
Title:

BSC 100

Technical Description

Rev. 2.

 **REGNECENTRALEN**

RC SYSTEM LIBRARY: FALKONERALLE 1 DK-2000 COPENHAGEN F

RCSL No: 52-AA890

Edition: February 1979.

Author: Villy Hansen

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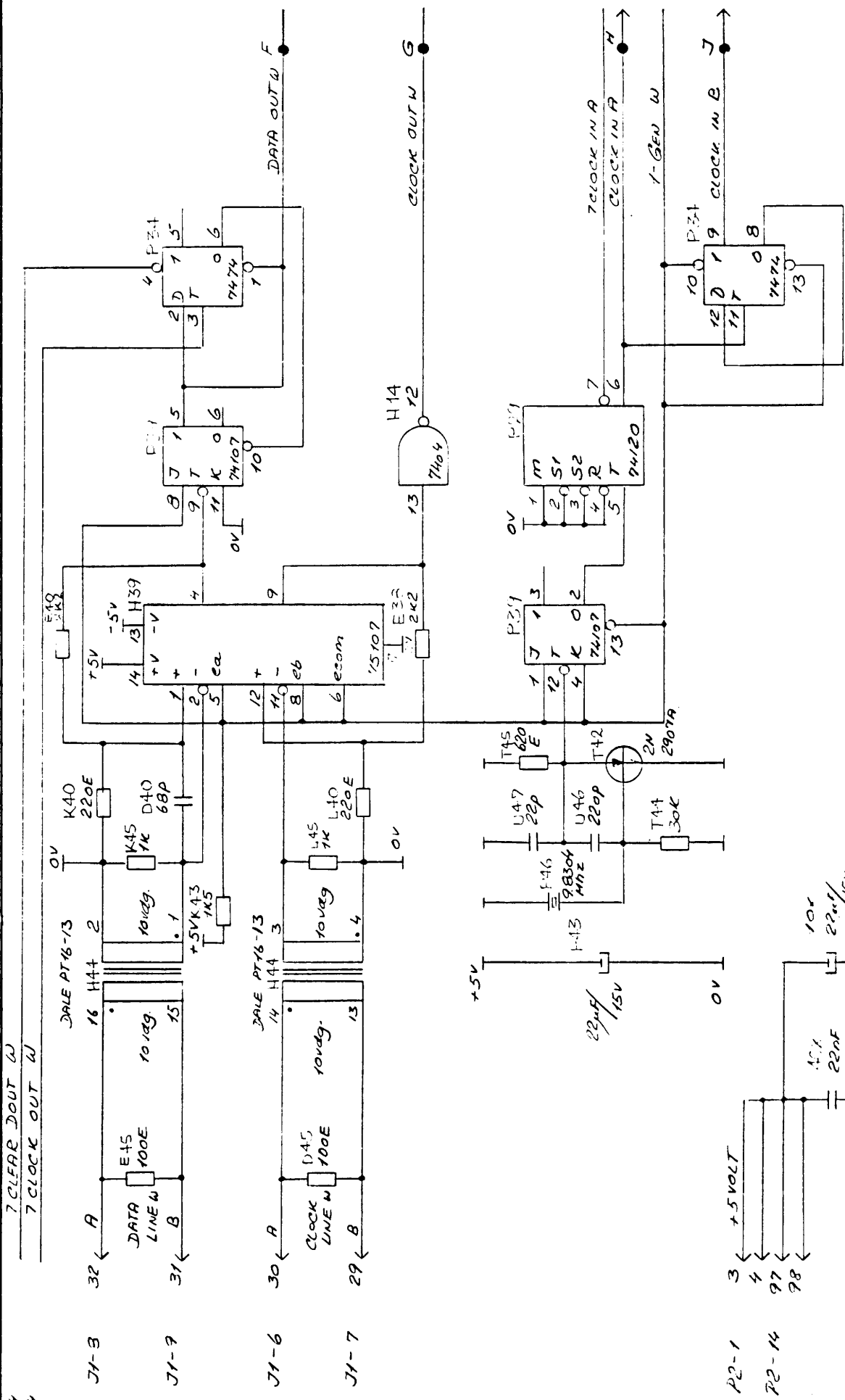
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POS :

	BYM 100	IFU	MKP 112
1			
2	SPACE FOR TB Y 100		
3	RC 3286-1		
4	RC 3287-1		
5	RC 3500 INTERFACE RC 3404-1		
6	BYM 100 INTERFACE RC 3403-1		
7	COM 2601/M.ODEM INTERFACE RC 3405-1		
8			
	POWER SUPPLY		

Designed by JH 140214	Drawn by C. V. S. 140214	Dwg. Office Code Rev 790222 JH/ABP	Design Check	Replaces Dwg. No.	due to EGN	Replaces Dwg. No.
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7 CLEAR DOUT W
7 CLOCK OUT W

