

C6600 Training

1 Dispenser

- 1.1 Longitudinal adjustment on the module rail
- 1.2 Threading the Labels
- 1.3 Paper brake
- 1.4 Flap adapter
- 1.5 Adjustment of the pressure roller of the flap adapter
- 1.6 Adjustment of the optical label scanner
- 1.7 Adjustment of rewinder coupling force

2 Electronics Board

- 2.1 Blockdiagram
- 2.2 Power Supply
- 2.3 Motordriver
- 2.4 Processor
- 2.5 Inputs
- 2.6 Outputs

3 Dispenser Board

- 3.2 Transformer connections primary side
- 3.2 Transformer connections secondary side
- 3.3 Connection of the mains input
- 3.4 Connection of the mains output
- 3.5 Connection of the stepping motor

4 DIL-switches

- 4.1 Test and diagnostics
- 4.2 Diagnostic connector
- 4.3 Test equipment
- 4.4 Windows terminal
- 4.5 Terminal dialog

5 Nonstop Labeling

- 5.1 Placement
- 5.2 Connections

6 Incremental encoder

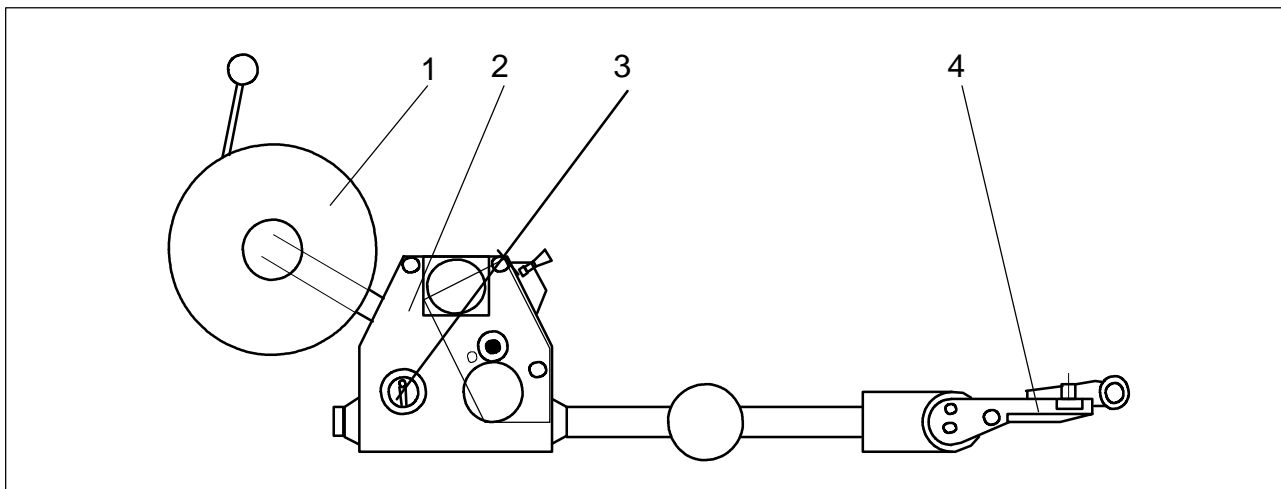
- 6.1 Connection
- 6.2 Calculation

7 Connection Diagram

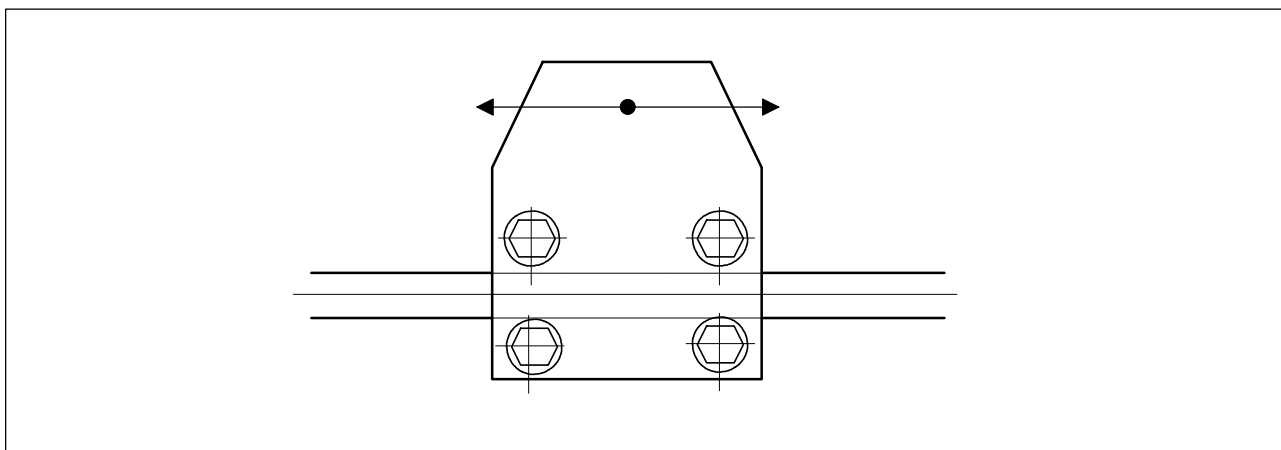
8 Technical Data

9 Trouble shooting checklist

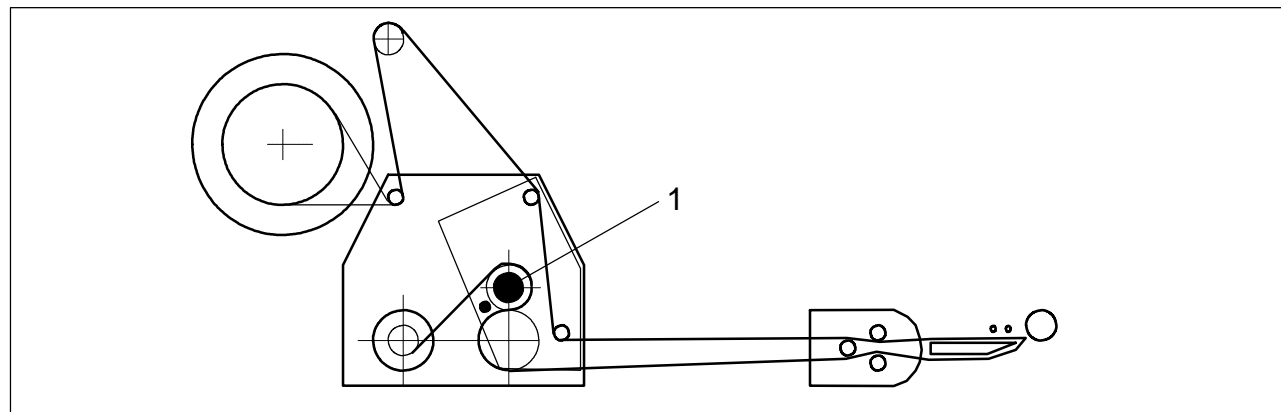
1 Dispenser



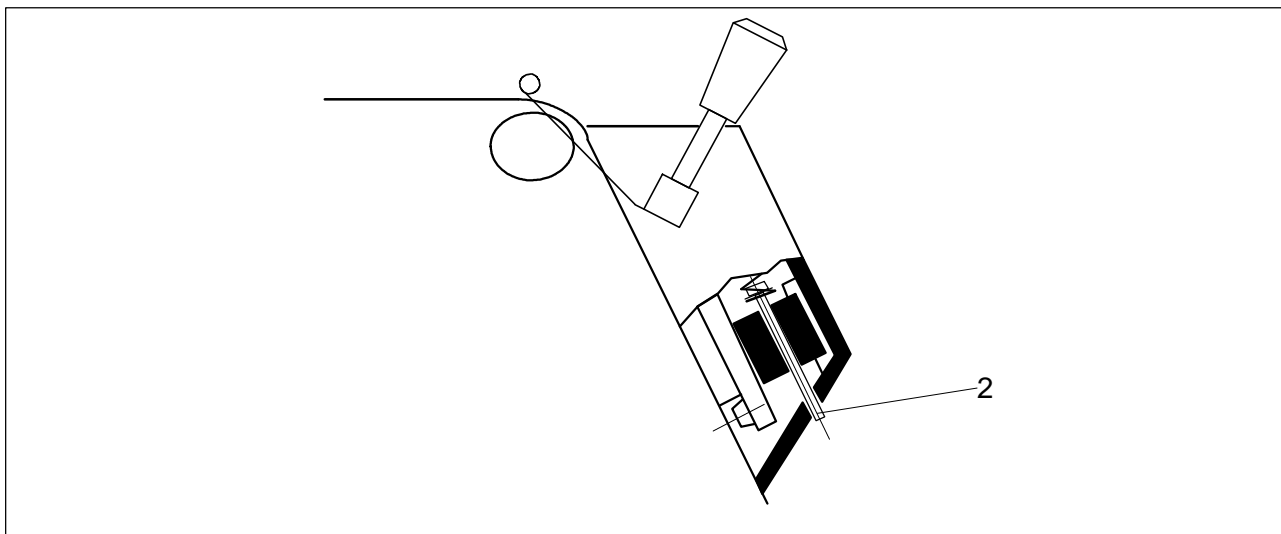
1.1 Longitudinal adjustment on the module rail



