Consumption Protection

1.2.1.3. Outputs I and II

- a. As voltage stabiliser
 - Range

Output effects

- (stability related to static operation)
- 1. Line regulation
- 2. Load regulation
- 3. Temperature coefficient
- 4. Periodic and random deviation (PARD)
- Dynamic operation
- 1. Transient recovery time
- 2. Dynamic internal impedance

Protection

b. As current stabiliser

Range

Output effects (stability related to static operation)

- 1. Line regulation
- 2. Load regulation
- 3. Temperature coefficient

4. Ripple current

Cross-over point

c. Series connection

d. Parallel connection

Max. 150 VA With fuses F1 and F2, 1 A slow-blow

 $0 \hdots$... 20 V continuously adjustable by means of R1 (output I) and R3 (output II).

For mains voltage variation of + or -10%Source effect (including settling) $\leq 0.05\%$ or 2 mV, whichever is greater.

For load variations from no-load to full-load and vice versa. Load effect (including settling) ≤ 10 mV.

 \leq 0,01 % per K from the adjusted output voltage or 1 mV per K, whichever is greater.

 \leq 1,5 mV_{r.m.s.} (+ or – output terminal earthed)

 \leq 25 μ s for a current change from 80 % to 100 % and vice versa and a $\frac{di}{dt} \ge$ 1 A/ μ s (see Fig. 7.).

For sinusoidal load variations from 80 % of full-load to full-load and a frequency of:

1 kHz ≤ 0,02 Ω 10 kHz ≤ 0,03 Ω 100 kHz ≤ 0,10 Ω 250 kHz ≤ 0,20 Ω

Reverse voltage protection
Constant current stabiliser

0 ... 1 A, continuously adjustable by means of R2 (output I) and R4 (output II).

For mains voltage variation of + or -10%Source effect (including settling) $\leq 5 \text{ mA}$.

For load variations from point D to E and vice versa (see Fig. 6.). Load effect (including settling) ≤ 5 mA.

≤2 mA per K

R.M.S. value $\leq 1 \text{ mA}$

See point B-C-D in Fig. 6. This value applies for any set output voltage between 0 and 20 V and output current between 0 and 1 A.

The outputs of the instrument may be series connected.

An arbitrary number of outputs and instruments may be connected in parallel for greater current outputs.