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 eMail: info@IEF-Werner.de



## Circuit diagram

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

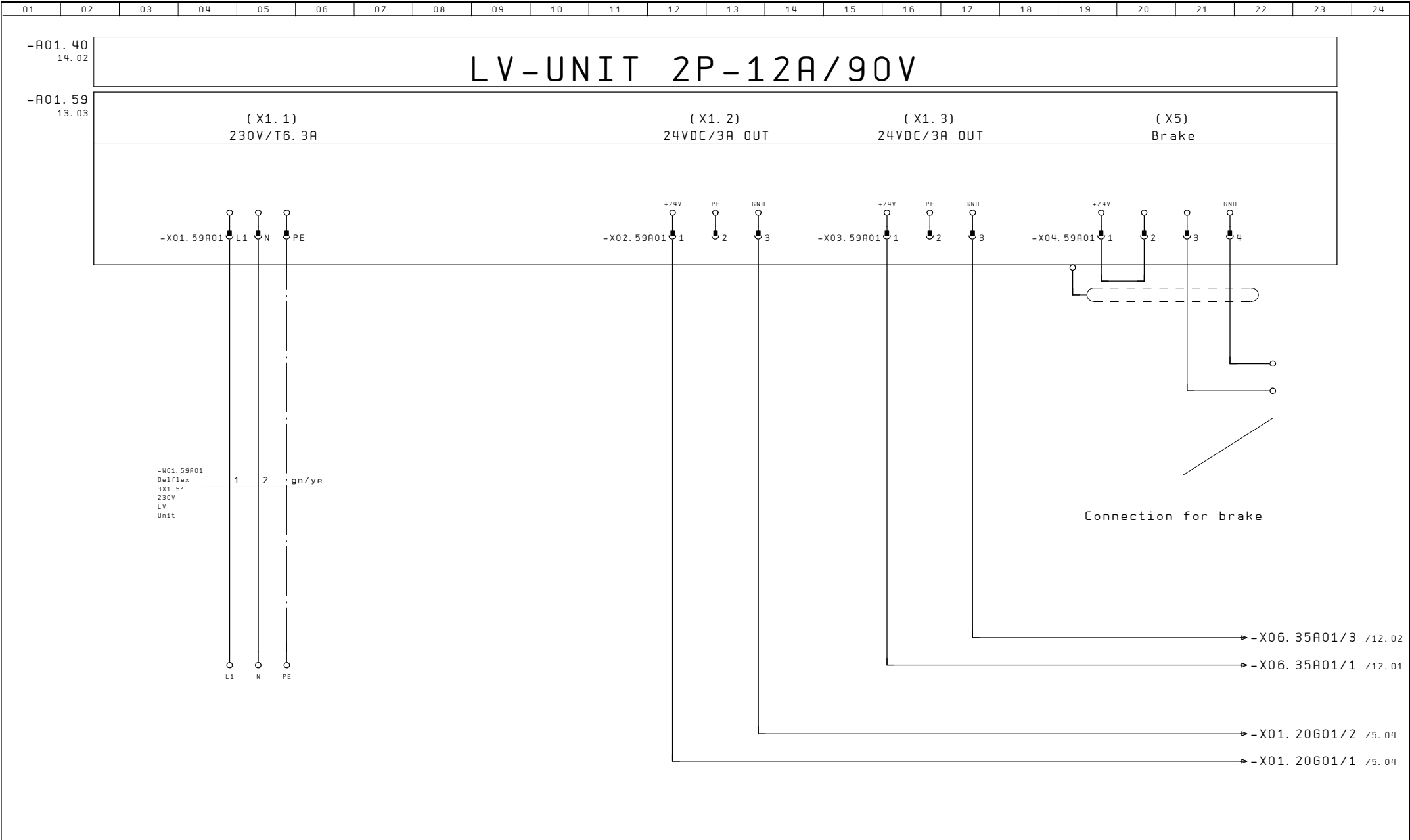
Type : 4 Axes english  
 Manufacturing date : 2002  
 Incoming supply : 230V/50Hz/16A  
 Feeding : 3x1,5mm<sup>2</sup>  
 Fuse protection : 16A  
 Control voltage : 24V

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

Editor		Date		Title page	Customer	Drawing-no. IEF	Page no.
Designer:	VOL	16.10.02				1027195	1
Modification:	VOL	28.06.05			Final customer	Drawing-no. customer	Pages
Print:		11.01.07					21
System:	Place:			PA-CONTROL 4-axis CPU4			







Editor	Date	<p style="font-size: 24px; font-weight: bold; margin: 0;">WERNER</p>	Power supply connection LV-unit	Customer	Drawing-no. IEF	Page no.	
Designer:	VOL 16.10.02		<p style="font-size: 24px; font-weight: bold; margin: 0;">WERNER</p>	<p style="font-size: 24px; font-weight: bold; margin: 0;">PA-CONTROL 4-axis CPU4</p>		1027195	4
Modification:	VOL 28.06.05				Final customer	Drawing-no. customer	Pages
Print:	11.01.07						21
System:	Place:						

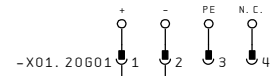
-R01.20  
6.02

# PA-CONTROL

-G01.20

## NT8

( X1.3 )  
24V IN



-W01.20G01  
Unitronic-FD Cy  
3X0.5"  
24V  
PA-CONTROL

bn bu

4.22/ -X01.20G01/1

4.22/ -X01.20G01/2

Editor		Date	
Designer:	VOL	16.10.02	
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Print:		11.01.07	
System:	Place:		



PA-CONTROL CPU-Power supply

PA-CONTROL 4-axis CPU4

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Final customer	Drawing-no. customer	Pages
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-A01. 20  
5.02

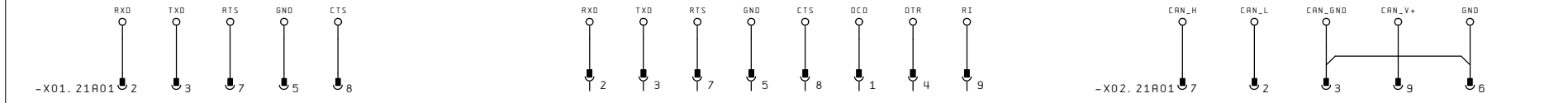
# PA-CONTROL

-A01. 21

( X1)  
COM1 Interface

CPU 4

( X2)  
CAN Interface



Editor	Date	
Designer: VDL	16.10.02	
Modification: VDL	28.06.05	
Print:	11.01.07	
System:	Place:	

