

# FAME Process and Execution

Larry E. Yonce,  
Product Line  
Manager - Power  
Breaker Center,  
Eaton, USA

FAME is an exclusive process offered by Eaton's Electrical Engineering Systems and Services (EESS) Division that allows customers to return their existing VCP-W power circuit breakers for a mechanism enhancement. FAME can also be performed on VCP-W-ND and the VR-Series replacement breakers since they utilize the same basic mechanism components. The FAME process can be combined with a Class 1 Reconditioning service if requested. (FAME is not technically a conversion per IEEE C37.59 but rather a mechanism enhancement using previously tested components.) The final product and testing exceed the requirements of IEEE C37.09 for mechanical endurance. FAME is a component upgrade and the final assemblies were subjected to mechanical endurance testing exceeding 10,000 mechanical operations, momentary operations of 111 kA, interruption at 41 kA at 15 kV, and close-and-latch at 111 kA and 2000A to qualify them to the IEEE Standard.

After the FAME process is completed, the new mechanism requires no scheduled maintenance or lubrication for 10,000 operations or 10 years, whichever comes first when applied in "usual" service conditions as defined by IEEE C37.04-1999.

The FAME enhancements can be applied to any VCP-W power circuit breaker or Power Breaker Center VR-Series replacement breaker that is functional, has all its original components, and is rated up to and including the following values:

Voltage rating	4.76kV-8.25kV-15kV
Continuous current	1200A or 2000A
Short circuit rating	41 kA (not to exceed K*I nameplate rating)
Maximum close-and-latch	111 kA (Based on $2.7 * K * I$ nameplate rating)

If the original VCP-W has a UL label, FAME does not degrade the mechanical or electrical performance originally used to qualify the circuit breaker to the UL test standard. FAME does add durability and longevity to the mechanism. An additional "Notice" label is added to each circuit breaker to assure the customer that we have not degraded the mechanisms performance. The PBC

is working with UL to determine how to officially address the UL label in the future, but this has not been determined at the time this document was created. At this point, the UL label is to be retained after the FAME upgrade although it may have to be relocated on the circuit breaker's front cover. It should be noted that reconditioning or repair officially voids the original UL label. FAME does not fall into the category of repair or reconditioning.

## NOTICE

### MECHANISM

#### FACTORY AUTHORIZED MECHANISM ENHANCEMENT (FAME).

**FAME was performed on this circuit breaker's operating mechanism. The operating mechanism now has performance characteristics that exceed the mechanical endurance capabilities of the original design testing program. The nameplate ratings and interrupting capabilities remain unchanged.**

94C9523H80

Process:

- FAME enhancement (Performed at the PBC or any PBRc for VCP-W only)
- FAME enhancement to VCP-W ND (Performed exclusively at the PBC)
- FAME enhancement to VR-Series Replacement Breakers (Performed exclusively at the PBC)
- Class 1 Reconditioning of VCP-W (Performed only at PBRc locations)
- FAME plus Class 1 Reconditioning VCP-W (Performed only at PBRc locations)

Contact your local EESS DOC or Eaton electrical distributor to obtain pricing based on whether you want FAME or FAME + Class 1 Reconditioning. This will determine the location that performs the work. Issue a purchase order according to the instructions provided on the quotation. Return instructions and identification will be provided. The power circuit breaker should be packaged according to the specific instructions prior to shipment to the PBC or PBRc location.

Upon receipt at the PBC/PBRc:

- An incoming inspection and test will be performed per QAF-IIF-VCPW-FAME Incoming Inspection Form. Although the circuit breaker's insulation and vacuum pole units are not part of the FAME process, they are tested to validate their electrical operational integrity prior to initiating FAME.

