



Airport Technics GmbH
Industriestrasse 19
D-68519 Viernheim



Den Norske Opera
Storgaten 23
N-0028 Oslo
www.operaen.no

Commission : -----
Plant / code name : DEN NORSKE OPERA
STORAGE SYSTEM OF SCENERY ITEMS
UT-order number : P2007.10289
UT-Projectmanager : Gerd Feldmann

Unit / Device :
Parts-list-No. : A2007.10289 -10
Drawing number : A2007.10289
UT-hardware design : Gerd Feldmann

Year of manufacturing : 2008
Date of construction : 07. Mär. 2008

Caution :

These documents are designed-by the
CAE-system "EPLAN 5.70".
Revisions and changes should only be done with
this CAE-system by using the original settings.

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UT-Intern:

	Date	Name		Date	Name
Drewn:	07. Mär. 2008	H. Müller	Proc.:	25. Aug. 2008	Gerd Feldmann
			Checked:	28. Okt. 2008	Gerd Feldmann
ICM AIRPORT TECHNICS			Unitechnik AG		

Cover sheet

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File-No.:	Final customer:		Subcontr. order-No.:	
001C01_D	DEN NORSKE OPERA		-----	= 001C01
Formate:			Project-folder.:	
A3			P2007.10289	+ 001C01
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Code name:	ICM Opera Oslo		Next page:	
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Control Panel - Opera

+ 001C01

Informations of construction / for manufacturing

	Wire color:	Mind. conductor cross section		(control cabinet, control panel terminal boxes) have to be groudted star-shape within minimum 16mm² and to be connected at the central grounding point - for bus- and data cables EMV capable cable glands have to be used																								
Supply voltage : 400 V 50 Hz	black	1,5 QMM	Ewire ends: wire end ferrules																									
Control voltage : 230 V 50 Hz	red	1,0 QMM	inscription of wire ends: none																									
Control voltage :			painting internal: RAL 7035																									
Control voltage : 24 V DC	blue	1,0 QMM	painting external: RAL 7035																									
Brake voltage : 400/230V AC	black/red	1,5 QMM	mounting plate: galvanized																									
Valve voltage : 24 V DC	blue	1,0 QMM	SPS - system: Siemens S7																									
Lamp voltage : 24 V DC	blue	1,0 QMM	fieldbus - system Siemens ET 200S																									
Intercon. voltage:	orange	1,0 QMM	appliance description: paper label on unit + mounting plate																									
Terminated power: 8 kVA			tumbler arrangement: standard																									
Nominal current : 16 A			hinges: standard	Changes / Revisions: <table><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td>Date</td><td>Name</td><td>New page</td><td>Changed page</td></tr></table>																					Date	Name	New page	Changed page
Date	Name	New page	Changed page																									
Standard specifications : IEC 60204-1 : 1997 + cor.1998 60439-1 1999	Technical documentation: (=.A) Panel arrangements (=.B) Cabel connection overview Cabel listings Terminal diagram (=.C) Circuit diagram (=.E) Emergency stop (=.P) PLC (=.S) Signal interchange		Auftragsnummer: A2007.10289																									

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001C01		001C01	2	Cover sheet Information of construction									SGR	25.08.08						
001C01		001C01	3	Table of contents									SGR	06.10.08						
001C01		001C01	3a	Table of contents									SGR	06.10.08						
001C01		001C01	10	Maintenance instruction									SGR	25.08.08						
001C01		001C01	11	Electrical item designation									SGR	25.08.08						
001C01		001C01	12	Electrical item designation									SGR	25.08.08						
001C01		001C01	13	List of abbreviations									SGR	25.08.08						
001C01		001C01	14	Revision status									SGR	25.08.08						
001C01A		001C01	1	Layout control panel 001C01 Opera									SGR	25.08.08						
001C01A		001C01	2	Layout Transmitter									SGR	25.08.08						
001C01A		001C01	3	Layout Plug housing 001T01 Truck dock 1/opera									SGR	25.08.08						
001C01A		001C01	4	Layout Plug housing 001T02 Truck dock 2/opera									SGR	25.08.08						
001C01A		001C01	5	Overview plug housing warehouse opera									SGR	25.08.08						
001C01C		001C01	1	Main infeed of control cabinet +P01C01									SGR	25.08.08						
001C01C		001C01	2	Power distribution 230V AC alive circuit after disconnecting main switch									SGR	25.08.08						
001C01C		001C01	3	Cabinet lighting/service sockets +001C01									SGR	25.08.08						
001C01C		001C01	4	Power distribution 24V DC									SGR	06.10.08						
001C01C		001C01	5	Power distribution 24V DC									SGR	06.10.08						
P01AA01		001C01	1	Trailer 1 conveyor drive									SGR	06.10.08						
P01AA01		001C01	2	Trailer 1 conveyor drive contactors									SGR	06.10.08						
P01AA01		001C01	3	Trailer 1 conveyor drive brake									SGR	06.10.08						
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P01AA01		001C01	7	Trailer 1 pallet blocker contactors									SGR	06.10.08						
P01AA01		001C01	8	Trailer 1 connection opera									SGR	06.10.08						
P01AA01		001C01	9	Trailer 1 Sensor switches									SGR	06.10.08						
P01AA01		001C01	10	Trailer 1 pallet blocker contactors									SGR	06.10.08						
P01AA02		001C01	1	Trailer 2 conveyor drive									SGR	25.08.08						
P01AA02		001C01	3	Trailer 2 conveyor drive brake									SGR	25.08.08						
P01AA02		001C01	5	Trailer 2 pallet blocker									SGR	25.08.08						
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Maintenance instructions

Please note:

	Minimal maintenance intervals	Included in this control unit	
		yes = x	Remarks
■ Air condition and fan filters to be cleaned/changed in according to the operation conditions.	1-3 months	X	refer instruction manual
■ Mechanical and electrical functions of the safety limit-switches to be inspected.	2 months	X	
■ Batteries in PLC's, displays etc.to be checked and replaced if necessary.	12 months	X	
■ Screwed terminals in moving units (f.e. transport vehicles) to be tighten.	6 months	X	
■ Visual condition check of all moving cables to be carried out.	6 months	X	
■ The optics of the light barriers and data light barriers to be cleaned.	1-4 month	X	in dusty conditions 2-4 weeks
■ Manual test of the power circuit breaker to be carried out.	12 months	X	
■ Visual condition check of the power contactors to be carried out.	12 months	X	
■ Checks cable drag chain for abrasion	6 months		
■			
■			
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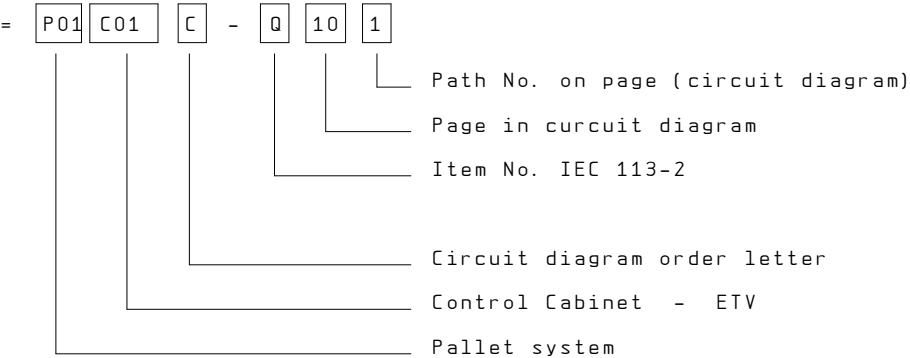
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Electrical item designation

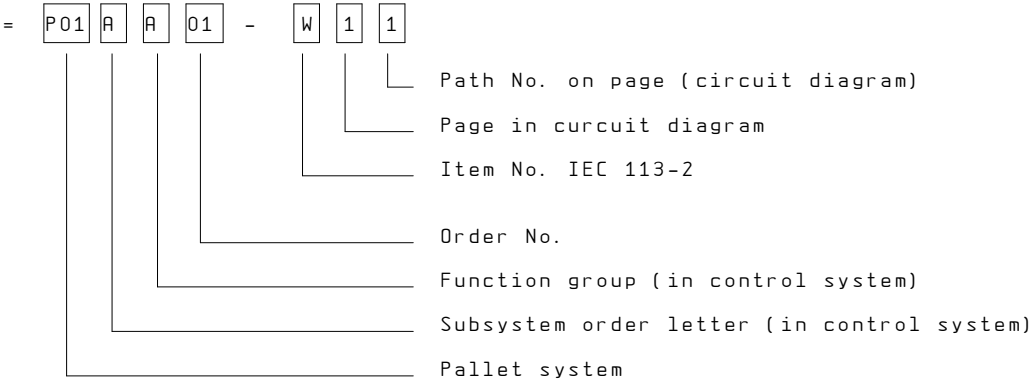
Item designation	Location designation
=P01C01 = Table of contents / information of construction	+P01C01 = Control Cabinet - ETV
=P01C01A = Control cabinet layout	+P01P01 = Control panel - Palet transport system
=P01C01C = Circuit diagram's general part	+P01P11 = Control panel - Trailer transfer deck
=P01C01E = Circuit diagram's emergency stop	+P01P12 = Control panel - workshop deck
=P01C01P = Circuit diagram's PLC	+P01P20 = Control panel - Aisle power supply landside ETV
=P01C01T = terminal strip diagram / terminal strip diagram	+001C01 = Control panel - Opera
=P01AA00 = Drives and sensors Truck dock warehouse	
=P01AA01 = Drives and sensors Trailer 1	
=P01AA02 = Drives and sensors Trailer 2	
=P01AB01 = Drives and sensors Transferdeck truck dock	
=P01AB02 = Drives and sensors Identifikation deck	
=P01AB03 = Drives and sensors Turntable	
=P01AD01 = Drives and sensors Transferdeck ETV	
=P01AC01 = Drives and sensors Workshop area	+L = Local environment

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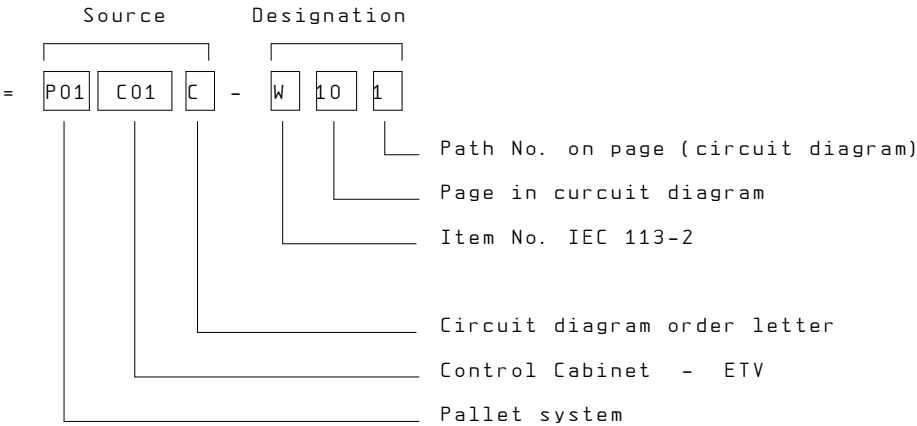
Example for electrical item designation (device in control unit)



Example for cable designation (drive)



Example for cable designation (sensors)



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List of abbreviations

Control devices

- ESP = Emergency-stop push-button
- IESP = Illuminated emergency-stop push-button
- IL = Illuminated lamp
- IPB = Illuminated push-button
- ISS = Illuminated selector switch
- JS = Joystick
- KS = Keyswitch
- MS = Main / Maintenance switch
- PB = Push-button
- SS = Selector switch

Mechanical units

- TR = Trailer
- TD = Truck dock warehouse
- TT = Transferdeck truck dock
- ID = Identifikation deck
- TT = Turntable
- TE = Transferdeck ETV
- WA = Workshop area

Sensors

- DLB = Data light barrier
- DS = Door switch
- IPS = Inductive proximity sensor
- LS = Limit switch
- LSC = Laser scanner
- MPS = Magnetic proximity sensor
- PPS = Photoelectric proximity switch
- PRS = Photoelectric reflex switch
- PS = Pressure switch
- TPS = Trough-beam photoelectric switch
- TS = Temperature switch
- SC = Scale sensor

