

CHAPTER 5

ELECTRIC DIAGRAMS

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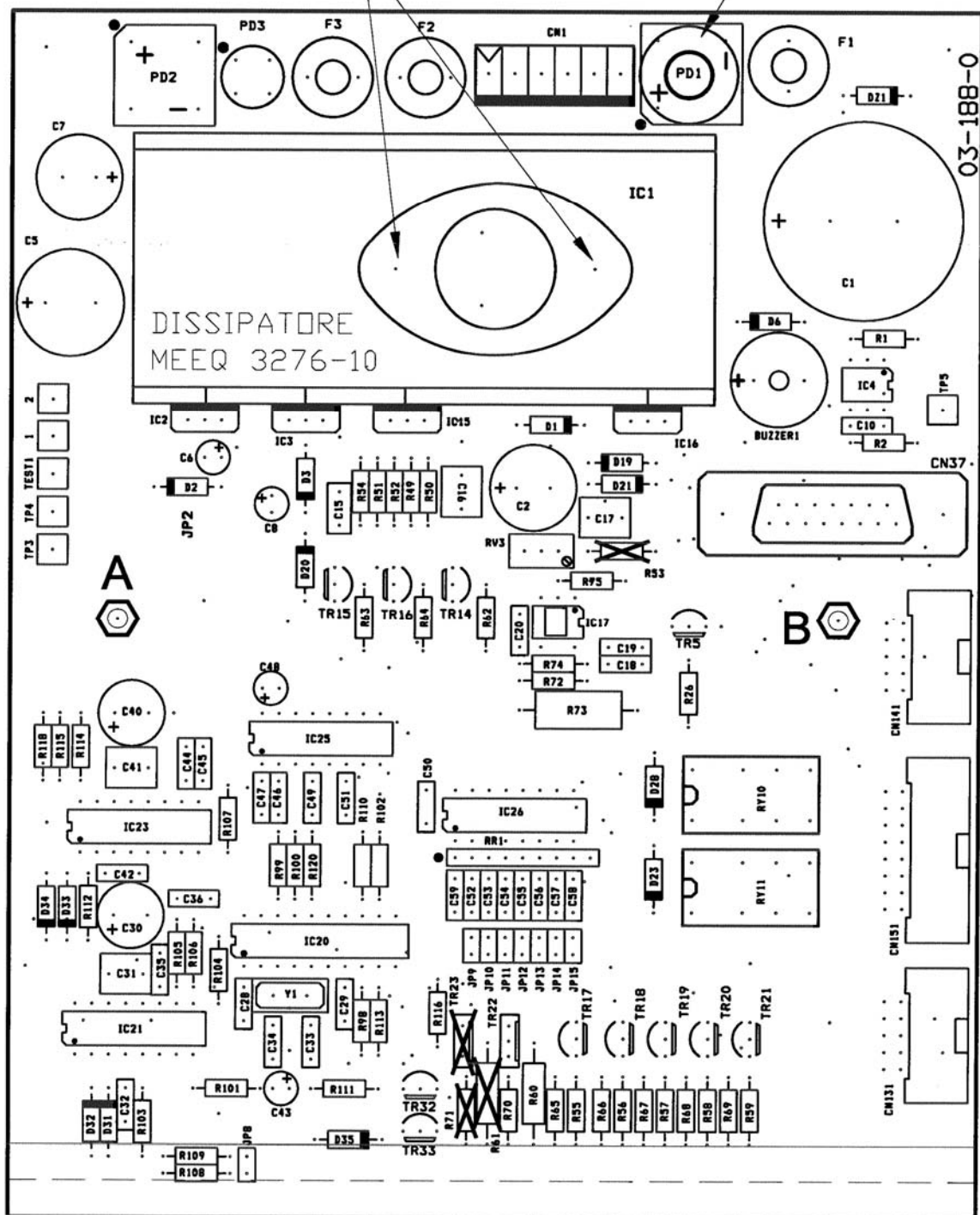
03-188 *MOTHER BOARD*

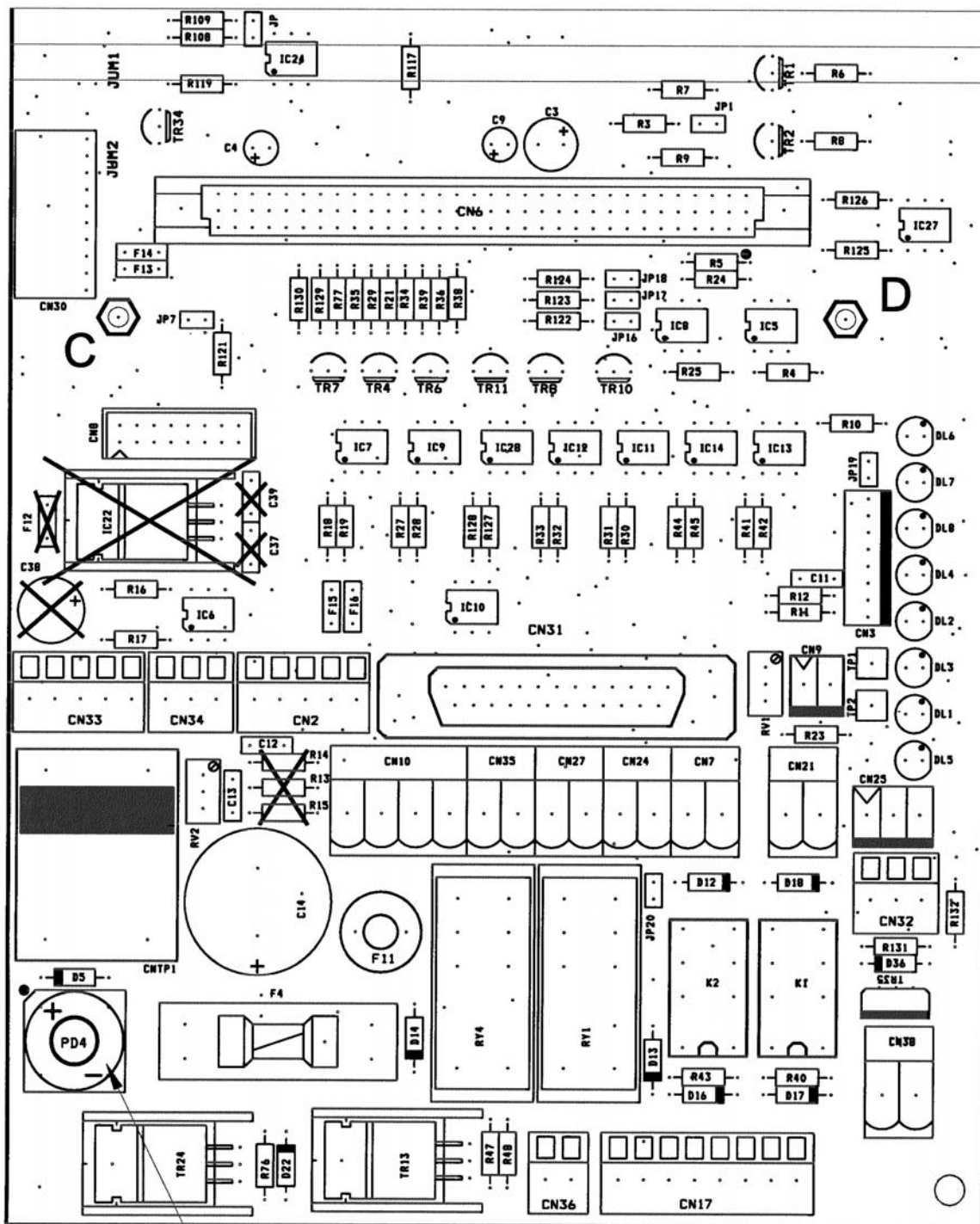
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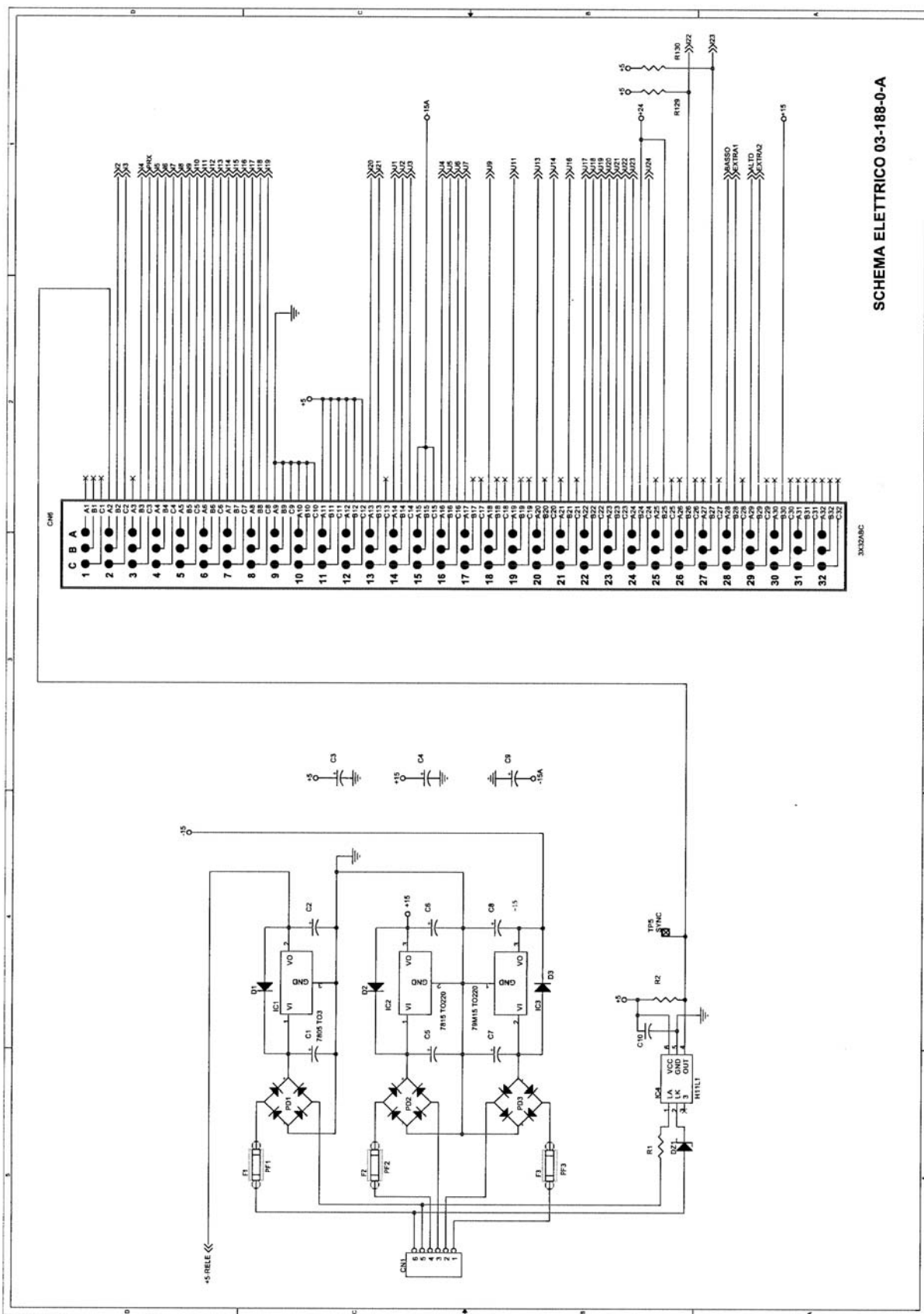
RV1 inverter Vdc sensing

Replacement:

