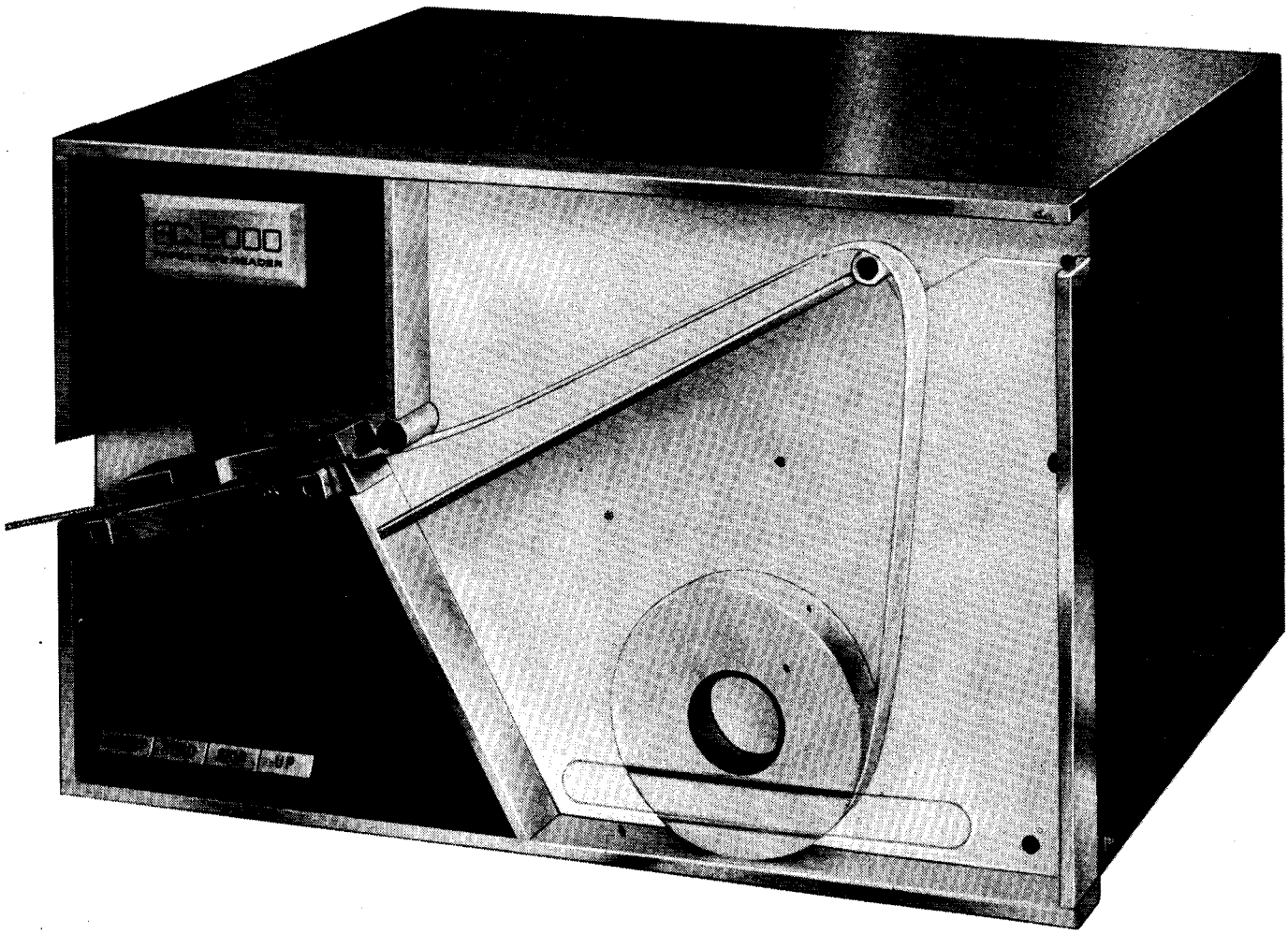


TECHNICAL MANUAL

R3000

PAPER TAPE READER

GIER

ELECTRONICS

CONTENTS

1. LIST OF TERMS

Tracks 1 - 5,7,8	Tracks on 5,7, and 8 track tapes
Tracks A - F	Tracks on Olivetti tapes
A0 - A7	Address counter: output address register
B0 - B7	Address counter: input address register
WA	(Write A) delay before writing (monostable multivibrator)
WD	Write current time
WC	Clearing of input registers and increasing B by one (monostable multivibrator)
WB	Inhibit pulse time (monostable)
RA	(Read A) stores the start signal coming from outside, until instructions can be processed (flip-flop). At the same time ready signal out.
BUSY	Amplified RA
RB	Read current time
RC	Strobe and reset for reading from core store
RESET	Controls clearing of core store and address register (monostable)
PO	Paper Out is not set, when there is paper in the tape guide and the reader has been activated by RESET or READ.
READY	Ready signal to the computer
IN	Register for a character from the photocells
OUT	Register for a character from the core store read amplifier.
ZFB	Zero from Buffer.
OGP	Out Gate Pulse.

2.1 THE PRINCIPLE OF THE READER

The tape is read by means of photocells and each character is stored in a ferrite core store (256 characters) which acts as a buffer between the tape and the output lines.

The motor that advances the tape is servo controlled so that the speed of the motor decreases as the store is filled.

The address of the store is controlled from two counters: one (A) for the output address (character out) and one (B) for the input address (the next character from the tape).

The counters are coupled to an adder; the outputs of the adder show the difference between the counters corresponding to the number of characters stored in the buffer.

A simple D/A converter, coupled to the outputs of the adder, controls the motor speed.

2.2 READING OF THE TAPE

As the tape is moved over the photocells, the read amplifiers emit positive impulses. A set of flip-flop picks up the actual character.

The output from each photocell amplifier is connected in parallel through diodes to an OR-gate. On the trailing edge of the signal from this gate (that is, when the character in question has just passed the photocells), WA is triggered, producing a delay of 7,5 μs, before being written in the store. Any output from the store in progress can be completed. At the same time WA inhibits the start of new output.

The trailing edge of WA triggers WB, giving inhibit pulse time control. The inhibit pulse gate and amplifier are mounted on the same printed circuit card as the photocell amplifier and associated flip-flop (and output circuits for the same bit).

The leading edge of WB triggers WD, which controls the write currents. The inhibit pulse must have a greater duration than the write current. The trailing edge of WB triggers WC, which clears the input flip-flop register.

The trailing edge of WC gives a pulse to the B address counter, the contents of which are thereby increased by one.

2.3 OUTPUT FROM THE STORE

The leading edge of the start signal sets the RA flip-flop to one. RA is part of an AND-gate along with decoding of adder zero, WA, WB, and a clearing signal.

The gate gives an output signal, when RA is one, WA and WB are zero, decoding of adder other than zero, and the clearing signal not present.

RA, then is set by the start signal. No input from the tape is in progress, the store is not empty, and there is no clearing signal.

The output signal is delayed 5 μs, is inverted, and triggers RB (monostable), which controls the read currents in the store.

The leading edge of RB triggers RC, which gives combined strobe and reset to the output register.

A delay circuit increases the A register by one app. 3 μs after the trailing edge of RB. The trailing edge of RB clears RA. The trailing edge of RA is differentiated, and the pulse thereby derived (50 μs) is amplified and used as a gate pulse for the outputs in low representation. Outputs in high representation are not gated.

After the 50 μs, ready (15 μs) is emitted to the computer and the operation is complete.

The BUSY signal follows RA. It is not used in GIER, but can be employed to indicate when output data is ready at non-gated outputs. RA and BUSY are cleared app. 2 μs after data is ready. The duration of the BUSY signal is a minimum of app. 9 μs, when data is ready in the store and it is not necessary to wait for completion of writing (or reset).

2.4 RESET

When the tape has been placed in the reader, the "RESET" button is pushed. The monostable RESET (app. 17 ms) is triggered. RB is triggered after a 2 μs delay, and the trailing edge of RB re-triggers RB after a delay of 2 μs, and so forth, until RESET reverts to zero. RB triggers the count pulse to A as usual.

In the course of app. 17 ms, the entire store is scanned and cleared by the read currents. The trailing edge of RESET is differentiated. The pulse thereby derived clears the A and B counters and RB.
If a start signal has come during the process of clearing, RA is set to one, since clearing is inhibited during RESET. After clearing, the store is empty, and the decoding of the adder blocks the gate. The waiting instruction is not processed, until a character is read from the tape to the store.

The trailing edge of RESET is utilized for activating output of the first character to the computer.

2.5 PAPER OUT CONTROL

The PO flip-flop (Paper Out) is normally one, when there is no paper in the reader. It is set to one, when there is no paper in the paper guide or when the UP button is activated and the door to the right is open.
At the same time, these signals control the solenoid that holds the lid over the tape guide down. PO is cleared (if there is paper in the tape guide and the door is closed) at the trailing edge of RESET or when the READ button is pushed. The circuits for writing in the store can operate only when PO is zero, otherwise the setting of WA to one is inhibited.

2.6 MOTOR CONTROL

The motor speed is controlled by the outputs from the adder so that the motor speed, up to a certain maximum, is proportional to the difference between the contents of the A and B counters. The outputs from adder positions 2, 3, 4, 5, 6, and 7 are connected to a simple digital converter followed by a linear amplifier. The output voltage from this amplifier is limited by a zener diode, which thereby controls the maximum motor speed.

The power to the motor is supplied by an emitter follower. This cannot, however, shortcircuit the motor, when input voltage drops to zero, so in order to reduce the braking time, a grounded emitter circuit supplies approximately zero volts through a germanium power diode.

2.7 LAMP REGULATOR

In order to assure constant light intensity regardless of changes in the lamp, the lamp power is regulated by feed-back from a photocell of the same type as employed for reading. The output transistor of the regulator amplifier is mounted in the power supply.

2.8 THE READ BUFFER

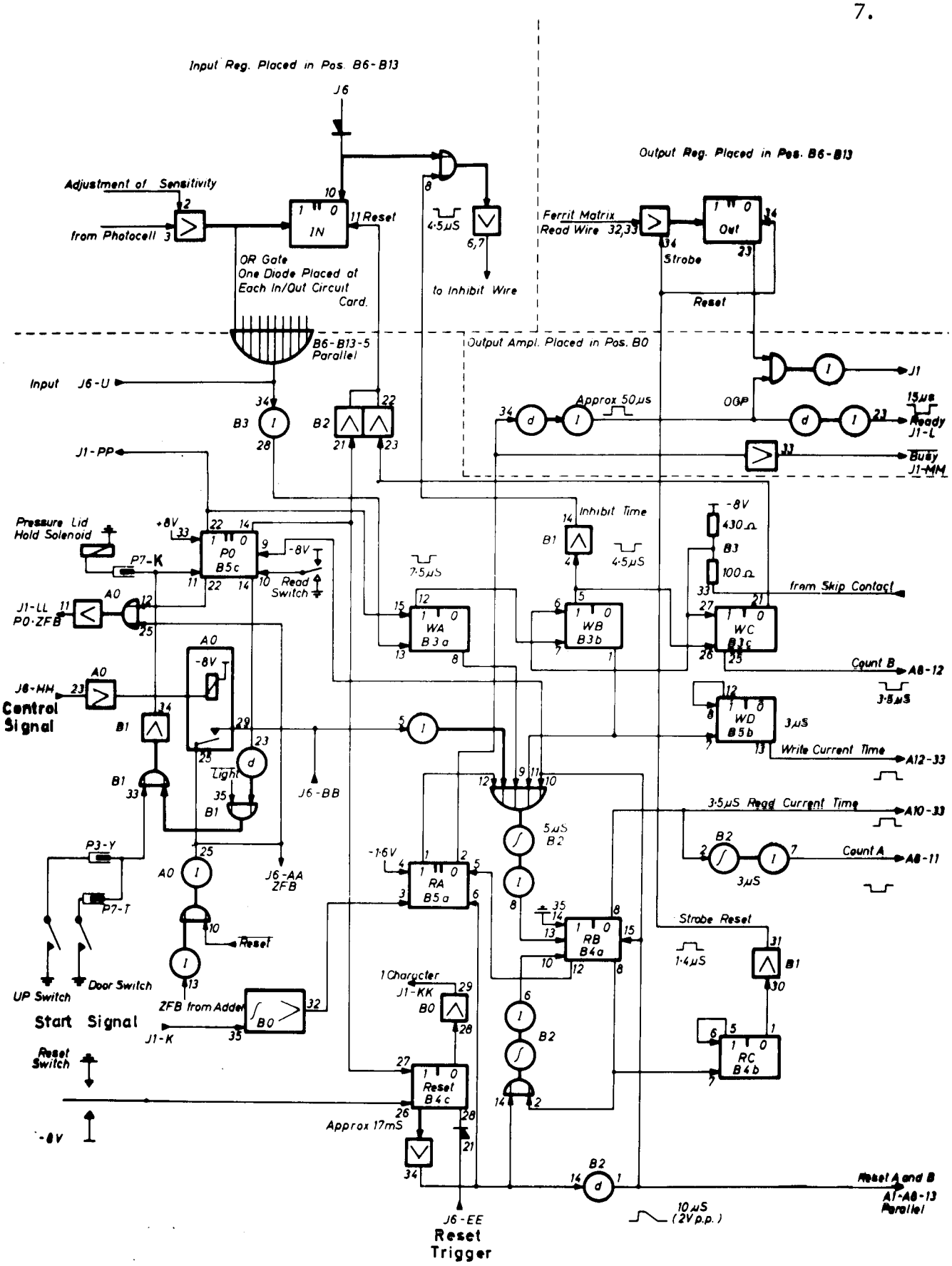
The core store consists of two planes, each in four sections. The wiring is double, so that the read and write currents run through separate wires. The currents are defined by 30 Ω 1% resistors and the voltage difference between the - 8 and - 1.6 V power supplies.

2.9 PHOTOCELLS

The photocells are NPN transistors with the base not connected. In normal polarization, they act as photocells. In reversed polarization, they do not conduct. There is one set for 5, 7, and 8 track tapes and another set for Olivetti tape, as well as three cells for Paper Out control.

2.10 PHOTOCELL AMPLIFIERS

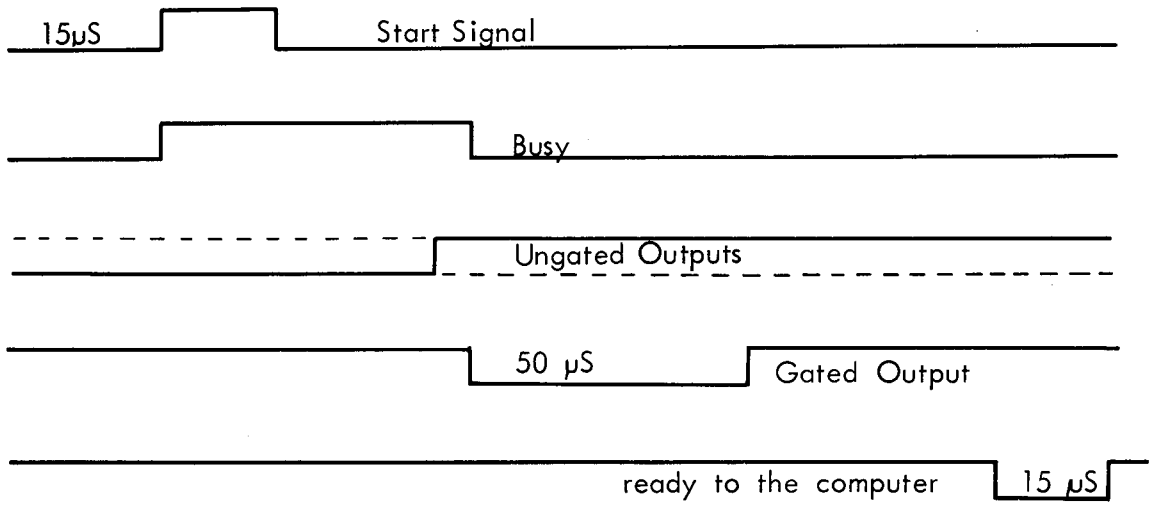
The amplifiers operate as Schmitt triggers. Their sensitivity is greatest, when voltage is least. The supplied voltage for the entire circuit is regulated, in order to maintain a constant relationship between the various currents. Sensitivity is determined by the current via 56 k.



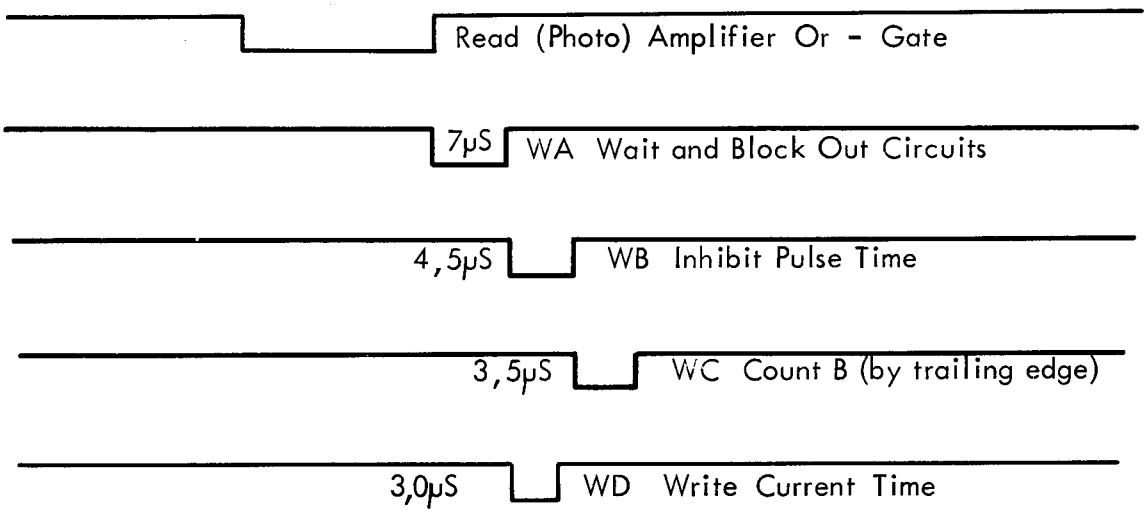
RC2000 CONTROL CIRCUITS

AUGUST 1966-JOB

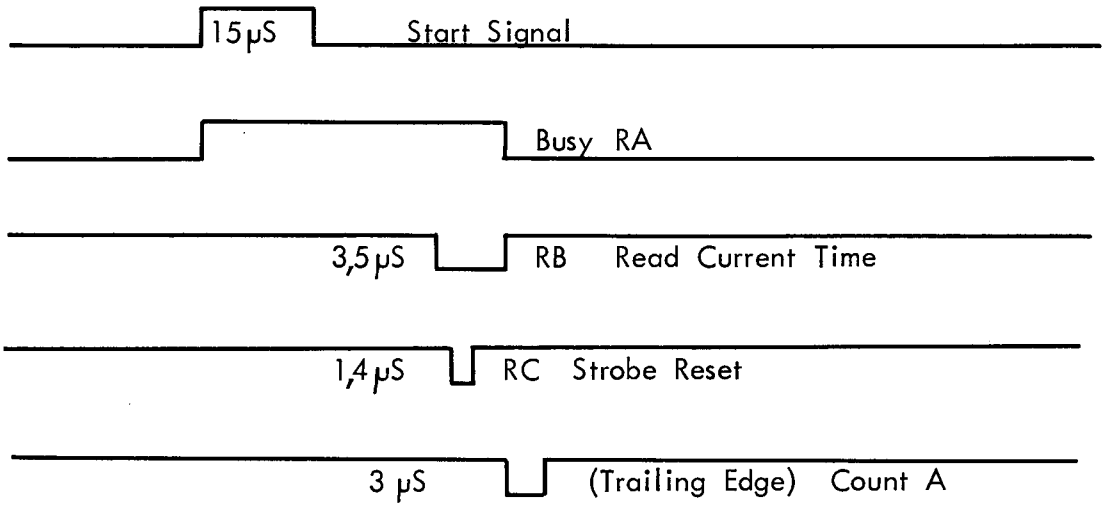
IN-OUT SIGNALS



INTERNAL IN TIMING



INTERNAL OUT TIMING



RC2000 Timing Scheme

3 POWER SUPPLY

The Power Supply transformer has taps for mains voltages of 220 V, 127 V, and 115 V. Frequency 50 - 60 cps. Three rectifiers supply unregulated voltages as follows:

- 7 volts for the lamp
- 30 volts
- 15 volts for the motor
+ 15 volts.

-30 volts and + 15 volts feed the voltage stabilizers for:

- 24 volts
- 8 volts
-1.6 volts
+ 8 volts.

4.1 SPECIFICATION FOR INPUT TO THE RC 2000 BUFFER

The RC 2000 ferrite core buffer may be used to buffer input signals from other devices. When used in this way the photocell read head and the motor are disconnected electrically by a relay, controlled via the input connector.

Also controlled via this are the following signals:

Reset of buffer.

Data 1.....8: sets the corresponding input register flip-flop when high.

Data Strobe : the character set in the input register is transferred to the core buffer on the trailing edge of this signal.

Output Disable: disables output from buffer.

The RC 2000 returns one signal going high when more than 128 characters are stored in the buffer, and one signal going low when the buffer is empty. Also + 8 V and - 8 V are available at the interface to drive small loads.

4.2 CONTROL SIGNALS (CON. 6 - HH)

This wire is normally left floating. In order to switch the reader to external control the wire must be shorted to ground.

4.3 RESET TRIGGER (CON. 6 - EE)

A positive pulse will trigger reset of the buffer in the same way as the RESET button. The reset takes app. 17 mS.

Signal Levels:	True:	0V nom.
	False:	-8V nom.
Duration :		min. 10 µS, max. 5 mS

4.4 DATA 1 TO 8 (CON. 6 - A - C - E - H - K - M - P - S)

A positive pulse or level will set the input register flip-flop.

Signal Levels:	true:	0V nom.
	false:	- 8V nom.

Duration and rese times not specified.

4.5 SUM DATA (CON. 6 - U)

This signal should be the logical sum of the data signals. Buffering will take place on the trailing edge of this signal:

Signal Levels:	true:	0V nom.
	false:	- 8V nom.

Duration and rise times not specified.

4.6 OUTPUT DISABLE (CON. 6 - BB)

This signal disables output of information from the buffer when low.

Signal Levels:	true:	more neg. than - 2 V or left floating.
	false:	0 V nominal.

In normal operation Output Disable is shorted to ZFB by a relay contact inside the RC 2000. Circuits attached must not disturb this function.

4.7 128 CHARACTERS STORED (CON. 6 - CC)

This signal indicates that more than 128 characters are stored in the buffer.

Signal Levels at No Load:	true: - 0.3 V nom.
	false: - 8 V nom.
Fise and Fall Times:	max. 1 µS
Circuit:	grounded emitter 2Kohm to - 8 V
Load:	max. 1 mA

4.8 ZFB (CON. 6 - AA and CON. 1 - SS)

This signal indicates that the buffer is empty.

Signal Levels at No Load:	true: - 8 V nominal
	false: - 0,3 V nominal
	max. load 1 mA
Rise and Fall times at no Load:	max. 1 µS
Circuit:	grounded emitter, pnp 1Kohm to - 8 V

4.9 SIGNAL GROUND (CON. 6 -B-D-F-J-L-N-R-T-V-NN-SS-TT)

+ 8 V (Con. 6-PP) and - 8 V (6-MM):	from the internal power supply can be loaded with max. 50 mA

5 ADJUSTMENTS

5.1 ADJUSTMENT OF THE PRESSURE LID

1. Loosen the armature and the pressure lid.

2. Place three layers of tape in the tape guide and push the pressure lid down over them.

3. With the lid in this position, tighten the hold solenoid and the armature so that they lie completely flat against each other.

5.2 LATERAL ALIGNMENT OF THE PHOTOCELLS AND THE TAPE GUIDE

Be sure that the photocells are beneath the holes before adjustment. The tape may be punched crookedly or the lateral alignment of the photocells may be incorrect.

Alignment is made visually: the photocells should appear in the center of the holes in the tape through the prism supplied for the purpose.

5.3 PHOTOCELL AMPLIFIERS

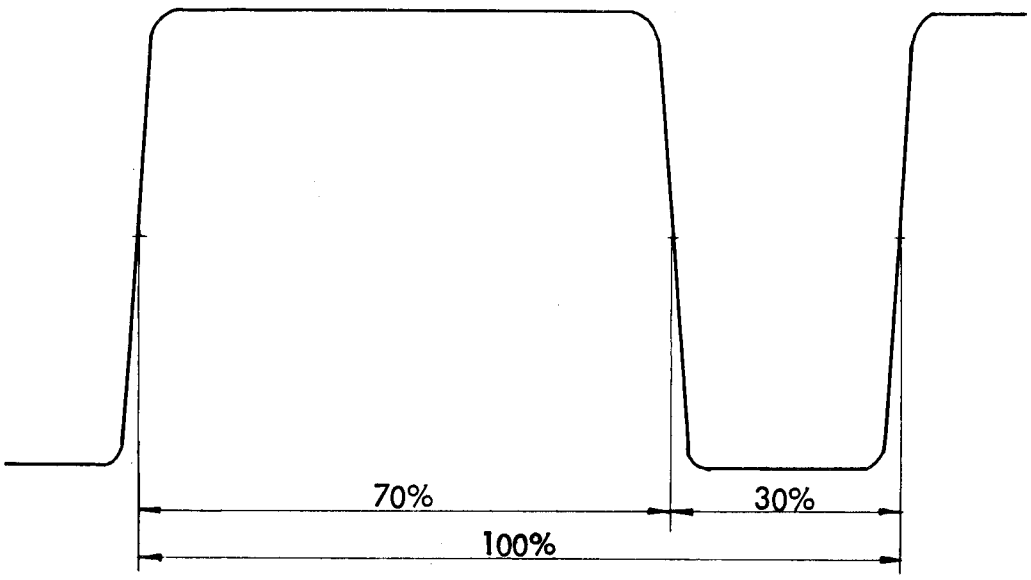


Fig. 5.3.1.

In the output from the amplifier, the relation between holes and spaces must be 70/30, as shown in Fig. 5.3.1.

5.4 MINOR ADJUSTMENTS

If only one of the amplifiers gives incorrect output, this amplifier should be adjusted.

If all of the amplifiers give incorrect, though uniform, output, the lamp should be adjusted.

5.5 OVERALL ADJUSTMENT

After a photocell or the lamp circuit has been repaired, an overall adjustment should be conducted as follows:

1. Adjust the light to minimum intensity.

2. Adjust all photocell potentiometers (except those for the Paper Out Control) to ca. -3 Volts (testpoint 1-8 placed on push-button unit). ±15V

3. Switch to the tape in question (6-track or 8-track) and place a tape, with holes punched in all tracks, in the tape guide.

4. Push SKIP, increase the light intensity, and using an oscilloscope, find the least sensitive photocell. Adjust the light, until the relationship between "holes" and "no holes" is 70/30, as shown in Fig. 5.3.1.

5. Adjust the other photocells in the column in question to 70/30.

Notes: The amplitude of the outputs must be at least 1.8 Volts.

It is not necessary to make special adjustments for 5- and 7-track tapes, since these photocells are the same as those used for 8-track tape.

If 6-track tape is used along with 5-, 7-, or 8-track tapes, the least sensitive photocell must be sought for among all the photocells, i.e. both those for 6-track and those for 8-track.

5.6 ADJUSTING THE PAPER OUT CONTROL

1. Adjustment is made separately for 8-track and for 6-track tapes. Place a tape in the tape guide. Pull the tape through or advance it with SKIP, adjusting the potentiometer CCW, until the lid opens.

2. With no tapes in the reader, turn the potentiometer CW, counting the number of turns, until the lid is held down by the solenoid. Turn the potentiometer CCW halfway back to the point of transition located in step 1.

Note: Use the most translucent tape employed in the reader.

5.7 CHECK OF SPRING IN CARRIAGE ON RC 2000

This check determines whether there is sufficient friction between the paper tape and the tape drive capstan, so that the latter will not be worn unnecessarily by blocking of the tape and so that acceleration will be sufficient.

Perform the check with the power on.

a. Remove the tension spring that raises the pressure lid.

b. Cover the lens with opaque material.

c. Push the pressure lid with a spring balance. As the solenoid catches, the spring balance should show a pressure of 800 - 1100 g. If not, the spiral spring that depresses the ball bearings must be replaced.

d. After this, make sure that the motor can be stopped completely by blocking of the tape.

5.8 CHECK OF SOLENOID IN RC 2000

This check determines whether the pressure lid is released too easily, e.g. when spliced tapes are read.

Perform the check with the power on.

a. Cover the lens with opaque material.

b. Push the pressure lid down, intil the solenoid holds.

c. Place a piece of foam rubber or something like that between the pressure lid and the top front plate (because of the light control lid when the pressure lid flings up).

d. Using a spring balance, apply pressure under the armature of the solenoid. When the solenoid releases, the spring balanae should show a pressure of at 1500 g. If the solenoid releases before this, the following may be wrong:

1. the tension of the pressure lid is too tight;
2. the surfaces of the armature and the solenoid are not clean;
3. the solenoid has become stuck; and/or
4. the drive circuits for the solenoid are not functioning as they should.
5. the tension spring for the pressure lid is too tight.
   measuring is performed with the spring removed from armature.
   with spring balance is pulled in the spring, and when the spring is in position of
   a pull of 750 g maximum must exist.
6. if the 5 tracks tape goes oblique the following may be wrong:
   a. Capstan is too close to motor.
   b. Ball bearing defect.
   c. Spring in carriage too tight.

5.9 REPLACEMENT OF CAPSTAN

On replacement of capstan ought to be taken care of its placing about 0.5 mm from buttom of tape guide on mounting on the engine shaft measured in the groove for the tape guide.

6 CLEANING INSTRUCTION FOR VILEDON FILTERS

ABSTRACT: Instruction for cleaning of air-filter.

6.1 FILTER TYPES

At present P 15/500 filters are used in all units.
In ALEC blower units A 3/300 filters are used; they cannot be cleaned.

6.2 CLEANING FREQUENCY

Clean the filters as often as instructions for the unit in question indicate.
If there are no special instructions, clean every third month.
If the premises are particularly dusty, clean more often.

6.3 CLEANING METHODS

Any one of these three methods will suffice:

1. Wash the filter in lukewarm water (up to 40°C), to which detergent may be added. Spray the filter with a tube. Do not press the end of the tube, since the filter will not tolerate a hard jet of water. Do not wring the filter. Spray on the fine smoothe side of the filter. After washing, hang the filter up to dry.
2. Clean the filter with compressed air, blowing from the fine, smoothe side.
3. Vacuum-clean the filter from both sides.

6.4 REINSERTION

Reinsert the filter so that air enters from the coarse, woolly side and leaves from the fine, smoothe side of the filter.

6.5 REPLACEMENT

Replace the filter for every fifth cleaning.

