

LAB 300

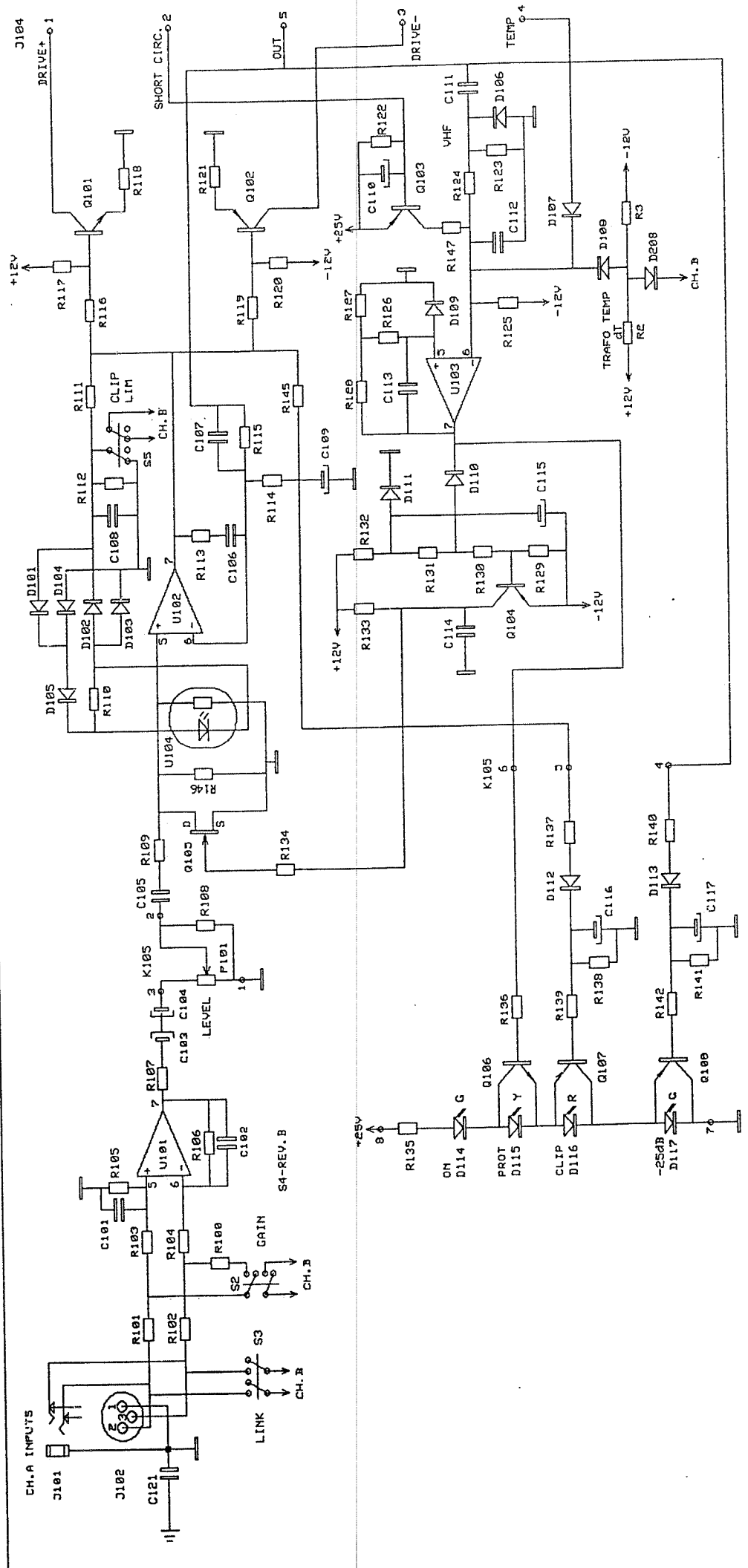
SERVICEMANUAL

1996 EMC

LAB.GRUPPEN

Andersson & Bävholm AB
Gullregnsvägen 16
S-434 44 KUNGSBACKA
SWEDEN

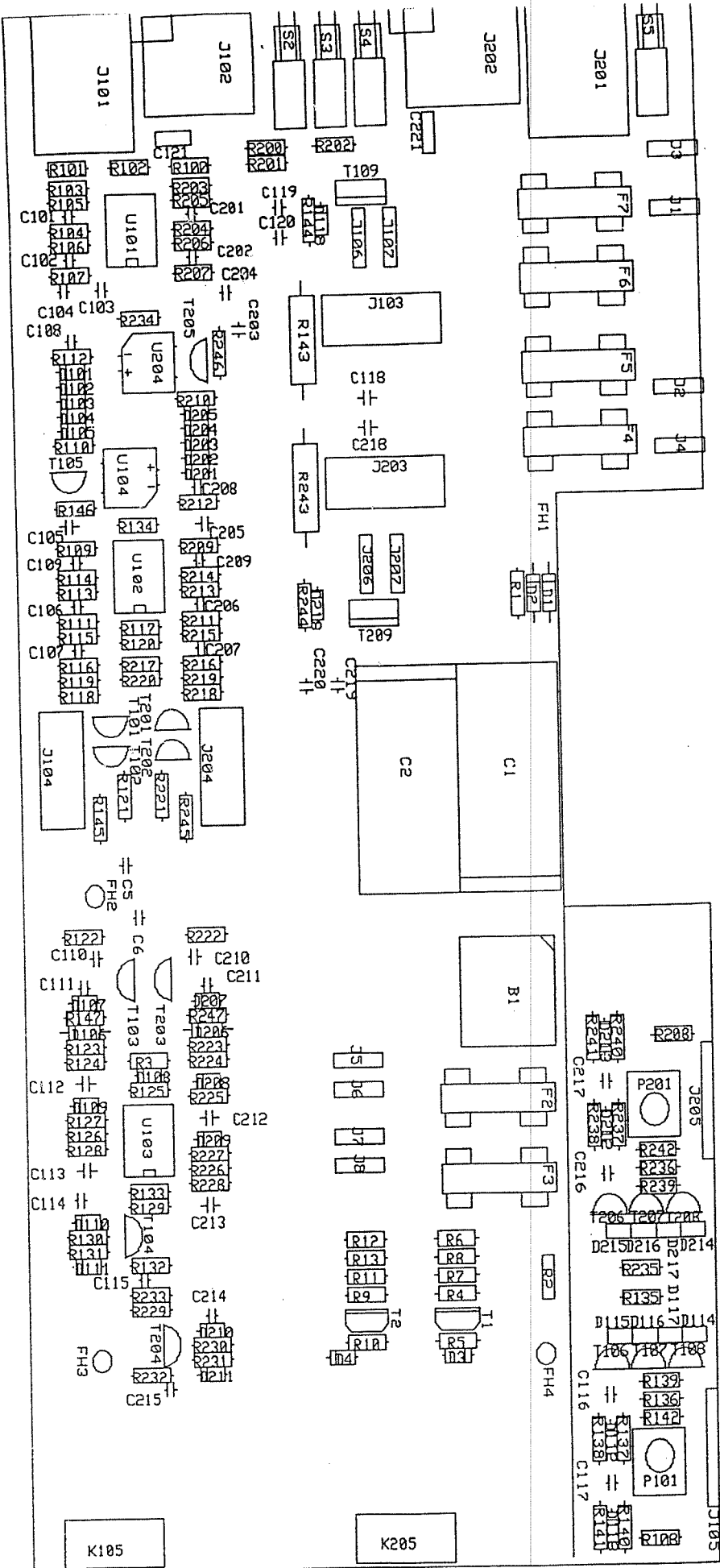
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DET.-NR	ANT	BENJNING	MATERIAL	ERSLITTER	ERSA
KONSTR.	RITAD	KOP	STAND.	GOSK.	SKALA
LAB. GRUPPEN			POWER AMPLIFIER		
KUNGSBACKA SWEDEN			SCHEMATIC		
			LAB 300		
			LAB300CE		
			RITR.-NR		
			INPUT&PROTI		
			LAB301		
			DAT 96		

