

This drawing is the property of Festo Didactic SE
Diese Zeichnung ist Eigentum der Festo Didactic SE

0	1	2	3	4	5	6	7	8	9
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FESTO

Schaltungsunterlagen Circuit diagrams

Produkt
Product

Produktname: Fügen
productname: Joining

Materialnummer Produkt: 8129125
Material number product:

Variante MPS 400
variant

Stromversorgung: 230V AC / 50 Hz
Power supply unit:

Bemerkung: remark:

Kunde: Customer:

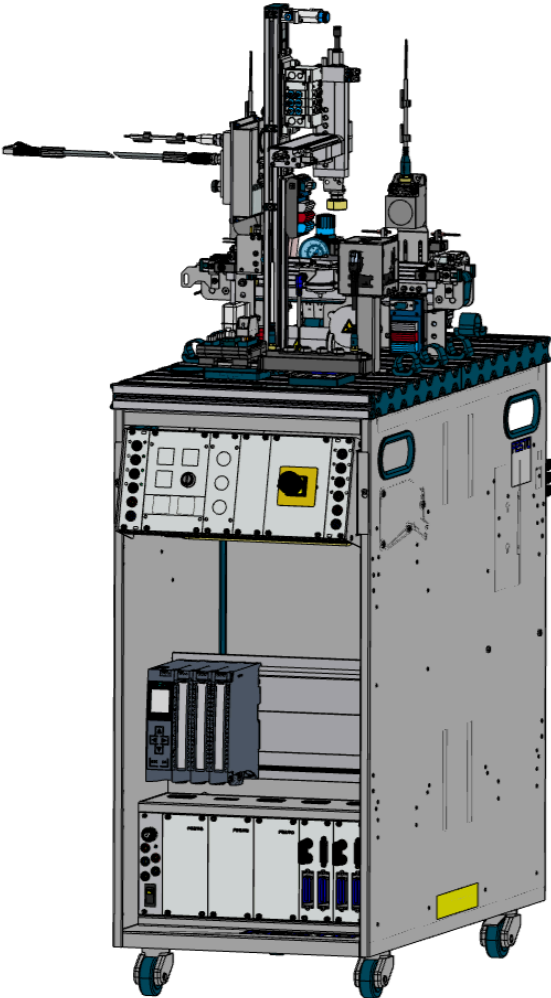
letzte Änderung: 2025-03-24
last Modification:

Druckdatum: 2025-03-24
Print date:

Dokumentation
Documentation

Materialnummer Schaltplan: 8233335
Material Number Circuit Diagram:

Revision: -
Revision:



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=X1	&EFS1	+X1	26	Fügen Modul Band digital -G1XG1 Joining - Conveyor module digital -G1G1		2025-02-20	kshc	
=X1	&EFS1	+X1	27	Fügen Modul Band digital -G1XG1 Joining - Conveyor module digital -G1XG1		2025-02-20	kshc	
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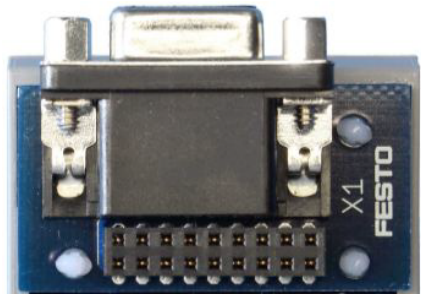
&EDB

Strukturkennzeichen
Structure identifier

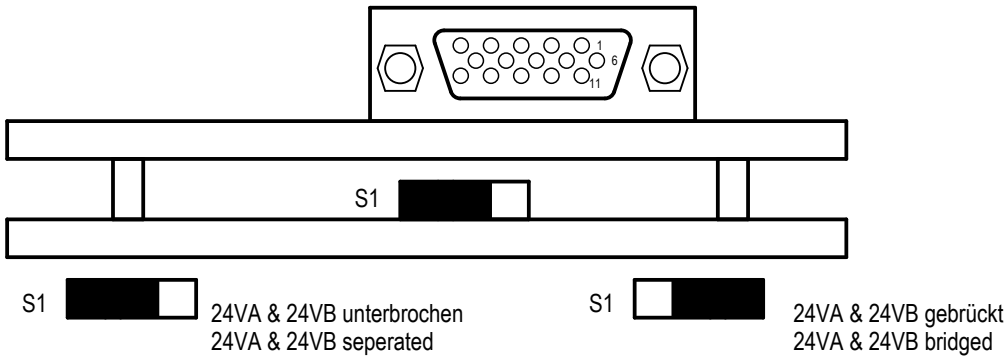
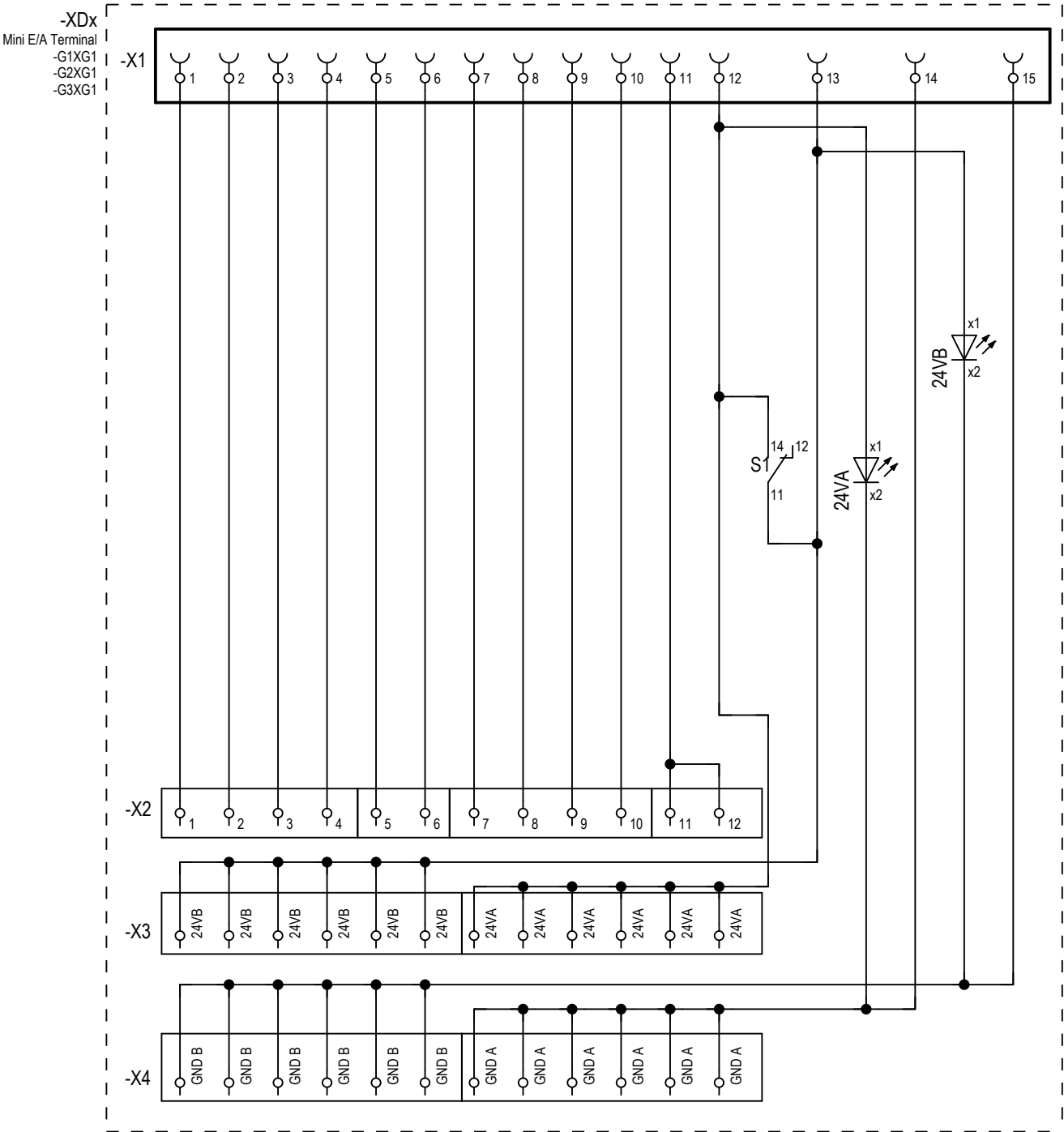
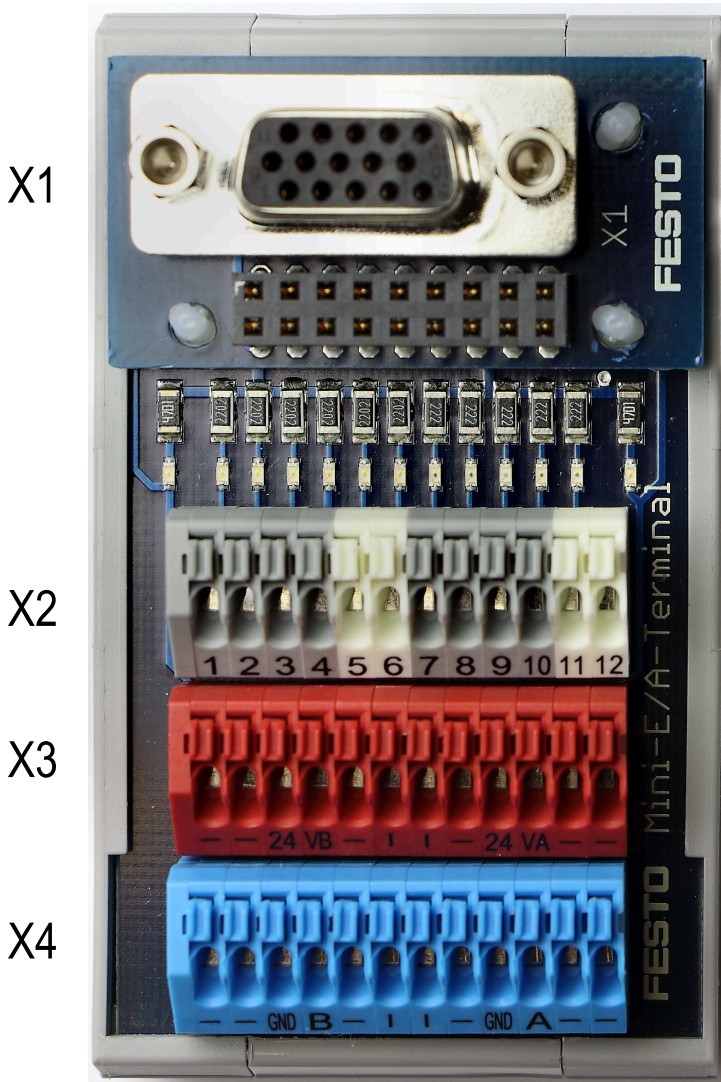
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Ed. by.	kshc		Rechbergstraße 3															PSP / DPJ																				VN					= X1					Joining					Page 5				
Creat.	kshc		D-73770 Denkendorf																																																						
Drw.No.			N:	F:		V: 2025.0.3		Z:\INT\Data\EPLAN\DATA_xx\DE\Projects\Didactic\Products\28 MPS_DIMPS-400_TN 8129125- Fügen.elk															+										of 49																								

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Strukturkennzeichenübersicht Structure identifier overview									
Beschriftung labeling		Strukturkennzeichen structure identifier		Beschreibung description				Anzahl Quantity	
Function designation		=X1		Fügen Joining				2555	
Document type		&EAA		Deckblatt cover sheet				1	
Document type		&EAB		Inhaltsverzeichnis Table of contents				3	
Document type		&EDB		Strukturkennzeichen Structure identifier				5	
Document type		&EMA		Übersichtsplan layout plan				6	
Document type		&EFS1		Schaltplan, Elektrik Circuit diagram, electric				31	
Document type		&MFS		Pneumatik pneumatics				3	
Location designation		+SZ1		Bedienpult Control desk				381	
Location designation		+X1		Fügen Joining				889	
Location designation		+K1		Steuerung control unit				892	
Location designation		+K2		Pneumatik Pneumatics				5	

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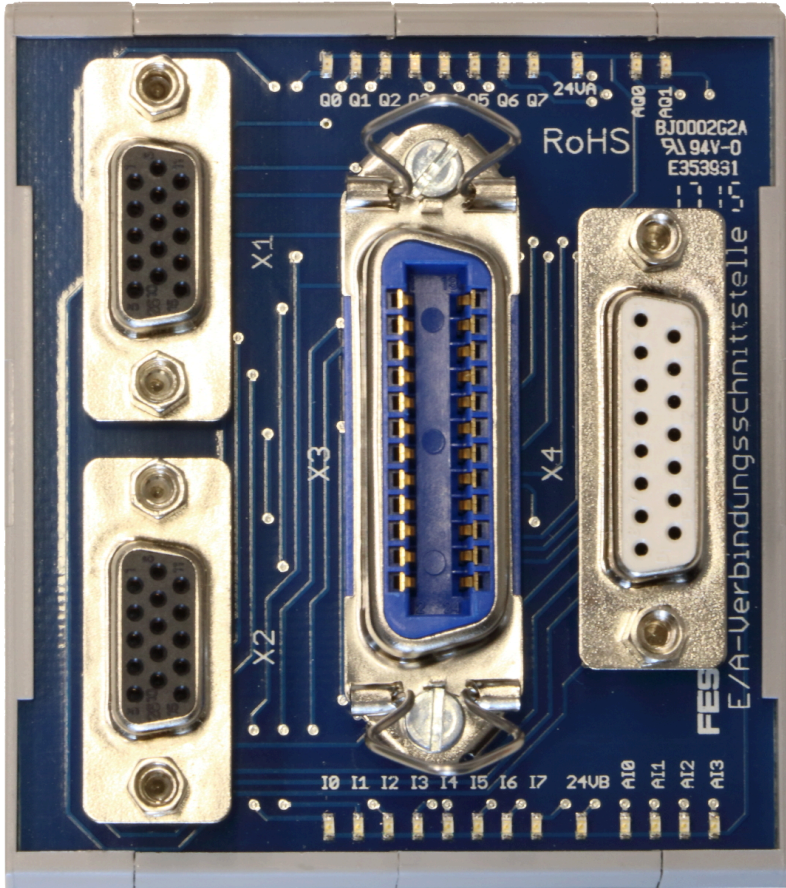
Alternativ Bauform
alternative configuration