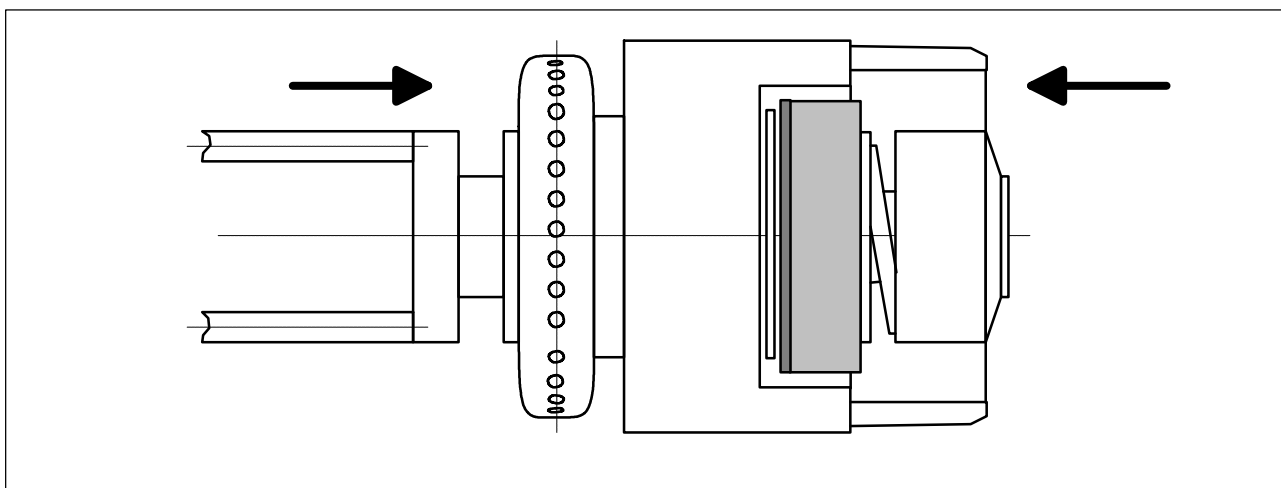
1.2 Threading the Labels



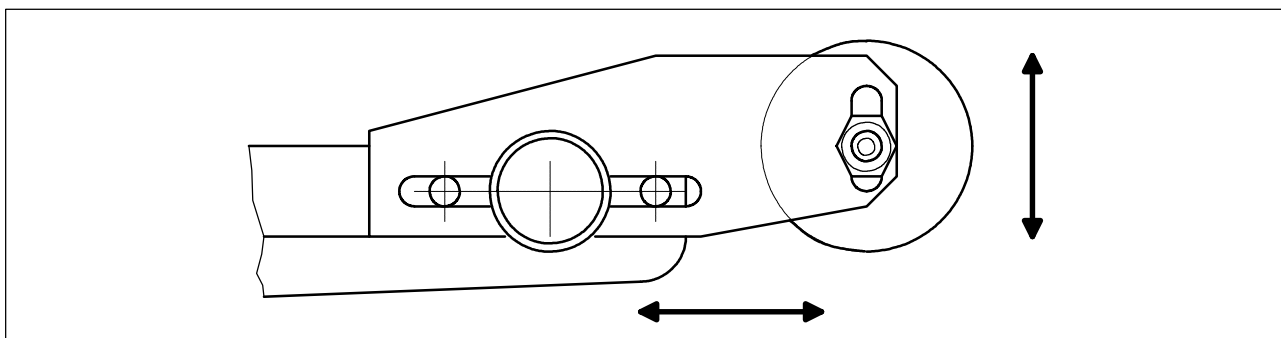
1.3 Paper brake



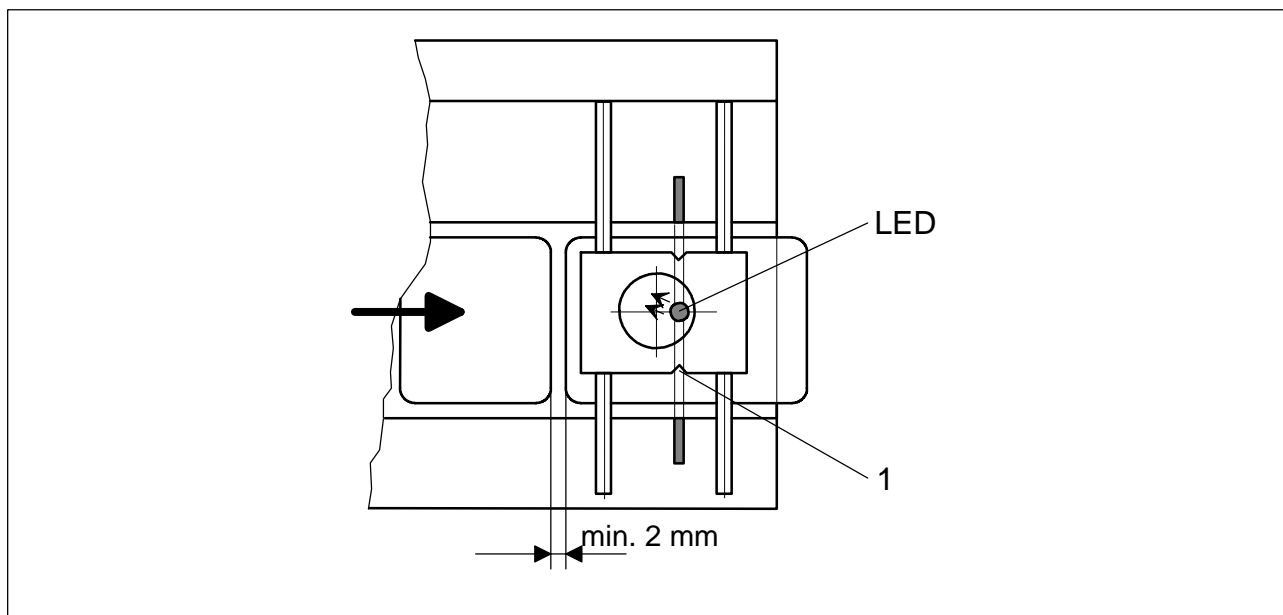
1.4 Flap adapter



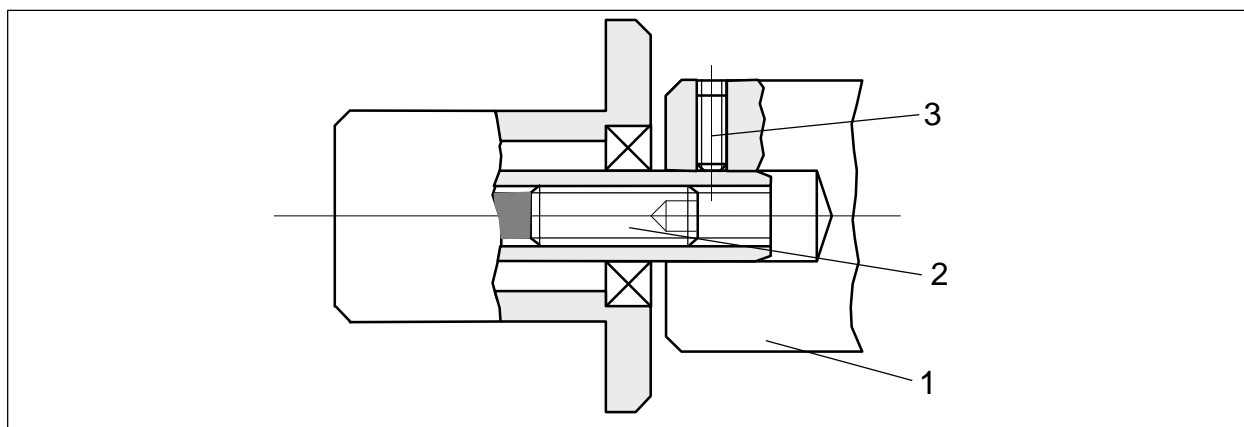
1.5 Adjustment of the pressure roller of the flap adapter



