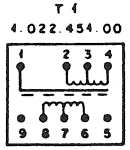
STUDER
professional audio equipment

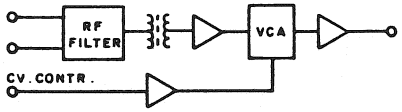
Audio System Components

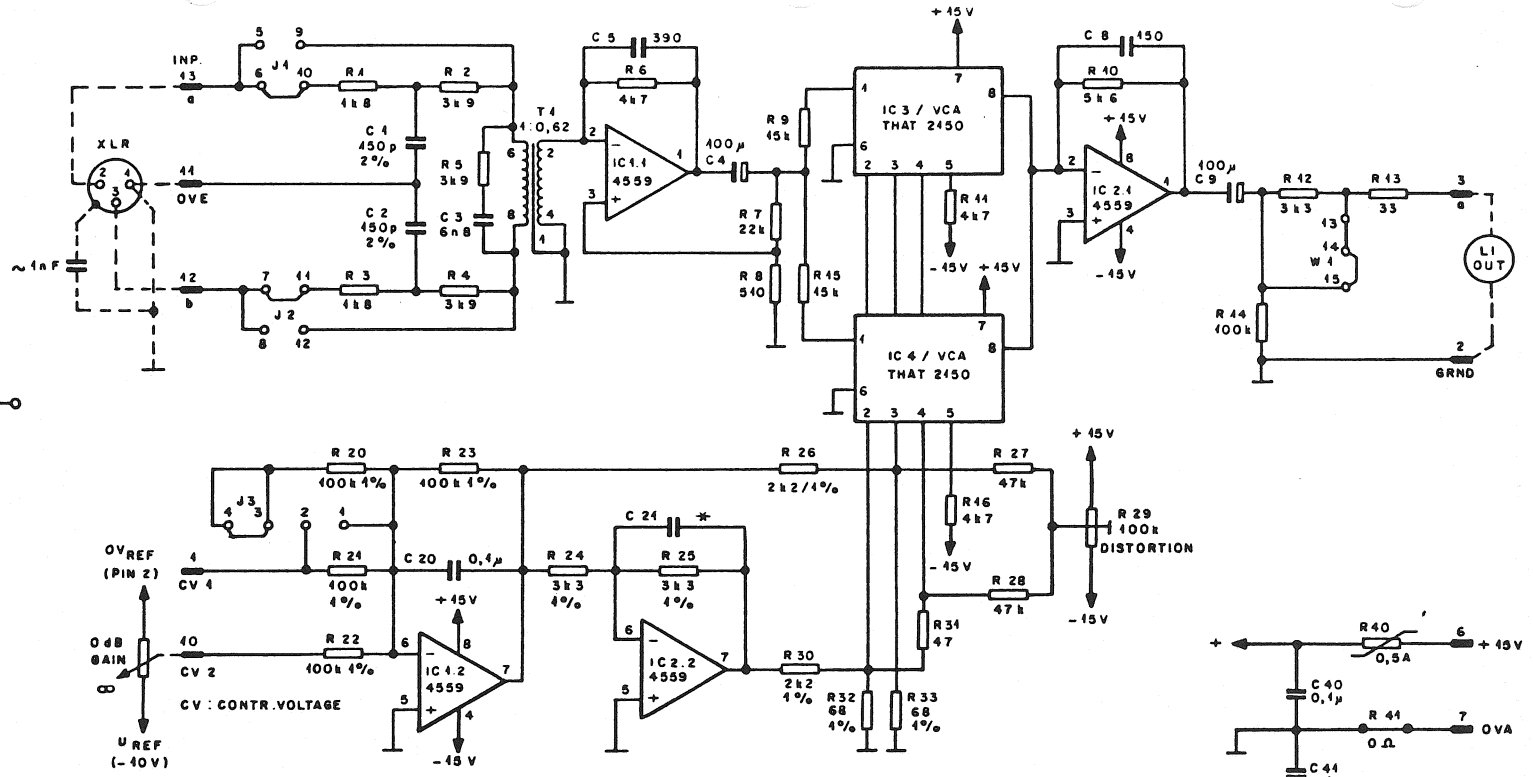
Earlier Units

PIN	CIS	EURO 32 P. (a)	(b)	(c)	(d)
INP a	13	1	7	21	27
INP b	12	2	8	22	28
0V E	11	3	9	23	29
CV 2	10	17	17	18	18
	9				
-15V	8	14	14	14	14
0VA	7	15	15	15	15
+15V	6	16	16	16	16
	5				
	4				
OUT a	3	4	10	24	30
GRND	2	5	11	25	31
CV 1	1	6	13	26	32



BLOCK DIAGRAM





* NOT EQUIPPED

GRND-> Ground is the reference for the control voltage CV and is normally connectet to 0VA.
0V E is wired to the source of the input signal. (to XLR pin 1 and from there to the chassis.)

GENERAL

0dBu = 0,775V eff			
GAIN @ control voltage CV 0V	attenuation	-6	dB
Range 30 Hz ... 16 kHz			
Frequency response		+0 / -0,25	dB
Noise @ gain CV 0V, DIN 45405	N	<-100	dBu
Noise CCIR 468 @ gain CV 0V	N	< - 90	dBu
THD + Noise @ gain 0 dB; input + 6 dBu	d	< -65	dB
THD + Noise @ all input levels	d	< -55	dB
Power requirements +/- 15 V	+/-	25	mA

INPUT

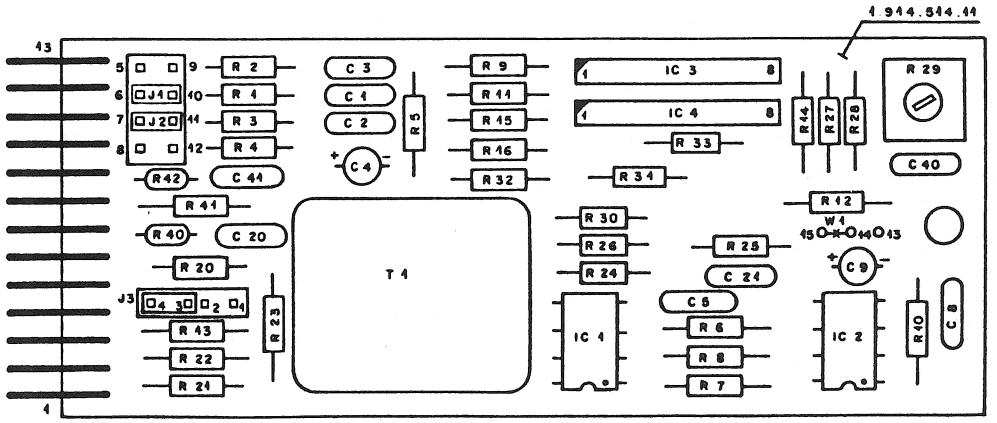
Jumper 6/10, 7/11:			
Balanced, floating RF filter	Ri >	10	kOhm
Max. input level	Uin	+24	dBu
Common mode rejection ratio	>	50	dB
Jumper 5/9, 8/12:			
Current input, balanced, floating	Ri approx.	150	Ohm

OUTPUT

Max. output level	U out	+20	dBu
Output impedance	R out	33	Ohm
without wire link 14/15	R out	3,3	kOhm
Load (R out 33 Ohm)	RL >	600	Ohm

CONTROL CHARACTERISTICS

positive voltage			amplification	
negative voltage			attenuation	
Pin	10		10	dB / Volt
Pin	1	Jumper @ 1-2	1	dB / µA
		Jumper @ 2-3	20	dB / Volt
		Jumper @ 3-4	10	dB / Volt
Control range		Gain/Att	+20...-100	dB



0	20.8.93	We	
1	30.11.93	We	

STUDER REGENSDORF ZURICH

LINE IN WITH VCA ESE

SC 1.914.514.00

STUDER

TELEPHONE TRANSFORMATOR

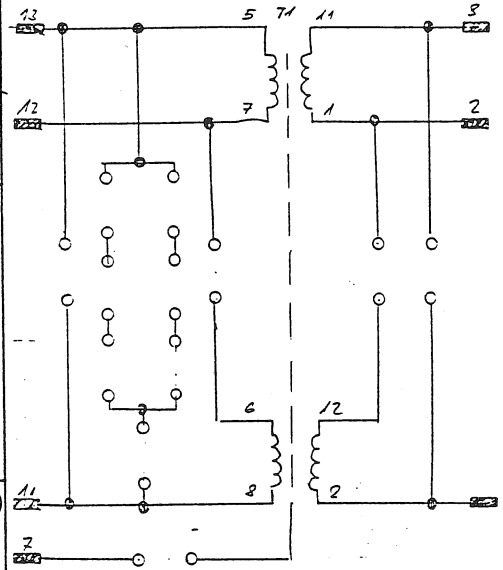
0 21.03.89 Hrj

1.914.536.00

PAGE 1 OF 1

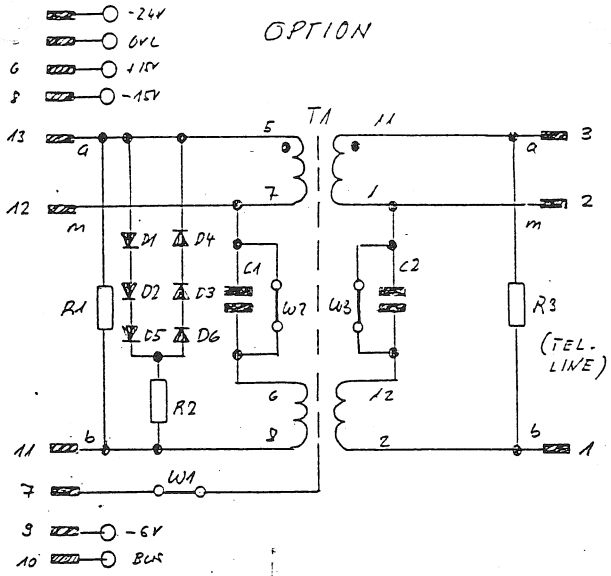
SCHEMATIC DIAGRAM

STUDER 1.022.237.00

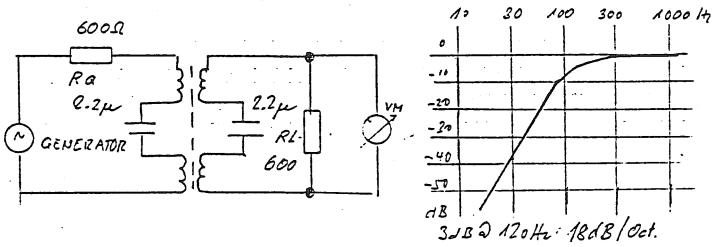


VERSION: _ _ _ _ _ _ _ _ _ _

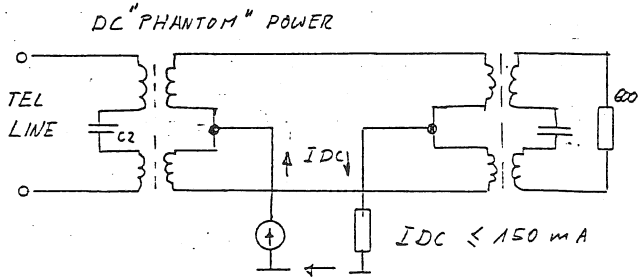
OPTION



POS	STUDER NR	VALUE	EQUIPPED WITH	REMARK	NORMALLY USED	
C1					59.02.0225	2µ2 63V
C2					59.31.7125	2µ2 250V
D1					50.04.0105	1N4004
D2					50.04.0105	1N4004
D3					50.04.0105	1N4004
D4					50.04.0105	1N4004
D5					51.04.0105	1N4004
D6					50.04.0105	1N4004
R1					57.11.3621	620Ω
R2					57.11.3569	5.6Ω
R3					57.11.3621	620Ω
W1						–
W2						–
W3						–
T1	1.022.237.00	1:1	YES			

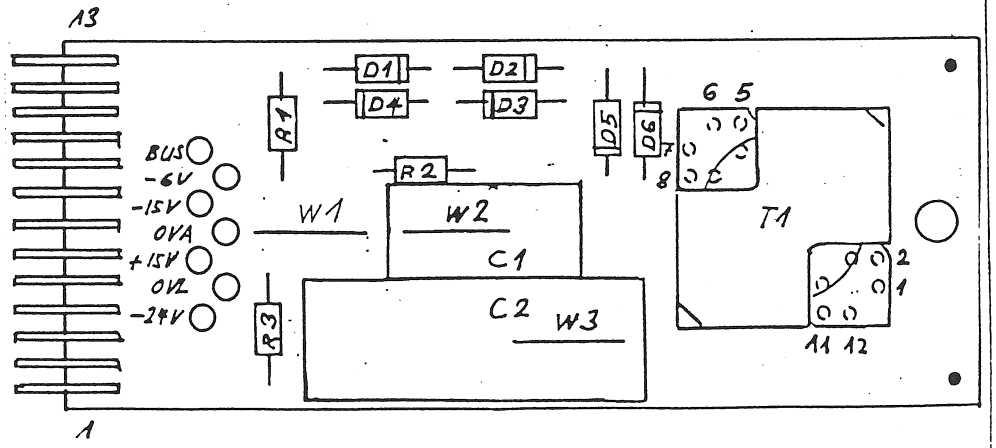


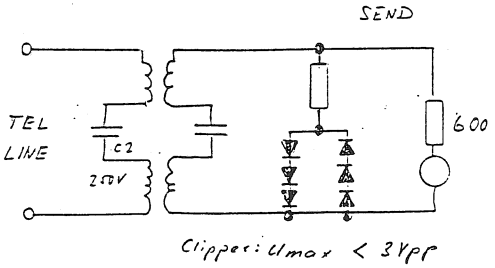
DC "PHANTOM" POWER

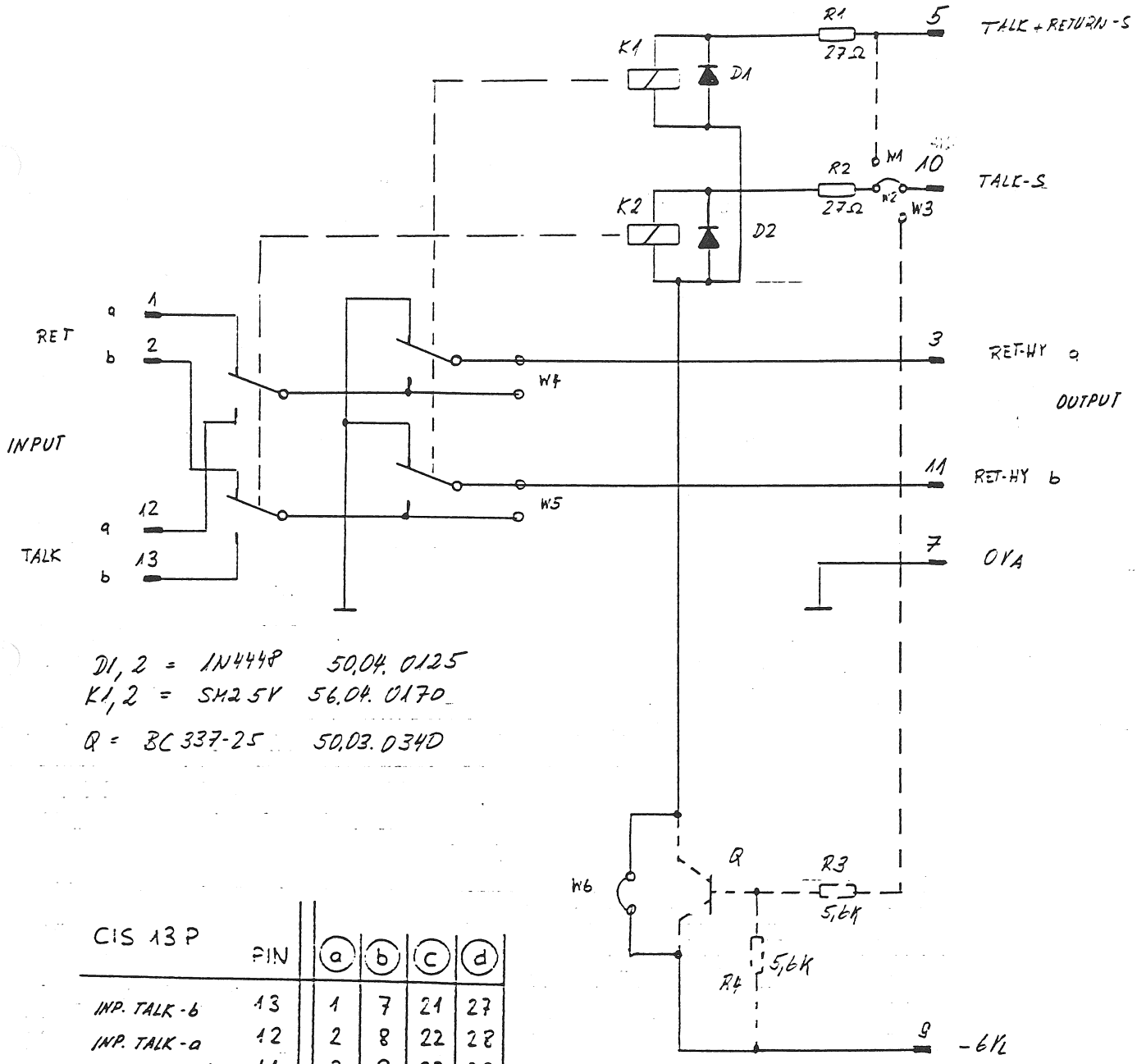


EURO 32P

PIN		a	b	c	d
LINE a	13	1	7	21	27
LINE m	12	2	8	22	28
LINE b	11	3	9	23	29
not used	10				
	9				
	8				
(0VA)	7				
	6				
	5				
	4				
TEL LINE a	3	4	10	24	30
TEL LINE m	2	5	11	25	31
TEL LINE b	1	6	13	26	32



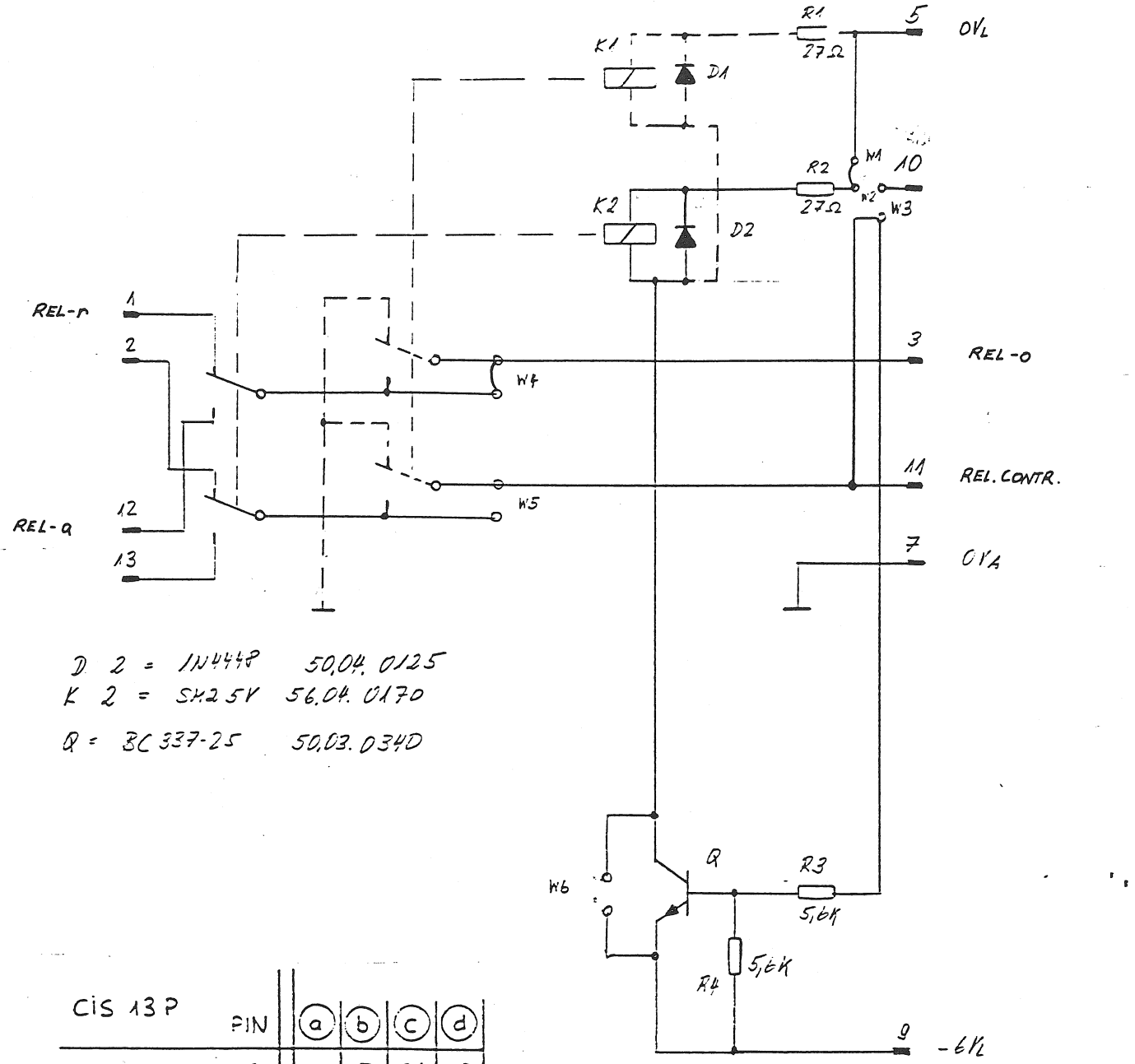




D1, 2 = 1N4448 50.04.0125
K1, 2 = SH2 5V 56.04.0170
Q = BC 337-25 50.03.0340

CIS 13 P	PIN	ⓐ	ⓑ	ⓒ	ⓓ
INP. TALK - b	13	1	7	21	27
INP. TALK - a	12	2	8	22	28
OUTP. RETHY - b	11	3	9	23	29
REL. CONTR TALK-S	10	17	17	18	18
$-6V_L$	9	12			
	8	14			
$0V_A$	7	15			
	6	16			
REL. CONTR. TALK + RET - S	5	19			
	4	20			
OUTP. RETHY - a	3	4	10	24	30
INP. RET - b	2	5	11	25	31
INP. RET - a	1	6	13	26	32

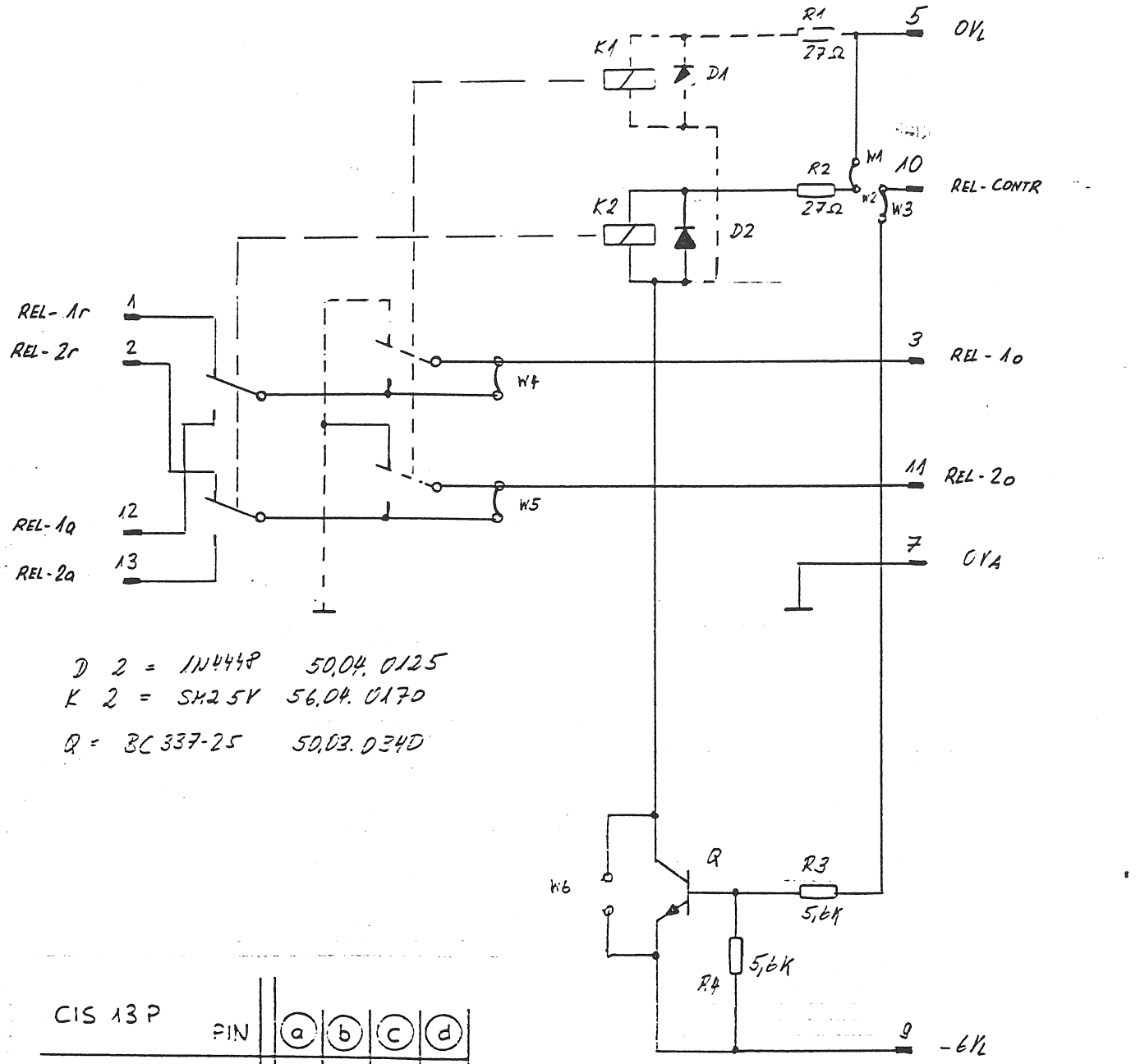
0	7.3.90	MF				
SCALE:	RTL CENTRE KIRCHBERG					
RELAY 2 / 08						
1.914.537/01						PAGE 2 OF 2



CIS 13 P	PIN	a	b	c	d
	13	1	7	21	27
REL-q	12	2	8	22	28
REL. CONTR.	11	3	9	23	29
	10	17	17	18	18
$-6V_L$	9	12			
	8	14			
$0V_A$	7	15			
	6	16			
$0V_L$	5	19			
	4	20			
REL-o	3	4	10	24	30
	2	5	11	25	31
REL-r	1	6	13	26	32

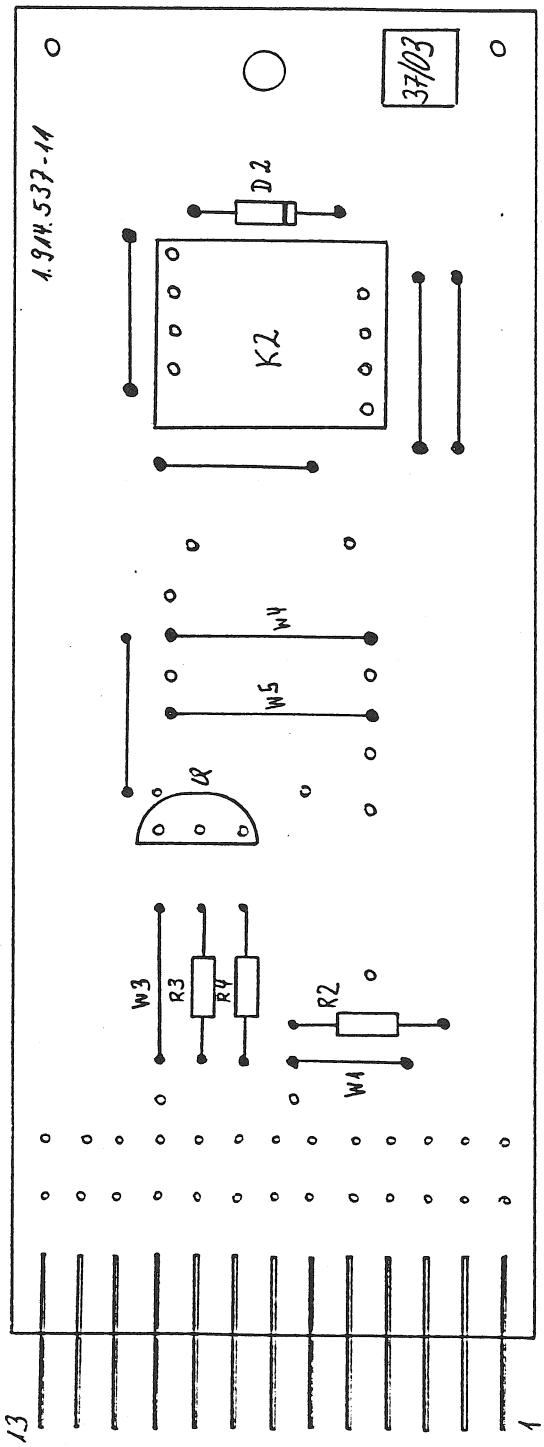
0 8.12.89	0 7.3.90	0 ..	0 ..	0 ..
	RTL CENTRE KIRCHBERG			PAGE 1 OF 2
STUDER	RELAY 2	1 GROUP FADER		1.914.537/02

0	7.3.90	AA				
	RTL CENTRE KIRCHBERG					PAGE 2 OF 2
	RELAY2 / GROUP FADER					1.914.537/02

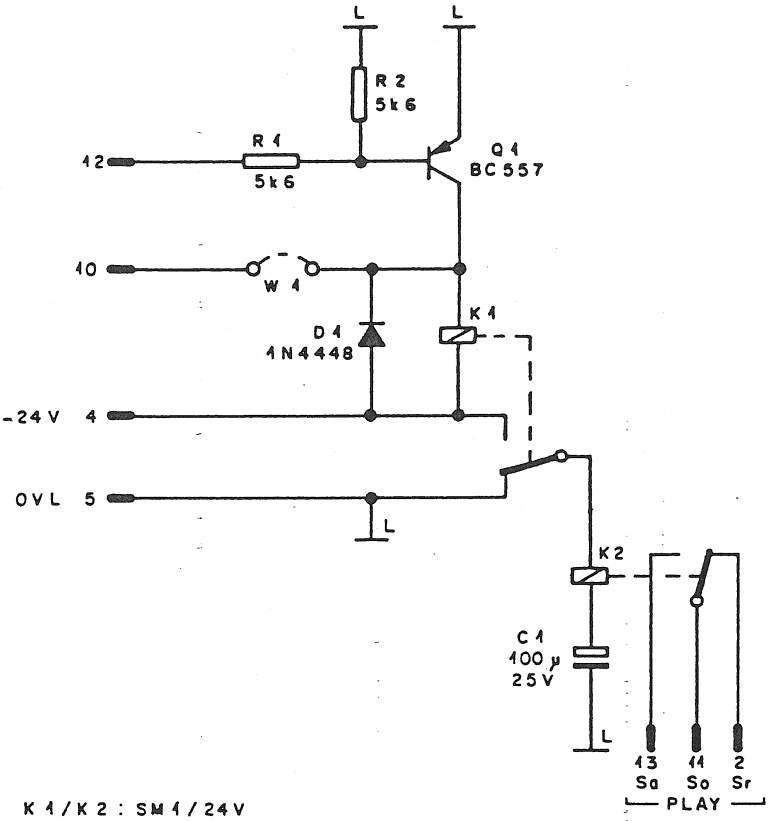


D 2 = 1N4448 50.04.0125
K 2 = SH2 5V 56.04.0170
Q = BC 337-25 50.03.0340

CIS 13 P	PIN	a	b	c	d
REL-2a	13	1	7	21	27
REL-1a	12	2	8	22	28
REL-2o	11	3	9	23	29
REL-CONTR.	10	17	17	18	18
-6VL	9	12			
	8	14			
0VA	7	15			
	6	16			
0VL	5	19			
	4	20			
REL-1o	3	4	10	24	30
REL-2r	2	5	11	25	31
REL-1r	1	6	13	26	32

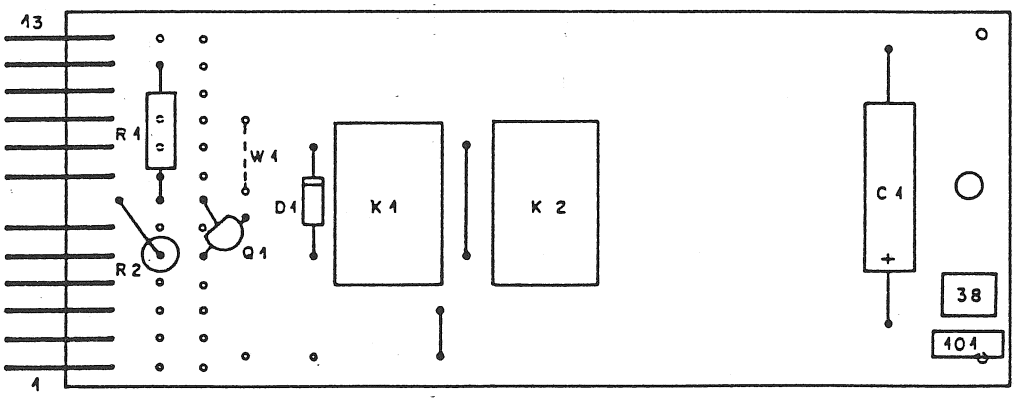


07.3.90				
	RTL CENTRE KIRCHBERG			PAGE 2 OF 2
STUDER	RELAY 2 / ON AIR SIGN			1.914.537/03



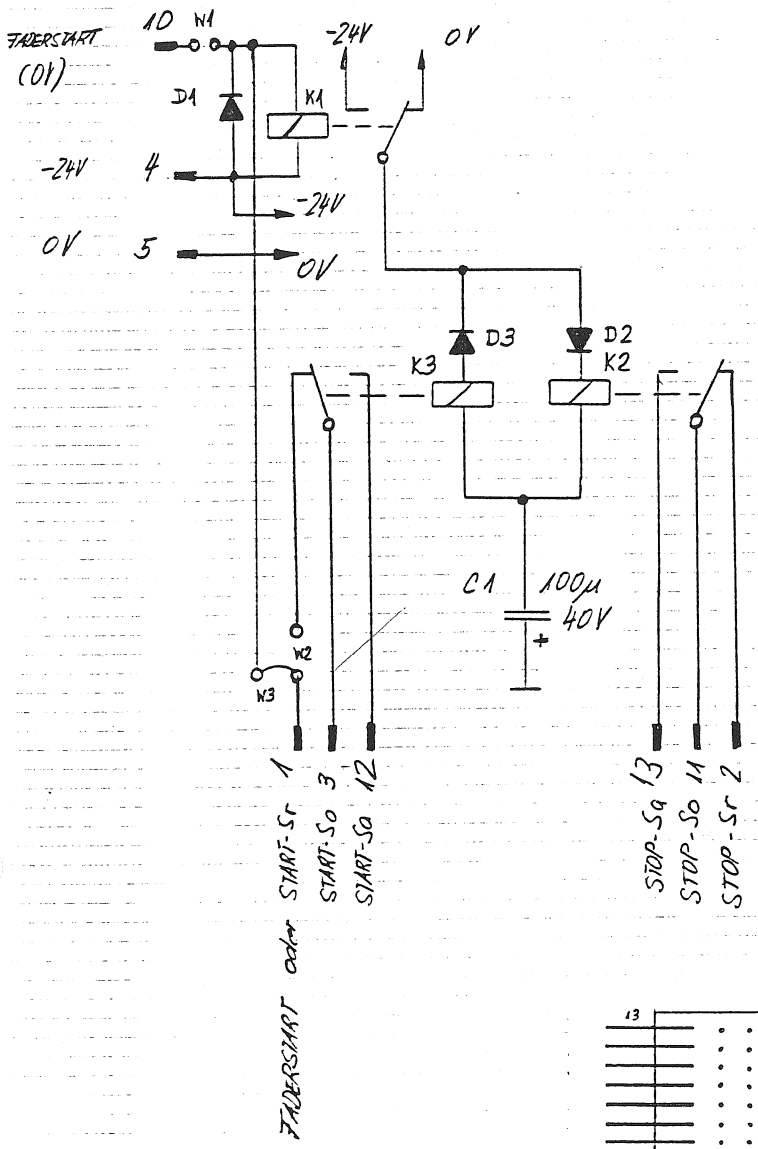
K 1 / K 2 : SM 1 / 24 V

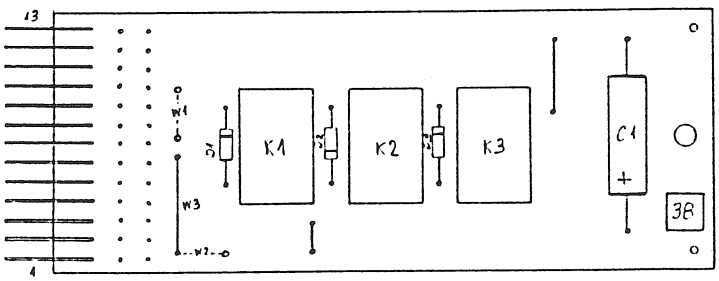
CIS 13 P.	PIN	a	b	c	d
PLAY Sa	13	1	7	21	27
FADER SIGN. (-6V)	12	2	8	22	28
PLAY So	11	3	9	23	29
FADER SIGN. (0V)	10	17	17	18	18
	9	12	—	—	—
	8	14	—	—	—
	7	15	—	—	—
	6	16	—	—	—
OVL	5	19	—	—	—
-24V	4	20	—	—	—
	3	4	10	24	30
PLAY Sr	2	5	11	25	31
	1	6	13	26	32



0 25.5.94 Ge				
STUDER REGENSDORF ZÜRICH	FADER START IMPULS RELAYS			1.914.538/101

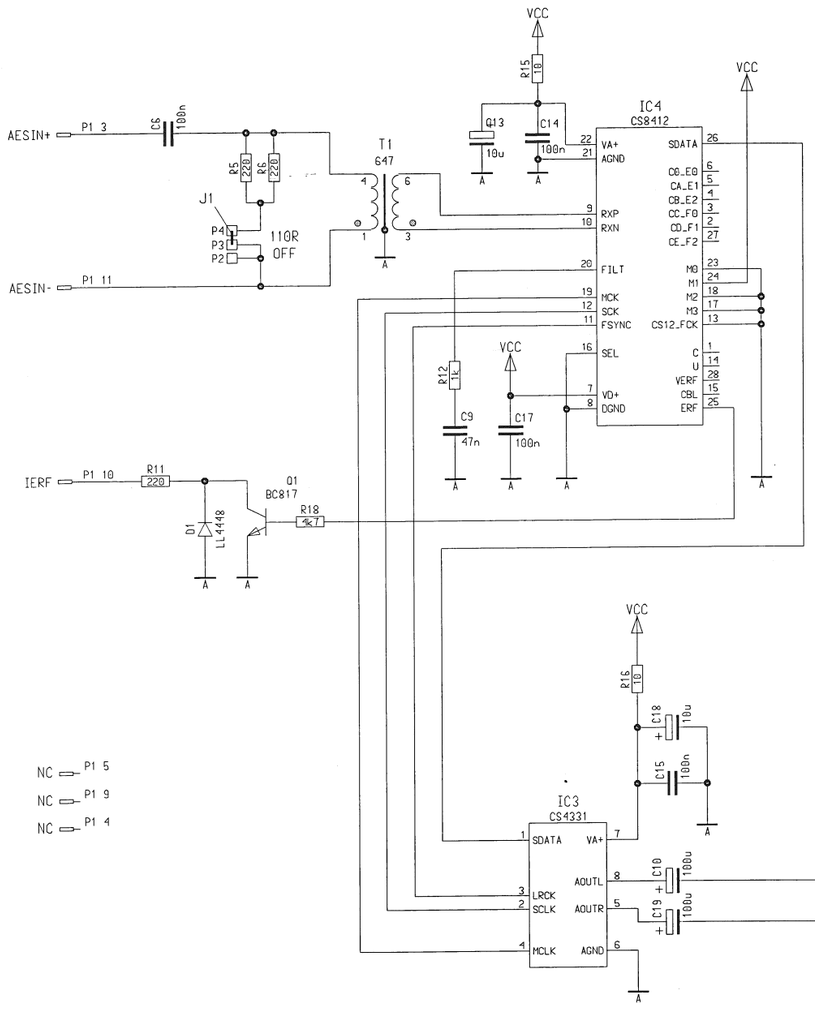
CIS 13 P	PIN	a	b	c	d
STOP-Sa	13	1	7	21	27
START-Sa	12	2	8	22	28
STOP-So	11	3	9	23	29
(FADERSTART OV)	10	17	17	18	18
	9	12			
	8	14			
	7	15			
	6	16			
OV_L	5	19			
-24V	4	20			
START-So	3	4	10	24	30
STOP-Sr	2	5	11	25	31
FADERSTART OV (START-Sr)	1	6	13	26	32





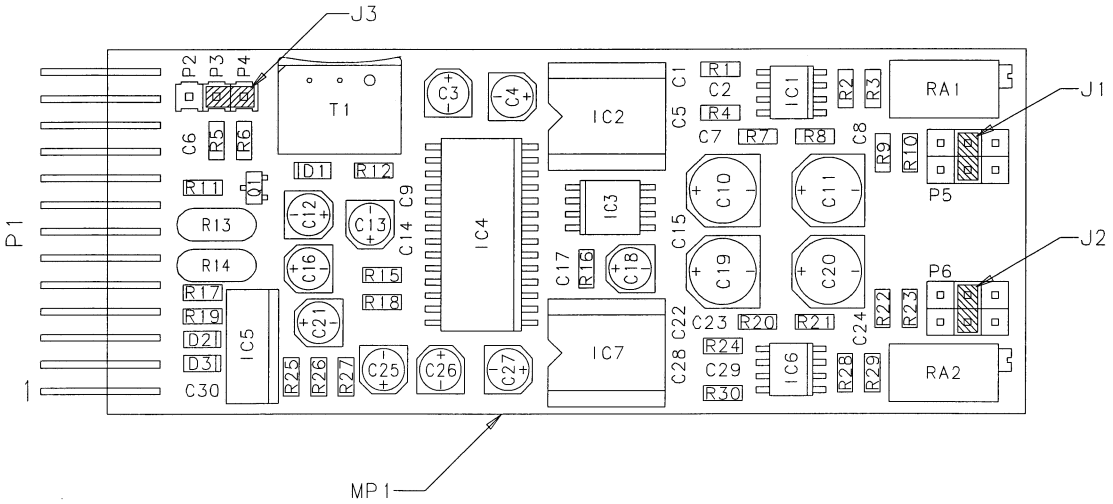
K1_K3: SIIA / 24V

⓪ 21.12.89					PAGE 1 OF 1
STUDER	FADERSTART IMPULS RELAY				1.914.532



Erstellt	0 29.06.2001 ZT				PAGE 1 OF 1
STUDER	D/A CONVERTER			SC	1.914.550.00

Ansicht Bestueckungsseite



Schilder und Etiketten nach Fabrikations-
muster und Positionsliste aufgeklebt

Accompanying documents: Zugehoerige Unterlagen: PL	General tolerance: Freimasstoleranz: .	Scale: Massstab: 1.5:1	Edition Ausgabe	29.06.2001 Date Datum	ZT Visa Gez.	ML Checked Gepr.	HW Seen Ges.	0 Index
Substitute for: Ersatz fuer: .				Page: Seite: 1 / 1				
STUDER REGENSDORF	Description: Benennung: D/A CONVERTER, ESE		Z	Number: Nummer: 1.914.550.00				

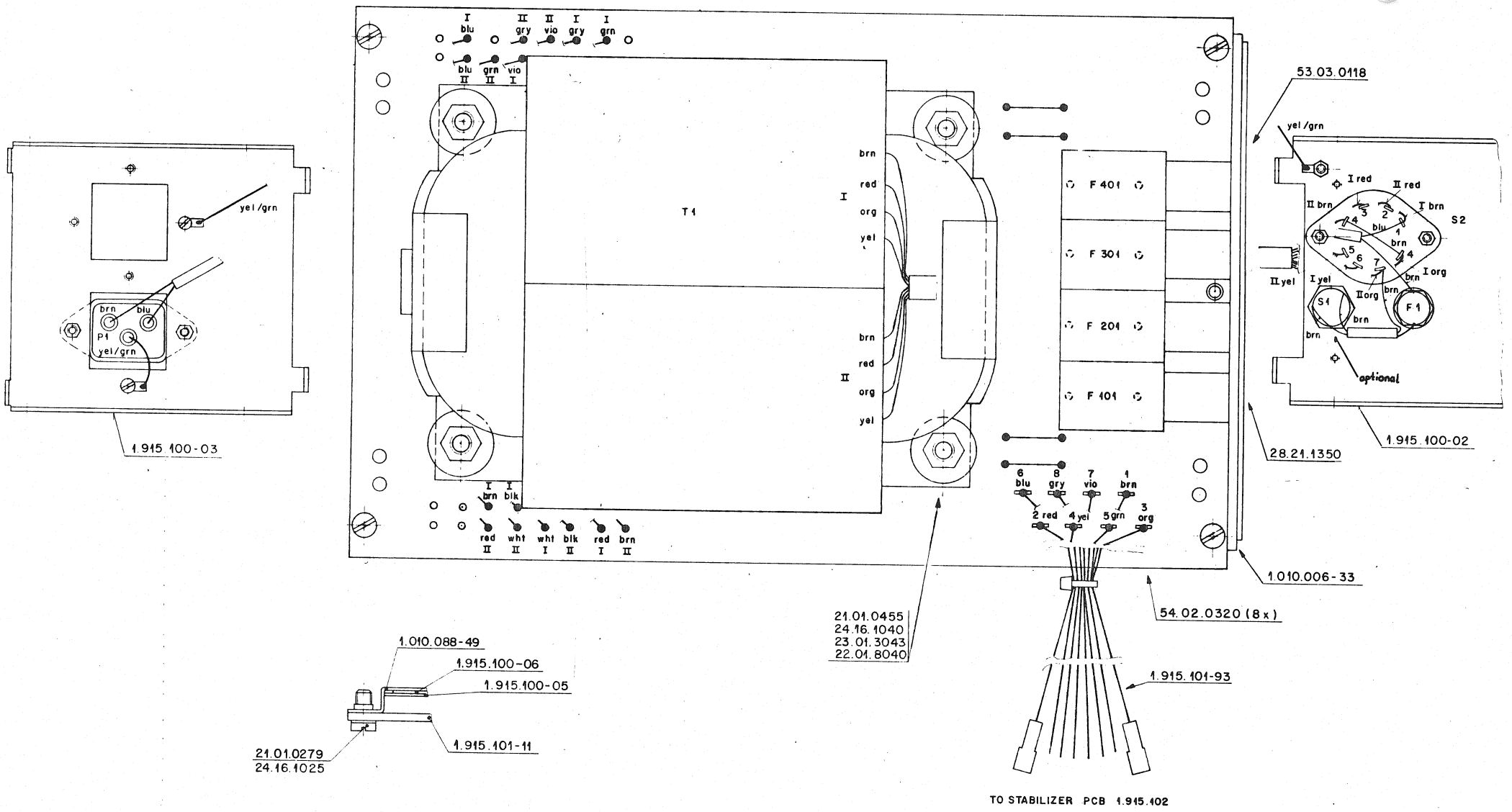
Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 2	59.63.1105	1 pce	220p	PPS 50V, 2%, 0805
0	C 3	59.68.0025	1 pce	22u	EL 6V, 4.0*5.7
0	C 4	59.68.0025	1 pce	22u	EL 6V, 4.0*5.7
0	C 5	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 6	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 7	59.63.1113	1 pce	1n0	PPS 50V, 2%, 0805
0	C 8	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 9	59.60.3333	1 pce	47n	CER 50V, 10%, X7R, 0805
0	C 10	59.68.0029	1 pce	100u	EL 6V, 6.3*5.7
0	C 11	59.68.0029	1 pce	100u	EL 6V, 6.3*5.7
0	C 12	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 13	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 14	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 15	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 16	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 17	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 18	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 19	59.68.0029	1 pce	100u	EL 6V, 6.3*5.7
0	C 20	59.68.0029	1 pce	100u	EL 6V, 6.3*5.7
0	C 21	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 22	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 23	59.63.1113	1 pce	1n0	PPS 50V, 2%, 0805
0	C 24	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 25	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 26	59.68.0025	1 pce	22u	EL 6V, 4.0*5.7
0	C 27	59.68.0025	1 pce	22u	EL 6V, 4.0*5.7
0	C 28	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 29	59.63.1105	1 pce	220p	PPS 50V, 2%, 0805
0	C 30	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	D 1	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 2	50.60.8002	1 pce	GL34A	500mA 50V DO 213
0	D 3	50.60.8002	1 pce	GL34A	500mA 50V DO 213
0	IC 1	50.61.0204	1 pce	MC33078	Dual Op-Amp low noise
0	IC 2	50.09.0124	1 pce	2142	Audio balanced line driver
0	IC 3	50.61.8003	1 pce	CS4331	D/A Converter 18bit Ste SO 8
0	IC 4	50.62.0913	1 pce	CS8412	AES-Receiver
0	IC 5	50.10.0104	1 pce	LM317SP	Series regulator 1.5A ...+37V
0	IC 6	50.61.0204	1 pce	MC33078	Dual Op-Amp low noise
0	IC 7	50.09.0124	1 pce	2142	Audio balanced line driver
0	J 1	54.01.0021	1 pce	Jumper	0.63*0.63mm, Au
0	J 2	54.01.0021	1 pce	Jumper	0.63*0.63mm, Au
0	J 3	54.01.0021	1 pce	Jumper	0.63*0.63mm, Au
0	MP 1	1.914.550.11	1 pce		DA Converter PCB

Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	MP 2	1.914.550.04	1 pce		NR.-ETIKETTE 5 * 20
0	MP 3	43.01.0108	1 pce	Label	ESE-WARNSCHILD
0	P 1	54.01.0273	1 pce	13p	P LEISTE 13 POL CIS WINKEL
0	P 2	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	P 3	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	P 4	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	P 5	54.11.0136	1 pce	2*3p	Pin 0.63*0.63, RM2.54
0	P 6	54.11.0136	1 pce	2*3p	Pin 0.63*0.63, RM2.54
0	Q 1	50.60.0050	1 pce	BC817-25	NPN 45V 800mA SOT 23
0	R 1	57.60.1682	1 pce	6k8	MF, 1%, 0204, E24
0	R 2	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0	R 3	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 4	57.60.1183	1 pce	18k	MF, 1%, 0204, E24
0	R 5	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 6	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 7	57.60.1183	1 pce	18k	MF, 1%, 0204, E24
0	R 8	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0	R 9	57.60.1562	1 pce	5k6	MF, 1%, 0204, E24
0	R 10	57.60.1682	1 pce	6k8	MF, 1%, 0204, E24
0	R 11	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 12	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 13	57.92.7012	1 pce	0.3A	PTC 60V
0	R 14	57.92.7012	1 pce	0.3A	PTC 60V
0	R 15	57.60.1100	1 pce	10R	MF, 1%, 0204, E24
0	R 16	57.60.1100	1 pce	10R	MF, 1%, 0204, E24
0	R 17	57.60.1681	1 pce	680R	MF, 1%, 0204, E24
0	R 18	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0	R 19	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 20	57.60.1183	1 pce	18k	MF, 1%, 0204, E24
0	R 21	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0	R 22	57.60.1562	1 pce	5k6	MF, 1%, 0204, E24
0	R 23	57.60.1682	1 pce	6k8	MF, 1%, 0204, E24
0	R 24	57.60.1682	1 pce	6k8	MF, 1%, 0204, E24
0	R 25	57.60.1151	1 pce	150R	MF, 1%, 0204, E24
0	R 26	57.60.1151	1 pce	150R	MF, 1%, 0204, E24
0	R 27	57.60.1151	1 pce	150R	MF, 1%, 0204, E24
0	R 28	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0	R 29	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 30	57.60.1183	1 pce	18k	MF, 1%, 0204, E24
0	RA 1	58.05.0203	1 pce	20k	10%, 0.5W, Cermet
0	RA 2	58.05.0203	1 pce	20k	10%, 0.5W, Cermet
0	T 1	1.022.647.00	1 pce	1:1.4	OUTPUT TRAFO AES/EBU

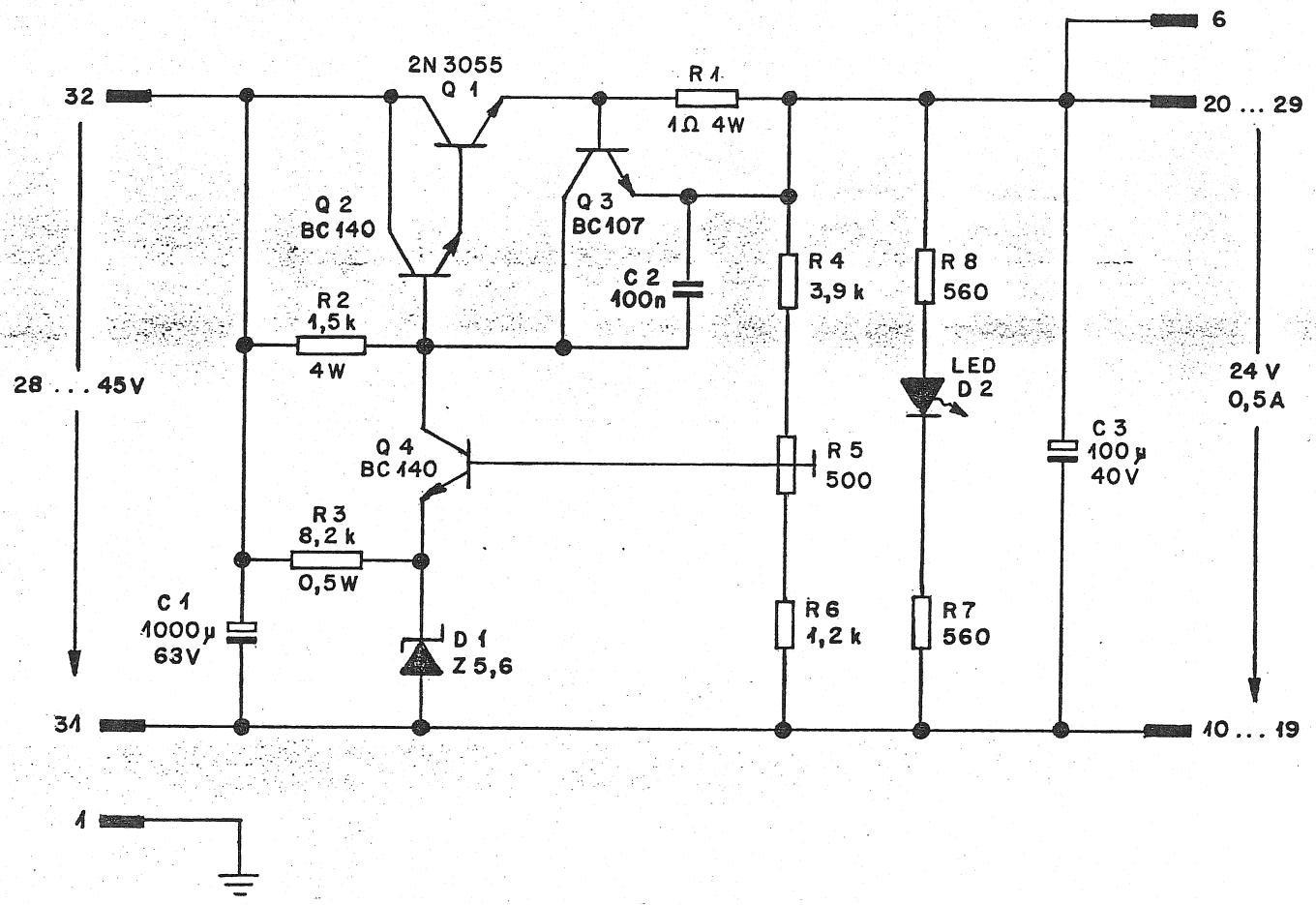
Idx	Pos.	Part No.	Qty.	Type/Val.	Description

End of List

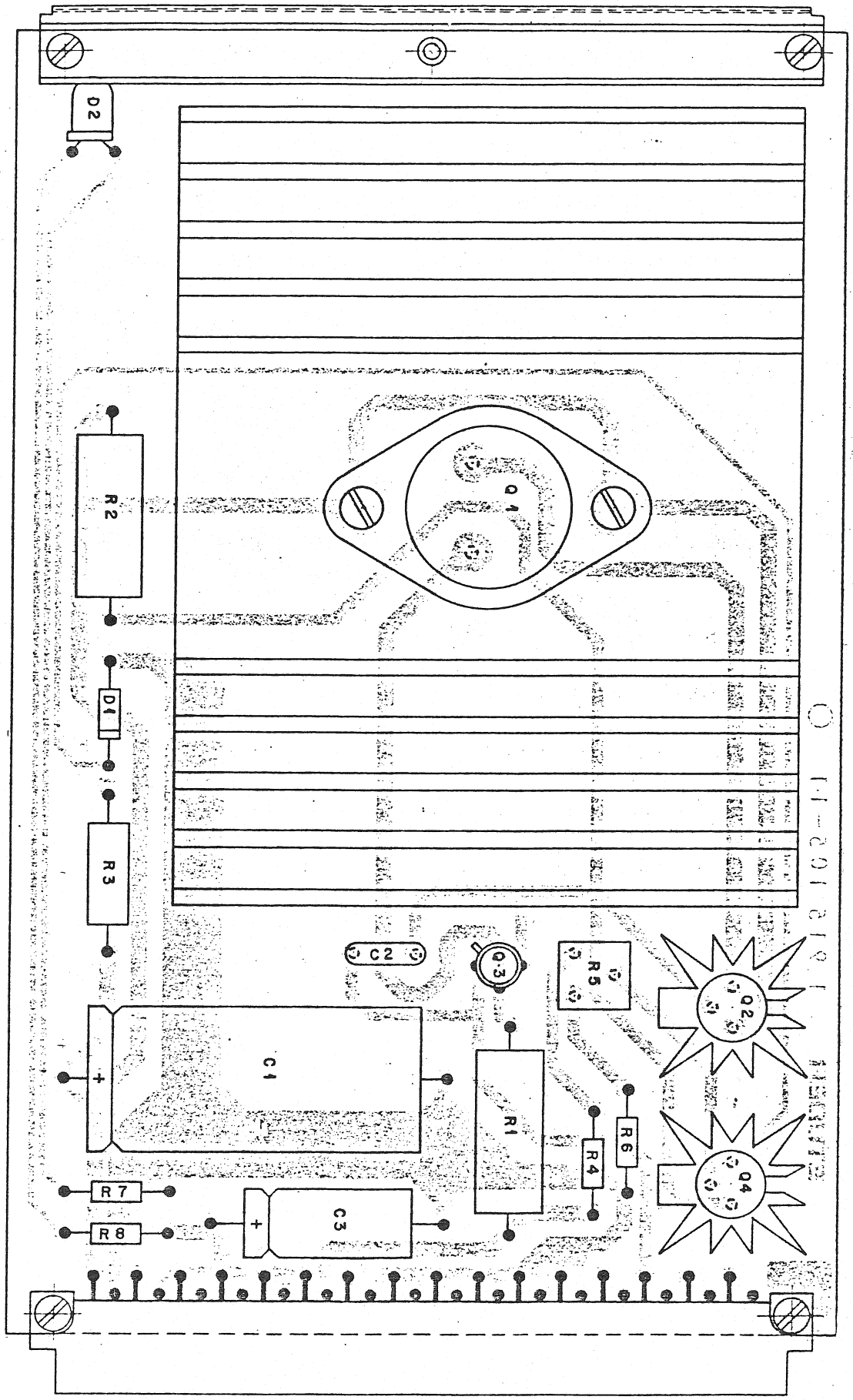
Comments:



Werkstoff: Norm-Nr.: DIN-Bez.: Abmessung:	Oberfläche: Güte: Beh.:		Änderung: ③ ② ①
Zugehörige Unterlagen: PL 1.915.100	Freimasstoleranz: +	Maßstab: 2:1 (1:1)	Ausgabe: 20.11.79 Ho 0
Ersatz für:	Ersetzt durch:		Kopie für:
STUDER REGENSDORF ZÜRICH	Benennung: Trafo - Print		Nummer: 1.915.101-00



Zugehörige Unterlagen:		Freimasstoleranz: ±		Maßstab:	Ausgabe	18.1.80	Si	4/e		0
						Datum	Gez.	Gepr.	Ges.	Index
Ersatz für:		Ersetzt durch:			Kopie für:					
STUDER REGENSDORF ZÜRICH		Benennung: SIGN. POWER STABILIZER			Nummer: SC 1.915.105					



Zugehörige Unterlagen: PL	Freimasstoleranz:	Maßstab: 2:1	Ausgabe 22.1.80 Ho We ⓪ (Datum / Gez. / Gepr. / Ges. / Index)
Ersatz für:	Ersetzt durch:		Kopie für:
STUDER REGENSDORF ZURICH	Benennung: Sign. Power Stabilizer		Nr. 1.915.105-00

STABILISATOR 5 .... 24 V

Spannungsstabilisator dessen Ausgangsspannung und Kurzschlusstrom mit Widerständen extern einstellbar ist. Mit Ausnahme der Phantom stromversorgung werden alle in den Mischpulten der Serie 900 benötigten Betriebsspannungen mit demselben Kartentyp stabilisiert.

