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COMPex Pro 100

General

Modification	Date	Name	Date	24.03.2015
AQ	14512-01	24.03.2015	Dirk Marschke	Editor
AP	11320-08	31.03.2014	Dirk Marschke	Plot
AO	11320-05	23.01.2014	Dirk Marschke	



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Title page

Project: COMPex Pro 100		Sub Schematics
Sub Schematics: General		=GENERAL
Part Number	Document Number	sheet 1
D125314	D125314	of 31 sh.

=GENERAL

Total Schematic Diagram COMpex Pro 100

D125314 AQ

=LHS0

LASERHOUSING ELT.
COMPEX BASIC DEVICE

1104568 AN

Label Print Data Files for Marking
COMPex Pro 100 LHS0
D136218 AE

=POW0

230V-Distribution elt
POW0

1104569 AH

Label Print Data Files for Marking
COMPex Pro POW0
D136219 AC

$$= 24V_0$$

24V-Distribution elt
24V0

1104570 AE

Label Print Data Files for Marking
COMPex Pro 24V0
D136220 AC

=LCB0

LCB Box elt
LCB0

1104571 AI

Label Print Data Files for Marking
COMPex Pro LCB0
D136211 AC

=KIT0

Retrofit kit for 230V KIT0

1118504 AF

Label Print Data Files for Marking
COMPex Pro KIT0
D136214 AB

=KIT1

Retrofit kit for 120V
KIT1

1118503 AF

Label Print Data Files for Marking
COMPex Pro KIT1
D136213 AB

=LHS4

Cable water leak sensor W24
LHS4

1271405 AA

Label Print Data Files for Marking
Cable W24 LHS4
D148871 AA

=LHS5

Distribution Housing complete
LHS5

1235311 AC

Label Print Data Files for Marking
Distribution Housing LHS5
D146025 AA

Modification		Date	Name	Date	08.04.2015
AQ	14512-01	24.03.2015	Dirk Marschke	Editor	Dirk Marschke
AP	11320-08	31.03.2014	Dirk Marschke	Plot	08.04.2015
AO	11320-05	23.01.2014	Dirk Marschke		