PA-CONTROL interface connection

PA-CONTROL 4-axis CPU4

Customer	
Final customer	

Drawing-no. IEF	1027195
Drawing-no. customer	

Page no.	6
Pages	21

-A01.20  
5.02

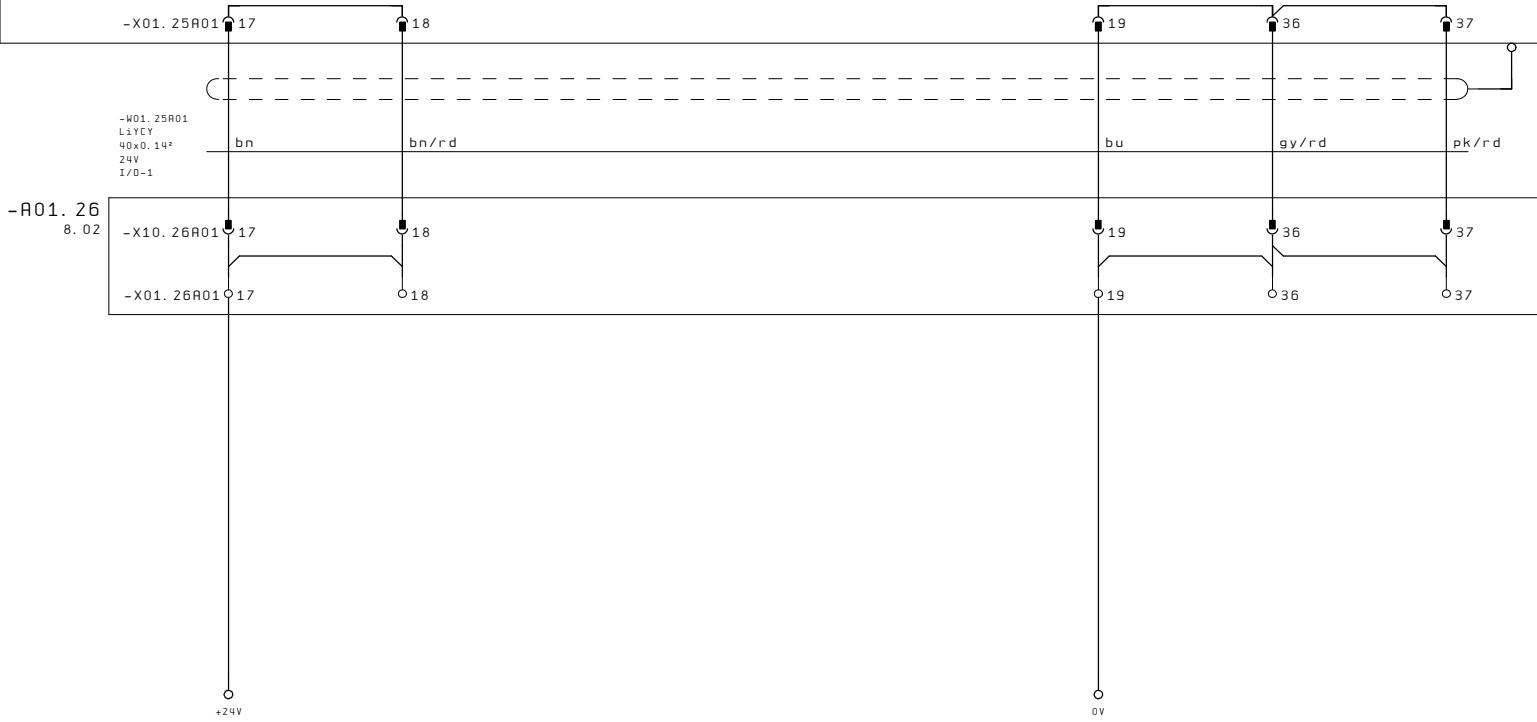
# PA-CONTROL


-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)

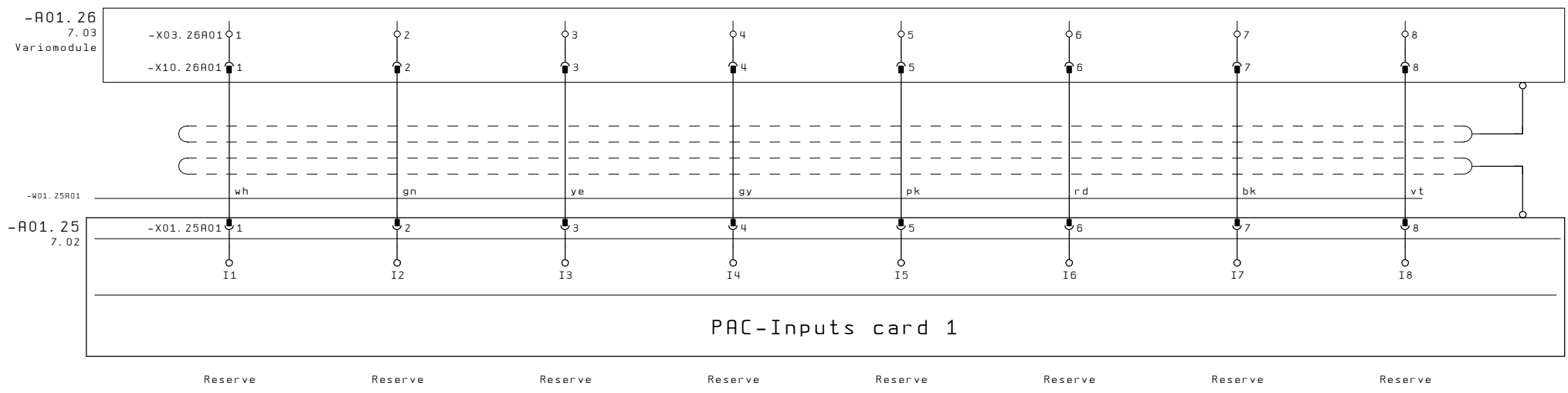
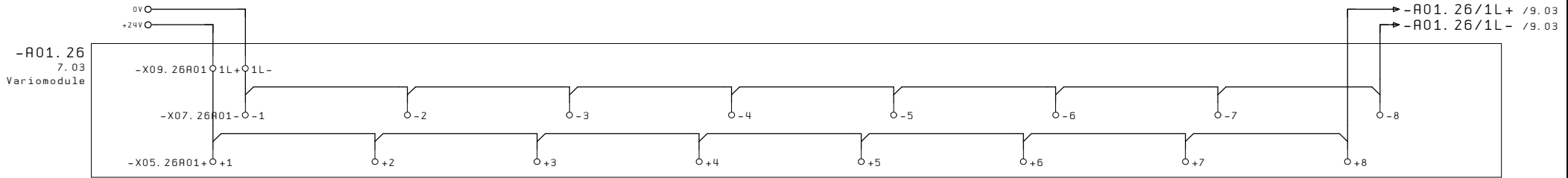


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Designer:	VOL	16.10.02	
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System:	Place:		

Power supply PAC  
I/O-card

PA-CONTROL 4-axis CPU4

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Final customer	Drawing-no. customer	Pages
		21



