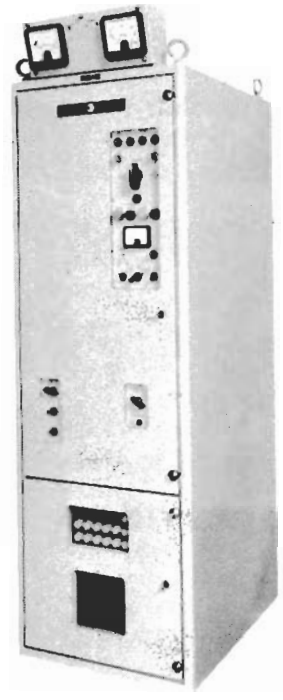
AMPLIFIER OUTFIT WBB

SUMMARY OF DATA

PURPOSE

For unattended operation with rapid changes in operating frequency, in both the MF and HF ranges.



CABINET ELECTRICAL EQUIPMENT

TYPE OF TRANSMISSION

ISB, FST, CW or any normal form of data transmission.

FREQUENCY RANGE

MF: 240 to 3000 kHz
HF: 1.5 to 24 MHz

BANDWIDTH

The bandwidth extends from 240 kHz to 24 MHZ. Inside the spectrum the power gain is constant to within ± 3.0 dB.

BRIEF TECHNICAL DESCRIPTION

The amplifier is a two-stage balanced distributed amplifier, using nine pairs of CV3998 valves in the penultimate stage and eight pairs of CV2487 in the final stage.

MAJOR UNITS

NSN	Title
5820-99-580-7635	Cabinet, Electrical Equipment
5820-99-580-7638	Control, Amplifier
5820-99-580-7637	Amplifier, Radio Frequency (Penultimate Stage)
5820-99-580-7636	Amplifier, Radio Frequency (Final Stage)
5820-99-580-7642	Coupler Directional HF
5820-99-580-7643	Coupler Directional MF
5820-99-580-7641	Meter Assembly, Electrical
5820-99-580-7639	Power Supply (Power Supply)
5820-99-580-7640	Power Supply (E.H.T. Power Supply)
5820-99-580-1084	Transformer Power Distribution

PHYSICAL DATA

Cabinet, Electrical Equipment:	Height:	5 ft 9½ in. (176 cm)
	Width:	1 ft 8½ in. (54 cm)
	Depth:	2 ft 3 in. (69 cm)
	Weight:	720 lb (330 kg approx.)

ELECTRICAL CHARACTERISTICS

Input Impedance:	70 ohm
Power Input:	Approx. 20-80 mW for 1 kW P.E.P.
Output Impedance:	59 ohm
Power Output:	On HF range: 1 kW P.E.P. 700 W FST or CW
	On MF range: 500 W P.E.P. FST or CW
Control Circuits:	Sequenced delay by thermal relay

POWER REQUIREMENTS

380 to 450 V +3½% -2½%, 3 phase 3 wire 50 or 60 Hz ± 2½%.

POWER CONSUMPTION

Standby:	600 W
On (no r.f. output)	4 kW
On (with r.f. output) 5.2 kW P.E.P. two-tones	Approx. 6 kW at peak signal power (for 1 kW mean hand keyed)

HEAT DISSIPATION

Dust filtered air flow cooling is required of 250 cu ft/min at 38 ^{o}C or 400 cu ft/min at 55 ^{o}C.

AERIAL SYSTEM

The amplifier is designed to operate via a 50 ohm coaxial feeder, to the selected aerial.

HANDBOOK

BR 2389

ESTABLISHMENT LIST

E1299

INSTALLATION SPECIFICATION

Part of B919