## High Voltage Bushing Well 25kV Class





Table 1

ECI, ERMCO Components Inc. 1607 Industrial Road Greeneville, TN 37745 Phone: (423) 638-2302 Toll Free: (877) 267-1855 Fax (423) 636-6492

#### Voltage Ratings and Characteristics

Description	kV
Standard Voltage Class	25
Maximum Continuous Line to Ground Voltage	15.2
AC 60 Hz 1 Minute Withstand	40
DC 15 Minute Withstand	78
BIL and Full Wave Crest	125
Minimun Corona Voltage Level	19

Voltage ratings and characteristics are in accordance with ANSI/IEEE Std. 386<sup>TM</sup> standard.

#### Table 2 Current Ratings and Characteristics

Description	Amperes
Continuous Current	200 A rms
Short Time	10,000 A rms symmetrical for 0.17 seconds 3,500 A rms symmetrical for 3.0 seconds

Current ratings and characteristics are in accordance with ANSI/IEEE Std. 386<sup>TM</sup> standard.

# BEYOND THE STANDARD

The ERMCO Components, Inc. SURE MAKE high voltage bushing well utilizing a polyester thermoset compound that meets or exceeds all industry and ECI requirements. The bushing well is designed for the termination of primary leads in oil filled devices such as padmount transformers. The bushing well mating interface conforms to the ANSI/IEEE Std. 386 for Separable Insulated Connectors and will accept switch modules (bushing well inserts) that comply with the Standard.

#### DESIGN FEATURES

• Insulated body is molded of a polyester thermoset compound designed for excellent electrical and mechanical properties.

• The ground shield is oil resistant.

• The connecting stud is a copper alloy molded into the body to provide a high strength leak free bond.

• Gasket location and compression are controlled at the O.D. by the molded in gasket retaining ring.

• Dimensions comply with ANSI/IEEE 386 Std. for Separable Insulated Connectors.

- Uses tank mounting hole of 2.562 inches diameter.
- Recommended torque values: External clamp is 80 inch lbs, Internal connection is 80 inch-lbs
- Nitrile gasket (9U09AAW274)

• The removable insert is tin plated for corrosion resistance and ease of removal.

Use a 5/32 allen wrench to replace the removable insert, insert non-threaded lead-end first and torque to 100 inch-lbs.

Order removable inserts separately (9U09AAW271)

For more information about the high voltage bushing well, contact your Ermco Components representative or call (877) 267-1855

### **Ordering Information**

#### High Voltage Bushing Well Kits (Standard Stud Type)

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Catalog Number	Description
9U03DAS125	High Voltage Bushing Well
9U03DAS125G	<ul><li>High Voltage Bushing Well</li><li>Nitrile Gasket</li></ul>
9U03DAS125C	<ul> <li>High Voltage Bushing Well</li> <li>Nitrile Gasket</li> <li>Steel Clamp (Zinc Electroplating with Yellow Chromate)</li> </ul>

#### High Voltage Bushing Well Kits (Replaceable Stud Type)

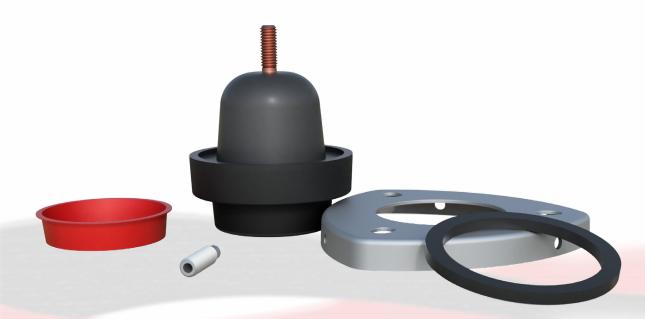
Catalog Number	Description
9U03DAR125	High Voltage Bushing Well
9U03DAR125G	<ul><li>High Voltage Bushing Well</li><li>Nitrile Gasket</li></ul>
9U03DAR125C	<ul> <li>High Voltage Bushing Well</li> <li>Nitrile Gasket</li> <li>Steel Clamp (<i>Zinc Electroplating with Yellow Chromate</i>)</li> </ul>

