

Tuf Ex-Well

200 Amp Bushing Well

Central Moloney, Inc.
Components Operation
An ISO 9002 Certified Company

Product Data Sheet

File No: PDS1030
Availability: Immediate

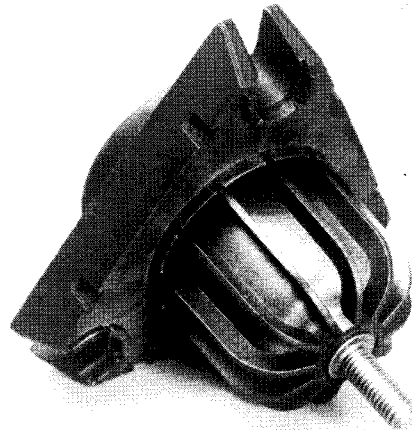
"Tuf Ex-Well" A Breakthrough In Bushing Well Technology

Central Moloney Components is proud to introduce a revolutionary new series of 200 amp bushing wells designed to improve the reliability of padmount transformers. The Tuf Ex-Well is the first bolted design bushing well capable of being mounted directly to the transformer - without the use of a metal clamp ring.

Combining technology utilized for decades on padmount secondary bushings with the strength of today's engineering thermoplastics, CMI has developed a product with significant benefits for both the

OEM and end user.

Bushing well clamp ring corrosion has been a major problem in this industry. Thin gauge, plated clamp rings are a source of corrosion, except at those utilities willing to pay a premium for stainless clamp rings. The Tuf Ex-Well has eliminated the corrosion problem associated with plated clamp rings and the need for high cost stainless clamp rings.



Patent Pending

200 Amp, 15KV, 25KV, & 35KV Class Bushing Well

Tuf Ex-Well Features

- No clamp ring required
- Superior corrosion resistance
- Secure, compression limited gasketing
- Mounts with the industry standard hole and stud pattern

The Tuf Ex-Well bushings are molded with strong, high temperature, hydrolytically stabilized, engineered thermoplastic. This material has been utilized by CMI Components in a variety of products for over ten years with excellent field history.

The gasketing system features positive gasket stops to insure

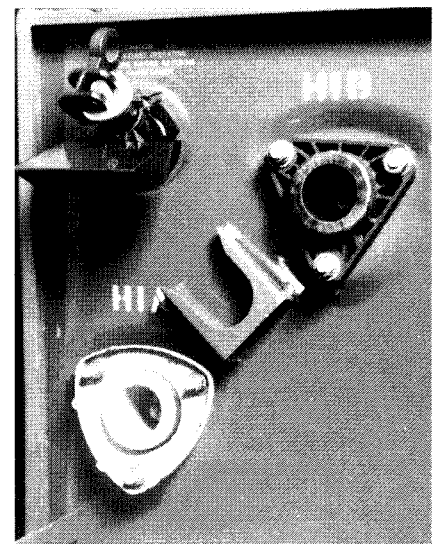


Fig 2 Tuf Ex-Well (above) compared to standard well with clamp ring

controlled gasket compression for maximum seal life. Additionally, the gasket is positively located by the internal shank O.D. During application the gasket cannot fall out of a groove and become pinched.

Tuf Ex-Well

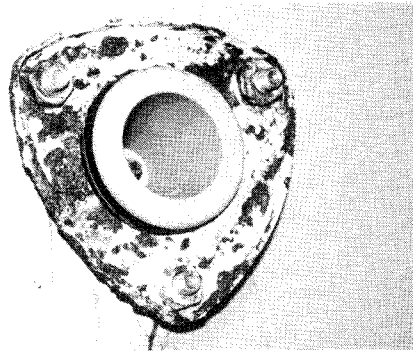


Fig 3 Clamp Ring Corrosion

Corrosion Resistance

The Tuf Ex-Well without bail provisions has no metal parts to corrode. Bail provisions, when furnished, are made of 300 grade stainless for ultimate corrosion protection. Photo at left shows a clamp ring installed well after only 1500 hours in a salt fog chamber.

