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### Circuit diagrams Schaltungsunterlagen

designation: CP Lab 8167762  
 Bezeichnung:  
 Customer:  
 Kunde:  
 Plant identifier S7M0T7  
 Anlagenkennzeichen  
 remark: V7 (Electrical Optimization)  
 Bemerkung:  
 last Modification: 09.03.2023  
 letzte Änderung:  
 Print date: 17.04.2023  
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 Pfad: SE\_2.elk

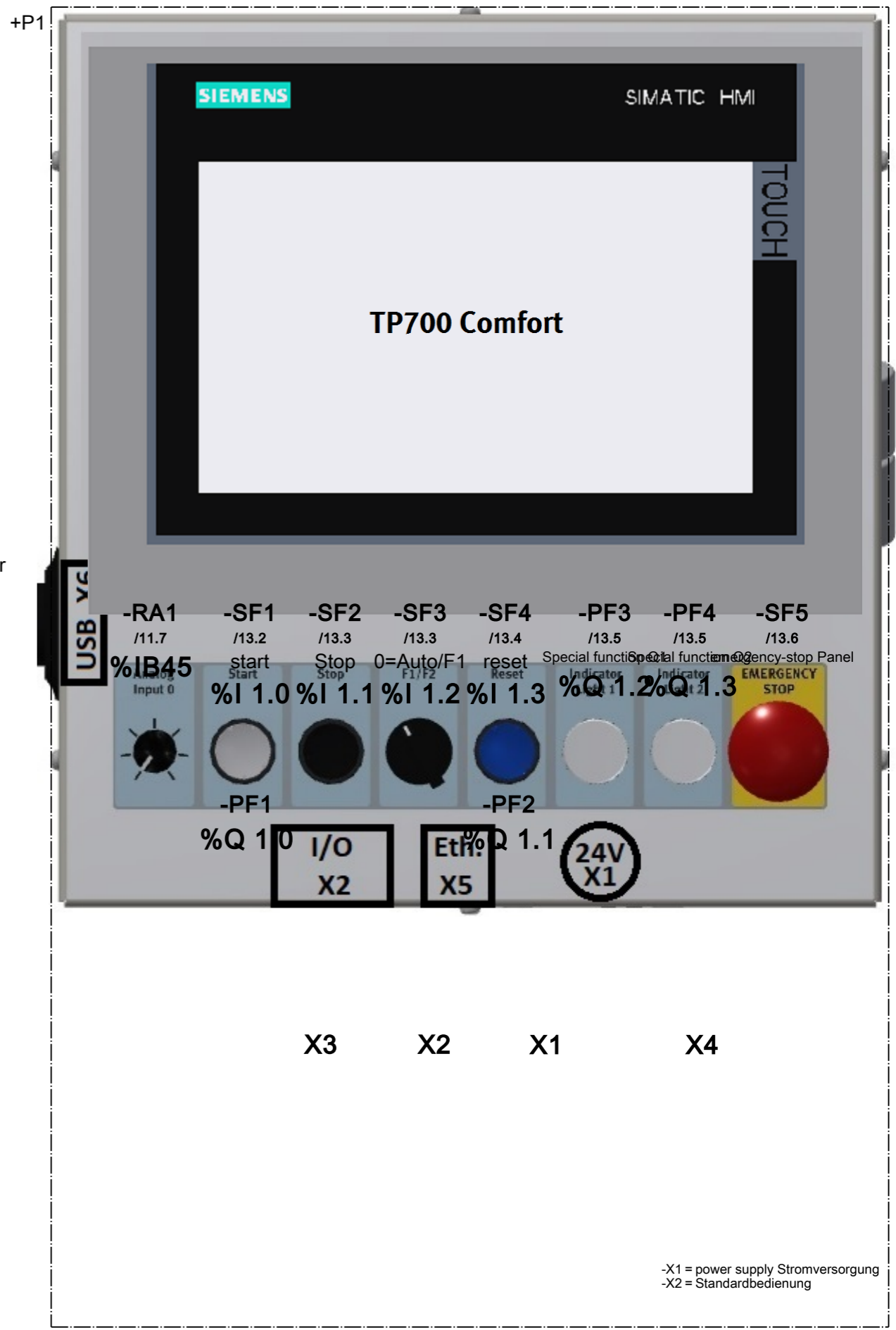
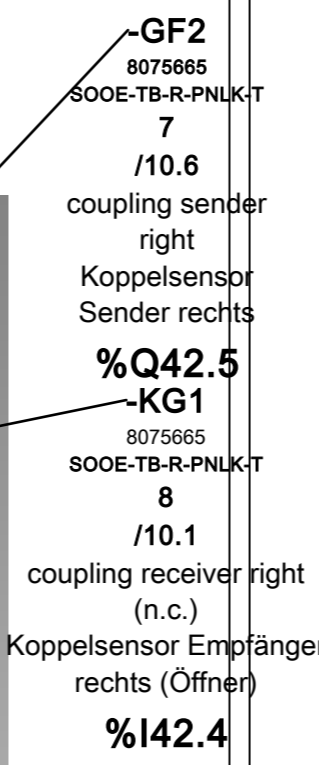
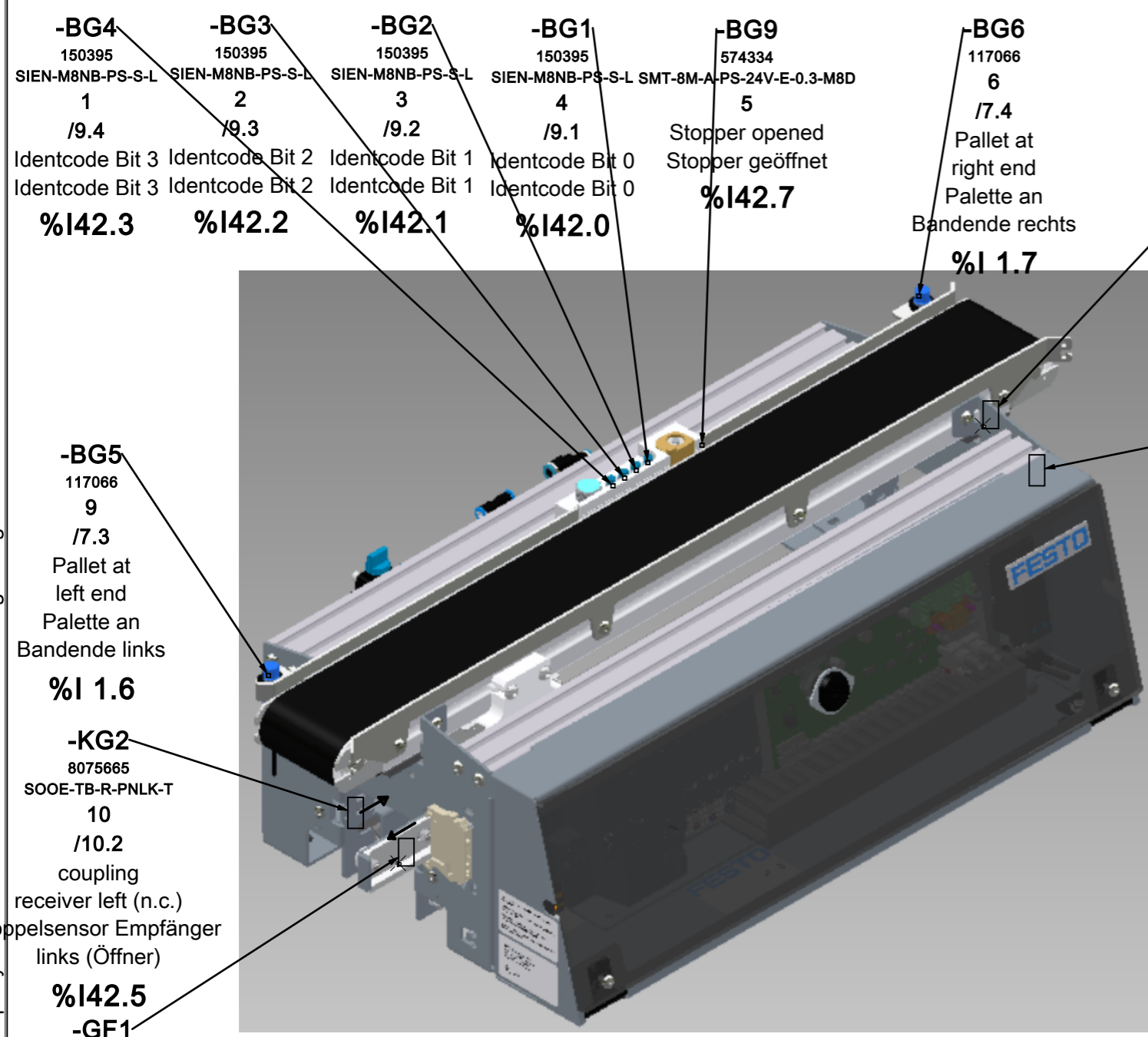
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Date	29.04.2022	Festo Didactic SE Rechbergstraße 3 D-73770 Denkendorf		<b>FESTO</b>		Title page / cover sheet Titel- / Deckblatt		S-Nr. 8167762			
Ed. by.	ca0fgvn							PSP / DPJ VN		= S7M0T7	
Drw.No.										Page 1	
										of 14	

