SECTION 33 77 00.01

15KV PADMOUNT VACUUM FAULT INTERRUPTER - OIL FILLED

PART 1  GENERAL

1.1 DESCRIPTION

Padmount Switch with vacuum load and/or fault interrupters, complete with insulating oil, and protective relays.

1.2 INCORPORATED DOCUMENTS

Latest applicable NEMA and ANSI standards for padmount, dead front, oil-filled vacuum fault interrupters.

1.3 SUBMITTALS

A. Submit shop drawings containing information of dimensions, weight, overcurrent protection devices, and fabrication details.

B. Submit manufacturer’s test report.

PART 2  PRODUCTS

2.1 GENERAL DESCRIPTION

A. Manufacturer: Trayer Engineering
   898 Pennsylvania Ave.
   San Francisco, CA 94107
   Phone:(800) 377-1774

B. Type: Padmount Fault Interrupter

C. Basic Catalog # 3800_7.

D. No Substitutions allowed

2.2 ELECTRICAL CHARACTERISTICS

A. Nominal Voltage: 15 kV, 3-Phase, 60 Hz.

B. Number of switch positions: 6-way, all ways switched with vacuum load interrupters as indicated in the purchase documents.

C. Provide 600 A apparatus bushings without male stud.
D. Vacuum Load Interrupters rated for 600 A, 95kV BIL.

E. Visible Disconnect

F. Insulating Liquid: Mineral Oil, ASTM D-3487.

G. Fault Interrupters as specifically indicated on the Purchase Documents
   1. Control Power Transformer: one with two fuses for 12.47 kV delta connection.
   2. Current transformers: one for each interrupter, 600:5 ratio.
   3. Three phase overcurrent relay: SEL 501-2 with phase, residual overcurrent protection with inverse, very inverse, or extremely inverse curves all available in one relay.
   4. Trip Device: Capacitor trip.
   5. One “a“, one “b”, and one “trip” contact on each interrupter suitable for SCADA interface. Terminate the auxiliary contacts on a screw type terminal block.

2.3 HIGH VOLTAGE TERMINATION AND EQUIPMENT
   A. Single sided access, standard base.
   B. Provide parking stands.
   C. Provide photo engraved stainless steel diagrammatic main nameplate.

2.4 CONSTRUCTION
   A. Construction shall be all stainless steel and dead front.
   B. All bussing shall be copper.
   C. Provide lifting lugs and provisions for jacking, rolling, and skidding.
   D. Provide lugs for bolting the switch to the pad. The lugs shall be designed for UBC to resist seismic forces according to the CBC for Zip Code 94305
   E. Provide the following accessories:
      1) Liquid level indicator.
      2) Wind latch.
      3) Ground terminals.
F. Painting: Finish the switch according to ANSI standards for surface preparation, primer, and paint durability. Exterior color: Semi-gloss black, similar to Kelly Moore 1245 407 acrylic low sheen "carbon."

**PART 3 EXECUTION**

3.1 FACTORY TESTS

Perform factory tests according to ANSI Standards and submit test reports to the Owner prior to shipment.

3.2 PROCUREMENT - SHIPPING AND DELIVERY

Notify the Owner 24 hours prior to delivery at the phone number provided in the Purchase Order.