Leuchtdiode zur Anzeige des Betriebszustandes.

Drei von vorne zugängliche Messpunkte zur Kontrolle der Referenz- und Ausgangsspannung

Schutzeinrichtungen:

- "Crow Bar" schaltet ab bei zu hoher Ausgangsspannung
- Temperaturüberwachung am Regeltransistor
- Verpolungsschutz am Ausgang
- Langsames Hochfahren der Spannung beim Einschalten

STABILIZER 5 ... 24 V

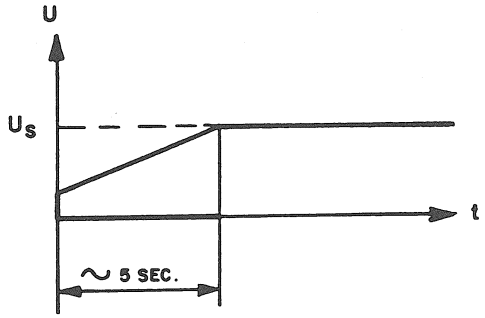
The output voltage and the short-circuit current of this voltage stabilizer are externally adjustable with resistors. Except for the phantom supply, all operating voltages of the Series 900 mixers are stabilized with the same type of circuit board.

Pilot LED for indicating the operating status.

Three test points for checking the reference voltage and the output voltage are accessible from the front.

Protective features:

- Crow bar disconnects if overvoltages are detected
- Temperature monitoring at regulating resistor
- Polarity confusion protection at output
- Slow voltage run-up when unit is switched on

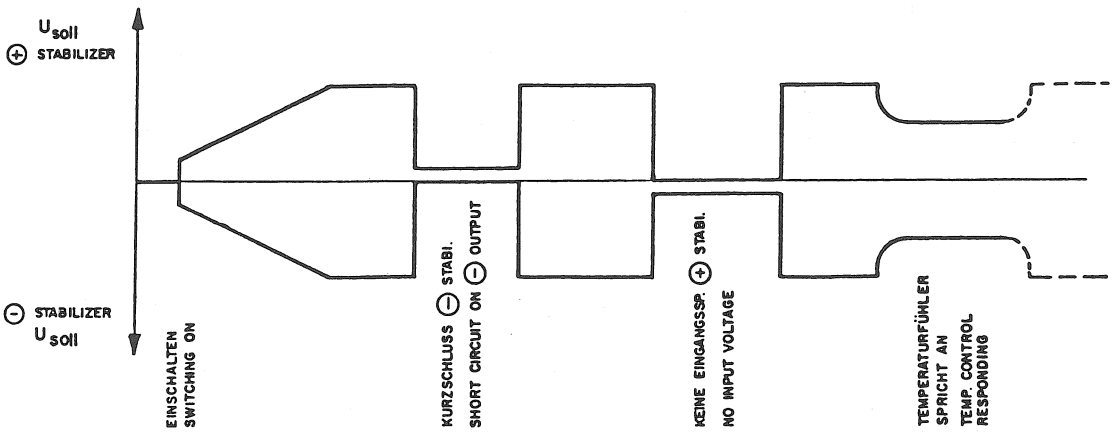


Beim Betrieb als Doppelstabilisator für die Stromversorgung von Verstärkern mit positiver und negativer Speisespannung werden zwei Stabilisatorkarten gekoppelt.

Die Ausgangsspannung des einen Stabilisators steuert die Ausgangsspannung des anderen (Tracking)

Dual stabilizer operation for supplying amplifiers with negative and positive supply voltages is possible by coupling two stabilizers boards.

The output voltage of the first stabilizer controls the output voltage of the other (tracking)

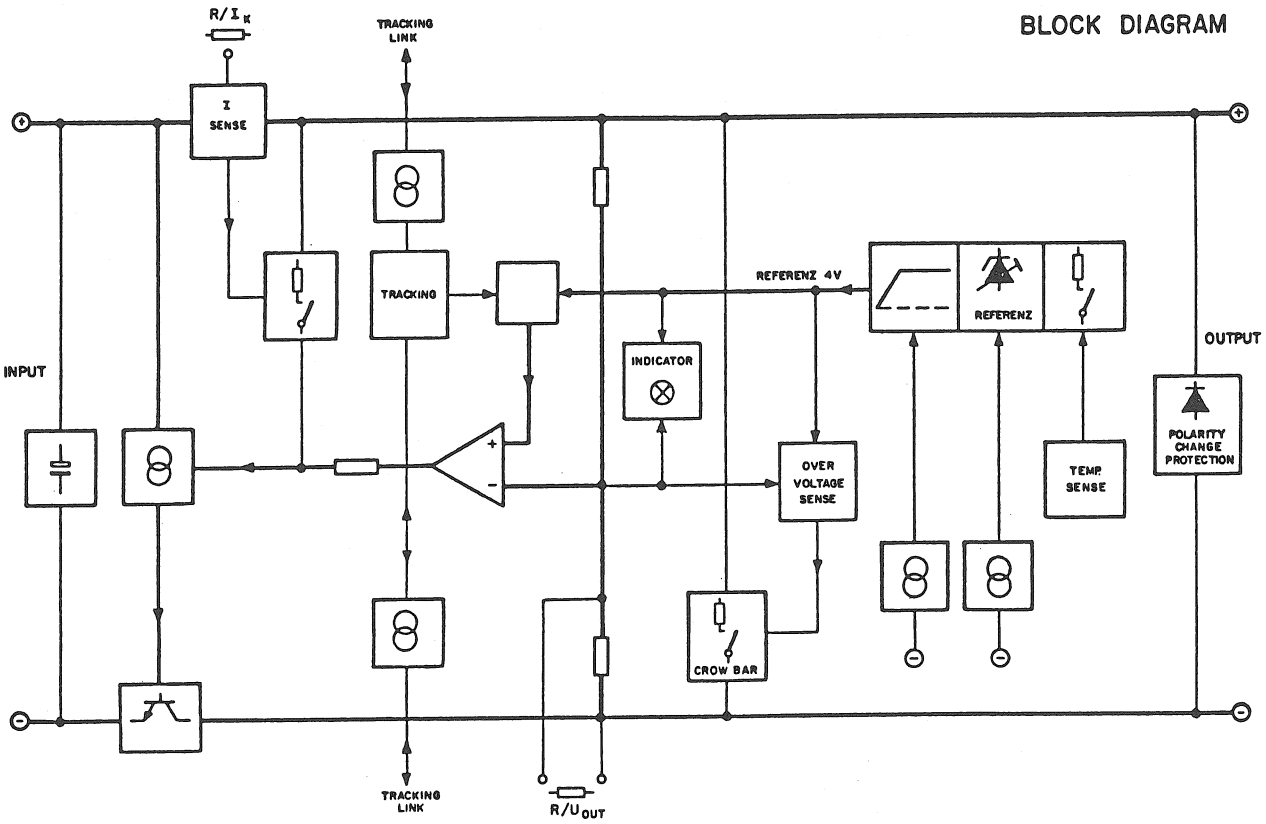


Damit werden die Koppelkondensatoren der angeschlossenen Audioverstärker nicht unnötig belastet.

In this manner the coupling capacitors of the audio amplifiers are not unnecessarily loaded.

Blockschaltbild

Block Diagram

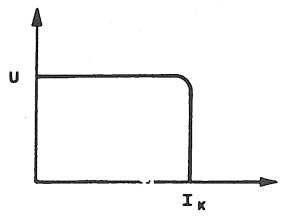


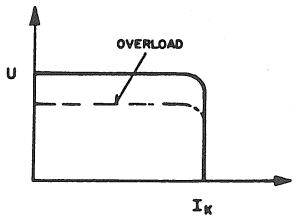
TECHNISCHE DATEN

- Ausgangsspannung extern programmierbar
- Minimale Eingangsspannung (ohne Rippel)
- Maximale Eingangsspannung
- Kurzschlusstrom extern programmierbar
- Max. Verlustleistung am Kühlblech
- Kurzschlussverhalten
- Bei Ueberlast regelt der Temperatursensor die Ausgangsspannung zurück.

SPECIFICATIONS

- Output voltage externally programmable — U = 5 ÷ 24 V
- Minimum input voltage (without ripple) — U_{min} = U + 1,5 V
- Maximum input voltage — U_{max} = 36 V
- Short-circuit current, externally progr. — I_{ki} ≅ 0,5 ... 4,5 A
- Max. power dissipation at heat sink — P ca. 18 W
- Short circuit response
- In the event of an overload the output voltage is regulated down by the temperature sensor





- Ueberspannungsschutz spricht an bei ca. 15 % Ueberspannung am Ausgang
- Ueberlagerte Brummspannung — $U_{Br} \leq 100\ \mu V$
- Leerlaufstrom — I_{oa} (Uin 30V) = 30 mA

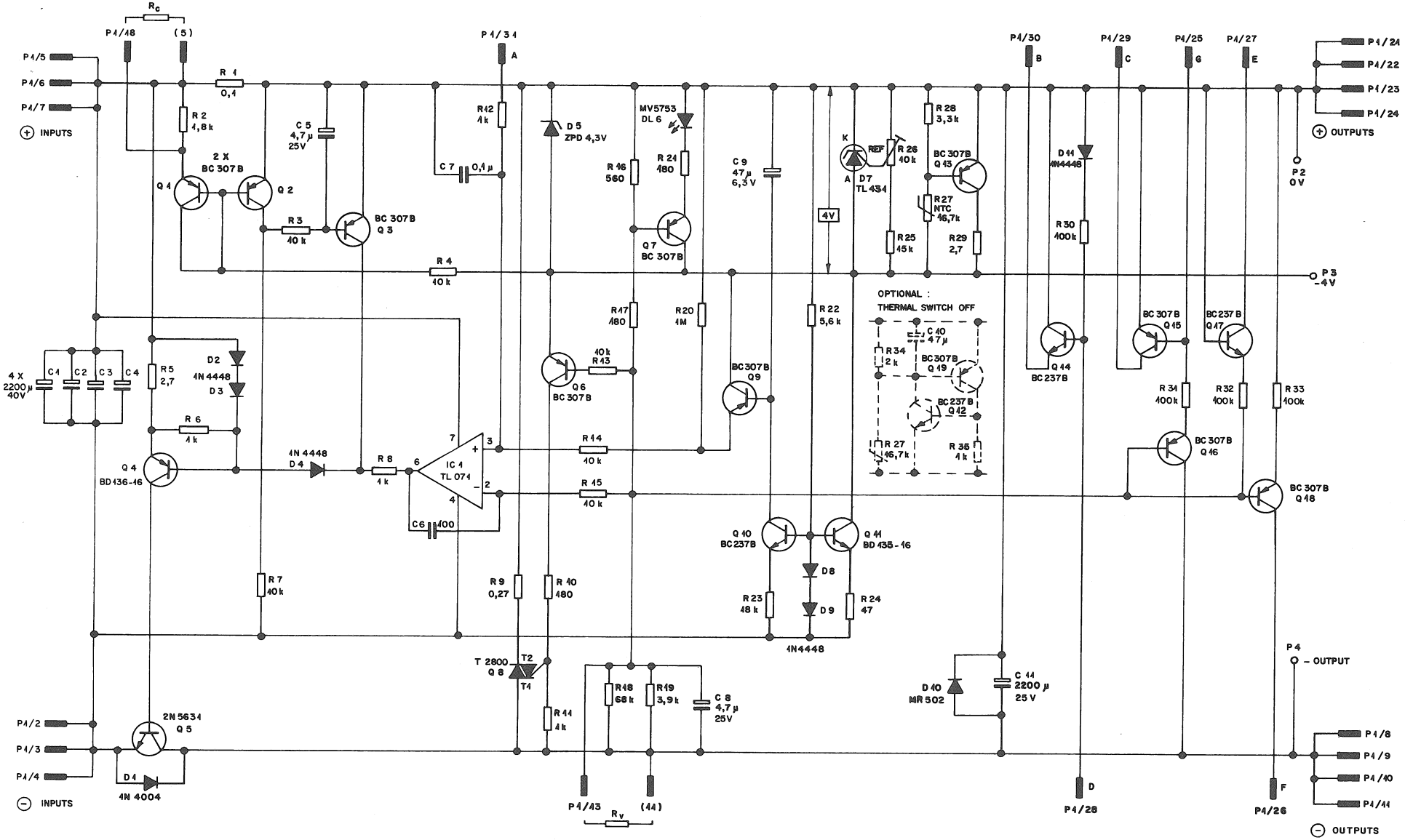
- Over-voltage sense responds at approx. 15 % excess output voltage
- Superimposed ripple voltage — U_{Br} 100 uV
- No-load current — Ioa 30 V U_{in} = 30 mA

MECHANISCHE DATEN

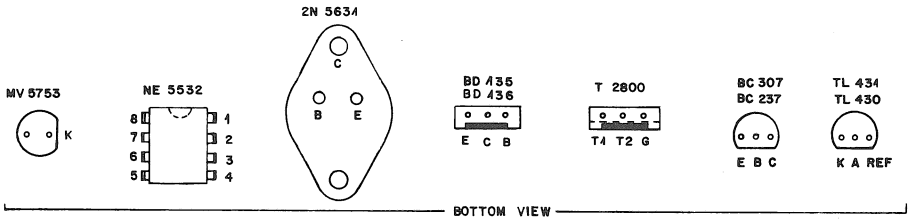
- Abmessungen	Europakarte 100 mm x 160 mm
- Breite	33 mm, 7 M
- Steckersystem	DIN 41 612 TYP B
- Gewicht	ca. 360 gr

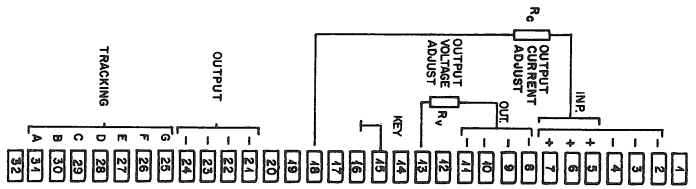
MECHANICAL DATA

- Dimensions	"Europe" PCB 100 x 160 mm
- Width	33 mm, 7 M
- Connector system	DIN 41 612, type B
- Weight	500 g

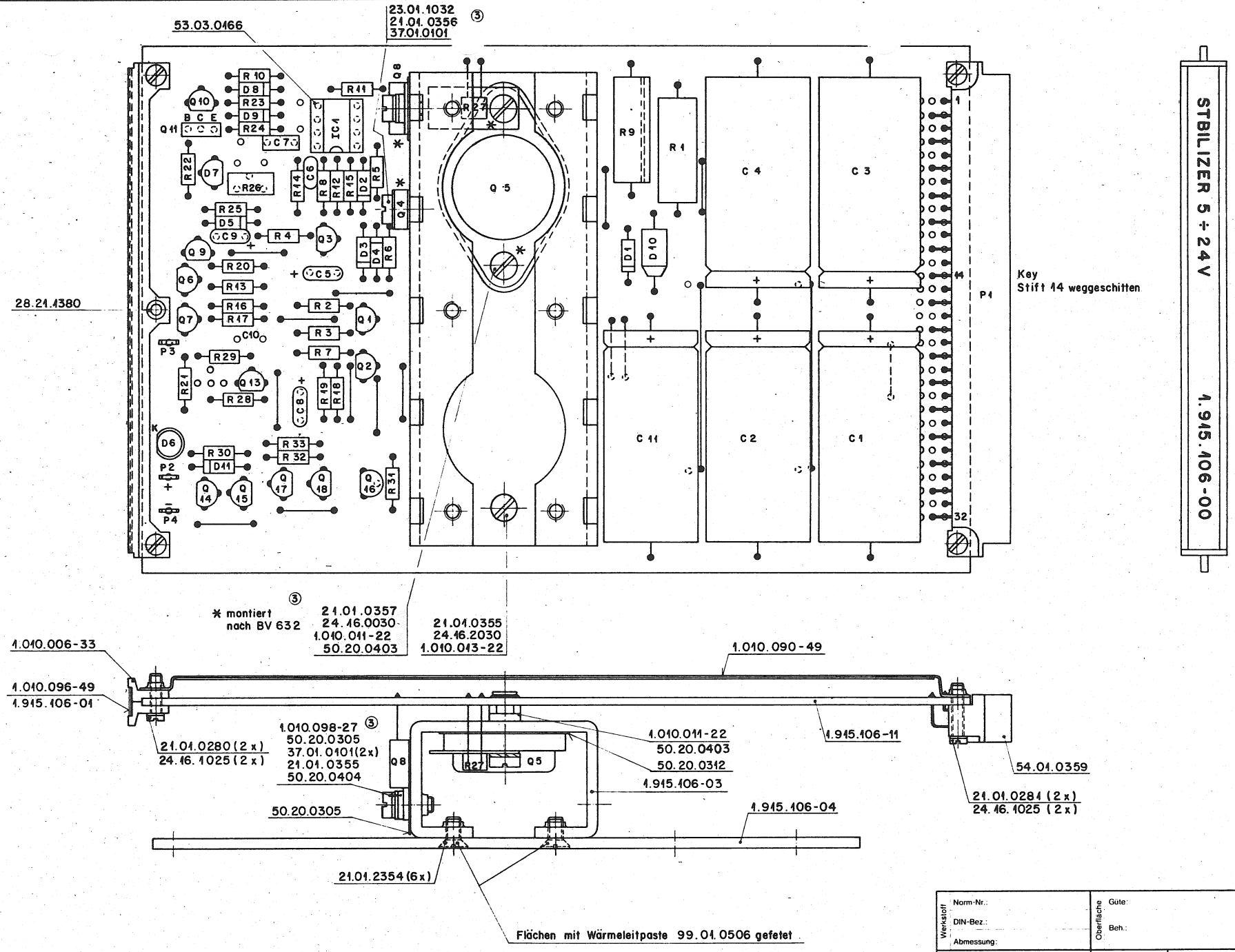


∂ $R_c = \infty$, $R_v = \infty$: $U_{out} = 24V$ I_{out} ca 4,5A





STUDER REGENSDORF ZÜRICH	DATE:	
	SIGN:	2. 12. 84
STABILIZER 5 ÷ 24 V		22. 6. 83
SC 1.915.106		



Werkstoff: Norm-Nr.: / DIN-Bez.: / Abmessung:	Oberfläche: Güte: / Beh.:	Änderung	10.1.86 A.Ho ③ 1.5.84 A.Ho ② 4.4.84 A.Ho ①
Zugehörige Unterlagen: PL: BV 632 ③	Freimasstoleranz: +	Maßstab: 2:1	Ausgabe 3.8.84 Ho ⓪ (Datum / Gez. / Gepr. / Ges. / Index)
Ersatz für:	Ersetzt durch:		Kopie für:
STUDER REGENSDORF ZÜRICH	Benennung: Stabilizer 5÷24 V		Nummer: 1.915.106-00

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	C 1	59.25.5222	2200 µF	40V EL	
	C 2	59.25.5222	2200 µF	40V EL	
	C 3	59.25.5222	2200 µF	40V EL	
	C 4	59.25.5222	2200 µF	40V EL	
	C 5	59.26.5479	4,7 µF	25 V SAL	
④	C 6	59.34.4101	100 pF	CER	
	C 7	59.06.0104	0,1 µF	PE	
	C 8	59.26.5479	4,7 µF	25V SAL	
	C 9	59.26.0470	47 µF	6,3V SAL	
	C 10				
	C 11	59.25.4222	2200 µF	25V EL	
	D 1	50.04.0105	1N4004	1A	
	D 2	50.04.0125	1N4448		
	D 3	50.04.0125	1N4448		
	D 4	50.04.0125	1N4448		
	D 5	50.04.1120	ZPD 4,3V	5%	
	DL 6	50.04.2111	MV 5753	LED CM4-284 B	MS/CM
	D 7	50.10.0106	TL 430	µA 430 CLP IC	TI/F
	D 8	50.04.0125	1N4448		
	D 9	50.04.0125	1N4448		
	D 10	50.04.0507	MR 502	3A/30V	
	D 11	50.04.0125	1N4448		
	IC 1	50.09.0103	TL 071	LF 351 SINGLE FET OPA	TI/N

IND	DATE	NAME
④		
③		
②		
①	22.6.83	VR
○	22.7.81	Frigo

EL - Electrolytic
SAL - Solid Aluminium
PE - Polyester
CER - CERAMIC

MS - Monsanto
CM - Chicago Miniatur
TI - Texas Instruments
N - National
F - Fairchild

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	Q 1	50.03.0515	BC 307 B	PNP General purpose 0,1A/Uceo ≥ 40V	any
	Q 2	50.03.0515	BC 307 B	PNP →	
	Q 3	50.03.0515	BC 307 B	PNP →	
	Q 4	50.03.0510	BD 136-16	PNP min 1A/40V	M,R,S,T
	Q 5	50.03.034-2	2N 5631	NPN min 10A/min 60V 200W	M
	Q 6	50.03.0515	BC 307 B	PNP →	
	Q 7	50.03.0515	BC 307 B	PNP →	
	Q 8	50.99.0106	T 2800	TRIAC 8A SC 146 D	R/GE
	Q 9	50.03.0515	BC 307 B	PNP →	
	Q 10	50.03.0436	BC 237 B	NPN General purpose 0,1A/Uceo ≥ 40V	any
	Q 11	50.03.0495	BD 135-16	NPN P min 2W	M,R,S,T
	Q 12				
	Q 13	50.03.0515	BC 307 B	PNP →	
	Q 14	50.03.0436	BC 237 B	NPN →	
	Q 15	50.03.0515	BC 307 B	PNP →	
	Q 16	50.03.0515	BC 307 B	PNP →	
	Q 17	50.03.0436	BC 237 B	NPN →	
	Q 18	50.03.0515	BC 307 B	PNP →	
	R 1	57.56.5108	0,1 Ω	4W	
	R 2	57.11.4182	1,8 k	2%	
	R 3	57.11.4103	10 k		
	R 4	57.11.4103	10 k		
	R 5	57.11.4279	2,7 Ω		
	R 6	57.11.4102	1 k		
	R 7	57.11.4103	10 k		
	R 8	57.11.4102	1 k		
	R 9	57.56.5278	0,27 Ω	4W	

IND	DATE	NAME
④		
③		
②		
①	22.6.83	VR
○	22.7.81	Frigo

M - Motorola
R - RCA
S - Siemens
T - Telefunken
GE - General Electric

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	R 10	57.11.4181	180 Ω		
	R 11	57.11.4102	1 k		
	R 12	57.11.4102	1 k		
	R 13	57.11.4103	10 k		
	R 14	57.11.4103	10 k		
	R 15	57.11.4103	10 k		
	R 16	57.11.4561	560 Ω	2%	
	R 17	57.11.4181	180 Ω	2%	
	R 18	57.11.4683	68 k	2%	
	R 19	57.11.4392	3,9 k	2%	
	R 20	57.11.4105	1 M		
	R 21	57.11.4181	180 Ω		
	R 22	57.11.4562	5,6 k		
	R 23	57.11.4183	18 k		
	R 24	57.11.4470	47 Ω		
	R 25	57.11.4153	15 k		
	R 26	58.01.7103	10 k	LIN 10% CERMET	
	R 27	57.99.0208	16,7 k	@ 100°C NTC 2322 640 98005	PH
	R 28	57.11.4332	3,3 k		
	R 29	57.11.4279	2,7 Ω		
	R 30	57.11.4104	100 k		
	R 31	57.11.4104	100 k		
	R 32	57.11.4104	100 k		
	R 33	57.11.4104	100 k		
	Modification List				
①	C 6	330 pF → 100 pF		HF - Problems	

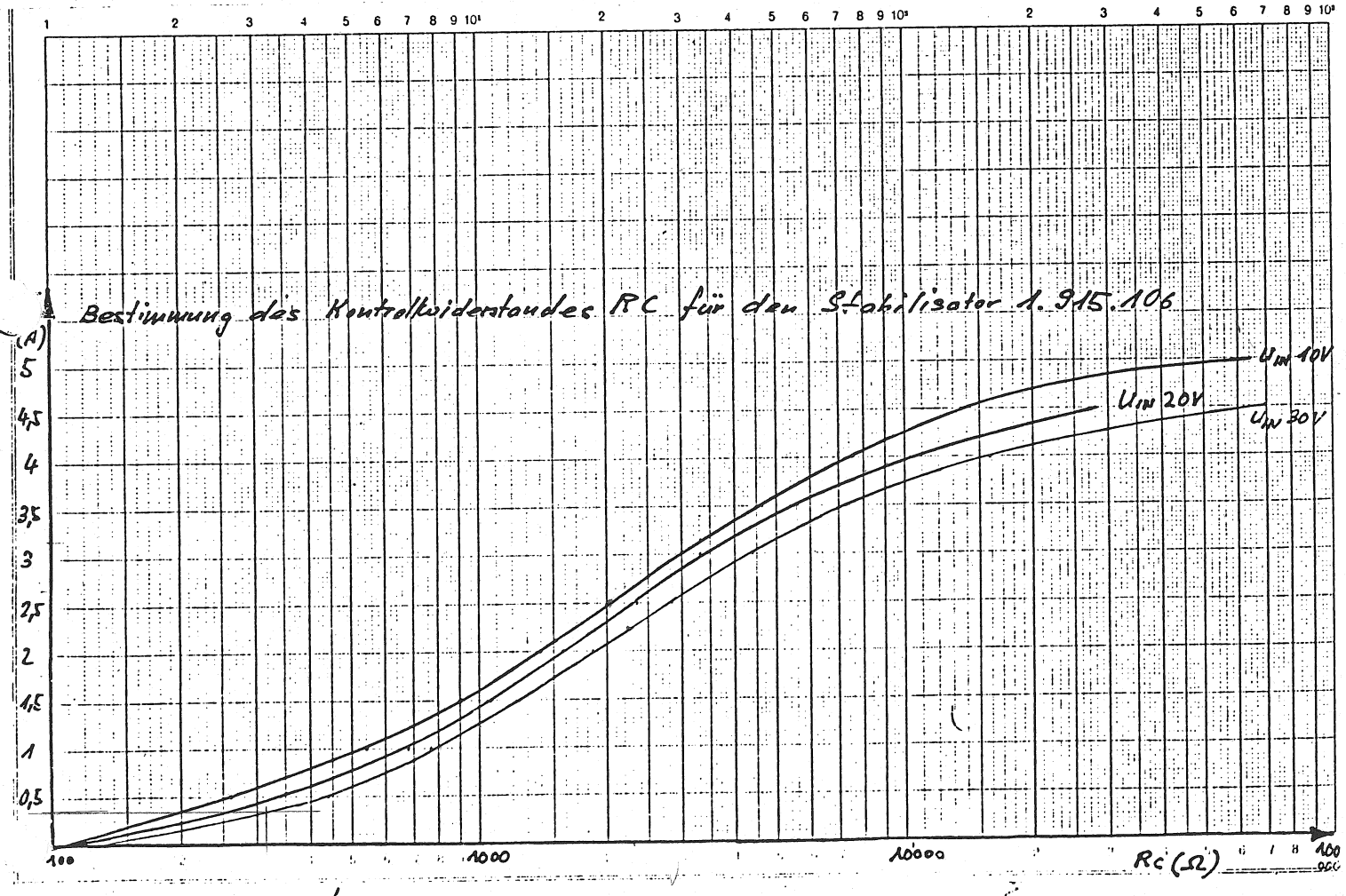
IND	DATE	NAME
④		
③		
②		
①	22.6.83	VR
○	22.7.81	Frigo

PH - Philips

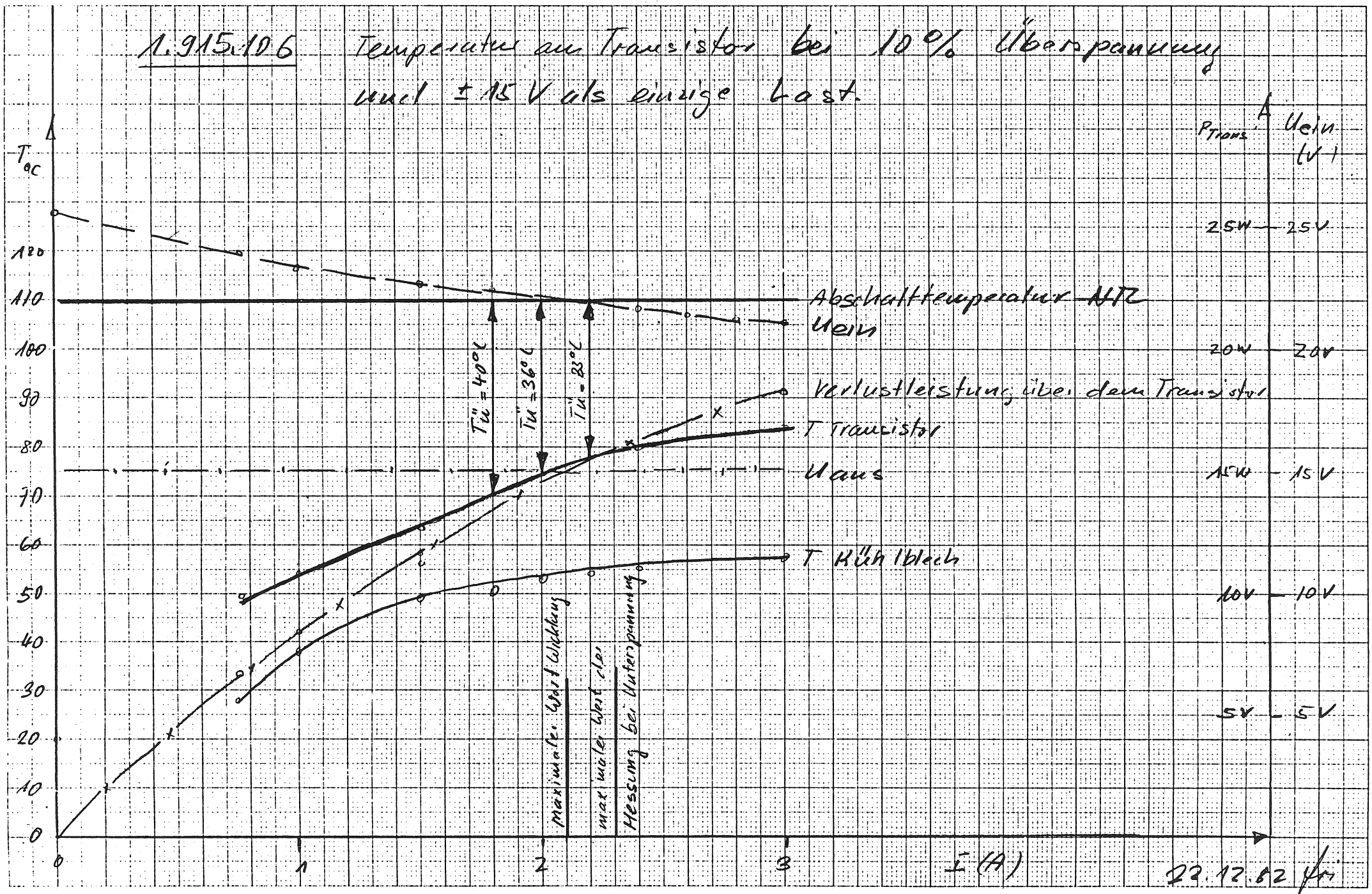
Bestimmung des Kontrollwiderstandes R_V für den Stabilisator 1.915.106

	R_V	$R_1 \parallel R_2$		U_{out} gerechnet
5 V	193,26	220	1,5k	4,99V
6 V	408,12	470	3,3k	6,01V
12 V	2448,5	2,7k	27k	12,01V
15 V	4490	4,7k	100k	15,00V
18 V	8574	10k	56k	17,96V
24 V	—	—	—	24,09V

$$\frac{1}{RV} = \frac{5{,}4454 \cdot 10^{-3}}{U - 4} - \frac{1}{3672}$$



2 9.81	Imo	R_V / R_C		
STUDER	STABILIZER 5 ÷ 24V		1.915.106.00	PAGE 1 OF 1


1.915.106 Temperatur am Transistor bei 10% Überspannung und ± 15 V als einzige Last.
T °C
P Trans
A Uein (V)
120
110
100
90
80
70
60
50
40
30
20
10
0
0
1
2
3
I (A)
Abschalttemperatur ATZ
Uein
Verlustleistung über dem Transistor
T Transistor
Uaus
T Kühlblech
25W — 25V
20W — 20V
15W — 15V
10V — 10V
5V — 5V
Tü" = 40°C
Tü" = 36°C
Tü" = 23°C
maximale Wärmewiderstand
max. zulässige Verlustleistung bei Unterspannung
22.12.82

STUDER 1.915.107

PHANTOM / 24 V STABILISATOR

Stabilisatorkarte mit zwei getrennten, isoliert aufgebauten Spannungstabilisatoren für die Phantom- und 24 V Stromversorgung. Zwei Leuchtdioden zeigen den Betriebszustand an. Zwei Messpunktpaare sind mit Messklemmen von vorne zugänglich.

1) Phantomstromversorgung

Die Ausgangsspannung von 12 V, 24 V oder 48 V ist mit einer Brücke einstellbar (Beachten Sie, dass eine Aenderung der Phantomspannung auch eine Anpassung der Eingangsspannung und eine Aenderung der Phantomeinspeisewiderstände im Mikrokanal bedingt).

PHANTOM / 24 V STABLILIZER

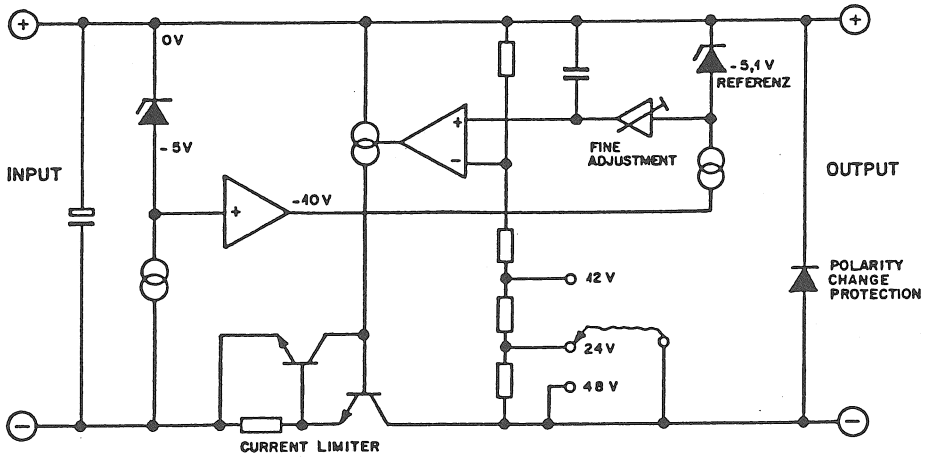
Stabilizer board with two separate and isolated voltage stablizers for the phantom supply and the 24 V supply. The two pilot LEDs indicate the operating status. Two pairs of test points are accessible from the front with rest clips.

1) PHANTOM SUPPLY

The 12 V, 24 V or 48 V output voltage can be adjusted with a bridge. (Please note that any change of the phantom voltage requires a corresponding adjustment of the input voltage and the replacement of the phantom supply resistors in the microphone channel).

Blockschaltbild

BLOCK DIAGRAM



TECHNISCHE DATEN

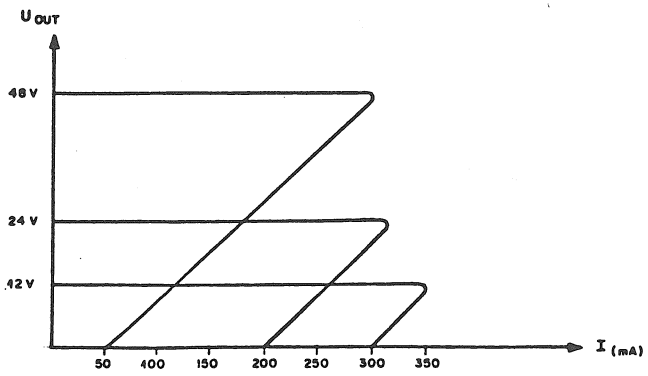
- Ausgangsspannung einstellbar
- Minimale Eingangsspannung für 12 V
- Max. Eingangsspannung
- Kurzschlusstrom
- Laststrom
- Kurzschlussverhalten mit automatisch, spannungsabhängigem "Fold Back"

Specifications

- Output voltage, variable	U = 12 V, 24 V, 48 V
- Minimum input voltage for 12 V	U min = 13 V
- Max. input voltage	U max = 100 V
- Short-circuit current	Ik = 350 mA
- Load current	I max = 300 mA

- Short-circuit response with automatic, voltage-dependent fold-back

22.6.83 sk



- Ueberlagerte Brummspannung	- Superimposed ripple voltage	$U_{Br} \leq 100\ \mu V$
- Leerlaufstrom	- No-load current	I_o a) 80 V U_{in} = 25 mA

2) 24 V Stabilisator

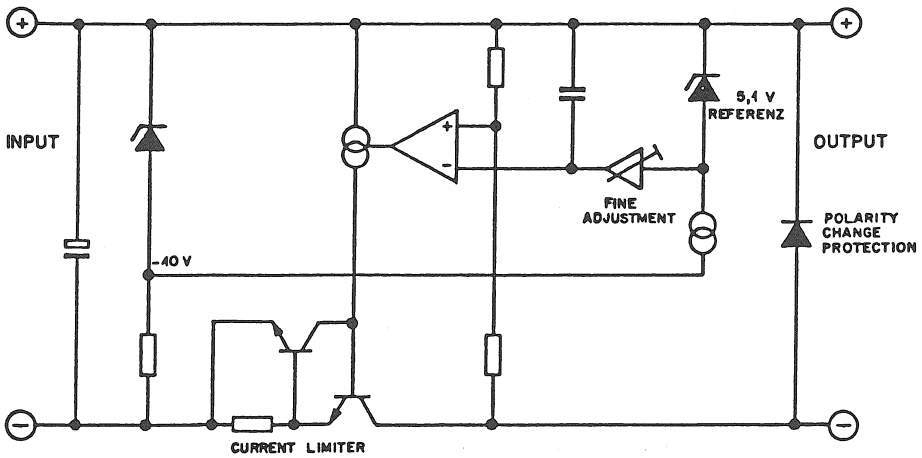
Die Ausgangsspannung ist fest eingestellt auf 24 V DC.

Blockbild

2) 24 V STABILIZER

The output voltage is permanently set to 24 VDC.

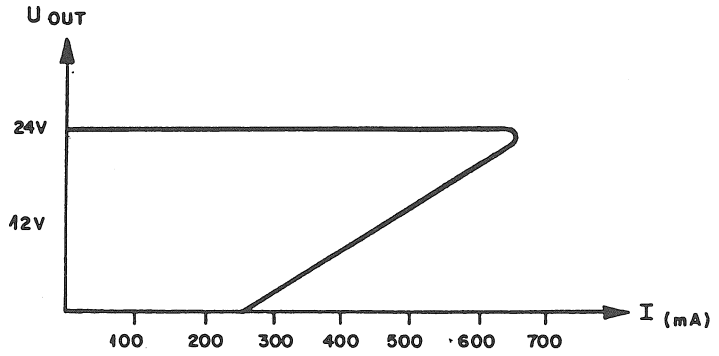
BLOCK DIAGRAM



TECHNISCHE DATEN

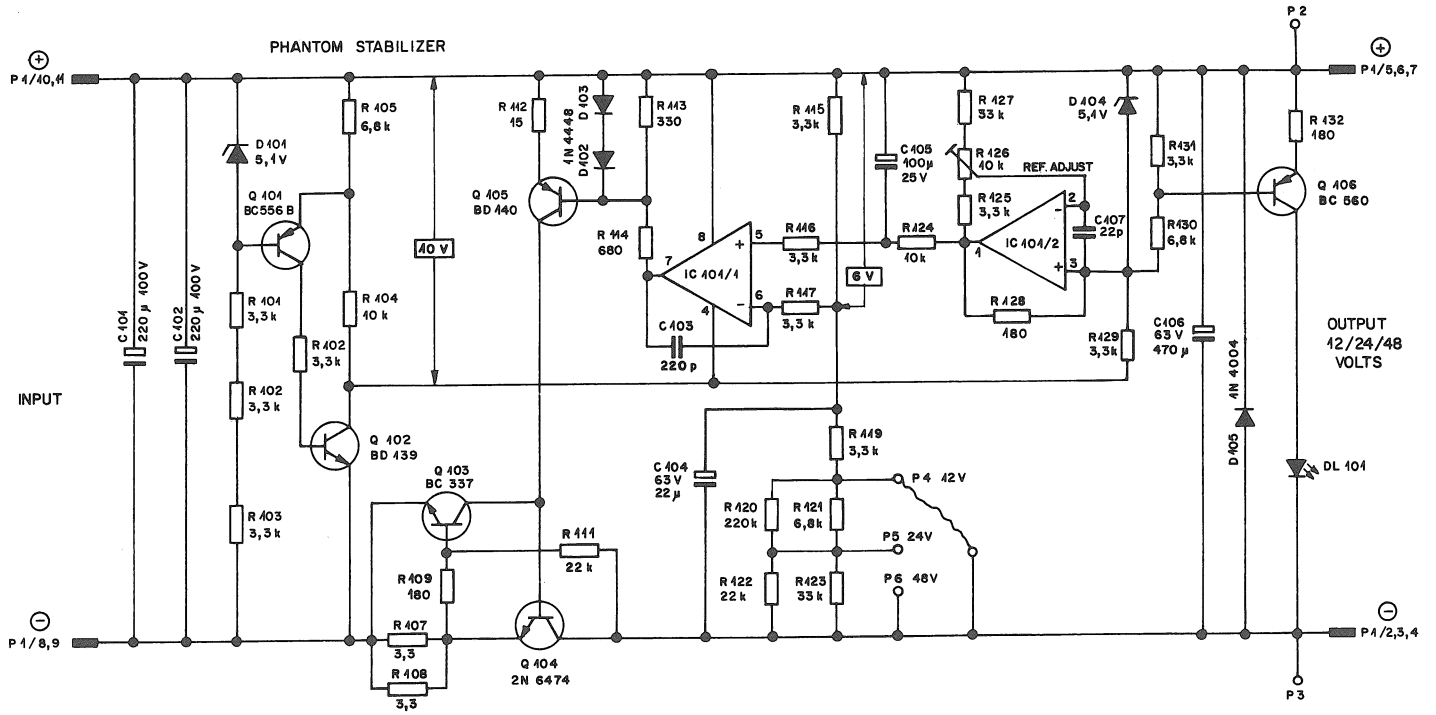
Specifications

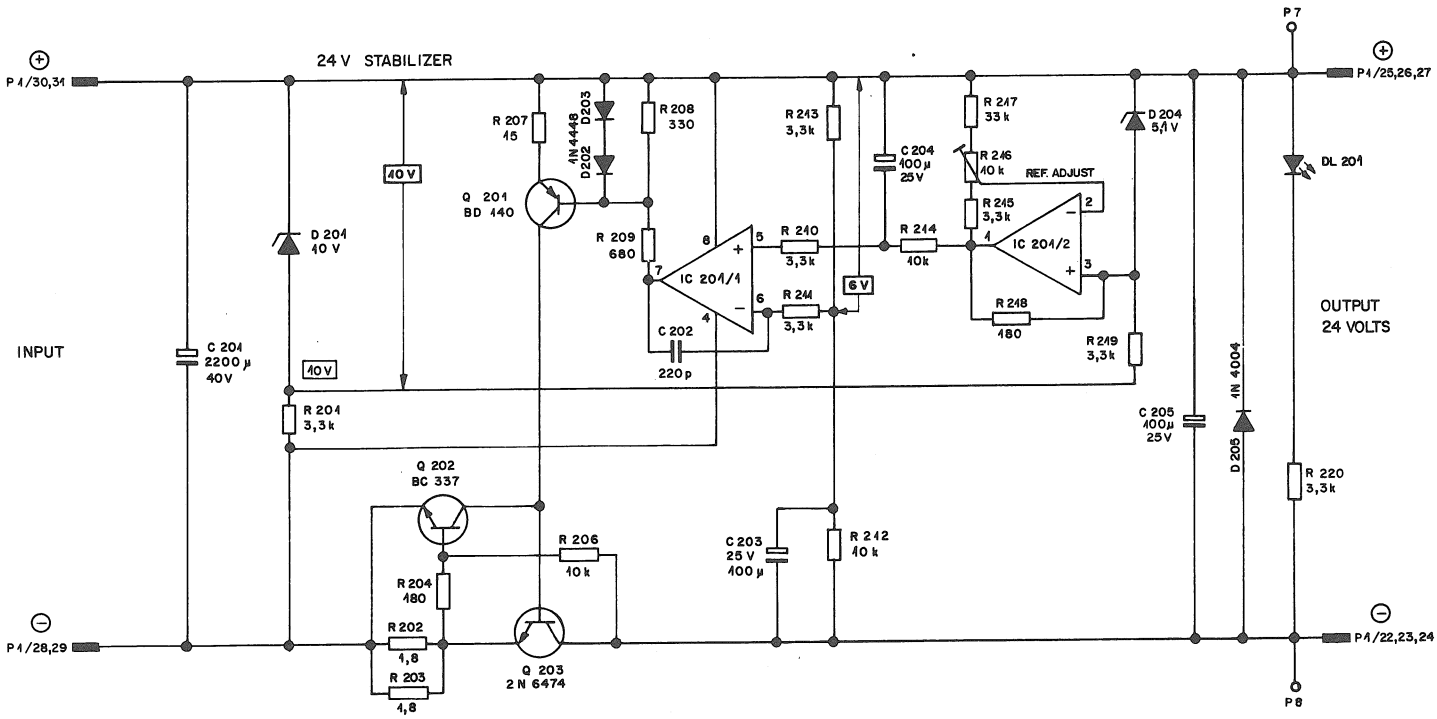
- Ausgansspannung	- Output voltage	U = 24 V
- Minimale Eingangsspannung (ohne Rippel)	- Minimum input voltage (without ripple)	U min = 25 V
- Maximale Eingangsspannung	- Maximum input voltage	U max = 36 V
- Kurzschlusstrom	- Short-circuit current	I_k ~660 mA
- Laststrom	- Load current	Imax = 600 mA
- Kurzschlussverhalten mit automatischem "Fold Back"	- Short-circuit response with automatic-fold-back	

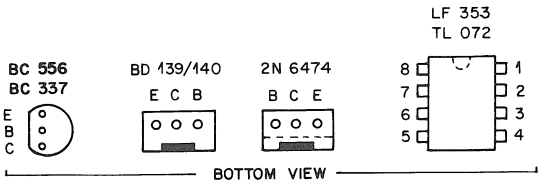


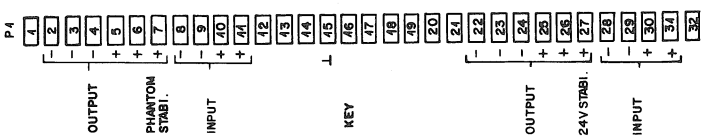
- Ueberlagerte Brummspannung	- Superimposed ripple voltage	$U_{Br} \leq 100\,\mu V$
- Leerlaufstrom	- No-load current	$I_{o@}$ Uin 30V = 20 mA

3) Mechanische Daten	3) Mechanical data	
Abmessungen	Dimensions	"EUROPE" PCB 100mm x 160 mm
Steckersystem	Connector system	DIN 416 12 TYP B
Breite	Widht	33 mm 7 M
Gewicht	Weight	ca. 320 gr

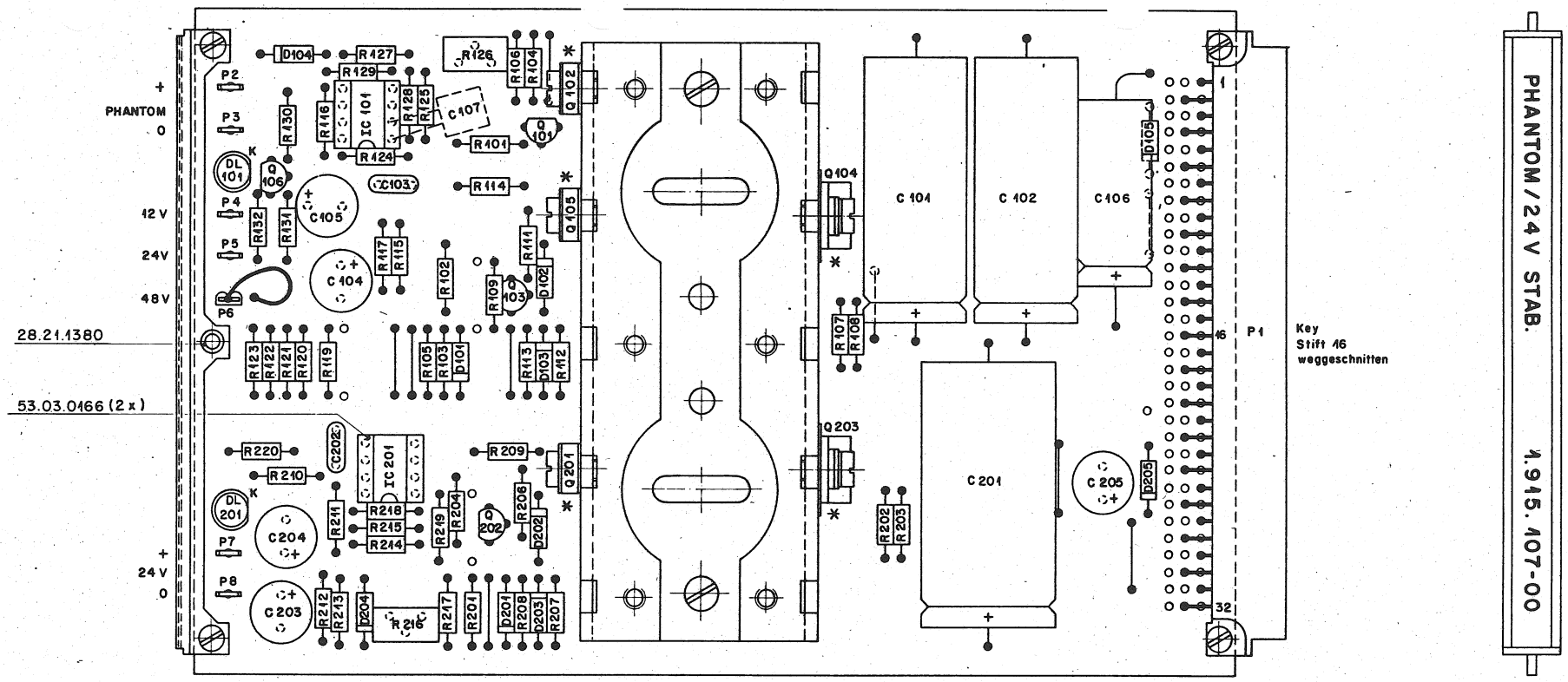


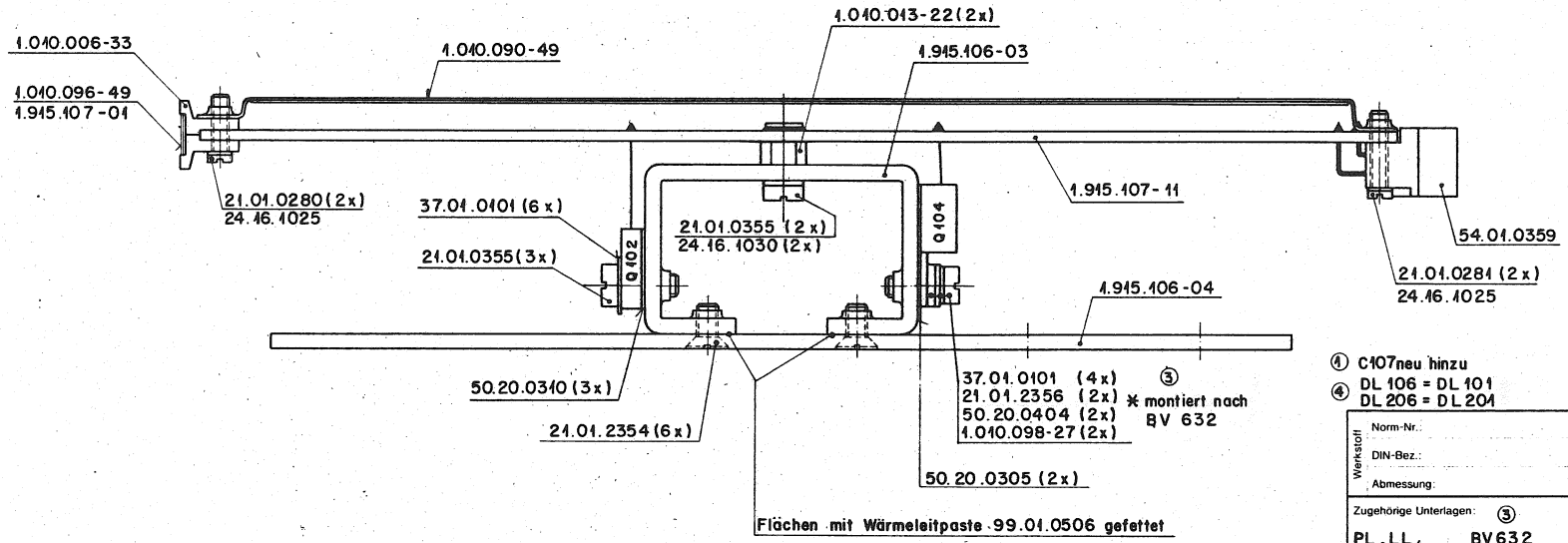






DATE:	5.11.81	11.2.83				
SIGN:						
STUDER REGENSDORF ZÜRICH	PHANTOM/24V STABILIZER					SC. 1.915.107





① C107 neu hinzu
④ DL 106 = DL 101
DL 206 = DL 201

Änderung	Datum	Gez	Gepr	Ges	Index
	22.1.86	A.Ho			④
	10.1.86	A.Ho			③
	4.4.84	A.Ho			②
	13.1.83	A.Ho			①
Ausgabe	3.8.81	Ho			⓪

Werkstoff: Norm-Nr.: / DIN-Bez.: / Abmessung:	Oberfläche: Güte: / Beh.:		
Zugehörige Unterlagen: ③ PL, LL, BV632	Freimasstoleranz: +	Maßstab: 2:1	
Ersatz für:	Ersetzt durch:	Kopie für:	

STUDER REGENSDORF ZÜRICH

Benennung: Phantom 24V Stab.

