



## Generator Current Transformer

### Application

The LRA-948 is a top quality, rugged indoor, dry-type, current transformer suitable for service in the most demanding generator applications. Whether hydro, gas turbine, nuclear or steam plant, this transformer meets all application requirements. The LRA-948 is currently in operation at the largest nuclear facility in the US.

Primary current ratios are available up to 60,000:5 and 30,000:1 amps at 60 or 50 Hz. The typical rating factor is 1.0 at 55 degree C. Inside diameters are available from 4" up to 44".

### Fabrication

Wound cores of high permeability and low loss, grain orientated silicon steel are used to optimize performance and physical size of the transformers. High temperature insulation is used to insulate between the windings and the core as well as between winding layers. To achieve maximum mechanical and electrical performance, all windings or sections are evenly distributed around the periphery of the core.

The fully insulated winding is board mounted to a glass reinforced insulating board giving the LRA superior thermal, mechanical and electrical strength to withstand the high vibration and temperature of generator applications.

The unit has 1/4"-20 secondary stud connections in a terminal box with two conduit openings (1" NPT) and a cover plate for ease of electrical connection.

### Accuracy

LRA's are specifically designed to provide metering accuracy of 0.3 @ B0.1 thru B1.8 burdens and/or relay accuracy of C800. IEC Accuracy classes are available. The accuracy class and size are dependent on specified current ratios.

### Magnetic Circuits

LRA's are available in single ratio designs only. Internal shielding is provided at and above 10,000 primary amps to prevent the effects of external flux from adjacent phases.



### Mounting

The LRA-948 is designed for mounting over the generator bushings. All transformers are designed to specific customer requirements for mounting hole size and location. The transformer assembly should always be mounted with the coil side up.

### Testing

Every transformer is tested in accordance with IEEE Standard C57.13 (latest revision)

### Options

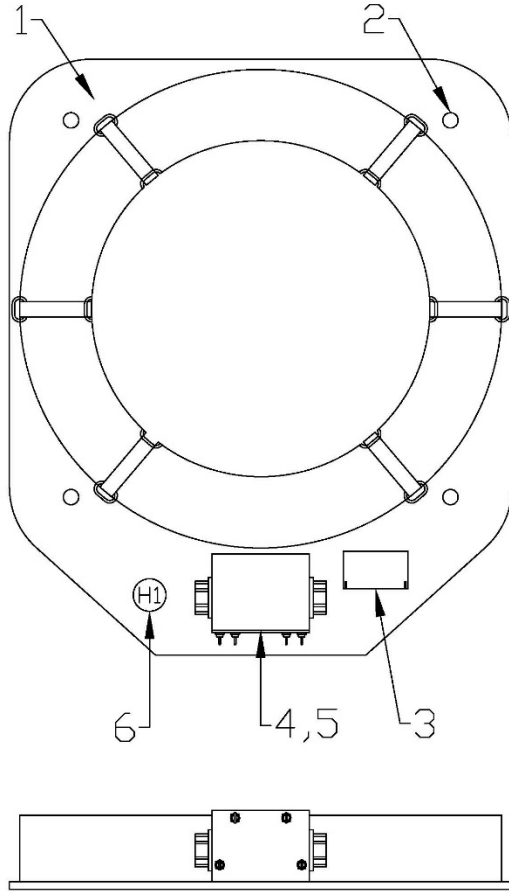
- Emergency Response / Expedited Shipments.
- Pre-assembled, multiple transformer assemblies.
- Gapped core designs.
- Special designs to match existing CT performance characteristics.
- Coils only (No mounting boards) with flexible secondary leads.

Product Data  
 LRA-948  
 Generator Current  
 Transformer  
 600 Volt Class  
 10 kV BIL



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### Dimensions and Details



### Notes:

1. Mounting Board
2. Mounting Holes (4) 7/8" dia.
3. Nameplate
4. Secondary Terminal Box with 1" NPT conduit hubs.
5. Secondary Terminals 1/4"-20 studs with hardware.
6. Polarity Mark

CURRENT TRANSFORMER			
TYPE-STYLE	LRA-948	NSV/BIL	0.6 / 10 KV 60 HZ
RATIO	50000:5	RATING FACTOR	1.0 @ 30° AMB
ACCURACY	C800/0.3B0.1..B1.8	SERIAL NUMBER	
MECH. SHORT TIME RATING	UNLIMITED	THERMAL SHORT TIME RATING	N/A KA RMS

SINGLE RATIO  
  
 MADE IN USA  
 CHARLOTTE, NORTH CAROLINA  
 np NO. 110-05-004

Typical Nameplate

### Quotation / Order Required Information

When requesting a quotation or placing an order the following information is needed to custom design the LRA-948 to fit your application;

- Minimum Inside Diameter (ID)
- Maximum Outside Diameter (OD)
- Maximum Height (HT)
- Current Ratio
- Number of Cores
- Accuracy and Burden Requirements of each core
- Frequency
- Continuous Current Rating
- Lead Length required if supplied without a Terminal Box
- Mounting Details – hole size and bolt pattern

This information is subject to change without notice.  
 ITEC is not responsible for typographical errors.

Other ratings and options may be available  
 Please contact the factory with your requirements.

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## Instrument Transformer Equipment Corporation

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600 V Class  
10 kV BIL



**Instrument Transformer  
Equipment Corporation**

**Product Data**  
221-600-13  
LRA-948  
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