RC 2000 Paper Tape Reader

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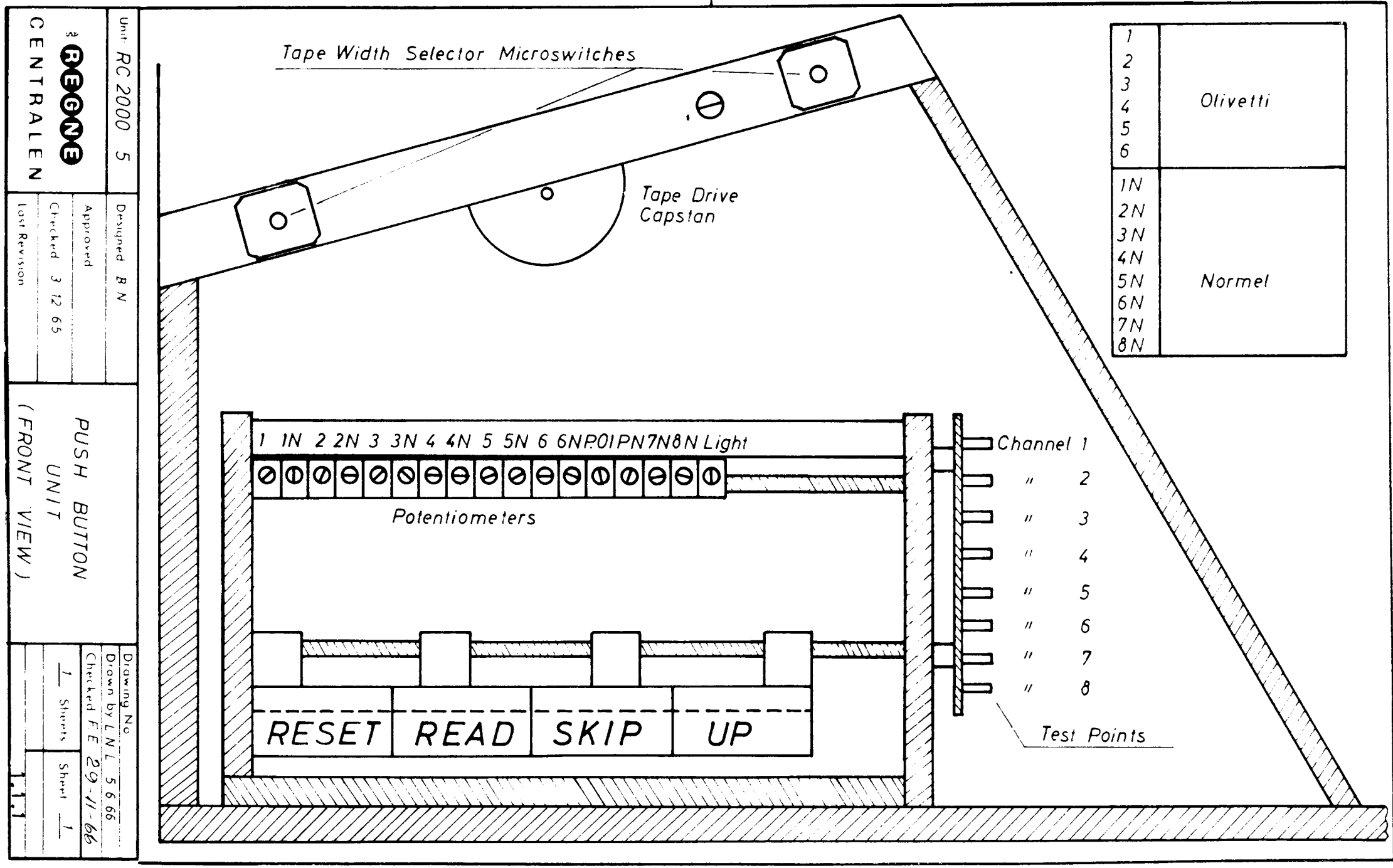
Tape Width Selector Microswitches
Tape Drive Capstan
1
2
3
4
5
6
Olivetti
1N
2N
3N
4N
5N
6N
7N
8N
Normel
1 1N 2 2N 3 3N 4 4N 5 5N 6 6N P 0 1 P N 7N 8N Light
Potentiometers
Channel 1
" 2
" 3
" 4
" 5
" 6
" 7
" 8
Test Points
RESET
READ
SKIP
UP
REGNE
CENTRALEN
Unit RC 2000 5
Designed B N
Approved
Checked 3 12 65
Last Revision
PUSH BUTTON UNIT
(FRONT VIEW)
Drawing No
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Checked F E 29-11-66
1 Sheets
Sheet 1

Unit RC 2000 5
Designed B N
Approved
Checked 3 12 65
Last Revision
REGNE CENTRALEN

PRINCIPLE OF THE READER

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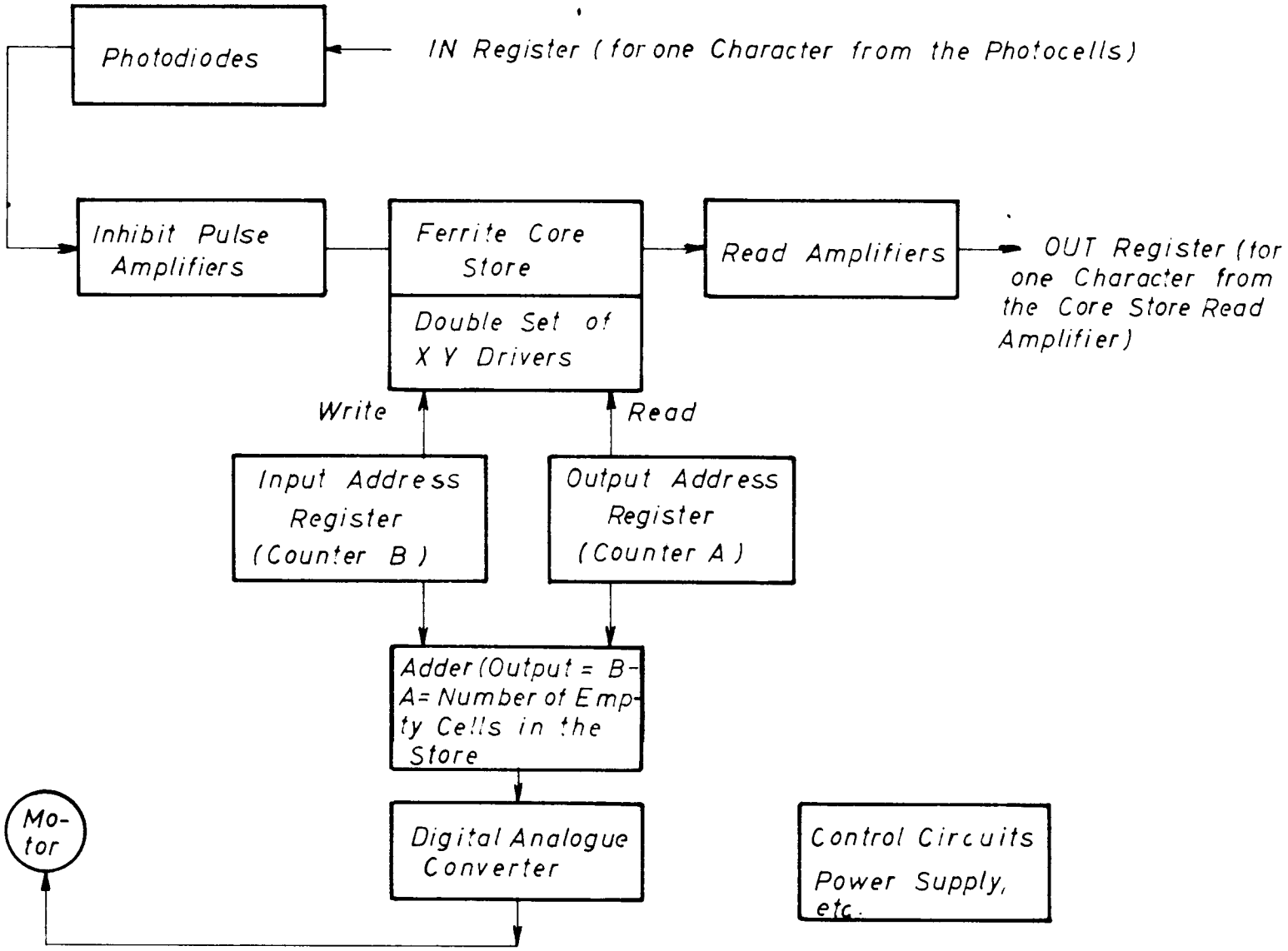

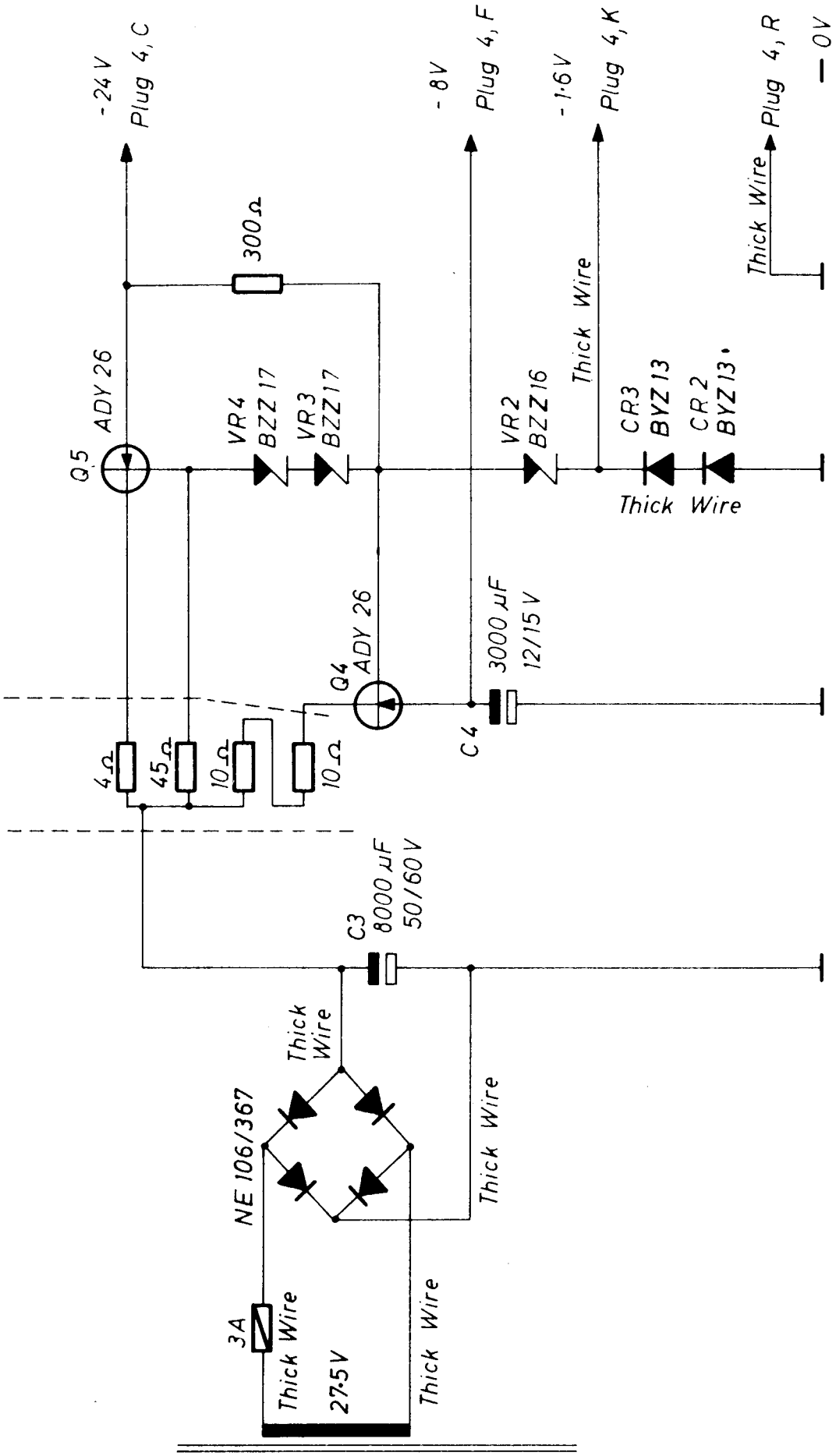

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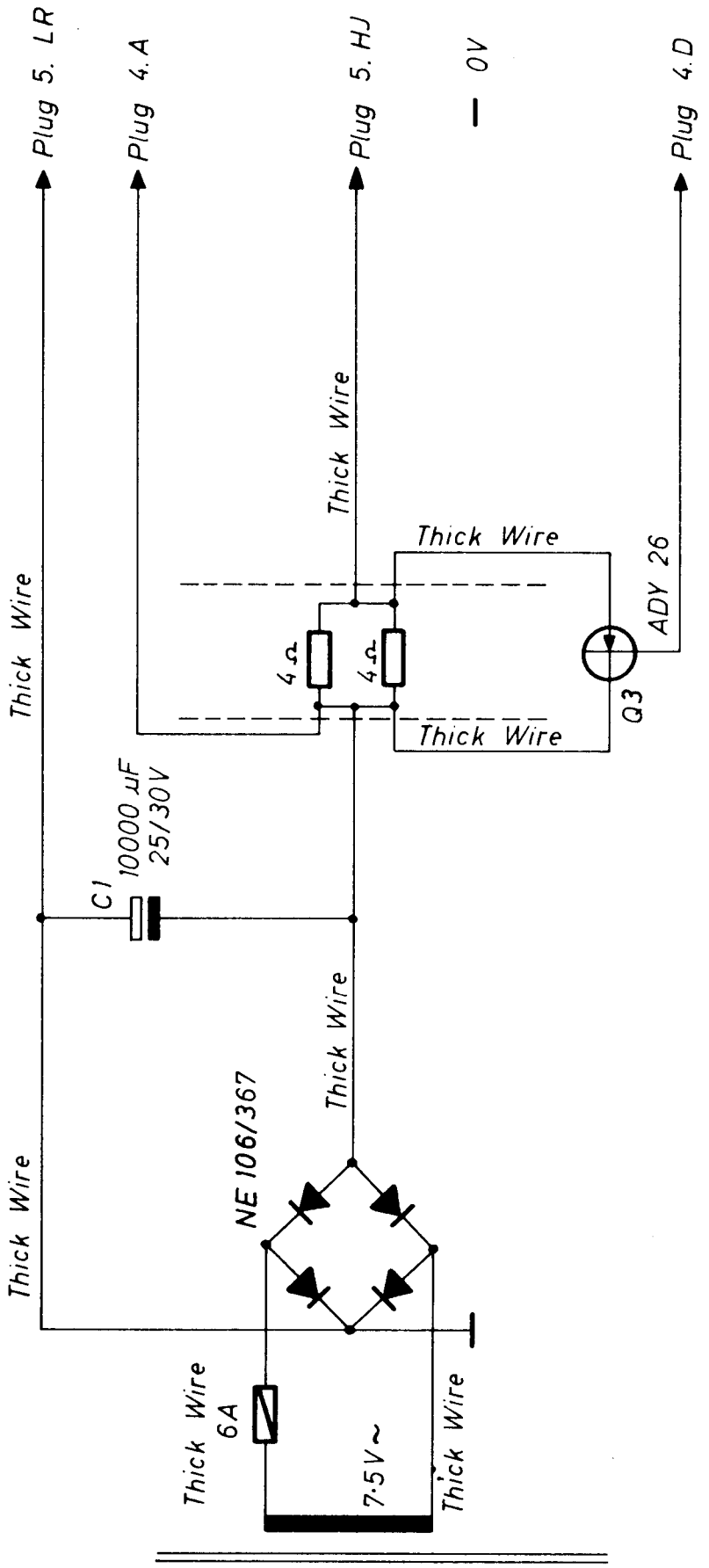
	Last Revision 14. 12. 66 L.L.		6 Sheets / Sheet 1
			3.1.1



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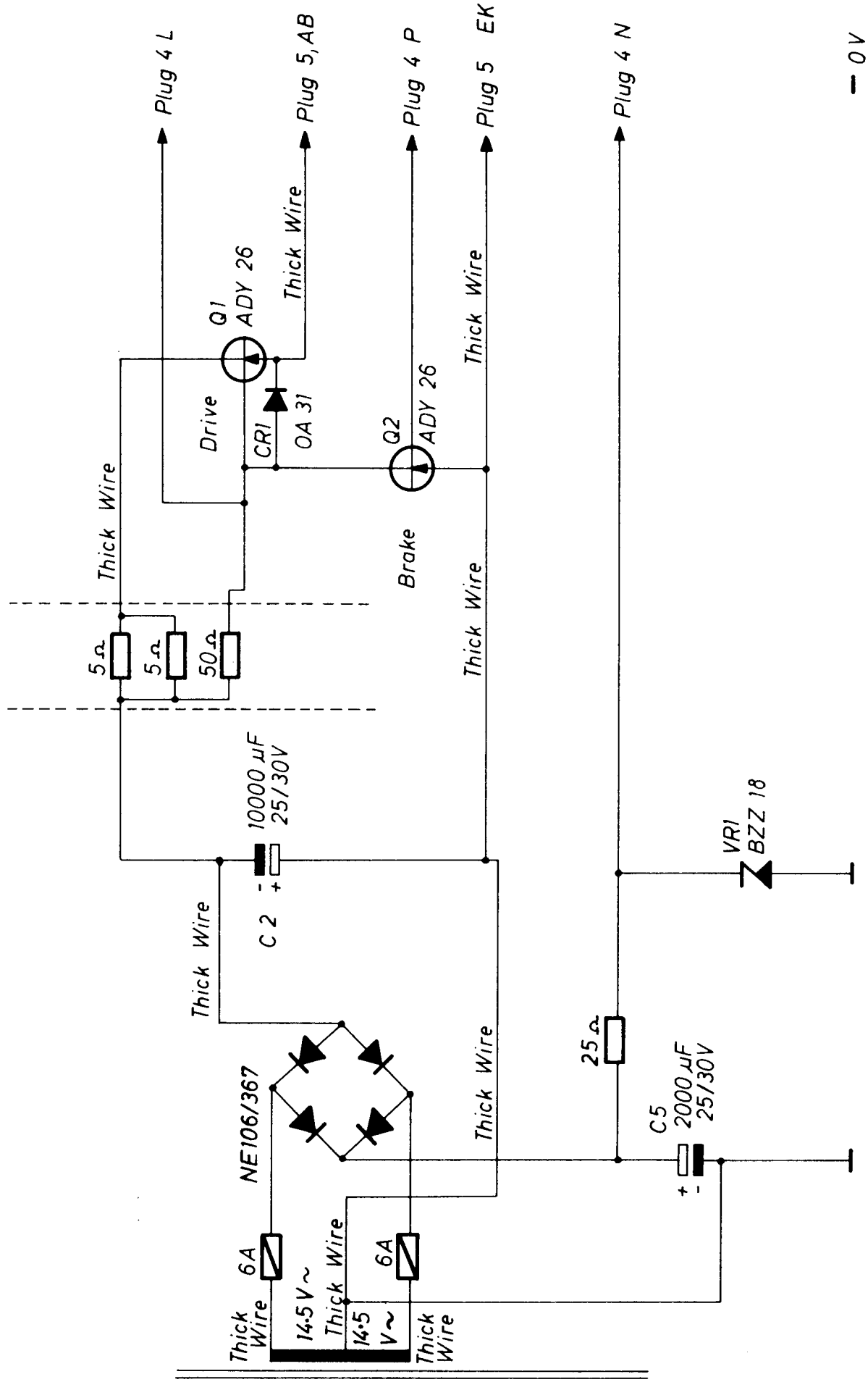

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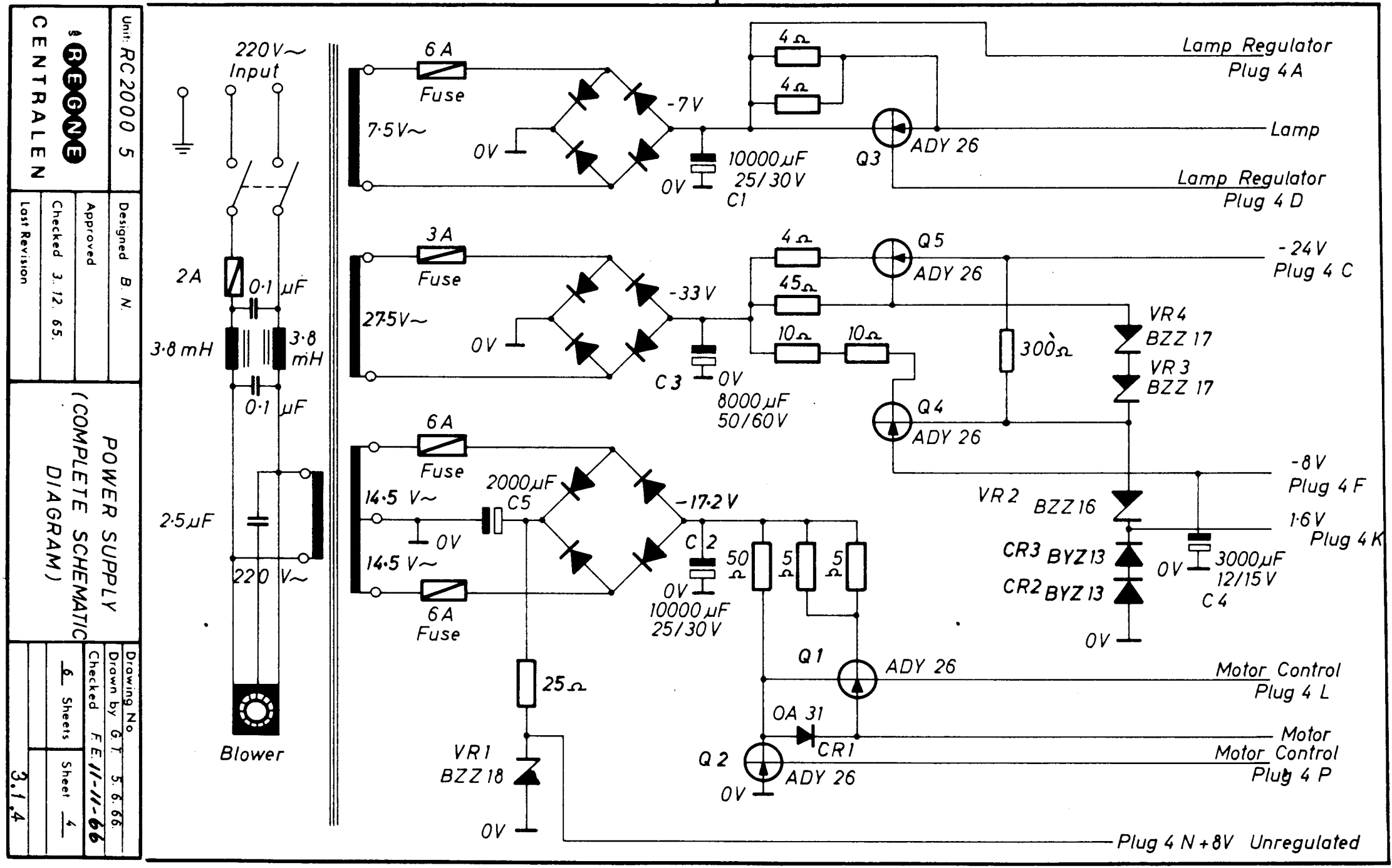

CENTRALEN REGNE			Unit: RC2000 5
Last Revision	Checked 3.12.65.	Approved	Designed B.N.
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3.1.4	6 Sheets	Sheet 4	Drawing No. FE11-11-66
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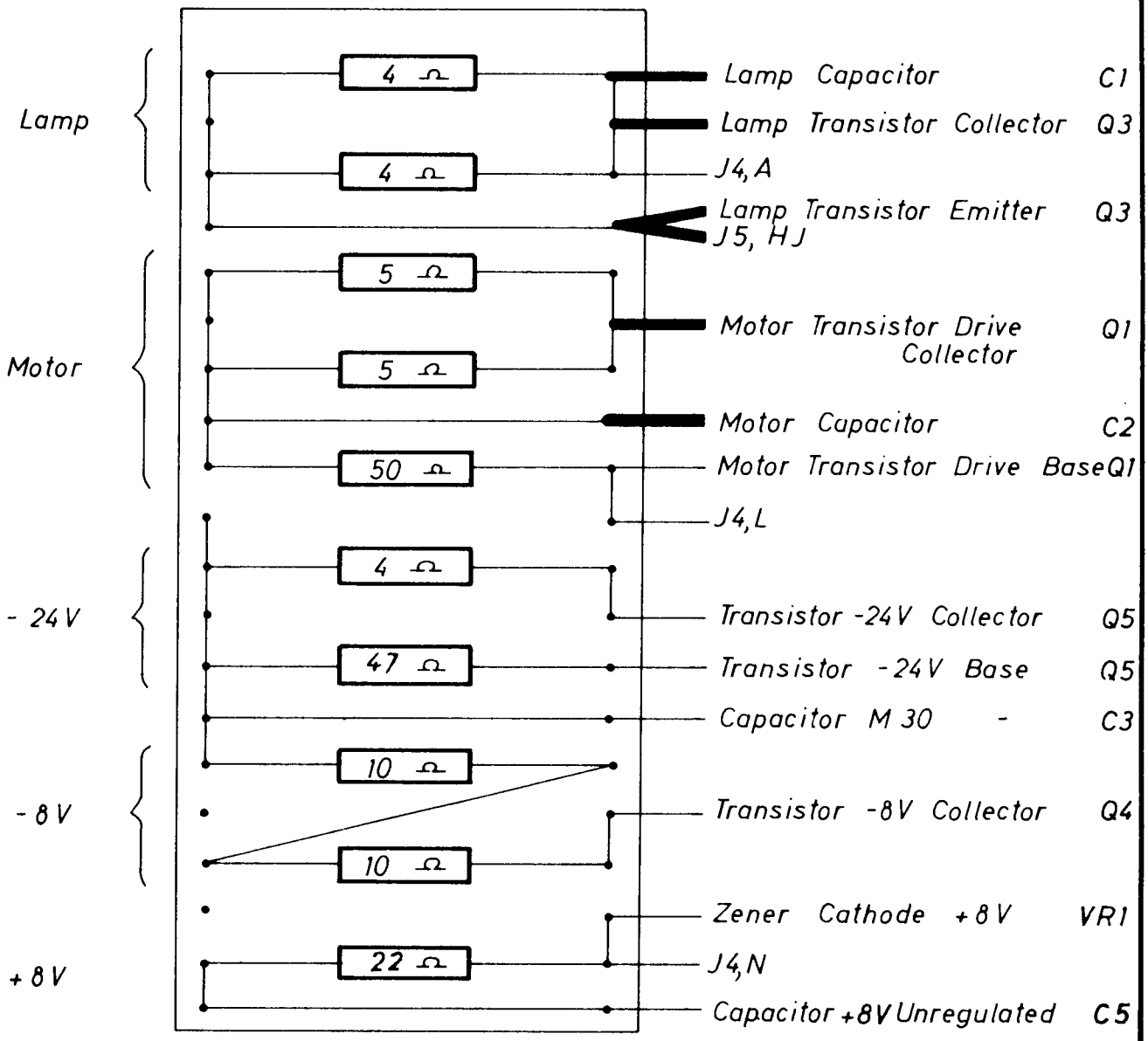
Resistors



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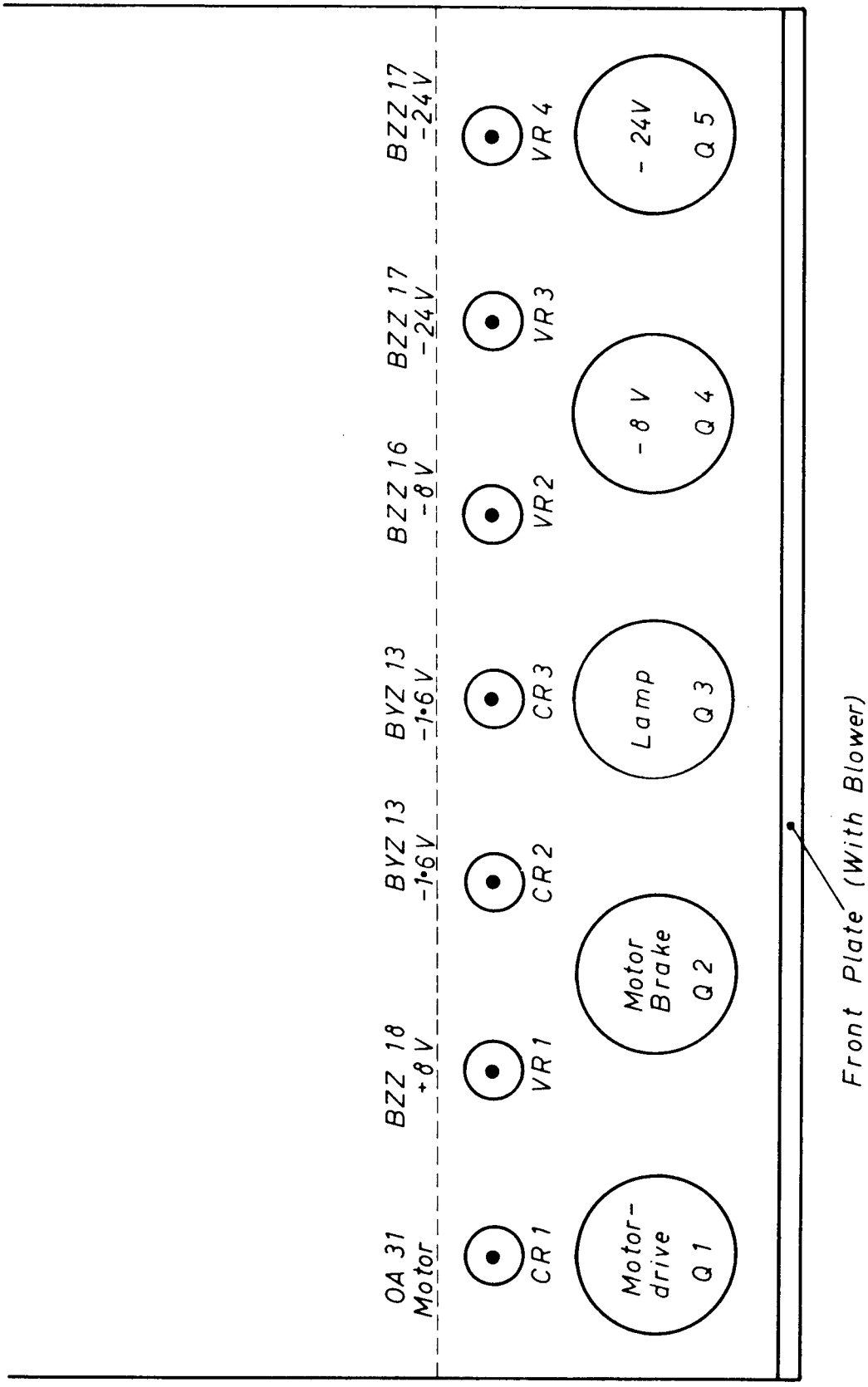
Diode and Transistor Locations



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§ REGNE CENTRALEN
Unit: RC 2000 5
Designed B N.
Approved
Checked 3. 12. 65.
Last Revision

ADDRESS DECODING SYSTEM

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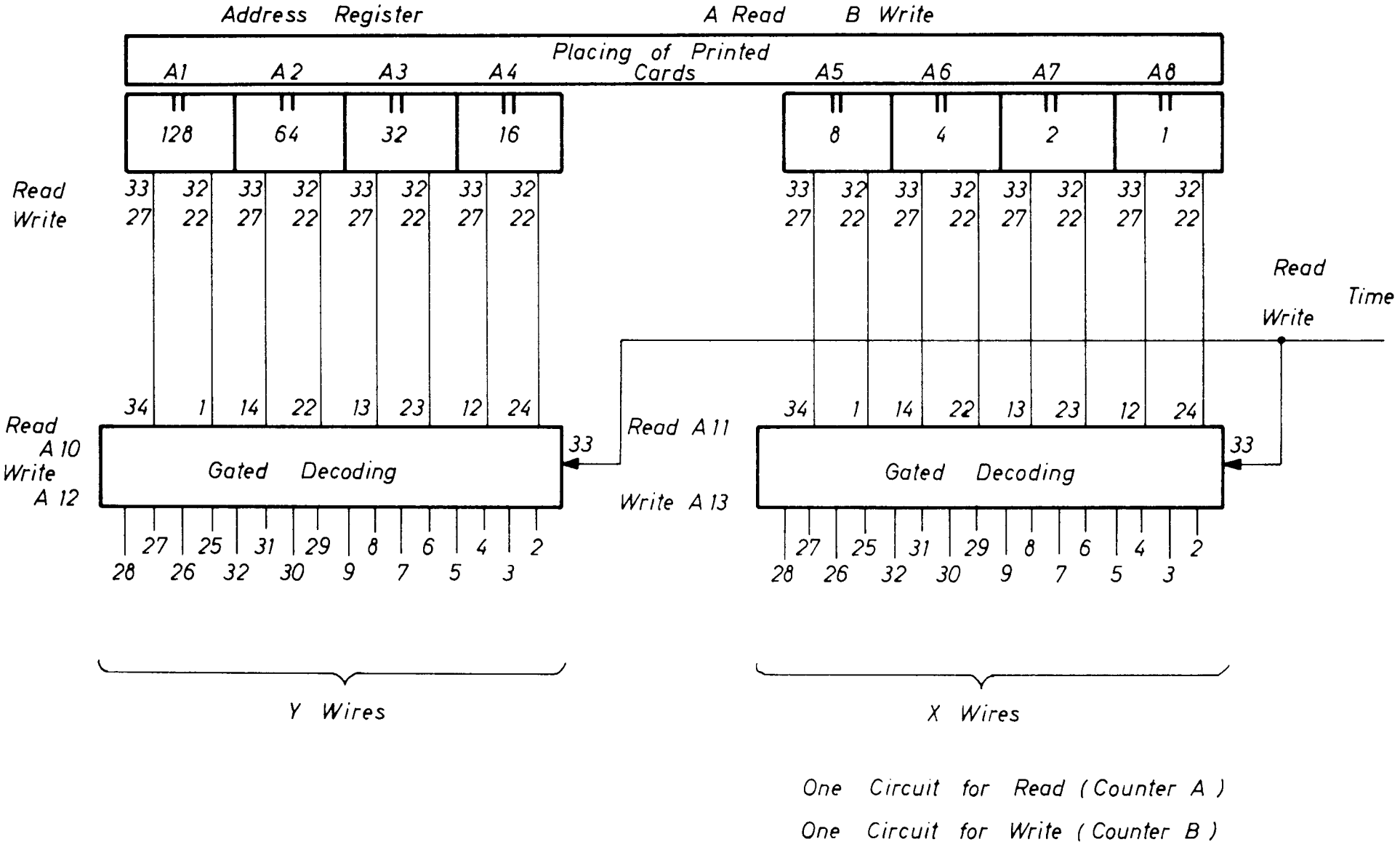
Sheet 1
4.1.1