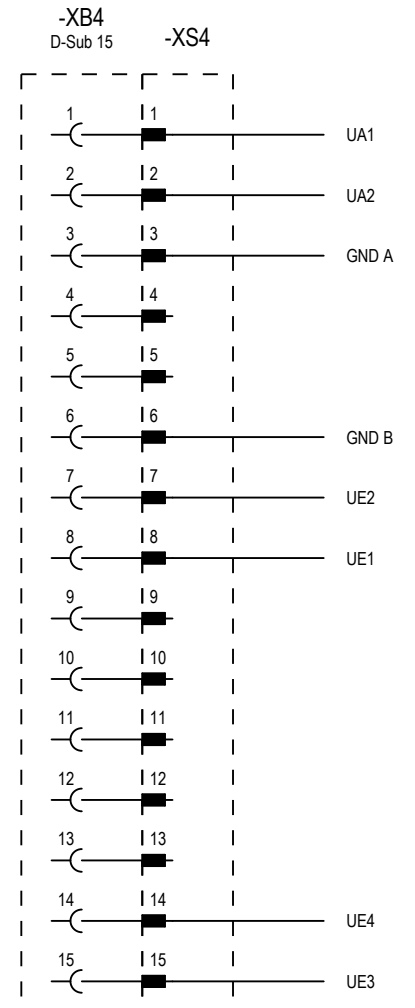
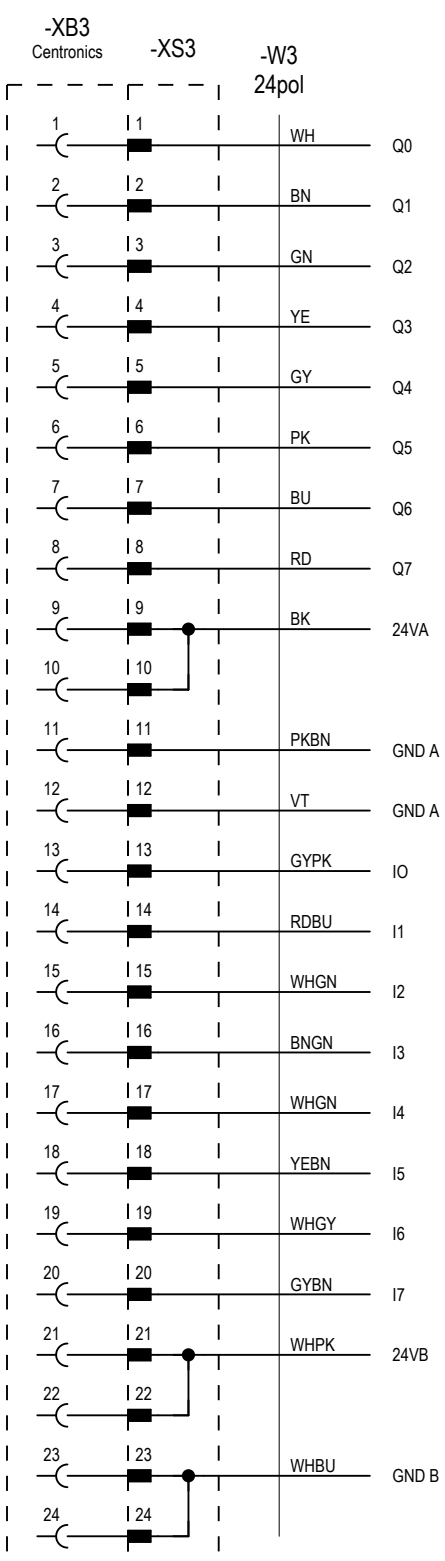
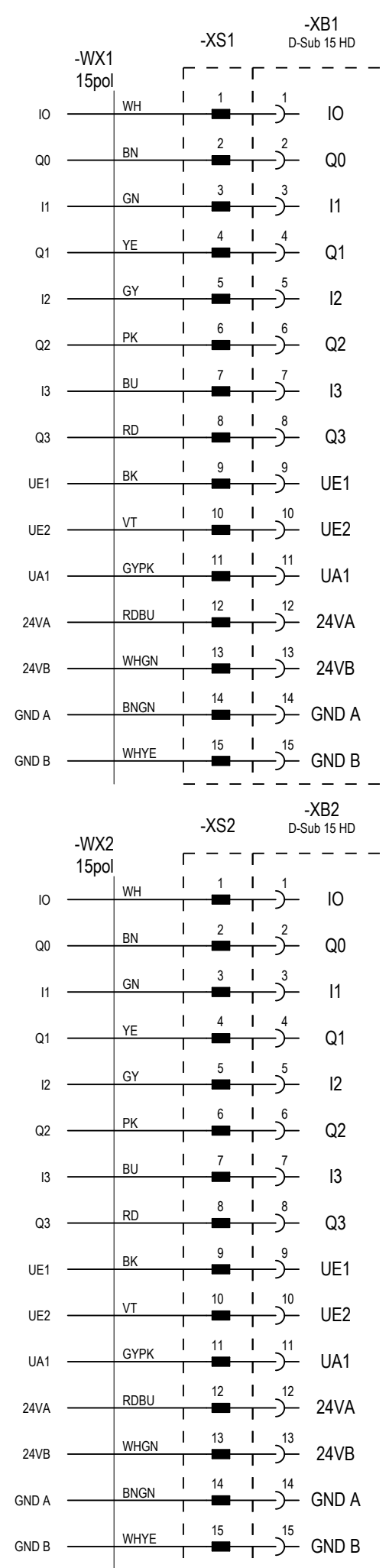
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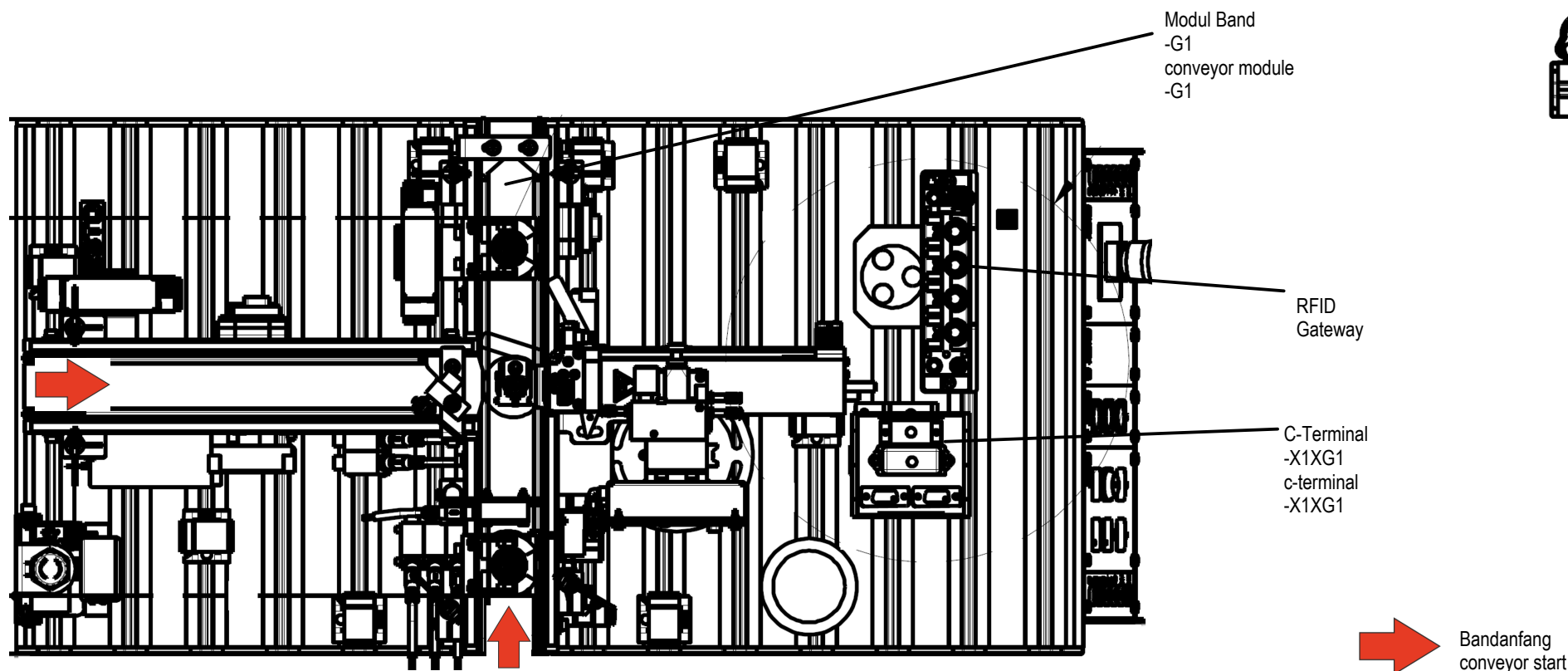
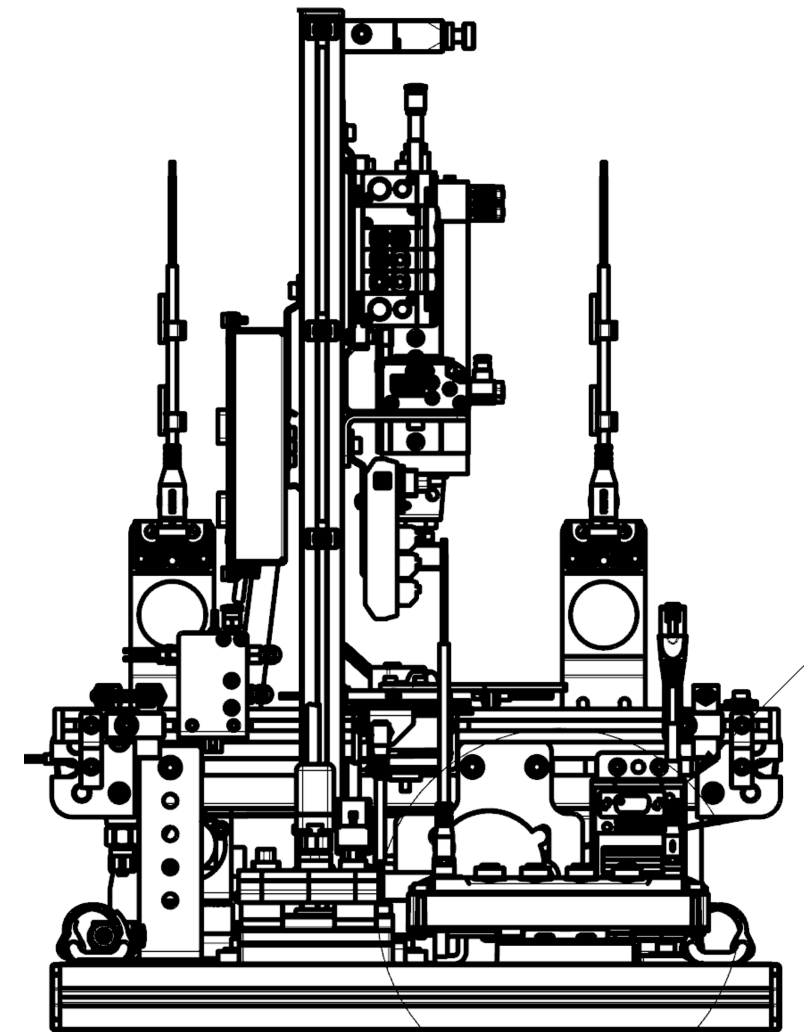
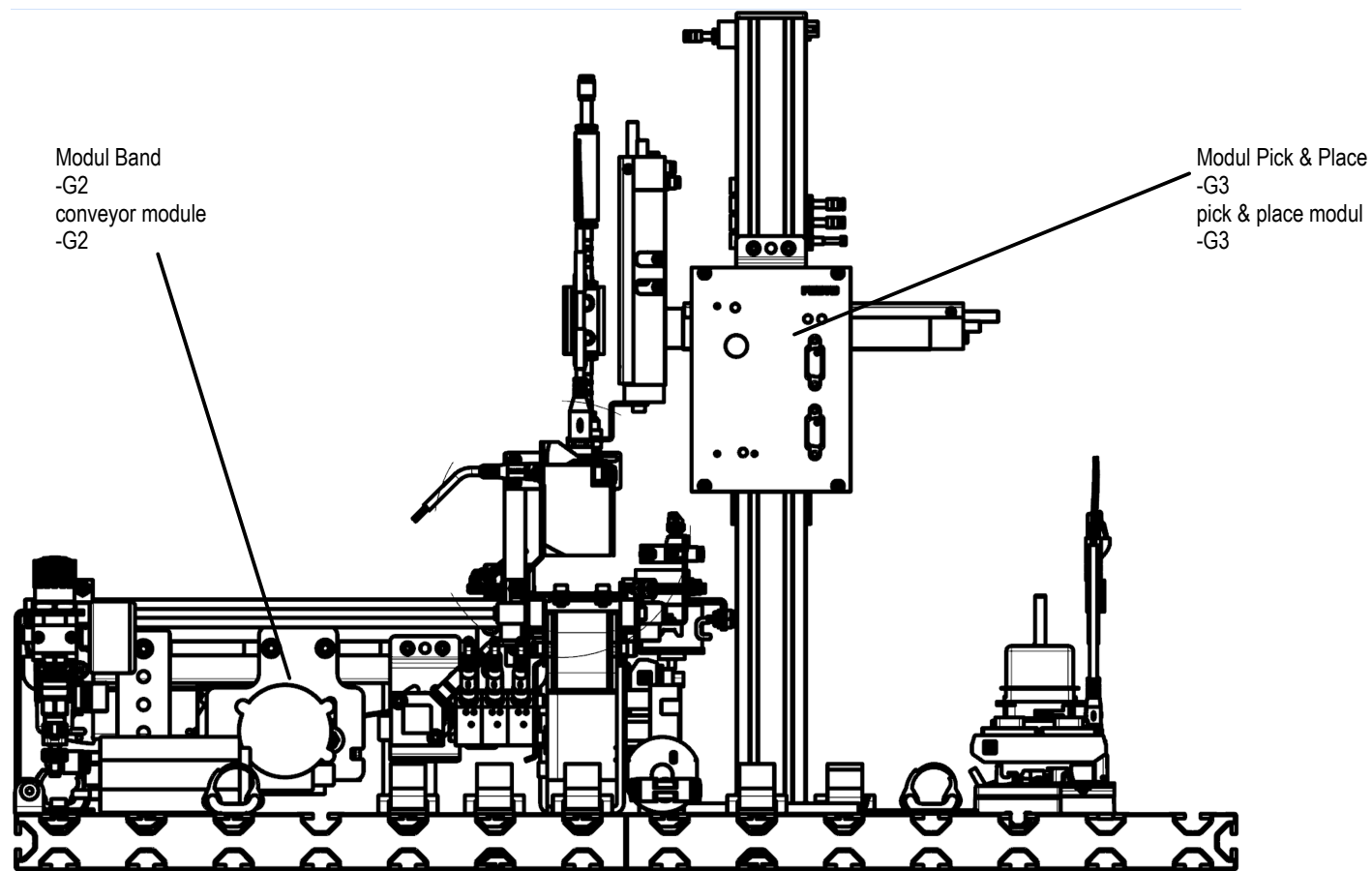
-XDc
C-interface
-X1XG1



<<7

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<8

&EMA/10>>

Date	2024-11-20	Festo Didactic SE Rechbergstraße 3 D-73770 Denkendorf		FESTO Aufbauplan assembly		Part number 8129125			
Ed. by.	kshc					PSP / DPJ	VN	= X1	Joining
Creat.	kshc	N:	F:	V: 2025.0.3	Z:\INT\Data\IPLANDATA_xx\DE\Projects\Didactic\Products\28 MPS_DIMPS-400_TN 8129125- Fügen.elk			+	Page 9
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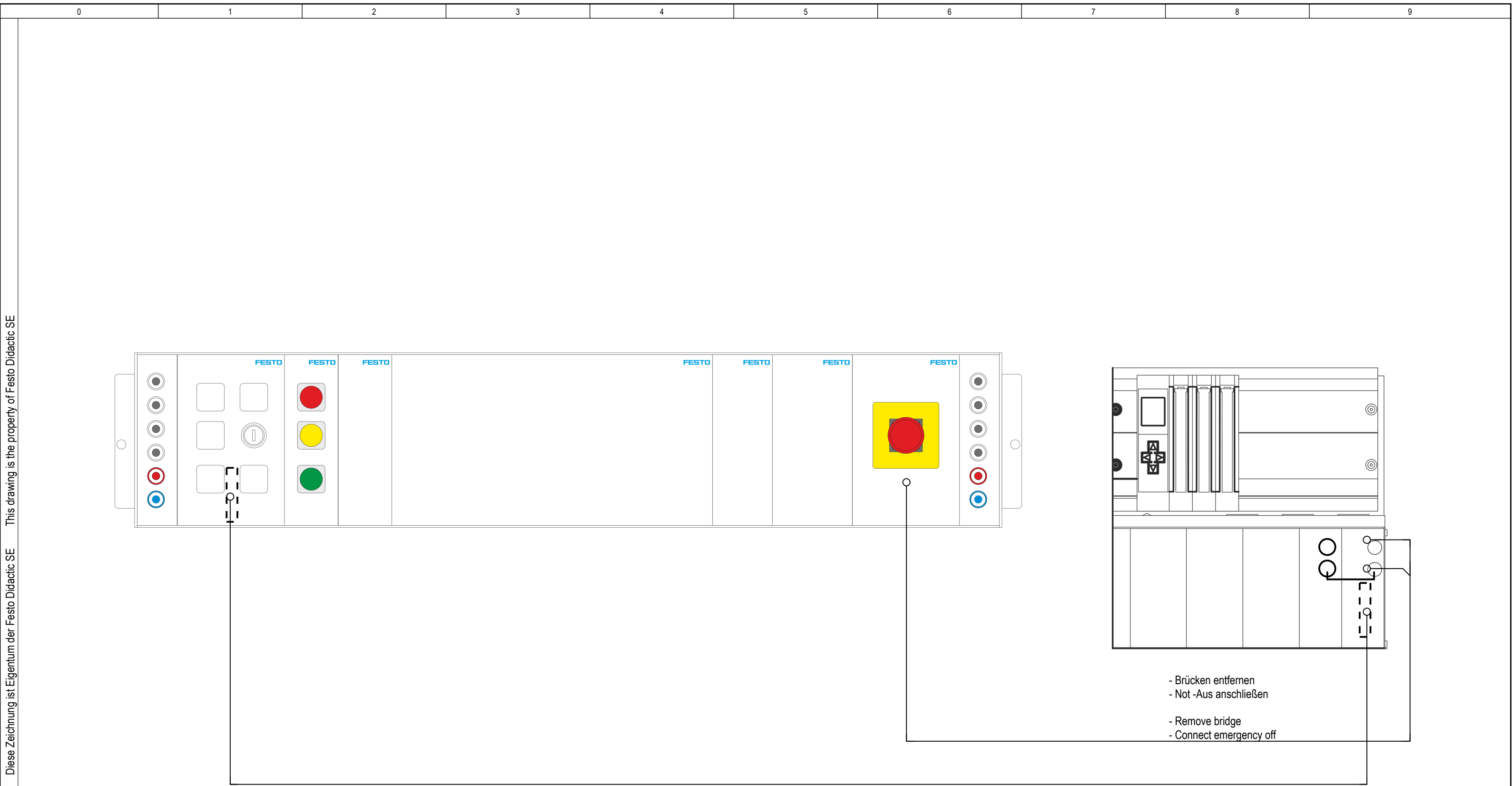
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&EMA