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# Table of contents Inhaltsverzeichnis

Plant Anlage	Location Ort	Page Seite	Page description Seitenbeschreibung	supplementary field Zusatzfeld	Date Datum	Edited by Bearbeit.	x
=S7M0T7		1	Title page / cover sheet Titel- / Deckblatt		29.04.2022	ca0fgvn	
=S7M0T7		2	Table of contents Inhaltsverzeichnis		31.05.2022	ca0fgvn	
=S7M0T7		3	Assembly Aufbau		29.04.2022	ca0fgvn	
=S7M0T7		4	Platinen Rev 2022-04		29.04.2022	ca0fgvn	
=S7M0T7		5	assembly PLC Aufbauplan SPS		31.05.2022	ca0fgvn	
=S7M0T7		6	application - Byte 0 Applikation - Byte 0		31.05.2022	ca0fgvn	
=S7M0T7		7	PCB - Byte 1 Platine - Byte 1		31.05.2022	ca0fgvn	
=S7M0T7		8	PCB - IO-Link & Ethernet Platine - IO-Link & Ethernet		31.05.2022	ca0fgvn	
=S7M0T7		9	PCB - IO-Link A Platine - IO-Link A		31.05.2022	ca0fgvn	
=S7M0T7		10	PCB - IO-Link B Platine - IO-Link B		31.05.2022	ca0fgvn	
=S7M0T7		11	PCB - IO-Link analog Platine - IO-Link Analog		21.03.2022	ca0fgvn	
=S7M0T7		12	PCB - motor + encoder Platine - Motor + Inkrementalgeber		31.05.2022	ca0fgvn	
=S7M0T7		13	controlpanel basic functions & touchpanel Bedienfeld	Grundfunktionen & Touchpanel	31.05.2022	ca0fgvn	
=S7M0T7		14	pneumatic schematic Pneumatikplan		31.05.2022	ca0fgvn	

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-X1 = power supply Stromversorgung  
-X2 = Standardbedienung

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Festo Didactic SE  
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 D-73770 Denkendorf