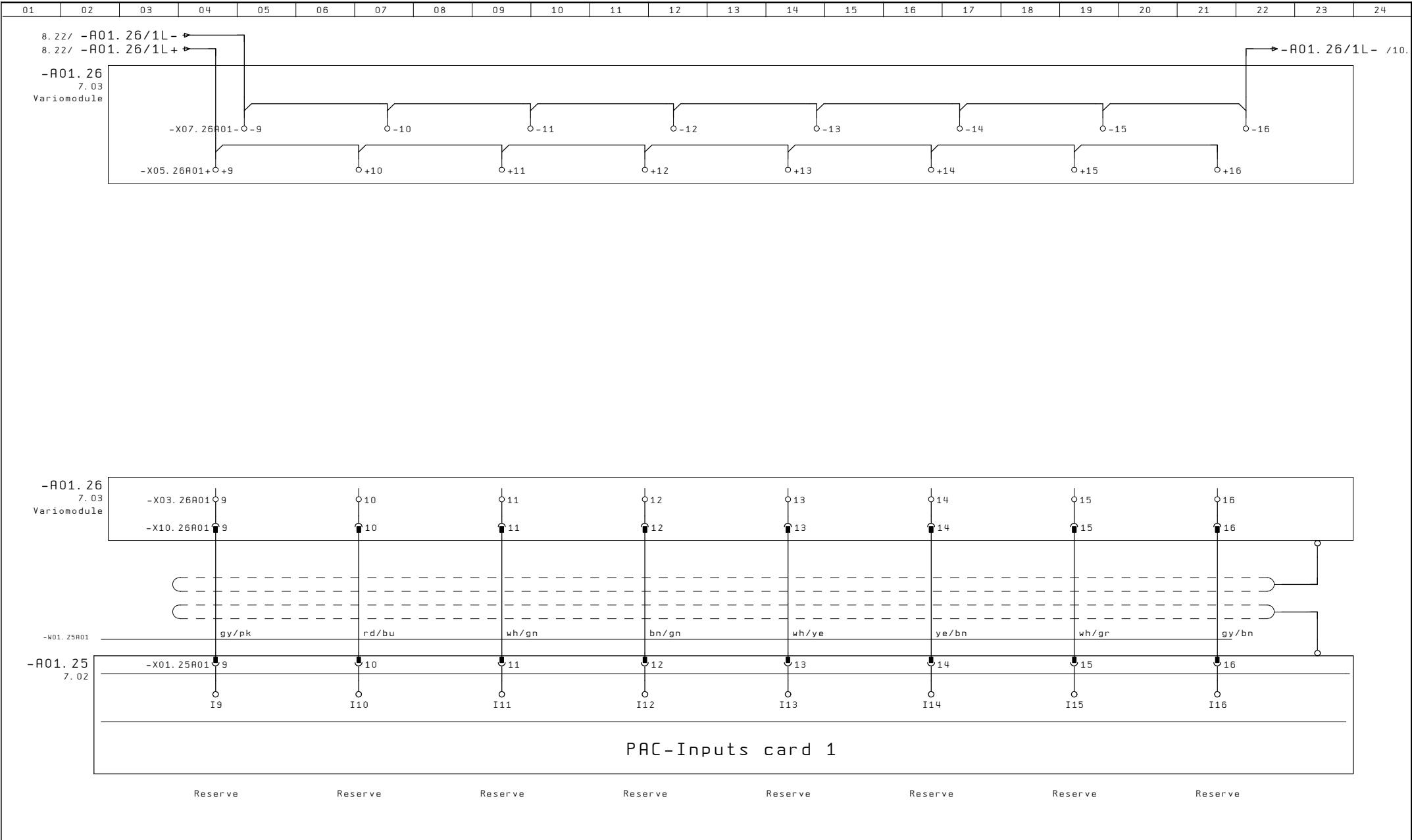
PAC-Inputs card 1

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Designer:	VOL	16.10.02	
Modification:	VOL	28.06.05	
Print:		11.01.07	
System:		Place:	

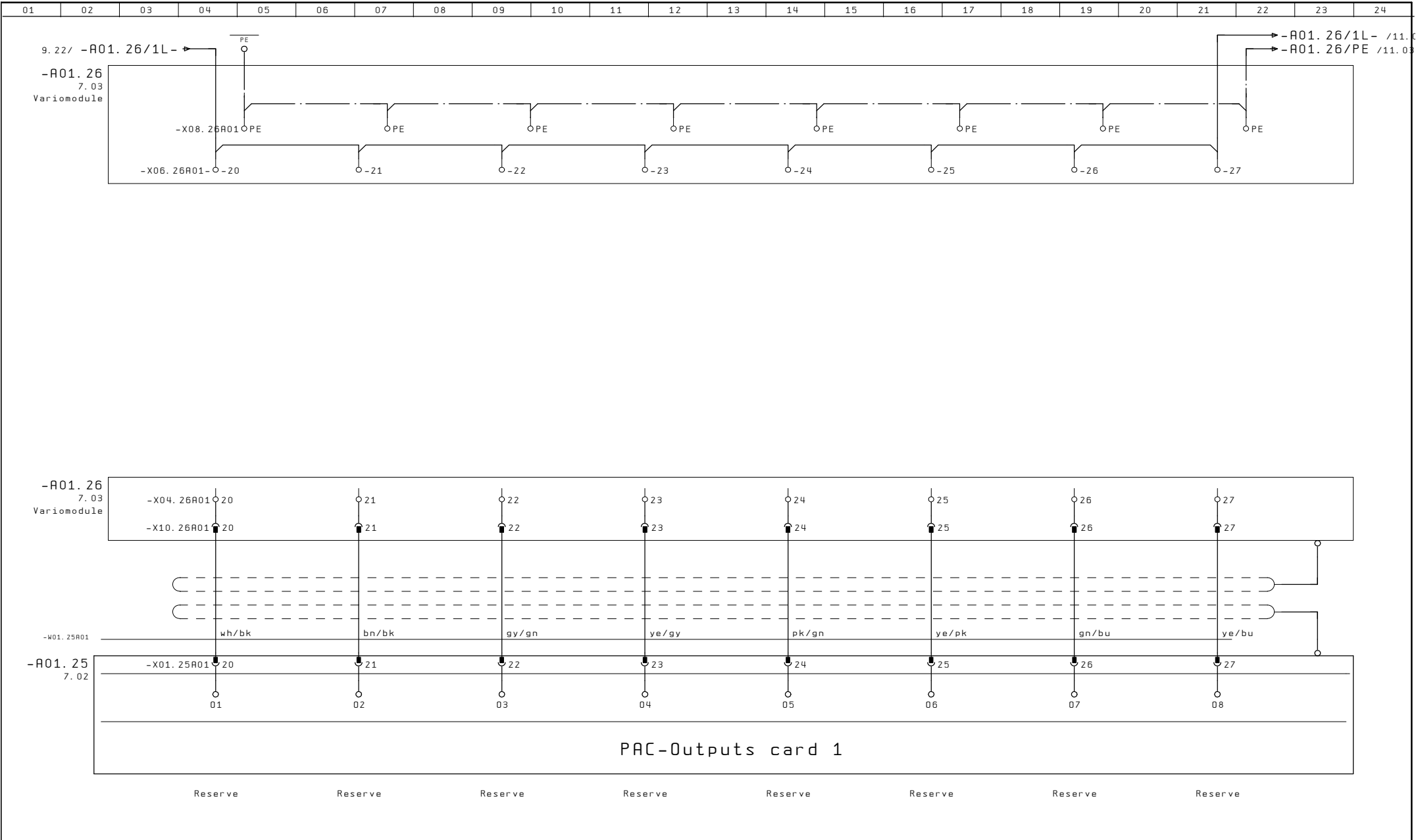


PAC Inputs I1-I8	
PA-CONTROL 4-axis CPU4	

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Final customer	Drawing-no. customer	Pages
		21