1.6 Adjustment of the optical label scanner

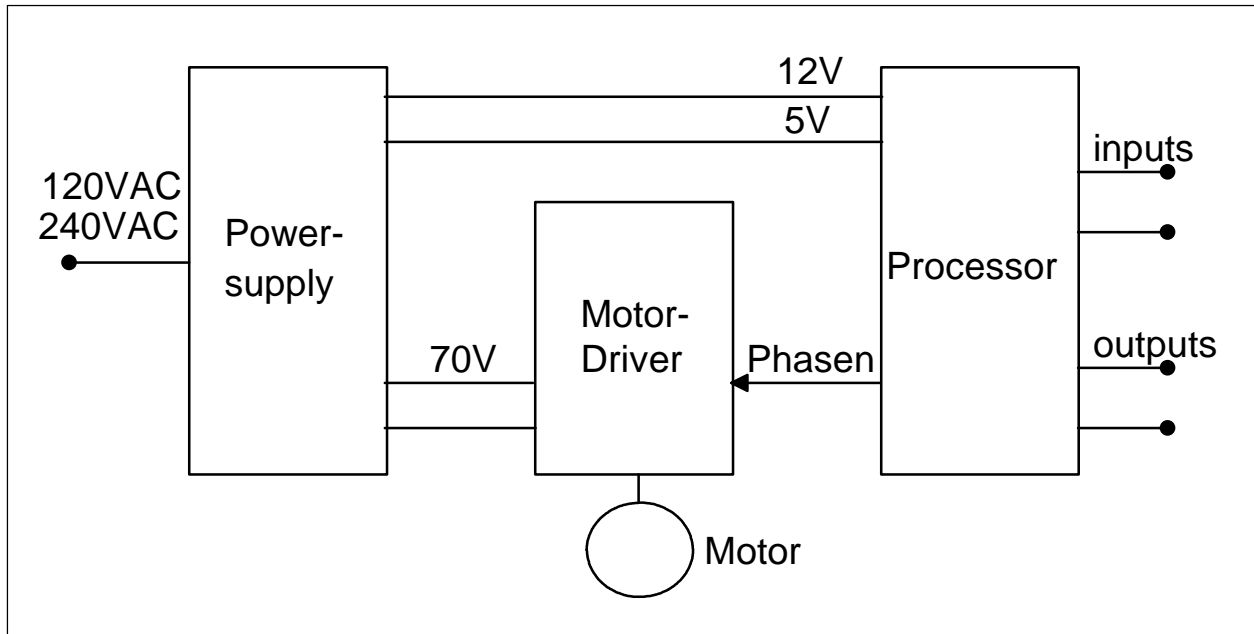


1.7 Adjustment of rewinder coupling force

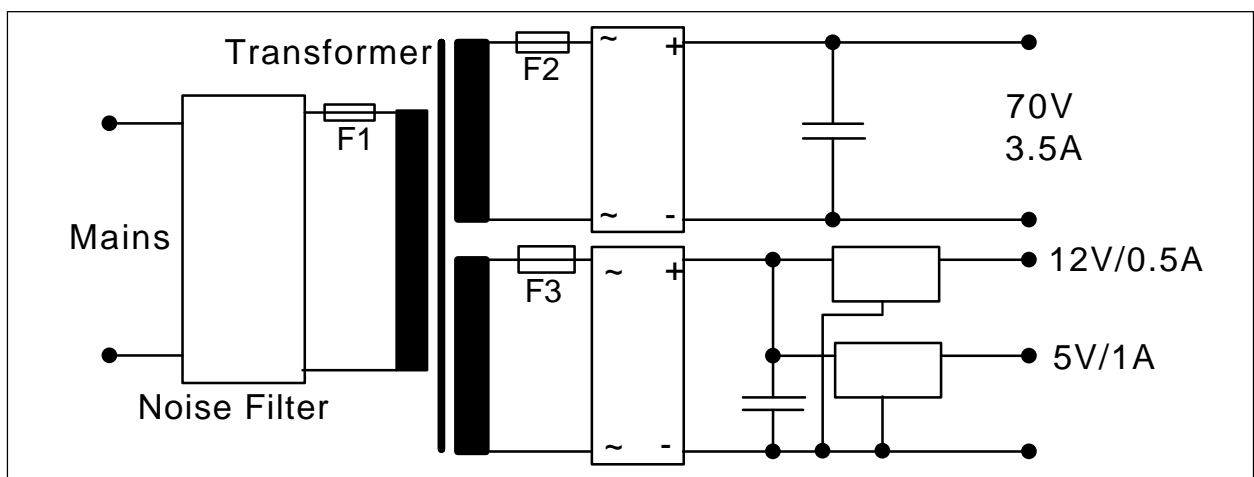


2 Electronics Board

2.1 Blockdiagram

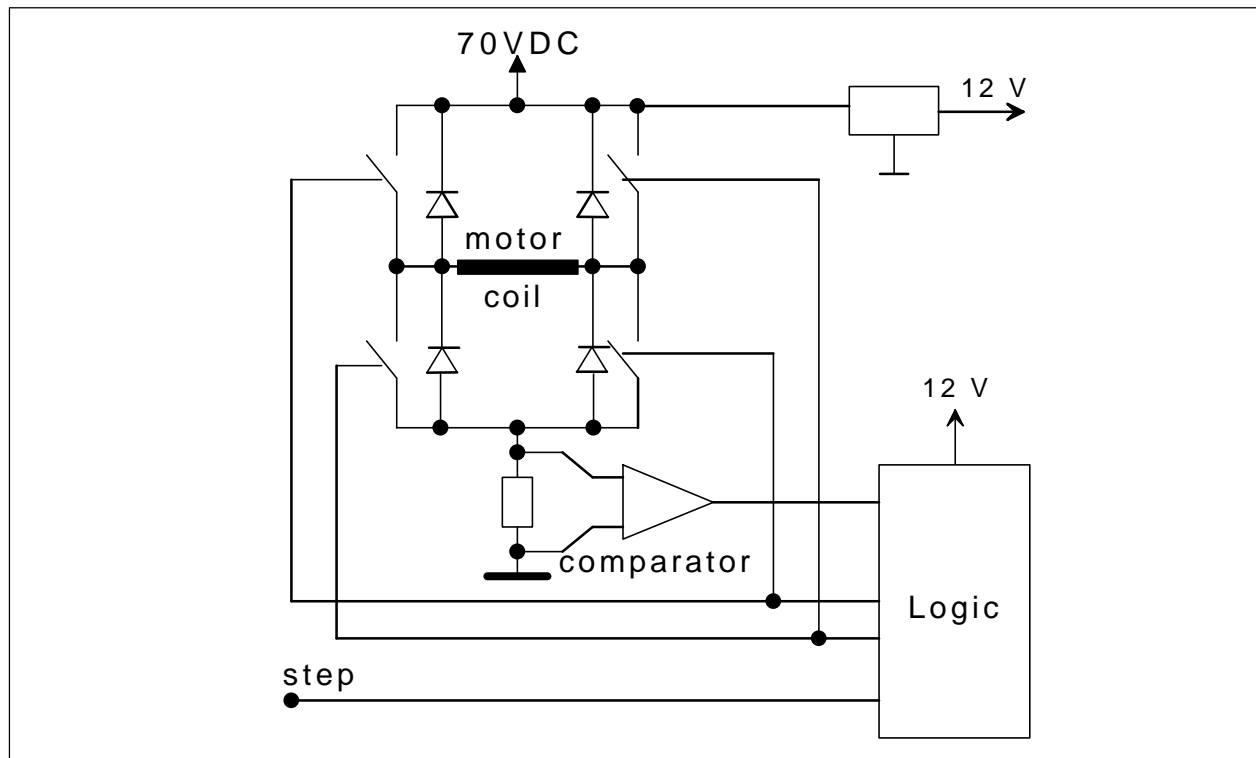


2.2 Power Supply



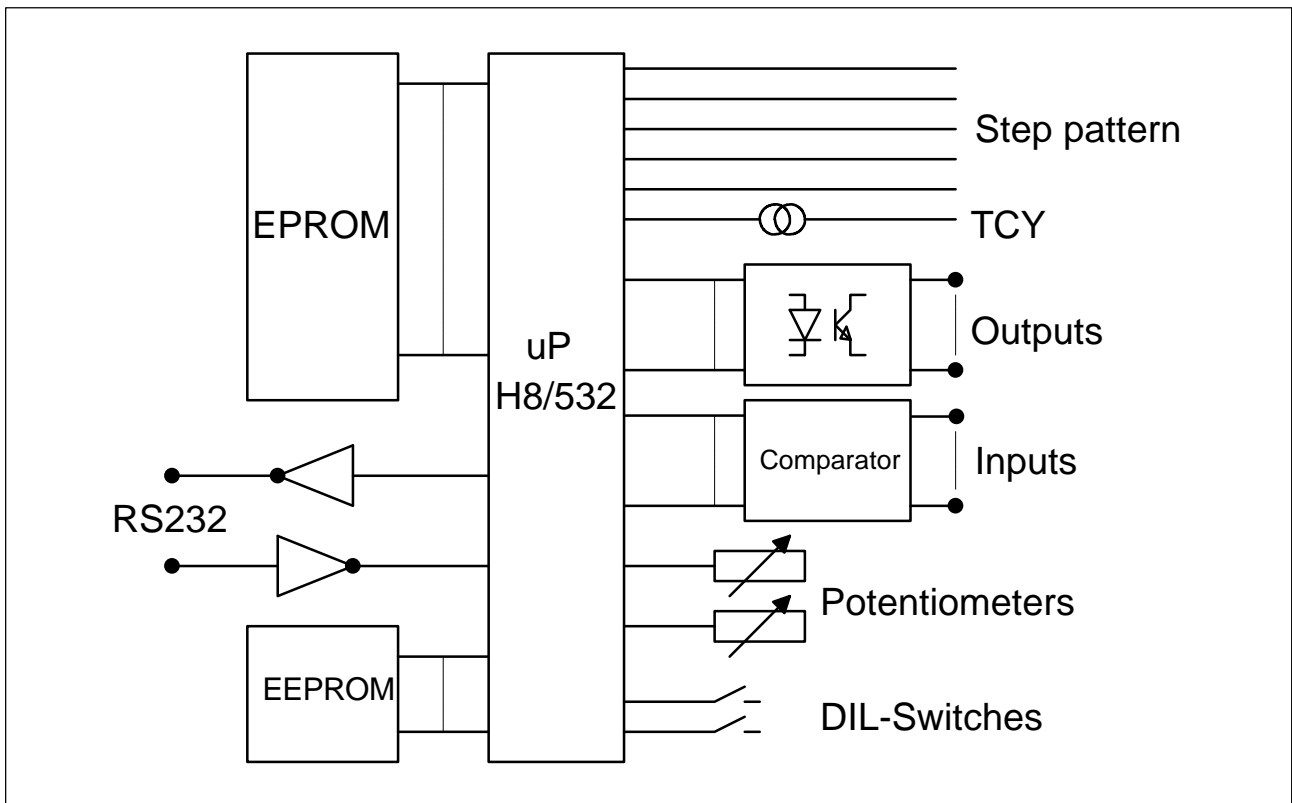
- Input voltage: 110, 120, 220, 230, 240 VAC
- Input frequency: 50..60Hz
- Power requirement: 200VA
- 3 Output voltages: 70V, 3.5A not regulated for the Motordriver
12V, 0.5A for the sensors
5V, 1A regulated for the microprocessor

2.3 Motordriver



- 2 Phase choppered
- Chopper frequency 20 kHz
- Phase current 4 A
- Driver supply voltage 70 V
- Max. Speed 30 m/min
- Min. Speed 3 m/min
- Full step at speed > 8 m/min
- Half step at speed < 8 m/min
- Step pattern generated by microprocessor

