

LABPAC B 204



LABPAC B 204 – A quadruple power supply especially for MICROPROCESSOR developments, two of four voltages feature the OLTRONIX MUTUAL TRACKING MODE* for the best possible load protection.

- Output 1: 0 to + 5.5V/5A voltage, current limit and overvoltage protection, all adjustable
- Output 2: — 5V/1A fixed voltage and current limit
- Output 3: 0 to + 16.5V/1.5A } voltage and current limit
- Output 4: 0 to — 16.5V/1.5A } separately adjustable or voltage tracking mode*
- High resolution setting for all the adjustable voltages by means of three 10-turn precision potentiometers
- Three separately adjustable current limits
- Low source and load effect, low PARD (ripple and noise)
- Four switchable volt/ampere-meters for permanent monitoring of each output
- Operating mode indicated by LEDs: constant voltage or constant current
- Adjustable overvoltage protection (OVP) and tripping indication by a LED for output 1
- All output voltages are short circuit proof
- Mains transformer with overtemperature protection (OTP)
- Fuse protection of each mains conductor
- OLTRONIX standard guarantee of 5 years

***MUTUAL TRACKING**

The positive voltage is set to the desired value. The negative voltage follows the positive one, even under overload conditions. Should the negative voltage decrease (overload condition), the positive one will also follow it due to the **MUTUAL TRACKING** feature.

Rating Data¹⁾

Source voltage, frequency

Output voltage range/current, output 1

output 2

output 3 and 4

Ambient temperature, operating

Model

U_S / f_S

U_{ex} / I_{ex}

t_{amb}

B 204

$220\text{ V} \pm 10\% \text{) } 48 - 63\text{ Hz}$

0 to + 5.5V / 5 A

- 5V \pm 0.2V / 1 A

0 to \pm 16.5 V / 1.5 A

0 - 40° C

Performance Ratings¹⁾ (Data subject to change)

Source current, max.

Load effect (load regulation) $I_{ex} = 0 - 100\%$

$U_{ex} = 0 - 100\%$

Source effect (line regulation)

for $U_S = U_{Snom} \pm 10\%$

Temperature coefficient, $t_{amb} = 0 - 40^\circ\text{ C}$

PARD (ripple and noise) $f_B = 20\text{ Hz} - 20\text{ MHz}$

Drift (stability) $\tau = 8\text{ h}$, $f_B = 0 - 20\text{ Hz}$

Load transient recovery time

$I_{ex} = 0 - 100\%$ - 0 and $U_S = 220\text{ V}$

Transient recovery band = $\pm 50\text{ mV}$

Output impedance

Setting range

Control range

Control deviation, max.

Crossover area, max.

Overvoltage protection, range

Reverse current protection, max.

Reverse voltage protection, max.