Übersichtsplan

layout plan

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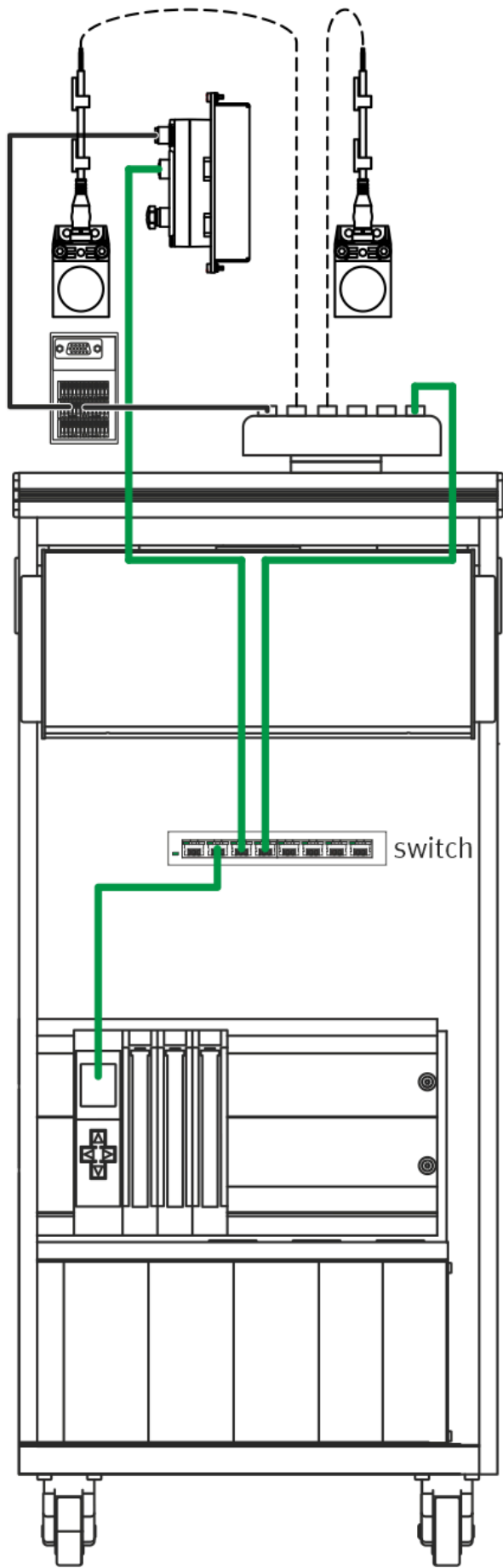


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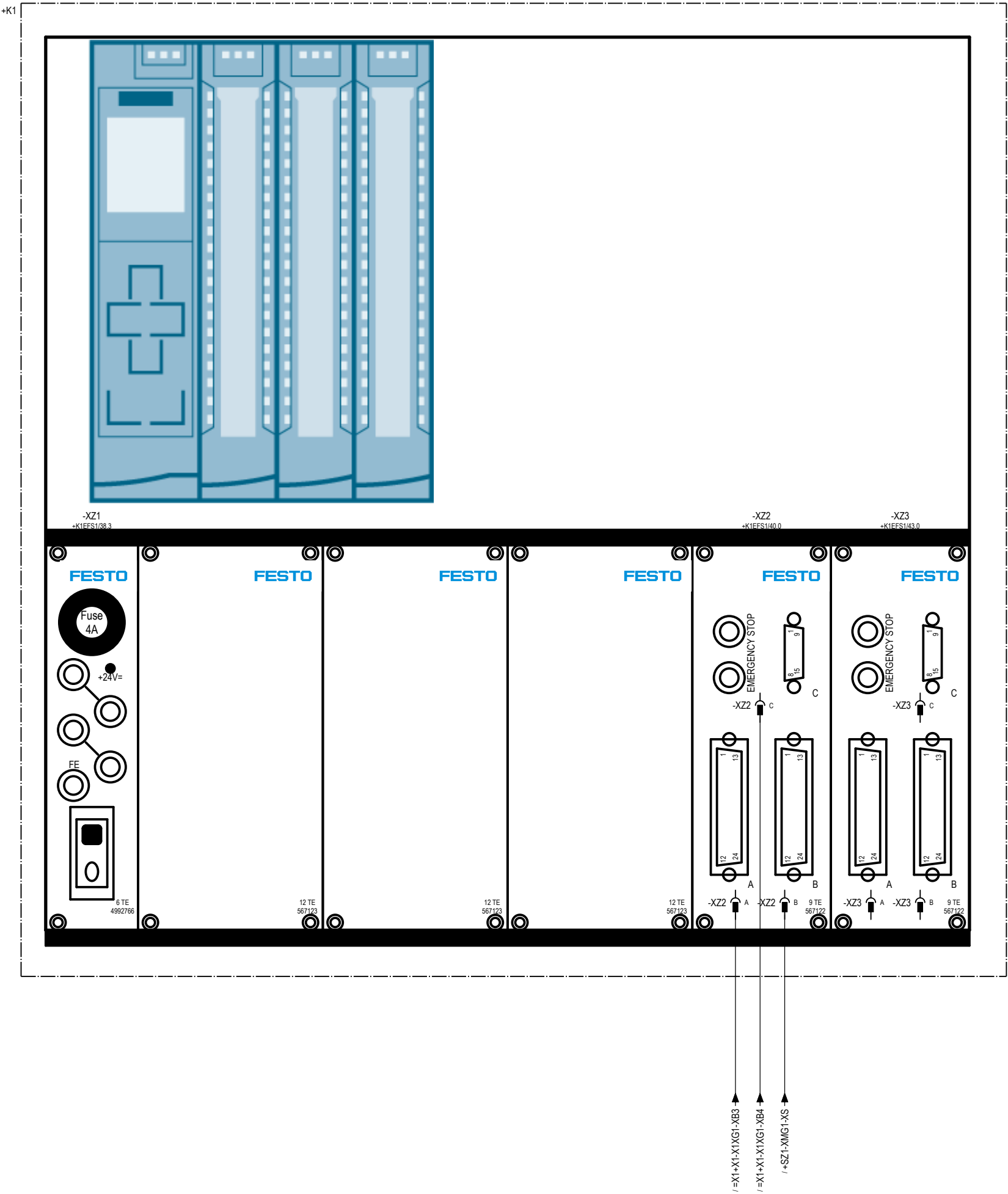
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Ed. by.	kshc							PSP / DPJ		VN	= X1	Joining	Page 11
Creat.	kshc										+		of 49
Drw.No.		N:	F:	V: 2025.0.3	Z:\INT\Data\EPLAN\DATA_xx\DE\Projects\Didactic\Products\28 MPS_DIMPS-400_TN 8129125- Fügen.elk								

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----- RFID
— ProfiNET / Ethernet / Modbus
— Versorgung / power supply

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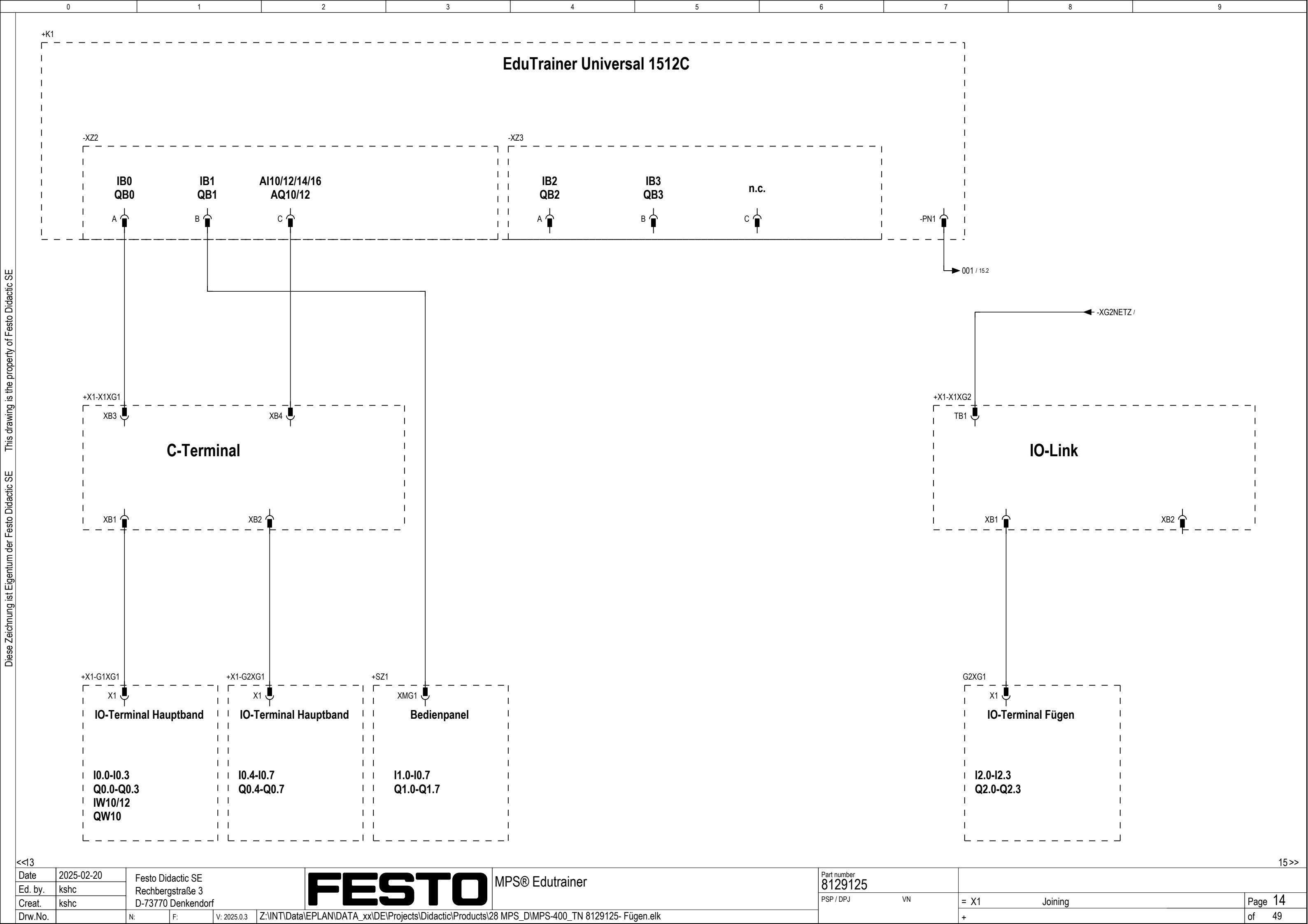


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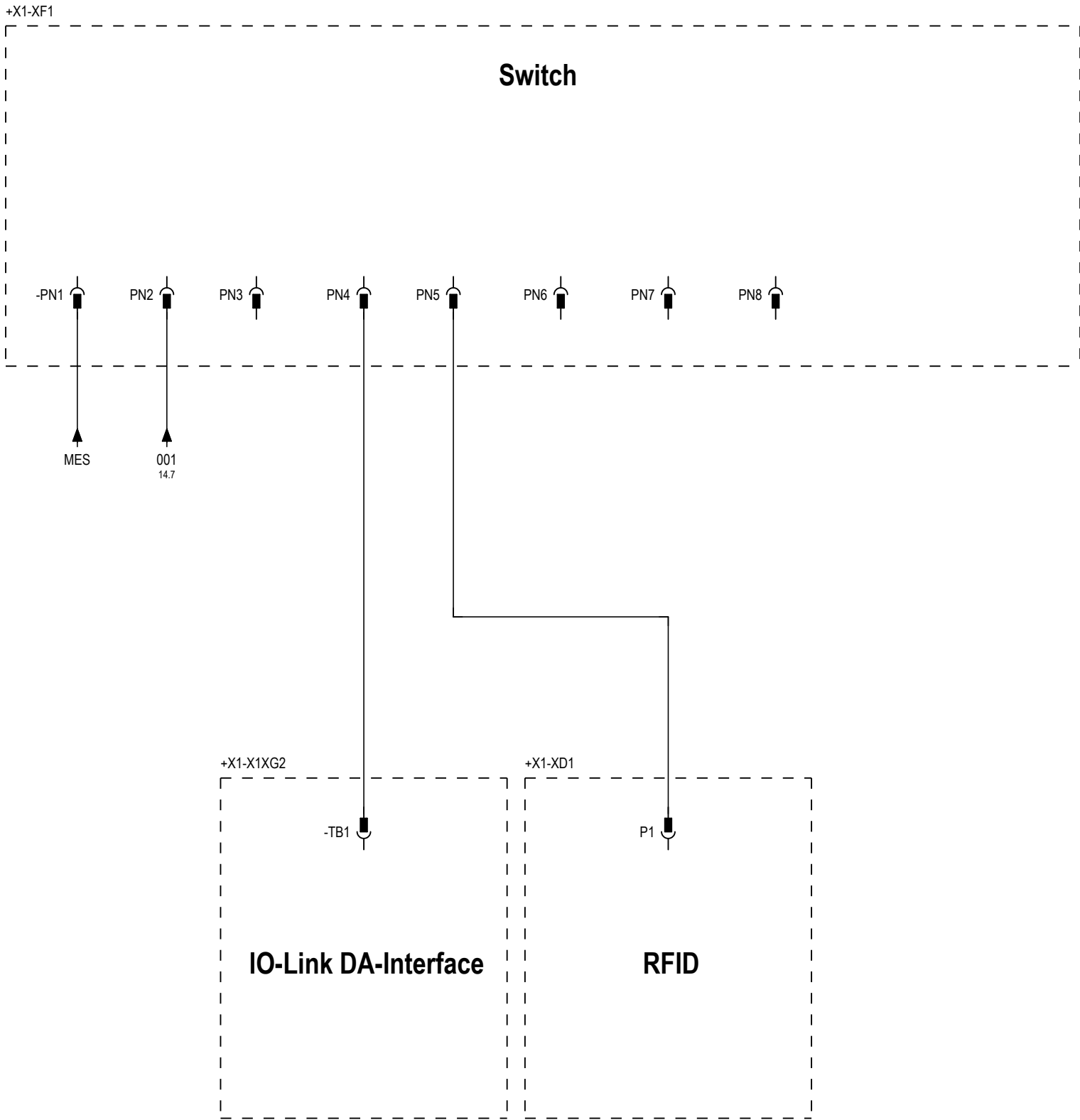
14>>

Date	2025-02-20	Festo Didactic SE Rechbergstraße 3 D-73770 Denkendorf			FESTO MPS® Edutrainer		Part number 8129125		= X1 Joining		Page 13	
Ed. by.	kshc											
Creat.	kshc	N:			V: 2025.0.3		Z:\INT\Data\IPLAN\DATA_xx\DE\Projects\Didactic\Products\28 MPS_DIMPS-400_TN 8129125- Fügen.elk		PSP / DPJ VN		+ of 49	
Drw.No.												

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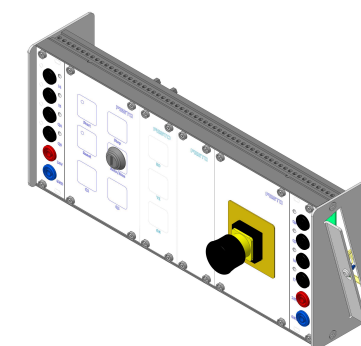
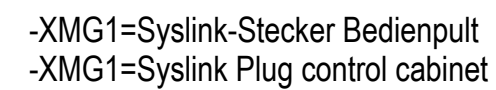
PC (MES) Steuerung control unit IO-Link DA-Interface RFID RFID

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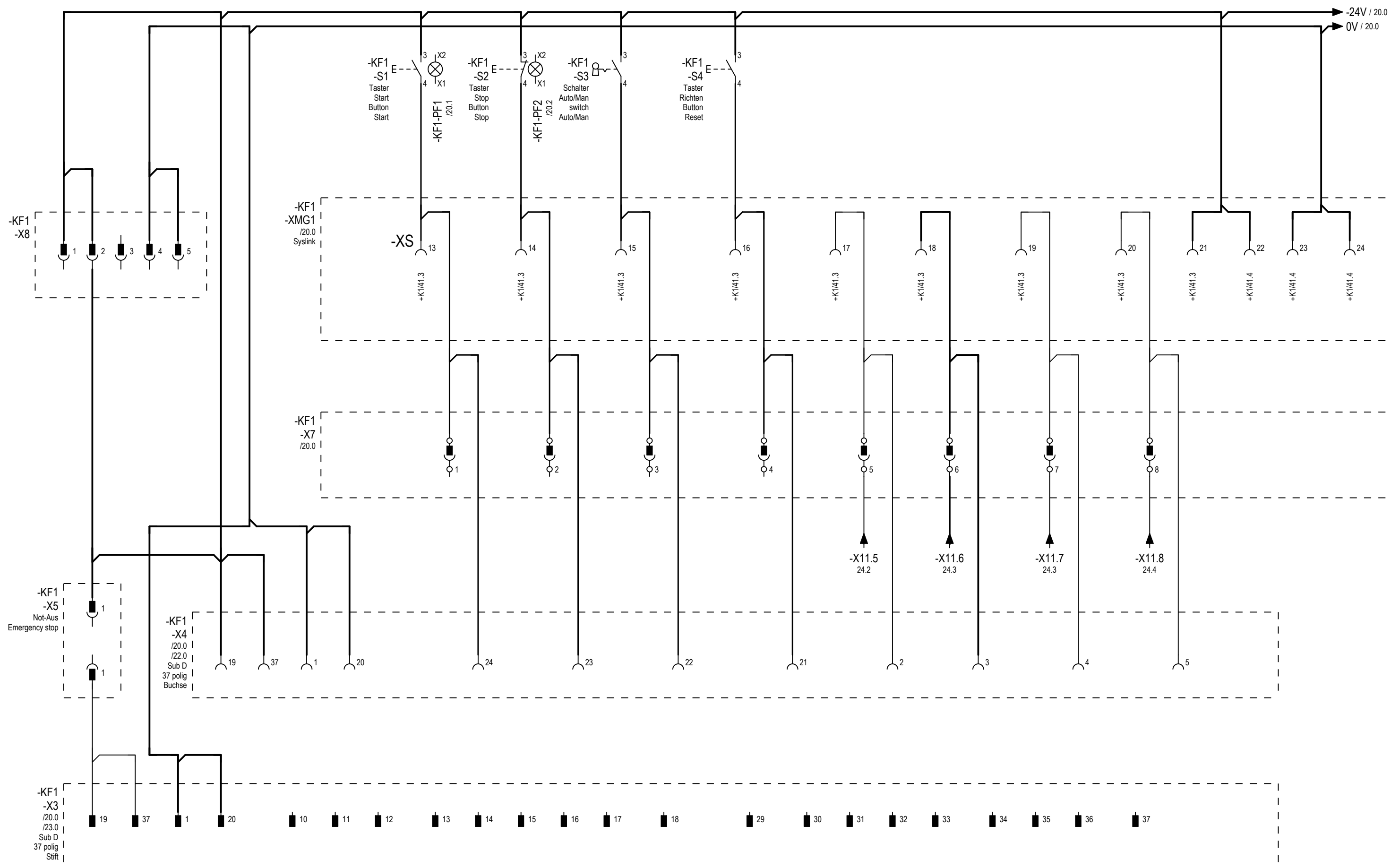
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+SZ1

