

## TECHNICAL BULLETIN NUMBER 8009A

Antenna Terminators and Dummy loads

TMC Models TER

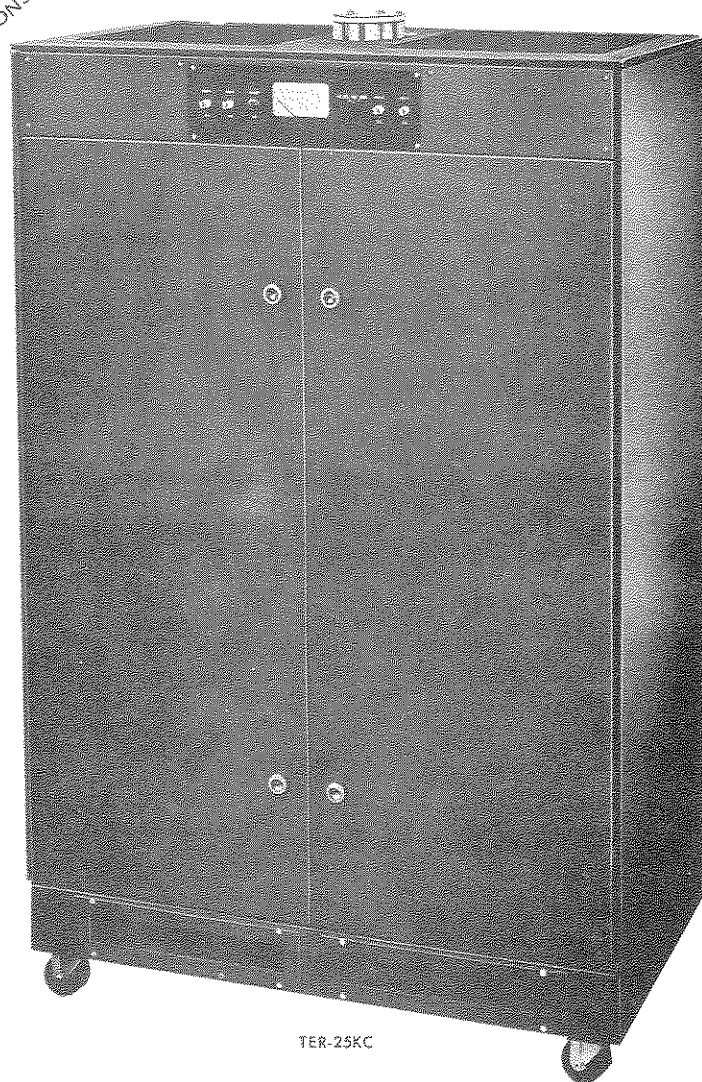
DA-199/U

DA-200/U

DA-210/U

DA-201/U

DA-209/U



TMC Models TER are a series of RF Antenna Terminators and Dummy Loads, available in a wide range of power dissipation from 250 watts to 50 kilowatts peak power in either balanced or unbalanced operation.

Models TER are used at transmitting sites for routine off-the-air tuning of transmitters and for termination of Rhombic, Sloping Vee, or other types of antennas requiring resistive termination.

Models TER are housed in rugged weatherproof cases easily installed on poles or platforms and require a minimum of maintenance. The special glass resistors used afford a minimum of reactance and may be instantly brought to full rated power in a  $-40^{\circ}$  C. ambient. Models

## Antenna Terminators and Dummy Loads

TER-25K dissipators include filtered forced air cooling, forward and reflected power metering to compute VSWR. Casters for mobility and transmit interlock connections for personnel and equipment safety are included on all TER-25K and TER-18K (less TER-18K-600BF). Casters can be locked for permanent installations.

A wide variety of RF fittings are available to mate the TER series to many standard transmission systems, as featured in TMC's Connector Products Catalog. As an example: to order a TER 5000-70U with an L. C. coupling connector, order TER 5000-70U/AX-287-( )\*.