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Designer:	VOL	16.10.02				1027195	9	
Modification:	VOL	28.06.05						
Print:		11.01.07				Final customer	Drawing-no. customer	Pages
System:	Place:				PA-CONTROL 4-axis CPU4			21

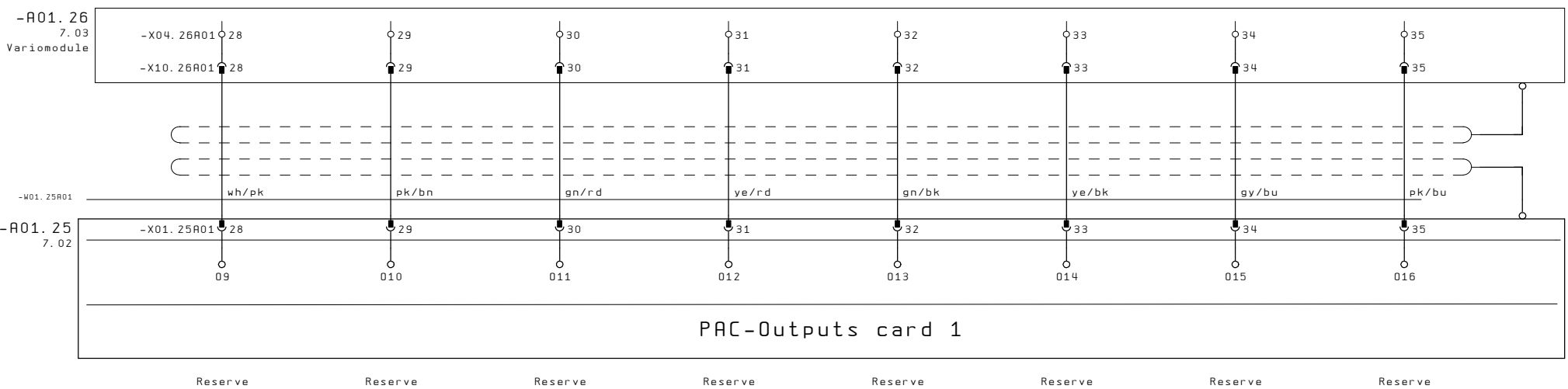
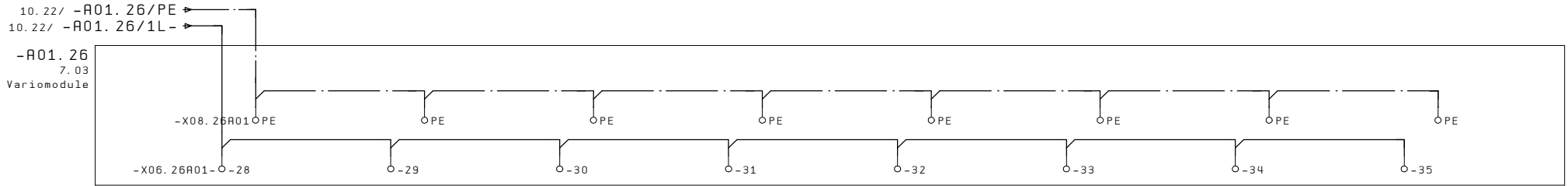


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Designer:	VOL	16.10.02
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System:	Place:	



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

Customer	Drawing-no. IEF	Page no.
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Final customer	Drawing-no. customer	Pages
		21



PAC-Outputs card 1

Reserve      Reserve      Reserve      Reserve      Reserve      Reserve      Reserve      Reserve

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PAC Outputs 09-016		Customer	Drawing-no. IEF	Page no.
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PA-CONTROL 4-axis CPU4		Final customer	Drawing-no. customer	Pages
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-A01. 20  
5. 02

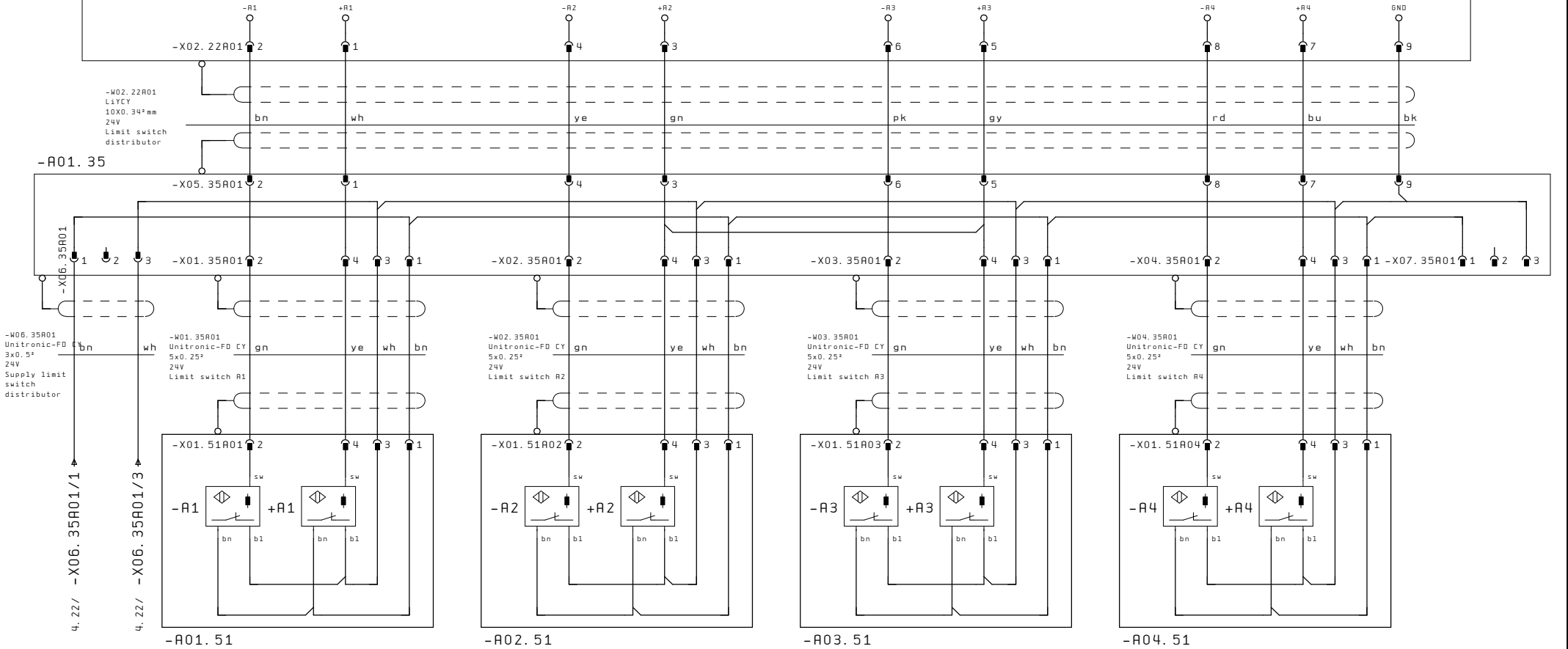
# PA-CONTROL


-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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Designer:	VOL	16.10.02	
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Print:		11.01.07	
System:	Place:		