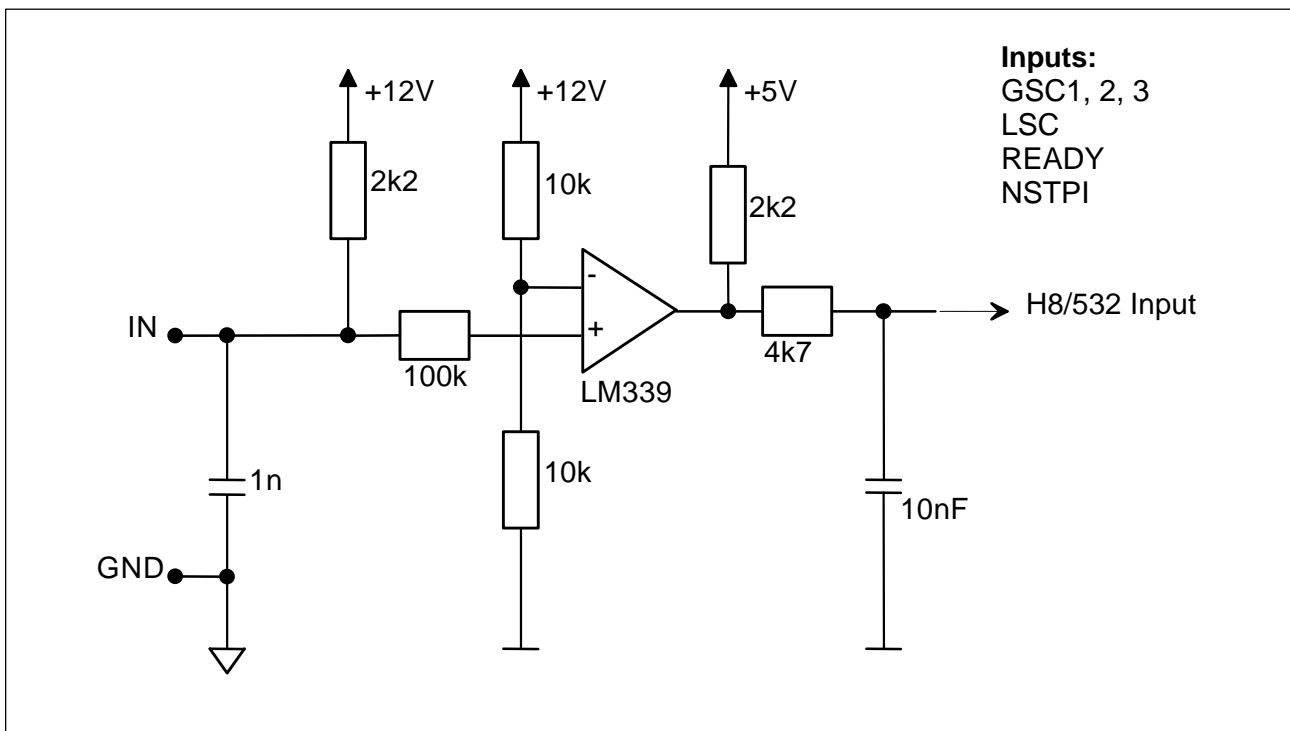
2.4 Processor



- Type: Hitachi H8/532
16Bit, 10 MHz
- Programming language: "C"
- Firmware in 32 Kbyte EPROM
- Tasks: Generation of motor step pattern
controlling of all sensors
controlling of potentiometers
handling output signals
- Datahold in 256 bit EEPROM
communication with RS232 for testing software