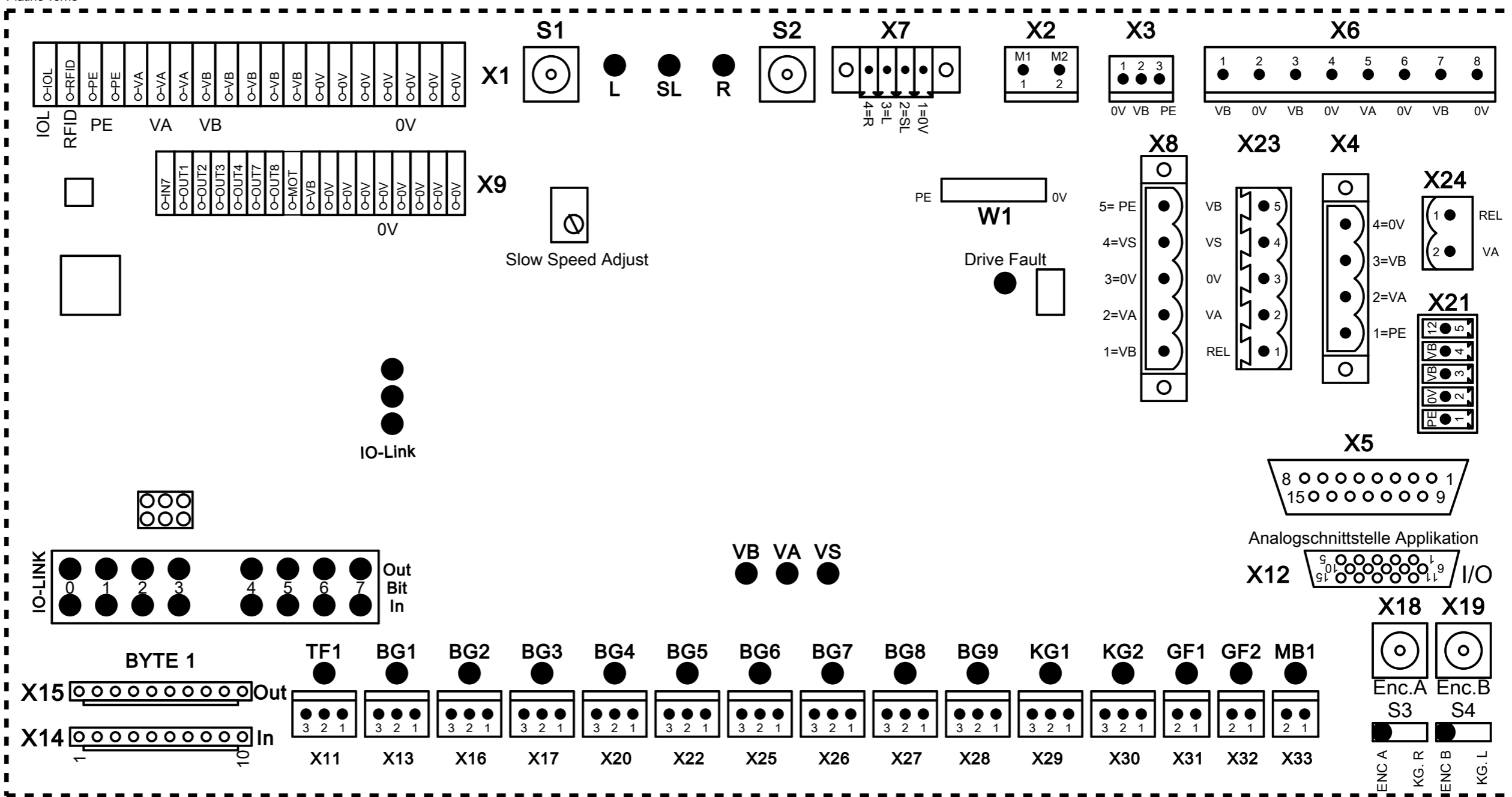
**FESTO** Assembly Aufbau

S-Nr.  
**8167762**  
 PSP / DPJ VN

V4

Platinen Rev 2022-04

-XZ1  
front PCB  
Platine vorne



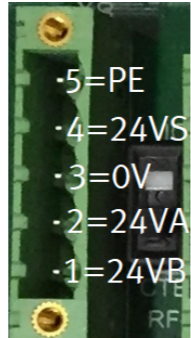
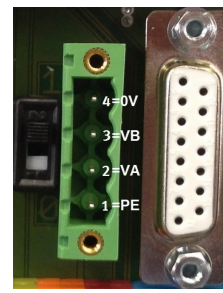
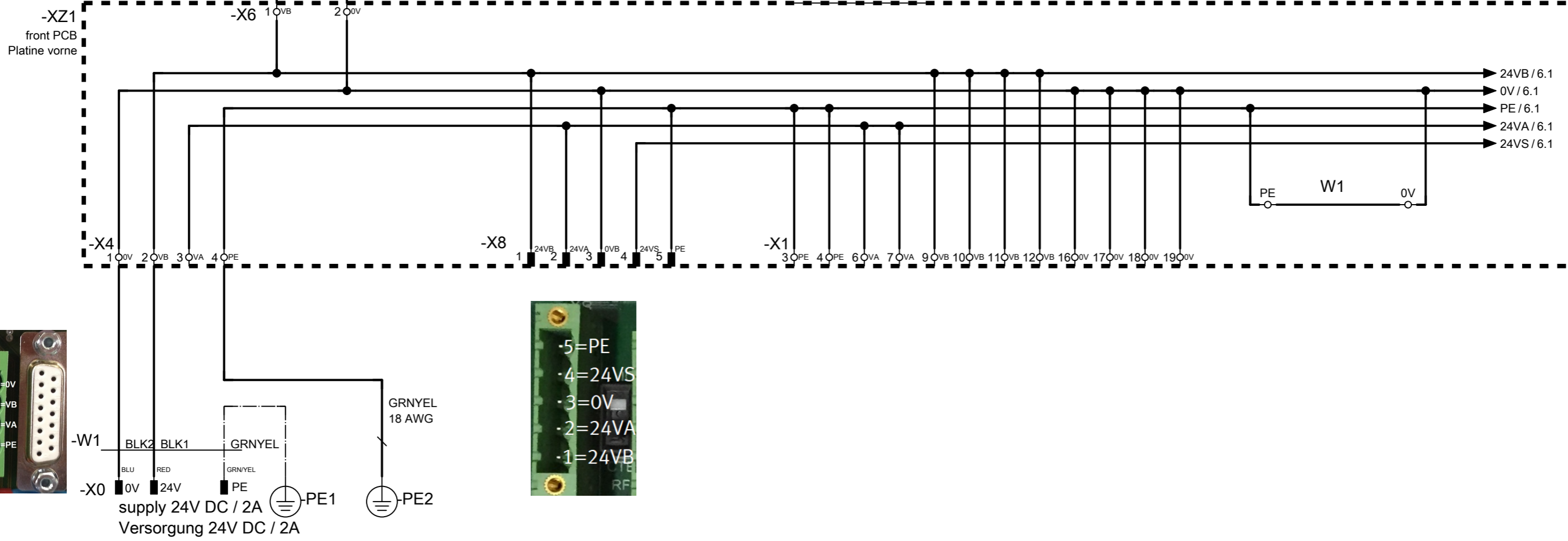
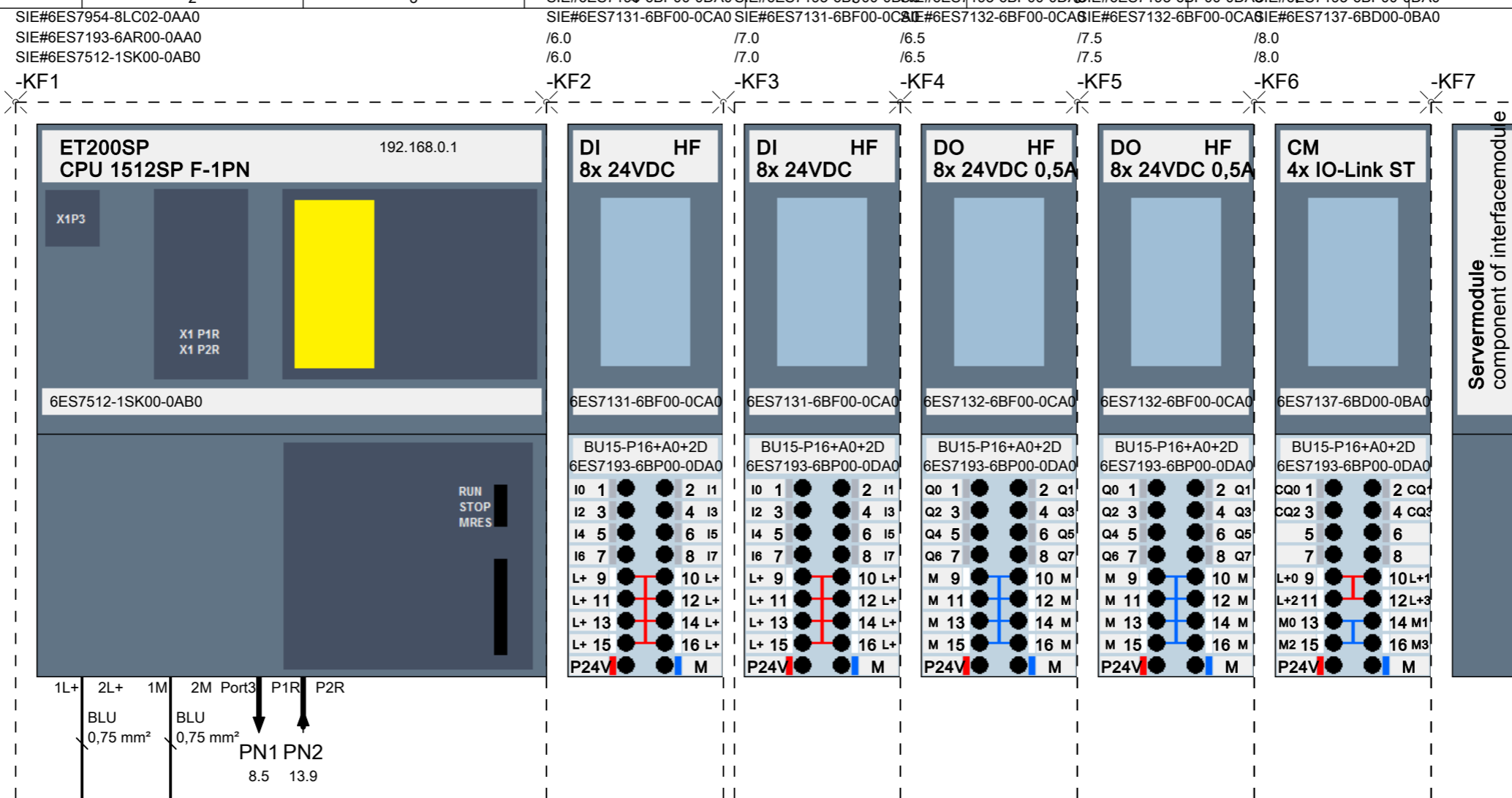
- XZ1-X1 = terminals PCB front side Klemmen Platine vorne
- XZ1-X4 = power supply Stromversorgung
- XZ1-X5 = analog signals for application Analsignale Applikationsmodul
- XZ1-X7 = connection to external Motorcontroller Ansteuerung externer Motorregler
- XZ1-X8 = 24V application modules 24V Applikationsmodule
- XZ1-X9 = terminals PCB front side Klemmen Platine vorne
- XZ1-X12 = controlpanel basic functions Bedienfeld Grundfunktionen
- XZ1-X14 = Input-Byte 1 Eingangs-Byte 1
- XZ1-X15 = Output-Byte 1 Ausgangs-Byte 1
- XZ1-X18 = incremental encoder BNC-Connector 1 Inkrementalgeber BNC-Anschluss 1
- XZ1-X19 = incremental encoder BNC-Connector 2 Inkrementalgeber BNC-Anschluss 2
- XZ1-X21 = Powersupply HMI HMI Stromversorgung
- XZ1-X23 = external Emergency-Stop Connector Not-Halt-Anschluss extern
- XZ1-X24 = external Emergency-Stop Connector Not-Halt-Anschluss extern

