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 eMail: info@IEF-Werner.de



Circuit diagram

Customer :
 Plant designation : PA-CONTROL 4-axis CPU4
 Project number : 1027195

Type : 4 Axes english
 Manufacturing date : 2002
 Incoming supply : 230V/50Hz/16A
 Feeding : 3x1,5mm²
 Fuse protection : 16A
 Control voltage : 24V

Created on : 16.10.02 Highest Page No. : 21
 Project leader : A.Pfeiffer
 Last changed : 28.06.05
 Editor : VOL


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WUPJ0010 24.02.1994

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18	Power card 1 A1-axis 5-phase stepper motor		28.06.2005	VOL
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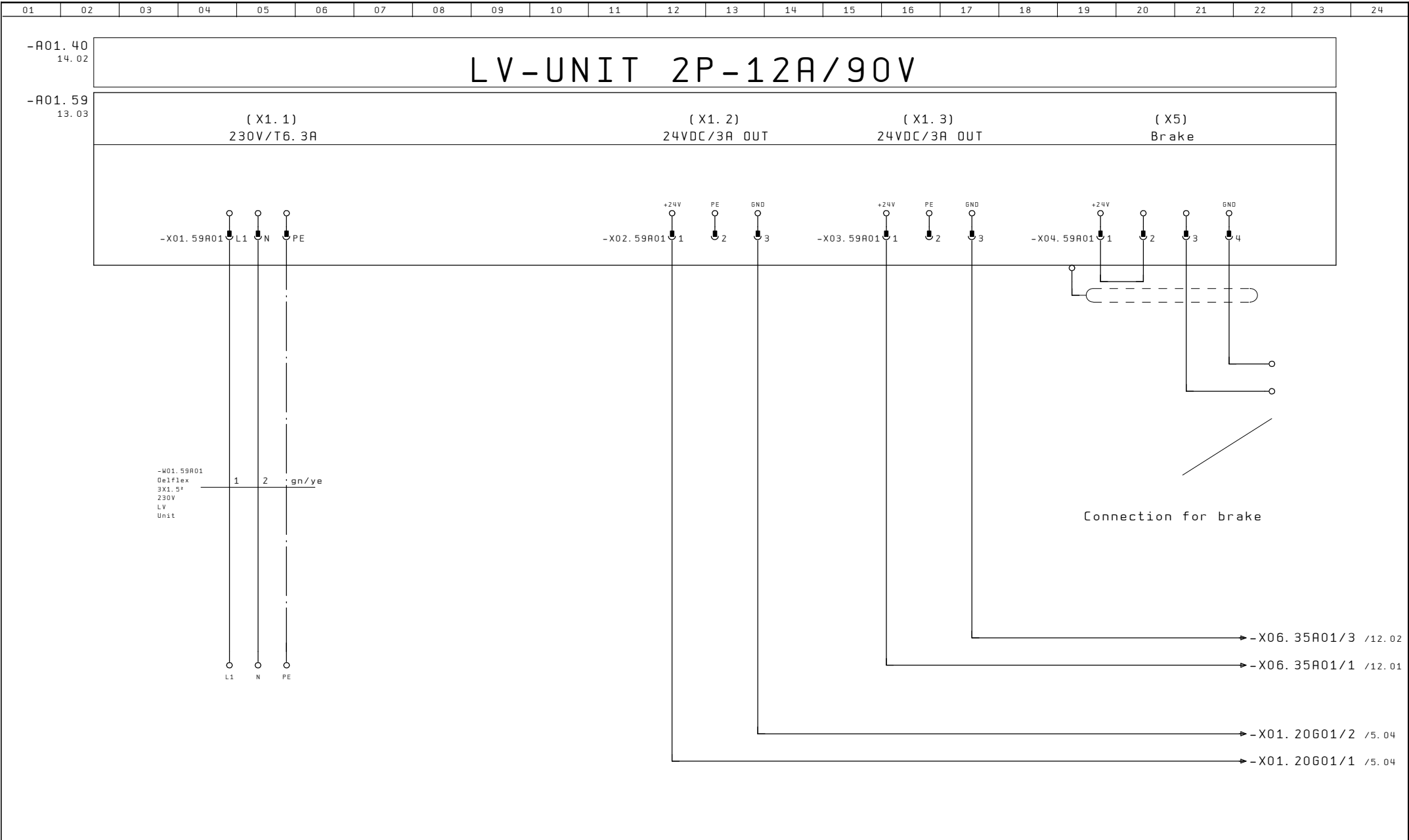


WERNER

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PA-CONTROL 4-axis CPU4

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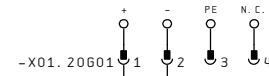
-R01.20
6.02

PA-CONTROL

-G01.20

NT8

(X1.3)
24V IN



-W01.20G01
Unitronic-FD Cy
3X0.5²
24V
PA-CONTROL

bn bu

4.22/ -X01.20G01/1

4.22/ -X01.20G01/2

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PA-CONTROL CPU-Power supply

PA-CONTROL 4-axis CPU4

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-A01. 20
5.02

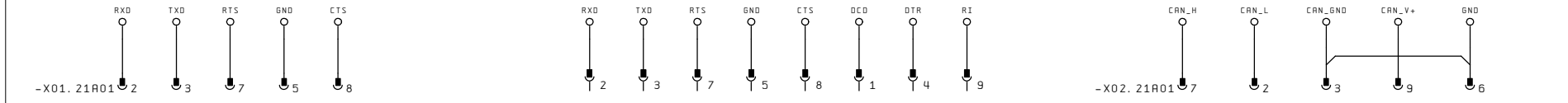
PA-CONTROL

-A01. 21

(X1)
COM1 Interface

CPU 4

(X2)
CAN Interface



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PA-CONTROL interface connection