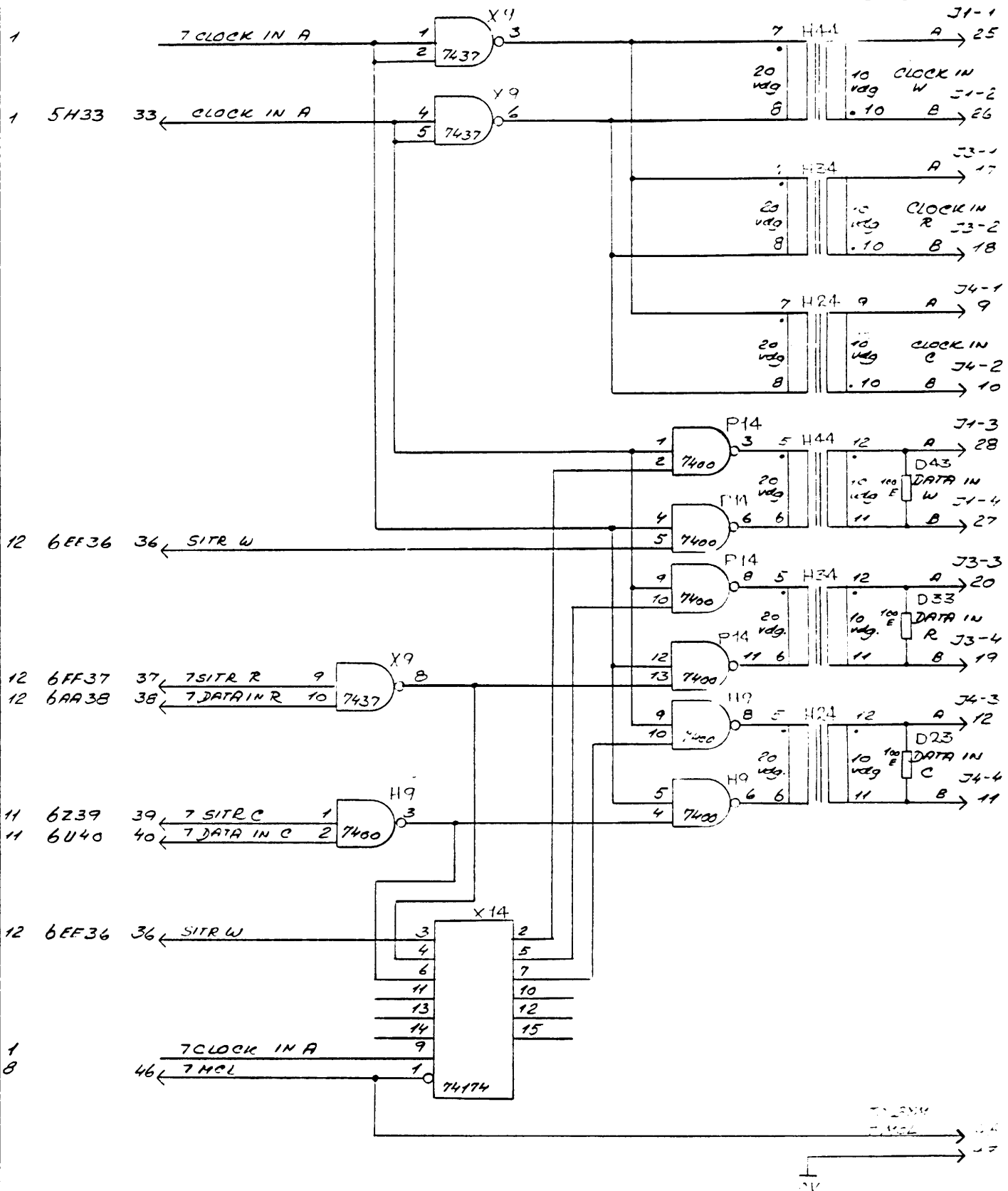


Unit 251 100
Dwg. No. A13694

RC 3500 INTERFACE
WRITE CHANNEL DOUT, CLOCK & MCL
RC 3500

BSC 1
POS 5
1-7

DALE PT 16-13

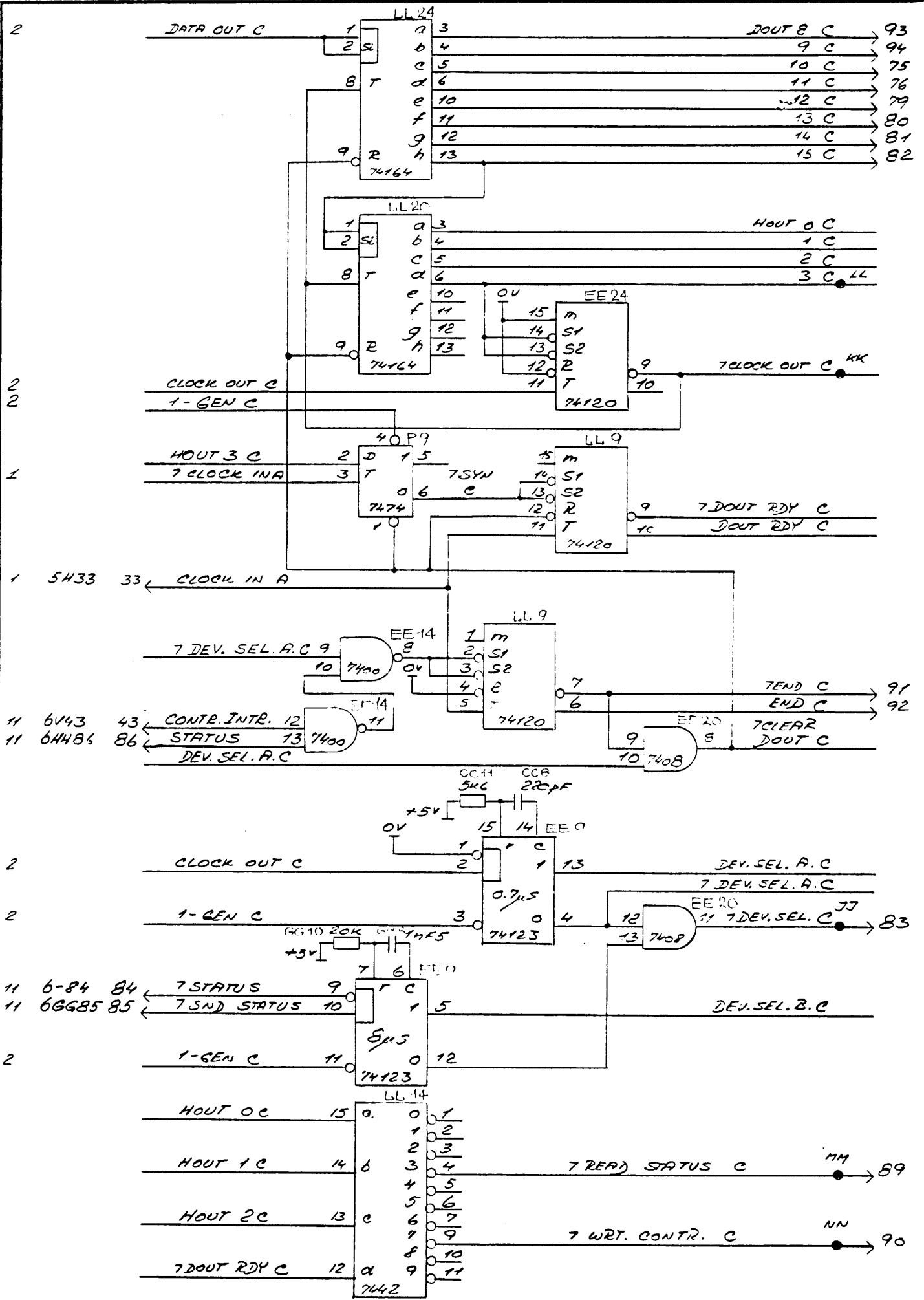


7 HCL is wired to 7411 pin 3 and 7414 pin 3
 7 HCL is wired to 7411 pin 3 and 7414 pin 3

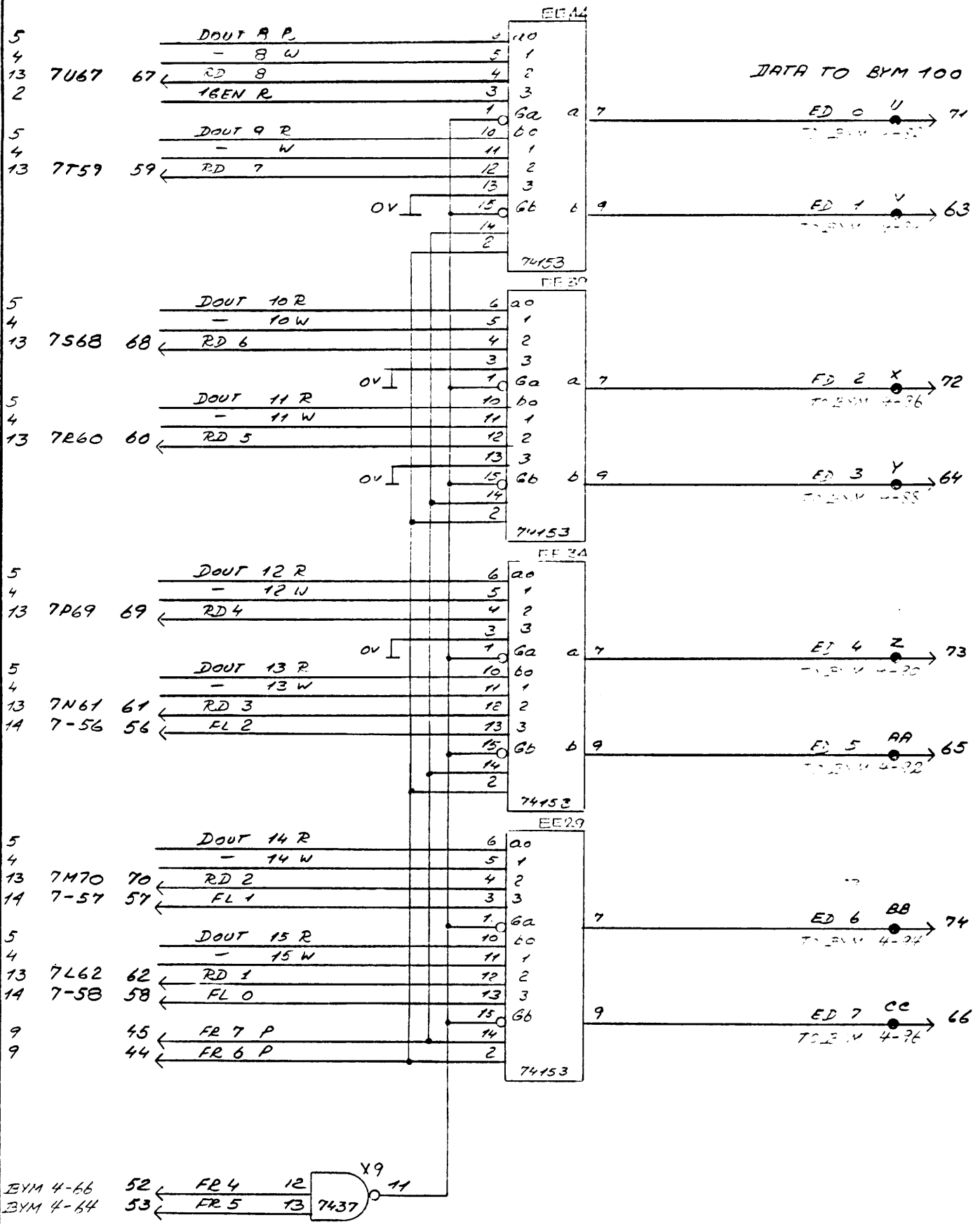
Unit
BSC 100Dwg. No.
A13696

RC 3500 INTERFACE
 DATA IN TRANSFORMERS
 RC 3504-1

BSC 3
 POS 5
 3-7



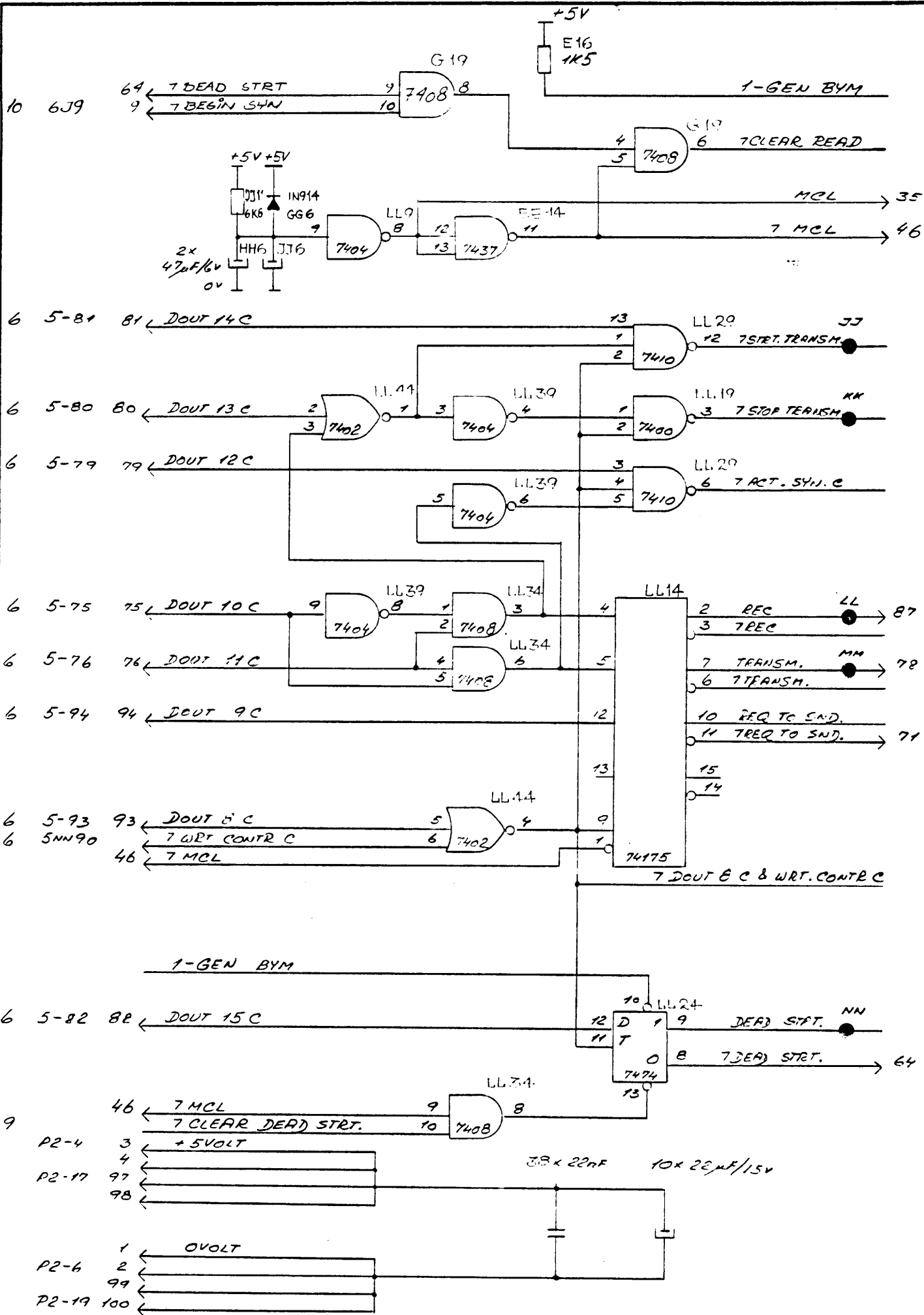
Unit
 BSC 100
 Dwg. No.
 A13700
 A/S REGNE
 TRALEN
 Designed by
 7402/13
 Drawn by
 R. V. JERON/APF
 Design Check
 Dwg. Office
 Rev. 790222 VHM/MP
 Replaces Dwg. No.
 due to ECN
 Replace
 Dwg. No.



ED 0 = EXTERNAL DATA BIT 0 = MSB.

RC 3500 INTERFACE
 DATA TO BYM 100
 RC 3101-1

BSC 7
 POS. 5
 7-7

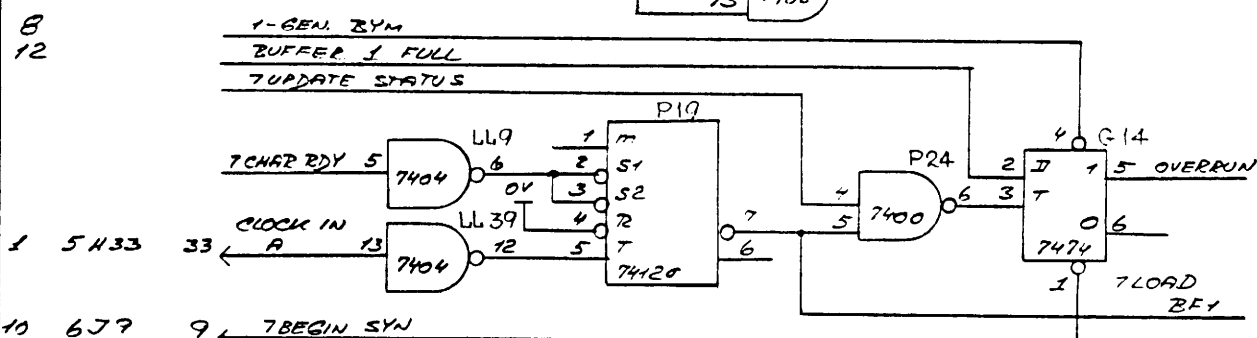
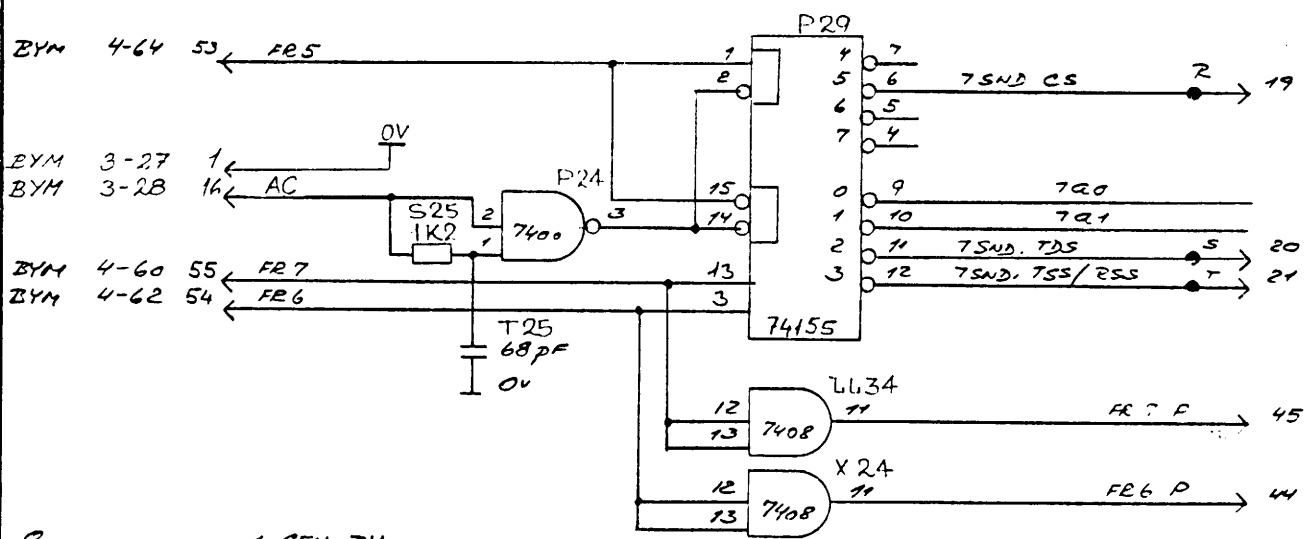
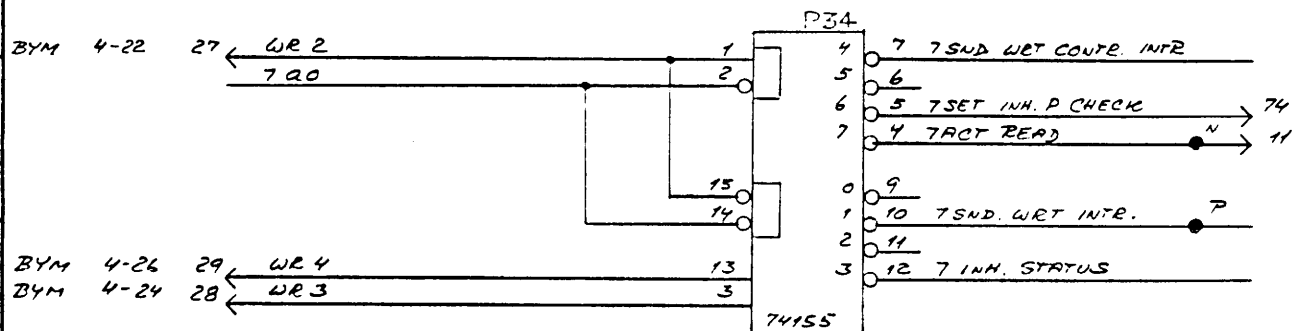
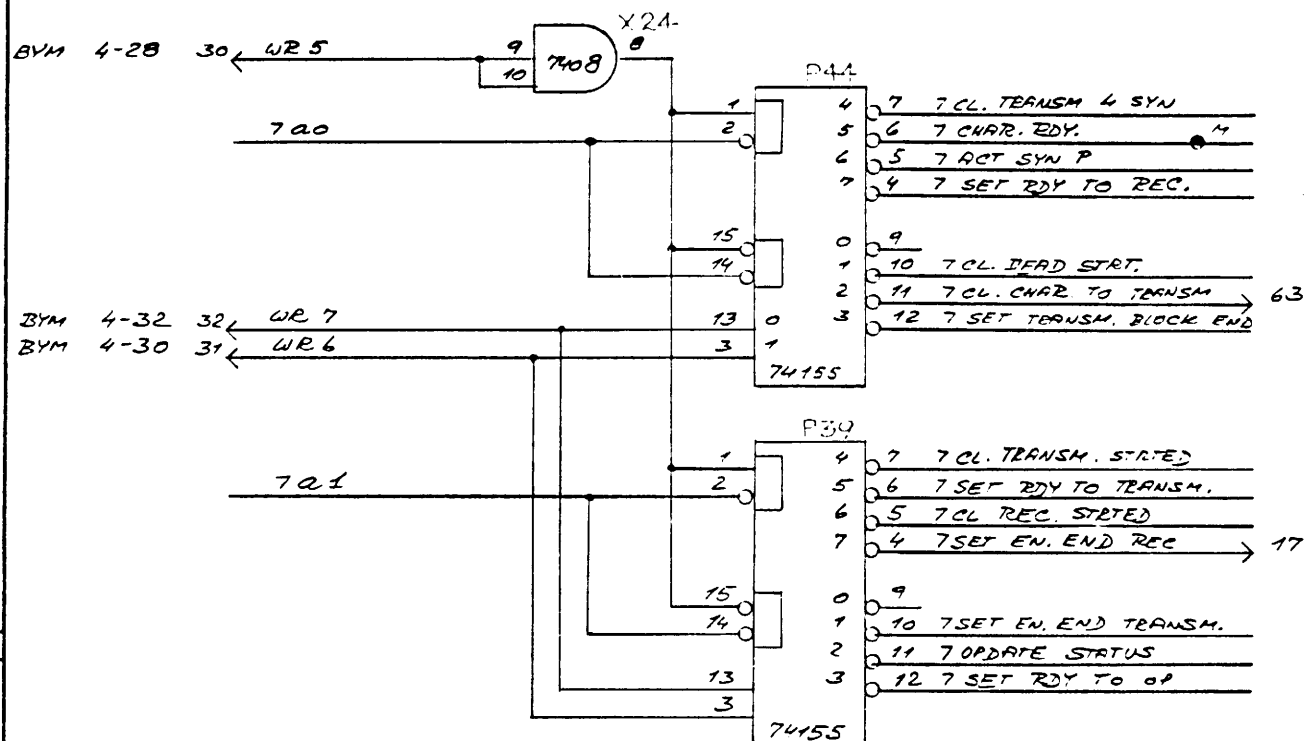