Electrical devices

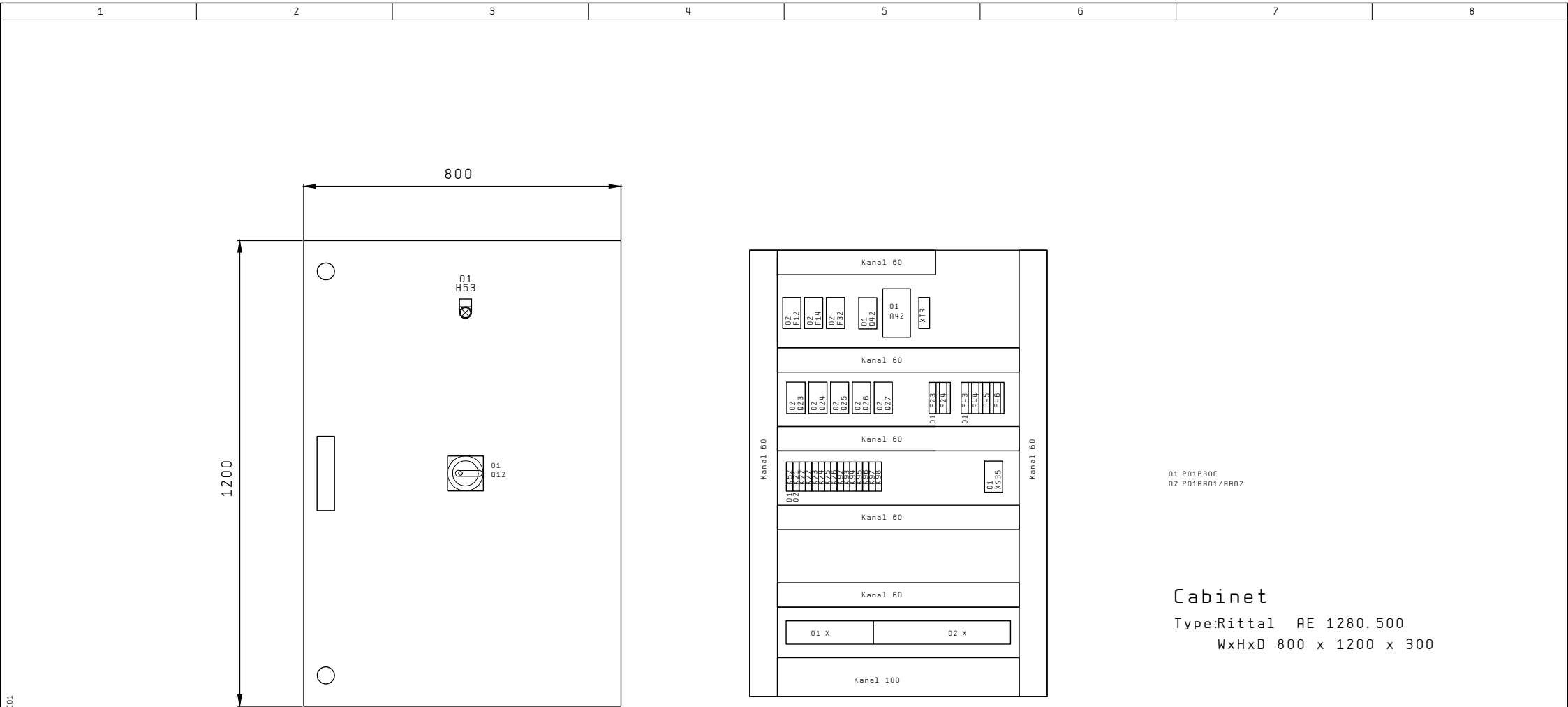
- C = Contactor
- CB = Circuit breaker
- FI = Frequency inverter
- M = Motor
- MCB = Motor circuit breaker
- MCR = Main contactor
- MM = Multispeed motor
- RM = Reverse motor
- SI = Signal interchange
- VE = Valve

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Revision status

Revision status	Date :	Description	Documentation		Responsible
A	22.08.2008	Final documentation	Amount :	For the att.of :	Hr.Feldmann
			1x A4 PDF	Customer	
B					
C					
D					
E					

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Cabinet

Type:Rittal AE 1280.500

WxHxD 800 x 1200 x 300

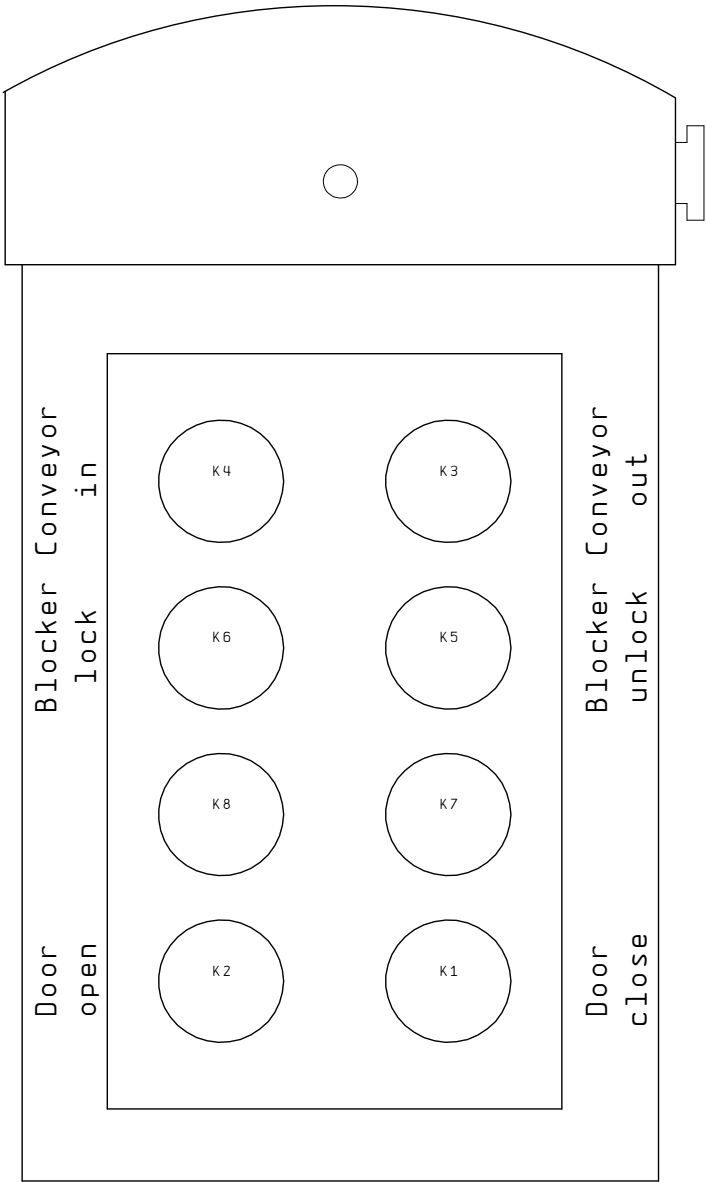
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							© Copyright reserved			Code name: ICM Opera Oslo	

Transmitter

HBC ORBIT



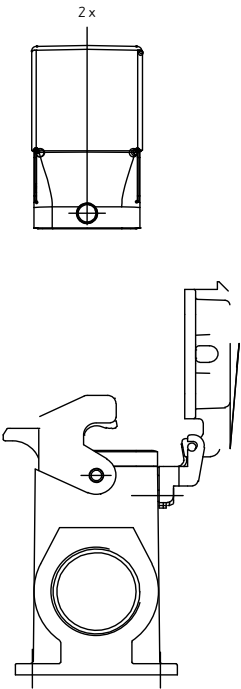
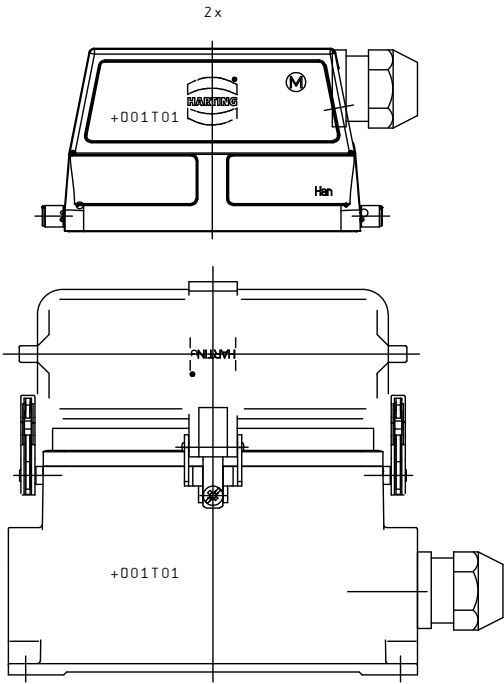
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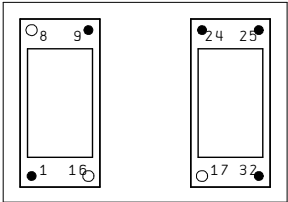
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09 33 016 2711 : Han 16E-bu-s (17-32) 1x



Harting

	Article	piece

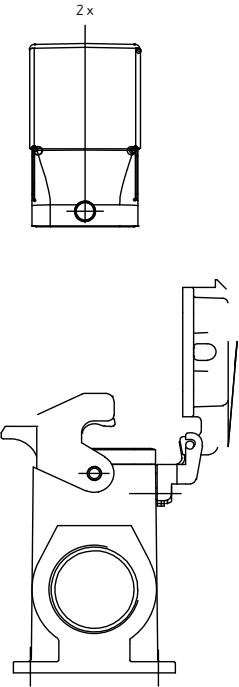
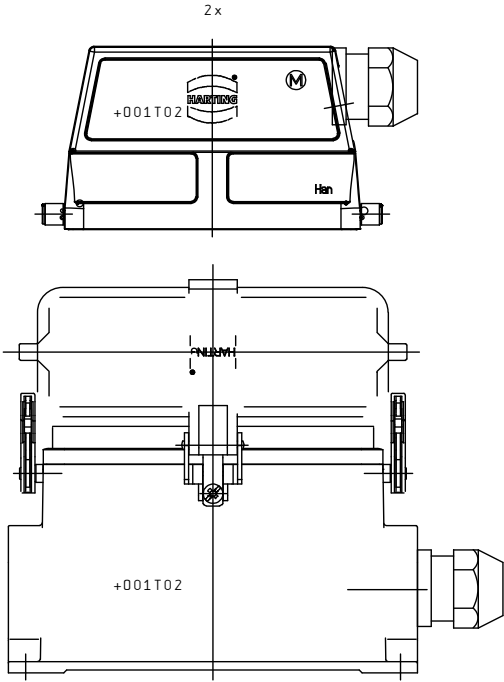


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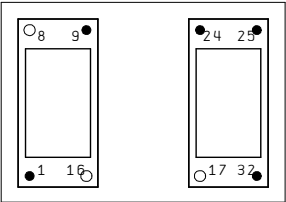
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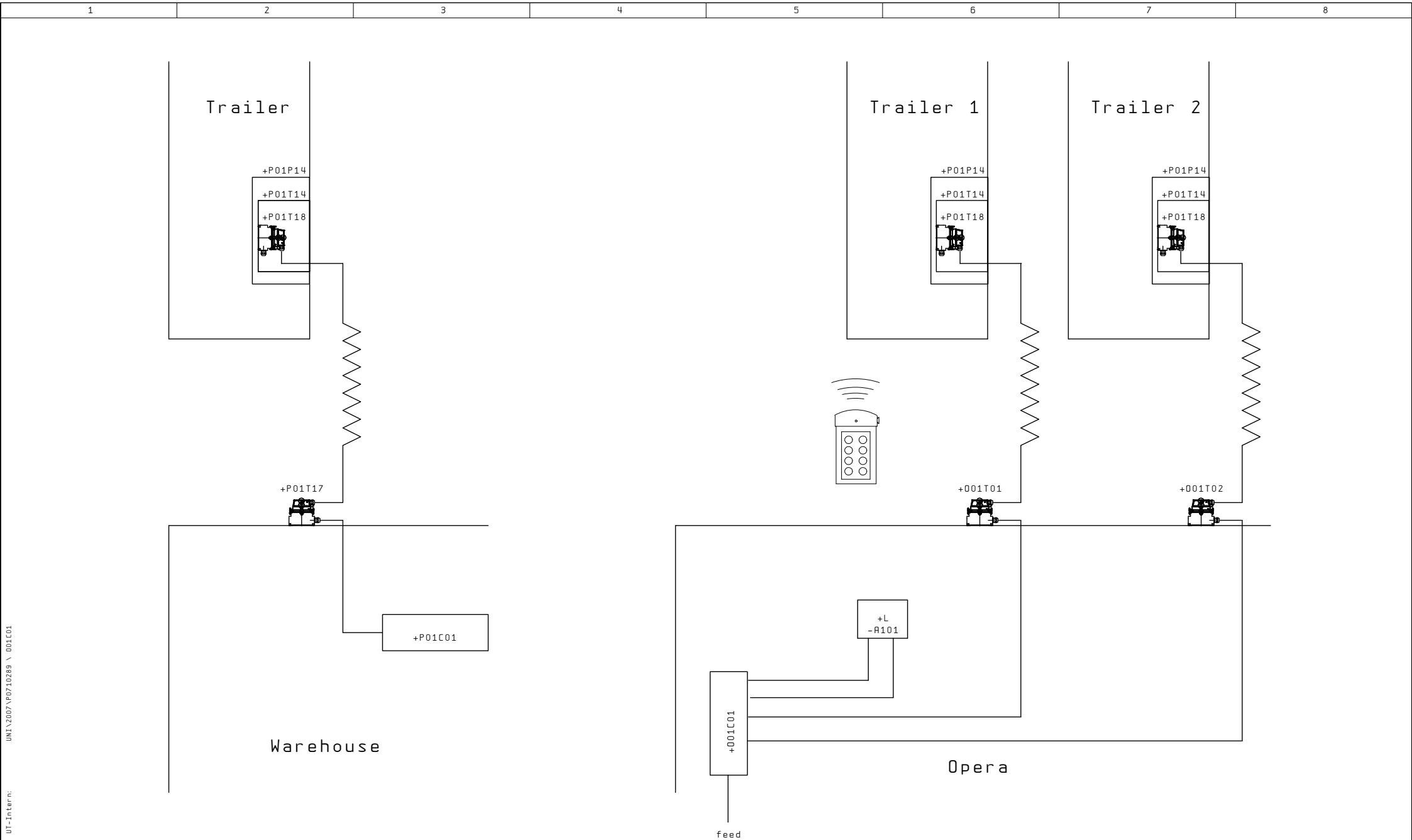


