

Met dank aan A.R.A van Rossum

DELTA ELEKTRONIKA BV

Ned. Ver. v. Historie v/d Radio

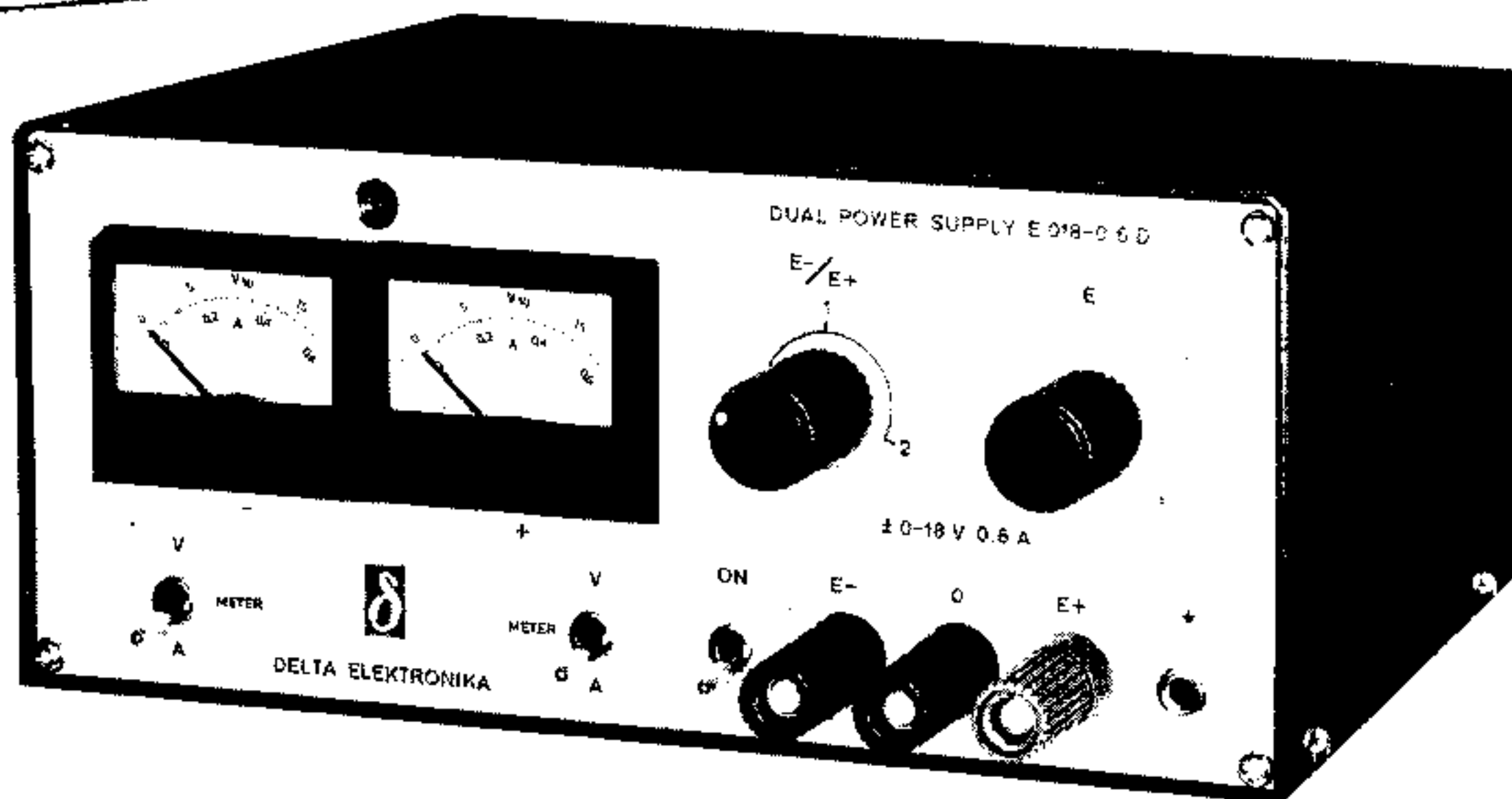
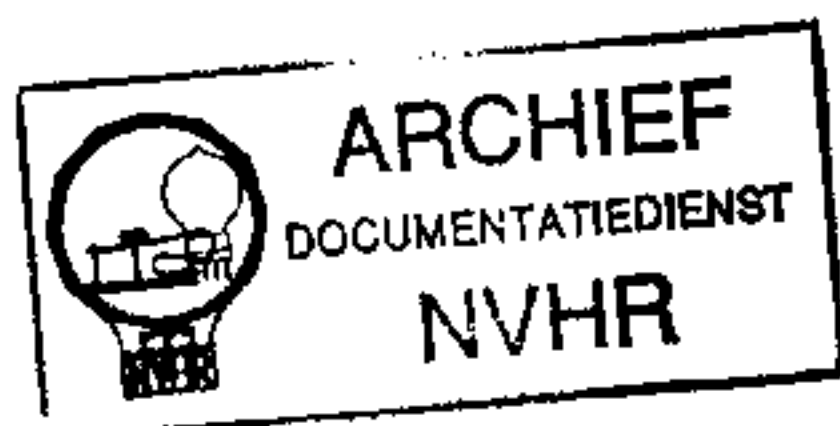