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

Customer	Drawing-no. IEF	Page no.
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Final customer	Drawing-no. customer	Pages
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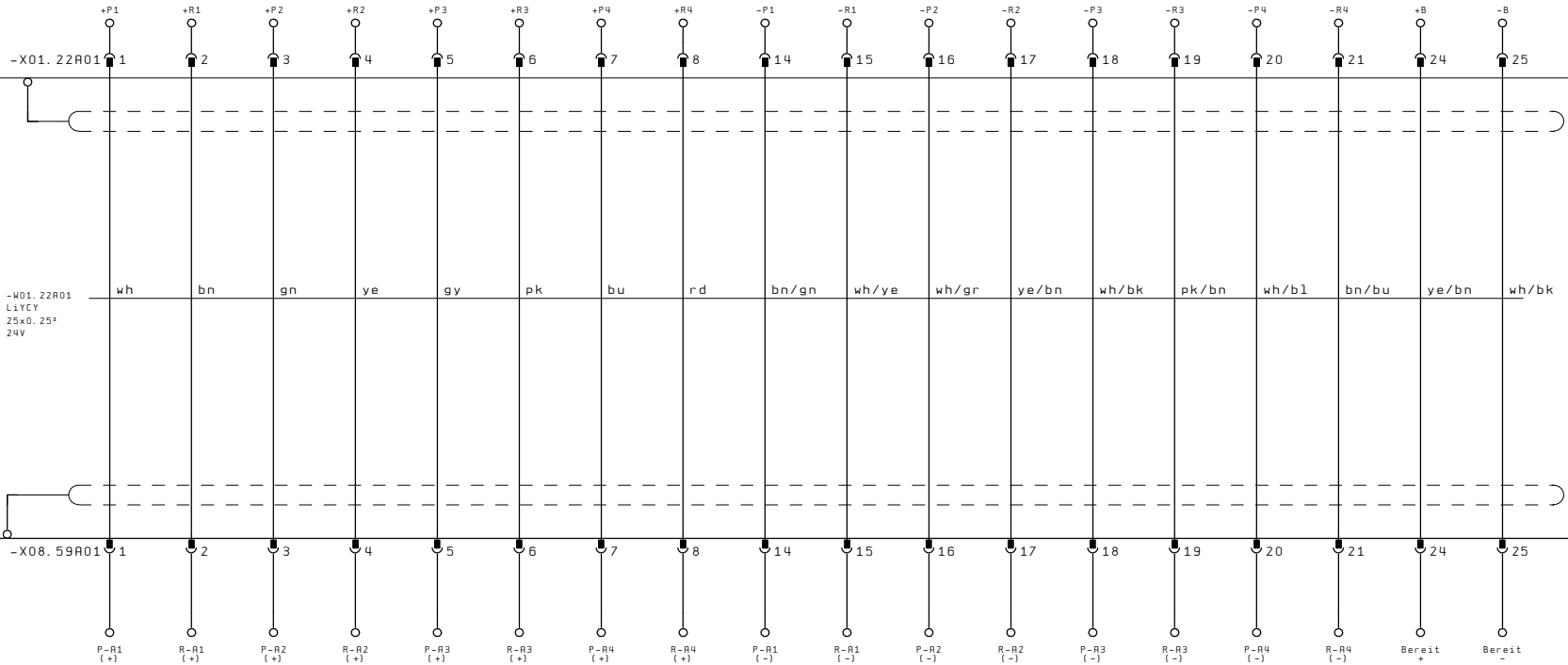
-A01. 20  
5. 02

# 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

Customer	Drawing-no. IEF	Page no.
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Final customer	Drawing-no. customer	Pages
		21

-A01.40  
4.02

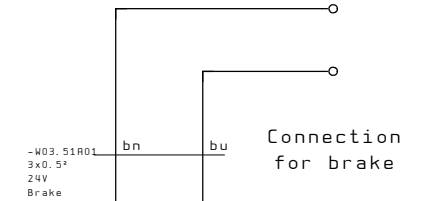
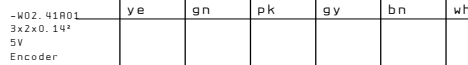
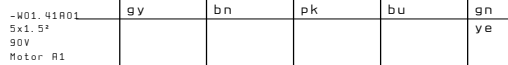
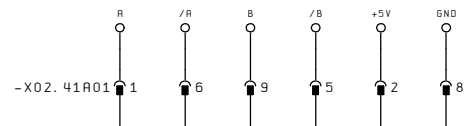
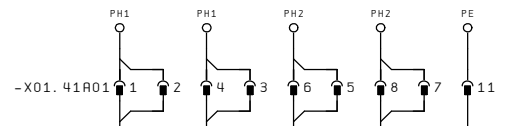
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-A01.41

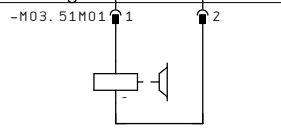
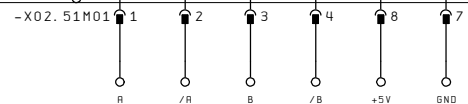
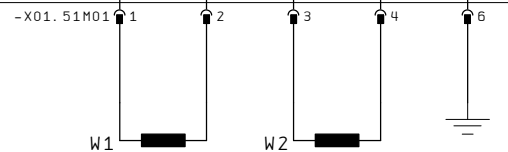
## Power card 1

(X2) Motor

(X4) ENC



-M01.51



Motor

Rotation monitoring

Brake

optional

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Power card 1  
A1-axis 2  
phase stepper motor  
PA-CONTROL 4-axis CPU4

Customer	
Final customer	

Drawing-no. IEF	Page no.
1027195	14
Drawing-no. customer	Pages
	21

-R01.40  
4.02

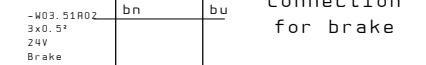
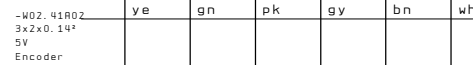
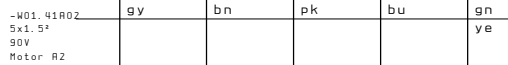
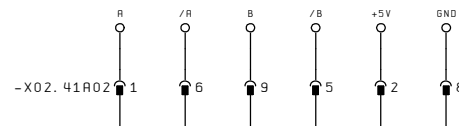
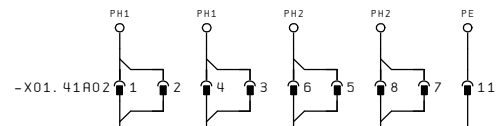
# LV-UNIT