Harting

	Article	piece



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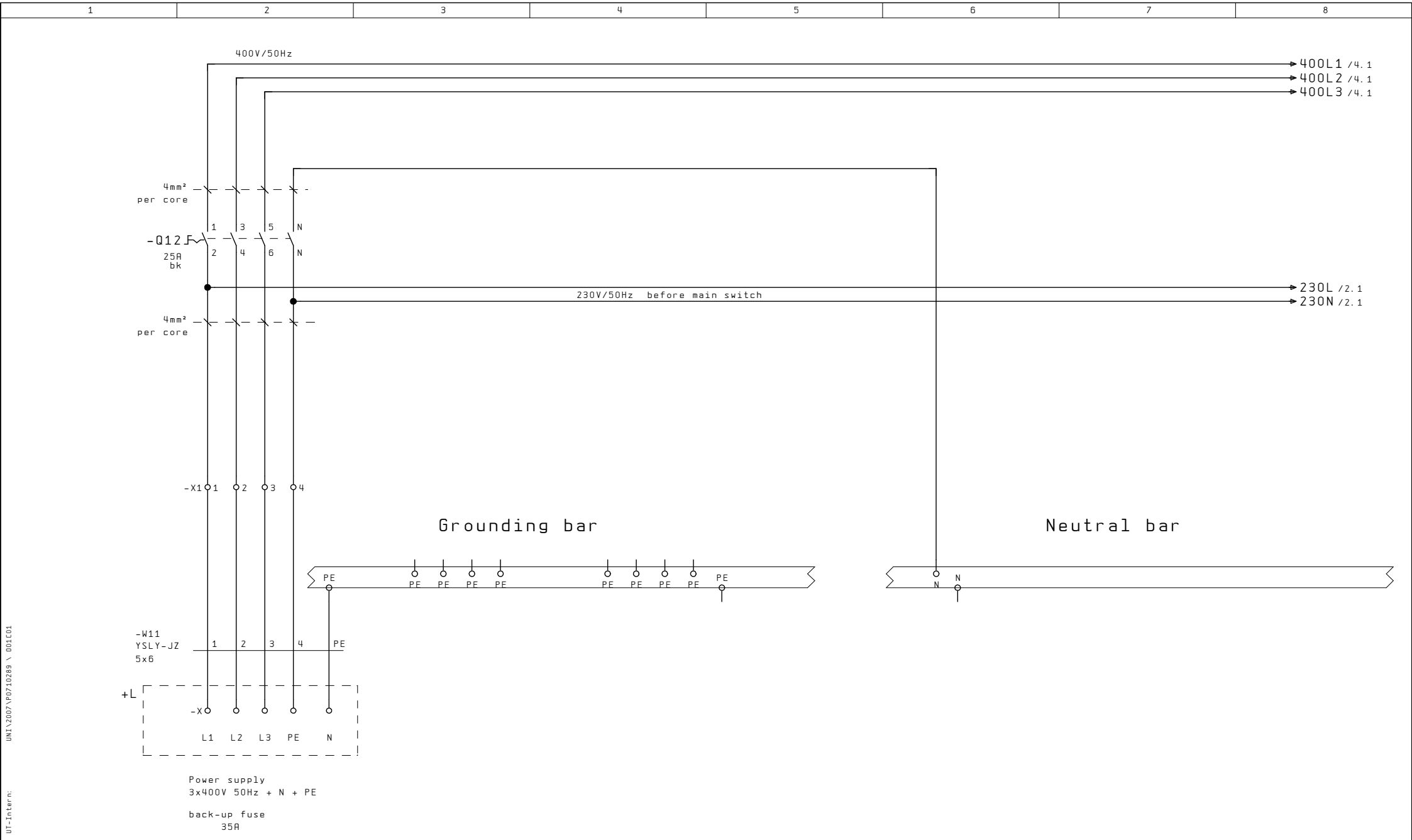


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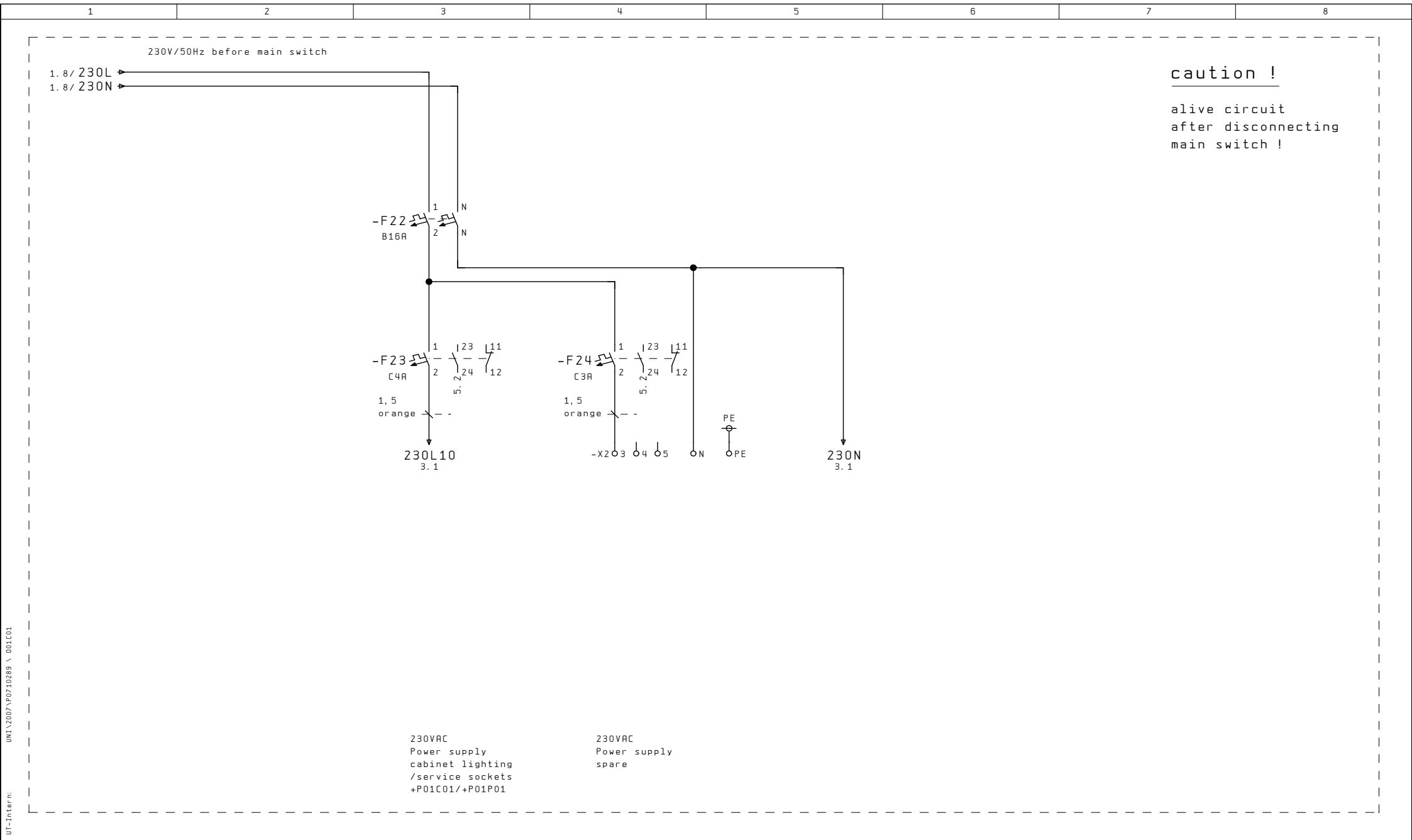
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Overview plug housing warehouse opera	
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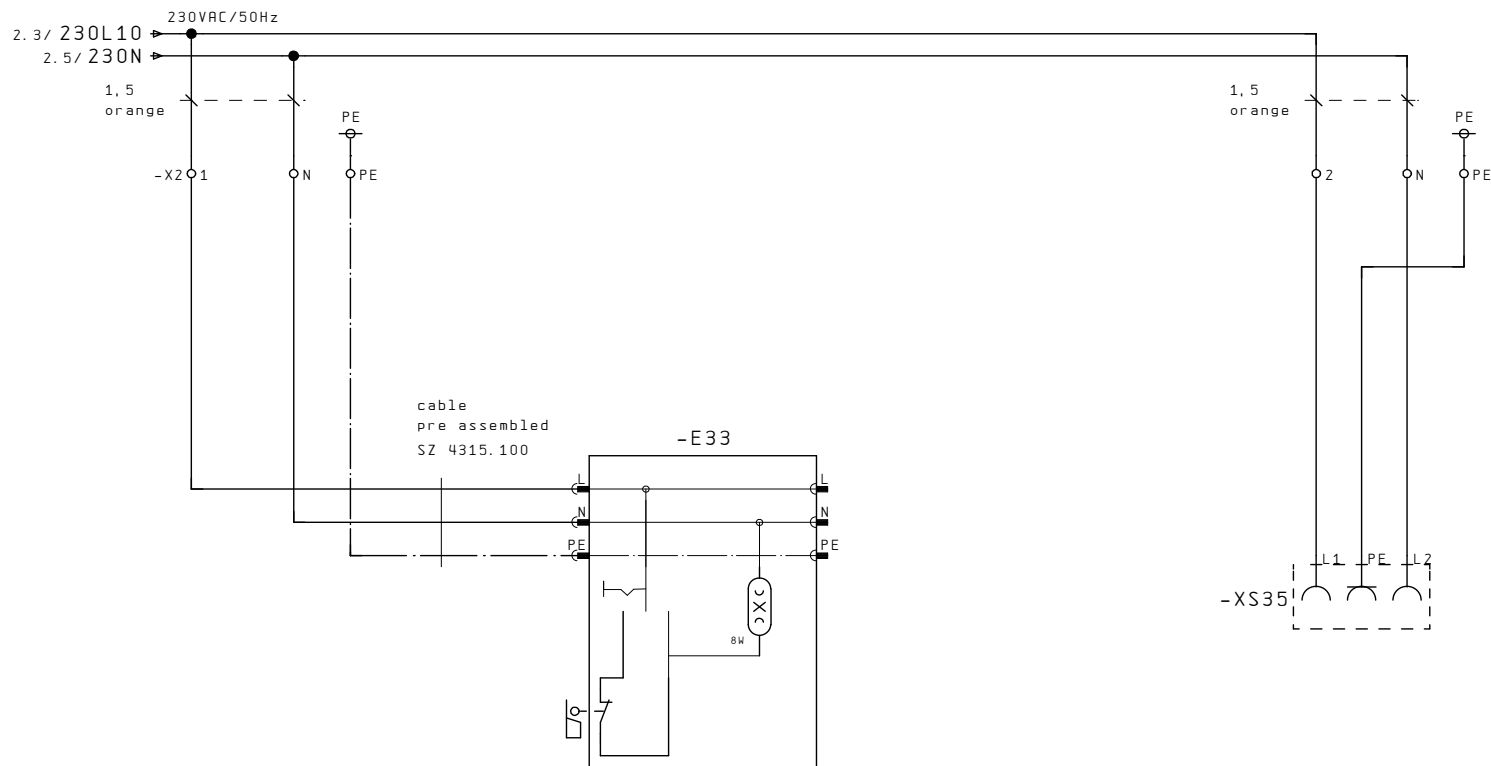
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ICM AIRPORT TECHNICS Unitechnik						Code name:	ICM Opera Oslo	Next page:	3
Power distribution 230V AC alive circuit after disconnecting main switch						© Copyright reserved			



Caution !

Alive circuit
after disconnecting
main switch !

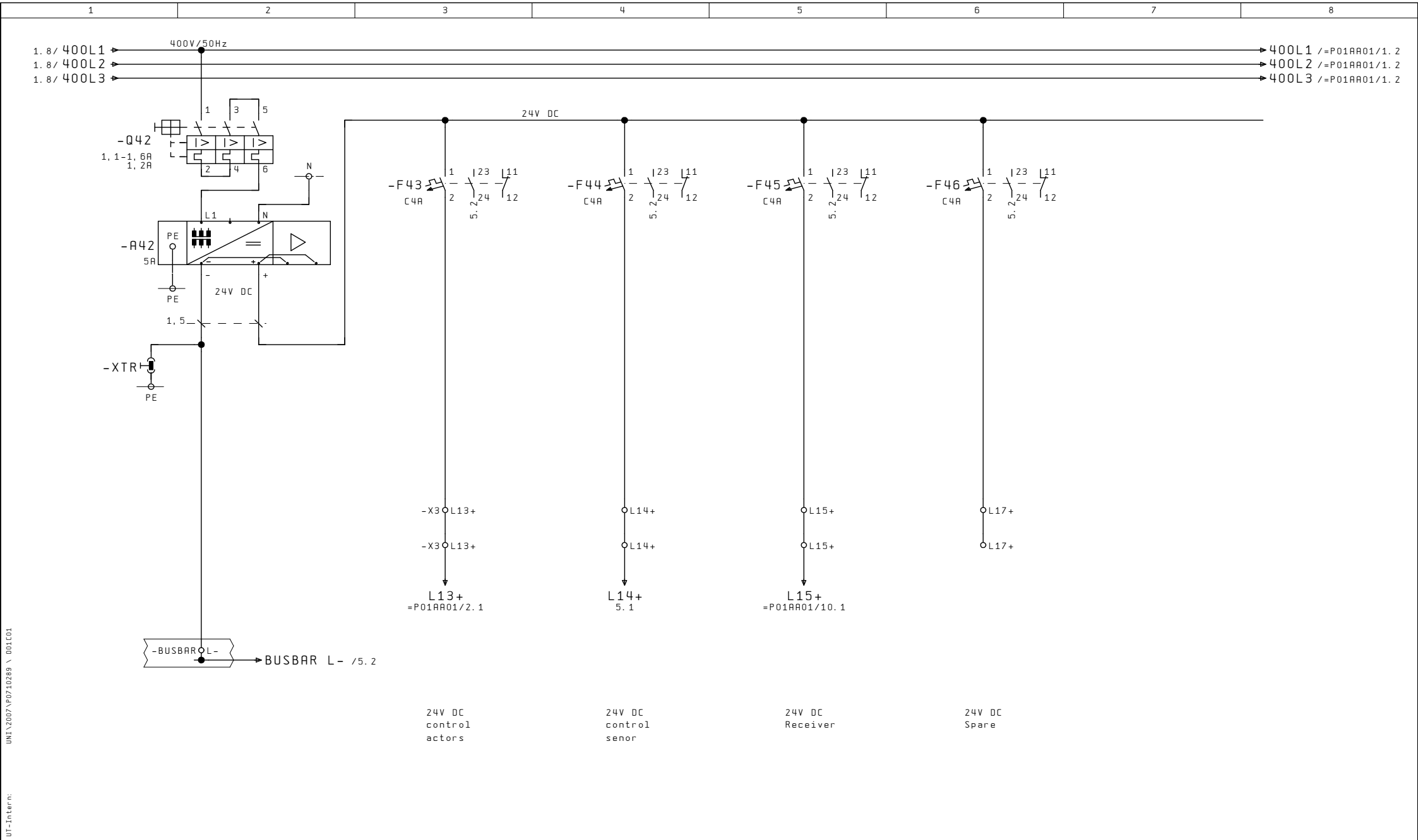
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		28. Okt. 2008	Gerd Feldmann