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- A high resolution photograph is taken of the circuit breaker nameplate when received at the PBC/PBRc to be used as documentation and to assist in the creation of the new nameplate after conclusion of the FAME process.
- If defective components are detected in the inspection and test phase that are not part of the standard FAME process, the location that placed the purchase order with the PBC/PBRc will be contacted via a "notification e-mail" within 5-7 business days after receipt of the VCP-W circuit breaker to advise the end user customer of the additional costs to repair or replace the defective component(s). No further work will be performed and the schedule will be suspended until written confirmation is received from the DOC/Distributor authorizing the additional charges and release to proceed. The DOC/Distributor has 10 business days to respond to the PBC/PBRc after the notification e-mail is sent to accept or reject the additional costs to complete the process.
- The PBC/PBRc has a minimum charge for incoming inspection, test and handling of the circuit breaker regardless of the outcome of the tests or decision to proceed. Contact your local EESS DOC or Eaton Distributor for details.
- If the customer decides not to proceed with FAME or Class 1 Reconditioning, the VCP-W circuit breaker will be returned and the minimum charge will apply.
- If the standard FAME components are all that is required, then the FAME process will be initiated immediately after completion of the incoming inspection and test. Projected turnaround is 10-15 business days based on our current shop load and parts availability. This is subject to adjustment.
- After completion of the FAME process along with other required repairs or reconditioning, each circuit breaker will be subjected to the complete battery of "Production tests" per IEEE C37.09.
- A new nameplate is created as follows:
  - The nameplate information is checked and validated within Eaton's master design data system and any information that does not match the original information is corrected to match the information based on the original design style numbers.
  - The new style number will be the same as the original and will have "+FAME" added as a suffix.
  - The original IB number will be repeated with the addition of "+ FAME IL82403EN"
  - The new serial number will follow the current PBC convention. The first four digits will be the year and month and the remaining four digits will duplicate the last four digits of the original serial number.
  - The complete original serial number will be duplicated in the "Notes field" of the new nameplate to document the original circuit breaker components that were not changed in the FAME process.

Type	50VCP – WND250	Yr/Ser No	120400781
Style	3A75630G02	I.B.	32 – 255 – 1H
Weight	325 Lbs.	Wiring Diag	691C386H46
Rtd Max Voltage	4.76 kV	Motor Volts	125VDC/AC
Impulse Voltage	60 kV PEAK	Close Current	6.6 A
Rtd Cont Current	1200 A	Voltage Range	100 – 140 VDC
Rtd Frequency	60 Hz	Trip – 1 Current	6.6 A
Rtd S – C Current	29 kA	Voltage Range	70 – 140 VDC
V Range Fac – K	1.24	Trip – 2 Current	N.A.
Rtd Intrl Time	5 Cycles	Voltage Range	N.A.
C&L Current	97 kA PEAK	UV Trip Volts	N.A.
Option	20240200042020000000		

Type	50VCP – WND250	FAME Yr/Sr No	170400781
Style	3A75630G02 + FAME	I.B.	32 – 255 – 1H + FAME IL182403EN
Weight	325 Lbs.	Wiring Diag	691C386H46
Rtd Max Voltage	4.76 kV	Motor Volts	125VDC/AC
Impulse Voltage	60 kV PEAK	Close Current	6.6 A
Rtd Cont Current	1200 A	Voltage Range	100 – 140 VDC
Rtd Frequency	60 Hz	Trip – 1 Current	6.6 A
Rtd S – C Current	29 kA	Voltage Range	70 – 140 VDC
V Range Fac – K	1.24	Trip – 2 Current	N.A.
Rtd Intrl Time	5 Cycles	Voltage Range	N.A.
C&L Current	97 kA PEAK	UV Trip Volts	N.A.
Option	20240200042020000000	Original Yr/Ser No	120400781

- The completed VCP-W circuit breaker along with signed test documents and any additional instruction leaflets will be packaged for shipment and returned F.O.B, POS, PPD and included in the price.

Warranty

All circuit breakers that undergo the FAME process will be shipped with a warranty on the new FAME mechanism only as stated in SP-25-000 for 36 months from the date of installation or 42 months from the date of shipment, whichever comes first.

Any additional components replaced during the FAME process will carry a standard warranty as stated in SP-25-000 for one year from the date of installation or 18 months from the date of shipment, whichever comes first.

Eaton  
 1000 Eaton Boulevard  
 Cleveland, OH 44122  
 United States  
 Eaton.com

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 Printed in USA  
 Publication No. WP182006EN  
 Effective June 2017