



April 16, 2015

### **Eaton Residential & Wiring Devices Division Communication**

To: Eaton Distributors and Channel Partners

From: Jay Haugen, Product Manager: Ground Fault Circuit Breakers

Subject: Launch of single-pole ground fault circuit breakers with self-test

Eaton is proud to announce the release of single-pole ground fault circuit breakers with self-test functionality. These new circuit breakers comply with the latest UL 943 requirements by running a diagnostic program periodically that ensures the device is functioning properly and safely.

### What are we launching?

- · New catalog numbers representing single-pole ground fault self-test circuit breakers will be available for sale immediately.
- Legacy ground fault catalog numbers without self-test will still be available, but when inventory is exhausted at the warehouse, it will not be replaced. These catalog numbers will be obsoleted once their stock is exhausted.

#### Why are we launching new parts?

- UL 943, the standard governing personnel protection ground fault devices, requires that all devices manufactured after June 29<sup>th</sup>, 2015, must have self-test functionality.
- Parts that do not contain self-test may be purchased and sold indefinitely, but in order to apply a UL marking to the device, the
  device must contain self-test functionality after June 29<sup>th</sup>.
- Eaton will replace all existing 5mA ground fault catalog numbers with new catalog numbers that indicate self-test functionality.
   We will not be replacing 30mA equipment protection breakers.

#### An explanation of self-test

- UL performed a study that found there were devices in the field that had gone "brain dead" and could no longer protect against electrical shock and leakage current, but were still functional.
- As a result of the study, UL required that all new GFCI devices perform a routine self-test of their capability to detect and prevent ground faults. The device must disable itself if the self-test is failed.
- The self-test software runs in the background—it will be invisible to the user when the self-test program is running.
- All Eaton devices will maintain their TEST buttons to manually test the device. Pressing a breaker's TEST button will yield the
  expected result: the breaker will trip if it is functioning properly.

### **Pricing**

- The re-design of the electronic components of the new self-test circuit breaker carries an increase to breaker's manufacturing
  cost.
- The new self-test catalog numbers will carry a price increase over their legacy counterparts.
- DSPs have already been loaded automatically
- CSPs are still in the process of being loaded. For immediate orders, please contact CPRO to load individual CSPs.

#### Fit, Form, and Function

• The exterior of all single-pole circuit breakers remains unchanged. The interior electronics have been redesigned to accommodate the new requirements. (The function has changed, but the form and fit are unchanged.)

## What is affected (and what is unaffected)

- Please see the attached table of catalog numbers affected by this launch.
- Note that equipment protection circuit breakers (30mA leakage current) are governed by UL 1077, not UL 943, and do not require self-test functionality. We will not make any changes to equipment protection breakers at this time.
- Two-pole ground fault self-test circuit breakers will be launched in June and are not affected by this launch.
- The Dual Purpose Arc Fault/Ground Fault circuit breaker already contains self-test functionality and will not be affected by this launch.





## Next Steps

- For orders of legacy circuit breakers that have already stocked out, and must be filled with self-test breakers, the product line will match the legacy price. This is only good for orders placed prior to distribution of this announcement.
- Two-pole breakers will launch in June.
- Legacy catalog numbers will be obsoleted as their stock is depleted.

### **Questions or comments**

• Please contact your local Eaton Sales Engineer with any questions or concerns.



# Legacy and New Catalog Numbers affected by Ground Fault Self Test requirement

# List includes breakers meeting the following criteria:

- 1) Single Pole
- 2) 5mA leakage current detection (personnel protection governed by UL 943)
- 3) Root Catalog number only. All currently available suffixes will be available in self-test

## Ground fault breakers that are <u>not</u> affected by this launch:

- 1) Equipment protection 30mA protection
- 2) Two-pole or three-pole circuit breakers