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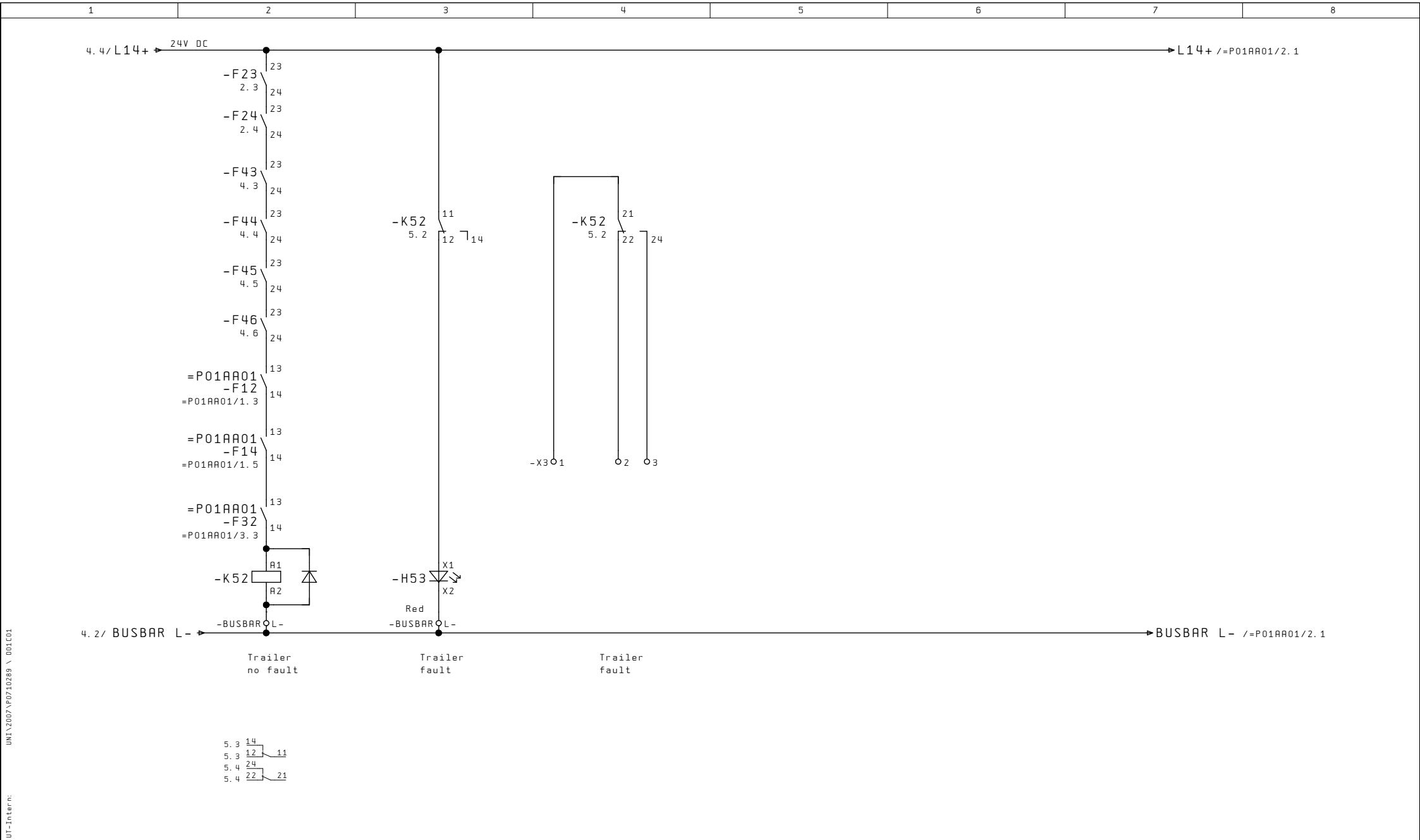
Unitechnik^{AG}