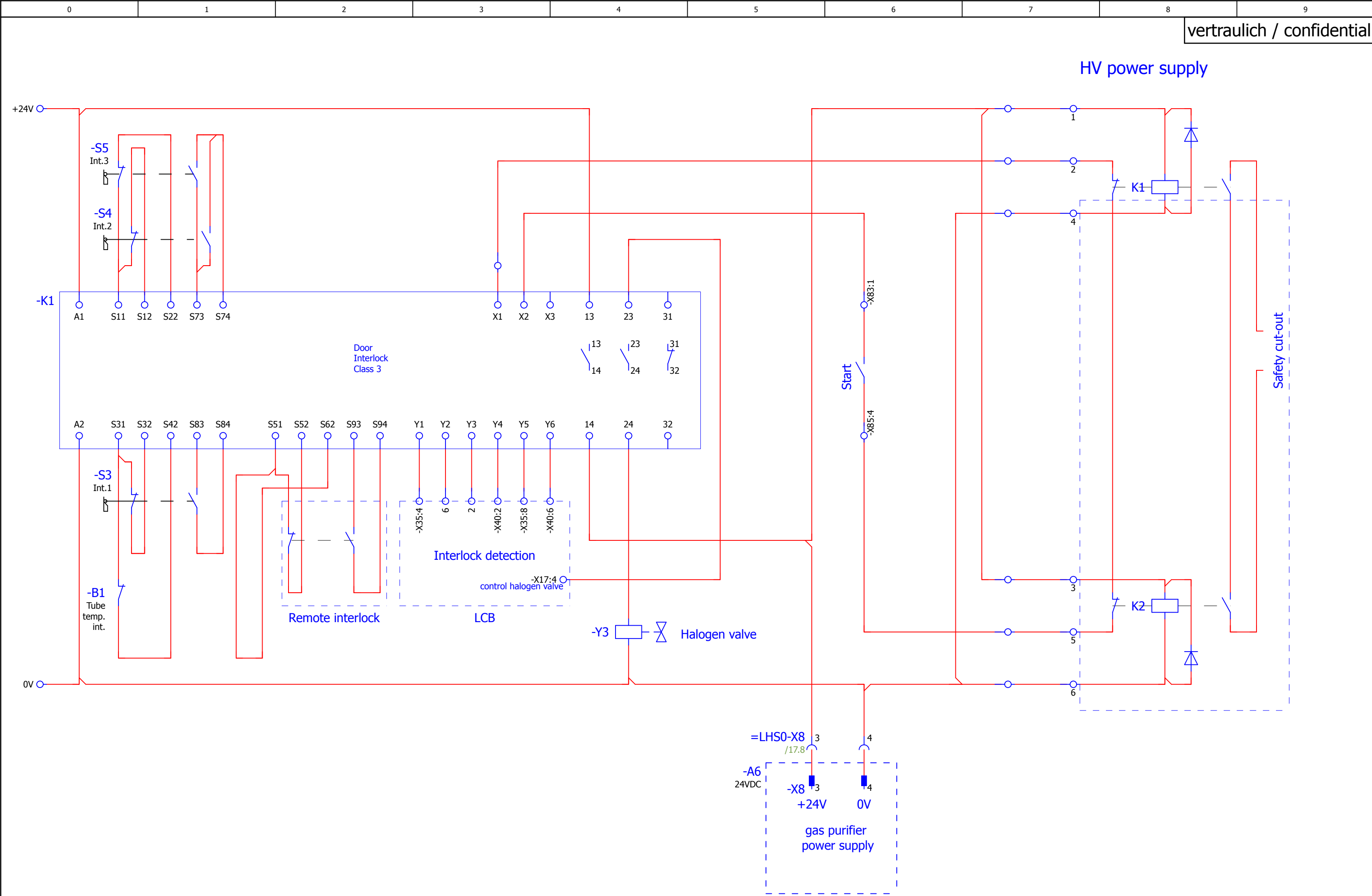


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Schematic Overview

Project: COMPEX Pro 100		Sub Schematics	
Sub Schematics: General		=GENERAL	
Part Number	D125314	Document Number	D125314
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		of	31 sh.

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Overview Diagram Interlock Circuit

Project:	COMPex Pro 100	Sub Schematics:	General	Sub Schematics	=GENERAL
Part Number	D125314	Document Number	D125314	sheet	7
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Mains Voltage

Control voltage

table of fuses

fuse no.	amp rating	electric circuit	Page
F1	T16A / T12A	Main circuit breaker 230V / 120V 104V	=POW0/10.4
F2	T16A / T12A	Main circuit breaker 230V / 120V 104V	=POW0/10.4
F3	T16A / T12A	Main circuit breaker 230V / 120V 104V	=POW0/10.6
F4	T16A / T12A	Main circuit breaker 230V / 120V 104V	=POW0/10.6
F5	T10A	230V consumer load	=POW0/14.0
F6	T12.5A	HV power supply	=POW0/14.7
F7	T1.25A	Power Supply 24V	=POW0/14.0
F8	T5A	Gas Circulation Fan	=POW0/14.4
F9	T1.6A	Fan and Vacuum pump	=POW0/14.2
A15-F10	T3.15A	Thyratron Power Supply	=LHS0/16.2
F11	T0.63A	Spare	=24V0/11.1
F12	T0.8A	LCB 24V	=24V0/11.2
F13	T0.5A	internal interlock relays on LCB, int. and ext. laser radiation lamp	=24V0/11.3
F14	T1A	gas valves and relay vacuumpump	=24V0/11.4
F15	T1.6A	gas purifier power supply interlock	=24V0/11.5
F16	T1A	water valve control	=24V0/11.6
F17	T0.8A	energy monitor, 24V dc OK lamp and interface board	=24V0/12.1
F18	T3.15A	HV power supply interlock, safety relay, gas purifier power supply	=24V0/12.6

