

Control^{IT}

S900 Process I/O System

Field Housing FH810S

Data sheet

1.0.0



ABB

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AUTOMATION PRODUCTS

S900 IN FIELD HOUSING FH810S MOUNTING DIAGRAMS

CABLE COLOURS

24 V/DC EEx-e red
 0 V/DC EEx-e blue
 POTENTIAL 24V/DC FIELD: grey
 POTENTIAL 0V/DC FIELD: grey

TERMINALS

X01: SUPPLY VOLTAGE 24 V/DC EEx-e
 X04: POTENTIAL 24 V/DC FIELD-INPUT
 X05: POTENTIAL 24 V/DC FIELD-OUTPUT

CABLE DIAMETER IN FIELD HOUSING

24 V/DC EEx-e 2.5 mm²
 0 V/DC EEx-e 2.5 mm²
 POTENTIAL 24V/DC FIELD: 1.5 mm²
 POTENTIAL 0V/DC FIELD: 1.5 mm²

CABLE DIAMETER EXTERNAL

24 V/DC EEx-e (TERMINALS/DIRECTLY) max. 10.0/2.5 mm²
 0 V/DC EEx-e (TERMINALS/DIRECTLY) max. 10.0/2.5 mm²
 POTENTIAL 24V/DC FIELD: max. 2.5 mm²
 POTENTIAL 0V/DC FIELD: max. 2.5 mm²

**No. INSIDE HOUSING
EXAMPLE**

1 F 2



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 TYPE OF DEVICE
 PAGE No.

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F	a				S900 IN FIELD HOUSING 800x1000x300 mm (WxHxD)	AUTOMATION PRODUCTS Borsigstrasse 2, D - 63755 Alzenau	COVER SHEET FH810S-XXXX	PROJECT S900 IN FIELD HOUSING	A1		1	
	b		DATE	13.03.2003								
	c		DRAWN	Schulz								
	d		COORD.									
	DETAILS OF REVISION	DATE	NAME	CHECKED	ORIG.	REPL.	© COPYRIGHT BY ABB AUTOMATION PRODUCTS					

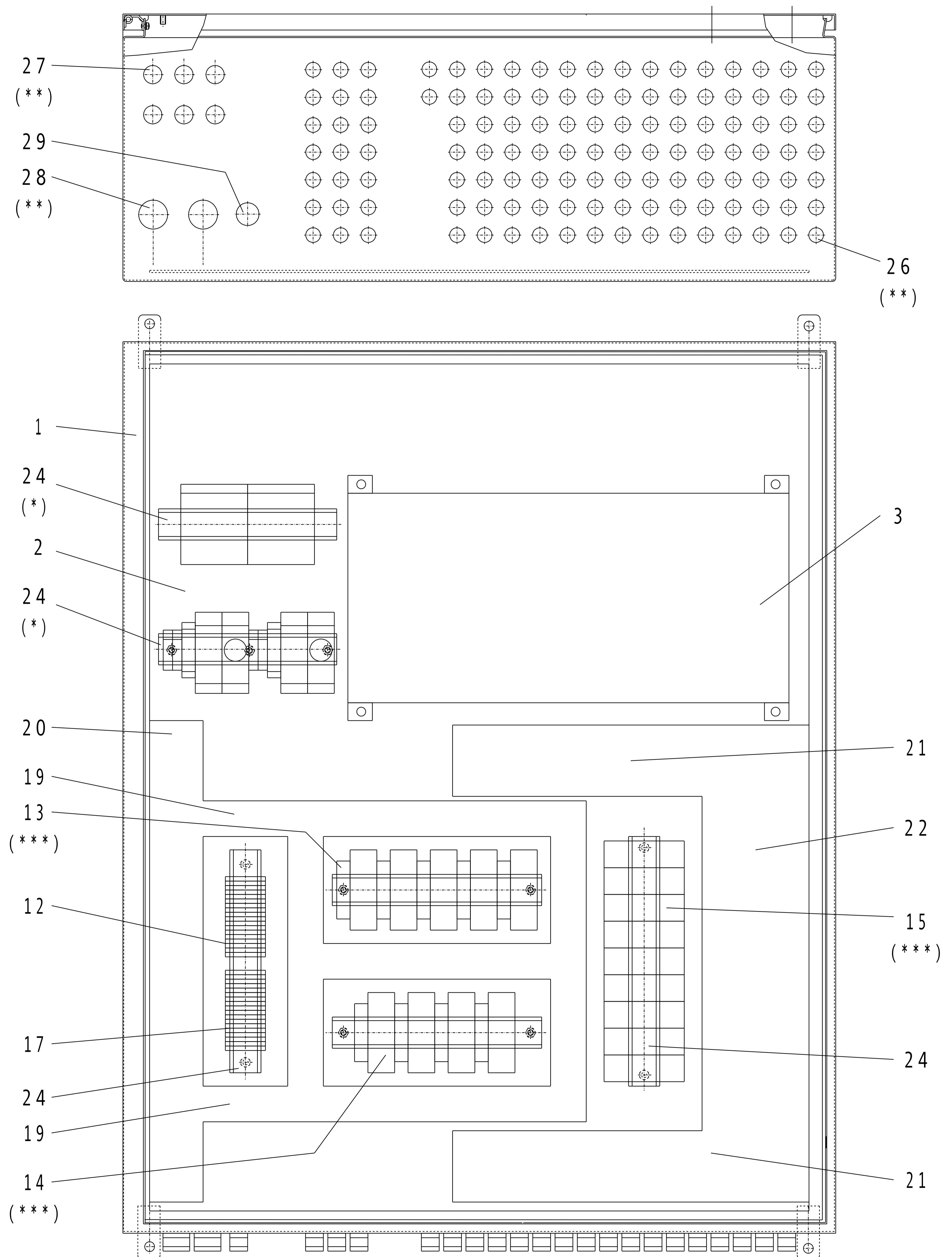
POSITION	QUANTITY	DESCRIPTION	TYPE/ORDER No.	REMARKS
1	1	HOUSING STAINLESS STEEL	RITTAL KEL9408.600	1000x800x300x1.5 mm
2	1	MOUNTING PLATE, STAINLESS STEEL	RITTAL	950x740x3 mm
3	1	TERMINATION UNIT (BACKPLANE), REDUNDANCE	ABB TU9215	
4	1	WALL MOUNTING HOLDER	RITTAL KL1594.000	
5	(*)	POWER CONDITIONER	ABB BP9015	
6	4	TERMINALS, SUPPLY VOLTAGE 24VDC	Phoenix UK10N-Ex	X01, max.10mm ²
7	(*)	SWITCH (OPTION)	BARTEC 07-7311-6131/EE00	
8	(*)	ISOLATING REPEATER WITH BUS TERMINATION (OPTION)	ABB BI9135	CU POINT-TO-POINT COUPLER
9	(*)	LWL-COUPLER (OPTION)	ABB BI9215	
10	(*)	LWL-RING COUPLER (OPTION)	ABB BI9235	
11	(*)	LWL-T-COUPLER (OPTION)	ABB BI9225	
12	18	TERMINALS POTENTIAL 24VDC (FIELD-INPUT)	Phoenix UK3N-Ex	X04, max.2.5mm ²
13	(***)	SWITCH (OPTION)	BARTEC 07-7311-6131/EE00	
14	(***)	FUSE (OPTION)	BARTEC 07-7311-63J2/LT00	
15	(***)	ISOLATOR RELAY (OPTION)	BARTEC 07-7311-937E/W500	
16				
17	18	TERMINALS POTENTIAL 24VDC (FIELD-OUTPUT)	Phoenix UK3N-Ex	X05, max.2.5mm ²
18				
19	5	CABLE DUCT, GREY	STANDARD	40x60 mm
20	1	CABLE DUCT, GREY	STANDARD	60x60 mm
21	2	CABLE DUCT, BLUE	STANDARD	80x100 mm
22	1	CABLE DUCT, BLUE	STANDARD	120x100 mm
23				
24	6	DIN RAIL TS35	STANDARD	35x7.5 mm
25				
26	121	CABLE GLAND M16, EEx-e (**)	Caprie CMDEL-T	CABLE DIAMETER 6-11 mm
27	6	CABLE GLAND M20, EEx-e (**)	Caprie CMDEL-T	CABLE DIAMETER 8,5-13 mm
28	2	CABLE GLAND M32; EEx-e (**)	Caprie CMDEL-T	CABLE DIAMETER 17,5-25 mm
29	1	DRAIN PLUG/BREATHER M25, EEx e	Stahl 8162003020	
30				

MAXIMUM ASSEMBLY SHOWN

(*) SPECIFIC ASSEMBLY WITH POS. 5-11 SEE SHEET 3!