P.O. BOX 27

ZIERIKZEE

NETHERLANDS

TELEPHONE (01110) 2734



DUAL POWER SUPPLY E 018-0.6 D

± 0 - 18 V, 0.6 A

DESCRIPTION

The regulated power supply E 018-0.6 D is specially designed for the development work with operational amplifiers. It provides a positive and a negative output, both of 0-18 V DC 0.6 A, which are tracking and can be varied with one ten turn potentiometer.

With the left-hand knob the ratio of the two voltages can be varied between $\frac{1}{2}$ and 2.

The positive and negative output have coupled overload protection circuits.

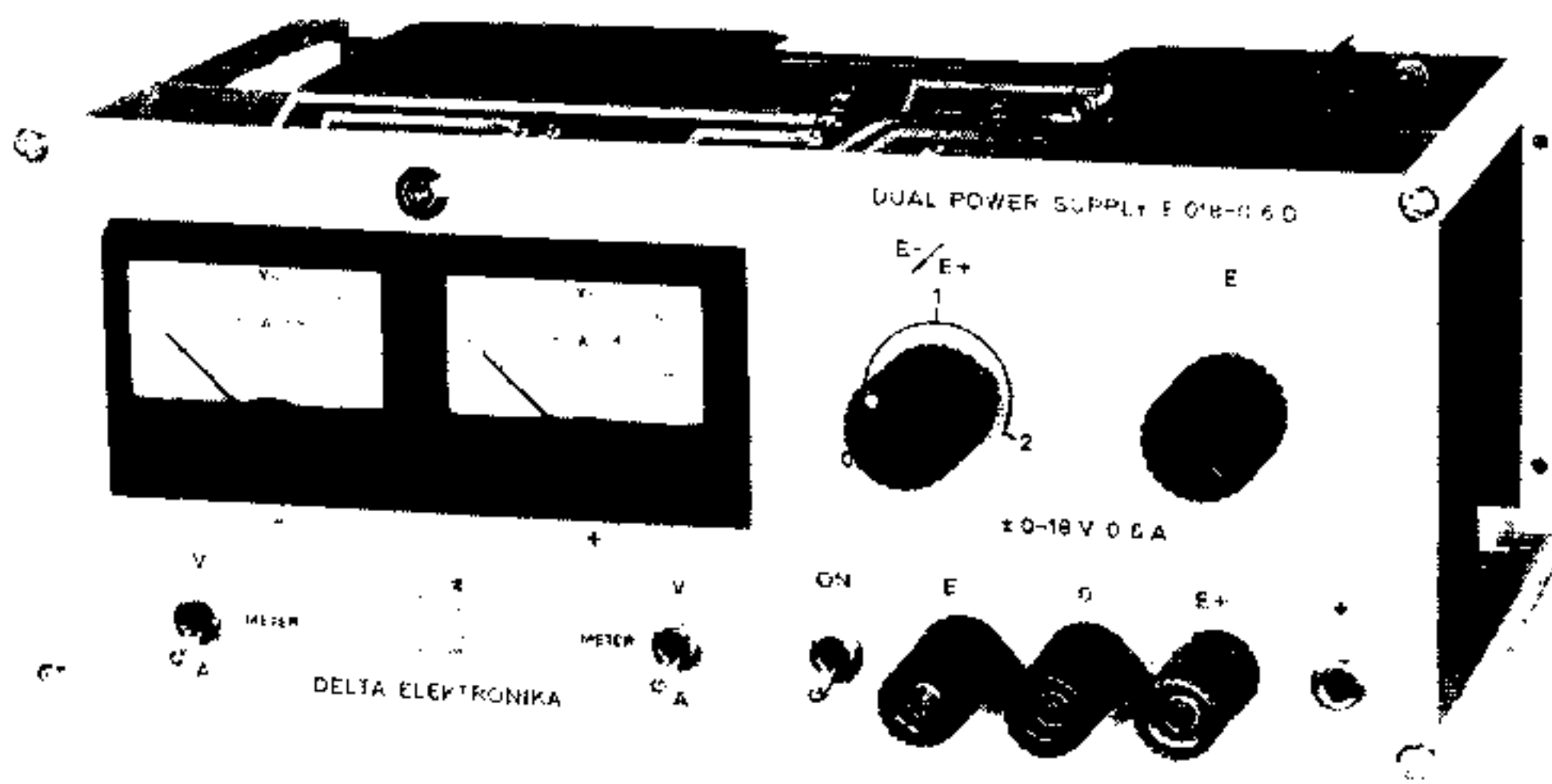
This means that both voltages will decrease proportionally if one output is overloaded.