Cabinet lighting/service sockets +001C01	File-No.: 001C01_D	Final customer: DEN NORSKE OPERA		Subcontr. order-No.: -----	= 001C01C
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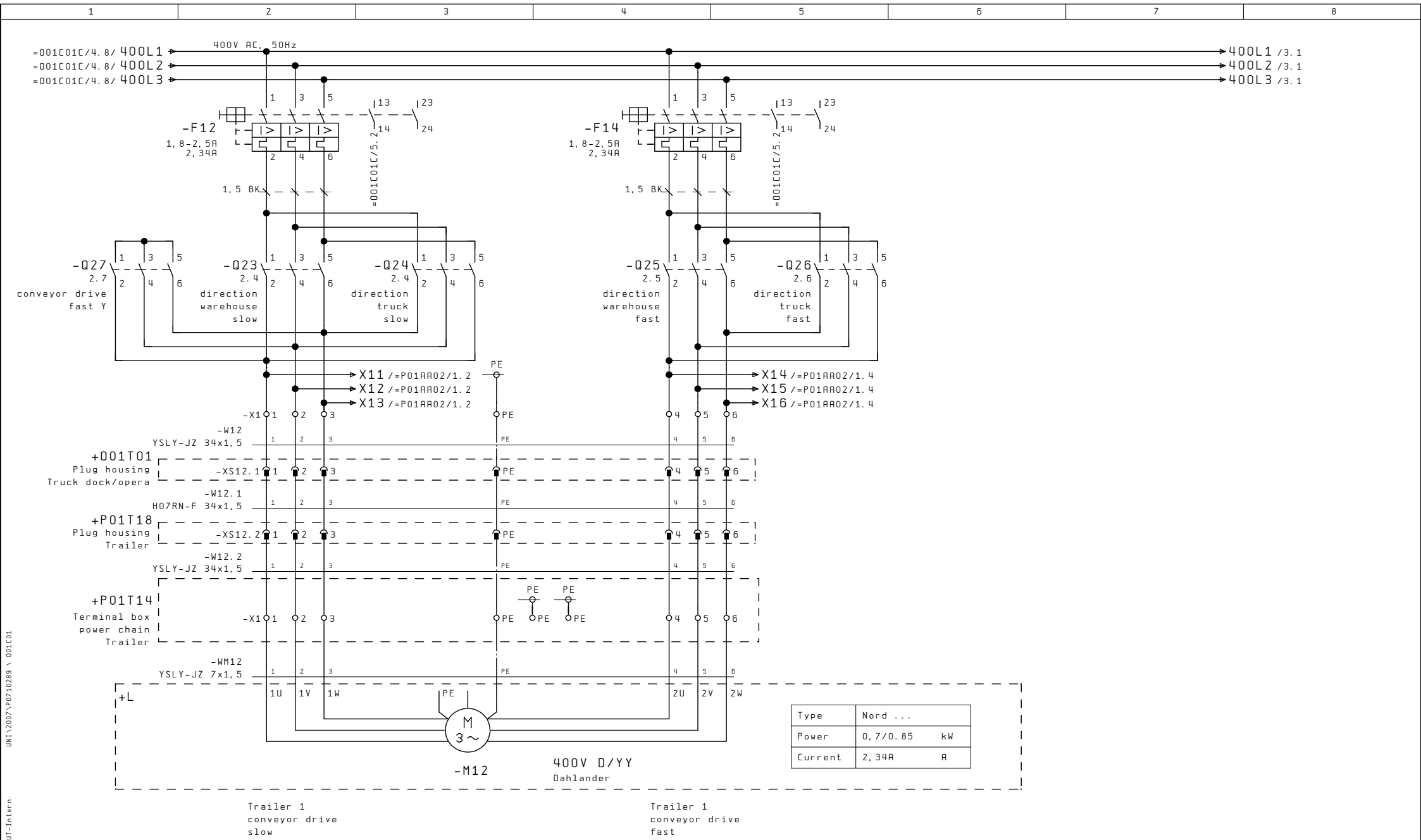
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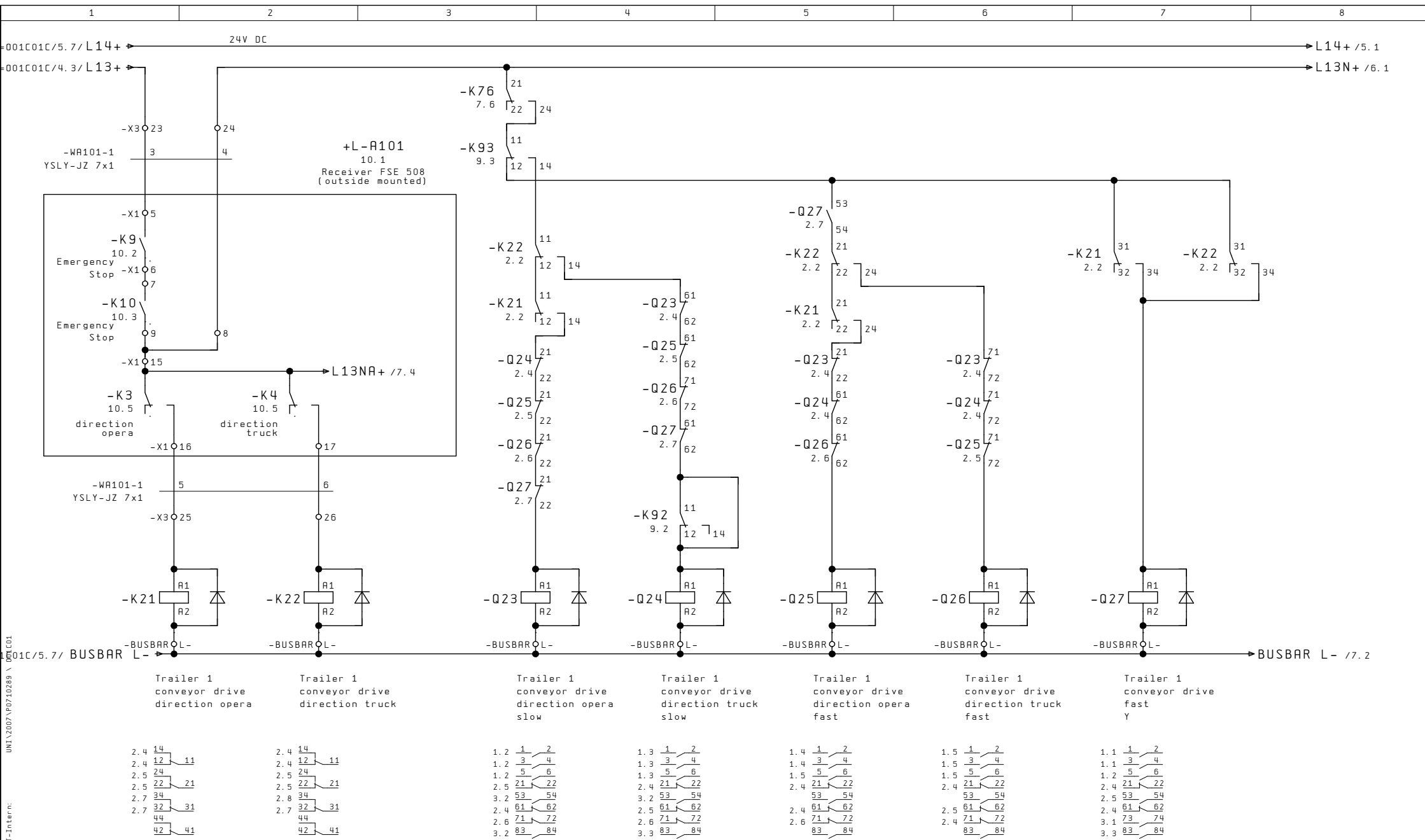
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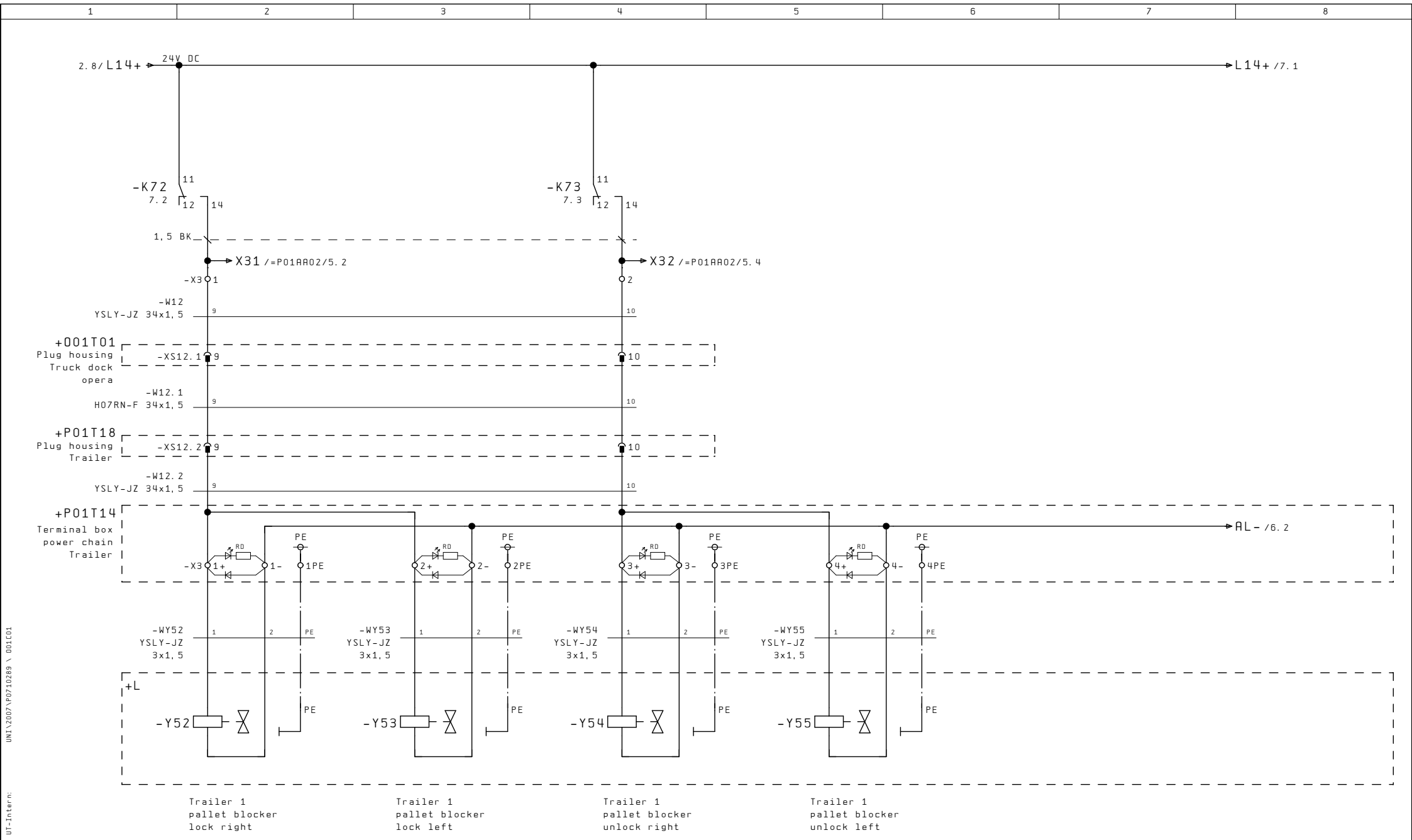
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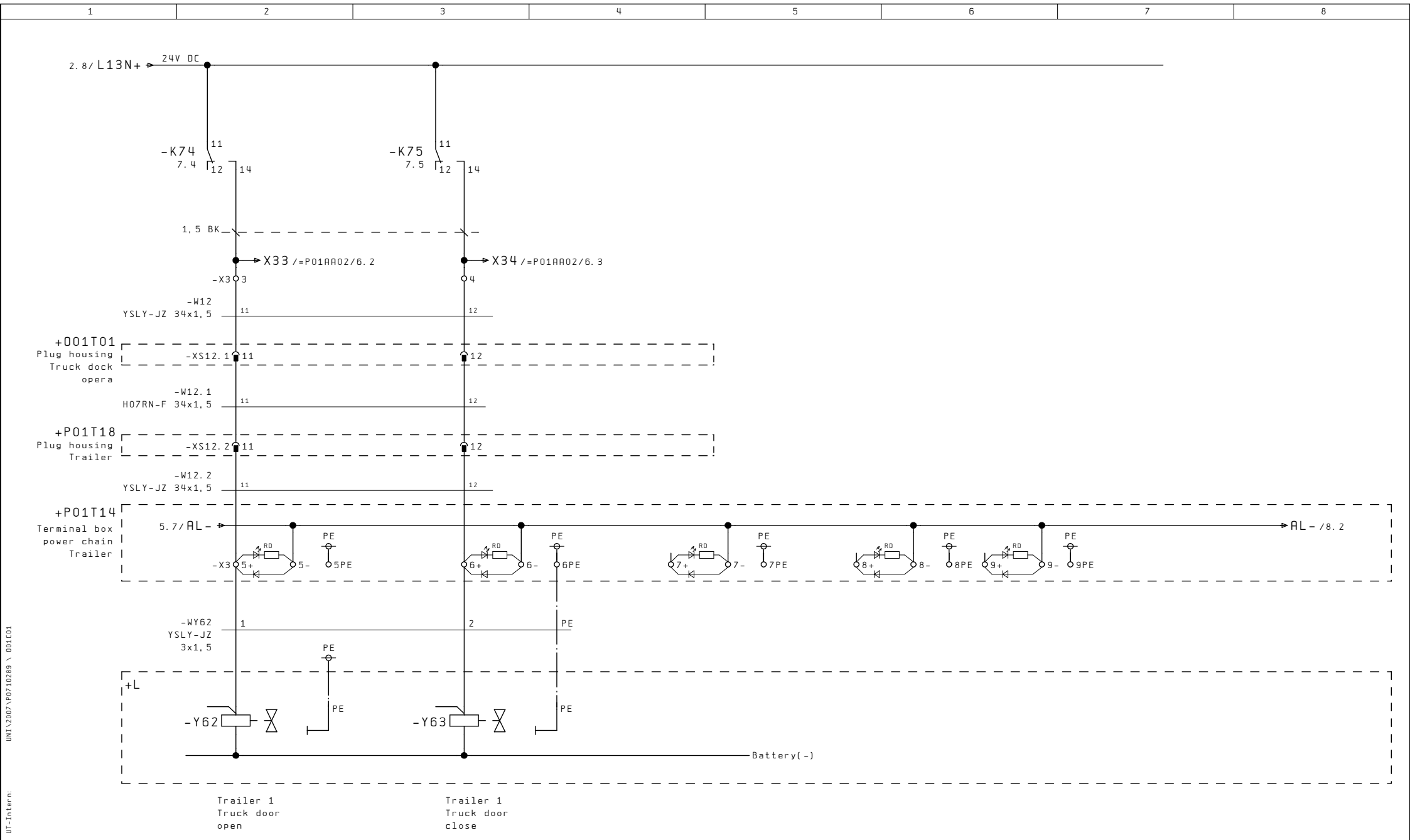
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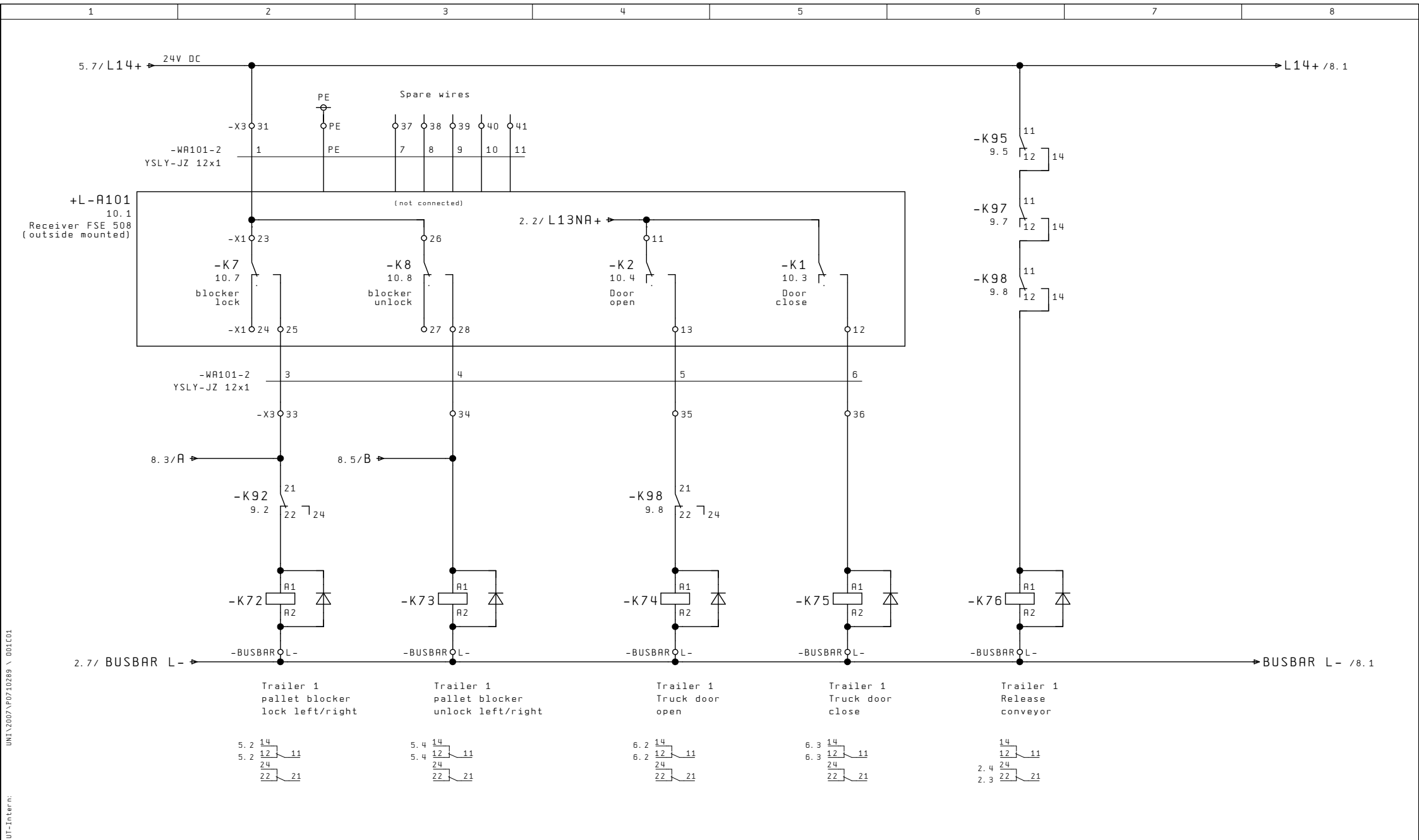
Trailer 1 pallet blocker
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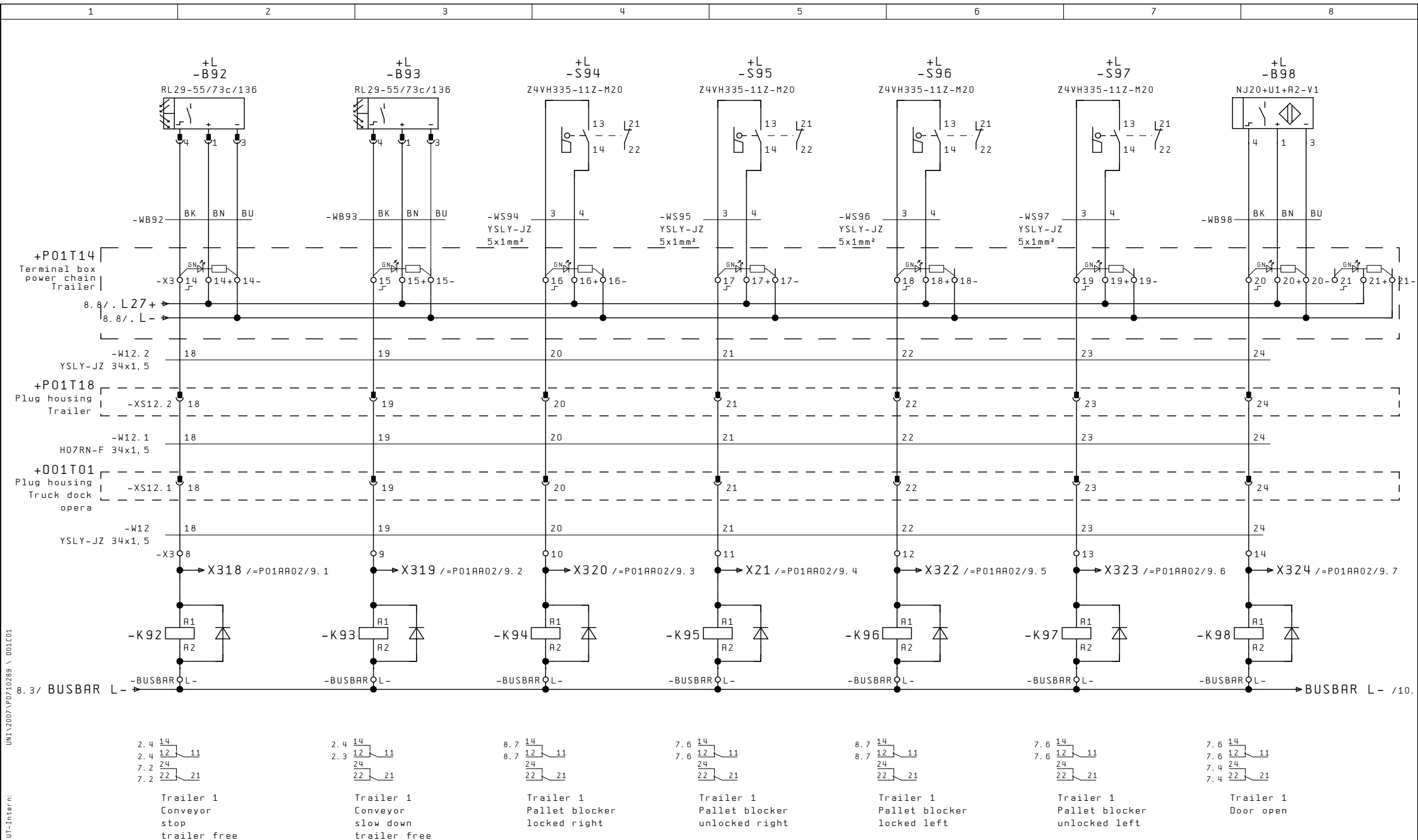