(**) ALL CABLE GLANDS EMV WITH SHIELD CONNECTION

(***) SPECIFIC ASSEMBLY WITH POS. 13-15 SEE SHEET 3!



a					S900 IN FIELD HOUSING	ABB AUTOMATION PRODUCTS Borsigstrasse 2, D - 63755 Alzenau	FH810S-XXXX PARTS LIST	A1	2	
b			DATE	13.03.2003						
c			DRAWN	Schulz						
d			COORD.							
DETAILS OF REVISION				DATE	NAME	CHECKED	ORIG.	REPL.	PROJECT	PURCHASE ORDER No.:
									S900 IN FIELD HOUSING	

ORDERING MATRIX HOUSING FH810S-XXXX

(DIMENSIONS 800x1.000x300 mm (WxHxD))

FH810S-XXXX

	<p>ISOLATING REPEATER OPTION (CU-COUPLER) BI913S WITH BUS TERMINATION AND LWL COUPLER</p> <p>SWITCH OPTION (BARTEC 07-7311-6131/EE00)</p> <p>POWER CONDITIONER (BP901S)</p> <p>FIELD SIDE OPTION, CONSISTING OF: SWITCH (BARTEC 07-7311-6131/EE00) FUSE (BARTEC 07-7311-63J2/LT00) ISOLATOR RELAY (BARTEC 07-7311-937E/W500)</p>	<p>0= WITHOUT 1= 1 PIECE ISOLATING REPEATER BI913S 2= 2 PIECES ISOLATING REPEATER BI913S (FOR REDUNDANCE) 3= 1 PIECE BI913S / LWL-COUPLER (BI921S) EACH 4= 2 PIECES BI913S / LWL-COUPLER (BI921S) EACH (FOR REDUNDANCE) 5= 1 PIECE BI913S / LWL RING-COUPLER (BI923S) EACH 6= 2 PIECES BI913S / LWL RING-COUPLER (BI923S) EACH (FOR REDUNDANCE) 7= 1 PIECE BI913S / LWL T-COUPLER (BI922S) EACH 8= 2 PIECES BI913S / LWL T-COUPLER (BI922S) EACH (FOR REDUNDANCE)</p> <p>0= WITHOUT 1= 1 PIECE 2= 2 PIECES (FOR REDUNDANCE)</p> <p>1= 1 PIECE 2= 2 PIECES (FOR REDUNDANCE)</p> <p>0= WITHOUT 4= 4 PIECES SWITCH/FUSE/RELAY EACH 9= 9 PIECES SWITCH/FUSE/RELAY EACH</p>
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NOTE!
POWER CONDITIONER IS/ARE REQUIRED ALWAYS!

ALL VARIANTS ARE EQUIPPED WITH TERMINALS
X01 (max.10mm², Pos. 6), X04 (max.2.5mm², Pos. 12) AND X05 (max.2.5mm², Pos. 17) AS STANDARD!

a					S900 IN FIELD HOUSING	ABB AUTOMATION PRODUCTS Borsigstrasse 2, D - 63755 Alzenau	FH810S-XXXX	A1	3				
b			DATE	13.03.2003	800x1000x300 mm (WxHxD)								
c			DRAWN	Schulz									
d			COORD.										
DETAILS OF REVISION				DATE	NAME	CHECKED	ORIG.	REPL.	© COPYRIGHT BY ABB AUTOMATION PRODUCTS	ORDERING MATRIX	PROJECT S900 IN FIELD HOUSING	PURCHASE ORDER No.:	



AUTOMATION PRODUCTS

CLIENT:

PROJECT:

S900

ORDER NO.:

FH810S-XXXX

DOCUMENT NO.:

S2/xxxxx

S900 IN FIELD HOUSING FH810S CIRCUIT DIAGRAMS

CABLE COLOURS

24 V/DC EEx-e	red
0 V/DC EEx-e	blue
POTENTIAL 24V/DC FIELD:	grey
POTENTIAL 0V/DC FIELD:	grey

TERMINALS

X01:	SUPPLY VOLTAGE 24 V/DC EEx-e
X04:	POTENTIAL 24 V/DC FIELD-INPUT
X05:	POTENTIAL 24 V/DC FIELD-OUTPUT

CABLE DIAMETER IN FIELD HOUSING

24 V/DC EEx-e	2.5 mm ²
0 V/DC EEx-e	2.5 mm ²
POTENTIAL 24V/DC FIELD:	1.5 mm ²
POTENTIAL 0V/DC FIELD:	1.5 mm ²

CABLE DIAMETER EXTERNAL

24 V/DC EEx-e (TERMINALS/DIRECTLY)	max. 10.0/2.5 mm ²
0 V/DC EEx-e (TERMINALS/DIRECTLY)	max. 10.0/2.5 mm ²
POTENTIAL 24V/DC FIELD:	max. 2.5 mm ²
POTENTIAL 0V/DC FIELD:	max. 2.5 mm ²

No. INSIDE HOUSING EXAMPLE

1 F 2



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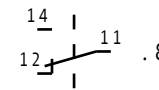
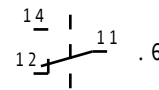
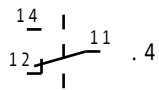
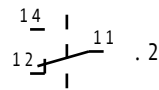
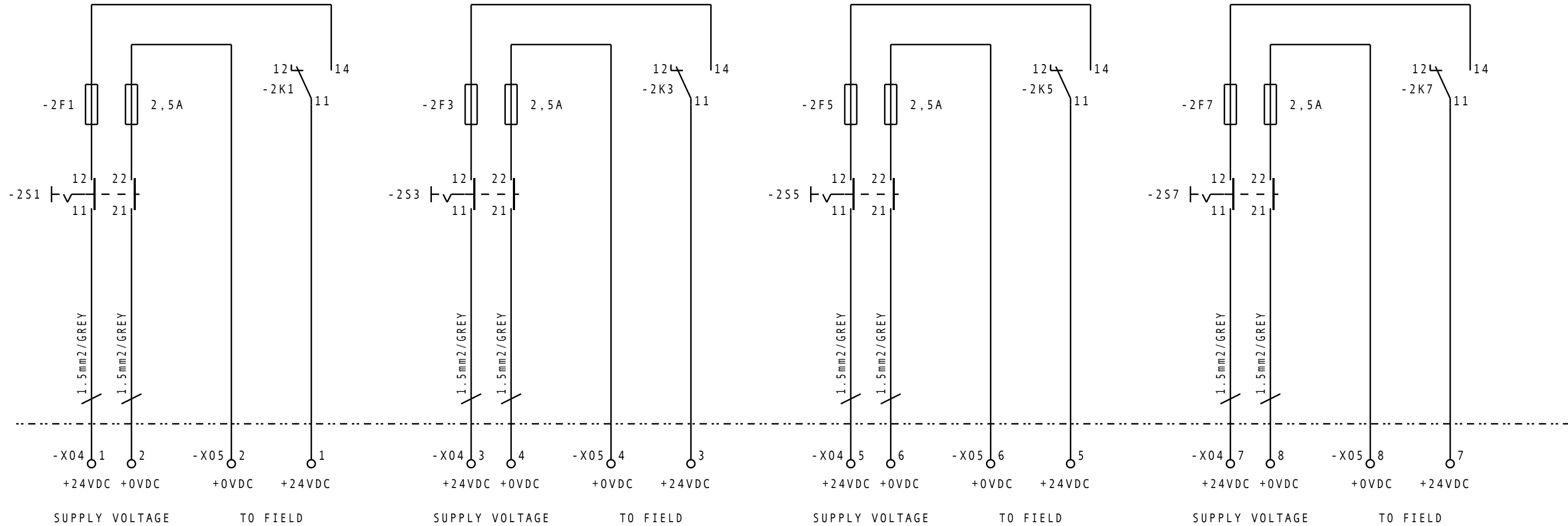
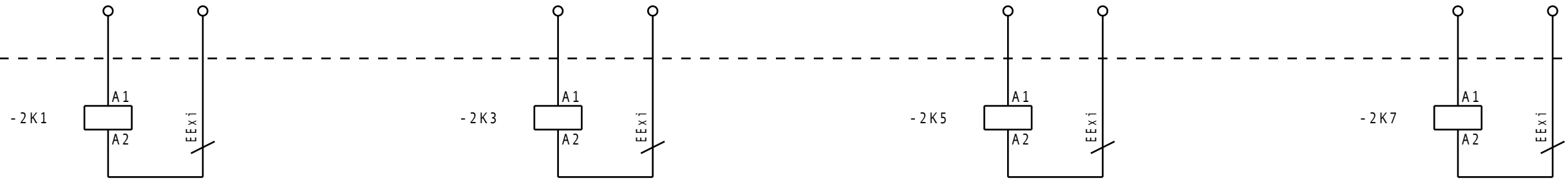
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	b		DATE	13.03.2003						
	c		DRAWN	Schulz						
	d		COORD.							
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S900-BACKPLANE

