

# ANTENNA TUNING UNIT 5820-17-024-9264

## (SYSTEM SSA SERIES)

### SUMMARY OF DATA

#### PURPOSE

To automatically match the output of the associated 100 W or 500 W Transmission Amplifier to the antenna in use. When used with the 1 kW Transmission Amplifier, the output from this amplifier is restricted to a lower level in order not to overload the Antenna Tuning Unit.

#### BRIEF DESCRIPTION

The ATU automatically matches the antenna to the transmission amplifier in use; two variable capacitors and a variable inductor are tuned by discriminator/servo systems which sense certain input and output parameters.

#### PHYSICAL DATA

The ATU is contained within one sheet metal case which is divided into two compartments; the smaller compartment contains an air blower, and the larger compartment houses the ATU stages and a second blower. Covers are fitted to both compartments, the larger one being sealed.

The approximate dimensions and weight of the unit are as follows:-

Height	Width	Depth	Weight
27.3 cm (10.75 in.)	36 cm (14.25 in.)	128 cm (50.5 in.)	61 Kg (134.5 lb)

#### ELECTRICAL CHARACTERISTICS

##### INPUT POWER LEVEL

Following the completion of a tuning cycle: 500 W mean or 500 W PEP.

##### INPUT IMPEDANCE

50-ohm nominal.

##### VSWR

Better than 0.67 with respect to the 50-ohm input impedance.

##### OUTPUT IMPEDANCE

Capable of being matched to the 50-ohm (nominal) input impedance.

#### POWER REQUIREMENTS

Input 115 V or 230 V  $\pm$  2½%, 50 Hz, single-phase.

#### HANDBOOK

BR 2491

#### ESTABLISHMENT LIST

S 1535

#### INSTALLATION SPECIFICATION

B 1028