Code for designation of colours

vertraulich / confidential

abbreviation	Color		Voltage	Usage
BK	Black		>42V ac or dc	Main circuit
WH	White		Neutral 208V/115V Equipment	Conductor in 400V/230V equipment could be colored with light blue heat shrinking sleeve as possible (viewable), instead of changing conductor.
BU	Blue	light blue	Neutral 400/230V Equipment	Color is only approved for neutral in 400V/230V equipment. Conductor do not be energised with an other electrical potential.
		dark blue	< + 42V dc	Control circuits. Conductor, which are permanently or temporary energised with this voltage and not connected to ground.
WHBU	White with a blue stripe		0V dc	Control circuits. Conductor, which are permanently energised with this voltage and connected to ground.
RD	Red		< 42V ac	Control circuits. Conductor which are permanently or temporary are energised with this Voltage and not connected to ground.
WHRD	White with a red stripe		0V ac (not Neutral)	Control circuits. Conductor which are permanently connected to this voltage and the voltage is grounded.
OG	Orange		Potential free	Interlock circuits which could be energised, if the supplied voltage is disconnected.
GNYE	Green-Yellow		Protective wire	Every segment of 15mm length the surface of 30% to 70% of have to be the one color, the rest have to be the other color. Potective erth contacts do not be used as mechalical fastening.
YE	Yellow		< 42V	only used in multiconductor data cable
GN	Green		< 42V	only used in multiconductor data cable
GY	Gray		Free	Free
BN	Brown		Free	Free
PK	Pink		Free	Free
TQ	Turquoise		Free	Free
VI	Violet		Free	Free

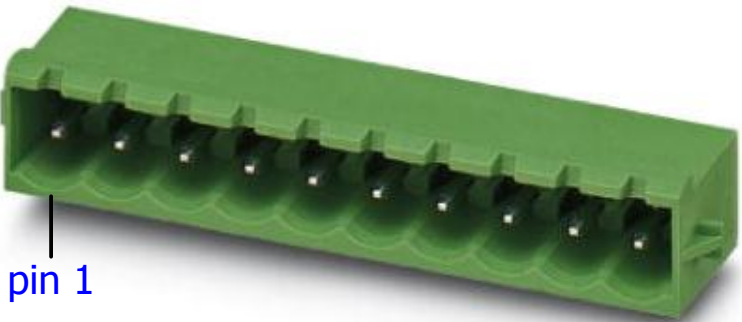
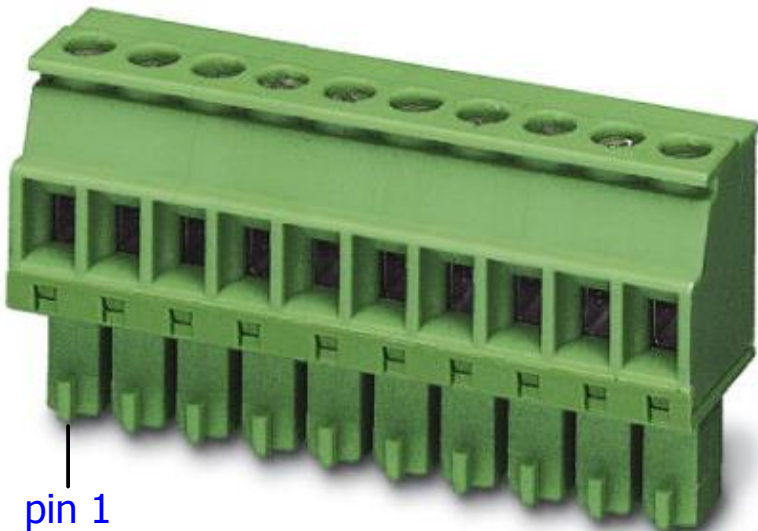
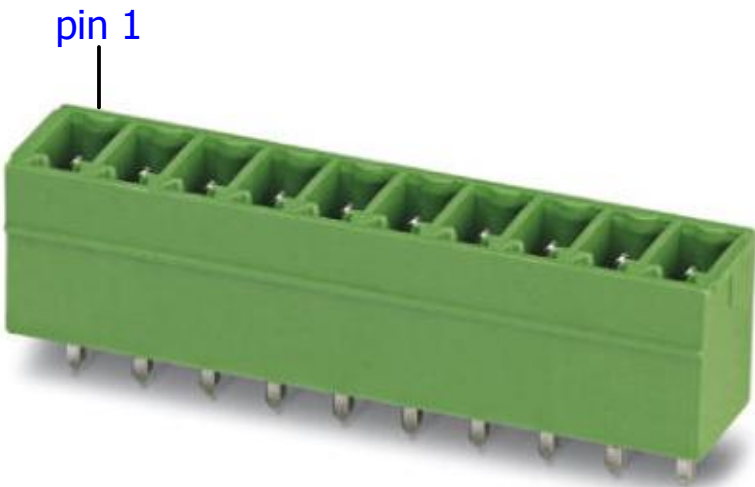
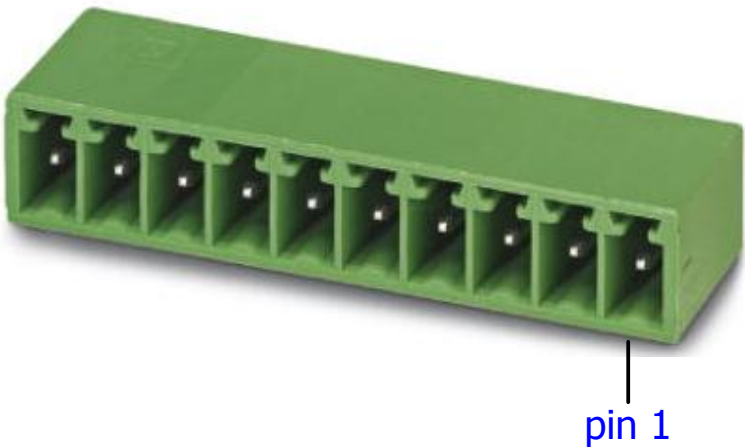
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Orientation of pin 1 at Phoenix plug connectors of the series MINI COMBICON and CLASSIC COMBICON