Legacy Catalog		New Self-Test
Number	Description	Catalog Number
CH		

СН			
	CHFGF115	TYPE CH 3/4" GROUND FAULT W/ FLAG, 1P, 15A, 10KAIC	CHFGFT115
	CHFGF120	TYPE CH 3/4" GROUND FAULT W/ FLAG, 1P, 20A, 10KAIC	CHFGFT120
	CHFGF125	TYPE CH 3/4" GROUND FAULT W/ FLAG, 1P, 25A, 10KAIC	CHFGFT125
	CHFGF130	TYPE CH 3/4" GROUND FAULT W/ FLAG, 1P, 30A, 10KAIC	CHFGFT130

GFCB115	Type BR 5 mA GFI Breaker 15A/1 Pole 120V 10K	GFTCB115
GFCB120	Type BR 5 mA GFI Breaker 20A/1 Pole 120V 10K	GFTCB120
GFCB125	Type BR 5 mA GFI Breaker 25A/1 Pole 120V 10K	GFTCB125
GFCB130	Type BR 5 mA GFI Breaker 30A/1 Pole 120V 10K	GFTCB130
GFCB140	Type BR 5 mA GFI Breaker 40A/1 Pole 120V 10K	GFTCB140
GFCBH115	Type BR 5 mA GFI Breaker 15A/1 Pole 120V 22K	GFTCBH115
GFCBH120	Type BR 5 mA GFI Breaker 20A/1 Pole 120V 22K	GFTCBH120
GFCBH125	Type BR 5 mA GFI Breaker 25A/1 Pole 120V 22K	GFTCBH125
GFCBH130	Type BR 5 mA GFI Breaker 30A/1 Pole 120V 22K	GFTCBH130

Classified			
	CL115GF	TYPE CL 5 MA BKR 1POLE 15 AMP 120/240V 10K CLASSIFIED 1"	CL115GFT
	CL120GF	TYPE CL 5 MA BKR 1POLE 20 AMP 120/240V 10K CLASSIFIED 1"	CL120GFT
	CL130GF	TYPE CL 5 MA BKR 1POLE 30 AMP 120/240V 10K CLASSIFIED 1"	CL120GFT

olt On	t On		
QBGF1015	BOLT ON GFCB W/PCB 10KAIC 15A 5MA TRIP	QBGFT1015	
QBGF1020	BOLT ON GFCB W/PCB 10KAIC 20A 5MA TRIP	QBGFT1020	
QBGF1025	BOLT ON GFCB W/PCB 10KAIC 25A 5MA TRIP	QBGFT1025	
QBGF1030	BOLT ON GFCB W/PCB 10KAIC 30A 5MA TRIP	QBGFT1030	
QBGF1040	BOLT-ON GF BKR 1P 40A 120/240VAC 10KAIC 5MA TRIP	QBGFT1040	
QBHGF1015	TYPE QBHGF BREAKER, 1P, 15A, 120V, 22K AIC	QBHGFT1015	
QBHGF1020	20 AMP 1 POLE GF	QBHGFT1020	
QBHGF1025	TYPE QBHGF BREAKER, 1P, 25A, 120V, 22K AIC	QBHGFT1025	
QBHGF1030	TYPE QBHGF BREAKER, 1P, 30A, 120V, 22K AIC	QBHGFT1030	



Legacy Catalog New Self-Test
Number Description Catalog Number

ble-in/Cable-ou	le-in/Cable-out		
QCGF1010	CABLE CABLE GFCB W/PCB 10KAIC 10A 5MA TRIP	QCGFT1010	
QCGF1015	CABLE CABLE GFCB W/PCB 10KAIC 15A 5MA TRIP	QCGFT1015	
QCGF1020	CABLE CABLE GFCB W/PCB 10KAIC 20A 5MA TRIP	QCGFT1020	
QCGF1025	CABLE-CABLE GFCB W/PCB 10KAIC 25A 5MA TRIP	QCGFT1025	
QCGF1030	CABLE-CABLE GFCB W/PCB 10KAIC 30A 5MA TRIP	QCGFT1030	
QCGF1040	CABLE-IN/CABLE-OUT QC GF BKR 1P 40A 120/240VAC 10KAIC	QCGFT1040	
QCHGF1015	1P 15A CABLE-CABLE 22KA 5MA TRIP GFCB BLK HANDLES	QCHGFT1015	
QCHGF1020	1P 20A CABLE-CABLE 22KA 5MA TRIP GFCB BLK HANDLES	QCHGFT1020	