All TER-18K and TER-25K unbalanced units are provided with 3 $\frac{1}{8}$ " EIA flanges. All Models TER of either 300 or 600 ohm impedances are provided with bowl insulators.

For models available and individual specifications, see accompanying Chart.

### GENERAL TECHNICAL SPECIFICATIONS, Models TER:

FREQUENCY RANGE:	DC to 30 megacycles, except as noted in Chart.
DISSIPATION RATINGS:	250 w to 50 kw (refer to Chart)
IMPEDANCE:	See Chart. First group of figures in TMC Model number indicates power dissipation, and second group of figures shows input impedance. Last letter indicates whether termination is balanced or unbalanced.  Example: Model TER-500-600B is a 500 watt average dissipator with 600 ohm balanced input terminals.
COOLING:	1. Convection cooling by means of screened vent ports. 2. Filtered air blower system for TER-25K series, by means of 4 base mounted fans.
INPUT TERMINALS:	Insulator bowls on balanced units, 12" on center. Insulator bowls or coaxial connectors on unbalanced units. (See Chart.)
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.

\* For matching RF fittings see TMC Connector Products Catalog.

TMC MODEL NUMBER	MILITARY NOMENCLATURE	FREQUENCY RANGE	TYPICAL VSWR RATIO TO UNITY	AVERAGE POWER (In watts)	PEAK ENVELOPE POWER (In watts)	TYPE OF CASE (refer to notes)	DIRECTIONAL COUPLER AND METER	LIGHTNING SPARK GAP PROTECTION	INSTALLATION DATA				SHIPPING DATA		MOUNTING PLATE CONNECTOR ASSEMBLIES *												BOWL ASSEMBLIES				LOGISTICS DATA		TMC MODEL NUMBER					
									HEIGHT (in.)	WIDTH (in.)	DEPTH (in.)	WEIGHT (lbs.) (APPROX.)	VOLUME (cu. ft.) (APPROX.)	WEIGHT (lbs.) (APPROX.)	AX-271 (700) 1 1/8" EIA Flange	AX-272 (500) 1 1/8" EIA FLANGE	AX-273 QDL	AX-278 (500) 3 1/8" to 1 1/8" Reducer	AX-279 (700) 3 1/8" to 1 1/8" Reducer	AX-281 UHF.	AX-285 HN	AX-286 C	AX-287 LC	AX-289 QDS	3 1/8" EIA (500) Flange	3 1/8" EIA (700) Flange	2 SMALL MYKROY (1/4" RODS)	1 SMALL MYKROY (1/4" RODS)	1 Large Porcelain (1/2" RODS)	2 Large Porcelain (1/2" RODS)	FSN W/ SPARES	FSN W/O SPARES						
TER-250-300 U		DC to 30 mc	1.2	250	500	1		X	14	9	5	25	3	42																								TER-250-300 U
TER-500-70 U		DC to 30 mc	1.2	500	1000	2		X	28	20 1/4	16	21	11	100	X							X	X	X	X	X											TER-500-70 U	
TER-500-600 B	DA-199/U	DC to 30 mc	1.2	500	1000	2		X	28	20 1/4	16	21	"	100																				F5985-682-2711 w/o		TER-500-600 B		
TER-1800-300 U		DC to 30 mc	1.15	1800	3600	2		X	28	20 1/4	16	25	"	104																							TER-1800-300 U	
TER-3500-70 U		DC to 30 mc	1.15	1750	3500	2		X	28	20 1/4	16	25	"	104										X													TER-3500-70 U	
TER-3500-600 B	DA-200/U	DC to 30 mc	1.2	1750	3500	2		X	28	20 1/4	16	25	"	104																			F5985-624-0400 w/o		TER-3500-600 B			
TER-5000-50U	DA-209/U	DC to 30 mc	1.1	5000	10,000	2		X	63 1/2	47	27	125	60	275				X																		TER-5000-50U		
TER-5000-70 U	DA-210/U	DC to 30 mc	1.2	5000	10,000	2		X	63 1/2	47	27	125	60	275				X															F5820-799-8438 w/o		TER-5000-70 U			
TER-5000-300 U		2-30 mc	1.5	5000	10,000	2		X	63 1/2	28	27	90	44	275																						TER-5000-300 U		
TER-5000-600 B	DA-201/U	DC to 30 mc	1.2	5000	10,000	2		X	63 1/2	47	27	125	60	275																						TER-5000-600 B		
TER-18KA-50 U		DC to 30 mc	1.15	18,000	36,000	3			75	44	22	410	60	615				X																		TER-18KA-50 U		
TER-18KC-50 U		DC to 30 mc	1.15	18,000	36,000	3	X		"	"	"	415	85	620				X																		TER-18KC-50 U		
TER-18KA-70 U		"	1.1	18,000	36,000	3			"	"	"	410	"	615																						TER-18KA-70 U		
TER-18KC-70 U		"	1.1	18,000	36,000	3	X		"	"	"	415	"	620																						TER-18KC-70 U		
TER-18K-600 B		DC to 28 mc	1.5	18,000	36,000	3			"	"	"	410	"	615																						TER-18K-600 B		
TER-18K-600 BF		DC to 28 mc	1.5	18,000	36,000	2		X	70	47	26	285	90	425																						TER-18K-600 BF		
TER-25KA-50 U		DC to 30 mc	1.15	25,000	50,000	3			70	44	22	420	"	625				X																		TER-25KA-50 U		
TER-25KC-50 U		"	1.15	25,000	50,000	3	X		"	"	"	425	"	630				X																		TER-25KC-50 U		
TER-25KA-70 U		"	1.1	25,000	50,000	3			"	"	"	420	"	625																						TER-25KA-70 U		
TER-25KC-70 U		"	1.1	25,000	50,000	3	X		"	"	"	425	"	630																						TER-25KC-70 U		
TER-25K-600 B		DC to 28 mc	1.5	25,000	50,000	3			75	47	26	420	85	625																						TER-25K-600 B		