Unit RC 2000 5		
BEGNE CENTRALEN		
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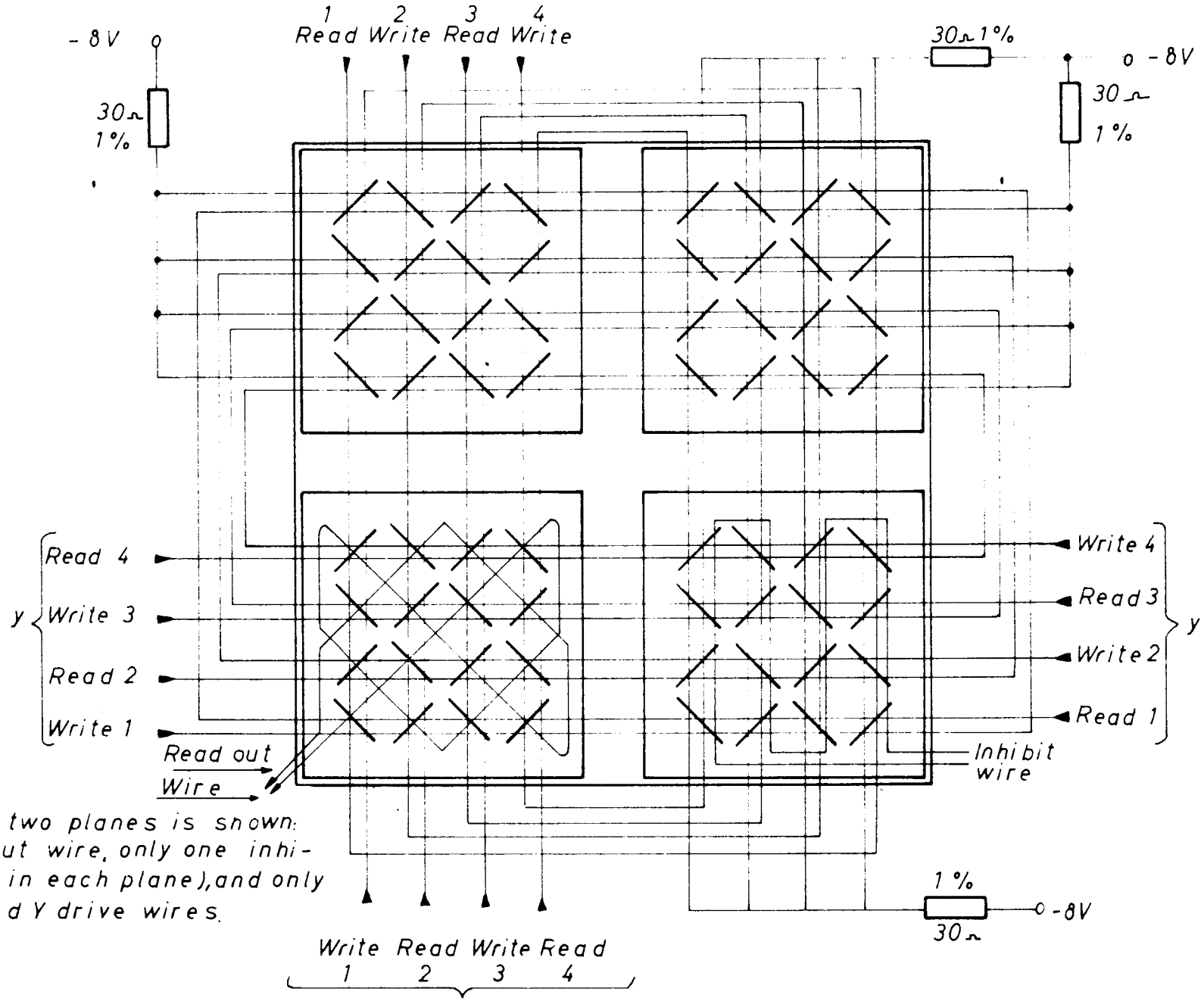
Last Revision		

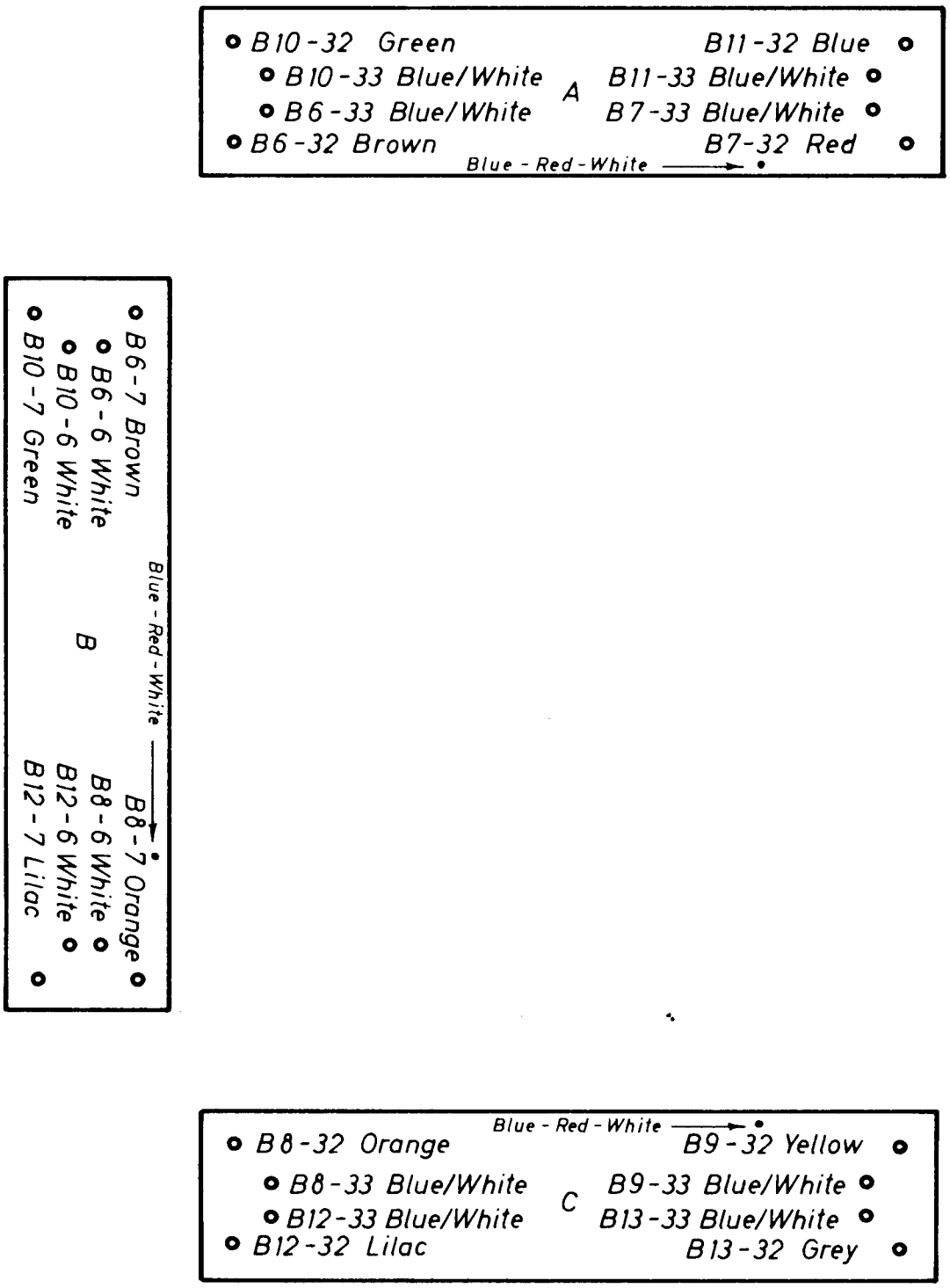
FERRIT MATRIX WIRING



Only one of the two planes is shown: only one read out wire, only one inhibit wire (Four in each plane), and only 4 of the 16 X and Y drive wires.

Drawing No 5.1.1	Drawn by R N 5 6 66	Checked F E 29-11-66
1 Sheets	Sheet 1	

RC 2000 Memory Connection
of Inhibit and Read Wire
Inhibit (6,7)
Read Wire (32,33)



Blue - Red - White
C = B3-31
D = B3-32
A = B3-29
B = B3-30

Unit: RC 2000 5	Designed B. N.	RC 2000 MEMORY WIRING SCHEME	Drawing No
A/S REGNECENTRALEN	Approved		Drawn by G.T. 3. 9. 66.
	Checked 3. 12. 65.		Checked F.E. 11-11-66
	Last Revision		1 Sheets / Sheet 1
			5.2.1

PIN	Wired to	Name of Signal	PIN
A 1	A 13 - 2	x 0 (Write)	A 1
A 2	A 11 - 3	x 1 (Read)	A 2
A 3	A 13 - 4	x 2 (Write)	A 3
A 4	A 11 - 5	x 3 (Read)	A 4
A 5	A 13 - 6	x 4 (Write)	A 5
A 6	A 11 - 7	x 5 (Read)	A 6
A 7	A 13 - 8	x 6 (Write)	A 7
A 8	A 11 - 9	x 7 (Read)	A 8
A 9	A 13 - 29	x 8 (Write)	A 9
A 10	A 11 - 30	x 9 (Read)	A 10
A 11	A 13 - 31	x 10 (Write)	A 11
A 12	A 11 - 32	x 11 (Read)	A 12
A 13	A 13 - 25	x 12 (Write)	A 13
A 14	A 11 - 26	x 13 (Read)	A 14
A 15	A 13 - 27	x 14 (Write)	A 15
A 16	A 11 - 28	x 15 (Read)	A 16

Unit: RC2000 5

REGNE CENTRALEN

Designed B.N.

Approved

Checked 3.12.65.

Last Revision LL. 4.11.66.

FERRITE MATRIX WIRING X

Drawing No 5.3.1

Drawn by G.T. 4.5.66.

Checked F.E. 11-11-66

4 Sheets

Sheet 1

PIN	Wired to	Name of Signal	PIN
B 1	A 12 - 2	Y 0 (Write)	B 1
B 2	A 10 - 3	Y 1 (Read)	B 2
B 3	A 12 - 4	Y 2 (Write)	B 3
B 4	A 10 - 5	Y 3 (Read)	B 4
B 5	A 12 - 6	Y 4 (Write)	B 5
B 6	A 10 - 7	Y 5 (Read)	B 6
B 7	A 12 - 8	Y 6 (Write)	B 7
B 8	A 10 - 9	Y 7 (Read)	B 8
B 9	A 12 - 29	Y 8 (Write)	B 9
B 10	A 10 - 30	Y 9 (Read)	B 10
B 11	A 12 - 31	Y 10 (Write)	B 11
B 12	A 10 - 32	Y 11 (Read)	B 12
B 13	A 12 - 25	Y 12 (Write)	B 13
B 14	A 10 - 26	Y 13 (Read)	B 14
B 15	A 12 - 27	Y 14 (Write)	B 15
B 16	A 10 - 28	Y 15 (Read)	B 16

CENTRALEN

REGNE

Unit: RC2000 5

Designed B. N.

Approved

Checked 3.12.65.

Last Revision L.L 4.11.66.

FERRITE MATRIX WIRING Y

Drawing No

Drawn by G.T. 6.5.66.

Checked F.E. 11-11-66

4 Sheets

Sheet 2

5.4.1

PIN	Wired to	Name of Signal	PIN
C 1	A11 - 2	x 0 (Read)	C 1
C 2	A13 - 3	x 1 (Write)	C 2
C 3	A11 - 4	x 2 (Read)	C 3
C 4	A13 - 5	x 3 (Write)	C 4
C 5	A11 - 6	x 4 (Read)	C 5
C 6	A13 - 7	x 5 (Write)	C 6
C 7	A11 - 8	x 6 (Read)	C 7
C 8	A13 - 9	x 7 (Write)	C 8
C 9	A11 - 29	x 8 (Read)	C 9
C 10	A13 - 30	x 9 (Write)	C 10
C 11	A11 - 31	x 10 (Read)	C 11
C 12	A13 - 32	x 11 (Write)	C 12
C 13	A11 - 25	x 12 (Read)	C 13
C 14	A13 - 26	x 13 (Write)	C 14
C 15	A11 - 27	x 14 (Read)	C 15
C 16	A13 - 28	x 15 (Write)	C 16

CENTRALEN

SAAB REGNE

Unit: RC 2000 5

Designed B.N.

Approved

Checked 3. 12. 65.

Last Revision

FERRITE MATRIX

WIRING

X

Drawing No

Drawn by G.T. 4. 9. 66.

Checked F.E. 11-11-66

4 Sheets

Sheet 3

5.5.1

PIN	Wired to	Name of Signal	PIN
D 1	A10 - 2	Y 0 (Read)	D 1
D 2	A12 - 3	Y 1 (Write)	D 2
D 3	A10 - 4	Y 2 (Read)	D 3
D 4	A12 - 5	Y 3 (Write)	D 4
D 5	A10 - 6	Y 4 (Read)	D 5
D 6	A12 - 7	Y 5 (Write)	D 6
D 7	A10 - 8	Y 6 (Read)	D 7
D 8	A12 - 9	Y 7 (Write)	D 8
D 9	A10 - 29	Y 8 (Read)	D 9
D 10	A12 - 30	Y 9 (Write)	D 10
D 11	A10 - 31	Y 10 (Read)	D 11
D 12	A12 - 32	Y 11 (Write)	D 12
D 13	A10 - 25	Y 12 (Read)	D 13
D 14	A12 - 26	Y 13 (Write)	D 14
D 15	A10 - 27	Y 14 (Read)	D 15
D 16	A12 - 28	Y 15 (Write)	D 16

CENTRALEN

REGNE

Unit: RC 2000 5

Designed B.N.

Approved

Checked 3.12.65.

Last Revision

FERRITE MATRIX
WIRING
Y

Drawing No 5.6.1

Drawn by L.L. 4.10.66.

Checked F.E. 11-11-66

4 Sheets

Sheet 4

Unit: RC 2000 5

REGNE CENTRALEN

Designed B. N

Approved

Checked 3. 12. 65

Last Revision

REGISTERS

A-B AND ADDER

Drawing No 6.1.1

Drawn by G.T. 11. 9. 66.

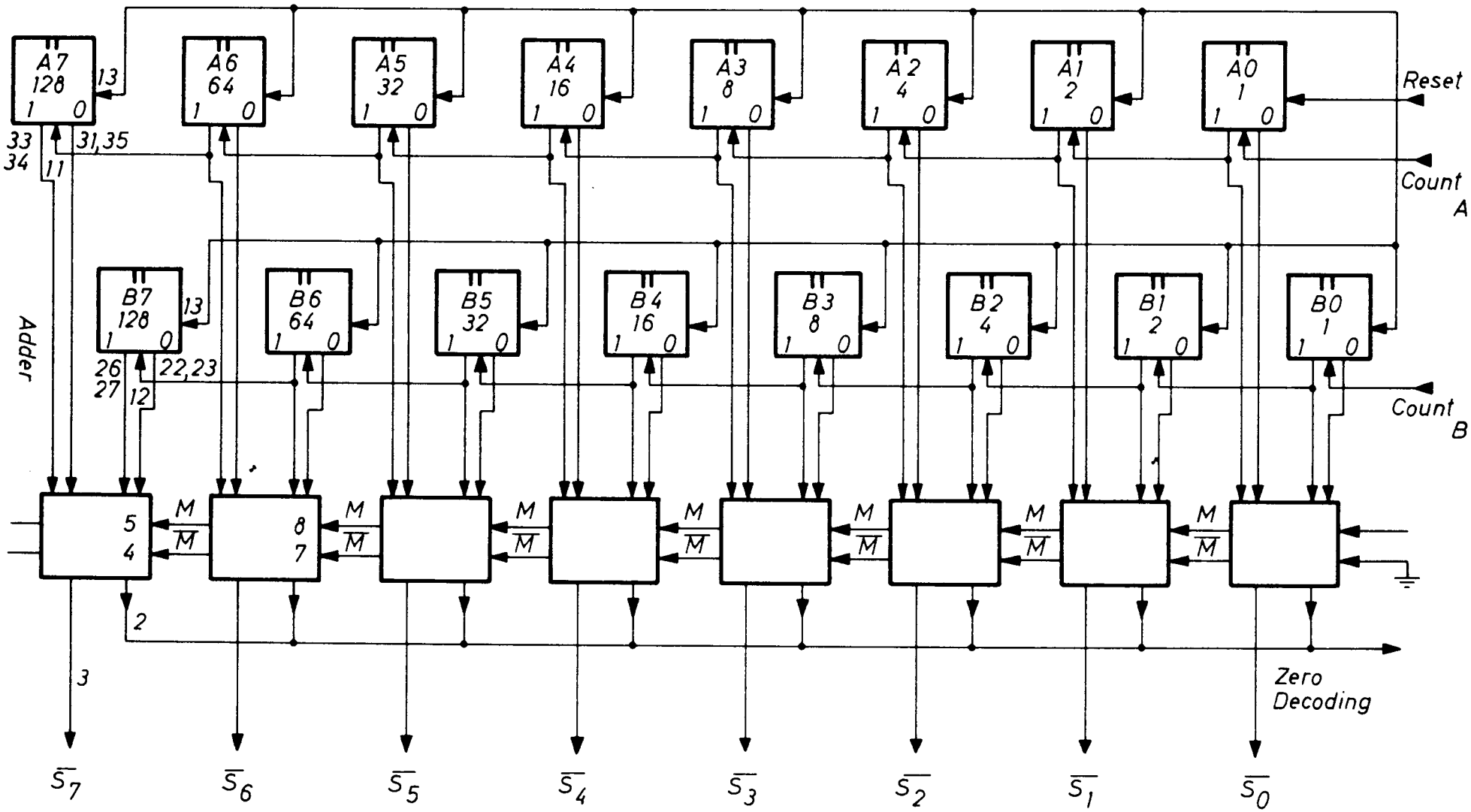
Checked F.E. 11-11-66

1 Sheets

Sheet 1

Placing of Printed Cards

A1 A2 A3 A4 A5 A6 A7 A8



Terminal Numbers Shown for Stage 7

All Stages Identical.

Unit: RC 2000 5

REGNE CENTRALEN

Designed B N.

Approved

Checked 3.12.65.

Last Revision

MOTOR CONTROL

Drawing No

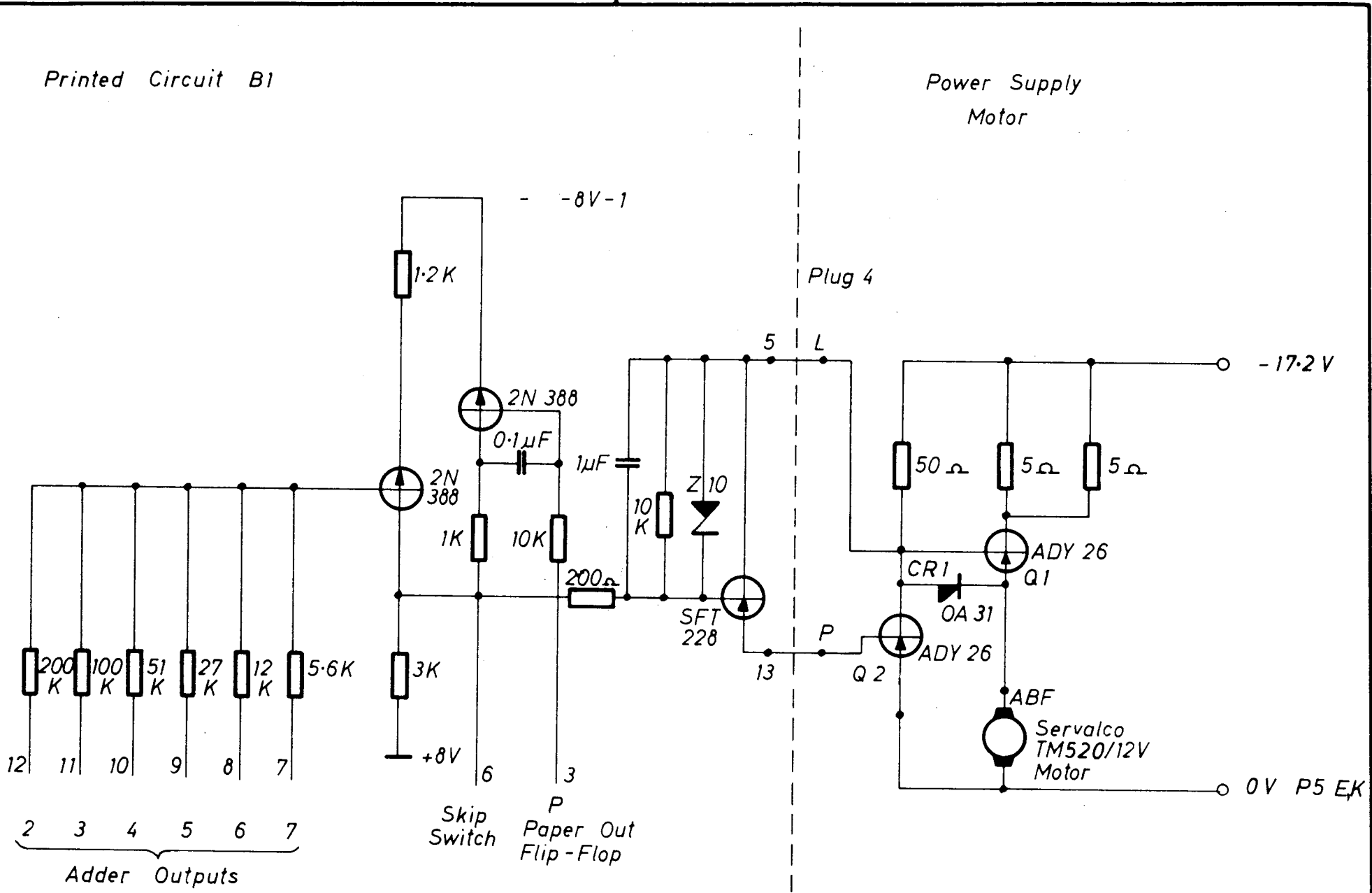
Drawn by G.T 7.5.66.

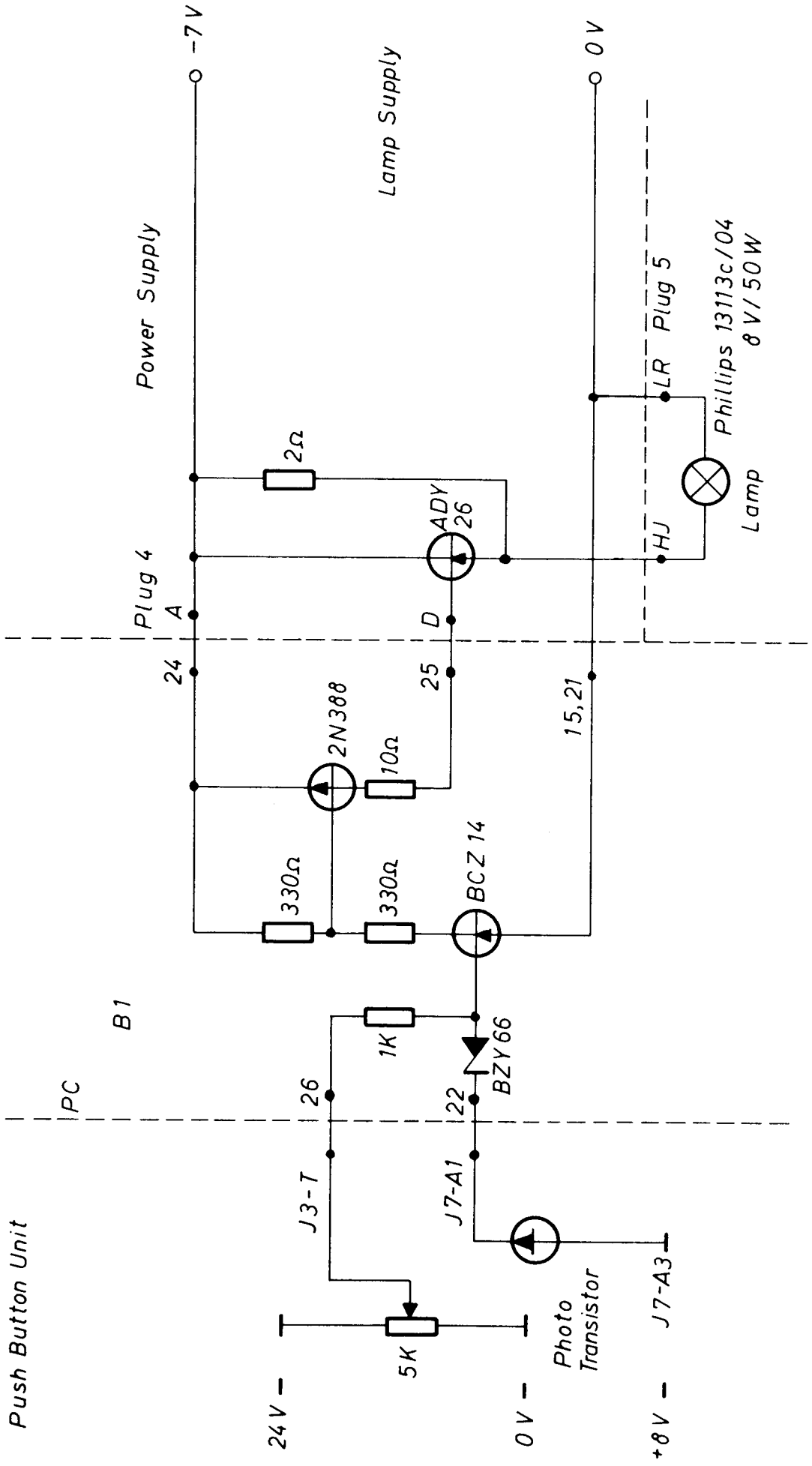
Checked F.E. 11-11-66

1 Sheets

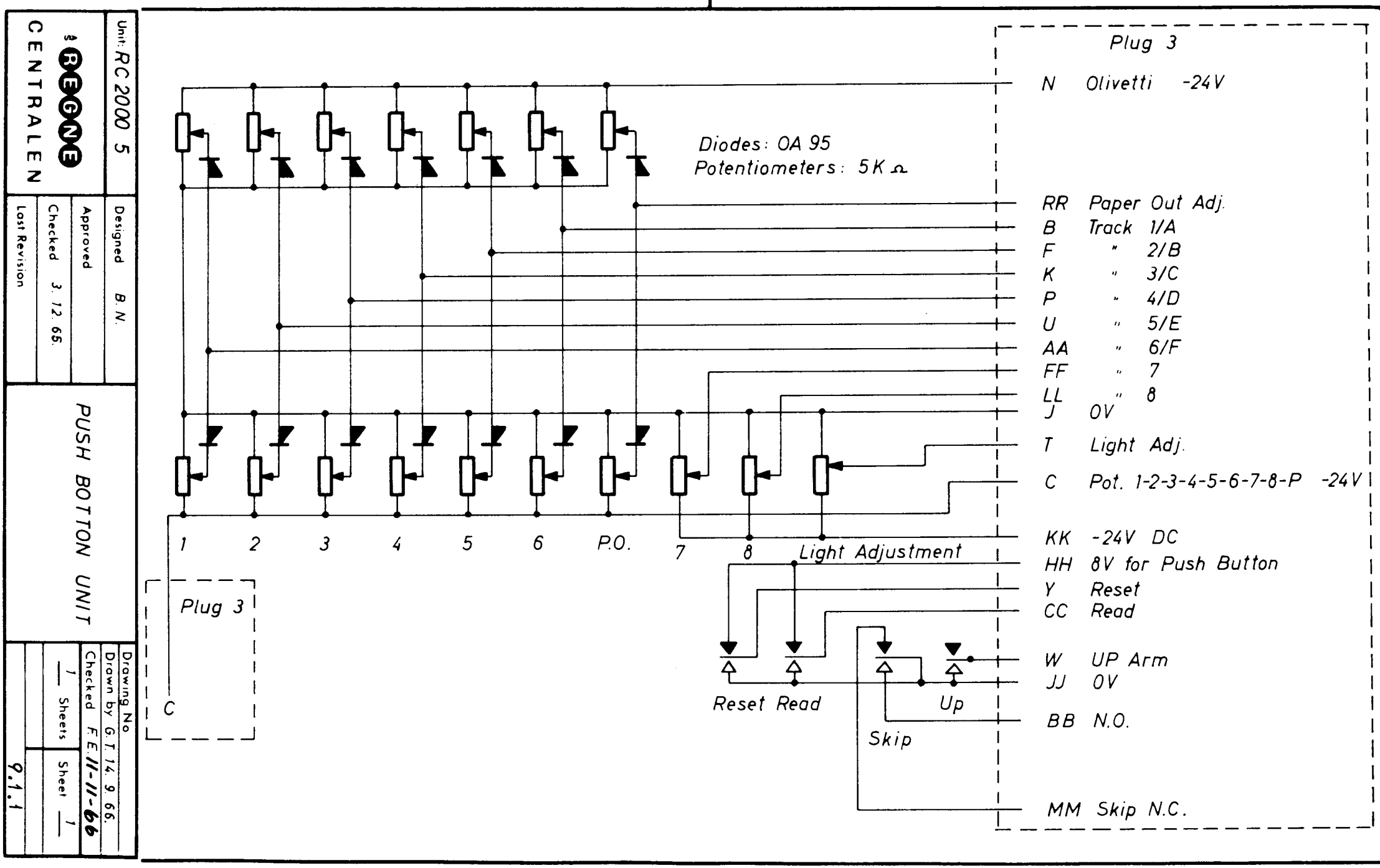
Sheet 1

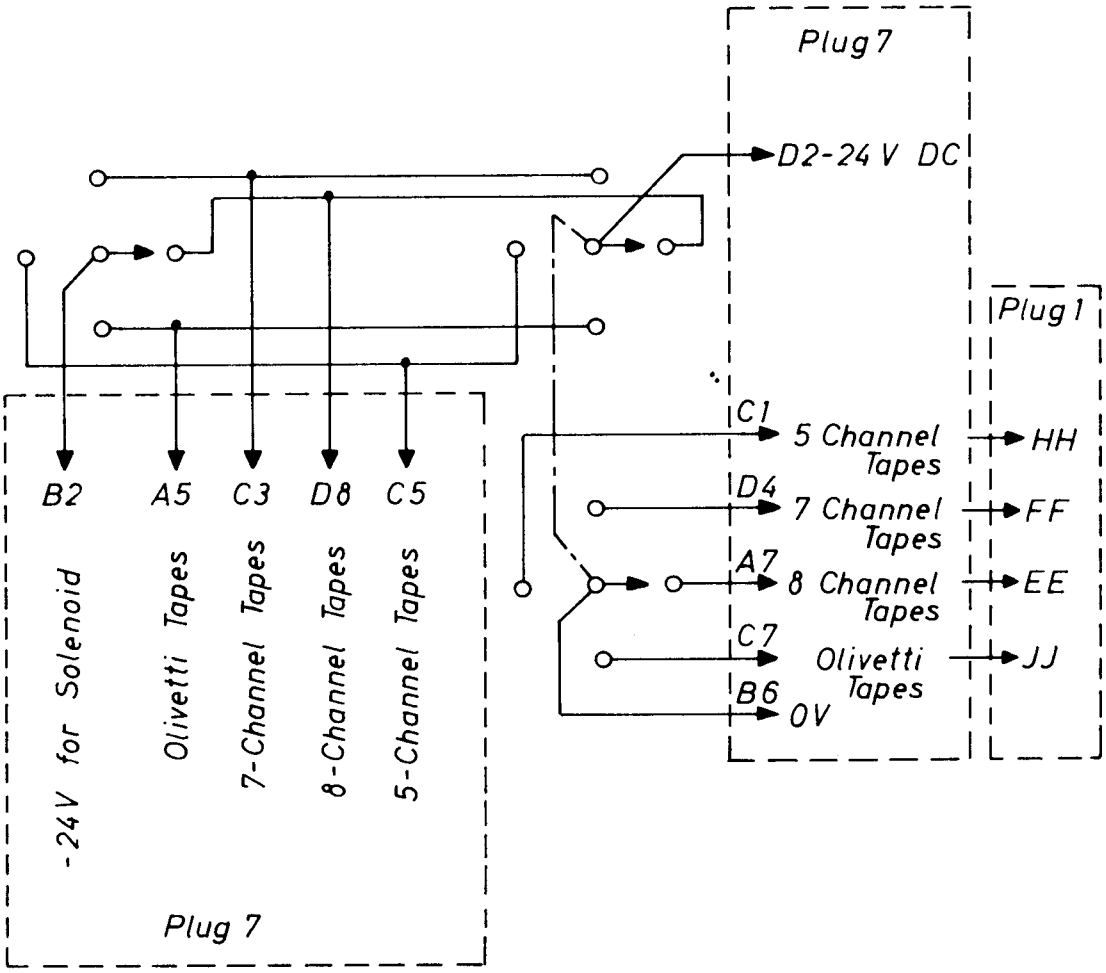
7.1.1



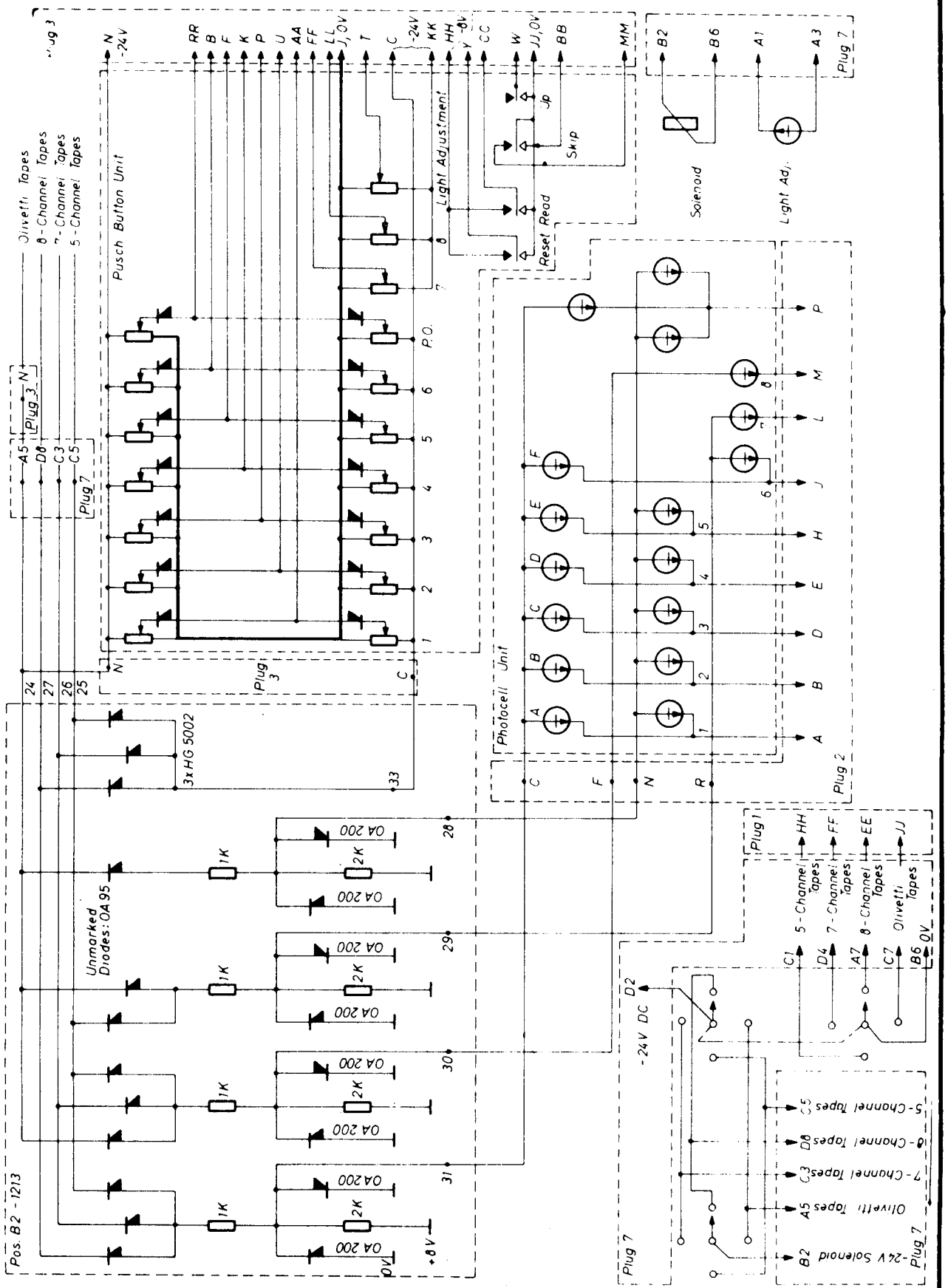


Unit: RC 2000 5	Designed B. N.	LAMP REGULATOR	Drawing No
			Drawn by B.R. 18.11.66
	Approved		Checked F.E. 18-11-66
A/S REGNECENTRALEN	Checked 3.12.65		1 Sheets / Sheet 1
	Last Revision		8.1.1