PA-CONTROL 4-axis CPU4

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-A01.20
5.02

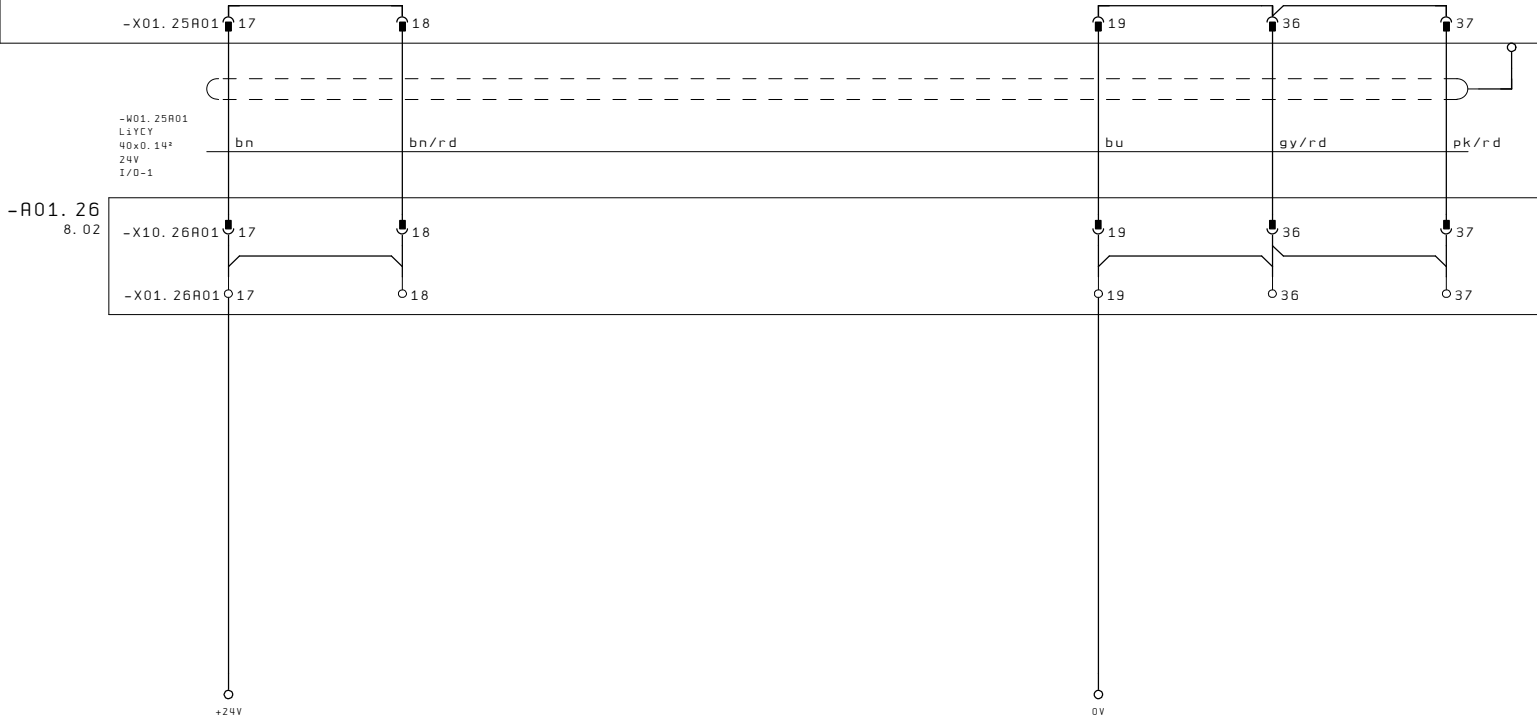
PA-CONTROL

-A01.25
8.02

PAC I/O-card 1

Pin 17: +24V for In-Outputs
Pin 18: +24V for In-Outputs

Pin 19: Mass 24V (GND)
Pin 36: Mass 24V (GND)
Pin 37: Mass 24V (GND)

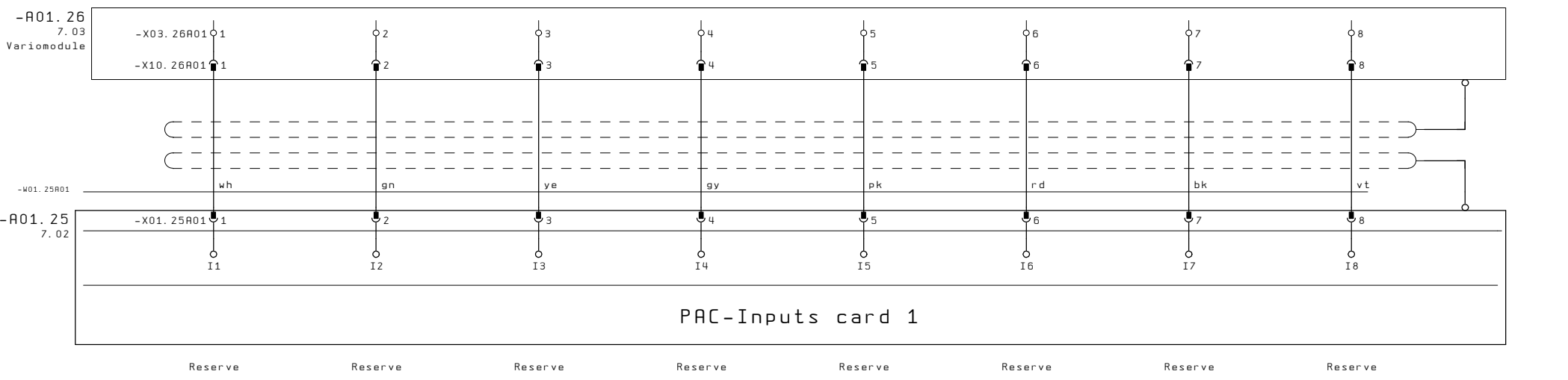
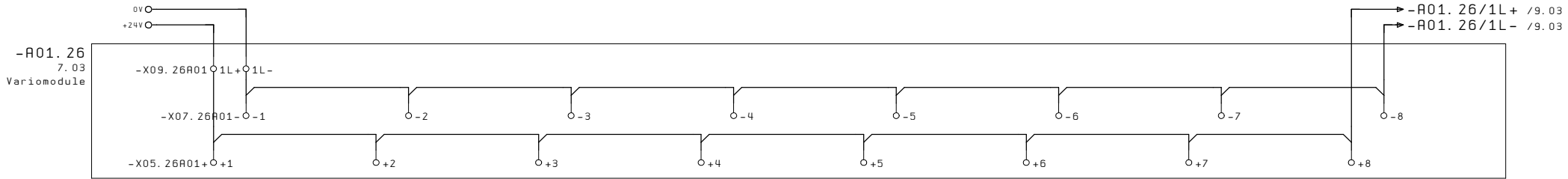