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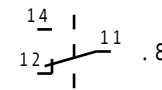
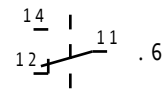
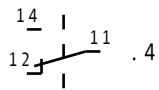
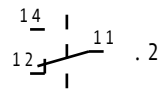
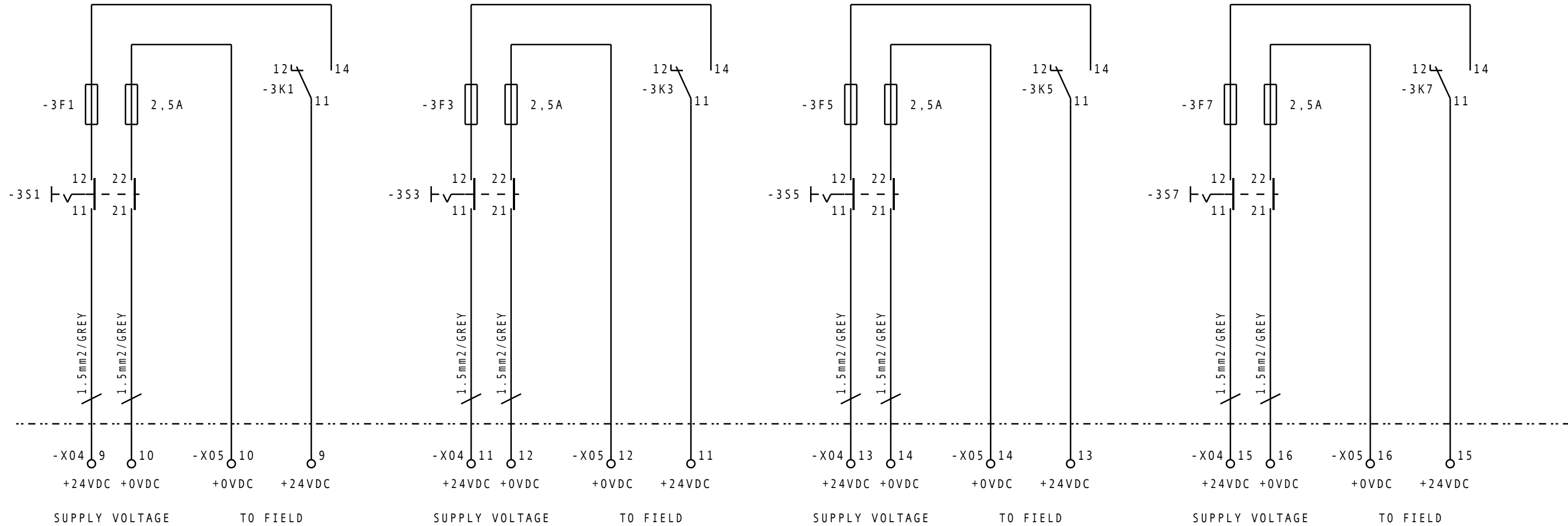
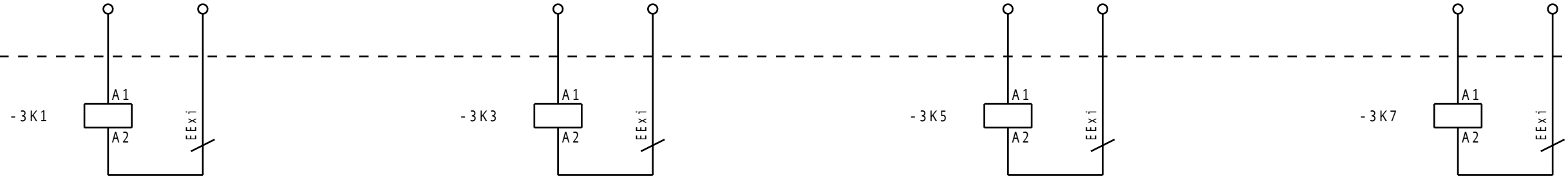
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	b			DATE	20.02.2003				FIELD SIGNALS 1-4		PURCHASE ORDER No.:
	c			DRAWN	Schulz						
	d			COORD.							
	DETAILS OF REVISION	DATE	NAME	CHECKED	ORIG.	REPL.					

S900-BACKPLANE

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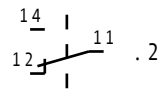
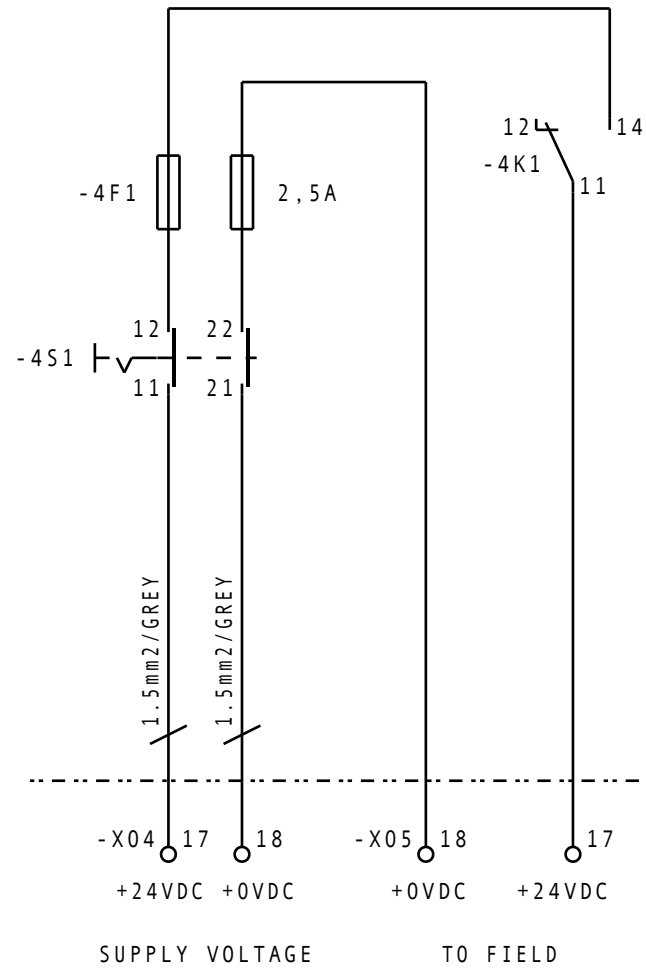
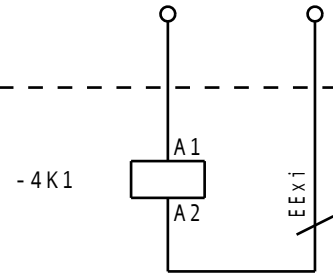
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	b			DATE	22.10.2002								
	c			DRAWN	Schulz								
	d			COORD.									
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S900-BACKPLANE