For companion RF Broadband Transformers refer to Technical Bulletin #8015.

\* Supplied angle or straight. Refer to Connector Products Catalog. Priced separately.

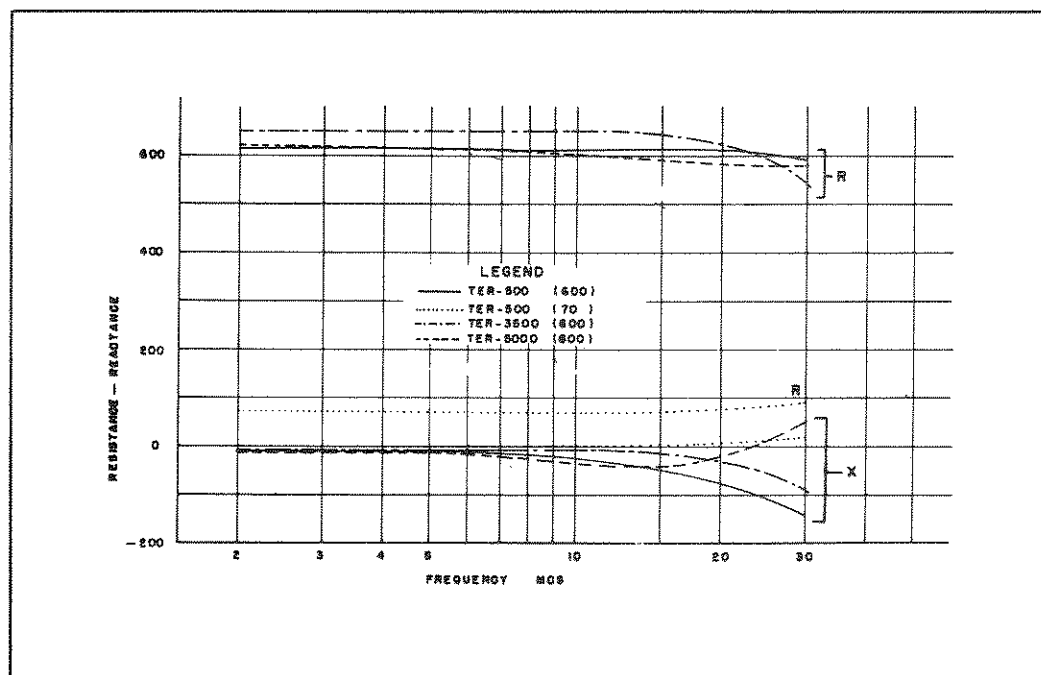
NOTES:

1. Stress relieved cast aluminum case.
2. Fiberglass reinforced plastic case.

3. Heavy gauge steel case with interlocks for connection to transmitter provided.

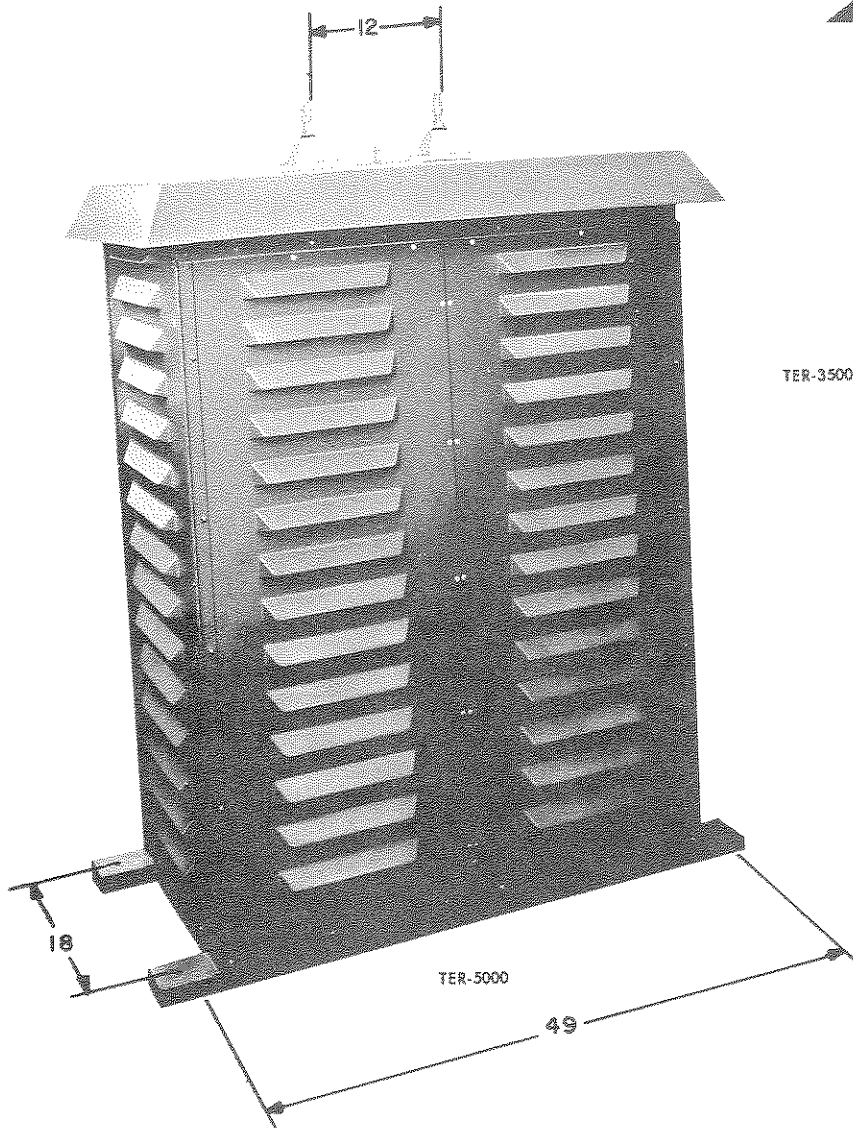
Indicates Standard Mounting Plate Connector Assembly Provided. When other assemblies are desired please use appropriate AX number. Example: TER-3500-70U/AX-287