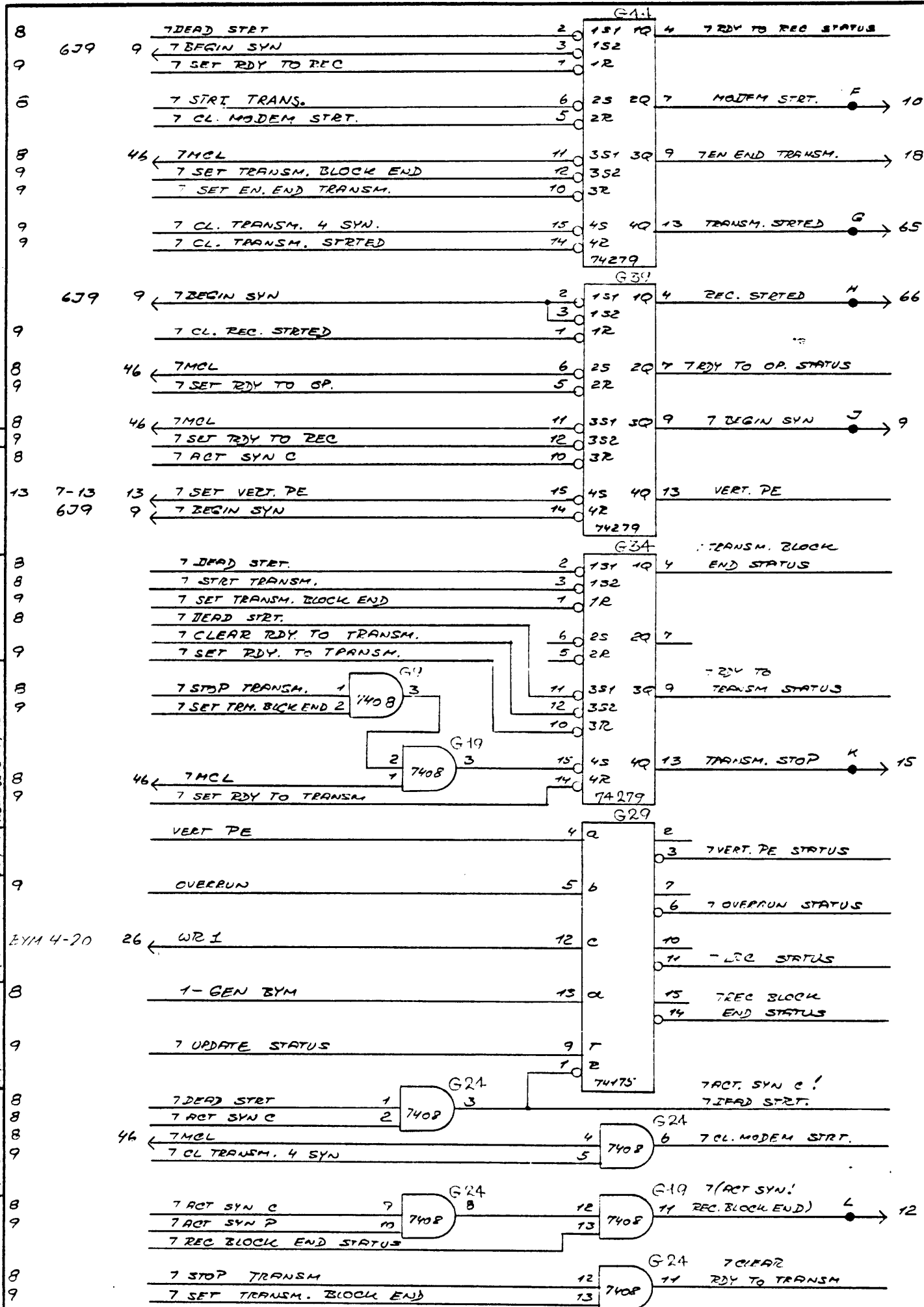
Unit
BSC 100

Dwg. No.
A13701

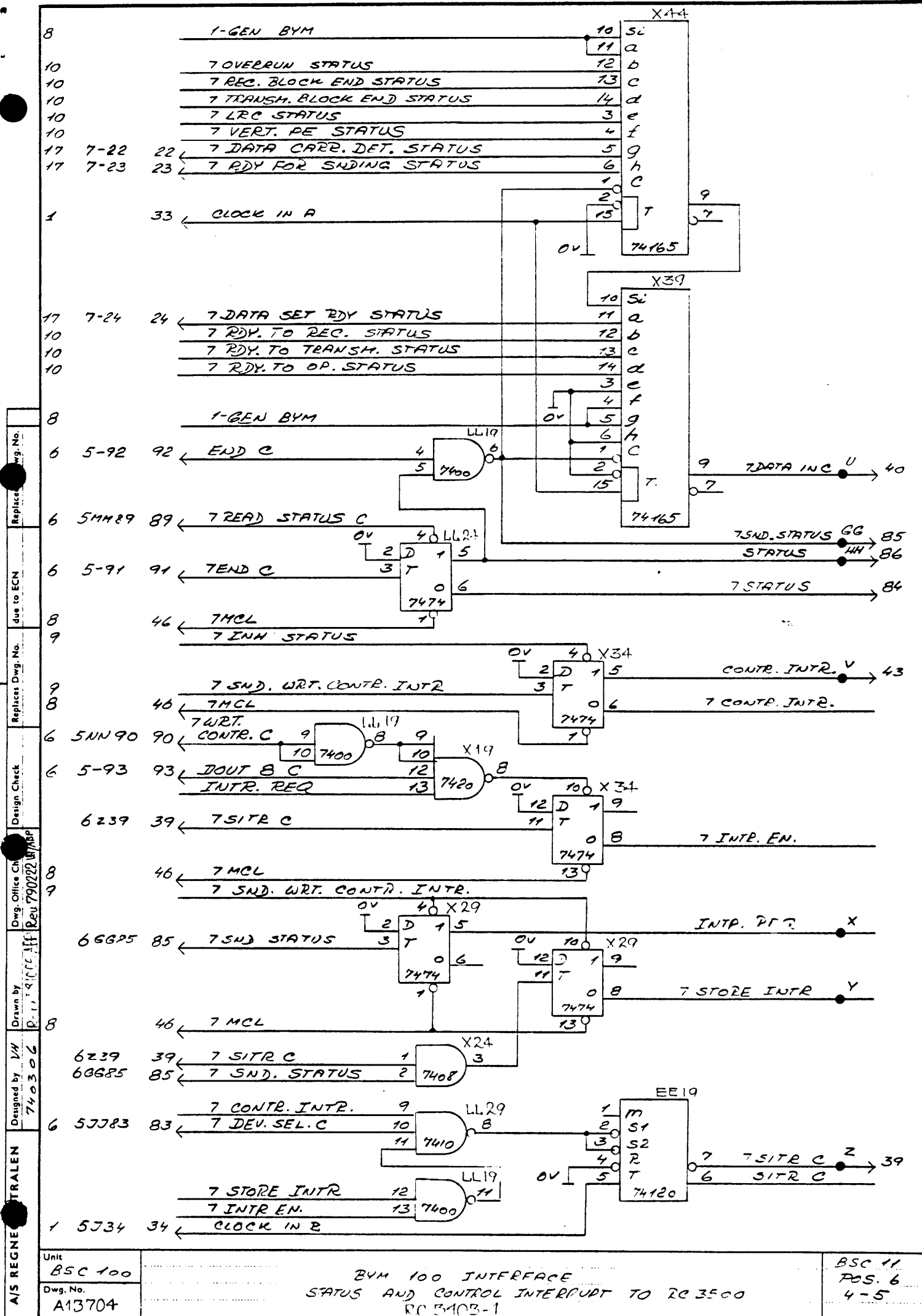
BYM 100 INTERFACE
WRITE CONTROL DECODING
PC 3413-1

BSC 8
POS. 6
1-5

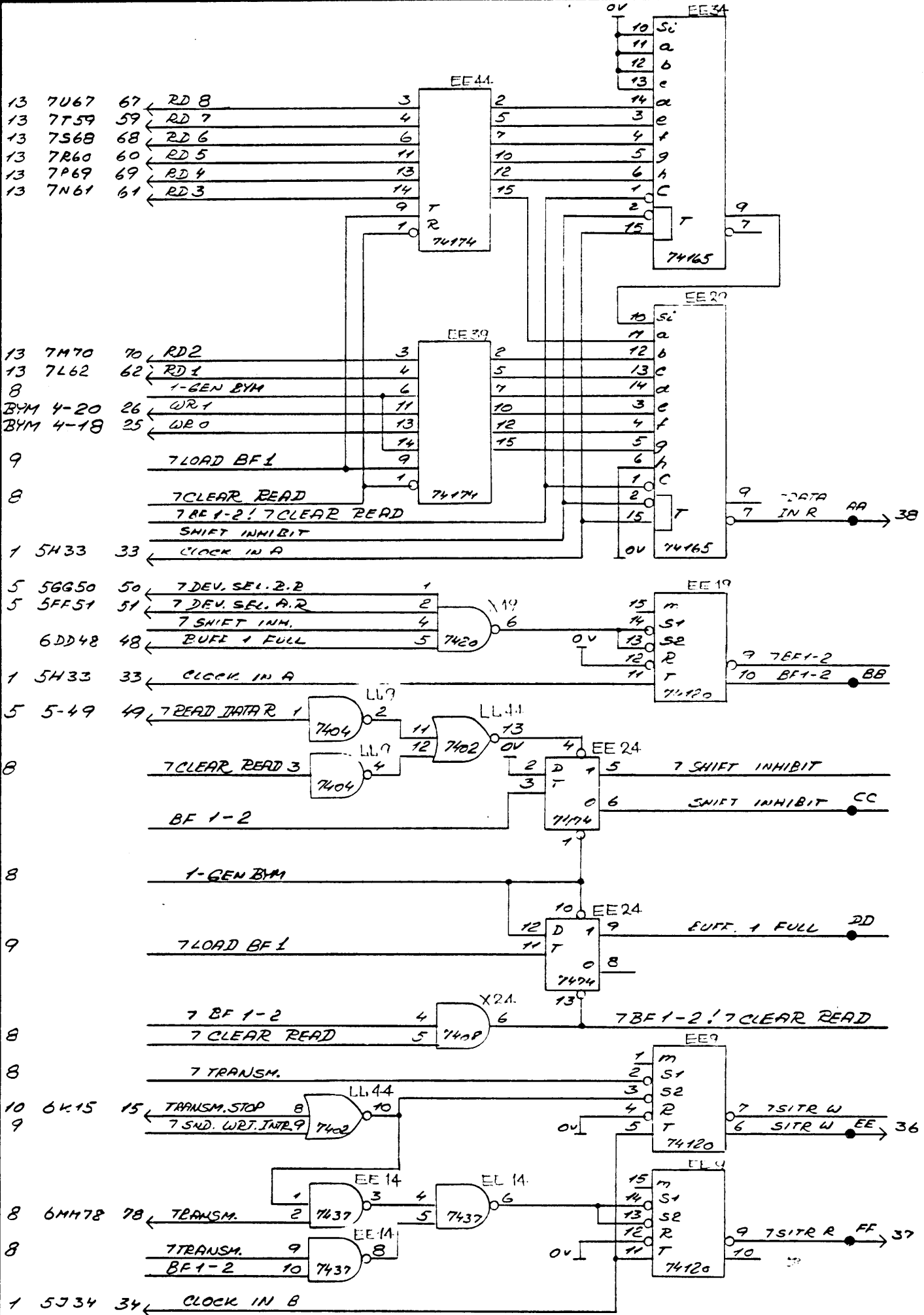




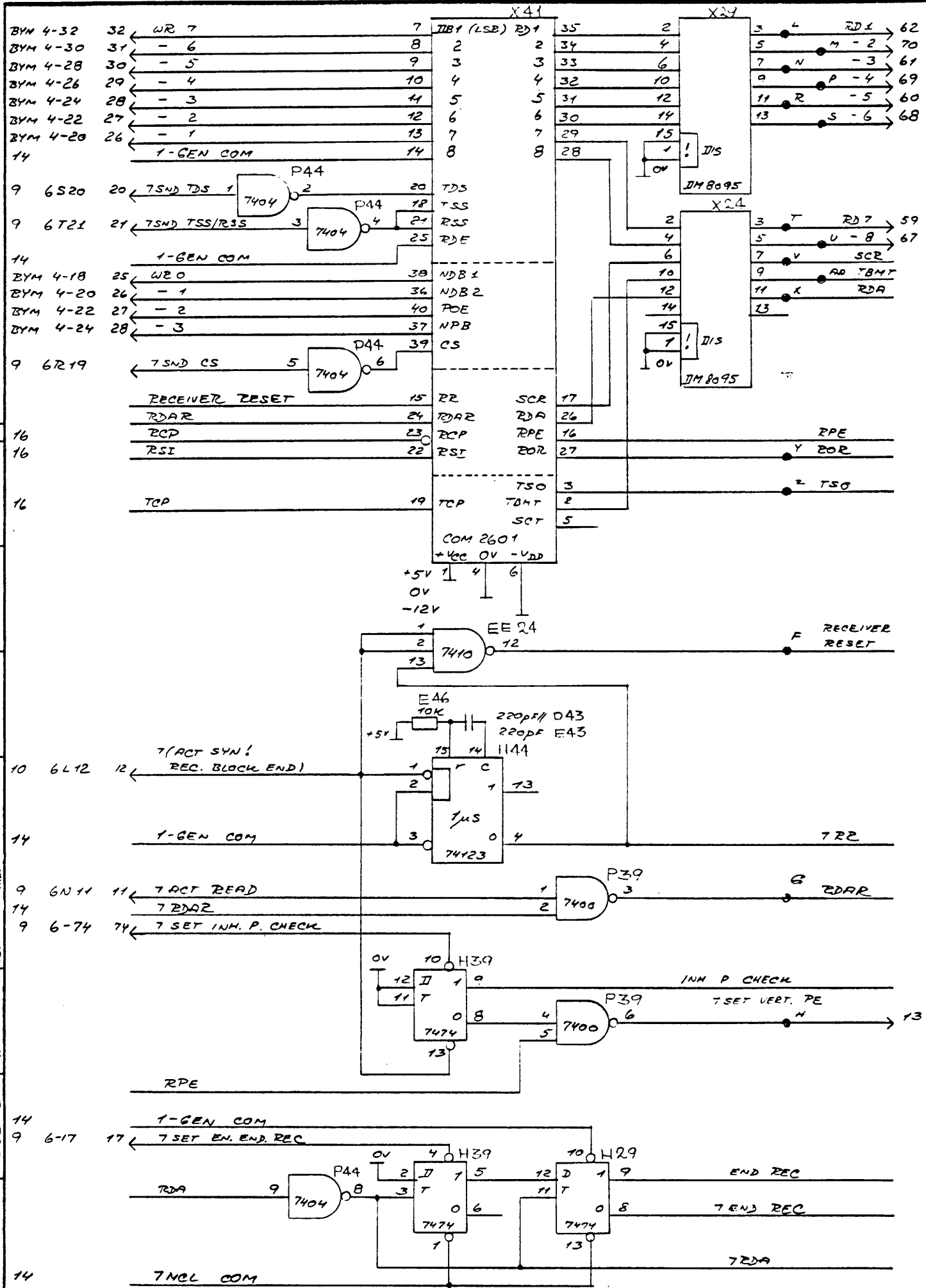
Unit	BSC 100	BYM 100 INTERFACE	BSC 10
Dwg. No.	A13703	STATUS BUFFER	Pos. 6
		RC 3105-1	3-5