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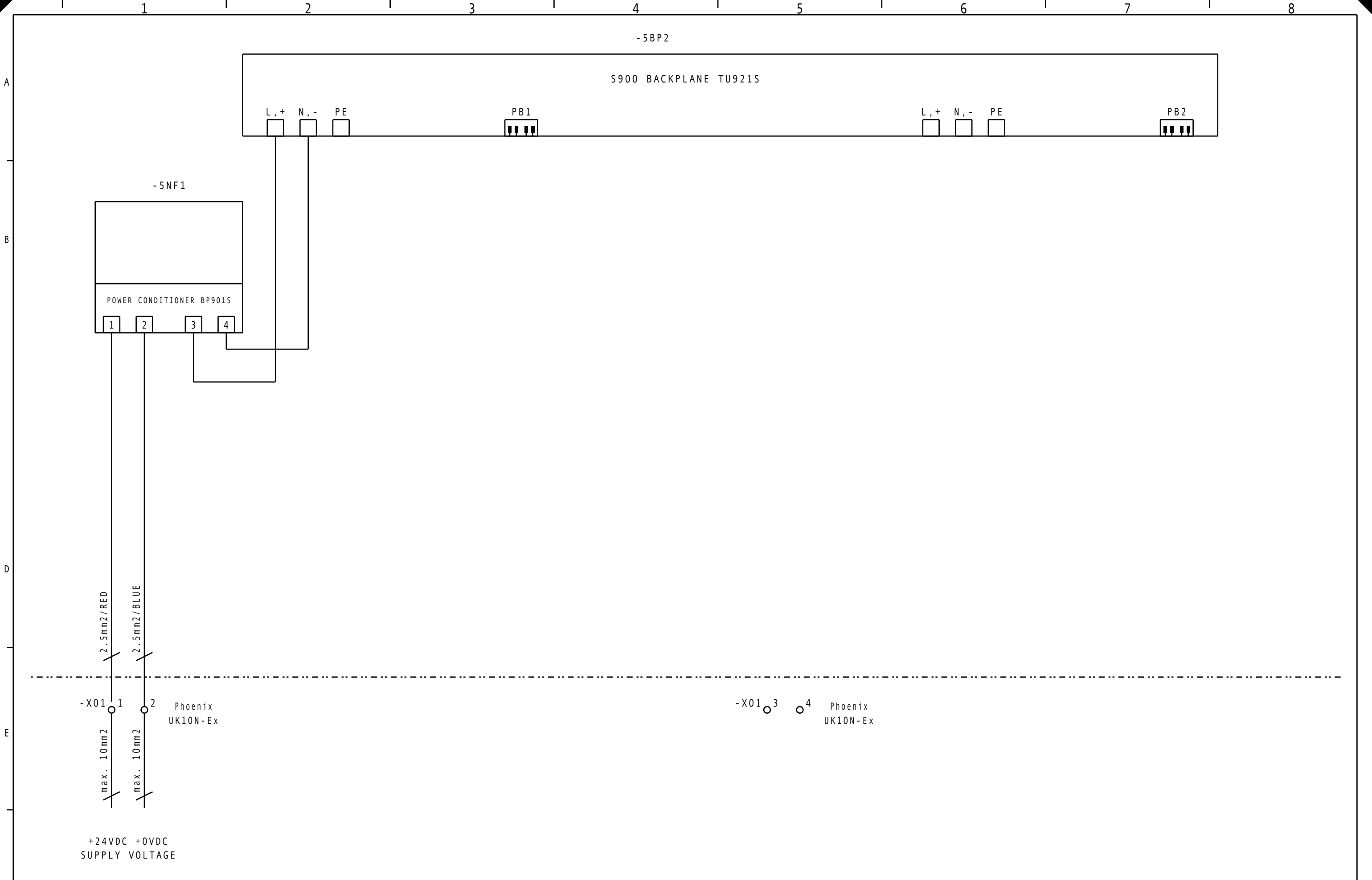
WIRING IS TO BE DONE BY CUSTOMER!

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b			DATE	22.10.2002	800x1000x300 mm (WxHxD)					
c			DRAWN	Schulz						
d			COORD.							
DETAILS OF REVISION		DATE	NAME	CHECKED	ORIG.	REPL.	PROJECT	PURCHASE ORDER No.:		
							S900 IN FIELD HOUSING			

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1 2 3 4 5 6 7 8

A

B

D

E

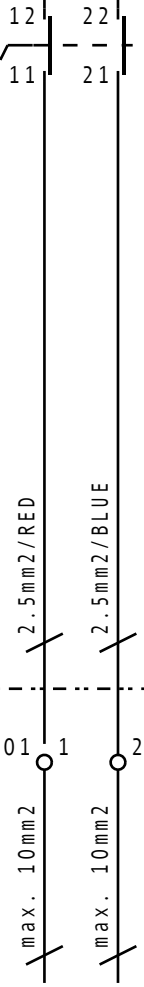
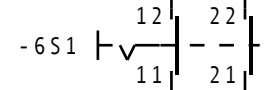
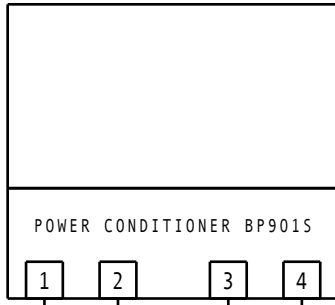
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-6BP2