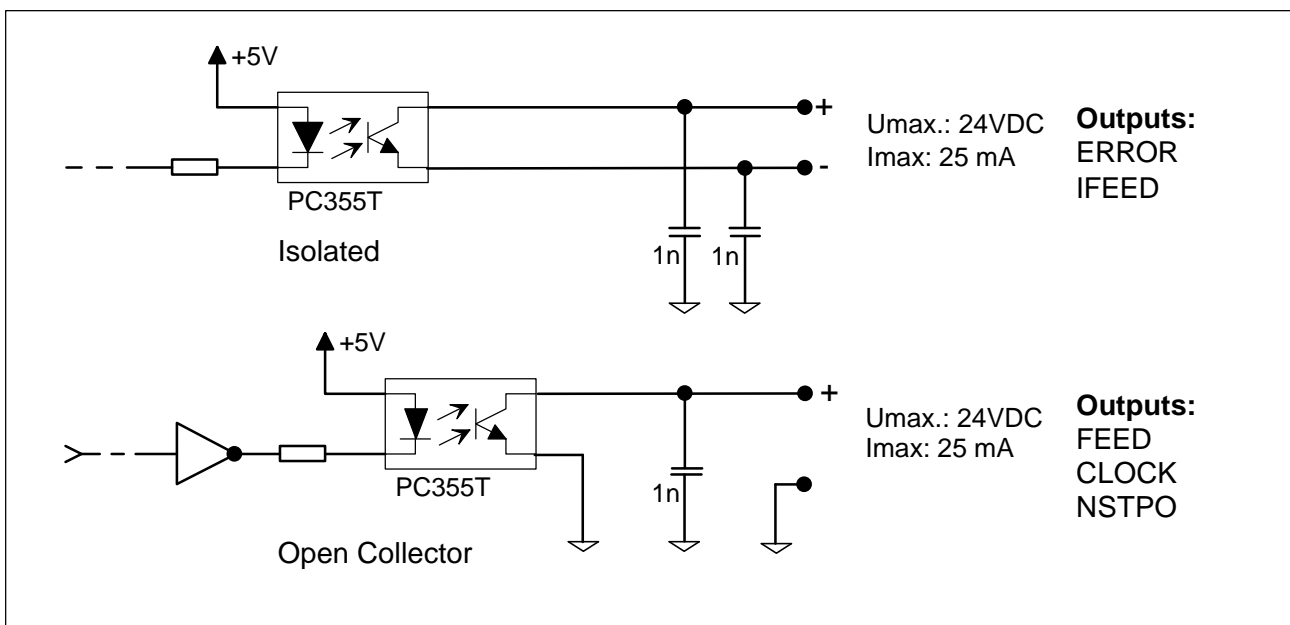
2.5 Inputs

All inputs are equipped with comparators

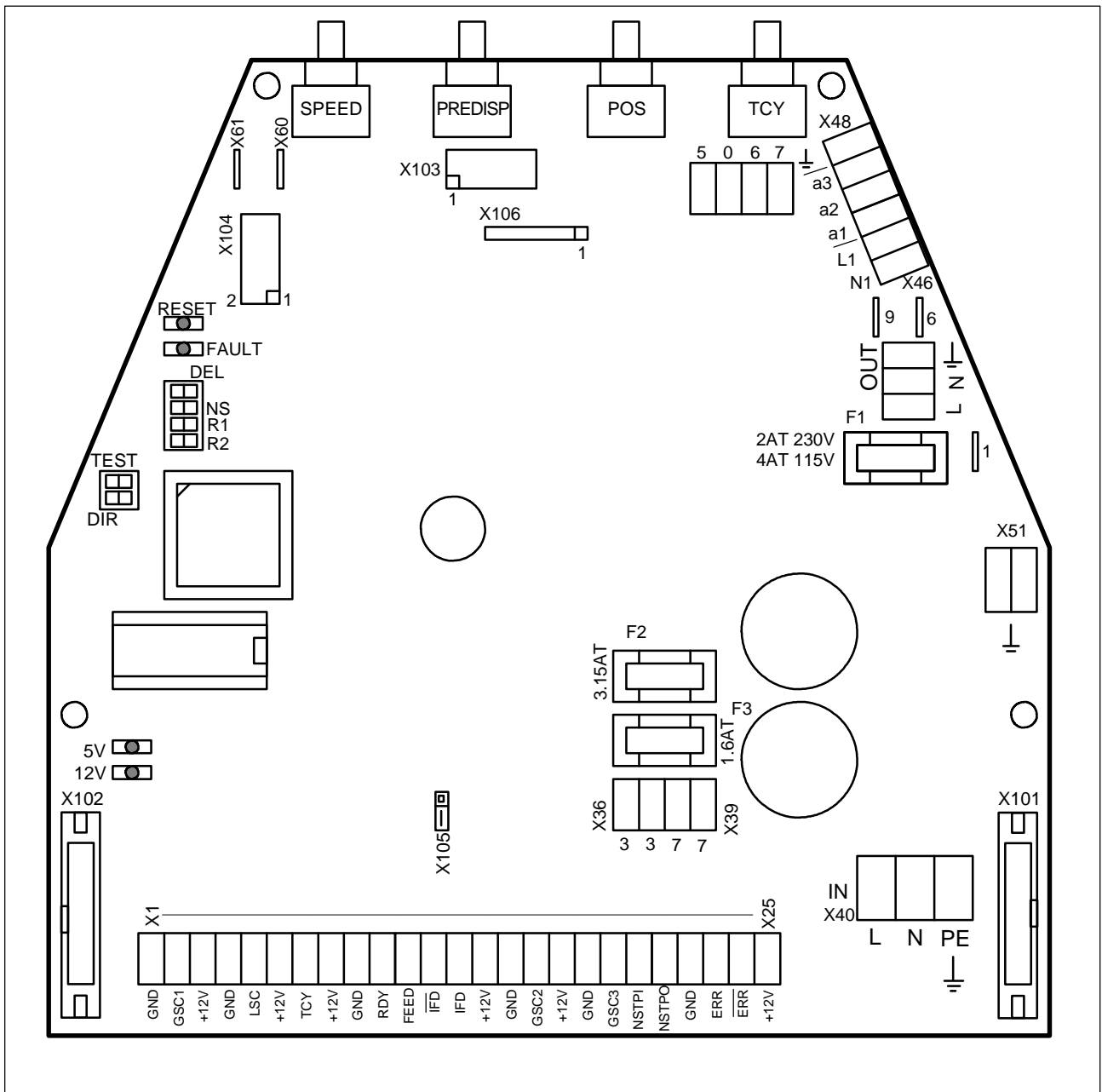


2.6 Outputs

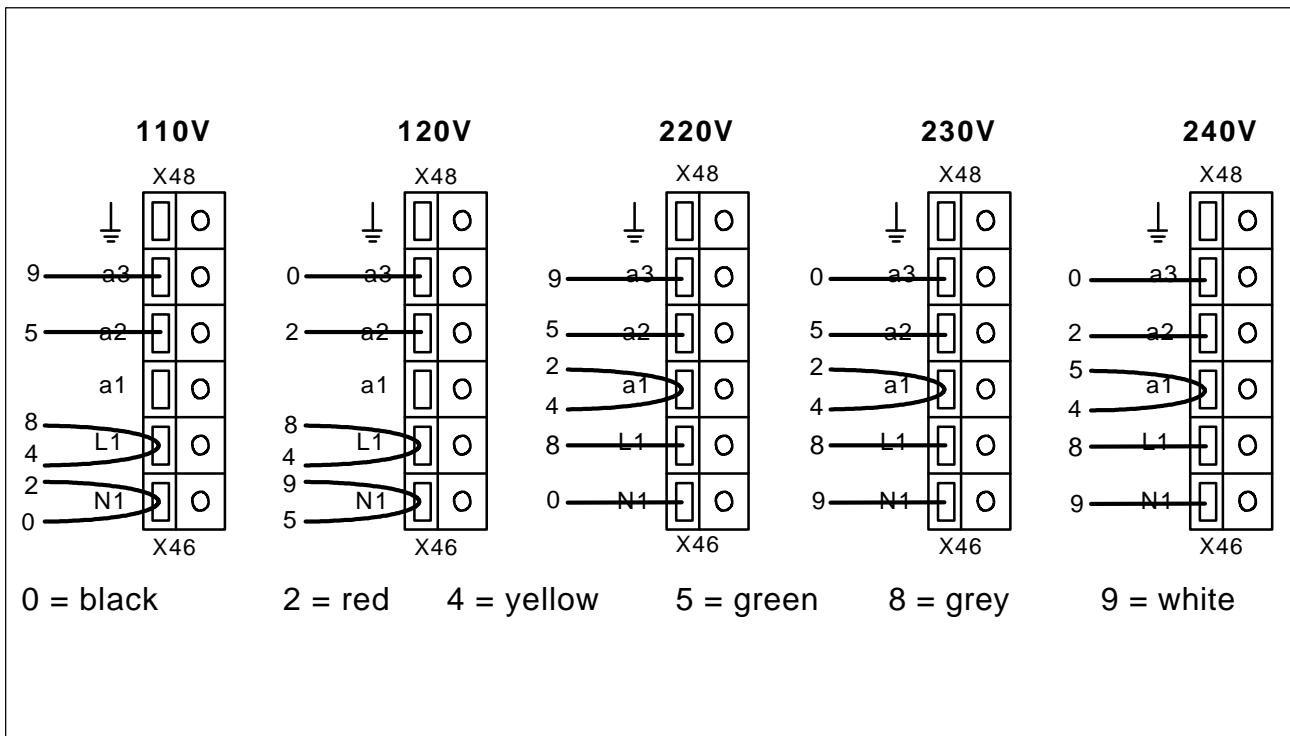
All Outputs are equipped with photo couplers. (except the TCY output)



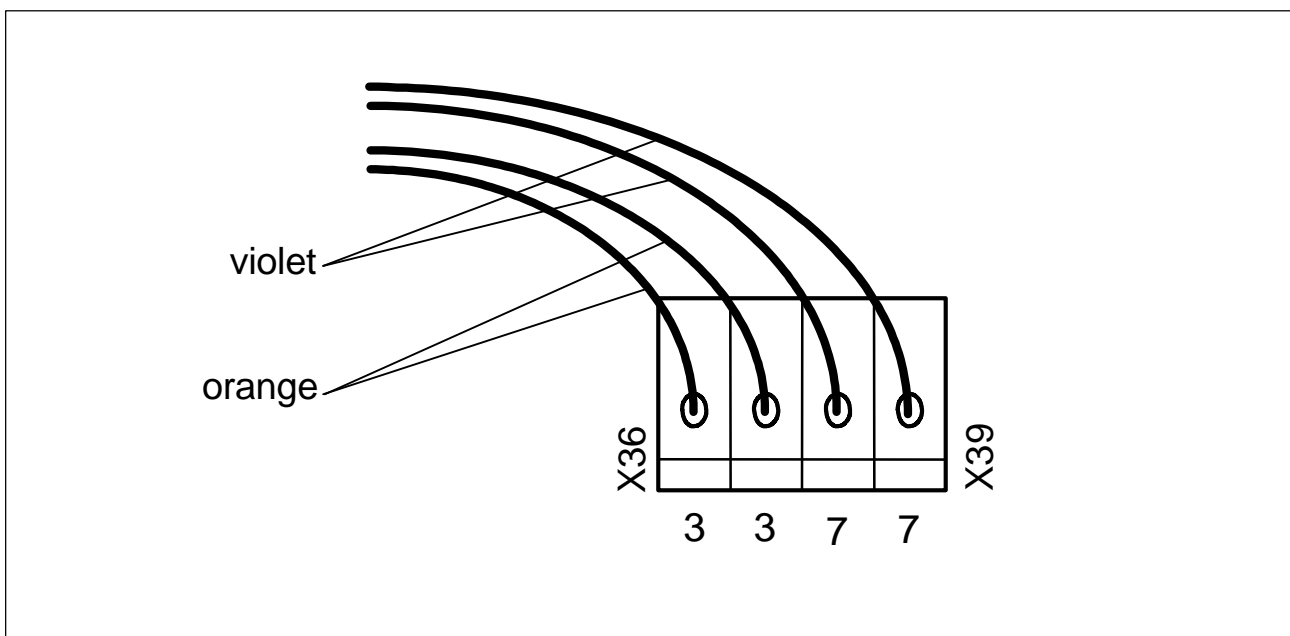
3 Dispenser Board



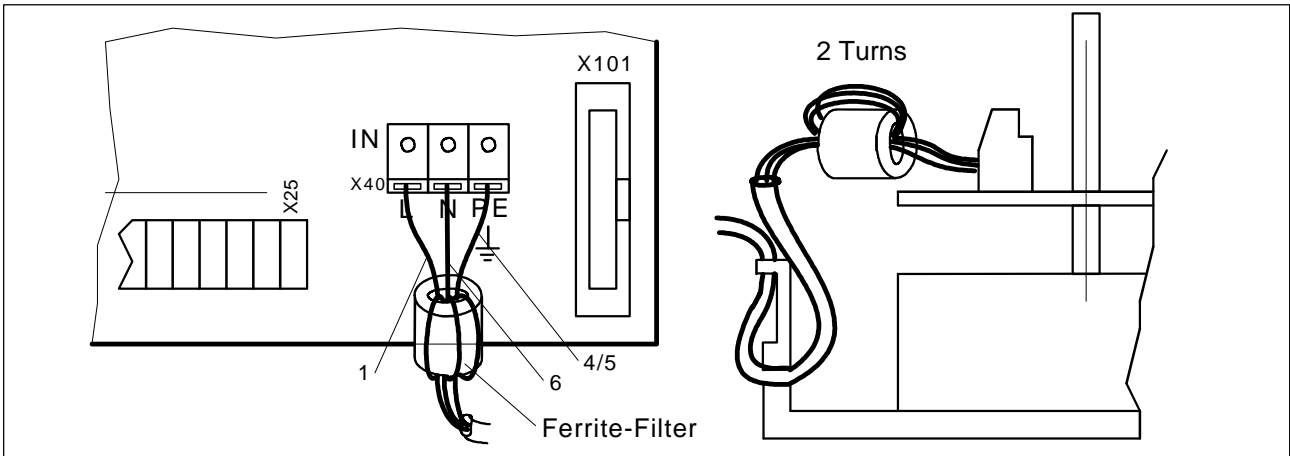
3.1 Transformer connections primary side



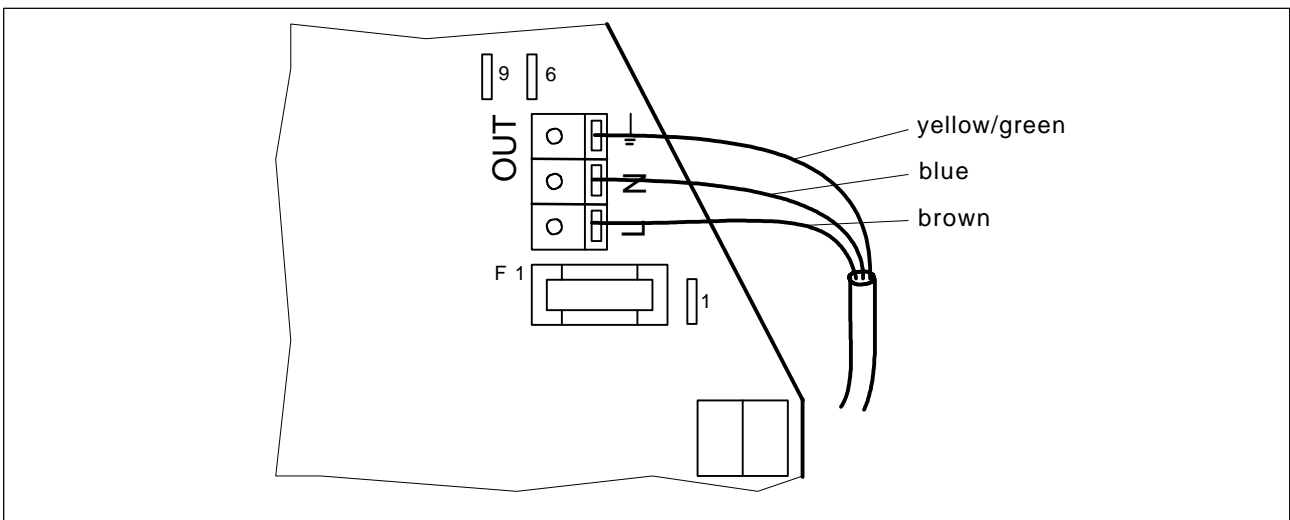
3.2 Transformer connections secondary side