-R02.41

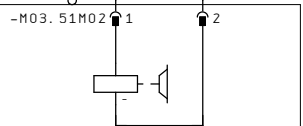
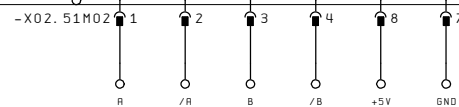
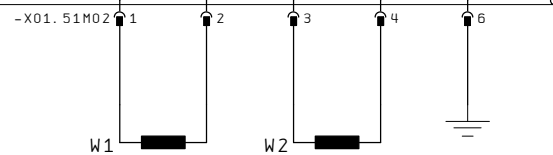
## Power card 2

(X2) Motor

(X4) ENC



-M02.51



Motor

Rotation monitoring

Brake

optional

Editor		Date	
Designer:	VOL	16.10.02	
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System:	Place:		



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

Customer	
Final customer	

Drawing-no. IEF	1027195
Drawing-no. customer	

Page no.	15
Pages	21

-R01.40  
4.02

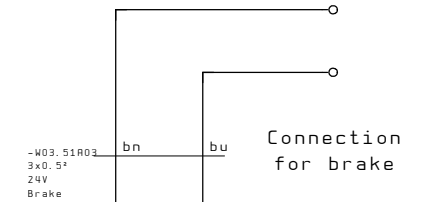
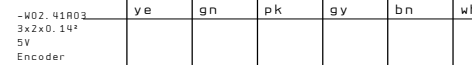
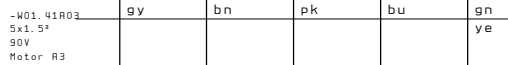
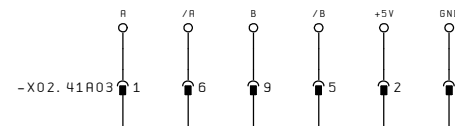
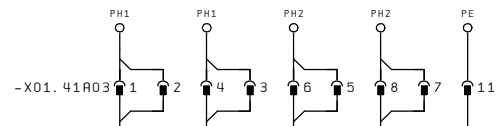
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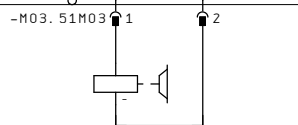
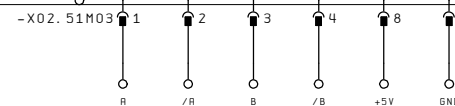
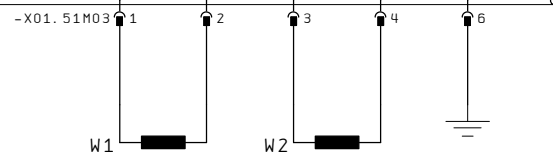
## Power card 3

(X2) Motor

(X4) ENC



-M03.51



Motor

Rotation monitoring

Brake

optional

Editor		Date	
Designer:	VOL	16.10.02	
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System:	Place:		



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

Customer	
Final customer	

Drawing-no. IEF	1027195
Drawing-no. customer	

Page no.	16
Pages	21

-R01.40  
4.02

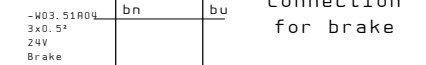
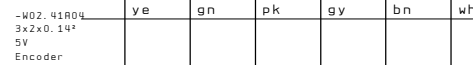
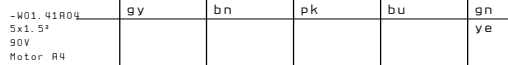
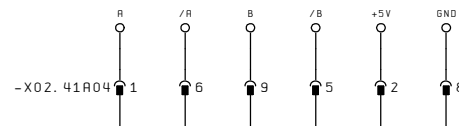
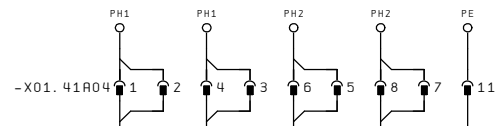
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-R04.41

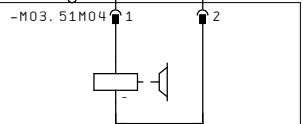
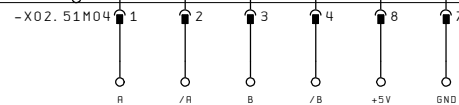
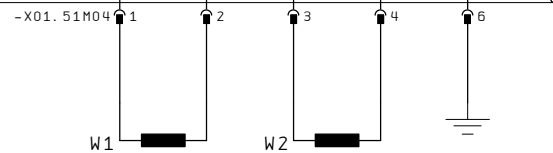
## Power card 4

(X2) Motor

(X4) ENC



-M04.51




Motor

Rotation monitoring

Brake

optional

Editor		Date	
Designer:	VOL	16.10.02	
Modification:	VOL	28.06.05	
Print:		11.01.07	
System:	Place:		

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

Customer	Drawing-no. IEF	Page no.
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Final customer	Drawing-no. customer	Pages
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-R01.40  
4.02