Nummer: 1.915.107-00

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	C 101	59.25.7221	220 µF	100 V EL	
	C 102	59.25.7221	220 µF	100 V EL	
	C 103	59.34.4221	220 pF	CER	
	C 104	59.22.8220	22 µF	63 V EL	
	C 105	59.22.5101	100 µF	25 V EL	
1	C 106	59.25.6471	470 µF	63 V EL	
	C 201	59.25.5222	2200 µF	40 V EL	
	C 202	59.34.4221	220 pF	CER	
	C 203	59.22.5101	100 µF	25 V EL	
	C 204	59.22.5101	100 µF	25 V EL	
	C 205	59.22.5101	100 µF	25 V EL	
1	C 107	59.34.2220	22 pF	CER	
	D 101	50.04.1112	Z 5,1 V	5,1 V @ 5 mA 5%	
	D 102	50.04.0125	1N4448		
	D 103	50.04.0125	1N4448		
	D 104	50.04.1112	Z 5,1 V	5,1 V @ 5 mA 5%	
	D 105	50.04.0105	1N4004	1,1 V @ 1 A	
	D 201	50.04.1114	Z 10 V	10 V @ 5 mA 5%	
	D 202	50.04.0125	1N4448		
	D 203	50.04.0125	1N4448		
	D 204	50.04.1112	Z 5,1 V	5,1 V @ 5 mA 5%	
	D 205	50.04.0105	1N4004	1,1 V @ 1 A	
	DL 101	50.04.2111	MV5753	CM4-284B	Ms/Cm
	DL 201	50.04.2111	MV5753	CM4-284B	Ms/Cm

IND	DATE	NAME
④		
③		
②		
①	13.1.83	
O	9.6.81	

EL ELECTROLYTIC MS MONSANTO
CER CERAMIC CM CHICAGO MINIATUR

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	IC 101	50.09.0101	TL 072	DUAL OPA LF 353	N,TI
	IC 201	50.09.0101	TL 072	DUAL OPA LF 353	N,TI
	Q 101	50.03.0492	BC 556	PNP 0,1A U_{CES} 80V	S,I
	Q 102	50.03.0451	BD 139	NPN	P,S
	Q 103	50.03.0340	BC 337	NPN 0,8A	P,TI
	Q 104	50.03.0344	2N 6474	NPN	R
	Q 105	50.03.0452	BD 140	PNP	P,S
	Q 106	50.03.0496	BC 560	PNP 0,1A	S
	Q 201	50.03.0452	BD 140	PNP	P,S
	Q 202	50.03.0340	BC 337	NPN 0,8A	P,TI
	Q 203	50.03.0344	2N 6474	NPN	R
	R 101	57.11.4332	3,3 k		
	R 102	57.11.4332	3,3 k		
	R 103	57.11.4332	3,3 k		
	R 104	57.11.4103	10 k		
	R 105	57.11.4682	6,8 k		
	R 106	57.11.4103	10 k		
	R 107	57.11.4339	3,3		
	R 108	57.11.4339	3,3		
	R 109	57.11.4181	180		
	R 110				
	R 111	57.11.4223	22 k		
	R 112	57.11.4150	15		
	R 113	57.11.4331	330		
	R 114	57.11.4681	68,0		
	R 115	57.11.4332	3,3 k	2%	

IND	DATE	NAME
④		
③		
②		
①	13.1.83	
O	9.6.81	

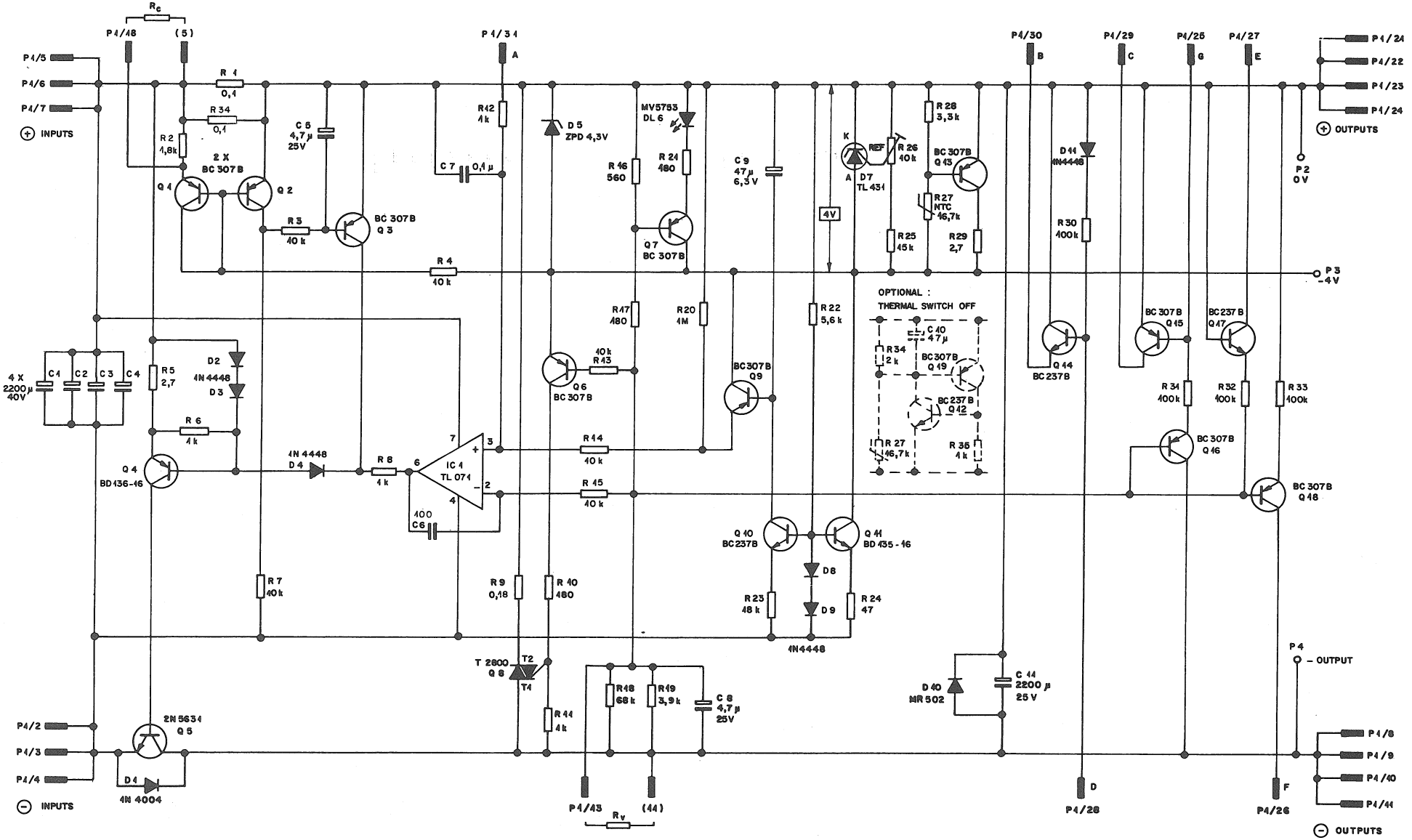
S SIEMENS I ITT
RA RAYTHEON N NATIONAL
TI TEXAS INSTR.
P PHILIPS
R RCA

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	R 116	57.11.4332	3,3 k		
	R 117	57.11.4332	3,3 k		
	R 118				
	R 119	57.11.4332	3,3 k	2%	
	R 120	57.11.4224	220 k	2%	
	R 121	57.11.4682	6,8 k	2%	
	R 122	57.11.4223	22 k	2%	
	R 123	57.11.4333	33 k	2%	
	R 124	57.11.4103	10 k		
	R 125	57.11.4332	3,3 k		
	R 126	58.01.7103	10 k	LIN. 10%	
	R 127	57.11.4333	33 k		
	R 128	57.11.4181	180		
	R 129	57.11.4332	3,3 k		
	R 130	57.11.4682	6,8 k		
	R 131	57.11.4332	3,3 k		
	R 132	57.11.4181	180		
	R 201	57.11.4332	3,3 k		
	R 202	57.11.4189	1,8		
	R 203	57.11.4189	1,8		
	R 204	57.11.4181	180		
	R 205				
	R 206	57.11.4103	10 k		
	R 207	57.11.4150	15		
	R 208	57.11.4331	330		
	R 209	57.11.4681	680		
	R 210	57.11.4332	3,3 k		
	R 211	57.11.4332	3,3 k		
	R 212	57.11.4103	10 k	2%	
	R 213	57.11.4332	3,3 k	2%	

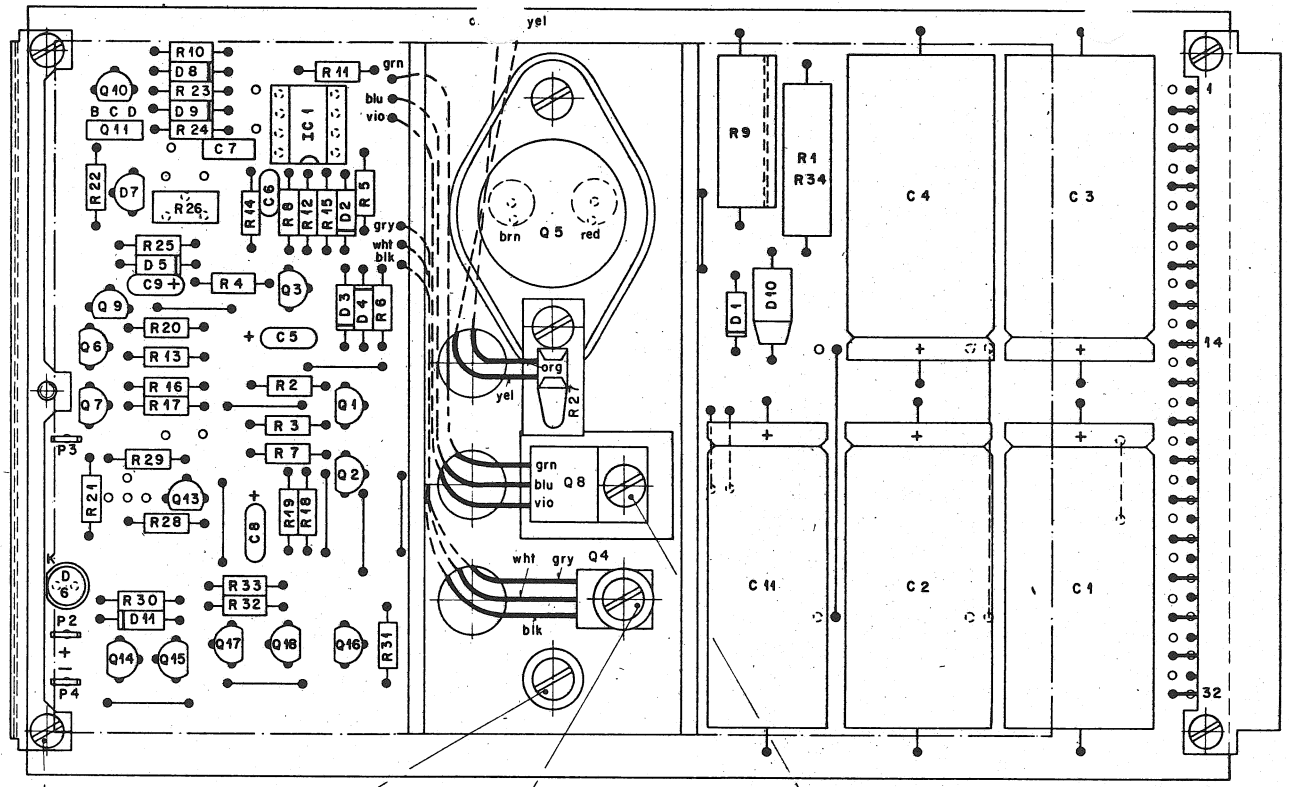
IND	DATE	NAME
④		
③		
②		
①	13.1.83	
O	9.6.81	

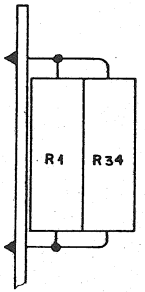
IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	R 214	57.11.4103	10 k		
	R 215	57.11.4332	3,3 k		
	R 216	58.01.7103	10 k	LIN. 10%	
	R 217	57.11.4333	33 k		
	R 218	57.11.4181	180		
	R 219	57.11.4332	3,3 k		
	R 220	57.11.4332	3,3 k		
		Modification	List		
	Dat.			HF Problems	
1	13.1.83				
	C 106	22 µF →	470 pF		
	C 107	22 pF →	new		

IND	DATE	NAME
④		
③		
②		
①	13.1.83	
O	9.6.81	



STUDER REGENSDORF ZURICH	SIGN:	DATE:
STABILIZER 5 ÷ 24 V/5A		1.12.82
		22.6.83
SC 1.945.108		

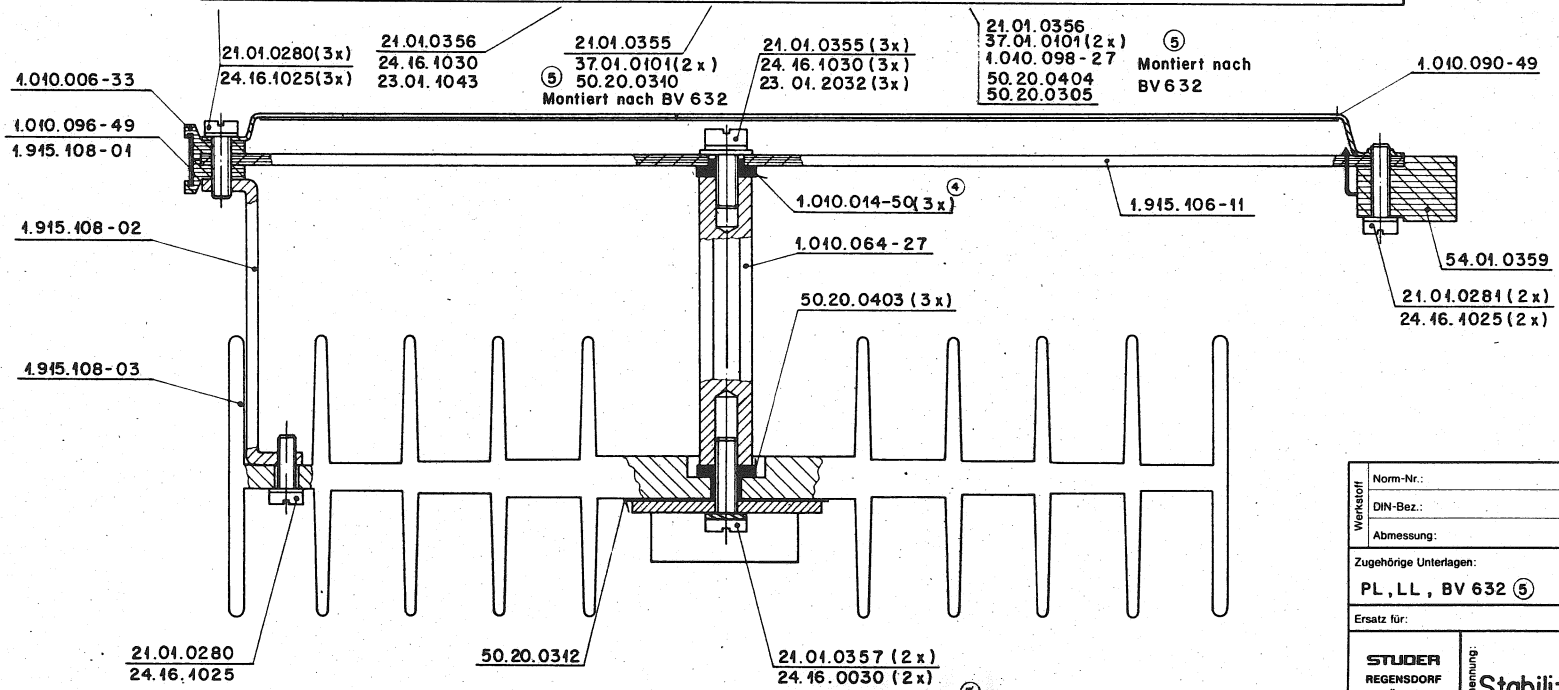




Key
Stift 14 weggeschnitten

STABILIZER 5÷24V

1.915.108-00



Werkstoff		Oberfläche		Änderung					
	Norm-Nr.:		Güte:		17.1.86	A.Ho			⑤
	DIN-Bez.:		Beh.:		20.3.85				④
	Abmessung:				1.5.84	A.Ho			③
					4.4.84	A.Ho			②
					1.4.84	A.Ho			①
Zugehörige Unterlagen: PL, LL, BV 632 ⑤		Freimasstoleranz: ±	Maßstab: 2:1	Ausgabe	21.2.83	A.Ho			⓪
					Datum	Gez.	Gepr.	Ges.	Index
Ersatz für:		Ersetzt durch:		Kopie für:					

STUDER REGENSDORF ZÜRICH

Benennung: Stabilizer 5÷24V/5A

Nummer: 1.915.108-00

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	C 1	59.25.5222	2200 µF	40V EL	
	C 2	59.25.5222	2200 µF	40V EL	
	C 3	59.25.5222	2200 µF	40V EL	
	C 4	59.25.5222	2200 µF	40V EL	
	C 5	59.26.5479	4,7 µF	25 V SAL	
)	C 6	59.34.4101	100 pF	CER	
	C 7	59.06.0104	0,1 µF	PE	
	C 8	59.26.5479	4,7 µF	25V SAL	
	C 9	59.26.0470	47 µF	6,3V SAL	
	C 10				
	C 11	59.25.4222	2200 µF	25V EL	
	D 1	50.04.0105	1N4004	1A	
	D 2	50.04.0125	1N4448		
	D 3	50.04.0125	1N4448		
	D 4	50.04.0125	1N4448		
	D 5	50.04.1120	ZPD 4,3V	5%	
	DL 6	50.04.2111	MV 5753	LED CM4-284 B	MS/CM
	D 7	50.10.0106	TL 430	µA 430 CLP IC	TI/F
	D 8	50.04.0125	1N4448		
	D 9	50.04.0125	1N4448		
	D 10	50.04.0507	MR 502	3A/30V	
	D 11	50.04.0125	1N4448		
	IC 1	50.09.0103	TL 071	LF 351 SINGLE FET OPA	TI/N

IND	DATE	NAME
④		
③		
②		
①	22.6.83	
○	22.11.82	Frigo

EL - Electrolytic
SAL - Solid Aluminium
PE - Polyester
CER - CERAMIC
MS - Mousanto
CM - Chicago Miniatur
TI - Texas Instruments
N - National
F - Fairchild

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	Q 1	50.03.0515	BC 307 B	PNP General purpose 0,1A/Uceo ≥ 40V	any
	Q 2	50.03.0515	BC 307 B	PNP →	
	Q 3	50.03.0515	BC 307 B	PNP →	
	Q 4	50.03.0510	BD 136-16	PNP min 1A/40V	M,R,S,T
	Q 5	50.03.0342	2N 5631	NPN min 10A/min 60V 200W	M
	Q 6	50.03.0515	BC 307 B	PNP →	
	Q 7	50.03.0515	BC 307 B	PNP →	
	Q 8	50.99.0106	T 2800	TRIAC 8A SC 146 D	R/GE
	Q 9	50.03.0515	BC 307 B	PNP →	
	Q 10	50.03.0436	BC 237 B	NPN General purpose 0,1A/Uceo ≥ 40V	any
	Q 11	50.03.0495	BD 135-16	NPN P min 2W	M,R,S,T
	Q 12				
	Q 13	50.03.0515	BC 307 B	PNP →	
	Q 14	50.03.0436	BC 237 B	NPN →	
	Q 15	50.03.0515	BC 307 B	PNP →	
	Q 16	50.03.0515	BC 307 B	PNP →	
	Q 17	50.03.0436	BC 237 B	NPN →	
	Q 18	50.03.0515	BC 307 B	PNP →	
	R 1	57.56.5108	0,1 Ω	4W	
	R 2	57.11.4182	1,8 k	2%	
	R 3	57.11.4103	10 k		
	R 4	57.11.4103	10 k		
	R 5	57.11.4279	2,7 Ω		
	R 6	57.11.4102	1 k		
	R 7	57.11.4103	10 k		
	R 8	57.11.4102	1 k		
	R 9	57.56.5188	0,18 Ω	4W	

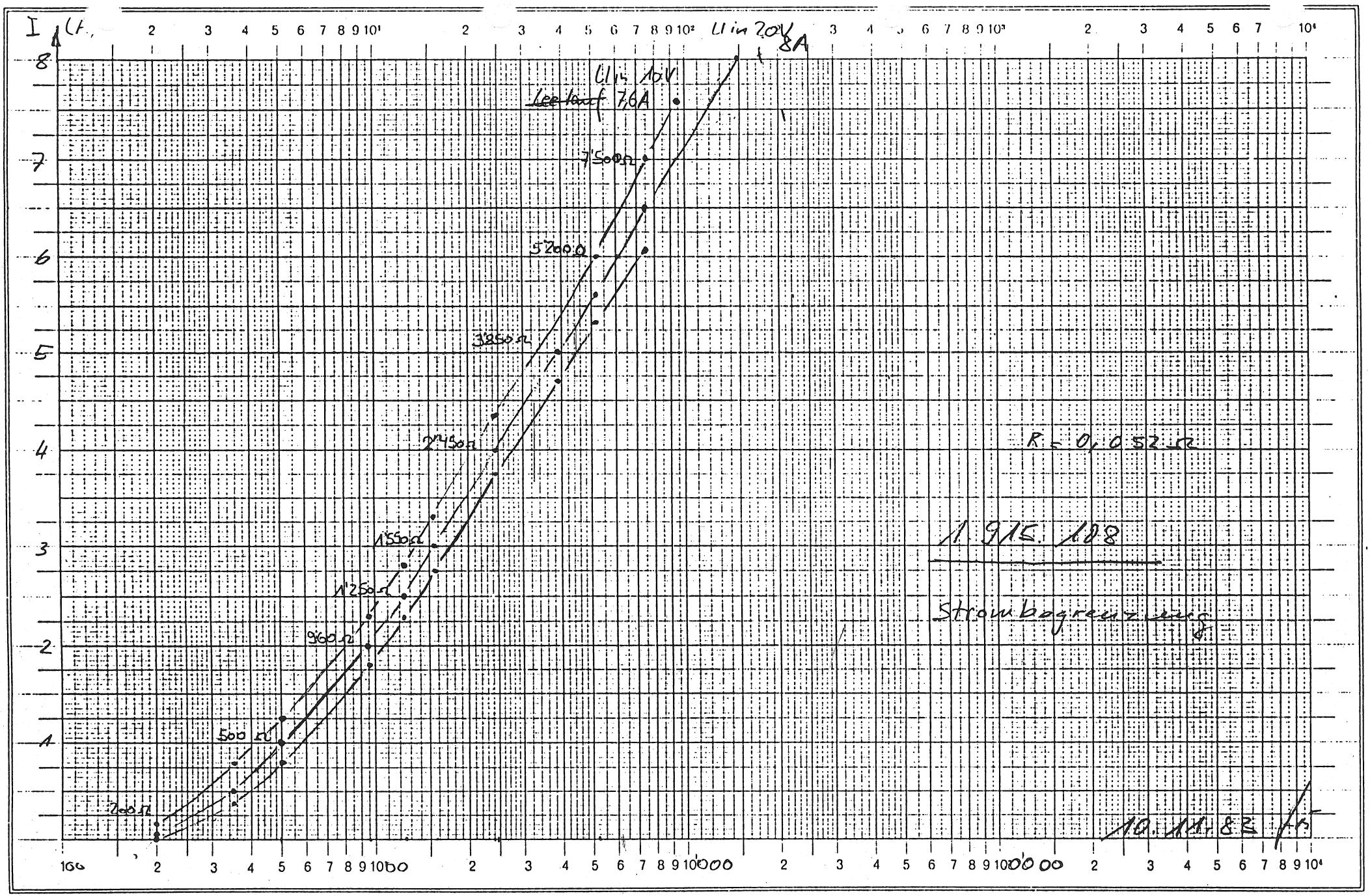
IND	DATE	NAME
④		
③		
②		
①	22.6.83	
○	22.11.82	Frigo

M - Motorola
R - RCA
S - Siemens
T - Telefunken
GE - General Electric

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	R 10	57.11.4181	180 Ω		
	R 11	57.11.4102	1 k		
	R 12	57.11.4102	1 k		
	R 13	57.11.4103	10 k		
	R 14	57.11.4103	10 k		
	R 15	57.11.4103	10 k		
	R 16	57.11.4561	560 Ω	2%	
	R 17	57.11.4181	180 Ω	2%	
	R 18	57.11.4683	68 k	2%	
	R 19	57.11.4392	3,9k	2%	
	R 20	57.11.4105	1M		
	R 21	57.11.4181	180 Ω		
	R 22	57.11.4562	5,6k		
	R 23	57.11.4183	18 k		
	R 24	57.11.4470	47 Ω		
	R 25	57.11.4153	15 k		
	R 26	58.01.7103	10 k	LIN 10% CERMET	
	R 27	57.99.0208	16,7k	@100°C NTC 2322 640 98005	PH
	R 28	57.11.4332	3,3 k		
	R 29	57.11.4279	2,7 Ω		
	R 30	57.11.4104	100 k		
	R 31	57.11.4104	100 k		
	R 32	57.11.4104	100 k		
	R 33	57.11.4104	100k		
	R 34	57.56.5108	0,1 Ω	4W	
	Modification List				
④	C 6	330 pF → 100pF		HF-Problems	

IND	DATE	NAME
④		
③		
②		
①	22.6.83	
○	22.11.82	Frigo

PH - Philips



Logar. Teilung / Division 1-10000 Einheit / Unité 62,5 mm

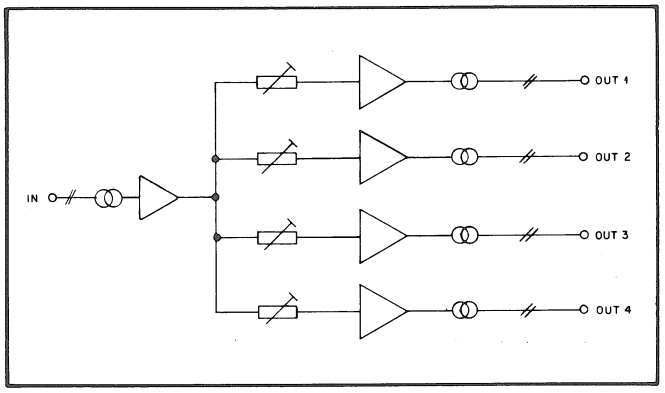
Ed. Aerni-Leuch, Bern Nr. 526

DISTRIBUTION AMPLIFIER

Five amplifiers on one EURO-card in a circuit configuration which provides for the distribution of one signal input to four separate, individually adjustable outputs.

The input and all outputs are transformer-equipped, thus they are balanced and floating.

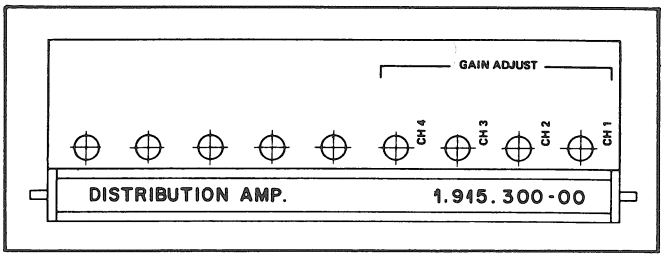
Used singly, or in combination with other system components, any complex signal routing and distribution requirement can be satisfied with this versatile amplifier.



Technical Specifications

(dBu based on 0.775 V.
Across 600 Ohms, dBu equals dBm)

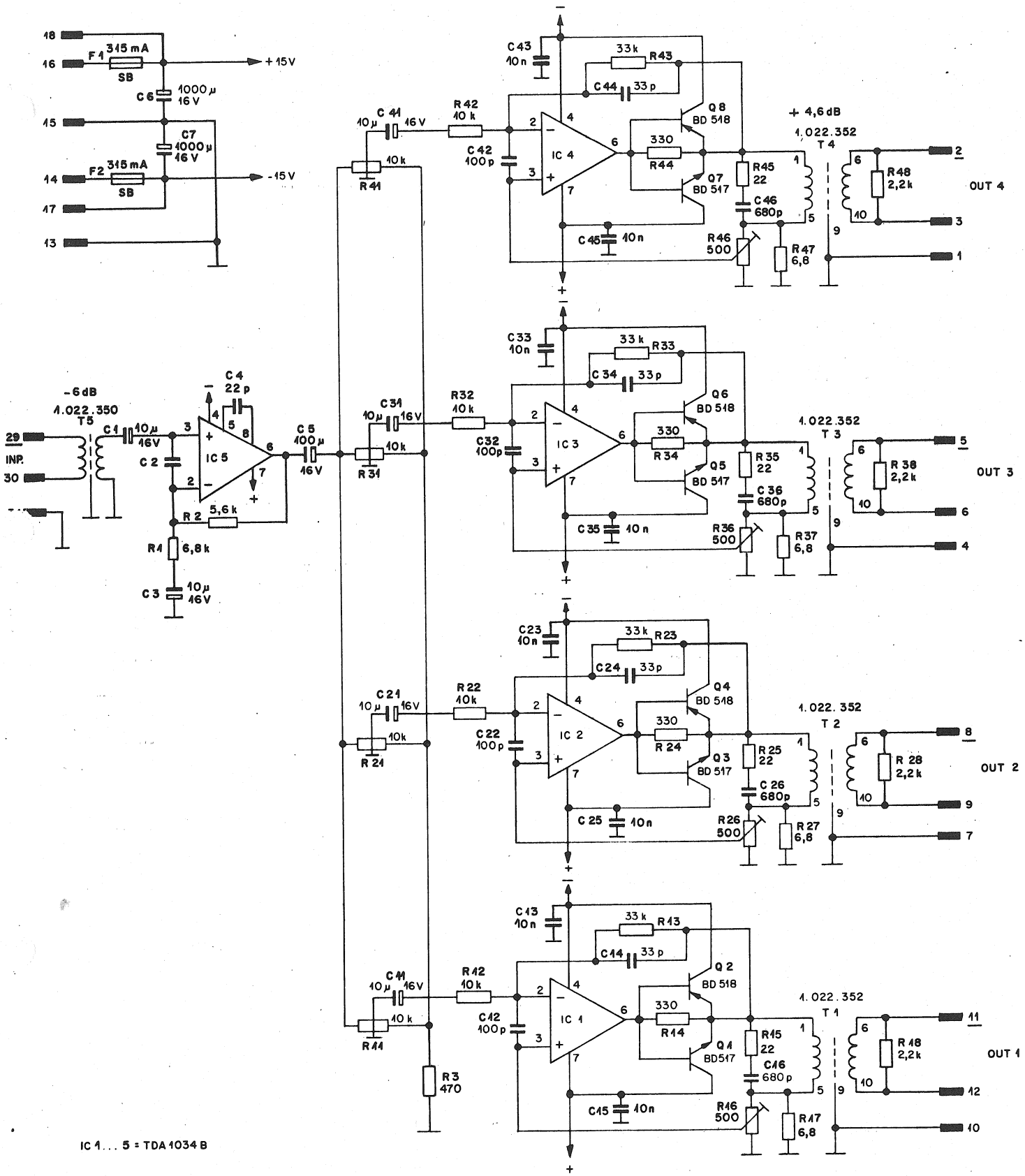
Input:	balanced/floating
Impedance:	>5 kOhms
Gain, adjustable:	- 1...+ 10 dB
Output:	balanced/floating
Output impedance:	<50 Ohms
Maximum output level into 200 Ohm load:	+ 21 dBu / 8,7 V
Frequency response, 30 Hz...15 kHz:	+ 0,2 / - 0,5 dB
Total harmonic distortion 40 Hz...15 kHz + 21 dBm/600 Ohms:	<0,5 %



Output noise voltage:	- 95 dBu / 14 µV
Level drop on one output when:	
short-circuiting one other output:	0,3 dB
short-circuiting three outputs:	0,9 dB
Required supply voltage:	± 15 V DC
Current consumption:	
Idling	25 mA
All outputs + 6 dBu into 200 Ohms	50 mA
All outputs + 21 dBu into 200 Ohms	180 mA

Dimensions

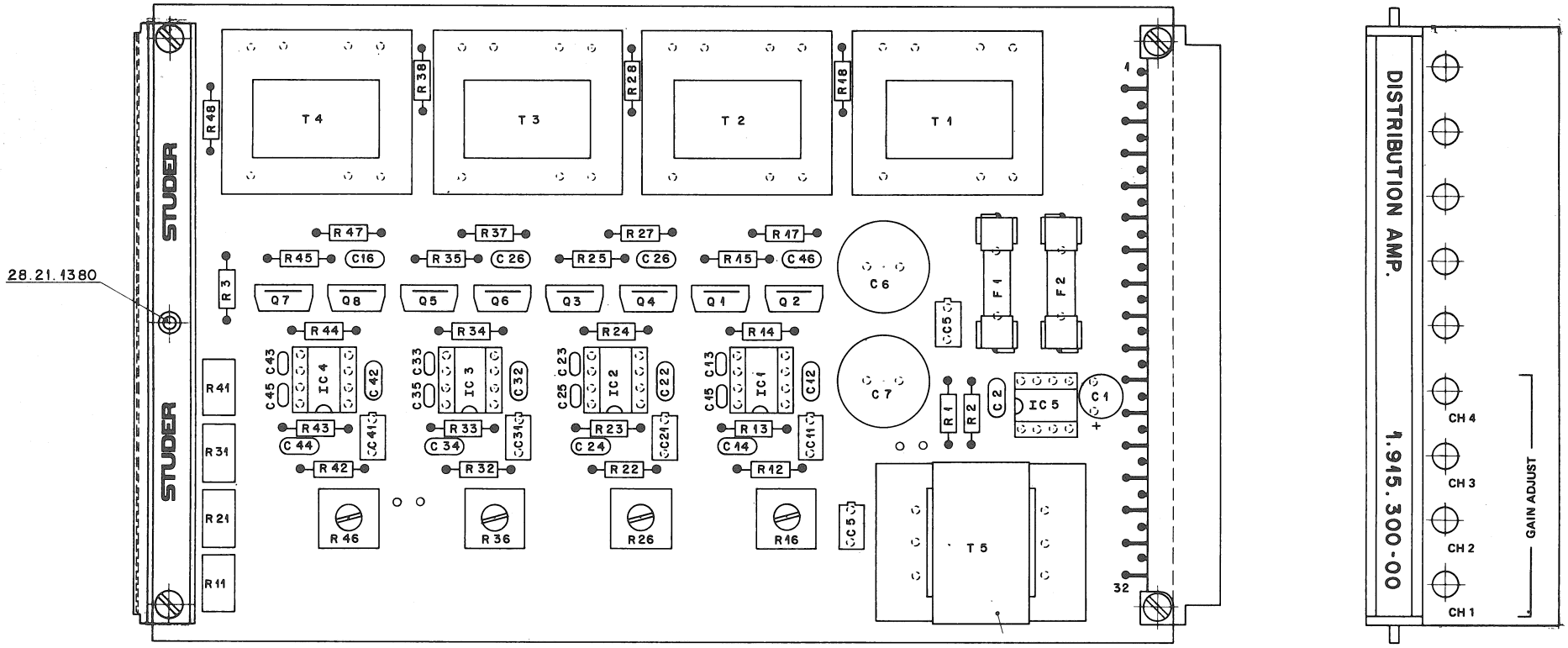
EURO-card:	100 x 160 mm 7 M units wide
Weight:	500 g/17,5 ozs. approx.



IC 1 ... 5 = TDA 1034 B

Änderung					
					③
					②
	26.10.79	Si			①
Ausgabe	9. 7.79	Si			⓪
	Datum	Gez.	Gepr.	Ges.	Index

Ersatz für:	Ersetzt durch:	Kopie für:
STUDER REGENSDORF ZÜRICH	Benennung: DISTRIBUTION AMP MK II	Nummer: SC 1.915.300/1



Werkstoff: Norm-Nr / DIN-Bez / Abmessung	Oberfläche: Gute / Beh	Änderung	3 / 2 / 4.4.84 A.Ho / 1
Zugehörige Unterlagen: PL	Freimasstoleranz	Maßstab: 2:1	Ausgabe: 26.10.79 Ho / 0
Ersatz für	Ersetzt durch	Kopie für	Datum Gez Gepr Ges. Index
STUDER REGENSDORF ZÜRICH	Benennung: Distribution AMP		Nummer: 1.915.300-00

POS NO	PART NO	VALUE	SPECIFICATIONS	EQUIVALENT	MFR
R 1	57.11.4682	6,8K	5% 1/4 W CSCH		
R 2	57.11.4562	5,6K	5% " "		
R 3...10	—				
R 11/21 31/41	58.01.7103	10K	10% 1/2W PMG		
R 12..42	57.11.4103	10K	5% 1/4W CSCH		
R 13..43	11.4333	33K	5% " "		
R 14..44	11.4331	330	5% " "		
R 15..45	11.4220	22	5% " "		
R 16..46	58.01.8501	500	10% 1/2W PMG		
R 17..47	57.11.4689	6,8	5% 1/4 W CSCH		
R 18..48	57.11.4222	2,2K	5% " "		
C 1/3	59.30.4100	10µ	-20% 16V TA		
C 2	—				
C 4	59.32.0220	22p	20% 400V KER		
C 5	59.30.4101	100µ	-20% 16V TA		
C 6/7	59.22.4102	1000µ	-10% 16V EL		
C 8...10	—				
C 11/21 31/41	59.30.4100	10µ	-20% 16V TA		
C 12..42	59.32.0101	100p	20% 400V KER		
C 13..43	59.32.3103	0,01µ	+80% 40V KER		
C 14..44	59.32.1330	33p	10% 400V KER		
C 15..45	59.32.3103	0,01µ	+80% 40V KER		
C 16..46	59.32.2681	680p	10% KER		
Q 1/3/5/7	50.03.0455	BD 517-5	NPN		
Q 2/4/6/8	50 03 0456	BD 518-5	PNP		
T 1/2/3/4	1.022.352.00	1:1,7	TRAFO		STU
T 5	1.022.350.00	1:2			STU
IC 1..5	50.05.0243	TDA 1034 B	OPAMP	NE5543	
F 1,2	51.01.0112	315 MA T	SICHERUNG		

CSCH → CARBON FILM
PMG → TRIMMER
TA → TANTAL
KER → CERAMIC
EL → ELECTROLYT

STU → STUDER

IND	DATE	NAME
④		
③		
②		
①		
○	24.3.80	We

STUDER

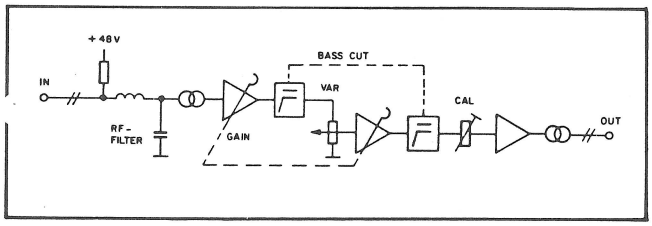
DISTRIBUTION AMP MKII

1.915.300

MICROPHONE AMPLIFIER

Basically, this is a microphone amplifier with sufficient gain to amplify a low level signal up to line level. There are three user accessible controls on the amplifier's front panel for gain adjustment in six 12 dB steps, an overlapping fine adjustment, as well as a bass-cut filter to eliminate rumbles and extreme low frequency signals (impact sounds).

With the wide range of gain settings available and by applying good engineering practice, this amplifier lends itself to a variety of useful applications. To avoid distortion due to ouput signal clipping, the designer must observe that a sufficient overload margin is allowed for, depending on the type of level meters used in a system.



Technical Specifications

Input

Impedance, balanced/floating:	> 2 kOhms
Sensitivity (for + 21 dBu into 200 Ohms):	- 66 dBu
Input overload point:	+ 10 dBu

Adaptation for microphone phantom powering possible.

Output

Impedance, balanced/floating:	< 50 Ohms
Maximum level into 200 Ohms:	+ 21 dBu

Frequency Response

30 Hz... 15 kHz:	+ 0,2 / - 1 dB
With bass cut:	- 3 dB / 100 Hz
	- 14 dB / 30 Hz

Gain

Adjustable, six steps:	12, 24, 36, 48 60 and 72 dB
Range of overlapping fine control:	15 dB
Minimum gain:	12 dB
Maximum gain:	87 dB

Distortion

At + 21 dBu into 200 Ohms 30 Hz...50 kHz:	< 0.5 % THD

Noise Performance

Noise figure, input terminated with 200 Ohms, gain 72 dB:	< 5 dB

(This represents - 124 dBu of unweighted equivalent input noise).

Absolute unweighted noise level at the output with gain set to 12 dB:	< - 95 dBu

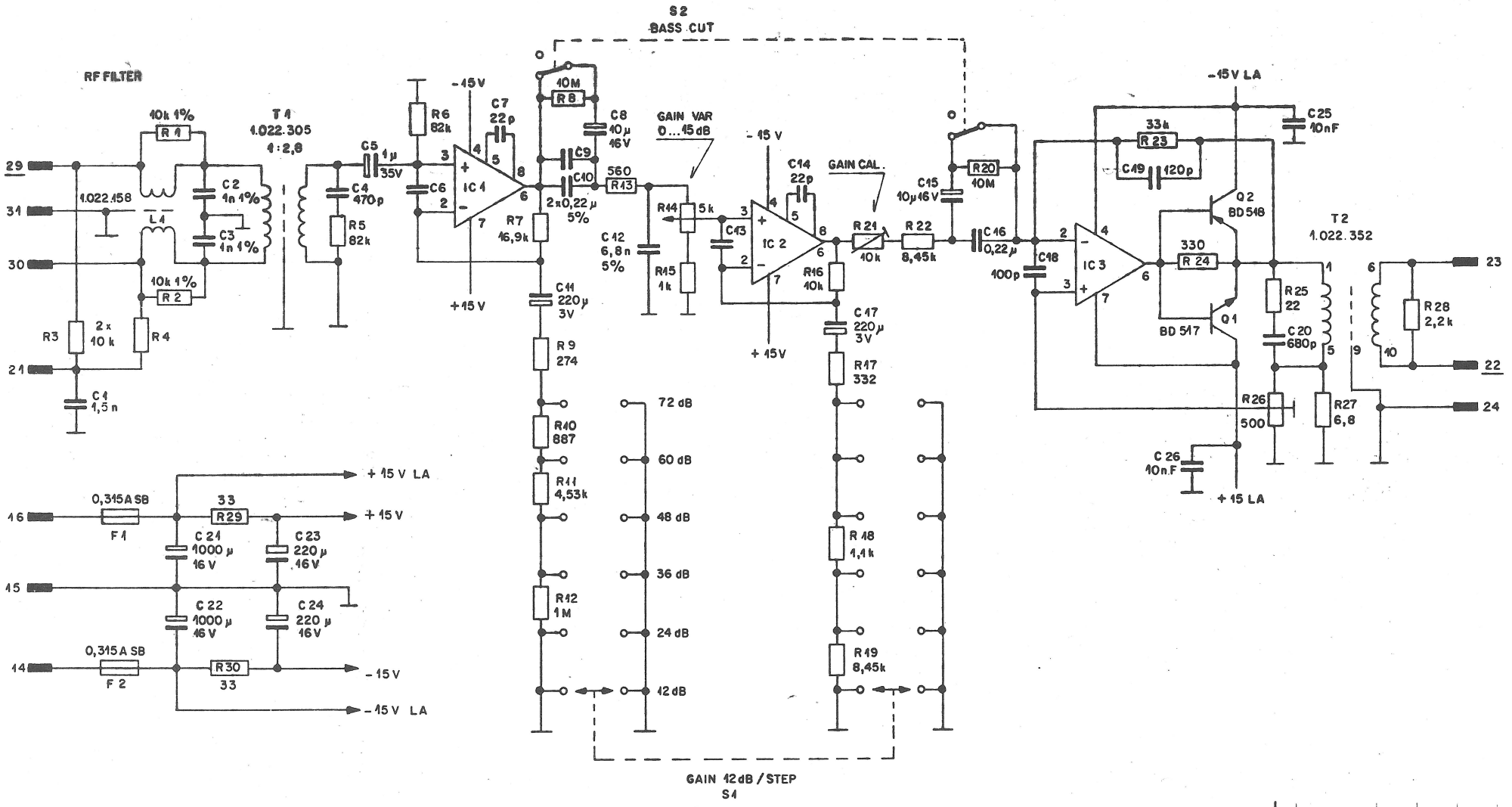
Power Requirement

Operating voltage:	± 15 V
Current consumption, idling:	15 mA
With + 6 dBu into 200 Ohms:	25 mA
With + 21 dBu into 200 Ohms:	55 mA

Dimensions

EURO-card:	100 x 160 mm, 7 M units wide
Weight:	350 g/12,5 ozs. approx.

Ordering	
1.915.301.00	Microphone Amplifier



IC 1 ... 3 = TDA 1034 B

Änderung					
					3
					2
	29.10.79	Si	We		1
Ausgabe	30.5.78	Si	em		0
	Datum	Gez.	Gepr.	Ges.	Index

Ersatz für:	Ersetzt durch:	Kopie für:
STUDER REGENSDORF ZÜRICH	Benennung: LINE AMP. WITH MIC. INPUT	Nummer: SC 1.915.301

NO	PART NO	VALUE	SPECIFICATIONS	EQUIVALENT	MFR
R 1/2	57.39.1002	10K	1% 1/4W	MF	
3/4	57.99.0250	6,8K	0,1%	MF	
5/6	57.41.4823	82K	5%	CSCH	
7	57.39.1692	16,9K	1%	MF	
8/20	57.02.5106	10 M	10%	CMA	
9	57.39.2740	274	1%	MF	
10	57.39.8870	887	1%	MF	
11	57.39.4531	4,53K	1%	MF	
12	57.41.4105	1M	5%	CSCH	
13	57.41.4561	560	5%		
14	58.02.0502	5k POT	10% 1/2W	PSCH	
15	57.41.4102	1k	5% 1/4W	CSCH	
16	57.39.1002	10k	1%	MF	
17	57.39.3320	332	1%	MF	
18	57.39.1101	1,1K	1%	MF	
19/22	57.39.8451	8,45K	1%	MF	
21	58.01.8103	10k TPOTI	10% 1/2W	PMG	
23	57.41.4333	33K	5% 1/4W	CSCH	
24	57.41.4331	330	5% 1/4W	CSCH	
25	57.41.4220	22	5% 1/4W	CSCH	
26	58.01.0502	500 POTI	10% 1/2W	PMG	
27	57.41.4689	6,8	5% 1/4W	CSCH	
28	57.41.4222	2,2K	5% 1/4W	CSCH	
29/30	57.41.4330	33	5% 1/4W	CSCH	
C 1	59.32.1152	1,5nF	10% 400V	KER	
2/3	59.12.9102	1nF	1% 100V	PS	
4	59.32.1471	470p	10% 400V	KER	
5	59.30.6109	1µF	-20% 35V	TA	
6	—				
7/14	59.32.0220	22p	20% 400V	KER	
8/15	59.30.4100	10µ	-20% 16V	TA	
9/10/16	59.12.2224	0,22µ	5% 100V	MPETP	
11/17	59.30.1221	220µ	-20% 3V	TA	
12	59.11.3682	6,8n	5% 160V	PC	
13	—				
18	59.32.0101	100p	20% 400V	KER	
19	59.32.0101	120p	20% 400V	KER	
20	59.32.2681	680p	10%	KER	
21/22	59.22.4102	1000µ	-10% 16V	EL	
23/24	59.25.3221	220µ	-10% 16V	EL	
25/26	59.32.3103	10n	-20% 40V	KER	

MF MF
CSCH CSCH
CMA CMA
PSCH PSCH
PMG PMG
KER KER

TA TA
EL EL
MPETP MPETP
PC PC

IND	DATE	NAME
④		
③		
②		
①	15.4.83	Vr
○	25.3.80	We

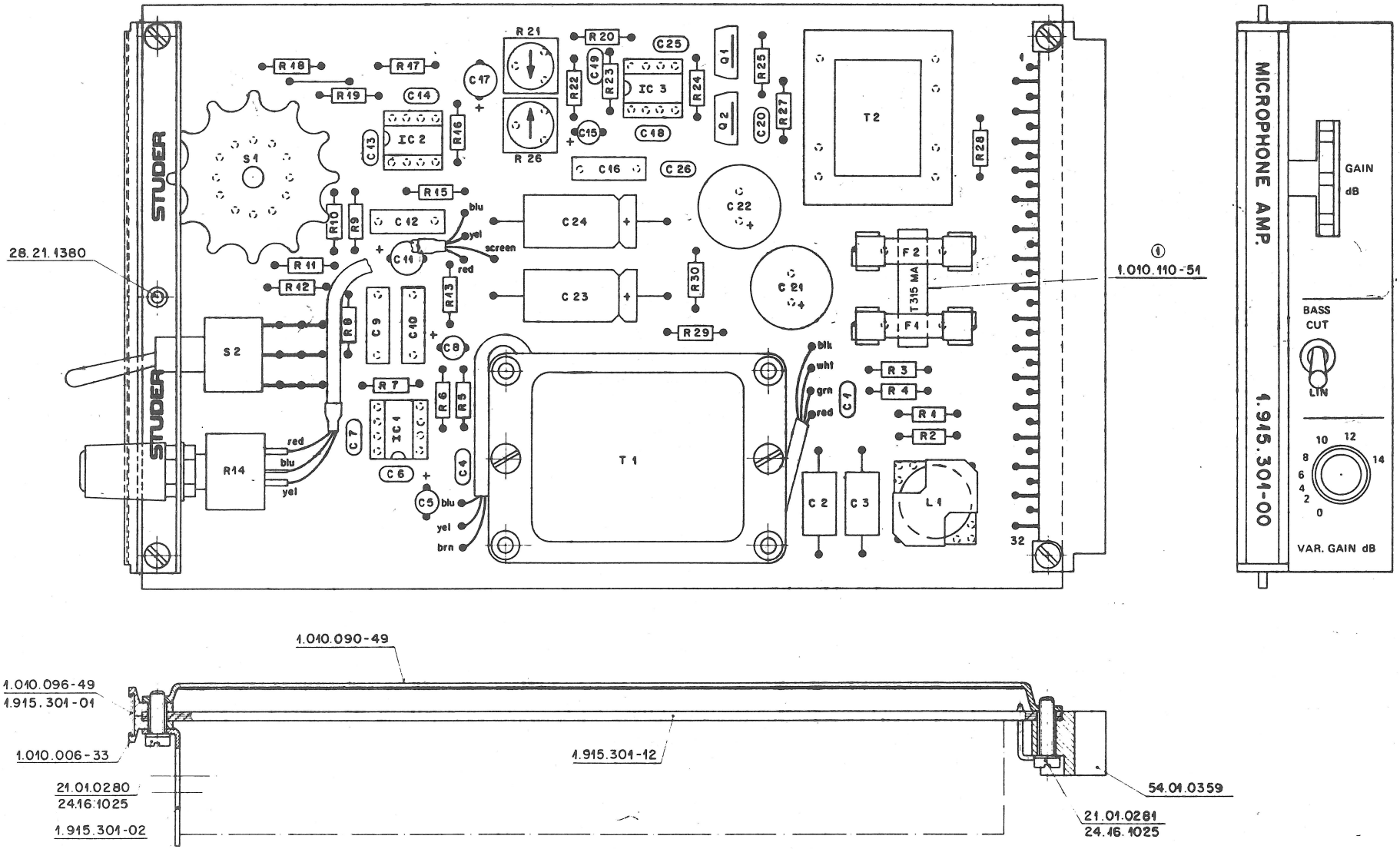
STUDER | LINE AMP WITH MIC INPUT | 1.915.301 | PAGE 1 of 2

POS NO	PART NO	VALUE	SPECIFICATIONS	EQUIVALENT	MFR
IC 1..3	50.05.0243	NE5534N	OP AMP	NE5534P	
F 1,2	51.01.0112	315 MA T	FUSE		
Q1	50.03.0456	BD 517	PNP		
Q2	50.03.0455	BD 518	NPN		
S1	55.01.0205	2x6pos	DIGITAL		
S2	55.01.0157	3x ON-ON	KIPPSCHALTER		
L1	1.022.158.00	HF DROSSEL			ST
T1	1.022.305.00	1 : 2,8			ST
T2	1.022.352.00	1 : 1,7			ST

S → STUDER

IND	DATE	NAME
④		
③		
②		
①	15.4.83	Vr
○	25.3.80	We

STUDER | LINE AMP WITH MIC INPUT | 1.915.301 | PAGE 2 of 2

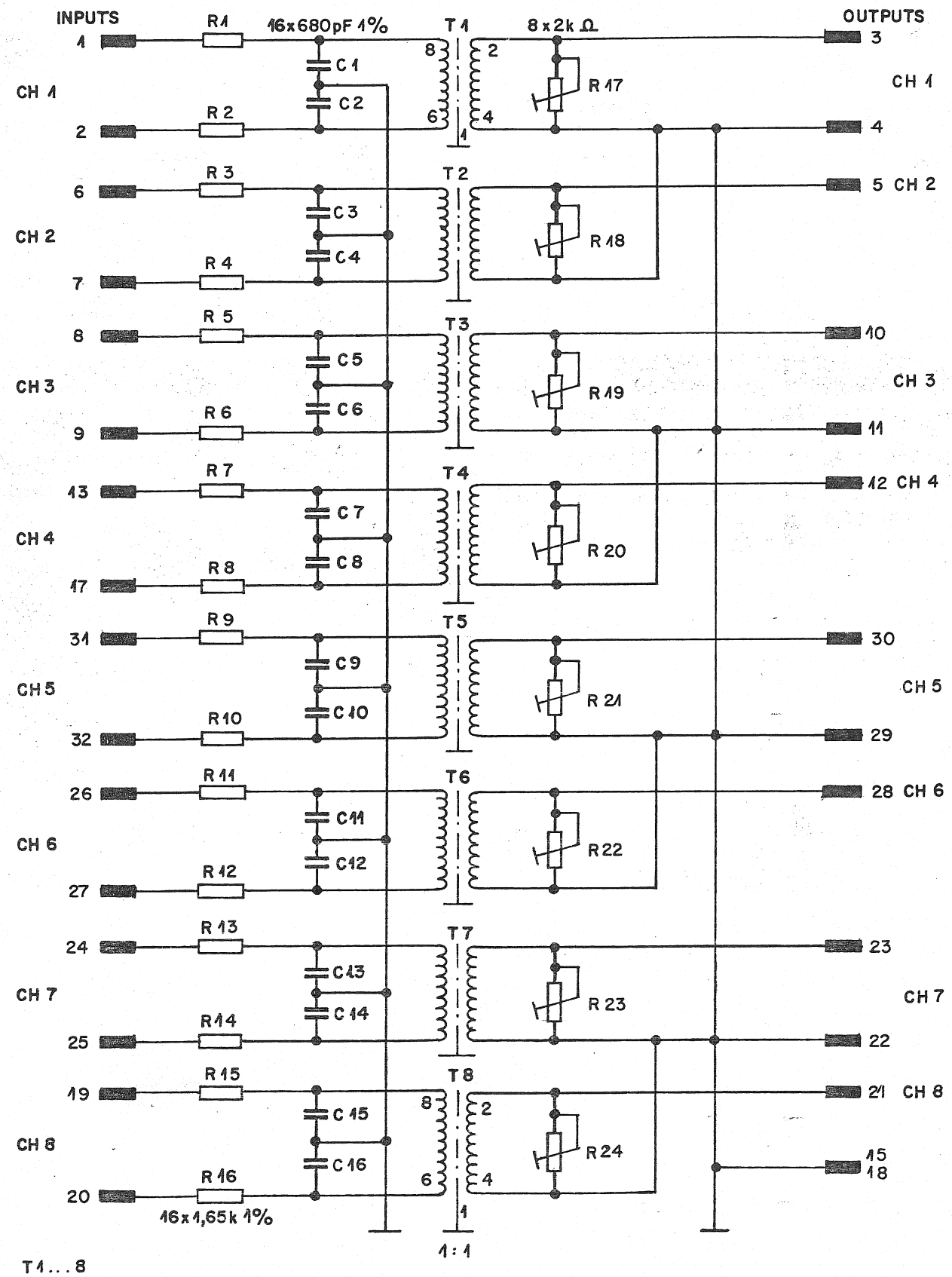


Werkstoff: Norm-Nr / DIN-Bez / Abmessung	Oberfläche: Güte / Beh		Änderung	4.4.84 A.Ho 23.11.83 A.Ho
Zugehörige Unterlagen: PL	Freimasstoleranz	Maßstab: 2:1	Ausgabe	26.10.79 Hö
Ersatz für	Ersetzt durch		Kopie für	

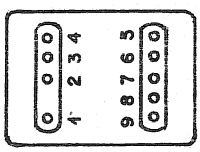
STUDER REGENSDORF ZÜRICH

Benennung: Microphone AMP.

Nummer: 1.915.301-00



T1...8
1.022.405



BOTTOM VIEW

Ausgabe	22.5.80	Si			0
	Datum	Gez.	Gepr.	Ges.	Index

Kopie für:

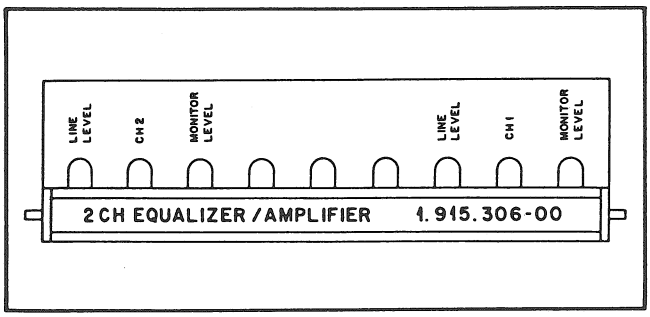
STUDER
REGENSDORF
ZÜRICH

Benennung: TRANSFORMER-UNIT

Nummer: SC 1.915.302

PHONO PRE-AMPLIFIER, STEREO

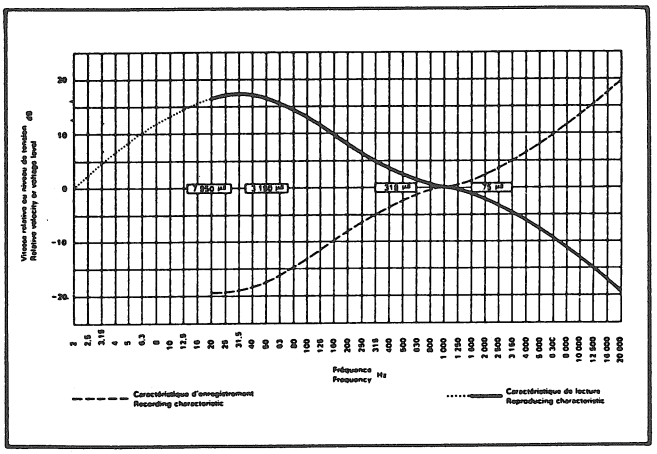
A 2-channel (stereo) phono pre-amplifier on one EURO-card, equalized to match the IEC 98 curve, with a low-frequency roll-off, according to modification 4 1976 (new RIAA). This modification was introduced to limit the extreme low-frequency response of a system (below 20 Hz) for reduced rumble and impact noise interference.