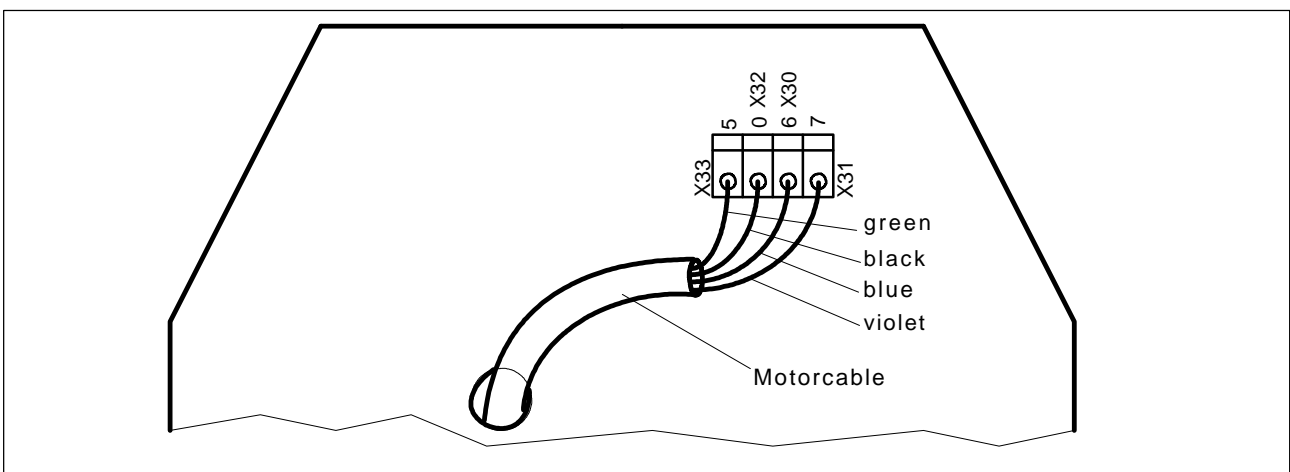
3.3 Connection of the mains input



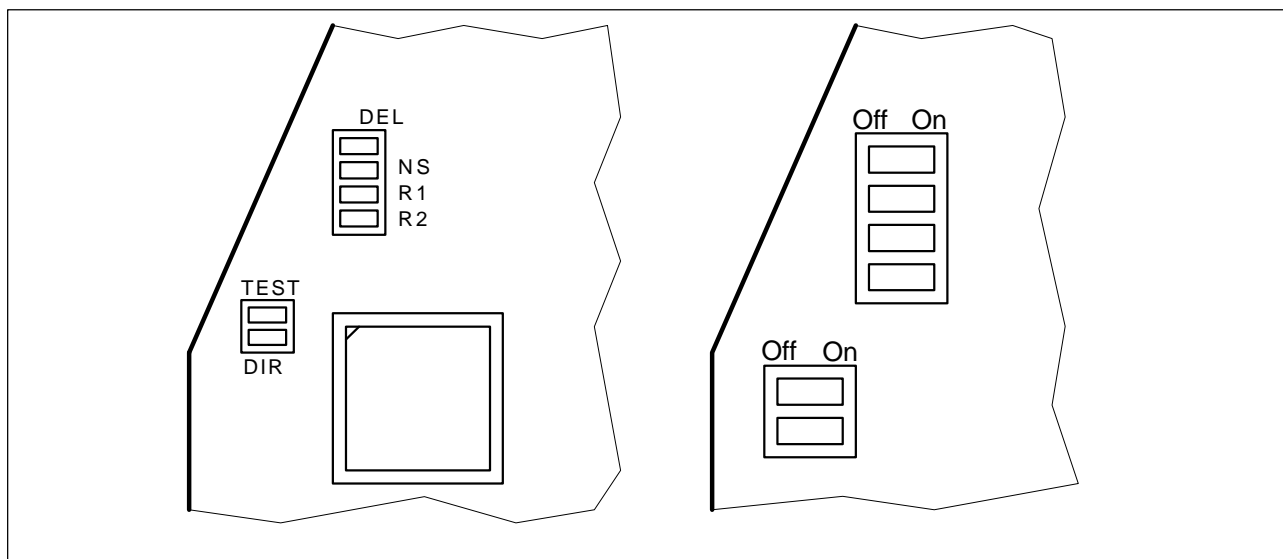
3.4 Connection of the mains output



3.5 Connection of the stepping motor

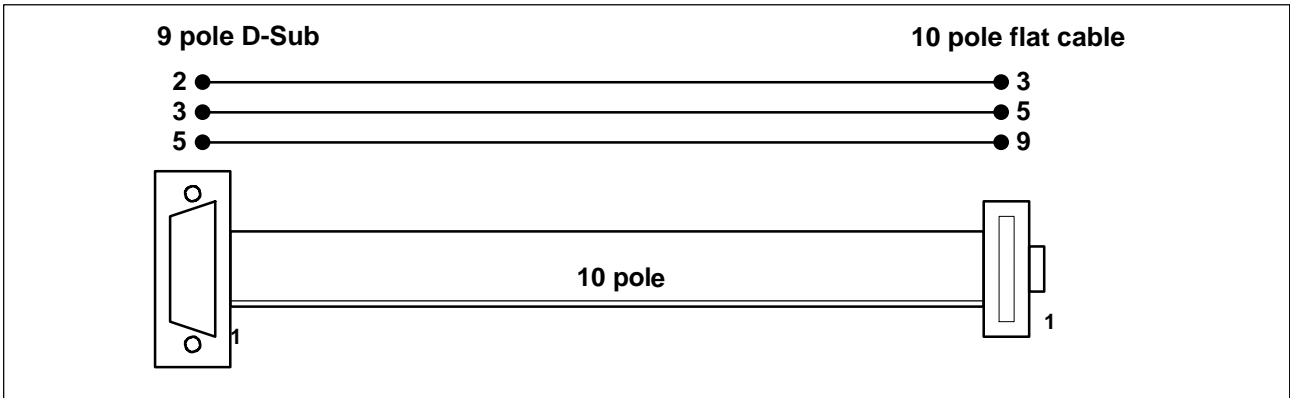


4 DIL-switches

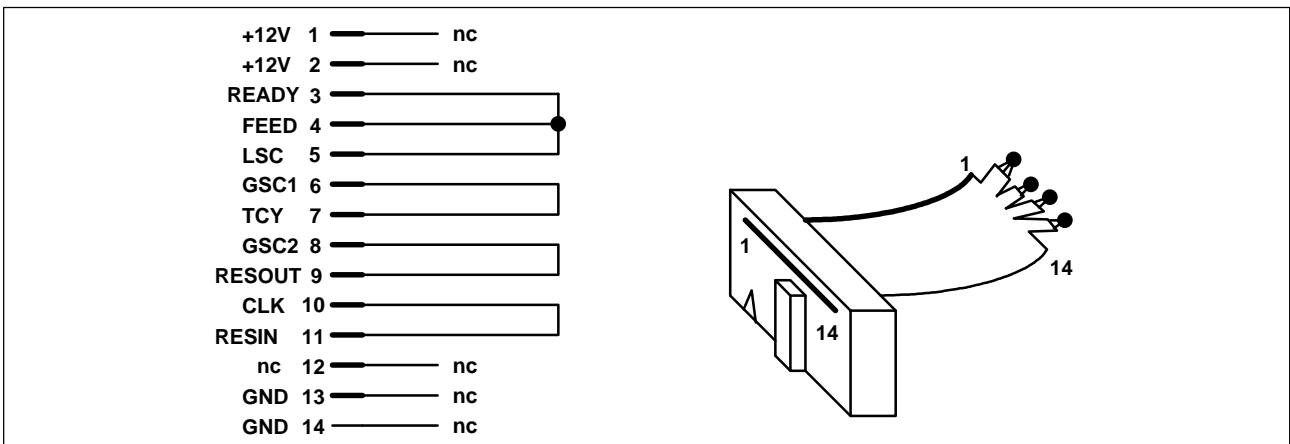


Switch	Function	Off	On
DIR	Turning direction of the motor	Right	Left
TEST	Labeling mode/ Test mode Slave in Nonstop mode	Labeling mode	Test mode
DEL	Delayed predispensing	Normal mode	Delayed predispensing
NS	Nonstop	Normal mode	Nonstop mode Test On : Master Test Off : Slave
R1	Position/GSC-Suppression	Position	GSC-Suppression
R2	Potentiometer-range	Normal	Programmed SPEED with encoder