- XZ1-X2 = Motor connectors Motorbuchsen
- XZ1-X3 = 24V SWITCH
- XZ1-X6 = 24V PLC
- XZ1-X6 = 24V PLC
- XZ1-BG1 = BG1
- XZ1-BG2 = BG2
- XZ1-BG3 = BG3
- XZ1-BG4 = BG4
- XZ1-BG5 = BG5
- XZ1-BG6 = BG6
- XZ1-BG7 = BG7
- XZ1-BG8 = BG8
- XZ1-BG9 = BG9

- XZ1-KG1 = KG1
- XZ1-KG2 = KG2
- XZ1-GF1 = GF1
- XZ1-GF2 = GF2
- XZ1-MB1 = MB1

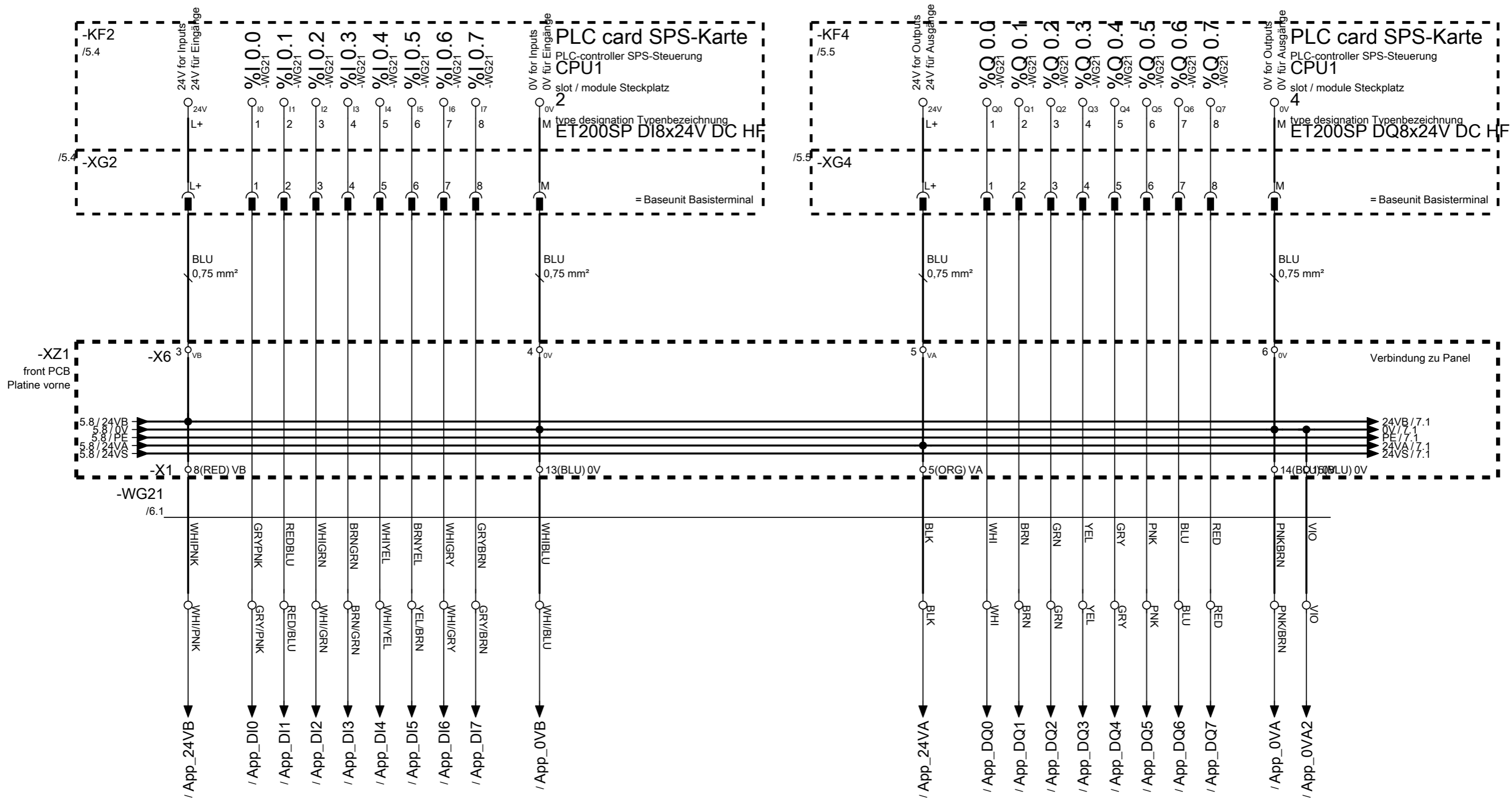
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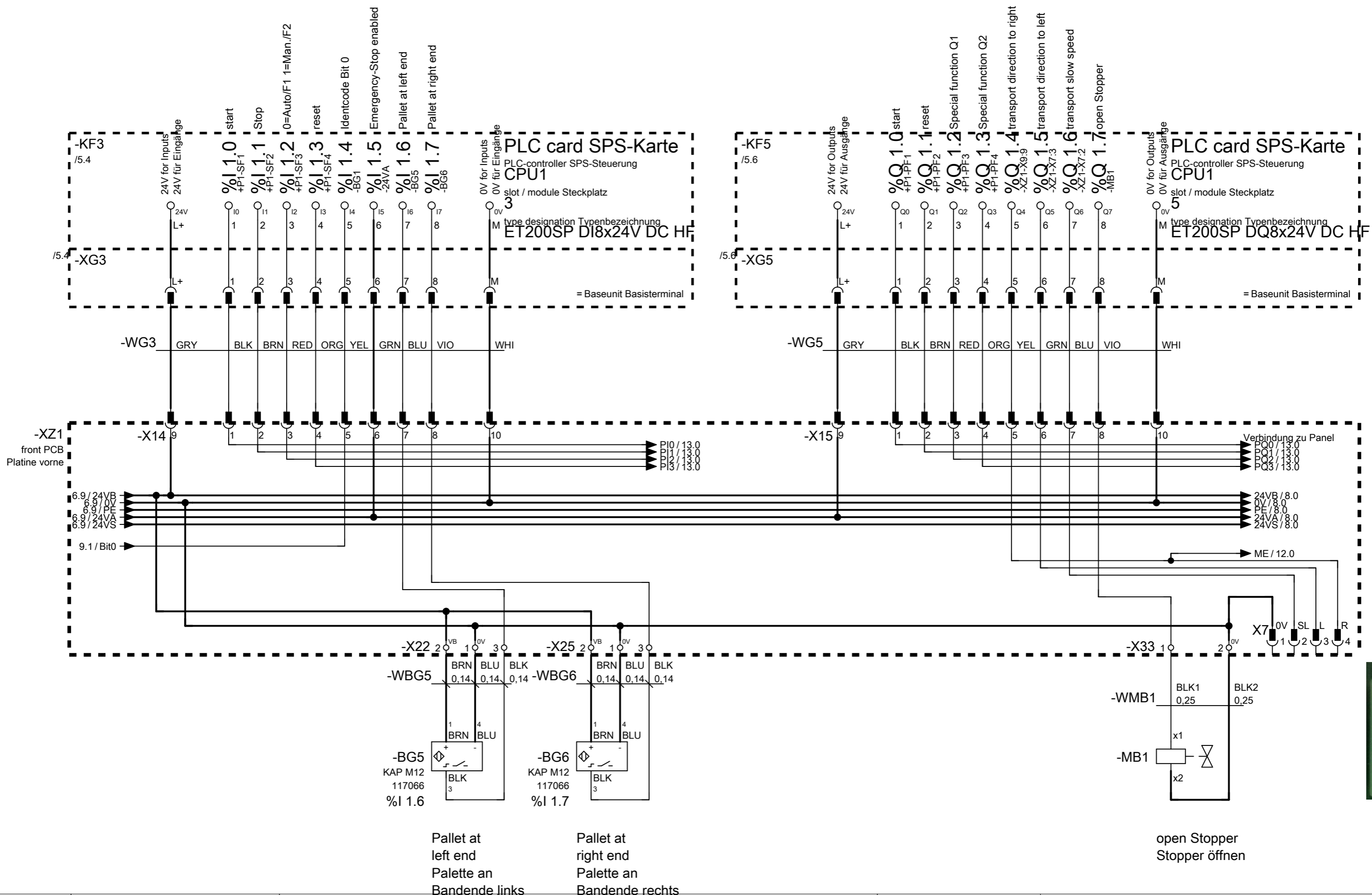


