bell Alarm (W1) or Auxiliary Switch (W2)

15	QBGF1015W1	263.	QBGF2015W1	257.
20	QBGF1020W1	263.	QBGF2020W1	257.
25	QBGF1025W1	263.	QBGF2025W1	257.
30	QBGF1030W1	263.	QBGF2030W1	257.
40	—	—	QBGF2040W1	257.
50	—	—	QBGF2050W1	257.
15	QBGF1015W2	263.	—	—
20	QBGF1020W2	263.	—	—
25	QBGF1025W2	263.	—	—
30	QBGF1030W2	263.	—	—

Special Application Ground Fault Circuit Protectors — 30 mA Sensitivity

QUICKLAG Type: QBGFEP 10,000 Ampere I.C. with Bell Alarm (W1) or Auxiliary Switch (W2)

15	QBGFEP1015W1	424.	QBGFEP2015W1	580.
20	QBGFEP1020W1	424.	QBGFEP2020W1	580.
25	QBGFEP1025W1	424.	QBGFEP2025W1	580.
30	QBGFEP1030W1	424.	QBGFEP2030W1	580.
40	—	—	QBGFEP2040W1	625.
50	—	—	QBGFEP2050W1	625.
15	QBGFEP1015W2	424.	—	—
20	QBGFEP1020W2	424.	—	—
25	QBGFEP1025W2	424.	—	—
30	QBGFEP1030W2	424.	—	—

Discount Symbol CB-1

QUICKLAG®

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Quick Reference

Table 11-1. QUICKLAG Industrial Circuit Breakers ① Plug-In, Bolt-On, Cable-In/Cable-Out

Circuit Breaker Type	Circuit Breaker Type Code	Continuous Ampere Rating @ 40°C	Number of Poles	Volts		Federal Spec. W-C-375b	Interrupting Ratings rms Symmetrical Amperes						Page Number
				AC	DC		AC Ratings Volts			DC ②			
							120	120/240	240	24-48	62.5	80	
HQP	P	10 – 70	1	120/240	24, 48, 62.5	10a, 11a, 12a	—	10,000	—	5,000	③	—	11-4
HQP		10 – 125	2	120/240	24, 48, 80	10a, 12a	—	10,000	—	5,000	5,000	5,000	11-4
HQP		10 – 100	2, 3	240	—	10b, 11b, 12b	—	—	10,000	—	—	—	11-4
QPHW	P	15 – 70	1	120/240	24, 48, 62.5	14a	—	22,000	—	5,000	③	—	11-4
QPHW		15 – 125	2	120/240	24, 48, 80	14a	—	22,000	—	5,000	5,000	5,000	11-4
QPHW		15 – 100	2, 3	240	—	14b	—	—	22,000	—	—	—	11-4
QHPX	P	15 – 70	1	120/240	24, 48, 62.5	—	—	42,000	—	5,000	③	—	11-4
QHPX		15 – 100	2	120/240	24, 48, 80	—	—	42,000	—	5,000	5,000	5,000	11-4
QHPX		15 – 100	3	240	—	—	—	—	42,000	—	—	—	11-4
QHPW	P	15 – 30	1	120/240	24, 48, 62.5	15a	—	65,000	—	5,000	③	—	11-4
QHPW		15 – 30	2	120/240	24, 48, 80	15a	—	65,000	—	5,000	5,000	5,000	11-4
QHPW		15 – 20	3	240	—	15b	—	—	65,000	—	—	—	11-4
QPGF	P, GF	15 – 40	1	120	—	10a, 11a, 12a	10,000	—	—	—	—	—	11-5
QPGF		15 – 50	2	120/240	—	10a, 11a, 12a	—	10,000	—	—	—	—	11-5
QPHGF	P, GF	15 – 30	1	120	—	10a, 11a, 12a	22,000	—	—	—	—	—	11-5
QPHGF		15 – 50	2	120/240	—	10a, 11a, 12a	—	22,000	—	—	—	—	11-5
QPGFEP	P, GFEP	15 – 40	1	120	—	—	10,000	—	—	—	—	—	11-5
QPGFEP		15 – 50	2	120/240	—	—	—	10,000	—	—	—	—	11-5
QPHGFEP	P, GFEP	15 – 30	1	120	—	—	22,000	—	—	—	—	—	11-5
QPHGFEP		15 – 30	2	120/240	—	—	22,000	22,000	—	—	—	—	11-5

① QUICKLAG circuit breakers are suitable for application in relative humidity 0 – 95% non-condensing.

② Two-pole DC interrupting ratings based on 2 poles connected in series.

③ 62.5V AC interrupting rating is 3800 AIC 10 – 50 amperes and 2500 AIC 55 – 100 amperes continuous.

Circuit Breaker Type Codes: **P** Plug-In; **B** Bolt-On; **C** Cable-In/Cable-Out; **GF** Ground Fault, 5 mA; **GFEP** Ground Fault, 30 mA.For Types GHBS, GBHS and BABR Solenoid-Operated, Remote-Controlled Circuit Breakers, see **Pages 11-14 – 11-15**.For Types WMS and SPHM Supplementary Protectors, see **Pages 11-23 and 11-34**.