Bail Provisions

For those few applications where bails are required to install a feedthrough device, the Tuf Ex-Well can be retrofitted with wire clips which are easily installed in slots molded into the flange. Assemblies are also available with bail provisions pre-installed.

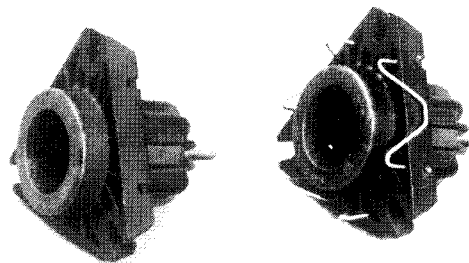


Fig 4 Available Bail Provisions

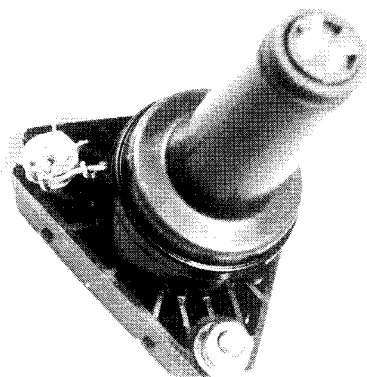


Fig 5 Insert Grounding

Insert Grounding

The insert shield is automatically grounded upon installation through contact with the conductive coating on the lip of the bushing well. This conductive coating is grounded to the tank through the mounting stud and hardware. Auxiliary grounding of the insert can be accomplished through a short jumper wire to a spring connector installed on one of the mounting studs.

Removable Stud

The same removable stud design which CMI pioneered in 1985 is available with the new Tuf Ex-Well. The removable stud is easily removed or installed with a disposable hex wrench adaptor which is furnished with each replacement stud kit.