S900 BACKPLANE TU9215



-6NF1



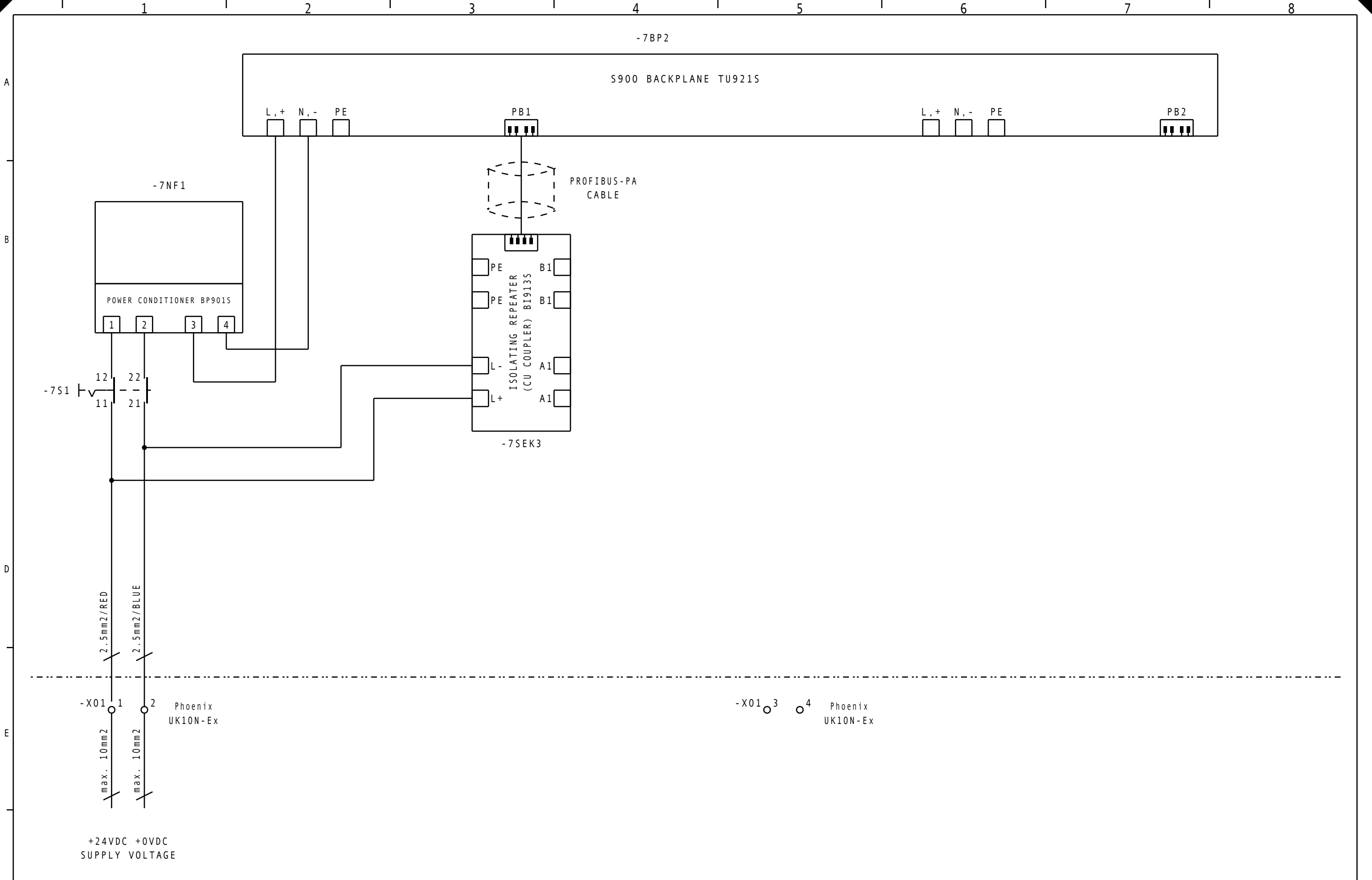
Phoenix UK10N-Ex

Phoenix UK10N-Ex

+24VDC +0VDC
SUPPLY VOLTAGE

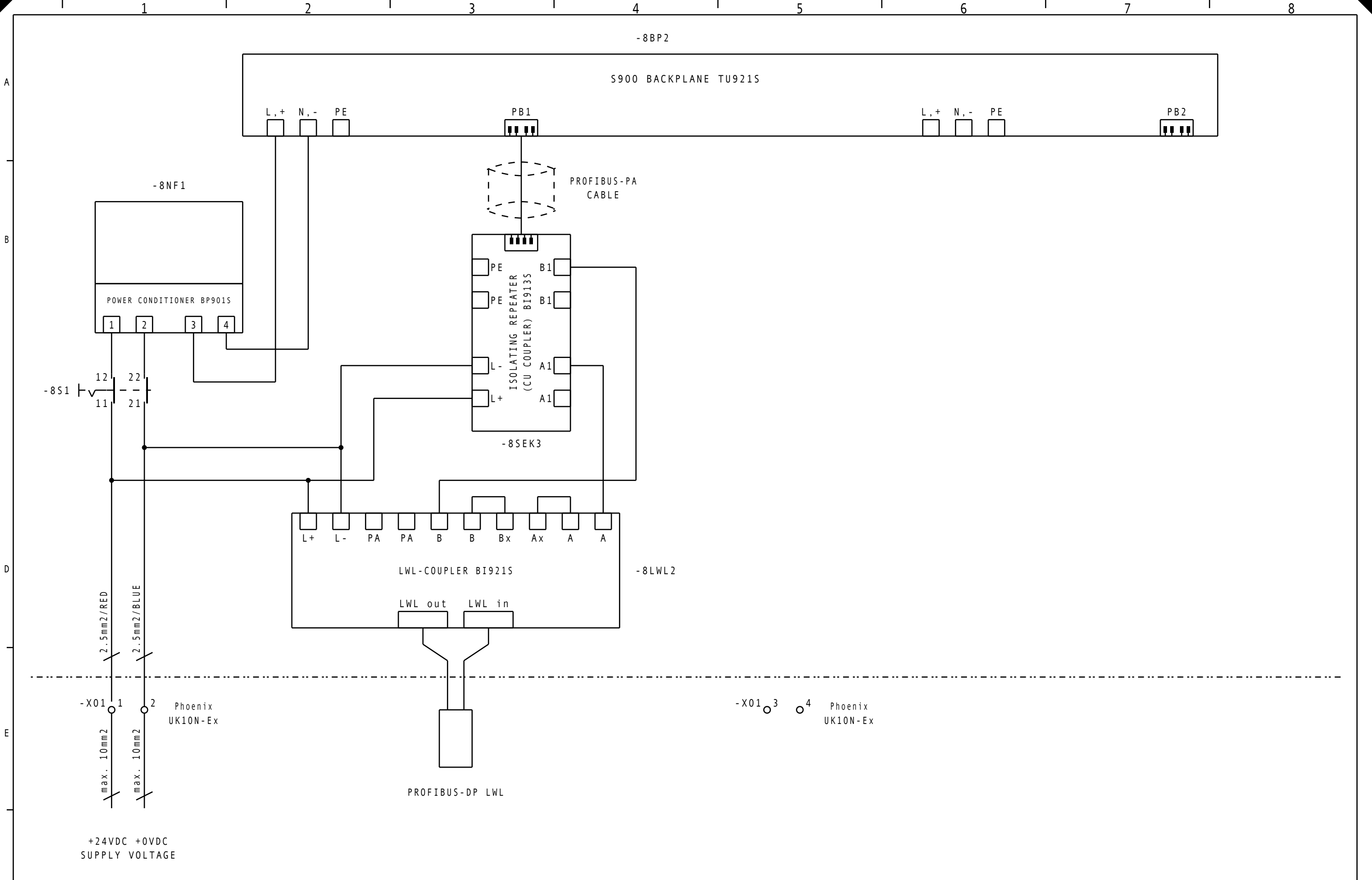
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							S900 IN FIELD HOUSING			

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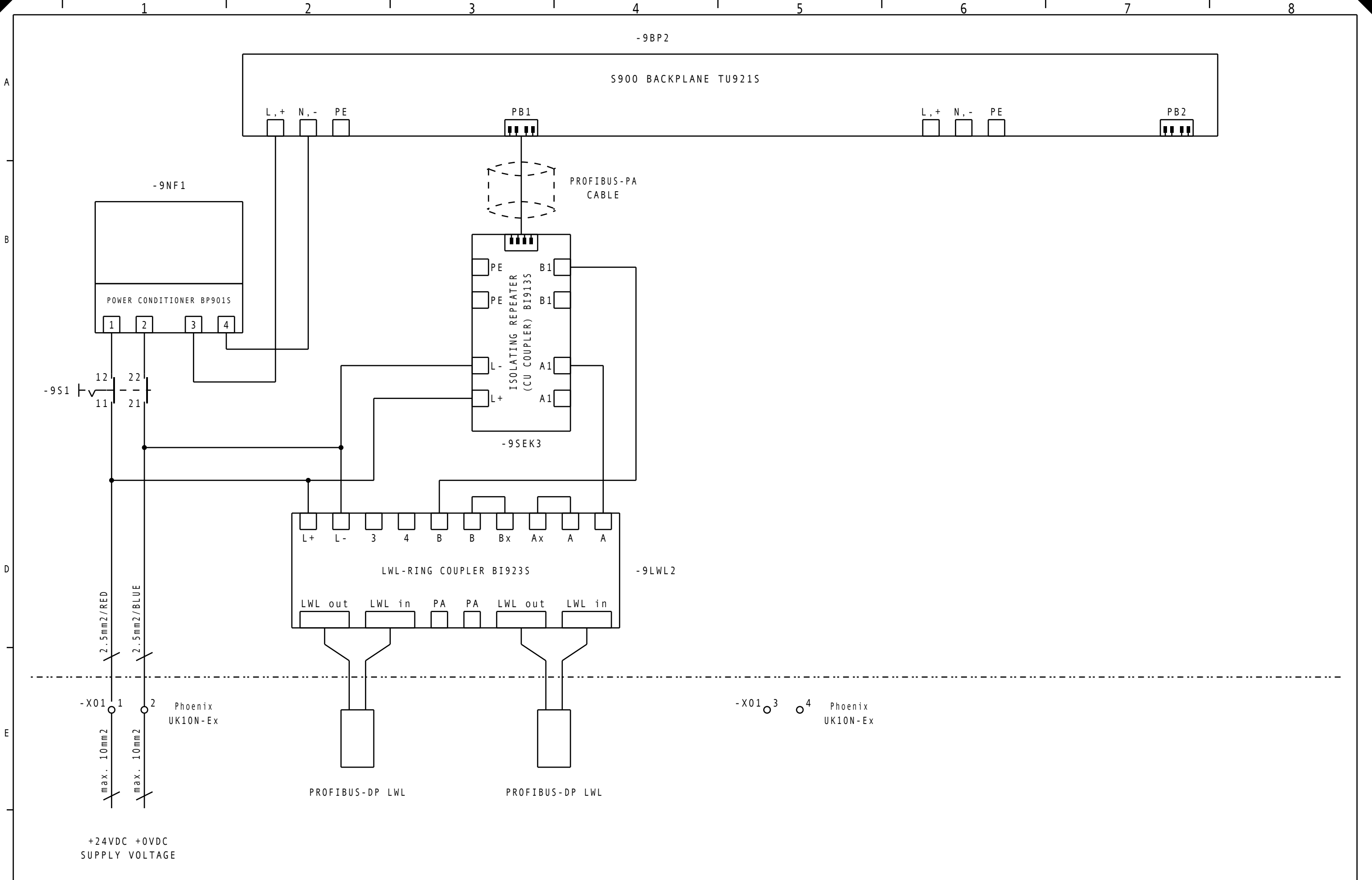
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c			DRAWN	Schulz						
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							S900 IN FIELD HOUSING			