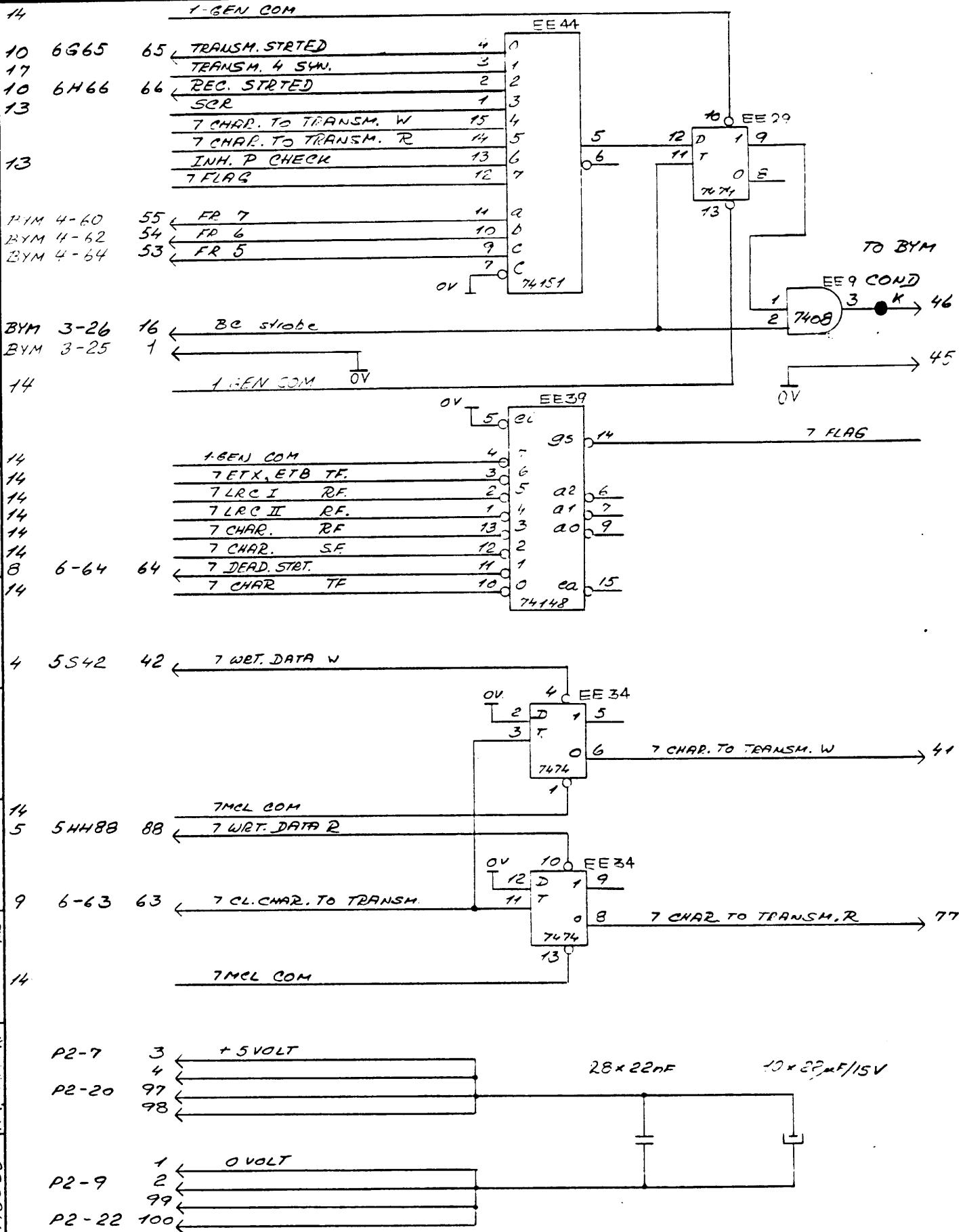
Rep. by Dwg. No. 740306
 due to ECN
 Replaces Dwg. No. 740306
 Design Check
 Dwg. Office
 Drawn by
 Designed by
 A/S REG. CENTRALEN



Unit BSC 100	BYM 100 INTERFACE	BSC 12
Dwg. No. A13705	RECEIVE DATA, READ AND WRITE INTERRUPT TO RC3500	POS. 6
	PC 3-105-1	5-5



Unit ZSC 100	COM 2601 / MODEM INTERFACE	85C 13
Dwg. No. A13706	UNIVERSAL SYNCHRONOUS REC/TRANSM.	POS 7
	RC 2-105-1	1-5



COND is when to BYM pos. 3 per 22

COND 2V is when to BYM pos. 3 per 21

Unit
BSC 100

Dwg. No.
A13708

COM 2601 / MODEM INTERFACE

FLAG DATA AND BRANCH CONDITION TO BYM 100

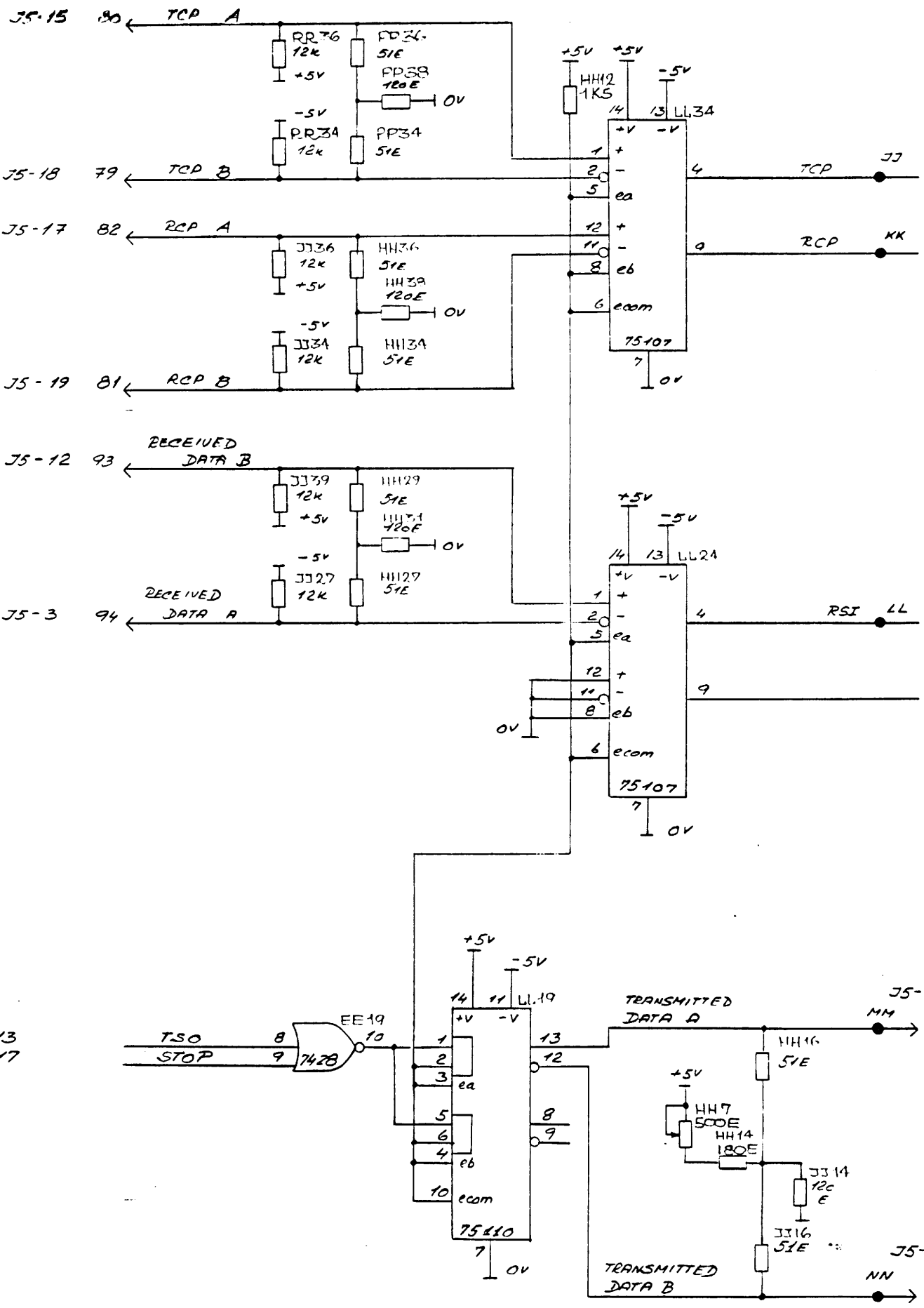
RC 3405

BSC 15

POS 7

3-5

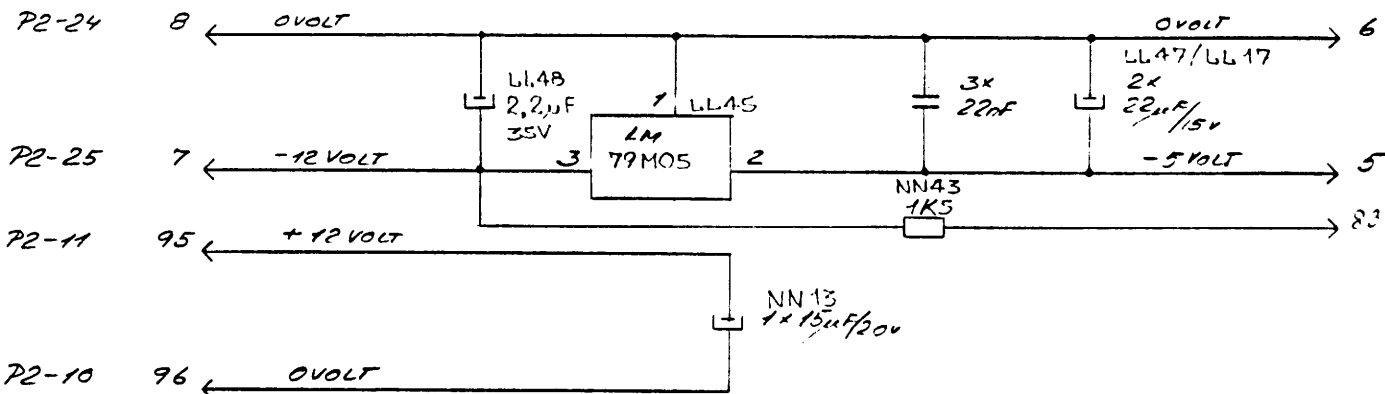
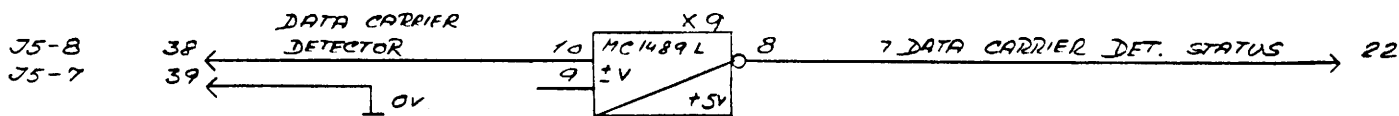
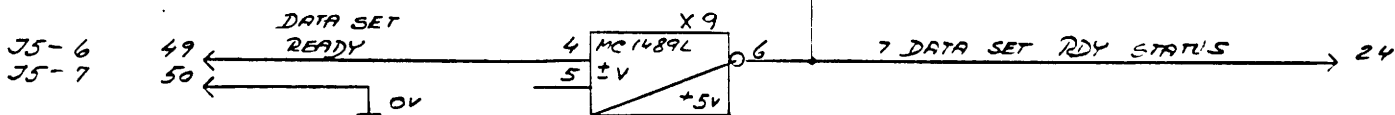
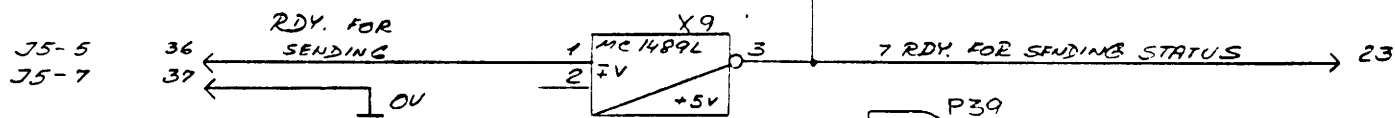
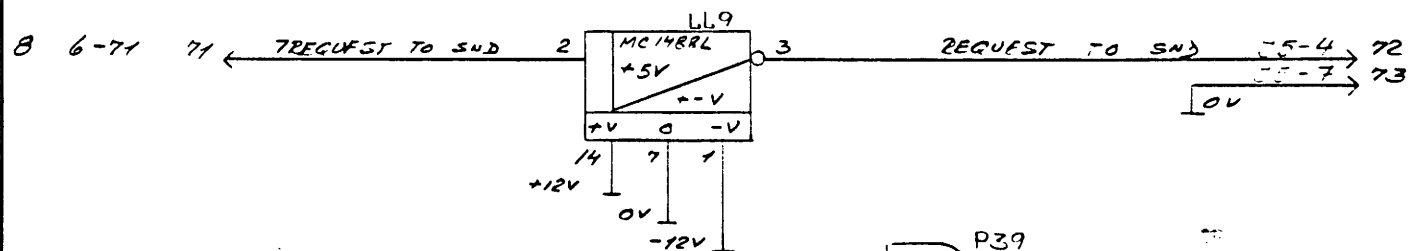
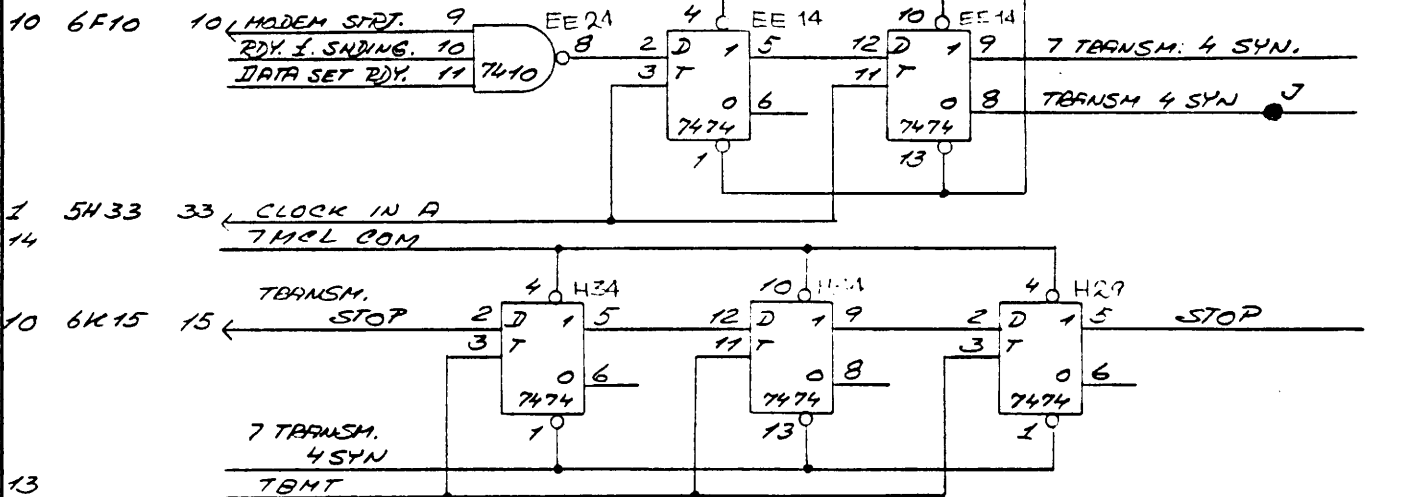
Dwg. No. 74 0130
 Replaces Dwg. No. 74 0130
 due to ECN
 Design Check
 Drawn by
 Designed by
 Unit
 A13709
 RC 3405-1