CENTER TAP:	Furnished on 600 ohm units.
PROTECTION:	Internal spark gaps for lightning protection.
CASE MATERIAL:	Refer to Chart.
SIZE:	See Chart.
MOUNTING:	All outdoor units fitted for pole or platform mounting. (See Back Page for mounting details).
WEIGHT:	See Chart.
AC POWER REQUIREMENTS: (For TER-25K series)	115/230 v, 1 $\phi$ , 50-60 cps Approx. 400 watts.
COMPONENTS AND CONSTRUCTION:	All equipment manufactured in accordance with JAN/MIL specifications wherever practicable.
OPTIONAL EQUIPMENT:	See Chart.
SHIPPING DATA:	See Chart.

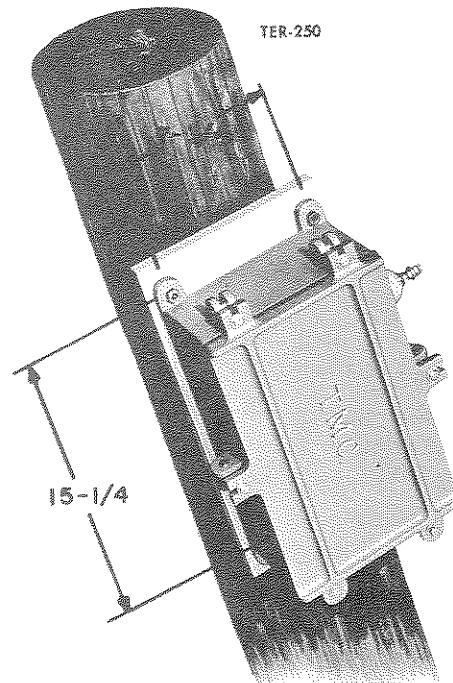
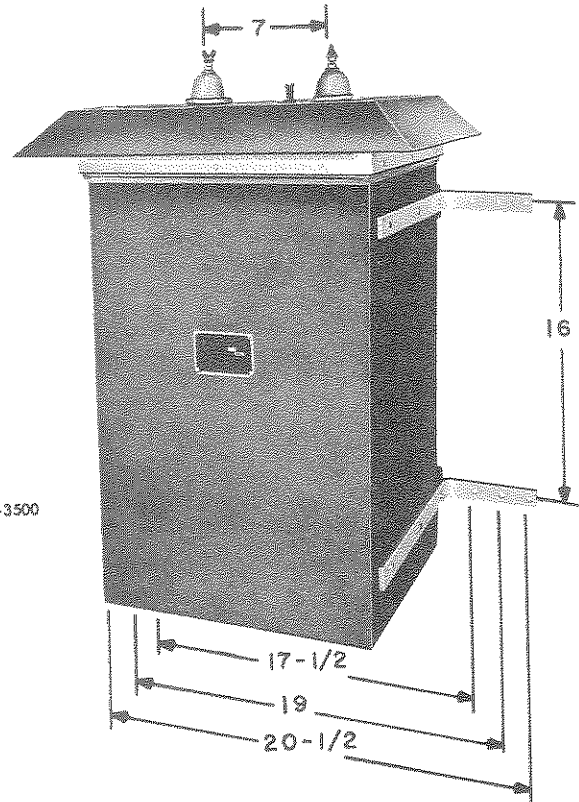


Typical Impedance Characteristics.

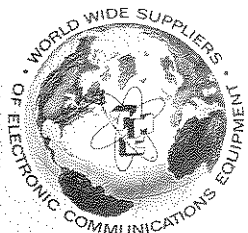
Models TER



TER-3500



We reserve the right to make engineering changes.



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