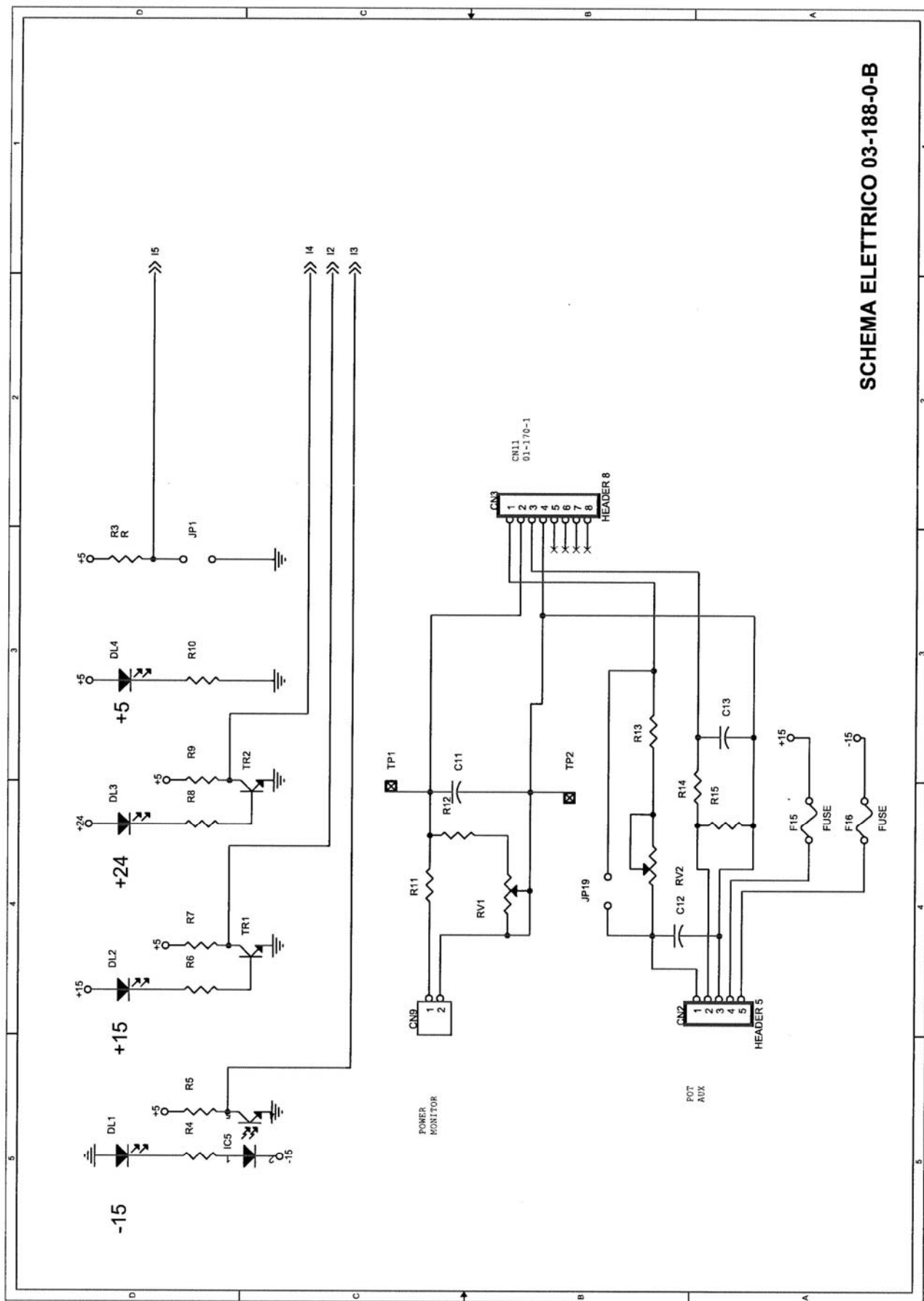
IC20 contains specific firmware



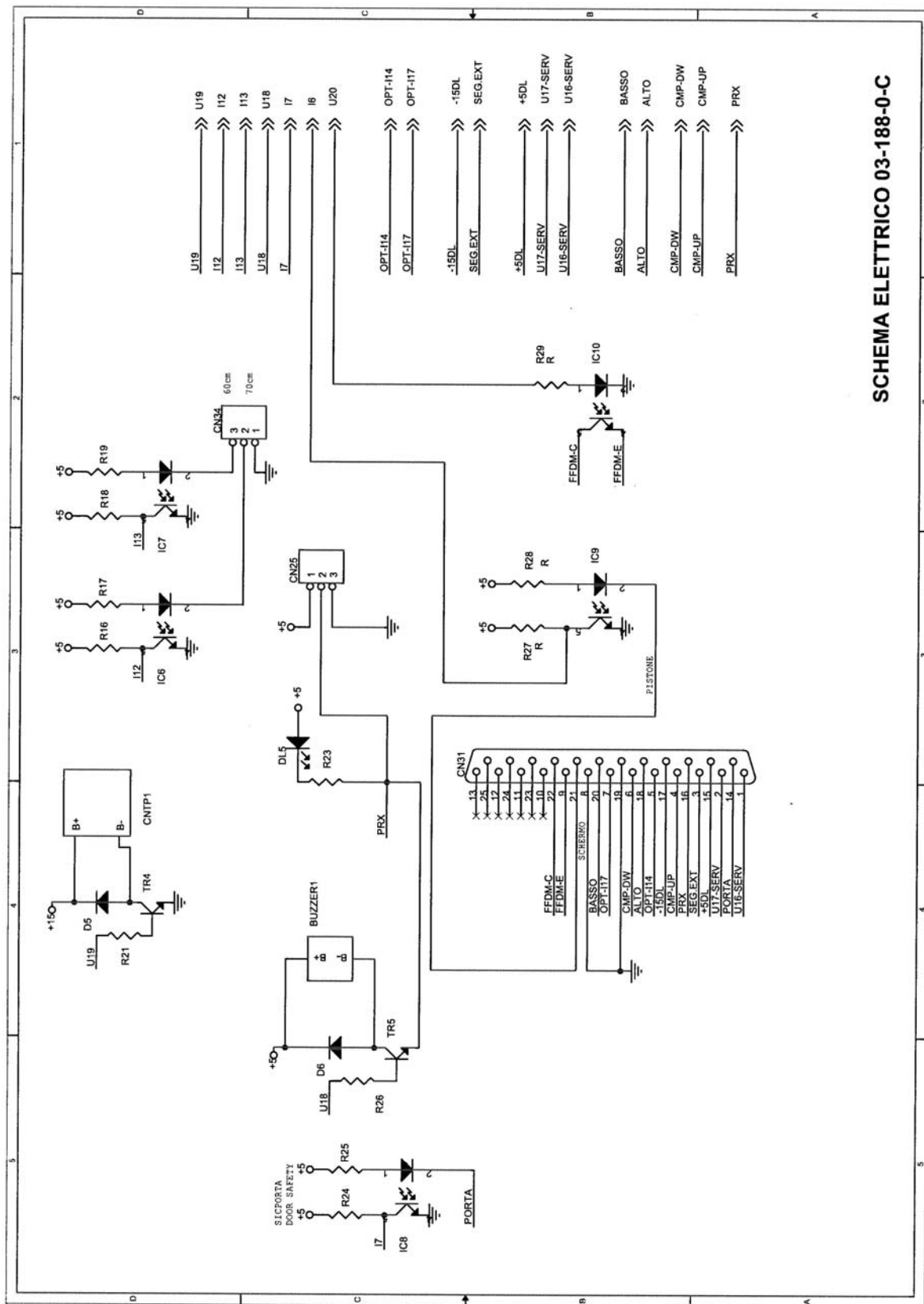


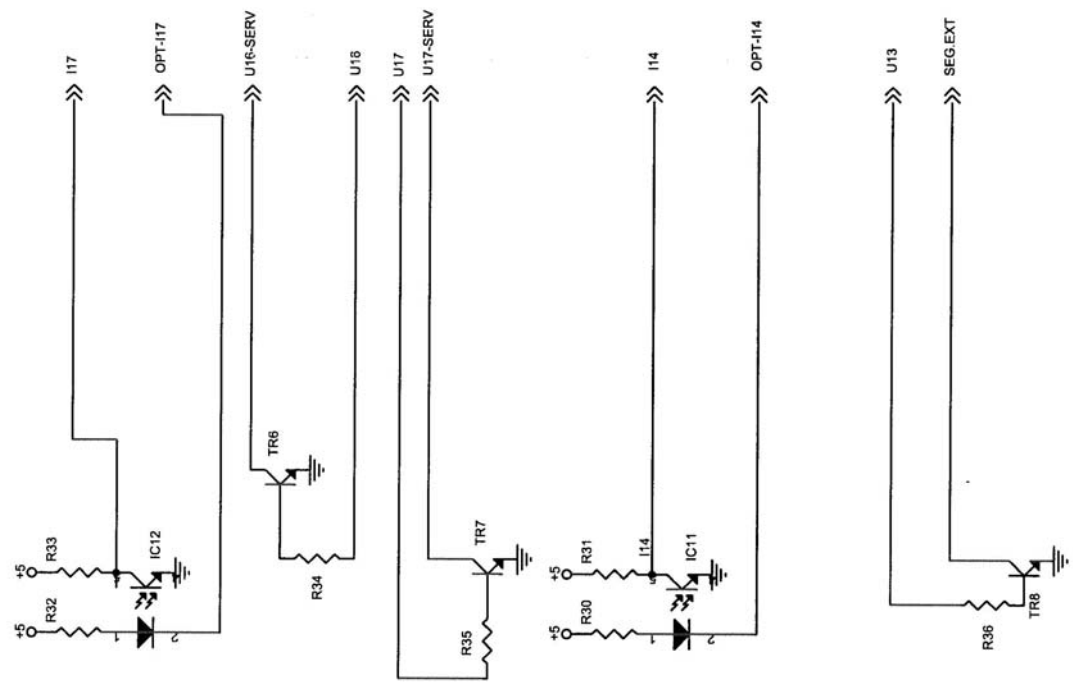


SCHEMA ELETTRICO 03-188-0-A



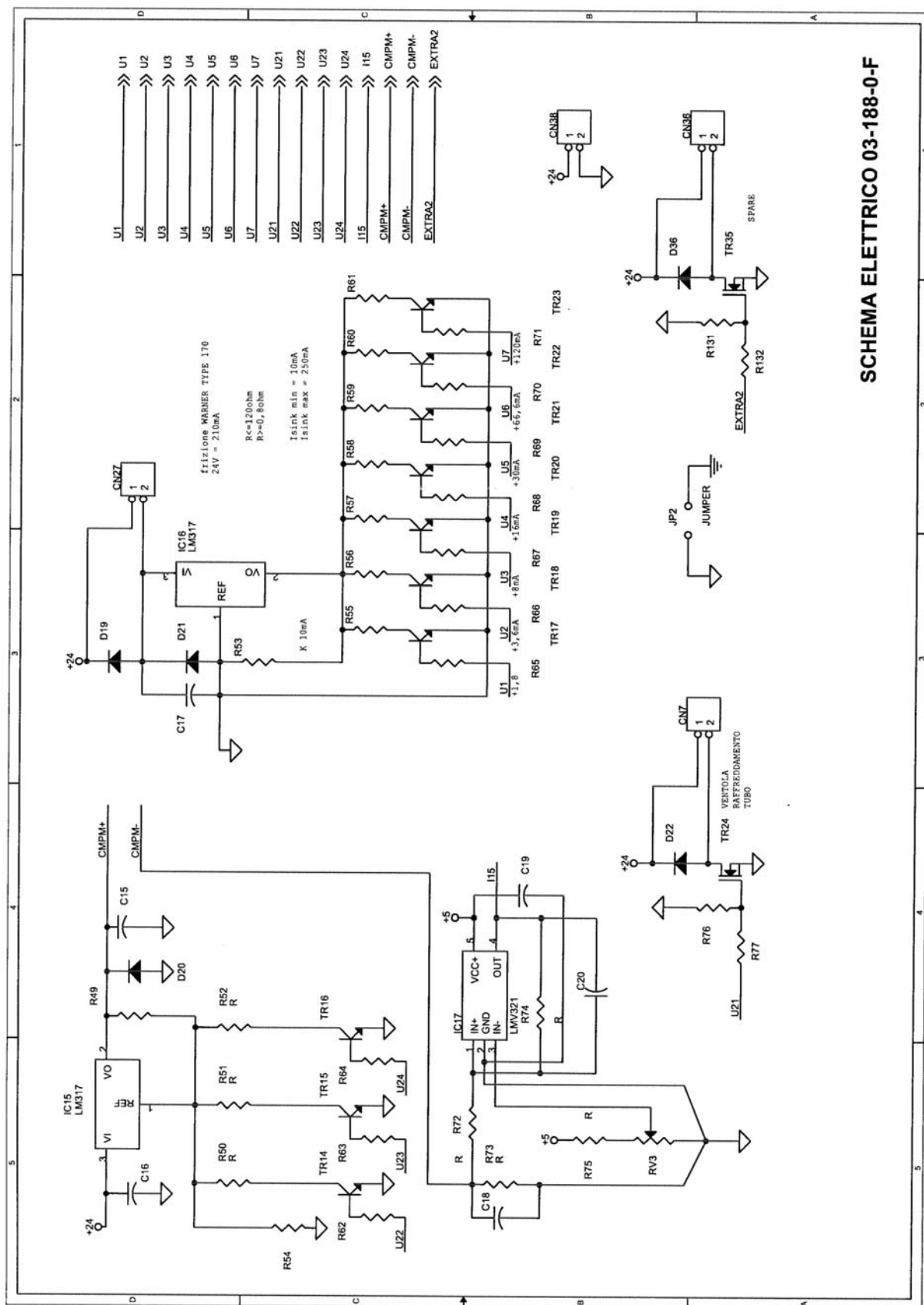
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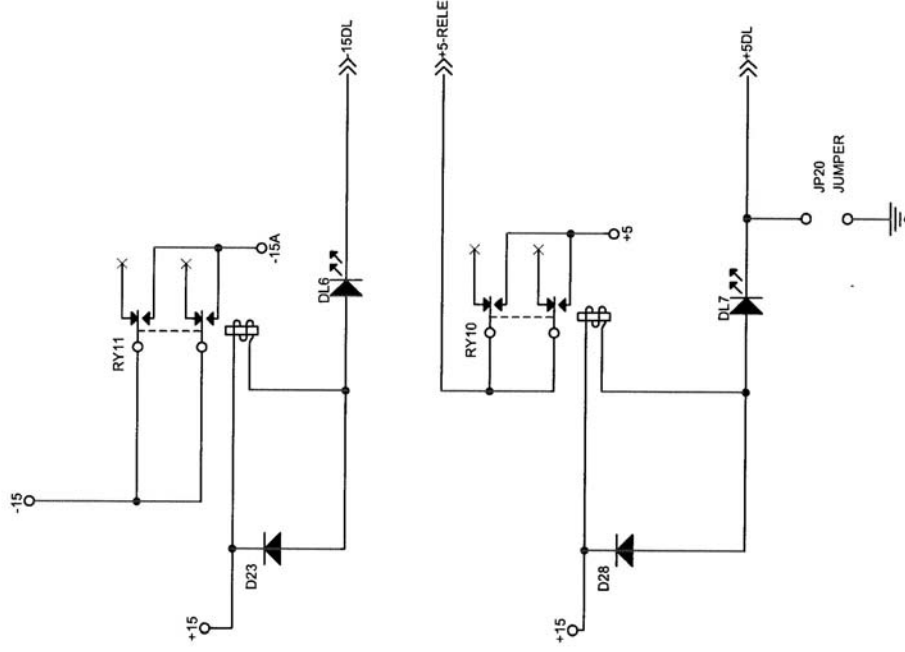