Unit RC 100	COM 2601/MODEM INTERFACE	BSC 16
Dwg. No. A13709	V35 RECEIVER/TRANSMITTER	POS. 7
	RC 3405-1	4-5

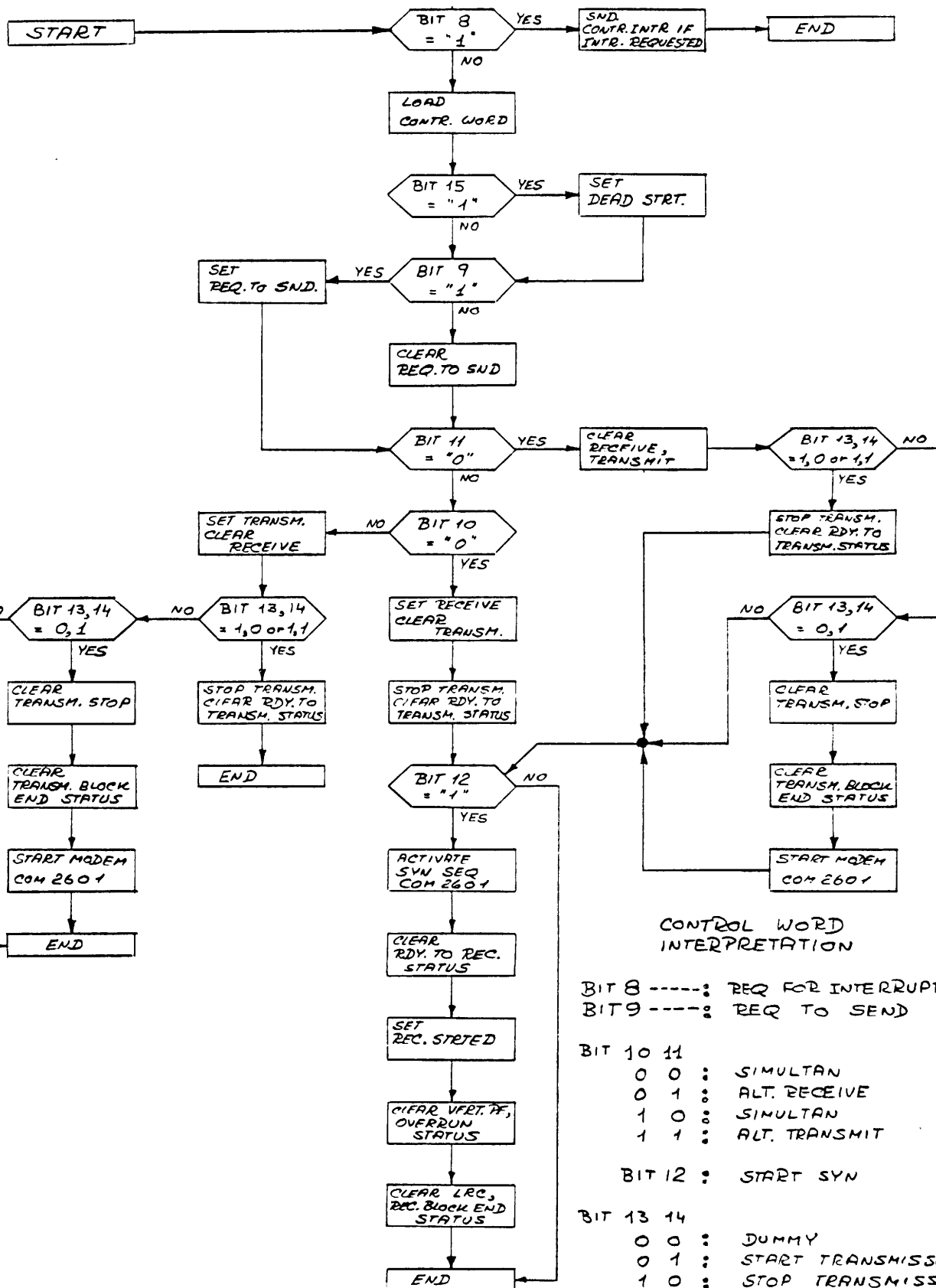
14

1- GEN COM

Unit
BSC 100Dwg. No.
A13710

COM 2601 / MODEM INTERFACE

V24 RECEIVERS / TRANSMITTER
PC 3405 1BSC 17
POS 7
5-5



CONTROL WORD INTERPRETATION

BIT 8 -----: REQ FOR INTERRUPT
 BIT 9 -----: REQ TO SEND

BIT 10 11
 0 0 : SIMULTAN
 0 1 : ALT. RECEIVE
 1 0 : SIMULTAN
 1 1 : ALT. TRANSMIT

BIT 12 : START SYN

BIT 13 14
 0 0 : DUMMY
 0 1 : START TRANSMISSION
 1 0 : STOP TRANSMISSION
 1 1 : —

BIT 15 -----: DEAD START

Unit
BSC 100

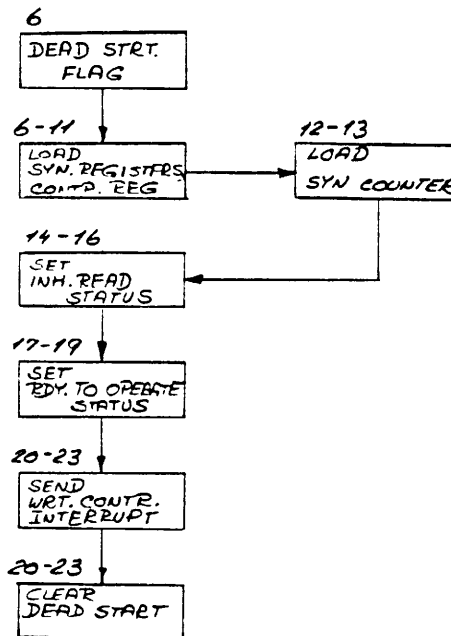
Dwg. No.

A12190

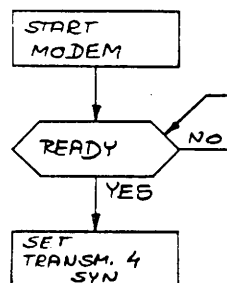
WRITE CONTROL FLOW
 F1

DEAD STRT. SEQ
BYM 100

INSTRUCTION
ADDRESS IN ROS A
XX-XX



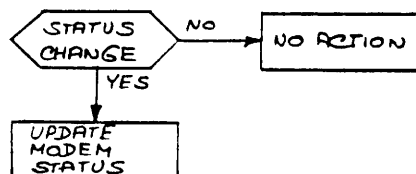
START MODEM
MODEM INTERFACE



READY ==

MODEM STRT = 1 &
RDY. FOR SENDING = 1 &
DATA SET RDY.

MODEM STATUS



MODEM STATUS ==

DATA SET RDY
RDY. FOR SENDING
DATA CARRIER DET.

DEAD STRT, START MODEM & MODEM STATUS
FLOW
F2

Dwg. No.

due to ECN

Replaces Dwg. No.

Design Check

Dwg. Office

Drawn by

Designed by V/H
746321

Unit
PC 100
Dwg. No.
A 12 191

AIS REG. CENTRALEN

Designed by V.H.
740321

Drawn by

Dwg. Office

Design Check

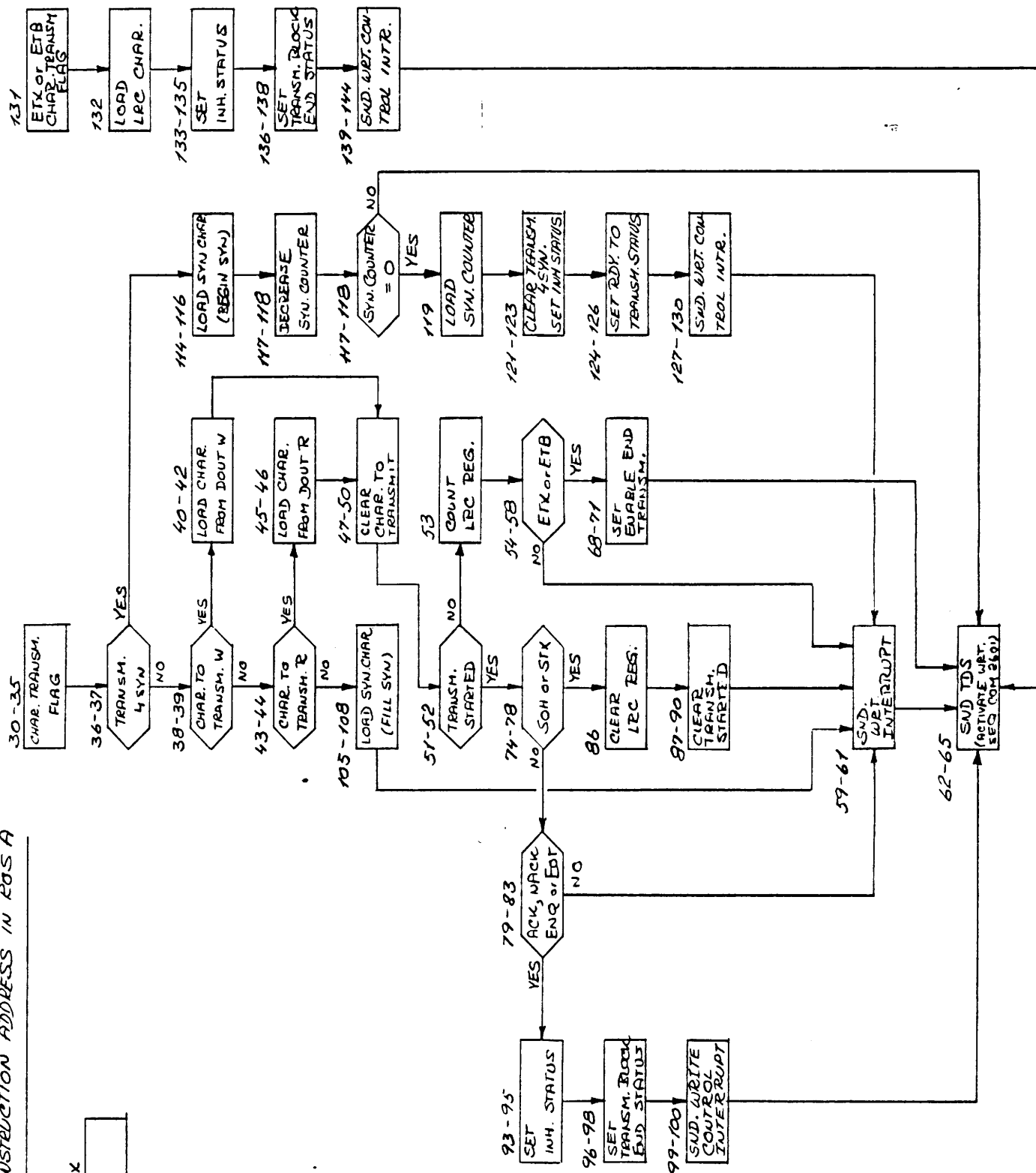
Replaces Dwg. No.

due to E.C.N.

Replaces by Dwg. No.

INSTRUCTION ADDRESS IN RAS A

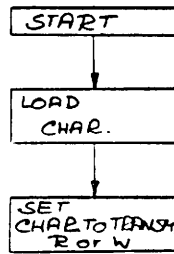
XX-XX

TRANSMIT FLOW
F3Unit
PSC 100

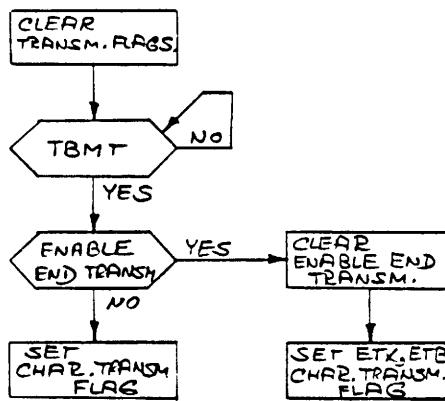
Dwg. No.

A12192

WRITE DATA CHANNEL RC 3500



WRITE SEQUENCE COM 2601



Dwg. No.

due to ECN

Replaces Dwg. No.

Design Check

Dwg. Office

Drawn by

Designed by WJ
740321

A/S REGENT NTRALEN

Unit
BSC 100
Dwg. No.
A12193

WRITE DATA CHANNEL, WRITE SEQUENCE FLOW
F4

AIS REGNE TRALEN

Designed by VH 740830

Drawn by

Dwg. Office C 761217

Design Check

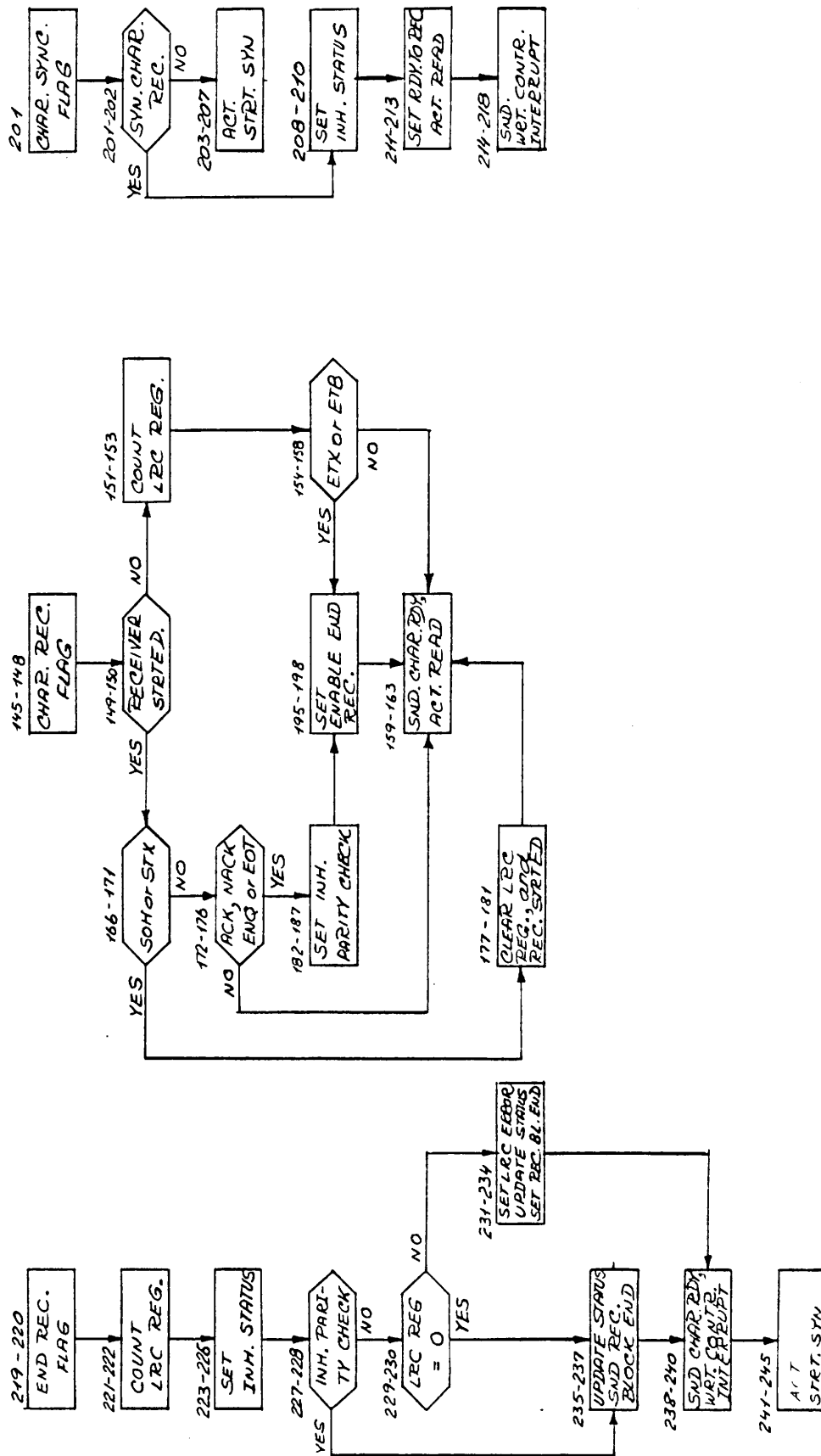
Replaces Dwg. No.

due to ECN

Replaces Dwg. No.