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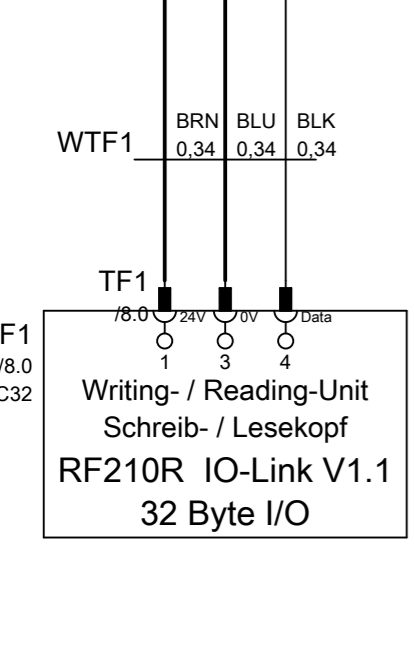
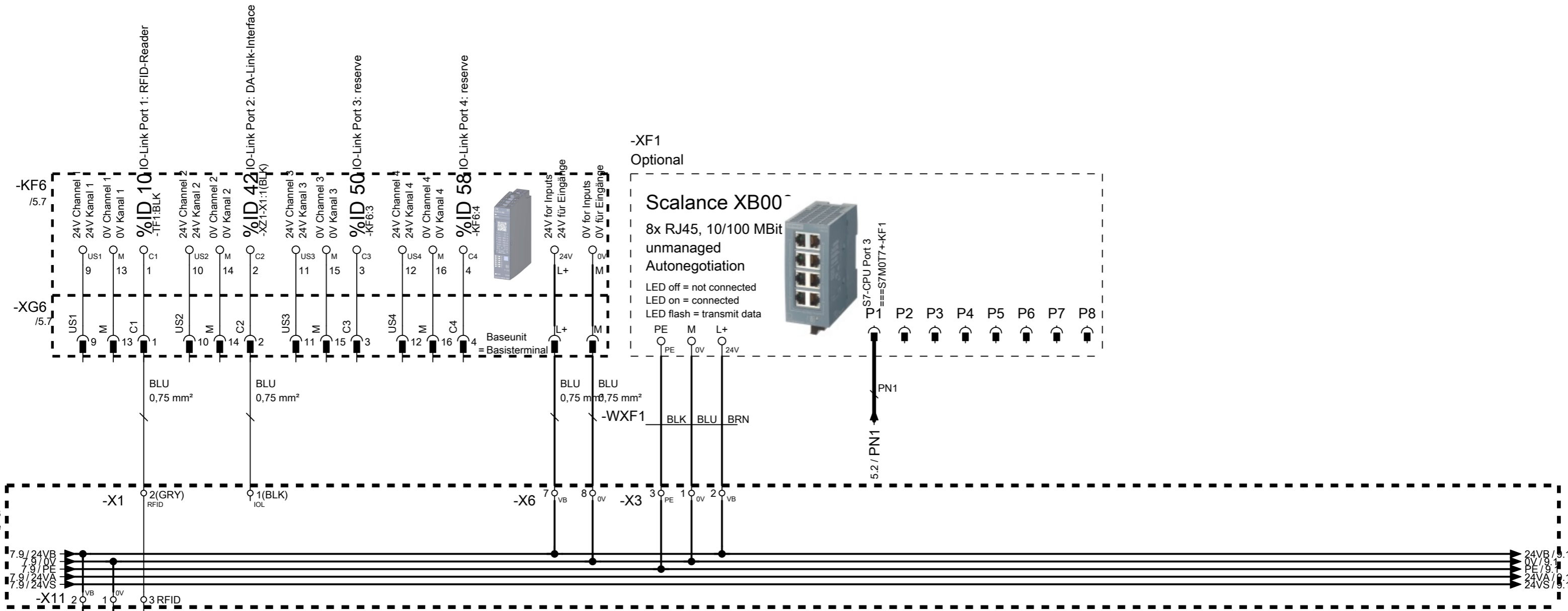
0 1 2 3 4 5 6 7 8 9



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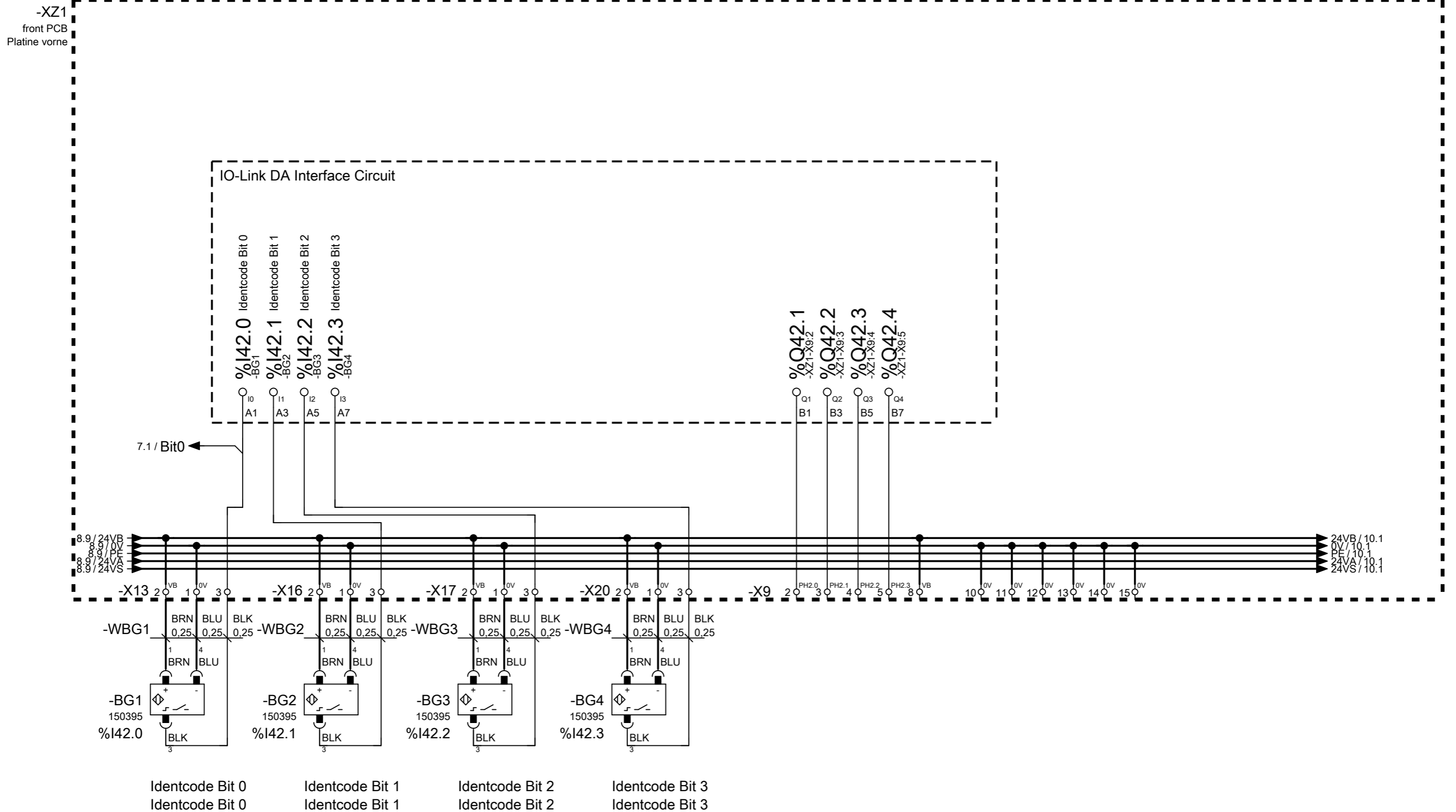