The definition for pin 1 is valid for all plug connectors of these series, unless otherwise noted in the connection diagram

MINI COMBICON

CLASSIC COMBICON



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Orientation of pin 1 at Phoenix plug
connector

Project:	COMPex Pro 100	Sub Schematics:	General	Sub Schematics	=GENERAL
Part Number	D125314	Document Number	D125314	sheet	11
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Cable overview

Cable designation	from	to	Cable type	Conductors	Length	Function	Remark
=LHS0-W2	=POW0-X14	=24V0-G2	ÖLFLEX 150	3x1 mm²	2050 mm	Power Supply 24V	protect cable end with heat shrinkable sleeve
=LHS0-W3	=POW0-X14	=LHS0-M4	ÖLFLEX 150	3x0.5 mm²	300 mm	Exhaust fan	protect cable end with heat shrinkable sleeve
=LHS0-W4	=POW0-X14	=LHS0-X22	ÖLFLEX 150	3x0.5 mm²	600 mm	Vacuum pump	protect cable end with heat shrinkable sleeve
=LHS0-W5	=POW0-X14	=LHS0-X38	ÖLFLEX 150	3x0.75 mm²	2400 mm	Gas Circulation Fan	protect cable end with heat shrinkable sleeve
=LHS0-W10	=24V0-X23	=LHS0-Z3	LiYY	2x0.34 mm²	1450 mm	24V Interface Board	protect cable end with heat shrinkable sleeve
=LHS0-W12	=LCB0-X82	=POW0-K7	LiYY	2x0.34 mm²	3800 mm	relay vacuum pump	protect cable end with heat shrinkable sleeve
=LHS0-W14	=24V0-X23	=POW0-H3	LiYY	2x0.34 mm²	1880 mm	24V dc OK	protect cable end with heat shrinkable sleeve
=LHS0-W15	=LHS0-X25	=LCB0-X60	LiYY	2x0.34 mm²	2470 mm	Internal laser ratiation lamp	protect cable end with heat shrinkable sleeve
=LHS0-W16	=24V0-X23	=LHS0-X8	ÖLFLEX 150	2x0.5 mm²	890 mm	gas purifier power supply	protect cable end with heat shrinkable sleeve
=LHS0-W18	=24V0-XK1	=LHS0-S3	Interlock	4x0.34 mm²		cover interlock 1	
=LHS0-W19	=24V0-XK1	=LHS0-X12	ÖLFLEX 150	2x1 mm²	2150 mm	Tube temp. interlock	protect cable end with heat shrinkable sleeve
=LHS0-W20.1	=24V0-X23	=LHS0-X21	ÖLFLEX 150CY	7x1 mm²	1650 mm	ext. Remote Interlock 1	Protect source cable end with heat shrinkable sleeve
		=LHS0-XSH3					
=LHS0-W20.2	=24V0-X23	=LHS0-X21	ÖLFLEX 150CY	7x1 mm²	1680 mm	ext. Remote Interlock 2	Protect source cable end with heat shrinkable sleeve
		=LHS0-XSH3					
=LHS0-W21	=LCB0-X84	=LHS0-X29	LiYY	4x0.34 mm²	2580 mm	gas purifier power supply interlock	protect cable end with heat shrinkable sleeve
=LHS0-W25	=LCB0-X56	=LHS0-X24	LiYY	7x0.34 mm²	4250 mm	gas valves	protect cable end with heat shrinkable sleeve
	=LCB0-X16						
	=LCB0-X17						
=LHS0-W26	=24V0-X23	=LCB0-X30	LiYY	7x0.34 mm²	2300 mm	24V LCB	protect cable end with heat shrinkable sleeve
		=LCB0-X85					
=LHS0-W27	=24V0-X23	=LHS0-X34	ÖLFLEX 150CY	7x1 mm²	700 mm	HVPS Interlock	Protect target cable end with heat shrinkable sleeve
=LHS0-W28	=LCB0-X17	=24V0-XK1	LiYY	7x0.34 mm²	2250 mm	ext. int. Halogen Leak	protect cable end with heat shrinkable sleeve
	=LCB0-X40	=24V0-X23					
=LHS0-W29	=24V0-XK1	=LCB0-X19	LiYY	7x0.34 mm²	2250 mm	LCB	protect cable end with heat shrinkable sleeve
	=24V0-X23	=LCB0-X83					
		=LCB0-X85					
=LHS0-W30	=LCB0-X20	=LHS0-B20	LiYCY	2x0.34 mm²		tube temperatur sensor	