XX-XX

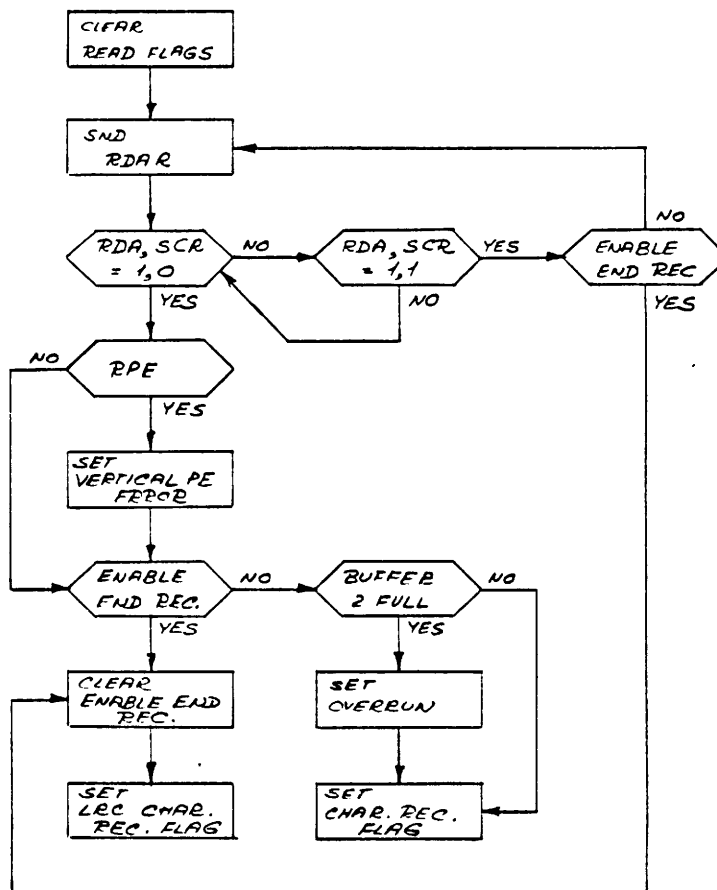
INSTRUCTION ADDRESS IN ROS A



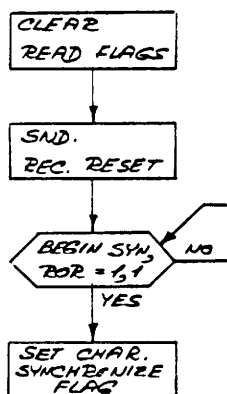
RECEIVE FLOW
F5

Unit
BSC 100
Dwg. No.
A12194

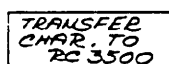
ACT. READ
COM 2601



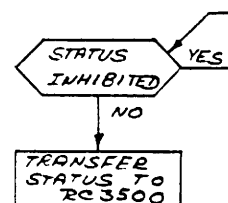
ACT. SYN.
COM 2601



READ DATA
RC 3500



READ STATUS
RC 3500



Unit
BSC 100
Dwg. No.
A12196

ACT READ, ACT SYN, READ DATA & READ STATUS
FLOW
F6

Replaces Dwg. No.

due to ECN

Replaces Dwg. No.

Design Check

Dwg. Office

Drawn by

Designed by VH
740322

A/S REG. CENTRALEN

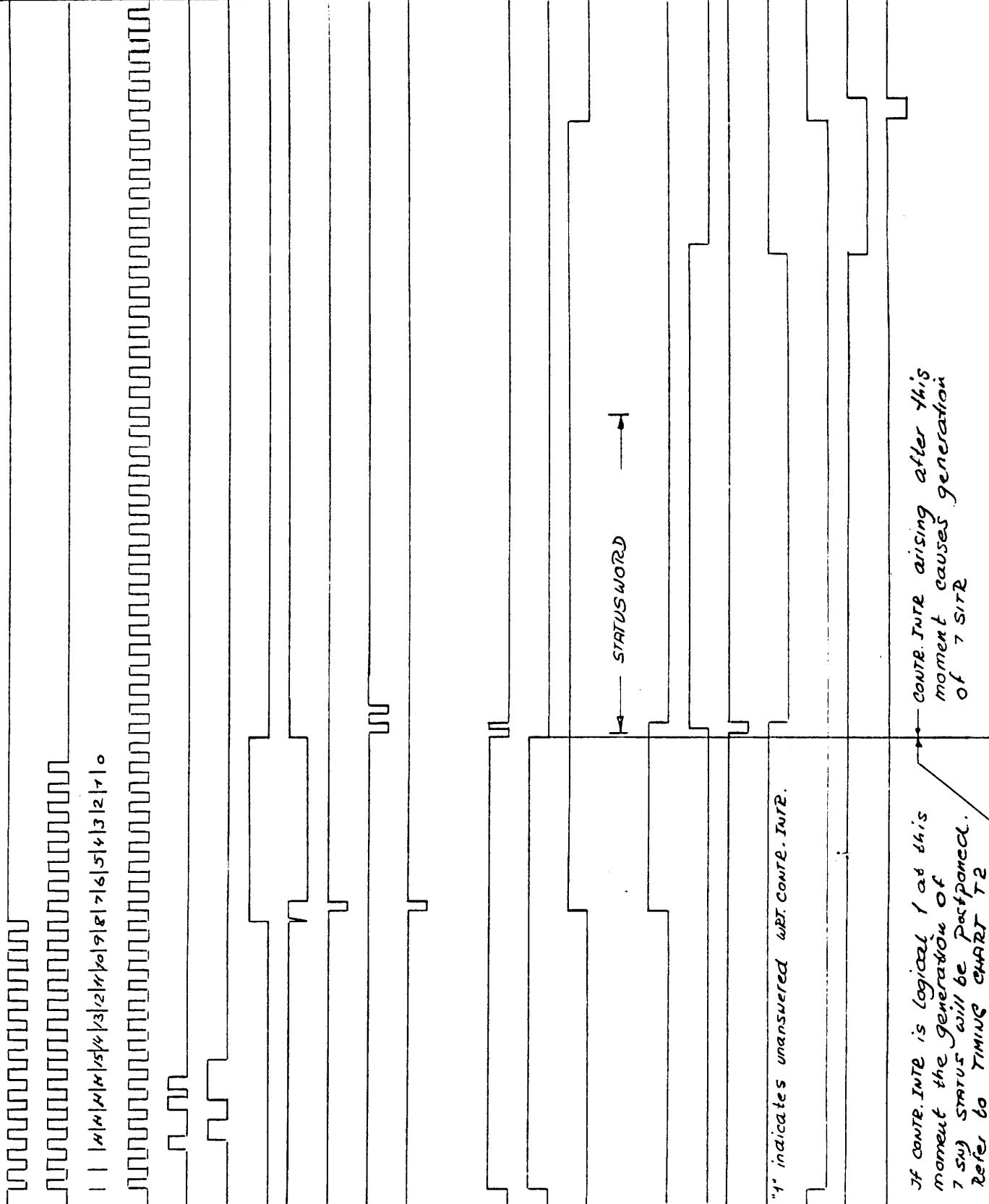
A/S REG	INTRALEN	Designed by	Drawn by	Dwg. Office	Design Check	Replaces Dwg. No.	due to ECN	Repl. Dwg. No.
		740204						

Unit	BSC 100
Dwg. No.	A12196

- 6 5KK 7CLOCK OUT
- 2 5N CLOCK OUT
- 1 5433 CLOCK IN
- 2 5M DATA OUT
- 6 5-73 DOUT 8
- 6 5LL HOUT 3
- 3 JC45-6 7SYNC.
- 6 JC39-9 7DOUT EDH
- 6 JC9-7 7END
- 6 5MM89 7READ STATUS
- 6 JC30-8 DEVSEL.A!
(CONTR INTR & STATUS)
- 6 JC31-13 DEVSEL.A
- 6 JC31-5 DEVSEL.B
- 11 6V40 7DATA IN
- 11 6HH86 STATUS
- 11 6V43 CONTR. INTR
- 11 6GG85 7SND. STATUS
- 11 6X INTR. REQ
- 6 5JJ83 7DEVSEL.C
- 11 6Y 7STORE INTR
- 11 6Z39 7S/TR

READ STATUS response to a previous generated CONTR. INTR. A new CONTR INTR. occurs during the transfer of the STATUS WORD.

TIMING CHART T1



Unit	Signal	Timing Description
BSC 100	5KX 7 CLOCK OUT	
	5N 7 CLOCK OUT	
	5H33 7 CLOCK IN	
	5M 7 DATA OUT	
	5-93 7 DOUT 8	
	5LL 7 HOUT 3	
	JC15-6 7 SYNC	
	JC39-9 7 DATA OUT READY	
	JC39-7 7 END	
	5MM87 7 READ STATUS	
	JC34-13 7 DEVICE SEL A	
	6U40 7 DATA IN	
	JC31-5 7 DEVICE SEL B	
	6HH86 7 STATUS	
	6U43 7 CONTR INTR	
	6G285 7 SYNC STATUS	
	6X 7 INTR REQUESTED	
	5JJ83 7 DEV SEL C	
	JC38-14 7 INTR EN	
	6Z39 7 S1TR	

READ STATUS response to a previous generated CONTR INTR. A new CONTR INTR occurs during the transfer of STATUS WORD.

TIMING CHART T2

-J4 CONTR INTR arises after this moment refer to TIMING CHART T1

A/S REGN. CENTRALEN	Designed by <i>1/H</i>	Drawn by	Dwg. Office	Design Check	Replaces Dwg. No.	due to ECN	Replaces	Dwg. No.
	<i>740131</i>							

Unit
PSC 100
Dwg. No.
A12198

6 5Kk 7 clock out

2 5N clock out

1 5H33 clock in

WRITE CONTR.

2 5M DATA OUT

6 5-93 DOUT 8

6 5LL HOUT 3

6 JC15-6 7SYNC

6 JC39-9 7DATA OUT
READY

6 JC29-B 7CLEAR DOUT

6 5MM 90 7LRT. CONTR

6 JC31-13 DEVICE SELA

11 6V43 CONTR. INTR

11 JC19-8 7INTR EN.

11 6Y 7STORE INTR

11 6X INTR REQUESTED

11 6239 7S1TR

11 JC36-B CONTR. INTR.

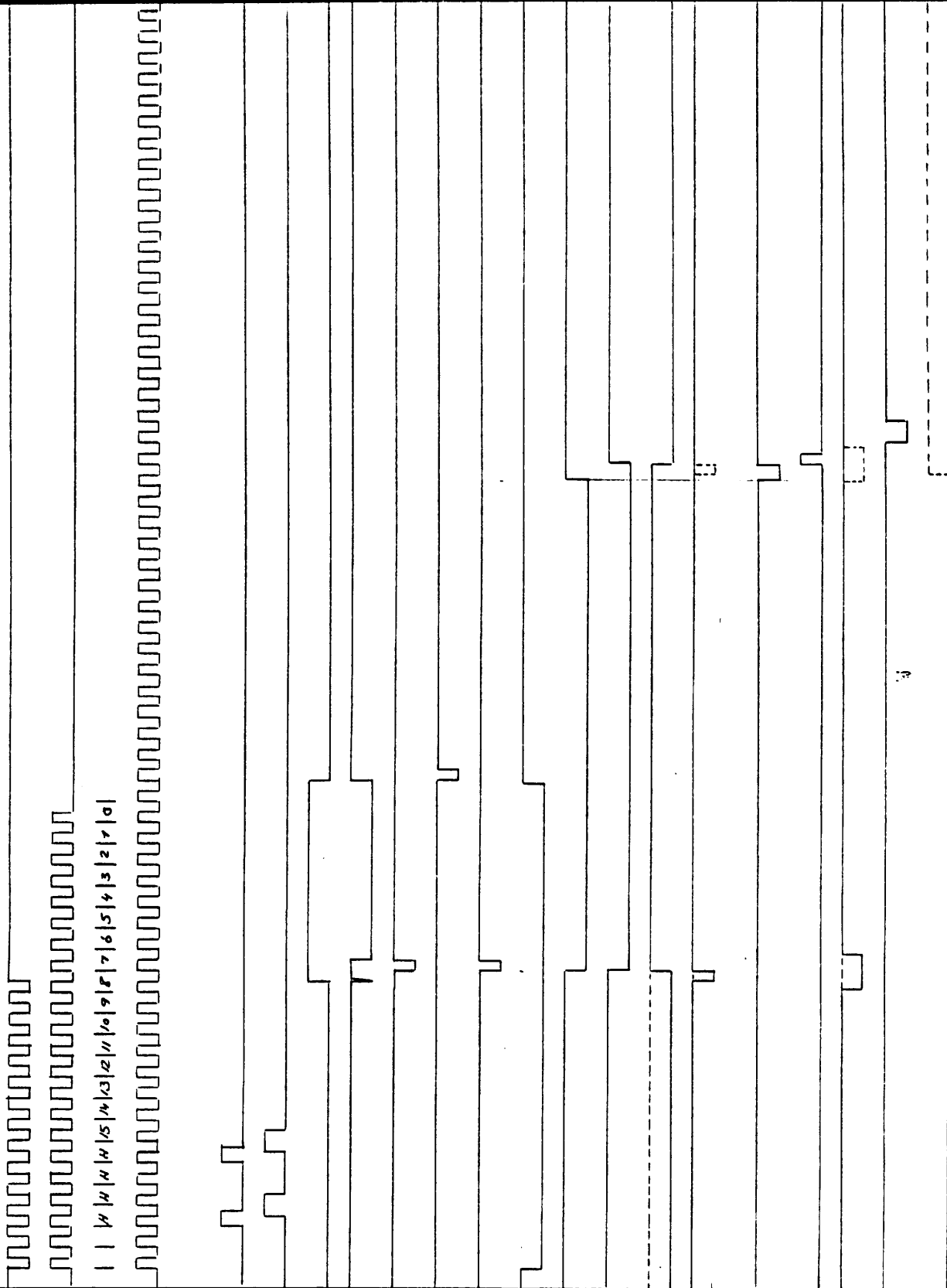
ONLY IF DOUT 8 = "1" and INTR REQ = "1"

WRITE CONTROL (CONTROL CHANNEL)
TIMING DIAGRAM T3

A/S REGN CENTRALEN	Designed by	Drawn by	Dwg. Office	Design Check	Replaces Dwg. No.	due to ECN	Replaces Dwg. No.
	VH 740214						

Unit	BSC 100
Dwg. No.	A12199

5	5EE	7CLOCK OUT
2	5L	CLOCK OUT
1	5H33	CLOCK IN
2	5K	DATA OUT
5	JC32-3	DOUT 8
5	5DD	HOUT 3
5	JC24-6	7SYNC
5	JC35-9	7DOUT 2DV
5	JC35-7	7END
5	5-49	7READ DATA
5	5FF51	7DESEL A
5	5GG50	7DESEL. B
12	6CC	SHIFT INHIBIT
12	6DD	BUF 1 FULL
9	JC14-7	7LOAD BF 1
12	JC22-6	7(BUFF 1 FULL & DESEL & 7SHIFT INH)
12	6BB	BF 1-2
9	6M	7CHAR. RDY
12	6FF37	7SITR
10	JC3-7	OVERRUN



READ DATA (READ CHANNEL)
TIMING DIAGRAM T4

A/S REG
Unit
BSC 100
Dwg. No.
112200

Designed by UM
740214

Drawn by

Dwg. Office

Design Check

Replaces Dwg. No.

due to ECN

Rep. Dwg. No.

4 52 7 CLOC4 OUT W

1 56 CLOC4 OUT W

1 5H33 CLOC4 IN

1 5F DATA OUT W

4 Jc16-3 DOUT B W

4 5P HOUT 3 W

4 JC21-8 7 SYNC W

4 Jc19-9 7 DOUT RDY W

4 JC19-7 7 END W

4 5S42 7 DET. DATA W

15 7-41 7 CHAR TO TRANSMIT W

12 6EE36 SITR W

WRITE DATA (WRITE CHANNEL)
TIMING DIAGRAM. 75

min. 4μS

AIS REGISTRATION
Designed by V/H
74 12 16
Drawn by
74 12 16

Dwg. Office
761217 LLM
Design Check
Replaces Dwg. No.
due to ECN
Rep.
Dwg. No.