Also when one output is short circuited both voltages will fall down to zero.

The E 018-0.6 D can also be used as a 0-36 V 0.6 A supply.

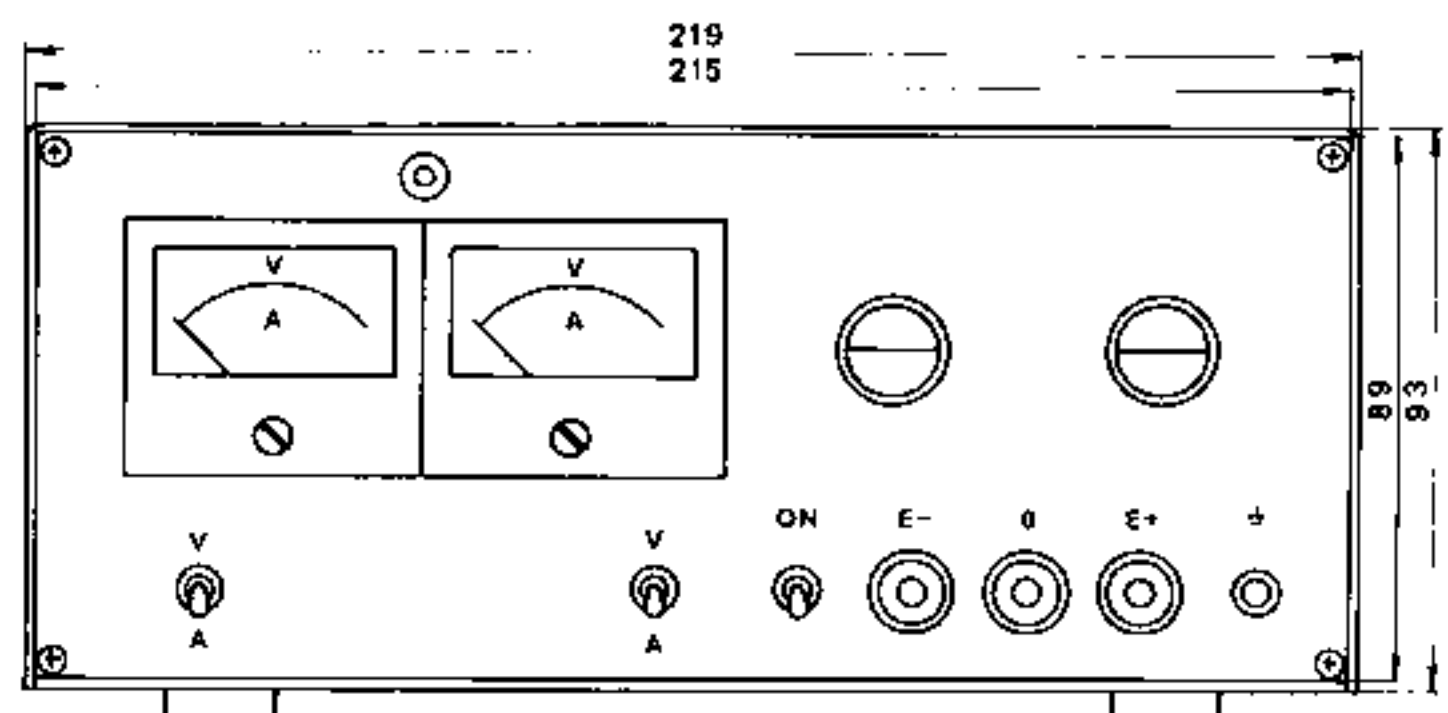
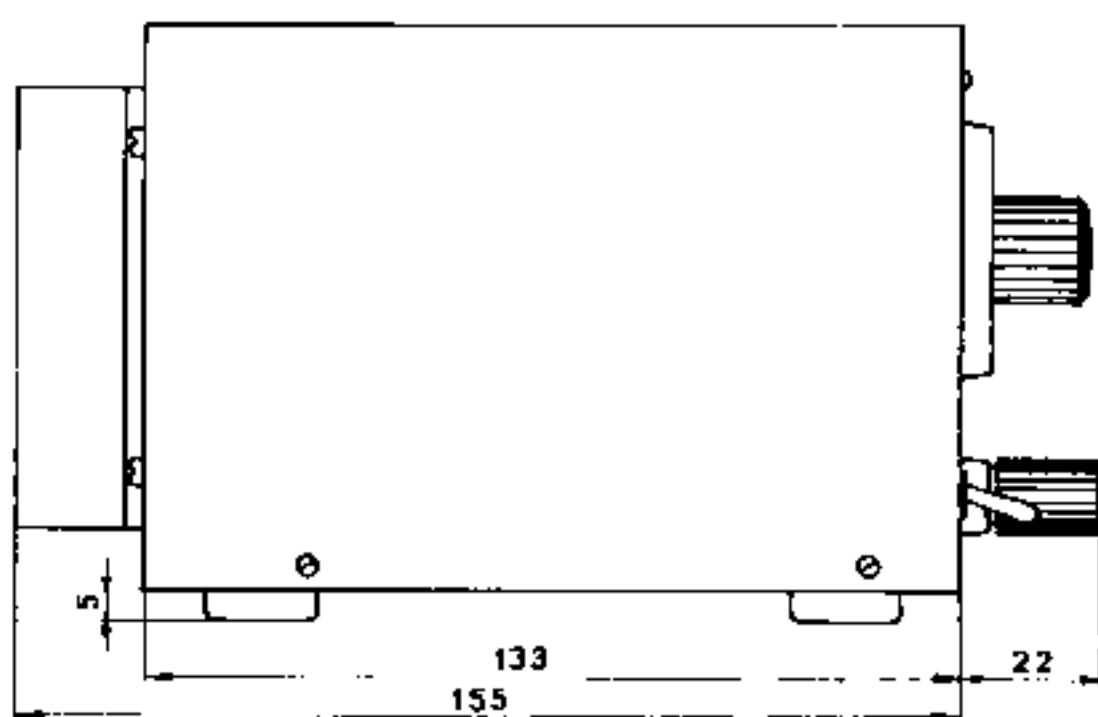
TECHNICAL DATA (Equal for positive and negative output)

