

SECTION 2

SPECIFICATION

Power Requirements : The PP1 operates from 50 c/s (only) power supplies between 94V and 138V or 187V and 276V. The power consumption on full load is 560 watts at a power factor of 0.92.

Supplies Provided : The power pack provides four d.c. supplies and two a.c. supplies. The specification for each d.c. supply is given in Table 1.

TABLE 1

OUTPUT SPECIFICATION

SUPPLY No.	1	2	3	4
VOLTAGE	Variable 0 to 600V d.c.	Variable +100 to +800V d.c.	Fixed -200V d.c.	Variable 0 to -200V d.c.
MAXIMUM CURRENT	300mA total		50mA	5mA
STABILIZA- TION	10% change in supply volts produces output change of less than 0.01% [Factor 1000:1]	Factor of 4:1 (essentially unstabilized)	10% change in supply volts produces output change of less than 0.01% [Factor 1000:1]	
MAXIMUM RIPPLE VOLTAGE (R.M.S)	3mV *	3V	1mV	1mV
MAXIMUM SOURCE IMPEDANCE	0.1 Ω (d.c.) ** 0.5 Ω (at 50kc/s)	-	0.1 Ω (d.c.) 0.3 Ω (at 30kc/s)	13k Ω
SHORT CIRCUIT PROTECTION	Electro-magnetic cut-out		100mA fuse	

- * Can be varied by front panel control to produce artificial 50 c/s ripple up to 6V r.m.s. maximum. A jack is provided for injecting up to 50 kc/s, 6V r.m.s. maximum, from an external generator working into 5 Ω load.
- ** Can be varied by front panel control from 0.1 Ω to 40 Ω .

The two a.c. supplies are each 6.3V (r.m.s.) at 4A, stabilized by the Volstat so that a 10% change in supply volts produces an output change of less than 1%.

Output Arrangements :

All outputs are floating with respect to chassis. The positive and negative supplies are connected only through the NEUTRAL terminal, and can be used in series provided that the current drain does not exceed the maximum of the lowest rated supply. All terminals will withstand 1000V potential, and take a standard 4mm plug.

Metering :

Two meters are fitted, a voltmeter and an ammeter. The voltmeter has two scales, 250V for monitoring the negative line and 1000V for monitoring the positive lines, and can be switched to measure all d.c. output voltages. The ammeter has two scales, 0 to 50mA for negative line monitoring and 0 to 500 mA for positive line monitoring.

Dimensions :

19.3/4 in. wide x 15 in. deep x 13 in. high
(50.2 cm x 38.1 cm x 33 cm).

Weight :

92 lb (41.7 kg).

Finish :

Light Admiralty grey to B.S.381C, tint No. 697,
and Dark Admiralty grey to B.S.381C, tint No. 632.