Cable overview

Cable designation	from	to	Cable type	Conductors	Length	Function	Remark
=LHS0-W31	=24V0-X23	=LHS0-X55	LiYCY	2x0.34 mm²	1000 mm	Energy Monitor	protect cable end with heat shrinkable sleeve
=LHS0-W32	=LHS0-X33	=LHS0-Y8	LiYCY	4x0.34 mm²	980 mm	water valve control	Protect source cable end with heat shrinkable sleeve. Twist shield source and insolate with the heat shrinkable sleeve
=LHS0-W35	=LCB0-X52	=LHS0-X51	LiYCY	3x0.34 mm²	2950 mm	Tube Pressure Sensor	Protect source cable end with heat shrinkable sleeve
=LHS0-W36	=LCB0-X28	=LHS0-X38	LiYCY	2x0.34 mm²	2860 mm	gas circulation fan interlock	protect cable end with heat shrinkable sleeve
	=LCB0-X40						
=LHS0-W37	=LHS0-TERM-X31	=LHS0-X78	LiYCY	4x0.34 mm²		Handheldterminal	
=LHS0-W41	=24V0-XK1	=LHS0-S5	Interlock	4x0.34 mm²		cover interlock 3	
=LHS0-W43	=24V0-XK1	=LHS0-S4	Interlock	4x0.34 mm²		cover interlock 2	
=LHS0-W45	=POW0-X14	=LHS0-M3	ÖLFLEX 150	3x0.5 mm²	750 mm	Exhaust fan	protect cable end with heat shrinkable sleeve
=LHS0-W58	=LCB0-X56	=24V0-XK1	LiYY	7x0.34 mm²	2220 mm	ext. int. Halogen Leak	protect cable end with heat shrinkable sleeve
	=LCB0-X35	=24V0-X23					
	=LCB0-X40						
=LHS0-W59	=LCB0-X28	=POW0-K8	LiYCY	2x0.34 mm²	3850 mm	Gas Circulation Fan	protect cable end with heat shrinkable sleeve
	=LCB0-X40						
=LHS0-W81	=LHS0-XSV1	=LCB0-X98	Flachband rund	16x0.09 mm²	3550 mm	Interface Data	protect cable end with heat shrinkable sleeve
	=LCB0-XSH1						
=LHS0-W85	=LHS0-X41	=LHS0-A7	RG58	1x		HV Cable	
=LHS0-W87	=LHS0-A6	=LHS0-LDU	HV-Cable	1x1 mm²			
=LHS4-W24	=LHS4-X32	=LHS4-X36	LiYY	4x0.34 mm²	950 mm	water leak sensor	
=LHS5-W6	=LHS5-A15-F10	=LHS5-X42	ÖLFLEX 150CY	3x1 mm²	430 mm	Thyratron Power Supply	protect cable end with heat shrinkable sleeve. Shield must have no contact with the housing
	=LHS5-A15-X14	=LHS0-A4-X42					
=LHS5-W7	=POW0-XSH2	=LHS5-A15-X14	ÖLFLEX 150CY	3x2.5 mm²	1765 mm	HV power supply (HVPS) and Thyratron power supply	protect cable end with heat shrinkable sleeve. Shield must have no contact with the housing. Fix ferrit 20mm from cable jacket end.
	=POW0-Z2	=LHS5-A15-F10					
	=POW0-PE7						
=LHS5-W7.1	=LHS5-A15-X14	=LHS5-X57	ÖLFLEX 150CY	3x2.5 mm²	400 mm	HV power supply (HVPS)	protect cable end with heat shrinkable sleeve. Shield must have no contact with the housing
	=LHS5-A15-F10						
=24V0-W44	=24V0-X23	=24V0-G2	ÖLFLEX 150	2x1 mm²	680 mm	24V power supply	protect cable end with heat shrinkable sleeve
	=24V0-F11						
=LCB0-W30.1	=LCB0-X20	=LCB0-X50	LiYCY	2x0.34 mm²		Tube temp. Sensor	