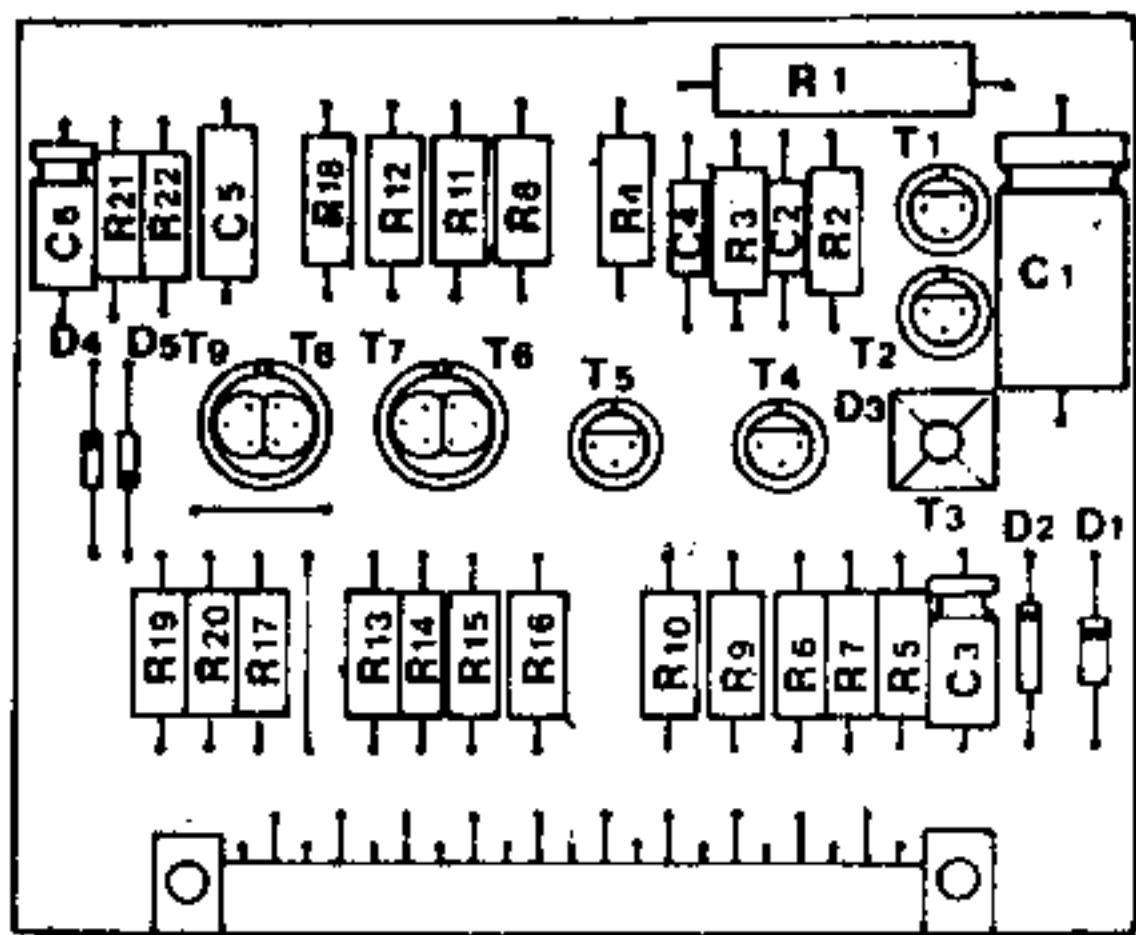
Voltage control	10-turn potentiometer, range 0-18 V.
Voltage ratio control	1-turn potentiometer, range $\frac{1}{2}$ to 2.
Voltage regulation	5 mV for a + or - 10 % AC input variation. 10 mV for a 0-100 % load change.
Temp. coefficient	$2 \cdot 10^{-4}$ per °C.
Ripple voltage	0.1 mV r.m.s.
Output impedance	Maximum 0.1 Ohm up to 100 kHz load frequency.