Unit	COM 2601	TRANSM. BUFFER	SYN 1	SYN 2	SYN 3	SYN 4	STX	CHAR. 1	CHAR. 2	CHAR. 3	ETX	LRC	FILL SYN	FILL SYN
Dwg. No.	761217	761217	761217	761217	761217	761217	761217	761217	761217	761217	761217	761217	761217	761217
A12201	16 7NN 76	TRANSM. DATA	FILL SYN	SYN 1	SYN 2	SYN 3	SYN 4	STX	CHAR. 1	CHAR. 2	CHAR. 3	ETX	LRC	FILL SYN
	10 6K15	TRANSM. STOP												
	17 JC4-5	STOP												
	17 7J	TRANSMIT 4 SYN.												
	13 7AA	TBM T												
	14 7FF	7 CHAR. TF.												
	14 7GG	7 ETX, ETB TF												
	BYM 100	SYN COUNTER												
	9 6S20	7 SUD TDS												
	9 JCH-12	7 INH. STATUS												
	10 JC3-9	7 READY TO TRANSM. STATUS												
	9 JCH-7	7 SUD WRT. CONTR. INTR.												
	9 6P	7 SUD WRT. INTERRUPT												
	15 7-41	CHAR TO TRANSM. W												
	10 6G65	TRANSM. STARTED												
	14 JC26-5	END TRANSMIT												
	10 JC3-4	7 TRANSM BLOCK END STATUS												

COM 2601 TRANSMIT TIMING
T6

A/S REG. CENTRALEN

Designed by WH
7505 13

Drawn by

Dwg. Office
761217 LLM

Design Check

Replaces Dwg. No.
A12202

due to ECN

Replaces Dwg. No.

SIR

BSC 100

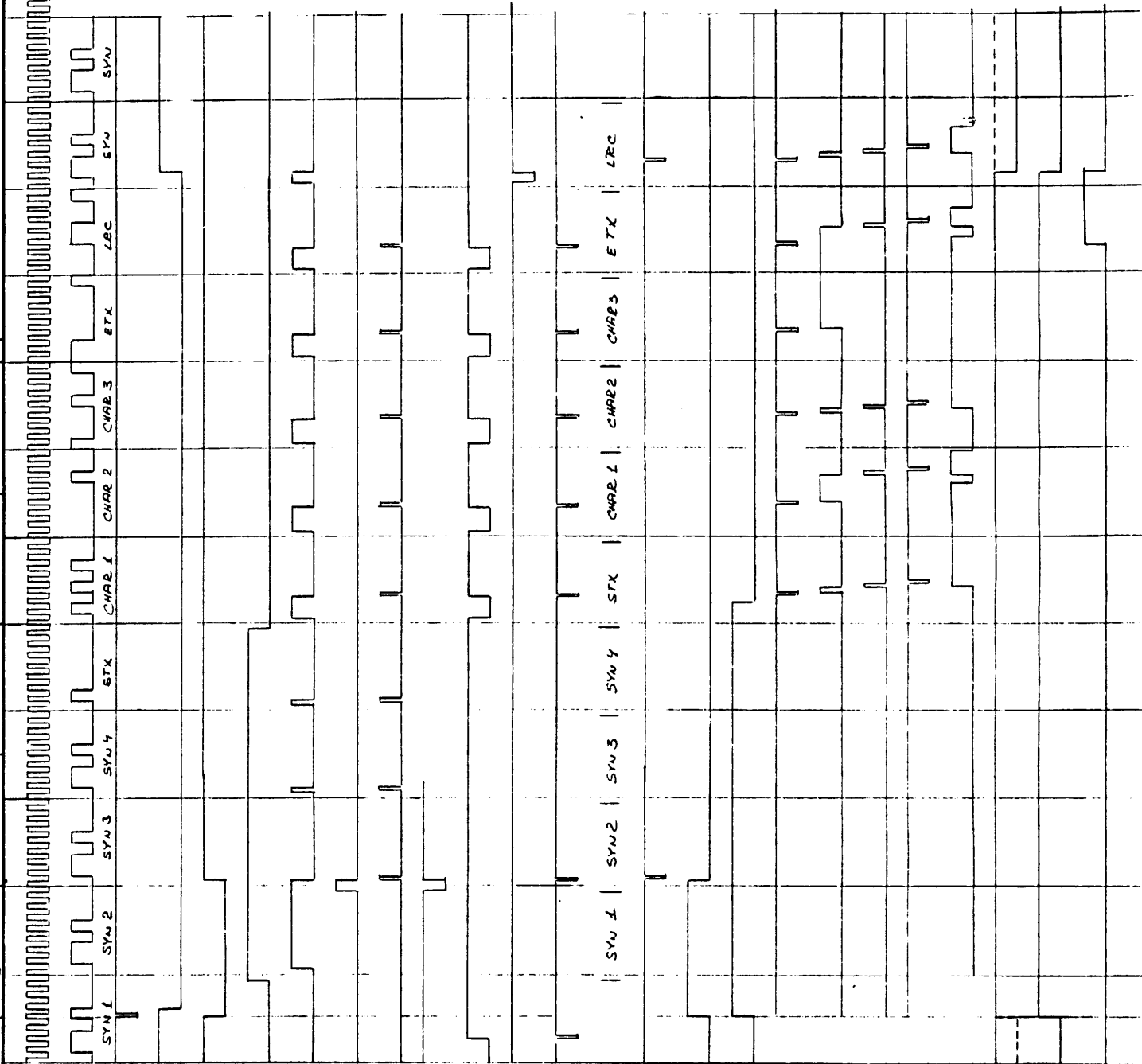
Dwg. No.

A12202

COM 2601 RECEIVE TIMING

T7

16	7 KK	PCP	
16	7 LL	RSI	
8	JC36-5	7 ACT SYN C	
13	7 F	REC. RESET	
10	6 J9	7 BEGIN SYN	
13	7 V	SCR	
13	7 X	RDA	
13	7 Y	ROR	
13	7 G	RJAR	
14	7 HH	7 CHAR SF	
14	7 BB	7 CHAR RF	
14	7 CC	7 LRC IF	
9	6 NH	7 ACT READ	
13	7 L-U	RD 1-8	
9	JCH-7	7 SUB. NET. CONTR. INTR.	
10	JC1-4	7 RDY. TO REC. STATUS	
10	6 H66	REC. STARTED.	
9	6 M47	7 CHAR. RDY	
12	6 J48	BUFF. 1 FULL	
12	6 BB	BF 1 → 2	
12	6 FF37	7 SITE Z	
12	6 CC	SHIFT INH	
10	JC4-6	7 OVERR. STATUS	
10	JC4-14	7 REC BL END STATUS	
13	JC4-9	END REC	



ROS A ADDR	INSTRUCTION MNEMONIC	INSTRUCTION CODE 0 1 2 3 4 5 6 7	INSTR. CODE 0-3 4-7	COMMENTS	COMMENTS
0	brt 7		14 15	check FLAG condition	: START
1	0		0 0	jump to START	
2	ldo 15		1 15	WR := FLAG PRIORITY	
3	ldo 9		1 9	WR := Ros B (WR)	
4	str 1		2 1	RW1 := WR	
5	brt 7		15 5	jump to address in RW1	
6	ldo 8		1 8	WR := CONTROL CHAR	: DEAD START
7		0100 0000	4 0	CONTROL CHAR	
8	act 5		15 13	SND CS	
9	ldo 8		1 8	WR := SYN CHAR	
10		0001 0110	1 6	SYN CHAR	
11	act 3		15 11	SND TSS/RSS	
12	snw 12		12 12	RW12 := 4 ~ LOAD SYN COUNT.	
13	4		0 4		
14	ldo 8		1 8	WR := INH STATUS	
15	0,3,0		1 8		
16	act 0		15 8		
17	ldo 8		1 8	WR := SET RDY TO OPERATE	
18	0,0,3		3		
19	act 1		15 9		
20	ldo 8		1 8	WR := SND WRT. CONTR. INTR, CLEAR DEAD STRT.	
21	0,4,1		2 1		
22	act 0		15 8		
23	cls 0		13 0		
24	brt 0		15 4	hop till START	
25	act 7		15 15		
26	act 7		15 15		
27	act 7		15 15		
28	act 7		15 15		
29	act 7		15 15		
Unit BSC 100		START & DEAD START			1-1
Dwg. No. A25546		BYM 100 PROGRAM P1			

ROS A ADDR	INSTRUCTION MNEUMONIC	INSTRUCTION CODE 0 1 2 3 4 5 6 7						INSTR. CODE 0-3 4-7	COMMENTS	COMMENTS
30	SNW 1							12 1		: CHAR TRM. FLAG
31								2 15	CLEAR CHAR. TO TRM. adr 47	
32	SNW 2							12 2		
33								3 11	SNJ. WRT. INTR. adr. 59	
34	SNW 3							12 3		
35								3 14	SNJ TDS adr. 62	
36	brc 1							14 9	1: Jump to BEGIN SYN adr. 174 0: 38	: TRM 4 SYN COND.
37		1 1 1						7 2		
38	brc 4								1: Jump to CHAR. TO TRM. adr. 43 0: 40	: CHAR. TO TRM. W COND.
39		1	1	1 1				2 11		
40	ldo 13							1 13	WR := CHAR. L JOUT W	
41	str 14							2 14	RW 14 : CHARACTER	
42	brc 1							15 5	Jump to CL. CHAR TO TRM. adr 47	
43	brc 5							14 13	1: Jump to FILL SYN adr. 105 0: 45	: CHAR. TO TRM. R COND.
44		1 1						6 9		
45	ldo 12							1 12	WR := CHAR. L JOUT R	
46	str 14							2 14	RW 14 := CHARACTER	
47	ldo 8							1 8	WR := CLEAR CHAR. TO TRM.	: CLEAR CHAR. TO TRM.
48	o, o, 2							0 2		
49	act 0							15 8		
50	lds 14							0 14	FETCH CHAR. TO WR	
51	brc 0							14 8	1: Jump to SOH/STX COND 74 0: 53	: TRM. STARTED COND.
52		1		1 1				4 10		
53	les 15							8 15	RW 15 := new LRC REG, count LRC	
54	SNW 13							12 13	RW 13 := 0 0 0 0 0 0 0 1	: ETX, ETB COND.
55								0 1		
56	ldo 9							1 9	WR := ROS B (WR)	
57	bes 13							10 13	= : Jump to ETX, ETB adr 68 #: 59	
58		1						4 4		
59	ldo 8							1 8	WR := SNJ WRT. INTR.	: SNJ. WRT INTR.
60	o, 1, 0							0 8		
61	act 0							15 8		
62	lds 14							0 14	FETCH CHAR. to WR	: SNJ TDS
63	act 2							15 10	SNJ TDS	

Unit
BSC 100

Dwg. No.
A23321

TRANSMIT
BYM 100 PROGRAM P2

1-4

ROS A ADDR	INSTRUCTION MNEEMONIC	INSTRUCTION CODE 0 1 2 3 4 5 6 7	INSTR. CODE 0-3 4-7	COMMENTS	COMMENTS
64	CLS 0		13 0		
65	brt 0		15 4	Jump to START adr. 0	
66	act 7		15 15		
67	act 7		15 15		
68	ldo 8		1 8	WR := EN. END TRANSMIT	: ETK, ETB
69	0,0,1		0 1		
70	act 1		15 9		
71	brt 3		15 7	Jump to SND TDS adr 62	
72	act 7		15 15		
73	act 7		15 15		
74	snw 13		12 13	RW 13 := binary 2	: SOH, STX COND.
75			0 2		
76	ldo 9		1 9	WR := ROS B (WR)	
77	bes 13		10 13	= : Jump to SOH/STX adr 86 # : 79	
78		1 1 1 1	5 6		
79	snw 13		12 13	RW 13 := binary 4	: ACK, NACK END, EOT COND.
80			0 4		
81	bes 13		10 13	= : Jump to ACK, NACK, ENQ, EOT 93 # : 83	
82		1 1 1 1 1	5 13		
83	brt 2		15 6	Jump to SND, WRT, INTR. adr 59	
84	act 7		15 15		
85	act 7		15 15		
86	cls 15		13 15	RW 15 := 0, LRC REG. = 0	: SOH, STX
87	ldo 8		1 8	WR := CLEAR TRM. STARTED	
88	0,0,4		0 4		
89	act 1		15 9		
90	brt 2		15 6	Jump to SND, WRT, INTR. adr 59	
91	act 7		15 15		
92	act 7		15 15		
93	ldo 8		1 8	WR := INHIBIT STATUS	: ACK, NACK ENQ, EOT
94	0,3,0		1 8		
95	act 0		15 8		
96	ldo 8		1 8	WR := SET TRM. BLOCK END	
97	0,0,3		0 3		

ROS A ADDR	INSTRUCTION MNEMONIC	INSTRUCTION CODE						INSTR. CODE	COMMENTS	COMMENTS
		0	1	2	3	4	5	6		
98	act 0							15 8		
99	ldo 8							1 8	WR := SND. WRT. CONTR. INTR.	
100	0,4,0							2 0		
101	act 0							15 8		
102	brc 3							15 7	Jump to SND. TDS adr 62	
103	act 7							15 15		
104	act 7							15 15		
105	ldo 8							1 8	WR := SYN CHAR	2 FILL SYN
106		1		1	1			1 6	SYN CHAR	
107	str 14							2 14	RW 14 := SYN CHAR	
108	brc 2							15 6	Jump to SND. WRT. INTR. adr 59	
109	act 7							15 15		
110	act 7							15 15		
111	act 7							15 15		
112	act 7							15 15		
113	act 7							15 15		
114	ldo 8							1 8	WR := SYN CHAR.	2 BEGIN SYN
115		1		1	1			1 6	SYN CHAR.	
116	str 14							2 14	RW 14 := SYN CHAR.	
117	deb 12							3 12	≠ 0 : Jump to SND TDS adr 62 = 0 : 119	
118		1	1	1	1			3 14		
119	snw 12							12 12	RW 12 := binary 4	2 BEGIN SYN TRANS-MITTED
120								0 4		
121	ldo 8							1 8	WR := INHIBIT STATUS CLEAR TRM. 4 SYN.	
122	0,3,4							1 12		
123	act 0							15 8		
124	ldo 8							1 8	WR := SET RDY. TO TRM.	
125	0,0,5							0 5		
126	act 1							15 9		
127	ldo 8							1 8	WR := SND. WRT. CONTR. INTR.	
128	0,4,0							2 0		
129	act 0							15 8		
130	brc 2							15 6	Jump to SND. WRT. INTR. adr 59	

RC doc. V8 140
 Unit
 BSC 100
 Dwg. No.
 123324
 Designed by
 VH
 741219
 Drawn by
 Dwg. Office
 Design Check
 Replaces Dwg. No.
 due to ECN
 Rep.
 Dwg. No.