LAB 300 960120

Input, Driver & power supply EMC modified



LAB 300 Component List

960120

Note CH.A Comp N:o 100-
Ch.B Comp N:o 200-

Input & Protection

Resistors

R100-R104, R108	10 kohm 1%
R105-R106, R129	19,6 kohm 1%
R107, R145	100 ohm 5%
R109	15 kohm
R110	330 kohm
R111, R113, R137, R139, R142	2.2 kohm
R112, R134	4.7 kohm
R114	665 ohm 1%
R115	22,6 kohm 1%
I.R116, R118, R119, R121	1,5 kohm 5%
R117, R120	8.2 kohm 5%
R122, R123, R138, R141, R147	33 kohm 5%
R124, R140,	1 Mohm
R125, R126, R128	4.7 Mohm
R127, R130, R131, R133	150 kohm
R132	220 kohm
R135	2.7 kohm 5% 1W
R136	68 kohm
R146	100 kohm 1%
P101	10 kohm LIN POT
R2	220 kohm NTC
R3	3.9 kohm 5%

Capacitors

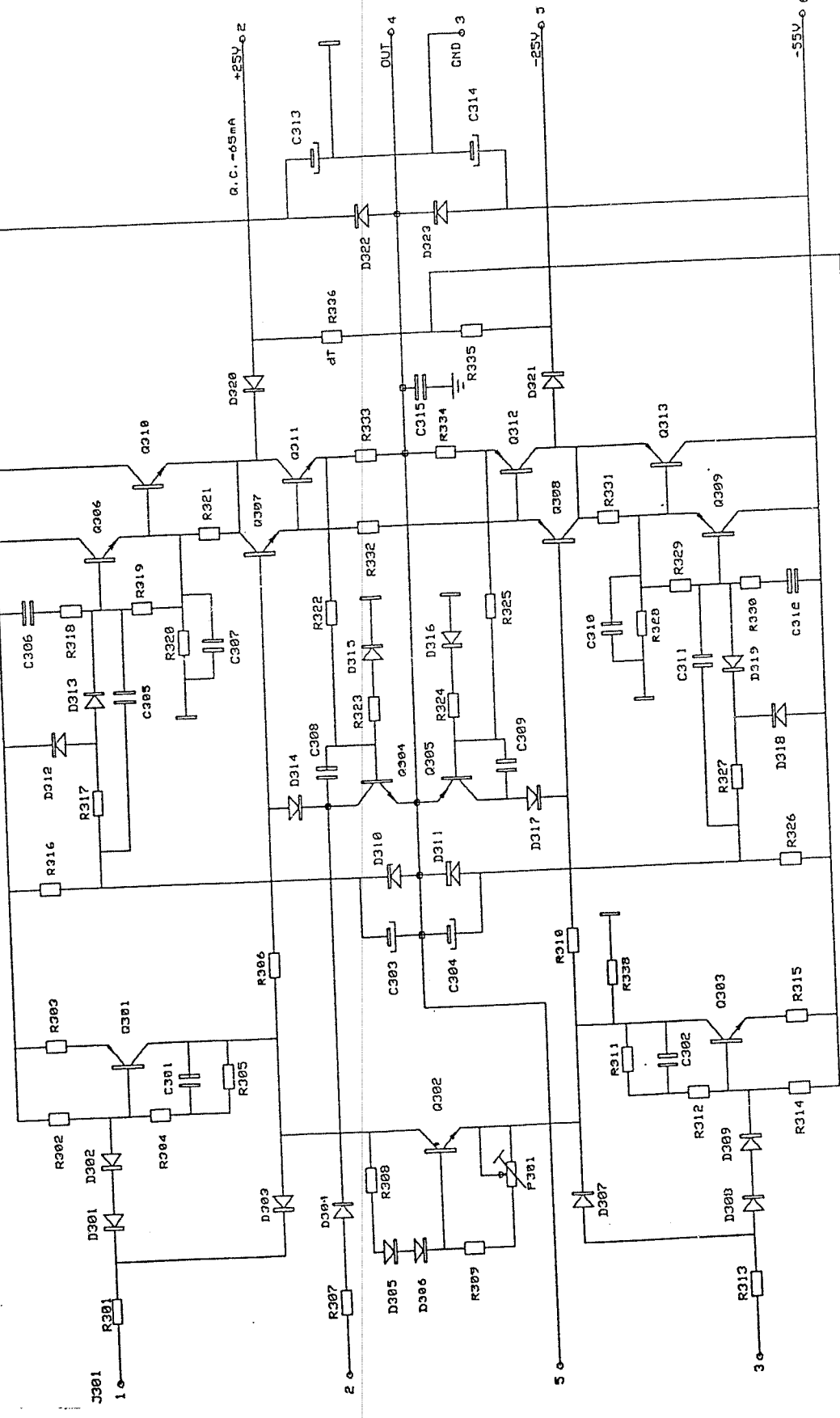
C101, C102	150 pF Ker
C103, C104	47 uF/ 25V
C105	330 nF
C106	82 pF Ker
C107	100 pF Ker
C108	470 pF Ker
C109	220 uF/ 10V
C110, C115	22 uF/ 50V
C111	68 pF Ker
C112	10 nF
C113	220 nF
C114	NC-
C116, C117	1 uF/ 50V
C121	100 nF