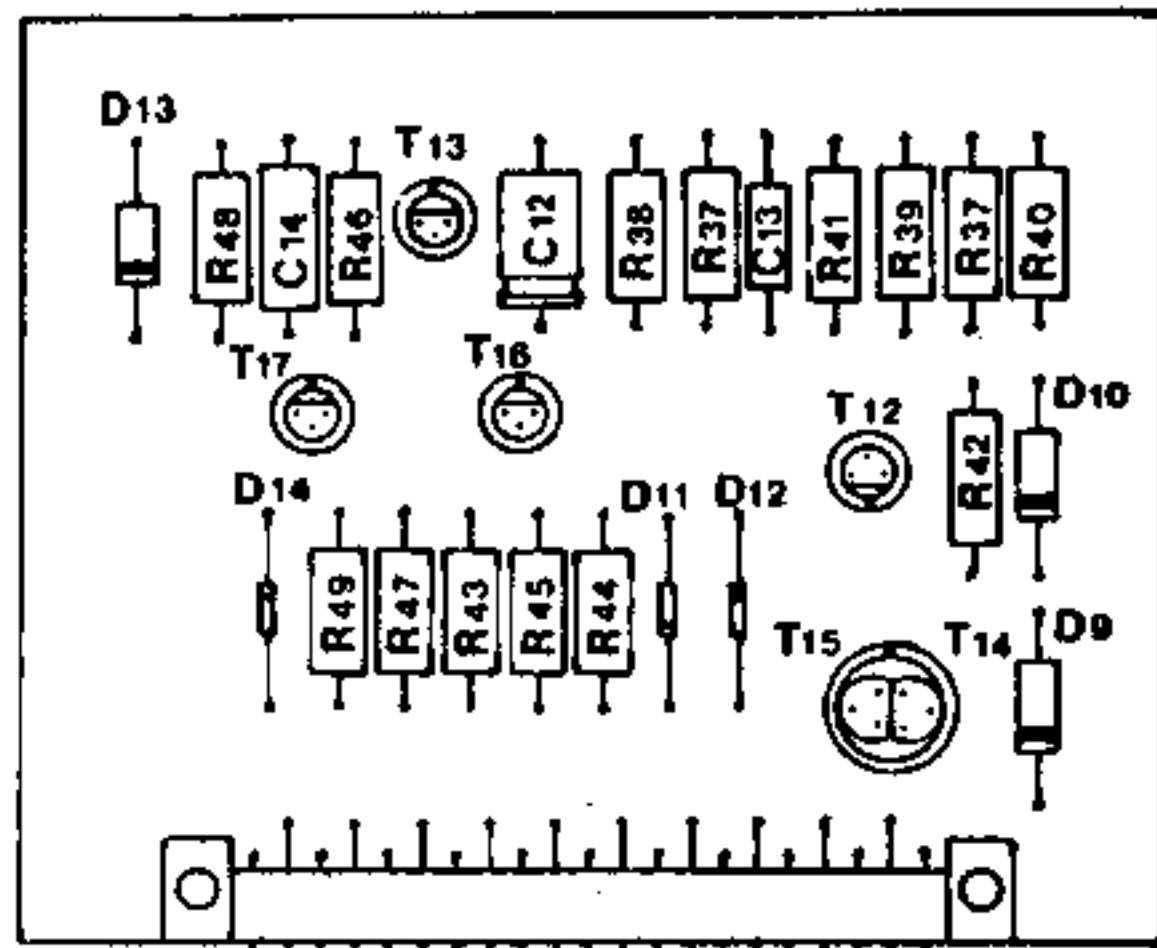
For uncased unit
add B to type number

- Recovery time** 15 micro seconds for recovery to within 30 mV of steady state voltage after a step load change from 10 % to 100 %.
- Voltage limit** The positive and negative output voltage can never exceed a limit of about 18.5 V, independent of the voltage and ratio setting.
- Current limit** Fixed constant current limit of about 125 % of nominal maximum current. The limiting circuits of the plus and minus output are coupled.
- Ambient temp.** - 20 to + 45 °C.
- Output terminals** Isolated from the case.
Maximum allowed voltage between output and case 500 V.
- Rack mounting** Two uncased units side by side can be rack mounted with the help of two brackets H 6.
- Cooling** By natural convection cooling. The air must flow freely through the vertically heat sink for effective cooling.
- Meters** Two 1.5 % meters with selector switches for monitoring voltage and current of both positive and negative output.
- Input voltage** 110-117-220-234 V, 50-400 Hz.
- Finish** Light gray front panel with dark gray case.
- Weight and size** 2,75 kg, 219 x 93 x 154 mm.