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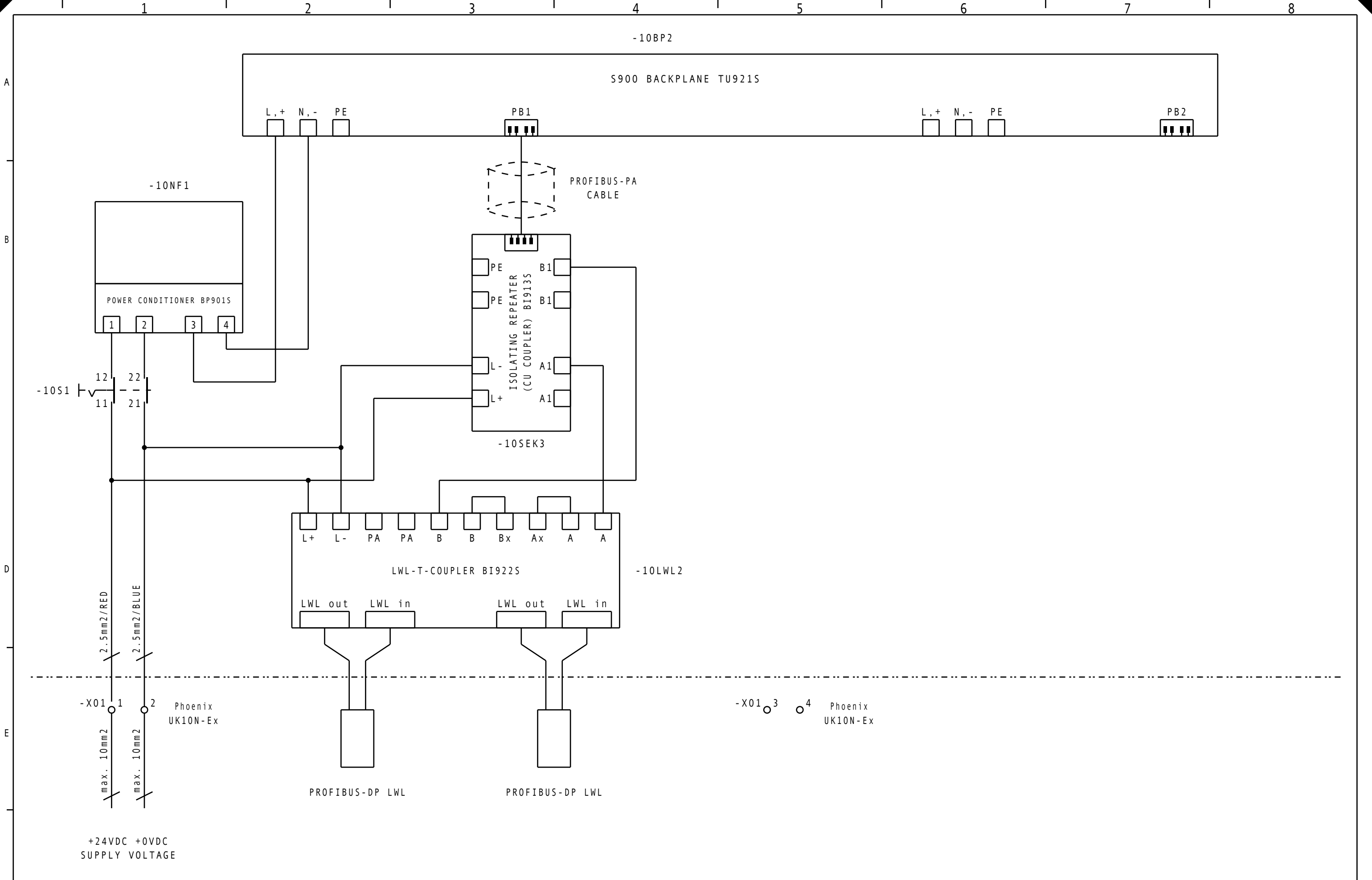


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FH8105-X113
Borsigstrasse 2, D - 63755 Alzenau
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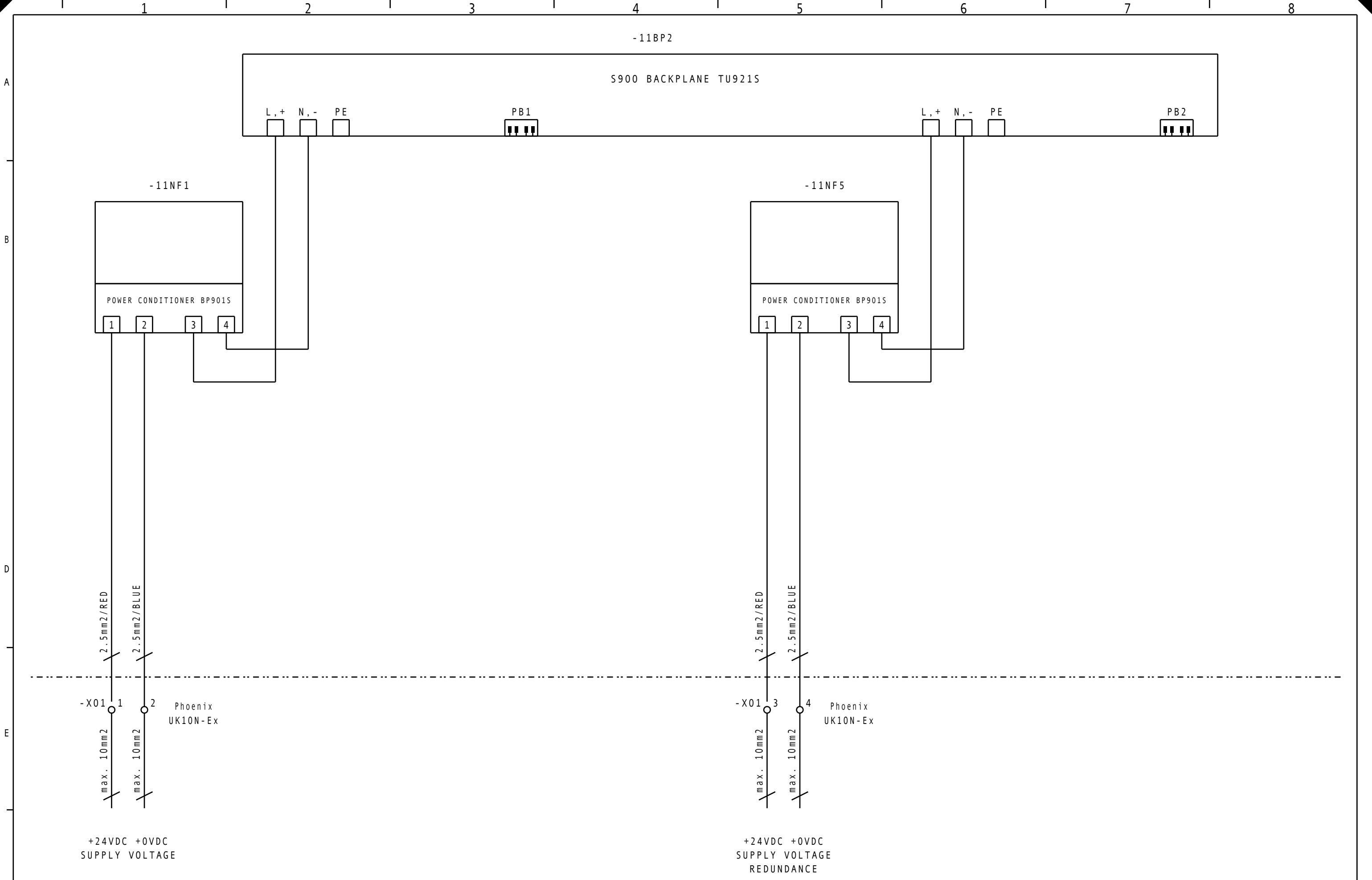


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								S900 IN FIELD HOUSING		