Quick Reference

Tables 11-1. QUICKLAG Industrial Circuit Breakers ① Plug-In, Bolt-On, Cable-In/Cable-Out (Continued)

Circuit Breaker Type	Circuit Breaker Type Code	Continuous Ampere Rating @ 40°C	Number of Poles	Volts		Special Spec. W-C-375b	Interrupting Ratings rms Symmetrical Amperes						Page Number
				AC	DC		AC Ratings Volts			DC ②			
							120	120/240	240	24-48	62.5	80	
BAB BAB BAB	B	10 – 70 10 – 125 10 – 100	1 2 2, 3	120/240 120/240 240	24, 48, 62.5 24, 48, 80 —	10a, 11a, 12a 10a, 12a 10b, 11b, 12b	— — —	10,000 10,000 —	— — 10,000	5,000 5,000 —	③ 5,000 —	— 5,000 —	11-6 11-6 11-6
BABR BABR	B	15 – 30 15 – 30	1 2	120 120/240	— —	— —	10,000 —	— 10,000	— —	— —	— —	— —	11-13 11-13
QBHW QBHW QBHW	B	15 – 70 15 – 125 15 – 100	1 2 2, 3	120/240 120/240 240	24, 48, 62.5 24, 48, 80 —	14a 14a 14b	— — —	22,000 22,000 —	— — 22,000	5,000 5,000 —	③ 5,000 —	— 5,000 —	11-6 11-6 11-6
HBAX HBAX HBAX	B	15 – 70 15 – 100 15 – 100	1 2 3	120/240 120/240 240	24, 48, 62.5 24, 48, 80 —	— — —	— — —	42,000 42,000 —	— — 42,000	5,000 5,000 —	③ 5,000 —	— 5,000 —	11-6 11-6 11-6
HBAW HBAW HBAW	B	15 – 30 15 – 30 15 – 20	1 2 3	120/240 120/240 240	24, 48, 62.5 24, 48, 80 —	15a 15a 15b	— — —	65,000 65,000 —	— — 65,000	5,000 5,000 —	③ 5,000 —	— 5,000 —	11-6 11-6 11-6
QBGf QBGf	B, GF	15 – 40 15 – 50	1 2	120 120/240	— —	10a, 11a, 12a 10a, 11a, 12a	10,000 —	— 10,000	— —	— —	— —	— —	11-7 11-7
QBHGf QBHGf	B, GF	15 – 30 15 – 30	1 2	120 120/240	— —	10a, 11a, 12a 10a, 11a, 12a	22,000 —	— 22,000	— —	— —	— —	— —	11-7 11-7
QBGfEP QBGfEP	B, GFEP	15 – 40 15 – 50	1 2	120 120/240	— —	— —	10,000 —	— 10,000	— —	— —	— —	— —	11-7 11-7
QBHGfEP QBHGfEP	B, GFEP	15 – 30 15 – 30	1 2	120 120/240	— —	— —	22,000 22,000	— 22,000	— —	— —	— —	— —	11-7 11-7
QC QC QC	C	10 – 70 10 – 100 10 – 100	1 2 2, 3, 4	120/240 120/240 240	24, 48, 62.5 24, 48, 80 —	10a, 11a, 12a 10a, 12a 10b, 11b, 12b	— — —	10,000 10,000 —	— — 10,000	5,000 5,000 —	③ 5,000 —	— 5,000 —	11-9 11-9 11-9
QCF QCF QCF QCR QCR QCR	C	10 – 60 15 – 20 15 – 30 10 – 60 15 – 20 15 – 30	1, 2 1, 2 2, 3 1, 2 1, 2 2, 3	120/240 120/240 240 120/240 120/240 240	24, 48, 62.5 24, 48, 62.5 24, 48, 62.5 24, 48, 62.5 24, 48, 62.5 24, 48, 62.5	— — — — — —	10,000 22,000 — 10,000 22,000 —	10,000 — 10,000 10,000 — 10,000	— — — — — —	3,000 3,000 3,000 3,000 3,000 3,000	③ 3,000 — 2,000 3,000 3,000	— — — — — —	11-10 11-10 11-10 11-10 11-10 11-10
QCHW QCHW QCHW	C	15 – 70 15 – 100 15 – 100	1 2 2, 3	120/240 120/240 240	24, 48, 62.5 24, 48, 80 —	14a 14a 14b	— — —	22,000 22,000 —	— — 22,000	5,000 5,000 —	③ 5,000 —	— 5,000 —	11-9 11-9 11-9
QHCX QHCX QHCX	C	15 – 70 15 – 100 15 – 100	1 2 3	120/240 120/240 240	24, 48, 62.5 24, 48, 80 —	— — —	— — —	42,000 42,000 —	— — 42,000	5,000 5,000 —	③ 5,000 —	— 5,000 —	11-9 11-9 11-9
QHCW QHCW QHCW	C	15 – 30 15 – 30 15 – 20	1 2 3	120/240 120/240 240	24, 48, 62.5 24, 48, 80 —	15a 15a 15b	— — —	65,000 65,000 —	— — 65,000	5,000 5,000 —	③ 5,000 —	— 5,000 —	11-9 11-9 11-9
QCGf QCGf	C, GF	15 – 40 15 – 50	1 2	120 120/240	— —	— —	10,000 —	— 10,000	— —	— —	— —	— —	11-13 11-13
QCHGf QCHGf	C, GF	15 – 30 15 – 30	1 2	120 120/240	— —	— —	22,000 —	— 22,000	— —	— —	— —	— —	11-13 11-13
QCGfEP QCGfEP	C, GFEP	15 – 40 15 – 50	1 2	120 120/240	— —	— —	10,000 —	— 10,000	— —	— —	— —	— —	11-13 11-13
QCHGfEP QCHGfEP	C, GFEP	15 – 30 15 – 30	1 2	120 120/240	— —	— —	22,000 —	— 22,000	— —	— —	— —	— —	11-13 11-13

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 ② Two-pole DC interrupting ratings based on 2 poles connected in series.
 ③ 62.5V AC interrupting rating is 3800 AIC 10 – 50 amperes and 2500 AIC 55 – 100 amperes continuous.

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