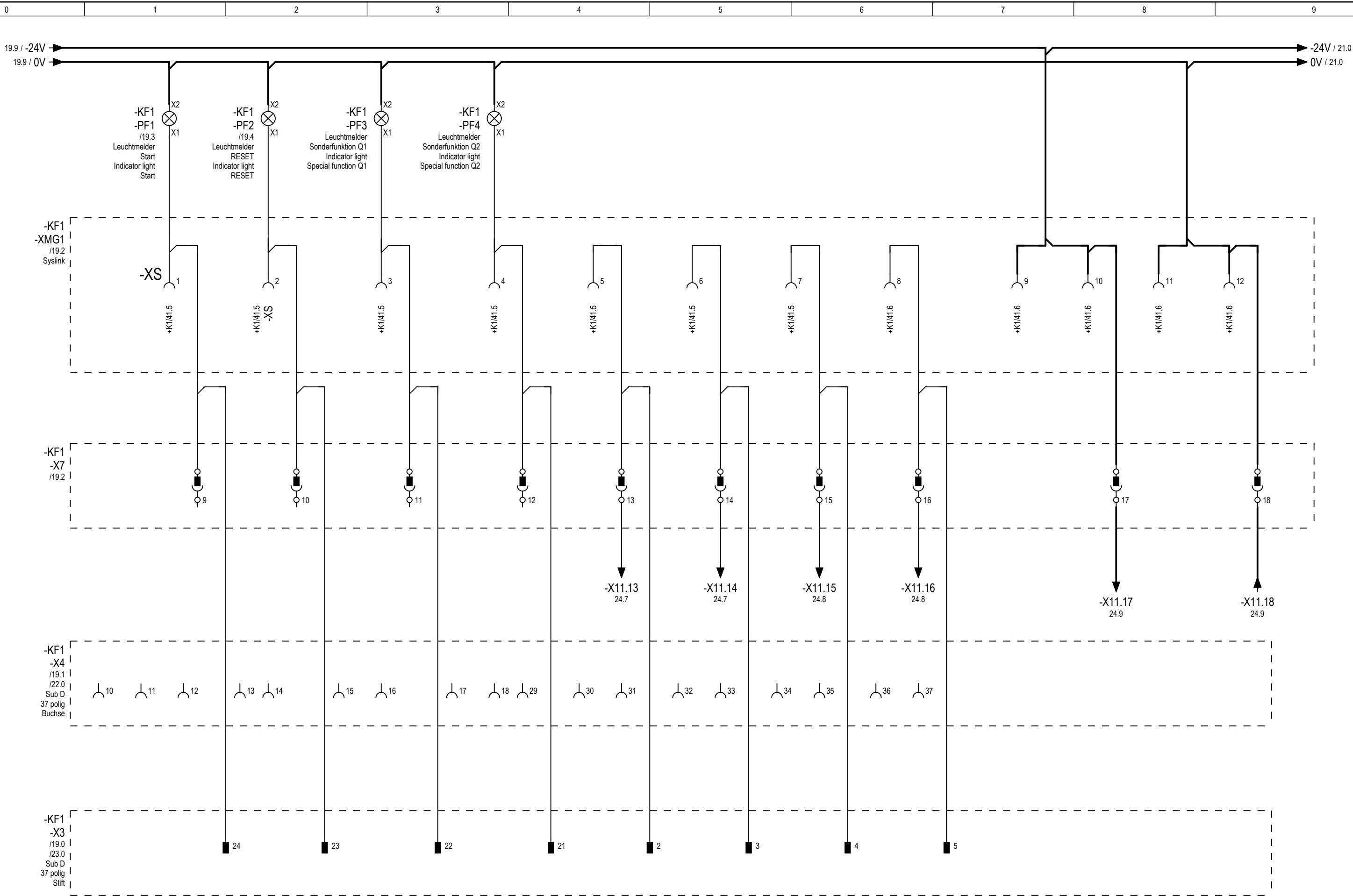
Bedienpult
Control desk



Brücke zwischen 2 & 4
jumper in between 2 & 4



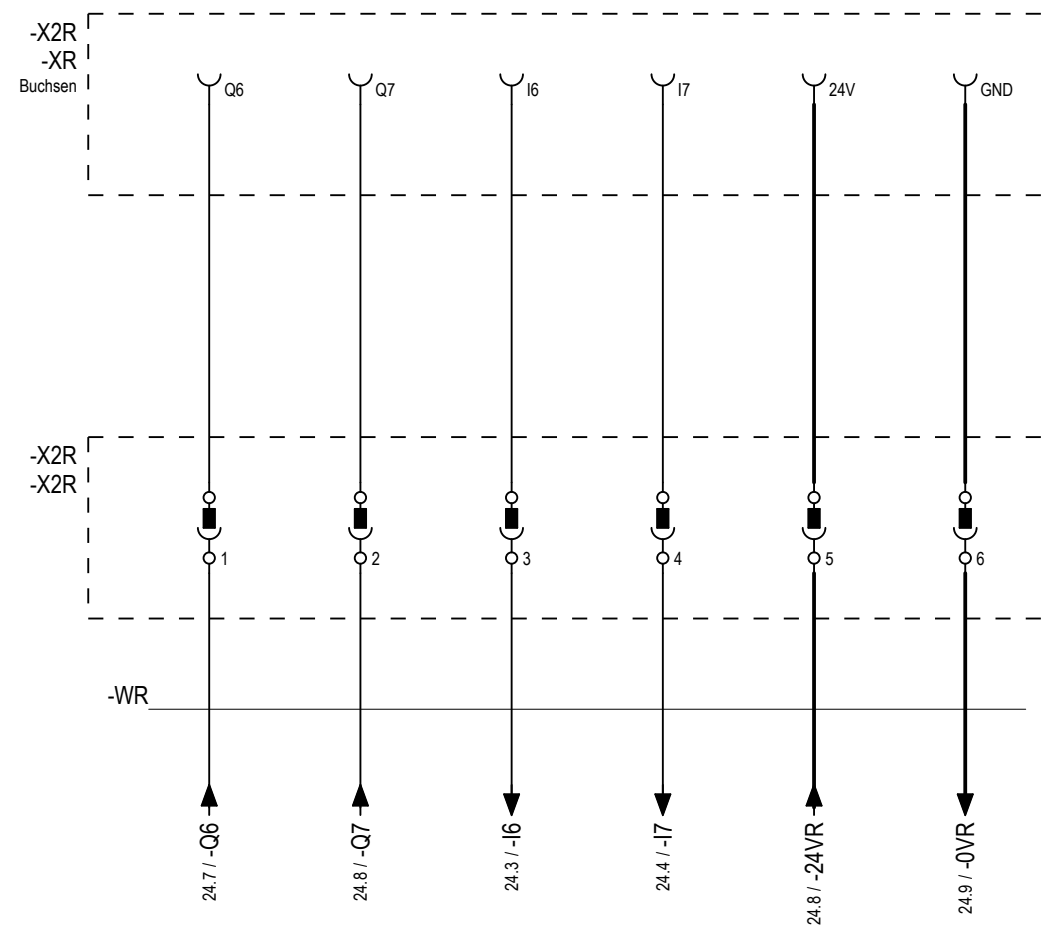
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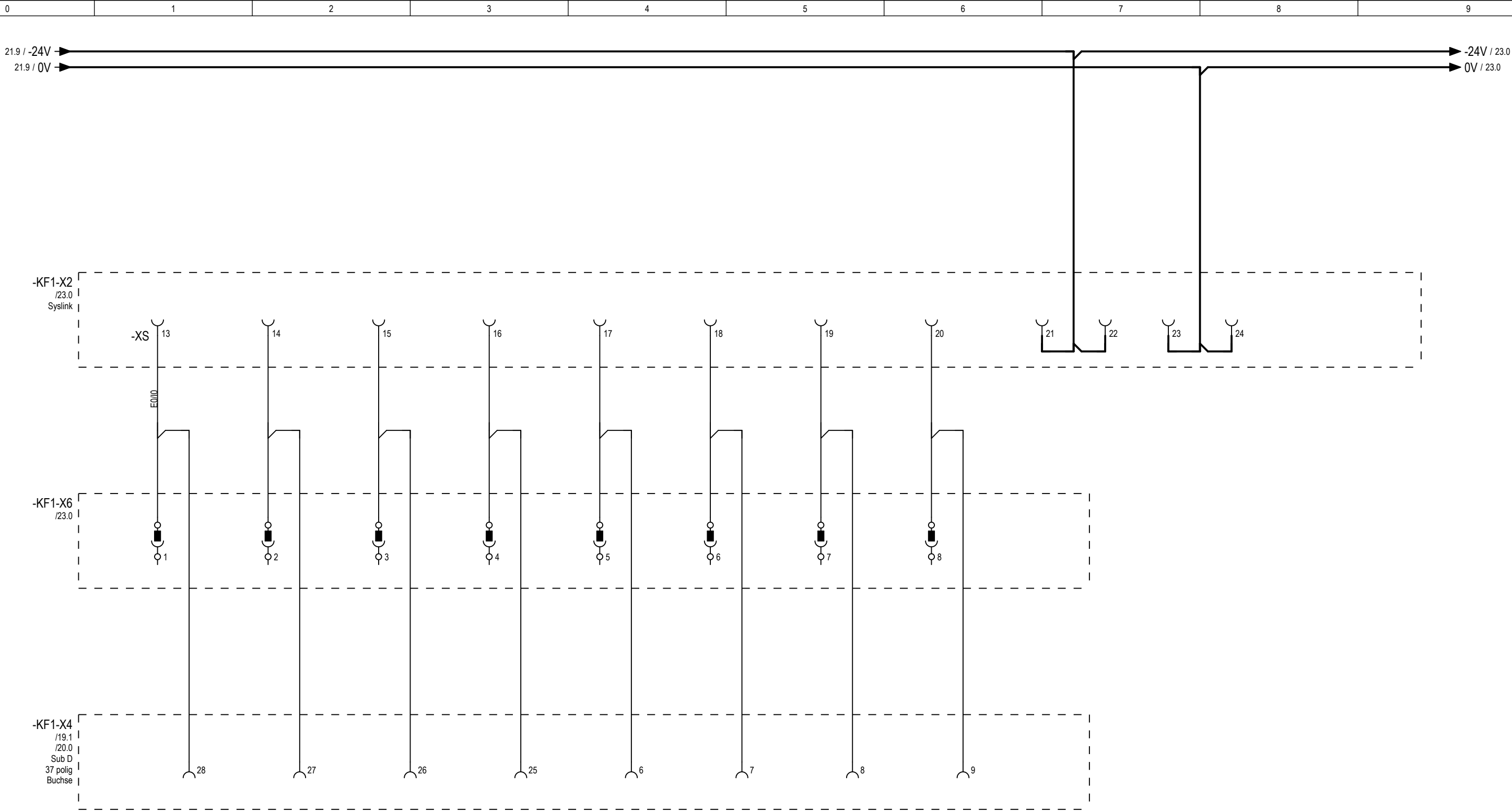
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Date	2025-02-20	Festo Didactic SE Rechbergstraße 3 D-73770 Denkendorf				FESTO Ausgänge outputs		Part number 8129125		= X1 Joining		Page 20	
Ed. by.	kshc							PSP / DPJ VN					
Creat.	kshc												
Drw.No.		N:	F:	V: 2025.0.3	Z:\INT\Data\EPLAN\DATA_xx\DE\Projects\Didactic\Products\28 MPS_D\MPS-400_TN 8129125- Fügen.elk								



Date	2025-02-20	Festo Didactic SE Rechbergstraße 3 D-73770 Denkendorf  Steckverbinder Plug-in connection				Part number 8129125					
Ed. by.	kshc					PSP / DPJ		VN	= X1	Joining	Page 21
Creat.	kshc					+ SZ1			Control desk	of 49	
Drw.No.		N:	F:	V: 2025.0.3	Z:\INT\Data\EPLAN\DATA_xx\DE\Projects\Didactic\Products\28 MPS_DIMPS-400_TN 8129125- Fügen.elk						

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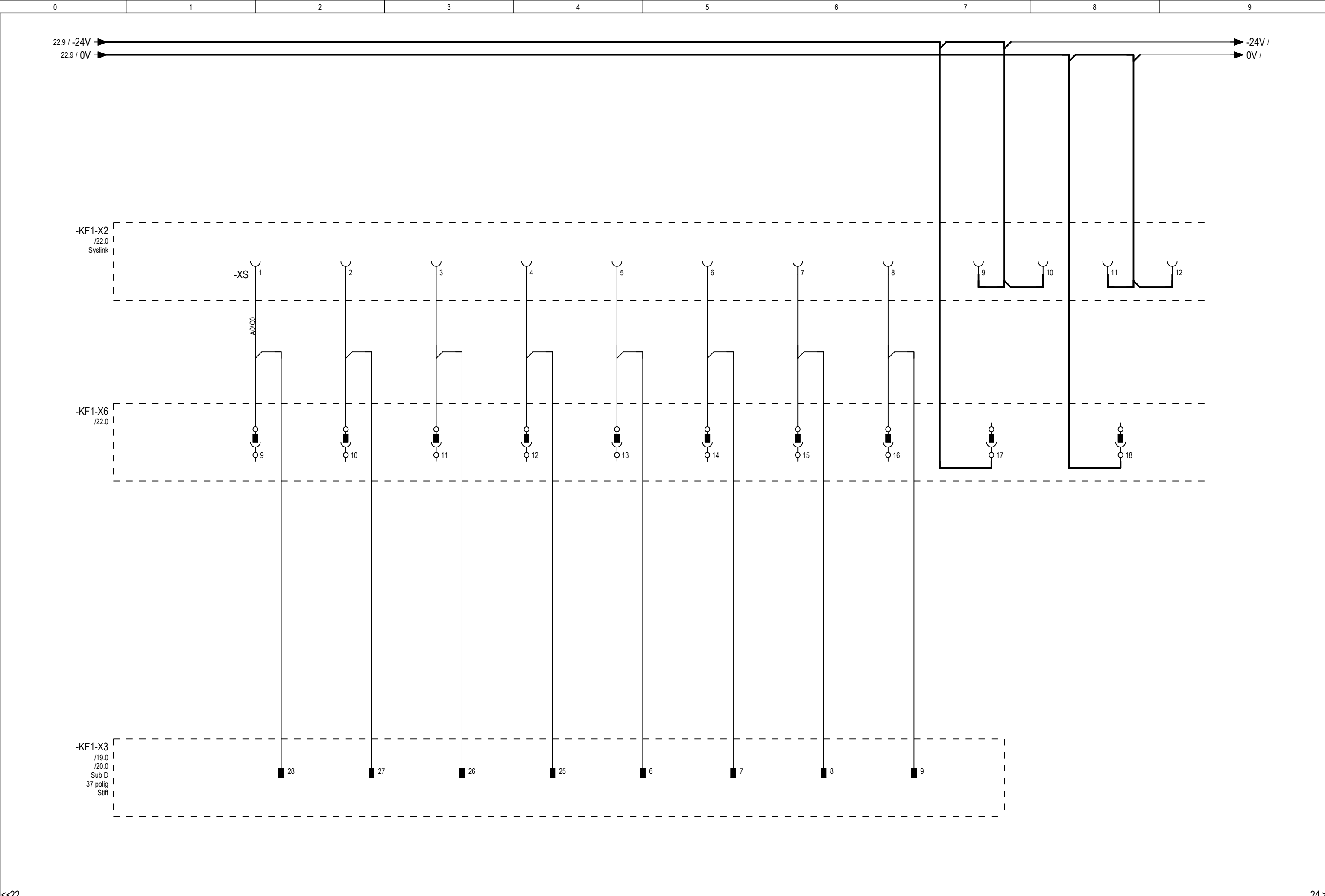


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Creat.	kshc							+ SZ1 Control desk		of 49
Drw.No.		N:	F:	V: 2025.0.3	Z:\INT\Data\EPLAN\DATA_xx\DE\Projects\Didactic\Products\28 MPS_DIMPS-400_TN 8129125- Fügen.elk					