Unit: RC 2000 5
REGNE CENTRALEN
Designed B. N.
Approved
Checked 3. 12. 65.
Last Revision
PUSH BOTTON UNIT
Drawing No
Drawn by G. T. 14. 9. 66.
Checked F. E. 11-11-66
1 Sheets
Sheet 1
9.1.1
Diodes: OA 95
Potentiometers: 5K Ω
1 2 3 4 5 6 P.O. 7 8 Light Adjustment
Plug 3
C
Reset Read
Up
Skip
Plug 3
N Olivetti -24V
RR Paper Out Adj.
B Track 1/A
F " 2/B
K " 3/C
P " 4/D
U " 5/E
AA " 6/F
FF " 7
LL " 8
J 0V
T Light Adj.
C Pot. 1-2-3-4-5-6-7-8-P -24V
KK -24V DC
HH 8V for Push Button
Y Reset
CC Read
W UP Arm
JJ 0V
BB N.O.
MM Skip N.C.



Unit: RC 2000 5	Designed B. N.	TAPE WITH SELECTOR SWITCHING SYSTEM	Drawing No
REGNE CENTRALEN	Approved		Drawn by G.T. 13. 9. 66.
	Checked 3. 12. 65.		Checked F.E. 11-11-66
	Last Revision		1 Sheets / Sheet 1
			10.1.1



Unit: RC2000 5	Designed B. N.	TAPE WITH SELECTOR SWITCHING SYSTEM	Drawing No
REGNECENTRALEN	Approved		Drawn by G. T. 13. 5. 66.
	Checked 3. 12. 65.		Checked F.E. 11-11-66
	Last Revision 24.10. 66.		1 Sheets / Sheet 1.
			10.1,2

0	1	2	3	4	5	6	7	8	9	10	11	12	13
Int. Block Motor	A B Adder 128	A B Adder 64	A B Adder 32	A B Adder 16	A B Adder 8	A B Adder 4	A B Adder 2	A B Adder 1	* Parity Control	Read Driver Y A 16 32 64 128	Read Driver X A 1 2 3 8	Write Driver Y B 16 32 64 128	Write Driver X B 1 2 3 8
1227	1201	1201	1201	1201	1201	1201	1201	1201	1228	1203	1203	1203	1203

Z-Flip-Flop Busy Signal / Signal	Lamp Control Motor Control	Gate	WA WB WC	RB RC Reset	RA WD PO	In Out Track 1 A	In Out Track 2 B	In Out Track 3 C	In Out Track 4 D	In Out Track 5 E	In Out Track 6 F	In Out Track 7	In Out Track 8
*1224	1205-1	1213	1200	1200-1	1212	1202	1202	1202	1202	1202	1202	1202	1202

A * Depending of outher device B

SURVEY OF PRINTED CIRCUIT CARDS

CENTRALEN — REGNE

Unit: RC 2000 5

Designed B.N.

Approved

Checked 3. 12. 65.

Last Revision

Drawing No

Drawn by L. L. 8. 10. 66.

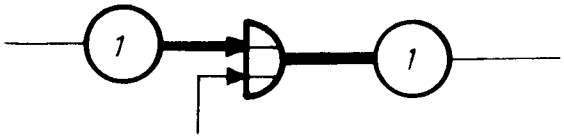
Checked F.E. 11-11-66

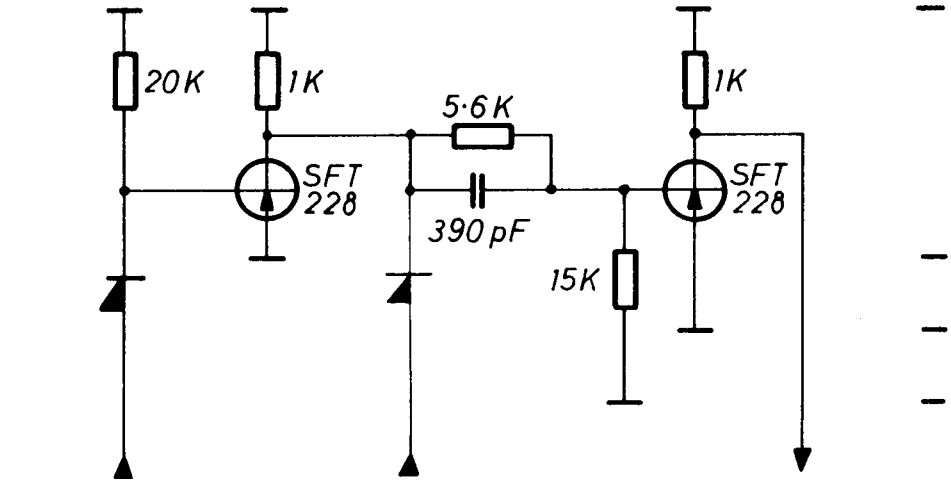
1 Sheets

Sheet 1

11.1.1

Unmarked Diodes : OA85



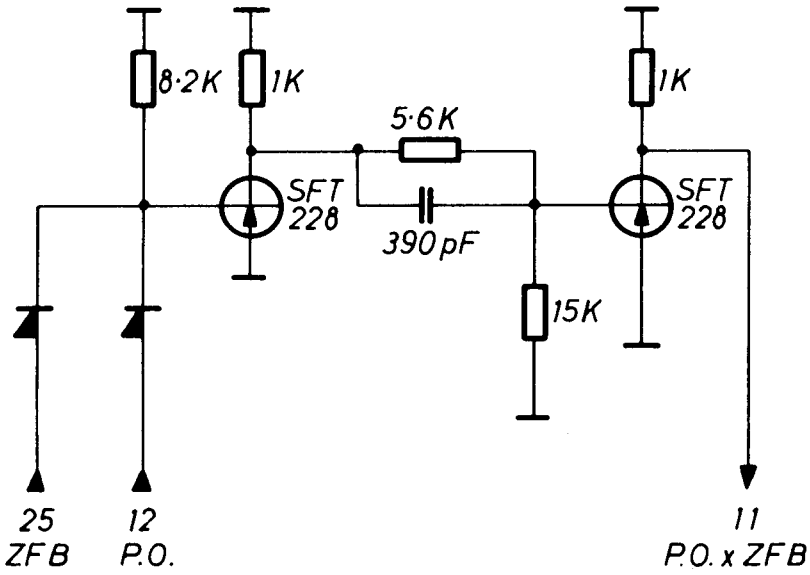


— -8V 28

— -1·6V 35

— 0V 15,21

— +8V 14



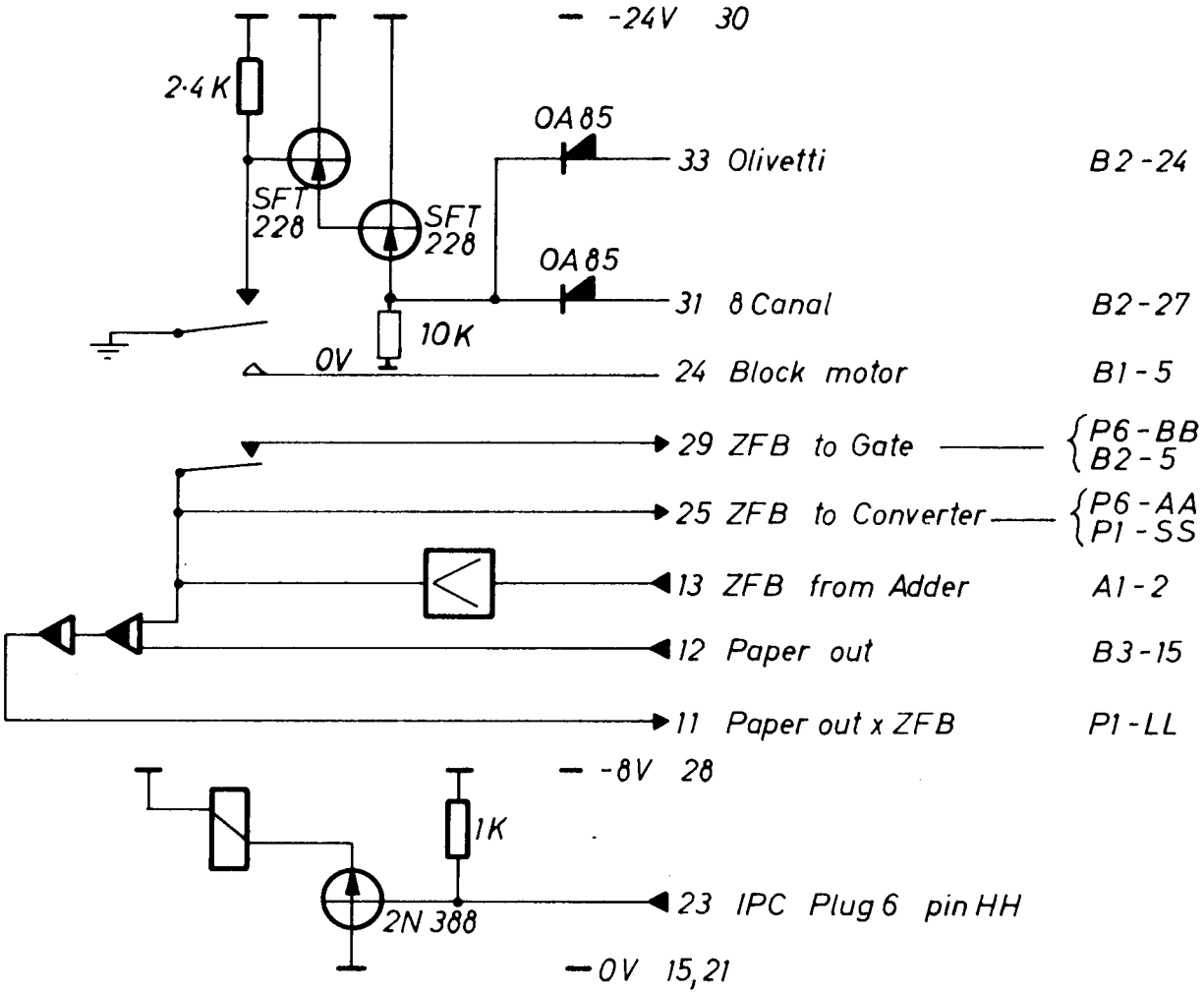
— -8V 28

— -1·6V 35

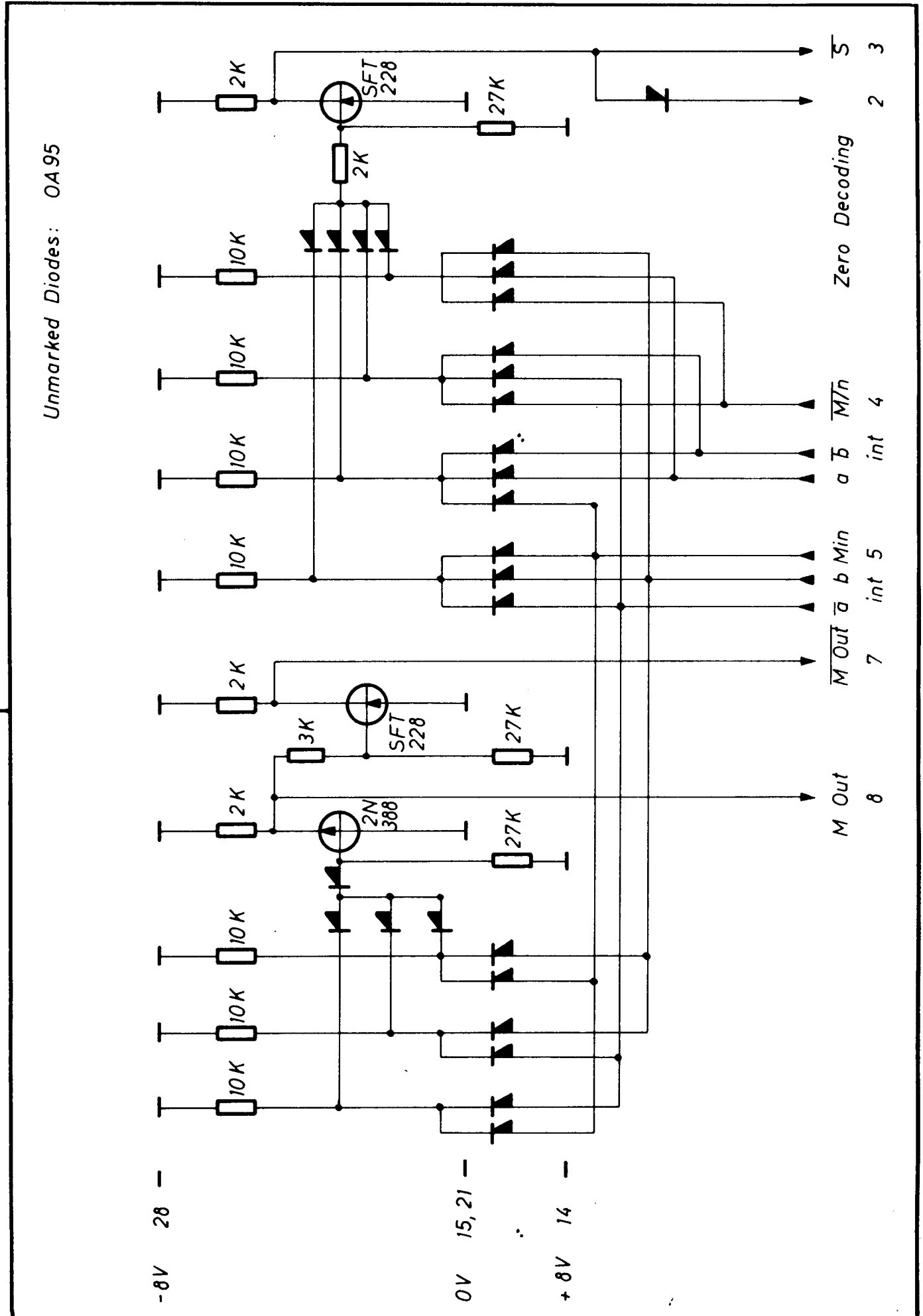
— 0V 15,21

— +8V 14

Unit: RC 2000 5	Designed B. N.	INT. BLOCK MOTOR	Drawing No
REGNECENTRALEN	Approved		Drawn by G.T. 7.9.66.
	Checked 3. 12. 65		Checked F.E. 11-11-66
	Last Revision		2 Sheets / Sheet 1
			A 0 / 1227
			11.2.1

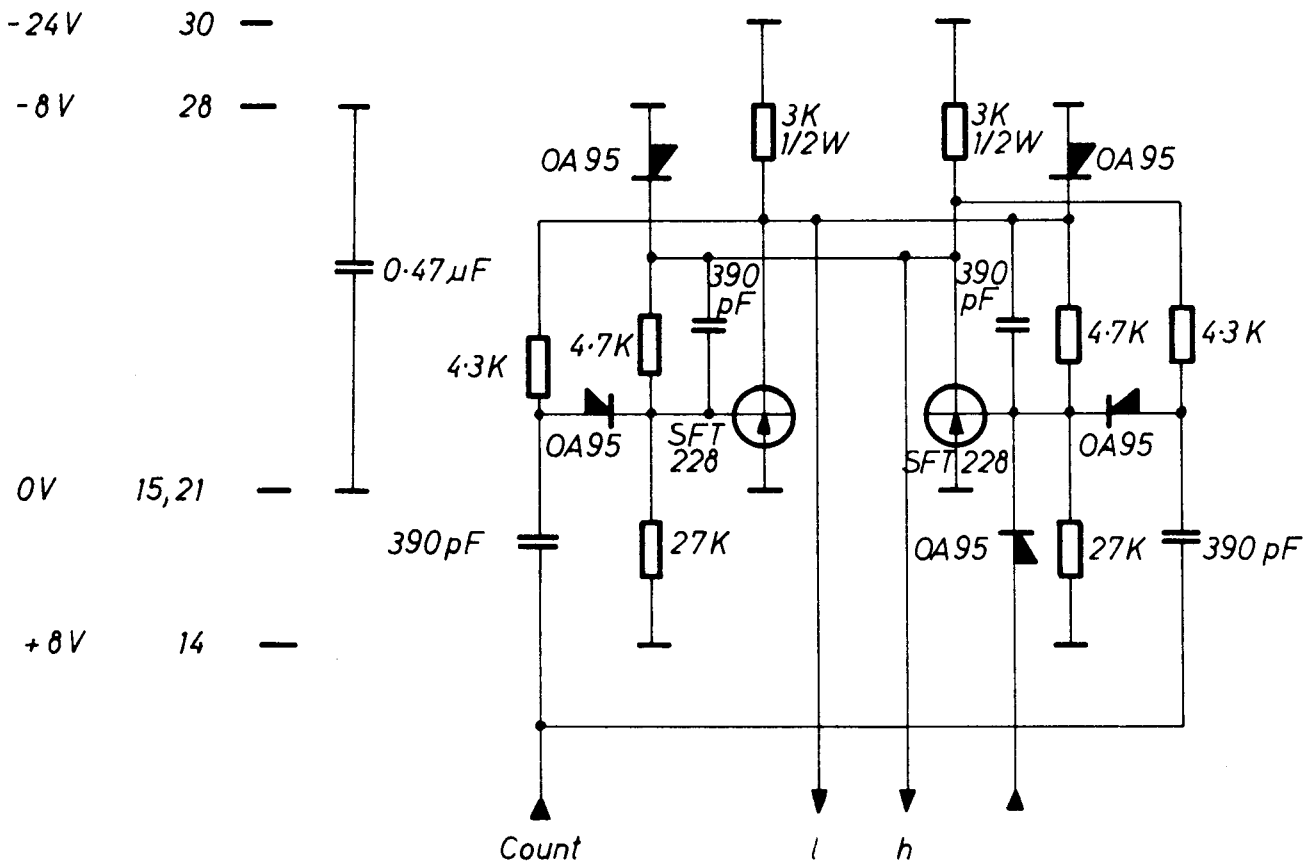


Unit: RC 2000 5	Designed B. N.	INT. BLOCK MOTOR	Drawing No
	Approved		Drawn by L. L. 3.10.66.
REGNE CENTRALEN	Checked 3. 12. 65.		Checked F.E. 11-11-66
	Last Revision		2 Sheets / Sheet 2
			A 0 / 1227
			11.2.2



Unit RC 2000 5	Designed B. N.	REGISTER AND ADDER	Drawing No
REGNE CENTRALEN	Approved		Drawn by G.T. 9. 6. 66.
	Checked 3. 12. 65.		Checked F.E. 11-11-66
	Last Revision		2 Sheets / Sheet 1
			A1 A8 / 1201
			11.3.1

2 Circuits
On Each Card



A :	11	33,34	31,32	13	Read
B :	12	26,27	22,23	13	Write

Unit: RC2000 5

BEGNE CENTRALEN

Designed B. N.

Approved

Checked 3. 12. 65.

Last Revision

REGISTER ANDADDER

Drawing No 11,3,2

Drawn by G. T. 7. 6. 66.

Checked F. E. 11-11-66

2 Sheets

Sheet 2

A1 - A8

1201

CENTRALEN

REGNE

Unit: RC2000 5

Designed B. N.

Approved

Checked 3. 12. 65.

Last Revision

PARITY CONTROL

Drawing No

Drawn by L.L. 8. 10. 66.

Checked F.E. 11-11-66

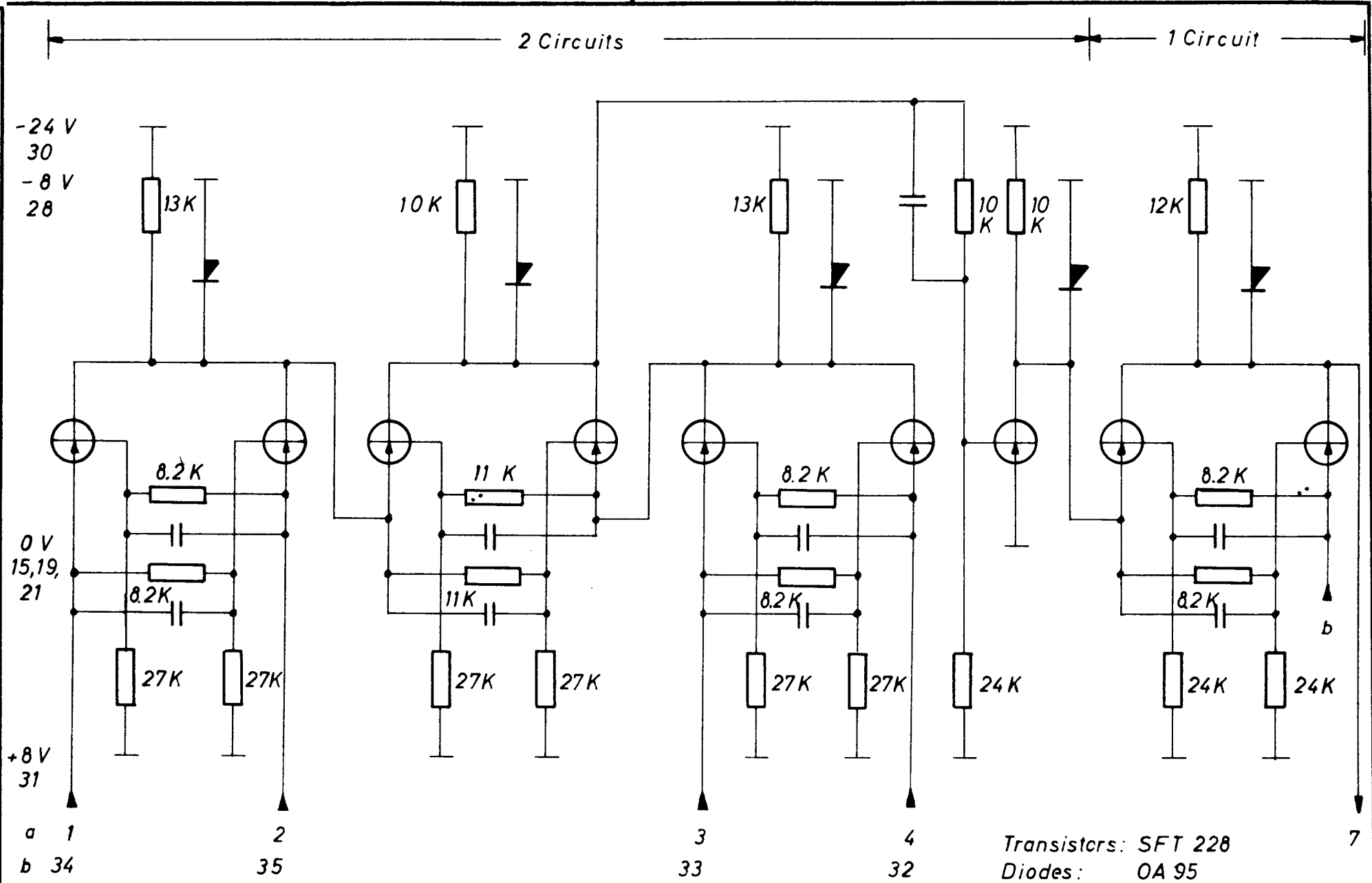
Sheet 1

Sheets 1

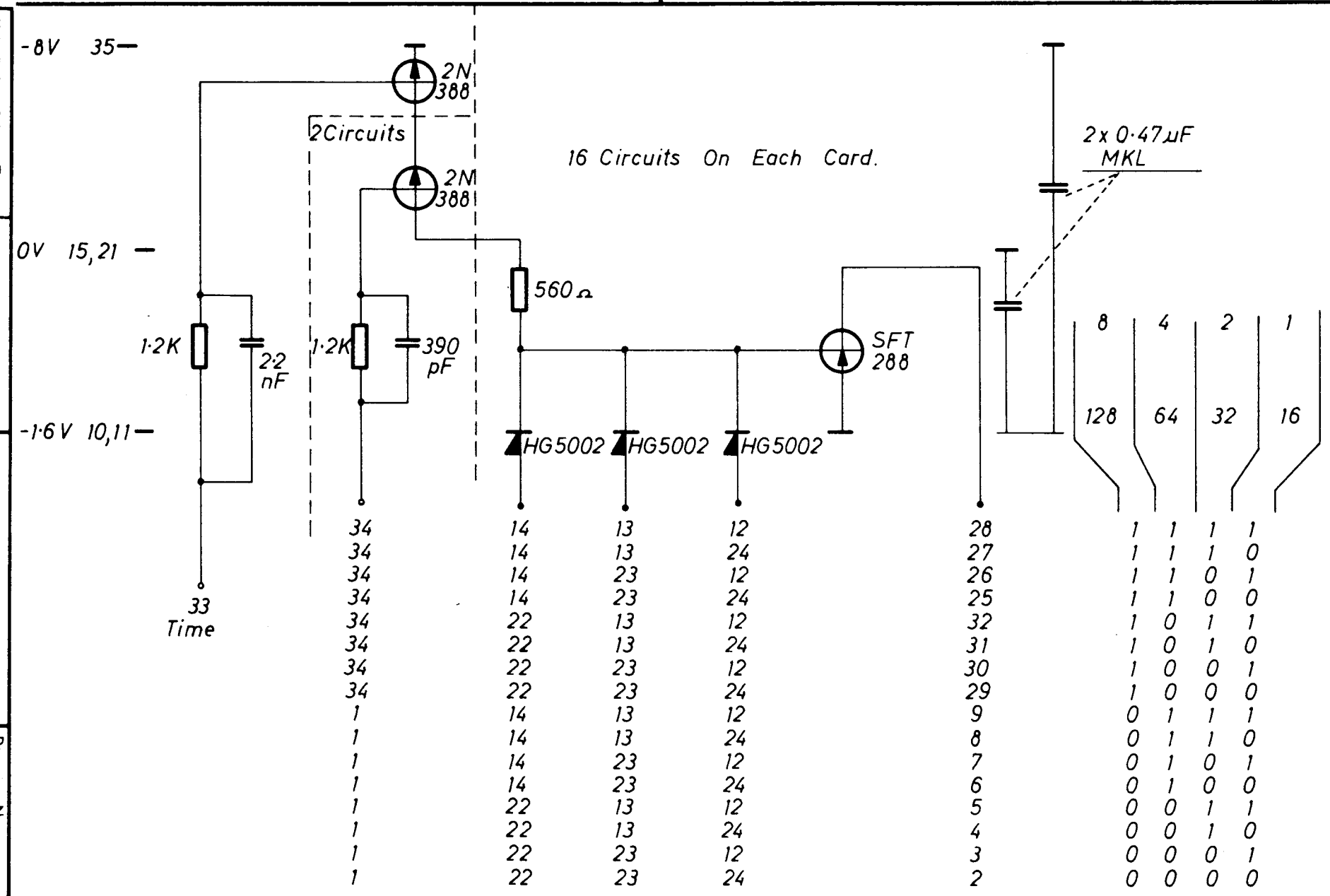
A 9

1228

11.4.1



Transistors: SFT 228
Diodes: OA 95
Resistors: BY 1/3 W
Condensers: 390 pF



REGNE CENTRALEN

Unit: RC 2000 5

Designed B. N.

Approved

Checked 3. 12. 65.