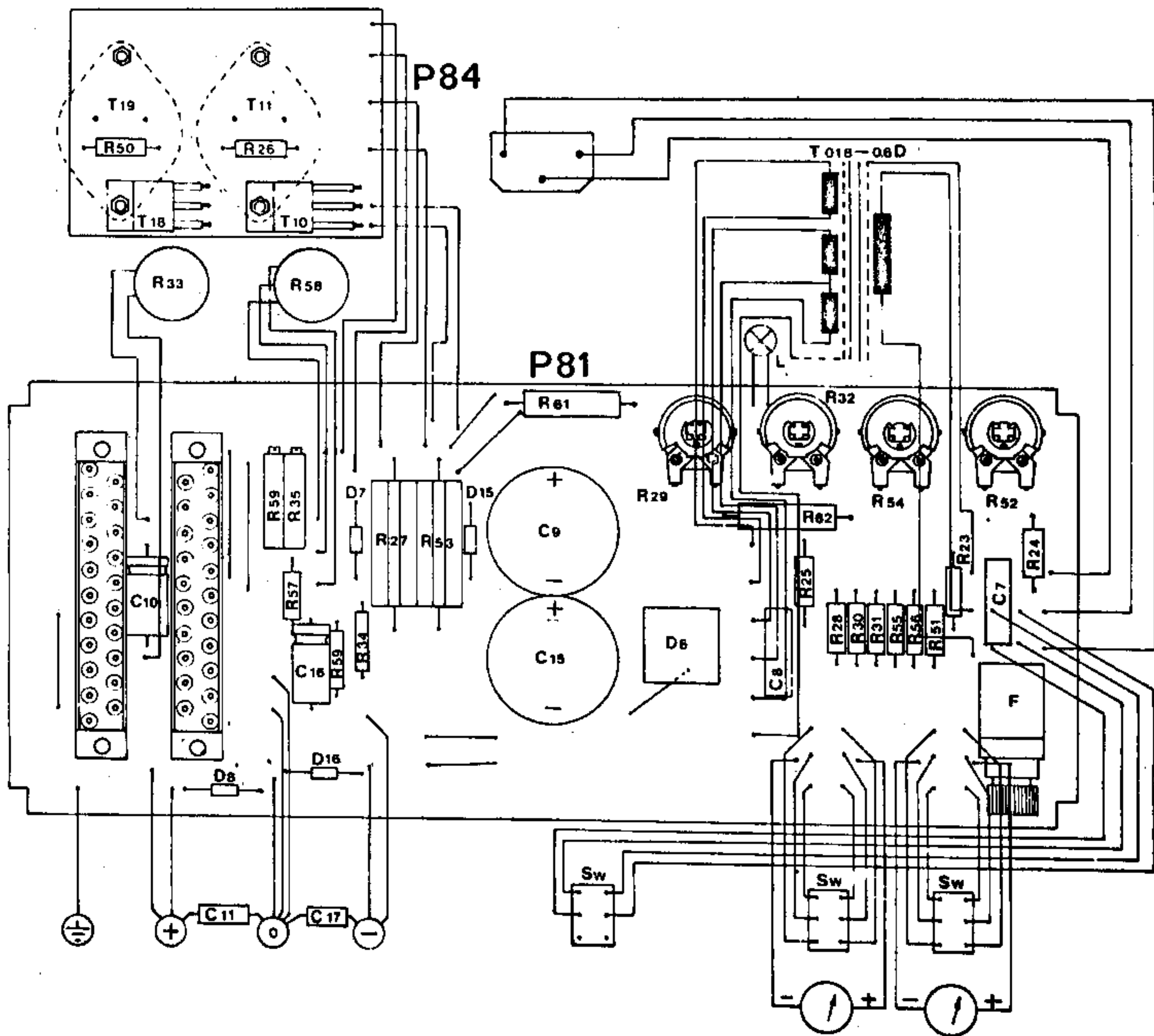