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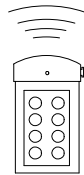
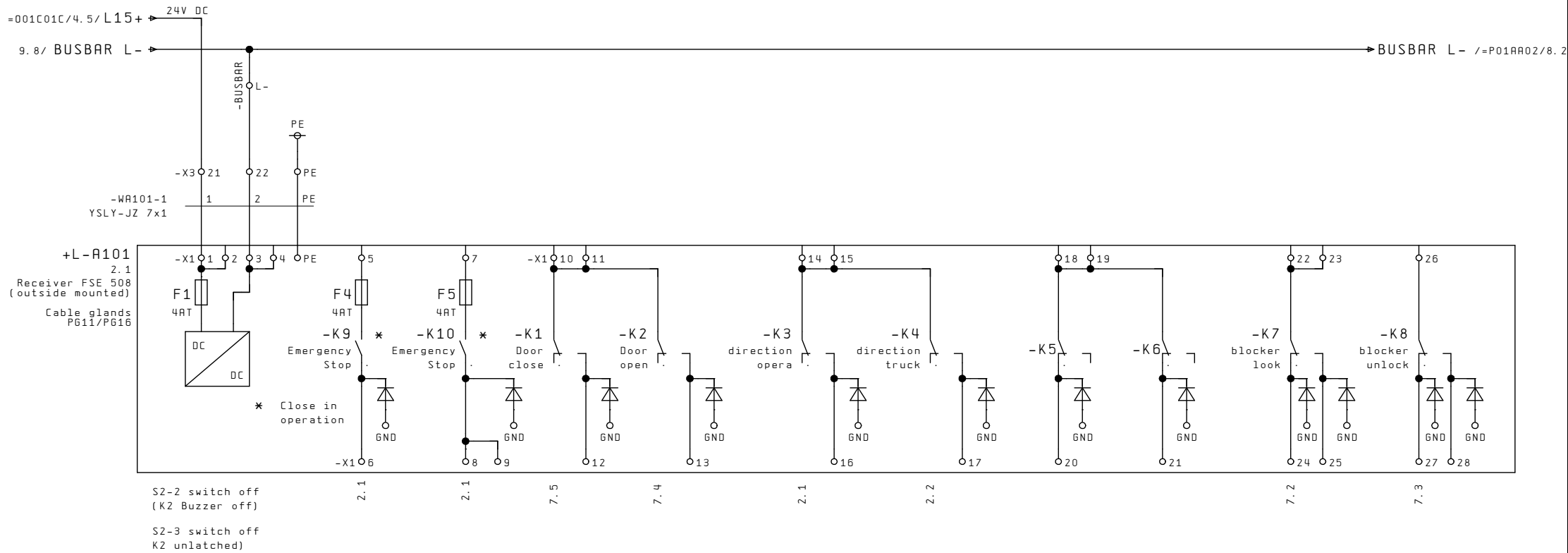
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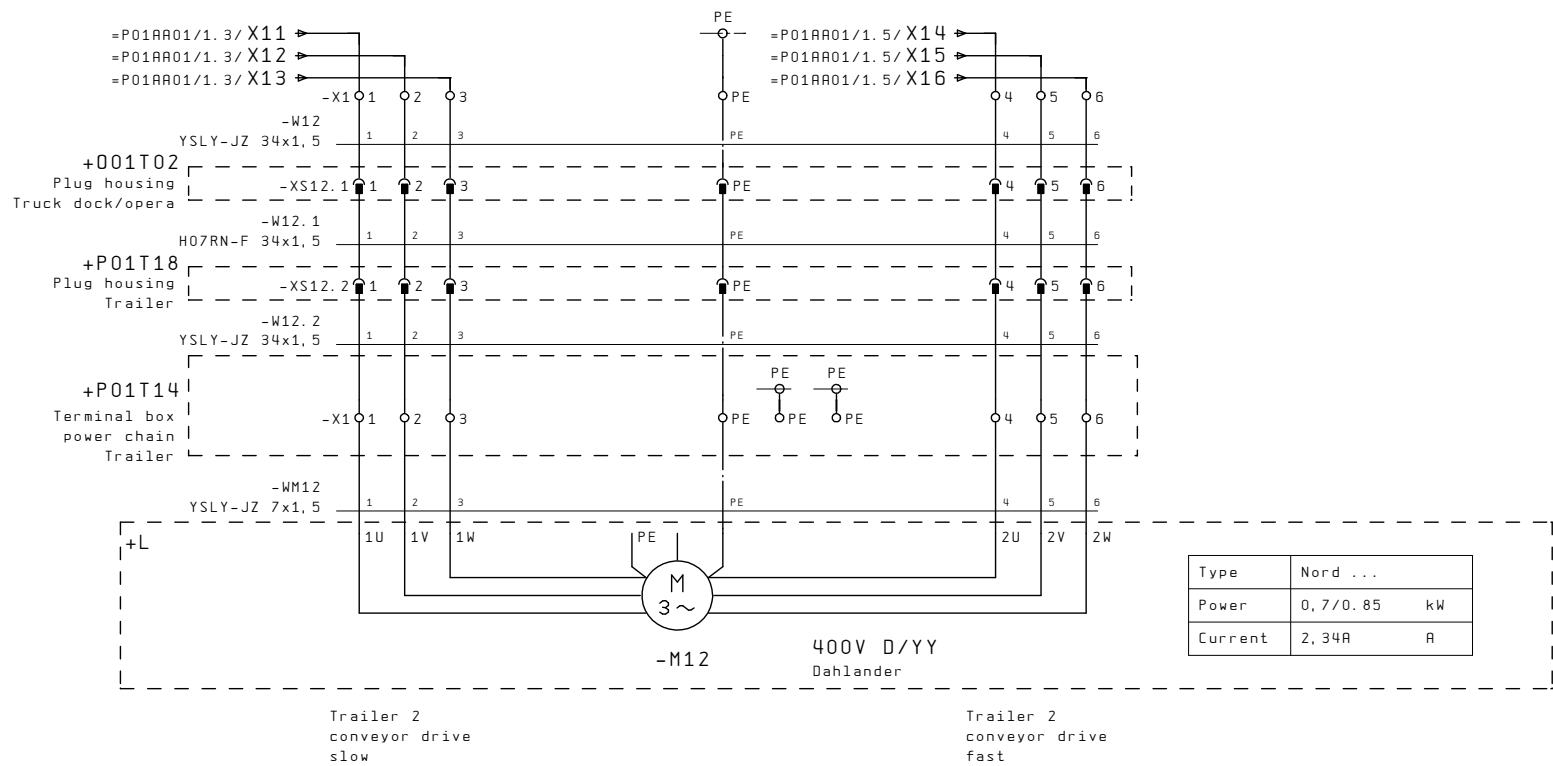


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ICM AIRPORT TECHNICS		Unitechnik ^{AG}		Trailer 1		Sensor switches		Format:		A3		Drawing-No.:		Counter:	
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Trailer 1
Reciever
power supply

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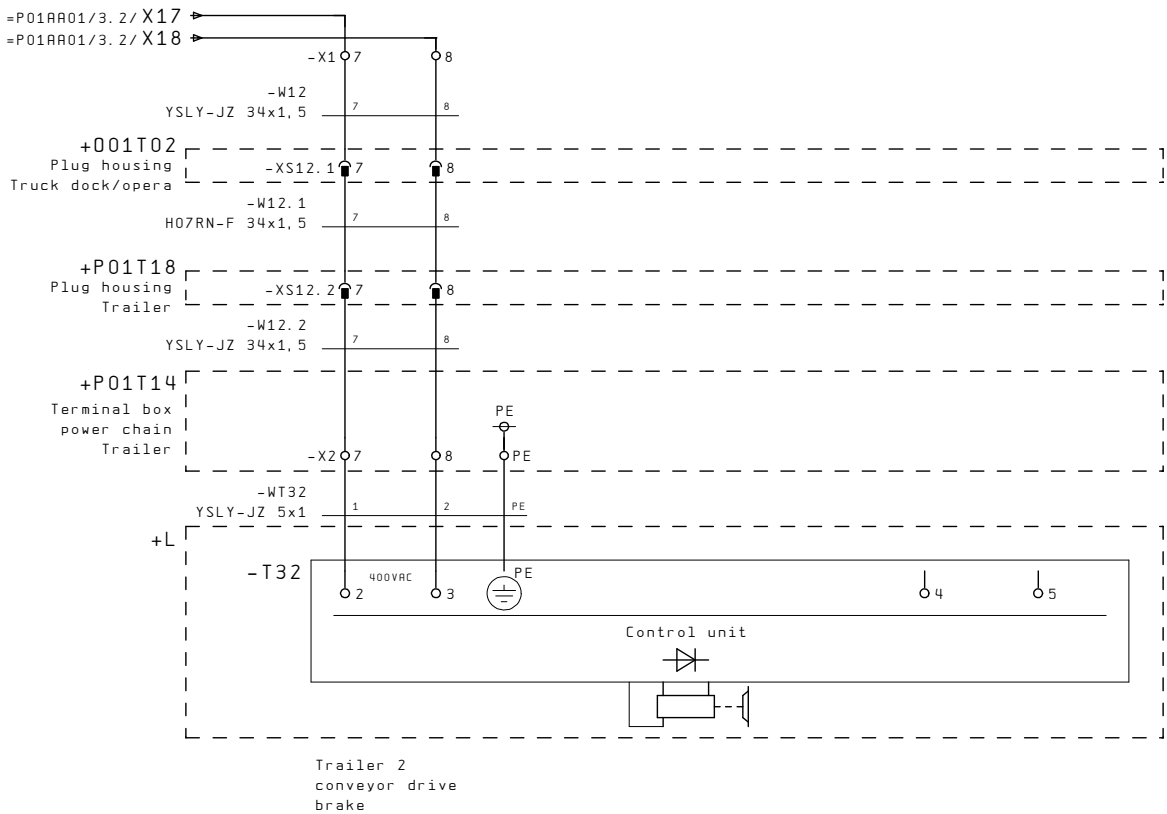
Type	Nord ...		
Power	0,7/0.85	kW	
Current	2,34A	A	

UNI\2007\PD710289 \ 001C01
UT-Intern

Date	Name	Date	Name
07. Mär. 2008	H. Müller	25. Aug. 2008	Gerd Feldmann
	Checked:	28. Okt. 2008	Gerd Feldmann

Trailer 2
conveyor drive

File-No.: 001C01_D	Final customer: DEN NORSKE OPERA		Subcontr. order-No.: -----	= P01AA02
Formate: A3	Drawing-No.: A2007.10289-10		Project-folder.: P2007.10289	+ 001C01
Rev.-No.: A	Counter: 029		Page:	1
Code name: ICM Opera Oslo	Next page:			3



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UT-Intern

	Date	Name		Date	Name
Drawn:	07. Mär. 2008	H. Müller	Proc.:	25. Aug. 2008	Gerd Feldmann
			Checked:	28. Okt. 2008	Gerd Feldmann

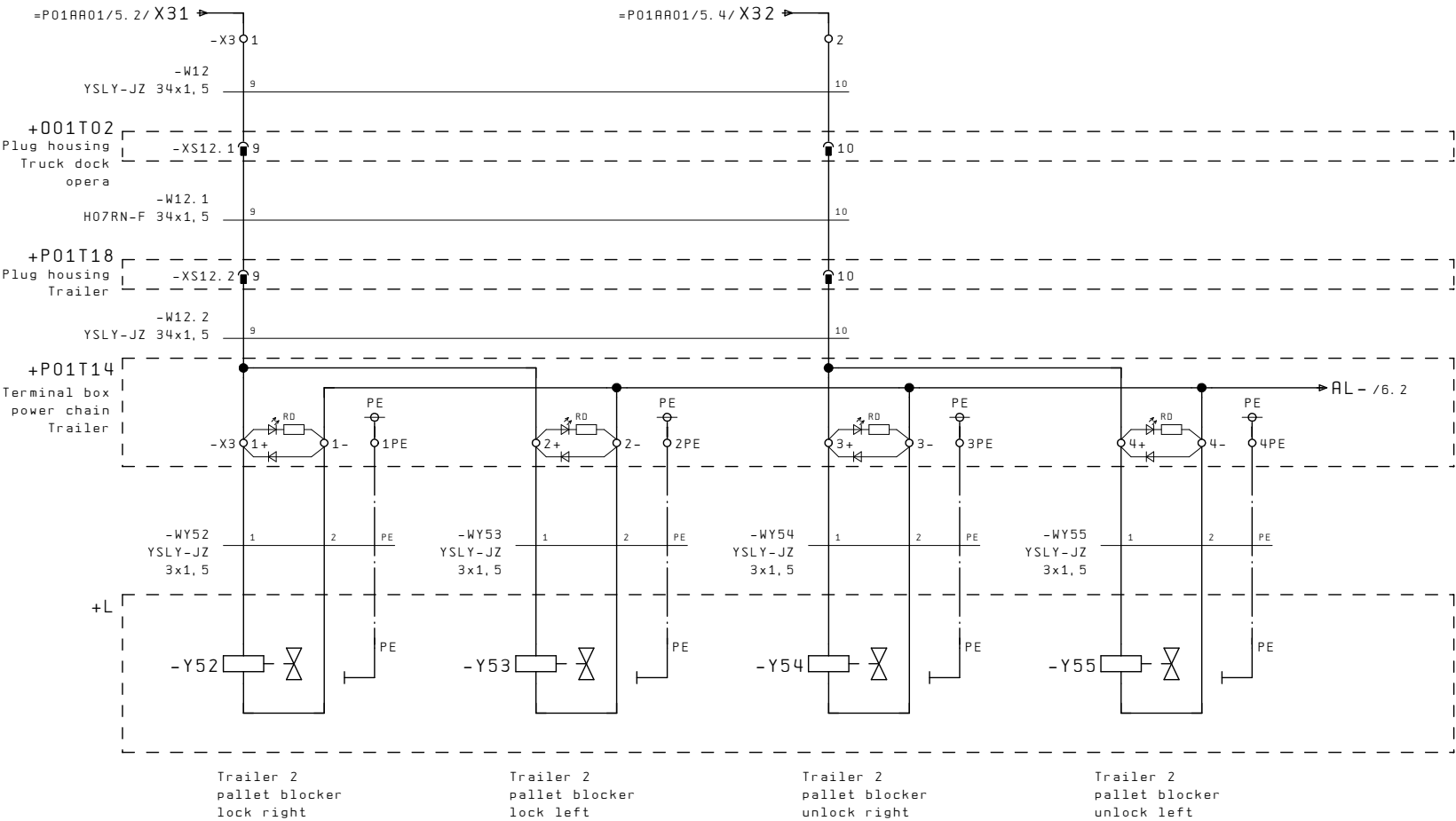
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Trailer 2 conveyor drive brake	
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File-No.: 001C01_D	Final customer: DEN NORSKE OPERA		Subcontr. order-No.: -----	= P01AA02
Formate: A3			Project-folder.: P2007.10289	+ 001C01
Rev.-No.: A	Drawing-No.: A2007.10289-10	Counter: 030	Page: 3	
Code name: ICM Opera Oslo			Next page: 5	