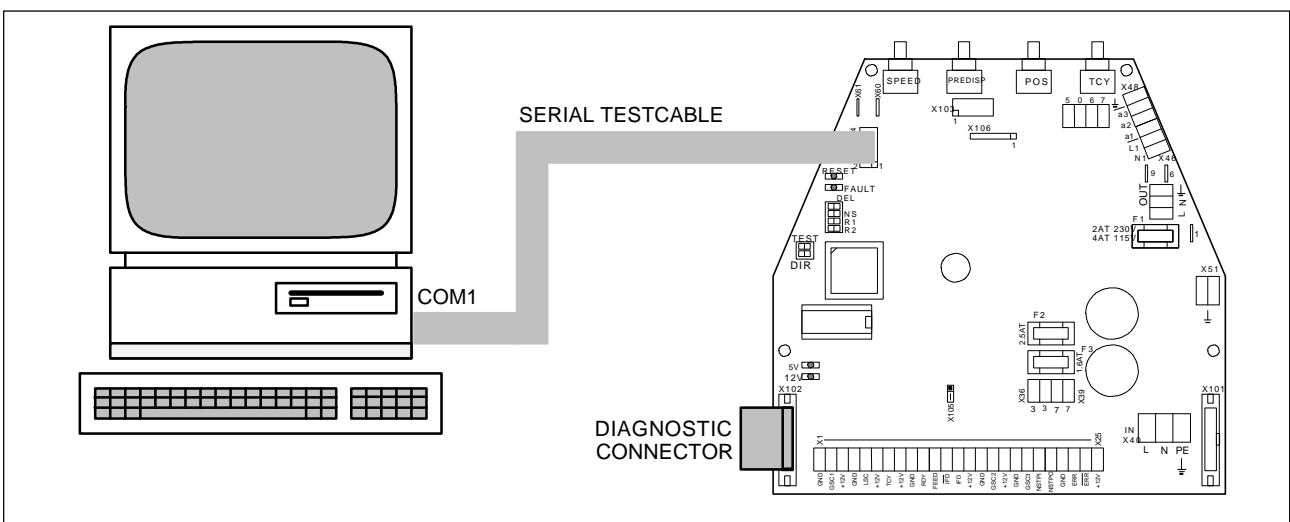
4.1 Test and diagnostics



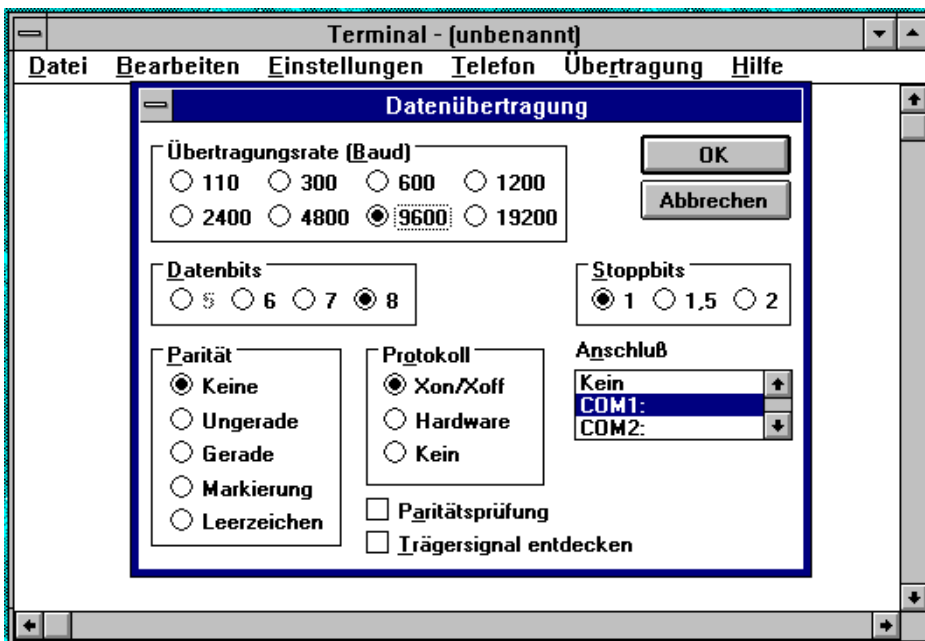
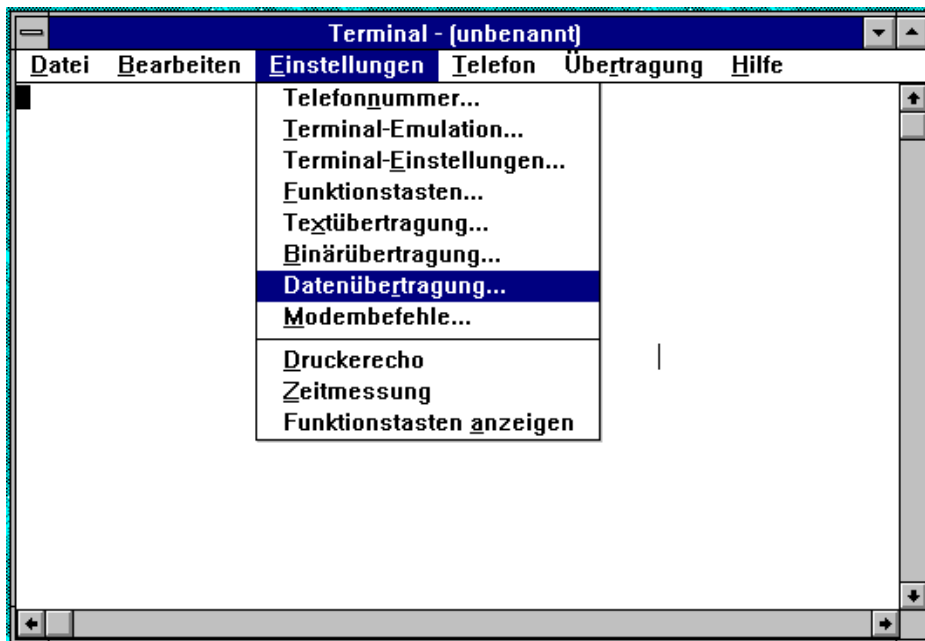
4.2 Diagnostic connector



4.3 Test equipment



4.4 Windows terminal



4.5 Terminal dialog

```

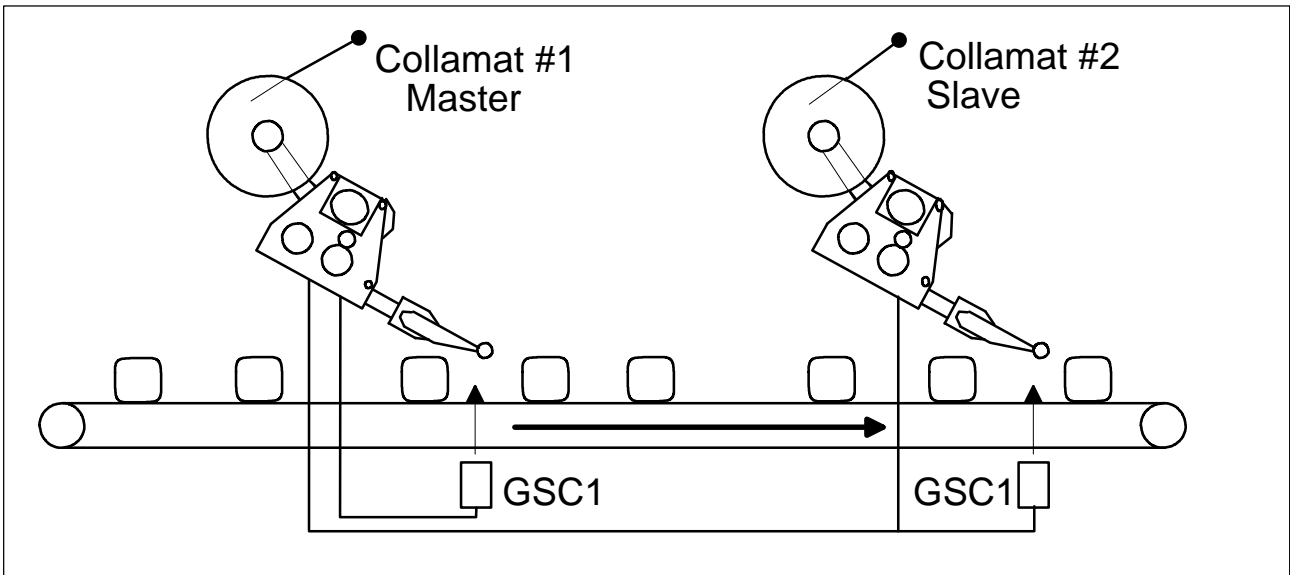
Terminal - (unbenannt)
Datei Bearbeiten Einstellungen Telefon Übertragung Hilfe
COLLAMAT 6600 V1.00
Motor intervall test. Use spacebar to leave

Helpmenue for C6600 Testprogram
-----
H : Help
M : Motortest
N : Motor intervall test
B : BUS-signal selftest
S : Signals display
D : DIL-switch settings
O : Potentiometer parameters
P : Potentiometer settings
I : Incrementalencoder
E : EEPROM Data
U : Version and Serial-No

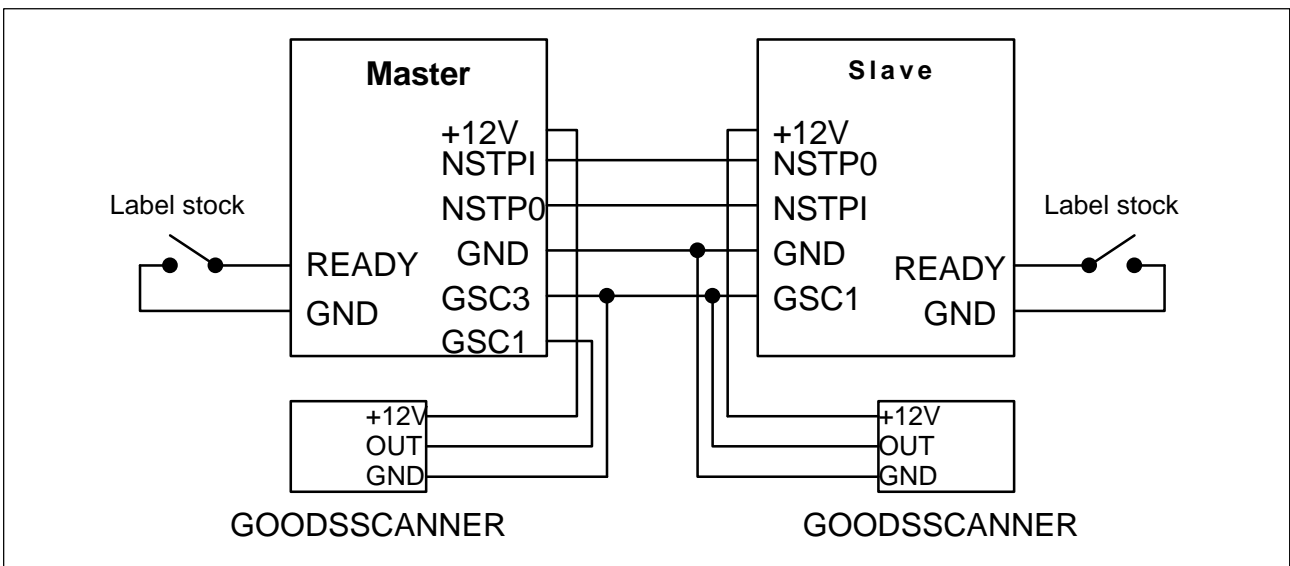
Select Testfunctions with the Keys H,M,N,B,S,D,O,P,I,E,U
>
  