The amplifier is designed to work with magnetic cartridges, requiring a 47 kOhm load and a parallel capacity of 220 pF. There is sufficient gain in this amplifier to raise the signal to line level output from the input provided by an average cartridge.

The length of the interconnecting cable between turntable and pre-amplifier should be so chosen that cable capacity plus the amplifier's input capacity does not exceed the maximum recommended capacitive load for the cartridge in use. Using normal audio cable, this will usually permit a length of up to 2 meters.

A special output circuitry is employed to ensure extremely low distortion performance.



Technical Specifications

(dBu based on 0.775 V.
Across 600 Ohms, dBu equals dBm)

Input	unbalanced
Impedance:	47 kOhms / 220 pF
Sensitivity at 1 kHz (for output of + 20 dBm into 600 Ohms):	- 48 dBu / 3 mV
Overload margin:	30 dB
Equalization	in accordance with IEC 98, Mod. 4 1976 (new RIAA)
Gain, max. at 1 kHz:	68 dB

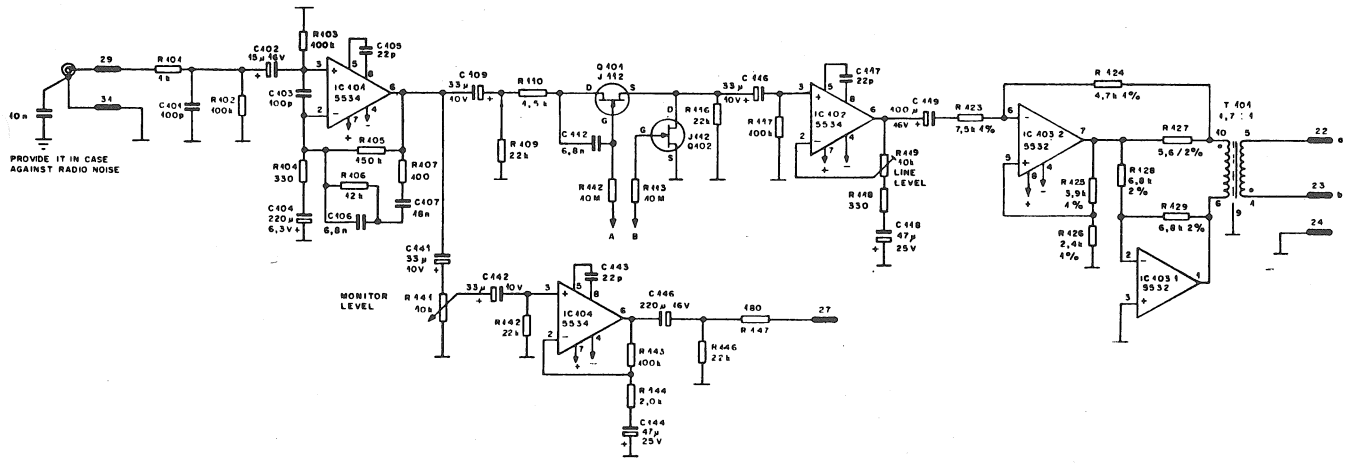
Output	balanced
Output level, adjustable:	-9 dBu...+ 20 dBu
Internal impedance 30 Hz...16 kHz:	<30 Ohms
Total harmonic distortion (+ 15 dBm into 600 Ohms):	
30 Hz	<0.2 %
60 Hz...16kHz	<0.1 %
Output level capability for 0.2 % THD 30 Hz to 16 kHz:	
into 200 Ohms	+ 14 dBu / 3.9 V
into 600 Ohms	+ 16 dBm / 4.9 V
Signal to noise ratio, input terminated with 1 kOhm, gain 63 dB at 1 kHz:	
linear, rms reading	>65 dB
A weighted	>75 dB
Channel separation 30 Hz...16 kHz at nominal output of 15 dBu:	>60 dB

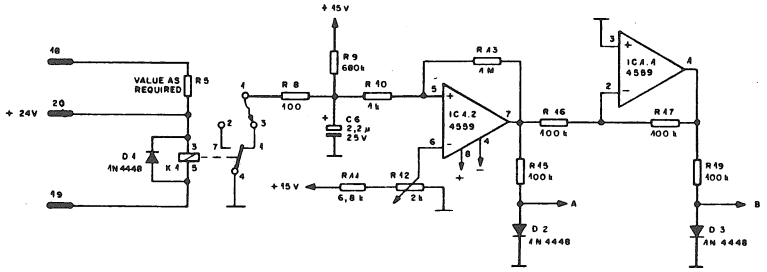
Power Requirement

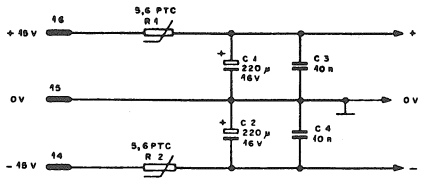
Supply Voltage:	± 15 V DC
Current consumption:	50 mA

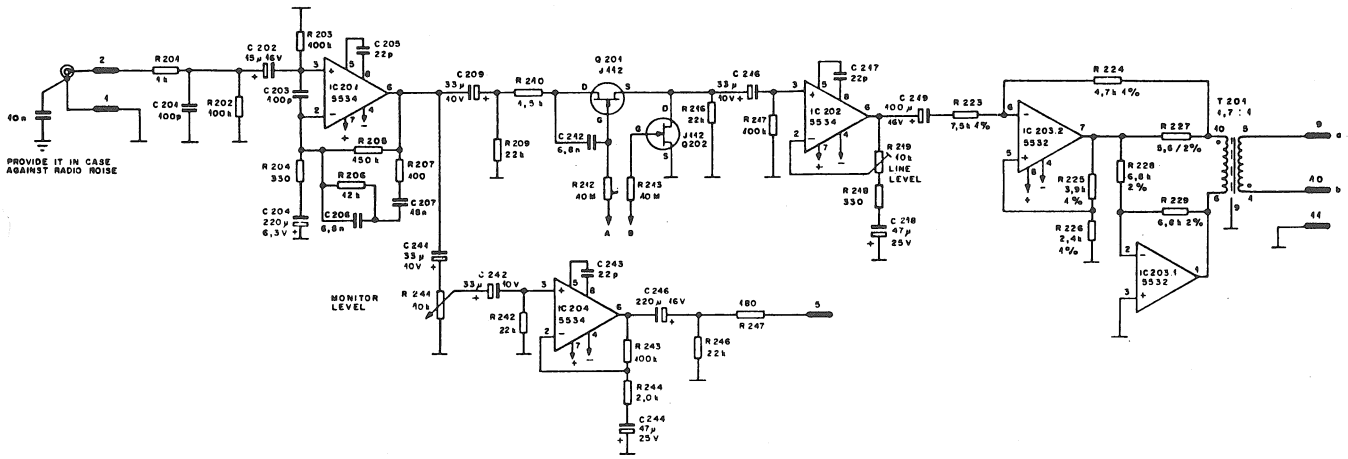
Dimensions

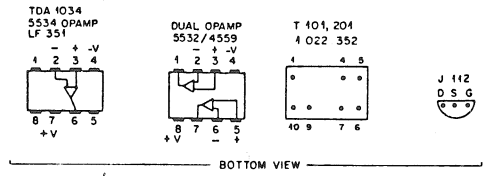
EURO-card:	100 x 160 mm 7 M units wide
Weight:	320 g/11 ozs. approx.











DATE	5. 12. 83					
SIGN.						
REGENSDORF ZURICH	2 CH PHONO EQUALIZER / AMP. WITH FADERSTART AND MONITOR					SC 1.915.305

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	C A	59.22.4224	220 µ	-20% 16V EL	
	2	59.22.4224	220 µ	-20% 16V EL	
	3	59.32.3103	10 n	40V CER	
	4	59.32.3103	10 n	40V CER	
	6	59.26.5229	2,2 µ	20% 25V SAL	
	..01	59.34.4101	100 p	5% 63V CER	
	..02	59.26.2150	15 µ	20% 16V SAL	
	..03	59.34.4101	100 p	5% 63V CER	
	..04	59.22.2224	220 µ	-20% 6,3V EL	
	..05	59.34.2220	22 p	5% 63V CER	
	..06	59.11.3682	6,8 n	5% 160V PC	
	..07	59.12.4183	18 n	5% 250V MPETP	
	..09	59.26.1330	33 µ	20% 10V SAL	
	..12	59.06.0682	6,8 n	10% 63V PETP	
	..16	59.26.1330	33 µ	20% 10V SAL	
	..17	59.34.2220	22 p	5% 63V CER	
	..18	59.22.5470	47 µ	-20% 25V EL	
	..19	59.22.4101	100 µ	-20% 16V EL	
	..81	59.26.1330	33 µ	20% 10V SAL	
	..42	59.26.1330	33 µ	20% 10V SAL	
	..43	59.34.2220	22 p	5% 63V CER	
	..44	59.22.5470	47 µ	-20% 25V EL	
	C..46	59.22.4224	220 µ	-20% 16V EL	

IND	DATE	NAME
④		
③		
②		
①		
○	31.8.84	α

CER CERAMIC SAL SOLID ALUMINUM
EL ELECTROLYTIC
MPETP POLYESTER
PC POLYCARBONATE
PETP POLYESTER

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	R 12	58.01.8202	2 K	TRIM-POT.	
	13	57.11.4106	1 M		
	15	57.11.4104	100 K		
	16	57.11.4104	100 K		
	17	57.11.4104	100 K		
	19	57.11.4104	100 K		
	..01	57.11.4102	1 K		
	..02	57.11.4104	100 K		
	..03	57.11.4104	100 K		
	..04	57.11.4331	330		
	..05	57.11.4154	150 K		
	..06	57.11.4123	12 K		
	..07	57.11.4101	100		
	..09	57.11.4223	22 K		
	..10	57.11.4152	1,5 K		
	..12	57.11.5106	10 M	5%	
	..13	57.11.5106	10 M	5%	
	..16	57.11.4223	22 K		
	..17	57.11.4104	100 K		
	..18	57.11.4331	330		
	..19	58.01.9103	10 K	TRIM-POT.	
	..23	57.11.3752	7,5 K	1%	
	R..24	57.11.3472	4,7 K	1%	

IND	DATE	NAME
④		
③		
②		
①		
○	31.8.84	α

RESISTORS METALFILM

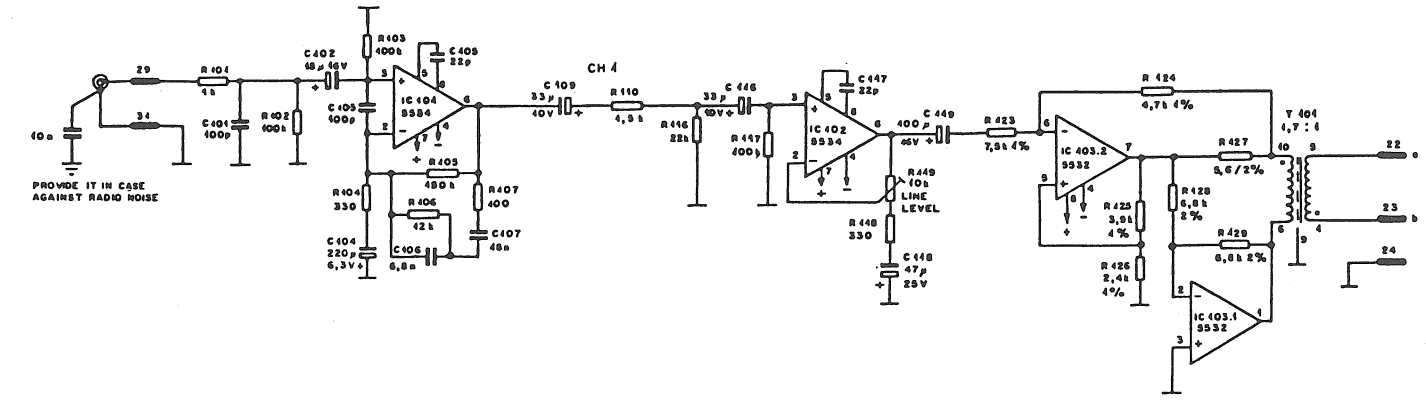
IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	D A	50.04.0125	1N 4448		
	2	50.04.0125	1N 4448		
	D 3	50.04.0125	1N 4448		
	IC A	50.09.0107	RC 4559 NB	UPC 4559 DUAL OP AMP	RA, NE
	..01	50.05.0244	NE 5534 AN	5534 ANB OP AMP	SIG, RA
	..02	50.05.0244	NE 5534 AN	5534 ANB OP AMP	SIG, RA
	..03	50.09.0105	NE 5532 N	XR..N, RC...NB DUAL OP AMP	SIG, EX
	IC..04	50.05.0244	NE 5534 AN	5534 ANB OP AMP	SIG, RA
	K A	56.02.1001	4u /24V		NAT
	Q..01	1.010.295.50	1N2, MPF 4392	J-N-FET/Q-GESICKT, 50.03.0350 FORM B, A	M
	..02	1.010.295.50	1N2, MPF 4392	J-N-FET/Q-GESICKT, 50.03.0350 FORM B, A	M
	R A	57.99.0209	5,6	} PHILIPS 2322.662.91006	
	2	57.99.0209	5,6		
	8	57.11.4104	100		
	9	57.11.4684	680 K		
	10	57.11.4102	1 K		
	R 11	57.11.4682	6,8 K		

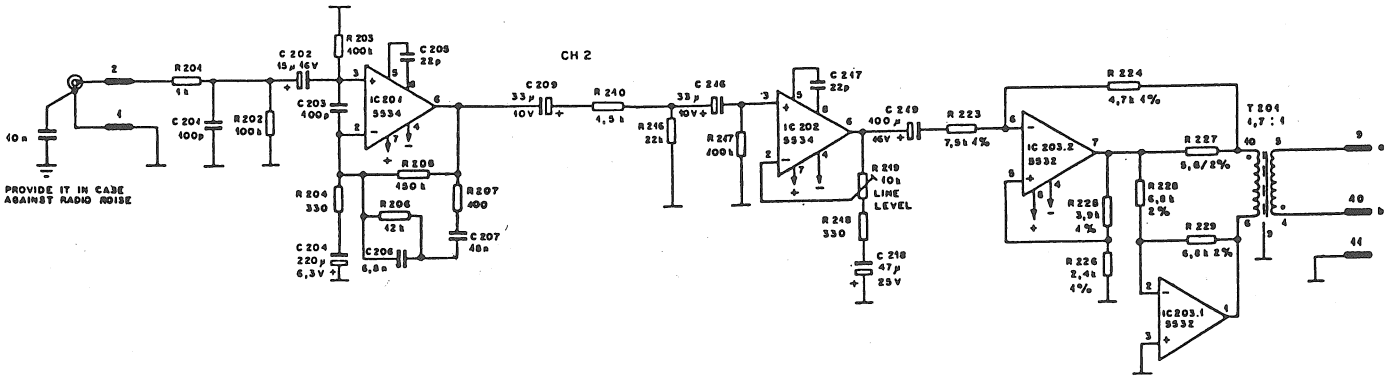
IND	DATE	NAME
④		
③		
②		
①		
○	31.8.84	α

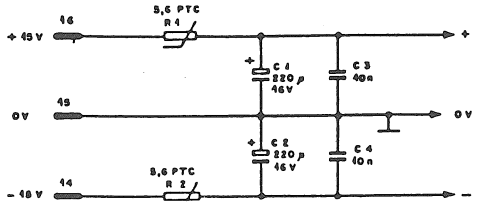
EX EXAR SIG SIGNETICS
M MOTOROLA
NAT NATIONAL
NE NIPPON ELECTRIC (NEC)
RA RAYTHEON

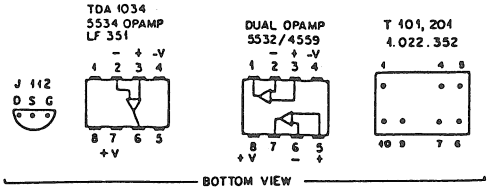
IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	R..25	57.11.3392	3,9 K	1%	
	..26	57.11.3242	2,4 K	1%	
	..27	57.11.4569	5,6		
	..28	57.11.4682	6,8 K		
	..29	57.11.4682	6,8 K		
	..41	58.01.9103	10 K	TRIM-POT.	
	..42	57.11.4223	22 K		
	..43	57.11.4104	100 K		
	..44	57.11.3202	2 K	1%	
	..46	57.11.4223	22 K		
	R..47	57.11.4181	180		
	T..01	1.022.352.00	1,7:1	OUTPUT TRANSFORMER	STUDER
	XIC	53.03.0166	DIL 8P	IC-SOCKET, 8 PIN	

IND	DATE	NAME
④		
③		
②		
①		
○	31.8.84	α









DATE:	5. 12. 83					
SIGN:						
STUDER REGENSDORF ZÜRICH	2 CH PHONO EQUALIZER / AMPLIFIER					SC 1.915.306

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT			MFR
	C 1	59.22.4224	220 µ	-20%	16V	EL	
	2	59.22.4224	220 µ	-20%	16V	EL	
	3	59.32.3103	10 n		40V	CER	
	4	59.32.3103	10 n		40V	CER	
	..01	59.34.4401	100 p	5%	63V	CER	
	..02	59.26.1150	15 µ	20%	16V	SAL	
	..03	59.34.4401	100 p	5%	63V	CER	
	..04	59.22.2224	220 µ	-20%	6,3V	EL	
	..05	59.34.2220	22 p	5%	63V	CER	
	..06	59.11.3682	6,8 n	5%	160V	PC	
	..07	59.12.4183	18 n	5%	250V	MPETP	
	..08	59.26.1330	33 µ	20%	10V	SAL	
	..10	59.26.1330	33 µ	20%	10V	SAL	
	..11	59.34.2220	22 p	5%	63V	CER	
	..12	59.22.5470	47 µ	-20%	25V	EL	
	C..13	59.22.4101	100 µ	-20%	16V	EL	
	IC..01	60.05.0244	NE 5534 AN	5534 ANB		OP AMP	SIG, RA
	..02	60.05.0244	NE 5534 AN	5534 ANB		OP AMP	SIG, RA
	IC..03	60.09.0205	NE 5532 N	XR... N, RC...NB		DUAL OP AMP	SIG, EX

IND	DATE	NAME
④		
③		
②		
①		
○	31.8.84	ok

CER CERAMIC
EL ELECTROLYTIC
MPETP POLYESTER
PC POLYCARBONATE
SAL SOLID ALUMINUM
EX EXAR
RA RAYTHEON
SIG SIGNETICS

STUDER	2CH PHONO EQUALIZER / AMPLIFIER	A.915.306-00	PAGE 1 OF 3

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	XIC	53.03.0166	DIL 8P	IC - SOCKET, 8 PIN	

IND	DATE	NAME
④		
③		
②		
①		
○	31.8.84	ok

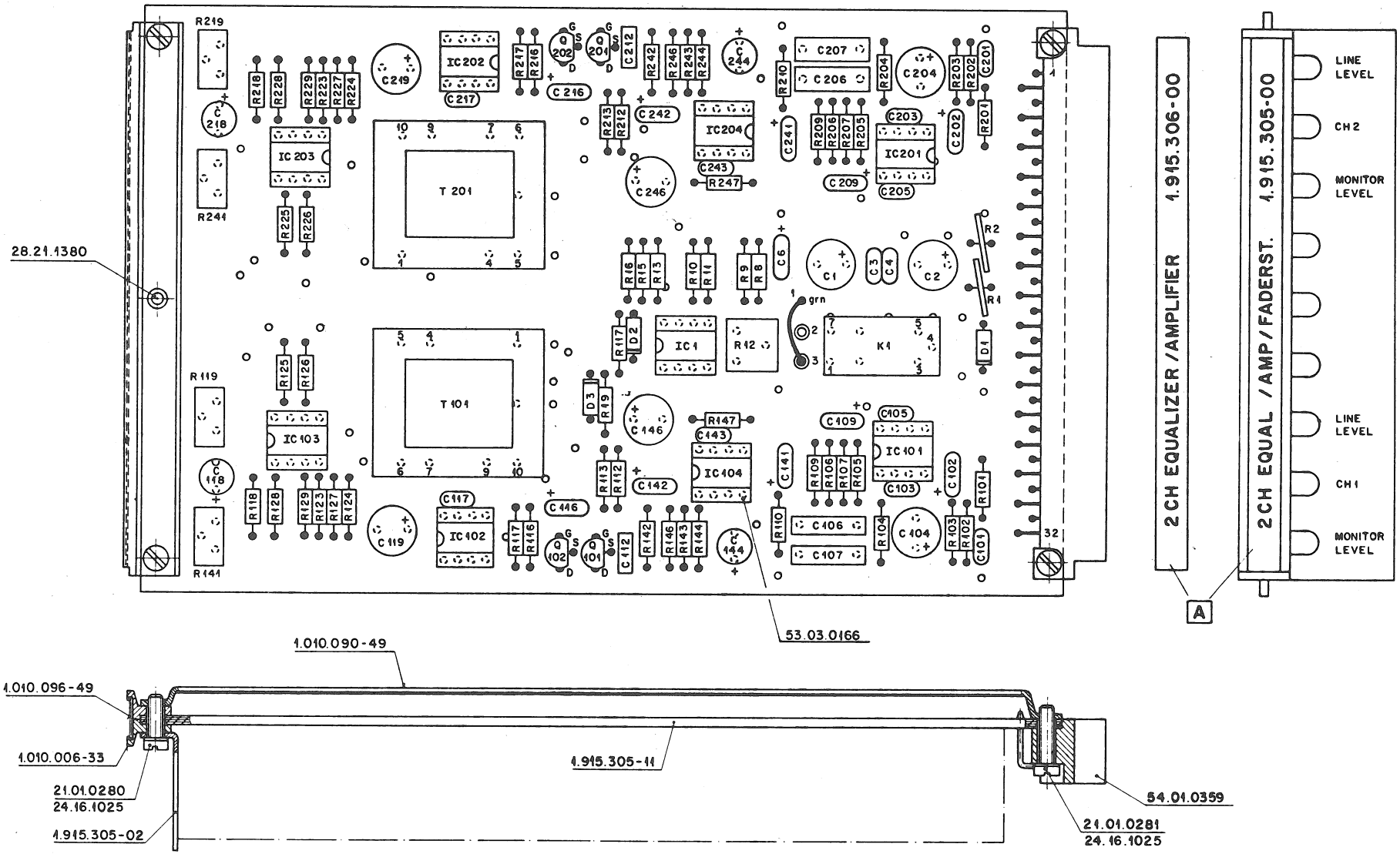
STUDER	2CH PHONO EQUALIZER / AMPLIFIER	A.915.306-00	PAGE 3 OF 3

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	R 1	57.99.0209	5,6	PHILIPS 2322.662.91006	
	2	57.99.0209	5,6		
	..01	57.11.4102	1 K		
	..02	57.11.4104	100 K		
	..03	57.11.4104	100 K		
	..04	57.11.4334	330		
	..05	57.11.4154	150 K		
	..06	57.11.4123	12 K		
	..07	57.11.4104	100		
	..10	57.11.4161	1,5 K		
	..16	57.11.4223	22 K		
	..17	57.11.4104	100 K		
	..18	57.11.4334	330		
	..19	58.01.9103	10 K	TRIM - POT.	
	..23	57.11.3752	7,5 K	1%	
	..24	57.11.3472	4,7 K	1%	
	..25	57.11.3332	3,3 K	1%	
	..26	57.11.3242	2,4 K	1%	
	..27	57.11.4569	5,6		
	..28	57.11.4682	6,8 K		
	R..29	57.11.4682	6,8 K		
	T..01	A.022.352.00	1,7:1	OUTPUT TRANSFORMER	STUDER

IND	DATE	NAME
④		
③		
②		
①		
○	31.8.84	ok

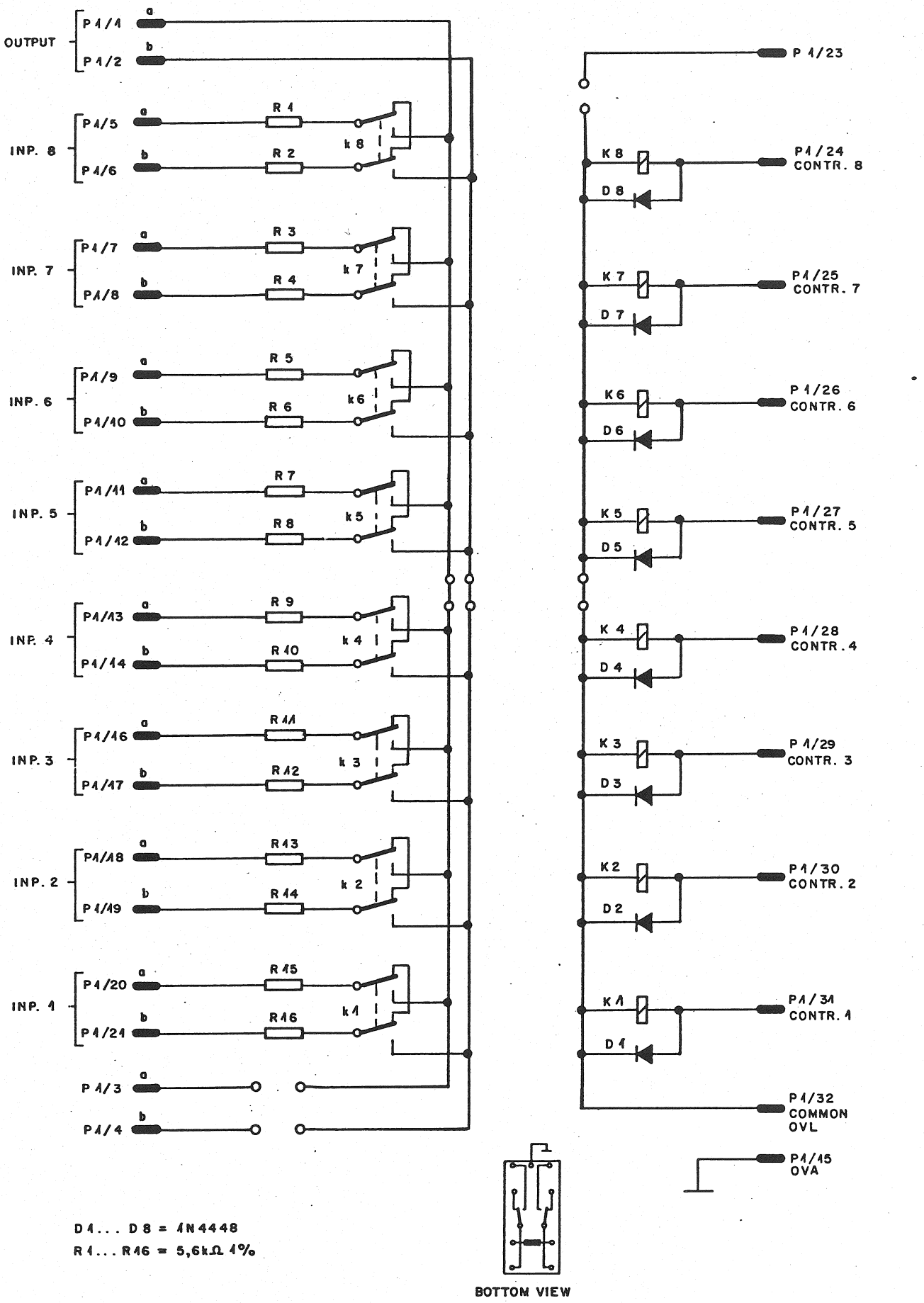
RESISTORS METALFILM

STUDER	2CH PHONO EQUALIZER / AMPLIFIER	A.915.306-00	PAGE 2 OF 3

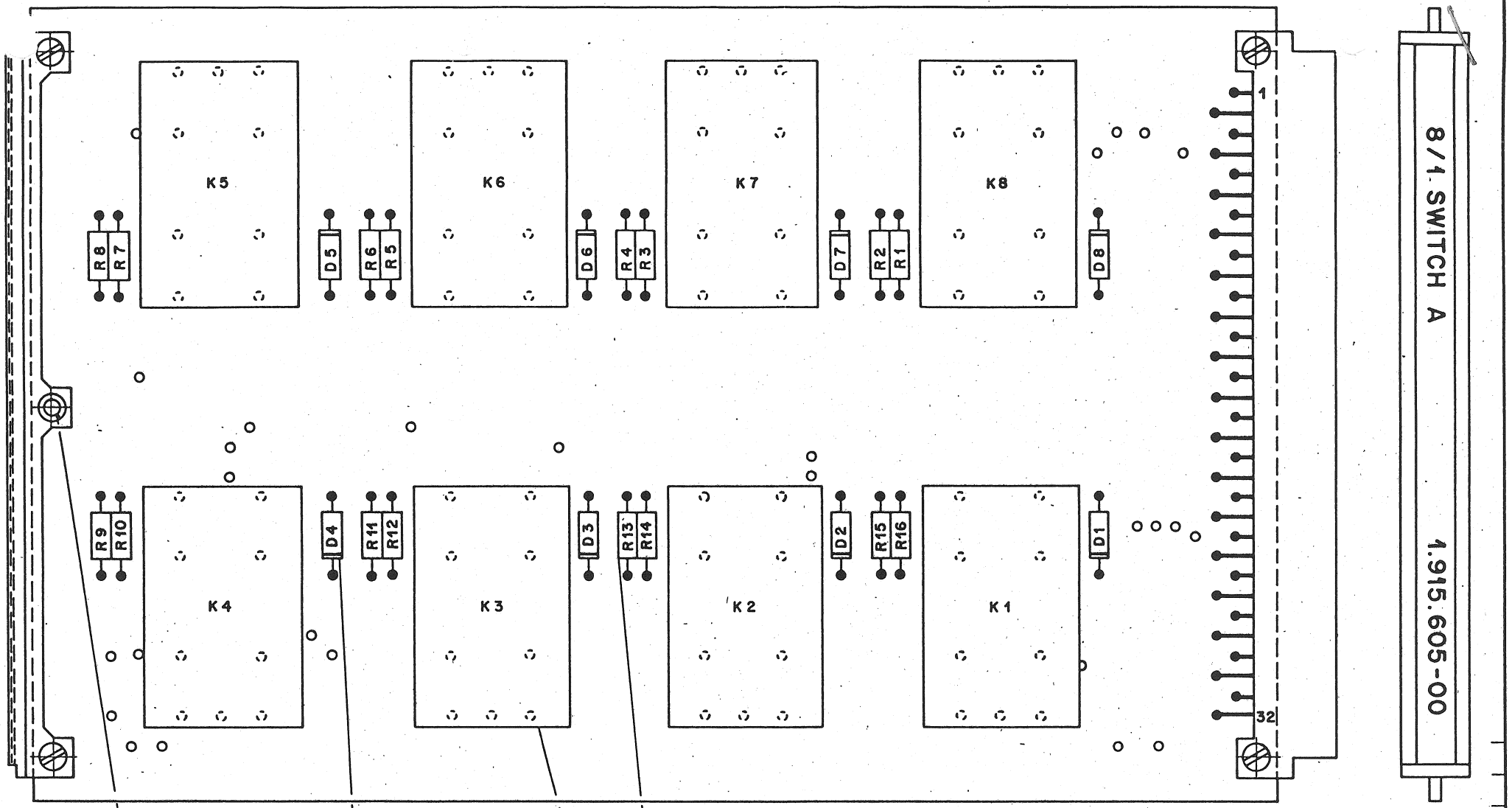


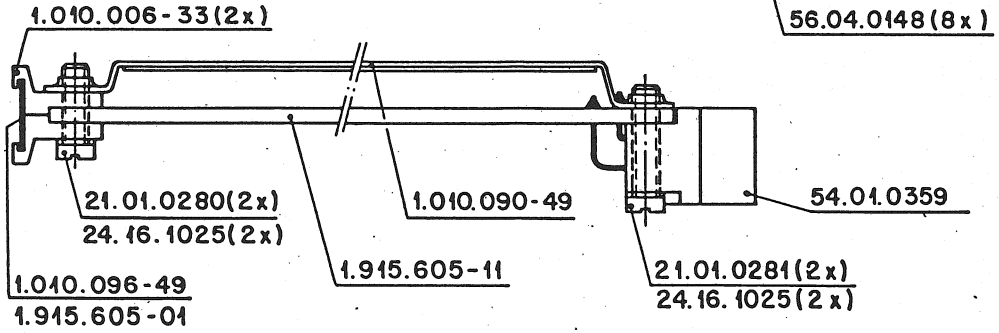
VALID FOR	NR UNIT	NR PL	A
2 CH PHONO EQUAL./ AMP. WITH FADERSTART	1.915.305-00	1.915.305-00	1.915.305-01
2 CH PHONO EQUAL./ AMPLIFIER	1.915.306-00	1.915.306-00	1.915.306-01

Werkstoff: Norm-Nr. / DIN-Bez. / Abmessung	Oberfläche: Gute / Beh		Änderung: 3 / 2 / 1
Zugehörige Unterlagen	Freimasstoldranz:	Maßstab: 2:1	Ausgabe: 3.11.83 A.Ho bdi 0 (Datum, Gez, Gepr, Ges, Index)
Ersatz für:	Ersetzt durch		Kopie für
STUDER REGENSDORF ZÜRICH	Benennung: 2CH Phono Equalizer/ Amplifier / Faderstart		Numm.-nr: 1.915.305.00 1.915.306.00



⓪ 28.1.86	① 14.1.87			
STUDER REGENSDORF ZÜRICH	MONITOR RELAYS 8/1 SWITCH.			SC 1.915.605



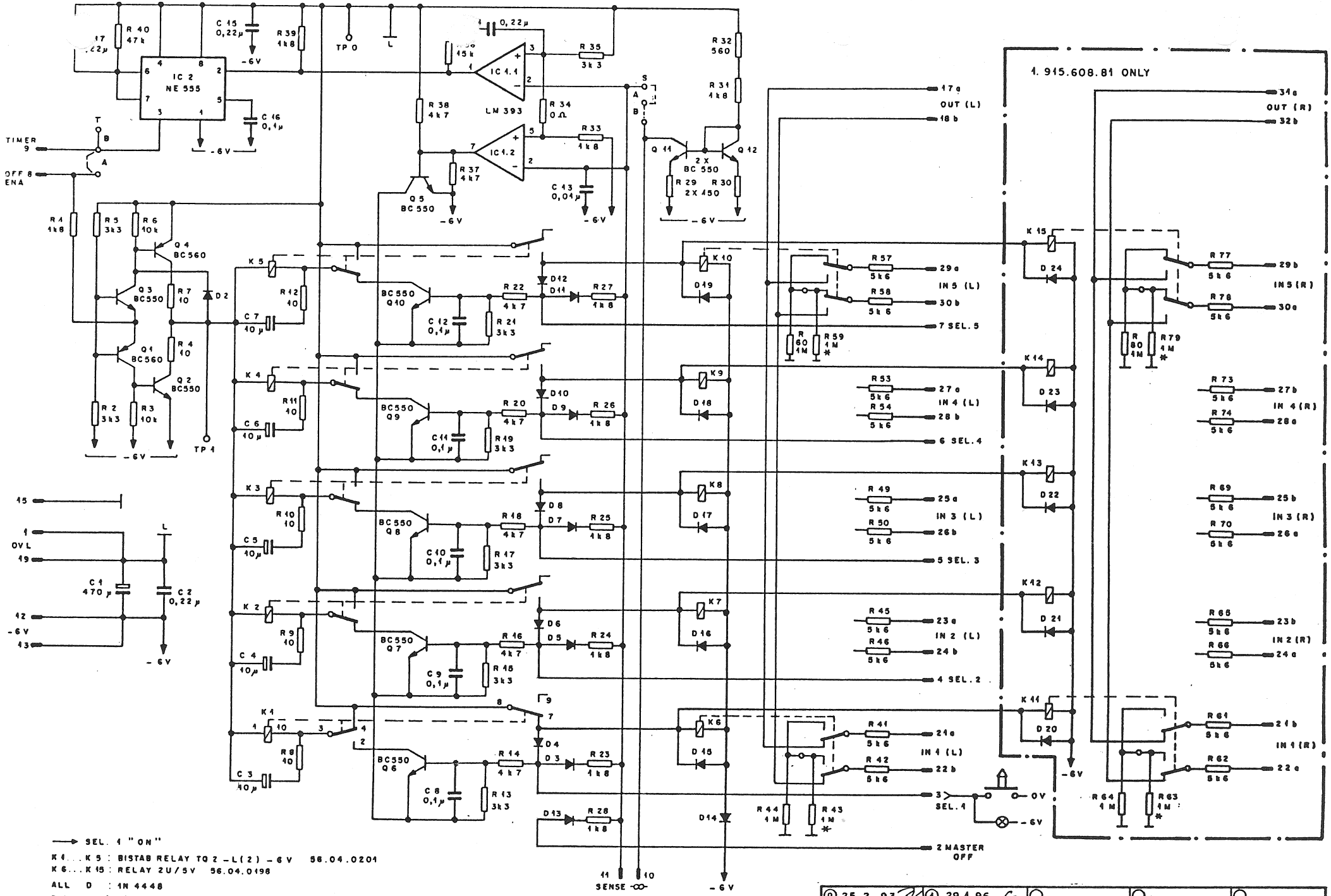


Werkstoff	Norm-Nr.:	Oberfläche	Güte:	Änderung	③
	DIN-Bez.:		Beh.:		②
	Abmessung:				①
Zugehörige Unterlagen:		Freimasstoleranz: ±	Maßstab: 2:1	Ausgabe / Datum	5.3.86 / A.Ho / Gez. / Gepr. / Ges. / ⓪ / Index
Ersatz für:		Ersetzt durch:		Kopie für:	

STUDER REGENSDORF ZÜRICH

Benennung: 8/1 SWITCH A

Nummer: 1.915.605-00



→ SEL. 1 "ON"

K 1 ... K 5 : BISTAB RELAY TO 2 - L(2) - 6 V 56.04.0201

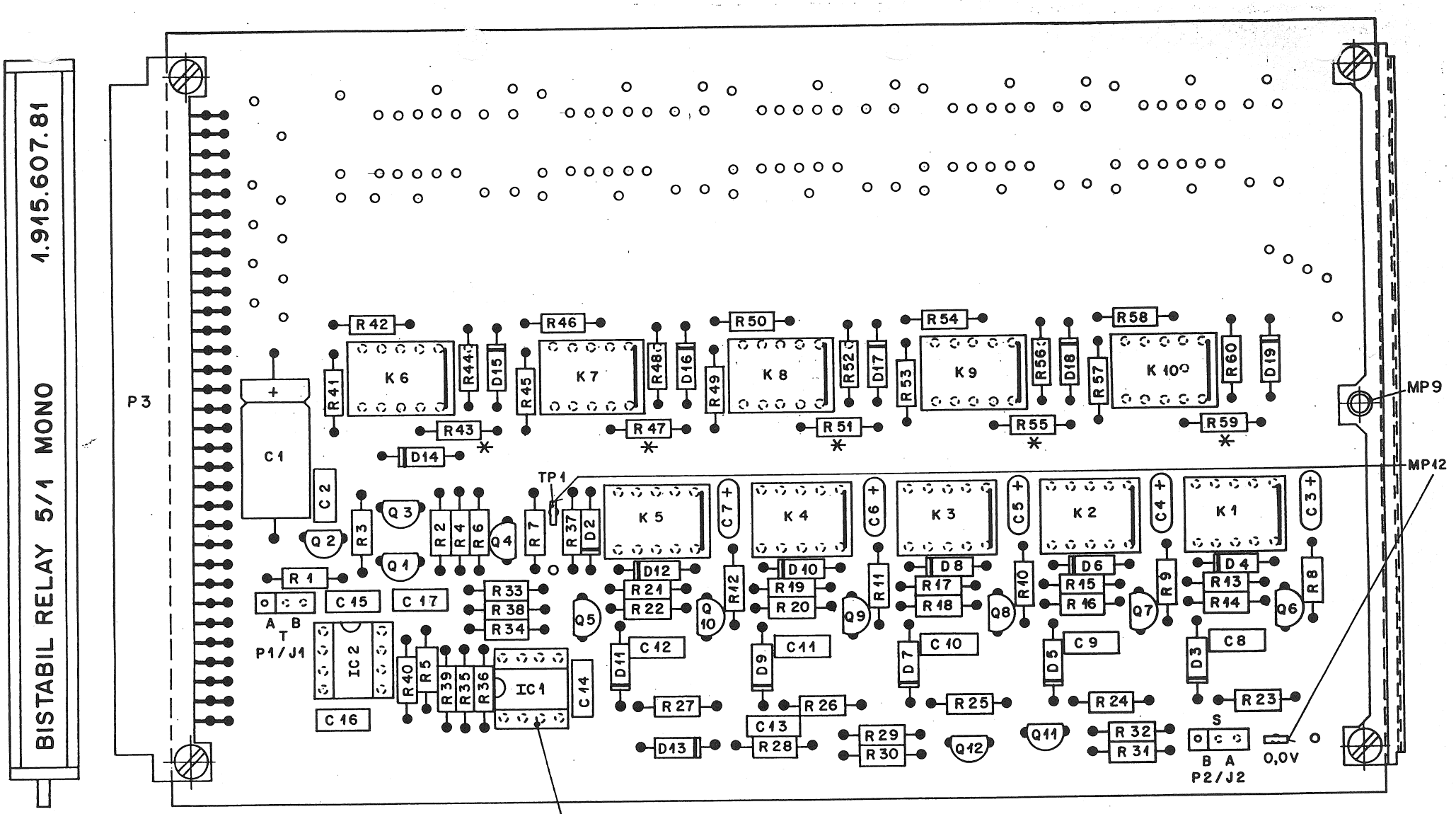
K 6 ... K 15 : RELAY 2U/5V 56.04.0198

ALL D : 1N 4448

D 4, 6, 8, 10, 12 : BAT 85

* OPTION

⓪ 25.2.93	④ 29.1.96				
STUDER REGENSDORF ZURICH	BISTABIL REL. UNIT 5/1 MONO	SC 1.915.607.81
	BISTABIL REL. UNIT 5/1 STEREO	SC 1.915.608.81



Schild MP 11 aufgeklebt nach Produktionsmuster

* Option

Änderung							3
							2
							1
Ausg	14.8.96	2	Vk	Sk			0
	Datum	Gez.	Gepr.	Ges.			Index

Zugehörige Unterlagen: PL	Freimasstoleranz: ±	Maßstab: 2:1
Ersatz für:	Ersetzt durch:	Kopie für:
STUDER REGENSDORF ZÜRICH	BISTABIL REL. 5/1 MONO ESE	1.915.607.81

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.25.2471		470u	C-EL, 20%, 10V
0	C 2	59.40.0224			C .22 U , 10%, 63V , PETP
0	C 3	59.42.5100			C 10 U , 20%, 25V , SAL
0	C 4	59.42.5100			C 10 U , 20%, 25V , SAL
0	C 5	59.42.5100			C 10 U , 20%, 25V , SAL
0	C 6	59.42.5100			C 10 U , 20%, 25V , SAL
0	C 7	59.42.5100			C 10 U , 20%, 25V , SAL
0	C 8	59.40.0104			C .1 U , 10%, 63V , PETP
0	C 9	59.40.0104			C .1 U , 10%, 63V , PETP
0	C 10	59.40.0104			C .1 U , 10%, 63V , PETP
0	C 11	59.40.0104			C .1 U , 10%, 63V , PETP
0	C 12	59.40.0104			C .1 U , 10%, 63V , PETP
0	C 13	59.06.0103		10n	PETP, 63V, 10%, RM5
0	C 14	59.40.0224			C .22 U , 10%, 63V , PETP
0	C 15	59.40.0224			C .22 U , 10%, 63V , PETP
0	C 16	59.40.0104			C .1 U , 10%, 63V , PETP
0	C 17	59.40.0224			C .22 U , 10%, 63V , PETP
0	D 2	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 3	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 4	50.04.0127		BAT85	200mA, Schottky
0	D 5	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 6	50.04.0127		BAT85	200mA, Schottky
0	D 7	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 8	50.04.0127		BAT85	200mA, Schottky
0	D 9	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 10	50.04.0127		BAT85	200mA, Schottky
0	D 11	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 12	50.04.0127		BAT85	200mA, Schottky
0	D 13	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 14	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 15	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 16	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 17	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 18	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 19	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	IC 1	50.05.0283		LM393	Dual Comparator
0	IC 2	50.05.0158		LM555	IC LM 555 CN
0	J 1	54.11.0126	3 pcs	1p	P STIFT,11.3 MM 1 PIN=1 STK.
0	J 2	54.11.0126	3 pcs	1p	P STIFT,11.3 MM 1 PIN=1 STK.
0	K 1	56.04.0201		2u	6V, 125V/2A, Ag/Au, bistable
0	K 2	56.04.0201		2u	6V, 125V/2A, Ag/Au, bistable
0	K 3	56.04.0201		2u	6V, 125V/2A, Ag/Au, bistable
0	K 4	56.04.0201		2u	6V, 125V/2A, Ag/Au, bistable

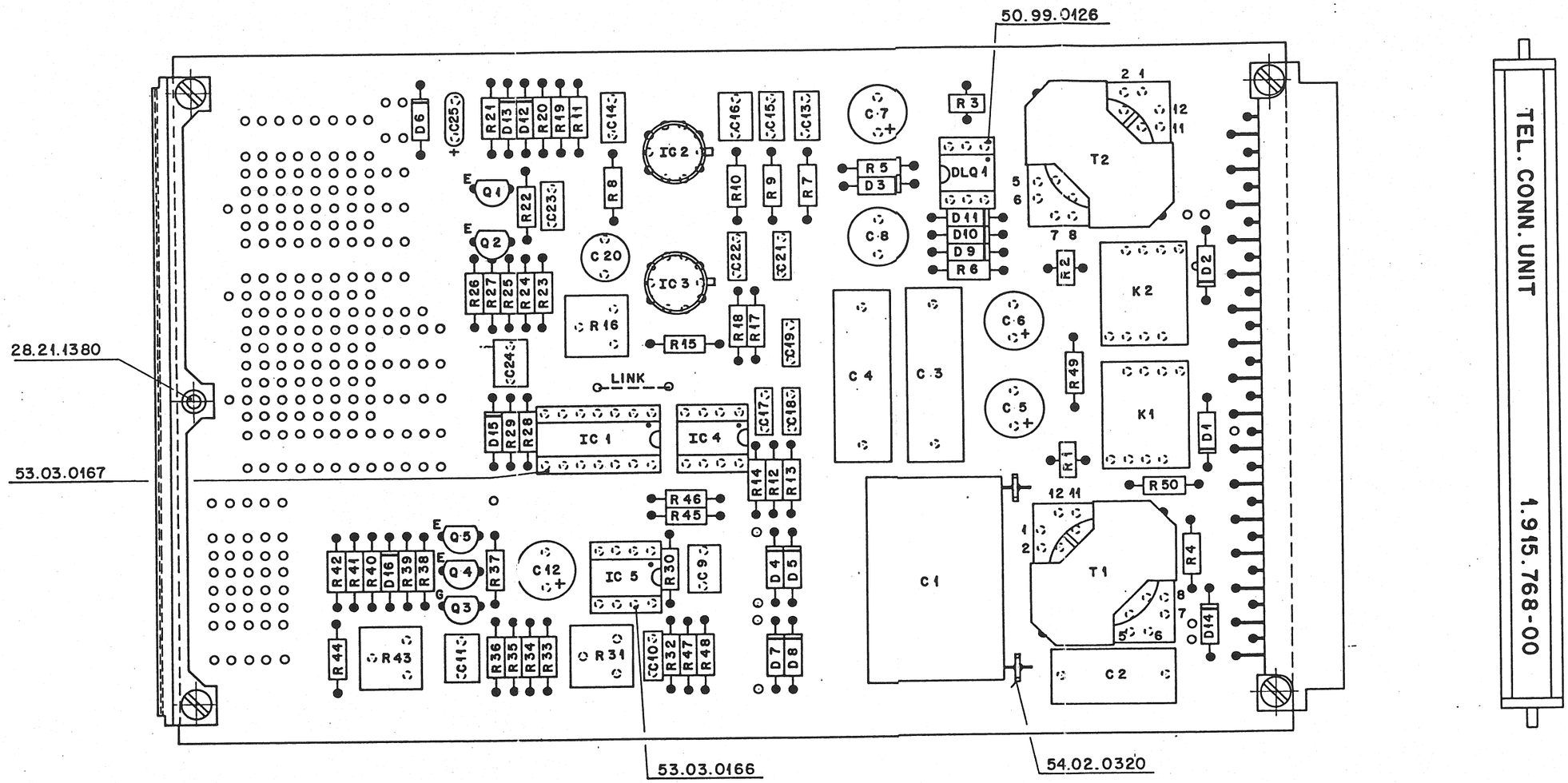
Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	K 5	56.04.0201		2u	6V, 125V/2A, Ag/Au, bistable
0	K 6	56.04.0198		2u	5V, 125V/2A, AG/AU
0	K 7	56.04.0198		2u	5V, 125V/2A, AG/AU
0	K 8	56.04.0198		2u	5V, 125V/2A, AG/AU
0	K 9	56.04.0198		2u	5V, 125V/2A, AG/AU
0	K 10	56.04.0198		2u	5V, 125V/2A, AG/AU
0	MP 1	1.915.607.13	1 pce		BISTABIL RELAY PCB
0	MP 2	1.010.090.49	1 pce	Screen	ABSCHIRMUNG KOMPLETT
0	MP 3	1.010.096.49	1 pce	-	KLARSICHTSCHILD
0	MP 4	1.915.607.01	0 pce		BEZ.STREIFEN 6,3 * 91
0	MP 5	1.010.006.33	2 pcs	Handle	GRIFFHAELFTE
0	MP 6	21.01.0281	2 pcs		Z - SCHR. , ZN , M2.5 * 10
0	MP 7	21.01.0280	2 pcs		Z - SCHR. , ZN , M2.5 * 8
0	MP 8	24.16.1025	4 pcs		RIPPENSCHEIBE D 2.7/ 5
0	MP 9	28.21.1380	1 pce		ROHRNIETE, D2.25* 6.5
0	MP 10	53.03.0166	2 pcs	8p	DIL 0.3", löt, gerade
0	MP 11	43.01.0108	1 pce	Label	ESE-WARNSCHILD
0	MP 12	54.02.0320	2 pcs	1p	Flatpin, 2.8*0.8mm
0	P 1	54.11.0128		Jumper	J BRUECKE 2 * .63
0	P 2	54.11.0128		Jumper	J BRUECKE 2 * .63
0	P 3	54.01.0359		32-P	P EU-B 2 * 16
0	Q 1	50.43.0601			Q BC 560 C ,A
0	Q 2	50.43.0407			Q BC 550 C,
0	Q 3	50.43.0407			Q BC 550 C,
0	Q 4	50.43.0601			Q BC 560 C ,A
0	Q 5	50.43.0407			Q BC 550 C,
0	Q 6	50.43.0407			Q BC 550 C,
0	Q 7	50.43.0407			Q BC 550 C,
0	Q 8	50.43.0407			Q BC 550 C,
0	Q 9	50.43.0407			Q BC 550 C,
0	Q 10	50.43.0407			Q BC 550 C,
0	Q 11	50.43.0407			Q BC 550 C,
0	Q 12	50.43.0407			Q BC 550 C,
0	R 1	57.11.3182		1k8	MF, 1%, 0207
0	R 2	57.11.3332		3k3	MF, 1%, 0207
0	R 3	57.11.3103		10k	MF, 1%, 0207
0	R 4	57.11.3100		10R	MF, 1%, 0207
0	R 5	57.11.3332		3k3	MF, 1%, 0207
0	R 6	57.11.3103		10k	MF, 1%, 0207
0	R 7	57.11.3100		10R	MF, 1%, 0207
0	R 8	57.11.3100		10R	MF, 1%, 0207
0	R 9	57.11.3100		10R	MF, 1%, 0207
0	R 10	57.11.3100		10R	MF, 1%, 0207

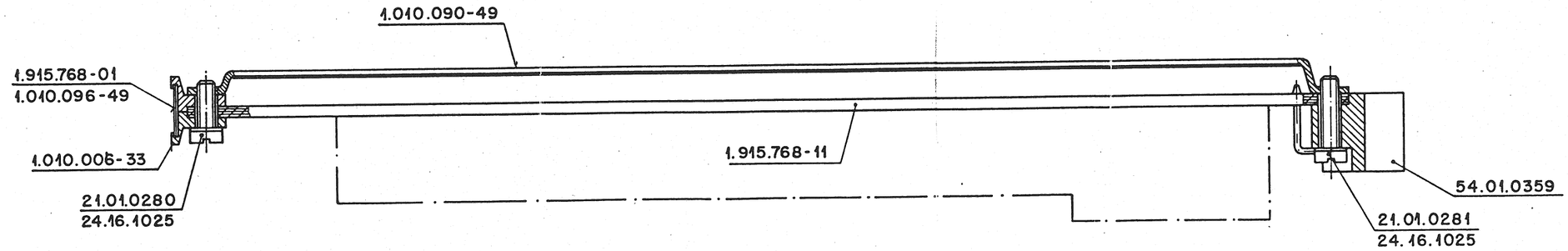
Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 11	57.11.3100		10R	MF, 1%, 0207
0	R 12	57.11.3100		10R	MF, 1%, 0207
0	R 13	57.11.3332		3k3	MF, 1%, 0207
0	R 14	57.11.3472		4k7	MF, 1%, 0207
0	R 15	57.11.3332		3k3	MF, 1%, 0207
0	R 16	57.11.3472		4k7	MF, 1%, 0207
0	R 17	57.11.3332		3k3	MF, 1%, 0207
0	R 18	57.11.3472		4k7	MF, 1%, 0207
0	R 19	57.11.3332		3k3	MF, 1%, 0207
0	R 20	57.11.3472		4k7	MF, 1%, 0207
0	R 21	57.11.3332		3k3	MF, 1%, 0207
0	R 22	57.11.3472		4k7	MF, 1%, 0207
0	R 23	57.11.3182		1k8	MF, 1%, 0207
0	R 24	57.11.3182		1k8	MF, 1%, 0207
0	R 25	57.11.3182		1k8	MF, 1%, 0207
0	R 26	57.11.3182		1k8	MF, 1%, 0207
0	R 27	57.11.3182		1k8	MF, 1%, 0207
0	R 28	57.11.3182		1k8	MF, 1%, 0207
0	R 29	57.11.3151		150R	MF, 1%, 0207
0	R 30	57.11.3151		150R	MF, 1%, 0207
0	R 31	57.11.3182		1k8	MF, 1%, 0207
0	R 32	57.11.3561		560R	MF, 1%, 0207
0	R 33	57.11.3182		1k8	MF, 1%, 0207
0	R 34	57.11.3000		0R0	MF, 0207
0	R 35	57.11.3332		3k3	MF, 1%, 0207
0	R 36	57.11.3153		15k	MF, 1%, 0207
0	R 37	57.11.3472		4k7	MF, 1%, 0207
0	R 38	57.11.3472		4k7	MF, 1%, 0207
0	R 39	57.11.3182		1k8	MF, 1%, 0207
0	R 40	57.11.3473		47k	MF, 1%, 0207
0	R 41	57.11.3562		5k6	MF, 1%, 0207
0	R 42	57.11.3562		5k6	MF, 1%, 0207
0	R 43	not used		1M0	MF, 1%, 0207
0	R 44	57.11.3105		1M0	MF, 1%, 0207
0	R 45	57.11.3562		5k6	MF, 1%, 0207
0	R 46	57.11.3562		5k6	MF, 1%, 0207
0	R 47	not used		1M0	MF, 1%, 0207
0	R 48	57.11.3105		1M0	MF, 1%, 0207
0	R 49	57.11.3562		5k6	MF, 1%, 0207
0	R 50	57.11.3562		5k6	MF, 1%, 0207
0	R 51	not used		1M0	MF, 1%, 0207
0	R 52	57.11.3105		1M0	MF, 1%, 0207
0	R 53	57.11.3562		5k6	MF, 1%, 0207
0	R 54	57.11.3562		5k6	MF, 1%, 0207
0	R 55	not used		1M0	MF, 1%, 0207
0	R 56	57.11.3105		1M0	MF, 1%, 0207
0	R 57	57.11.3562		5k6	MF, 1%, 0207

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 58	57.11.3562		5k6	MF, 1%, 0207
0	R 59	not used		1M0	MF, 1%, 0207
0	R 60	57.11.3105		1M0	MF, 1%, 0207