Cable overview

Cable designation	from	to	Cable type	Conductors	Length	Function	Remark
=LCB0-W32.1	=LCB0-X33	=LCB0-X86	LiYCY	4x0.34 mm²	430 mm	water valve control	Protect source cable end with heat shrinkable sleeve. Twist shield source and target and insolate with the heat shrinkable sleeve
=KIT0-W1	=POW0-X0	=POW0-Q1	ÖLFLEX CLASSIC 100	3x2.5 mm²	5000 mm	Power Cord	Route all three target wires twice through the ferrite core
		=POW0-X14					
=KIT1-W1	=POW0-X0	=POW0-Q1	SO	3x12 mm²	5000 mm	Power Cord	Route all three target wires twice through the ferrite core
		=POW0-X14					

Plug overview

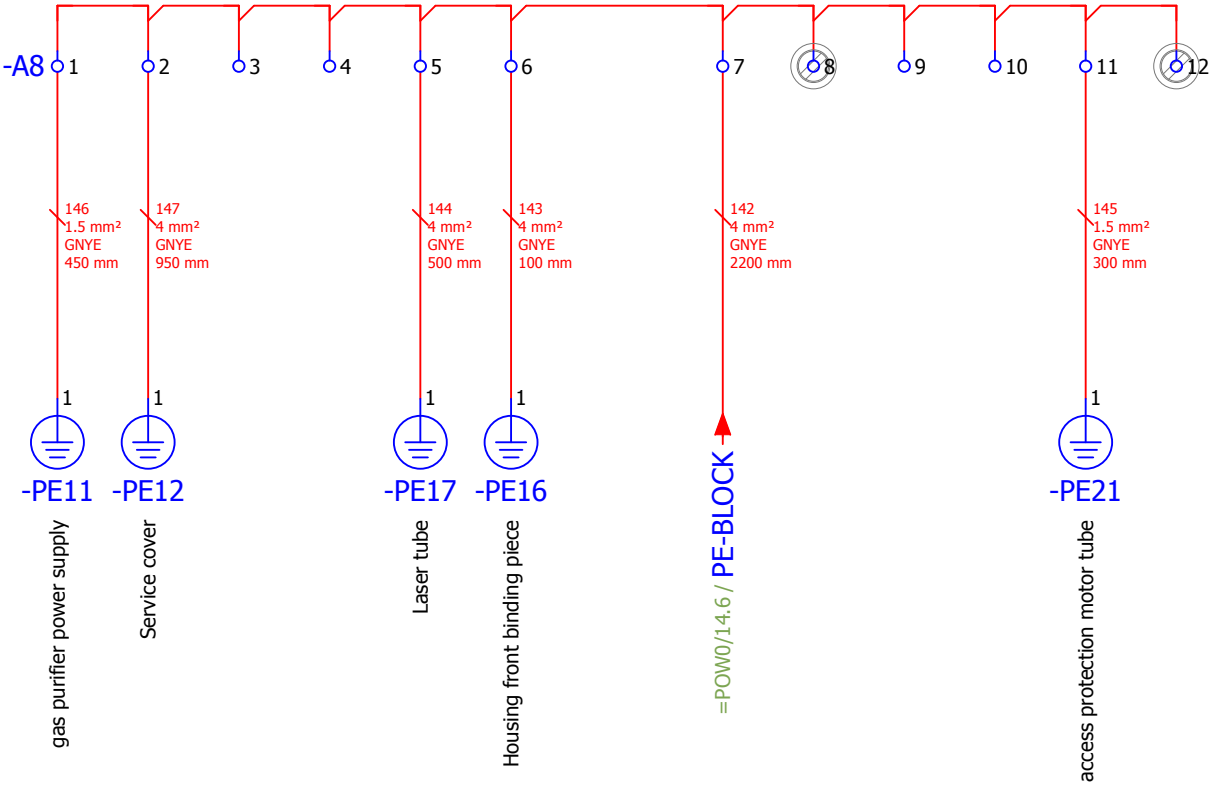
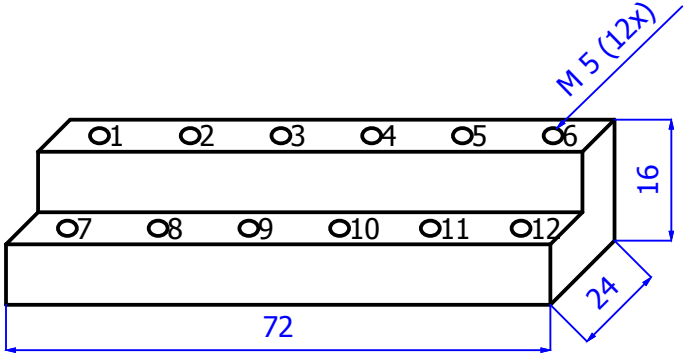
COHERENT_Steckerübersicht_1