- IB n+0: State State Bit 0: not used
- IB n+1: ErrorCode State Bit 1: Write 28 Byte
- IB n+2: Adress-H State Bit 2: Read 28 Byte
- IB n+3: Adress-L State Bit 3: not used
- IB n+4: Data0 State Bit 4: AntOff
- ..... State Bit 5: TagPresent
- IB n+31: Data27 State Bit 6: Error
- State Bit 7: Done
- QB n+0: Command Command Bit 0: not used
- QB n+1: not used Command Bit 1: Write 28 Byte
- QB n+2: Adress-H Command Bit 2: Read 28 Byte
- QB n+3: Adress-L Command Bit 3: not used
- QB n+4: Data0 Command Bit 4: AntOff
- ..... Command Bit 5: not used
- QB n+31: Data27 Command Bit 6: not used
- Command Bit 7: not used

-XTF1 = RFID-Connector RFID-Anschluss

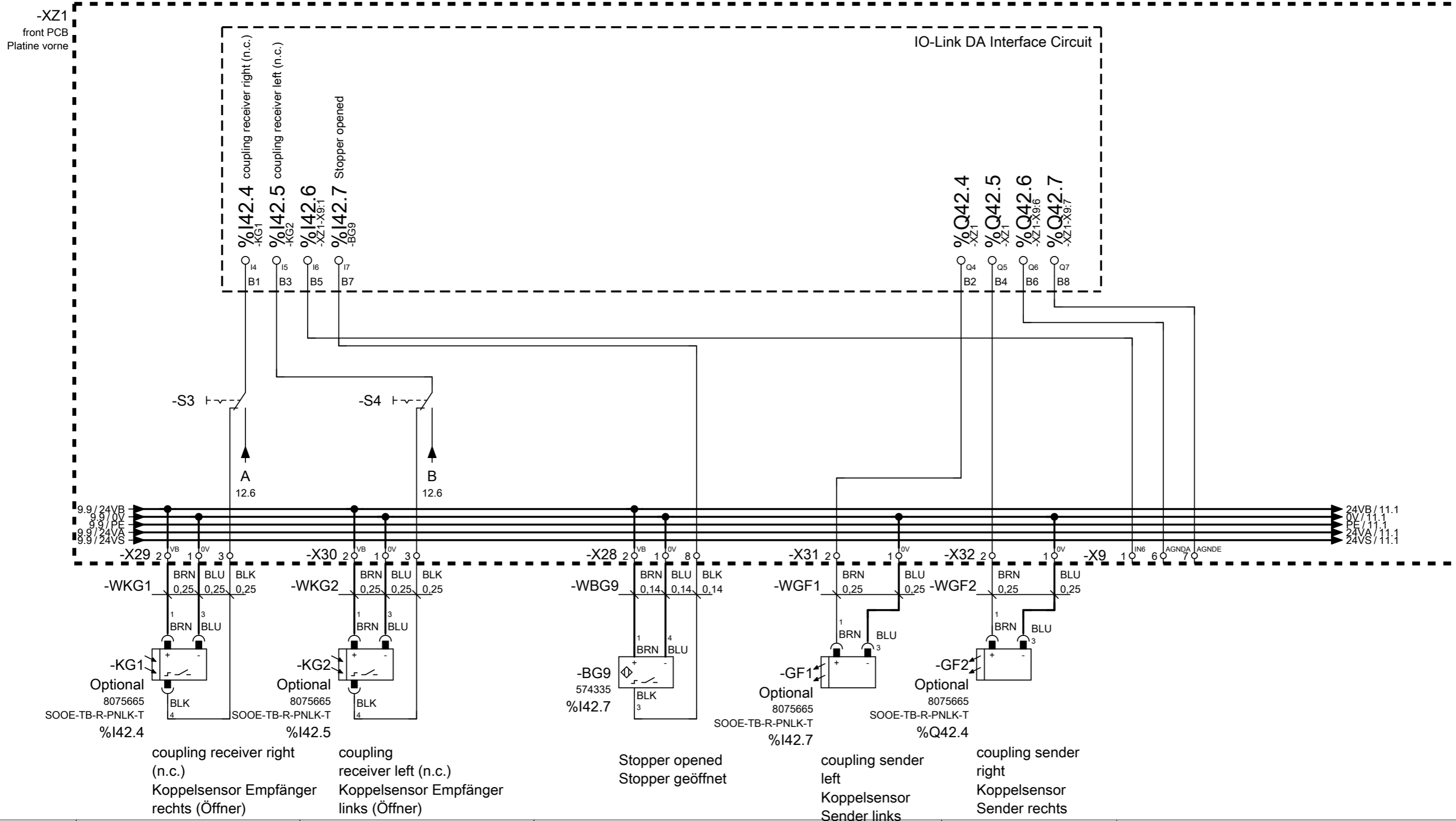


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Date	17.06.2022	<b>FESTO</b> PCB - IO-Link A Platine - IO-Link A	S-Nr.	8167762		= S7M0T7	Page 9 of 14	
Ed. by.	ca0fgvn		PSP / DPJ	VN	+			
Drw.Nd.	N:		F:	EPL0VZFG7M	I:\Festo.net\dfs01\INT\Data\PLAN\DATA_xx\CAI\Projects\Labvolt\8167762_CPLAB_S7M0T7\ASE_2.elk			

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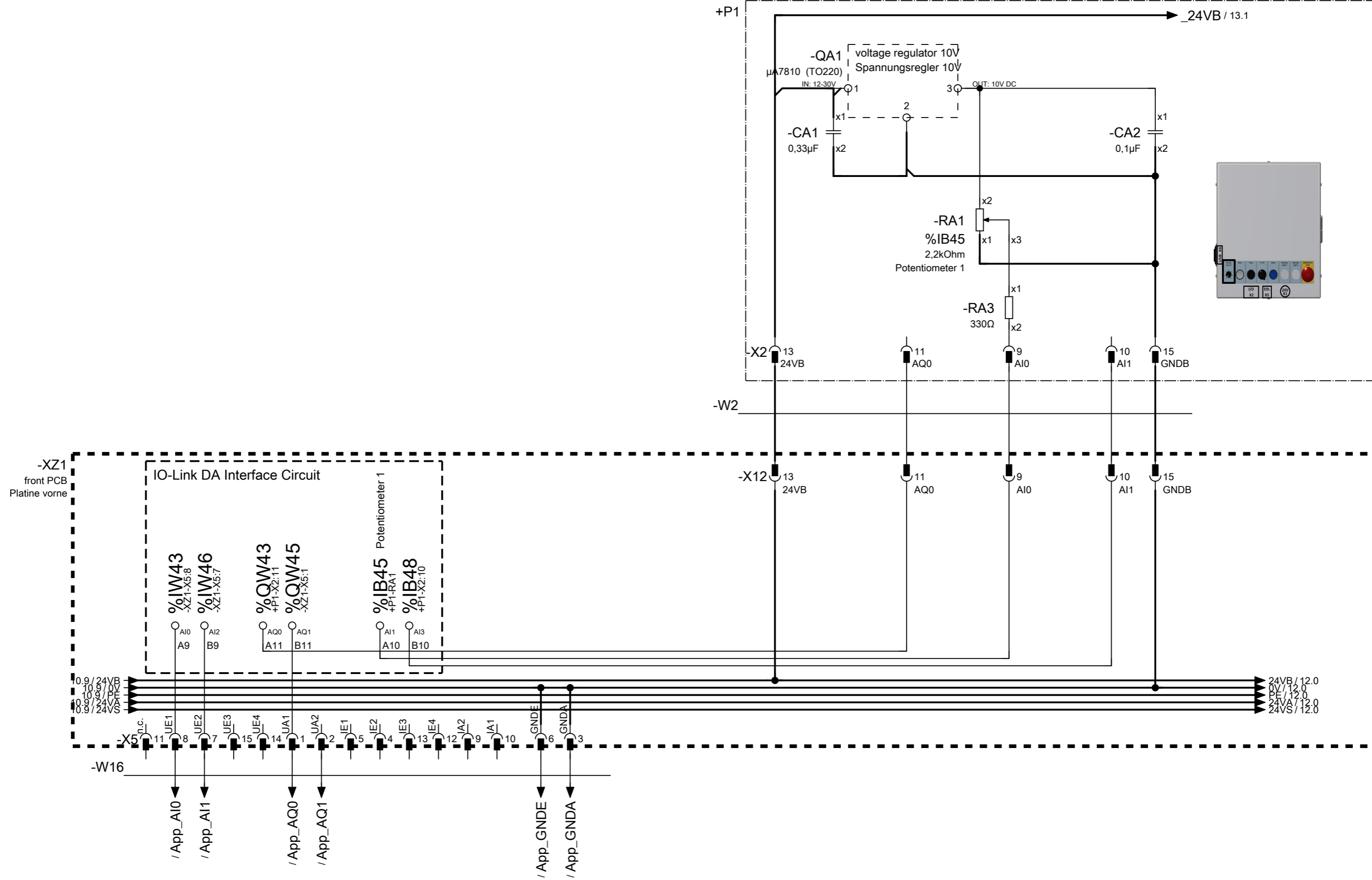


