CHAPTER II

# POWER SUPPLIES

1. The power specifications for the basic Pegasus computer are as follows:

(a) Unregulated AC

2 KW three phase at the voltage and frequency of the main for driving fans and auxiliaries.

(b) Regulated AC

4 KVA (power factor 0.95) three phase at 48.5 c/s, principally for supplying a balanced load of heater transformers. The r.m.s. voltage (240V) between the phases and neutral has a long-term stability of ±2%.

(c) Drum-motor Supply

1 KVA, three phase, 145.5 c/s at a nominal 200V r.m.s., this voltage being servo-controlled to keep the drum speed constant.

(d) Stabilised HT Supplies

(i) 1.5A to 3A at +300V ±2%.
Output impedance less than 2 ohms from zero frequency up to 50 Kc/s.
Ripple under 0.25%.

(ii) 5A to 7A at +200V ±2%.
Output impedance less than 0.1 ohm from zero frequency up to 0.5 Mc/s.
Ripple under 0.25%.

(iii) 6.5A to 7.5A at -150V ±2%.
Output impedance less than 0.5 ohm from zero frequency up to 50 Kc/s.
Ripple under 0.25%.

(e) Bias Supplies

(i) 2A to 3A at +13V ±5%.
Output impedance less than 0.5 ohm from zero frequency up to 50 Kc/s.
Ripple under 2%.

(ii) 1A to 3A at -10V ±5%.
Output impedance less than 0.5 ohm from zero frequency up to 50 Kc/s.
Ripple under 2%.

(iii) 2A to 3A at -20V ±5%.
Output impedance less than 0.5 ohm from zero frequency up to 50 Kc/s.
Ripple under 2%.