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Power supply PAC
I/O-card

PA-CONTROL 4-axis CPU4

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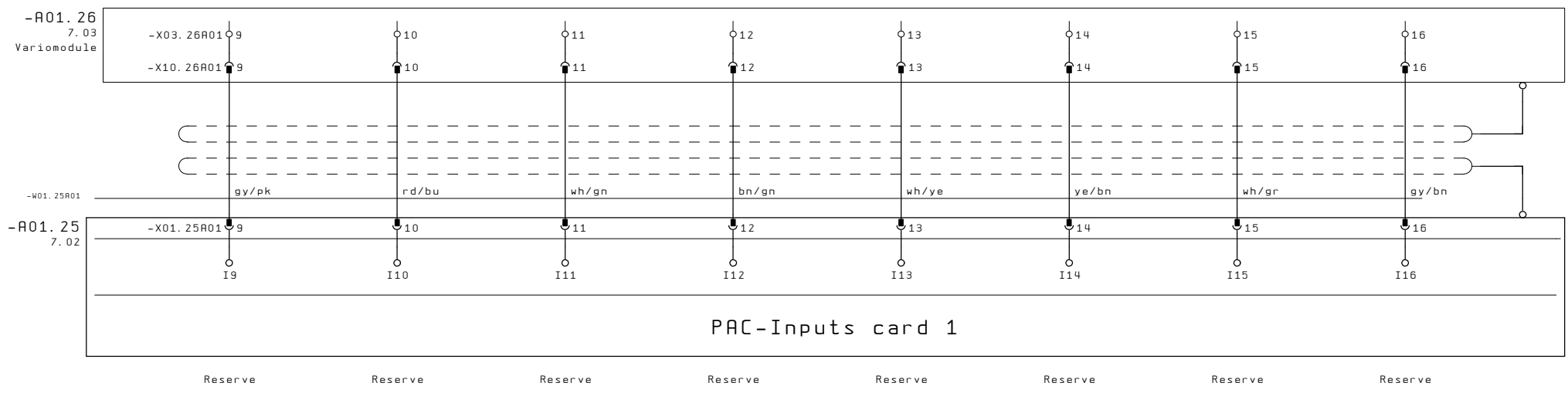
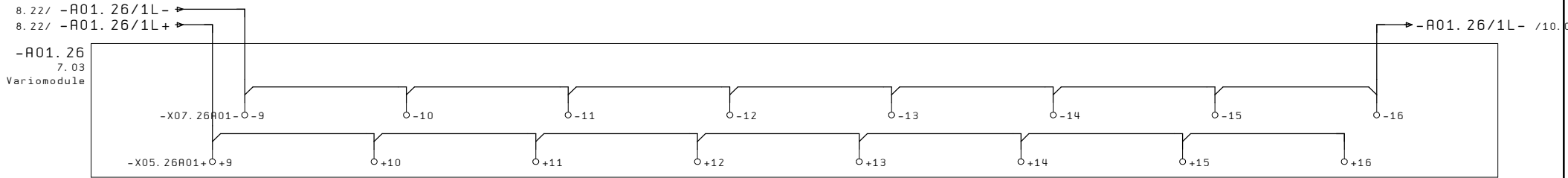
PAC-Inputs card 1

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PAC Inputs I1-I8	
PA-CONTROL 4-axis CPU4	

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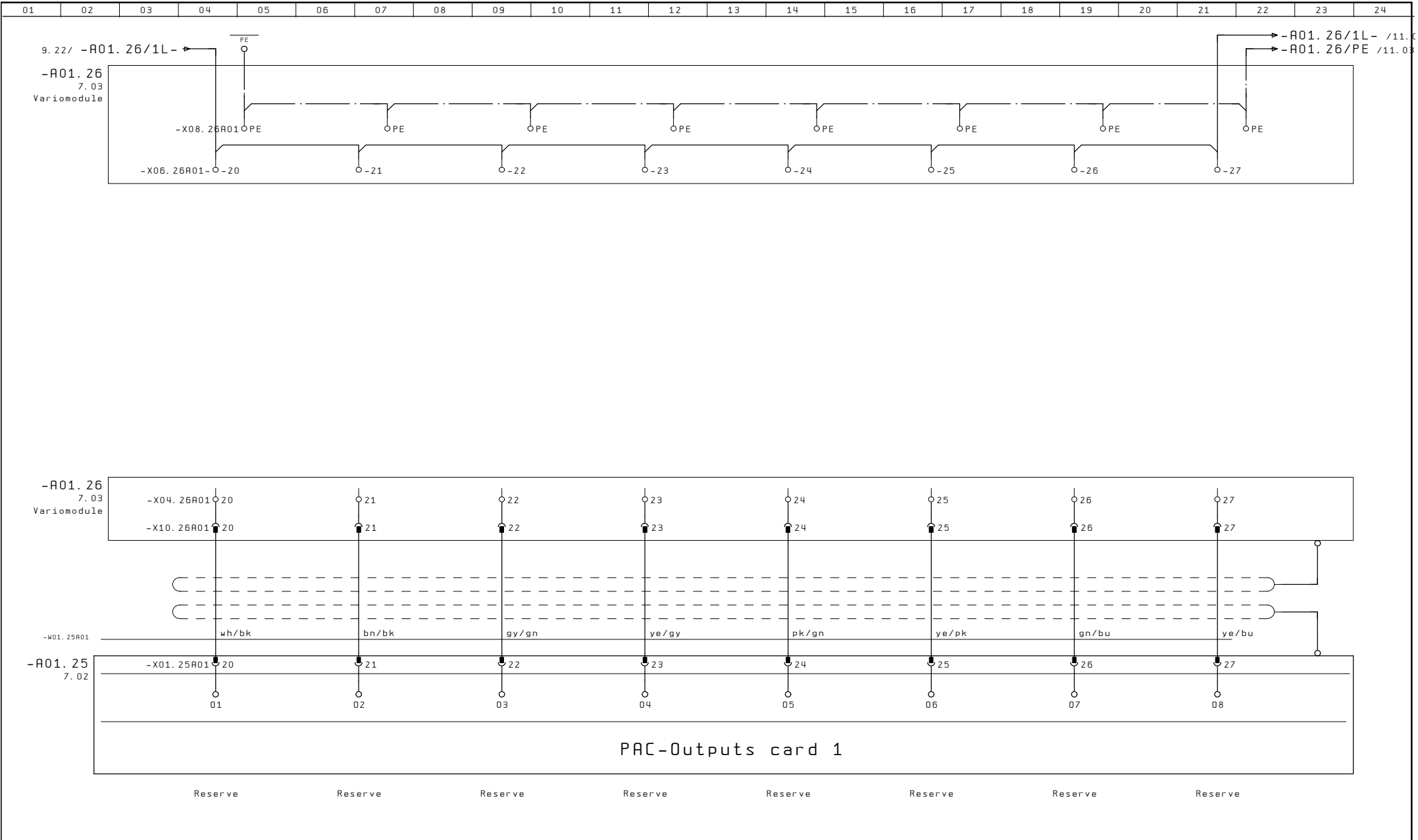
PAC-Inputs card 1