End of List

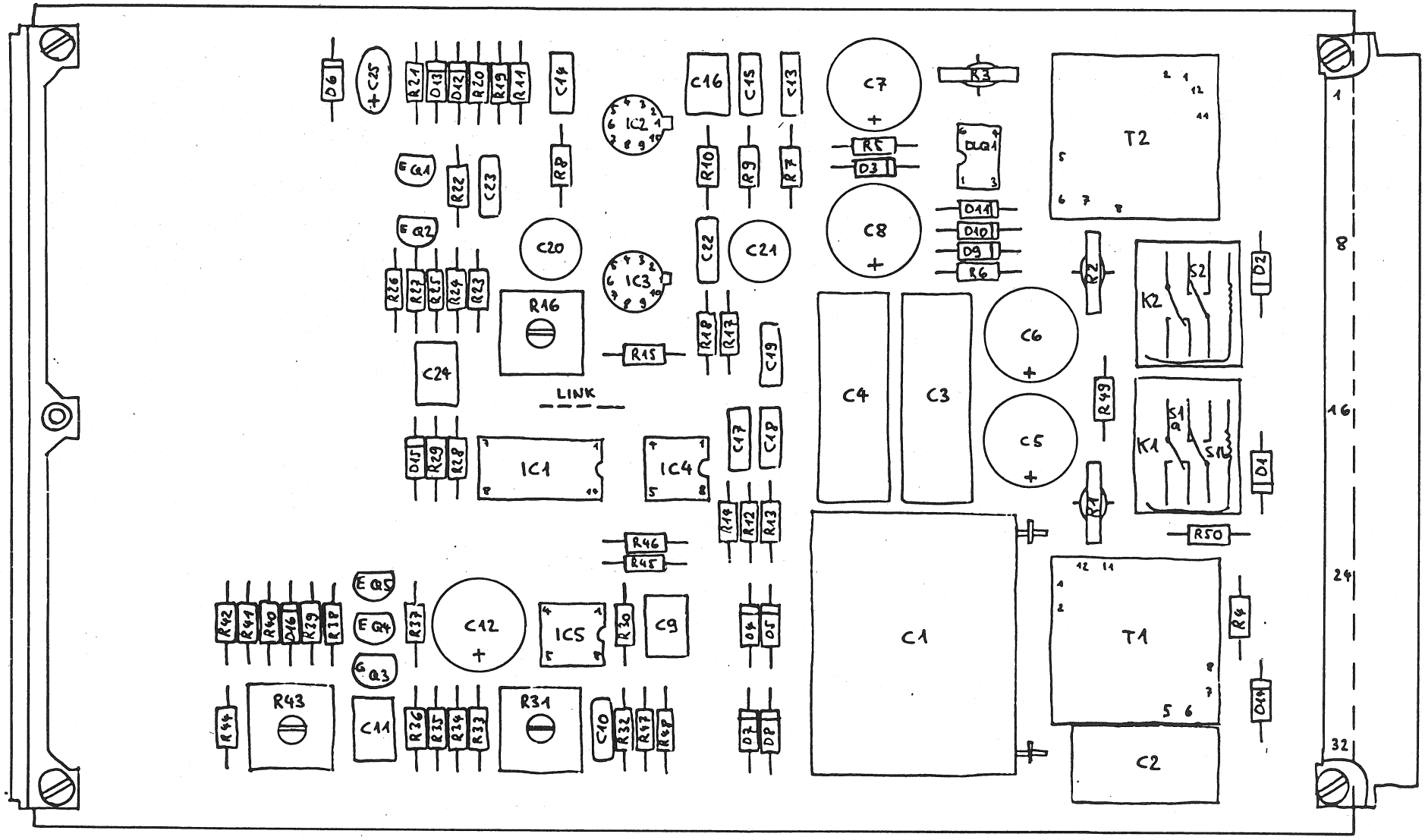
Comments:





TEL. CONN. UNIT 1.915.768-00

Werkstoff: Norm-Nr.: / DIN-Bez.: / Abmessung:	Oberfläche: Güte: / Beh.:		Änderung: 4.4.84 A.Ho	③ ② ①
Zugehörige Unterlagen: PL	Freimasstoleranz:	Maßstab: 2:1	Ausgabe: 26.8.83 A.Ho	⓪
Ersatz für:	Ersetzt durch:		Kopie für: Studebeli	
STUDER REGENSDORF ZÜRICH	Benennung: Tel. Connection Unit		13. APR 1984 Nummer: 1.915.768-00	

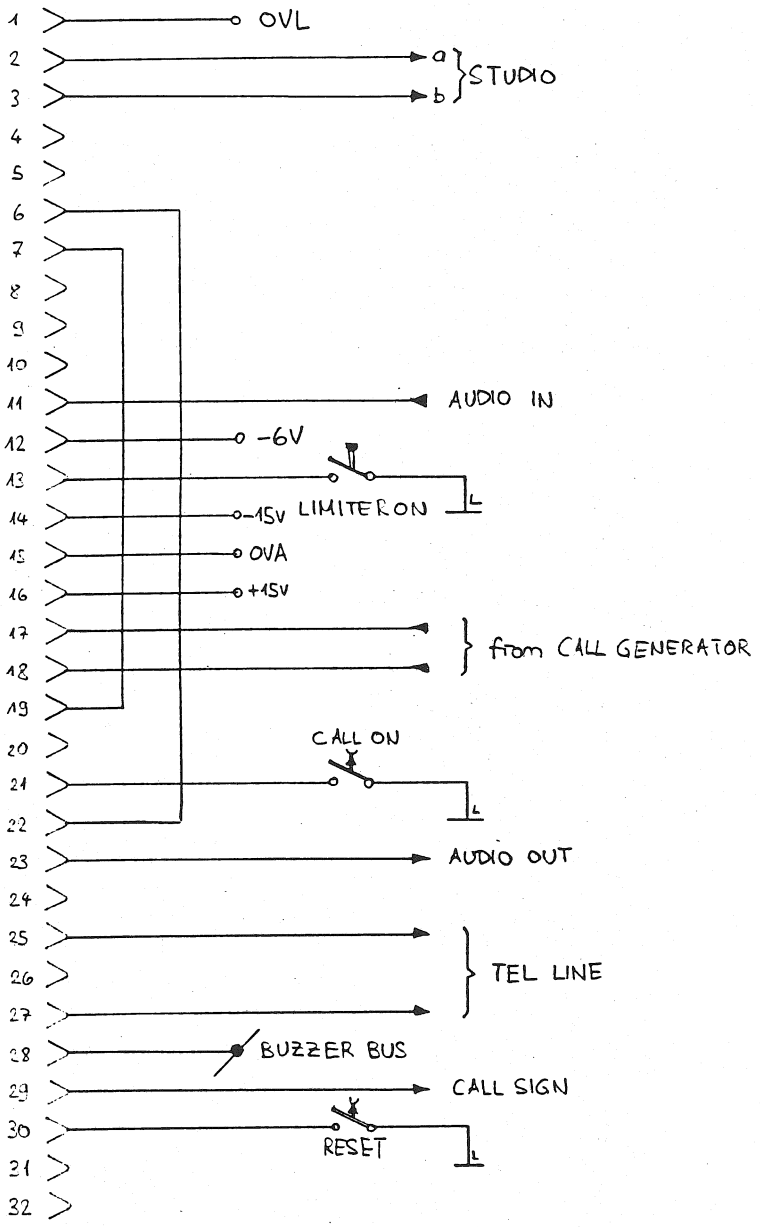


TEL CONNECTION UNIT 1.915.768.00

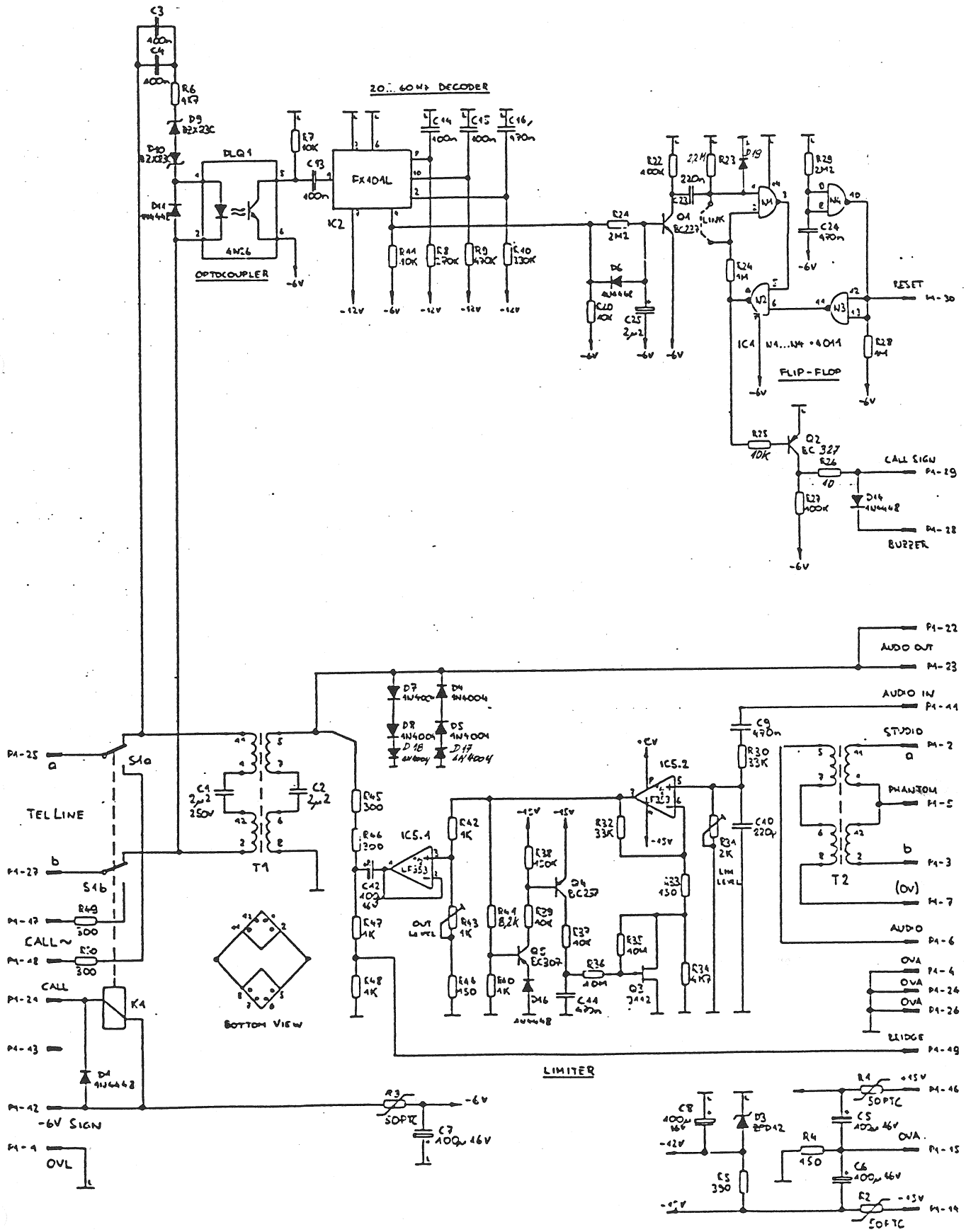
BESTÜCKUNGSPLAN

Nr	Name	Bemerkung
1	OVL	
2	STUDIO a	
3	STUDIO b	
4	OVA	
5	STUDIO PHANTOM	
6	STUDIO AUDIO	
7	STUDIO (OV)	
8		NC
9		NC
10		NC
11	AUDIO	
12	-6V	
13	LIMITER ON	
14	-15V	
15	OV	
16	+15V	
17	CALL	
18	CALL	
19	BRIDGE	
20		NC
21	CALL ON	
22	AUDIO	
23	AUDIO	
24	OVA	
25	TEL LINE a	
26	OVA	
27	TEL LINE b	
28	BUZZER BUS	
29	CALL SIGN	
30	RESET	
31		NC
32		NC

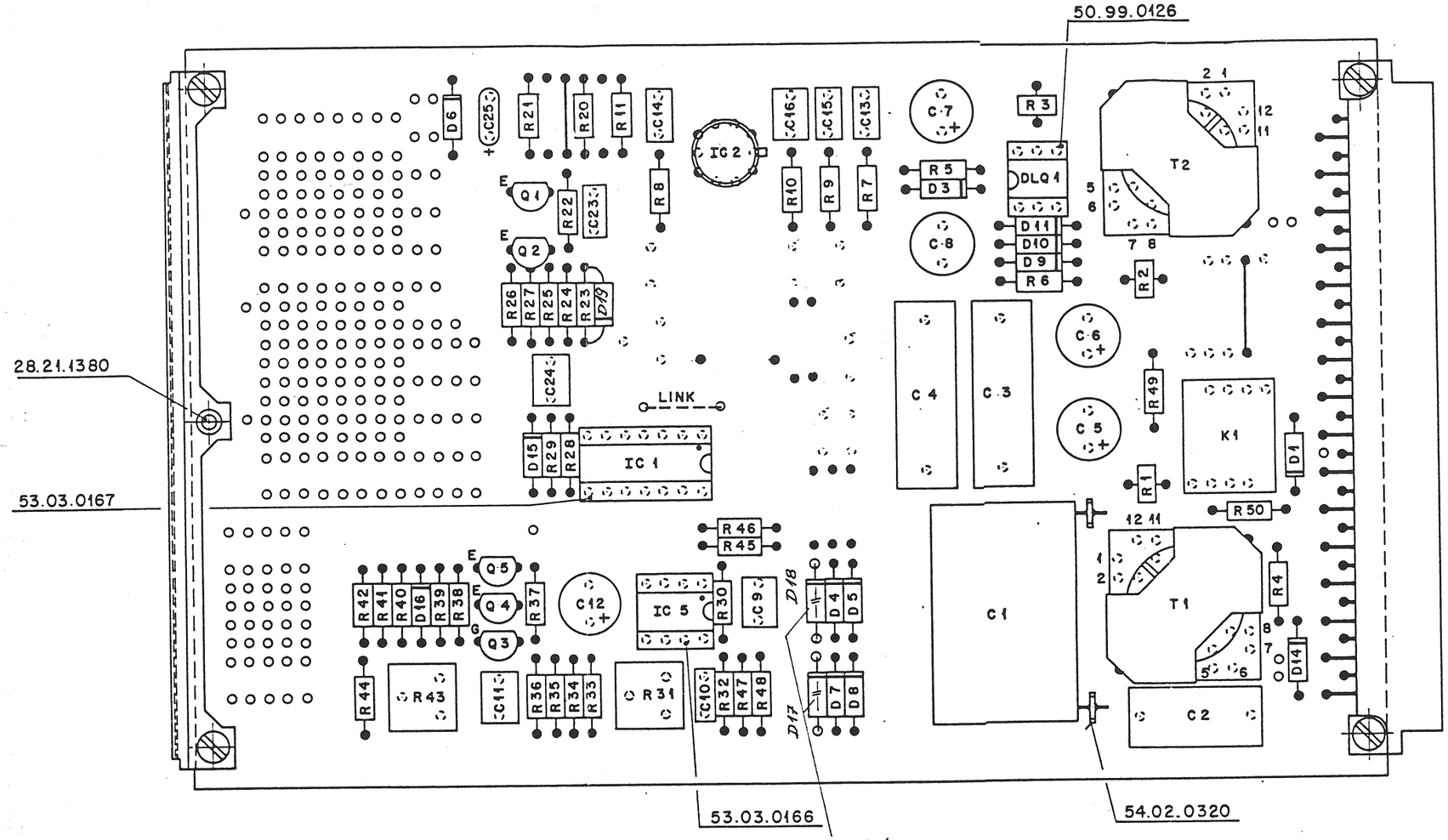
	2. FEB. 83	W. Markl	Steckerbelegung		
STUDER	TEL. CONNECTION UNIT			1.915.768.00	PAGE OF

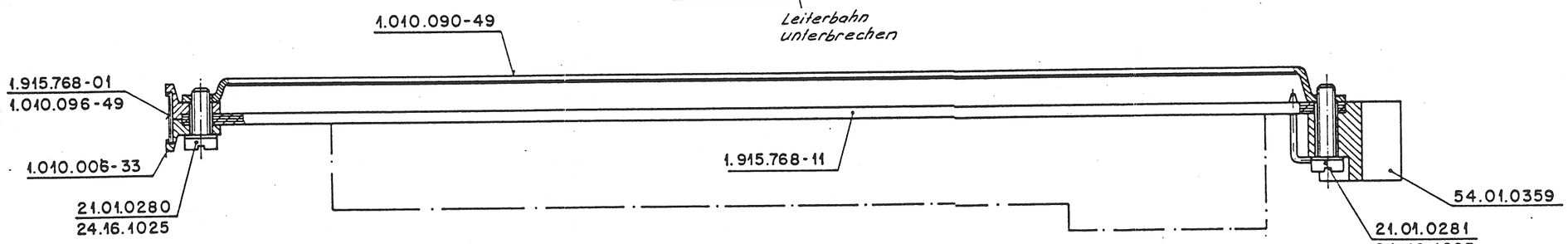


	7 April 83	W. Markl	CONNECTION DIAGRAM		
STUDER		TEL. CONNECTION UNIT		1.915.768.00	PAGE OF



	11. März 83	W. Morkl	14.11.86		
STUDER	TEL CONNECTION UNIT			1.915.768/22	PAGE OF





TEL. CONN. UNIT 1.915.768/22

Werkstoff: Norm-Nr.: / DIN-Bez.: / Abmessung:	Oberfläche: Güte: / Beh.:		Änderung	23.7.87	Hä			③
				4.4.84	A.Ho	Vr	Vr	② ①
Zugehörige Unterlagen: PL	Freimasstoleranz: +	Maßstab: 2:1	Ausgabe	26.8.83	A.Ho	Vr	Qe	⓪
				Datum	Gez.	Gepr.	Ges.	Index
Ersatz für:	Ersetzt durch:		Kopie für:					
STUDER REGENSDORF ZÜRICH	Benennung: Tel. Connection Unit		Nummer: 1.915.768/22					

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	C 1	59.12.4225	2,2 µ	250 V MPETP	
	2	59.05.1125	2,2 µ	MPC	
	3	59.99.0453	100 n	250 V PME	
	4	59.99.0453	100 n	250 V PME	
	5	59.22.4101	100 µ	16 V EL	
	6	59.22.4101	100 µ	16 V EL	
	7	59.22.4101	100 µ	16 V EL	
	8	59.22.4101	100 µ	16 V EL	
	9	59.06.0474	470 n	PETP	
	10	59.34.4221	220 p	KER	
	11	59.06.0474	470 n	PETP	
	12	59.22.4101	100 µ	16 V EL	
	13	59.06.0104	100 n	PETP	
	14	59.06.5104	100 n	PETP	
	15	59.06.5104	100 n	PETP	
	16	59.06.0474	470 n	PETP	
	~~17~~	~~59.06.0102~~	~~1 n~~	~~PETP~~	
	~~18~~	~~59.06.0102~~	~~1 n~~	~~PETP~~	
	~~19~~	~~59.06.0222~~	~~2,2 n~~	~~PETP~~	
	~~20~~	~~59.05.1472~~	~~4,7 n~~	~~1% PP~~	
	~~21~~	~~59.~~			
	~~22~~	~~59.06.0103~~	~~10 n~~	~~PETP~~	
	23	59.06.0224	220 n	PETP	
	24	59.06.0474	470 n	PETP	
	25	59.26.5229	2,2 µ	SAL	
	D- 1	50.04.0125	1N4448		
	~~2~~	~~50.04.0125~~	~~1N4448~~		
	3	50.04.1117	ZPD12	12 V	
	4	50.04.0105	1N4004		

IND	DATE	NAME
④		
③		
②		
①	23.7.87	
○	3. Feb. 83	W. Markl

STUDER	TEL CONNECTION UNIT	PL	1.915.768/22	PAGE 1 OF 4

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	D17,5	50.04.0105	1N4004		
	6	50.04.0125	1N4448		
	7	50.04.0105	1N4004		
	18,8	50.04.0105	1N4004		
	9	50.04.1109	BZX83C	20V	
	10	50.04.1109	BZX83C	20V	
	11	50.04.0125	1N4448		
	~~12~~	~~50.04.0125~~	~~1N4448~~	*	
	~~13~~	~~50.04.0125~~	~~1N4448~~		
	14	50.04.0125	1N4448		
	15	50.04.0125	1N4448		
	16	50.04.0125	1N4448		
	19	50.04.0125	1N4448		
	DLQ1	50.99.0126	4N28		
	K 1	56.04.0170	2*U	5V 135Ω	
	~~2~~	~~56.04.0170~~	~~2*U~~	~~5V 135Ω~~	
	Q 1	50.03.0436	BC237		
	2	~~50.03.0515~~	~~BC307~~	→ 50.03.0351 BC 327	
	3	50.03.0350	J112		
	4	50.03.0436	BC237		
	5	50.03.0515	BC307		
	IC 1	50.07.0011	4011		
	2	50.07.0032	FX101L		
	~~3~~		~~FX101L~~		
	~~4~~	~~50.09.0109~~	~~TL071~~		
	5	50.09.0101	TL072		

IND	DATE	NAME
④		
③		
②		
①	23.7.87	
○	3.Feb.83	W.Markl

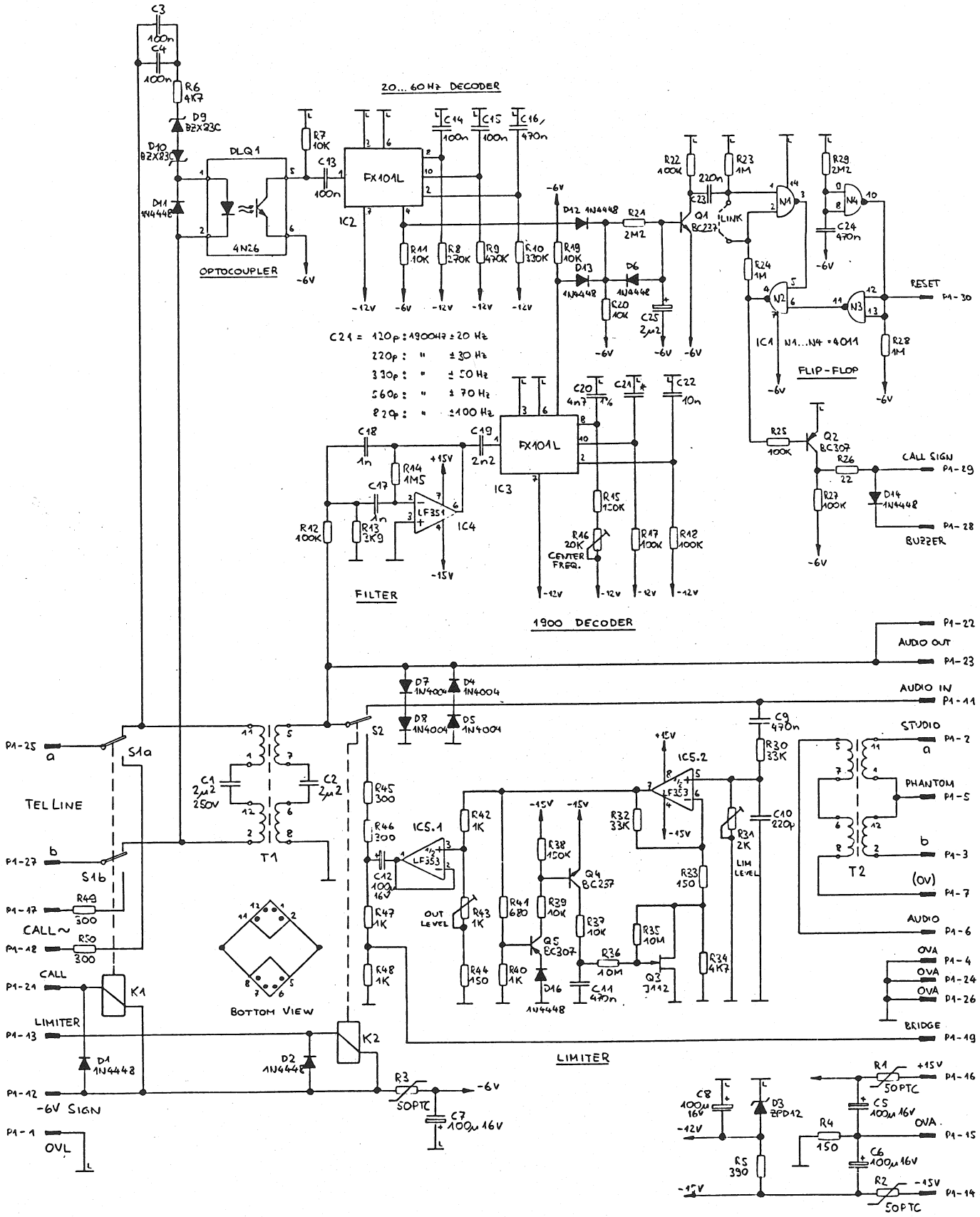
IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	R 1	57.99.0206	50	PTC	
	2	57.99.0206	50	PTC	
	3	57.99.0206	50	PTC	
	4	57.11.4151	150		
	5	57.11.4391	390		
	6	57.11.4472	4,7 K		
	7	57.11.4103	10 K		
	8	57.11.4274	270K		
	9	57.11.4474	470K		
	10	57.11.4334	330K		
	11	57.11.4103	10 K		
	~~12~~	~~57.11.4104~~	~~100K~~		
	~~13~~	~~57.11.4392~~	~~3,9 K~~		
	~~14~~	~~57.11.5155~~	~~1,5 M~~		
	~~15~~	~~57.11.4154~~	~~150 K~~		
	~~16~~	~~58.01.8203~~	~~20 K~~	~~TRIM PMG~~	
	~~17~~	~~57.11.4104~~	~~100K~~		
	~~18~~	~~57.11.4104~~	~~100K~~		
	~~19~~	~~57.11.4103~~	~~10 K~~		
	20	57.11.4103	10 K		
	21	57.11.5225	2,2 M		
	22	57.11.4104	100K		
	23	~~57.11.4105~~	~~1 M~~	→ 57.11.5225 2,2 M	
	24	57.11.4105	1 M		
	25	~~57.11.4104~~	~~100K~~	→ 57.11.4103 10K	
	26	~~57.11.4220~~	~~22~~	→ 57.11.4100 10	
	-27	57.11.4104	100K		
	28	57.11.4105	1 M		
	29	57.11.5225	2,2 M		
	30	57.11.4333	33 K		

IND	DATE	NAME
④		
③		
②		
①	23.7.87	
	3. Feb. 83	W. Marki

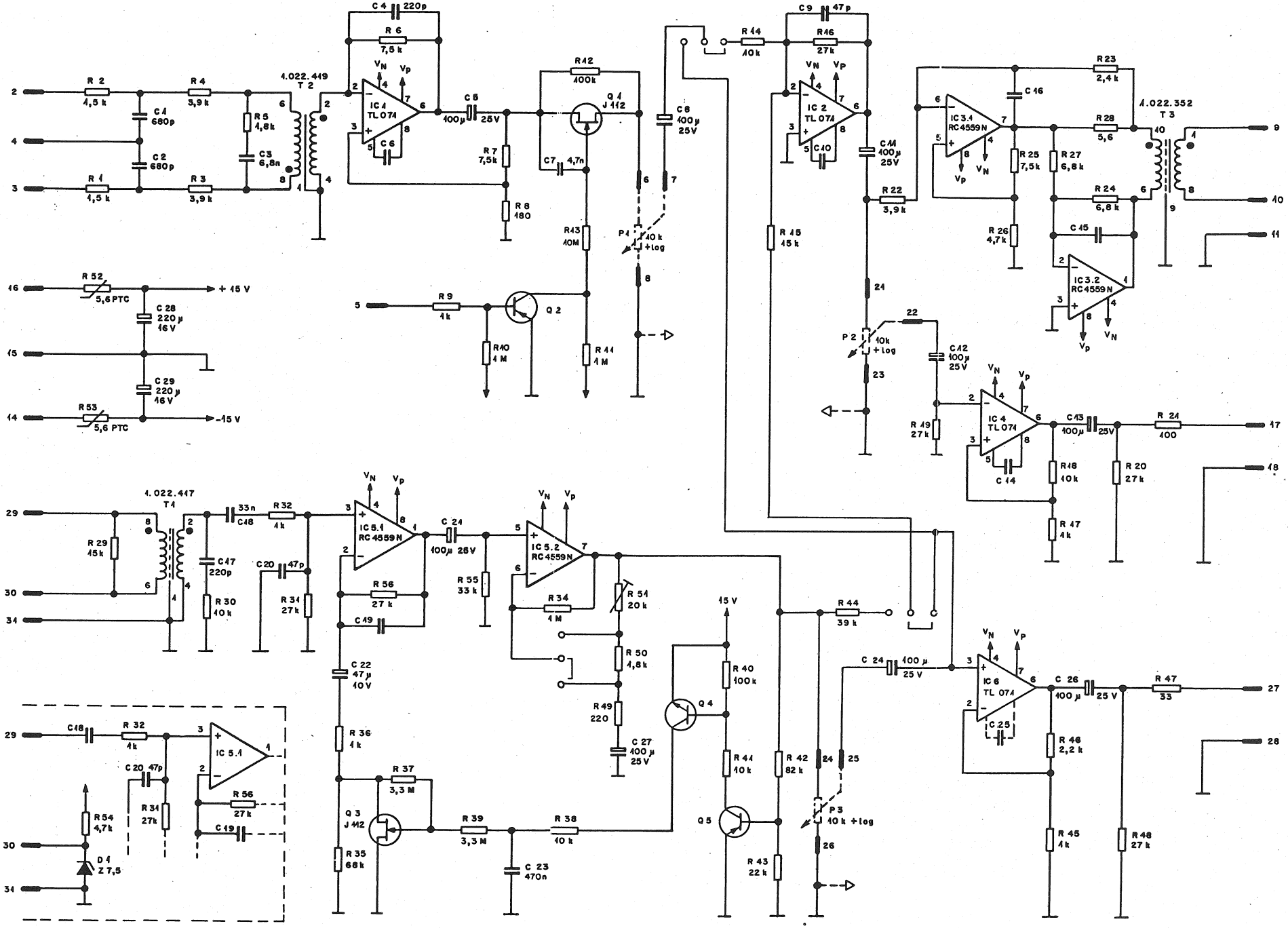
IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	R 31	58.01.8202	2 K	TRIM PMG	
	32	57.11.4333	33 K		
	33	57.11.4151	150		
	34	57.11.4472	4,7 K		
	35	57.11.6106	10 M		
	36	57.11.6106	10 M		
	37	57.11.4103	10 K		
	38	57.11.4154	150 K		
	39	57.11.4103	10 K		
	40	57.11.4102	1 K		
	41	~~57.11.4681~~	~~680~~	→ 57.11.4822	
	42	57.11.4102	1 K		
	43	58.01.8102	1 K	TRIM PMG	
	44	57.11.4151	150		
	45	57.11.3301	300		
	46	57.11.3301	300		
	47	57.11.4102	1 K		
	48	57.11.4102	1 K		
	49	57.11.3301	300		
	50	57.11.3301	300		
	S 1		AgAu 2u	KOMBINED WITH K1	
	2		AgAu 2u	KOMBINED WITH K2	
	T 1	1.022.237.00		TEL TRAFO	
	2	1.022.237.00		TEL TRAFO	
	XIC	50.03.0166	8 pol		
	XIC	50.03.0167	14 pol		

IND	DATE	NAME
④		
③		
②		
①	23.7.87	
○	3.Feb.83	W.Markl

STUDER	TEL CONNECTION UNIT	PL	1.915.768/22	PAGE 4 OF 4



	11. März 83	W. Markl			
STUDER	TEL CONNECTION UNIT		1.915.768.00	PAGE	OF



STUDER REGENSDORF ZÜRICH	SIGN:	DATE:
		9. 9. 82
MIC. / LINE AMPLIFIER		
SC 1.915.912	PAGE 1 OF 2	

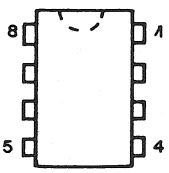
NORMAL VERSION

1		
2	a	LINE INP.
3	b	
4	⊥	
5	0V MUTE	
6	LIVE	POT. METER P 1
7	RET	
8	⊥	
9	a	LINE OUTP.
10	b	
11	⊥	
12		
13		
14	-15 V	
15	0V ⊥	
16	+15V	
17	ASYM.OUTP.	
18	⊥	
19		
20		
21	LIVE	POT. METER P 2
22	RET.	
23	⊥	
24	LIVE	POT. METER P 3
25	RET.	
26	⊥	
27	ASYM OUTP.	
28	⊥	
29	a	MIC. INP.
30	b	
31	⊥	
32		

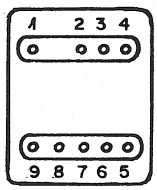
FOR TEL. SYSTEM

1		
2	a	INP. FROM TEL. HYBRID
3	b	
4	⊥	
5	0V MUTE	
6	LIVE	TEL. RET. VOLUME
7	RET.	
8	⊥	
9	a	MAIN OUTP.
10	b	
11	⊥	
12		
13		
14	-15 V	
15	0V ⊥	
16	+15V	
17	ASYM OUTP.	HEADPHONE OUTP.
18	⊥	
19		
20		
21	LIVE	HEADPHONE VOLUME
22	RET.	
23	⊥	
24	LIVE	MIC.VOLUME
25	RET.	
26	⊥	
27	ASYM. OUTP	OUTP. TO HYBRID
28	⊥	
29	a	MIC. INPUT
30	b	
31	⊥	
32		

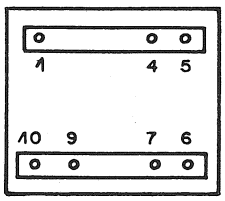
NE 5532
RC 4559
TL 071 CP



1.022.405
1.022.417



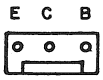
1.022.352



BC 337-25
BC 307

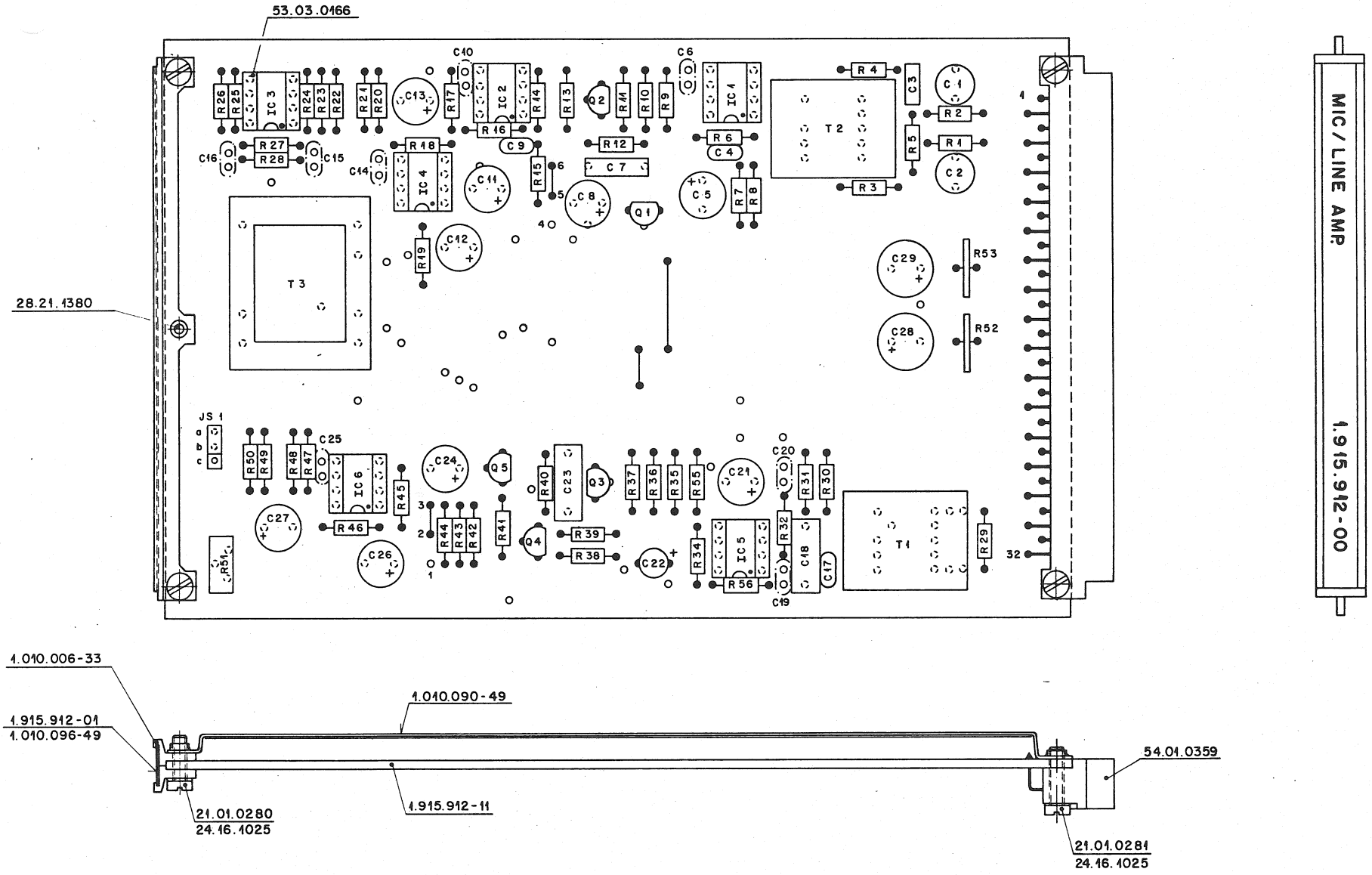
FET
J 112

BD 136
BD 135

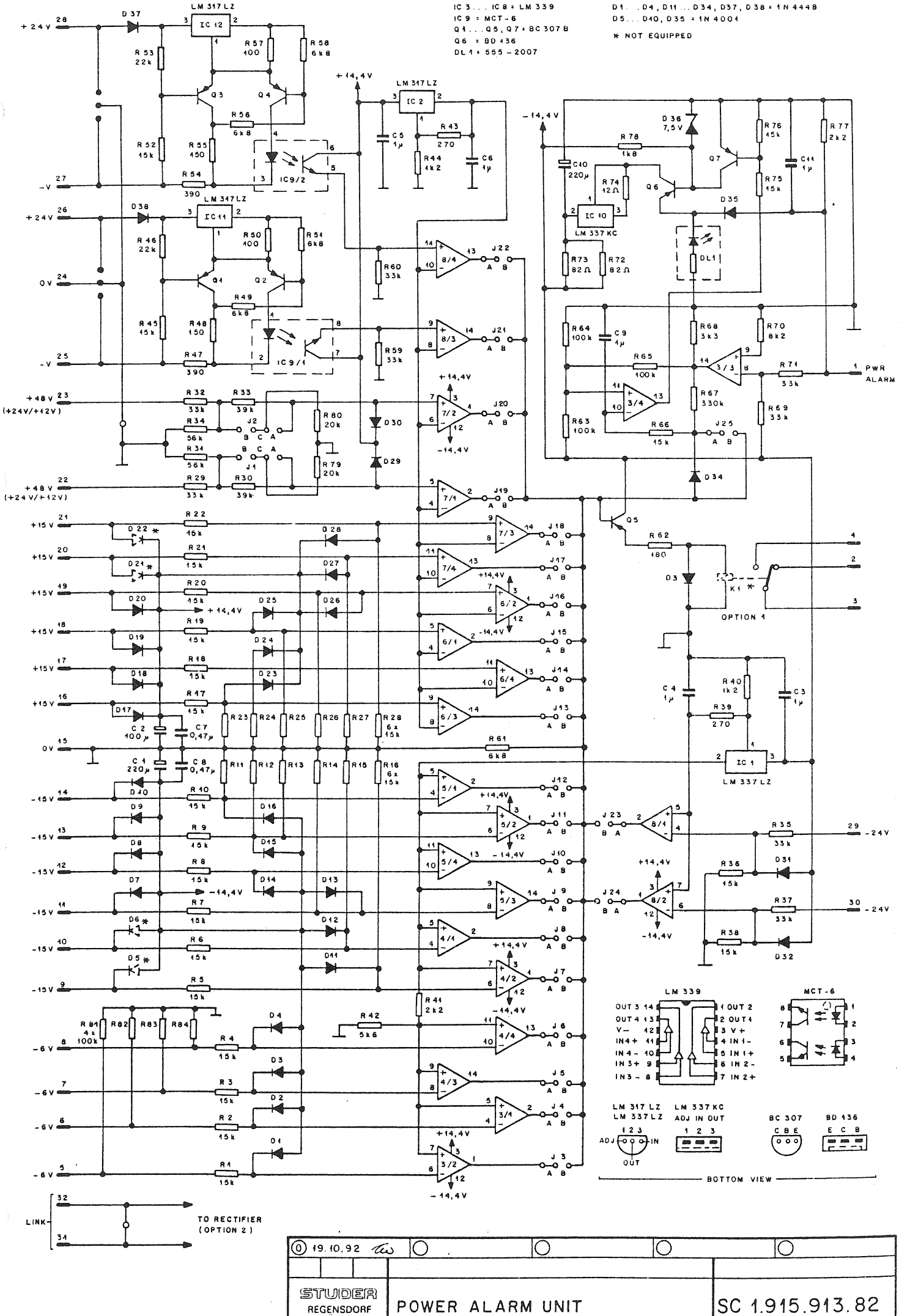


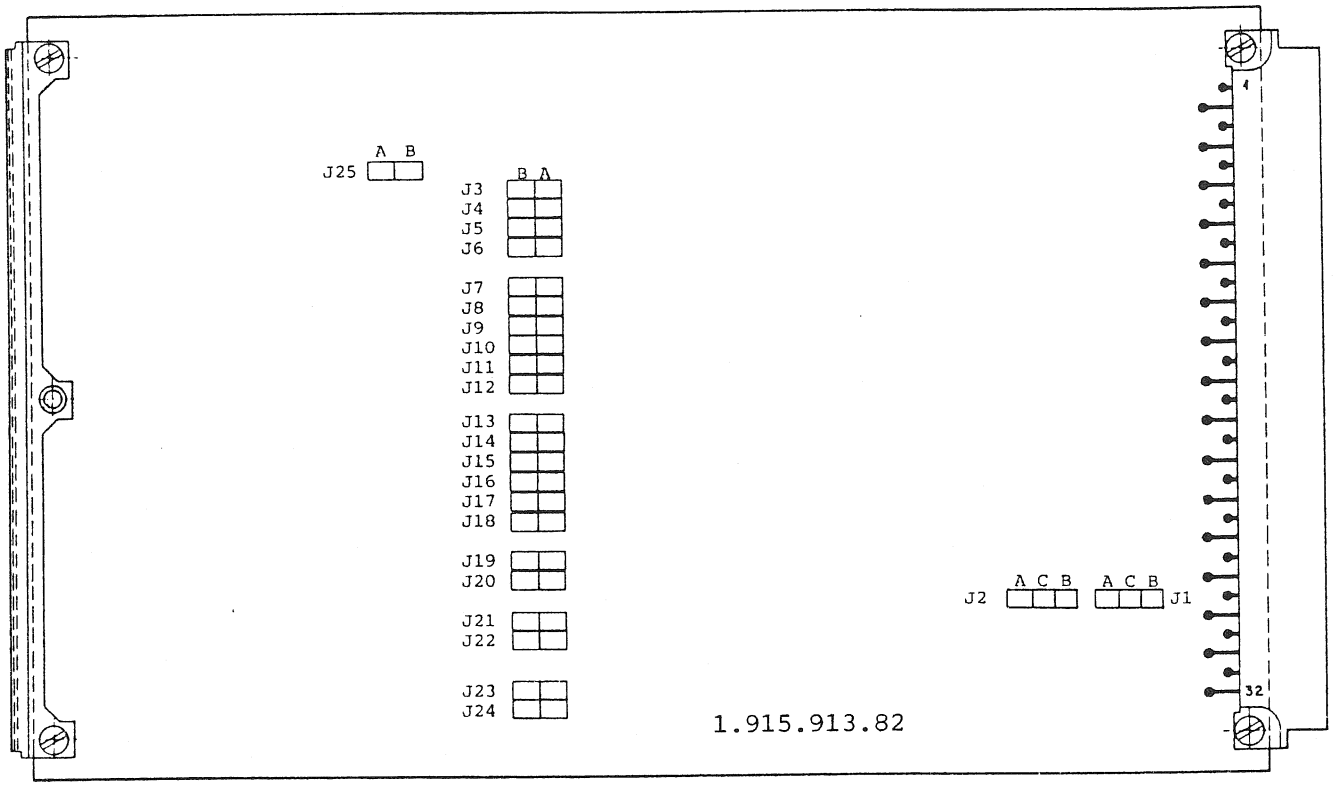
BOTTOM VIEW

DATE:	9.9. 82					
SIGN:						PAGE 2 OF 2
STUDER REGENSDORF ZÜRICH	MIC/LINE AMPLIFIER					1.915.912

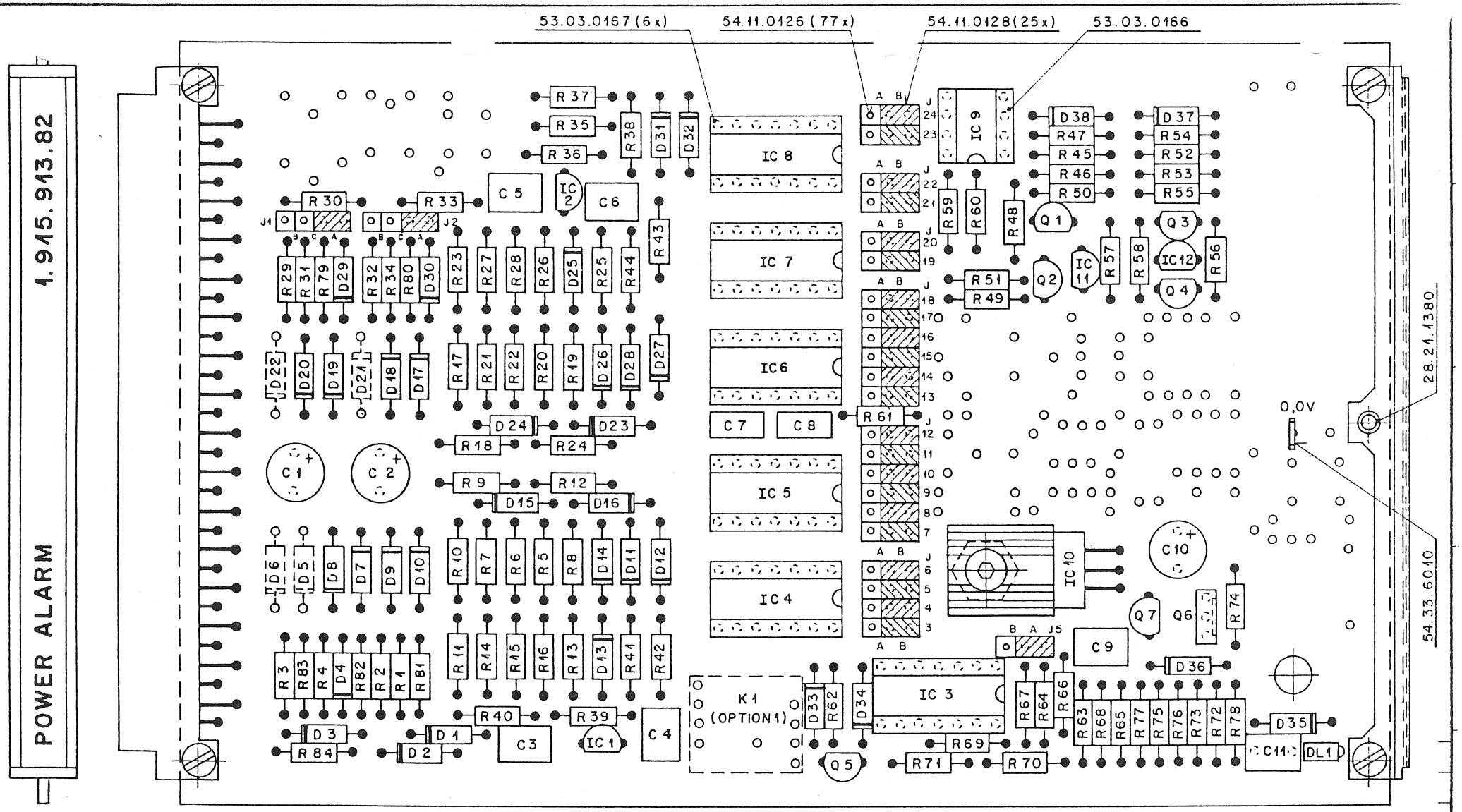


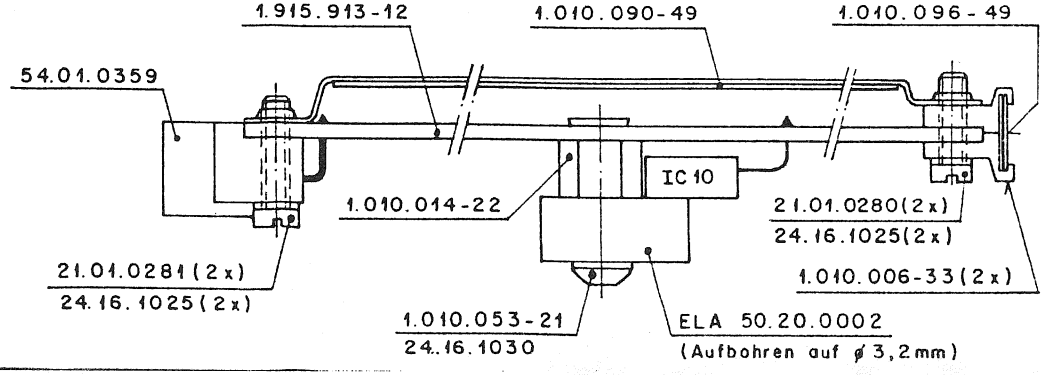
Werkstoff: Norm-Nr.: / DIN-Bez.: / Abmessung:	Oberfläche: Güte: / Beh.:		Änderung	③
			10.5.85	②
			4.4.84 A.Ho	①
Zugehörige Unterlagen: PL	Freimasstoleranz: ±	Maßstab: 2:1	Ausgabe 13.4.83 A.Ho	⓪
			Datum Gez. Gepr Ges. Index	
Ersatz für:	Ersetzt durch:		Kopie für:	
STUDER REGENSDORF ZÜRICH	Benennung: Mic-Line Amplifier		Nummer: 1.915.912-00	


IC 3 ... IC 8 = LM 339
IC 9 = MCT-6
Q1 ... Q5, Q7 = BC 307 B
Q6 = BD 436
DL 1 = 555 – 2007
D1 ... D4, D11 ... D34, D37, D38 = 1N 4448
D5 ... D10, D35 = 1N 4001
* NOT EQUIPPED
LM 317 LZ
LM 337 KC
LM 337 LZ
LM 339
MCT-6
BC 307
BD 436
OPTION 1
TO RECTIFIER (OPTION 2)
PWR ALARM
BOTTOM VIEW
19.10.92
STUDER REGENSDORF ZÜRICH
POWER ALARM UNIT
SC 1.915.913.82



JUMPER	CORRESP. CONN. PIN	VOLTAGE	JUMPER SETTING		
			A	B	C
J1	22	+48/24/12V	+48V	+24V	+12V
J2	23	+48/24/12V	+48V	+24V	+12V
J3	5	-6V	NOT ACTIVE	ACTIVE	
J4	6	-6V	NOT ACTIVE	ACTIVE	
J5	7	-6V	NOT ACTIVE	ACTIVE	
J6	8	-6V	NOT ACTIVE	ACTIVE	
J7	9	-15V	NOT ACTIVE	ACTIVE	
J8	10	-15V	NOT ACTIVE	ACTIVE	
J9	11	-15V	NOT ACTIVE	ACTIVE	
J10	12	-15V	NOT ACTIVE	ACTIVE	
J11	13	-15V	NOT ACTIVE	ACTIVE	
J12	14	-15V	NOT ACTIVE	ACTIVE	
J13	16	+15V	NOT ACTIVE	ACTIVE	
J14	17	+15V	NOT ACTIVE	ACTIVE	
J15	18	+15V	NOT ACTIVE	ACTIVE	
J16	19	+15V	NOT ACTIVE	ACTIVE	
J17	20	+15V	NOT ACTIVE	ACTIVE	
J18	21	+15V	NOT ACTIVE	ACTIVE	
J19	22	+48/24/12V	NOT ACTIVE	ACTIVE	
J20	23	+48/24/12V	NOT ACTIVE	ACTIVE	
J21	25/26	24V	NOT ACTIVE	ACTIVE	
J22	27/28	24V	NOT ACTIVE	ACTIVE	
J23	29	-24V	NOT ACTIVE	ACTIVE	
J24	30	-24V	NOT ACTIVE	ACTIVE	
J25	1	ALARM OUTPUT	FLASHING	CONT.	