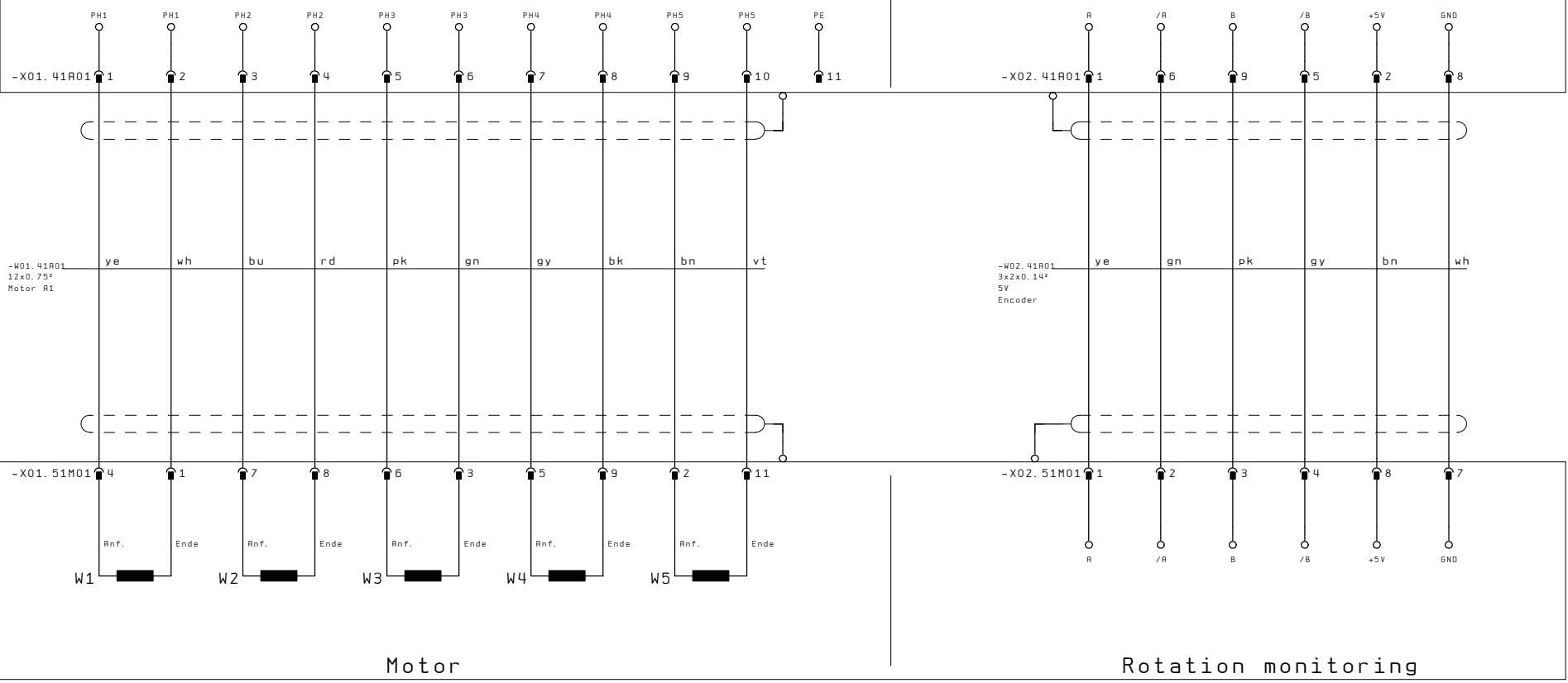
# LV-UNIT

-R01.41

## Power card 1

(X2) Motor

(X4) ENC



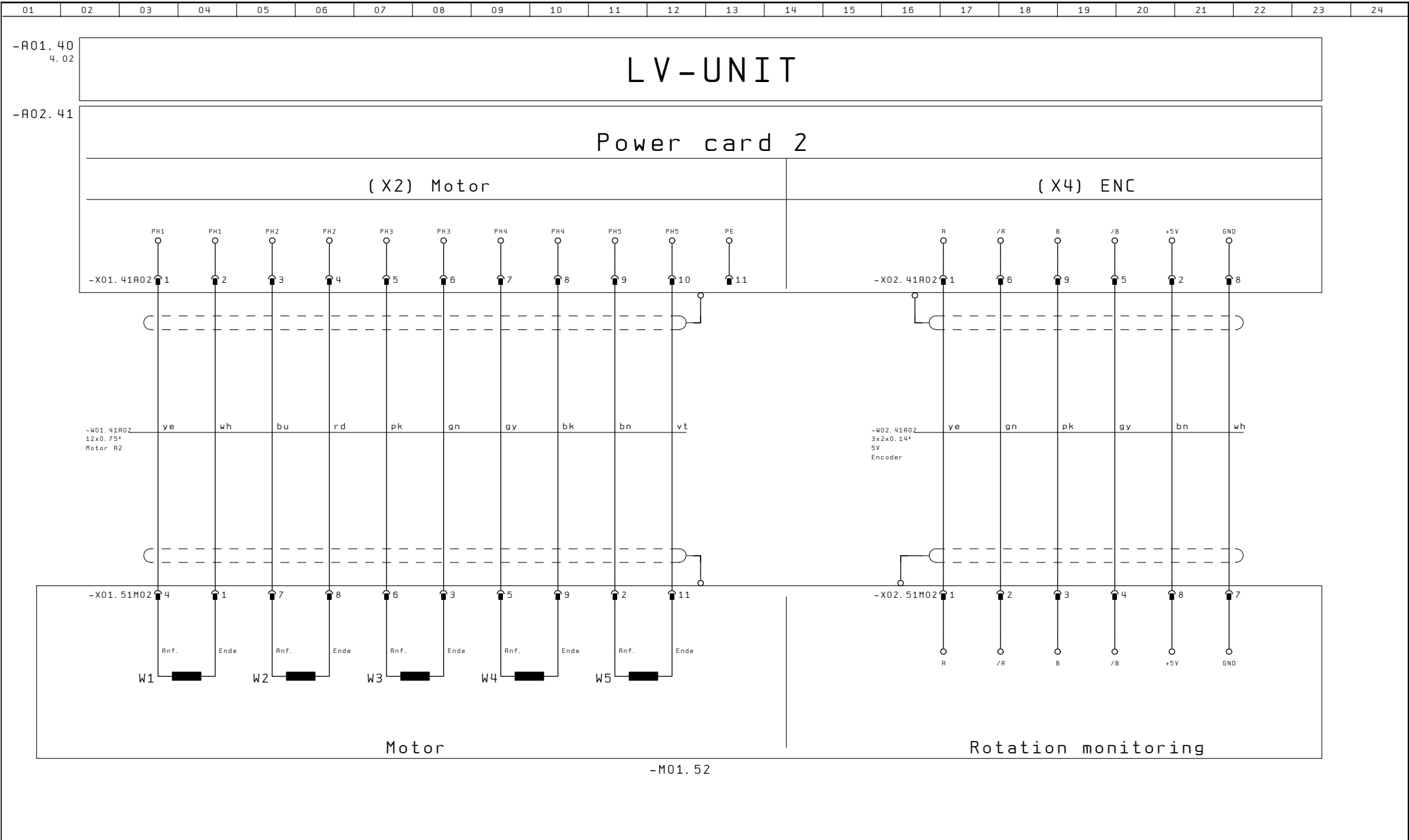
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System:	Place:		