Last Revision

FERRITE MATRIX DECODING

Drawing No

Drawn by L. L. 8. 10. 66

Checked F. E. 11-11-66

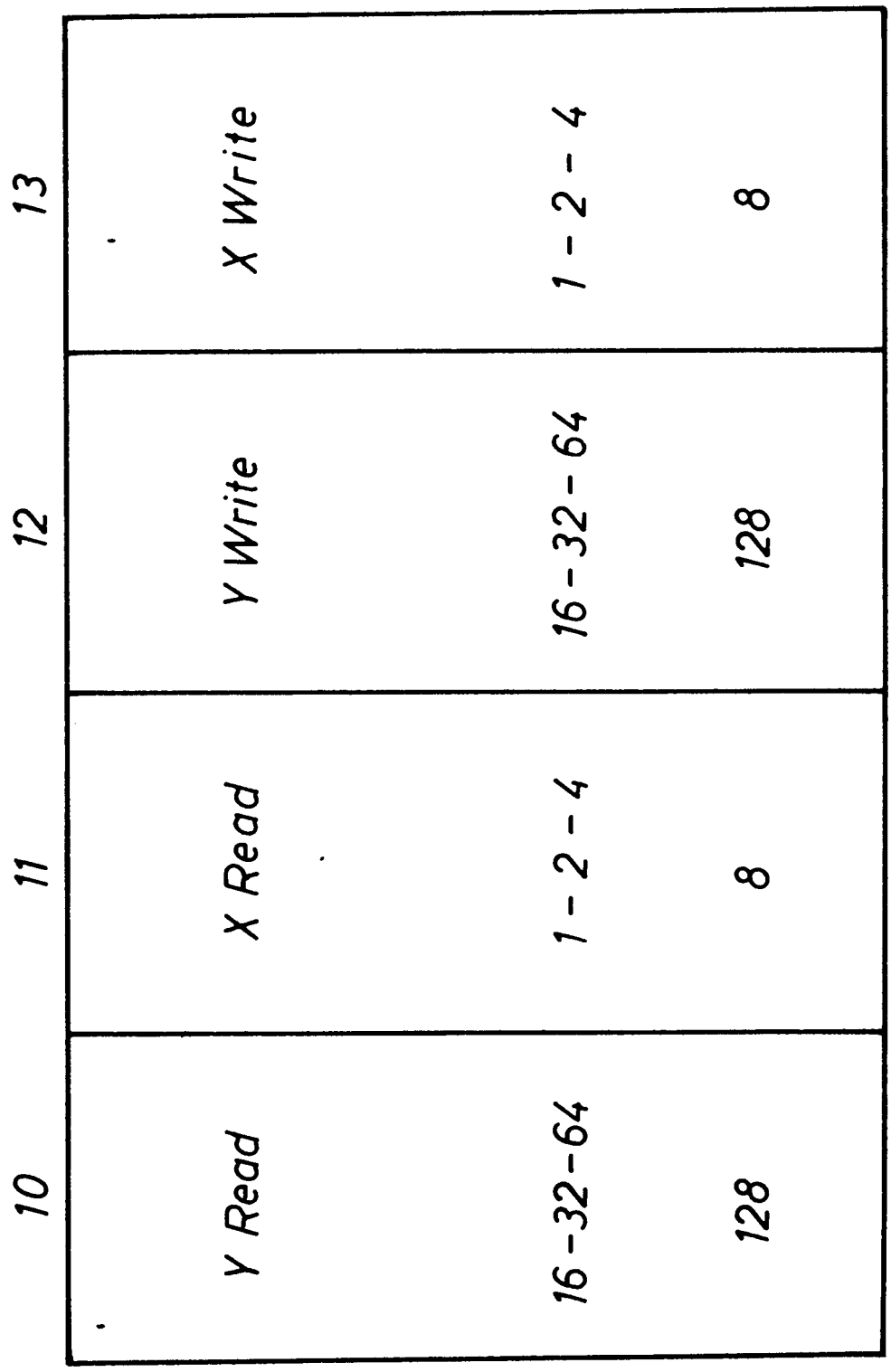
1 Sheets

Sheet 1

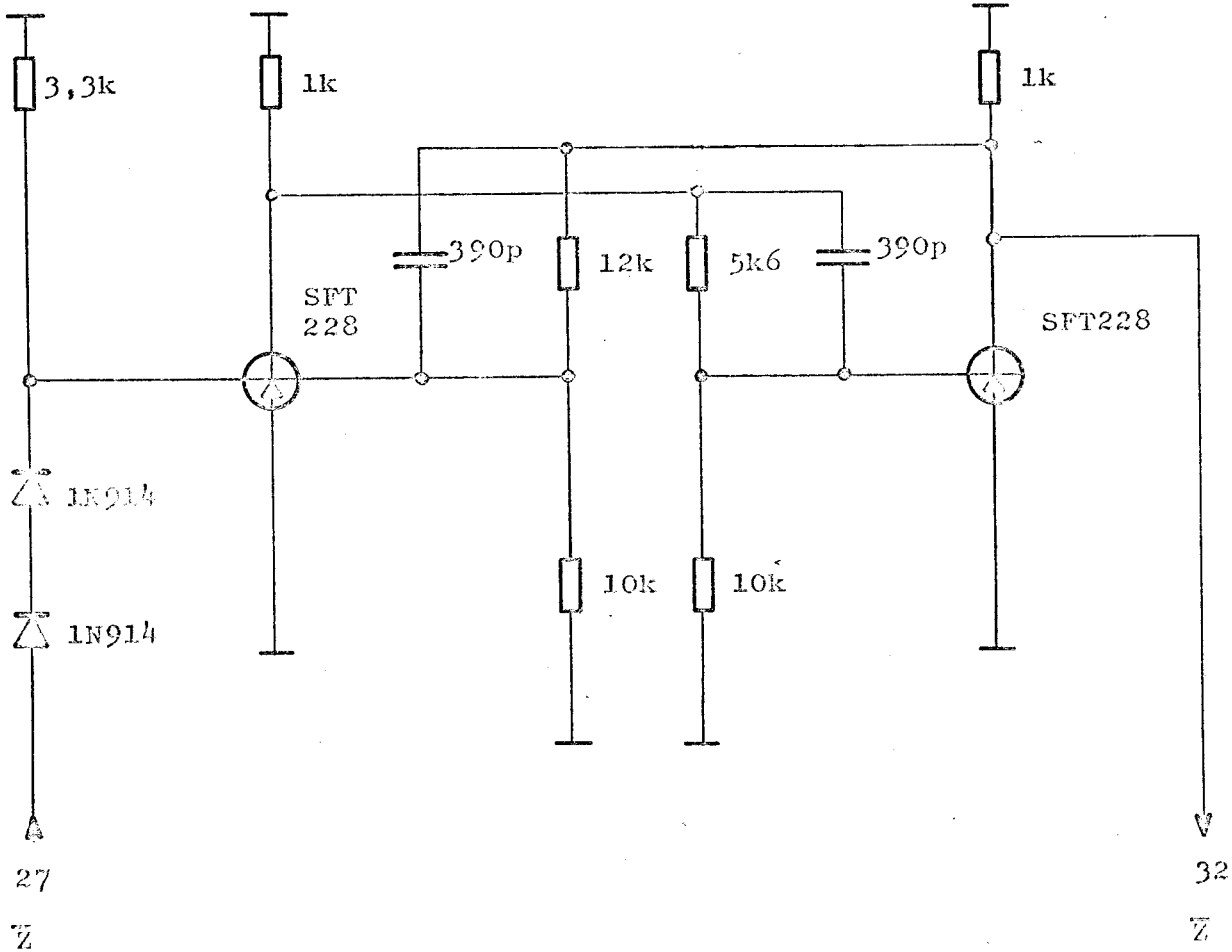
A10-13

1203

11.5.1



Unit RC 2000 5	Designed B N	FERRIT MATRIX DECODING AT FRAME A	Drawing No
A/S REGNE CENTRALEN	Approved		Drawn by L N L 5 6 66
	Checked 3 12 65		Checked F E 29-11-66
	Last Revision		1 Sheets / Sheet 1
			A 10-13
			11.6.1



CENTRALEN

Unit: RC 2000

Designed 10-8-67 EN

Approved

Checked

Last Revision

RC2000 -> TRI 100/2

E0

Drawing No

Drawn by

Checked

2 Sheets

Sheet 1

Form. 305-A4-2.8.66

CENTRALEN

Unit: RC 2000

Designed 23-10-67 BN

Approved

Checked

Last Revision

RC2000 -> TRI 100/2

Drawing No

Drawn by

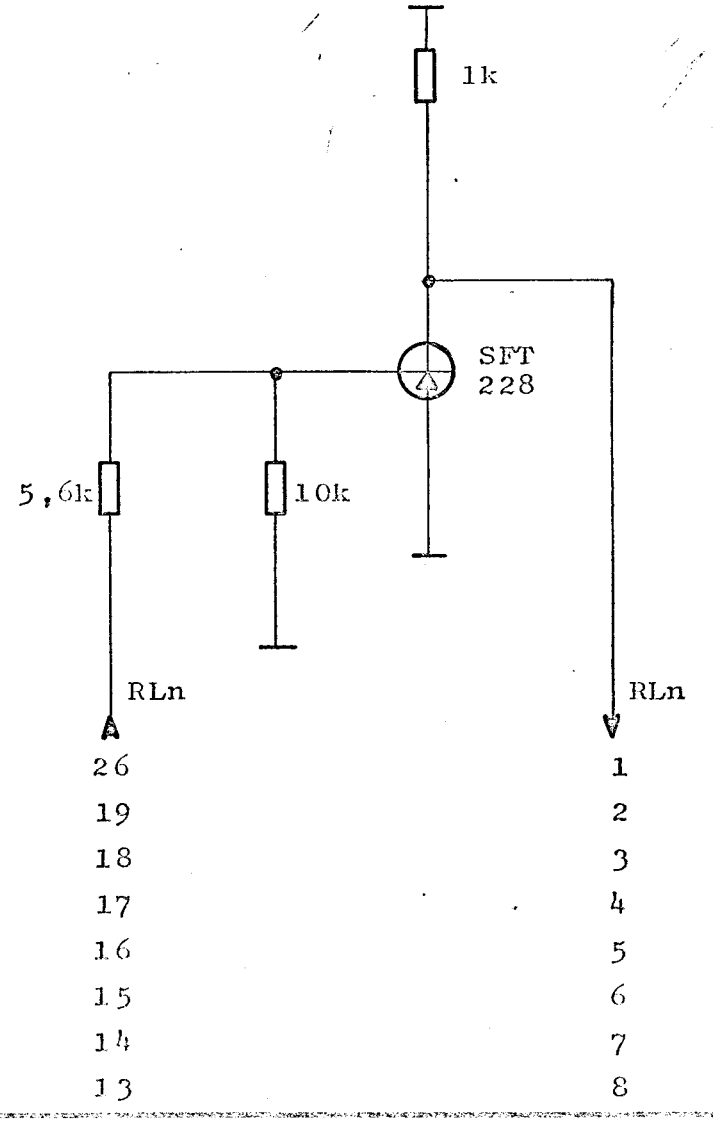
Checked

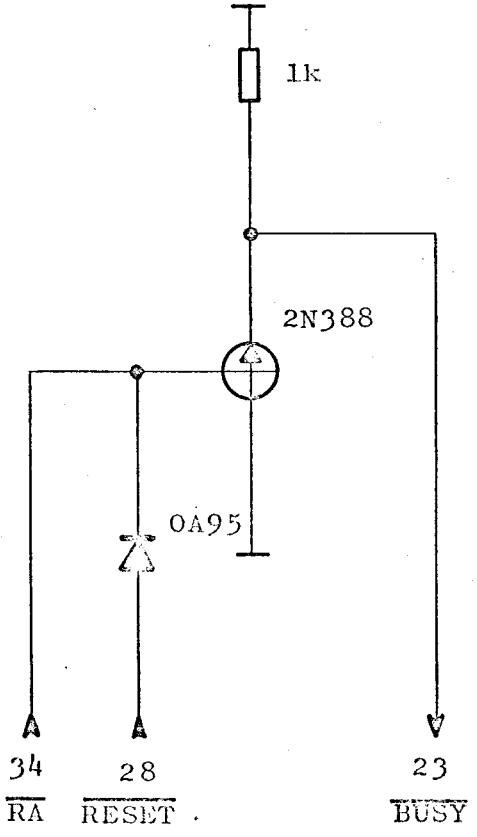
2 Sheets

Sheet 2

RC1244-2

8 circuits

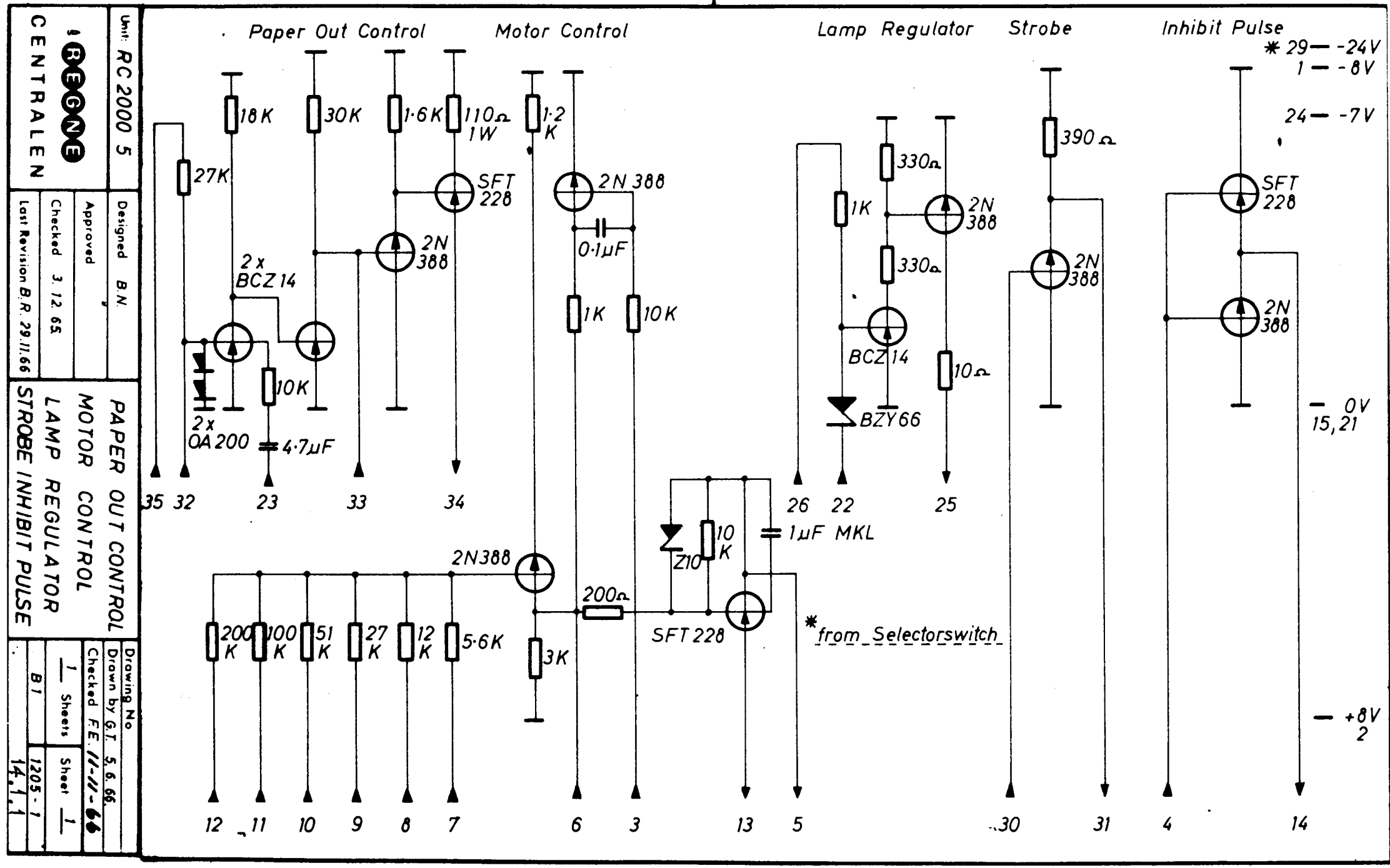




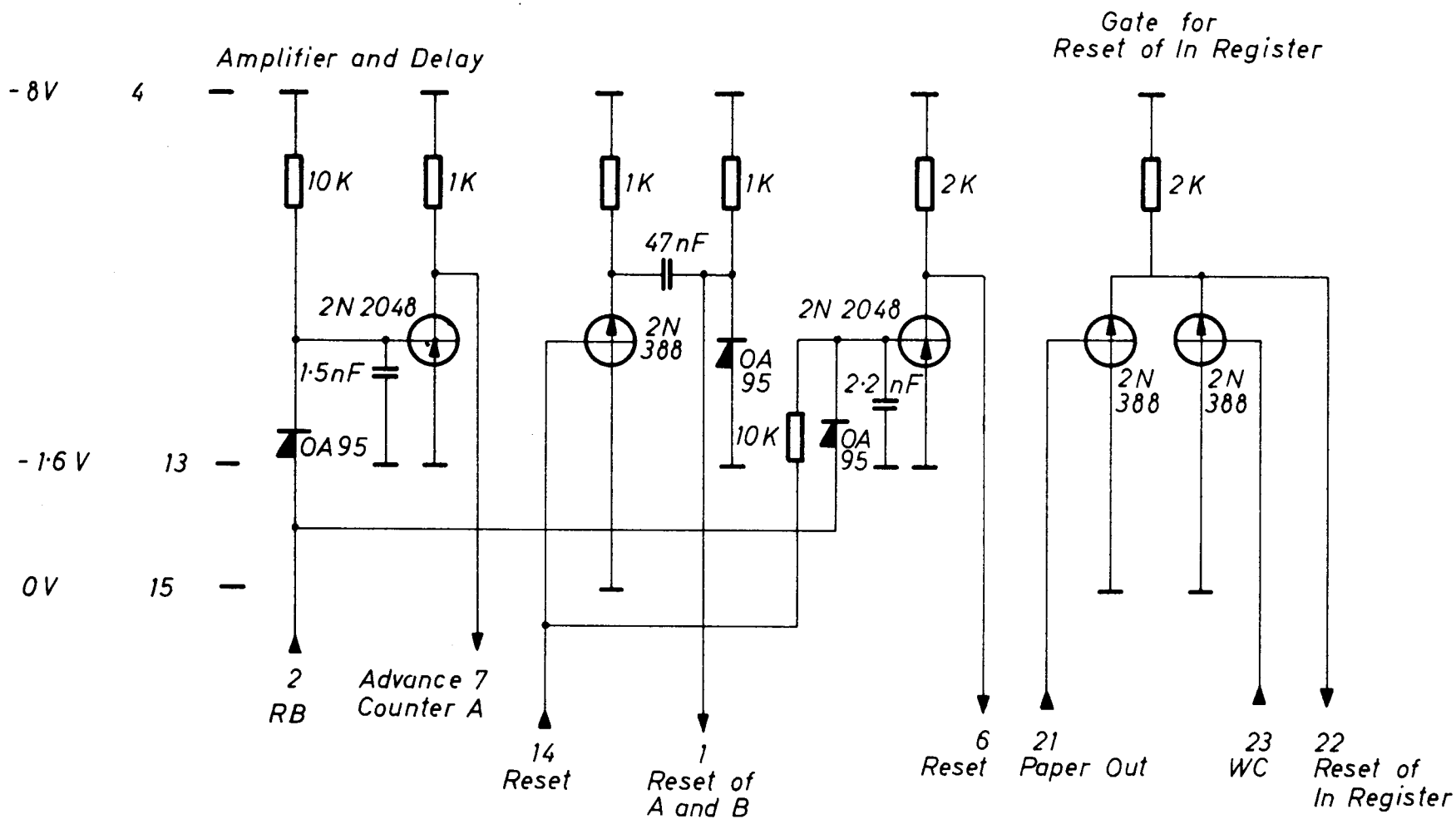
-8V 9

0V 12

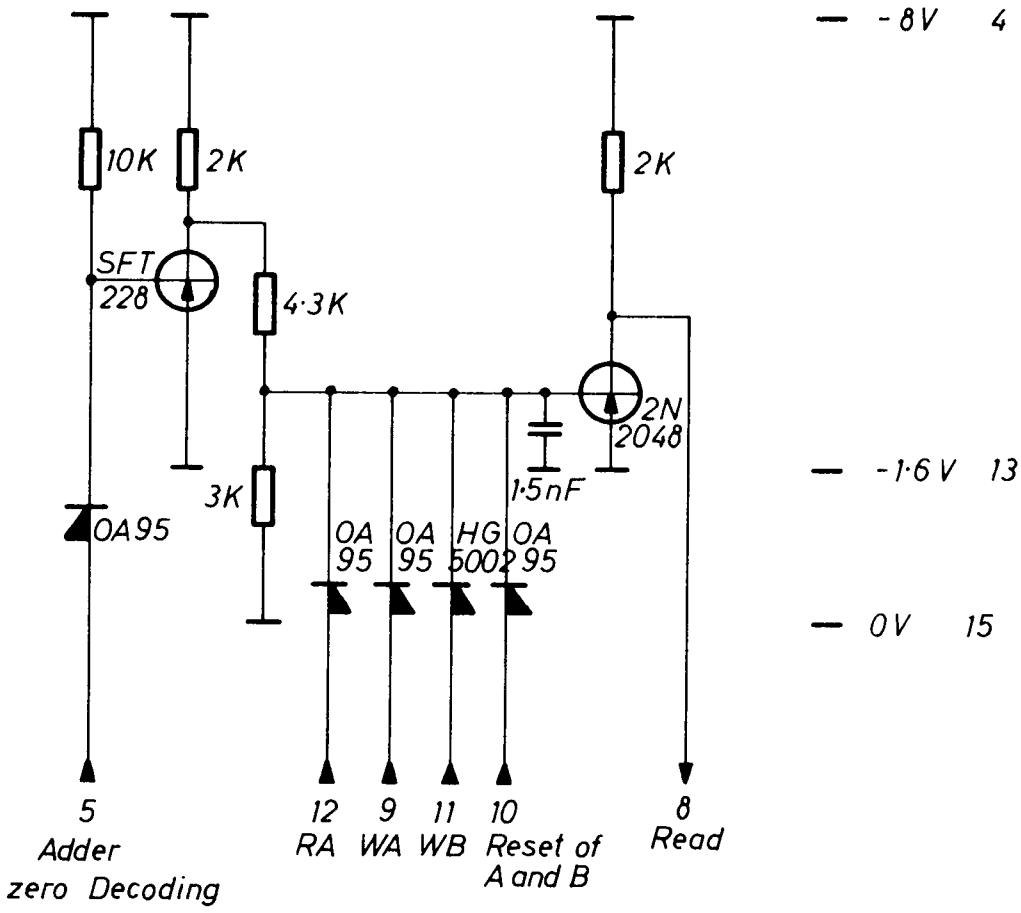
+8V 10



CENTRALEN	Unit: RC 2000 5		
Last Revision B.R. 29.11.66	Checked 3.12.65	Approved	Designed B.N.
STROBE INHIBIT PULSE LAMP REGULATOR MOTOR CONTROL PAPER OUT CONTROL			
B1	1 Sheets	Checked F.E. 11-11-66	Drawing No Drawn by G.T. 5.6.66
14.1.1	1205-1	Sheet 1	

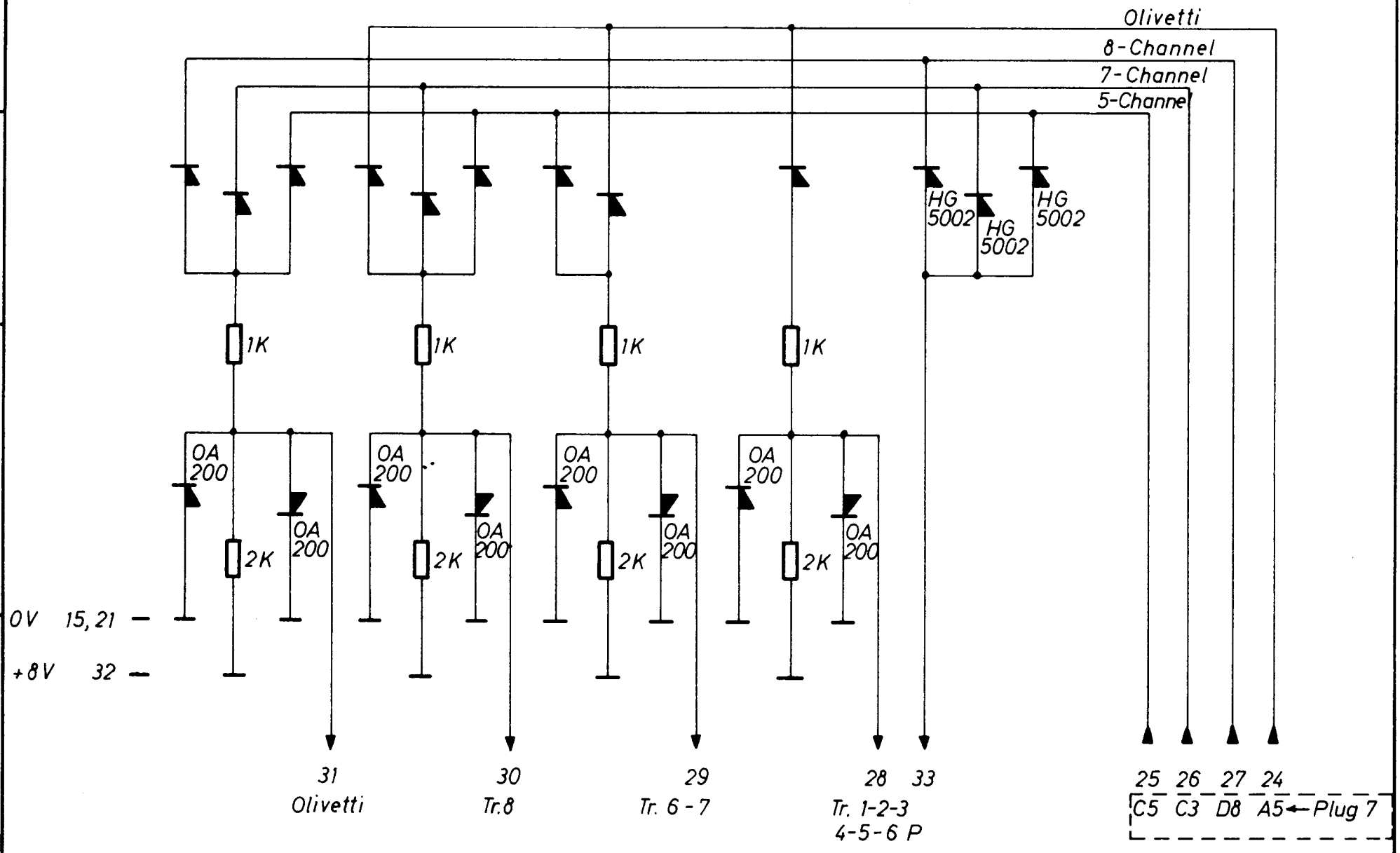


Unit RC 2000 5			
REGNE CENTRALEN			
Designed B. N.	Approved	Checked 3. 12. 65.	Last Revision
AMPLIFIER AND DELAY GATE FOR RESET OF IN REGISTER M CHARACTERS			
Drawing No			
Drawn by G.T. 3. 4. 66.			
Checked F.E. 11-11-66			
3 Sheets	Sheet 1		
B 2	1213		
15.1.1			



Unit RC2000 5	Designed B. N.	RESET OF A AND B	Drawing No
			Drawn by G.T. 5. 4. 66.
A/S REGNE CENTRALEN	Approved		Checked F.E. 11-11-66
	Checked 3. 12. 65.		3 Sheets / Sheet 2
	Last Revision		B 2 / 1213
			15.1.2

Unmarked Resistors : 1/3W
" Diodes : OA 95



SAAB REGNE CENTRALEN			Unit: RC 2000 5
Last Revision	Checked 3. 12. 65.	Approved	Designed B. N.
SELECTOR CIRCUIT			
Drawing No 15.1.3	Drawn by G.T. 3. 4. 66.	Checked F.E. 11-11-66	
B 2	3 Sheets	Sheet 3	
1213			

CENTRALEN

REGNE

Unit: RC 2000 5

Designed B.N.

Approved

Checked 3.12.65.

Last Revision L.L. 2.11.66.

W A
W B
W C

Drawing No

Drawn by G.T. 9.6.66.

Checked F.E. 11-11-66

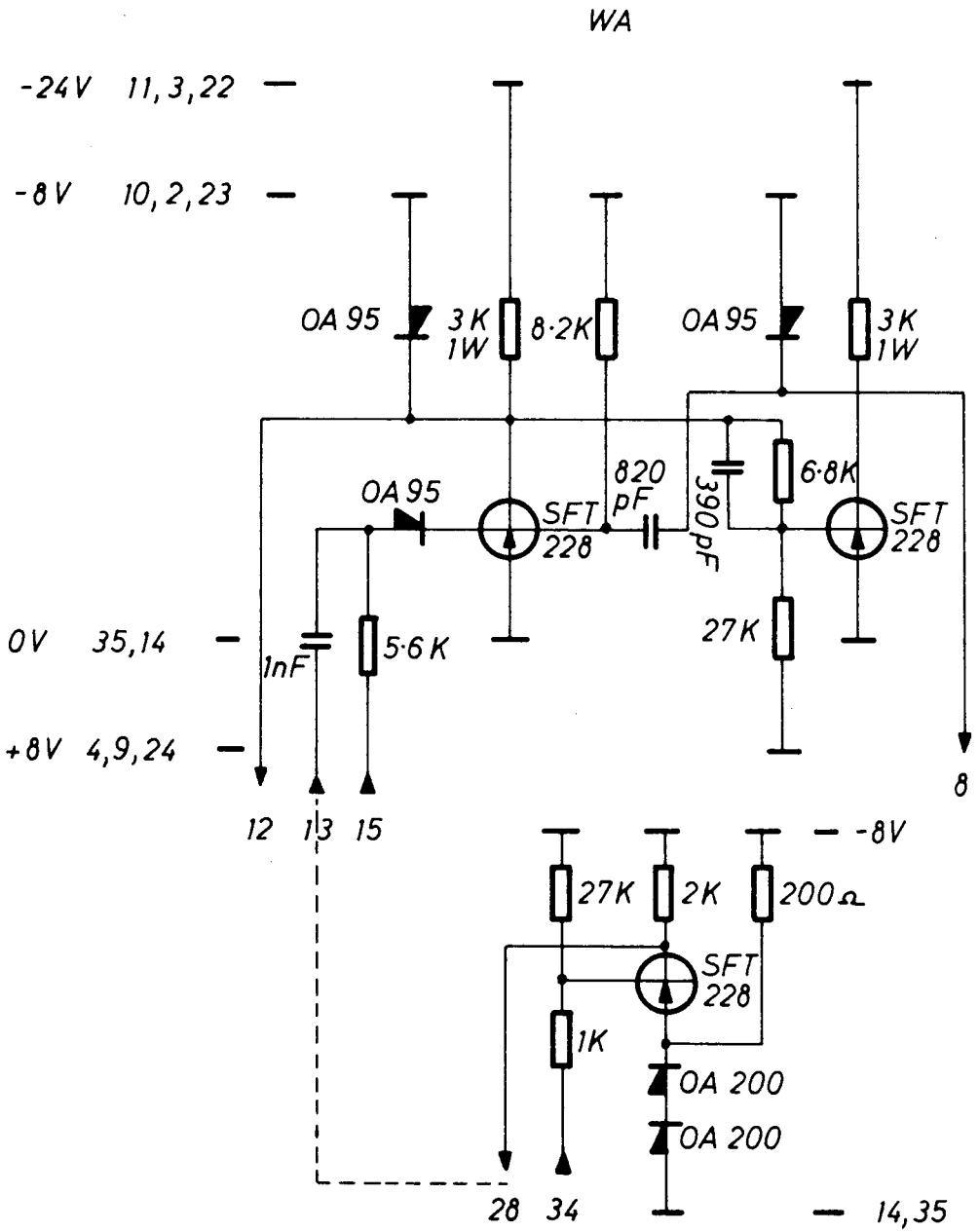
2 Sheets

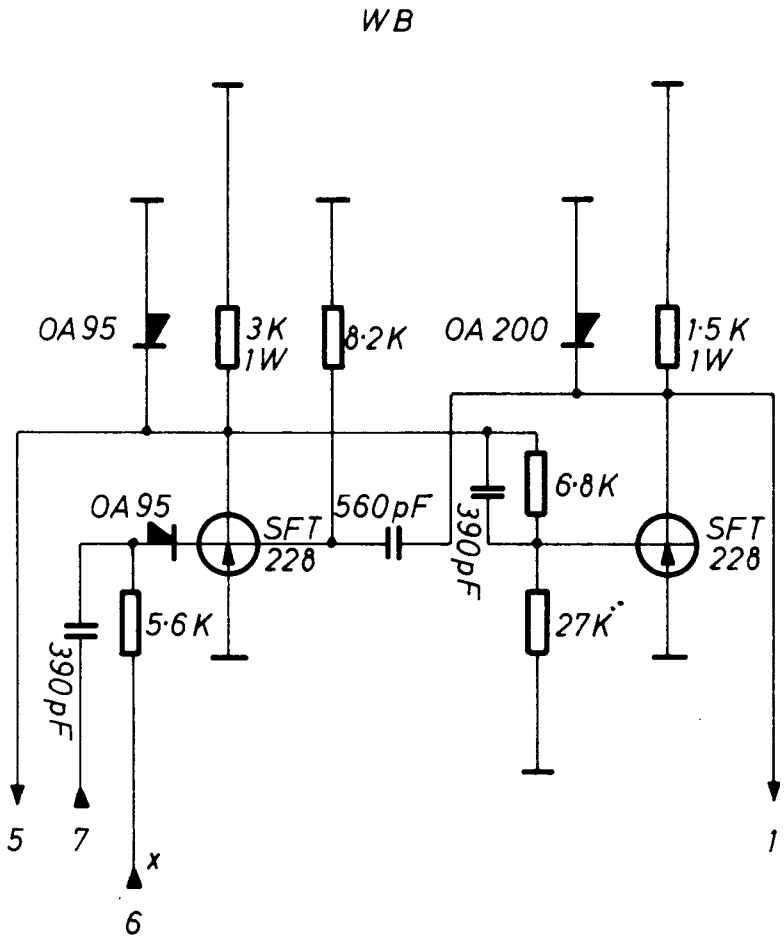
Sheet 1

B 3

1200

16.1.1





x Internal Connection

CENTRALEN
REGNE

Unit: RC 2000 5

Designed B. N.

