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UNCLASSIFIED

PRELIMINARY

TECHNICAL MANUAL

for

TRANSMITTING ANTENNA DISSIPATOR AND DUMMY LOAD

MODEL TER-15K-600BF



THE TECHNICAL MATERIEL CORPORATION

MAMARONECK, N.Y.

OTTAWA, ONTARIO

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1. PURPOSE

Transmitting Antenna Dissipator and Dummy Load, Model TER-15K-600BF is a flat resistive termination used at transmitting sites as a dummy load for routine off-the-air tuning of transmitters or for termination of Rhombic, Sloping Vee or other types of antennas requiring resistive termination.

2. DESCRIPTION

The TER-15K-600BF is capable of dissipating RF energy in the order of 15 kilowatts average and 30 kilowatts peak, over a frequency range of 4 to 28 megacycles.

The TER unit consists of two low-reactance glass resistors with two RF coil assemblies housed in a fiberglass reinforced plastic case.

3. TECHNICAL SPECIFICATIONS

FREQUENCY RANGE:

DC to 28 megacycles.

AVERAGE POWER DISSIPATION:

15000 watts

PEAK POWER DISSIPATION:

30000 watts

INPUT IMPEDANCE:

600 ohms balanced

VSWR RATIO:

1.5 to 1

COOLING:

Convention cooling by means of screened vent ports.

INPUT TERMINALS:

2 large porcelain bowls.

OPERATING TEMPERATURE:

-40°C. to +75°C. Ambient.

RESISTORS:

Special glass cylinders with resistive element electro-fused into surface. Baked silicone protective coating. Fired on silver bands to assure positive connection. Resistor spiral cut to insure

even heat dissipation.

PROTECTION:

Internal spark gaps for lighting protection.

3. TECHNICAL SPECIFICATIONS (Cont)

CASE MATERIAL: Fiberglass reinforced plastic

DIMENSIONS: 70 inches high x 47 inches wide x

27 inches deep

WEIGHT: 350 lbs (Approx.)

VOLUME: 90 cu. ft. (Approx.)

COMPONENTS AND

CONSTRUCTION:

All equipment manufactured in accordance with JAN/MIL specifications wherever practicable.

4. UNPACKING

When the unit is uncrated it should be inspected for any damage that may have incurred in transit. Inspect all packing material for parts which may have been shipped as loose items.

With respect to damage to the equipment for which the carrier is liable, the Technical Materiel Corporation will assist in describing methods of repair and the furnishing of replacement parts.

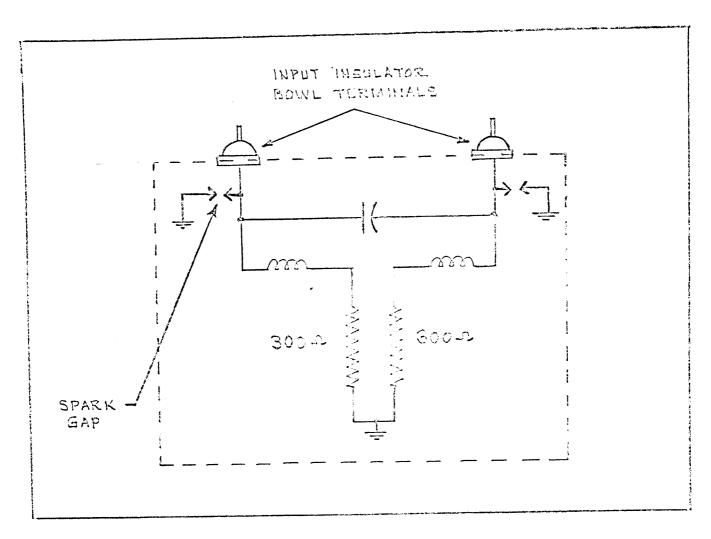
5. INSTALLATION

The TER-15K-600BF is shipped in one crate and is completely assembled at the time of delivery. Each unit has been factory tested and arrives ready to be placed directly in service. No preliminary adjustments are necessary.

6. MAINTENANCE

The TER-15K-600BF normally requires no maintenance other than a periodic cleaning of electrical connections and a check that all external and internal connections are securely connected.

A simplified schematic diagram of the TER-15K-600BF is shown below.



Model TER-15K-600BF, Schematic Diagram.