Reserve Reserve Reserve Reserve Reserve Reserve Reserve Reserve

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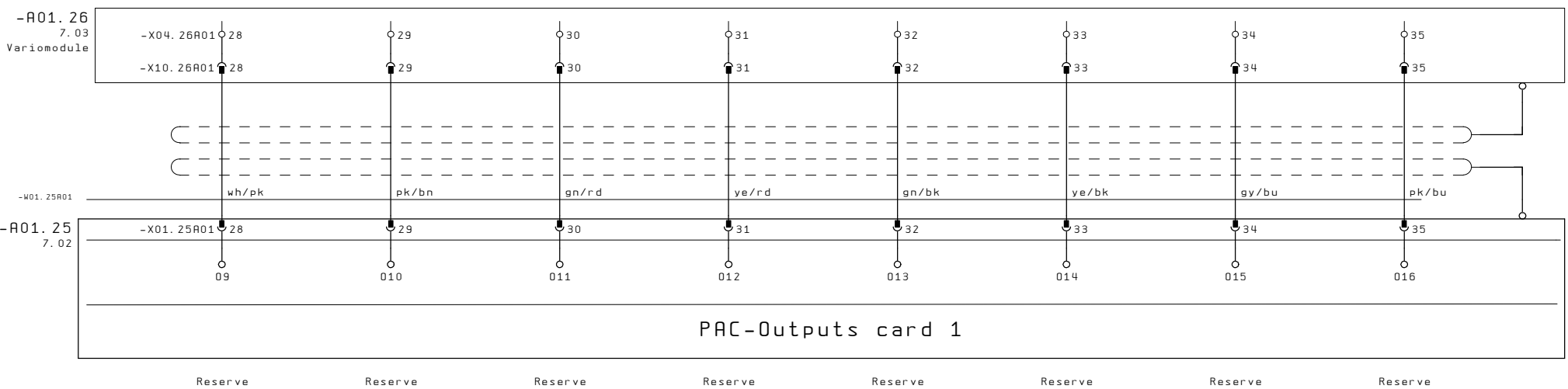
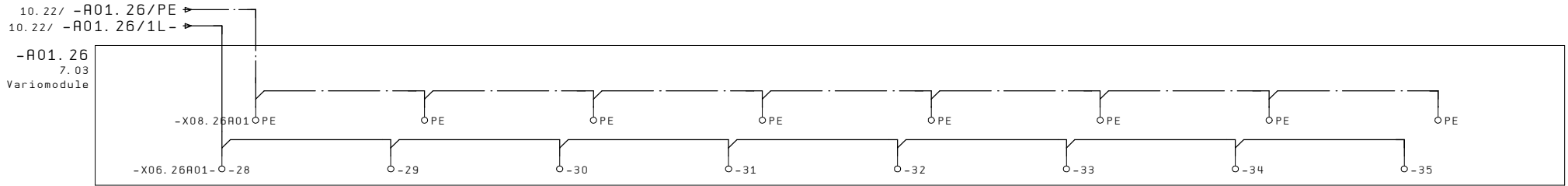


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PAC Outputs 01-08	
PA-CONTROL 4-axis CPU4	

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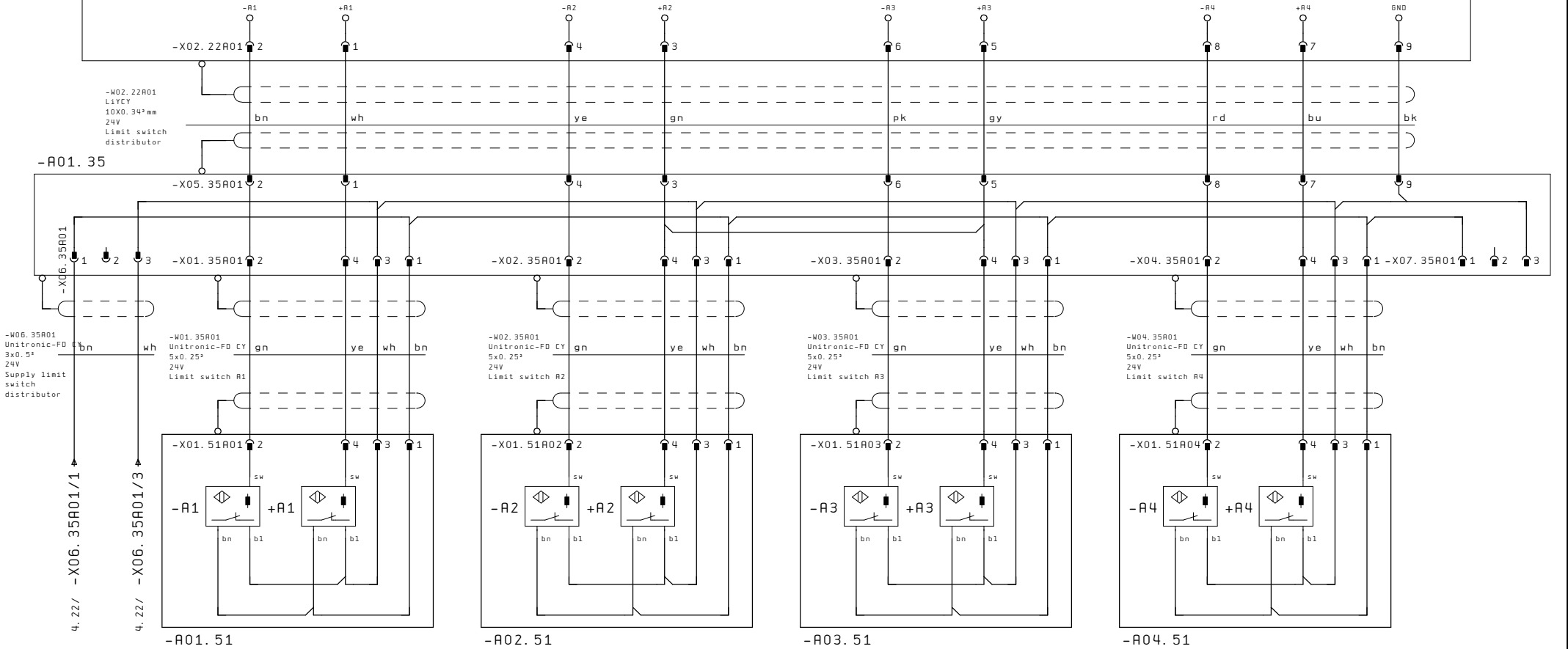
-A01. 20
5. 02

PA-CONTROL

-A01. 22
13. 02

PA-CONTROL PLS7 board

-A1 : Limit switch axis 1-
+A1 : Limit switch axis 1+
-A2 : Limit switch axis 2-
+A2 : Limit switch axis 2+
-A3 : Limit switch axis 3-
+A3 : Limit switch axis 3+
-A4 : Limit switch axis 4-
+A4 : Limit switch axis 4+



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PA-CONTROL
limit switch axes
1-4 PLS7
PA-CONTROL 4-axis CPU4