SCHEMA ELETTRICO 03-188-0-D

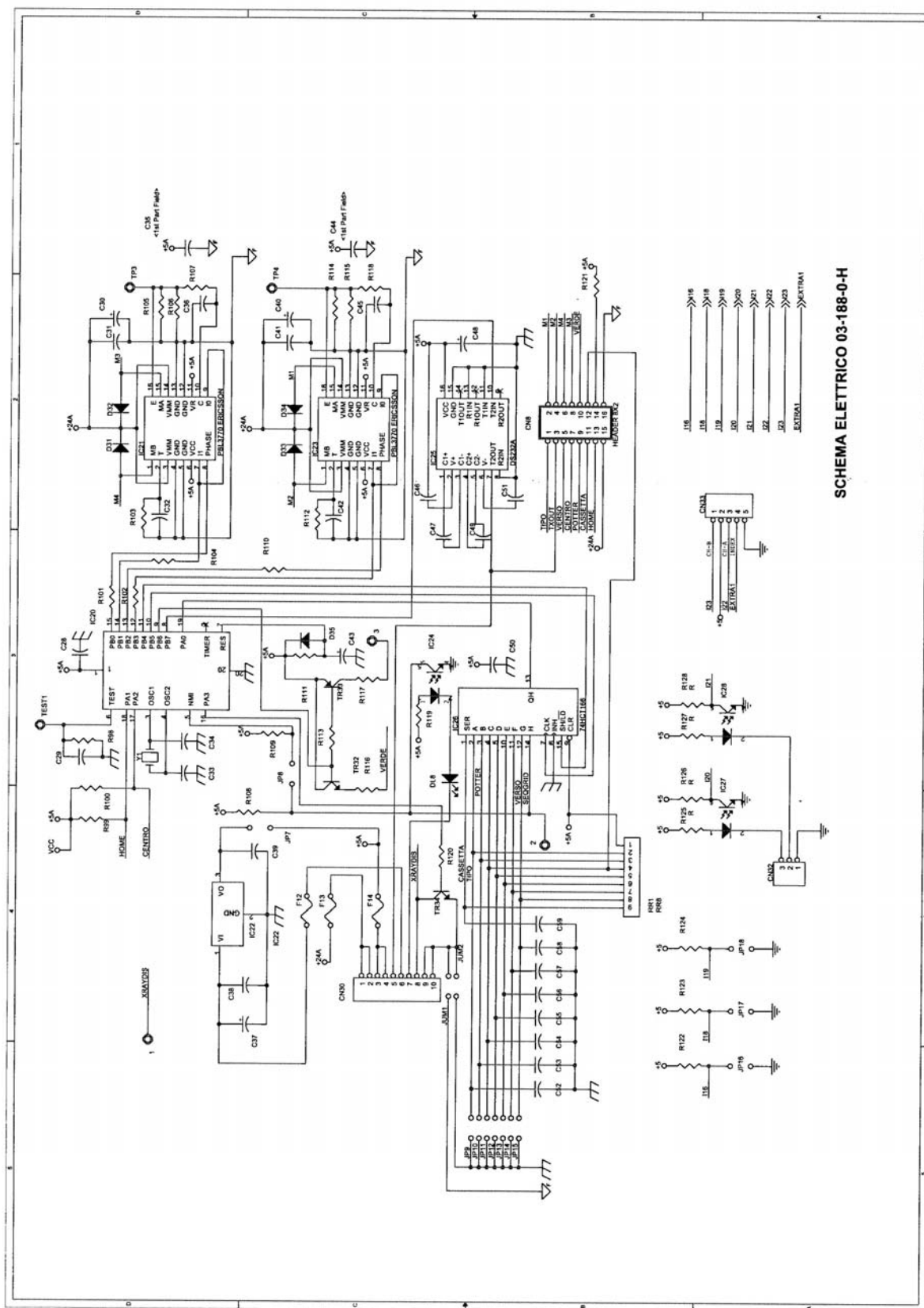




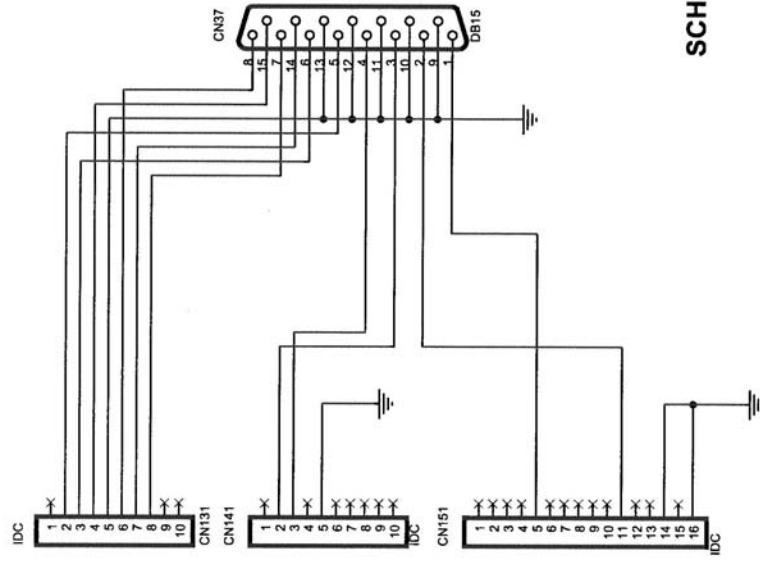
SCHEMA ELETTRICO 03-188-0-F



SCHEMA ELETTRICO 03-188-0-G



SCHEMA ELETTRICO 03-188-0-H

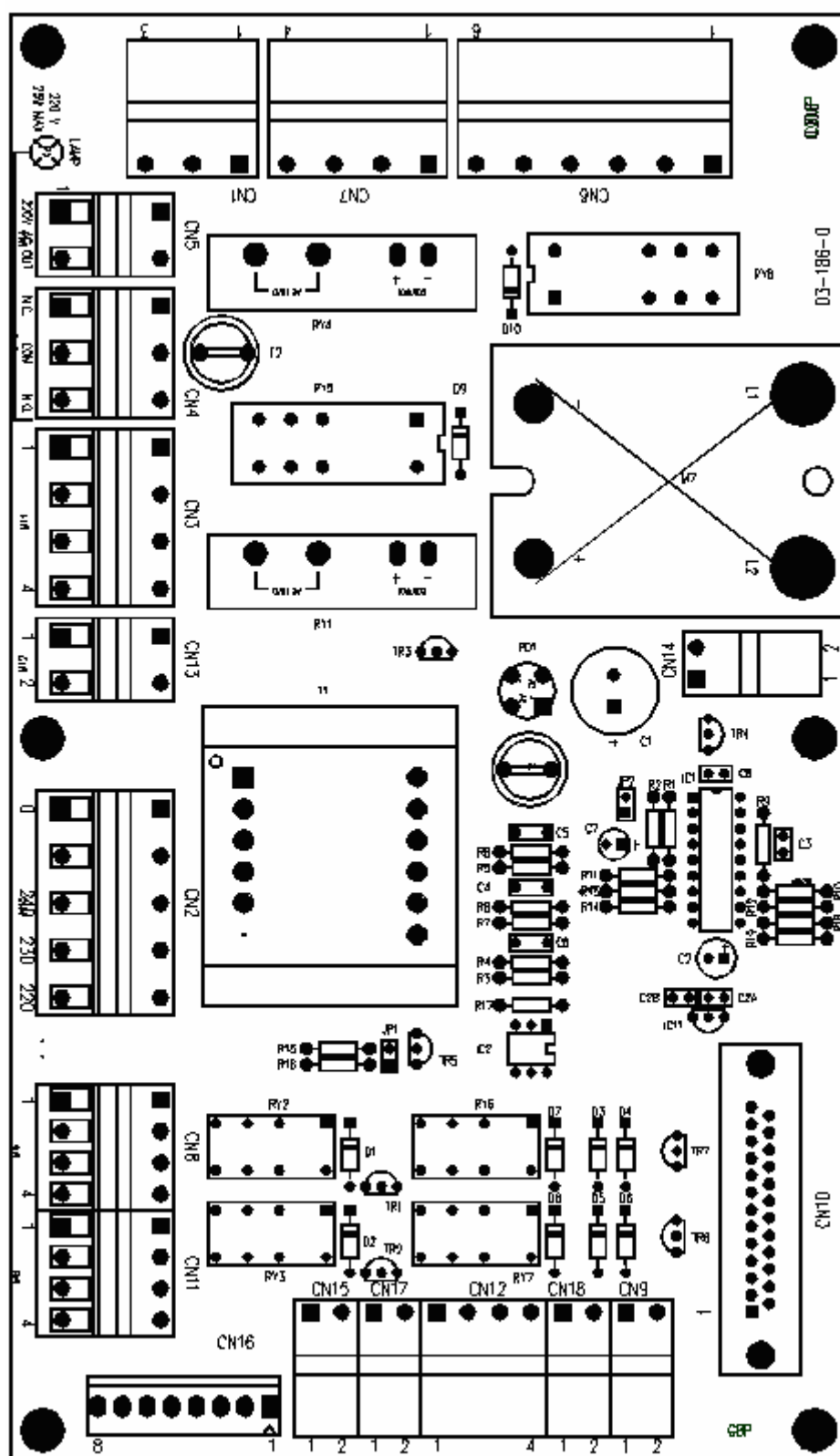


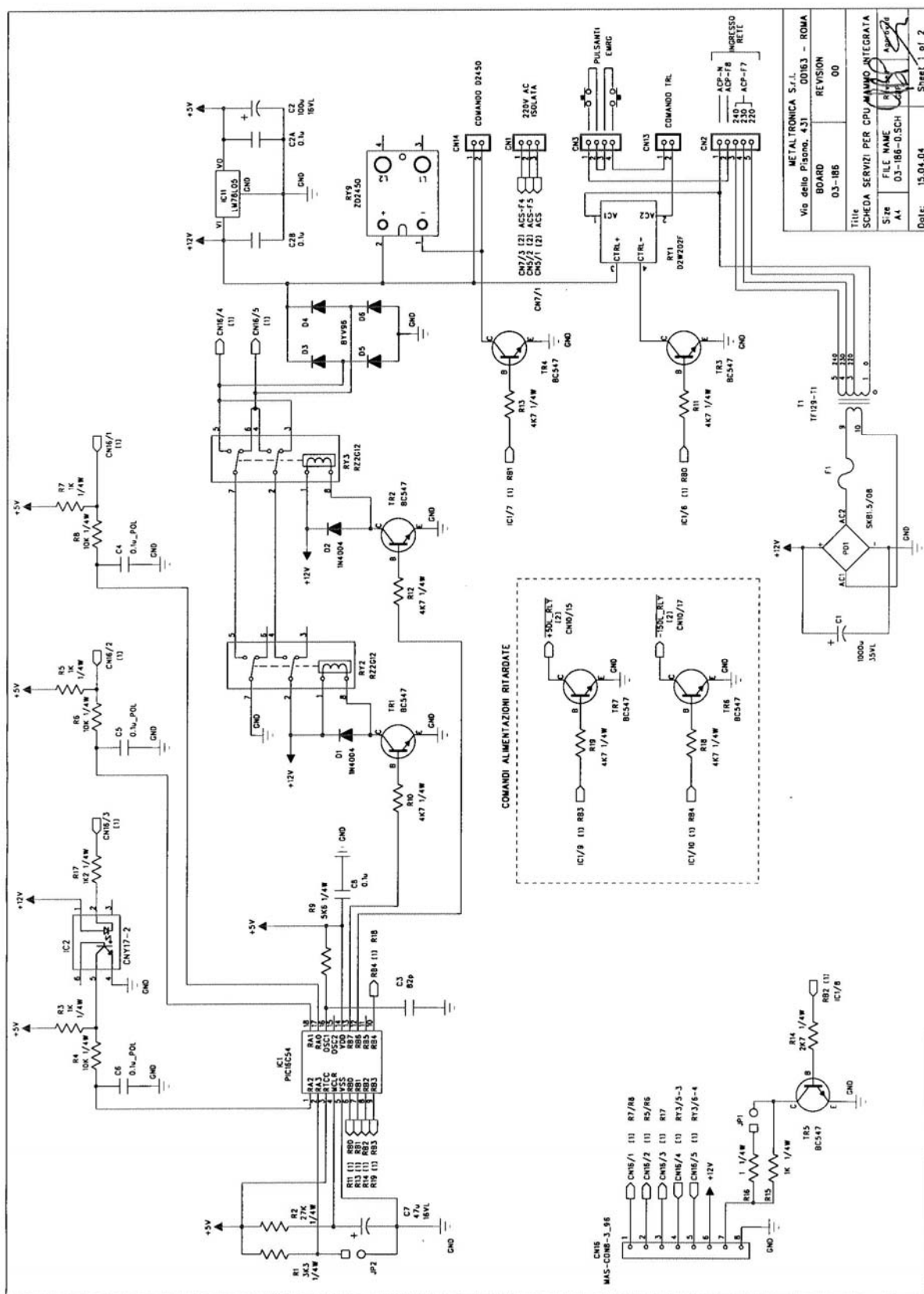
SCHEMA ELETTRICO 03-188-0-L

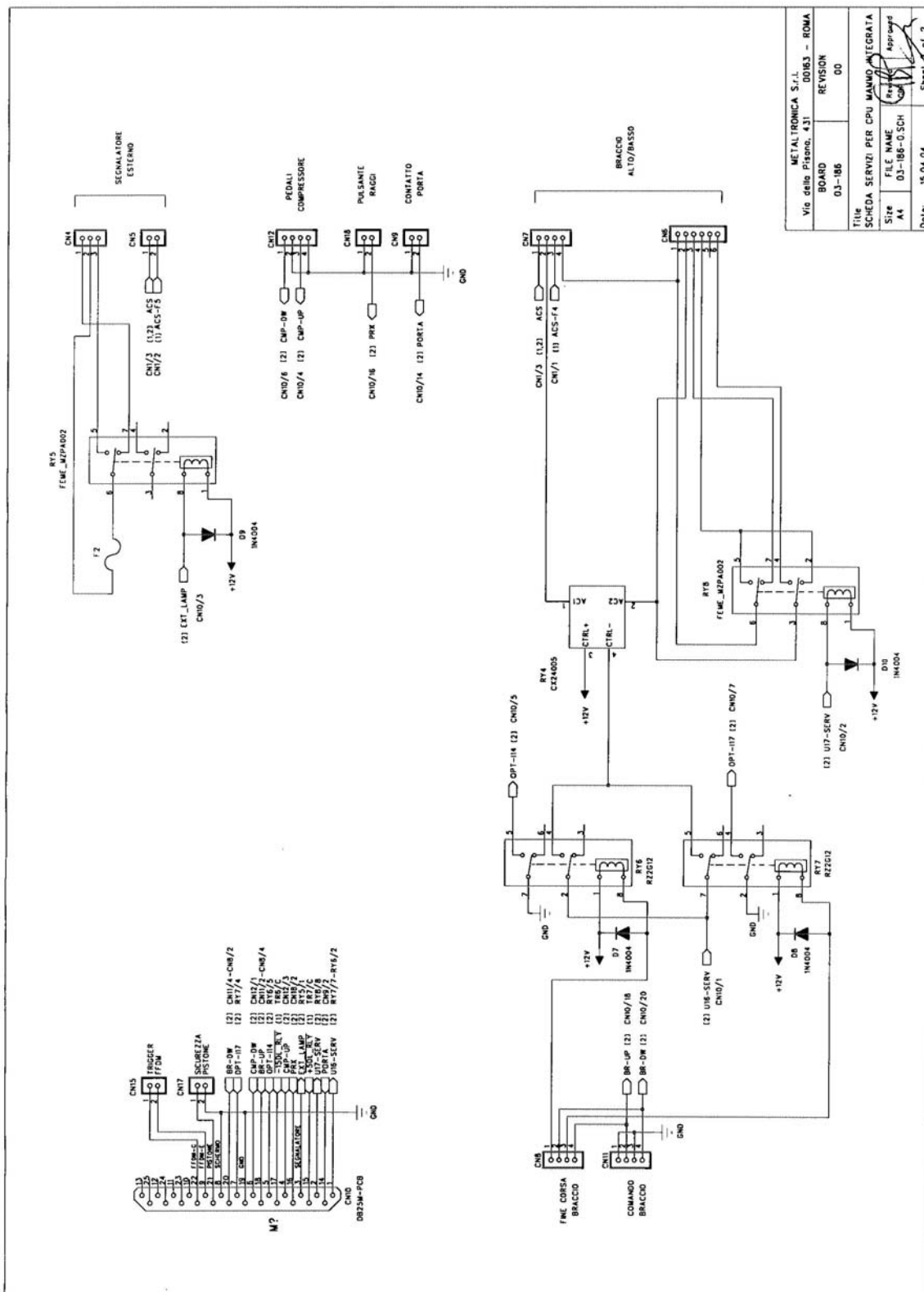
03-186 *SERVICE BOARD*

Calibration:
no calibration is requested

Replacement:
IC1 contains specific firmware



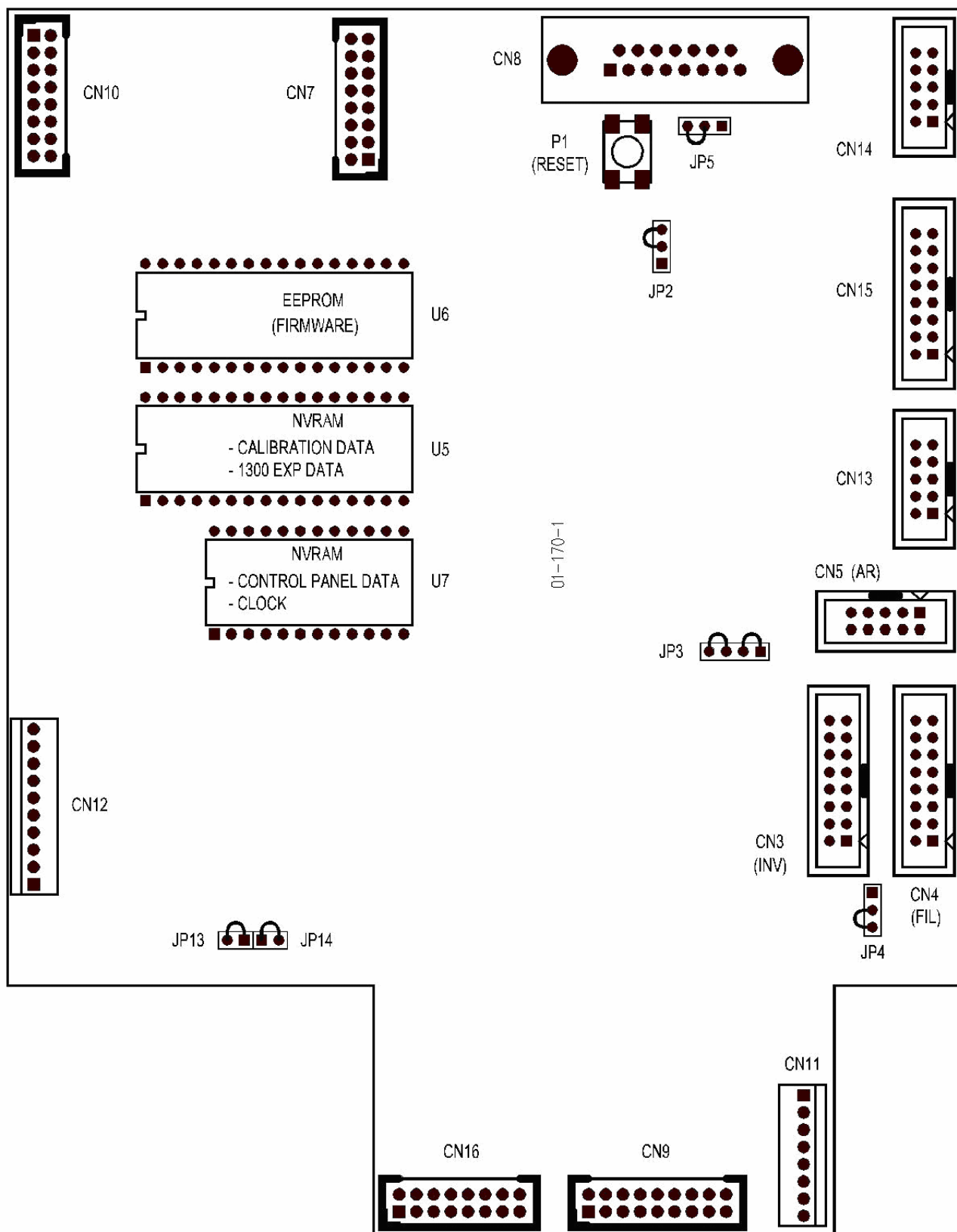


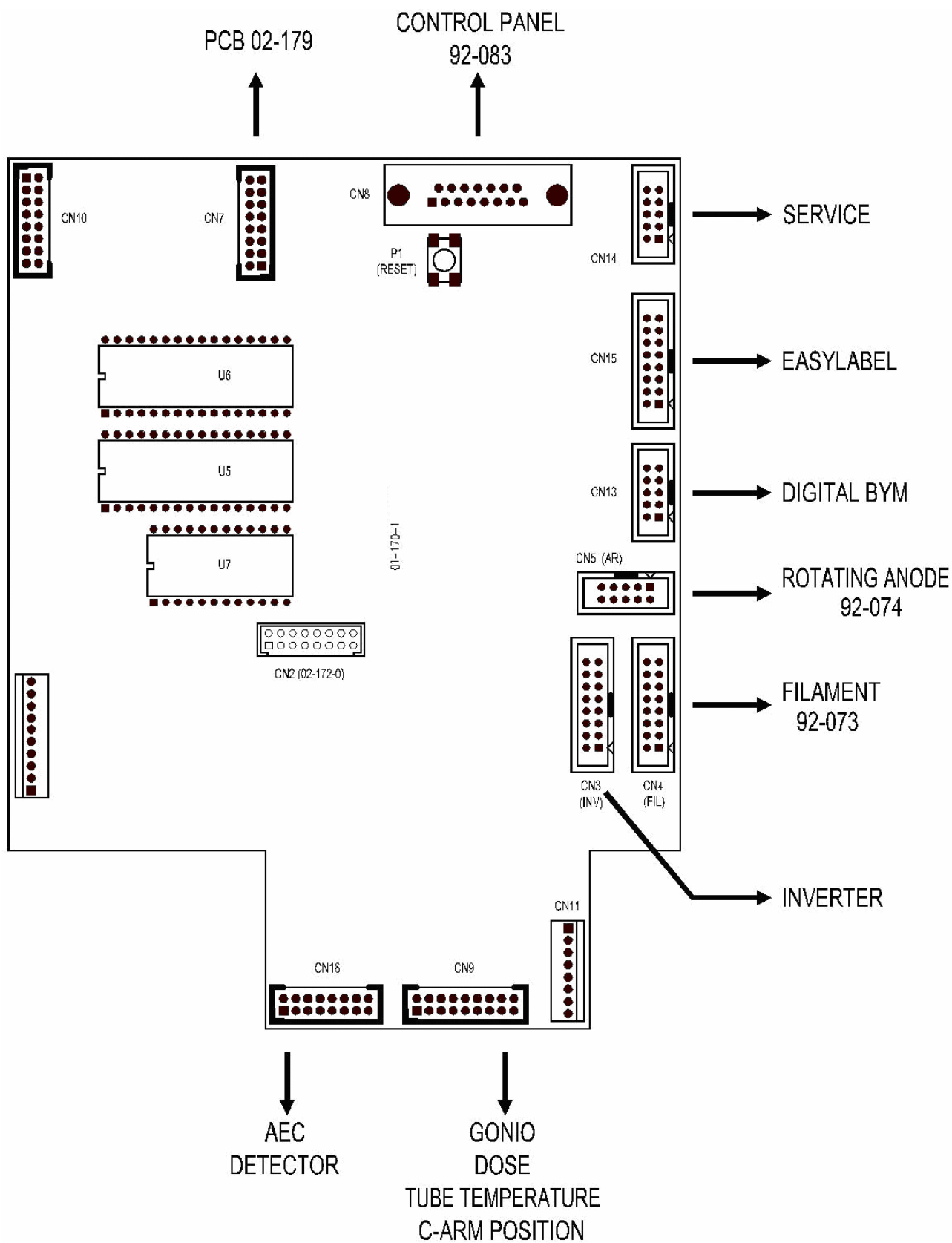


01-170 *CPU BOARD*

Calibration:
no calibration is requested

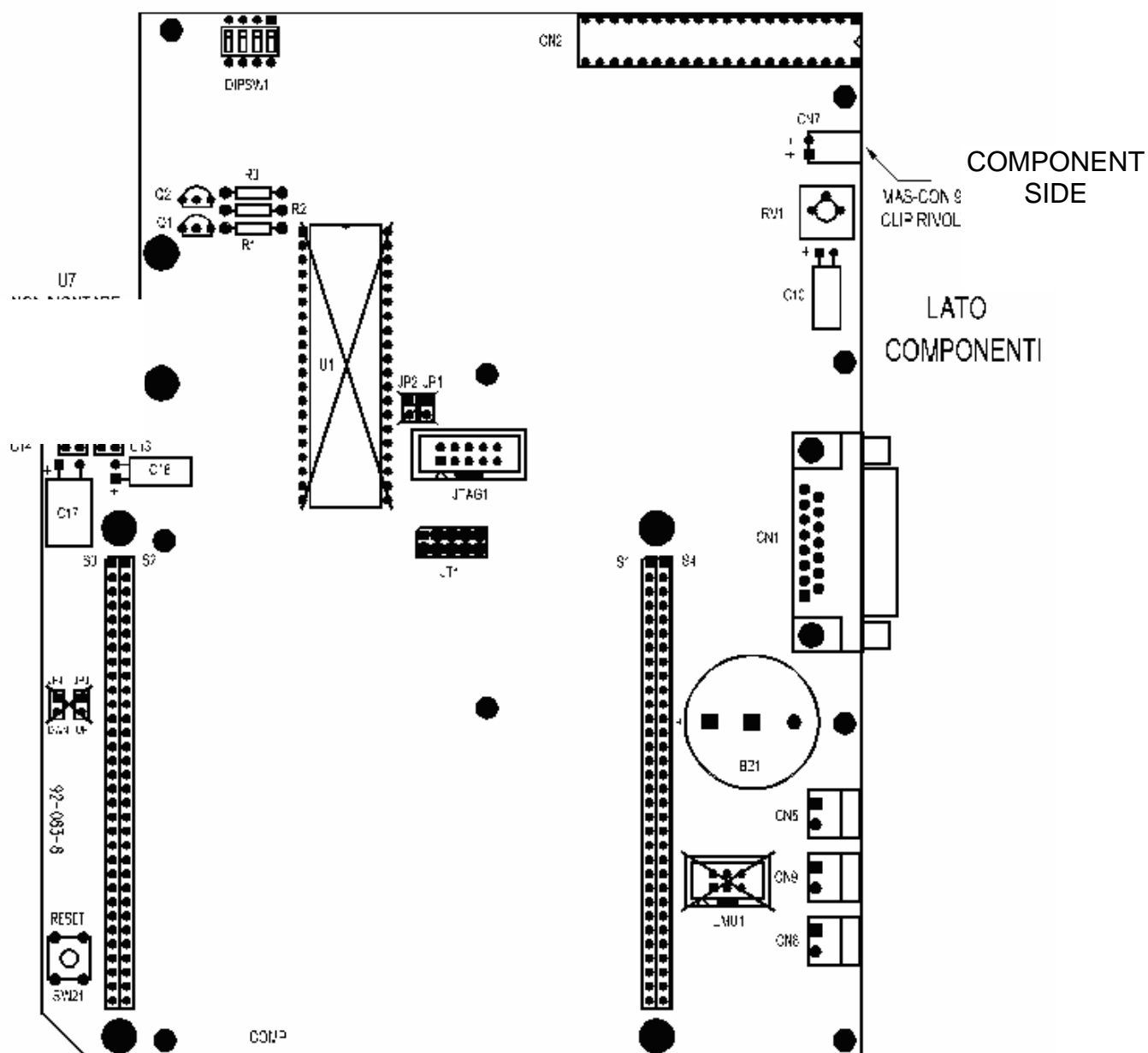
Replacement:
EEPROM contains specific firmware
2 k RAM contains panel settings and CLOCK
512 k RAM contains calibrations

