# COOPER POWER SERIES

## Under-oil arrester disconnector



#### General

Eaton's Cooper Power<sup>TM</sup> series arrester disconnector provides the transformer manufacturer or utility with a means of disconnecting and reconnecting the under-oil arrester ground for transformer testing. It is designed for mounting (secured from inside shown at left bottom row or outside the tank shown at left top row) in transformers filled with transformer oil, Envirotemp<sup>TM</sup> FR3<sup>TM</sup> fluid, or an approved equivalent.

The arrester disconnector was designed to withstand various surge currents as specified in IEEE Std C62.11-1993™ standard as well as highpotential and impulse requirements specified in IEEE Std C57.12.00-1993™ standard.

The elliptically shaped shaft prevents the arrester ground lead from being rotated during operation of the disconnector. The mating corrosion resistant, aluminum seal gland incorporates two Viton<sup>®</sup> O-Rings for double leak protection.

The shaft and handle are molded of UV stable polymer materials for long term durability. The gasket surface provides a controlled compression and containment of the highly resilient Buna-N rubber gasket.

A threaded (1/4-20 x .56" long) stud is provided for easy arrester ground lead connection.

Top row of images show externally secured and the row below show internally secured.

#### Installation

The arrester disconnector is installed into an industry standard, 1.325" diameter, keyed (.14 radius) hole from the inside or outside of the tank. It is internally or externally secured and positively grounded with a metal UL® approved electrical grounding conduit lock nut. Refer to Service Information S800-51-1 Under-Oil Arrester Disconnector Installation/Operation Instructions for details.



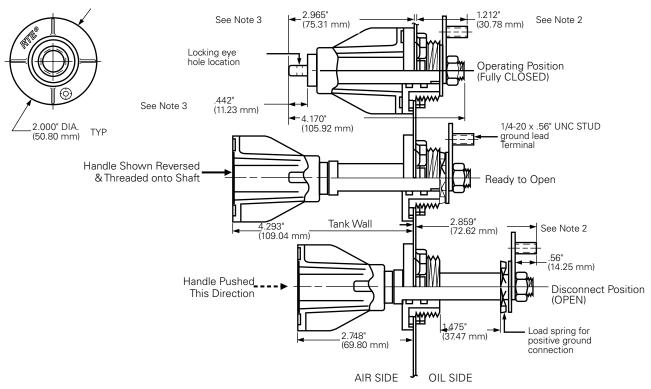


Figure 1. Arrester disconnector (internally secured) shown with standard locking provision.

Notes: 1. Dimensions given are for reference only.
2. Dimensions given using a 14-gage tank wall. Designed to accommodate tank wall thicknesses – 14-gage to <sup>5</sup>/<sub>16</sub>\*.
3. Dimensions shown include additional .442\* (11.23 mm) for locking provision. Locking eye hole diameter for padlock provision is .172\* (4.36 mm). Without locking provision, air side extension dimension is reduced from 2.965\* (75.31 mm) to 2.523\* (64.08 mm), for the internally secured version, and 3.254\* (82.65 mm) to 2.812\* (71.42 mm), for the externally secured version.

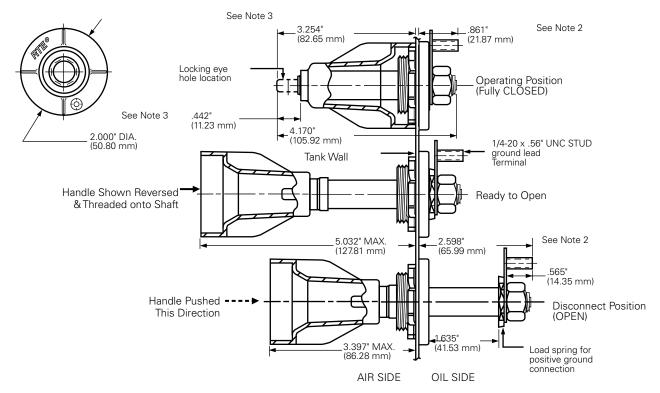


Figure 2. Arrester disconnector (externally secured) shown with standard locking provision.

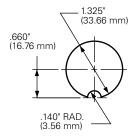


Figure 3. Mounting hole.

**Table 1. Voltage Ratings and Characteristics** 

Description	kV	kA
Standard Voltage Class	35	_
AC 60 Hz. 1 Minute Withstand (in Open Position)	50	_
BIL (Full Wave Crest) (in Open Position)	150	_
BIL (Chopped Wave) (in Open Position)	175	_
Discharge Current Withstand (in Closed Position)	_	100

### **Ordering information**

To order an arrester D=disconnector, specify the item from Table 2.

**Table 2. Arrester Disconnector** 

Description	Catalog Number Internally Secured	Catalog Number Externally Secured
Arrester Disconnector with Standard Locking Provision and Corrosion Resistant Aluminum Sealing Gland	AD150PA100	AD150PA200
Arrester Disconnector (No Locking Provision) with Corrosion Resistant Aluminum Sealing Gland	AD150NA100	AD150NA200
Gasket*	0537980C29	0537980C29
Decal*	1139140B01	1139140B02

<sup>\*</sup> Gasket and decal are included with arrester disconnectors listed in Table 2.

Note: For kit without decal, change "A100" to "A101" or "A200" to "A201". Decal must be ordered separately.

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For Eaton's Cooper Power series under-oil arrester disconnector product information call 1-877-277-4636 or visit: www.eaton.com/cooperpowerseries.