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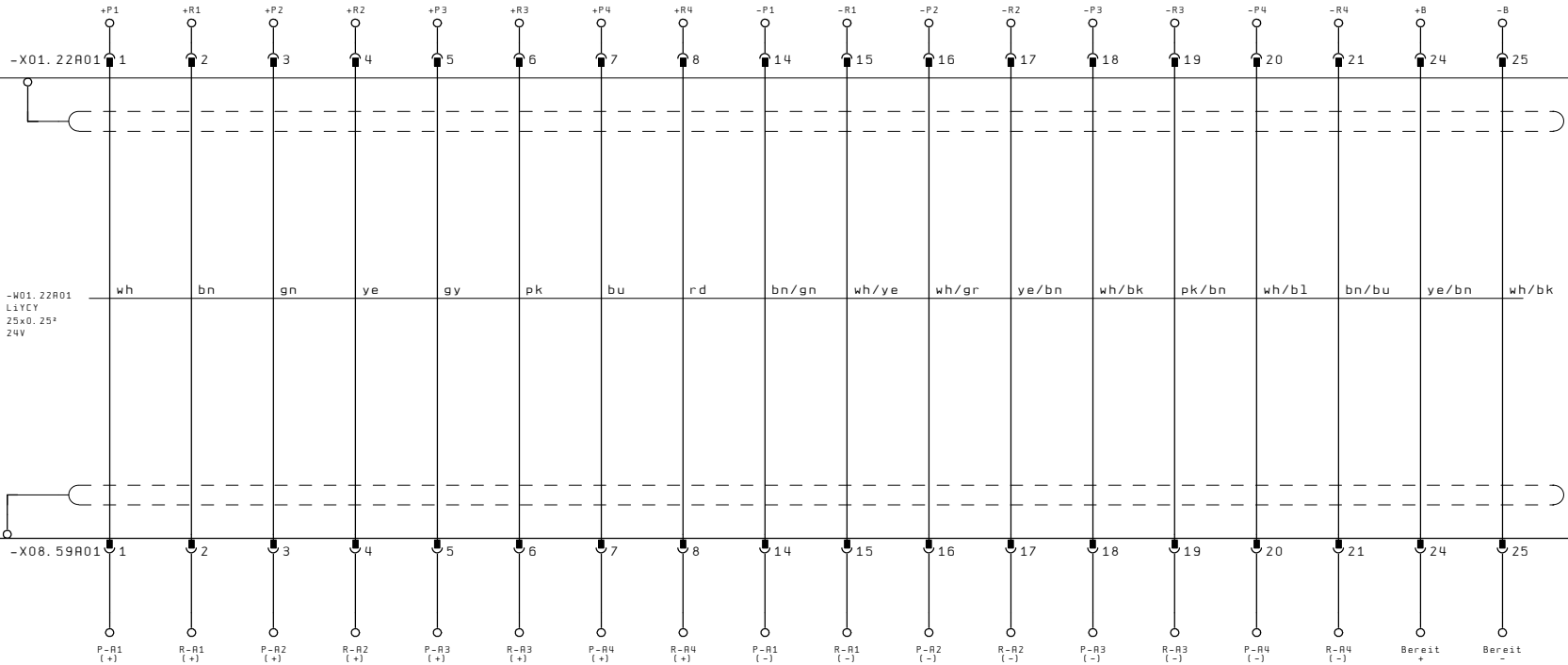
-A01. 20
5. 02

PA-CONTROL

-A01. 22
12. 02

PAC PLS7-card

P+A1: pulse	A1-axis	P+A3: pulse	A3-axis	P-A1: pulse	A1-axis	P-A3: pulse	A3-axis	+Stand-by
R+A1: direction	A1-axis	R+A3: direction	A3-axis	R-A1: direction	A1-axis	R-A3: direction	A3-axis	-Standby
P+A2: pulse	A2-axis	P+A4: pulse	A4-axis	P-A2: pulse	A2-axis	P-A4: pulse	A4-axis	
R+A2: direction	A2-axis	R+A4: direction	A4-axis	R-A2: direction	A2-axis	R-A4: direction	A4-axis	



-A01. 59
4. 02

LV-UNIT

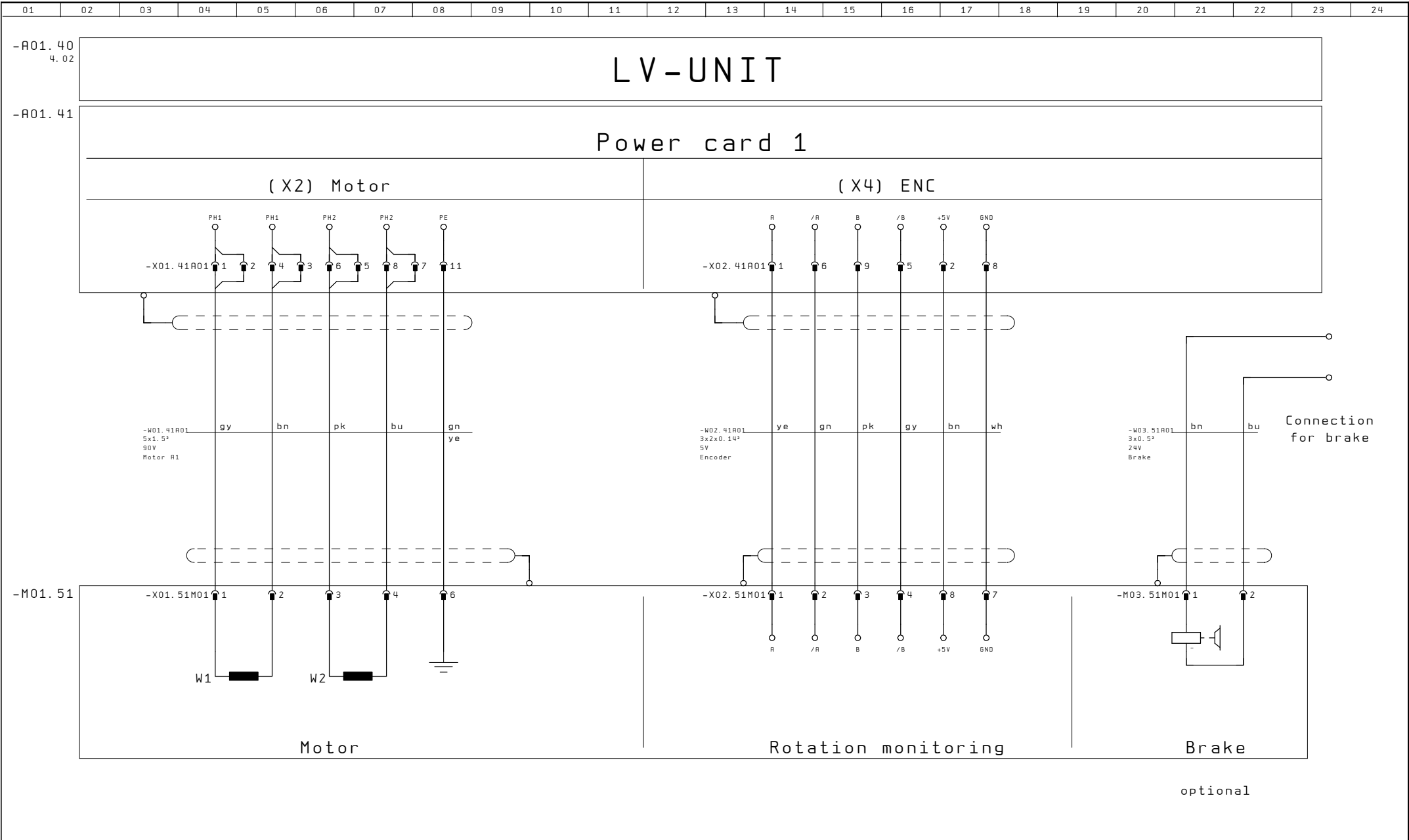
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PLS7
pulse transmitter
card axes 1-4