SEMICONDUCTORS

D101-D113	1N4148
U101, U102, U103	TL072CP/LF353
U104	VTL 5C4
Q101	MPSA42
Q102	MPSA92
Q103, Q107, Q108	BC 557B
Q104, Q106	BC547B
Q105	2N5458
D114, D117	LED Green
D116	LED Red
D115	LED Yellow
Misc:	
J101	Stereo jack
J102	XLR Female
S2, S3, S4, S5	2-pol Switch
	ALPS

J302

+35V



G.C. - 65mA

+25V

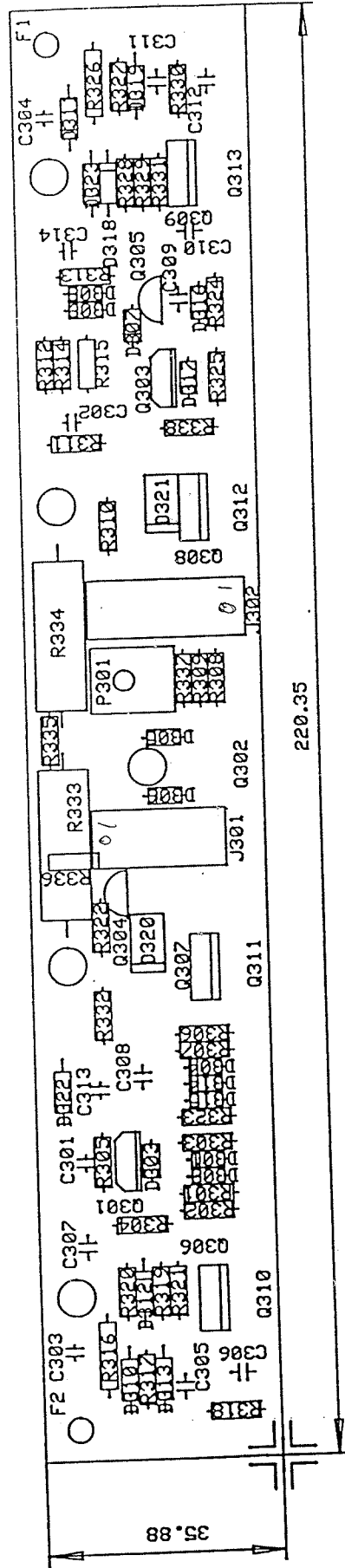
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-55V