POS A ADDR	INSTRUCTION MNEMONIC	INSTRUCTION CODE						INSTR. CODE	COMMENTS	COMMENTS
		0	1	2	3	4	5			
131	lds 15							0 15	WR := RW 15 (LRC)	: ETX, ETB CHAR. TRANSMIT FLAG
132	str 14							2 14	RW 14 := WR (LRC)	
133	ldo 8							1 8	WR := INHIBIT STATUS	
134	o, 3, 0							1 8		
135	act 0							15 8		
136	ldo 8							1 8	WR := SET TRM. BLOCK END	
137	o, 9, 3							0 3		
138	act 0							15 8		
139	ldo 8							1 8	WR: SND WRT. CONTR. INTR.	
140	o, 4, 0							2 0		
141	act 0							15 8		
142	snw 3							12 3		
143			1	1	1	1		3 14	SND TDS adr. 62	
144	brt 3							15 7	Jump to SND TDS adr 62	

TRANSMIT
 BYM 100 PROGRAM P2

4-4

ROS A ADDR	INSTRUCTION MNEMONIC	INSTRUCTION CODE 0 1 2 3 4 5 6 7						INSTR. CODE 0-3 4-7	COMMENTS	COMMENTS
145	snw 1							12 1	RW1 := ACT. READ SEQ adr. 159	: CHAR. REC FLAG
146	159	1	1	1	1	1		9 15		
147	snw 2							12 2	RW2 := SNJ. CHAR. RDY. adr 238	
148	238	1	1	1	1	1		14 14		
149	brc 2							14 10	1: Jump to SOH/STX COND. 166	: REC STARTED COND.
150	166	1	1			1		10 6	0: 151	
151	ldo 14							1 14	WR := CHAR. fra COM 2601	
152	les 10							8 10	RW10 := new LRC REG. COUNT LRC	
153	str 14							2 14	RW14 := CHAR. STORE CHAR.	
154	snw 13							12 13	RW13 := binary 1	: ETX, ETB COND.
155								0 1		
156	ldo 9							1 9	WR := ROS B (WR)	
157	bes 13							10 13	=: Jump to ETX, ETB adr 195	
158	195	1	1					12 3	#: 159	
159	ldo 8							1 8	WR := ACT READ SEQ, SNJ CHAR RDY. (NO EOI)	: ACT. READ SEQ.
160	2, 7, 5							11 13		
161	act 0							15 8		
162	cls 0							13 0		
163	brc 0							15 4	Jump to START adr 0	
164	act 7							15 15		
165	act 7							15 15		
166	ldo 14							1 14	WR := CHAR. from COM 2601	: SOH, STX COND.
167	snw 13							12 13	RW13 := binary 2	
168								0 2		
169	ldo 9							1 9	WR := ROS B (WR)	
170	bes 13							10 13	=: Jump to SOH, STX adr. 177	
171	177	1	1					1 11	#: 172	
172	snw 13							12 13	RW13 := binary 4	: ACK, NACK, ENQ, EOT COND.
173								0 4		
174	bes 13							10 13	=: Jump to ACK, NACK, ENQ, EOT 182	
175	182	1	1					1 11	#: 176	
176	brc 1							15 5	Jump to ACT. READ SEQ adr 159	

Unit
 BSC 100
 Dwg. No.
 A23325

RECEIVE
 BYM 100 PROGRAM P3

1-4

ROS A ADDR	INSTRUCTION MNEUMONIC	INSTRUCTION CODE 0 1 2 3 4 5 6 7						INSTR. CODE 0-3 4-7	COMMENTS	COMMENTS
177	CLS 10							13 10	RW 10 := 0, CLEAR LRC REG.	: SON, STX
178	LDO 8							1 8	WR := CLEAR REC. STARTED	
179	0,9,6							0 6		
180	act 1							15 9		
181	brc 1							15 5	Jump to ACT. READ SEQ adr 159	
182	LDO 8							1 8	WR := SET INH. P CHECK	: ACK, NACK ENQ, EOT
183	0,6,0							3 0		
184	act 0							15 8		
185	SNW 0							12 0		
186	195	11				11		12 3		
187	brc 0							15 4	Jump to ETX, ETB adr. 195	
188	act 7							15 15		
189	LDO 8							1 8	WR := UPDATE STATUS	
190	0,0,2							0 2		
191	act 1							15 9		
192	brc 2							15 6	Jump to SND. CHAR. RLY. adr 238	
193	act 7							15 15		
194	act 7							15 15		
195	LDO 8							1 8	WR := SET EN. END REC.	: ETX, ETB
196	0,0,7							0 7		
197	act 1							15 9		
198	brc 1							15 5	Jump to ACT. READ SEQ adr. 159	
199	act 7							15 15		
200	act 7							15 15		
201	brc 3							14 11	1: Jump to adr. 202 0: 203	: CHAR. SYN FLAG
202	208	11				1		13 0		
203	LDO 8							1 8	WR := ACT SYN	
204	0,0,6							0 6		
205	act 0							15 8		
206	CLS 0							13 0		
207	brc 0							15 4	Jump to START adr. 0	
208	LDO 8							1 8	WR := INHIBIT STATUS	
209	0,3,0							1 8		
210	act 0							15 8		

Unit
 BSC 100
 Dwg. No.
 123326

RECEIVE
 BYM 100 PROGRAM P3

2-4

AC 900 V8 140
 A/S REG
 Designed by **W**
 Drawn by
 Dwg. Office
 Design Check
 Replaces Dwg. No.
 due to ECN
 Rep. by Dwg. No.

ROS A ADDR	INSTRUCTION MNEMONIC	INSTRUCTION CODE 0 1 2 3 4 5 6 7				INSTR. CODE 0-3 4-7	COMMENTS	COMMENTS
211	ldo 8					1 8	WR := SET RDY. TO REC., ACT. READ SEQ.	
212	0,7,7					3 15		
213	act 0					15 8		
214	ldo 8					1 8	WR := SND WRT. CONTR. INTR	
215	0,4,0					2 0		
216	act 0					15 8		
217	els 0					13 0		
218	brc 0					15 4	Jump to START adr. 0	
219	snw 2					12 2	RW2 := SND. CHAR. RDY adr. 238	: END REC. FLAG
220	238	111	111			14 14		
221	ldo 14					1 14	WR := CHAR. TRA COM 2601	
222	les 10					8 10	RW10 := new LRC REC, COUNT LRC	
223	ldo 8					1 8	WR := INH. STATUS	
224	0,3,0					1 8		
225	act 0					15 8		
226	ldo 0					1 0	WR := 0	
227	brc 6					14 14	1: Jump to NO LRC ERROR 235 0: 229	
228	235	111	111			14 11		
229	bes 10					10 10	=: Jump to NO LRC ERROR 235 #: :	
230	235	111	111			14 11		
231	ldo 8					1 8	WR := LRC ERROR, UPDATE STATUS, SET REC. BLOCK END	
232	1,0,2					4 2		
233	act 1					15 9		
234	brc 2					15 6	Jump to SND. CHAR. RDY. adr. 238	
235	ldo 8					1 8	WR := UPDATE STATUS, SET REC. BLOCK END	: NO LRC ERROR
236	0,9,2					0 2		
237	act 1					15 9		
238	ldo 8					1 8	WR := SND CHAR. RDY (EOI), SND WRT. CONTR. INTR.	: SND CHAR RDY
239	1,4,5					6 5		
240	act 0					15 8		

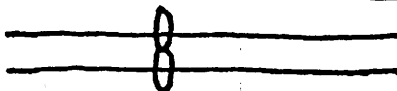
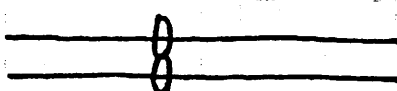
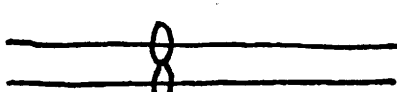
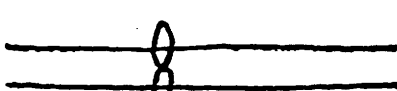
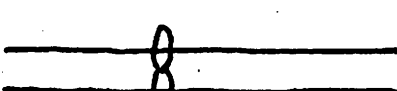
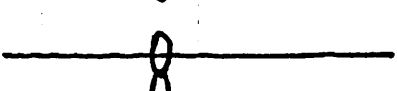
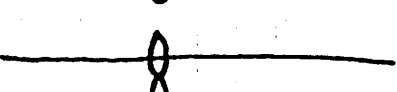
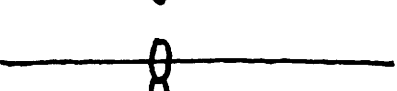
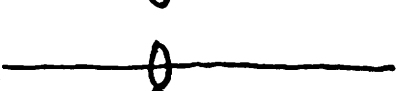
Unit BSC 100	RECEIVE	3-4
Dwg. No. A23327	BYM 100 PROGRAM P3	

A/S REG	CENTRALEN	Designed by	74129	Drawn by	Dwg. Office	Design Check	Replaces Dwg. No.	due to ECN	Replaces Dwg. No.

ROS A ADDR	INSTRUCTION MNEUMONIC	INSTRUCTION CODE						INSTR. CODE	COMMENTS	COMMENTS
		0	1	2	3	4	5			
241	ldo 8							1 8	WR := ACT. SYN	
242	09,6							0 6		
243	act 0							15 8		
244	cls 0							13 0		
245	brc 0							15 4	Jump to START adr. 0	
246	act 7							15 15		
247	act 7							15 15		
248	act 7							15 15		
249	act 7							15 15		
250	act 7							15 15		
251	act 7							15 15		
252	act 7							15 15		
253	act 7							15 15		
254	act 7							15 15		
255	act 7							15 15		
Unit BSC 100 Dwg. No. A23328										RECEIVED BYM 100 PROGRAM P3 4-4

ROS B ADDR	INSTRUCTION MNEEMONIC	INSTRUCTION CODE 0 1 2 3 4 5 6 7	INSTR. CODE 0-3 4-7	COMMENTS	COMMENTS
1	2	1	0 2	SOH	
2	2	1	0 2	STX	
3	1	1	0 1	ETX	
4	4	1	0 4	EOT	
5	4	1	0 4	ENQ	
6	4	1	0 4	ACK	
21	4	1	0 4	NACK	
23	1	1	0 1	ETB	
129	131	1	11 8 3	ETX, ETB TRM. FLAG ADR.	
130	219	11 1 1 11	13 11	LRC CHAR REC FLAG ADR.	
131	219	11 1 1 11	13 11	LRC CHAR REC FLAG ADR.	
132	145	1 1	9 1	CHAR. REC. FLAG ADR.	
133	201	11	12 9	CHAR. SYN. FLAG ADR.	
134	6	11	0 6	HEAD STRT. FLAG ADR.	
135	30	1 11 1	1 14	CHAR. TRM FLAG ADR.	
Unit BSC 100 Dwg. No. A23329 ROS B CONTENTS P4 1-1					

CONNECTOR I : CANON DBC 25P
 CONNECTOR II : MRAC-34P-GN-HD-VL
 CABLE : 10x2x0.25mm Dätwyler G51/2783

I	WIRE	II
17 19	 gul hvid	V X
2 11	 grøn hvid	P S
8 5	 brun hvid	F D
15 18	 grø hvid	Y a
3 12	 blå / hvid hvid	R T
6 7	 blå / gul hvid	E B
4 7	 blå hvid	C B
1 13	 blå / grøn hvid	A g
24 25	 blå / brun hvid	U W

A/S REGNECENTRALEN

Designed by

76/2/16 VH

Drawn by

Dwg. Office Check

Design Check

Replaces Dwg. No.

due to ECN

Replaced by Dwg. No.

Unit

Dwg. No.

A24795

Kabeltype 511 / 12 m
 CBL 511

Replaced by Dwg. No.
 Due to ECN
 Replaces Dwg. No.
 Design Check
 Dwg Office Check
 Designed by
 730907 KNEH 730910 IGH
 A/S REG. CENTRALEN

CONNECTOR I : Canon Plug DE - 9 P

CONNECTOR II : Canon Plug DE - 9 P

CABLE : 6 x 2 x 0,25 mm² Datwyler 2783

I PIN	WIRE	II PIN
1	blå	1
2	hvid	2
3	gul	3
4	hvid	4
5		5
6	brun	6
7	hvid	7
8	grå	8
9	hvid	9
10		10
11		11
12		12
13		13
14		14
15		15
16		16
17		17
18		18
19		19
20		20
21		21
22		22
23		23
24		24
25		25

Kabeltype 410 / m
 CBL 410

Dwg. No.
 A22102

J1
ITT Cannon, type DEC - 9S

PIN	GEN. ADR	SIGNAL NAME
1	3 5-25	CLOCK IN A WRITE
2	3 5-26	CLOCK IN B WRITE
3	3 5-28	DATA IN A WRITE
4	3 5-27	DATA IN B WRITE
5		
6		CLOCK OUT A WRITE
7		CLOCK OUT B WRITE
8		DATA OUT A WRITE
9		DATA OUT B WRITE

DBSL: 062

VH

740319

BSC 100

A23330

WRITE CHANNEL TO RC 3500

Jacklist

J1

P 2 B		ITT Cannon, type DB - 25P					
P							
PIN	I *	T *	GEN. ADR.	SIGNAL NAME		I *	P. PIN
1				4	5V +		
2					5V + sense		
3					5V ÷		
4				3	5V +		
5					5V + sense		
6					5V ÷		
7				2	5V +		
8					5V + sense		
9					5V ÷		
10				1	12V ÷		
11					12V +		
12					12V ÷		
13							
14				4	5V +		
15					5V ÷ sense		
16					5V ÷		
17				3	5V +		
18					5V ÷ sense		
19					5V ÷		
20				2	5V +		
21					5V ÷ sense		
22					5V ÷		
23				1	12V ÷		
24					12V +		
25					12V ÷		

I* : Interconnection.

T* : Twisted pairs.

Length of cable:

BSC 100

POWER PLUG

P2B -P

A23331

Pluglist

J3
ITT Cannon, type DEC - 95

PIN	GEN. ADR	SIGNAL NAME
1	3 5-17	CLOCK IN A READ
2	3 5-18	CLOCK IN B READ
3	3 5-20	DATA IN A READ
4	3 5-19	DATA IN B READ
5		
6		CLOCK OUT A READ
7		CLOCK OUT B READ
8		DATA OUT A READ
9		DATA OUT B READ

DBSL: 062

W
740319

BSC 100

READ CHANNEL TO RC 3500

J3

A23332

Jacklist

J4
ITT Cannon, type DEC - 9S

PIN	GEN. ADR.	SIGNAL NAME
1	3 5-9	CLOCK IN A CONTROL
2	3 5-10	CLOCK IN B CONTROL
3	3 5-12	DATA IN A CONTROL
4	3 5-11	DATA IN B CONTROL
5		
6		CLOCK OUT A CONTROL
7		CLOCK OUT B CONTROL
8		DATA OUT A CONTROL
9		DATA OUT B CONTROL

DBSL: 062

UH
740319

BSC 100

A23333

CONTROL CHANNEL TO RC3500

Jacklist

J 4

761217LLM

DBSL: 064

J5 ITT Cannon, type DB - 25S		
PIN	GEN. ADR.	SIGNAL NAME
1		PROTECTIVE EARTH
2	16 7-75	TRANSMITTED DATA A
3		RECEIVED DATA A
4	17 7-72	REQ TO SEND
5		READY FOR SENDING
6		DATA SET READY
7		COMMON RETURN
8		DATA CARRIER DETECTOR
9		
10		
11	16 7-76	TRANSMITTED DATA B
12		RECEIVED DATA B
13	17 7-83	-12V through 1k5
14		
15		TCP A
16		
17		RCP A
18		TCP B
19		RCP B
20		
21		
22		
23		
24		
25		

BSC 100

OUTPUT JACK TO MODEM

J5

A23334

Jacklist