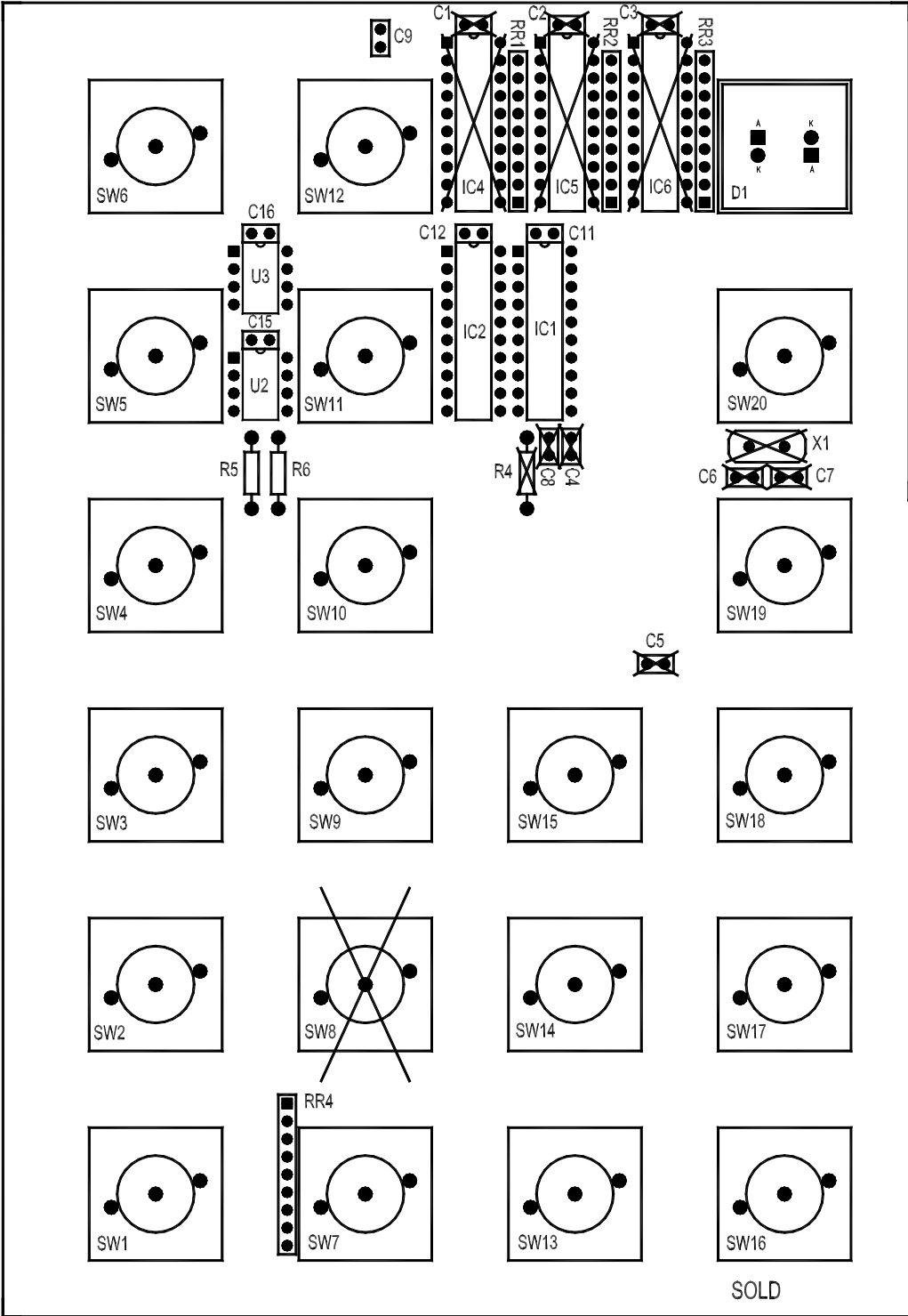




92-083-8 *KEYBOARD / CONTROL PANEL*

Calibration:
RV1 LCD contrast



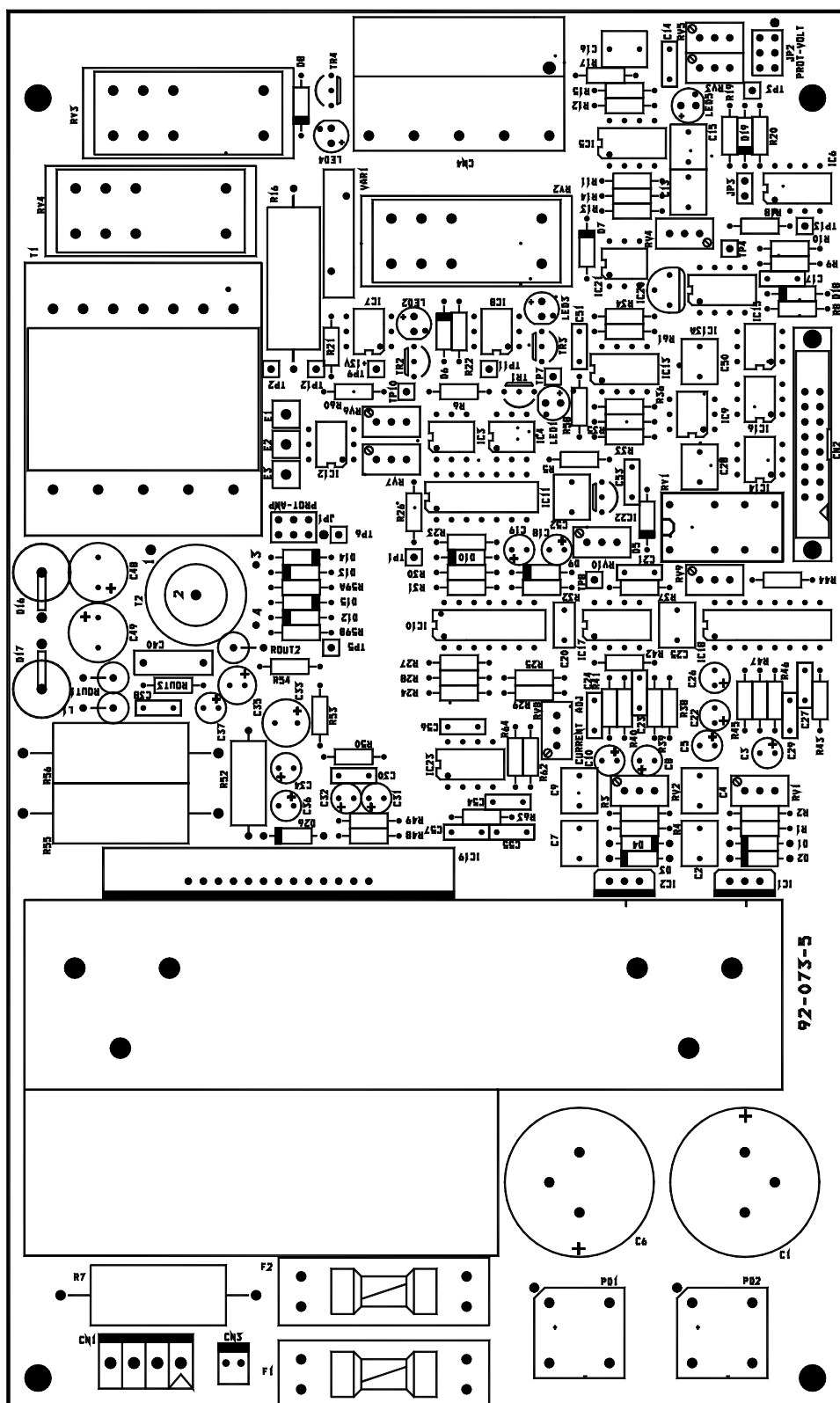


LATO
SALDATURE
SOLDER
SIDE

92-073-5 *FILAMENT POWER SUPPLY*

Calibration:
refer to chapter 3

Replacement:
anode current calibration
filament safety circuit calibration:
Refer to chapter 3

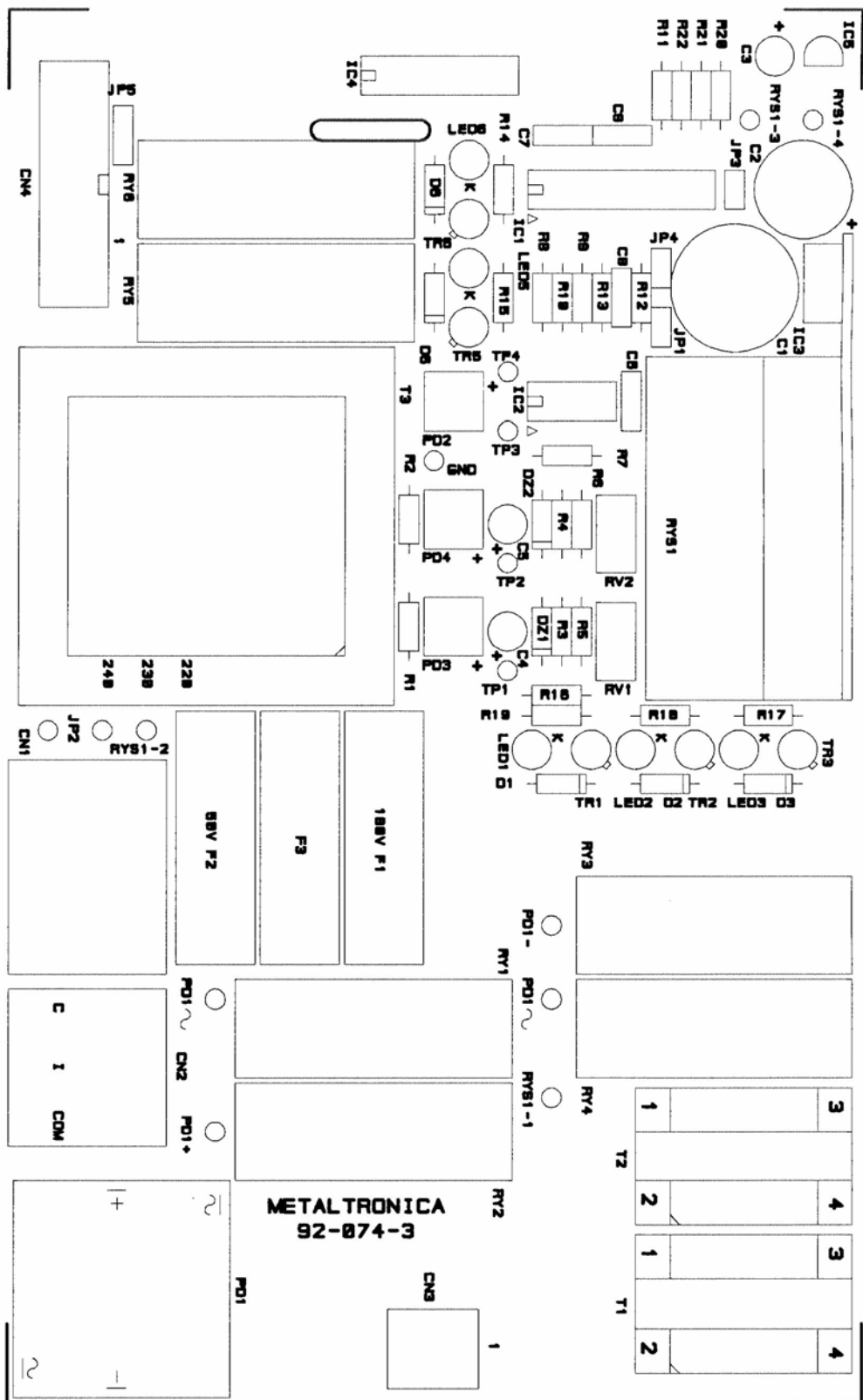


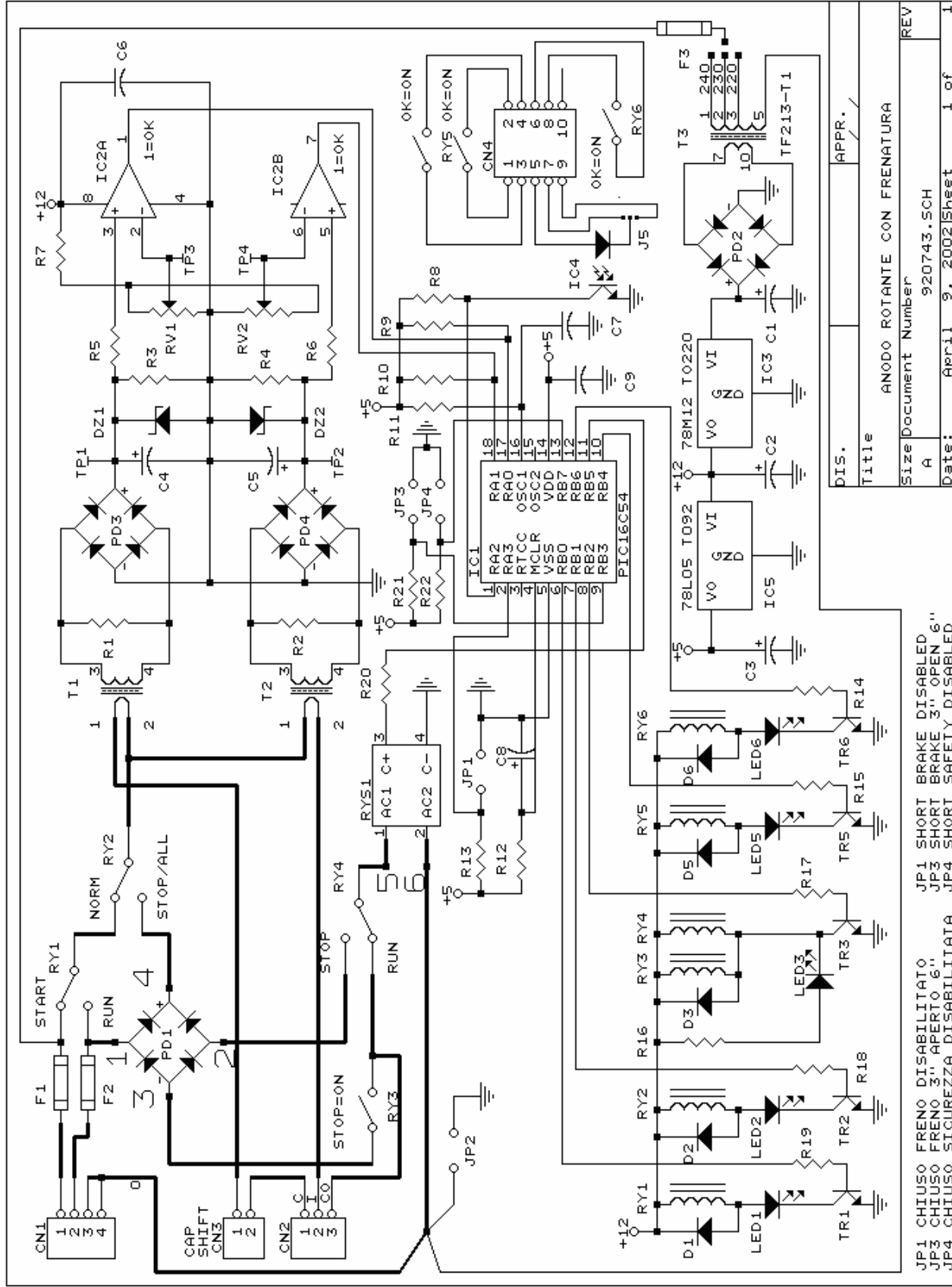
92-074-3 *ROTATING ANODE STARTER*

Calibration:
refer to chapter 3.

Replacement:
safety circuit calibration (RV1, RV2)
voltage selection (220V - 230V - 240V)
Refer to chapter 3.

Warning:
Circuit ground is floating with respect to other blocks in the unit having the same symbol.
Be careful making measurements on this PCB, use only insulated instruments.





JP1 CHIUSO FRENO DISABILITATO JP1 SHORT BRAKE DISABLED
 JP3 CHIUSO FRENO 3" APERTO 6" JP3 SHORT BRAKE 3" OPEN 6"
 JP4 CHIUSO SICUREZZA DISABILITATA JP4 SHORT SAFETY DISABLED

DIS. _____ APPR. _____
 Title _____
 Size Document Number _____
 A 920743.SCH _____
 Date: April 9, 2002 Sheet 1 of 1

02-179-1 *AUTOMATIC COLLIMATOR MIRROR ACTUATOR, BEAM LIGHT AND FILTERMAMM*

Main functions:

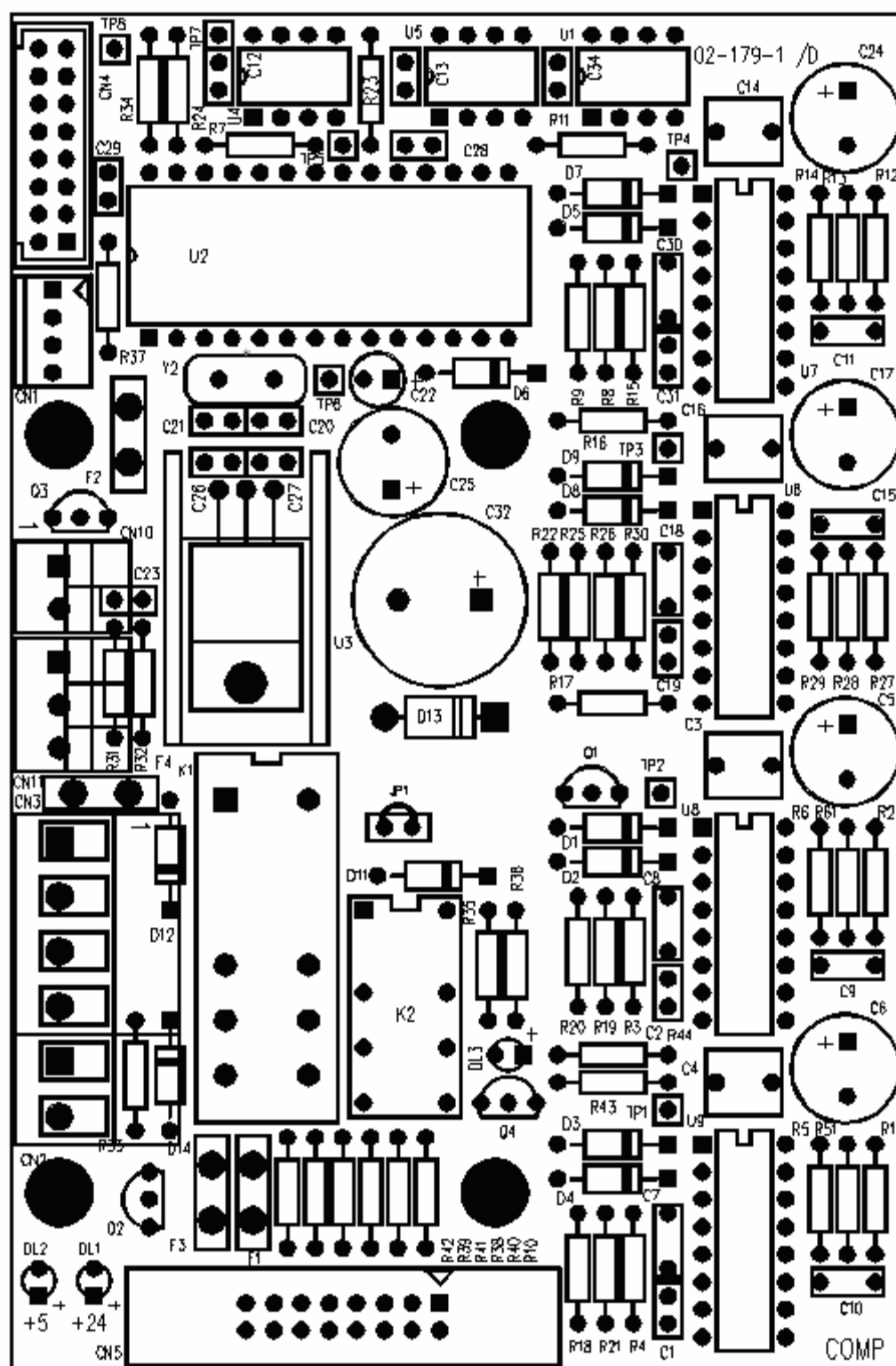
- Mirror actuator
- Centering lamp
- Automatic collimator
- Automatic Mo/Rh filter FILTERMAMM