Werkstoff: Norm-Nr.: / DIN-Bez.: / Abmessung:	Oberfläche: Güte: / Beh.:		Änderung	3 / 2 / 1
Zugehörige Unterlagen: PL	Freimasstoleranz: ±	Maßstab: 2:1	Ausgabe: 20.10.92 A.Ho WS WS	0
Ersatz für:	Ersetzt durch:		Kopie für:	

		Datum	Gez.	Gepr.	Ges.	Index

STUDER REGENSDORF ZÜRICH

Benennung: POWER ALARM

Nummer: 1.915.913-82

Pos.	Bauteil No.	Bezeichnung	Stk.	Bemerkung
R1	57.11.3153	WIDERSTAND 15K MF 1%(0,125W)		
R2	" 3153	" 15K "		
R3	" 3153	" 15K "		
R4	" 3153	" 15K "		
R5	" 3153	" 15K "		
R6	" 3153	" 15K "		
R7	" 3153	" 15K "		
R8	" 3153	" 15K "		
R9	" 3153	" 15K "		
R10	" 3153	" 15K "		
R11	" 3153	" 15K "		
R12	" 3153	" 15K "		
R13	" 3153	" 15K "		
R14	" 3153	" 15K "		
R15	" 3153	" 15K "		
R16	" 3153	" 15K "		
R17	" 3153	" 15K "		
R18	" 3153	" 15K "		
R19	" 3153	" 15K "		
R20	" 3153	" 15K "		
R21	" 3153	" 15K "		
R22	" 3153	" 15K "		
R23	" 3153	" 15K "		
R24	" 3153	" 15K "		
R25	" 3153	" 15K "		
R26	" 3153	" 15K "		
R27	" 3153	" 15K "		
R28	" 3153	" 15K "		
R29	" 3333	" 33K "		
R30	" 3393	" 39K "		
R31	" 3563	" 56K "		
R32	" 3333	" 33K "		
R33	" 3393	" 39K "		
R34	" 3563	" 56K "		
R35	" 3333	" 33K "		

Aenderungen	① 19. MRZ 1992	②	③	④	⑤

STUDER REGENSDORF ZÜRICH	Positionsliste POWER ALARM UNIT 1.915.913/82	Erstellt: W. Huber Geprüft: Blatt: 1 Blätter 5
Kopie für:	Ersatz für: Ersetzt durch:	1.915.913.82

Pos.	Bauteil No.	Bezeichnung	Stk.	Bemerkung
R 36	57.11. 3153	WIDERSTAND 15 K MF 1% (0,125W)		
R 37	" .3333	" 33K "		
R 38	" .3153	" 15K "		
R 39	" .3271	" 270Ω "		
R 40	" 3122	" 1,2K "		
R 41	" 3222	" 2,2K "		
R 42	" 3562	" 5,6K "		
R 43	" 3271	" 270Ω "		
R 44	" 3122	" 1,2K "		
R 45	" 3153	" 15K "		
R 46	" 3223	" 22K "		
R 47	" 3391	" 390Ω "		
R 48	" 3151	" 150Ω "		
R 49	" 3682	" 6,8K "		
R 50	" 3101	" 100Ω "		
R 51	" 3682	" 6,8K "		
R 52	" 3153	" 15K "		
R 53	" 3223	" 22K "		
R 54	" 3391	" 390Ω "		
R 55	" 3151	" 150Ω "		
R 56	" 3682	" 6,8K "		
R 57	" 3101	" 100Ω "		
R 58	" 3682	" 6,8K "		
R 59	" 3333	" 33K "		
R 60	" 3333	" 33K "		
R 61	" 3682	" 6,8K "		
R 62	" 3181	" 180Ω "		
R 63	" 3104	" 100K "		
R 64	" 3104	" 100K "		
R 65	" 3104	" 100K "		
R 66	" 3153	" 15K "		
R 67	" 3334	" 330K "		
R 68	" 3332	" 3,3K "		
R 69	" 3333	" 33K "		
R 70	" 3822	" 8,2K "		

Aenderungen	① 23. MRZ. 1992	②	③	④	⑤

STUDER
REGENSDORF
ZÜRICH

Positionsliste

POWER ALARM UNIT
1.915.913.82

Erstellt: Wicherhuber
Geprüft:
Blatt: 2 Blätter: 5

Kopie für:

Ersatz für:
Ersetzt durch:

1.915.913.82

Pos.	Bauteil No.	Bezeichnung	Stk.	Bemerkung
R 71	57.11.3333	WIDERSTAND 33K MF 1% (0,125W)		
R 72	" 3820	" 82Ω "		
R 73	" 3820	" 82Ω "		
R 74	" 3120	" 12Ω "		
R 75	" 3153	" 15K "		
R 76	" 3153	" 15K "		
R 77	" 3222	" 2,2K "		
R 78	" 3182	" 1,8K "		
R 79	" 3203	" 20K "		
R 80	" 3203	" 20K "		
R 81	" 3104	" 100K "		
R 82	" 3104	" 100K "		
R 83	" 3104	" 100K "		
R 84	" 3104	" 100K "		
C 1	59.22.5221	ELKO 220µ/25V		
C 2	59.22.5101	ELKO 100µ/25V		
C 3	59.06.0105	KONDENSATOR 1µ/63V PETP		
C 4	59.06.0105	" 1µ/63V "		
C 5	59.06.0105	" 1µ/63V "		
C 6	59.06.0105	" 1µ/63V "		
C 7	59.06.0474	" 0,47µ/63V "		
C 8	59.06.0474	" 0,47µ/63V "		
C 9	59.06.0105	" 1µ/63V "		
C 10	52.22.5221	ELKO 220µ/25V		
C 11	59.06.0105	KONDENSATOR 1µ/63V PETP		

Aenderungen	① 23. MRZ. 1992	②	③	④	⑤

STUDER REGENSDORF ZÜRICH	**Positionsliste** POWER ALARM UNIT 1.915.913.82	Erstellt: Wichelhaus Geprüft: Blatt: 3 Blätter: 5
Kopie für:	Ersatz für: Ersetzt durch:	1.915.913.82

Pos.	Bauteil No.	Bezeichnung	Stk.	Bemerkung
D1	50.04.0125	DIODE 1N 4448		
D2	50.04.0125	" "		
D3	50.04.0125	" "		
D4	50.04.0125	" "		
D5	50.04.0122	" 1N 4001		NICHT BESTÜCKT (OPT.)
D6	50.04.0122	" "		NICHT BESTÜCKT (OPT.)
D7	50.04.0122	" "		
D8	50.04.0122	" "		
D9	50.04.0122	" "		
D10	50.04.0122	" "		
D11	50.04.0125	" 1N 4448		
D12	50.04.0125	" "		
D13	50.04.0125	" "		
D14	50.04.0125	" "		
D15	50.04.0125	" "		
D16	50.04.0125	" "		
D17	50.04.0125	" "		
D18	50.04.0125	" "		
D19	50.04.0125	" "		
D20	50.04.0125	" "		
D21	50.04.0125	" "		NICHT BESTÜCKT (OPT.)
D22	50.04.0125	" "		NICHT BESTÜCKT (OPT.)
D23	50.04.0125	" 1N 4448		
D24	50.04.0125	" "		
D25	50.04.0125	" "		
D26	50.04.0125	" "		
D27	50.04.0125	" "		
D28	50.04.0125	" "		
D29	50.04.0125	" "		
D30	50.04.0125	" "		
D31	50.04.0125	" "		
D32	50.04.0125	" "		
D33	50.04.0125	" "		
D34	50.04.0125	" "		
D35	50.04.0122	" 1N 4001		

Aenderungen	① 26. MRZ 1992	②	③	④	⑤

STUDER
REGENSDORF
ZÜRICH

Positionsliste

POWER ALARM UNIT
1.915.913.82

Erstellt: Widmer
Geprüft:
Blatt: 4 Blätter: 5

Kopie für:

Ersatz für:
Ersetzt durch:

1.915.913.82

Pos.	Bauteil No.	Bezeichnung	Stk.	Bemerkung
D36	50.04.1103	ZENER DIODE 7,5V / 500mW		
D37	50.04.0125	DIODE 1N4448		
D38	50.04.0125	" "		
DL1	50.04.2107	LED ROT 555-2007		
IC1	50.10.0109	VOLTAGE REGULATOR LM 337LZ		
IC2	50.10.0108	" LM 317LZ		
IC3	50.11.0104	QUAD KOMPARATOR LM 339		
IC4	50.11.0104	" LM 339		
IC5	50.11.0104	" LM 339		
IC6	50.11.0104	" LM 339		
IC7	50.11.0104	" LM 339		
IC8	50.11.0104	" LM 339		
IC9	50.99.0111	OPTO COUPLER MCT-6		
IC10	50.10.0105	VOLTAGE REGULATOR LM 337 KC		
IC11	50.10.0108	" LM 317 LZ		
IC12	50.10.0108	" LM 317LZ		
K1	56.04.0171	RELAIS 12 VOLT 2 * U_{LL}		(OPT.)
Q1	50.03.0515	PNP TRANSISTOR BC 307 B		
Q2	50.03.0515	" BC 307 B		
Q3	50.03.0515	" BC 307B		
Q4	50.03.0515	" BC 307B		
Q5	50.03.0515	" BC 307B		
Q6	50.03.0510	" BD 136		
Q7	50.03.0515	" BC 307B		

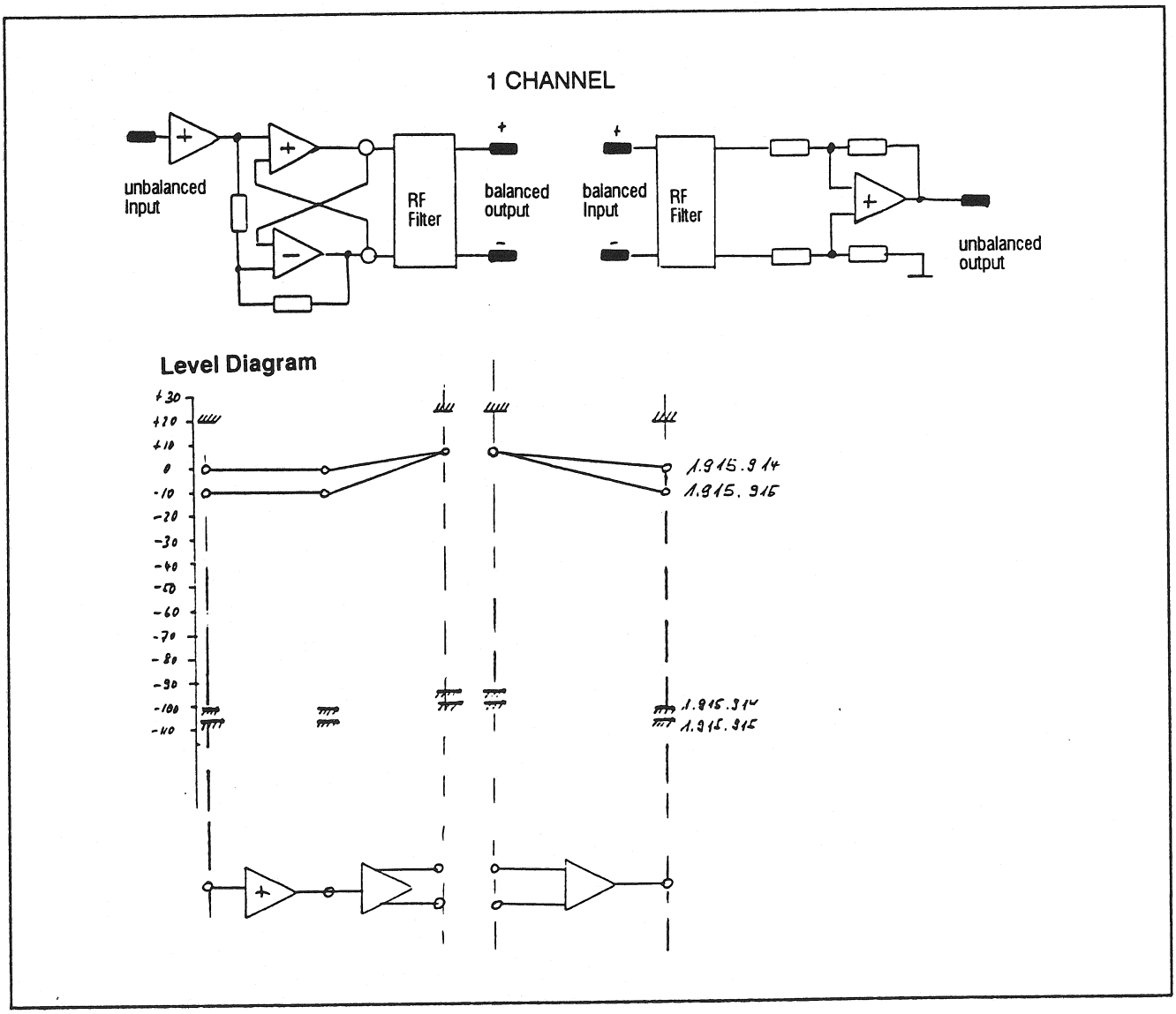
Aenderungen	① 26. MRZ 1992	②	③	④	⑤
STUDER REGENSDORF ZÜRICH	**Positionsliste** POWER ALARM UNIT 1.815.913.82			Erstellt: Widmer Geprüft: Blatt: 5 Blätter: 5	
Kopie für:	Ersatz für: Ersetzt durch:			1.915.913.82	

4 Kanal - Symmetrierverstärker

6dB: 1.915.914
16dB: 1.915.915

Der Symmetrierverstärker wird für den Anschluss halbprofessioneller Geräte mit asymmetrischen Leitungen an symmetrische Ein- und Ausgänge benötigt. Eine weitere Anwendung bietet sich in der Symmetrierung asymmetrischer Insert-Send und -Return Punkte.
Die Europakarte wandelt getrennt vier symmetrische Signale in asymmetrische und vier asymmetrische Signale in symmetrische. Die Symmetrierung erfolgt bei Ein- und Ausgängen transformatorlos.

Block- und Pegeldiagramm



Technische Daten

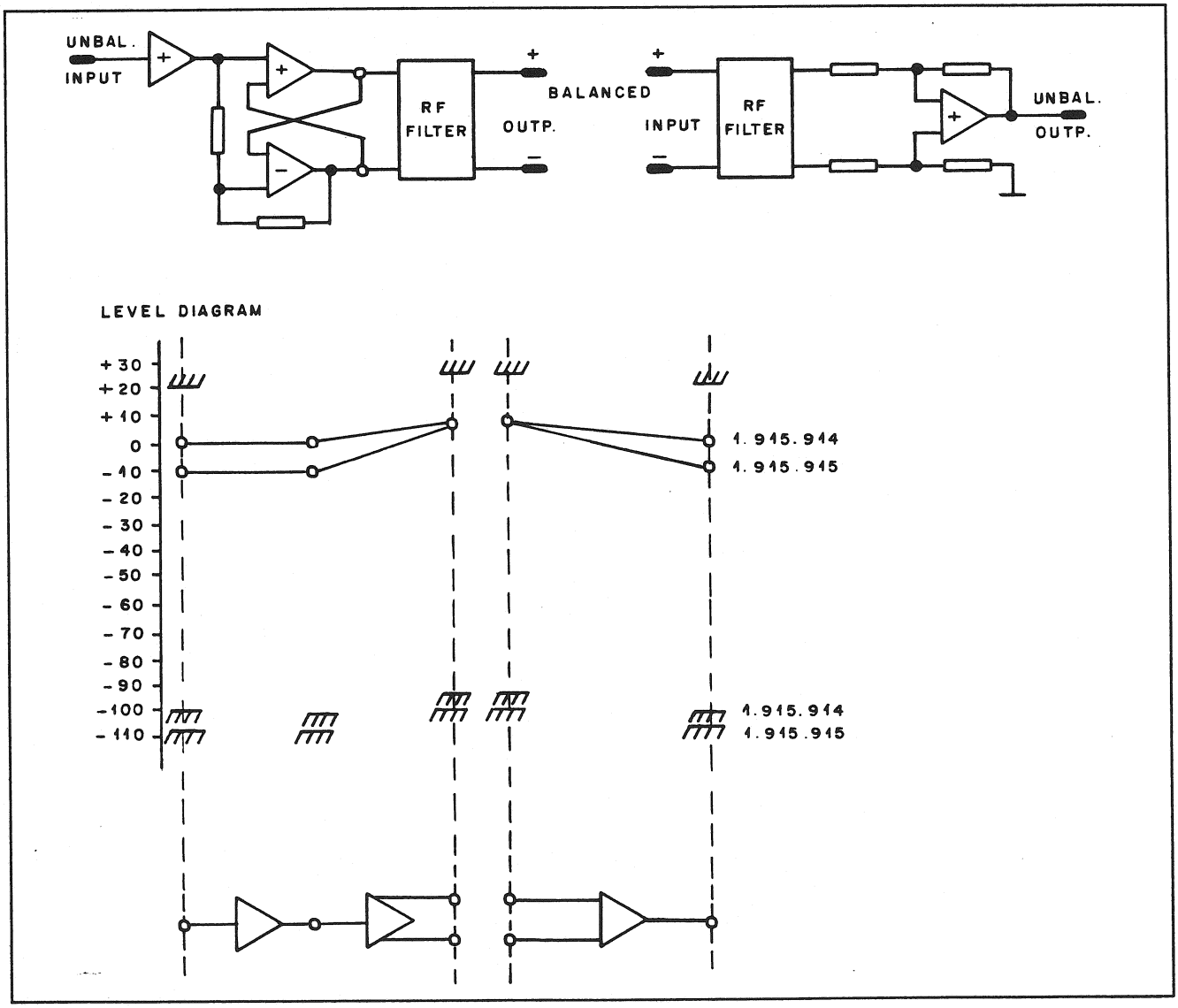
Allgemein:	**Frequenzgang**	**±0.5dB**	30Hz ...16kHz
	Klirrdämpfung	**> 80dB**	
	Fremdspannungsabstand	**100dB**	
	Verstärkung asym./sym.	**6dB**	
	Dämpfung sym./asym.	**6dB**	
	Speisung	**+ 15V**	70mA
		- 15V	70mA
Verstärkerteil 1:			
asymmetrischer Eingang:	**Eingangsimpedanz**	**> 10kΩ**	
	Max. Eingangspegel	**+ 20dBu**	
symmetrischer Ausgang: (transformerlos)	**Ausgangsimpedanz**	**< 50Ω**	
	Max. Ausgangspegel	**+ 24dBu**	
	Min. Last	**> 600Ω**	
Verstärkerteil 2:			
symmetrischer Eingang: (transformerlos)	**Eingangsimpedanz**	**> 10kΩ**	
	Max. Eingangspegel	**+ 24dBu**	
asymmetrischer Ausgang:	**Ausgangsimpedanz**	**< 100Ω**	
	Max. Ausgangspegel	**+ 20dBu**	
	Min. Last	**> 1kΩ**	
Steckersystem:	**DIN 41612, Typ B**		
Abmessungen:	**Europakarte**	**100 x 160mm**	
	Breite	**25mm**	
	Gewicht	**200g**	

4 Channel Balancing Amplifier

6dB: 1.915.914
16dB: 1.915.915

The balancing amplifier is used for adapting unbalanced units such as semiprofessional equipment to balanced inputs and outputs.
This circuit board is equipped with four amplifier circuits. For each channel an amplifier with unbalanced input and transformerless, balanced output as well as an amplifier with transformerless, balanced input and unbalanced output are available. This arrangement provides unbalanced insert inputs and outputs in addition to the balanced outputs.

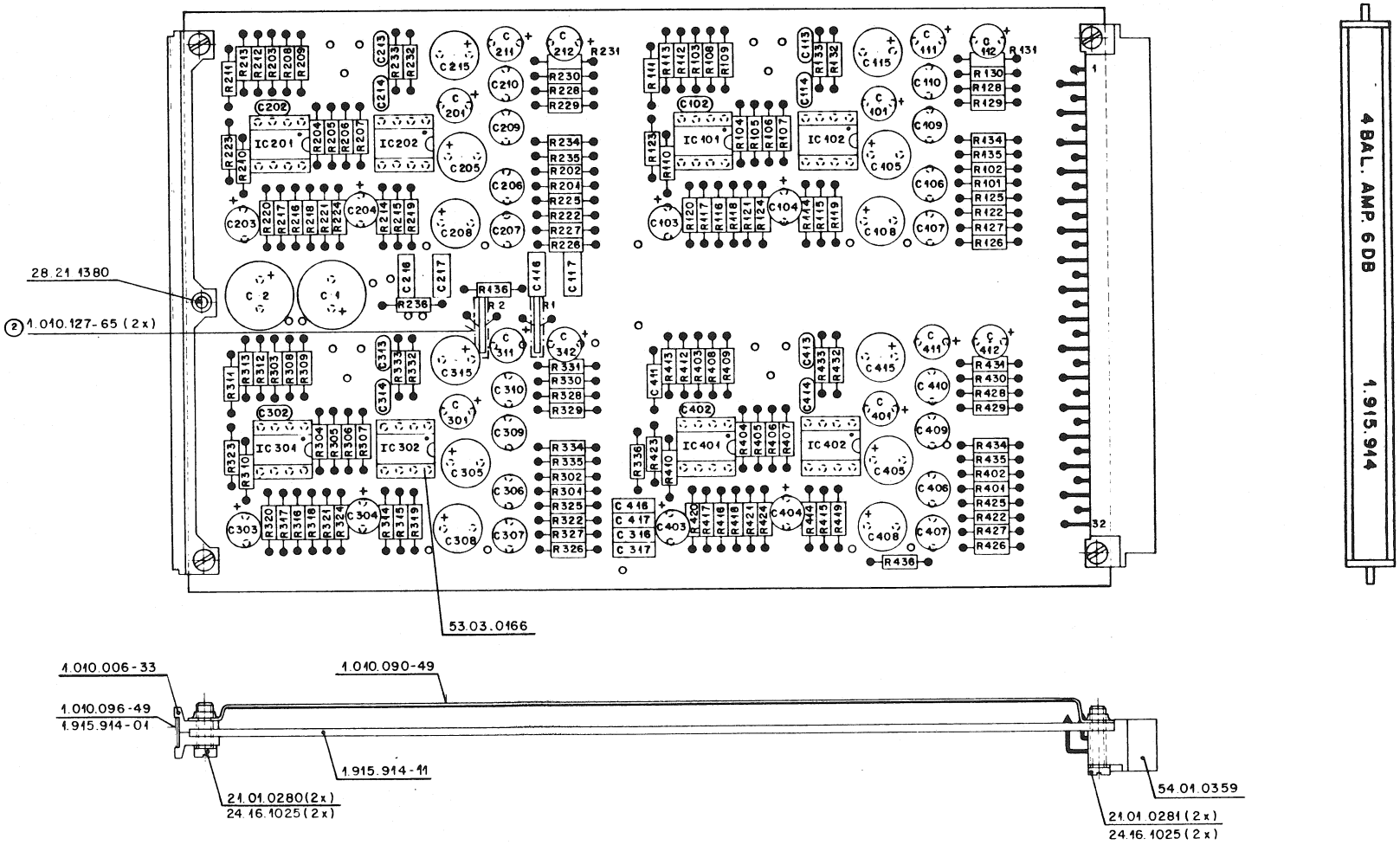
Block Diagram and Level Diagram



Technical Data Balancing Amplifier:

General:	**Frequency response**	**±0.5dB**	30Hz ...16kHz
	Distortion	**< 80dB**	
	Signal-to-noise ratio	**100dB**	
	Gain (unbal./bal.)	**6dB**	
	Attenuation (bal./unbal.)	**6dB**	
Amplifier section 1:			
Input unbalanced:	**Input impedance**	**> 10kΩ**	
	Max. input level	**+20dBu**	
Output balanced: (transformerless)	**Output impedance**	**< 50Ω**	
	Max. load	**> 600Ω**	
	Max. output level	**+24dBu**	
Amplifier section 2:			
Input balanced: (transformerless)	**Input impedance**	**> 10kΩ**	
	Max. input level	**+24dBu**	
Output unbalanced:	**Output impedance**	**< 100Ω**	
	Max. output level	**+20dBu**	
	Max. load impedance	**> 1kΩ**	
Connector System:	**DIN 41612, type B**		
Dimensions:	**"Europe"-PCB**	**100 x 160mm**	
	Width	**25mm**	
	Weight	**200g**	

Ordering Information
EURO-cards:
- 4CH Balancing Unit, +6dB, trafoless **1.915.914.00**
- 4CH Balancing Unit, +16dB, trafoless **1.915.915.00**

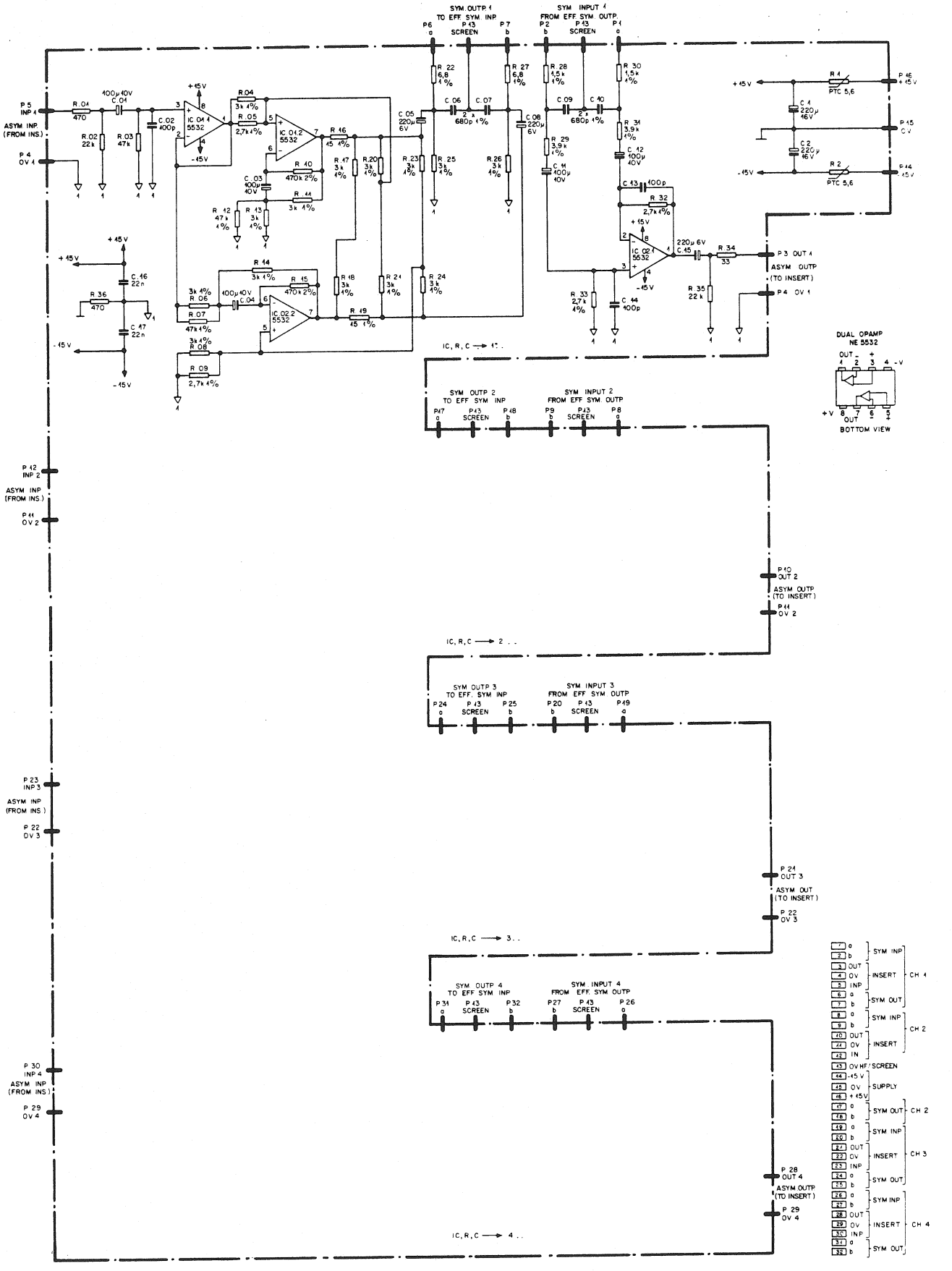


Gültig für :		Pos - Liste	Bez. Schild
1.915.914-00	4 Bal Amplifier 6 DB	1.915.914-00	1.915.914-01
1.915.915-00	4 Bal Amplifier 16 DB	1.915.915-00	1.915.915-01

Werkstoff: Norm-Nr / DIN-Bez / Abmessung	Oberfläche: Güte / Beh		Änderung: 3.6.87 Si (3) / 4.4.84 Si (1)
Zugehörige Unterlagen: PL	Freimasstoleranz: ,	Maßstab: 2:1	Ausgabe: 27.10.82 A.Ho (0)
Ersatz für	Ersetzt durch		Kopie für
STUDER REGENSDORF ZURICH	Benennung: 4 Bal. Amplifier 6 DB		Nummer: 1.915.914-00

EDITION: AUGUST 1994

4CH BALANCING AMPLIFIER



DATE	22.11.82						
SIGN	9.2.83						
REGENSDORF ZURICH	4 BALANCING AMP GAIN 6dB						SC 1.915.914

4CH BALANCING AMPLIFIER

Ad	POS.	REF.No.	DESCRIPTION			MANUFACTURER
	C....1	59.22.4221	220µ	16V	EL	
	C....2	59.22.4221	220µ	16V	EL	
		CH1	ELEMENT	100...199		
		CH2	ELEMENT	200...299		
		CH3	ELEMENT	300...399		
		CH4	ELEMENT	400...499		
	C....1	59.22.3101	100µ	10V	EL	
	C....2	59.34.2101	100p		CER	
	C....3	59.22.3101	100µ	10V	EL	
	C....4	59.22.3101	100µ	10V	EL	
	C....5	59.22.2221	220µ	6V	EL	
	C....6	59.05.1681	680p	1%	PP	
	C....7	59.05.1681	680p	1%	PP	
	C....8	59.22.2221	220µ	6V	EL	
	C....9	59.05.1681	680p	1%	PP	
	C...10	59.05.1681	680p	1%	PP	
	C...11	59.22.3101	100µ	10V	EL	
	C...12	59.22.3101	100µ	10V	EL	
	C...13	59.34.2101	100p	2%	CER	
	C...14	59.34.2101	100p	2%	CER	
	C...15	59.22.2221	220µ	6V	EL	
	C...16	59.06.0223	0,022µ		PE	
	C...17	59.06.0223	0,022µ		PE	
	IC....1	50.09.0106	NE5532	LOW NOISE OP AMP		SIG, TI, RA
	IC....2	50.09.0106	NE5532	LOW NOISE OP AMP		SIG, TI, RA
	R....1	57.99.0209	5,6Ω	PTC		
	R....2	57.99.0209	5,6Ω	PTC		
	R....1	57.11.4471	470			
	R....2	57.11.4223	22k			
	R....3	57.11.3473	47k			
	R....4	57.11.3302	3k	1%		
	R....5	57.11.3272	2,7k	1%		
	R....6	57.11.3302	3k	1%		
	R....7	57.11.3473	47k	1%		
	R....8	57.11.3302	3k	1%		
	R....9	57.11.3272	2,7k	1%		
	R...10	57.11.4474	470k	2%		
	R...11	57.11.3302	3k	1%		
	R...12	57.11.3473	47k	1%		
	R...13	57.11.3302	3k	1%		
	R...14	57.11.3302	3k	1%		
	R...15	57.11.4474	470k	2%		
	R...16	57.11.3150	15	1%		
	R...17	57.11.3302	3k	1%		
	R...18	57.11.3302	3k	1%		
	R...19	57.11.3150	15	1%		
	R...20	57.11.3302	3k	1%		
	R...21	57.11.3302	3k	1%		
	R...22	57.11.3689	6,8Ω	1%		
	R...23	57.11.3302	3k	1%		
	R...24	57.11.3302	3k	1%		
	R...25	57.11.3302	3k	1%		
	R...26	57.11.3302	3k	1%		
	R...27	57.11.3689	6,8Ω	1%		
	R...28	57.11.3152	1,5k	1%		
	R...29	57.11.3392	3,9k	1%		
	R...30	57.11.3152	1,5k	1%		
	R...31	57.11.3392	3,9k	1%		
	R...32	57.11.3272	2,7k	1%		
	R...33	57.11.3272	2,7k	1%		
	R...34	57.11.4330	33Ω			
	R...35	57.11.4223	22k			
	R...36	57.11.4471	470			

Resistors metalfilm

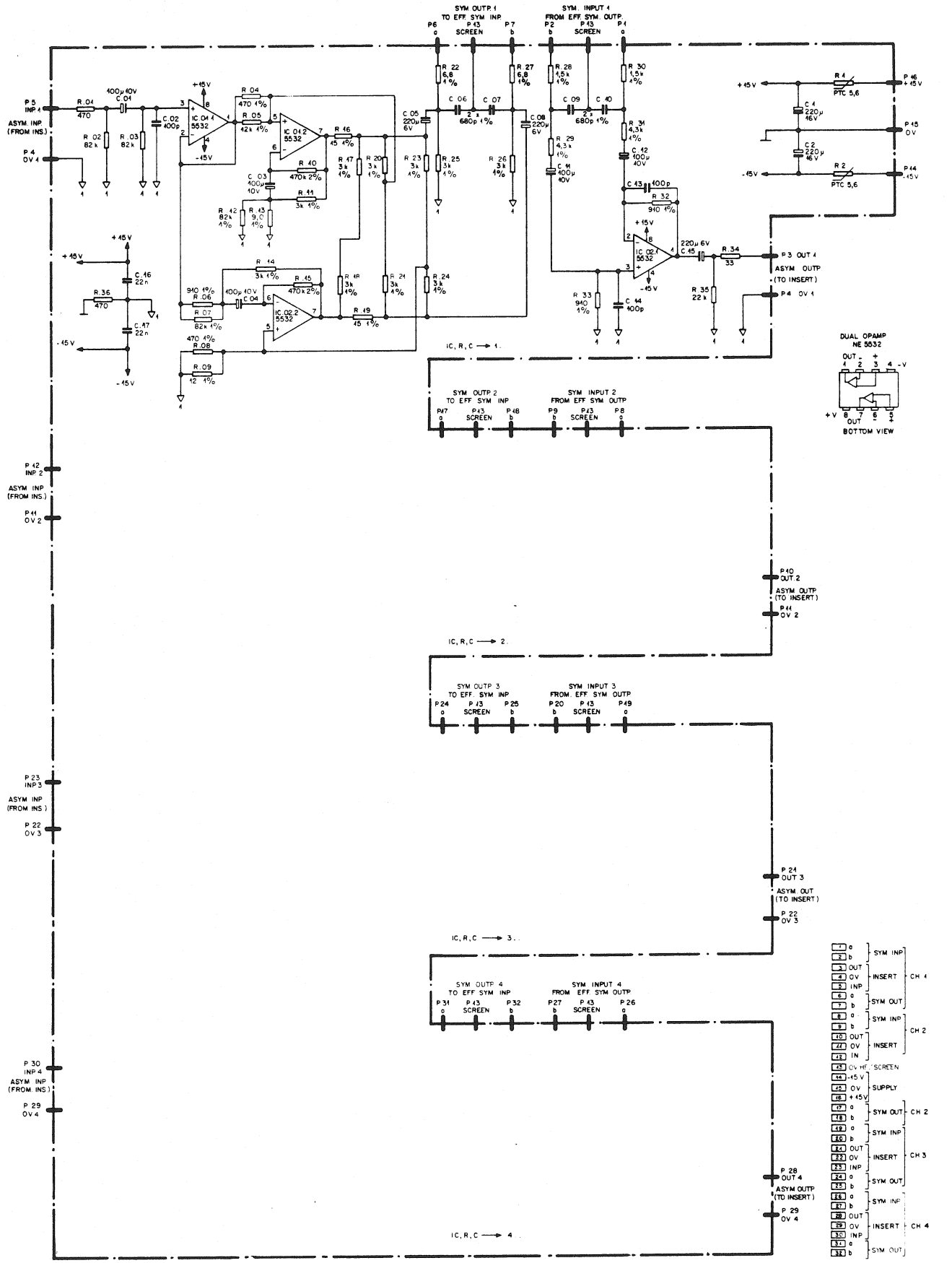
EL=Electrolytic, PE=Polyester, PP=Polypropylen, CER=Ceramic

MANUFACTURER: SIG=Signetics, TI=Texas Instruments, RA=Raytheon

1.915.914.00 4 BAL. AMPLIFIER 6dB FRI 05/10/82

END

4CH BALANCING AMPLIFIER



DATE	23 M 82					
SIGN	14.2.83					
STUDER REGENSDORF ZURICH	4 BALANCING AMP. GAIN 16 dB					SC 1.915.915

4CH BALANCING AMPLIFIER

Ad	POS.	REF.No.	DESCRIPTION			MANUFACTURER
	C....1	59.22.4221	220µ	16V	EL	
	C....2	59.22.4221	220µ	16V	EL	
		CH1	ELEMENT	100...199		
		CH2	ELEMENT	200...299		
		CH3	ELEMENT	300...399		
		CH4	ELEMENT	400...499		
	C....1	59.22.3101	100µ	10V	EL	
	C....2	59.34.2101	100p		CER	
	C....3	59.22.3101	100µ	10V	EL	
	C....4	59.22.3101	100µ	10V	EL	
	C....5	59.22.2221	220µ	6V	EL	
	C....6	59.05.1681	680p	1%	PP	
	C....7	59.05.1681	680p	1%	PP	
	C....8	59.22.2221	220µ	6V	EL	
	C....9	59.05.1681	680p	1%	PP	
	C...10	59.05.1681	680p	1%	PP	
	C...11	59.22.3101	100µ	10V	EL	
	C...12	59.22.3101	100µ	10V	EL	
	C...13	59.34.2101	100p	2%	CER	
	C...14	59.34.2101	100p	2%	CER	
	C...15	59.22.2221	220µ	6V	EL	
	C...16	59.06.0223	0,022µ		PE	
	C...17	59.06.0223	0,022µ		PE	
	IC....1	50.09.0106	NE5532	LOW NOISE OP AMP		SIG, TI, RA
	IC....2	50.09.0106	NE5532	LOW NOISE OP AMP		SIG, TI, RA
	R....1	57.99.0209	5,6Ω	PTC		
	R....2	57.99.0209	5,6Ω	PTC		
	R....1	57.11.3471	470			
	R....2	57.11.4823	82k			
	R....3	57.11.4823	82k			
	R....4	57.11.3471	470Ω	1%		
	R....5	57.11.3123	12k	1%		
	R....6	57.11.3911	910	1%		
	R....7	57.11.4823	82k	2%		
	R....8	57.11.3471	470	1%		
	R....9	57.11.3123	12k	1%		
	R...10	57.11.4474	470k	2%		
	R...11	57.11.3302	3k	1%		
	R...12	57.11.4823	82k	1%		
	R...13	57.11.3911	910	1%		
	R...14	57.11.3302	3k	1%		
	R...15	57.11.4474	470k	2%		
	R...16	57.11.3150	15	1%		
	R...17	57.11.3302	3k	1%		
	R...18	57.11.3302	3k	1%		
	R...19	57.11.3150	15	1%		
	R...20	57.11.3302	3k	1%		
	R...21	57.11.3302	3k	1%		
	R...22	57.11.3689	6,8Ω	1%		
	R...23	57.11.3302	3k	1%		
	R...24	57.11.3302	3k	1%		
	R...25	57.11.3302	3k	1%		
	R...26	57.11.3302	3k	1%		
	R...27	57.11.3689	6,8Ω	1%		
	R...28	57.11.3152	1,5k	1%		
	R...29	57.11.3432	4,3k	1%		
	R...30	57.11.3152	1,5k	1%		
	R...31	57.11.3432	4,3k	1%		
	R...32	57.11.3911	910Ω	1%		
	R...33	57.11.3911	910Ω	1%		
	R...34	57.11.4330	33Ω			
	R...35	57.11.4223	22k			
	R...36	57.11.3471	470			

Resistors metalfilm

EL=Electrolytic, PE=Polyester, PP=Polypropylen, CER=Ceramic

MANUFACTURER: SIG=Signetics, TI=Texas Instruments, RA=Raytheon

1.915.915.00 4 BAL. AMPLIFIER 6dB FRI 05/10/82

END

CH 1

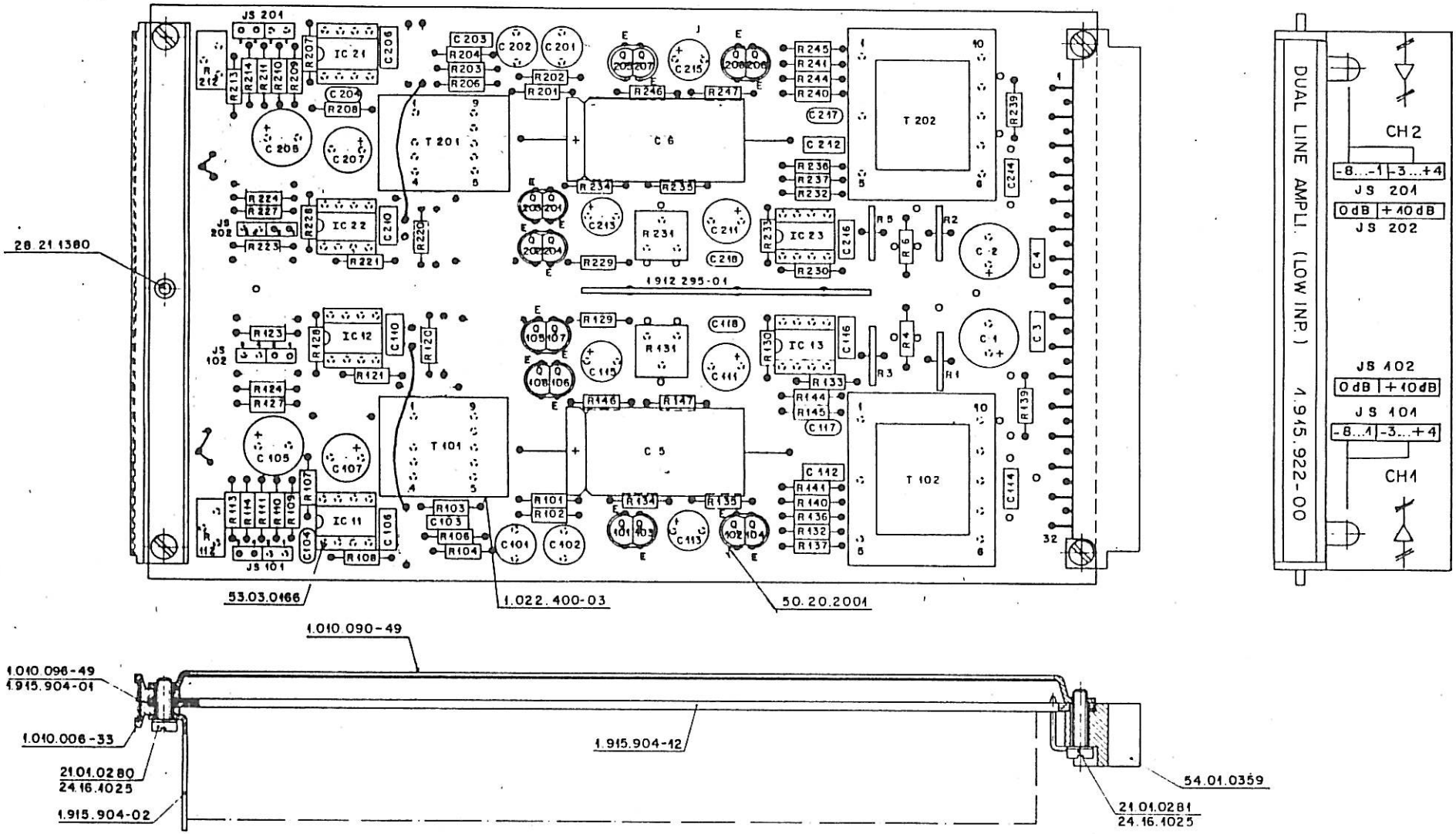
CH 2

P1 INP. 2 OUT 2 −15V 0V +15V OUT 1 INP. 1

BOTTOM VIEW

T 401, T 204 — T 402, T 202 — NE 5532 N — BC 327 / BC 337

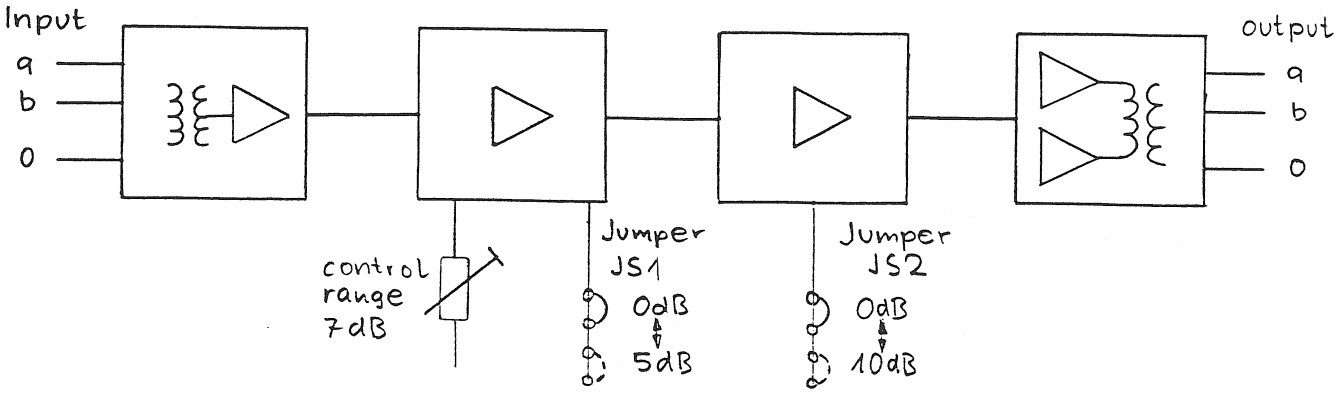
DATE:	10.7.86					
SIGN:	Sti					
STUDER REGENSDORF ZURICH	DUAL LINE AMP. LOW IMP.					SC 1.915.922



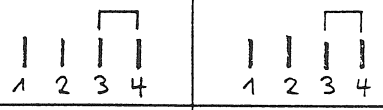
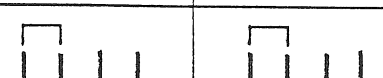
Werkstoff: Norm Nr. / Oth Bez. / Abmessung	Oberfläche: Gehr. / Beh.		Änderung				
				M.7.86	Si		3
				4.4.84	Si		2
Zugehörige Unterlagen: PL	Freimassstoleranz	Maßstab: 2:1	Ausgabe	24.11.82	A Ho		1
				Datum	Gez.	Gepr.	Norm	Index
Ersatz für	Ersetzt durch		Kopie für				
STUDER REGENSDORF ZURICH	Benennung: DUAL LINE AMPLI. (LOW IMPEDANCE		Nummer: 1.915.922.00				

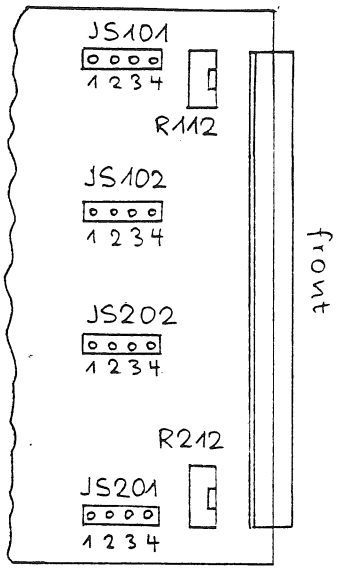
Dual Line Amplifier Low Impedance

Block Diagram (one channel)



Gain

range of the potentiometer	Jumper JS1, 5dB	Jumper JS2, 10dB
-8dB ... -1dB		
-3dB ... +4dB		
+2dB .... +9dB		
+7dB .....+14dB		



Specifications

0dBu ≙ 0,775 V_{rms}

INPUT: balanced, floating; impedance > 10kΩ; max. level: +24dBu

OUTPUT: balanced, floating; impedance 30Hz... 10kHz: < 10Ω
max. level at R_L = 100Ω 30Hz: +20,5 dBu >40Hz: +22dBu

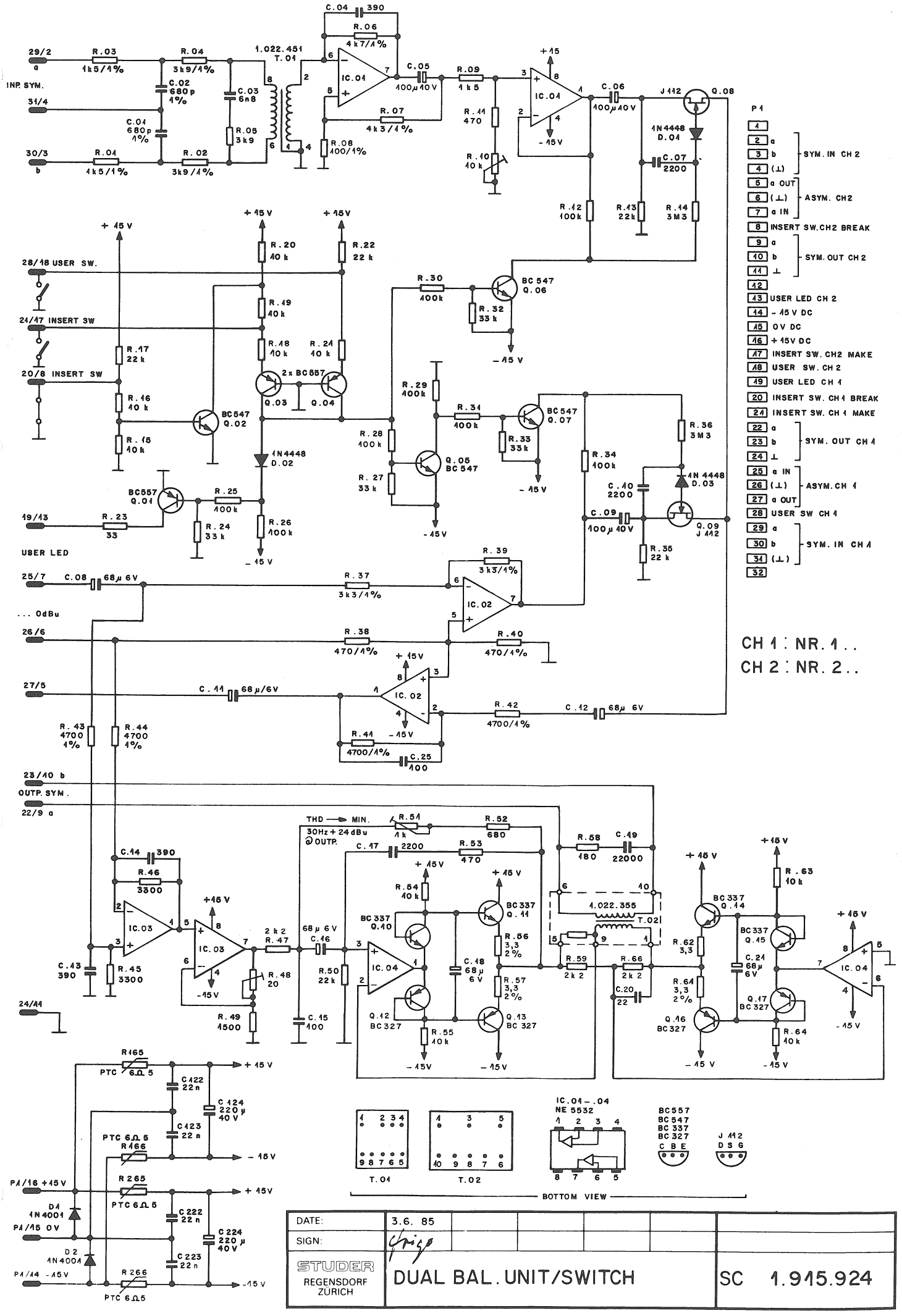
FREQUENCY RESPONSE: 20Hz.... 16kHz : ±0,5dB; -3dB: ≈ 60kHz

DISTORTION (THD): 30Hz....10kHz +18dBu: > 80dB; +20dBu: > 65dB

NOISE LEVEL at the output BW=23kHz, Gain=0dB: -97dBu
Gain = 6dB: -91dBu

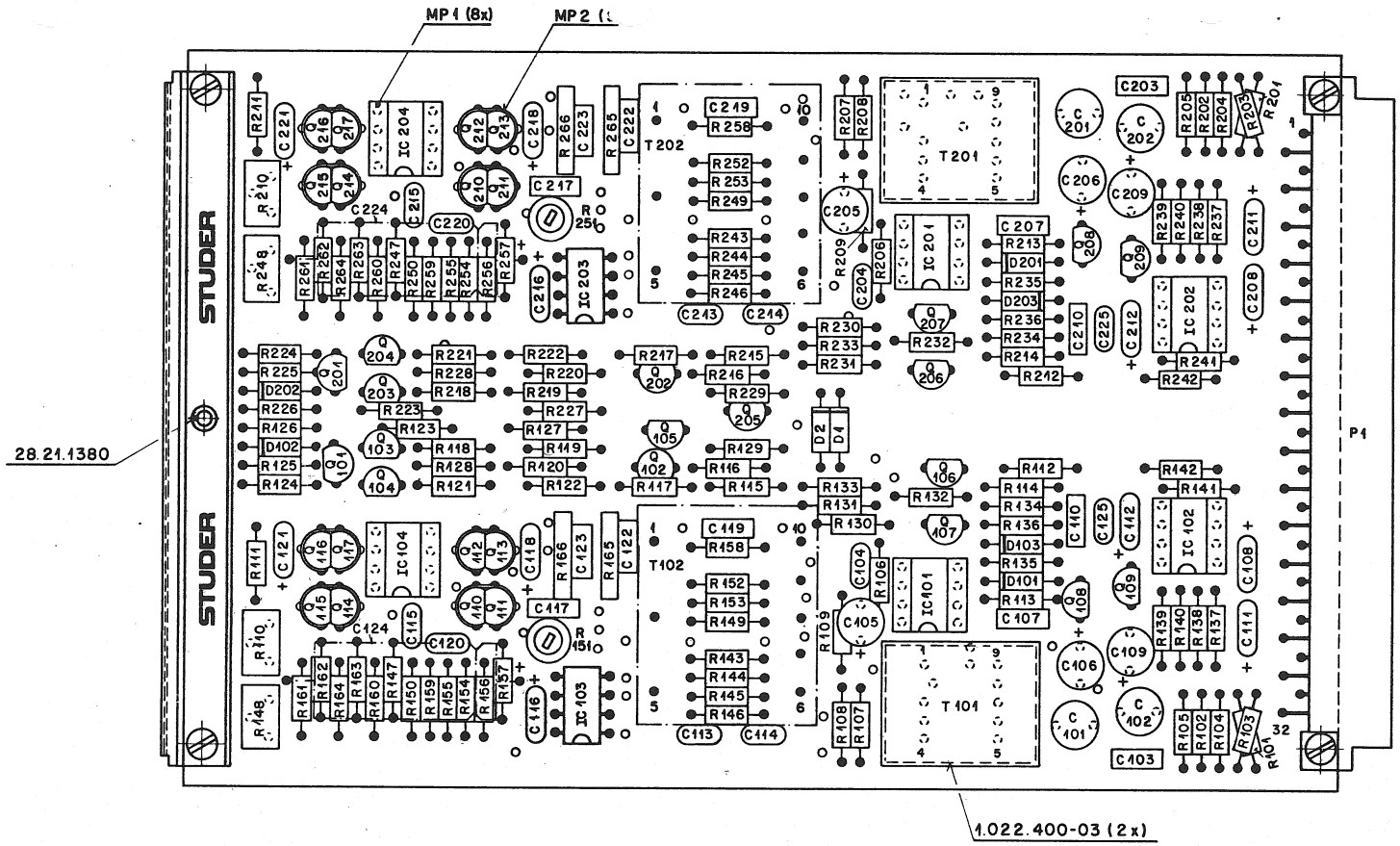
SUPPLY: Voltage ±15V; idle current: 70mA; max.current, loaded: 170mA

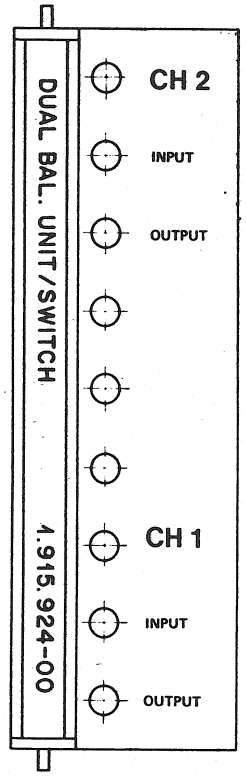
⓪ 17-7-86 wy				
				PAGE OF
STUDER	DUAL LINE AMP. LOW IMP.		BD	1.915.922.00

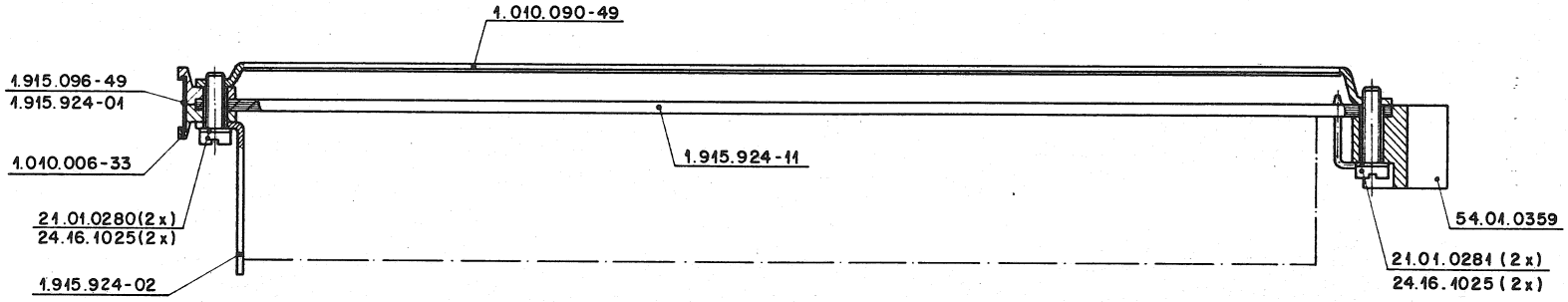


CH 1 : NR. 1 . .
CH 2 : NR. 2 . .