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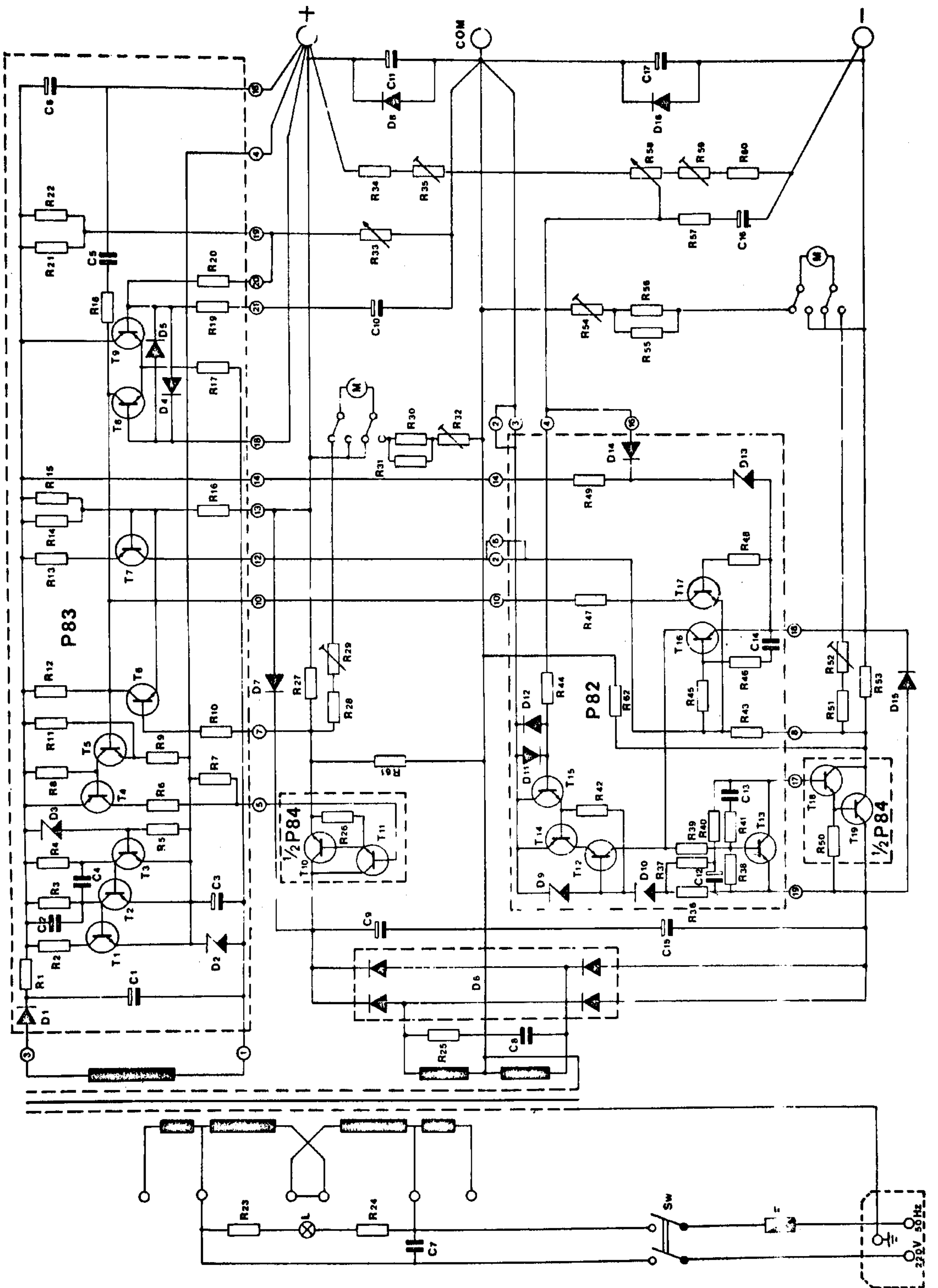