Calibration:

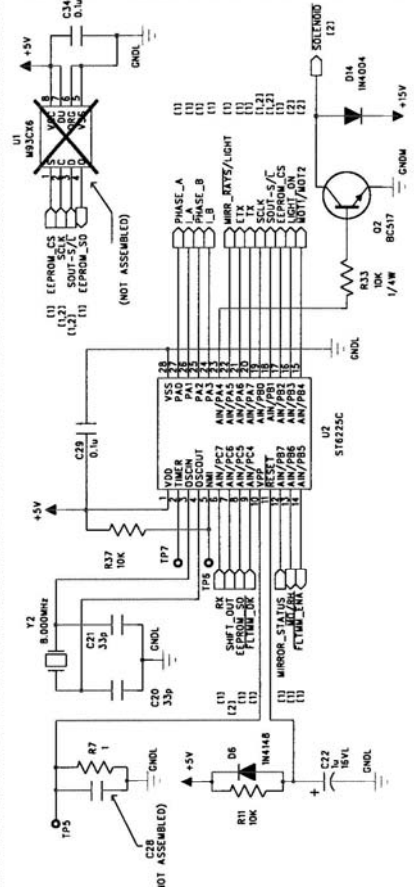
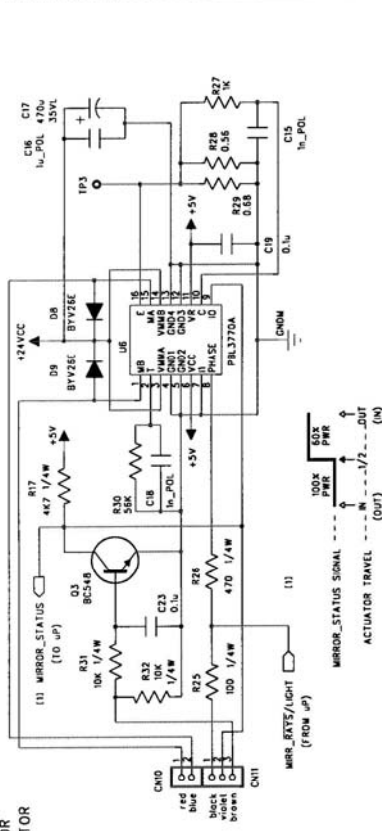
no calibration is requested

Replacement:

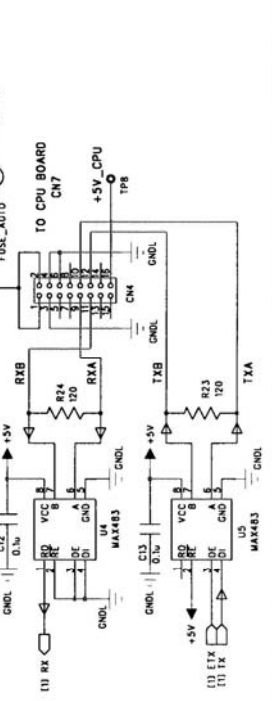
no adjustment



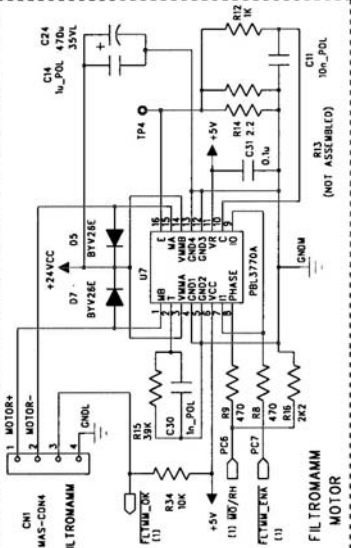
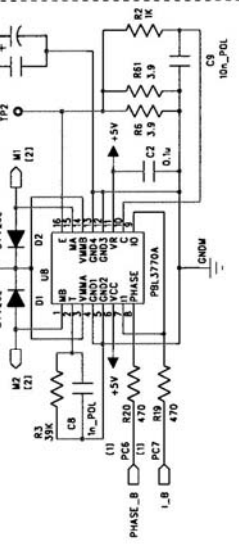
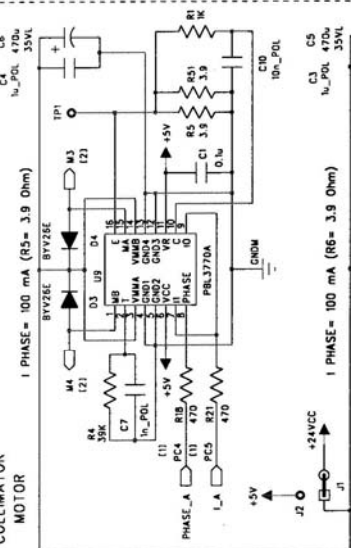
MIRROR ACTUATOR



SERIAL INTERFACE



COLLIMATOR MOTOR



METALTRONICA S.r.l.	
Via della Piana, 431	00163 - ROMA
BOARD	REVISION
02-179-.../D	01
Title	
MIRROR/BEAM-LIGHT/FILTRONAM/COLLIMATOR	
Size	FILE NAME
A4	02-179-LD-001-5CH
Date:	18.05.04
Sheet 1 of 2	

LIST OF FUSES

FUSE HOLDERS

F1	10 x 38	gG 20A
F2	10 x 38	gG 20A
F3	6 x 30	CT 3.15A
F4	6 x 30	CT 3.15A
F5	6 x 30	CT 500mA
F6	10 x 38	gG 10A
F7	5 x 20	CT 40mA
F8	6 x 30	CT 100mA
F9	10 x 38	gG 10A
F10	6 x 30	CT 10A
F11	6 x 30	CT 4A
F12	6 x 30	CT 100mA

PCB 03-186

F1	5 x 20	CT 500mA
F2	5 x 20	CT 500mA

PCB 03-188

F1	5 x 20	ET 1.6A
F2	5 x 20	ET 1A
F3	5 x 20	CT 0.5A
F4	6.3x 32	GT 3.15A
F11	5 x 20	ET 3.15A

PCB 92-073

F1	6.3x 32	GT 1.6A
F2	6.3x 32	GT 1.6A

PCB 92-074

F1	6 x 30	CT 10A
F2	6 x 30	CT 4A
F3	5 x 20	CT 40mA

INVERTER PCB 94-132

F2	5 x 20	CT 1A
F3	BUSSMANN B1000 20FC 20A 660V	

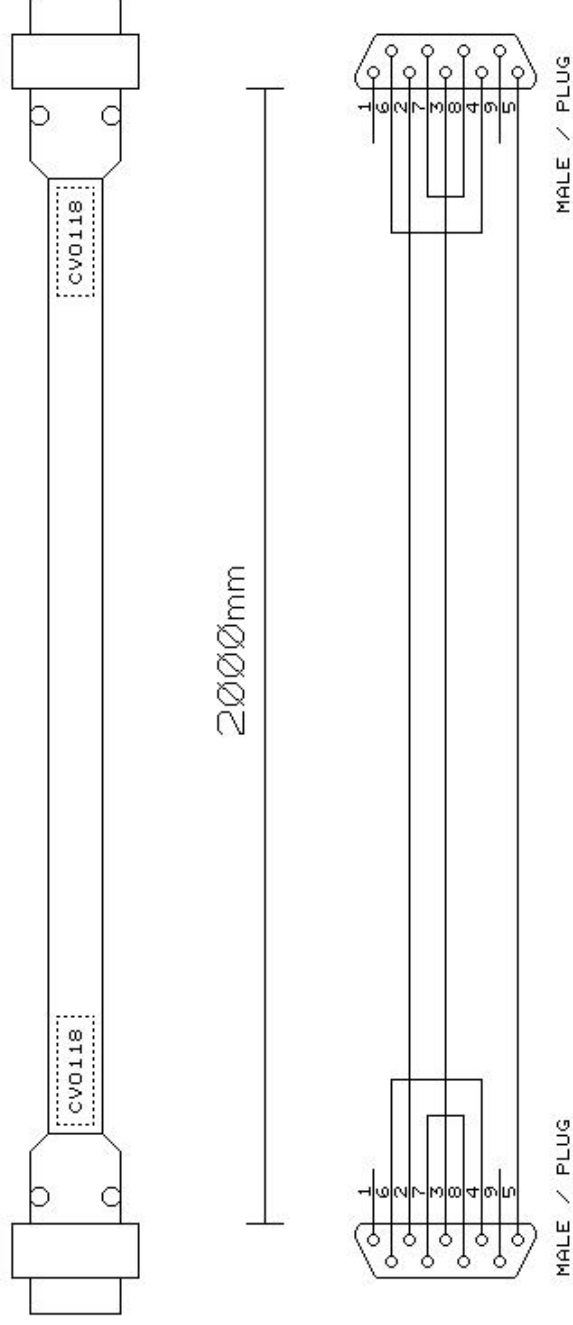
TRANSFORMERS PROTECTION ACCORDING TO STANDARD CEI 62-5 IEC601-1

WARNING: modifying fuse type and/or value may create risks of fire!

TF 129	(PCB 03-186)	Protected by slow blow fuses
TF 213	(PCB 92-074)	Protected by slow blow fuses
TF 155	Protected by termoswitch that acts on mains breaker turning off the device and avoiding self power-on at the termoswitch restoration. Further protection against transient overload by fuses on primary and secondary circuits.	
TF 165		

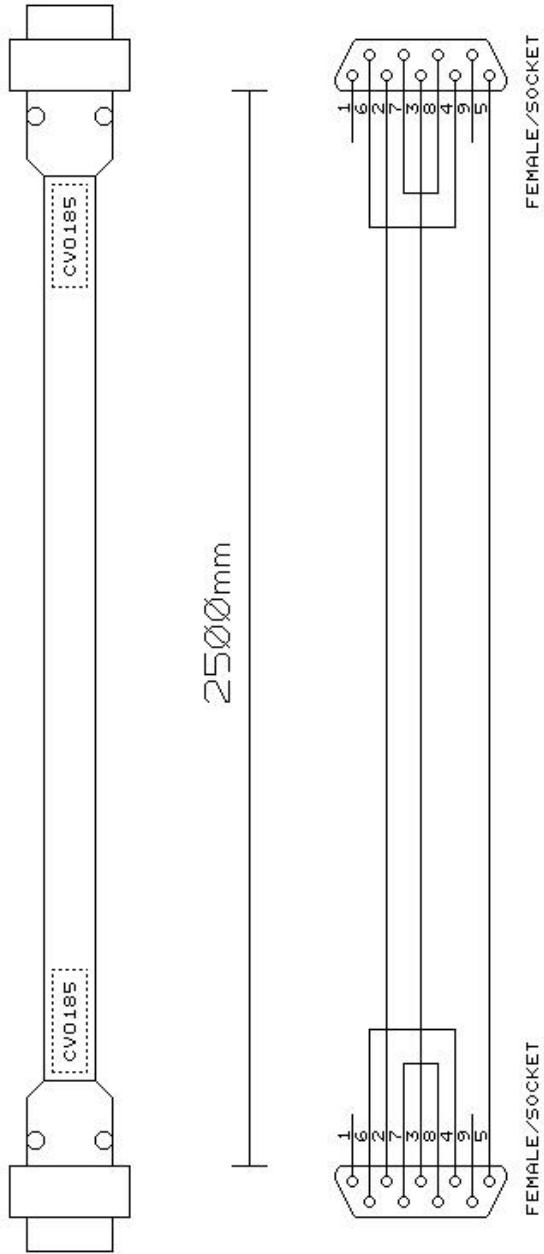
CABLES

EASYLABEL-CO/BS <---> MAMMO UNIT



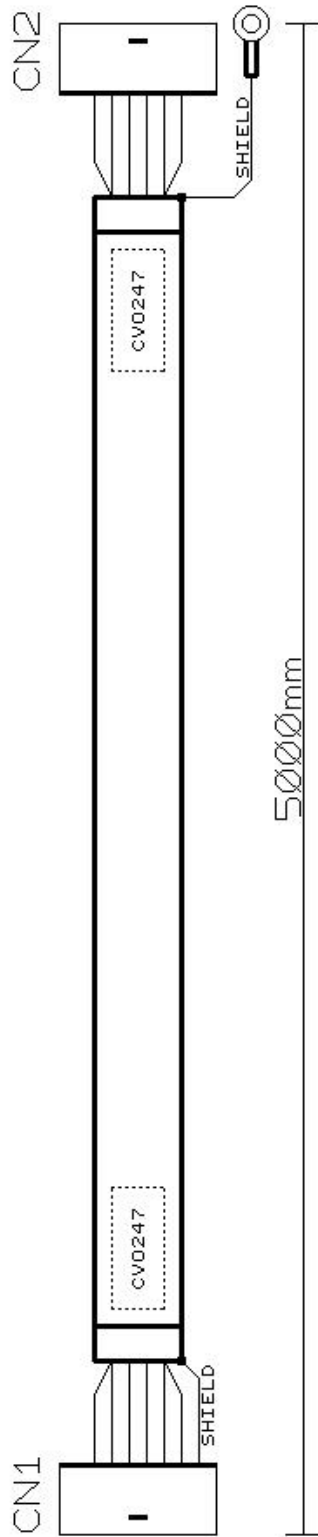
DIS.		APPR.	/
Title EASYLABEL-CO/BS <---> MAMMO UNIT			
Size	Document Number	REV	
A	CV0118-0.LYL		
Date:	March 21, 2006	Sheet	1 of 1

PC TO SERVICE CONNECTION CABLE



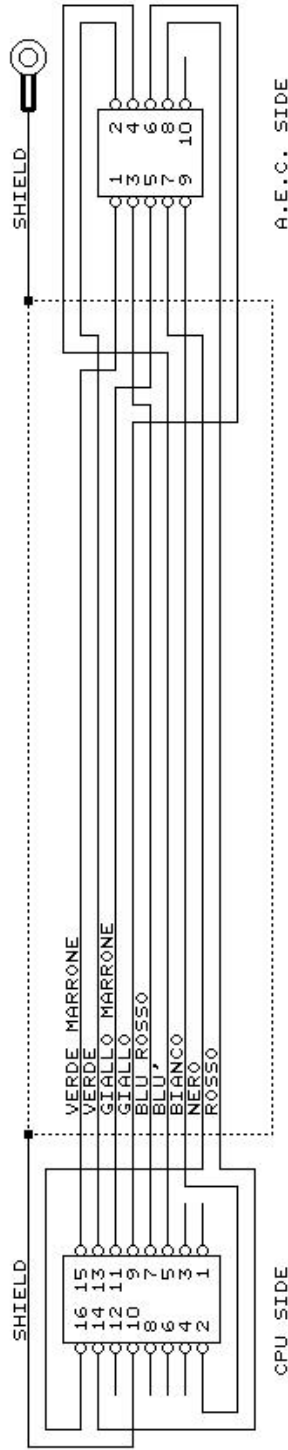
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Title PC TO SERVICE CONNECTION CABLE			
Size	Document Number	REV	
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Date:	March 21, 2006	Sheet	1 of 1

A.E.C. SHIELDED CABLE

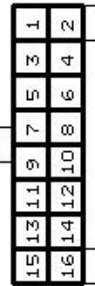


Ø1-17Ø/CN16

A.E.C.