Тур	Type QP		
	QPGF1015	PLUG ON GFCB W/PCB 10KAIC 15A 5MA TRIP_WITH BLACK HANDLES	QPGFT1015
	QPGF1020	PLUG ON GFCB W/PCB 10KAIC 20A 5MA TRIP WITH BLACK HANDLES	QPGFT1020
	QPGF1030	PLUG ON GFCB W/PCB 10KAIC 30A 5MA TRIP_WITH BLACK HANDLES	QPGFT1030
	QPHGF1020	TYPE QPHGF BKR 1P 20A 120V 22KAIC GROUND FAULT 5MA PLUG-IN	QPHGFT1020
	QPHGF1030	TYPE QPHGF BKR 1P 30A 120V 22KAIC GROUND FAULT 5MA PLUG-IN	QPHGFT1030
	QPHGF1040	TYPE QPHGF BKR 1P 40A 120V 22KAIC GROUND FAULT 5MA PLUG-IN	QPHGFT1040

and Labeled		
74584	TYPE CH 3/4", 1P, 20A, 120V GF W/ TRIP FLAG - WATKINS	74584
1492-MCGA115	1-Pole QCGF AB Brand Label 15A w/ 5mA GF	1492-MCGA115
1492-MCGA120	1-Pole QCGF AB Brand Label 20A w/ 5mA GF	1492-MCGA120
1492-MCGA125	1-Pole QCGF AB Brand Label 25A w/ 5mA GF	1492-MCGA125
1492-MCGA130	1-Pole QCGF AB Brand Label 30A w/ 5mA GF	1492-MCGA130
1492-MCGA140	1-Pole QCGF AB Brand Label 40A w/ 5mA GF	1492-MCGA140

Obsolete with no	osolete with no replacement		
BQGF15	1/P 15/A 10/KA G FAULT WITH PCB FOR COMMANDER	Obsolete with no replacement	
BQGF20	BQGF20 1/P 20/A 10/KA G FAULT WITH PCB FOR COMMANDER Obsolete with no replace		
BQGF30	1/P 30/A 10/KA G FAULT WITH PCB FOR COMMANDER	Obsolete with no replacement	
CH120GF	Type CH 5mA GFI Breaker 20A/1 Pole 120/240V 10K	Obsolete with no replacement	
CHB115GF	PERSONNEL GRND FAULT INTERRUPT	Obsolete with no replacement	
CHB120GF	PERSONNEL GRND FAULT INTERRUPT	Obsolete with no replacement	
CHB130GF	PERSONNEL GRND FAULT INTERRUPT	Obsolete with no replacement	
CHQ115GF	Type CHQ Classified 5mA GFI Breaker 15A/1 Pole 120V 10K	Obsolete with no replacement	
CHQ120GF	1P 20A QO CLASSIFIED_GF	Obsolete with no replacement	
CHQ130GF	Type CHQ Classified 5mA GFI Breaker 30A/1 Pole 120V 10K	Obsolete with no replacement	

Suff	Suffixes		
	BP	Bulk Pack	
	CS	Clamshell	
	F	Fungus Proof	
	H08	Marine Label	
	PN	Plug On Neutral	
	QN	Quick Connect Neutra	
	Т	Ring Lug Terminal	
	٧	Calibrated for 50 Degrees C	
	W1	Bell Alarm	
	W2	Aux Switch	
	X36	Bulk Pack - 36 Pieces	
	X44	Bulk Pack - 44 Pieces	
	X68	Bulk Pack - 68 pieces	