DATE:	3.6. 85					
SIGN:						
STUDER REGENSDORF ZÜRICH	DUAL BAL. UNIT/SWITCH					SC 1.915.924







Werkstoff	Norm-Nr.:	Oberfläche	Güte:	Änderung					③
	DIN-Bez.:		Beh.:		8.10.85	A.Ho			②
	Abmessung:				12.6.85	A.Ho			①
Zugehörige Unterlagen:		Freimasstoleranz:	Maßstab:	Ausgabe	7.5.85	A.Ho			⓪
PL		±	2 : 1	Datum		Gez.	Gepr.	Ges.	Index
Ersatz für:		Ersetzt durch:		Kopie für:					

STUDER REGENSDORF ZÜRICH

Benennung: DUAL BAL. UNIT / SWITCH

Nummer: 1.915.924-00

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C...101	59.05.T681	680 pF	1% 500V PP	
	C...102	59.05.1681	680 pF	1% 500V PP	
	C...103	59.06.0682	6.8 nF	10% PE	
	C...104	59.34.4391	390 pF	CE	
	C...105	59.22.3101	100 uF	-20% 10V EL	
	C...106	59.22.3101	100 uF	-20% 10V EL	
	C...107	59.06.0222	2.2 nF	PE	
	C...108	59.26.0680	68 uF	6V SAL	
	C...109	59.22.3101	100 uF	-20% 10V EL	
	C...110	59.06.0222	2.2 nF	PE	
	C...111	59.26.0680	68 uF	6V SAL	
	C...112	59.26.0680	68 uF	6V SAL	
	C...113	59.34.4391	390 pF	CE	
	C...114	59.34.4391	390 pF	CE	
	C...115	59.34.4101	100 pF	CE	
	C...116	59.26.0680	68 uF	6V SAL	
	C...117	59.06.0222	2.2 nF	PE	
	C...118	59.26.0680	68 uF	6V SAL	
	C...119	59.06.0223	22 nF	PE	
	C...120	59.34.2220	22 pF	CE	
	C...121	59.26.0680	68 uF	6V SAL	
	C...122	59.06.0223	22 nF	PE	
	C...123	59.06.0223	22 nF	PE	
	C...124	59.25.5221	220 uF	-10% 40V EL	
	C...125	59.34.4101	100 pF	CE	
	C...201	59.05.1681	680 pF	1% 500V PP	
	C...202	59.05.1681	680 pF	1% 500V PP	
	C...203	59.06.0682	6.8 nF	10% PE	
	C...204	59.34.4391	390 pF	CE	
	C...205	59.22.3101	100 uF	-20% 10V EL	
	C...206	59.22.3101	100 uF	-20% 10V EL	
	C...207	59.06.0222	2.2 nF	PE	
	C...208	59.26.0680	68 uF	6V SAL	
	C...209	59.22.3101	100 uF	-20% 10V EL	
	C...210	59.06.0222	2.2 nF	PE	
	C...211	59.26.0680	68 uF	6V SAL	
	C...212	59.26.0680	68 uF	6V SAL	
	C...213	59.34.4391	390 pF	CE	
	C...214	59.34.4391	390 pF	CE	
	C...215	59.34.4101	100 pF	CE	
	C...216	59.26.0680	68 uF	6V SAL	
	C...217	59.06.0222	2.2 nF	PE	
	C...218	59.26.0680	68 uF	6V SAL	
	C...219	59.06.0223	22 nF	PE	
	C...220	59.34.2220	22 pF	CE	
	C...221	59.26.0680	68 uF	6V SAL	
	C...222	59.06.0223	22 nF	PE	
	C...223	59.06.0223	22 nF	PE	
	C...224	59.25.5221	220 uF	-10% 40V EL	
	C...225	59.34.4101	100 pF	CE	
	D.....1	50.04.0122	1N4001	...4004	Mot.GI
	D.....2	50.04.0122	1N4001	...4004	Mot.GI
	D...101	50.04.0125	1N4448		any
	D...102	50.04.0125	1N4448		any
	D...103	50.04.0125	1N4448		any
	D...201	50.04.0125	1N4448		any
	D...202	50.04.0125	1N4448		any
	D...203	50.04.0125	1N4448		any
	IC..101	50.09.0105	NE5532	dual op. amp.	Sig.Ex.Ra
	IC..102	50.09.0105	NE5532	dual op. amp.	Sig.Ex.Ra
	IC..103	50.09.0105	NE5532	dual op. amp.	Sig.Ex.Ra
	IC..104	50.09.0105	NE5532	dual op. amp.	Sig.Ex.Ra
	IC..201	50.09.0105	NE5532	dual op. amp.	Sig.Ex.Ra
	IC..202	50.09.0105	NE5532	dual op. amp.	Sig.Ex.Ra
	IC..203	50.09.0105	NE5532	dual op. amp.	Sig.Ex.Ra
	IC..204	50.09.0105	NE5532	dual op. amp.	Sig.Ex.Ra
	MP....1	53.03.0166	8 pcs	IC-socket 8 pin	
	MP....2	50.20.2001	8 pcs	CLIP ; 2 * TO 92	St
	P.....1	54.01.0359	2*16 pin	euroconnector	Bu
	Q...101	50.03.0515	BC 557	PNP IC>100mA, B>100	any
	Q...102	50.03.0436	BC 547	NPN IC>100mA, B>100	any
	Q...103	50.03.0515	BC 557	PNP IC>100mA, B>100	any
	Q...104	50.03.0515	BC 557	PNP IC>100mA, B>100	any
	Q...105	50.03.0436	BC 547	NPN IC>100mA, B>100	any
	Q...106	50.03.0436	BC 547	NPN IC>100mA, B>100	any
	Q...107	50.03.0436	BC 547	NPN IC>100mA, B>100	any
	Q...108	50.03.0350	J 112	N-JFET	NS,Mot,Six
	Q...109	50.03.0350	J 112	N-JFET	NS,Mot,Six
	Q...110	50.03.0516	BC 337	NPN matched with Q 111	Sie
	Q...111	50.03.0516	BC 337	NPN	Sie
	Q...112	50.03.0625	BC 327	PNP matched with Q 113	Sie
	Q...113	50.03.0625	BC 327	PNP	Sie
	Q...114	50.03.0516	BC 337	NPN matched with Q 115	Sie
	Q...115	50.03.0516	BC 337	NPN	Sie
	Q...116	50.03.0625	BC 327	PNP matched with Q 117	Sie
	Q...117	50.03.0625	BC 327	PNP	Sie
	Q...201	50.03.0515	BC 557	PNP IC>100mA, B>100	any
	Q...202	50.03.0436	BC 547	NPN IC>100mA, B>100	any
	Q...203	50.03.0515	BC 557	PNP IC>100mA, B>100	any
	Q...204	50.03.0515	BC 557	PNP IC>100mA, B>100	any
	Q...205	50.03.0436	BC 547	NPN IC>100mA, B>100	any
	Q...206	50.03.0436	BC 547	NPN IC>100mA, B>100	any
	Q...207	50.03.0436	BC 547	NPN IC>100mA, B>100	any
	Q...208	50.03.0350	J 112	N-JFET	NS,Mot,Six
	Q...209	50.03.0350	J 112	N-JFET	NS,Mot,Six
	Q...210	50.03.0516	BC 337	NPN matched with Q 211	Sie
	Q...211	50.03.0516	BC 337	NPN	Sie
	Q...212	50.03.0625	BC 327	PNP matched with Q 213	Sie
	Q...213	50.03.0625	BC 327	PNP	Sie
	Q...214	50.03.0516	BC 337	NPN matched with Q 215	Sie
	Q...215	50.03.0516	BC 337	NPN	Sie
	Q...216	50.03.0625	BC 327	PNP matched with Q 217	Sie
	Q...217	50.03.0625	BC 327	PNP	Sie
	R...101	57.11.3152	1.5 kOhm	1% 0.25W	
	R...102	57.11.3392	3.9 kOhm	1% 0.25W	
	R...103	57.11.3152	1.5 kOhm	1% 0.25W	
	R...104	57.11.3392	3.9 kOhm	1% 0.25W	
	R...105	57.11.3392	3.9 kOhm	1% 0.25W	
	R...106	57.11.3472	4.7 kOhm	1% 0.25W	
	R...107	57.11.3432	4.3 kOhm	1% 0.25W	
	R...108	57.11.3101	100 Ohm	1% 0.25W	
	R...109	57.11.3152	1.5 kOhm	1% 0.25W	
	R...110	58.01.9103	10 kOhm	10% 0.50W	
	R...111	57.11.3471	470 Ohm	5% 0.25W	
	R...112	57.11.4104	100 kOhm	5% 0.25W	
	R...113	57.11.4223	22 kOhm	5% 0.25W	
	R...114	57.11.5335	3.3 MOhm	5% 0.25W	
	R...115	57.11.4103	10 kOhm	5% 0.25W	
	R...116	57.11.4103	10 kOhm	5% 0.25W	
	R...117	57.11.4223	22 kOhm	5% 0.25W	
	R...118	57.11.4103	10 kOhm	5% 0.25W	
	R...119	57.11.4103	10 kOhm	5% 0.25W	
	R...120	57.11.4103	10 kOhm	5% 0.25W	

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R...121	57.11.4103	10 kOhm	5% 0.25W	
	R...122	57.11.4223	22 kOhm	5% 0.25W	
	R...123	57.11.4330	33 Ohm	5% 0.25W	
	R...124	57.11.4333	33 kOhm	5% 0.25W	
	R...125	57.11.4104	100 kOhm	5% 0.25W	
	R...126	57.11.4104	100 kOhm	5% 0.25W	
	R...127	57.11.4333	33 kOhm	5% 0.25W	
	R...128	57.11.4104	100 kOhm	5% 0.25W	
	R...129	57.11.4104	100 kOhm	5% 0.25W	
	R...130	57.11.4104	100 kOhm	5% 0.25W	
	R...131	57.11.4104	100 kOhm	5% 0.25W	
	R...132	57.11.4333	33 kOhm	5% 0.25W	
	R...133	57.11.4333	33 kOhm	5% 0.25W	
	R...134	57.11.4104	100 kOhm	5% 0.25W	
	R...135	57.11.4223	22 kOhm	5% 0.25W	
	R...136	57.11.5335	3.3 MOhm	5% 0.25W	
	R...137	57.11.3332	3.3 kOhm	1% 0.25W	
	R...138	57.11.3471	470 Ohm	1% 0.25W	
	R...139	57.11.3332	3.3 kOhm	1% 0.25W	
	R...140	57.11.3471	470 Ohm	1% 0.25W	
	R...141	57.11.3472	4.7 kOhm	1% 0.25W	
	R...142	57.11.3472	4.7 kOhm	1% 0.25W	
	R...143	57.11.3472	4.7 kOhm	1% 0.25W	
	R...144	57.11.3472	4.7 kOhm	1% 0.25W	
	R...145	57.11.3332	3.3 kOhm	1% 0.25W	
	R...146	57.11.3332	3.3 kOhm	1% 0.25W	
	R...147	57.11.4222	2.2 kOhm	5% 0.25W	
	R...148	58.01.9203	20 kOhm	10% 0.50W	
	R...149	57.11.3152	1.5 kOhm	1% 0.25W	
	R...150	57.11.4223	22 kOhm	5% 0.25W	
	R...151	58.11.6102	1 kOhm	30% 0.50W	
	R...152	57.11.4681	680 Ohm	5% 0.25W	
	R...153	57.11.3471	470 Ohm	5% 0.25W	
	R...154	57.11.4103	10 kOhm	5% 0.25W	
	R...155	57.11.4103	10 kOhm	5% 0.25W	
	R...156	57.11.4339	3.3 Ohm	2% 0.25W	
	R...157	57.11.4339	3.3 Ohm	2% 0.25W	
	R...158	57.11.4181	180 kOhm	5% 0.25W	
	R...159	57.11.4222	2.2 kOhm	5% 0.25W	
	R...160	57.11.4222	2.2 kOhm	5% 0.25W	
	R...161	57.11.4339	3.3 Ohm	2% 0.25W	
	R...162	57.11.4339	3.3 Ohm	2% 0.25W	
	R...163	57.11.4103	10 kOhm	5% 0.25W	
	R...164	57.11.4103	10 kOhm	5% 0.25W	
	R...165	57.92.1271	6.5 Ohm	I= 270mA PTC	Philips Nr.2322 662 12711
	R...166	57.92.1271	6.5 Ohm	I= 270mA PTC	Philips Nr.2322 662 12711
	R...201	57.11.3152	1.5 kOhm	1% 0.25W	
	R...202	57.11.3392	3.9 kOhm	1% 0.25W	
	R...203	57.11.3152	1.5 kOhm	1% 0.25W	
	R...204	57.11.3392	3.9 kOhm	1% 0.25W	
	R...205	57.11.3392	3.9 kOhm	1% 0.25W	
	R...206	57.11.3472	4.7 kOhm	1% 0.25W	
	R...207	57.11.3432	4.3 kOhm	1% 0.25W	
	R...208	57.11.3101	100 Ohm	1% 0.25W	
	R...209	57.11.3152	1.5 kOhm	1% 0.25W	
	R...210	58.01.9103	10 kOhm	10% 0.50W	
	R...211	57.11.3471	470 Ohm	5% 0.25W	
	R...212	57.11.4104	100 kOhm	5% 0.25W	
	R...213	57.11.4223	22 kOhm	5% 0.25W	
	R...214	57.11.5335	3.3 MOhm	5% 0.25W	
	R...215	57.11.4103	10 kOhm	5% 0.25W	
	R...216	57.11.4103	10 kOhm	5% 0.25W	
	R...217	57.11.4223	22 kOhm	5% 0.25W	
	R...218	57.11.4103	10 kOhm	5% 0.25W	
	R...219	57.11.4103	10 kOhm	5% 0.25W	
	R...220	57.11.4103	10 kOhm	5% 0.25W	
	R...221	57.11.4103	10 kOhm	5% 0.25W	
	R...222	57.11.4223	22 kOhm	5% 0.25W	
	R...223	57.11.4330	33 Ohm	5% 0.25W	
	R...224	57.11.4333	33 kOhm	5% 0.25W	
	R...225	57.11.4104	100 kOhm	5% 0.25W	
	R...226	57.11.4104	100 kOhm	5% 0.25W	
	R...227	57.11.4333	33 kOhm	5% 0.25W	
	R...228	57.11.4104	100 kOhm	5% 0.25W	
	R...229	57.11.4104	100 kOhm	5% 0.25W	
	R...230	57.11.4104	100 kOhm	5% 0.25W	
	R...231	57.11.4104	100 kOhm	5% 0.25W	
	R...232	57.11.4333	33 kOhm	5% 0.25W	
	R...233	57.11.4333	33 kOhm	5% 0.25W	
	R...234	57.11.4104	100 kOhm	5% 0.25W	
	R...235	57.11.4223	22 kOhm	5% 0.25W	
	R...236	57.11.5335	3.3 MOhm	5% 0.25W	
	R...237	57.11.3332	3.3 kOhm	1% 0.25W	
	R...238	57.11.3471	470 Ohm	1% 0.25W	
	R...239	57.11.3332	3.3 kOhm	1% 0.25W	
	R...240	57.11.3471	470 Ohm	1% 0.25W	
	R...241	57.11.3472	4.7 kOhm	1% 0.25W	
	R...242	57.11.3472	4.7 kOhm	1% 0.25W	
	R...243	57.11.3472	4.7 kOhm	1% 0.25W	
	R...244	57.11.3472	4.7 kOhm	1% 0.25W	
	R...245	57.11.3332	3.3 kOhm	1% 0.25W	
	R...246	57.11.3332	3.3 kOhm	1% 0.25W	
	R...247	57.11.4222	2.2 kOhm	5% 0.25W	
	R...248	58.01.9203	20 kOhm	10% 0.50W	
	R...249	57.11.3152	1.5 kOhm	1% 0.25W	
	R...250	57.11.4223	22 kOhm	5% 0.25W	
	R...251	58.11.6102	1 kOhm	30% 0.50W	
	R...252	57.11.4681	680 Ohm	5% 0.25W	
	R...253	57.11.3471	470 Ohm	5% 0.25W	
	R...254	57.11.4103	10 kOhm	5% 0.25W	
	R...255	57.11.4103	10 kOhm	5% 0.25W	
	R...256	57.11.4339	3.3 Ohm	2% 0.25W	
	R...257	57.11.4339	3.3 Ohm	2% 0.25W	
	R...258	57.11.4181	180 kOhm	5% 0.25W	
	R...259	57.11.4222	2.2 kOhm	5% 0.25W	
	R...260	57.11.4222	2.2 kOhm	5% 0.25W	
	R...261	57.11.4339	3.3 Ohm	2% 0.25W	
	R...262	57.11.4339	3.3 Ohm	2% 0.25W	
	R...263	57.11.4103	10 kOhm	5% 0.25W	
	R...264	57.11.4103	10 kOhm	5% 0.25W	
	R...265	57.92.1271	6.5 Ohm	I= 270mA PTC	Philips Nr.2322 662 12711
	R...266	57.92.1271	6.5 Ohm	I= 270mA PTC	Philips Nr.2322 662 12711
	T...101	1.022.451.00		input trafo 1:0.62	St
	T...102	1.022.355.00		output trafo	
	T...201	1.022.451.00		input trafo 1:0.62	St
	T...202	1.022.355.00		output trafo	

CE=Ceramic, CF=Carbon Film, EL=Electrolytic, MF=Metal Film,
PE=Polyester, PP=Polypropylen, PS=Polystyrol

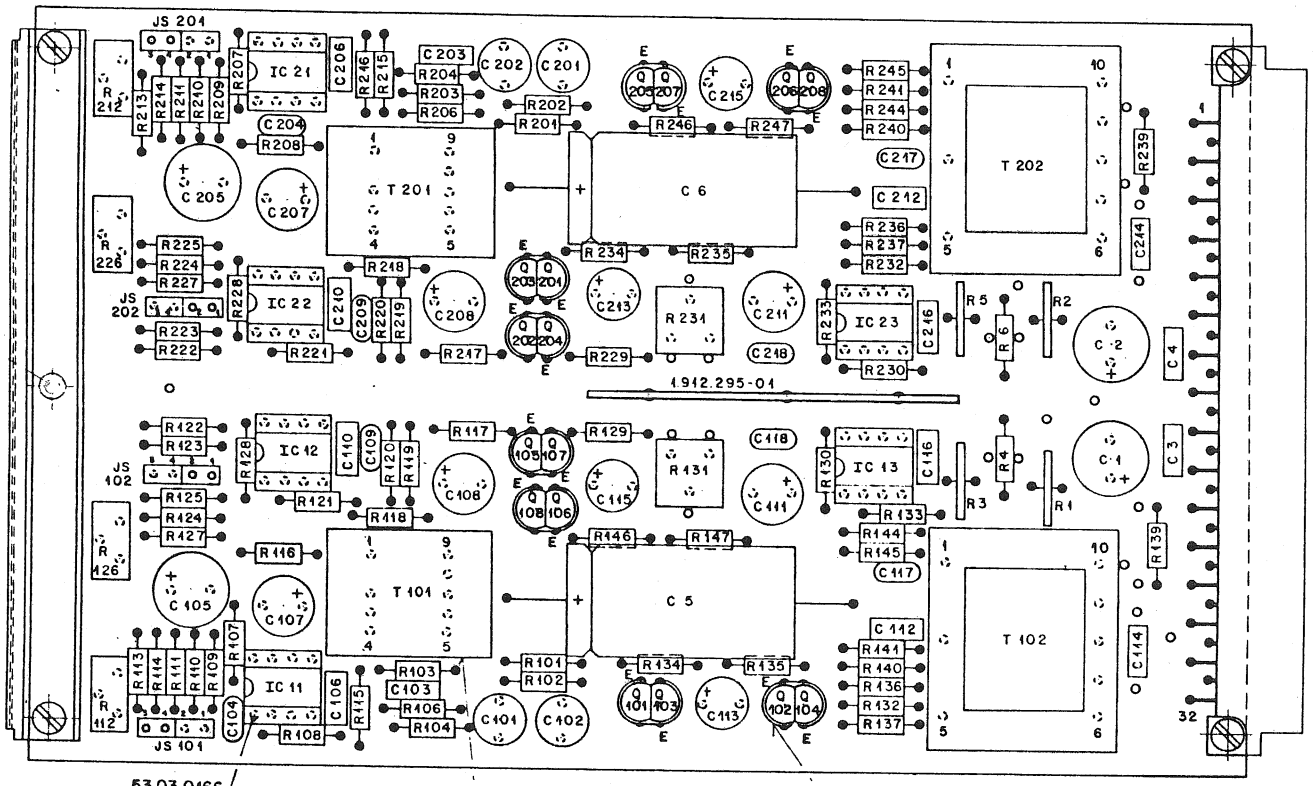
MANUFACTURER: Bu=Burndy, Ex=Exar, Fc=Fairchild, GI=General Instrument
HP=Hewlett Packard, ITT=Intermetall, Mot=Motorola, Nat=National
(Matsushita), NS=National Semiconductors, Ph=Philips,
Ra=Raytheon, Sig=Signetics, Six=Siliconix, St=Studer,
TI=Texas Instrument

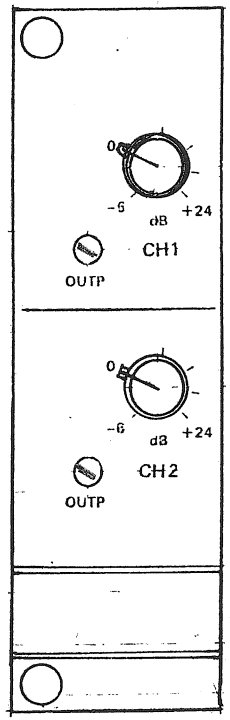
ORIG 85/04/16

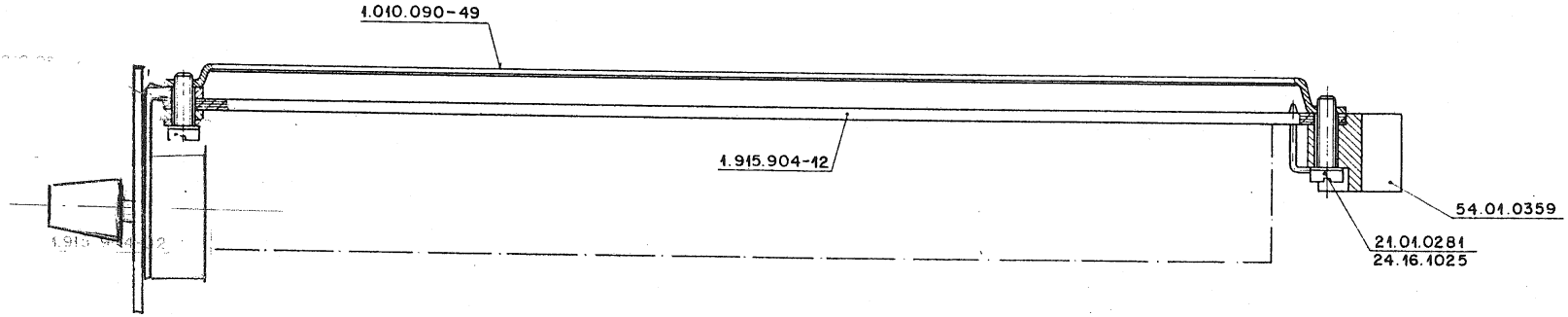
CH 2

CH 1

DATE	8.7.88		
SIGN	Kec/Sch		
STUDER REGENSDORF ZÜRICH	DUAL LINE AMPLIFIER (IEC)		SC 1.915.934-00







Werkstoff: Norm-Nr / DIN-Bez / Abmessung	Oberfläche: Gute / Beh		Änderung						
				4.4.84	Si				
Zugehörige Unterlagen: PL	Freimasstoleranz	Massstab: 2:1	Ausgabe	24.11.82	A.Ho	Rec			
				Datum	Gez	Gepr	Gen	Index	
Ersatz für: 1.915.904-00	Ersetzt durch		Kopie für						

STUDER REGENSDORF ZÜRICH

Benennung: DUAL LINE AMPLIFIER

Nummer: 1.915.934-00

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	C 1	59.22.4221	220 µ	16 V EL	
	2	59.22.4221	220 µ	16 V EL	
	3	59.06.0103	10 n	63 V PE	
	4	59.06.0103	10 n	63 V PE	
	5	59.25.5102	1000 µ	40 V EL	
	6	59.25.5102	1000 µ	40 V EL	
	C.01	59.05.1681	680 p	1% 630 V PP	
	.02	59.05.1681	680 p	1% 630 V PP	
	.03	59.06.0103	10 n	63 V PE	
	.04	59.34.4151	150 p	63 V CER	
	.05	59.22.2221	220 µ	6 V EL	
	.06	59.06.0104	0,1 µ	63 V PE	
	.07	59.22.5101	100 µ	25V EL	
	.08	59.22.5101	100 µ	25V EL	
	.09	59.34.5471	470 p	63 V CER	
	.10	59.06.0104	0,1 µ	63 V PE	
	.11	59.22.5101	100 µ	25V EL	
	.12	59.06.0222	2,2 n	63 V PE	
	.13	59.22.5470	47 µ	25 V EL	
	.14	59.06.0333	33 n	63 V PE	
	.15	59.22.5470	47 µ	25 V EL	
	.16	59.06.0104	0,1 µ	63 V PE	
	17	59.34.2220	22 p	63 V CER	
1	8	59.34.4101	100 p	63 V CER	
	IC.1	50.09.0105	NE 5532	DUAL OPAMP XR 5532	SIG/EX
	.2	50.09.0105	NE 5532	DUAL OPAMP XR 5532	SIG/EX

IND	DATE	NAME
4		
3		
2		
1		BR
○	24.11.82	BR

CER CERAMIC
EL ELECTROLYTIC
PE POLYESTER
PP POLYPROPYLEN
SIG SIGNETICS/PHILIPS
EX EXAR

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	IC.3	50.09.0105	NE 5532	DUAL OPAMP XR 5532	SIG/EX
	JS.01	54.01.0020	4 PIN		
		54.01.0021	JUMPER		
	.02	54.01.0021	4 PIN		
		54.01.0021	JUMPER		
	P 1	54.01.0359	2*16 P		
	Q.01	1.010.037.50	BC 337	NPN	
	.02	1.010.036.50	BC 327	PNP	
	.03	1.010.037.50	BC 337	NPN MATCHED	
	.04	1.010.036.50	BC 327	PNP	
	.05	1.010.037.50	BC 337	NPN	
	.06	1.010.036.50	BC 327	PNP	
	.07	1.010.037.50	BC 337	NPN	
	.08	1.010.036.50	BC 327	PNP	
	R 1	57.99.0209	5,6	PTC	PH
	2	57.99.0209	5,6	PTC	PH
	3	57.99.0209	5,6	PTC	PH
	4	57.11.4569	5,6		
	5	57.99.0209	5,6	PTC	PH
	6	57.11.4569	5,6		

IND	DATE	NAME
4		
3		
2		
1		
○	24.11.82	BR

PH PHILIPS

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	R.01	57.11.3152	1,5 K	1%	
	.02	57.11.3152	1,5 K	1%	
	.03	57.11.3392	3,9 K	1%	
	.04	57.11.3392	3,9 K	1%	
	.05				
	.06	57.11.4182	1,8 K		
	.07	57.11.3101	100		
	08	57.11.3432	4,3 K		
	09	57.11.3392	3,9 K	2%	
	.10	57.11.4561	560		
	.11	57.11.3561	560		
	.12		10 K	10% PREOSTAT 16 -U- MONO E	
	.13	57.11.4221	220	2%	
	.14	57.11.3392	3,9 K	2%	
	.15	57.11.4330	33		
	.16	57.11.4223	22 K		
	.17	57.11.4104	100 K		
	.18	57.11.3562	5,6 K		
	.19	57.11.3101	100		
	.20	57.11.3101	100	1%	
	.21	57.11.3562	5,6 K		
	.22	57.11.3562	5,6 K		
	.23	57.11.3562	5,6 K		
	.24	57.11.4181	180	2%	
	.25	57.11.4471	470	2%	
	.26	58.01.9102	1 K	10% TRIM	
	.27	57.11.4182	1,8 K	2%	

IND	DATE	NAME
4		
3		
2		
1		
○	24.11.82	BR

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	R.28	57.11.4561	560	2%	
	.29	57.11.4222	2,2 K		
	.30	57.11.4223	22 K		
	.31	58.01.8201	200	TRIM	
	.32	57.11.4122	1,2 K		
	.33	57.11.4471	470		
	.34	57.11.4103	10 K		
	.35	57.11.4103	10 K		
	.36	57.11.4339	3,3		
	.37	57.11.4339	3,3		
	.38				
	.39	57.11.4181	180		
	.40	57.11.4222	2,2 K	2%	
	.41	57.11.4222	2,2 K	2%	
	.42				
	.43				
	.44	57.11.4339	3,3		
	.45	57.11.4339	3,3		
	.46	57.11.4103	10 K		
	.47	57.11.4103	10 K		
	T.01	1.022.451.00	1:0,62	INPUT TRAFO	ST
	T.02	1.022.355.00	1:1,38	LINE OUTPUT TRAFO	ST
	XIC	53.03.0166	8 P	IC SOCKET	

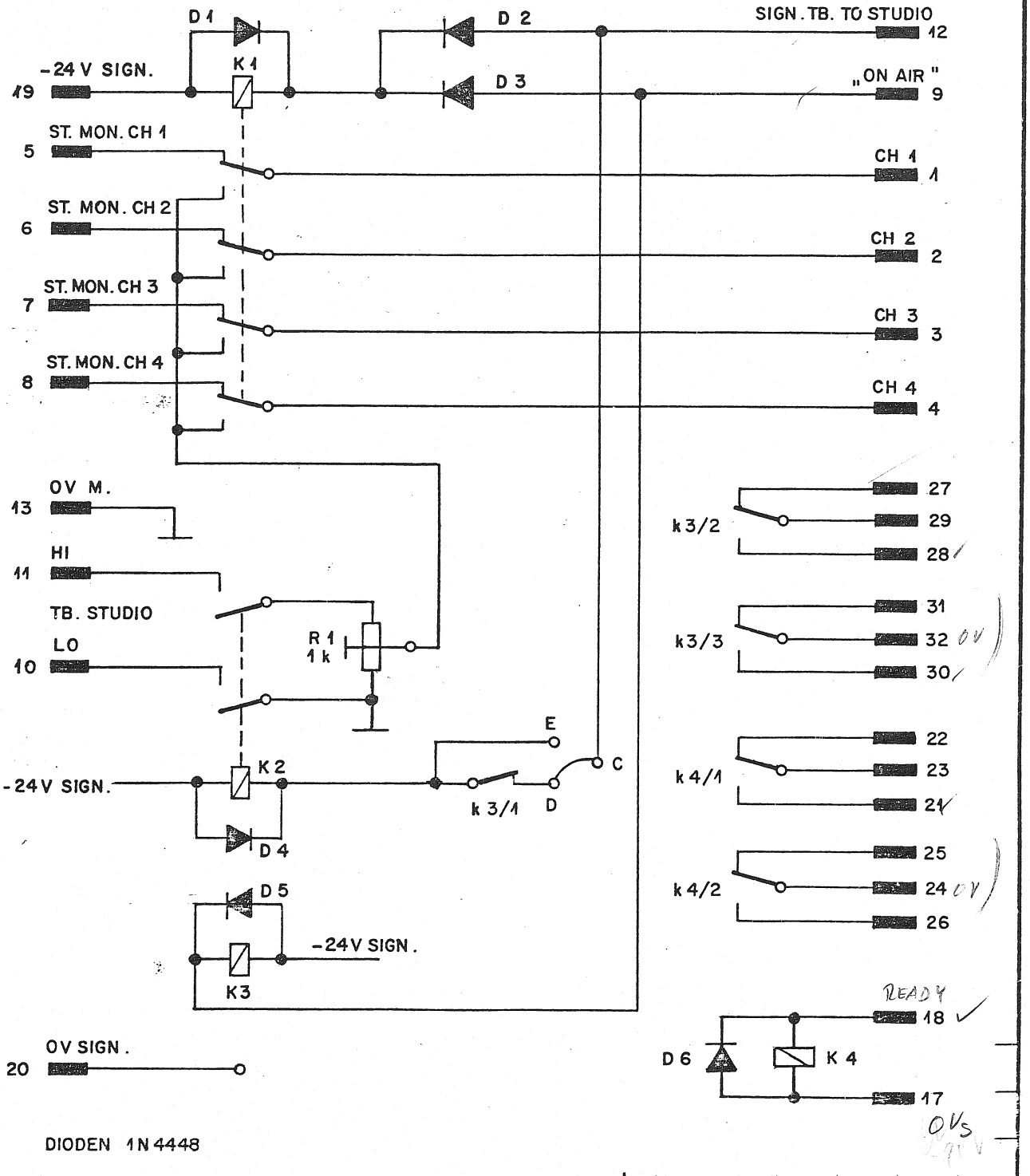
IND	DATE	NAME
4		
3		
2		
1		
○	24.11.82	

ST STUDER

	NUMMER	BEZEICHNUNG	MENGE	EINH.	BEMERKUNG	*
1	1.915.904.81	Dual Bal Amp.	1	St/4		
2	1.915.934.01	Frontschild	1			
3	1.915.934.02	Frontwinkel	1			
4	1.915.934.03	Unterlage für 2 Pot	2			
5	63250-113/0003	Potmeter 10k lin	2		Preh	
6	1.010.032.22	Pot. meter Mutter	2			
7	21.01.0279	Z-Schraube M2,5x6	3			
8	22.01.8025	Mutter M2,5	1			
9	24.16.1025	Schnorrscheibe f. M2,5	3			
10	21.51.8354	L-IS Schraube Ni M3x6	2			
11	49.02.0322	Verschluss Gewinde Einsatz	2			
12	49.02.0321	Verschluss Schraube	2			
13	42.01.0228	Drehknopf ⌀10 ; ⌀4	2			
14	42.01.0250	Deckel h grau für Knopf⌀10	2			
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

KONSTRUKTIONS-STÜCKLISTE	DATUM	VISUM	BLATT	BLÄTTER
	21.2.96		1	1
STUDER	DUAL LINE AMP		1.915.934	

2.001.281



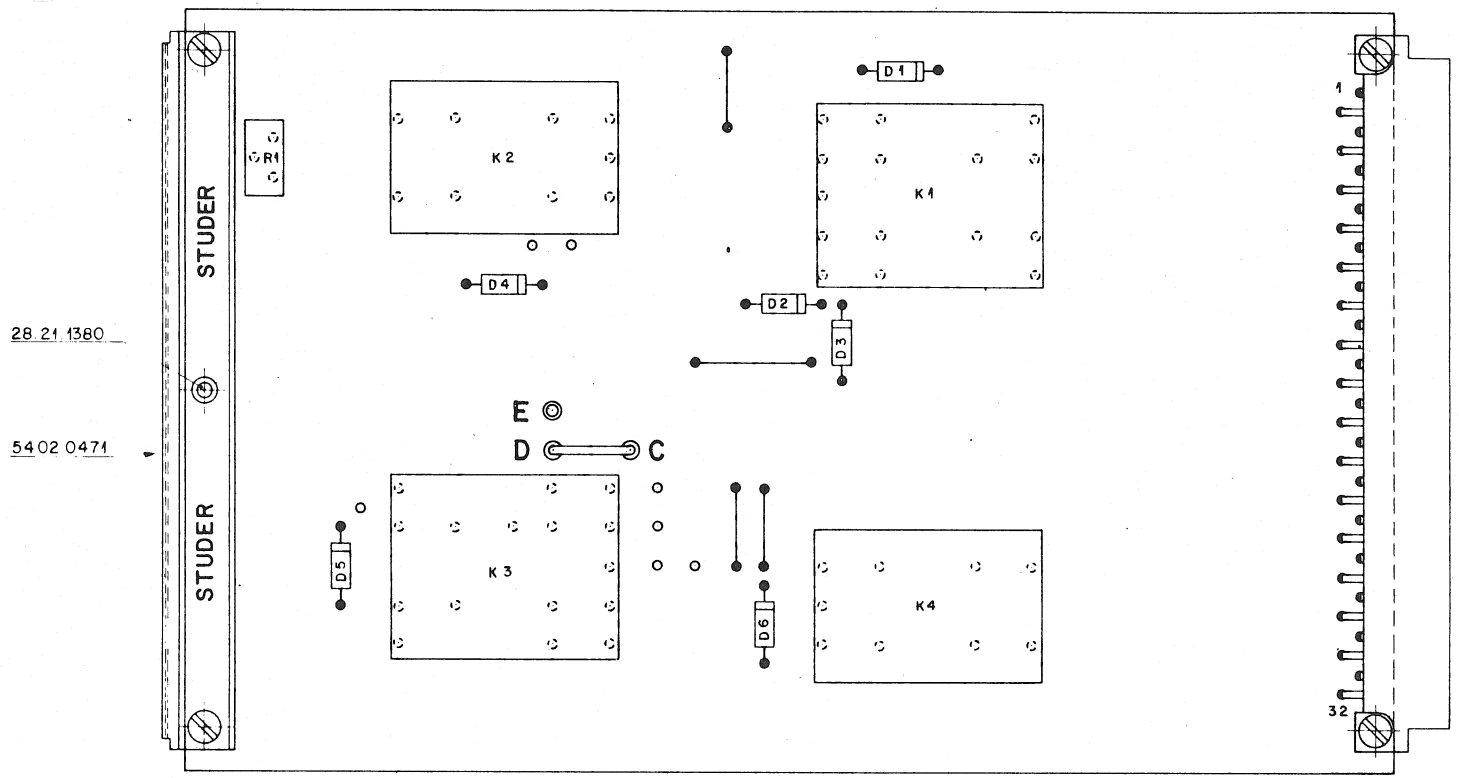
DIODEN 1N4448

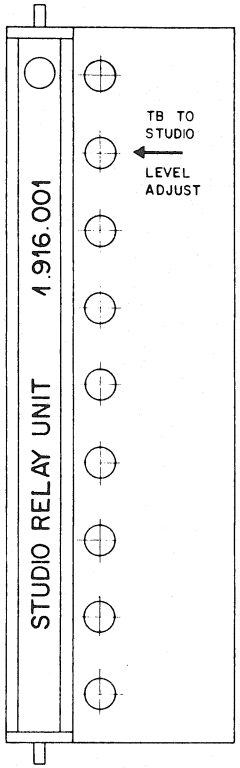
Werkstoff	Norm-Nr.:	Oberfläche	Güte:	Änderung					3
	DIN-Bez.:		Beh.:						2
	Abmessung:								1
Zugehörige Unterlagen:		Freimasstoleranz: ±		Maßstab:	Ausgabe	5. 12. 79	Si		0
						Datum	Gez.	Gepr.	Ges.	Index
Ersatz für:		Ersetzt durch:			Kopie für:					

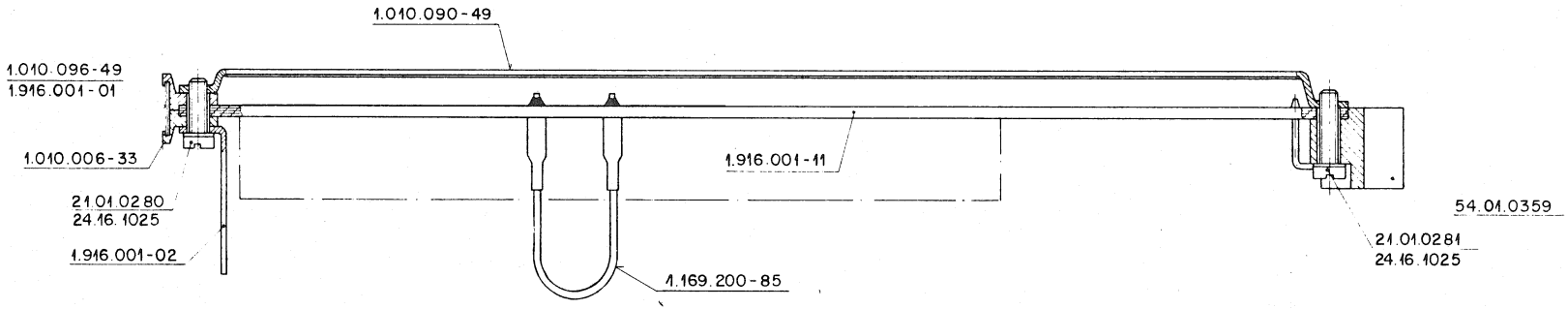
STUDER
REGENSDORF
ZÜRICH

Benennung: STUDIO RELAY UNIT

Nummer: SC 1.916.001







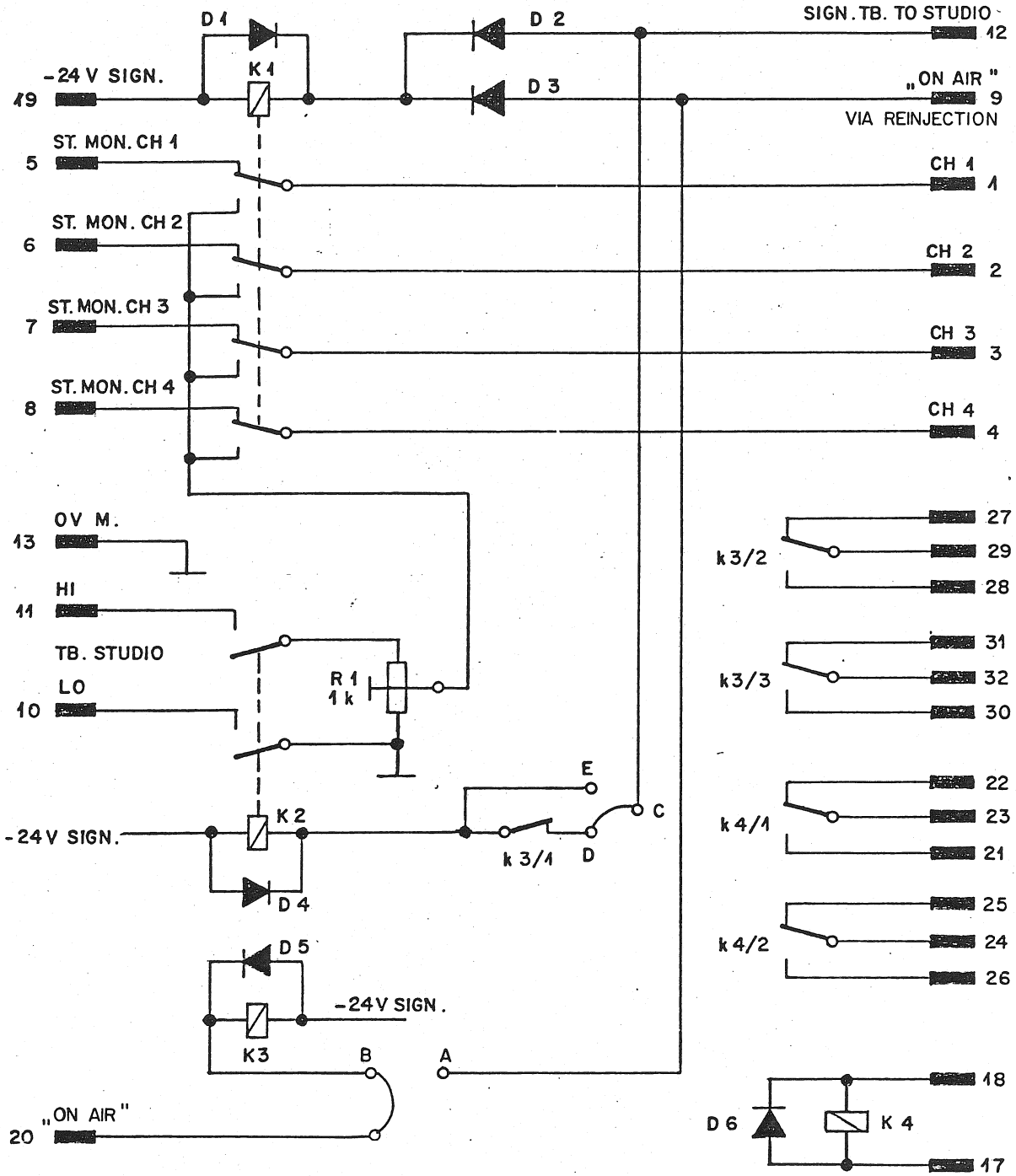
Ersatz für	Ersetzt durch	Ergänzt für
STUDER REGENSDORF ZURICH	Benennung: Studio Relay Unit	Nummer: 1.916.001-00

POS NO	PART NO	VALUE	SPECIFICATIONS	EQUIVALENT MFR
D1-6	50.04.0125	1N4448	Si	
K1,3	56.04.0144	24V 4xU	220V/2A	NA
K2,4	56.04.0143	24V 2xU	220V/2A	NA
R1	58.01.7102	1kΩ	0,5W LIN	

NA = NATIONAL

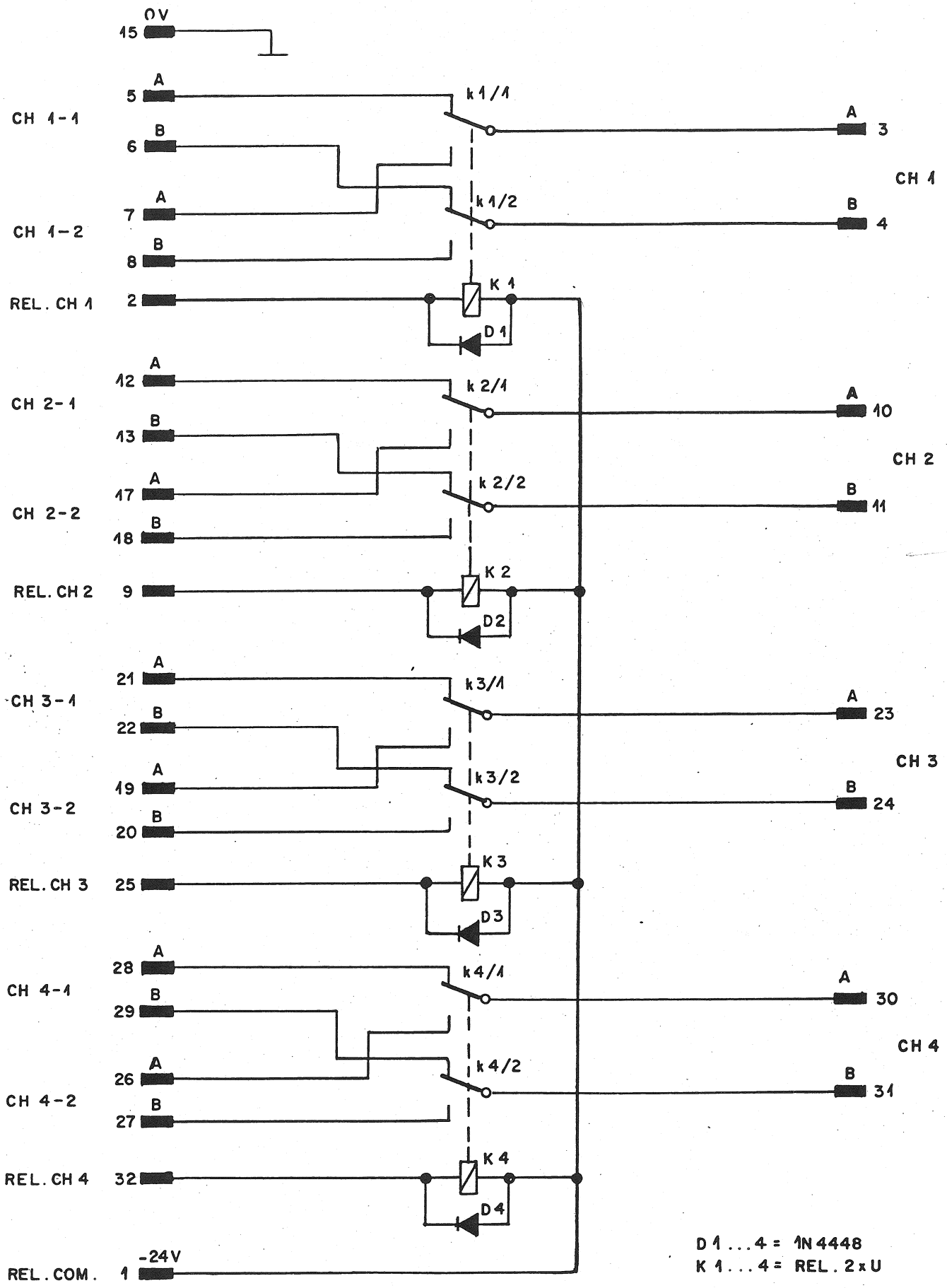
IND	DATE	NAME
④ ③ ② ① ○	23.1.80	

STUDER | STUDIO RELAY UNIT | 1.916.0001 | PAGE 1 of 1

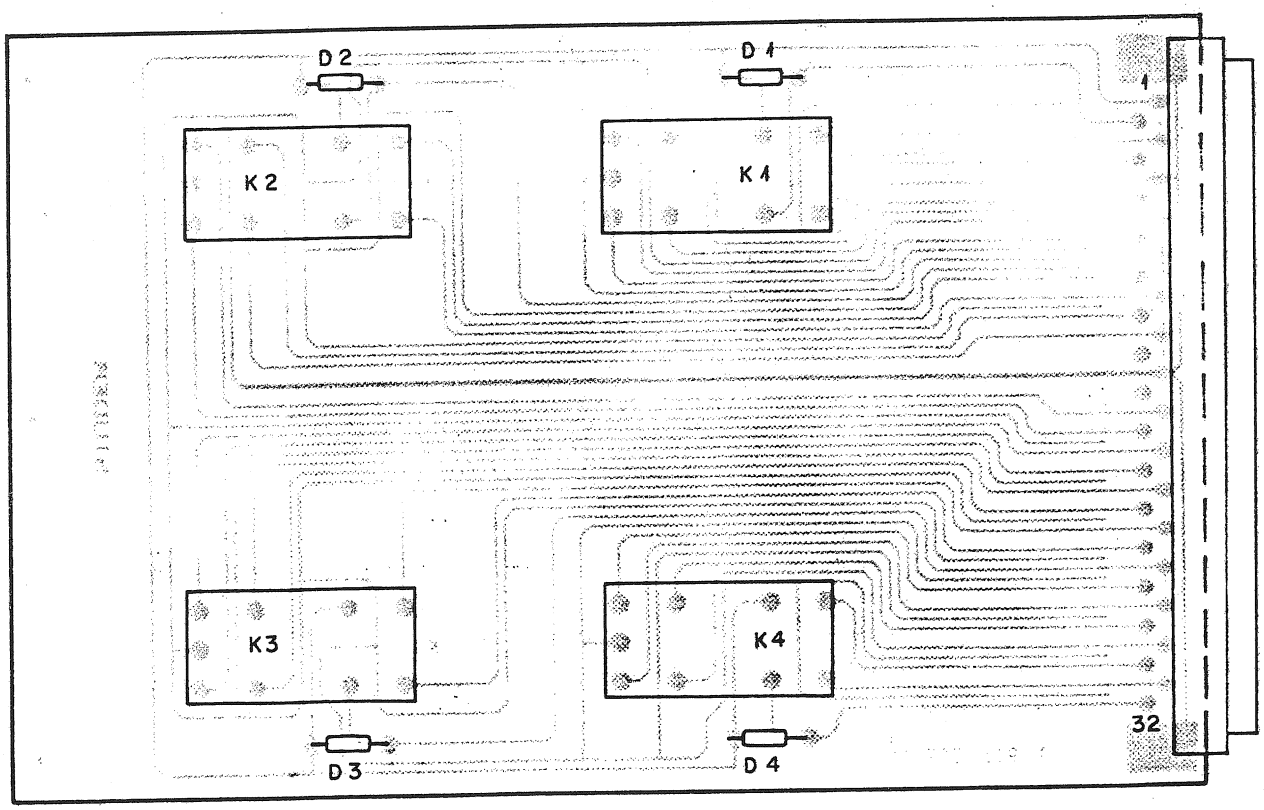


DIODEN 1N4448

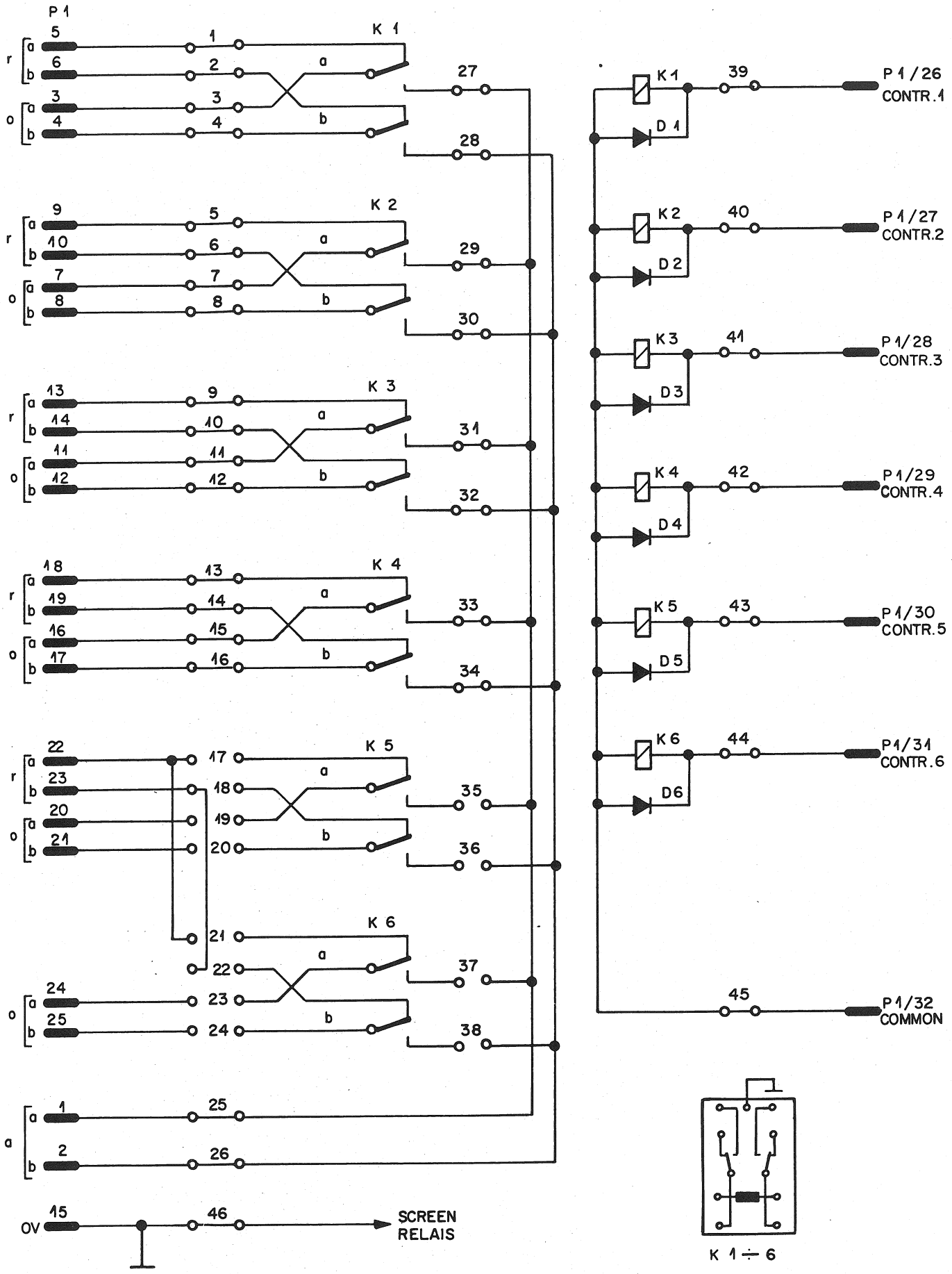
DATE:	29.3.82					RT TUNISIENNE
SIGN:						
STUDER REGENSDORF ZÜRICH	STUDIO RELAY UNIT					SC 1.916.001/1



DATE:	19.5.84					
SIGN:						
STUDER REGENSDORF ZÜRICH	METER SOURCE SEL. UNIT					1.916.002



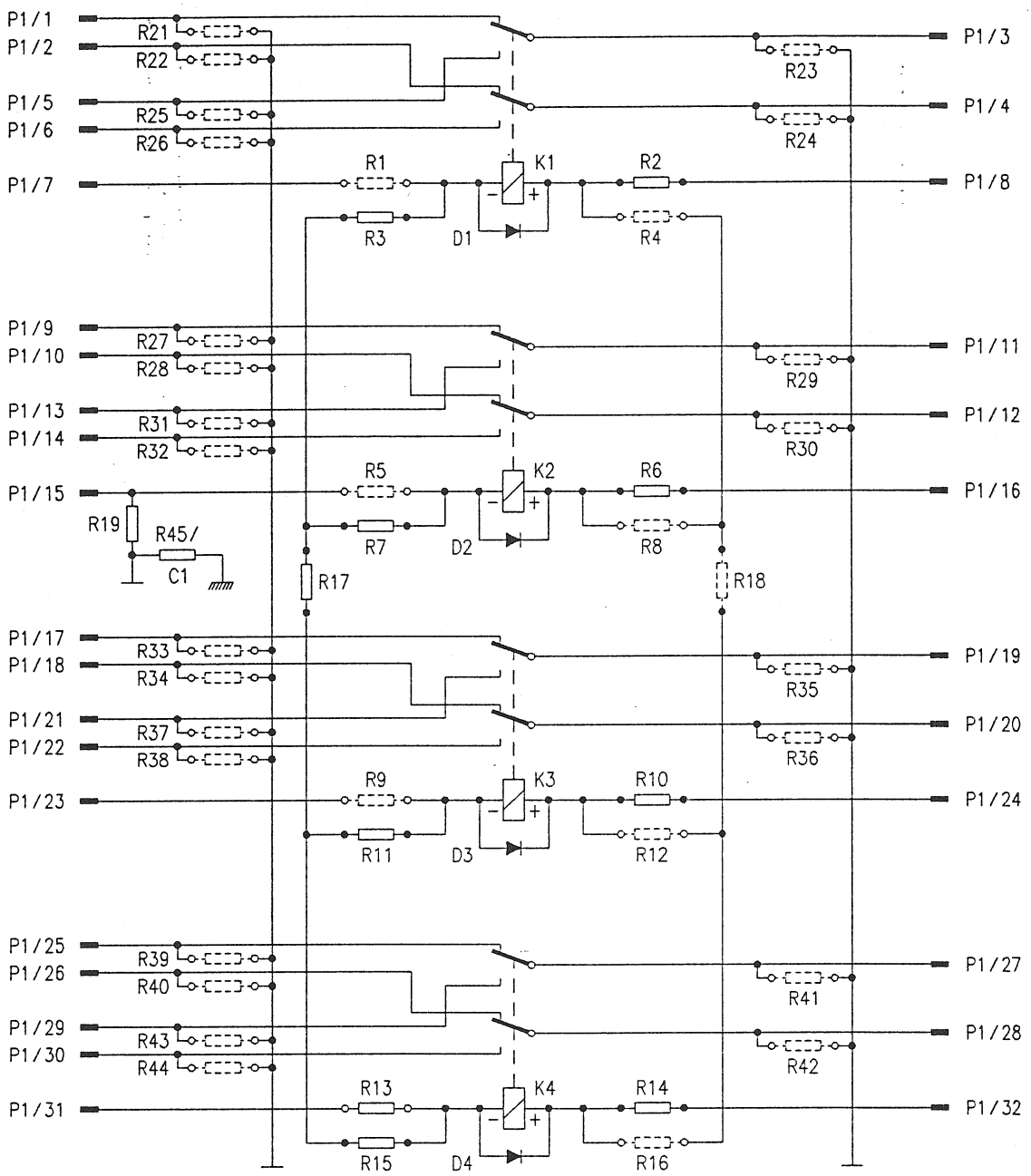
DATE:	15.9.83					
SIGN:						
STUDER REGENSDORF ZÜRICH	METER SOURCE SELECTOR					1.916.002



DATE:	8.11.82					
SIGN:						
STUDER REGENSDORF ZÜRICH	Relays Unit 6 A					1.916.003

Nr	Name	Bemerkung
1	a } a	BUS - INPUT
2	b }	a
3	a } o	
4	b }	
5	a } r	K 1
6	b }	
7	a } o	
8	b }	
9	a } r	K2
10	b }	
11	a } o	
12	b }	
13	a } r	K3
14	b }	
15	OV	SCREEN RELAYS
16	a } o	
17	b }	K4
18	a } r	
19	b }	
20	a } o	
21	b }	
22	a } r	K5 K6
23	b }	
24	a } o	
25	b }	
26	CONTROL 1	-
27	CONTROL 2	
28	CONTROL 3	
29	CONTROL 4	OV
30	CONTROL 5	
31	CONTROL 6	
32	COMMON	(- V)