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-PH1-X1

-PH1
-P7
RD
LED rot
Red LED

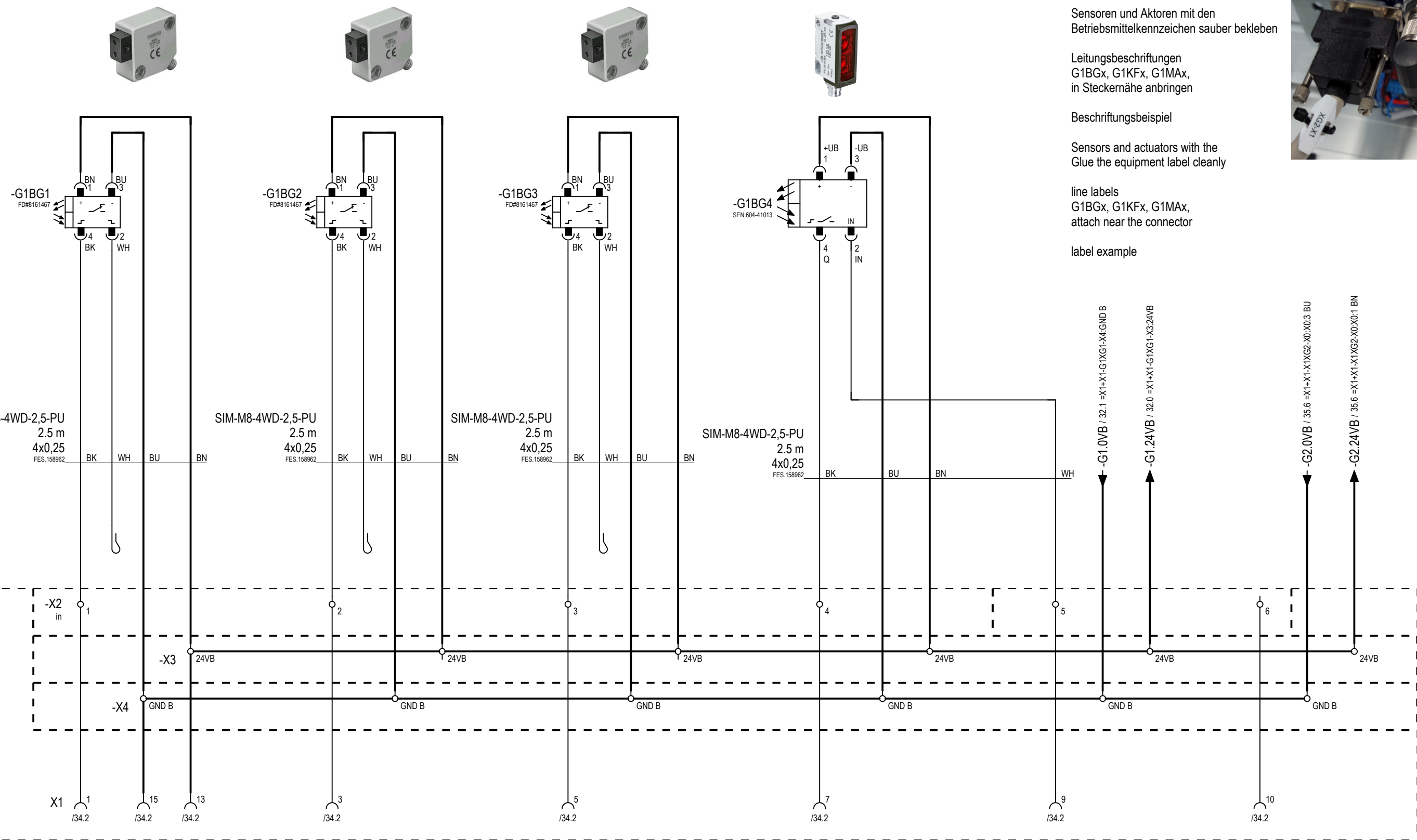
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+X1

Fügen

Joining

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Werkstück
bei Bandanfang

workpiece
at conveyor start

Werkstück
bei Bandende

workpiece
at conveyor end

Werkstück
bei Band-
zwischenposition

workpiece
at conveyor
intermediate position

Abstandssensor
Öffnung unten

distance sensor
opening at bottom

Abstandssensor
analog

distance sensor
analog

Text Überprüfen

Sensoren und Aktoren mit den
Betriebsmittelkennzeichen sauber bekleben

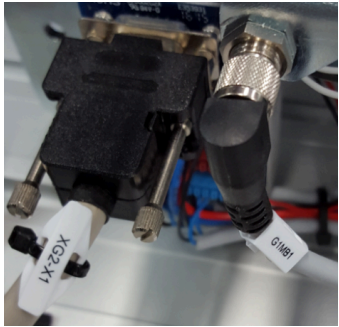
Leitungsbeschriftungen
G1BGx, G1KFx, G1MAx,
in Steckernähe anbringen

Beschriftungsbeispiel

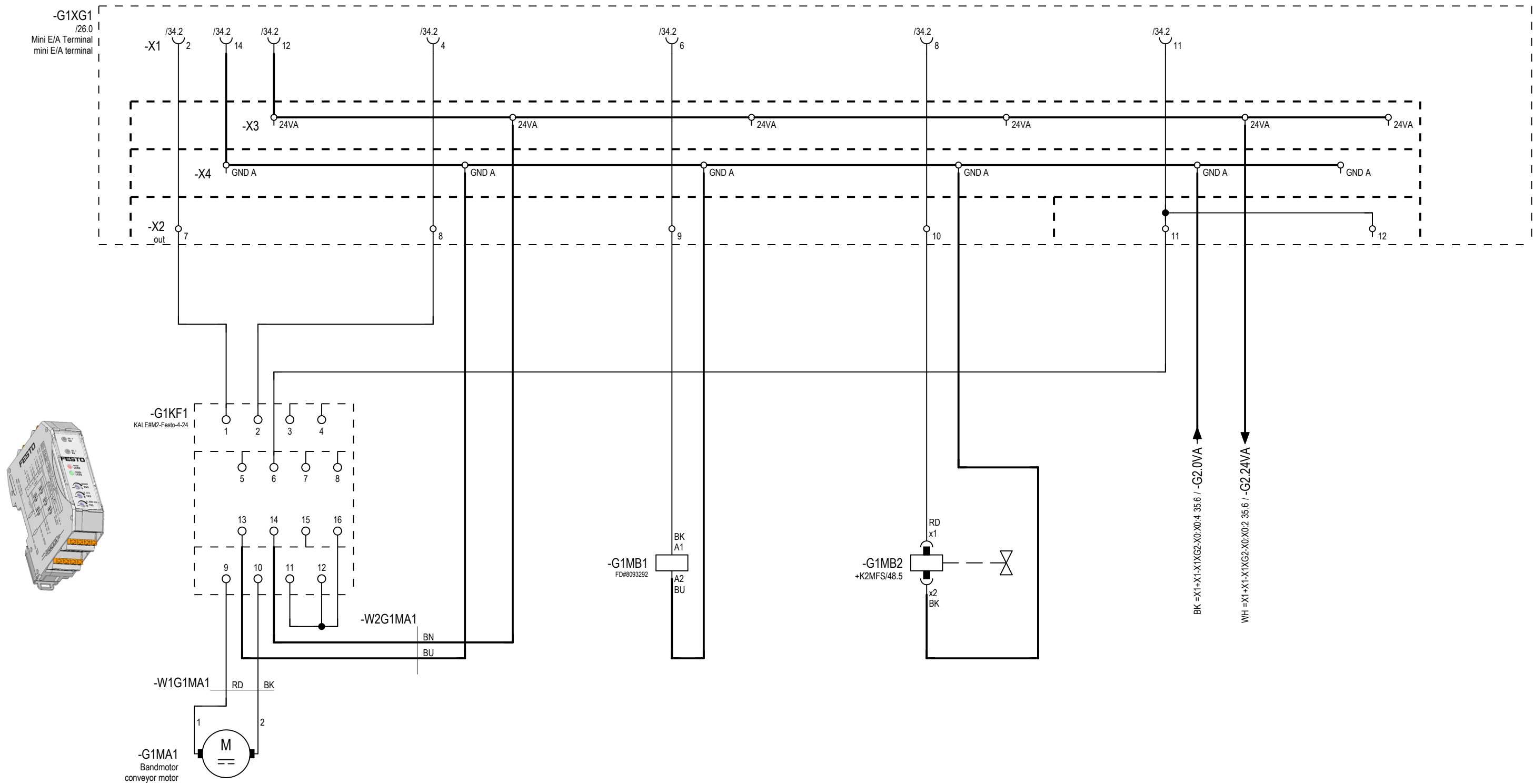
Sensors and actuators with the
Glue the equipment label cleanly

line labels
G1BGx, G1KFx, G1MAx,
attach near the connector

label example



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Bandmotor
1=vorwärts
2=rückwärts

Conveyor motor
1=forward
2=backward

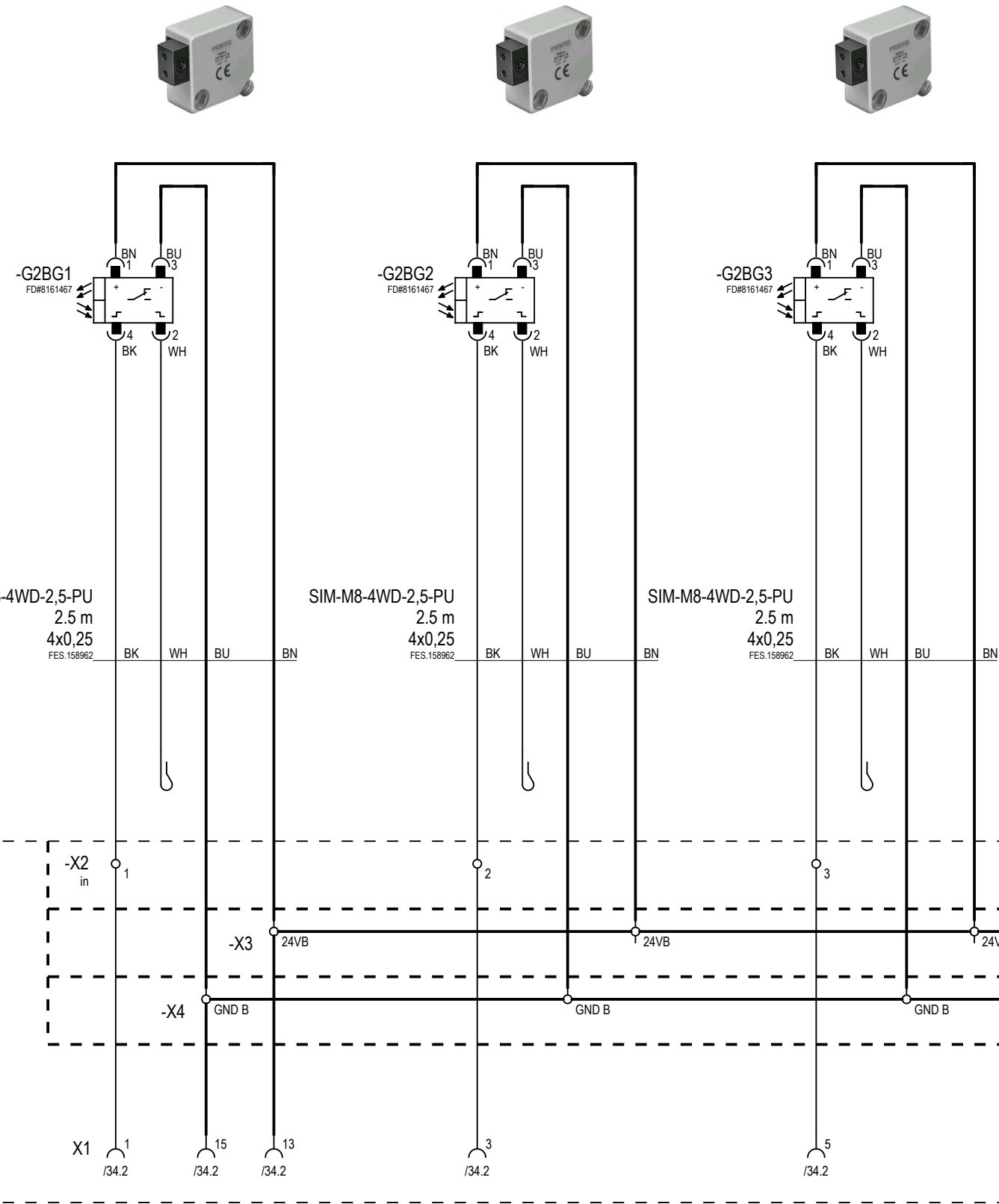
Weiche
ausfahren

advance
separator

Stopper
einfahren

retract
gate

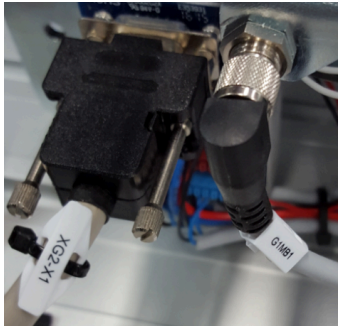
This drawing is the property of Festo Didactic SE
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Sensoren und Aktoren mit den Betriebsmittelkennzeichen sauber bekleben

Leitungsbeschriftungen
G1BGx, G1KFx, G1MAx,
in Steckernähe anbringen

Beschriftungsbeispiel



Werkstück
bei Bandanfang

workpiece
at conveyor start

Werkstück
bei Bandende

workpiece
at conveyor end

Werkstück
bei Bandende
Zwischenposition

workpiece
intermediate position

Reserve

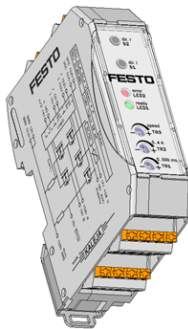
Reserve

Text Überprüfen

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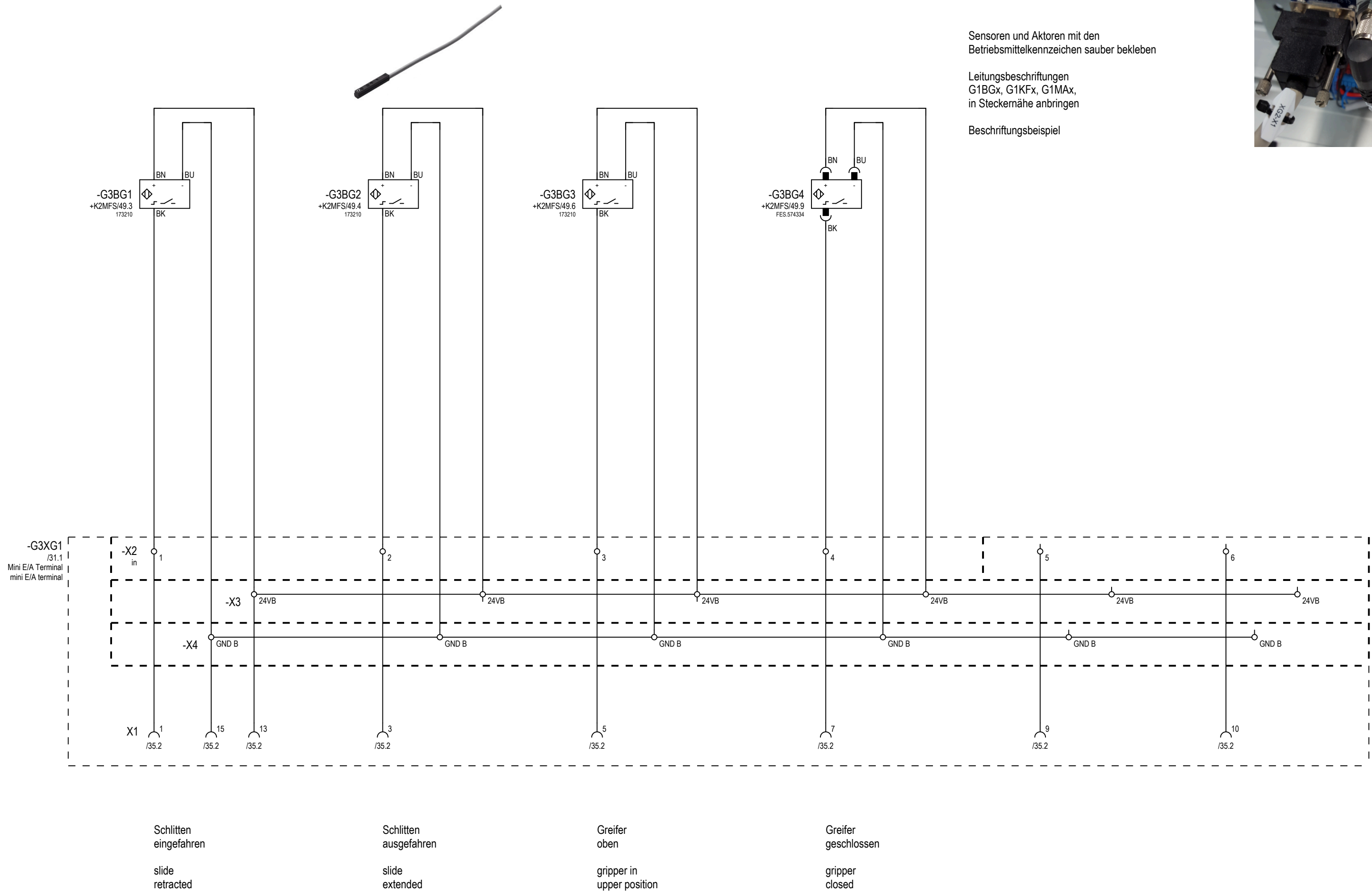
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Ed. by.	kshc							PSP / DPJ VN		= X1	Joining	Page 28
Creat.	kshc									+ X1	Joining	of 49
Drw.No.		N:	F:	V: 2025.0.3	Z:\INT\Data\IPLAN\DATA_xx\DE\Projects\Didactic\Products\28 MPS_D\MP5-400_TN 8129125- Fügen.elk							