PA-CONTROL 4-axis CPU4

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-R01.40
4.02

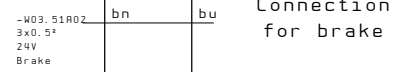
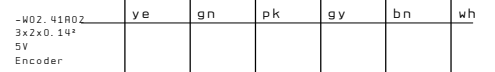
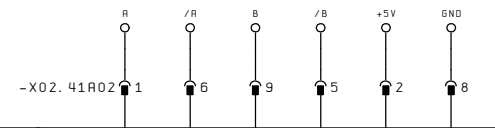
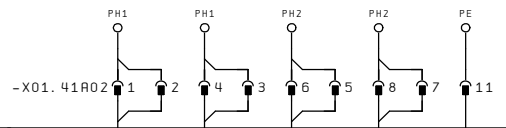
LV-UNIT

-R02.41

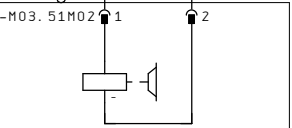
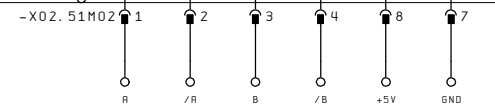
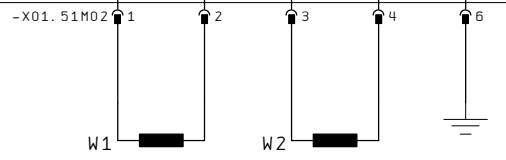
Power card 2

(X2) Motor

(X4) ENC



-M02.51




Motor

Rotation monitoring

Brake

optional

Connection for brake

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Power card 2
R2-axis 2
phase stepper motor
PA-CONTROL 4-axis CPU4

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-R01.40
4.02

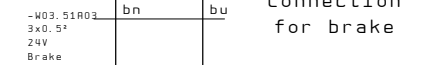
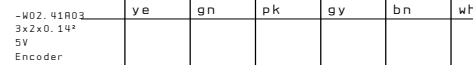
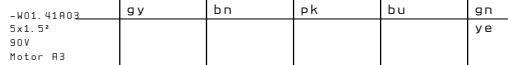
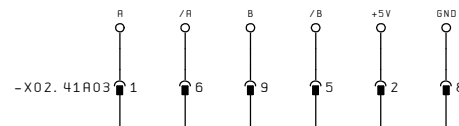
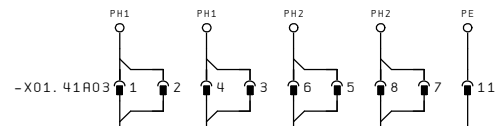
LV-UNIT

-R03.41

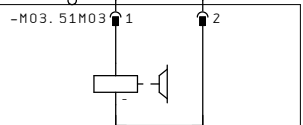
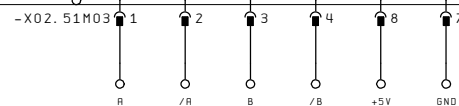
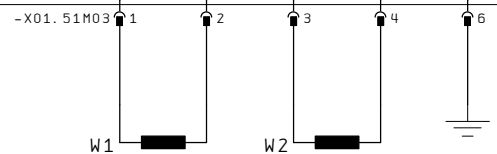
Power card 3

(X2) Motor

(X4) ENC



-M03.51



Motor

Rotation monitoring

Brake

optional

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Power card 3
A3-axis 2
phase stepper motor
PA-CONTROL 4-axis CPU4

Customer	
Final customer	

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-R01.40
4.02

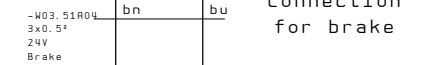
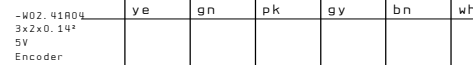
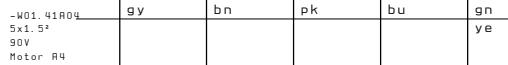
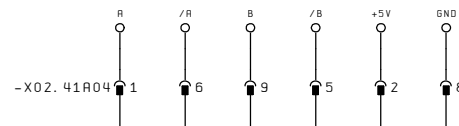
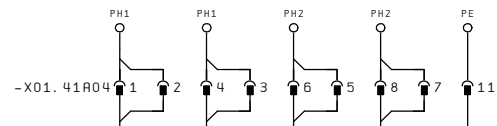
LV-UNIT

-R04.41

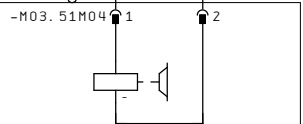
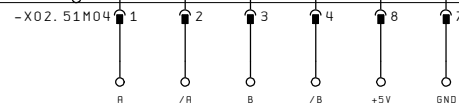
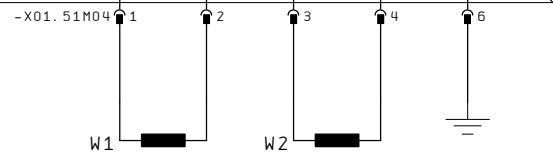
Power card 4

(X2) Motor

(X4) ENC



-M04.51




Motor

Rotation monitoring

Brake

optional

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Power card 4
R4-axis 2
phase stepper motor
PA-CONTROL 4-axis CPU4