CN1



LATO ENTRATA CAVI
CABLE INPUT SIDE

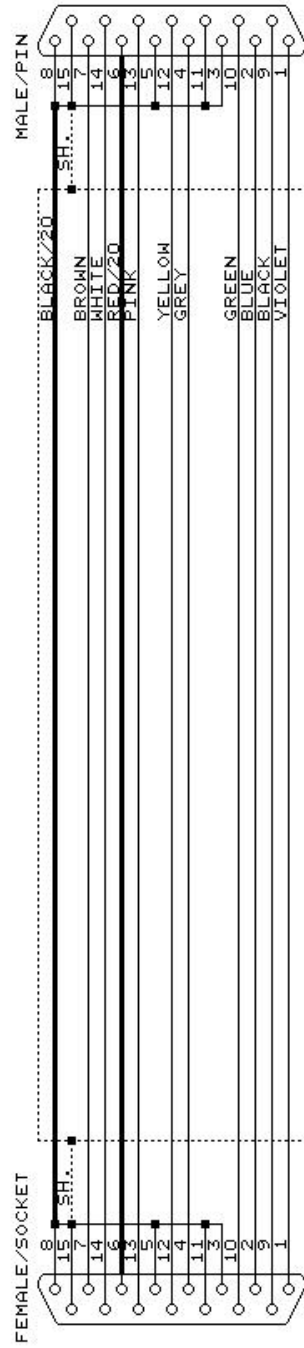
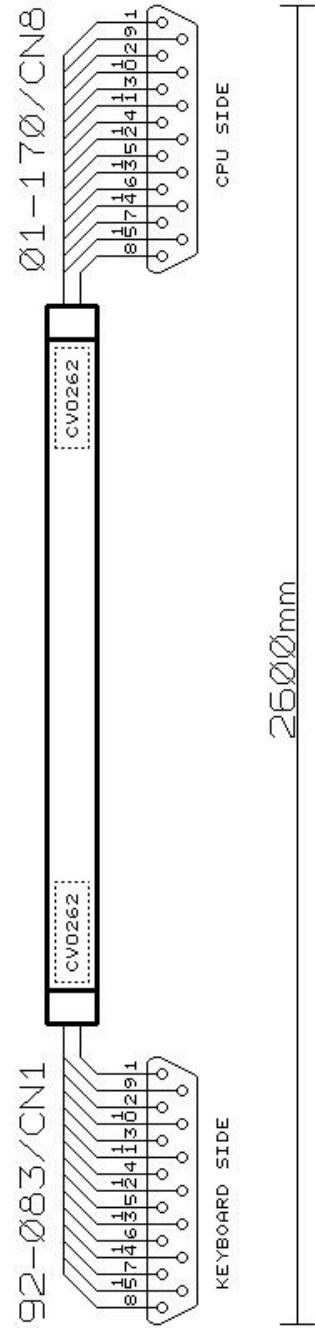
CN2



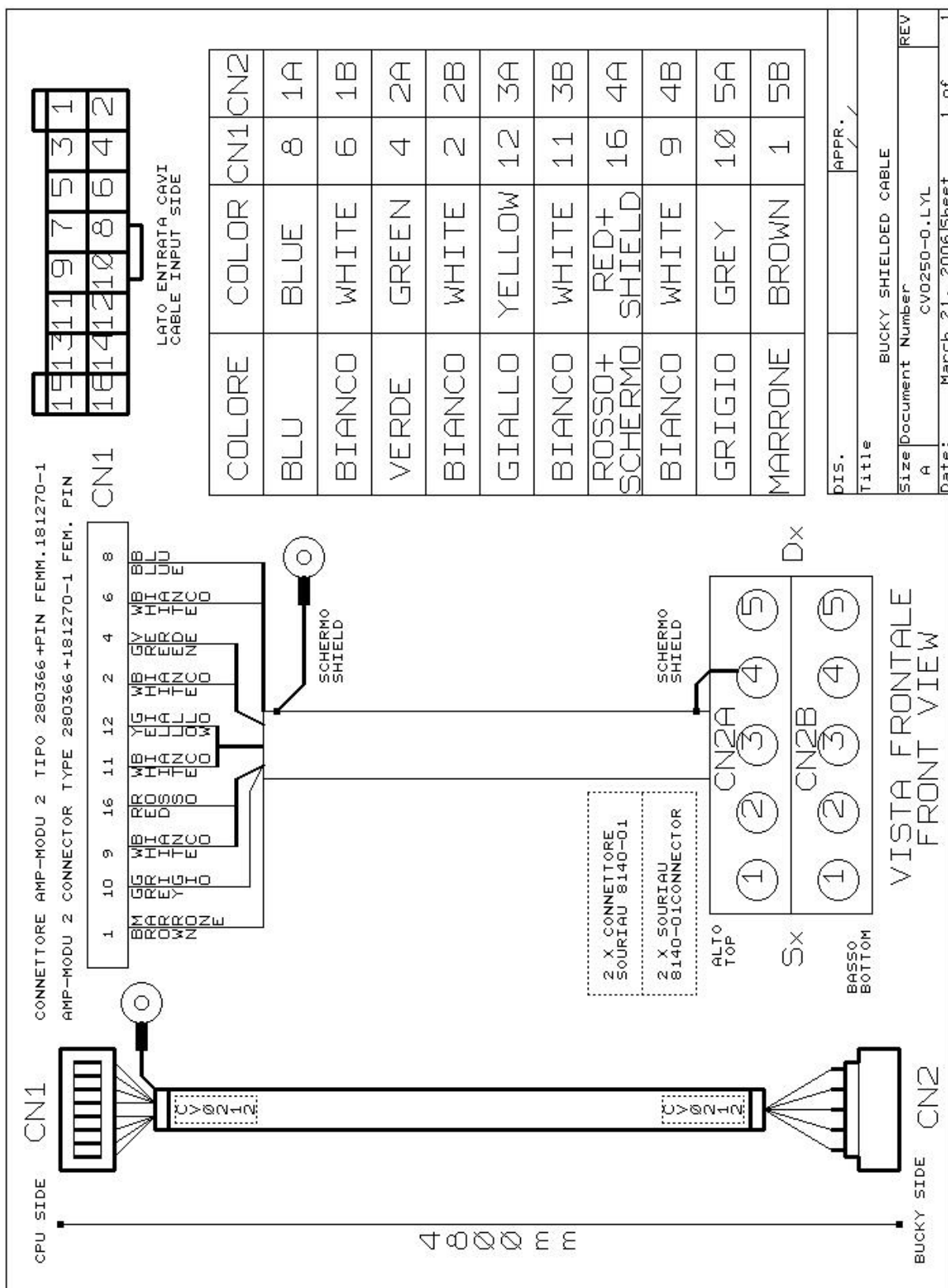
LATO ENTRATA CAVI
CABLE INPUT SIDE

DIS.			APPR.	/	/
Title	A.E.C. SHIELDED CABLE				
Size	Document Number	REV			
A	CVD247-O.L.YL	O			
Date:	April 21, 2006	Sheet	1 of	1	

KEYBOARD CABLE



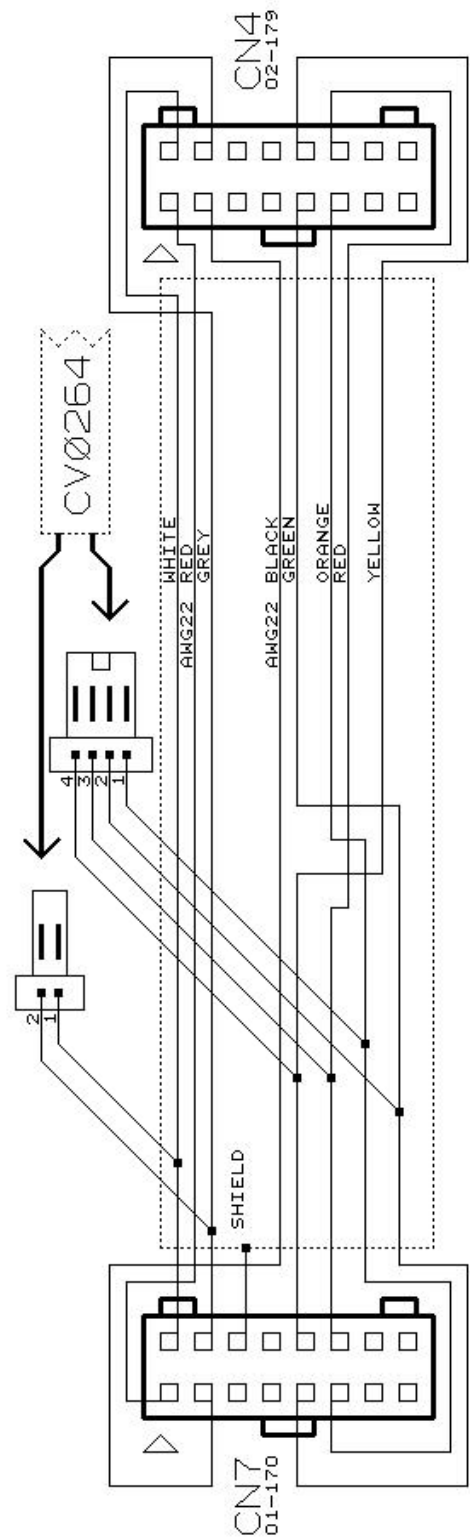
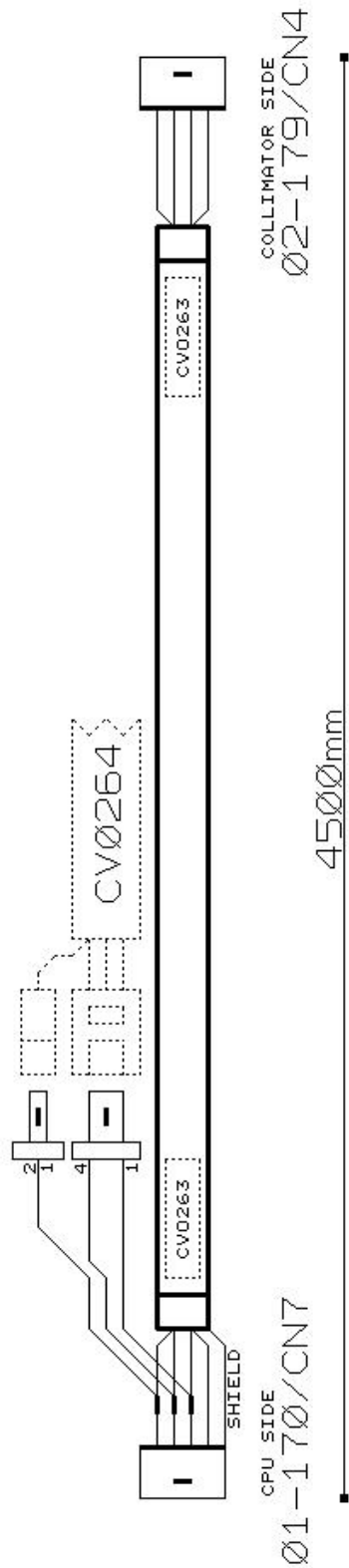
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Title KEYBOARD CABLE			
Size A		Document Number CV0262-0.LYL	REV
Date March 21, 2006		Sheet	1 of 1



COLORE	COLOR	CN1	CN2
BLU	BLUE	8	1A
BIANCO	WHITE	6	1B
VERDE	GREEN	4	2A
BIANCO	WHITE	2	2B
GIALLO	YELLOW	12	3A
BIANCO	WHITE	11	3B
ROSSO+ SCHERMO	RED+ SHIELD	16	4A
BIANCO	WHITE	9	4B
GRIGIO	GREY	10	5A
MARRONE	BROWN	1	5B

DIS.		APPR.	/
Title			
BUCKY SHIELDED CABLE			
Size	Document Number		
A	CV0250-0.1LYL		
Date:	March 21, 2006	Sheet	1 of 1

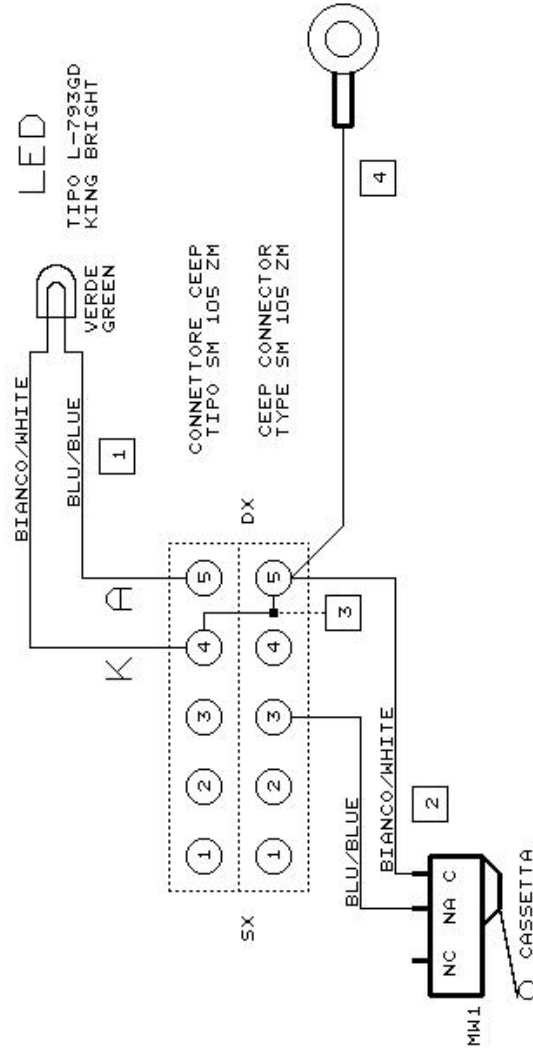
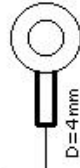
PCB/Ø1-170 TO PCB/Ø2-179 CONN. CABLE