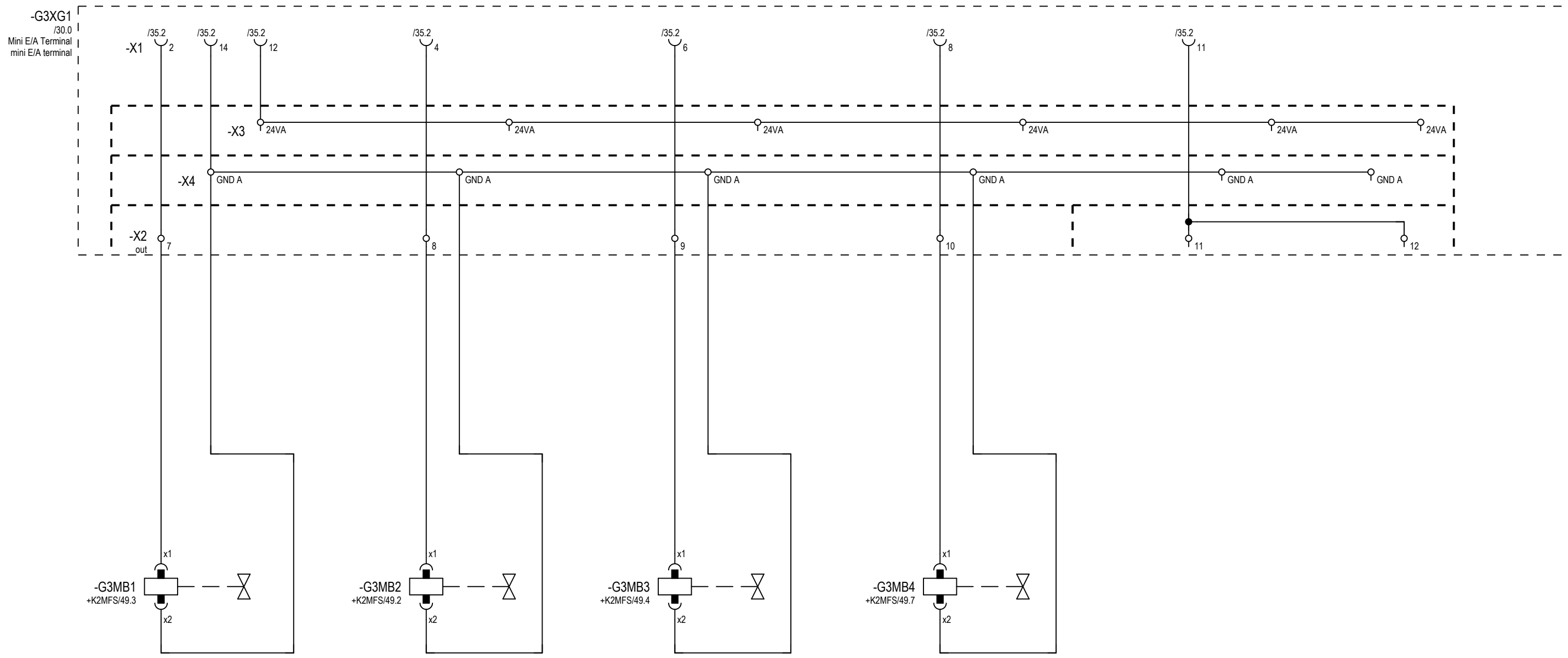
Reserve

Date	2025-02-20	Festo Didactic SE Reichbergstraße 3 D-73770 Denkendorf			FESTO	Fügen Modul Band digital -G2XG1 Joining Conveyor module digital -G2XG1	Part number		8129125			
Ed. by.	kshc						PSP / DPJ		VN	= X1	Joining	Page 29
Creat.	kshc									+ X1	Joining	of 49
Drw.No.		N:	F:	V: 2025.0.3	Z:\INT\Data\EPLAN\DATA_xx\DE\Projects\Didactic\Products\28 MPS_D\MPs-400_TN 8129125- Fügen.elk							

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Schlitten
einfahren
retract
slide

Schlitten
ausfahren
advance
slide

Greifer
nach unten

move gripper
downwards

Greifer
öffnen

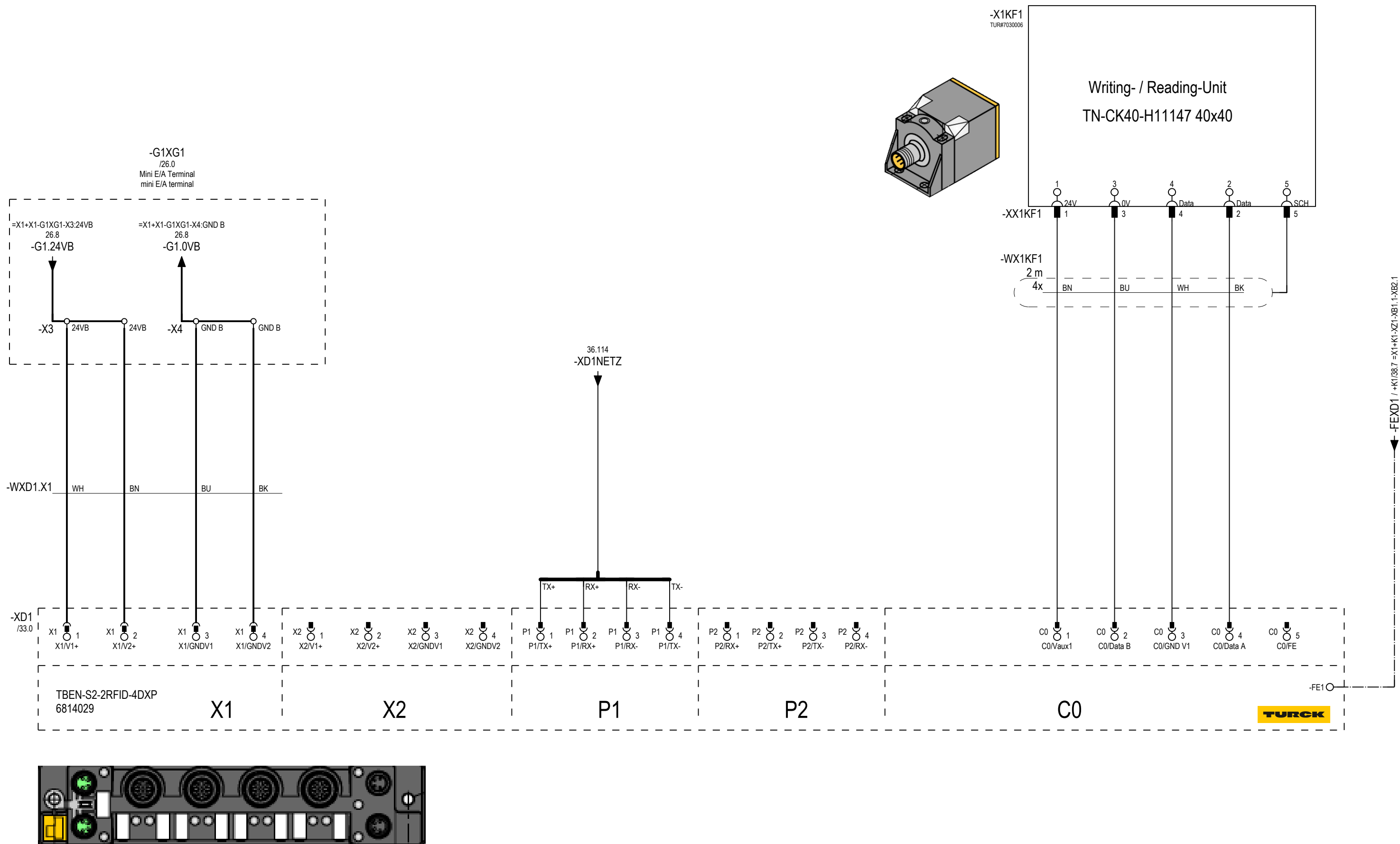
open
gripper

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Date	2025-02-20	Festo Didactic SE Rechbergstraße 3 D-73770 Denkendorf				FESTO	Fügen Modul Band digital -G3XG1 Joining Conveyor module digital -G3XG1	Part number 8129125			
Ed. by.	kshc							PSP / DPJ		VN	= X1
Creat.	kshc							+ X1		Joining	of 49
Drw.No.		N:	F:	V: 2025.0.3	Z:\INT\Data\EPLAN\DATA_xx\DE\Projects\Didactic\Products\28 MPS_DIMPS-400_TN 8129125- Fügen.elk						

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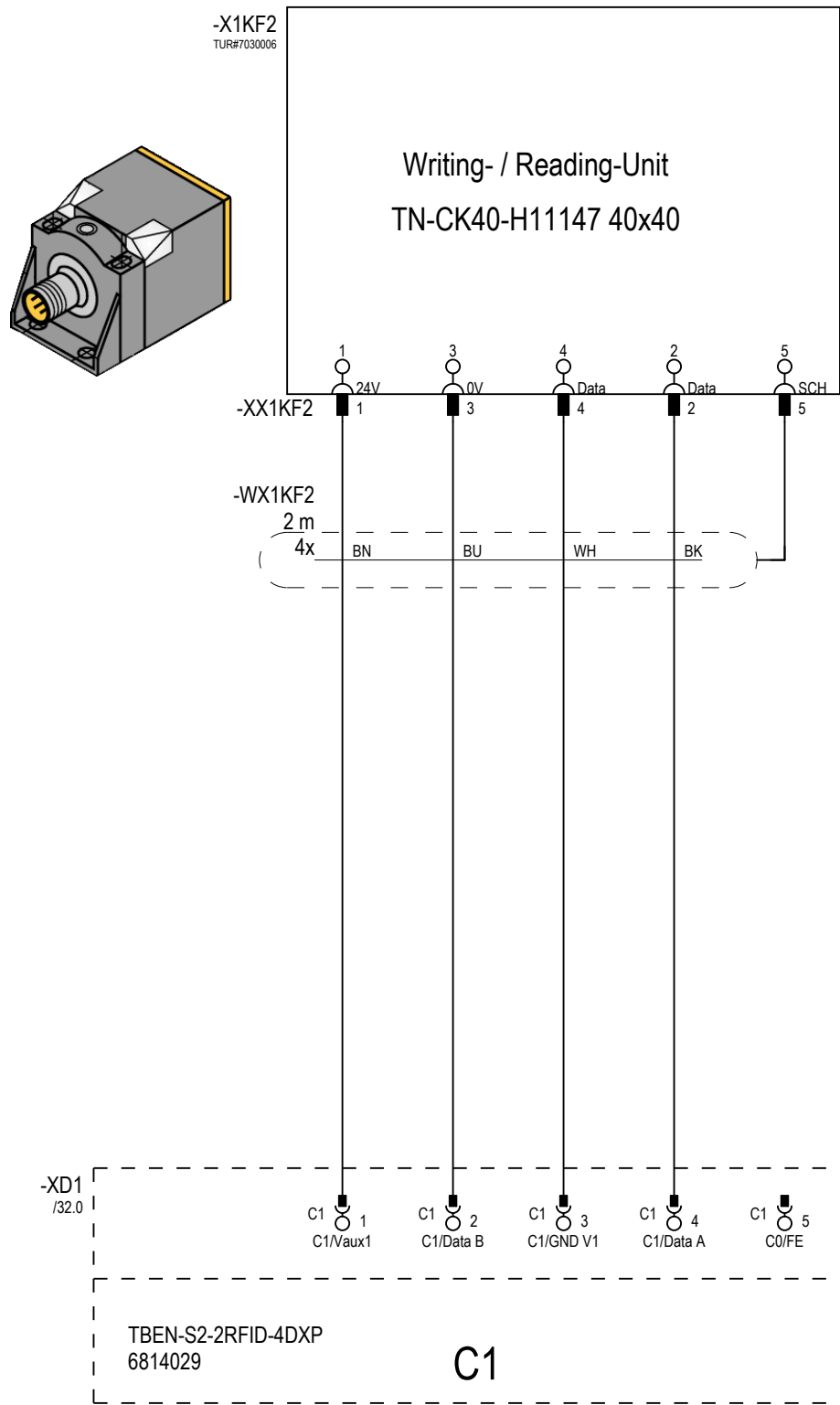


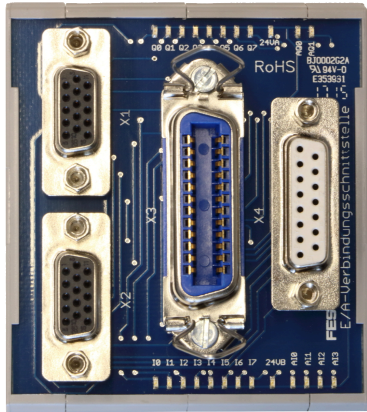
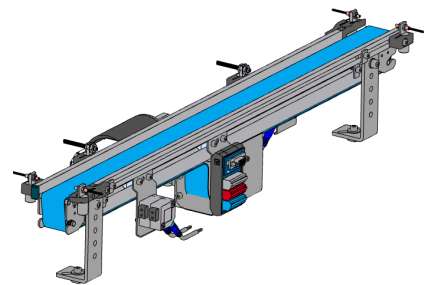
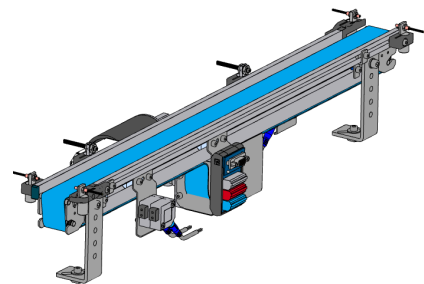
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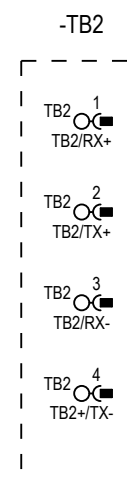
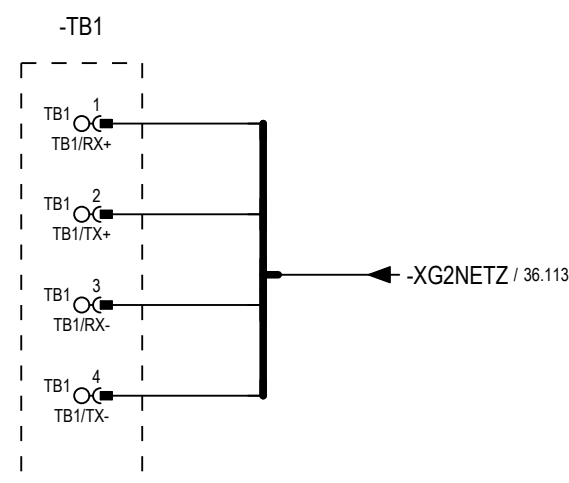
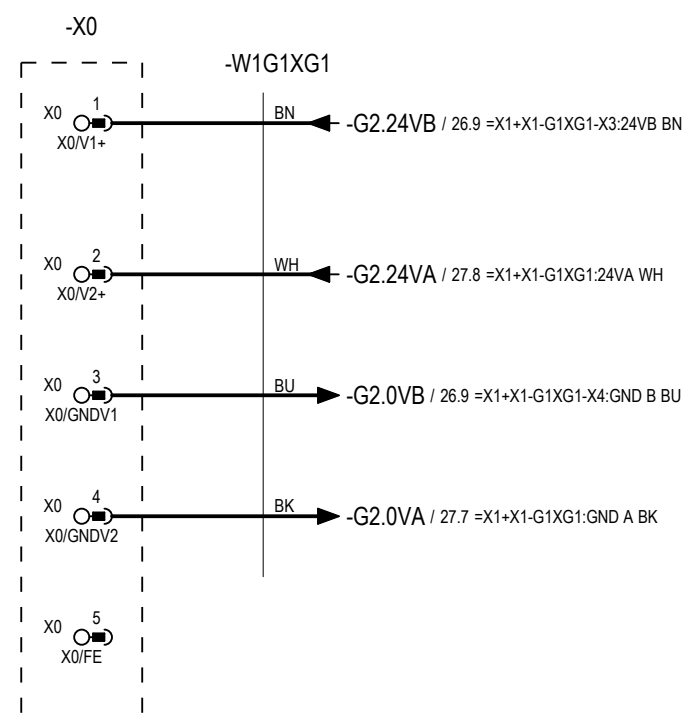
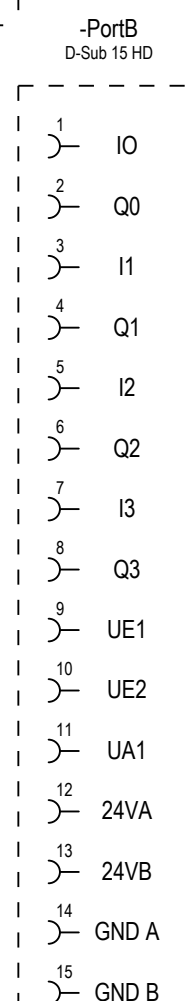
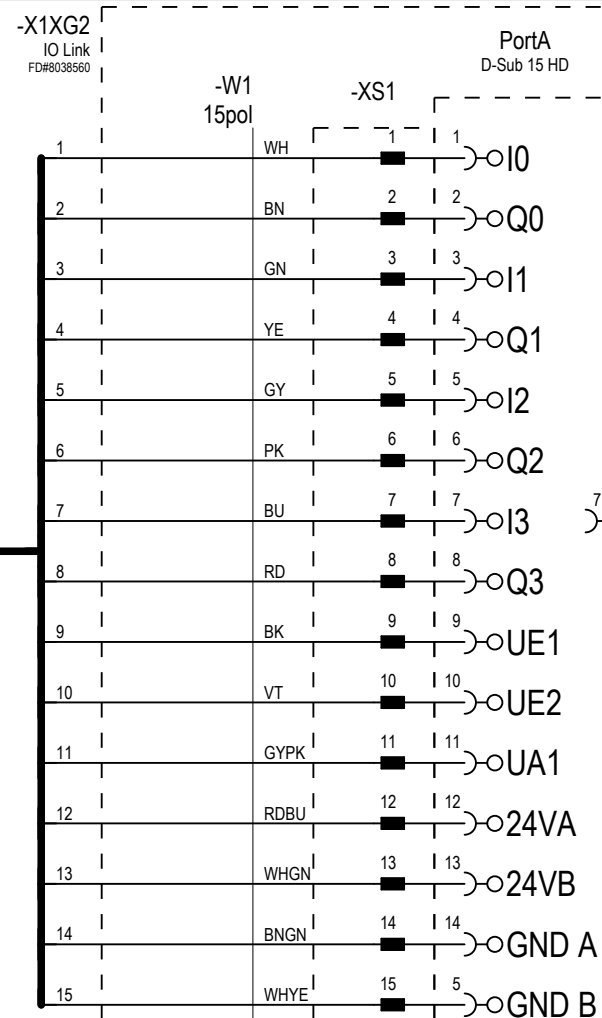
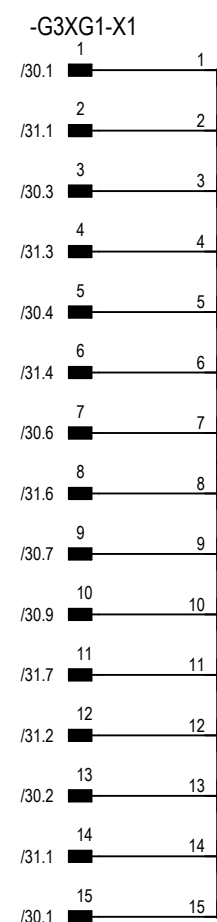
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Date	2025-02-20	Festo Didactic SE Rechbergstraße 3 D-73770 Denkendorf				FESTO	Fügen Pro - RFID Joining RFID	Part number 8129125					
Ed. by.	kshc							PSP / DPJ		VN	= X1	Joining	Page 32
Creat.	kshc							+ X1		Joining	of 49		
Drw.No.		N:	F:	V: 2025.0.3	Z:\INT\Data\EPLAN\DATA_xx\DE\Projects\Didactic\Products\28 MPS_DIMPS-400_TN 8129125- Fügen.elk								