1	2	3	4	5	6	7	8
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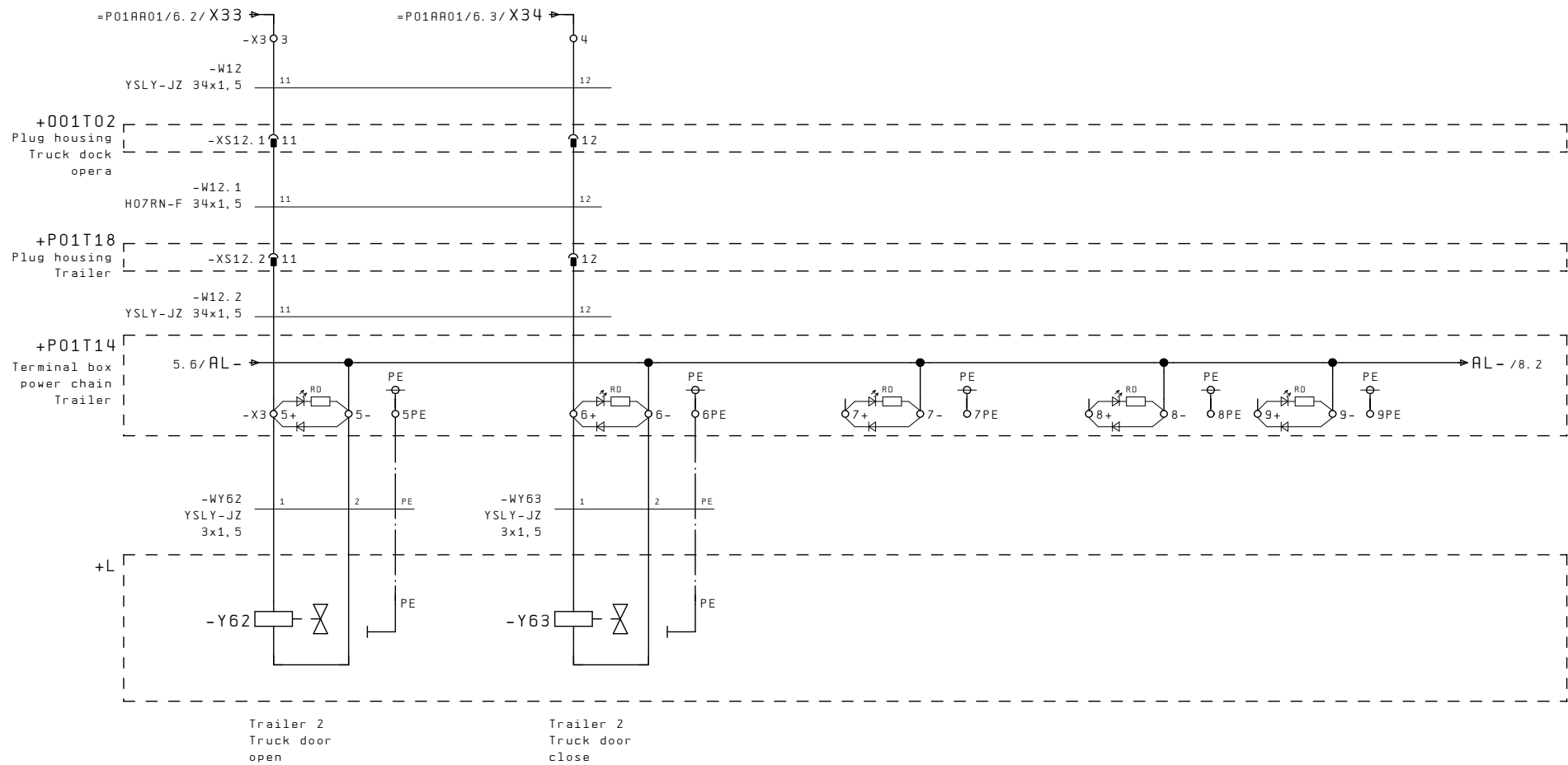


UNI\2007\PD10289 \ 001C01
UT-Intern

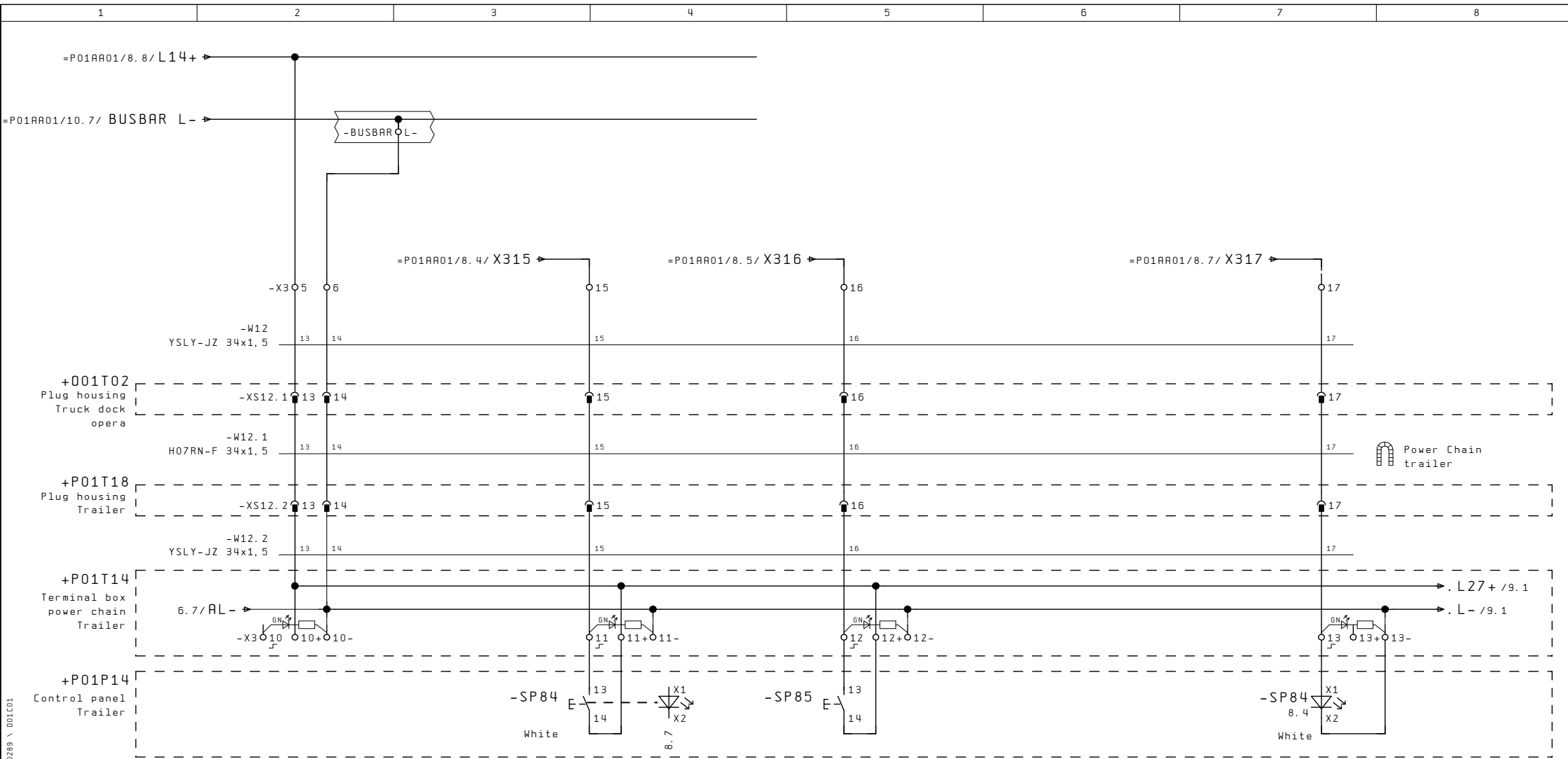
	Date	Name		Date	Name
Drawn:	07. Mär. 2008	H. Müller	Proc.:	25. Aug. 2008	Gerd Feldmann
			Checked:	28. Okt. 2008	Gerd Feldmann
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Trailer 2 pallet blocker	
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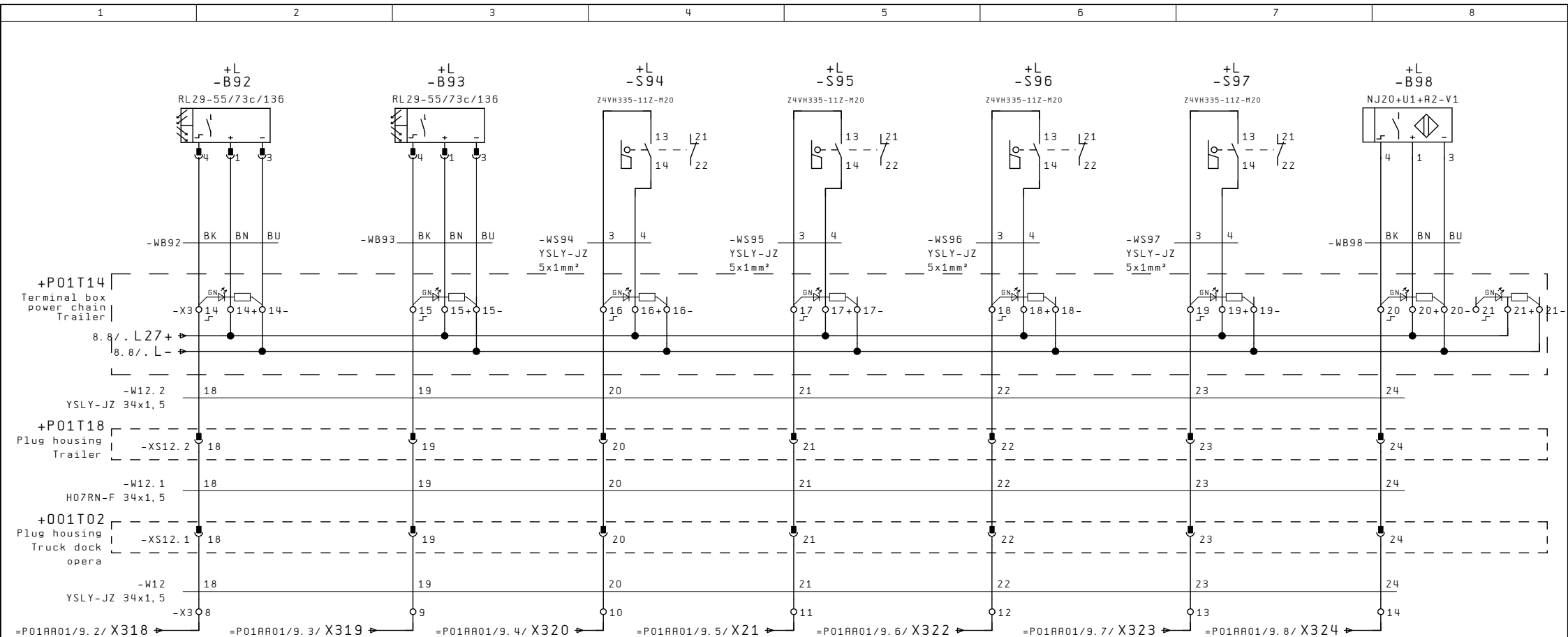
File-No. : 001C01_D	Final customer: DEN NORSKE OPERA		Subcontr. order-No. : -----	= P01AA02
Format: A3			Project-folder. : P2007.10289	+ 001C01
Rev. -No. : A	Drawing-No. : A2007.10289-10	Counter: 031	Page: 5	
Code name: ICM Opera Oslo			Next page:	6



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Trailer 2
Conveyor
stop
trailer free

Trailer 2
Conveyor
slow down
trailer free

Trailer 2
Pallet blocker
locked right

Trailer 2
Pallet blocker
unlocked right

Trailer 2
Pallet blocker
locked left

Trailer 2
Pallet blocker
unlocked left

Trailer 2
Door open

Date	07. Mär. 2008	Name	H. Müller	Proc.:	25. Aug. 2008	Name	Gerd Feldmann
Checked:	28. Okt. 2008						Gerd Feldmann