Isolation voltage: output terminals to the case

Insulation resistance, min. at $U_{test} = 500\text{ V DC}$

Insulation test voltage: mains to case,
with output connected to case

Transformer overtemperature protection

Storage temperature

Mains fuses

Overall dimensions

Mass

I_{Sm}

U_{erL}

I_{erL}

U_{erS}

I_{erS}

α_U

α_I

U_{PARD}

I_{PARD}

U_{erD}

I_{erD}

τ_R

Z_{out}

U

I

I_m

(U/I) const

U_{OVP}

I_{Rm}

U_{Rm}

U_{isol}

R_{insul}

U_{insul}

t_{OTP}

t_{stor}

F_{10}

height

width

depth

m

0.90 A_{rms}

< 2 mV

< 100 mV

< 2 mV

< 4 mA

NA³⁾

< 3 mA

< 1 mV

< 50 mV

< 1 mV

< 5 mA

NA³⁾

< 1.5 mA

< 0.01%

< 0.05%

< 0.01%/°C

< 0.02%

NA³⁾

< 0.01%/°C

< 1 mV_{p-p}

< 10 mV_{p-p}

< 1 mV_{p-p}

< 10 mA_{p-p}

NA³⁾

< 1 mA_{p-p}

< 0.05%

< 0.05%

< 0.05%

< 0.05%

NA³⁾

< 0.05%

< 50 μ s

< 50 μ s

< 50 μ s