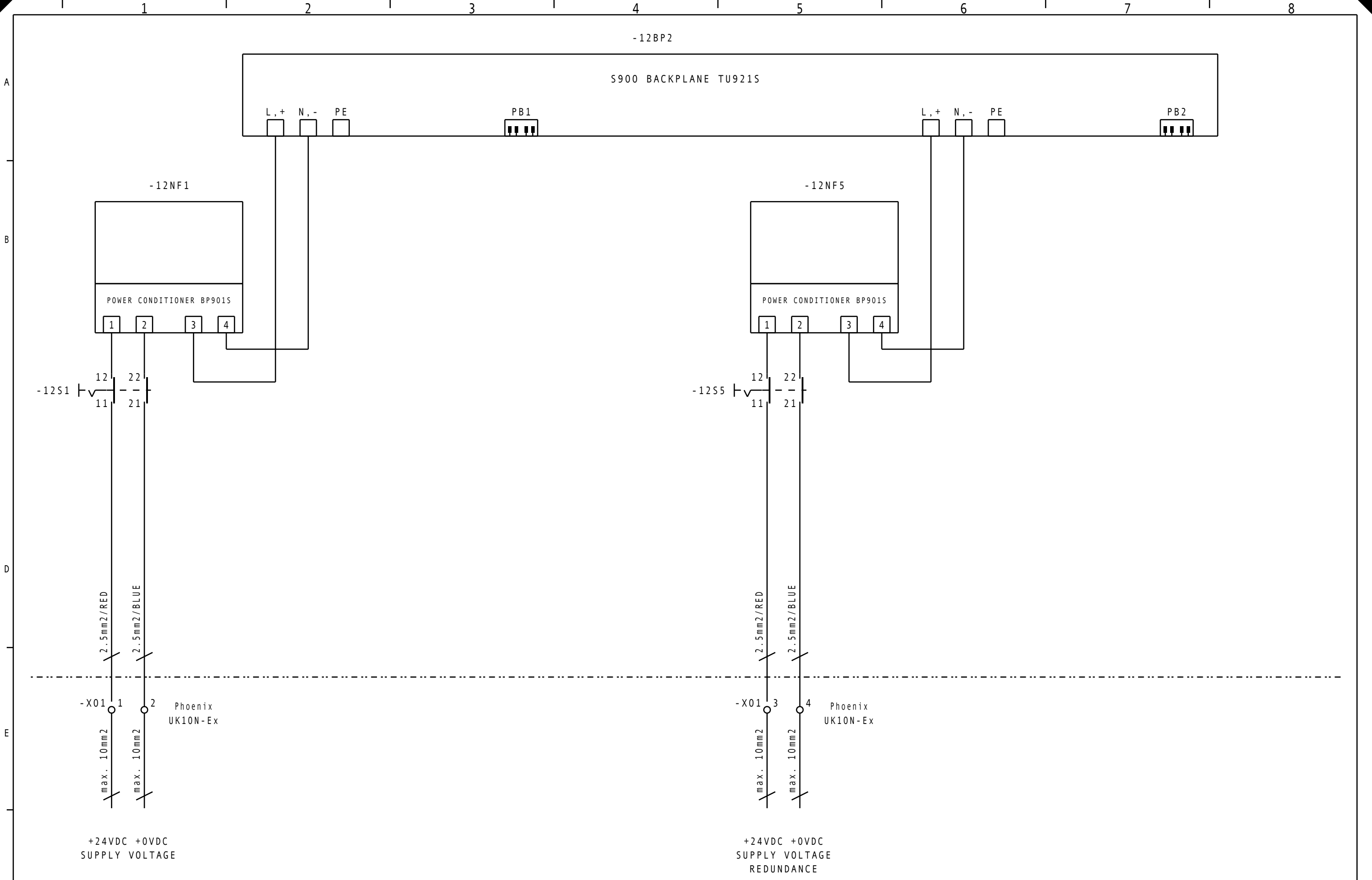


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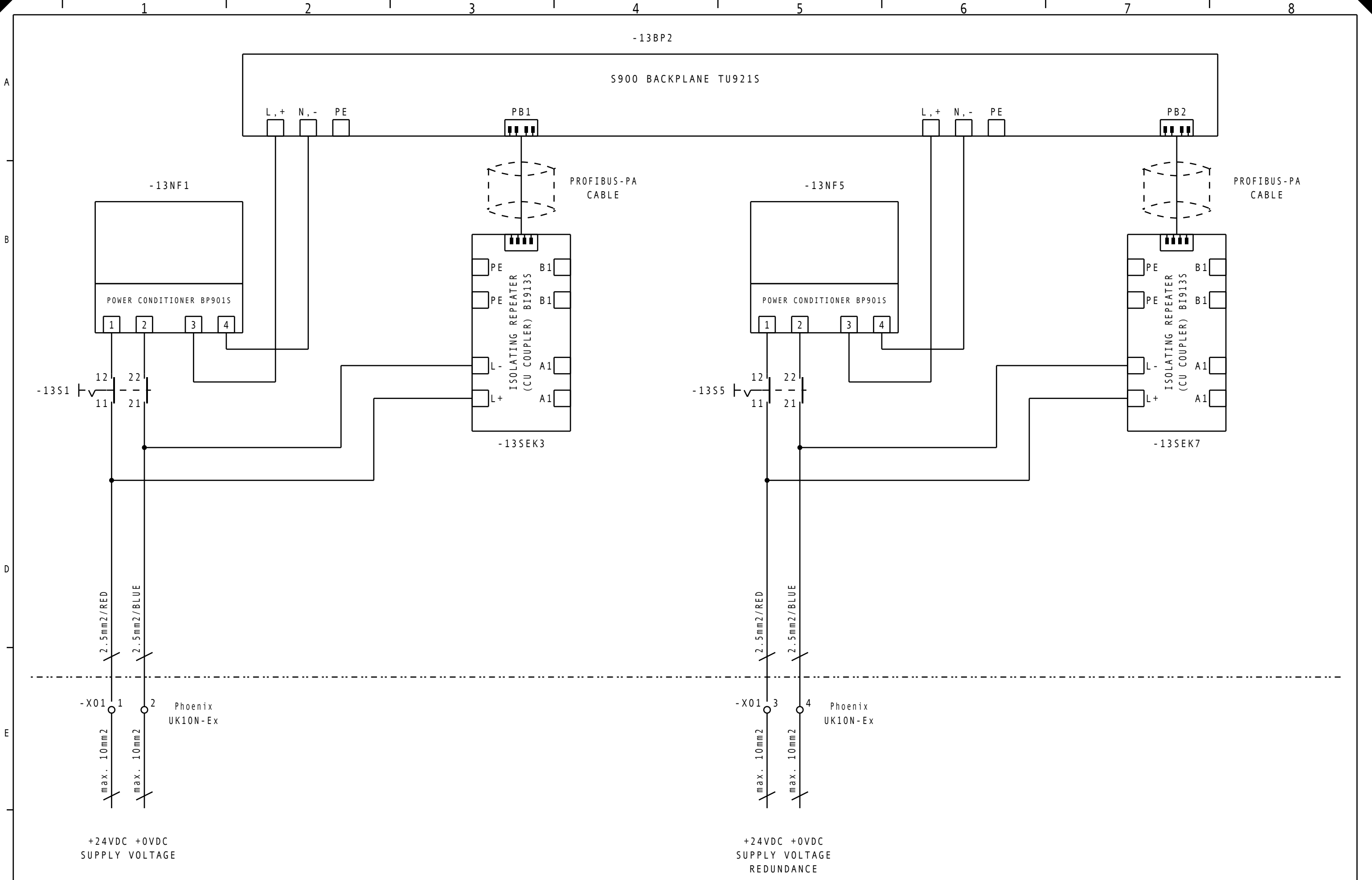
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a					S900 IN FIELD HOUSING	ABB AUTOMATION PRODUCTS	FH810S-X200	A2	11
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c			DRAWN	Schulz					
d			COORD.						
F	DETAILS OF REVISION	DATE	NAME	CHECKED	ORIG.	REPL.	PROJECT	PURCHASE ORDER No.:	
							S900 IN FIELD HOUSING		
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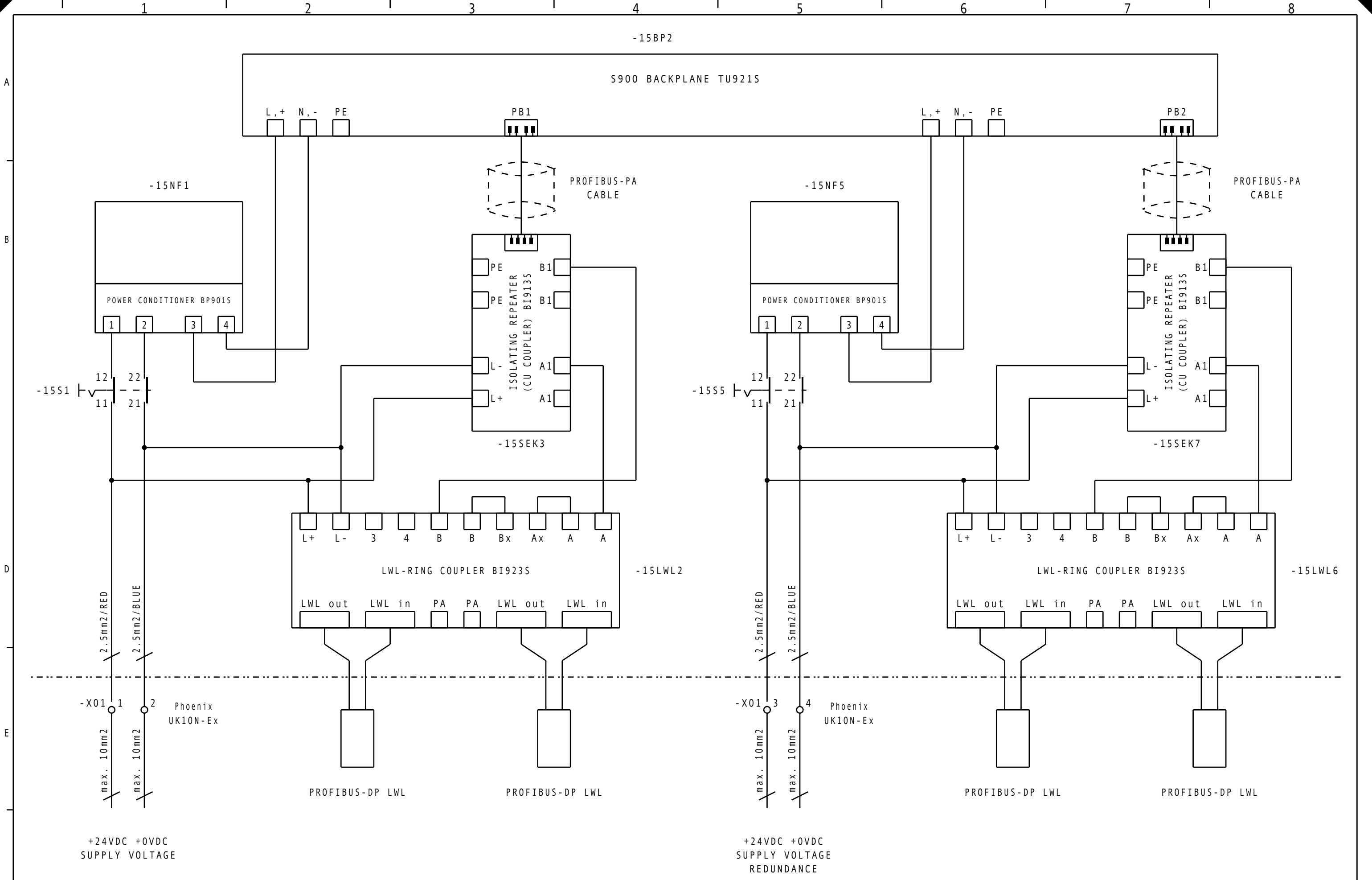