```

5 Nonstop Labeling

5.1 Placement

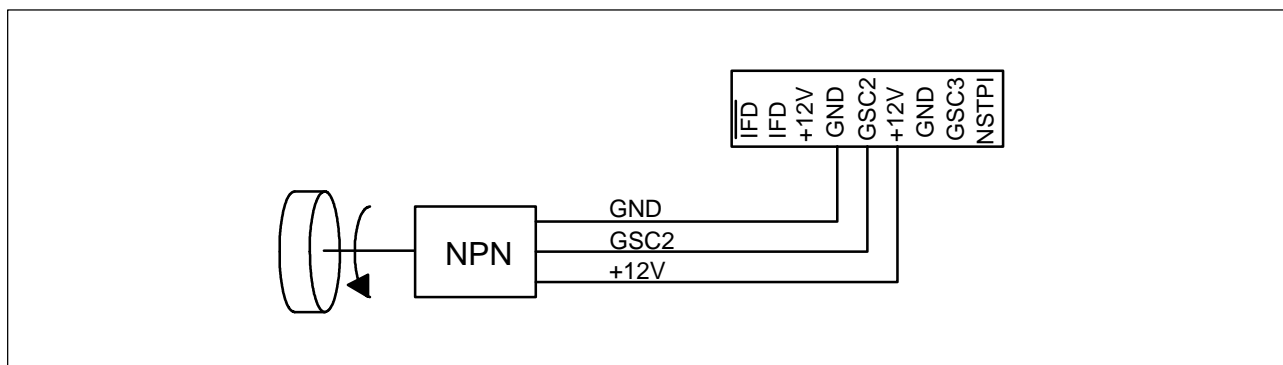


5.2 Connections

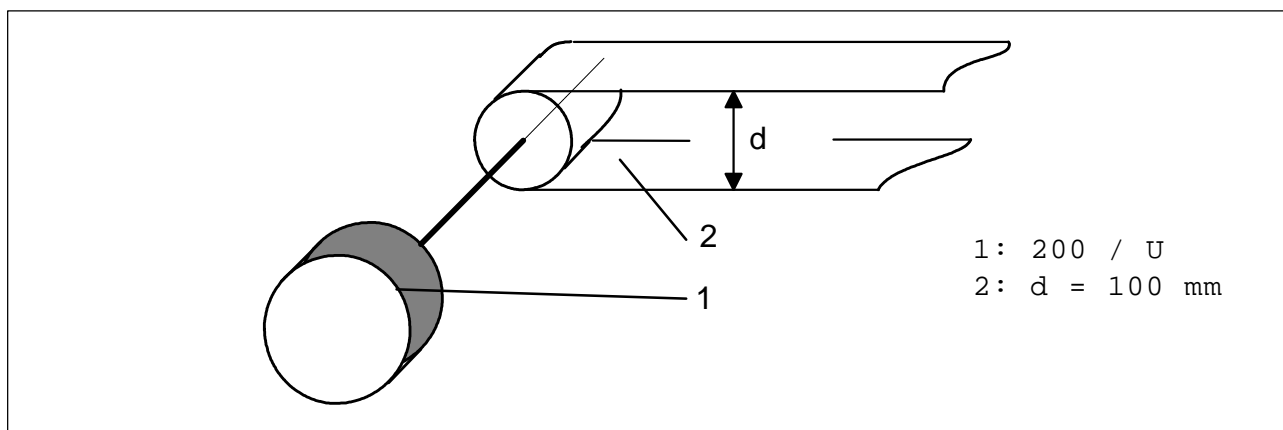


6 Incremental encoder

6.1 Connection



6.2 Calculation

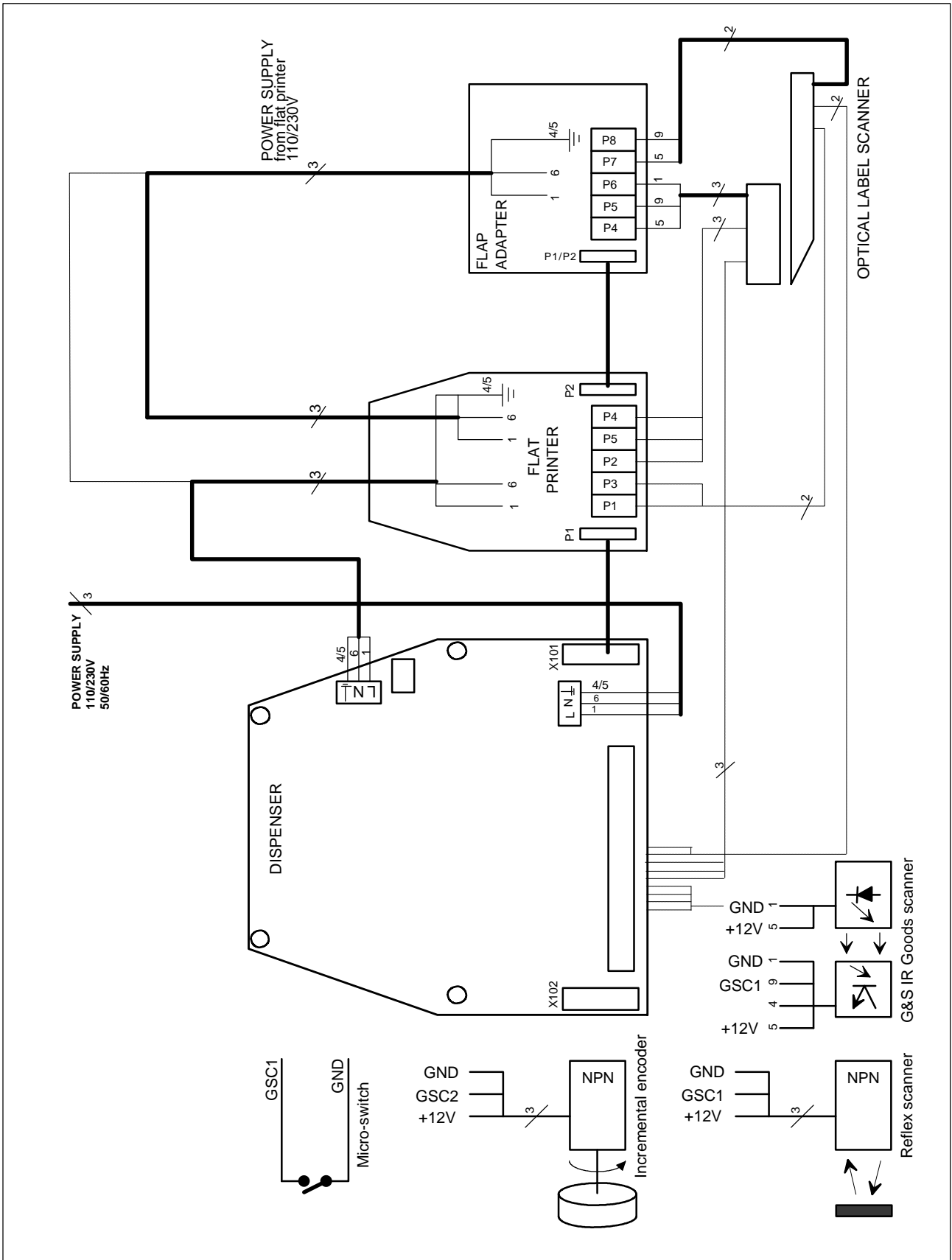


$$\text{Step} = \frac{d * \text{Pi}}{\text{Pulse}} = \frac{314 \text{ mm}}{200} = 1.57 \text{ mm}$$

The stepping rate must be in between 1.00 mm and 9.99 mm.

For best adjustment : Value range between 1.5.....2.0 mm.

7 Connection diagram



8 Technical Data

Traction unit	COLLAMAT 6610	COLLAMAT 6620
Design	right / left	right / left
Dispensing speed	3 to 30 m/min	3 to 30 m/min
Maximum predispensing of labels	100 mm	100 mm
Minimum passing width	10 mm	10 mm
Maximum passing width	95 mm	160 mm
Minimum label length	10 mm	10 mm
Stop tolerance	± 1 mm	± 1 mm
Minimum distance between goods	approx. 5 mm	approx. 5 mm
 Unwinder	Diameter 250 or 350 mm, with suspended spring and automatic roller brake	
Maximum diameter of label roll	250 / 350 mm	250 / 350 mm
Diameter of corn	42 mm	42 mm
Maximum weight of label roll	10 kg	10 kg
 Rewinder	Takes up the carrier paper of a label reel of diameter 250 mm	
Drive	2-phase stepper motor	
Power supply	110 / 120 V or 220 / 240 V +10 / -15 % , 50 / 60 Hz	
Power input	190 VA	
Tolerated ambient temperature	0 to 50 °C	
Tolerated ambient humidity	15 to 90 % , non-condensing	
 Dimensions (W / H / D)	approx. 266 x 245 x 288	approx. 266 x 245 x 353
Weight	approx. 13,5 kg	approx. 15,5 kg
Supplied accessories	5 mm hexagon socket spanner with handle	

Peripheral devices

- Fix dispensing edge 95 / 160
- Flap adapter 95 / 160 spring mounted or with magnet
- Goods scanner by infra-red or polarized light
- Mechanical switch to detect gap between goods
- Optical or mechanical label scanner

9 Trouble shooting checklist

Machine-Type:		Ser. No. Dispenser board:	Ser. No. Labeler:
Environment	Mains voltage:	Frequency Hz:	Temperature °C:
	Humidity %:	Interference level (Burst):	Interference level ESD (Static):
Labels	Width:	Length:	Gap:
	Thickness:	Transparency:	Material:
Paperweb	Width:	Thickness:	Transparency:
Goods	Kind:	Material:	Shape:
	Length:	Width:	Height:
	Speed m/min:	Length in sense of transport:	Distance between goods:
Labeler	Speed m/min:	Pieces / min.:	Measuring:
Settings	Predispensing:	Position mm:	Suppression:
	TCY value:	Label length:	Suppression:
Special:			
Machine-environment	Conveyor:	Feeder:	Taker:
	Other machines around:		
Peripheral units	1	2	3
Screening	Mains cables:	Sensor cables:	
ESD-Phenomena	Description:		
Description of the malfunctions:	Accumulation:		
Date / ev. date and time of the last disturbances:			
Comments:			
Disturbance registered by Name: Date:			