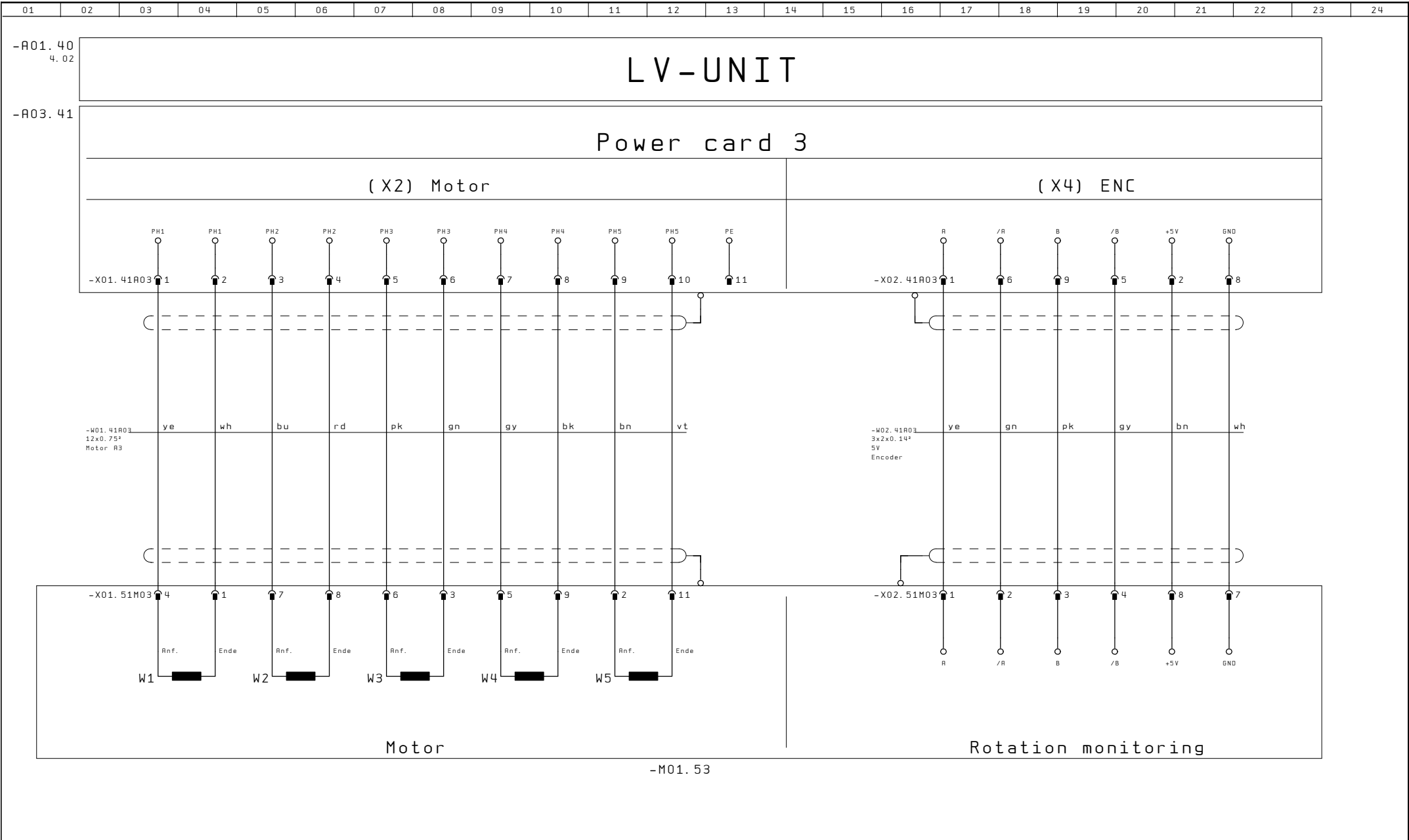


Power card 1  
R1-axis 5-phase  
stepper motor  
PA-CONTROL 4-axis CPU4

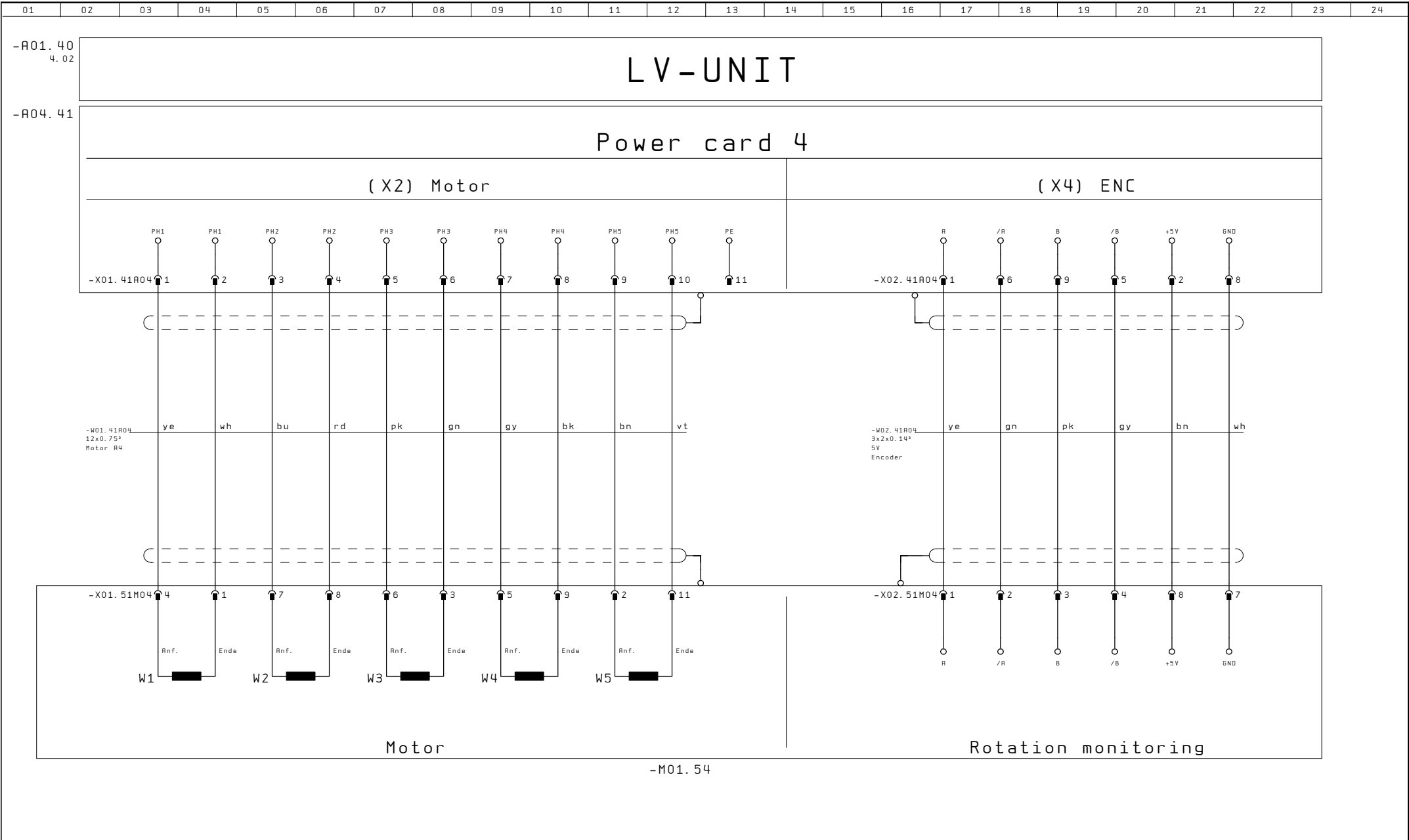
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		21



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Modification:	VOL 28.06.05			Drawing-no. customer	Pages
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System:	Place:				



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Designer: VOL	16.10.02			1027195	20
Modification: VOL	28.06.05			Drawing-no. customer	Pages
Print: 11.01.07			Final customer		21
System:	Place:				



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Designer: VOL	16.10.02			1027195	21
Modification: VOL	28.06.05				
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