DIS.		APPR.	/
Title			
PCB/01-170 TO PCB/02-179 CONN. CABLE			
Size	Document Number	REV	
A	CV0263-0.LYL		
Date:	March 21, 2006	Sheet	1 of 1

CAVI INGRANDITORE SINFL-ØØ LILYUM

1	= N 2 CAVI AWG24	BLU-BIANCO	L=180mm
2	= N 2 CAVI AWG24	BLU-BIANCO	L=100mm
3	= N 1 CAVO AWG24	BIANCO	L=50mm
4	= N 1 CAVO AWG24	GIALLLO/VERDE	L=75mm



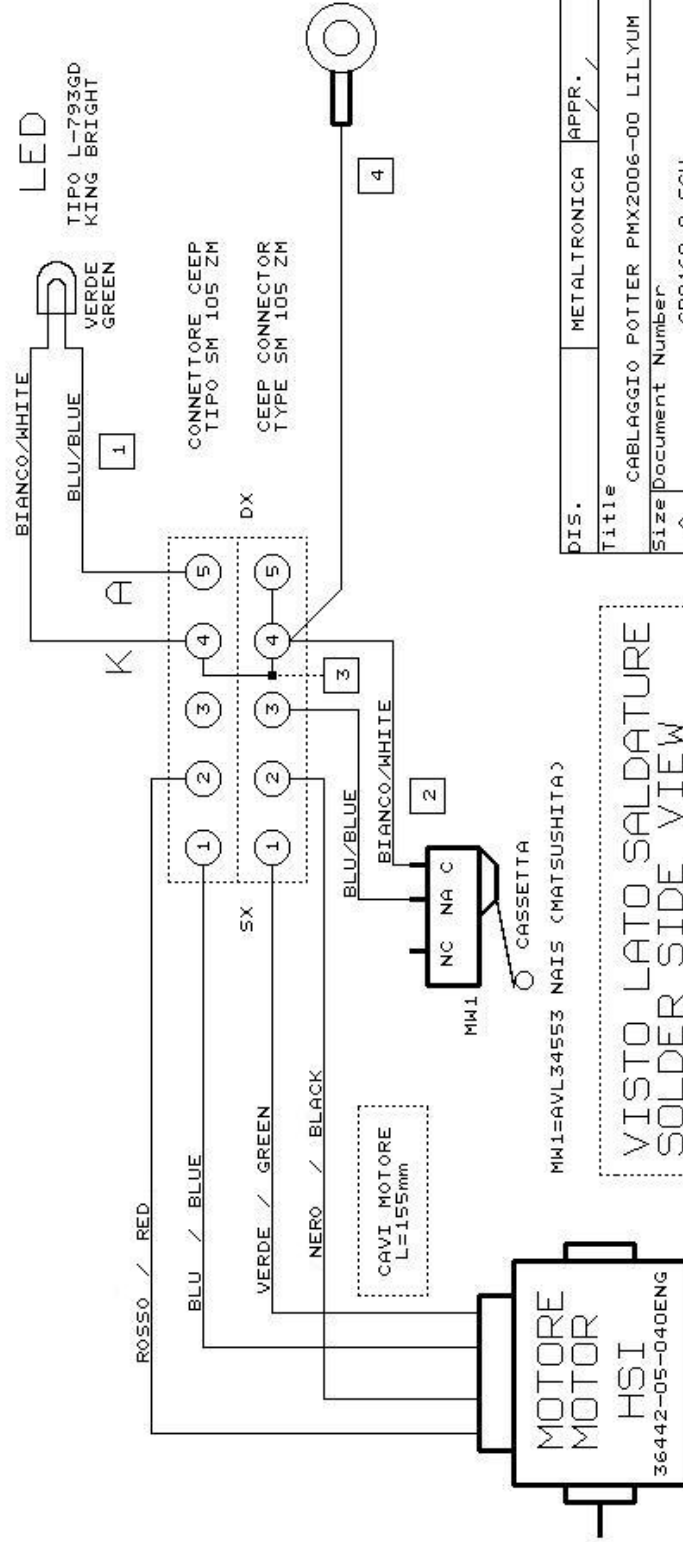
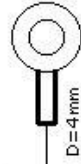
MW1=AVL34553 NAIS (MATSUSHITA)

DIS.	METALTRONICA	APPR.	/
Title	CABLAGGIO INGRANDITORE INTEGRATO LILYUM		
Size	Document Number	REV	
A	CB0171-0.SCH		
Date:	March 31, 2006	Sheet	1 of 1

VISTO LATO Saldature
Solder Side View

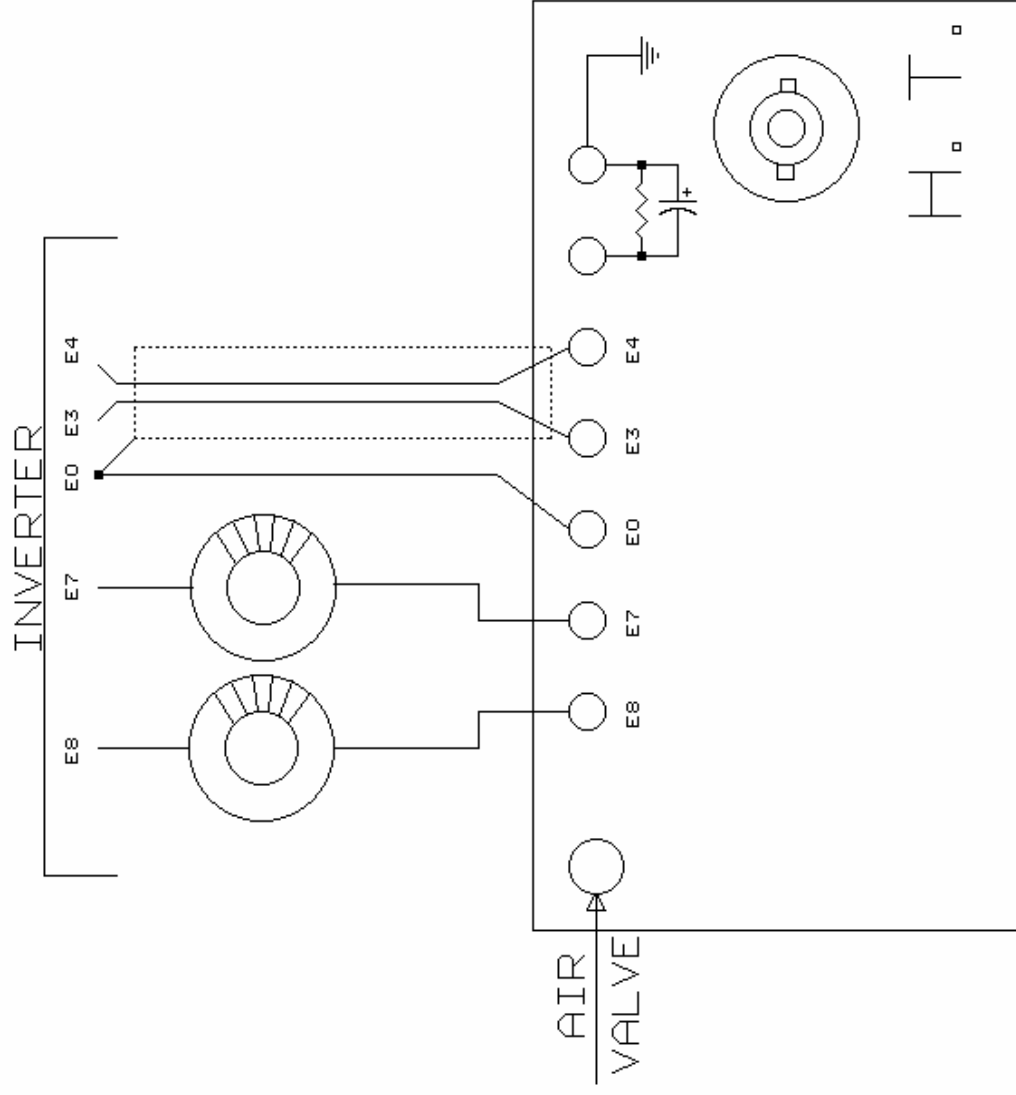
CAVI POTTER PMX2006-00 LILYUM

1	= N 2 CAVI AWG24 BLU-BIANCO	L=180mm
2	= N 2 CAVI AWG24 BLU-BIANCO	L=100mm
3	= N 1 CAVO AWG24 BIANCO	L=50mm
4	= N 1 CAVO AWG24 GIALLO/VERDE	L=75mm



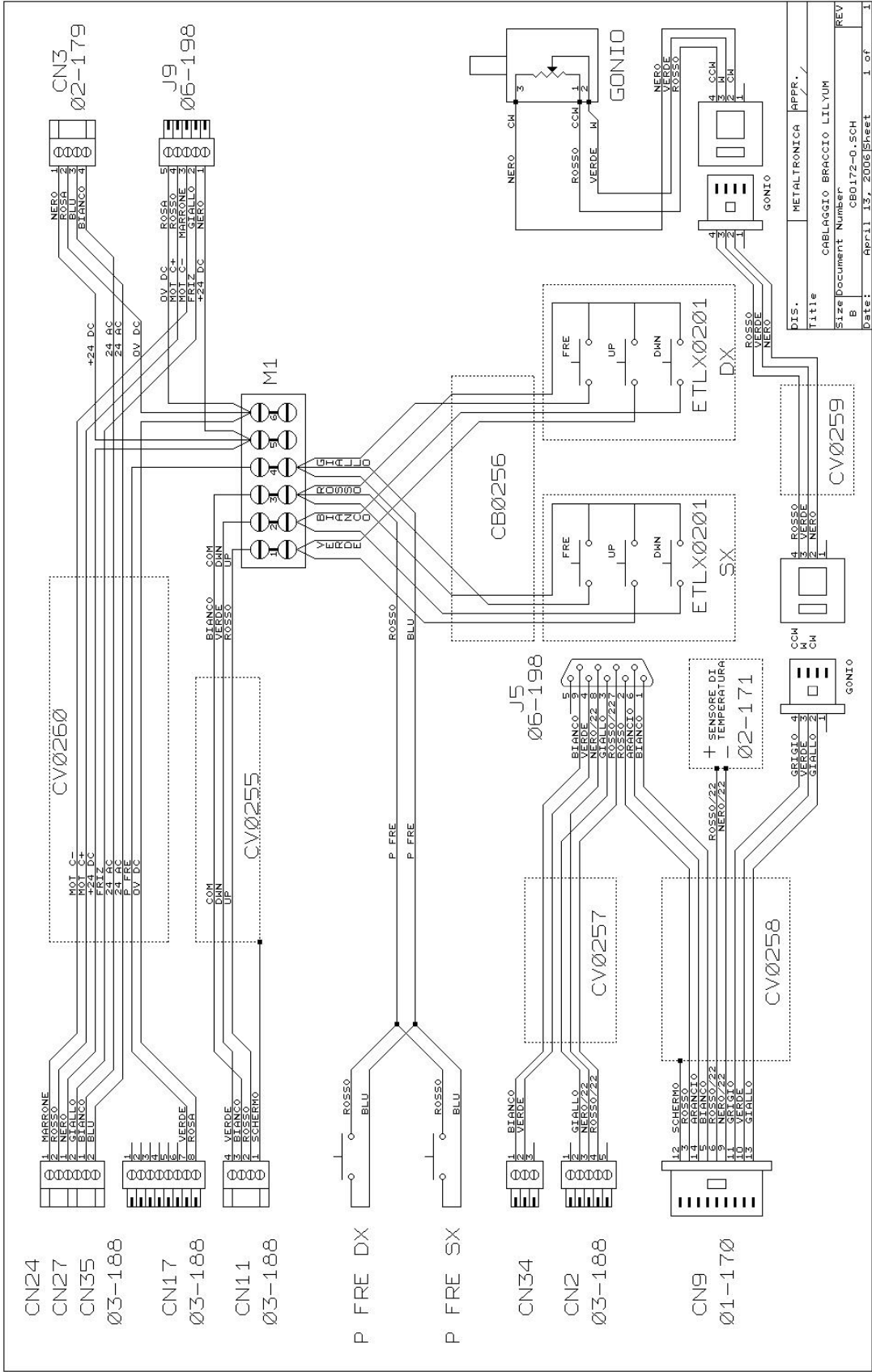
VISTO LATO SALDATURE
SOLDER SIDE VIEW

DIS.	METALTRONICA	APPR.	/
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Size	Document Number	REV	
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Date:	March 29, 2006	Sheet	1 of 1

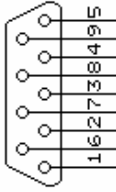
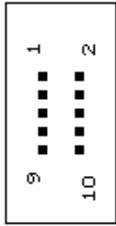
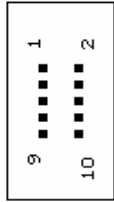


FLAT/SE ONLY

DIS.	METALTRONICA	APPR.	/
Title CABLAGGIO GENERATORE FLAT/SE			
Size Document Number			
A	CB0044-0.SCH	REV	0
Date: June 19, 2001			
Sheet			1 of 1



DIS.	METALTRONICA	APPR.	/
Title	CABLAGGIO BRACCIO LILYUM		
Size Document Number	B		
Size Document Number	CB0172-0, SCH		
Date:	April 13, 2006	Sheet	1 of 1
REV			



CPU CN 14

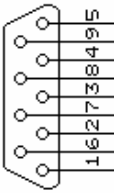
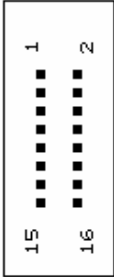
2 TX
3 RX
4 DSR
5 GND
6 DTR
7 CTS
8 RTS

CPU CN 13	PC
-----	PIN 1 : CARRIER
2 TX	PIN 2 : RX DATA
3 RX	PIN 3 : TX DATA
4 DSR	PIN 4 : EIA DTR
5 GND	PIN 5 : GND
6 DTR	PIN 6 : EIE DATA SET READY
7 CTS	PIN 7 : EIA RTS
8 RTS	PIN 8 : EIA CLR TO SEND
-----	PIN 9 : EIA RI

UART3 9600 BAUD

UART4 4800 BAUDPCB 01-170

DIS.	METALTRONICA	APPR. /
Title		
CONNESSIONE PORTE SERIALI COM1/2 FLAT III/SE		
Size	Document Number	REV
A	CB0090-0.SCH	0
Date:	June 20, 2001	Sheet 1 of 1



CPU CN15	PC
----- 5 TX 11 RX 15 DSR 2/4/6/8/10/12/14/16 GND 3 DTR 9 CTS 7 RTS -----	PIN 1 : CARRIER PIN 2 : RX DATA PIN 3 : TX DATA PIN 4 : EIA DTR PIN 5 : GND PIN 6 : EIE DATA SET READY PIN 7 : EIA RTS PIN 8 : EIA CLR TO SEND PIN 9 : EIA RI

UART2 4800 BAUD PCB 01-170

DIS.	METALTRONICA	APPR. /
Title CONNESSIONE PORTE SERIALI COM3 FLAT III/SE		
Size Document Number	REV	
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