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F	a				S900 IN FIELD HOUSING 800x1000x300 mm (WxHxD)	ABB AUTOMATION PRODUCTS FH810S-X222 Borsigstrasse 2, D - 63755 Alzenau	PROJECT S900 IN FIELD HOUSING	A2	13	
	b			DATE				20.02.2003		
	c			DRAWN				Schulz		
	d			COORD.						
	DETAILS OF REVISION	DATE	NAME	CHECKED	ORIG.	REPL.		PURCHASE ORDER No.:		

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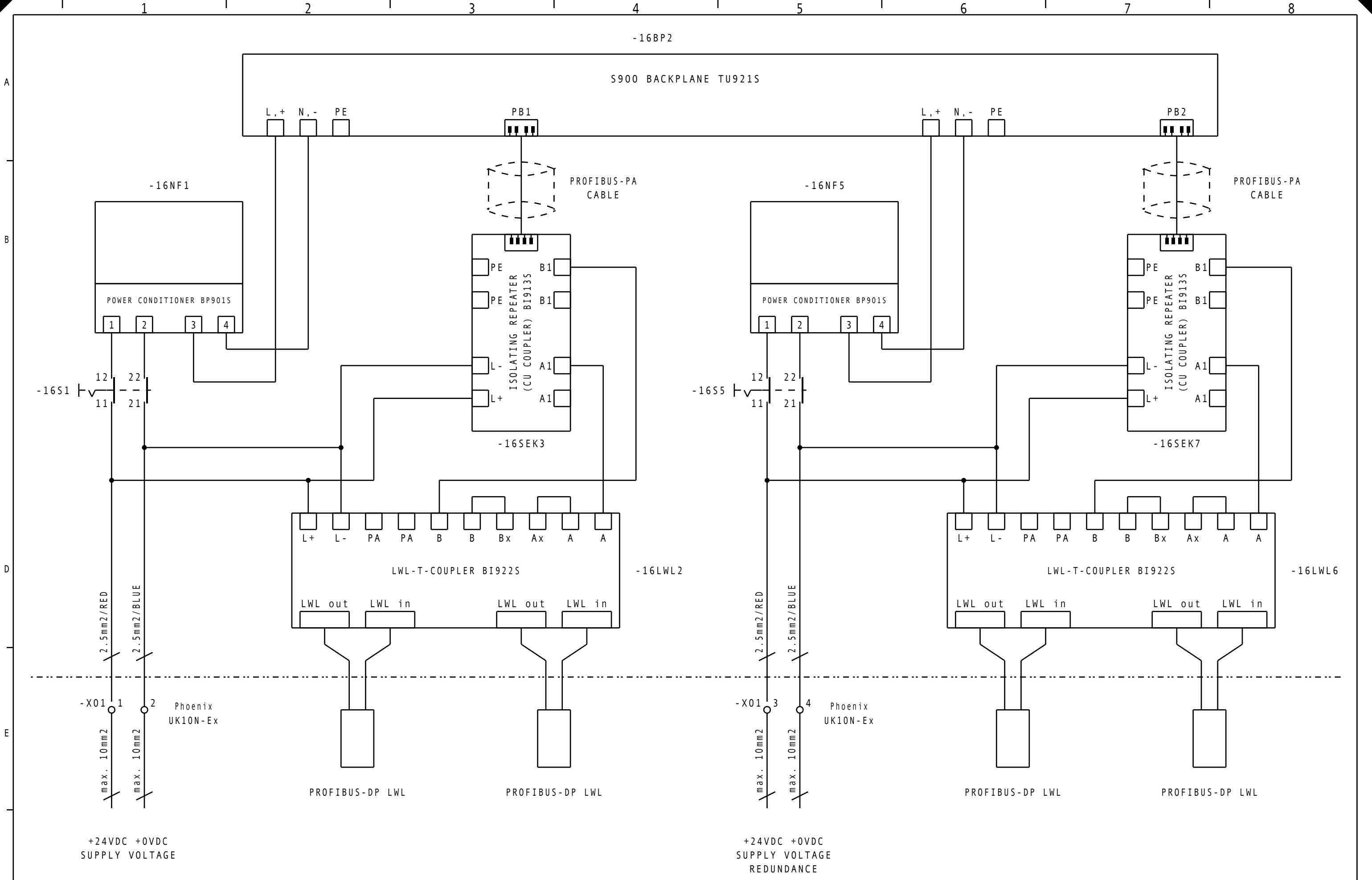
a					
b			DATE	20.02.2003	
c			DRAWN	Schulz	
d			COORD.		
	DETAILS OF REVISION	DATE	NAME	CHECKED	

S900 IN FIELD HOUSING
800x1000x300 mm (WxHxD)

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Borsigstrasse 2, D - 63755 Alzenau
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FH810S-X226

	A2	15
PROJECT	PURCHASE ORDER No.:	
S900 IN FIELD HOUSING		



F	a				S900 IN FIELD HOUSING	ABB AUTOMATION PRODUCTS	FH810S-X228				
	b		DATE	20.02.2003	800x1000x300 mm (WxHxD)	Borsigstrasse 2, D - 63755 Alzenau			A2	16	
	c		DRAWN	chulz							
	d		COORD.								
	DETAILS OF REVISION		DATE	NAME	CHECKED	ORIG.	REPL.	PROJECT		PURCHASE ORDER No.:	
								S900 IN FIELD HOUSING			
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ABB Automation Products GmbH
Borsigstrasse 2, D-63755 Alzenau
Phone +49(0)6023 92-0, Fax +49(0)6023 92-3430