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11 >>

Date	17.06.2022	Festo Didactic SE Rechbergstraße 3 D-73770 Denkendorf	<b>FESTO</b>	PCB - IO-Link B Platine - IO-Link B	S-Nr.	8167762		= S7M0T7	Page 10 of 14
Ed. by.	ca0fgvn				PSP / DPJ	VN	+		
Drw.Nr.	N:	F:	EPL0VZFG7M	\\festo.net\dfs01\INT\Data\EPLAN\DATA_XX\CAI\Projects\Labvolt\8167762_CPLAB.PLA\ASE_2.elk					

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12>>

Date	21.03.2022
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Drw.Nr.	

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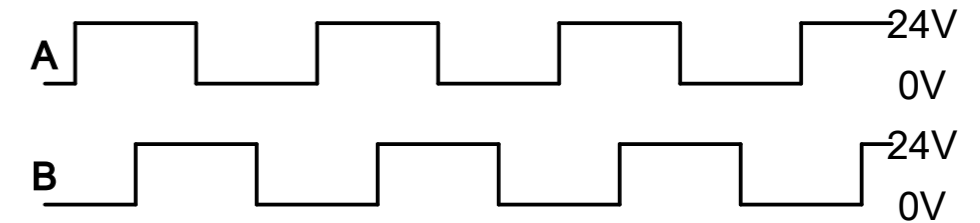
PCB - IO-Link analog  
Platine - IO-Link Analog

S-Nr.	8167762
PSP / DPJ	VN

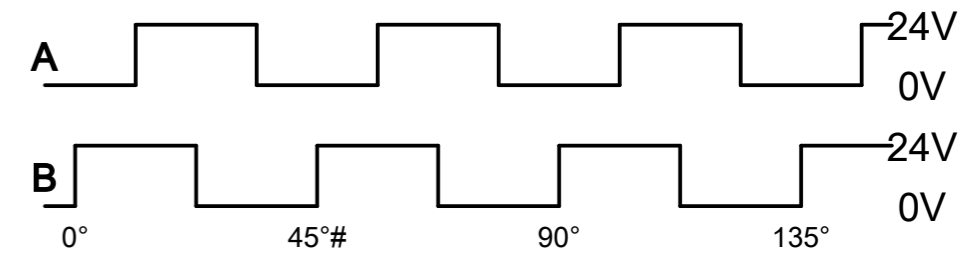
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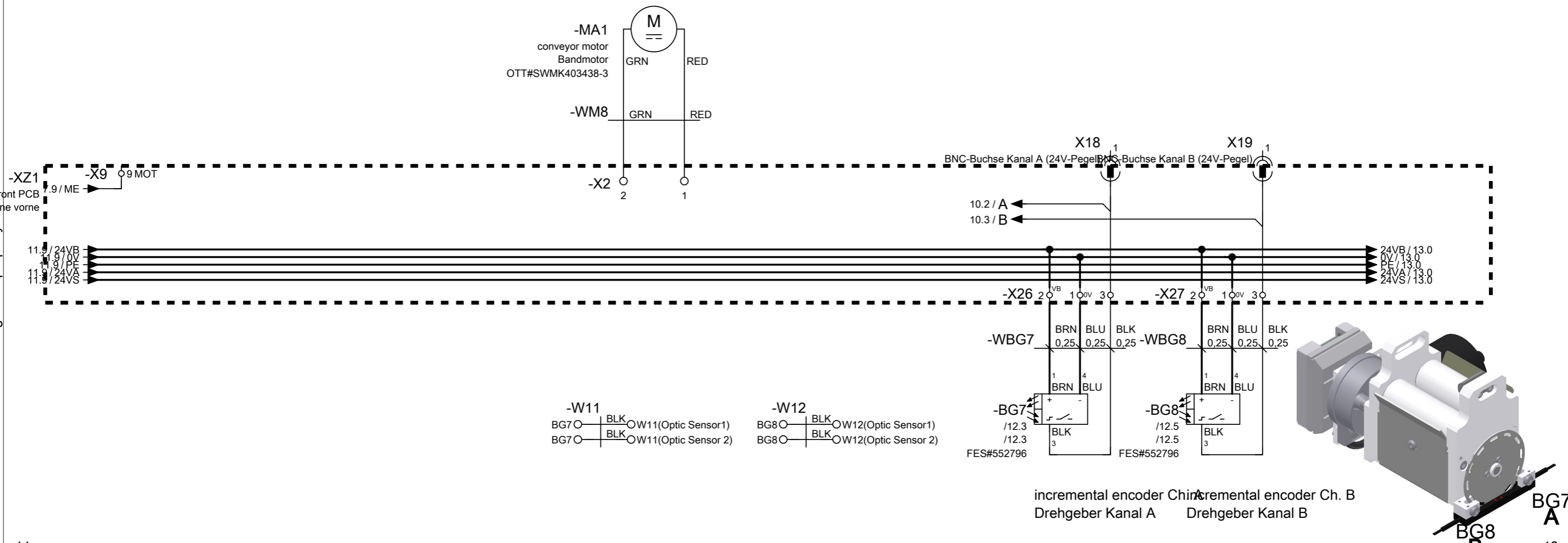
transport direction to right  
Bandantrieb Rechtslauf