0.5 m Ω , 0.25 μ H

50 m Ω , 0.25 μ H

1 m Ω , 0.5 μ H

0 - 10 V

NA³⁾

0 to \pm 20 V

0.1 - 5 A

NA³⁾

0.04 to \pm 2 A

10 mV / 10 mA

NA³⁾

10 mV / 2 mA

4 to 10 V

5 A

3 A

3 A

1 V (forward voltage drop of 1 diode)

\pm 500 V

> 100 M Ω

2100 V DC during 1 minute

110° C

- 40° C to + 85° C

2 x 1.6 A slow blow, on rear

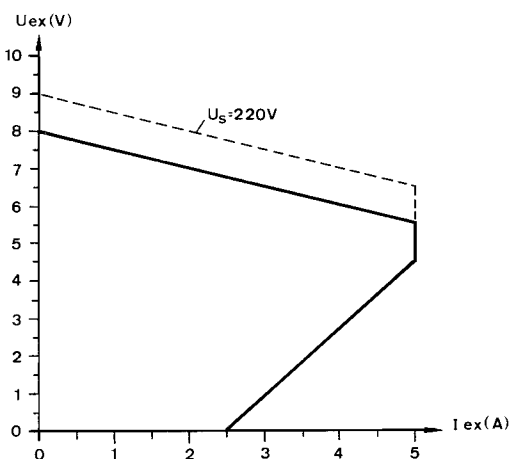
176 mm

176 mm

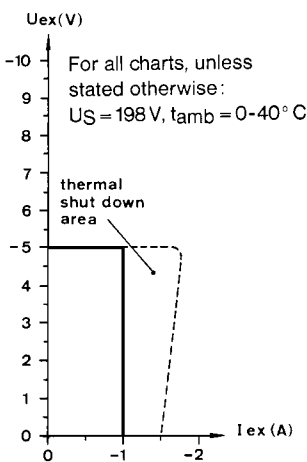
246 mm

5.4 kg

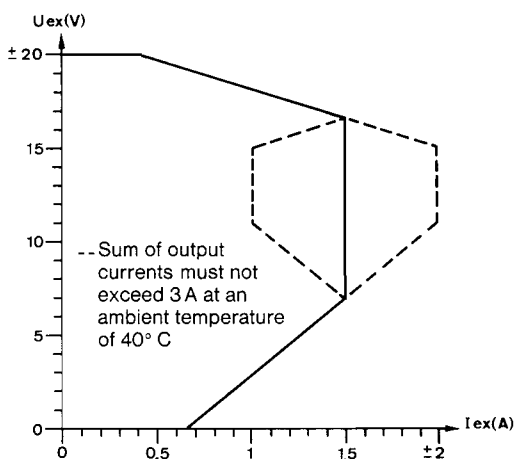
Output 1: 0 - 5.5 V / 5 A



Output 2: - 5 V / 1 A



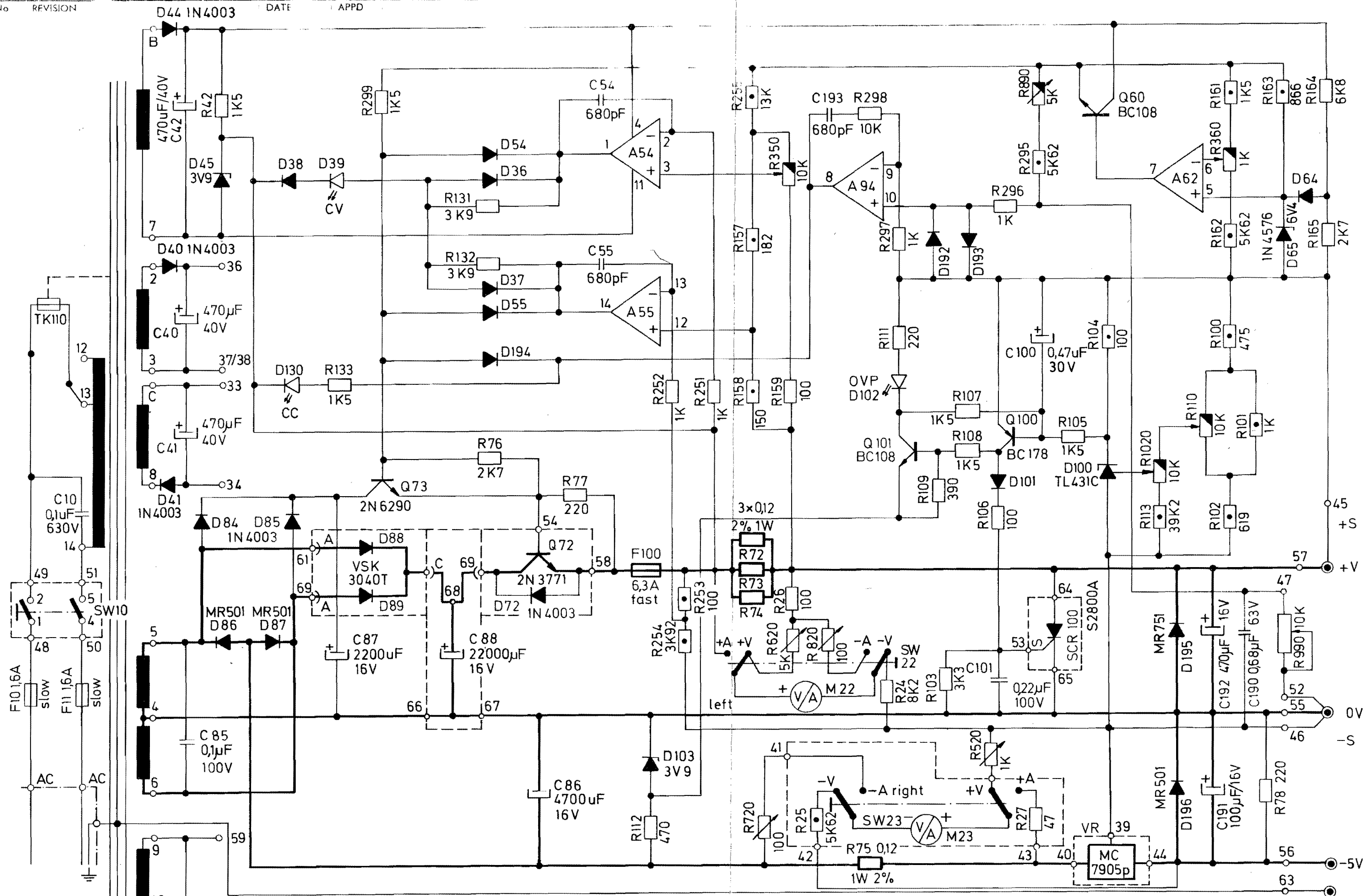
Output 3 and 4: 0 to \pm 16.5 V / 1.5 A



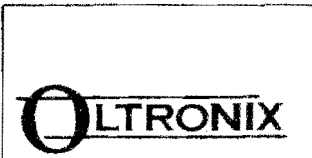
¹⁾ Rating Data and Performance Ratings are expressed in accordance with international recommendations, notably IEC-478.

²⁾ Connected for $U_{Snom} = 240\text{ V}$ on order or changed at Service Center.