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-A01.40
4.02

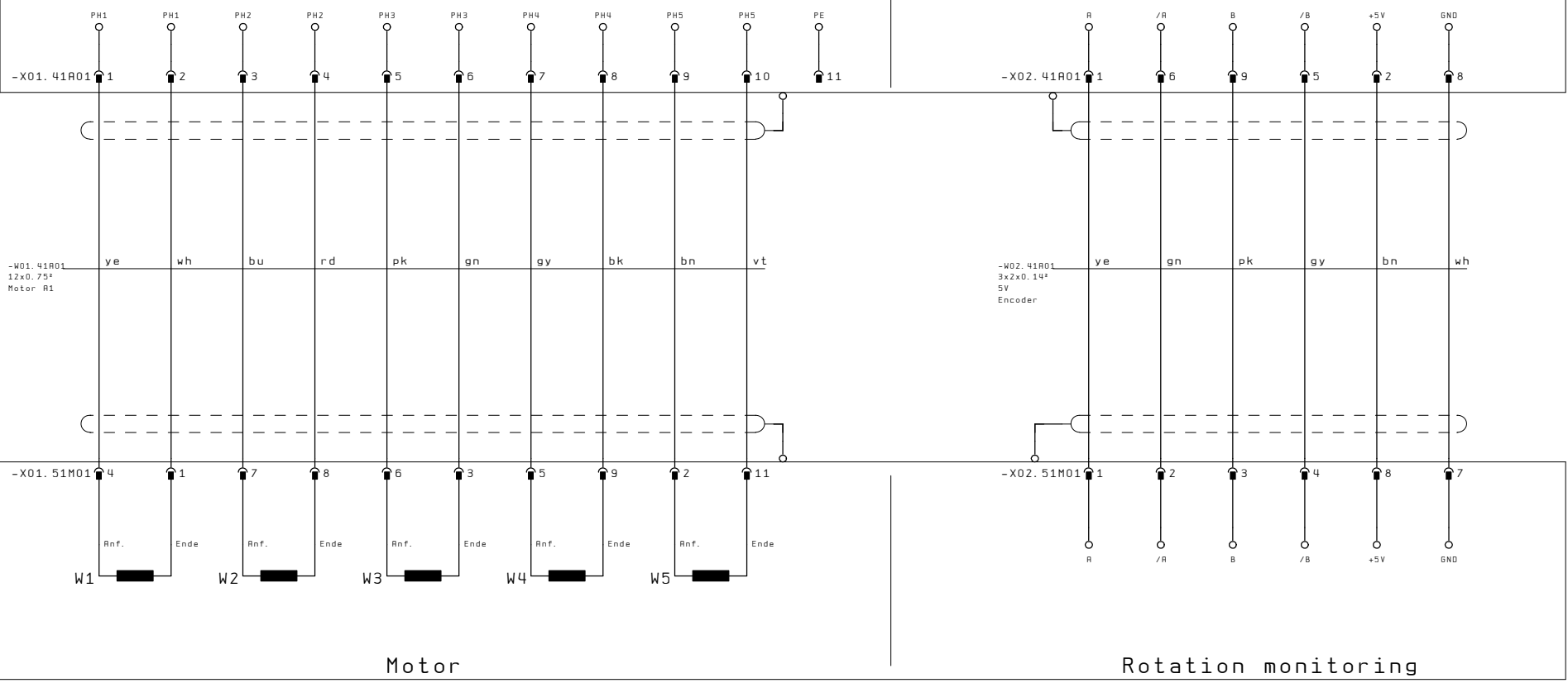
LV-UNIT

-A01.41

Power card 1

(X2) Motor

(X4) ENC



Motor

Rotation monitoring

-M01.51

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Power card 1
A1-axis 5-phase
stepper motor
PA-CONTROL 4-axis CPU4

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-R01. 40
4. 02

LV-UNIT

-R02. 41

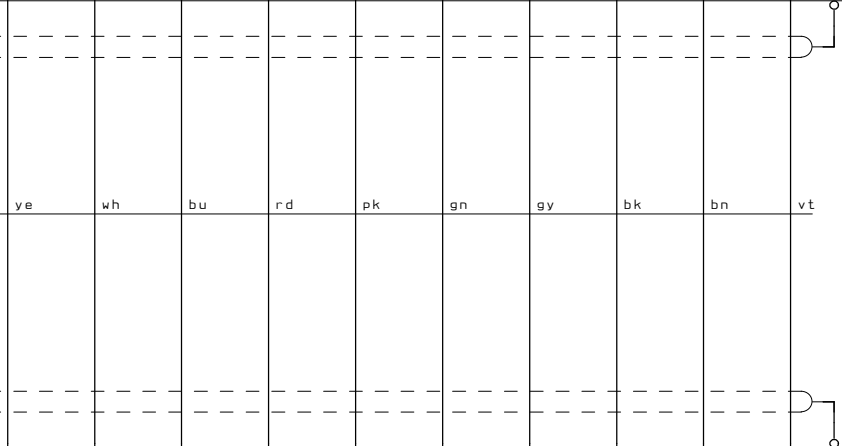
Power card 2

(X2) Motor

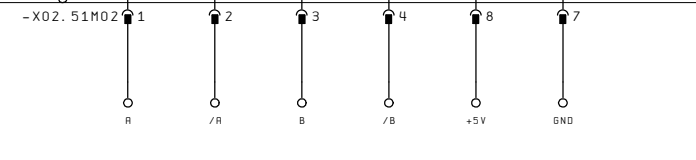
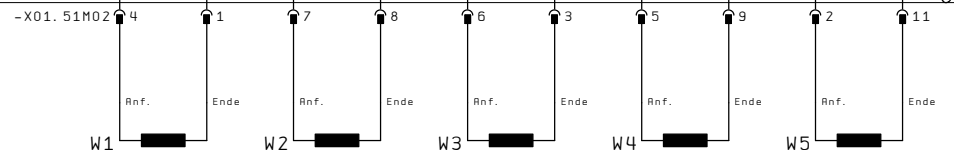
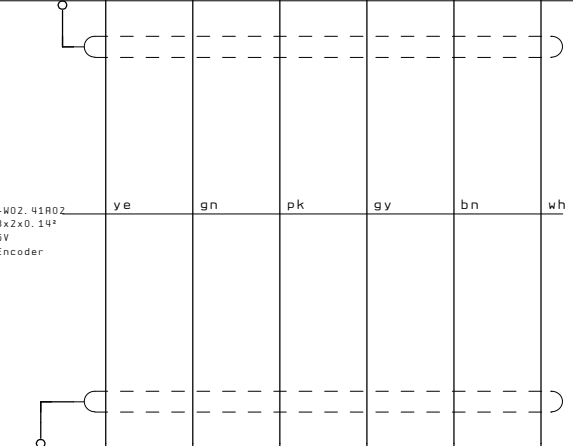
(X4) ENC



