

2 Specification

Power Requirements The PPI operates from only 50c/s power supplies between 94V and 138V or 187V and 276V. The power consumption on full load is 560W 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.

OUTPUT SPECIFICATION

Supply No. 1, 2, 3, 4 **VOLTAGE**

- 1) Variable 0 to 600V d.c.
- 2) Fixed- 200V d.c.
- 3) Variable 0 to 200V d.c.
- 4) Variable +100 to +800V d.c.

MAXIMUM CURRENT

- 1)+2) 300mA total
- 3) 50mA
- 4) 5mA

STABILISATION

- 1) 10 % change in supply volts produces output change of less than 0.01% [Factor 1,000: 1]
- 2) Factor of 4:1 (essentially unstabilised)
- 3) 10 % change in supply volts produces output change of less than 0.01 % [Factor 1,000:1]

MAXIMUM RIPPLE VOLTAGE (R.M.S.)

- 1) 3mV*
- 2) 3V
- 3) 1mV
- 4) 1m V

MAXIMUM SOURCE IMPEDANCE

- 1) 0.1 Ohm (d.c.) t 0.50 (at 50kc/s)
- 2) N/A
- 3) 0.1 Ohm (d.c.) 0,30 (at 30kc/s)
- 4) 13k Ohm

SHORT CIRCUIT PROTECTION

Electro-magnetic cut-out or 100mA fuse

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

t Can be varied by front panel control from 0.10 to 400.

The two a.c. supplies are each 6.3V (r.m.s.) at 4A, stabilised by the V olstat 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 take a standard 4mm plug and withstand potentials of 1,000V.

Metering Two meters are fitted, a voltmeter and an ammeter. The voltmeter has two scales, 250V for monitoring the negative line and 1,000V 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 500mA for positive line monitoring.

Dimensions 19 3/4 in. wide X 15 in. deep X 13 in. high (50,2 X 38.1 X 33 cm).

Weight 92 lb (41.7 kg).

Finish Dark blue metal case with light grey front panel and medium grey surround. All colours to BS.2660; case tint No. 7-086, front panel tint No. 9-093, front panel surround tint No. 9-095.