Approved

Checked 3.12.65.

Last Revision

WA
WB
WC

Drawing No

Drawn by G.T. 9.6.66.

Checked F.E. 11-11-66

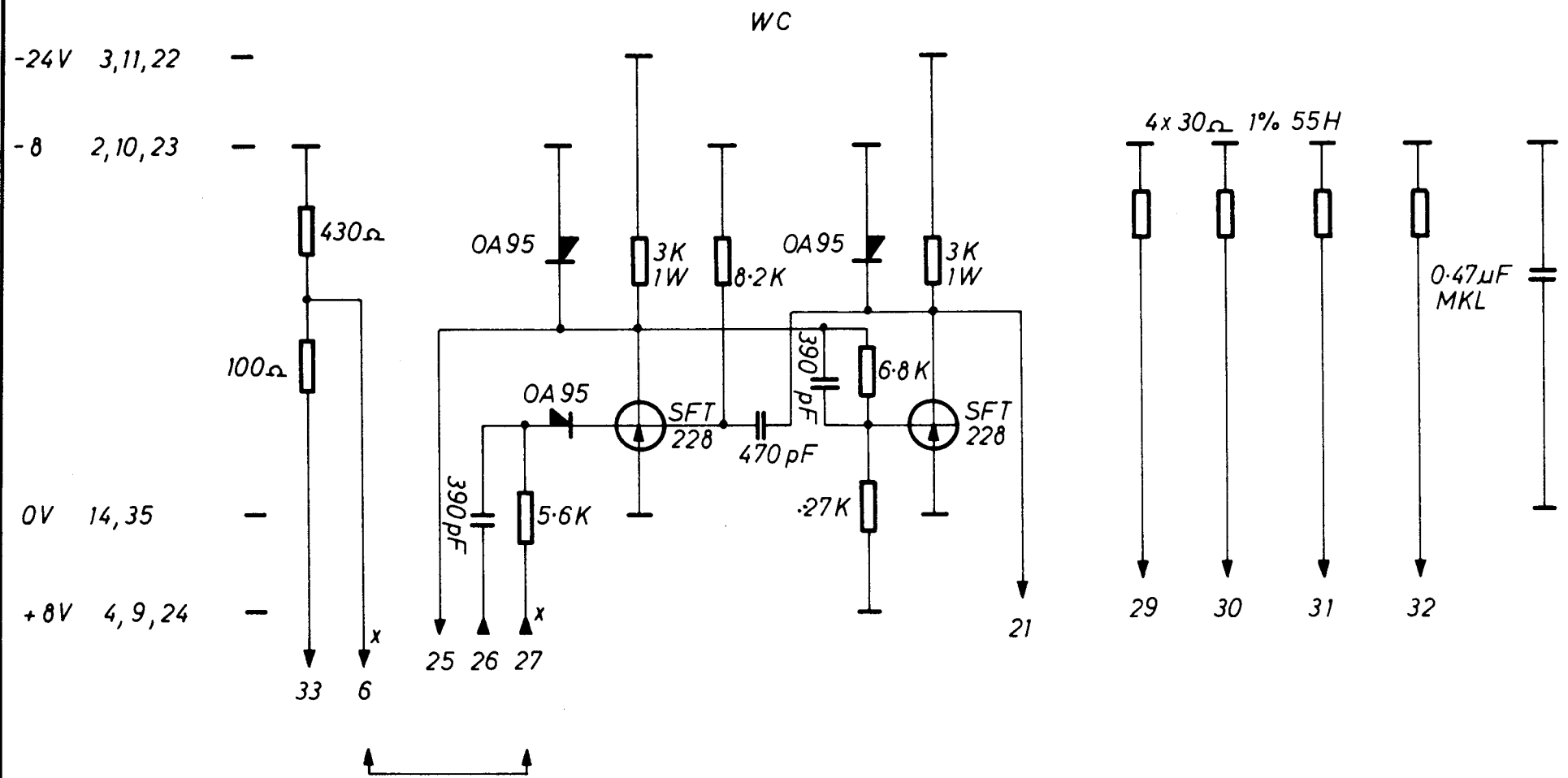
2 Sheets

Sheet 2

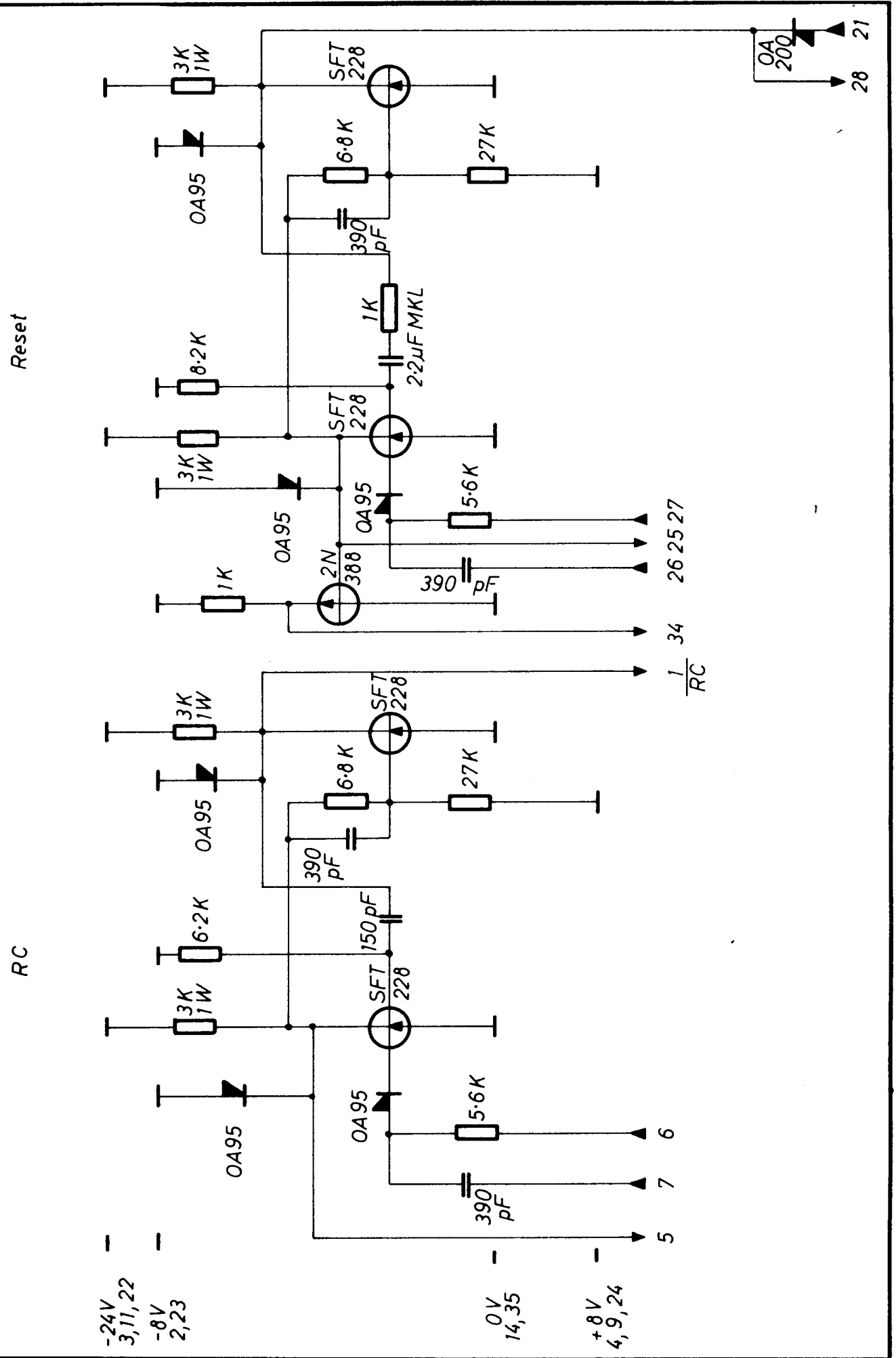
B 3

1200

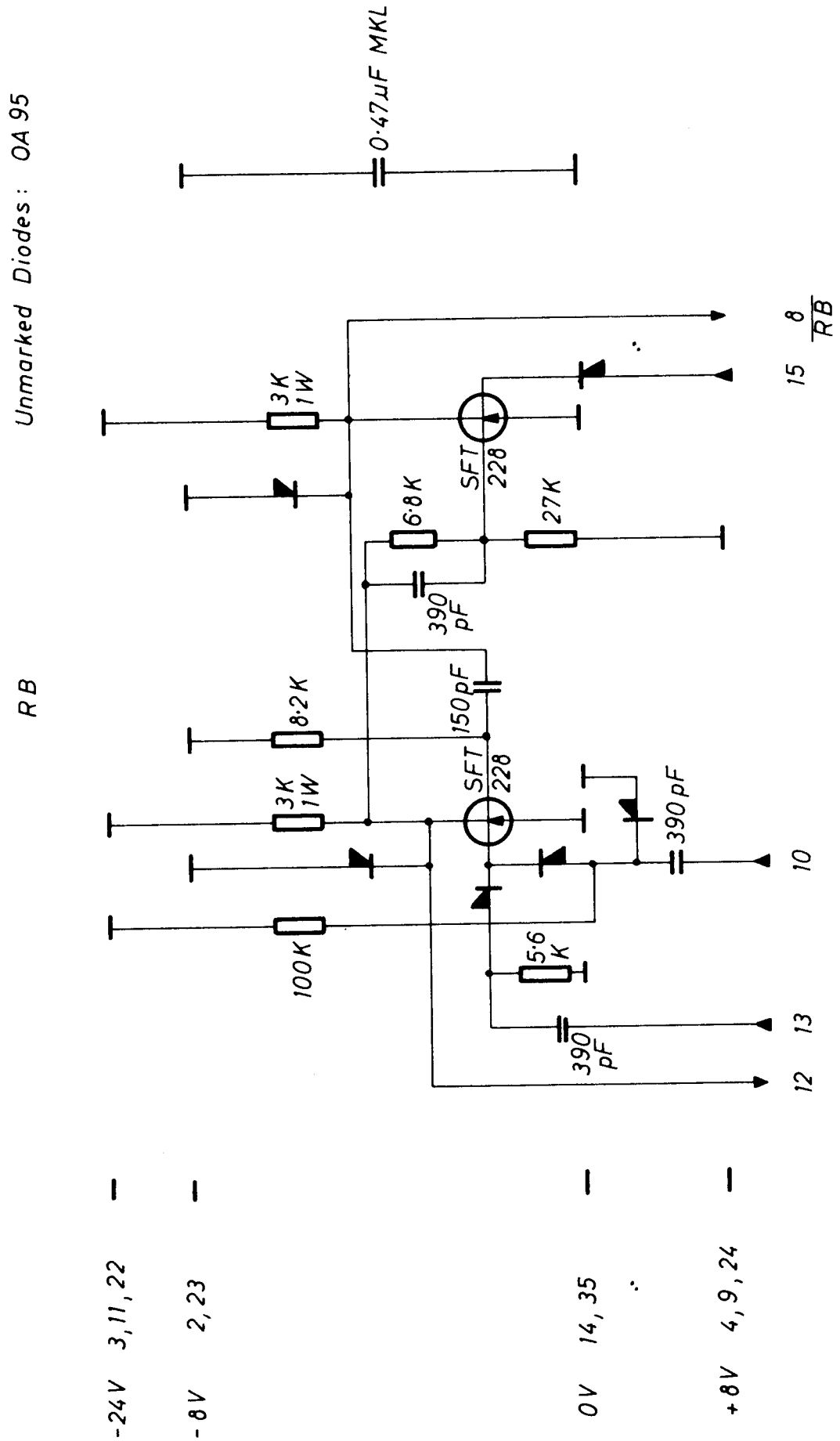
16.1.2



x Internal Connection



Unit: RC2000 5	Designed B. N.	RB RC RESET	Drawing No
REGNE CENTRALEN	Approved		Drawn by G.T 4. 6. 66.
	Checked 3. 12. 65.		Checked F.E. 10-11-66
	Last Revision		2 Sheets / Sheet 1
			B 4 / 1200-1
			17.1.1



Unit: RC 2000 5	Designed B. N.	RB RC RESET	Drawing No
REGNE CENTRALEN	Approved		Drawn by G. T. 4. 6. 66.
	Checked 3. 12. 65.		Checked F. E. 11-11-66
	Last Revision		2 Sheets / Sheet 2
			B 4 / 1200-1
			17.1.2

REGNE CENTRALEN

Unit: RC 2000 5

Designed B. N.

Approved

Checked 3.12.65

Last Revision B.R. 29.11.66

RA
WD
PO

Drawing No

Drawn by G.T. 3.6.66

Checked F.E. 11-11-66

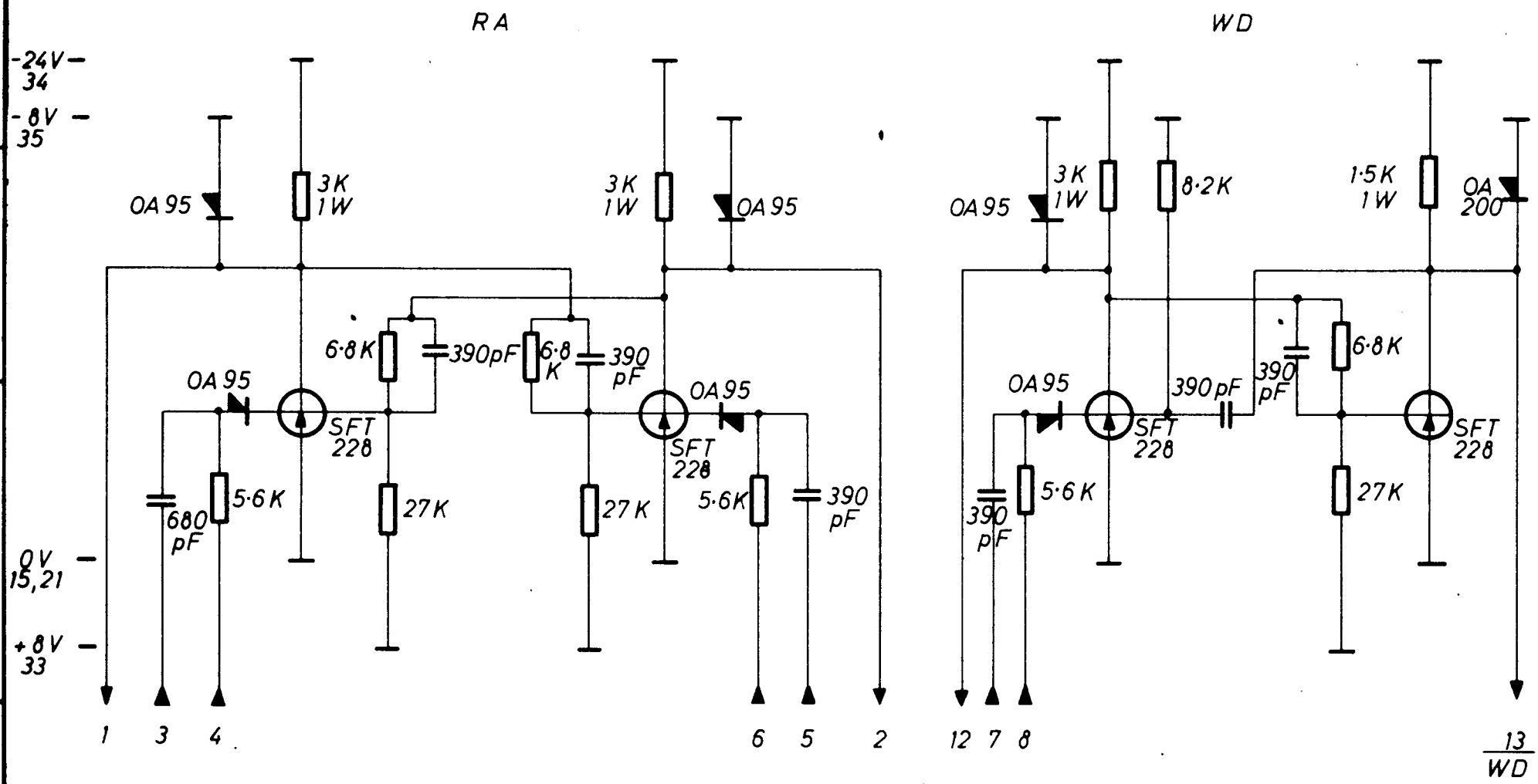
Sheet 1

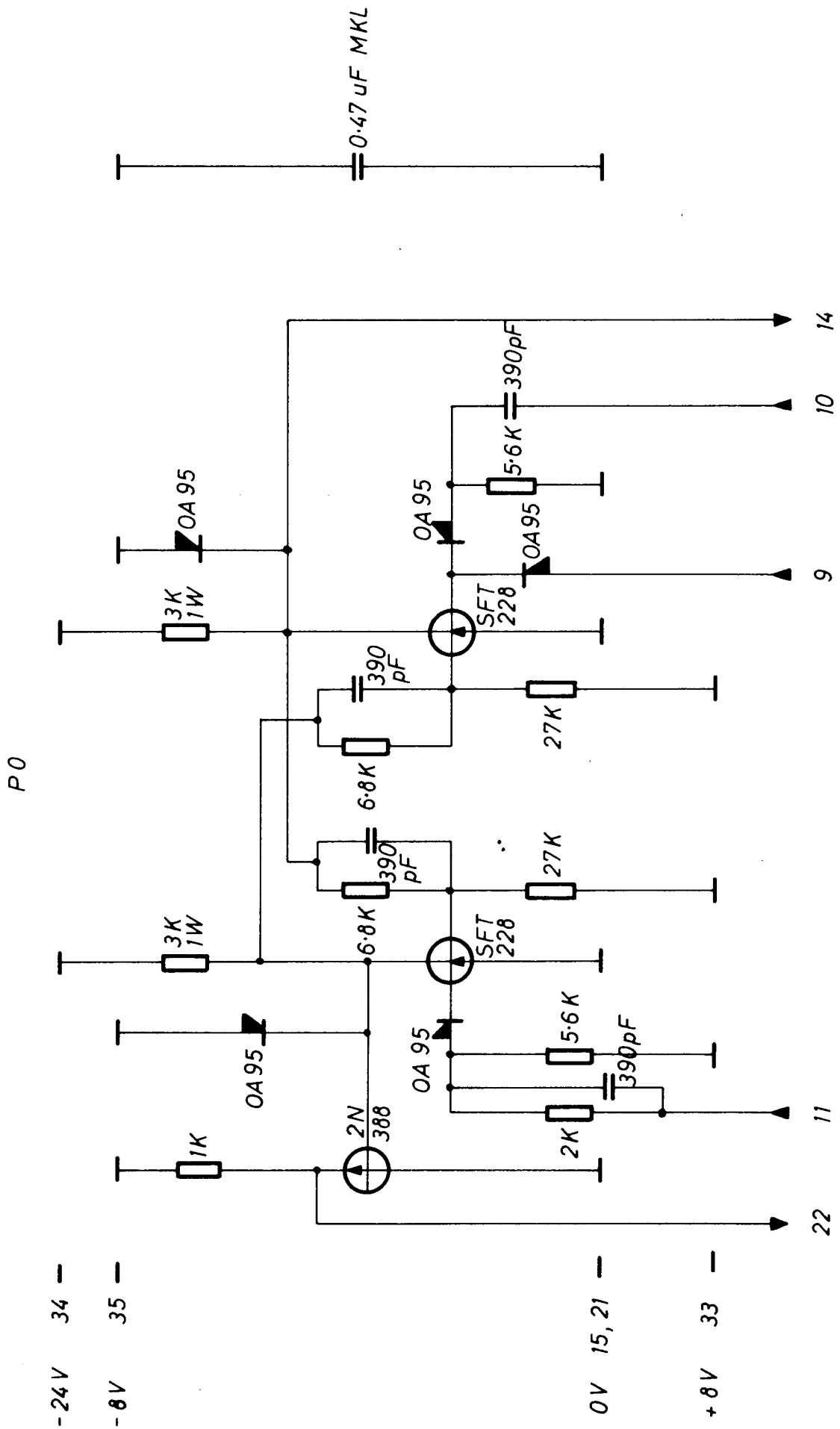
2 Sheets

B 5

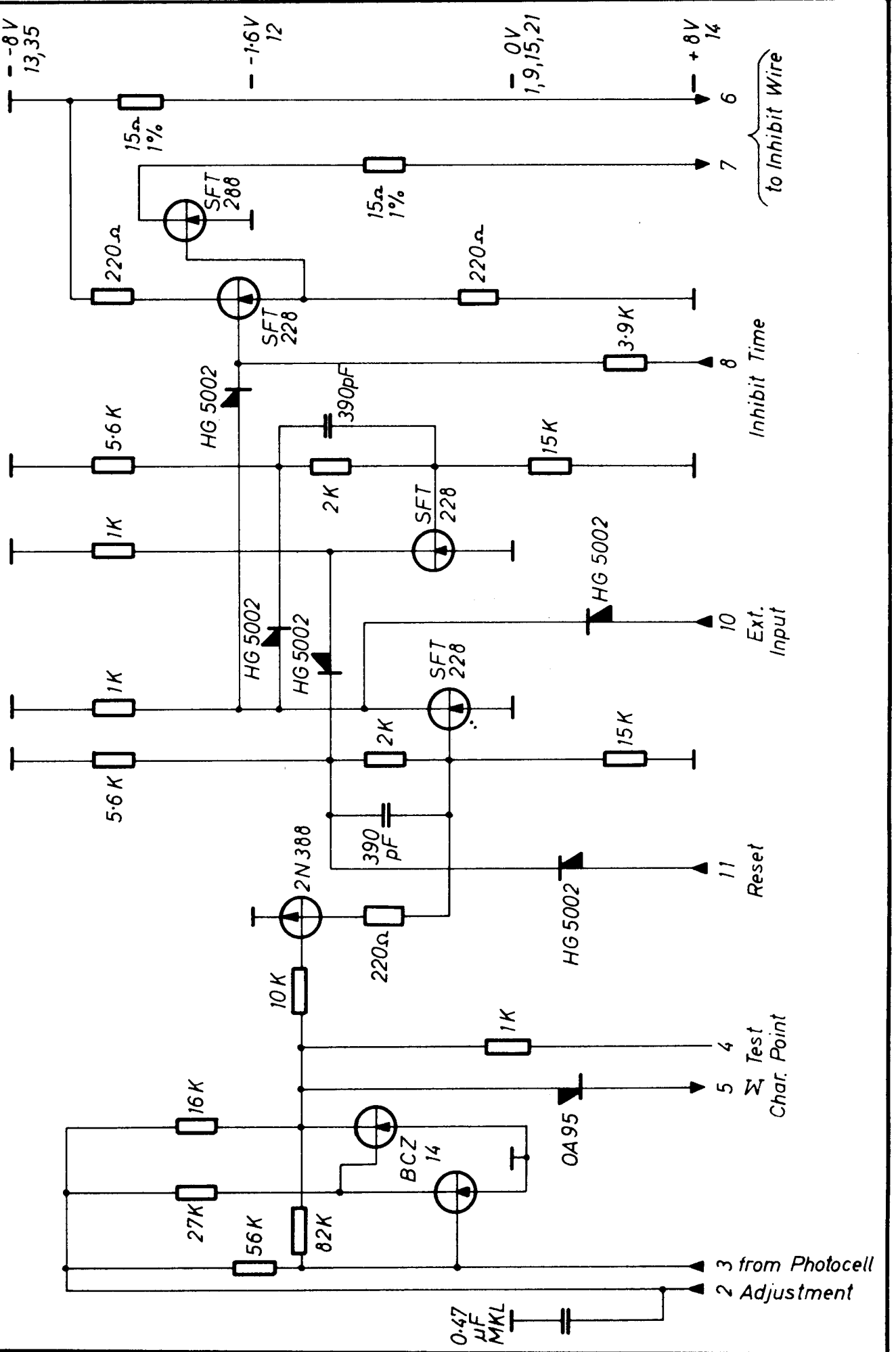
1212

18.1.1

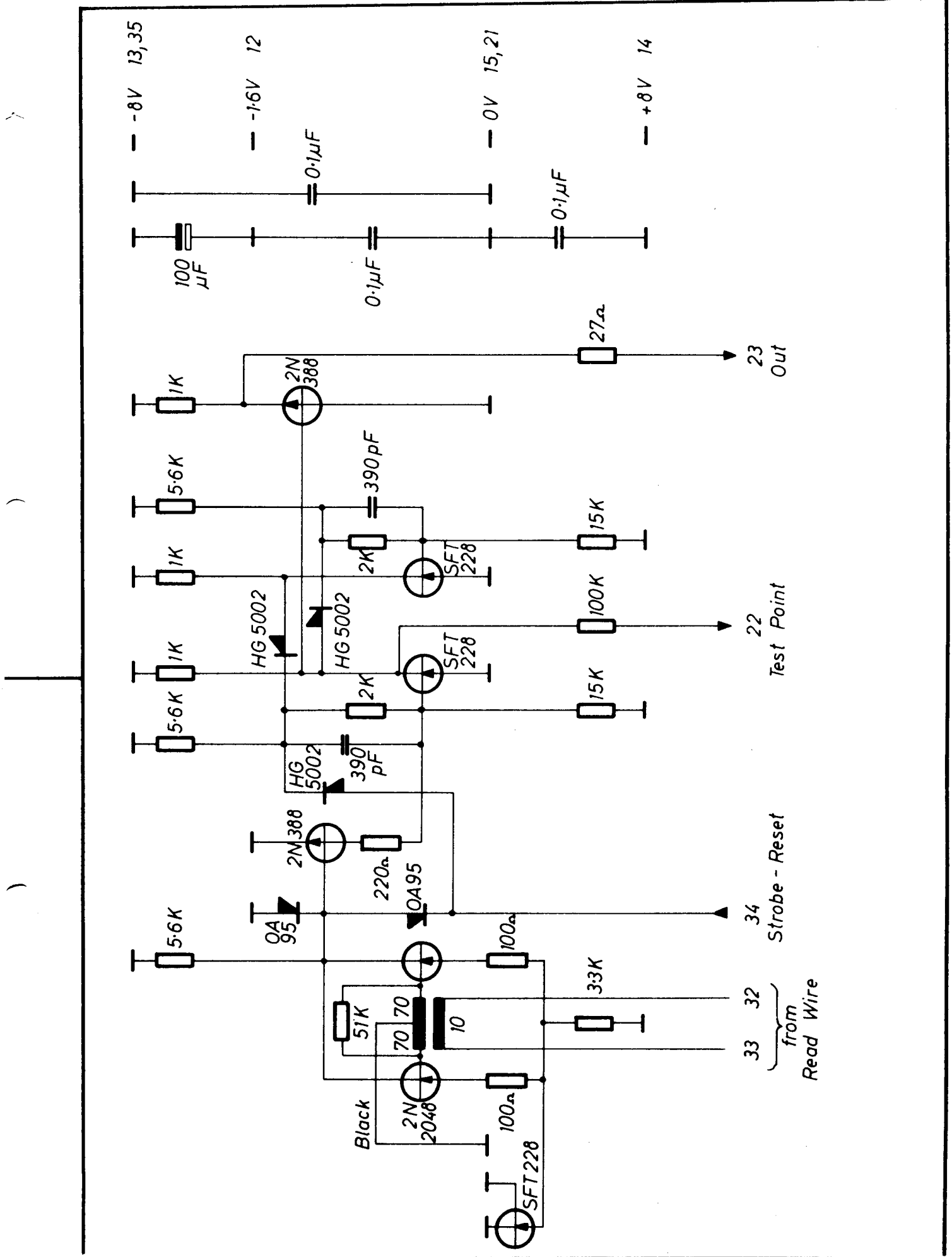




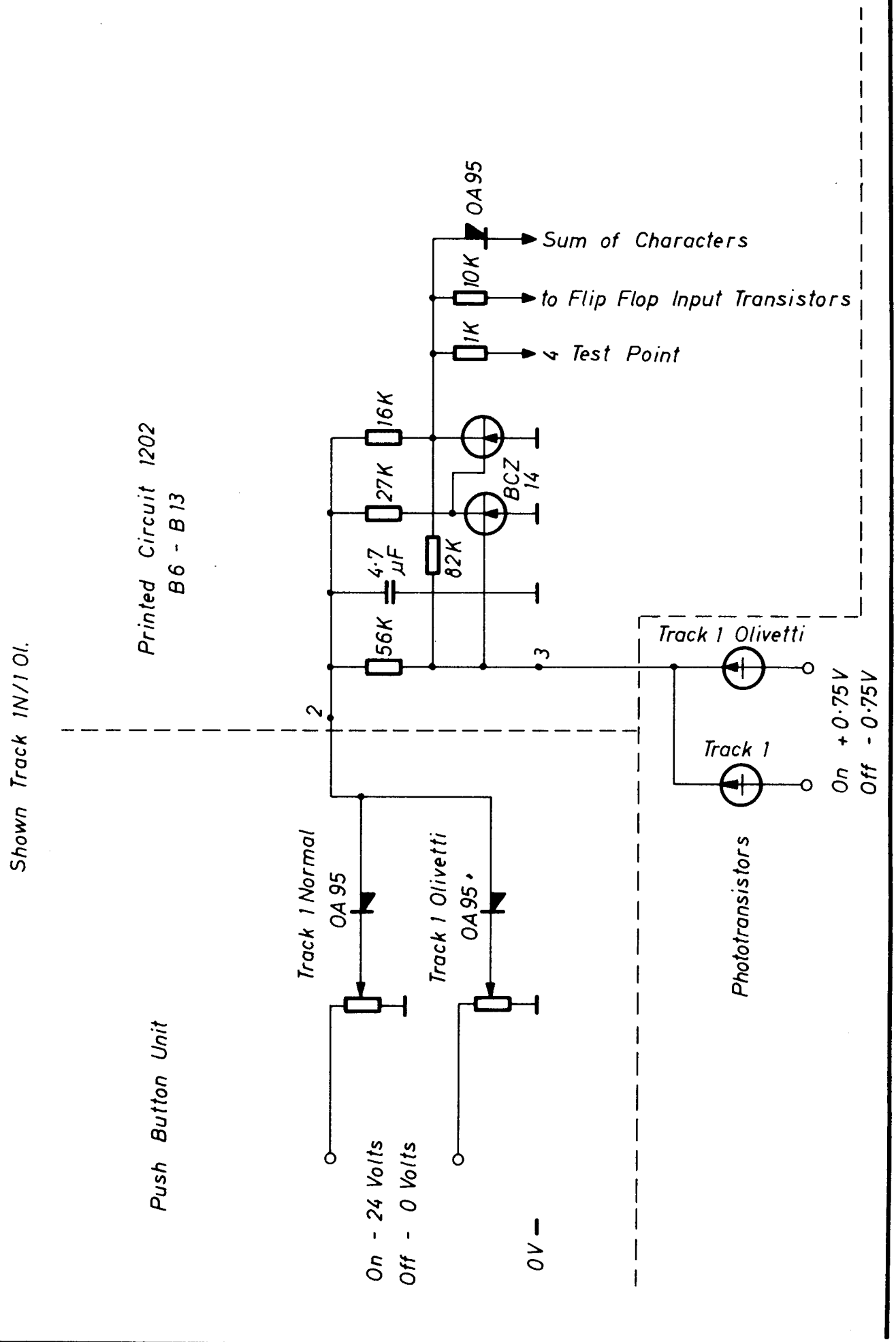
Unit: RC 2000 5	Designed B. N.	RA WD PO	Drawing No
REGNE CENTRALEN	Approved		Drawn by G.T. 3. 4. 66.
	Checked 3. 12. 65.		Checked F.E. 11-11-66
	Last Revision		2 Sheets / Sheet 2
			B 5 / 1212
			18.1.2



Unit: RC 2000 5	Designed B. N.	IN - OUT REGISTER	Drawing No
REGNE CENTRALEN	Approved		Drawn by G. T. 5. 6. 66.
	Checked 3. 12. 65.		Checked F. E. 12-11-66
	Last Revision		2 Sheets / Sheet 1
			B6 - B13 / 1202
			19.1.1

