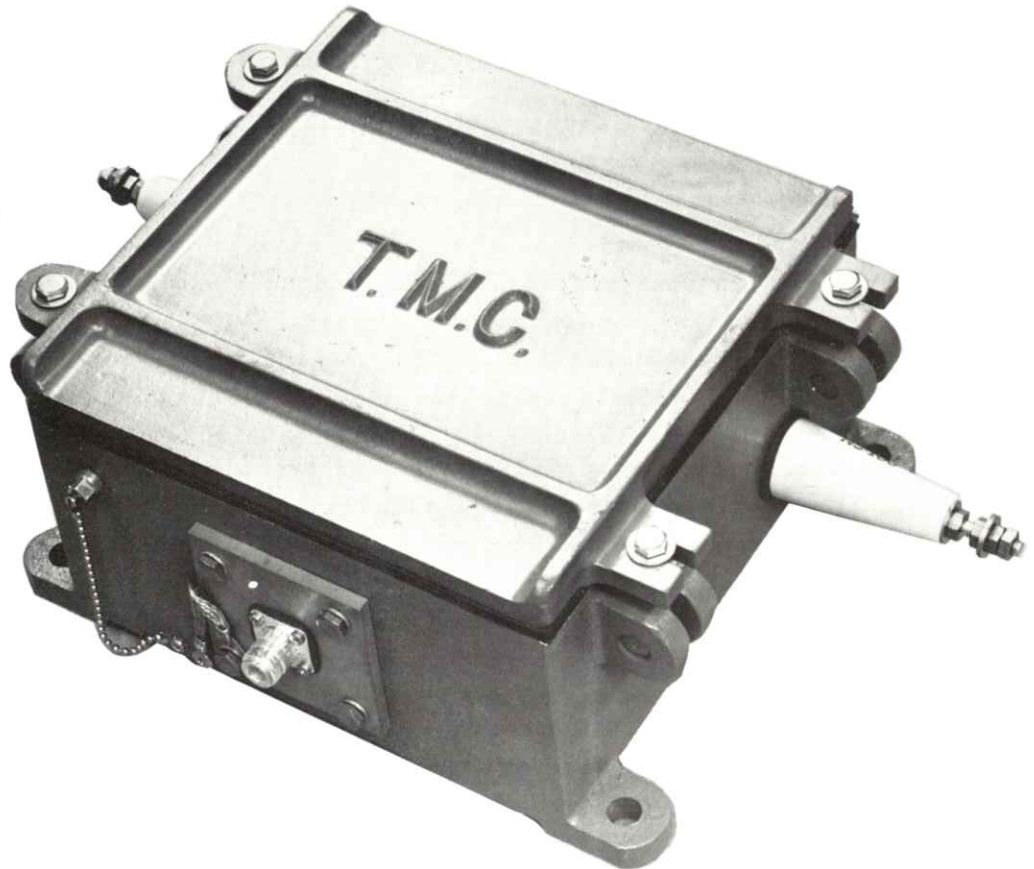




Rhombic Antenna Coupler Model RAC

TECHNICAL BULLETIN 204-4513

- 2-30 MHz
- Flat Response
- Lightning Protection
- Rugged Weatherproof Case
- Adapts to any Coax Cable



TMC Models RAC are a series of passive receiving rhombic antenna couplers designed to provide optimum impedance matching over a wide range of frequencies between rhombic antennas and coaxial transmission lines to radio receivers.

Models RAC contain linear broadband matching transformers enclosed in weatherproof cast aluminum cases for outdoor installation. The broadband transformers vary in design to provide a wide variety of impedance matching applications. The unique design of Models RAC permit continuity checking of the complete antenna system at the coaxial termination at the receiving site. The flat response of the transformers in Models RAC minimizes cross-modulation and permits reception of any type of signal within the unit's frequency range.

A complete set of hardware is provided to mount Model RACs on a pole or other vertical surfaces and an internal spark gap provides protection against lightning or static charges from the antenna or transmission line.

TMC Models RTB, Rhombic Terminal Units, described in Technical Bulletin 204-4317, complement Models RAC by providing proper and correct termination to Rhombic and Sloping Vee antennas for best antenna efficiency.

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TECHNICAL SPECIFICATIONS

Frequency Range

As indicated in CHART "A"

Frequency Response

Maximum deviation ± 1.5 db

Impedance Matching

Refer to CHART "A" below

Lightning Protection

RAC-1 through RAC-24 are provided with air gap lightning protection.

RAC-30 and higher are provided with hermetically sealed gas gap lightning protection and plug-in fuses.

Terminals

Output terminals are indicated on CHART "B"

Input terminals are ceramic insulators mounted horizontally opposite (See photo).

Equipment Case

Weatherproof cast aluminum

Mounting

Four heavy-duty cast flanges

Weight

Maximum 12 lbs.

CHART "A"

MODELS AVAILABLE

| Models | Frequency Range | Balanced Input | Unbalanced Output | Transformer TR- |
|--------|-----------------|----------------|-------------------|-----------------|
| RAC-11 | 2-30 MHz | 300 ohms nom. | 50 ohms nom. | 012 |
| RAC-9 | 2-30 MHz | 500 ohms | 50 ohms | 034 |
| RAC-13 | 2-30 MHz | 500 ohms | 70 ohms | 168 |
| RAC-7A | 2-32 MHz | 600 ohms | 70 ohms | 069 |
| RAC-24 | 2-32 MHz | 600 ohms | 50 ohms | 032 |
| RAC-7 | 2-32 MHz | 600/200 ohms | 50 ohms | 090 |
| RAC-32 | 2-32 MHz | 600/200 ohms | 70 ohms | 132 |
| RAC-30 | 2-32 MHz | 700/200 ohms | 70 ohms | 130 |
| RAC-12 | 2-30 MHz | 800 ohms | 50 ohms | 112 |

CHART "B"

OUTPUT TERMINALS

| | | |
|-------|-----------|--|
| /BN | AX-283-1 | Type BN Connector |
| /BNC | AX-284-1 | Type BNC Connector |
| /C | AX-286-1 | Type C Connector |
| /HN | AX-285-1 | Type HN Connector |
| /LC5 | AX-287-1 | Type LC Connector, 50 ohm |
| /LC7 | AX-287-5 | Type LC Connector, 70 ohm |
| /N | AX-259-1 | Type N Connector |
| /QDL | AX-273-1 | Type QDL Connector |
| /QDS | AX-289-1 | Type QDS Connector |
| /UHF | AX-281-1 | Type UHF Connector |
| /UHFT | AX-282-1 | Type UHF Twin Connector |
| /UHFL | AX-256-1 | Type UHF(L) Connector |
| /ALC5 | AX-276-1 | 3/8" Adapter Assembly, 50 ohm to LC female |
| /ALC7 | AX-277-1 | 3/8" Adapter Assembly, 70 ohm to LC female |
| /ES5 | ES-ST5875 | 7/8" styroflex end seal, 50 ohm |
| /ES7 | ES-ST7875 | 7/8" styroflex end seal, 70 ohm |
| /RG8 | AX-274-1 | Flange for RG-85/U Coaxial Cable |

Specifications Are Subject to Change Without Notice

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