³⁾ NA = Not Applicable

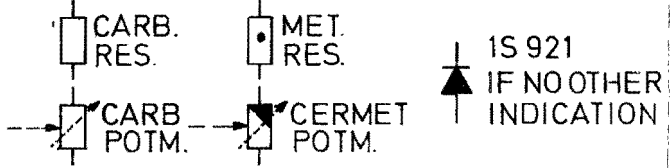
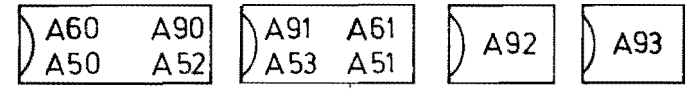
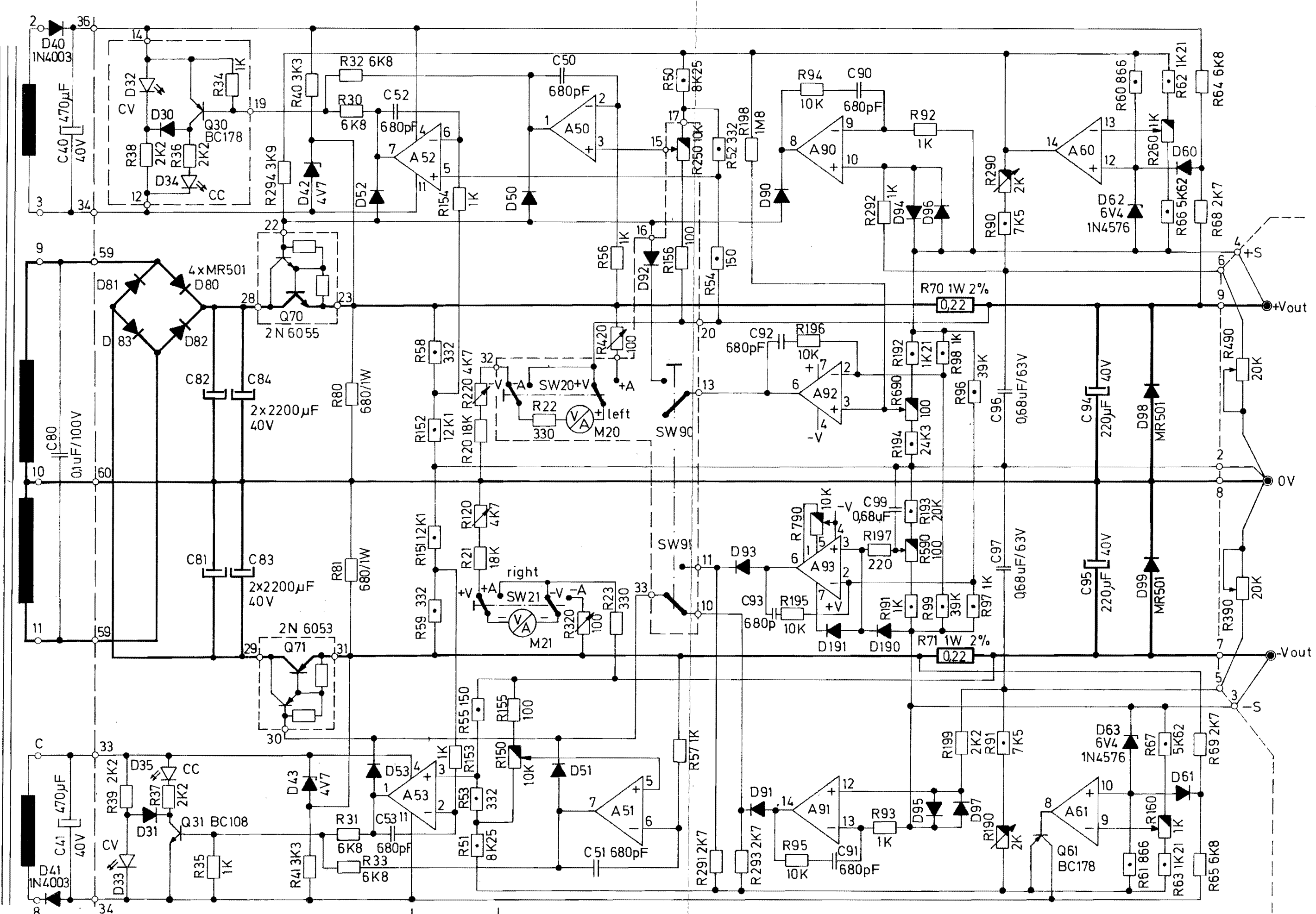


A55 A94
 A54 A62
 CARB. RES. MET RES.
 CARB. POTM. CERMET POTM.
 1S 921 IF NO OTHER INDICATION



LABPAC B204 ±5V

PART NO.	SCALE
DR 16.11.78	APPD
305-73-01	
REV	



OLTRONIX

LABPAC B204 ±16V

DR 10.12.78 APPD
305-73-02 REV