-W01. 41R02
12x0. 75"
Motor R2




-W02. 41R02
3x2x0. 14"
5V
Encoder



Motor

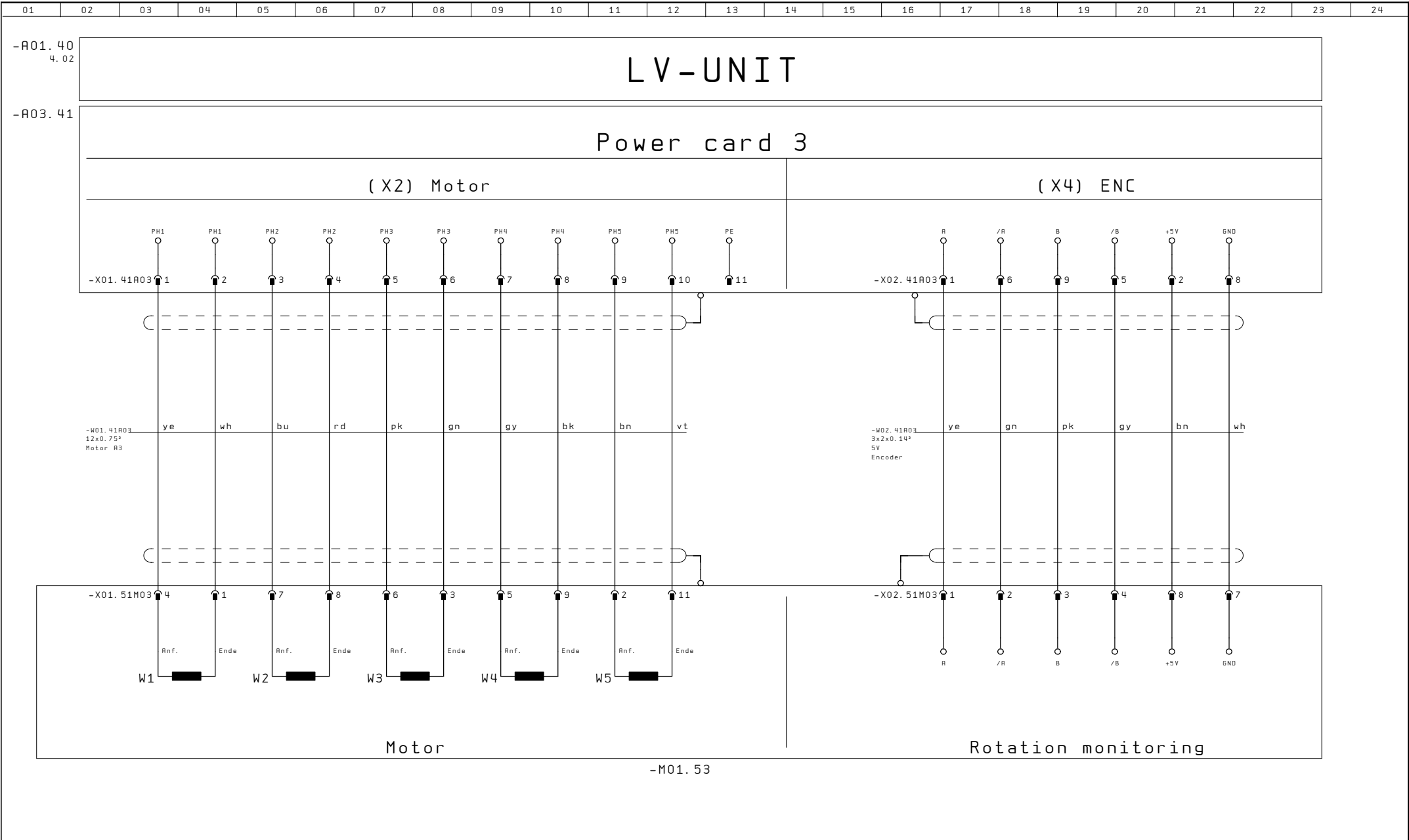
Rotation monitoring

-M01. 52

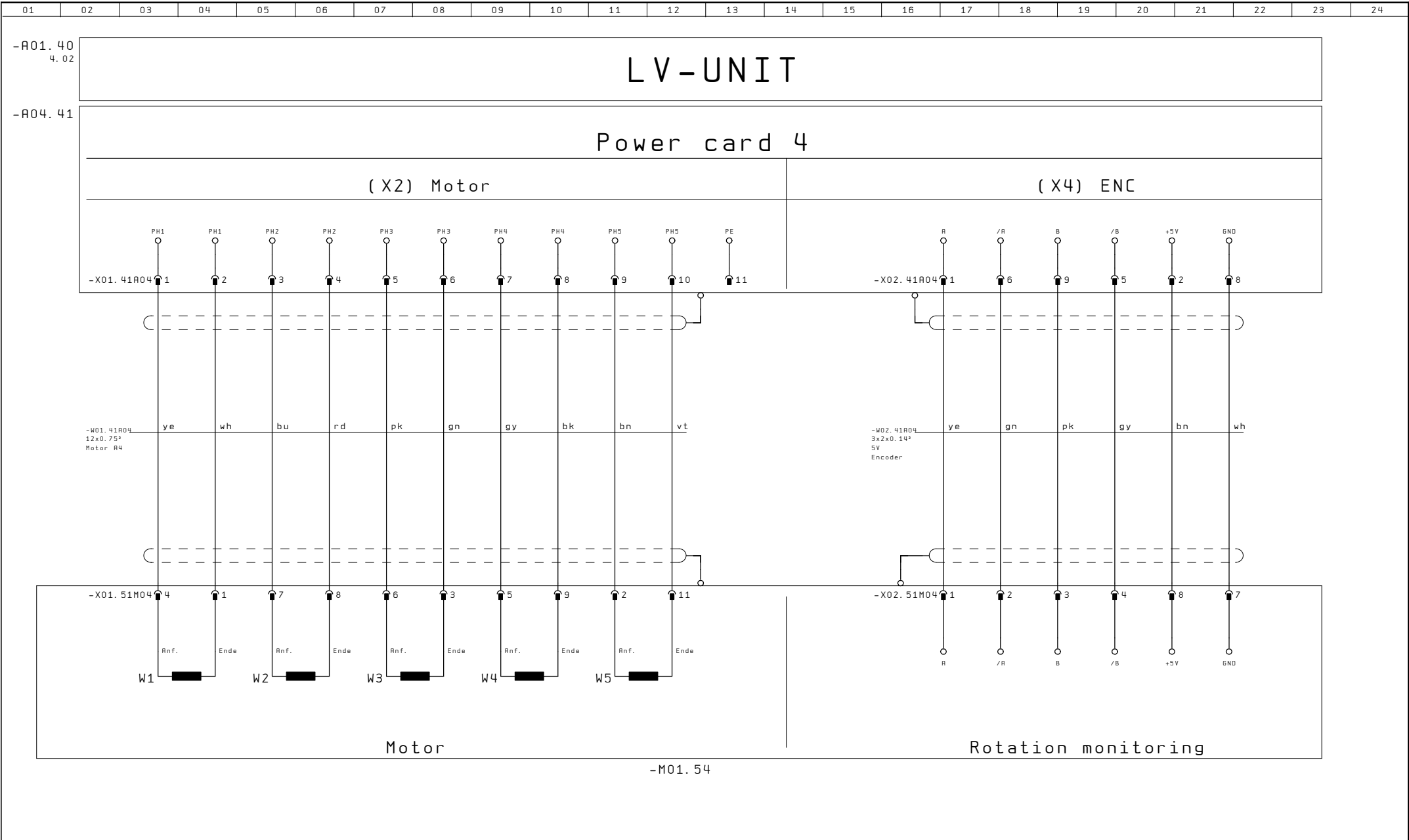
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Power card 2
R2-axis 5-phase
stepper motor
PA-CONTROL 4-axis CPU4

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Editor	Date	<p style="font-weight: bold; font-size: 1.2em; margin-top: 5px;">WERNER</p>	<p>Power card 4</p> <p>R4-axis 5-phase</p> <p>stepper motor</p>	Customer		Drawing-no. IEF	Page no.
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