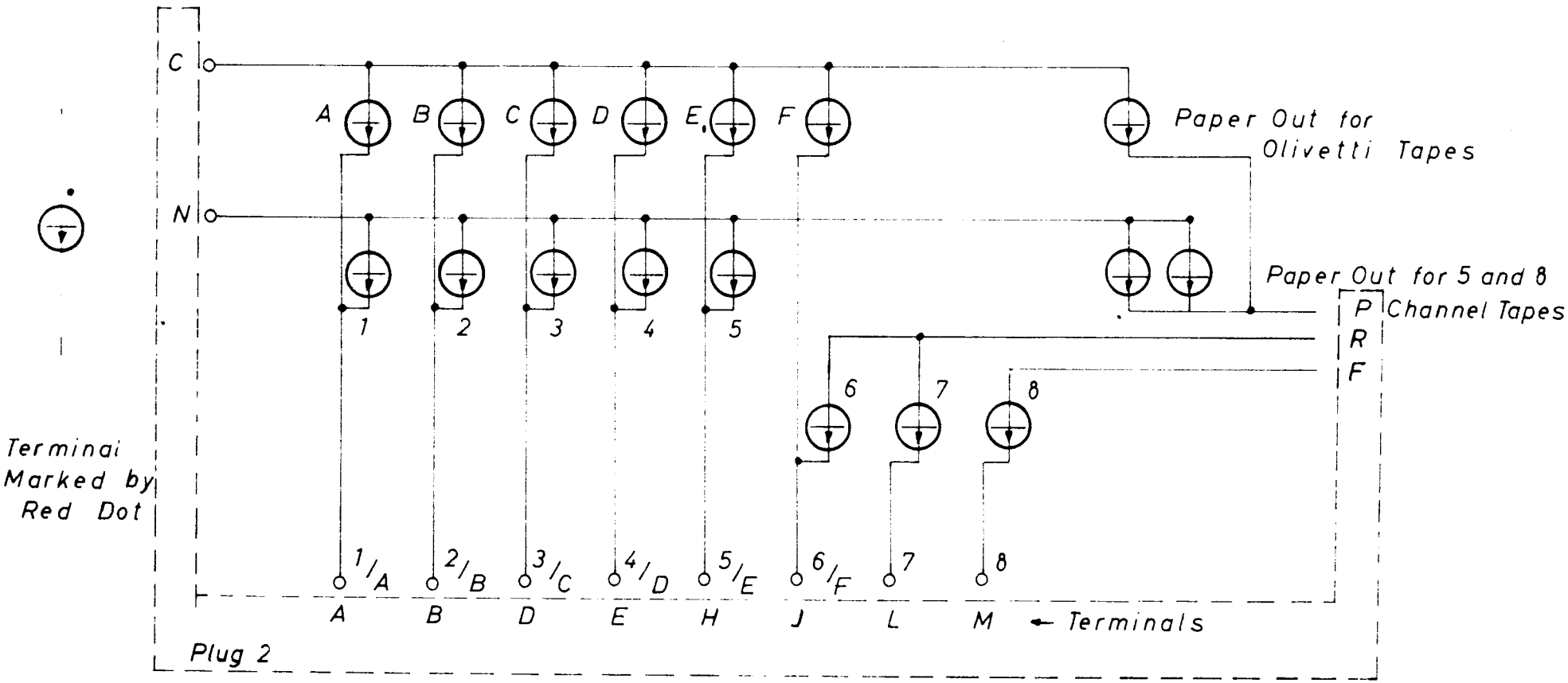


Unit: RC 2000 5	Designed B. N.	IN-OUT REGISTER	Drawing No
			Drawn by G.T. 5. 6. 66.
	Approved		Checked F.E. 11-11-66
REGNE CENTRALEN	Checked 3. 12. 65.		2 Sheets / Sheet 2
	Last Revision		B 6 - B13 / 1202
			19.1.2

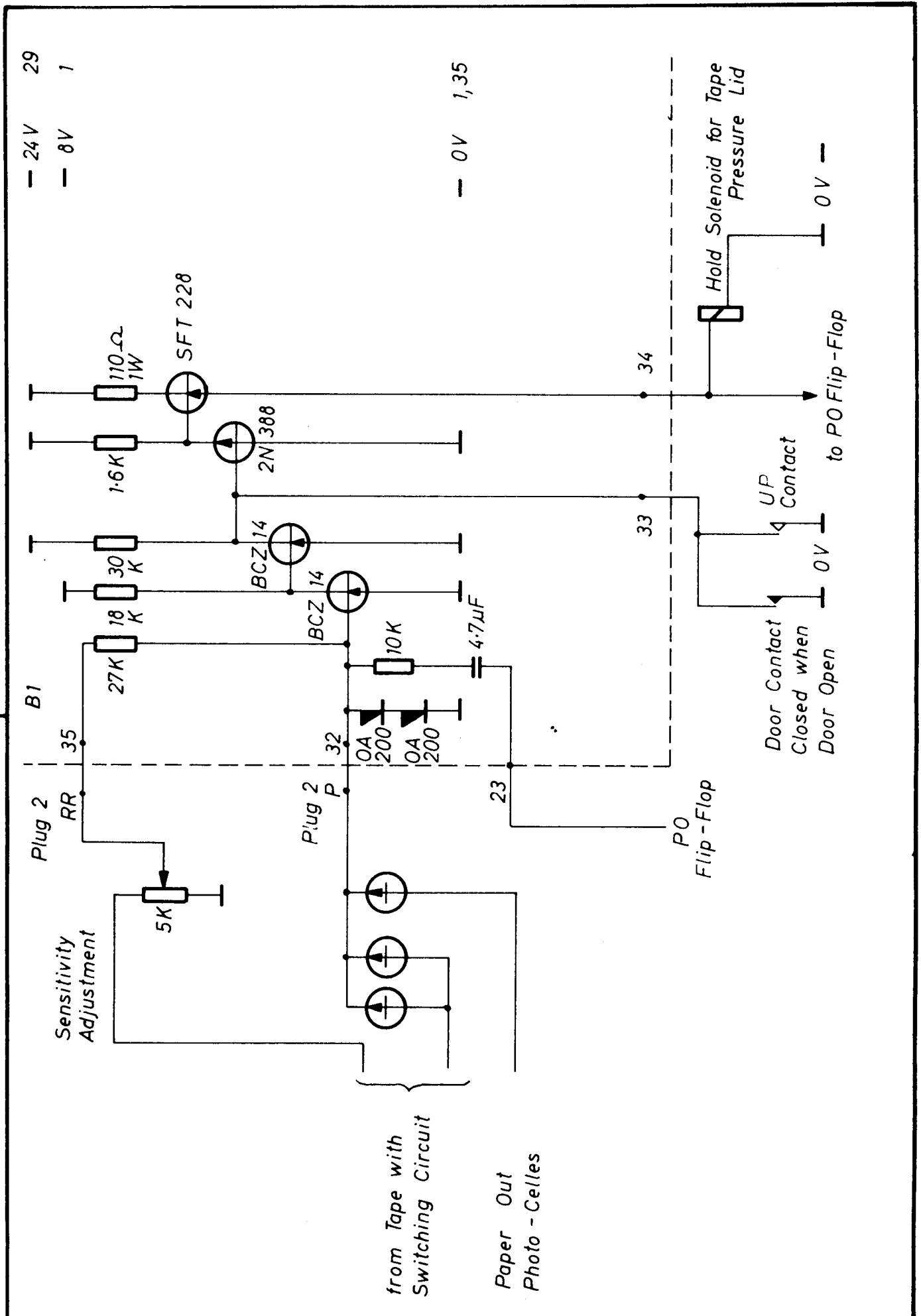


Unit: RC 2000 5	Designed B.N.	AMPLIFIER AND PHOTOCELL	Drawing No
	Approved		Drawn by L.L. 3.10.66.
REGNE CENTRALEN	Checked 3. 12.65.		Checked F.E. 11-11-66
	Last Revision		1 Sheets / Sheet 1
			20.1.1

All Photo Transistors: 33 F 2



CENTRALEN	Unit RC 2000 5		
REGNE	Designed B. N	Approved	
Last Revision	Checked 3.12.65		
PHOTOCELL UNIT			
Drawing No			
Drawn by L N L 5.6.66			
Checked F E	1 Sheets	Sheet 1	
20.1.2			



Unit: RC 2000 5	Designed B. N.	PAPER OUT	Drawing No
REGNE CENTRALEN	Approved		Drawn by L.L. 3. 10. 66.
	Checked 3. 12. 65.		Checked F.E. 12-11-66
	Last Revision		1 Sheets / Sheet 1
			21,1,1

PIN	Wired To	Wired To	Name of Signal
A	B0-20		$\overline{RL\ 0}$
B	B0-19		$\overline{RL\ 1}$
C	B0-18		$\overline{RL\ 2}$
D	B0-17		$\overline{RL\ 3}$
E	B0-16		$\overline{RL\ 4}$
F	B0-15		$\overline{RL\ 5}$
H	B0-14		$\overline{RL\ 6}$
J	B0-13		$\overline{RL\ 7}$
K	B0-35		Z-Flip-Flop
L	B0-23		J-Signal
M	B0-1		RL 0
N	B0-12	→	0 Volts
P	B0-2		RL 1
R			0 Volts
S	B0-3		RL 2
T			0 Volts
U	B0-4		RL 3
V			0 Volts
W	B0-5		RL 4
X			0 Volts
Y	B0-6		RL 5
Z			0 Volts
AA	B0-7		RL 6
BB			0 Volts
CC	B0-8		RL 7
DD	B7-15	→	0 Volts
EE	B0-26		0 Volts 8-Channel
FF	B0-24		0 Volts 7-Channel
HH	B0-22		0 Volts 5-Channel
JJ	B0-21		0 Volts Olivetti
KK	B0-29		1.Character
LL	A0-11		P.O.x ZFB
MM	B0-33		$\overline{BUSY}$
NN	B0-25		SPR 1
PP	B5-22		P.O.
RR	B0-27		SPR2
SS	A0-25		ZFB to Converter
TT	B12-15		0 Volts Screen

Unit: RC 20[illegible] 5	Designed B.N.	PLUG FOR GIER PLUG 1	Drawing No
			Drawn by L.L.6.10.66.
	Approved		Checked F.E.11-11-66
REGNE CENTRALEN	Checked 3.12.65.		1 Sheets / Sheet 1
	Last Revision		22.1.1

Pin	Wired To	Plug in RC 2000	Wired To	Name of Signal
A				
C				
B	B1-26-12	KK		One-hole drive
D	C2-17-3N	CC		RL 7 (EL)
E		DD		0 Volts
H				
F				
J	C2-17-4N	AA		RL 6 (X)
K		BB		0 Volts
M	C2-17-2	L		J (Ready)
L				
N	C2-17-5N	Y		RL 5(0)
P		Z		0 Volts
S	C2-3-7N	K		Z (Start)
R				
T	C2-17-6N	W		RL 4 (ch)
U		X		0 Volts
W				
V				
X	C2-17-3	U		RL 3 (8)
Y		V		0 Volts
AA				
ZZ				
BB	C2-17-4	S		RL 2 (4)
CC		T		0 Volts
EE				
DD				
FF	C2-17-5	P		RL 1 (2)
HH		R		0 Volts
KK				
JJ				
LL	C2-17-6	M		RL 0 (1)
MM		N		0 Volts
NN				
PP				
RR				
SS				
TT		Screen in RC 2000		
		Twisted pair.		

Unit: RC 2000 5	Designed B.N.	PLUG KB 8 (GIER) PLUG 1 (RC 2000)	Drawing No
REGNE CENTRALEN	Approved		Drawn by L.L. 24.9.66.
	Checked 3.12.65.		Checked F.E. 11-11-66
	Last Revision		1 Sheets / Sheet 1
			22.1.2

Pin	Name of Signal	Wired To	Pin	Wired To
A	Track 1		A	B6-3
B	Track 2		B	B7-3
C	Olivetti Tape		C	B2-31
D	Track 3		D	B8-3
E	Track 4		E	B9-3
F	Celle 8		F	B2-30
H	Track 5		H	B10-3
J	Track 6		J	B11-3
K	0 Volts		K	B1-15
L	Track 7		L	B12-3
M	Track 8		M	B13-3
N	Celle 1-2-3-4-5-P		N	B2-29
P	Fører Ryt Control		P	B1-32
R	Celle 6-7		R	B2-28

Unit: RC 2000 5	Designed B.N.	PLUG FOR PHOTODIODES PLUG 2	Drawing No Drawn by L.L. 8.10.66 Checked F.E. 11-11-66 1 Sheets Sheet 1 22.2.1
REGNECENTRALEN	Approved Checked 3.10.65. Last Revision		

Pin	Wired To	Wired To	Name of Signal
A	B6-4		Test Point 1
B	B6-2		Track 1/A
C	B2-33		Pot.1-2-3-4-5-6-P
D			
E	B7-4		Test Point 2
F	B7-2		Track 2/B
H			
J	B1-15		0 Volts
K	B8-2		Track 3/C
L	B8-4		Test Point 3
M			
N	B2-24	Plug7-A5	-24 Volts Olivetti Tape
P	B9-2		Track 4/D
R	B9-4		Test Point 4
S			
T	B1-26		Light Adjustment
U	B10-2		Track 5/E
V	B10-4		Test Point 5
W	B1-33		UP Arm
X	B11-4		Test Point 7
Y	B4-26		Reset
Z	B12-4		Test Point 7
AA	B11-2		Track 6/F
BB	B1-6		Skip N.O.
CC	B5-10		Read
DD	B13-4		Test Point 8
EE			
FF	B12-2		Track 7
HH	B0-2		-8V for Push Button
JJ	B1-21		0V for Push Button
KK	B5-34		- 24 Volts DC
LL	B13-2		Track 8
MM	B3-33		Skip N.C.
NN			
PP			
RR	B1-35		Paper Out Adjustment

Unit: RC 2000 5	Designed B.N.	PLUG FOR PUSHBUTTON UNIT	Drawing No
REGNECENTRALEN	Approved		Drawn by L.L.8.10.66.
	Checked 3.12.65.	PLUG 3	Checked F.E.11-11-66
	Last Revision		1 Sheets / Sheet 1
			22.3.1

PIN	Wired To	Wired To	Name of Signal	PIN
A	B1-24		Lamp (Collector)	A
B		C		B
C	B4-3	B	- 24 Volts	C
D	B1-25		Lamp (Base)	D
E		F		E
F	A7-28	E	- 8 Volts	F
H		J		H
J	B7-12	H	- 1,6 Volts	J
K				K
L	B1-5		Motor (Collector)	L
M	A7-19	S		M
N	B7-14		+ 8 Volts	N
P	B1-13		Motor (Base)	P
R				R
S	B6-21	M	0 Volts	S
T				T
U				U
V				V
X				X
W				W

PLUG FOR POWER SUPPLY

PLUG 4

Unit: RC 4000 5.

REGNE CENTRALEN

Designed B.N.

Approved

Checked 3.12.65.

Last Revision

Drawing No

Drawn by L.L. 7.10.66

Checked F.E. 11-11-66

1 Sheets

Sheet 1

22.4.1

PIN	Name of Signal	Wired To	Wired To	PIN
A		B	Motor −	A
B'			A	B
C				C
D				D
E		K	Motor +	E
F				F
H		J	Lamp −	H
J			H	J
K			E	K
L		R	Lamp +	L
M				M
N				N
P				P
R			L	R
S				S
T				T
U				U
V				V
X				X
W				W

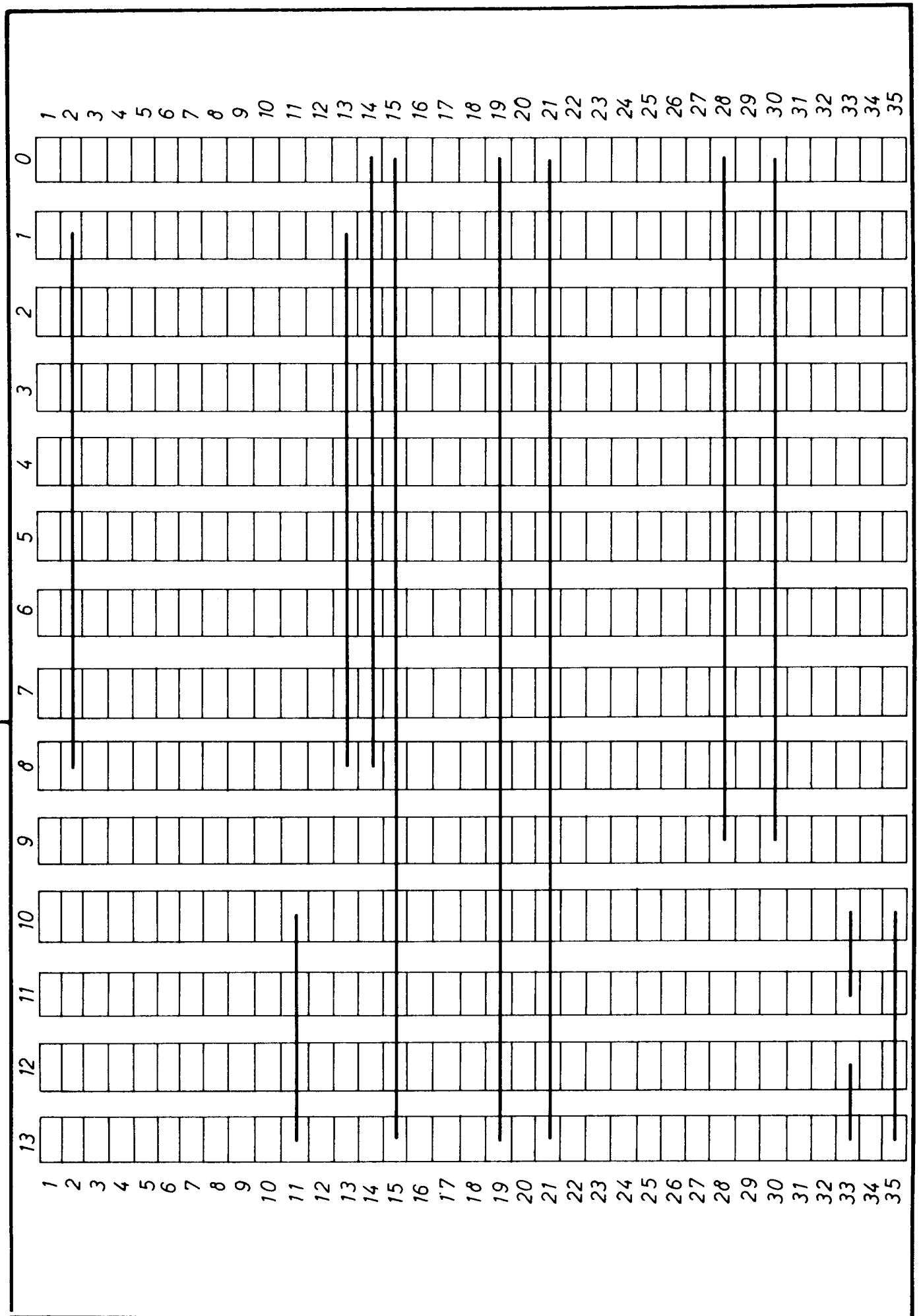
Unit: RC 2000 5	Designed B.N.	PLUG 5 PLUG BETWEEN LAMP, MOTOR, AND POWER SUPPLY.	Drawing No Drawn by L.L.7.10.66 Checked F.E.11-11-66 1 Sheets / Sheet 1 22.5.1
REGNECENTRALEN	Approved		
	Checked 3, 12. 65.		
	Last Revision		

PIN	Wired To	Wired To	Name of Signal
A	B6-10		IR 1
B	B6-19	→	0 Volts
C	B7-10		IR 2
D			0 Volts
E	B8-10		IR 3
F			0 Volts
H	B9-10		IR 4
			0 Volts
K	B10-10		IR 5
L			0 Volts
M	B11-10		IR 6
N			0 Volts
P	B12-10		IR 7
R			0 Volts
S	B13-10		IR 8
T			0 Volts
U	B3-34		Σ Characters
V	B3-14	→	0 Volts
W			
X			
Y			
Z			
AA	A0-25		Zero Decoding to Converter
BB	B2-5		Zero Decoding to Gate
CC	A1-3		Adder 128
DD			ZTB from Converter
EE	B4-21		Reset Ext.
FF			
HH	A0-23		Ext. Block of Motor
JJ			
KK			
LL			
MM	B12-35		- 8 Volts
NN	B9-15		0 Volts
PP	B13-14		+ 8 Volts
RR	B4-17		- 24 Volts
SS			
TT	B13-19		Screen

Unit: RC 2000 5	Designed B.N.	PLUG FOR INPUT	Drawing No
REGNECENTRALEN	Approved		Drawn by L.L. 6.10.66.
	Checked 3.12.65.	PLUG 6	Checked F.E. 11-11-66
	Last Revision		1 Sheets / Sheet 1
			22.6.1

PIN	Wired To	Wired To	Name of Signal
A1	B1-22		Photocelle for Light Adj.
A3	B8-14		+ 8 Volts for Light Adj.
A5	Plug 3 - N		- 24 Volts Olivetti Tapes
A7	B0-26		0 Volts for 8-Channel
B2	B1-34		Solenoid
B4	B1-33		Door Switch
B6	B5-15		0 Volts
B8			
C1	B0-22		0 Volts for 5-Channel
C3	B2-26		- 24 Volts 7-Channel
C5	B2-25		- 24 Volts 5-Channel
C7	B0-21		0 Volts for Olivetti
D2	B3-11		- 24 Volts DC
D4	B0-24		0 Volts for 7-Channel
D6	B1-29		- 24 Volts for Paper Cont.
D8	B2-27		- 24 Volts 8-Channel

Unit: RC 2000 5	Designed B.N.	PLUG FOR TAPE WITH SELECTOR PLUG 7	Drawing No
			Drawn by L.L. 6.10.66
	Approved		Checked F.E. 11-11-66
REGNE CENTRALEN	Checked 3.12.65.		1 Sheets / Sheet 1
	Last Revision		22.7.1



Unit: RC 2000 5	Designed B. N.	CROSSWIRING AT FRAME A	Drawing No
REGNE CENTRALEN	Approved		Drawn by B.R. 20.11.66
	Checked 3.12.65		Checked P.E. 21-11-66
	Last Revision		15 Sheets / Sheet 1
			A
			23.1.1

PIN	Special Wire	Wired To	Wired To	-x-	Name of Signal	PIN
1						1
2						2
3						3
4						4
5						5
6						6
7						7
8						8
9						9
10						10
11		P1-LL			P.O. x ZFB	11
12		B3-15			P.O.	12
13		A1-2			ZFB from Adder	13
14	+ 8 Volts			- x.	+ 8 Volts	14
15	0 Volts			- x	0 Volts	15
16						16
17						17
18						18
19	0 Volts			- x	0 Volts	19
20						20
21	0 Volts			- x	0 Volts	21
22		B0-28			Reset	22
23		P6-HH			IPC	23
24		B1-5			Block Motor	24
25		P6-AA	P1-SS		ZFB to Converter	25
26						26
27						27
28	- 8 Volts			- x	- 8 Volts	28
29		B2-5			ZFB to Gate	29
30	- 24 Volts			- x	- 24 Volts	30
31	- 24 Volts	B2-27			- 24 Volts Block 8 Channel	31
32	- 24 Volts	B2-26			- 24 Volts Block 7 Channel	32
33	- 24 Volts	B2-24			- 24 Volts Block Olivetti	33
34	- 24 Volts	B2-25			- 24 Volts Block 5 Channel	34
35	- 1,6 Volts	B0-31			- 1,6 Volts	35

pos.	
A0	1227

REGNE
CENTRALEN

Unit: RC 2000 5

Designed B.N.

Approved

Checked 3.12.65.

Last Revision

WIRING SCHEDULE

Drawing No

Drawn by L.L. 8.10.66

Checked F.E. 11-11-66

15 Sheets

Sheet 2

A0

1227

23.1.2

PIN	Special Wire	Wired To	Wired To	— x —	Name of Signal	PIN
1						1
2		A0-13		- x	ZFB from Adder	2
3		B1-7	Plug 6-CC			3
4		A2-7				4
5		A2-8				5
6						6
7						7
8						8
9						9
10						10
11		A2-34				11
12		A2-26				12
13				- x		13
14	+ 8 Volts			- x -	+ 8 Volts	14
15	0 Volts	A1-19		- x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts	A1-15		- x -	0 Volts	19
20						20
21	0 Volts			- x -	0 Volts	21
22		A12-1				22
23						23
24						24
25						25
26						26
27		A12-34				27
28	- 8 Volts			- x -	- 8 Volts	28
29						29
30	- 24 Volts			- x -	- 24 Volts	30
31						31
32		A10-1				32
33		A10-34				33
34						34
35						35

pos.	
A1	1201

CENTRALEN

REGNE

Unit: RC 2000 5

Designed B.N.

Approved

Checked 3.12.65.

Last Revision

WIRING SCHEDULE

Drawing No

Drawn by L.L.6.10.66.

Checked F.E.11-11-66

15 Sheets

Sheet 3

A1

1201

23.2.1

PIN	Special Wire	Wired To	Wired To	—x—	Name of Signal	PIN
1						1
2				- x -		2
3		B1-8				3
4		A3-7				4
5		A3-8				5
6						6
7		A1-4				7
8		A1-5				8
9						9
10						10
11		A3-34				11
12		A3-26				12
13				- x -		13
14	+ 8 Volts	B3-24		- x -	+ 8 Volts	14
15	0 Volts			- x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts			- x -	0 Volts	19
20						20
21	0 Volts			- x -	0 Volts	21
22		A12-22				22
23						23
24						24
25						25
26		A1-12				26
27		A12-14				27
28	- 8 Volts			- x -	- 8 Volts	28
29						29
30	- 24 Volts			- x -	- 24 Volts	30
31						31
32		A10-22				32
33		A10-14				33
34		A1-11				34
35						35

pos. A2	1202

CENTRALEN REGNE

Unit: RC 2000 5

Designed B.N.

Approved

Checked 3.12.65.

Last Revision

WIRING SCHEDULE

Drawing No 1202 23.2.2

Drawn by L.L.6.10.66.

Checked F.E. 11-11-66

15 Sheets

Sheet 4

A2

PIN	Special Wire	Wired To	Wired To	-x-	Name of Signal	PIN
1						1
2				- x -		2
3		B1-9				3
4		A4-7				4
5		A4-8				5
6						6
7		A2-4				7
8		A2-5				8
9						9
10						10
11		A4-34				11
12		A4-26				12
13		B2-10		- x -		13
14	+ 8 Volts			- x -	+ 8 Volts	14
15	0 Volts			- x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts			- x -	0 Volts	19
20						20
21	0 Volts			- x -	0 Volts	21
22		A12-23				22
23						23
24						24
25						25
26		A2-12				26
27		A12-13				27
28	- 8 Volts			- x -	- 8 Volts	28
29						29
30	- 24 Volts			- x -	- 24 Volts	30
31						31
32		A10-23				32
33		A10-13				33
34		A2-11				34
35						35

pos.	
A3	1201

REGNE CENTRALEN

Unit: RC 2000 5

Designed B.N.

Approved

Checked 3.12.65.

Last Revision

WIRING SCHEDULE

Drawing No 23.2.3

Drawn by L.L.6.10.66

Checked F.E.11-11-66

15 Sheets

Sheet 5

A3

1201

PIN	Special Wire	Wired To	Wired To	—x—	Name of Signal	PIN
1						1
2				- x -		2
3		B1-10				3
4		A5-7				4
5		A5-8				5
6						6
7		A3-4				7
8		A3-5				8
9						9
10						10
11		A5-34				11
12		A5-26				12
13				- x -		13
14	+ 8 Volts	B5-33		- x -	+ 8 Volts	14
15	0 Volts			- x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts			- x -	0 Volts	19
20						20
21	0 Volts			- x -	0 Volts	21
22		A12-24				22
23						23
24						24
25						25
26		A3-12				26
27		A12-12				27
28	- 8 Volts	B4-2		- x -	- 8 Volts	28
29						29
30	- 24 Volts	B4-22		- x -	- 24 Volts	30
31						31
32		A10-24				32
33		A10-12				33
34		A3-11				34
35						35

pos.	
A4	1201

CENTRALEN — REGNE

Unit: RC 2000 5

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Last Revision

WIRING SCHEDULE

Drawing No 1201 23.2.4

Drawn by L.L.4.10.66

Checked F.E.11-11-66

15 Sheets

Sheet 6

A 4

PIN	Special Wire	Wired To	Wired To	-x-	Name of Signal	PIN
1						1
2				- x -		2
3		B1-11				3
4		A6-7				4
5		A6-8				5
6						6
7		A4-4				7
8		A4-5				8
9						9
10						10
11		A6-34				11
12		A6-26				12
13				- x -		13
14	+ 8 Volts			- x -	+ 8 Volts	14
15	0 Volts			- x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts			- x -	0 Volts	19
20						20
21	0 Volts			- x -	0 Volts	21
22		A13-1				22
23						23
24						24
25						25
26		A4-12				26
27		A13-34				27
28	- 8 Volts			- x -	- 8 Volts	28
29						29
30	- 24 Volts	B5-34		- x -	- 24 Volts	30
31						31
32		A11-1				32
33		A11-34				33
34		A4-11				34
35						35

pos.	A5	1201

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Unit: RC 4000 5

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Last Revision

WIRING SCHEDULE

Drawing No 1201 23.2.5

Drawn by L.L. 6.10.66.

Checked F.E. 11-11-66

15 Sheets

Sheet 7

A5

PIN	Special Wire	Wired To	Wired To	-x-	Name of Signal	PIN
1						1
2				- x -		2
3		B1-12				3
4		A7-7				4
5		A7-8				5
6						6
7		A5-4				7
8		A5-5				8
9						9
10						10
11		A7-34				11
12		A7-26				12
13				- x -		13
14	+ 8 Volts			- x -	+ 8 Volts	14
15	0 Volts			- x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts	A6-21		- x -	0 Volts	19
20						20
21	0 Volts	A6-19		- x -	0 Volts	21
22		A13-22				22
23						23
24						24
25						25
26		A5-12				26
27		A13-14				27
28	- 8 Volts			- x -	- 8 Volts	28
29						29
30	- 24 Volts	B5-17		- x -	- 24 Volts	30
31						31
32		A11-22				32
33		A11-14				33
34		A5-11				34
35						35

pos.	A6	1201

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Unit: RC 4000 5

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WIRING SCHEDULE

Drawing No

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Checked F.E. 11-11-66

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Sheet 8

A6

1201

23.2.6

PIN	Special Wire	Wired To	Wired To	—x—	Name of Signal	PIN
1						1
2				- x -		2
3						3
4		A8-7				4
5		A8-8				5
6						6
7		A6-4				7
8		A6-5				8
9						9
10						10
11		A8-34				11
12		A8-26				12
13				- x -		13
14	+ 8 Volts			- x -	+ 8 Volts	14
15	0 Volts			- x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts	P3-J		- x -	0 Volts	19
20						20
21	0 Volts	P4-M		- x -	0 Volts	21
22		A13-23				22
23						23
24						24
25						25
26		A6-12				26
27		A13-13				27
28	- 8 Volts	P4-F		- x -	- 8 Volts Power Supply	28
29						29
30	- 24 Volts			- x -	- 24 Volts	30
31						31
32		A11-23				32
33		A11-13				33
34		A6-11				34
35						35

pos. A7	1201

CENTRALEN

Unit: RC 2000 S

Designed B.N.