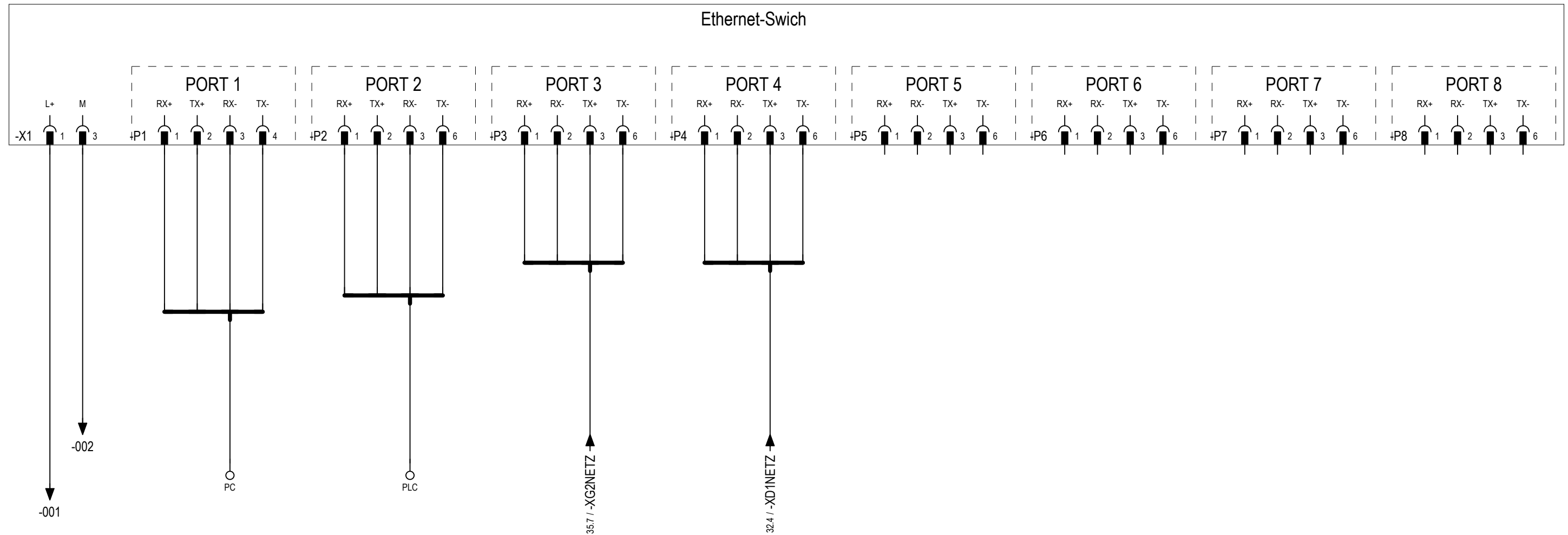
This drawing is the property of Festo Didactic SE







-XF1



PC (MES)

Steuerung
control unit

XG2

RFID
RFID

Reserve

Reserve

Reserve

Reserve

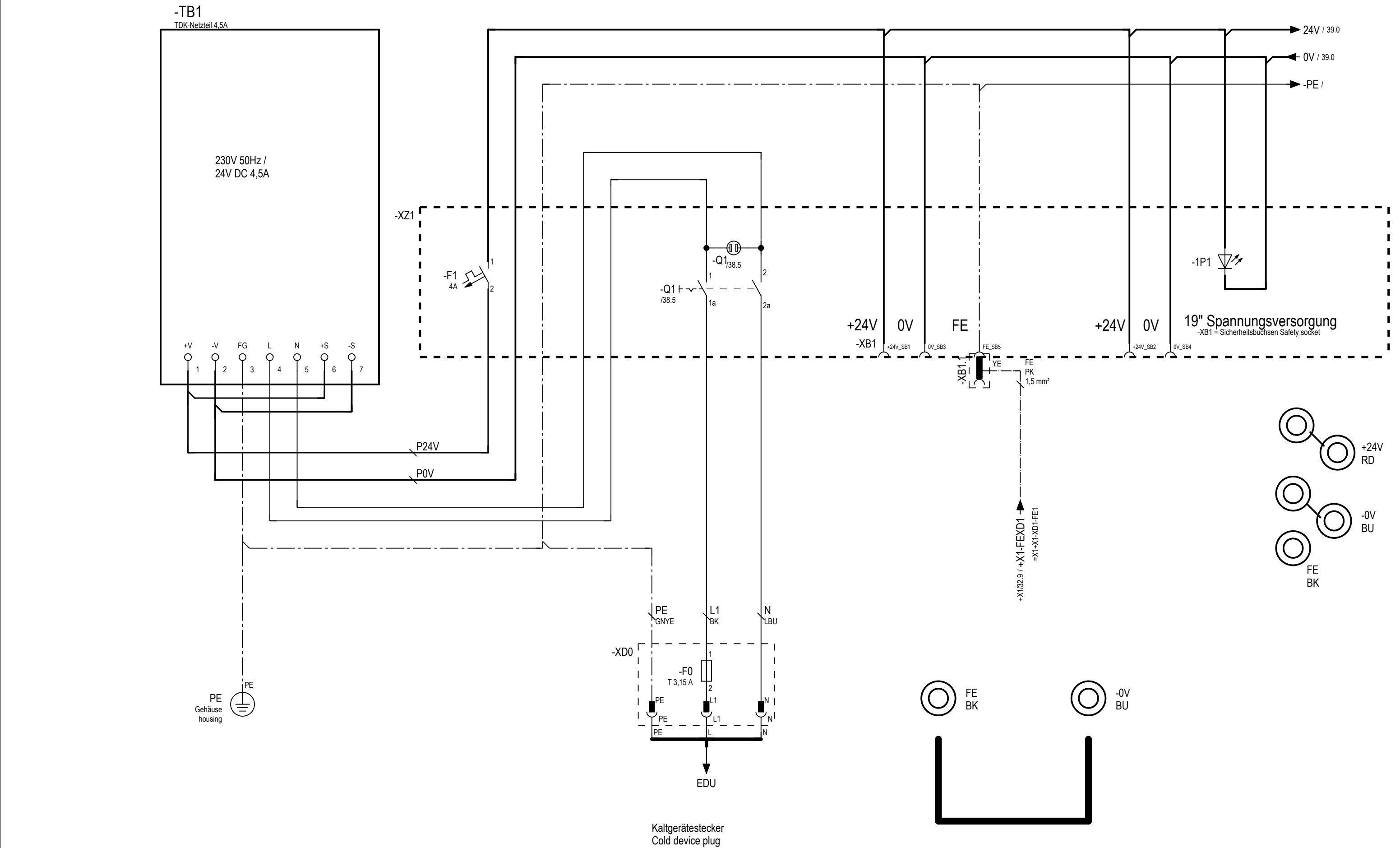
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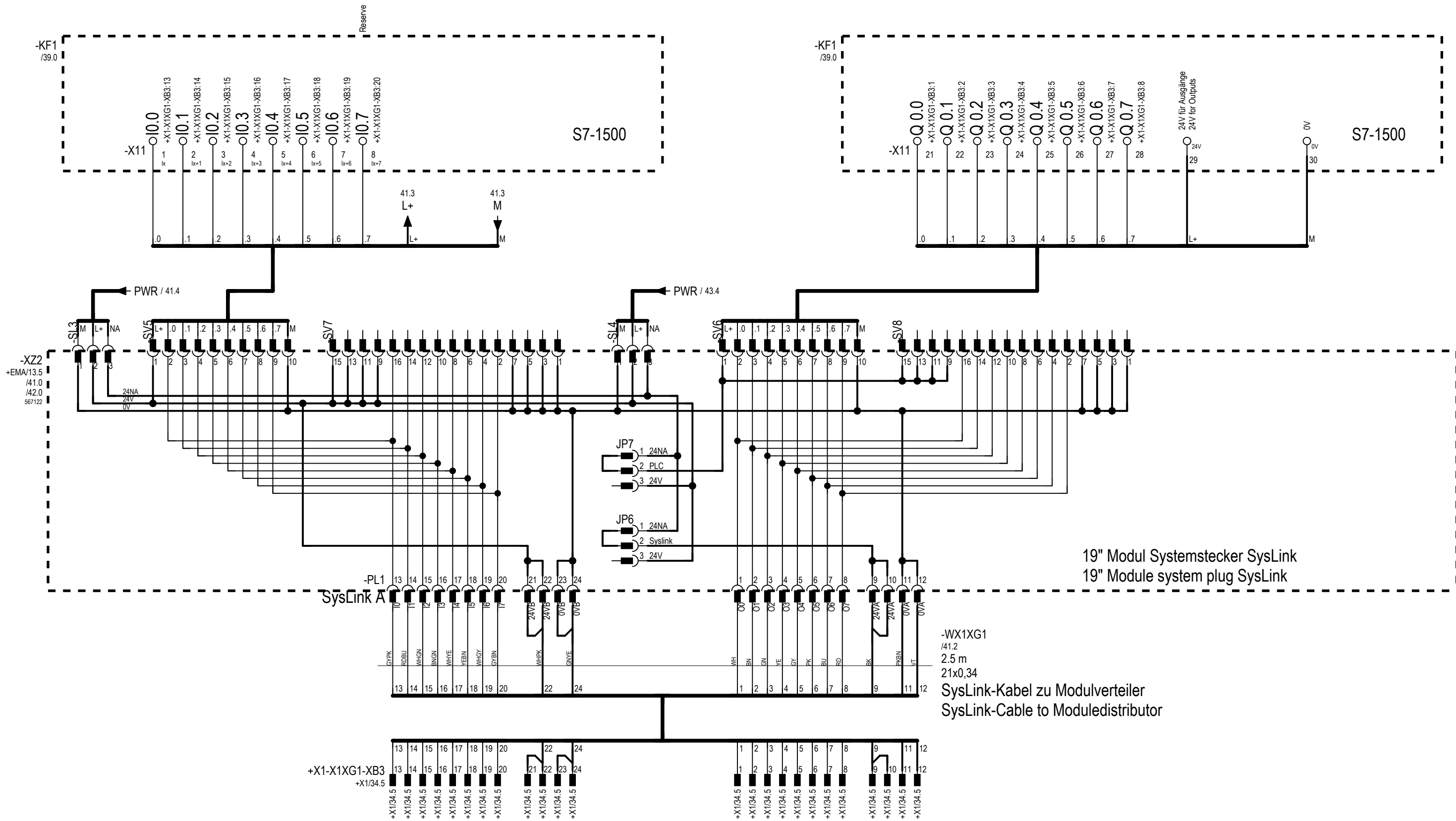
+K1