transport direction to left  
Bandantrieb Linkslauf



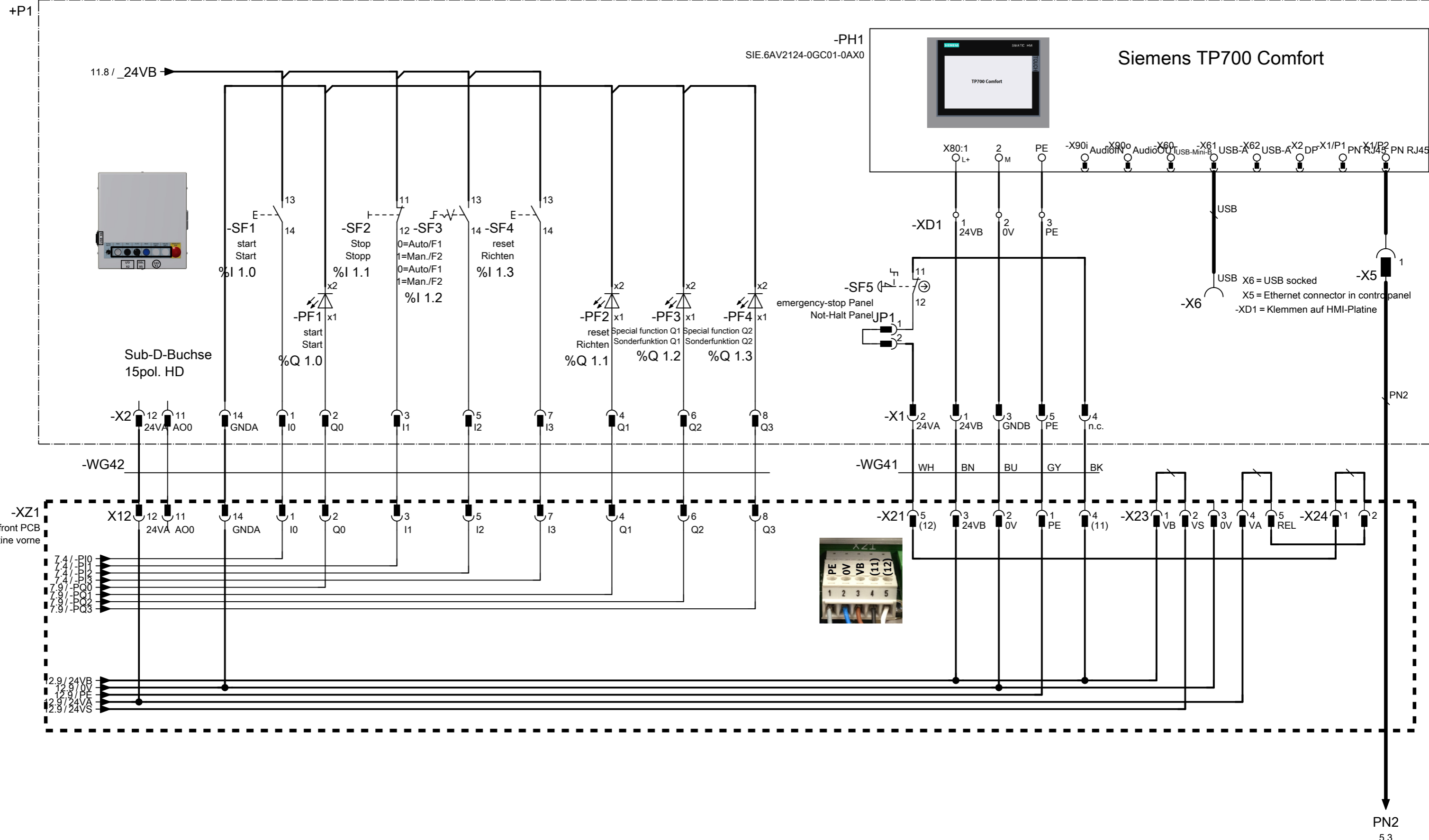
1 rotation = 8 pulses/channel =  $30\text{mm} * \pi = 94,2 \text{ mm}$   
1 Umdrehung = 8 Impulse je Kanal =  $30\text{mm} * \pi = 94,2 \text{ mm}$



<<1

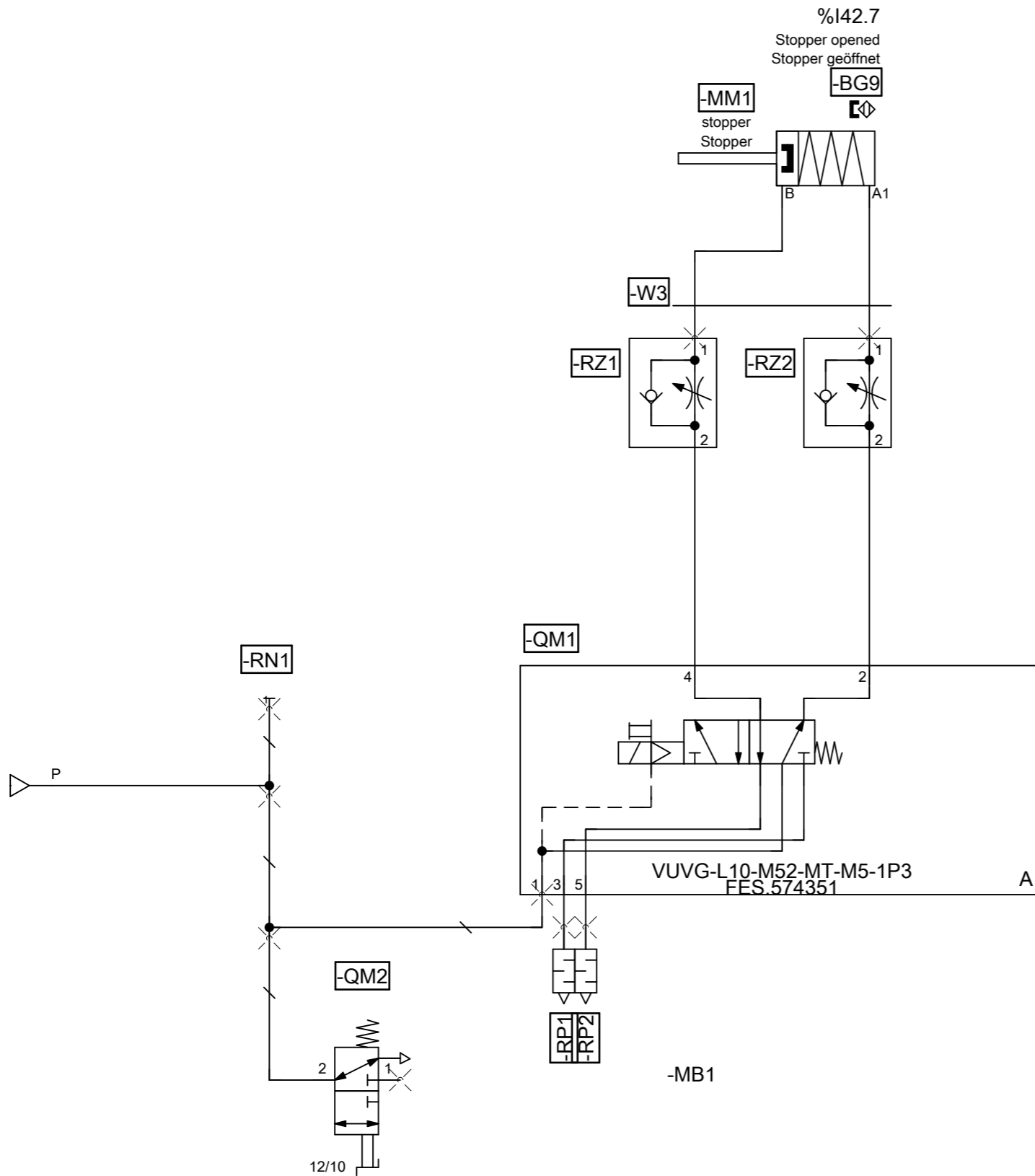
Date	17.06.2022	Festo Didactic SE Rechbergstraße 3 D-73770 Denkendorf	<b>FESTO</b>	PCB - motor + encoder Platine - Motor + Inkrementalgeber	S-Nr. <b>8167762</b>		
Ed. by.	ca0fgvn					PSP / DPJ VN	= S7M0T7
Drw.Nr.		N:	F:	EPL0VZFG7M \\Festo.net\dfs01\INT\Data\EPLAN\DATA_xx\CAI\Projects\Labvolt\8167762_CPLAB_S7M0T7\ASE_2.elk		+	of 14

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Date	17.06.2022	<b>FESTO</b> controlpanel basic functions & touchpanel Bedienfeld Grundfunktionen & Touchpanel	S-Nr.	8167762	= S7M0T7	
Ed. by.	ca0fgvn		PSP / DPJ	VN		+
Drw.Nr.						
Festo Didactic SE Rechbergstraße 3 D-73770 Denkendorf		EPL0VZFG7M \\vesto.net\dfs01\INT\Data\EPLAN\DATA_xx\CAI\Projects\Labvolt\8167762_CPLAB_SPS\ASE_2.elk		Page 13	of 14	

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Date	17.06.2022	Festo Didactic SE Rechbergstraße 3 D-73770 Denkendorf	<b>FESTO</b>	pneumatic schematic Pneumatikplan	S-Nr.	8167762		
Ed. by.	ca0fgvn				PSP / DPJ	VN	= S7M0T7	Page 14
Drw.Nr.							+	of 14