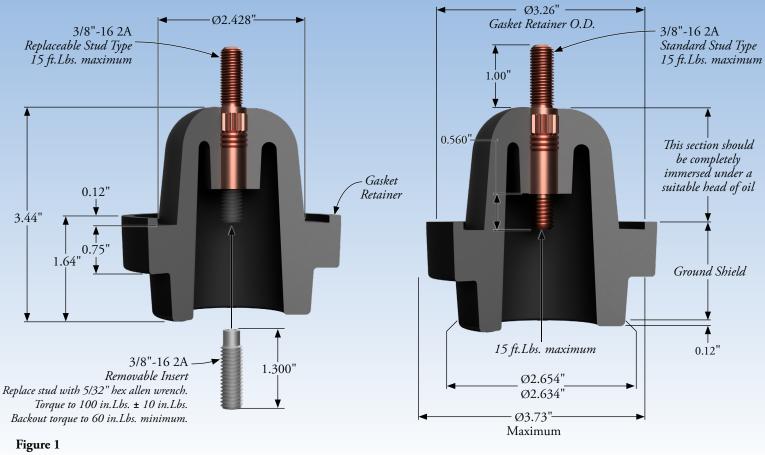
#### Hardware Kit

Catalog Number	Description
9U09AAW267	<ul> <li>Steel Clamp (Zinc Electroplating with Yellow Chromate)</li> <li>Nitrile Gasket</li> </ul>
9U09AAW268	<ul><li>Stainless Steel Clamp</li><li>Nitrile Gasket</li></ul>

#### **Replacement Parts**

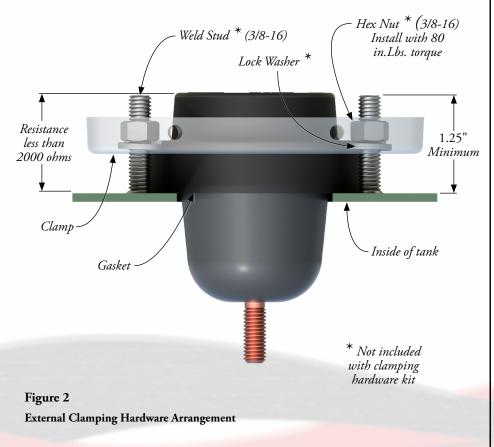
Catalog Number	Description
9U09AAW271	Removable Insert
9U09AAW272	Steel Clamp (Zinc Electroplating with Yellow Chromate)
9U09AAW273	Stainless Steel Clamp
9U09AAW274	Nitrile Gasket
7285ZA1699	Dust Cap





**High Voltage Bushing Well Dimensions** *Replaceable and Standard Type* 

Note: Dimensions are given for reference only.



#### MECHANICAL PERFORMANCE

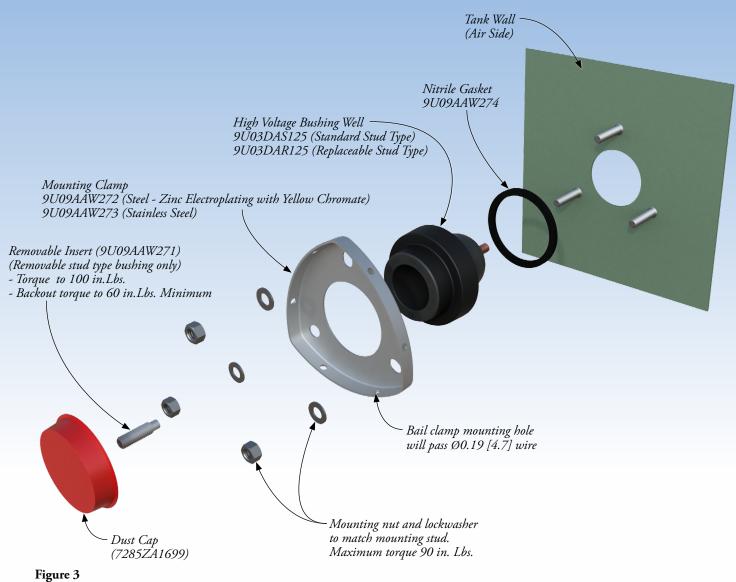
- The bushing well interface conforms to ANSI / IEEE Std 386-1985 for separable insulated connections.
- Direct pushout force exceeds 1500 lbf
- Breaking torque exceeds 25 ft-lbs on molded-in studs
- Seal integrity between the molding compound and the current carrying stud certified using Helium mass spectrometer at 1.2 x 10-6 atm cc/sec sensitivity.

#### CHEMICAL PERFORMANCE

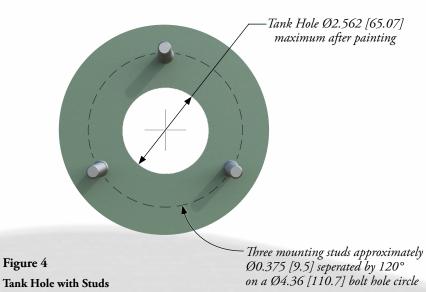
- Passes recognized 10°<sup>C</sup> transformer oil compatibility test.
- Passes recognized silicone fluid compatibility test.
- Material retains mechanical strength after 120 hrs exposure to insulating fluids at 140°<sup>C</sup>.

#### THERMAL PERFORMANCE

• The ERMCO Components, Inc. bushing well exhibited no cracking and passed electrical testing after thermocycling between -40°<sup>C</sup> and 150°<sup>C</sup> (10 cycles, one cycle / day, six hours transition, six hours dwell).



Mounting to Tank



Note: Dimensions are given for reference only.





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