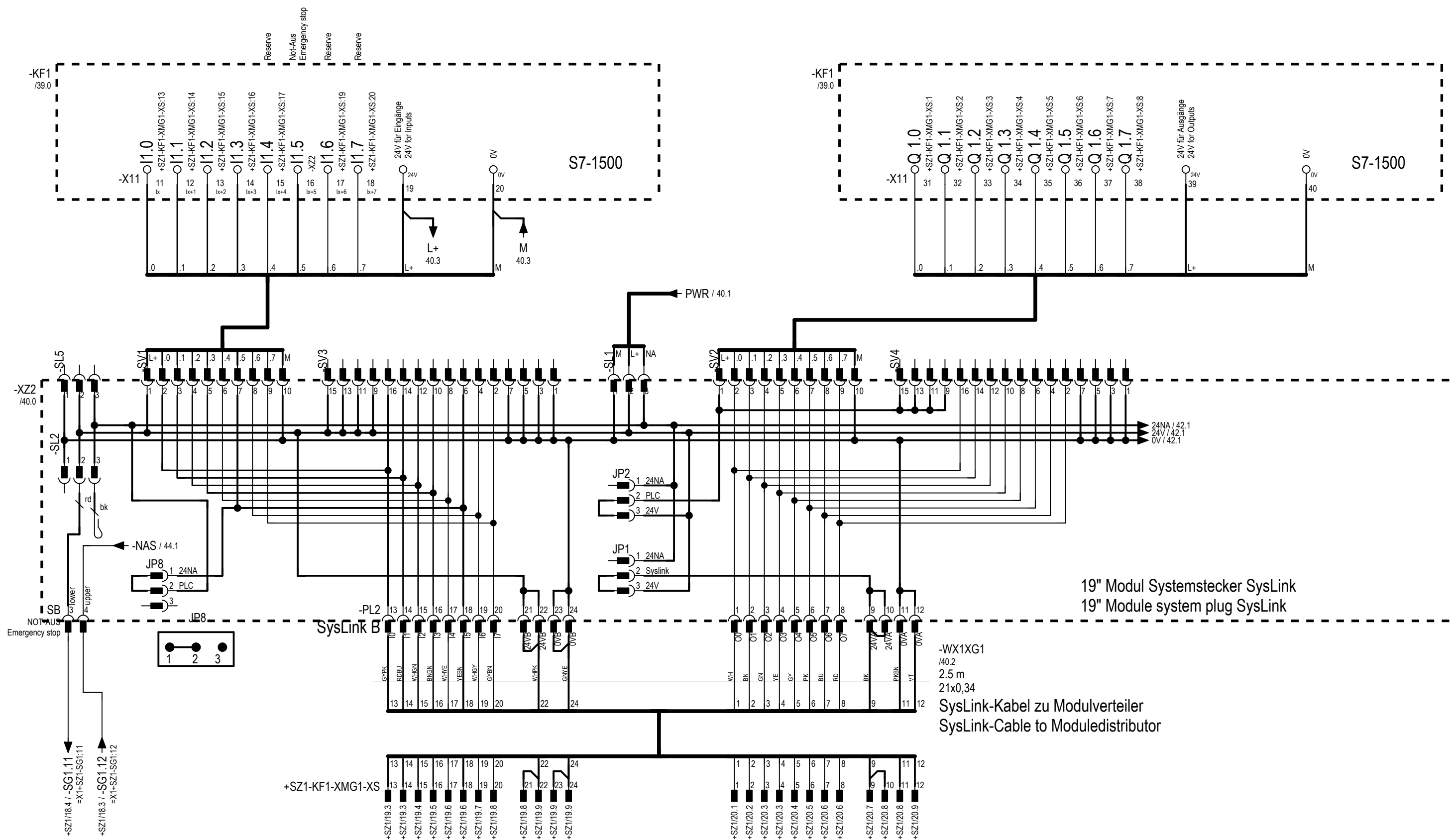
Steuerung
control unit

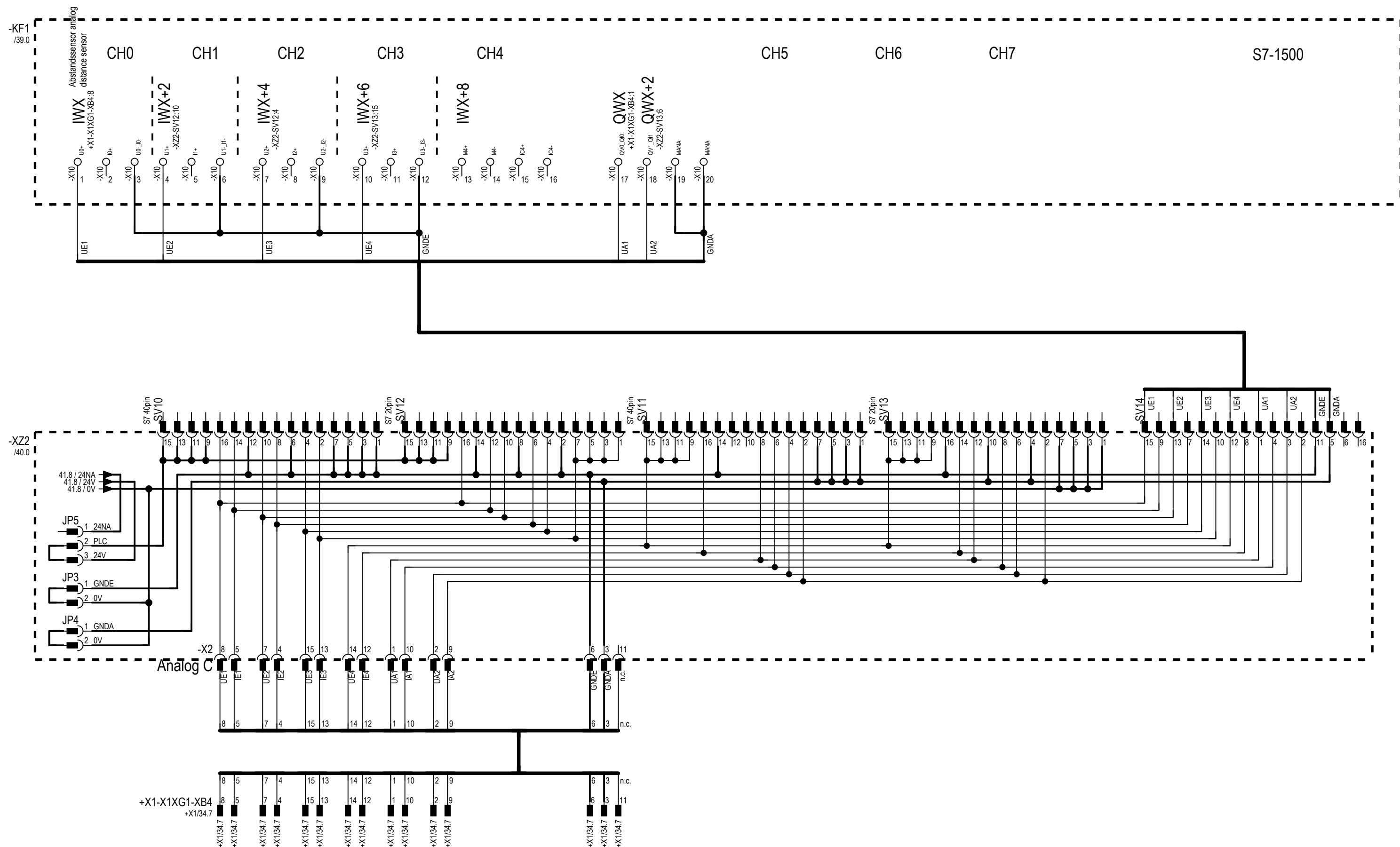
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Diese Zeichnung ist Eigentum der Festo Didactic SE



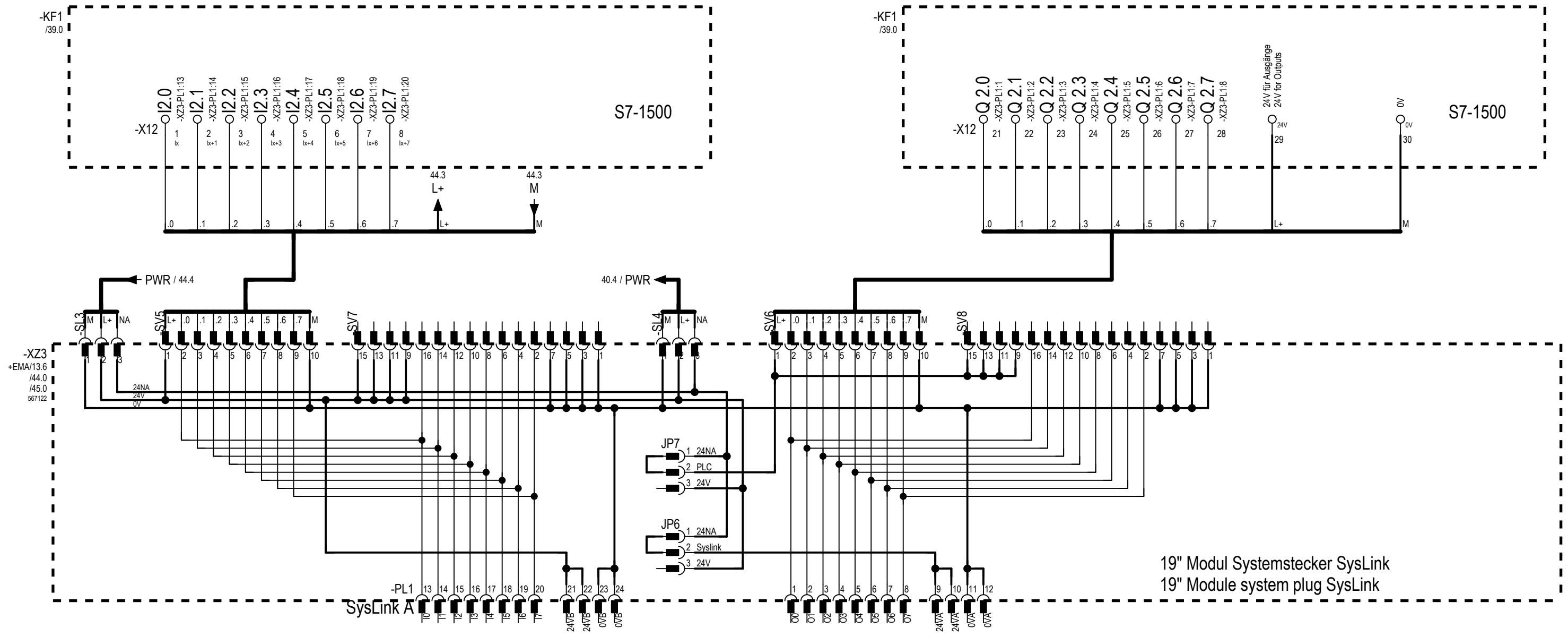
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This drawing is the property of Festo Didactic SE

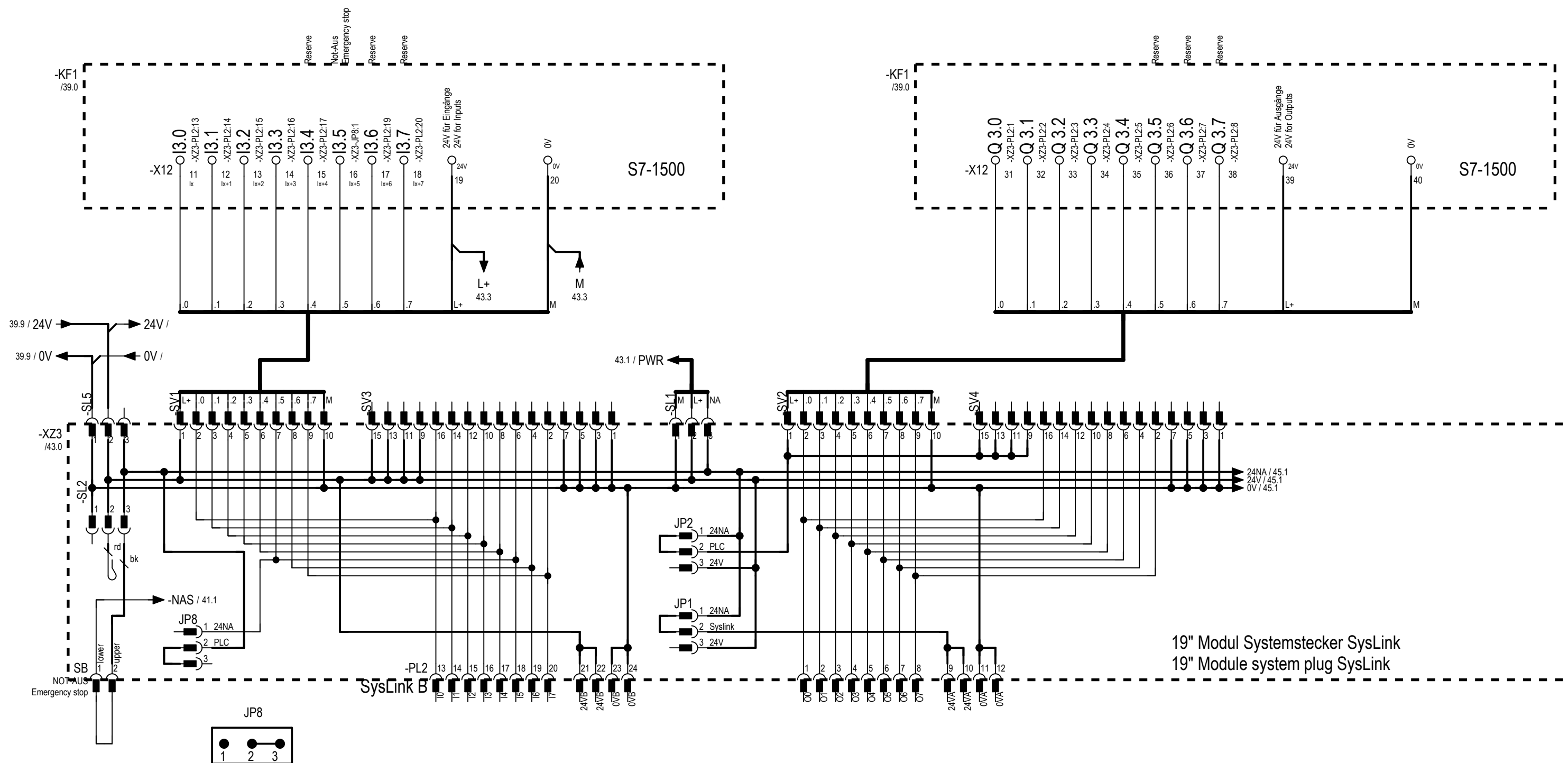






Diese Zeichnung ist Eigentum der Festo Didactic SE
This drawing is the property of Festo Didactic SE



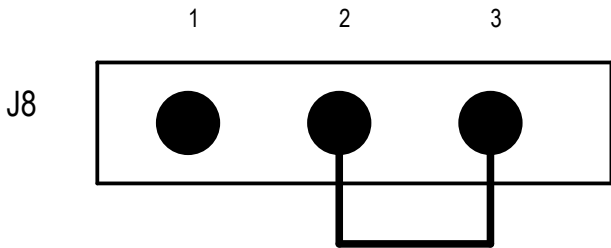
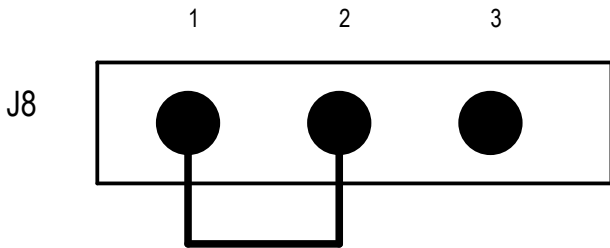
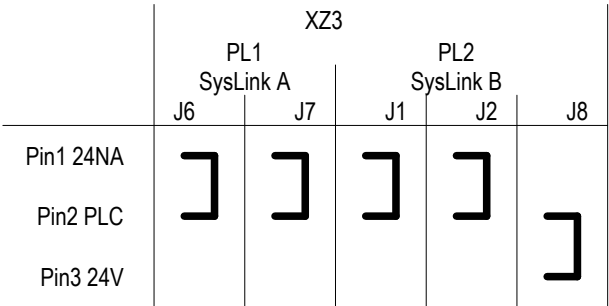
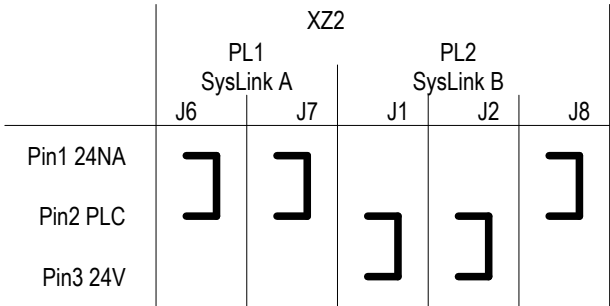




Date	2025-02-20	Festo Didactic SE Rechbergstraße 3 D-73770 Denkendorf					19" Modul Systemstecker Analog C 19" Module system plug Analog C	Part number 8129125					
Ed. by.	kshc							PSP / DPJ		VN	= X1	Joining	Page 45
Creat.	kshc										+ K1	control unit	of 49
Drw.No.		N:	F:	V: 2025.0.3	Z:\INT\Data\EPLAN\DATA_xx\DE\Projects\Didactic\Products\28 MPS_D\MPS-400_TN 8129125- Fügen.elk								

This drawing is the property of Festo Didactic SE

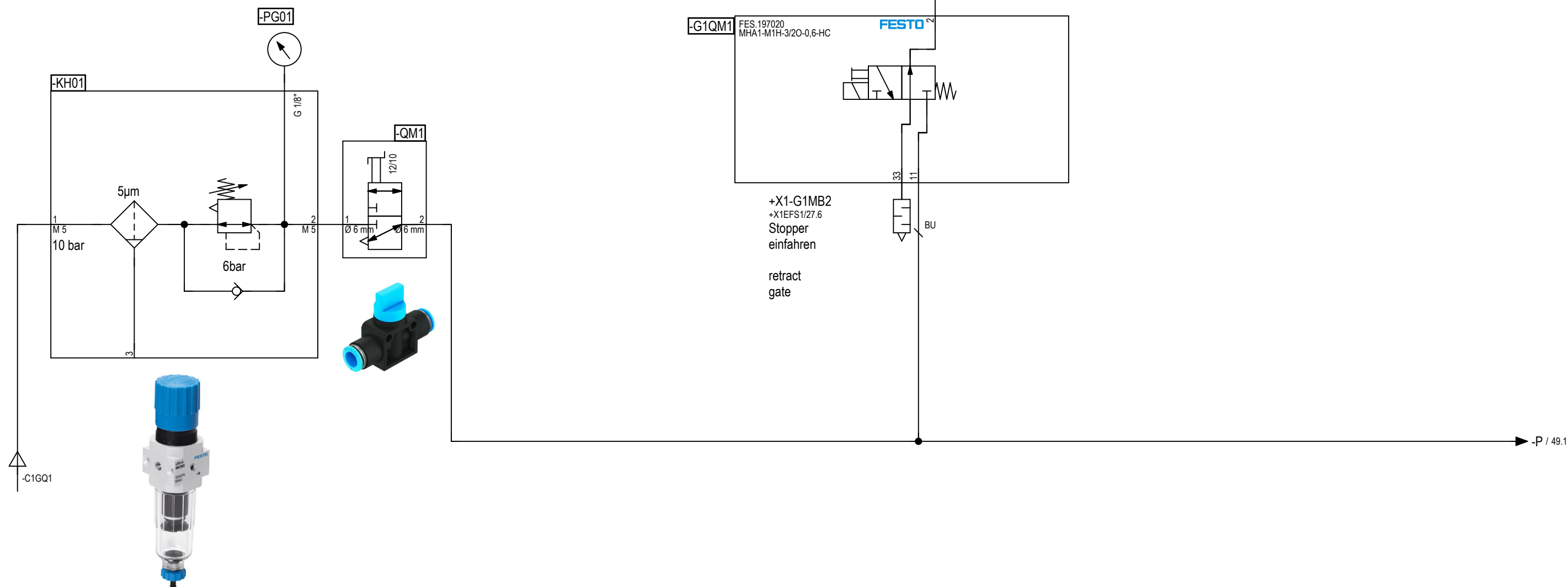
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This drawing is the property of Festo Didactic SE

+K2

Pneumatik
Pneumatics



Date	2025-02-20	Festo Didactic SE Rechbergstraße 3 D-73770 Denkendorf				MPS Modul Fügen Pneumatik -G1 Joining conveyor module pneumatics -G1	Part number		8129125							
Ed. by.	kshc						PSP / DPJ		VN		= X1		Joining		Page 48	
Creat.	kshc										+ K2		Pneumatics		of 49	
Drw.No.		N:	F:	V: 2025.0.3	Z:\INT\Data\EP\AN\DATA_xx\DE\Projects\Didactic\Products\28 MPS_D\MPS-400_TN 8129125- Fügen.elk											



Date	2025-02-20	Festo Didactic SE					MPS Modul Fügen Pneumatik -G1 Joining conveyor module pneumatics -G1	Part number		8129125			
Ed. by.	kshc	Rechbergstraße 3						PSP / DPJ	VN	= X1	Joining	Page	49
Creat.	kshc	D-73770 Denkendorf								+ K2	Pneumatics	of	49
Drw.No.		N:	F:	V: 2025.0.3	Z:\INT\Data\EPLAN\DATA_xx\DE\Projects\Didactic\Products\28 MPS_D\MPS-400_TN 8129125- Fügen.elk								