Plug designation	Plug definition text	Plug				Page of plug diagram
		first	last	Total number	Contact Insert	
=LHS0-A2				0		
=LHS0-B8	Tube Pressure Sensor	1	5	5	SEE MECH. DESIGN PARTS LIST	=LHS0/300
=LHS0-TERM-X31	operation terminal	1	9	9		=LHS0/301
=LHS0-X3	Interface Board 24V	1	2	2	Connector, 2 Pole, Female, 12A 250V 5.08mm, MSTB 2.5/ 2-ST-5.08	=LHS0/302
=LHS0-X8	gas purifier power supply	1	PE	5	Connector 5 Pol female insert 2.5mm² 400VAC, 10A, EPIC H-A 4 BS, UL CSA	=LHS0/303
=LHS0-X12	Tube temp. int	1	3	3	Connector Housing 3pol. Male 6.35 mm Universal MATE-N-LOK	=LHS0/304
=LHS0-X22	Vacuum pump	1	3	3	Connector Housing 3pol. Male 6.35 mm Universal MATE-N-LOK	=LHS0/305
=LHS0-X24	Valve block	1	9	9	Aufnahmegehäuse Buchse 9pol. Matrix Universal MATE-N-LOK Nylon	=LHS0/306
=LHS0-X24		1	9	9	Aufnahmegehäuse Stecker 9pol. Matrix Universal MATE-N-LOK Nylon	=LHS0/307
=LHS0-X25	Internal laser ratiation lamp	1	2	2	Connector Housing 2pol. male 6.35 mm Universal MATE-N-LOK	=LHS0/308
=LHS0-X25	Internal laser ratiation lamp	1	2	2	Aufnahmegehäuse Buchse 2pol. Universal MATE-N-LOK	=LHS0/309
=LHS0-X29	gas purifier power supply interlock	1	4	4	RundStecker 4pol. male gerade Series 712 658-753 Farnell	=LHS0/310
=LHS0-X33	Spare	1	5	5	Connector, 5Pole Ster male straight DIN circular connector Series 680	
=LHS0-X34	HVPS Interlock			0	Aufnahmegehäuse Stecker 6pol.	
=LHS0-X38	Gas Circulation Fan	1	6	6	Aufnahmegehäuse Stecker 6pol.	=LHS0/311
=LHS0-X41	High Voltage	1	1	1		=LHS0/312
=LHS0-X51	Tube Pressure Sensor	1	SH	6	Connector, 5Pole female straight DIN circular connector Series 680	=LHS0/313
=LHS0-X55	Energy monitor 24Vdc	1	3	3	Connector, 3 Pole, female, 160V 8A 3.81mm, MC1,5/ 3-ST-3,81	=LHS0/314
=LHS0-X77	RS-232 interface 9 poles	2	5	3		=LHS0/315
=LHS0-X78	RS-232 interface 25 poles	2	9	4		=LHS0/316
=LHS0-X101	Valve buffer gas	1+	2	5	Connector 3Pole FormA 90° for Valve Pole Protection Free-Wheeling Diode	=LHS0/317