Trailer 2
Sensor switches

File-No.:	001C01_D	Final customer:	DEN NORSKE OPERA	Subcontr. order-No.:	-----	= P01AA02
Formate:	A3	Drawing-No.:	A2007. 10289-10	Project-folder.:	P2007. 10289	+ 001C01
Rev.-No.:	A	Counter:	034	Page:		9
Code name:	ICM Opera Oslo	Next page:				=001C01T/1

Terminal strips

Terminal box

panel

=P01AA01+001T01-XS12.1=Plug housing
Truck dock 1/opera

=P01AA02+001T02-XS12.1=Plug housing
Truck dock 2/opera

=001C01C+001C01-X1=panel
power supply 400V AC

=001C01C+001C01-X2=panel
power supply 230V AC

=001C01C+001C01-X3=panel
control 24V DC

=P01AA01+001C01-X1=panel
power supply 400V AC

=P01AA01+001C01-X3=panel
control 24V DC

=P01AA02+001C01-X1=panel
power supply 400V AC

=P01AA02+001C01-X3=panel
control 24V DC

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JJ-Intern: IINI\2007\PO710289 \ 001C01

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UJ-Intern: IINI\2007\PO710289 \ 001f01

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1		2		3		4		5		6		7		8					
				Cable name										Cable name					
																Terminal strip / connector		=P01AA01+001C01-X3	
Description				Cable type										Cable type	Page / path				
Trailer 1 pallet blocker lock right															=P01AA01+001C01/5.2				
Trailer 1 pallet blocker unlock right															=P01AA01+001C01/5.4				
Trailer 1 Truck door open															=P01AA01+001C01/6.2				
Trailer 1 Truck door close															=P01AA01+001C01/6.3				
															=P01AA01+001C01/8.2				
															=P01AA01+001C01/8.2				
Trailer 1 pallet blocker locked left/right															=P01AA01+001C01/8.7				
Trailer 1 Conveyor stop trailer free															=P01AA01+001C01/9.2				
Trailer 1 Conveyor slow down trailer free															=P01AA01+001C01/9.3				
Trailer 1 Pallet blocker locked right															=P01AA01+001C01/9.4				
Trailer 1 Pallet blocker unlocked right															=P01AA01+001C01/9.5				
Trailer 1 Pallet blocker locked left															=P01AA01+001C01/9.6				
Trailer 1 Pallet blocker unlocked left															=P01AA01+001C01/9.7				
Trailer 1 Door open															=P01AA01+001C01/9.8				
Trailer 1 pallet blocker lock left/right															=P01AA01+001C01/8.4				
Trailer 1 pallet blocker unlock left/right															=P01AA01+001C01/8.5				
Trailer 1 Reciever power supply															=P01AA01+001C01/10.2				
=															=P01AA01+001C01/10.2				
															=P01AA01+001C01/2.1				
Trailer 1 conveyor drive direction opera															=P01AA01+001C01/2.2				
															=P01AA01+001C01/2.2				
Trailer 1 conveyor drive direction truck															=P01AA01+001C01/2.2				
Trailer 1 Reciever power supply															=P01AA01+001C01/10.2				
=															=P01AA01+001C01/7.2				
Trailer 1 pallet blocker lock left/right															=P01AA01+001C01/7.2				
Trailer 1 pallet blocker unlock left/right															=P01AA01+001C01/7.3				
Trailer 1 Truck door open															=P01AA01+001C01/7.4				
Trailer 1 Truck door close															=P01AA01+001C01/7.5				
Trailer 1 pallet blocker lock left/right															=P01AA01+001C01/7.3				
=															=P01AA01+001C01/7.3				
Trailer 1 pallet blocker unlock left/right															=P01AA01+001C01/7.3				
=															=P01AA01+001C01/7.3				
=															=P01AA01+001C01/7.3				
Trailer 1 pallet blocker lock left/right															=P01AA01+001C01/7.2				
	Date	Name		Date	Name	=P01AA01+001C01-X3 panel control 24V DC						File-No.: 001C01_D Formate: A3 Rev. -No.: A Code name:		Final customer: DEN NORSKE OPERA Drawing-No.: A2007. 10289 -10 Counter: 041		Subcontr. order-No.: ----- Project-folder.: P2007. 10289		= 001C01T +	
ICM AIRPORT TECHNICS				Unitechnik				© Copyright reserved						ICM Opera Oslo		Page: Next page:		24 25	

UT-Intern: IINI\2007\PO710289 \ 001C01

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=P01AA01+001T01-XS12.1
Plug housing
Truck dock 1/opera

File-No.:	Final customer:	Subcontr. order-No.:	
001C01_D	DEN NORSKE OPERA	-----	= 001C01T
Format:		Project-folder.:	
A3		P2007. 10289	+
Rev. -No.:	Drawing-No.:	Counter:	
A	A2007. 10289-10	042	Page: 25
Code name:	ICM Opera Oslo		Next page: 26

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1		2		3			4			5		6		7			8		
				Cable name							Terminal strip / connector							Cable name	
											=P01AA02+001C01-X3								
Description				Cable type							Destination	Connection	Terminal	Bridges	Name PLC Des.	Destination	Connection	Page / path	
Trailer 2 pallet blocker lock right											9	+001T02-XS12.1	9	1			=P01AA01-X3	1	=P01AA02+001C01/5. 2
Trailer 2 pallet blocker unlock right											10	+001T02-XS12.1	10	2			=P01AA01-X3	2	=P01AA02+001C01/5. 4
Trailer 2 Truck door open											11	+001T02-XS12.1	11	3			=P01AA01-X3	3	=P01AA02+001C01/6. 2
Trailer 2 Truck door close											12	+001T02-XS12.1	12	4			=P01AA01-X3	4	=P01AA02+001C01/6. 3
											13	+001T02-XS12.1	13	5			=P01AA01-K94	11	=P01AA02+001C01/8. 2
											14	+001T02-XS12.1	14	6			-BUSBAR	L-	=P01AA02+001C01/8. 2
Trailer 2 Conveyor stop trailer free											18	+001T02-XS12.1	18	8			=P01AA01-K92	A1	=P01AA02+001C01/9. 2
Trailer 2 Conveyor slow down trailer free											19	+001T02-XS12.1	19	9			=P01AA01-K93	A1	=P01AA02+001C01/9. 3
Trailer 2 Pallet blocker locked right											20	+001T02-XS12.1	20	10			=P01AA01-K94	A1	=P01AA02+001C01/9. 4
Trailer 2 Pallet blocker unlocked right											21	+001T02-XS12.1	21	11			=P01AA01-K95	A1	=P01AA02+001C01/9. 5
Trailer 2 Pallet blocker locked left											22	+001T02-XS12.1	22	12			=P01AA01-K96	A1	=P01AA02+001C01/9. 6
Trailer 2 Pallet blocker unlocked left											23	+001T02-XS12.1	23	13			=P01AA01-K97	A1	=P01AA02+001C01/9. 7
Trailer 2 Door open											24	+001T02-XS12.1	24	14			=P01AA01-K98	A1	=P01AA02+001C01/9. 8
Trailer 2 pallet blocker lock left/right											15	+001T02-XS12.1	15	15			=P01AA01-X3	15	=P01AA02+001C01/8. 4
Trailer 2 pallet blocker unlock left/right											16	+001T02-XS12.1	16	16			=P01AA01-X3	16	=P01AA02+001C01/8. 5
Trailer 2 pallet blocker locked left/right											17	+001T02-XS12.1	17	17			=P01AA01-X3	7	=P01AA02+001C01/8. 7
																			</

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ICM AIRPORT TECHNICS

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File-No.: 001C01-D	Final customer: DEN NORSKE OPERA	Subcontr. order-No.: -----	= 001C01T
Format: A3		Project-folder.: P2007. 10289	+
Rev. -No.: A	Drawing-No.: A2007. 10289-10	Counter: 045	Page: 28
Code name: ICM Opera Oslo			Next page: 30

1	2	3	4	5	6	7	8
Cable overview							
Cable designation	From	To	Cable type	Cond.	Used	Cr. sect.	Remark
=001C01C-W11	=001C01C+001C01-X1	=001C01C+L-X	YSLY-JZ	5	5	6	
=P01AA01-W12	=P01AA01+001C01-X1	=P01AA01+001T01-XS12. 1	YSLY-JZ	34	25	1. 5	
=P01AA01-W12. 1	=P01AA01+001T01-XS12. 1	=P01AA01+P01T18-XS12. 2	H07RN-F	34	25	1. 5	
=P01AA01-W12. 2	=P01AA01+P01T14-X1	=P01AA01+P01T18-XS12. 2	YSLY-JZ	34	25	1. 5	
=P01AA01-WA101-1	=P01AA01+001C01-X3	=P01AA01+L-A101-X1	YSLY-JZ	7	7	1	
=P01AA01-WA101-2	=P01AA01+001C01-X3	=P01AA01+L-A101-X1	YSLY-JZ	12	11	1	
=P01AA01-WB92	=P01AA01+P01T14-X3	=P01AA01+L-B92	YSLY-0	3	3	0. 5	
=P01AA01-WB93	=P01AA01+P01T14-X3	=P01AA01+L-B93	YSLY-0	3	3	0. 5	
=P01AA01-WB98	=P01AA01+P01T14-X3	=P01AA01+L-B98	YSLY-0	3	3	0. 5	
=P01AA01-WM12	=P01AA01+P01T14-X1	=P01AA01+L-M12	YSLY-JZ	7	7	1. 5	
=P01AA01-WS94	=P01AA01+P01T14-X3	=P01AA01+L-S94	YSLY-JZ	5	2	1	
=P01AA01-WS95	=P01AA01+P01T14-X3	=P01AA01+L-S95	YSLY-JZ	5	2	1	
=P01AA01-WS96	=P01AA01+P01T14-X3	=P01AA01+L-S96	YSLY-JZ	5	2	1	
=P01AA01-WS97	=P01AA01+P01T14-X3	=P01AA01+L-S97	YSLY-JZ	5	2	1	
=P01AA01-WT32	=P01AA01+P01T14-X2	=P01AA01+L-T32	YSLY-JZ	5	3	1	
=P01AA01-WY52	=P01AA01+P01T14-X3	=P01AA01+L-Y52	YSLY-JZ	3	3	1. 5	
=P01AA01-WY53	=P01AA01+P01T14-X3	=P01AA01+L-Y53	YSLY-JZ	3	3	1. 5	
=P01AA01-WY54	=P01AA01+P01T14-X3	=P01AA01+L-Y54	YSLY-JZ	3	3	1. 5	
=P01AA01-WY55	=P01AA01+P01T14-X3	=P01AA01+L-Y55	YSLY-JZ	3	3	1. 5	
=P01AA01-WY62	=P01AA01+P01T14-X3	=P01AA01+L-Y62	YSLY-JZ	3	3	1. 5	
=P01AA02-W12	=P01AA02+001C01-X1	=P01AA02+001T02-XS12. 1	YSLY-JZ	34	25	1. 5	
=P01AA02-W12. 1	=P01AA02+001T02-XS12. 1	=P01AA02+P01T18-XS12. 2	H07RN-F	34	25	1. 5	
=P01AA02-W12. 2	=P01AA02+P01T14-X1	=P01AA02+P01T18-XS12. 2	YSLY-JZ	34	25	1. 5	
=P01AA02-WB92	=P01AA02+P01T14-X3	=P01AA02+L-B92	YSLY-0	3	3	0. 5	
=P01AA02-WB93	=P01AA02+P01T14-X3	=P01AA02+L-B93	YSLY-0	3	3	0. 5	
=P01AA02-WB98	=P01AA02+P01T14-X3	=P01AA02+L-B98	YSLY-0	3	3	0. 5	
=P01AA02-WM12	=P01AA02+P01T14-X1	=P01AA02+L-M12	YSLY-JZ	7	7	1. 5	
=P01AA02-WS94	=P01AA02+P01T14-X3	=P01AA02+L-S94	YSLY-JZ	5	2	1	
=P01AA02-WS95	=P01AA02+P01T14-X3	=P01AA02+L-S95	YSLY-JZ	5	2	1	

UNI\2007-EPZ10289\ 001C01
 HÜ-Interch

1	2	3	4	5	6	7	8
Cable overview							
Cable designation	From	To	Cable type	Cond.	Used	Cr. sect.	Remark
=P01AA02-WS96	=P01AA02+P01T14-X3	=P01AA02+L-S96	YSLY-JZ	5	2	1	
=P01AA02-WS97	=P01AA02+P01T14-X3	=P01AA02+L-S97	YSLY-JZ	5	2	1	
=P01AA02-WT32	=P01AA02+P01T14-X2	=P01AA02+L-T32	YSLY-JZ	5	3	1	
=P01AA02-WY52	=P01AA02+P01T14-X3	=P01AA02+L-Y52	YSLY-JZ	3	3	1.5	
=P01AA02-WY53	=P01AA02+P01T14-X3	=P01AA02+L-Y53	YSLY-JZ	3	3	1.5	
=P01AA02-WY54	=P01AA02+P01T14-X3	=P01AA02+L-Y54	YSLY-JZ	3	3	1.5	
=P01AA02-WY55	=P01AA02+P01T14-X3	=P01AA02+L-Y55	YSLY-JZ	3	3	1.5	
=P01AA02-WY62	=P01AA02+P01T14-X3	=P01AA02+L-Y62	YSLY-JZ	3	3	1.5	
=P01AA02-WY63	=P01AA02+P01T14-X3	=P01AA02+L-Y63	YSLY-JZ	3	3	1.5	

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 ICM-Intech