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DET.-NR	ANT	BENJMINING	MATER:FL	ERSKUTTER
KONSTR. RITAD	KOP	KONTR.	STAND.	GODK.
GB				SKALA
LAB. GRUPPEN			POWER AMPLIFIER	
KUNCSBACKA SWEDEN			SCHEMATIC	
			LAB 300	
			RITH.-NR	
			OUTPUT	
			4	

LAB 300 Output module



LAB 300 Component List

OUTPUT MODULE

960120

RESISTORS

R301, R307, R313, R338	4.7 kohm 5%
R302, R314, R308	1 kohm
R303, R315, R306, R310	47 ohm
R304, R312	820 ohm
R305, R311	220 kohm
R309	1.8 kohm
R316, R326	3.9 kohm 1W
R317, R327	22 ohm
R318, R330	15 ohm
R319, R329	390 ohm
R320, R328	2.7 kohm
R321, R331	470 ohm
R322, R325	180 ohm
R323, R324	3.3 kohm 1%
R332	100 ohm 5%
R333, R334	0.05 ohm, 4W
R325	10 kohm 5%
R336	220 kohm NTC
P301	1 kohm Trim

CAPACITATORS

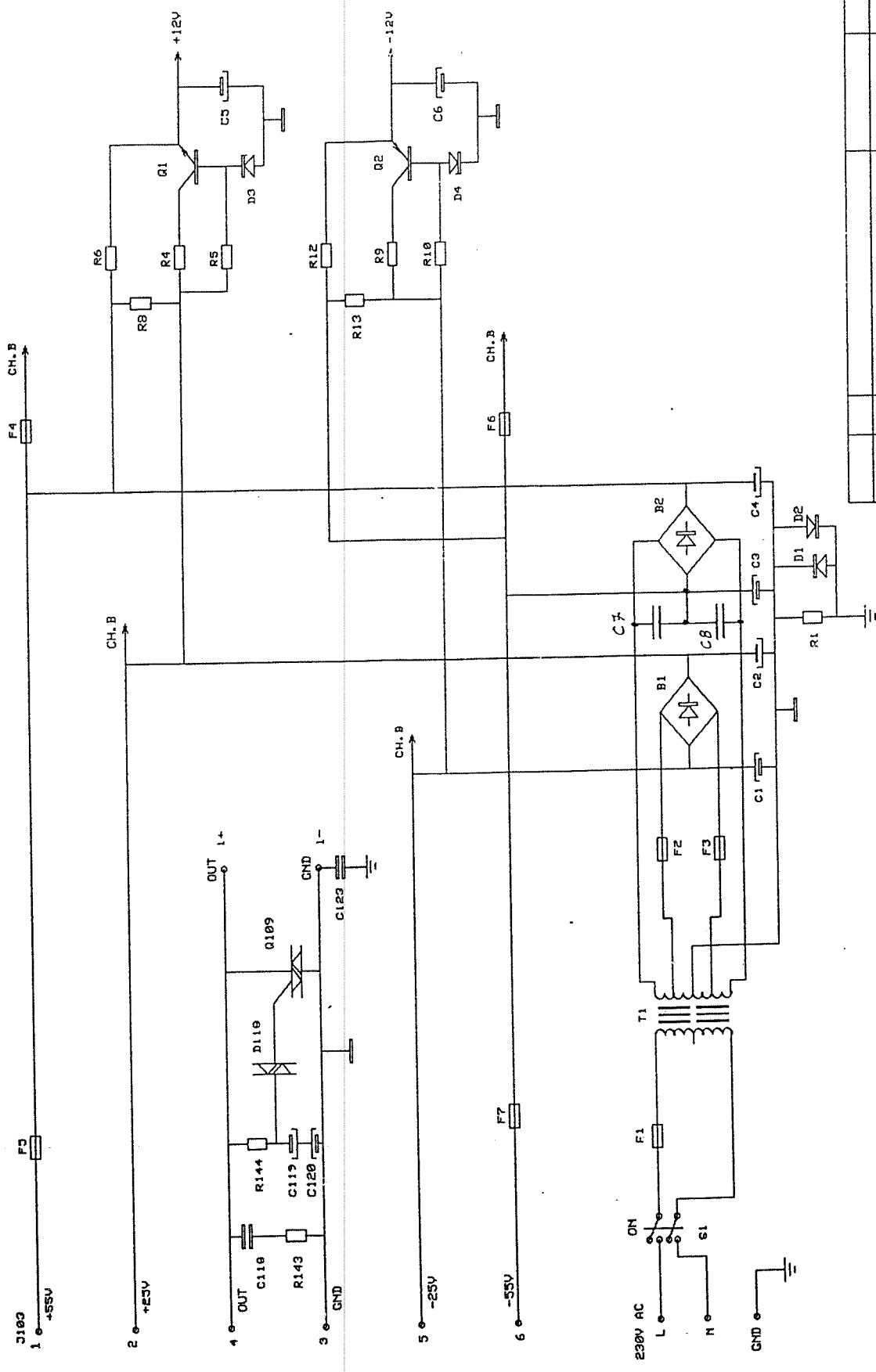
C301, C302	220 pF Ker
C303, C304	100 uF/ 10V
C305, C311	2.2 nF
C306, C308, C309, C312	10 nF
C307, C310	15 nF
C313, C314	1 uF/ 63V
C315	680 pF