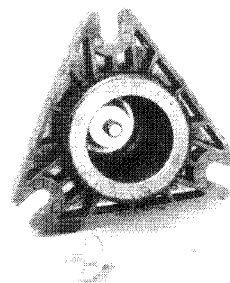


Fig 6 Removable Stud Version

Tuf Ex-Well

Part Dimensions

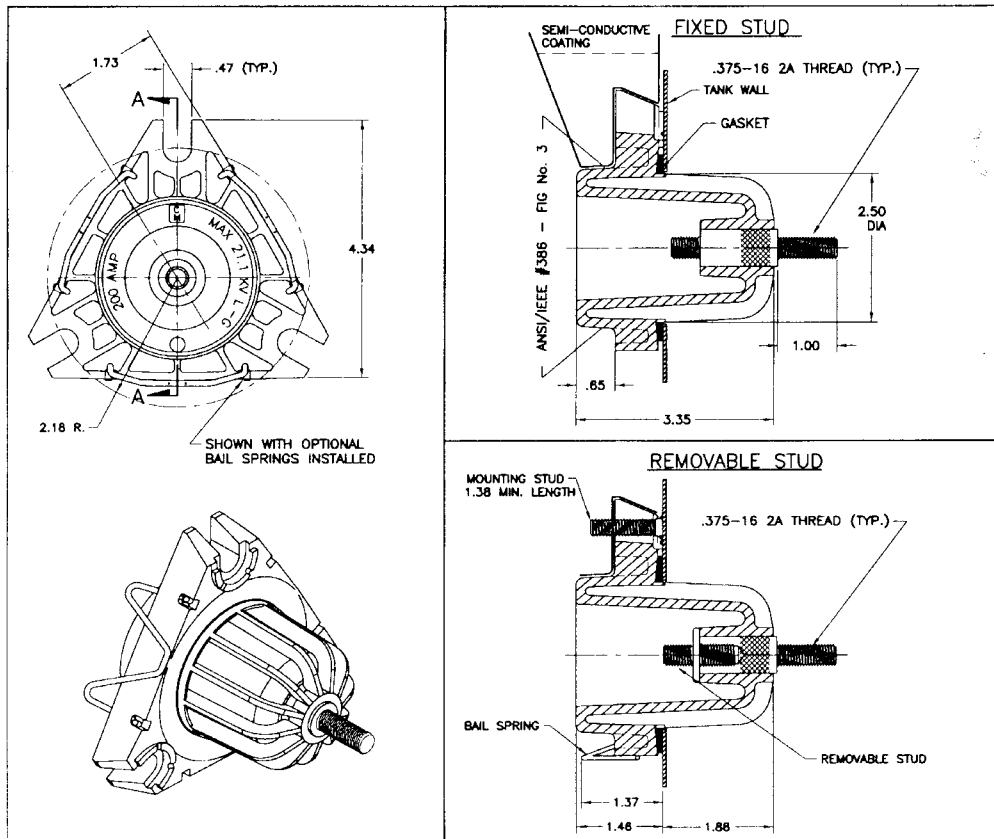


Fig 7

Mounting Details

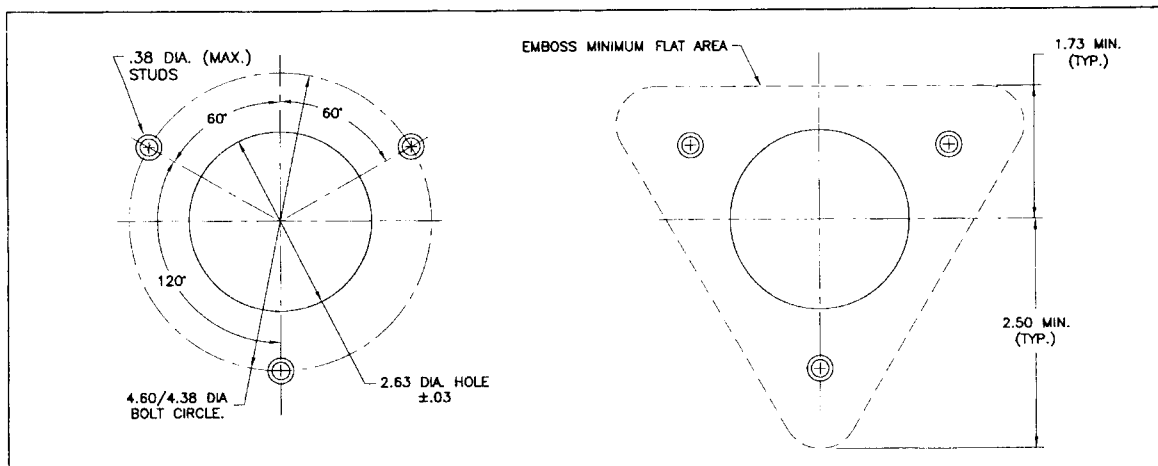


Fig 8

Tuf Ex-Well

Ordering Information

Description	Part #
Bushing well with fixed stud and gasket	70191752
Bushing well with removable stud and gasket	70191772
Bushing well with fixed stud, gasket, and bail wires installed	70191754
Bushing well with removable stud, gasket, and bail wires installed	70191774
Bail springs, each	70190052
Removable stud replacement kit	70190051

Table 1

Additional Information Available:

Design Test Report - Report No. 1917-00
Customer Data Sheet - CDS 19001

Electrical Rating Summary

Voltage Class	35 KV
Maximum Line to Ground	21.1 KV
Impulse (BIL)	150 KV
AC (1 minute)	50 KV
DC (15 minutes)	103 KV
Corona Extinction Level	26 KV
Continuous Current	200 Amps
Short Time Current - 3 Seconds (symmetrical)	3500 Amps
Short Time Current - .17 Seconds (symmetrical)	10,000 Amps

Table 2

The Tuf Ex-Well meets or exceeds the design requirements of ANSI/IEEE Standard 386-1995, as applicable to bushing wells.

In Conclusion:

Central Moloney Components has an established record as an industry leader in the innovation of transformer components.

The Tuf Ex-Well is yet another example of our commitment to provide products of superior reliability, performance, and value.

Central Moloney, Inc. Components Operation

An ISO 9002 Certified Company

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