14.9.82	trip	Steckerbelegung		
STUDER	RELAYS UNIT 6A		1.916.003	PAGE OF



K1: ☐ 5V (56.04.0198) ☐ 6V (56.04.0195) ☐ 12V (56.04.0196) ☐ 24V (56.04.0197) ☐ NOT EQUIPPED

K2: ☐ 5V (56.04.0198) ☐ 6V (56.04.0195) ☐ 12V (56.04.0196) ☐ 24V (56.04.0197) ☐ NOT EQUIPPED

K3: ☐ 5V (56.04.0198) ☐ 6V (56.04.0195) ☐ 12V (56.04.0196) ☐ 24V (56.04.0197) ☐ NOT EQUIPPED

K4: ☐ 5V (56.04.0198) ☐ 6V (56.04.0195) ☐ 12V (56.04.0196) ☐ 24V (56.04.0197) ☐ NOT EQUIPPED

R1–R19: 0-OHM (57.11.3000) EQUIPED: R-

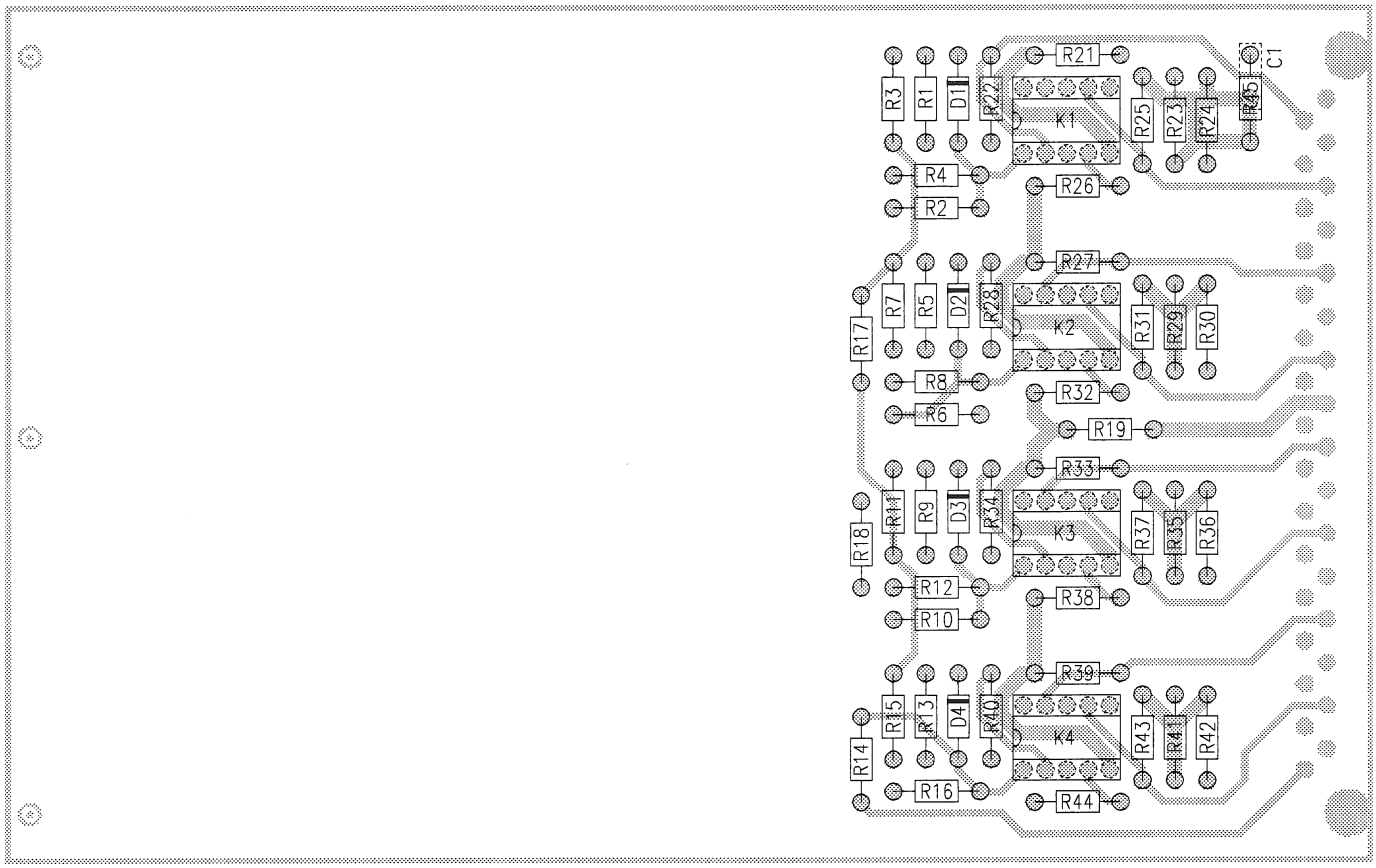
R21–R44: 1 M-OHM (57.11.3105) EQUIPED: R-

P1: 32P (54.01.0359)

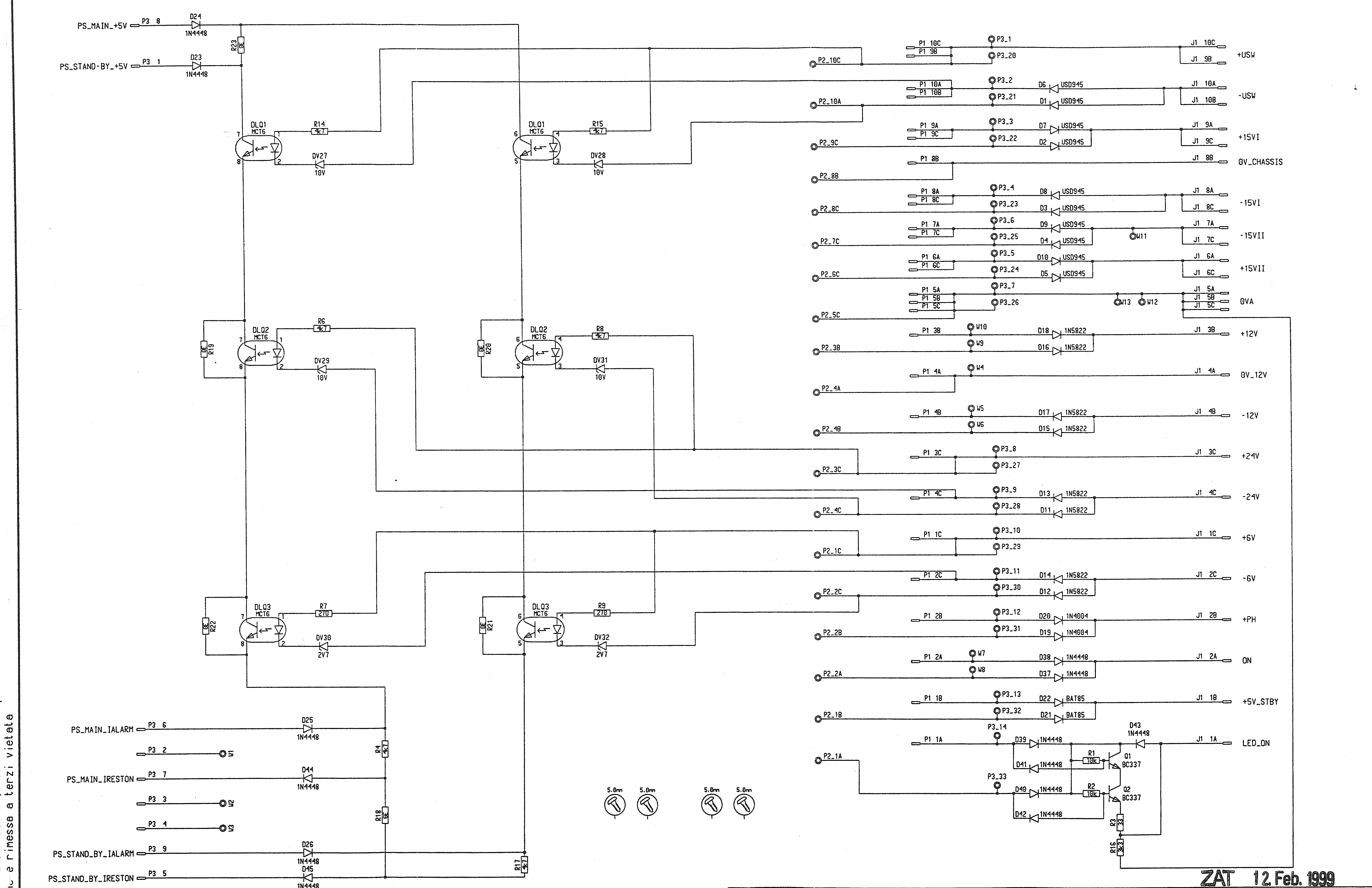
ALL D: 1N4448 (50.04.0125)

PCB: 1.916.010-11

⓪ 08.05.96 / BK				
SC916010				PAGE 1 OF 1
STUDER REGENSDORF SWITZERLAND	RELAY CARD 4x2 CO			1.916.010/___



0 22.02.2000zm				
91601011C				
STUDER REGENSDORF SWITZERLAND	RELAY CARD 4x2 CO			1.916.010.11

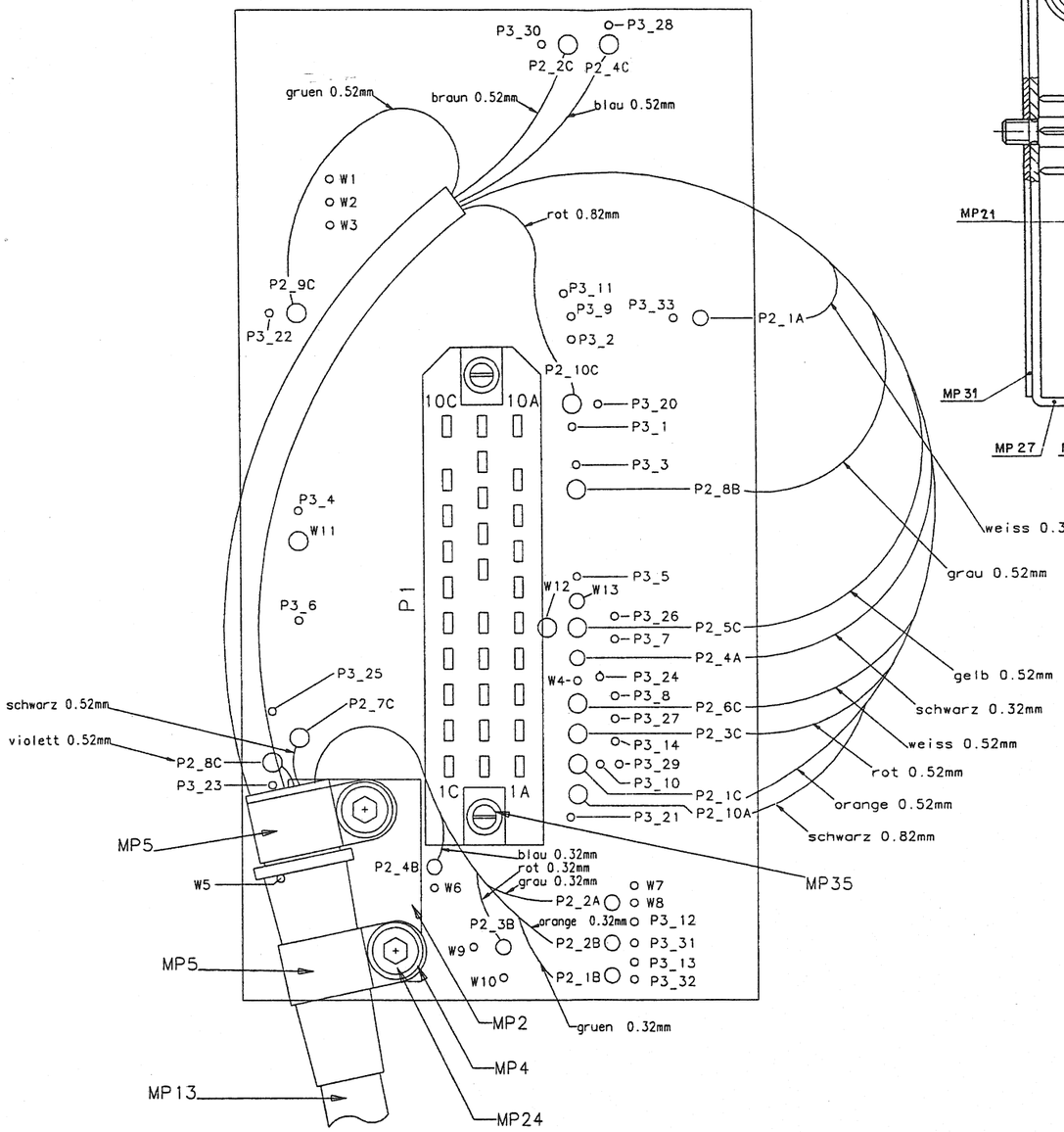


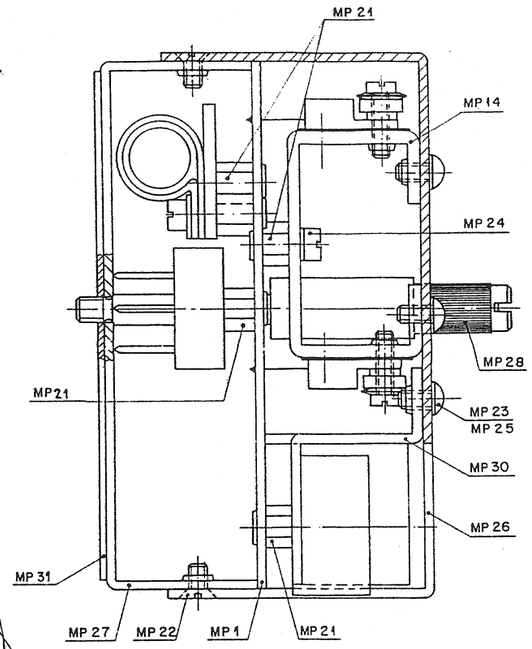
ZAT 12. Feb. 1999

0	19.01.98	ZT		
				PAGE 1 OF 1

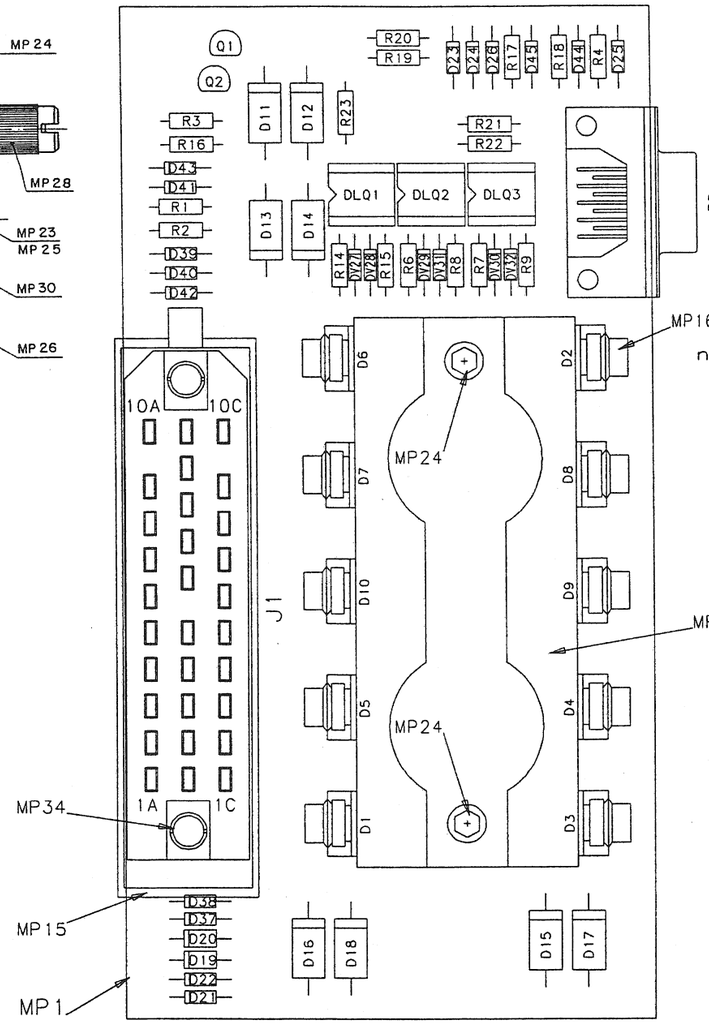
STUDER | CHANGE-OVER UNIT POWER PACK | SC | 1.918.074.00

Ansicht Loetseite





Ansicht Bestueckungsseite



MP16, MP17, MP18, MP19, MP20
nach BV632 bestueckt

ZAT 12. Feb. 1999

MP3 und MP29 aufgeklebt nach Fabrikationsmuster

Raw Material Werkstoff: Norm-No.: Norm-Nr.: ·		Surface Oberflaeche: Quality: Guete: ·		Modification Aenderung: ·	·	·	3
DIN-indication: DIN-Bez.: ·		Treatment: Behandlung:		·	·	·	2
Dimensions: Abmessung: ·		·		·	·	·	1
Accompanying documents: Zugehoerige Unterlagen: PL.BV632	General tolerance: Freimasstoleranz: ·	Scale: Massstab: ·	Edition Ausgabe: 19.12.1999 Date Datum	ZT Visa Gez.	SB Checked Gepr.	HM Seen Ges.	0 Index
Substitute for: Ersatz fuer: ·	Replaced by: Ersetzt durch: ·		Copy to: Kopie fuer: ·				
STUDER REGENSDORF	Description: Benennung: CHANGE-OVER UNIT POWER PACK , ESE		Number: Nummer: 1.918.074.00				

Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	D 1	50.04.0516		USD945	D USD 945,
0	D 2	50.04.0516		USD945	D USD 945,
0	D 3	50.04.0516		USD945	D USD 945,
0	D 4	50.04.0516		USD945	D USD 945,
0	D 5	50.04.0516		USD945	D USD 945,
0	D 6	50.04.0516		USD945	D USD 945,
0	D 7	50.04.0516		USD945	D USD 945,
0	D 8	50.04.0516		USD945	D USD 945,
0	D 9	50.04.0516		USD945	D USD 945,
0	D 10	50.04.0516		USD945	D USD 945,
0	D 11	50.04.0519		1N5822	3A, Schottky
0	D 12	50.04.0519		1N5822	3A, Schottky
0	D 13	50.04.0519		1N5822	3A, Schottky
0	D 14	50.04.0519		1N5822	3A, Schottky
0	D 15	not used		1N5822	3A, Schottky
0	D 16	not used		1N5822	3A, Schottky
0	D 17	not used		1N5822	3A, Schottky
0	D 18	not used		1N5822	3A, Schottky
0	D 19	50.04.0105		1N4004	D 1 N 4004 ... 1 N 4007
0	D 20	50.04.0105		1N4004	D 1 N 4004 ... 1 N 4007
0	D 21	50.04.0127		BAT85	200mA, Schottky
0	D 22	50.04.0127		BAT85	200mA, Schottky
0	D 23	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 24	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 25	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 26	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 37	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 38	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 39	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 40	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 41	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 42	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 43	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 44	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 45	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	DLQ 1	50.99.0111		MCT6	DLQ ILD-74, MCT 6, TLP 504 A
0	DLQ 2	50.99.0111		MCT6	DLQ ILD-74, MCT 6, TLP 504 A
0	DLQ 3	50.99.0111		MCT6	DLQ ILD-74, MCT 6, TLP 504 A
0	DV 27	50.04.1114		10V	Zener, 5%, 0.5W, DO-35
0	DV 28	50.04.1114		10V	Zener, 5%, 0.5W, DO-35
0	DV 29	50.04.1114		10V	Zener, 5%, 0.5W, DO-35
0	DV 30	50.04.1106		2V7	Zener, 5%, 0.5W, DO-35
0	DV 31	50.04.1114		10V	Zener, 5%, 0.5W, DO-35
0	DV 32	50.04.1106		2V7	Zener, 5%, 0.5W, DO-35

ZAT 12. Feb. 1999

Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	J 1	54.14.1032		30p	Buchsenleiste Ag PCB
0	MP 1	1.918.074.11	1 pce		CHANGE-OVER PCB
0	MP 2	1.918.075.05	1 pce		HALTEBLECH
0	MP 3	43.01.0108	1 pce	Label	ESE-WARNSCHILD
0	MP 4	23.01.3032	2 pcs	M3	U-Scheibe 3.2/9.0*0.8 St gb
0	MP 5	35.05.0315	2 pcs		KABELBRIDE D 11.1
0	MP 13	1.918.073.00	1 pce		CHANGE OVER CABLE
0	MP 14	1.915.106.03	1 pce		KUEHLBUEGEL 1
0	MP 15	54.14.7002	1 pce		MP RIEGELWANNE 30/39 POL
0	MP 16	21.53.0356	10 pcs	M3*10	Z-Schraube Inbus Zn gb chr
0	MP 17	1.010.098.27	10 pcs		DISTANZHUELSE D3.1/7.0* 2.3
0	MP 18	50.20.0305	10 pcs	TO220	Glimmerscheibe gefettet
0	MP 19	37.01.0101	20 pcs	3.2/8.0*0.3	Tellerfeder
0	MP 20	50.20.0404	10 pcs	d3.1	Durchführung, D3.5 * 2.1
0	MP 21	1.010.014.22	8 pcs	3*4.5	NIETMUTTER SW 6 M 3 *4,5
0	MP 22	1.010.045.21	4 pcs	M3*6	S - Schr IS sw
0	MP 23	1.010.025.21	6 pcs	M3*6	L-Schraube IS A2 sw oxydiert
0	MP 24	21.53.9356	4 pcs	M3*10	Z-Schraube Inbus-Ripp Zn gb ch
0	MP 25	24.16.1030	6 pcs		RIPPENSCHEIBE D 3.2/5.5
0	MP 26	1.918.074.01	1 pce		ABDECKUNG
0	MP 27	1.918.074.02	1 pce		CHASSIS
0	MP 28	1.918.075.03	2 pcs		BEFESTIGUNGSSCHRAUBE
0	MP 29	1.918.074.04	1 pce		STUDER-NR.-ETIKETTE 10 * 20
0	MP 30	1.918.075.06	1 pce		BLENDE
0	MP 31	1.918.075.07	1 pce		UNTERLAGE
0	MP 34	54.14.7023	2 pcs		PASS-BUCHSE
0	MP 35	54.14.7020	2 pcs		PASS-STIFT
0	P 1	54.14.1022		30p	Messerleiste Ag PCB
0	P 3	54.13.0071		9p	D-Sub, PCB, Winkel
0	Q 1	50.03.0340		BC337-25	800mA, 45V, NPN
0	Q 2	50.03.0340		BC337-25	800mA, 45V, NPN
0	R 1	57.11.3103		10k	MF, 1%, 0207
0	R 2	57.11.3103		10k	MF, 1%, 0207
0	R 3	57.11.3330		33R	MF, 1%, 0207
0	R 4	57.11.3472		4k7	MF, 1%, 0207
0	R 6	57.11.3472		4k7	MF, 1%, 0207
0	R 7	57.11.3271		270R	MF, 1%, 0207
0	R 8	57.11.3472		4k7	MF, 1%, 0207
0	R 9	57.11.3271		270R	MF, 1%, 0207
0	R 14	57.11.3472		4k7	MF, 1%, 0207
0	R 15	57.11.3472		4k7	MF, 1%, 0207
0	R 16	57.11.3332		3k3	MF, 1%, 0207
0	R 17	57.11.3472		4k7	MF, 1%, 0207

ZAT 12 Feb. 1999

Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 18	not used		0R0	MF, 0207
0	R 19	57.11.3000		0R0	MF, 0207
0	R 20	57.11.3000		0R0	MF, 0207
0	R 21	57.11.3000		0R0	MF, 0207
0	R 22	57.11.3000		0R0	MF, 0207
0	R 23	57.11.3000		0R0	MF, 0207

End of List

Comments

ZAT 12. Feb. 1999

SIGNALISATIONS-TREIBEREINHEIT Bestell-Nr. 1.918.203

Anwendung

Die vom Mischpult zur Verfügung gestellte Speisespannung für optische Signalisationseinrichtungen ist zur Speisung von Tastenbeleuchtungen und Led-Statusanzeigen ausgelegt, und demzufolge in der Belastbarkeit beschränkt.
In Erweiterung der Mischpult-Signalisationseinrichtung mit der SIGNAL DRIVE UNIT 1.918.203 können Wand-, resp. Türleuchten mit grösserer Wirksamkeit betrieben werden. Die Lampen-Speisespannung (24V) wird dabei separat aufbereitet und lässt sich getrennt für Rotlicht- (ON AIR), Grünlicht- (READY) und Gelb-, resp. Weisslicht- (CALL) Signalisation schalten. Die pultinterne Signalisationsspannung wird dabei kaum belastet, da sie lediglich als Steuerspannung der kontaktlosen Halbleiterrelais (SOLID STATE RELAYS) dient. SOLID STATE RELAYS arbeiten frei von Stör-Schaltimpulsen; eine im Studiobetrieb wichtige Voraussetzung.

Installation

Der Aufbau der Treibereinheit ist für den 19"Rack-Einbau (2E) ausgelegt, kann jedoch lageunabhängig an jeden zur Verfügung stehenden Ort installiert werden.

Anschliessen

Netzspannung -> siehe Abbildung unten

- Anpassung an örtliche Netzspannung durch entsprechende Verdrahtung der Transformator-Anschlussklemmen [1].
- Primärabsicherung [2]: 110 VAC=1.2AT / 220 VAC=0.63AT
- Netzanschluss an Klemmen [3].

Lampen-Speisespannung

Insgesamt vier Anschlussgruppen (Klemmen [4...7]) stellen je einen Anschluss für die separat schaltbaren Ausgänge für Rotlicht, Grünlicht und Weiss-(Gelb-)licht zur Verfügung. Die Anschlusskapazität ist auf maximal 25 einzelne SOFFITE S8-Lampeneinsätze (24V/5W) beschränkt.

Steuerspannung

Die SIGNAL DRIVE UNIT arbeitet mit Steuerspannungen in einem Bereich von -4V...-30V. Über den 15pol. D-Stecker [8] werden die Ausgänge der Mischpult-Signalisationseinrichtung zugeführt.

SIGNALIZATION DRIVER UNIT Order No. 1.918.203

Application

The supply voltage for visual signalization equipment, made available by the mixing console, is designed for illuminating push buttons and driving status LEDs which means that the load rating is limited.
When the mixing console signalization equipment is expanded with the SIGNAL DRIVE UNIT 1.918.203, wall and door lights can be operated more effectively. The lamp supply voltage (24 V) is prepared separately and can be controlled separately for signalization with red (ON AIR), green (READY), and yellow or white (CALL) lamps. The signalization voltage inside the mixer is hardly loaded because it is only used as the control voltage for noncontacting SOLID STATE relays. This type of relay does not produce any switching clicks which is a prerequisite for studio applications.

Installation

The driver unit is designed for 19" rack installation (2E), however, it can be installed in any orientation in any other available mounting location.

Connection

Line voltage -> refer to illustration below

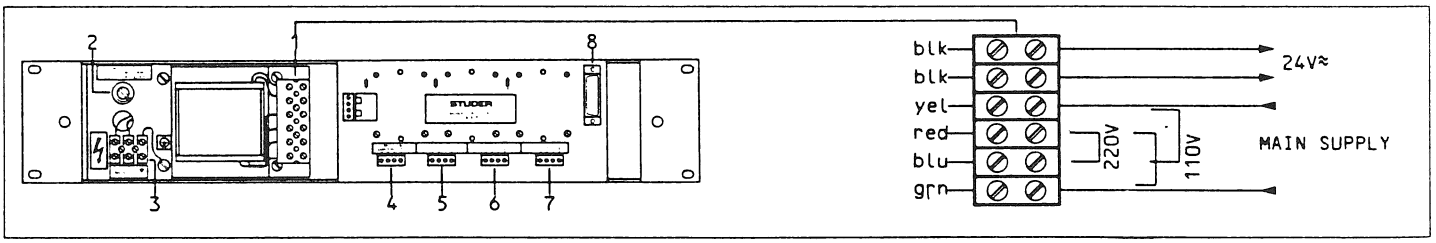
- Matching to local line voltage by corresponding wiring of the transformer terminals [1].
- Primary fuse [2]: 110 VAC=1/2A slow; 220 VAC=0.63A slow
- Power connection to terminals [3].

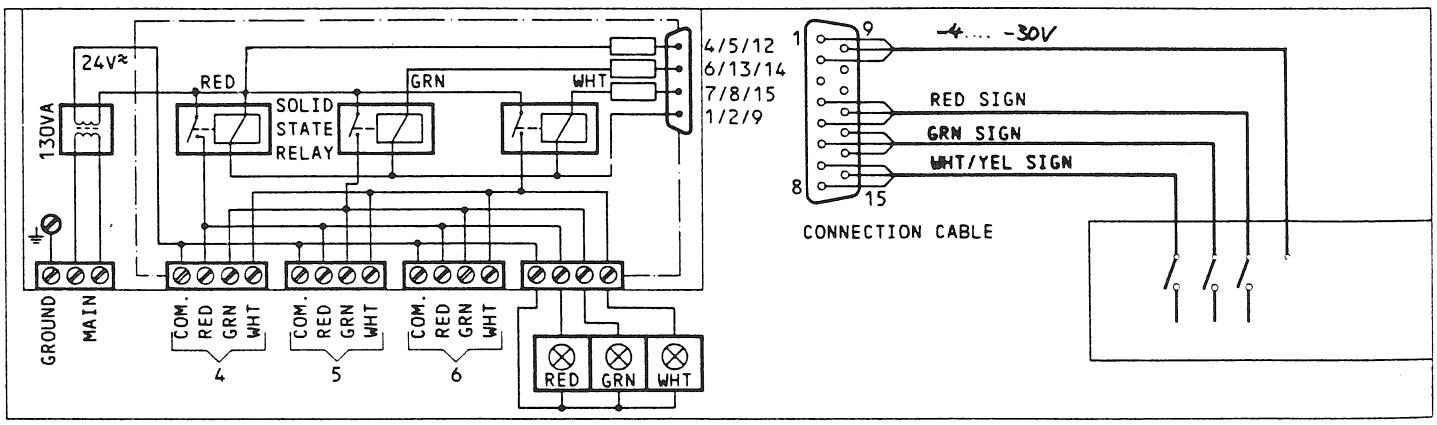
Lamp supply voltage

Four terminal groups (terminals [4...7]) provide one connection each for the separately controllable outputs for red, green, and white (yellow) light. The connected load is limited to 25 individual SOFFITE S8 lamp inserts (24V/5W).

Control voltage

The SIGNAL DRIVE UNIT operates with a control voltage within the range of -4 V to -30 V. The outputs of the mixing console signalization equipment is supplied via the 15-pin D-type connector [8].

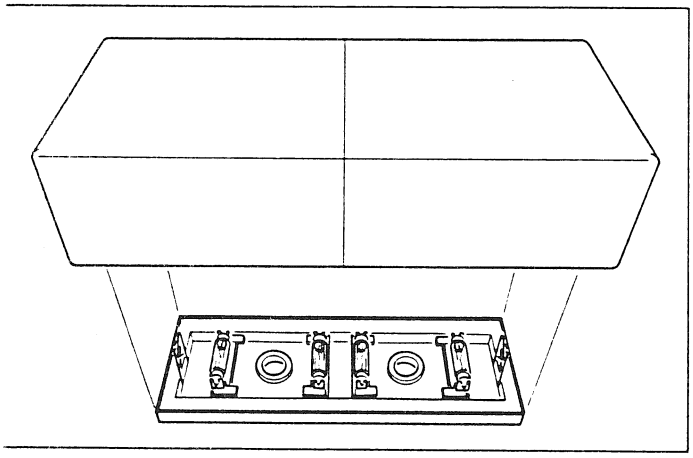




Signalisations-Leuchten (Zubehör)

Zur Ergänzung der Signalisations-Treibereinheit stehen Leuchten in den gängigen Signalisationsfarben Rot, Grün und Weiss (auch für Gelb) zur Verfügung. Sie eignen sich zur Wandmontage in Studio, Regie, und weiteren exponierten Stellen (Zutrittswarnung über Türen).
Die Speisung erfolgt mit 24V und einem Leistungsbedarf von 5 Watt je eingesetzter SOFFITE S8 Glühlampe. Die Anzahl eingesetzter Glühlampen in einer Leuchte, hängt von deren Farbe ab (Ausgleich der Leuchtkraft).
Alle Leuchten weisen dieselben Abmessungen auf, inklusive der DUAL-Wandleuchte ROT+GRÜN, deren Farbsektoren separat ansteuerbar sind.

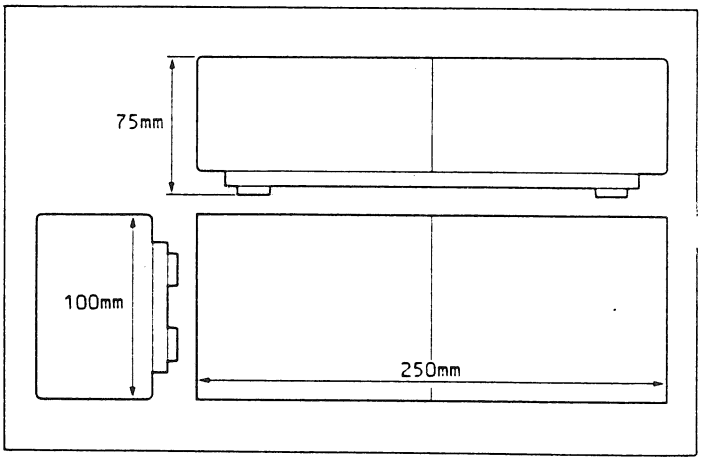
Varianten		Bestellnummer
A Wandleuchte ROT (ON AIR) bestückt mit 2 SOFFITE-Lampen	10 Watt*	10.010.102.10
B Wandleuchte GRÜN (READY) bestückt mit 3 SOFFITE-Lampen	15 Watt*	10.010.102.11
C Wandleuchte WEISS (CALL) bestückt mit 2 SOFFITE-Lampen	10 Watt*	10.010.102.12
D Dual-Wandleuchte ROT+GRÜN bestückt mit 2x2 SOFFITE-Lampen	20 Watt*	10.010.102.13
* Über die SIGNAL DRIVE UNIT 1.918.203 sind maximal 25 Stück SOFFITE- Lampen à 5 Watt zu bedienen (gilt nur bei gleichzeitiger Aktivierung aller Lampen).		
Ersatzlampe SOFFITE S8 24V/5W für alle Leuchten-Typen		10.010.102.14

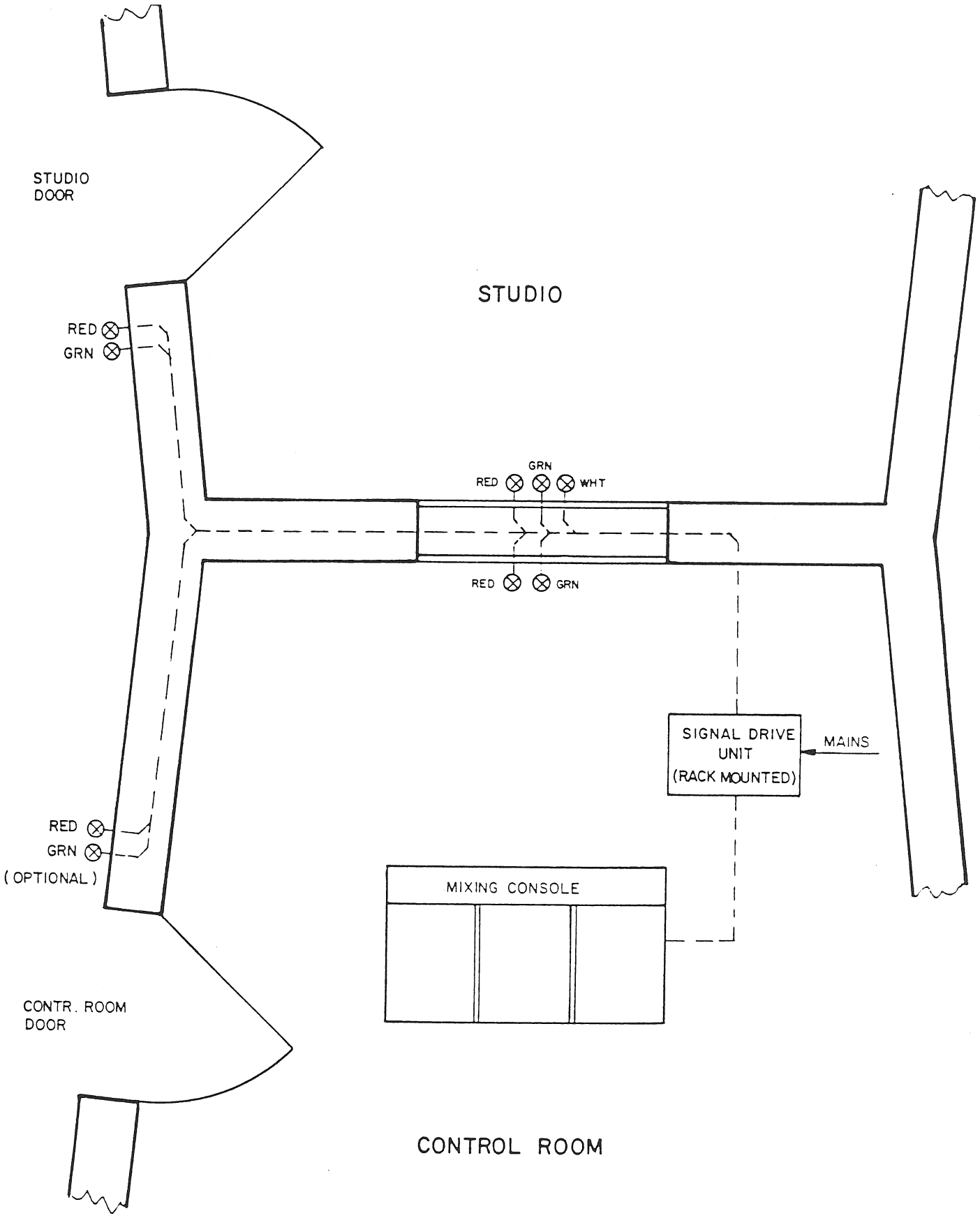


Signalization lights (accessory)

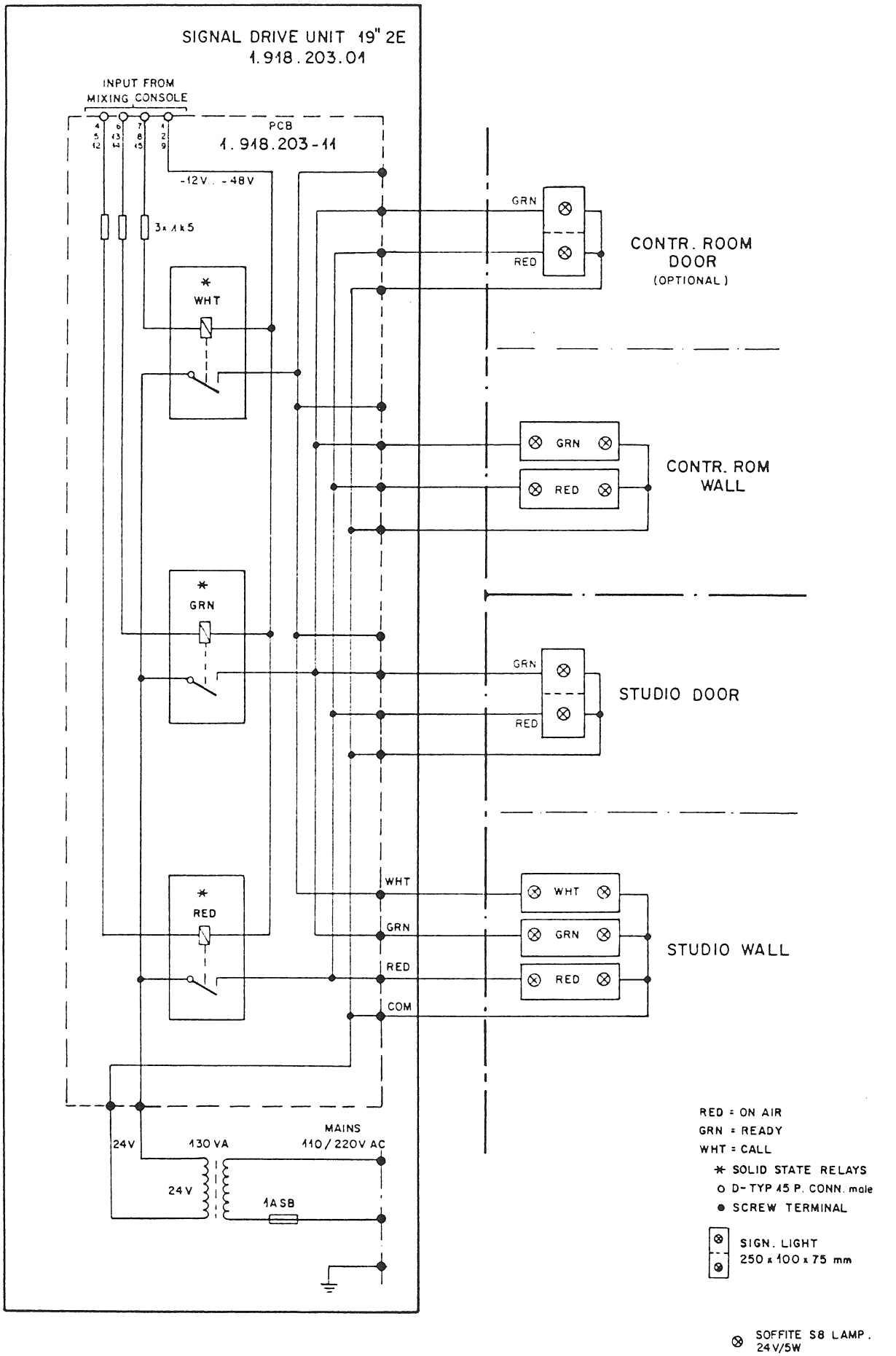
Lights in the commonly used colors red, green and white (also yellow) are available for use in conjunction with the signalization drive unit. These are suited for wall-mounting in the studio, control room, and other exposed locations (access warning above doors).
These lamps are supplied with 24 V and consume 5 W per inserted SOFFITE S8 incandescent lamp. The number of incandescent lamps to be inserted in light depends on their color (compensation of their luminous power).
All lights have the same dimension, including the DUAL wall-mount light RED+GREEN, the color sectors of which can be controlled separately.

Models		Part number
A Wall light RED (ON AIR) fitted with 3 SOFFITE lamps	15 W*	10.010.102.10
B Wall light GREEN (READY) fitted with 2 SOFFITE lamps	10 W*	10.010.102.11
C Wall light WHITE (CALL) fitted with 2 SOFFITE lamps	10 W*	10.010.102.12
D Dual wall light RED+GREEN fitted with 2x2 SOFFITE lamps	20W*	10.010.102.13
* Up to 25 SOFFITE lamps with a consumption of 5 W each can be operated via the SIGNAL DRIVE UNIT 1.918.203 (only applicable if all lamps are switched on concurrently).		
Spare SOFFITE lamp S8 24 V/5W for all types of lights		10.010.102.14

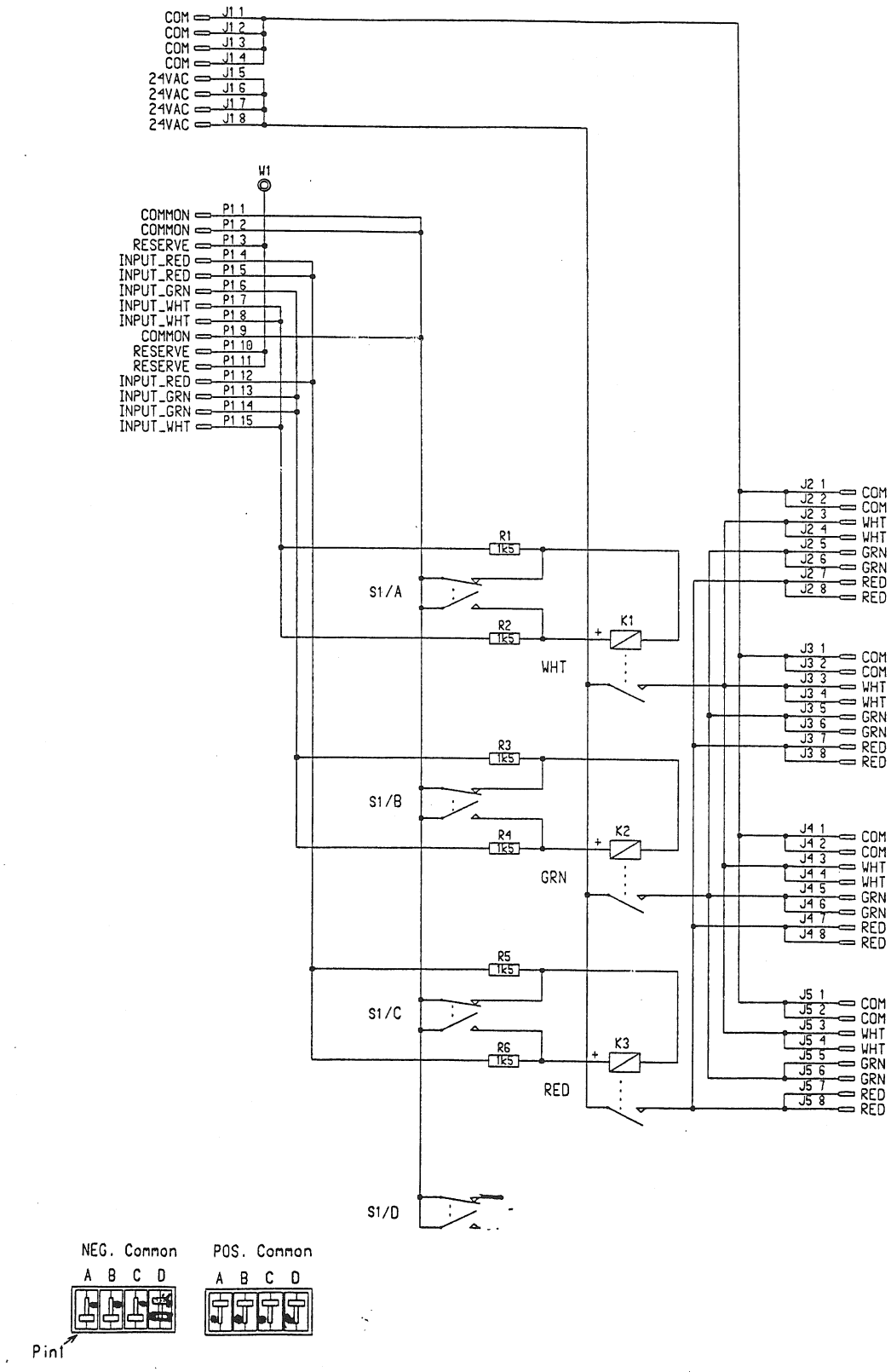




DATE: 26.6.81						
SIGN: WC						
STUDER REGENSDORF ZÜRICH	EXAMPLE FOR STUDIO-SIGNALISATION RED/GRN					SC 1.918.203/1



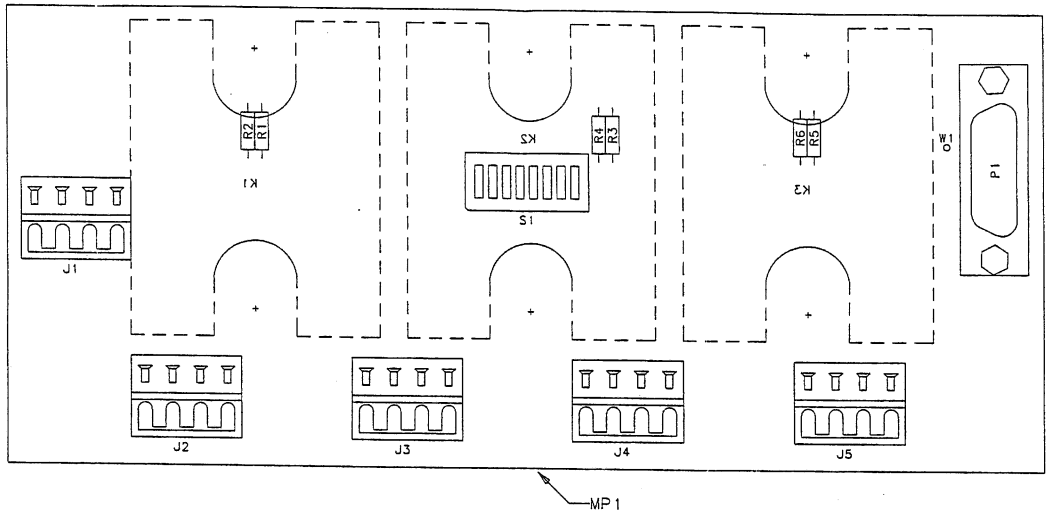
DATE.	25 6 84	19 8 83	7 3 85			
SIGN:	WK	WK	WK			
STUDER REGENSDORF ZÜRICH	„RED" „GRN" SIGNAL DRIVE UNIT					SC 1.918.203

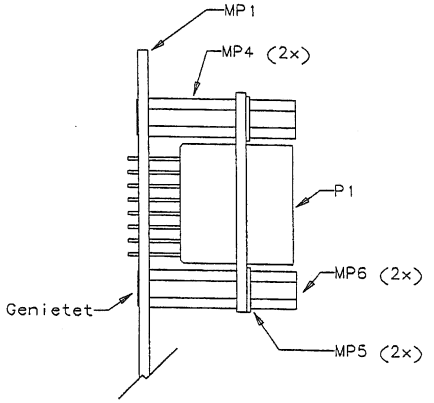


Erstellt	10.02.1999 WE				
					PAGE 1 OF 1
STUDER	SIGNALLING DRIVER UNIT			SC	1.918.203.~~00~~

81

Ansicht Bestueckungsseite





MP2...MP3 nach Fabrikationsmuster aufgeklebt

Accompanying documents: Zugehoerige Unterlagen: PL	General tolerance: Freimasstoleranz: BV613	Scale: Massstab: 1:1	Edition Ausgabe	23.02.1999 Date Datum	AF Visa Gez.	. Checked Gepr.	. Seen Ges.	0 Index
Substitute for: Ersatz fuer:			Page: Seite:	1 / 1				
STUDER REGENSDORF	Description: Benennung: SIGNALLING DRIVER UNIT		Z	Number: Nummer: 1.918.203.00 81				

Parts List

STUDER Professional Audio AG

Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	J 1	53.05.0140	4 pcs		KLEMME
					4 polig
0	J 2	53.05.0140	4 pcs		KLEMME
					4 polig
0	J 3	53.05.0140	4 pcs		KLEMME
					4 polig
0	J 4	53.05.0140	4 pcs		KLEMME
					4 polig
0	J 5	53.05.0140	4 pcs		KLEMME
					4 polig
0	K 1	not used		not used	not used
					120D10
0	K 2	not used		not used	not used
					120D10
0	K 3	not used		not used	not used
					120D10
0	MP 1	1.918.203.13	1 pce		SIGNALLING RELAY PCB
0	MP 2	1.918.203.10	1 pce		Nr.-Etikette 5x20
0	MP 3	not used	1 pce	not used	not used
					Bezeihnungs Streife
0	MP 4	1.010.055.22	2 pcs		NIETMUTTER, M 3 * 11
0	MP 5	24.16.2030	2 pcs		FAECHERSCHEIBE A D 3.2
0	MP 6	1.010.035.54	2 pcs		VERIEGELUNGS-GEWINDEBOLZEN
0	P 1	54.13.0032		15p	P D-TYPE, 15 POL.PRINT
0	R 1	57.11.3152		1k5	MF, 1%, 0207
0	R 2	57.11.3152		1k5	MF, 1%, 0207
0	R 3	57.11.3152		1k5	MF, 1%, 0207
0	R 4	57.11.3152		1k5	MF, 1%, 0207
0	R 5	57.11.3152		1k5	MF, 1%, 0207
0	R 6	57.11.3152		1k5	MF, 1%, 0207
0	S 1	55.01.0181			SZ SCHIEBE, 4*U, PCB, DIL

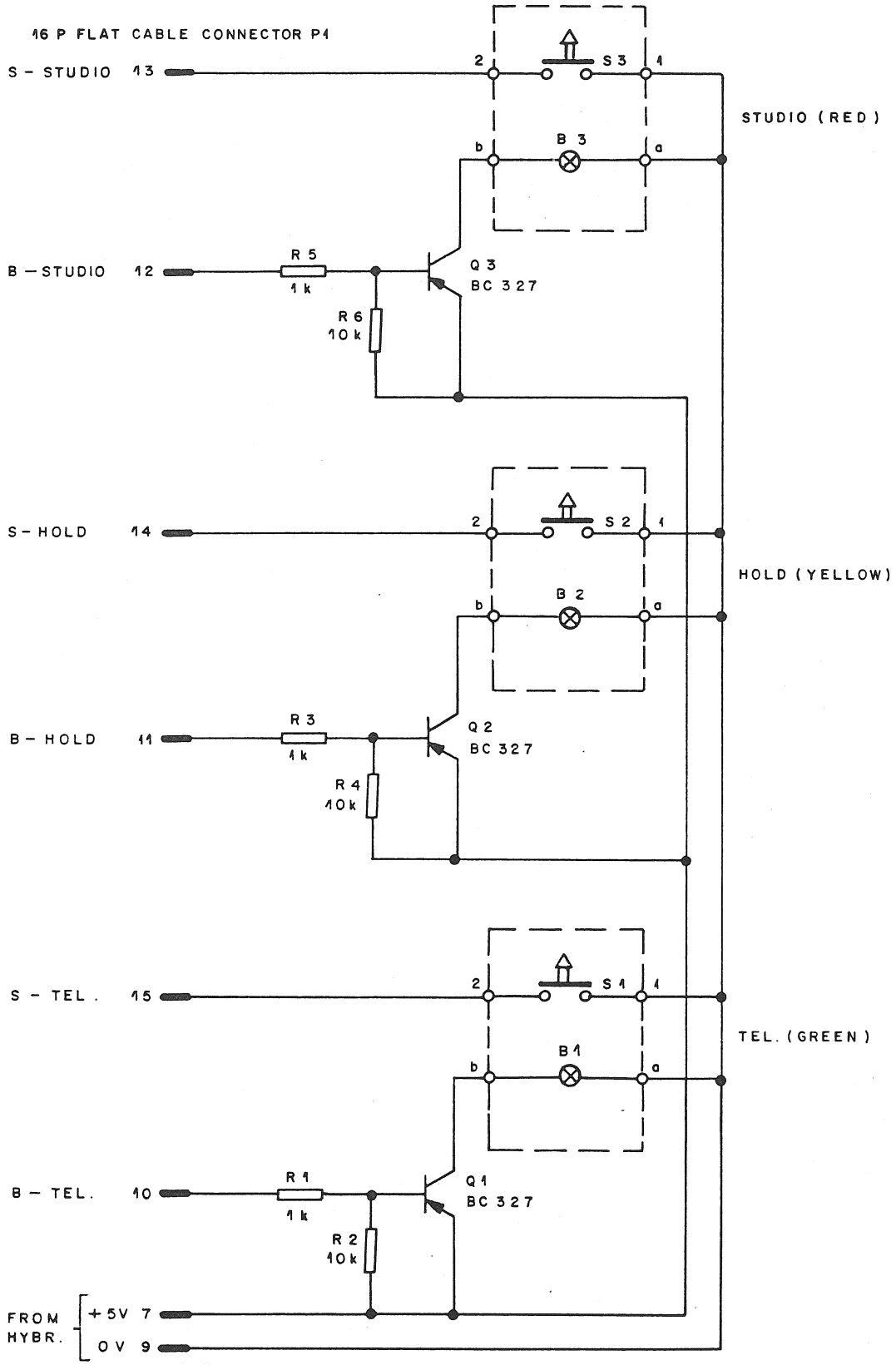
End of List

Comments

Part No.	Typ	Qty.	Value/Nam	Part Description
1.010.035.54		2 pcs		VERIEGELUNGS-GEWINDEBOLZEN
1.010.055.22		2 pcs		NIETMUTTER, M 3 * 11
1.918.203.10		1 pce		Nr.-Etikette 5x20
1.918.203.13		1 pce		SIGNALLING RELAY PCB
24.16.2030		2 pcs		FAECHERSCHEIBE A D 3.2
53.05.0140		20 pcs		KLEMME
54.13.0032		1 pce	15p	P D-TYPE, 15 POL.PRINT
55.01.0181	S	1 pce		SZ SCHIEBE, 4*U, PCB, DIL
57.11.3152	R	6 pcs	1k5	MF, 1%, 0207

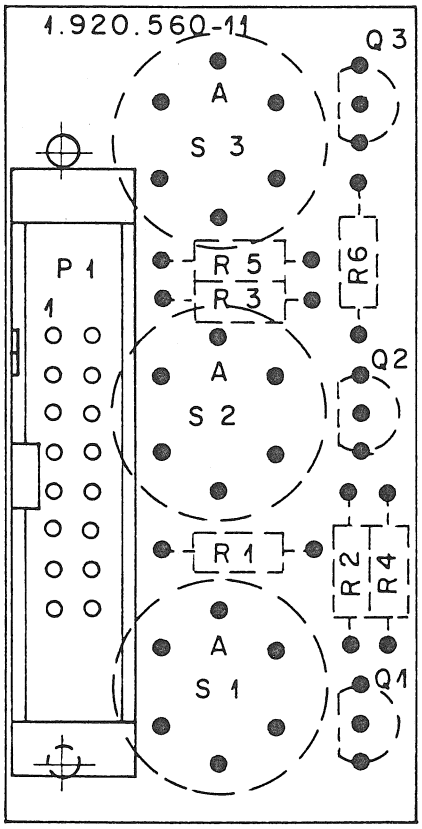
End of List

Comments



S1 . . . S 3 = EAO 31.425 / 31.435 / 31.455
B 1 . . . B 3 = 5V / 60 mA

⓪ 29.5.92					
STUDER REGENSDORF ZÜRICH	DSP HYBRID REMOTE CONTROL				SC 1.920.560



Werkstoff	Norm-Nr.:	Oberfläche	Güte:	Änderung					③
	DIN-Bez.:		Beh.:						②
	Abmessung:								①
Zugehörige Unterlagen: PL		Freimasstoleranz: ±	Maßstab: 2:1	Ausgabe	21.8.92	A. Horlacher			⓪
					Datum	Gez.	Gepr.	Ges.	Index
Ersatz für:		Ersetzt durch:		Kopie für:					
STUDER REGENSDORF ZÜRICH		Benennung: DSP HYBRID REM. CONTR.		Nummer: 1.920.560-00					

Pos.	Bauteil No.	Bezeichnung	Stk.	Bemerkung
Q1	50.03.0351	TRANSISTOR BC 327	1	
Q2	50.03.0351	" BC 327	1	
Q3	50.03.0351	" BC 327	1	
R1	57.11.3102	WIDERSTAND 1K	1	
R2	57.11.3103	" 10K	1	
R3	57.11.3102	" 1K	1	
R4	57.11.3103	" 10K	1	
R5	57.11.3102	" 1K	1	
R6	57.11.3103	" 10K	1	
S1	31.425/435/455	TASTE 1 SCHLIESSER	1	EAO
S2	31.425/435/455	" "	1	EAO
S3	31.425/435/455	" "	1	EAO
B1	51.02.0201	LAMPE 5V/60mA	1	
B2	51.02.0201	" "	1	
B3	51.02.0201	" "	1	
P1	54.14.2052	PRINTSTECKER GERADE 16p MIT VER-	1	OPT. OHNE VER. 54.14.2002

Aenderungen	1	2	3	4	5

STUDER
REGENSDORF
ZÜRICH

Positionsliste

DSP. HYBRID REMOTE CONTROL

Erstellt: 08. JULI 1992
Geprüft:
Blatt: 1 Blätter: 1

Kopie für:

Ersatz für:
Ersetzt durch:

1.920.560