DIODES

D301, D302, D305, D306,	1N4148
D308, D309	
D303, D304, D307,	BAV 21
D314- D317	
D312, D313, D318, D319,	1N4004
D322, D323	MR 852
D320, D321	8.2 V 1W Zener
D310, D311	

TRANSISTORS

Q301	MJE 350
Q302, Q303	MJE 340
Q304	MPSA 42
Q305	MPSA 92
Q306, Q307	MJE 15030
Q308, Q309	MJE 15031
Q310, Q311	2SC 3281
Q312, Q313	2SA 1302



DET.-NR	ANT	BENJNING	MATERIAL	ERSA
KONSTR. RITAD	db	KONTR.	GODK.	920120
LAB. GRUPPEN			POWER AMPLIFIER	LAB300CE
KUNGSBACKA SWEDEN			SCHEMATIC	RITN.-NR LAB303
			LAB 300	POWER SUP

LAB 300 Component list

960120

POWER SUPPLY & OUTPUT

RESISTORS

R1	100 ohm 5%
R4, R9	220 ohm 5%
R5, R10	4.7 kohm
R6	8.2 kohm 1W
R12	6.8 kohm 1W
R8, R13	3.3 kohm 1W
R143	2,2 ohm 2W
R144	220 kohm 5%

CAPACITATORS

C1, C2	2200 uF/ 40 V
C3, C4	10 000 uF/ 63 V
C5, C6	47 uF/ 25V
C118	100 nF/ 250V
C119, C120	4.7 uF/50 V
C123	100 nF
C7, C8	220 nF 250V

SEMICONDUCTORS

D1, D2	1N4004
B1	Rectifier BR104
B2	Rectifier CM2504
D3, D4	12 V 1W Zener
D118	HS 10 Diac
Q109	Q 4015 Triac
Q1	MJE 340
Q2	MJE 350

MISC

F1, F2, F3, F4, F5, F6, F7	T 4A Fuse Power Switch Arcoelectric 1300
S1	
T1	Transformer LAB300 RTR 160 35