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WIRING SCHEDULE

Drawing No 1201 23.2.7

Drawn by L.L. 6.10.66

Checked F.F. 11-11-66

15 Sheets

Sheet 9

A 7

PIN	Special Wire	Wired To	Wired To	—x—	Name of Signal	PIN
1						1
2				- x -		2
3						3
4	0 Volts	A9-19			0 Volts	4
5						5
6						6
7		A7-4				7
8		A7-5				8
9						9
10						10
11		B2-7				11
12		B3-25				12
13				- x -		13
14	+ 8 Volts	A9-31		x -	+ 8 Volts	14
15	0 Volts			- x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts			- x -	0 Volts	19
20						20
21	0 Volts			- x -	0 Volts	21
22		A13-24				22
23						23
24						24
25						25
26		A7-12				26
27		A13-12				27
28	- 8 Volts			- x -	- 8 Volts	28
29						29
30	- 24 Volts			- x -	- 24 Volts	30
31						31
32		A11-24				32
33		A11-12				33
34		A7-11				34
35						35

pos.	
A8	1201

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REGNE

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WIRING SCHEDULE

Drawing No

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Sheet 10

A8

1201

23.2.8

PIN	Special Wire	Wired To	Wired To	-x-	Name of Signal	PIN
1		B6-23			RL 0	1
2		B7-23			RL 1	2
3		B8-23			RL 2	3
4		B9-23			RL 3	4
5						5
6						6
7		B0-30			Parity	7
8						8
9						9
10						10
11						11
12						12
13						13
14						14
15	0 Volts			- x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts	B8-4		- x -	0 Volts	19
20						20
21				- x -		21
22						22
23						23
24						24
25						25
26						26
27						27
28	- 8 Volts	A10-35		x -	- 8 Volts	28
29						29
30	- 24 Volts			x -	- 24 Volts	30
31	+ 8 Volts	A8-14			+ 8 Volts	31
32		B10-23			RL 4	32
33		B11-23			RL 5	33
34		B12-23			RL 6	34
35		B13-23			RL 7	35

pos. A 9	1228

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Unit: RC 2000, 5

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WIRING SCHEDULE

Drawing No 23.2.9

Drawn by L.L.8.10.66

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Sheet 11

A 9

1228

PIN	Special Wire	Wired To	Wired To	— x —	Name of Signal	PIN
1		A1-32				1
2		D 1			Y 0 Read	2
3		B 2			Y 1 Read	3
4		D 3			Y 2 Read	4
5		B 4			Y 3 Read	5
6		D 5			Y 4 Read	6
7		B 6			Y 5 Read	7
8		D 7			Y 6 Read	8
9		B 8			Y 7 Read	9
10						10
11	- 1,6 Volts			- x	- 1,6 Volts	11
12		A4-33				12
13		A3-33				13
14		A2-33				14
15	0 Volts			- x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts	B9-19		- x -	0 Volts	19
20						20
21	0 Volts			- x	0 Volts	21
22		A2-32				22
23		A3-32				23
24		A4-32				24
25		D 13			Y 12 Read	25
26		B 14			Y 13 Read	26
27		D 15			Y 14 Read	27
28		B 16			Y 15 Read	28
29		D 9			Y 8 Read	29
30		B 10			Y 9 Read	30
31		D 11			Y 10 Read	31
32		B 12			Y 11 Read	32
33		B4-7		- x		33
34		A1-33				34
35	- 8 Volts	A9-28		- x	- 8 Volts	35

pos.	
A10	1203

REGNE CENTRALEN

Unit: RC 3003 5

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Last Revision

WIRING SCHEDULE

Drawing No

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Sheet 12

A10

1203

23.2.10

PIN	Special Wire	Wired To	Wired To	—x—	Name of Signal	PIN
1		A5-32				1
2		C 1			x 0 Read	2
3		A 2			x 1 Read	3
4		C 3			x 2 Read	4
5		A 4			x 3 Read	5
6		C 5			x 4 Read	6
7		A 6			x 5 Read	7
8		C 7			x 6 Read	8
9		A 8			x 7 Read	9
10						10
11	- 1,6 Volts			- x -	- 1,6 Volts	11
12		A8-33				12
13		A7-33				13
14		A6-33				14
15	0 Volts			- x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts			- x -	0 Volts	19
20						20
21	0 Volts			- x -	0 Volts	21
22		A6-32				22
23		A7-32				23
24		A8-32				24
25		C 13			x 12 Read	25
26		A 14			x 13 Read	26
27		C 15			x 14 Read	27
28		A16			x 15 Read	28
29		C 9			x 8 Read	29
30		A 10			x 9 Read	30
31		C 11			x 10 Read	31
32		A 12			x 11 Read	32
33				x-		33
34		A5-33				34
35	- 8 Volts			- x -	- 8 Volts	35

pos. A 11	1203

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Unit: RC 2000 5

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WIRING SCHEDULE

Drawing No 1203 23.2.11

Drawn by L.L.6.10.66.

Checked F.E.

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Sheet 13

A11

PIN	Special Wire	Wired To	Wired To	—x—	Name of Signal	PIN
1		A1-22				1
2		B 1			Y 0 Write	2
3		D 2			Y 1 Write	3
4		B 3			Y 2 Write	4
5		D 4			Y 3 Write	5
6		B 5			Y 4 Write	6
7		D 6			Y 5 Writw	7
8		B 7			Y 6 Write	8
9		D 8			Y 7 Write	9
10						10
11	- 1,6 Volts			- x -	- 1,6 Volts	11
12		A4-27				12
13		A3-27				13
14		A2-27				14
15	0 Volts			- x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts			- x -	0 Volts	19
20						20
21	0 Volts			- x -	0 Volts	21
22		A2-22				22
23		A3-22				23
24		A4-22				24
25		B 13			Y 12 Write	25
26		D 14			Y 13 Write	26
27		B 15			Y 14 Write	27
28		D 16			Y 15 Write	28
29		B 9			Y 8 Write	29
30		D 10			Y 9 Write	30
31		B 11			Y 10 Write	31
32		D 12			Y 11 Write	32
33		B 5-13		- x		33
34		A1-27				34
35	- 8 Volts			- x -	- 8 Volts	35

pos.	
A 12	1203

REGNE CENTRALEN

Unit: RC 2000 5

Designed B.N.

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Last Revision

WIRING SCHEDULE

Drawing No 23.2.12

Drawn by L.L.6.10.66.

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Sheet 14

A12

1203

PIN	Special Wire	Wired To	Wired To	— x —	Name of Signal	PIN
1		A5-22				1
2					x 0 Write	2
3		C 2			x 1 Write	3
4		A 3			x 2 Write	4
5		C 4			x 3 Write	5
6		A 5			x 4 Write	6
7		C 6			x 5 Write	7
8		A 7			x 6 Write	8
9		C 8			x 7 Write	9
10						10
11	- 1,6 Volts	B13-12		x -	- 1,6 Volts	11
12		A8-27				12
13		A7-27				13
14		A6-27				14
15	0 Volts			x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts			x -	0 Volts	19
20						20
21	0 Volts			x -	0 Volts	21
22		A6-22				22
23		A7-22				23
24		A8-22				24
25		A 13			x 12 Write	25
26		C 14			x 13 Write	26
27		A 15			x 14 Write	27
28		C 16			x 15 Write	28
29		A 9			x 8 Write	29
30		C 10			x 9 Write	30
31		A 11			x 10 Write	31
32		C 12			x 11 Write	32
33				x -		33
34		A5-27				34
35	- 8 Volts	B13-35		x -	- 8 Volts	35

pos.	
A 13	1203

CENTRALEN BEGNE

Unit: RC 2000 5

Designed B.N.

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Last Revision

WIRING SCHEDULE

Drawing No 23.2.13

Drawn by L.L.6.10.66.

Checked F.E.11-11-66

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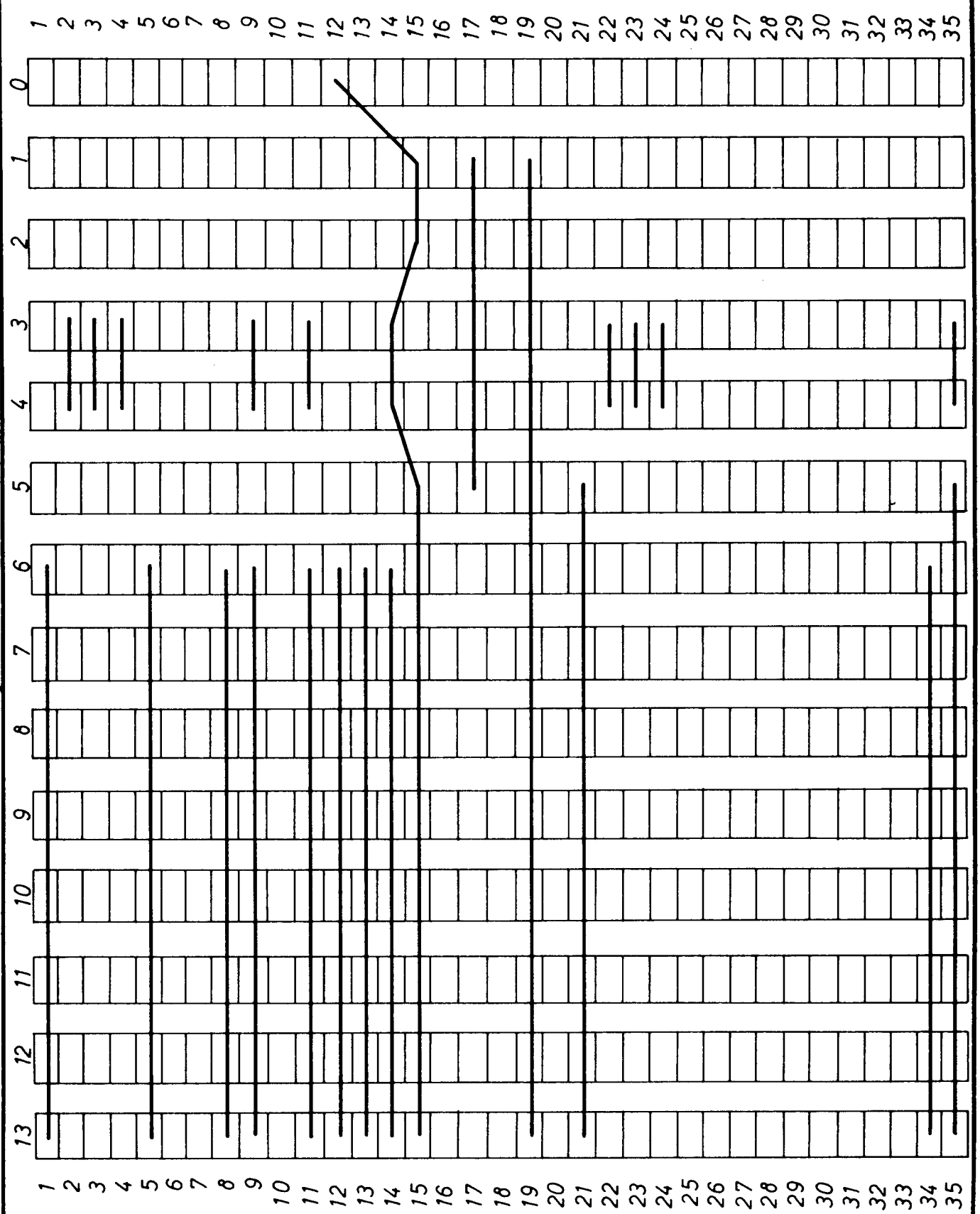
Sheet 15

A13

1203



Unit: RC 2000 5	Designed B. N.	CROSSWIRING AT FRAME B	Drawing No
REGNE CENTRALEN	Approved		Drawn by B.R. 23.11.66
	Checked 3.12.65		Checked F.E. 21-11-66
	Last Revision		15 Sheets / Sheet 1
			B
			23.3.1

PIN	Special Wire	Wired To	Wired To	-x-	Name of Signal	PIN
1		P1-M				1
2		P1-P				2
3		P1-S				3
4		P1-U				4
5		P1-W				5
6		P1-Y				6
7		P1-AA				7
8		P1-CC				8
9	- 8 Volts	B1-1	P3-HH		- 8 Volts	9
10	+ 8 Volts	B1-2			+ 8 Volts	10
11	- 24 Volts	B1-17			- 24 Volts	11
12	0 Volts		P1-N		0 Volts	12
13		B13-23	P1-J			13
14		B12-23	P1-H			14
15		B11-23	P1-F			15
16		B10-23	P1-E			16
17		B9-23	P1-D			17
18		B8-23	P1-C			18
19		B7-23	P1-B			19
20		B6-23	P1-A		IR 1	20
21		P7-C7	P1-JJ			21
22		P7-C1	P1-HH			22
23		P1-L			J to GIER	23
24		P7-D4	P1-FF			24
25		P1-NN				25
26		P1-EE	P7-A7			26
27		P1-RR				27
28		B4-28	A0-22		Reset	28
29		P1-KK			1. Character	29
30		A9-7				30
31	- 1,6 Volts	B2-13	A0-35		- 1,6 Volts	31
32		B5-3				32
33		P1-MM			Busy	33
34		B5-2			RA	34
35		P1-K				35

pos.	
B 0	1224

REGNE
CENTRALEN

Unit: RC 4000 5

Designed: B.N.

Approved:

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Last Revision:

WIRING SCHEDULE

Drawing No:

Drawn by: L.L. 8.10.66

Checked: F.F. 11-11-66

15 Sheets

Sheet 2

B0

1224

23.3.2

PIN	Special Wire	Wired To	Wired To	-x-	Name of Signal	PIN
1	- 8 Volts	B0-9	B2-4		- 8 Volts	1
2	+ 8 Volts	B0-10	B2-32		+ 8 Volts	2
3		B1-23			P.O.	3
4		B3-5			Inhibit Pulse	4
5		P4-L	A0-24		Block Motor	5
6		P3-BB			Skip N .O.	6
7		A1-3				7
8		A2-3				8
9		A3-3				9
10		A4-3				10
11		A5-3				11
12		A6-3				12
13		P4-P				13
14		B6-8			Inhibit Pulse	14
15	0 Volts	P2-K		- x	0 Volts	15
16						16
17	- 24 Volts	B0-11		- x	- 24 Volts	17
18						18
19	0 Volts	B1-21	P3-JJ	- x	0 Volts	19
20						20
21		B1-19	P3-J		0 Volts	21
22		P7-A1			Light Adjustment	22
23		B1-3	B2-21		P.O.	23
24		P4-A				24
25		P4-D				25
26		P3-T			Light Adjustment	26
27						27
28						28
29	- 24 Volts	P7-D6			- 24 Volts from selector switch	29
30		B4-1			Strobe	30
31		B6-34			Strobe	31
32		P2-P			P.O. Control	32
33		P3-W	P7-B4		UP Arm	33
34		B5-11	P7-B2		Solenoid	34
35		P3-RR			P.O.	35

pos.	B 1	1205-1

REGNE CENTRALEN

Unit: RC 4000 5

Designed B.N.

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Checked 3.12.66

Last Revision L.L.2.11.

WIRING SCHEDULE

Drawing No 1205-1 23.4.1

Drawn by L.L.6.10.66

Checked F.F.11-11-66

15 Sheets

Sheet 3

B1

PIN	Special Wire	Wired To	Wired To	-x-	Name of Signal	PIN
1		B2-10	B4-15			1
2		B4-8			RB	2
3						3
4	- 8 Volts	B1-1	B3-23		- 8 Volts	4
5		A0-29	P6-BB		Zero Decoding (ZFB)	5
6		B4-10			Reset	6
7		A8-11			Advance Counter A	7
8		B4-13			Read	8
9		B3-8			WA	9
10		B2-1	A3-13		Reset to A and B	10
11		B3-1			WD	11
12	-	B5-1			RA	12
13	- 1,6 Volts	B5-4	B0-31		- 1,6 Volts	13
14		B4-34				14
15	0 Volts	B2-19		x -	0 Volts	15
16						16
17	- 24 Volts	P3-KK		- x -	- 24 Volts	17
18						18
19	0 Volts	B2-15		- x -	0 Volts	19
20						20
21		B1-23	B4-27		P.O.	21
22		B6-11			Reset of Input Reg.	22
23		B3-21			WC	23
24	- 24 Volts	P3-N	A0-33		- 24 Volts Olivetti Tapes	24
25	- 24 Volts	P7-C5	A0-34		- 24 Volts 5-Channel Tapes	25
26	- 24 Volts	P7-C3	A0-32		- 24 Volts 7-Channel Tapes	26
27	- 24 Volts	P7-D8	A0-31		- 24 Volts 8-Channel Tapes	27
28		P2-N			Celle 1,2,3,4,5 and P	28
29		P2-R			Celle 6,7	29
30		P2-F			Celle 8	30
31		P2-C			Olivetti Celles	31
32	+ 8 Volts	B1-2	B3-9		+ 8 Volts	32
33	-.24 Volts	P3-C			- 24 Volts for Pot. (1,2,3,4,5,P	33
34						34
35						35

pos. B 2	1213

Unit: RC 2000 5

BULL CENTRALEN

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Last Revision

WIRING SCHEDULE

Drawing No 23.4.2

Drawn by L.L. 6.10.66

Checked F.E. 11-11-66

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Sheet 4

B2

1213

PIN	Special Wire	Wired To	Wired To	—x—	Name of Signal	PIN
1		B2-11	B5-7		WB	1
2	- 8 Volts	B4-23		- x	- 8 Volts	2
3	- 24 Volts	B3-11		- x	- 24 Volts	3
4	+ 8 Volts	B4-9		- x	+ 8 Volts	4
5		B3-26	B1-4		Inhibit Pulse	5
6		B3-27				6
7		B3-12				7
8		B2-9				8
9	+ 8 Volts	B2-32		- x	+ 8 Volts	9
10						10
11	- 24 Volts	B3-3		- x	- 24 Volts	11
12		B3-7				12
13		B3-28				13
14	0 Volts			- x	0 Volts	14
15		B5-22	A0-12		P.O.	15
16						16
17	- 24 Volts	P7-D2		- x -	- 24 Volts	17
18						18
19	0 Volts	B3-35		- x -	0 Volts	19
20						20
21		B2-23				21
22	- 24 Volts	B4-11	P4-C	- x	- 24 Volts	22
23	- 8 Volts	B2-4		- x	- 8 Volts	23
24	+ 8 Volts	B2-14		- x	+ 8 Volts	24
25		A0-12				25
26		B3-5				26
27		B3-6				27
28		B3-13			M Characters	28
29		A17 → A32			C.S.	29
30		B17 → B32			C.S.	30
31		C17 → C32			C.S.	31
32		D17 → D32			C.S.	32
33		P3-MM			Skip Contact	33
34		B6-5	P6-C		M Characters	34
35	0 Volts	B3-19		- x	0 Volts	35

pos.	B 3	1200

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Drawing No 23.4.3

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B3

Sheet 5

1200

PIN	Special Wire	Wired To	Wired To	—x—	Name of Signal	PIN
1		B1-30			Strobe RC	1
2	- 8 Volts	A4-28		x -	- 8 Volts	2
3	- 24 Volts	P4-C		x -	- 24 Volts	3
4	+ 8 Volts	B4-24		x -	+ 8 Volts	4
5		B4-6				5
6		B4-5				6
7		A10-33	B4-8		RB	7
8		B2-2	B4-7		RB	8
9	+ 8 Volts	B3-4		x -	+ 8 Volts	9
10		B2-6				10
11	- 24 Volts	B3-22		x -	- 24 Volts	11
12		B5-5				12
13		B2-8			Read	13
14	0 Volts	B4-19		x -	0 Volts	14
15		B2-1	B5-9		Reset to A and B	15
16						16
17	- 24 Volts	P6-RR		- x -	- 24 Volts	17
18						18
19	0 Volts	B4-14		- x -	0 Volts	19
20						20
21		P6-EE			Ext. Reset	21
22	- 24 Volts	A4-30		x -	- 24 Volts	22
23	- 8 Volts	B3-2		x -	- 8 Volts	23
24	+ 8 Volts	B4-4		x -	+ 8 Volts	24
25						25
26		P3-Y			Reset	26
27		B2-21	B5-14		P.O.	27
28		B0-28			Reset	28
29						29
30						30
31						31
32						32
33						33
34		B2-14	B5-6			34
35	0 Volts			x -		35

pos. B 4	1200-1

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Sheet 6

B4

1200-1

23.4.4

PIN	Special Wire	Wired To	Wired To	— x —	Name of Signal	PIN
1		B2-12			RA	1
2		B0-34			RA	2
3		B0-32			Z to RA	3
4	- 1,6 Volts	B2-13	B6-12		- 1,6 Volts	4
5		B4-12				5
6		B4-34				6
7		B3-1			WB	7
8		B5-12				8
9		B4-15				9
10		P3-CC			Read	10
11		B1-34				11
12		B5-8				12
13		A12-33			WD Write Current Time	13
14		B4-27				14
15	0 Volts	B5-19	P7-B6	- x	0 Volts	15
16						16
17	- 24 Volts	A6-30		x -	- 24 Volts	17
18						18
19	0 Volts	B5-15		- x -	0 Volts	19
20						20
21	0 Volts			- x	0 Volts	21
22		B3-15	J1-PP		P.O.	22
23						23
24						24
25						25
26						26
27						27
28						28
29						29
30						30
31						31
32						32
33	+ 8 Volts	A4-14	B6-14		+ 8 Volts	33
34	- 24 Volts	A5-30			- 24 Volts	34
35	- 8 Volts	B6-13		- x	- 8 Volts	35

pos.	
B 5	1212

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B5

Sheet 7

1212

23.4.5

PIN	Special Wire	Wired To	Wired To	—x—	Name of Signal	PIN
1	0 Volts			- x	0 Volts	1
2		P3-B				2
3		P2-A				3
4		P3-A				4
5		B3-34		- x		5
6		Ci 1b			Inhibit Wire 1b	6
7		Ci 1a			Inhibit Wire 1a	7
8		B1-14		- x	Inhibit Pulse	8
9	0 Volts			- x	0 Volts	9
10		P6-A				10
11		B2-22		- x	Reset	11
12	- 1,6 Volts	B5-4		- x	- 1,6 Volts	12
13	- 8 Volts	B5-35		- x	- 8 Volts	13
14	+ 8 Volts	B5-33		- x	+ 8 Volts	14
15	0 Volts			- x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts			- x -	0 Volts	19
20						20
21	0 Volts	P4-S		- x -	0 Volts	21
22						22
23		B0-20	A9-1			23
24						24
25						25
26						26
27						27
28						28
29						29
30						30
31						31
32		R 1b			Read Wire 1b	32
33		R 1a			Read Wire 1a	33
34		B1-31		- x		34
35	- 8 Volts			- x -	- 8 Volts	35

pos.	
B 6	1202

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B6 Sheet 1202

23.4.6

PIN	Special Wire	Wired To	Wired To	— x —	Name of Signal	PIN
1	0 Volts			- x -	0 Volts	1
2		P3-F				2
3		P2-B				3
4		P3-E				4
5				- x -		5
6		Ci 2b			Inhibit Wire 2b	6
7		Ci 2a			Inhibit Wire 2a	7
8				- x -		8
9	0 Volts			- x -	0 Volts	9
10		P6-C				10
11				- x -		11
12	- 1,6 Volts			- x -	- 1,6 Volts from P.S.	12
13	- 8 Volts			- x -	- 8 Volts	13
14	+ 8 Volts	P4-N		- x -	+ 8 Volts from P.S.	14
15	0 Volts	P1-DD		- x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts	B7-21		- x -	0 Volts	19
20						20
21	0 Volts	B7-19		- x -	0 Volts	21
22						22
23		B0-19	A9-2			23
24						24
25						25
26						26
27						27
28						28
29						29
30						30
31						31
32		R2 b			Read Wire 2b	32
33		R2 a			Read Wire 2a	33
34				- x -		34
35	- 8 Volts			- x -	- 8 Volts	35

pos.	
B 7	1202

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Unit RC 4000 5

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Sheet 9

B 7

1202

23.4.7

PIN	Special Wire	Wired To	Wired To	-x-	Name of Signal	PIN
1	0 Volts			- x -	0 Volts	1
2		P3-K				2
3		P2-D				3
4		P3-L				4
5				- x -		5
6		Ci 3b			Inhibit Wire 3b	6
7		Ci 3a			Inhibit Wire 3a	7
8				- x -		8
9	0 Volts			- x -	0 Volts	9
10		P6-E				10
11				- x -		11
12	- 1,6 Volts			- x -	- 1,6 Volts	12
13	- 8 Volts			- x -	- 0.Volts	13
14	+ 8 Volts	P7-A3		- x -	+ 8 Volts for Light Adj.	14
15	0 Volts	B8-19		- x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts	B8-15		- x -	0 Volts	19
20						20
21						21
22						22
23		B0-18	A9-3			23
24						24
25						25
26						26
27						27
28						28
29						29
30						30
31						31
32		R 3b			Read Wire 3b	32
33		R 3a			Read Wire 3a	33
34				- x -		34
35	- 8 Volts			- x -	- 8 Volts	35

pos. B 8	1202

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B 8

1202

23.4.8

PIN	Special Wire	Wired To	Wired To	— x —	Name of Signal	PIN
1	0 Volts			- x -	0 Volts	1
2		P3-P				2
3		P2-E				3
4		P3-R				4
5				- x -		5
6		Ci 4b			Inhibit Wire 4b	6
7		Ci 4a			Inhibit Wire 4a	7
8				- x -		8
9	0 Volts	B11-19		- x -	0 Volts	9
10		P6-G				10
11				- x -		11
12	- 1,6 Volts			- x -	- 1,6 Volts	12
13	- 8 Volts			- x -	- 8 Volts	13
14	+ 8 Volts			- x -	+ 8 Volts	14
15	0 Volts	P6-NN		- x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts	A10-19		- x -	0 Volts	19
20						20
21	0 Volts			- x -	0 Volts	21
22						22
23		B0-17	A9-4			23
24						24
25						25
26						26
27						27
28						28
29						29
30						30
31						31
32		R 4b			Read Wire 4b	32
33		R 4a			Read Wire 4a	33
34				- x -		34
35	- 8 Volts			- x -	- 8 Volts	35

pos.	
B 9	1202

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Unit: RC 2000 S
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WIRING SCHEDULE

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B9
1202
23.4.9

PIN	Special Wire	Wired To	Wired To	—x—	Name of Signal	PIN
1	0 Volts	B10-19		- x -	0 Volts	1
2		P3-U				2
3		P2-H				3
4		P3-V				4
5				- x -		5
6		Ci 5b			Inhibit Wire 5b	6
7		Ci 5a			Inhibit Wire 5a	7
8				- x -		8
9	0 Volts			- x -	0 Volts	9
10		P6-J				10
11				- x -		11
12	- 1,6 Volts			- x -	- 1,6 Volts	12
13	- 8 Volts			- x -	- 8 Volts	13
14	+ 8 Volts			- x -	+ 8 Volts	14
15	0 Volts			- x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts	B10-1		- x -	0 Volts	19
20						20
21	0 Volts			- x -	0 Volts	21
22						22
23		B0-16	A9-32			23
24						24
25						25
26						26
27						27
28						28
29						29
30						30
31						31
32		R 5b			Read Wire 5b	32
33		R 5a			Read Wire 5a	33
34				- x -		34
35	- 8 Volts			- x -	- 8 Volts	35

pos.	
B 10	1202

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WIRING SCHEDULE

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Sheet 12

B10

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23.4.10

PIN	Special Wire	Wired To	Wired To	-x-	Name of Signal	PIN
1	0 Volts			- x -	0 Volts	1
2		P3-AA				2
3		P2-J				3
4		P3-X				4
5				- x -		5
6		Ci 6b			Inhibit Wire 6b	6
7		Ci 6a			Inhibit Wire 6a	7
8				- x -		8
9	0 Volts			- x -	0 Volts	9
10		P6-L				10
11				- x -		11
12	- 1,6 Volts			- x -	- 1,6 Volts	12
13	- 8 Volts			- x -	- 8 Volts	13
14	+ 8 Volts			- x -	+ 8 Volts	14
15	0 Volts			- x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts	B9-9		- x -	0 Volts	19
20						20
21						21
22						22
23		B0-15	A9-33			23
24						24
25						25
26						26
27						27
28						28
29						29
30						30
31						31
32		R 6b			Read Wire 6b	32
33		R 6a			Read Wire 6a	33
34				- x -		34
35	- 8 Volts			- x -	- 8 Volts	35

pos.	
B 11	1202

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Unit: RC 2000 5

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Sheet 13

B11

1202

23.4.41

PIN	Special Wire	Wired To	Wired To	-x-	Name of Signal	PIN
1	0 Volts			- x -	0 Volts	1
2		P3-FF				2
3		P2-L				3
4		P3-Z				4
5				- x -		5
6		Ci 7b			Inhibit Wire 7b	6
7		Ci 7a			Inhibit Wire 7a	7
8				- x -		8
9	0 Volts			- x -	0 Volts	9
10		P6-N				10
11				- x -		11
12	- 1,6 Volts			- x -	- 1,6 Volts	12
13	- 8 Volts			- x -	- 8 Volts	13
14	+ 8 Volts			- x -	+ 8 Volts	14
15	0 Volts	P1-TT		- x -	0 Volts	15
16						16
17						17
18						18
19	0 Volts			- x -	0 Volts	19
20						20
21	0 Volts	P4-R		- x -	0 Volts	21
22						22
23		B0-14	A9-34			23
24						24
25						25
26						26
27						27
28						28
29						29
30						30
31						31
32		R 7b			Read Wire 7b	32
33		R 7a			Read Wire 7a	33
34				- x -		34
35	- 8 Volts			- x -	- 8 Volts	35

pos.	B 12	1202

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Unit: RC 2[illegible] 5

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Sheet 14

B12 1202

23.4.12

PIN	Special Wire	Wired To	Wired To	-x-	Name of Signal	PIN
1	0 Volts	B13-9		x-	0.Volts	1
2		P3-LL				2
3		P2-M				3
4		P3-DD				4
5				x-		5
6		Ci 8b			Inhibit Wire 8b	6
7		Ci 8a			Inhibit Wire 8a	7
8				x-		8
9	0 Volts	B13-1		x-	0 Volts	9
10		P6-R				10
11				x-		11
12	- 1,6 Volts	A13-11		x-	- 1,6 Volts	12
13	- 8 Volts			x-	- 8 Volts	13
14	+ 8 Volts			x-	+ 8 Volts	14
15	0 Volts			x-	0 Volts	15
16						16
17						17
18						18
19	0 Volts			x-	0 Volts	19
20						20
21	0 Volts			x-	0 Volts	21
22						22
23		B0-13	A9-35			23
24						24
25						25
26						26
27						27
28						28
29						29
30						30
31						31
32		R 8b			Read Wire 8b	32
33		R 8a			Read Wire 8a	33
34				x-		34
35	- 8 Volts	A13-35		x-	- 8 Volts	35

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B 13	1202

CENTRALEN

REGNE

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Sheet 15

B13

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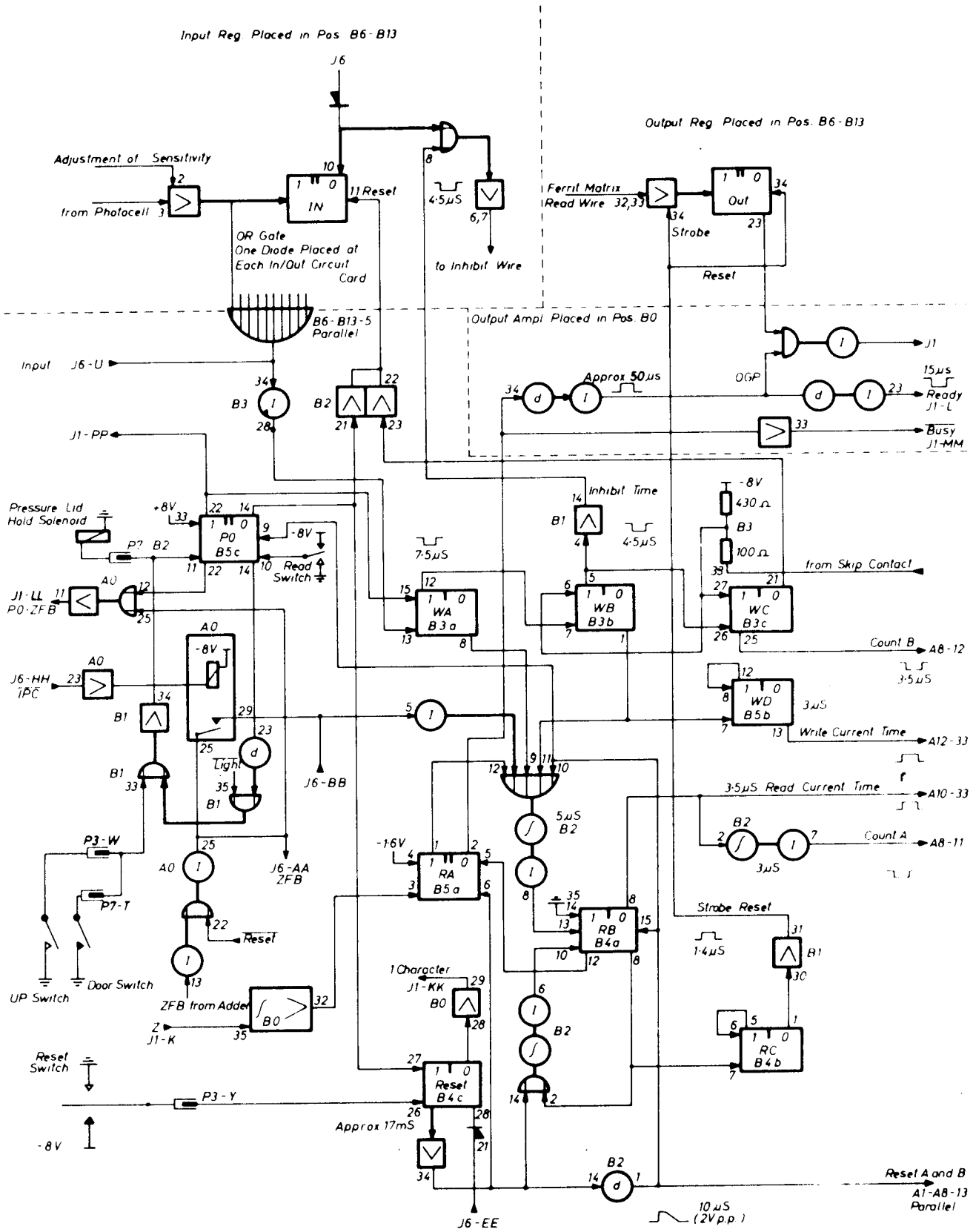
23.4.13



Unit: RC 2000 5	Designed B. N.	CONTROL CIRCUITS	Drawing No
REGNE CENTRALEN	Approved		Drawn by G.T. 9. 8. 66.
	Checked 3. 12. 65.		Checked F. E.
	Last Revision 24. 10. 66.		1 Sheets / Sheet 1
			24.1.1