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PART LIST

R (Ohm)		C (microfarad)	D
1 = 820	1 W	1 = 47 63 V	1 = 1N4003 TI
2 = 150		2 = 0,01 250 V	2 = ZP 6,2 ITT
3 = 10 k		3 = 22 25 V	3 = ZP 6,2 ITT
4 = 10 k		4 = 0,01 250 V	4 = 1N4148 TI
5 = 150		5 = 0,047 250 V	5 = 1N4148 TI
6 = 33		6 = 22 25 V	6 = VH 148 VARO
7 = 6,8 k		7 = 0,01 1000 V	7 = 1N4003 TI
8 = 2,2 k		8 = 0,1 250 V	8 = 1N4003 TI
9 = 2,2 k		9 = 2200 35 V	9 = ZP 6,2 ITT
10 = 470		10 = 10 100 V	10 = ZP 6,2 ITT
11 = 2,7 k		11 = 47 63 V	11 = 1N4148 TI
12 = 22 k		12 = 10 35 V	12 = 1N4148 TI
13 = 1,2 k		13 = 0,01 250 V	13 = ZY 18 ITT
14 = 12 k		14 = 0,047 250 V	14 = 1N4148 TI
15 = 1,5 k		15 = 2200 35 V	15 = 1N4003 TI
16 = 470		16 = 10 100 V	16 = 1N4003 TI
17 = 6,8 k		17 = 47 63 V	
18 = 270			
19 = 470			
20 = 470			
21 = 10 k		T	
22 = 2,2 k		1 = BC 182 TI	
23 = 270 k		2 = BC 182 TI	
24 = 270 k		3 = BC 182 TI	
25 = 82		4 = BC 212 TI	
26 = 10		5 = BC 182 TI	
27 = 3,3 7 W WW		6 = BC 182 TI	
28 = 1,5 k		7 = BC 212 TI	
29 = 1 k var.		8 = BC 182 TI	
30 = 220 k		9 = BC 182 TI	
31 = 18 k		10 = TIP 29A TI	
32 = 1 k var.		11 = 2N3055 RCA	
33 = 5 k 10-t. potm.		12 = BC 212 TI	
34 = 3,9 k		13 = BC 182 TI	
35 = 1 k 20-t. potm.		14 = BC 212 TI	
36 = 4,7 k		15 = BC 182 TI	
37 = 4,7 k		16 = BC 212 TI	
38 = 1 k		17 = BC 182 TI	
39 = 3,9 k		18 = TIP 29A TI	
40 = 1 k		19 = 2N3055 RCA	
41 = 1 k			
42 = 12 k			
43 = 470			
44 = 1 k			
45 = 1 k		F = Fuse 1 A - 5 x 20 mm	
46 = 47			
47 = 4,7 k		WW = Wire wound resistor	
48 = 1 k			
49 = 10 k			
50 = 10		All other resistors metalfilm $\frac{1}{2}$ W 2%	
51 = 1,5 k			
52 = 1 k var.			
53 = 3,3 7 W WW			
54 = 1 k var.			
55 = 18 k			
56 = 220 k			
57 = 1 k			
58 = 5 k var. WW			
59 = 1 k 20-t. potm.			
60 = 3,9 k			
61 = 560 1 W			
62 = 560 1 W			