=LHS0-X102	Valve rare gas	1+	2	5	Connector 3Pole FormA 90° for Valve Pole Protection Free-Wheeling Diode	=LHS0/318
=LHS0-X103	Valve halogen gas	1+	2	5	Connector 3Pole FormA 90° for Valve Pole Protection Free-Wheeling Diode	=LHS0/319
=LHS0-X104	Valve inert gas	1+	2	5	Connector 3Pole FormA 90° for Valve Pole Protection Free-Wheeling Diode	=LHS0/320
=LHS0-X105	Gas head valve	1+	2	5	Connector 24VDC for valve solenoid	=LHS0/321
=LHS0-X106	Vacuum valve	1+	2	5	Connector 24VDC for valve solenoid	=LHS0/322
=LHS0-XSV1	Interface Board	1	16	16	Connector female 16 pole in 2 lines flat cable insulation displacement	=LHS0/323
=LHS0-Y1		1	PE	3		=LHS0/324
=LHS0-Y2		1	PE	3		=LHS0/325
=LHS0-Y3		1	PE	3		=LHS0/326
=LHS0-Y5		1	PE	3		=LHS0/327
=LHS0-Y6		1	PE	3		=LHS0/328
=LHS0-Y7		1	PE	3		=LHS0/329
=LHS4-X32	Water leak sensor	1	SH	7	Connector, 6Pole male straight DIN circular connector Series 680	=LHS4/300
=LHS4-X36	Sensor water leak	1	6	6	Stecker rund male 6polig, gewinkelt nach IEC 60130-9	=LHS4/301
=LHS5-X42	Thyratron Power Supply	1	3	3	Connector Housing 3pol. Male 6.35 mm Universal MATE-N-LOK	=LHS5/300
=LHS5-X57	line voltage connector HVPS	1	SH	7	Insert Female, Han Q5/0	=LHS5/301
=24V0-XK1	Pug Safety relay	13	Y6	32	Connector, 4 Pole, Female, 12A 250V 5.00mm, MSTBT 2.5/ 4-ST	=24V0/300
=LCB0-X15	HVPS Interlock	1	2	2		=LCB0/300
=LCB0-X16	Valve buffer gas	1	2	2	Connector, 2 Pole, male, 160V 8A 3.81mm, IMC1,5/ 2-ST-3,81	=LCB0/301
=LCB0-X17	Head Valve	1	6	6	Connector, 6 Pole, male, 160V 8A 3.81mm, IMC1,5/ 6-ST-3,81	=LCB0/302
=LCB0-X18	Exhaust fan	1	2	2		=LCB0/303
=LCB0-X19	Remote interlock	1	6	6	Connector, 6 Pole, male, 160V 8A 3.81mm, IMC1,5/ 6-ST-3,81	=LCB0/304
=LCB0-X20	tube temperatur sensor	1	SH	3	Connector Bulkead Receptacle Twinax SeriesBR2, 500hm Rear Fixing Brass	
=LCB0-X26	Spare	1	2	2		=LCB0/305
=LCB0-X28	gas circulation fan interlock	1	2	2	Connector, 2 Pole, male, 160V 8A 3.81mm, IMC1,5/ 2-ST-3,81	=LCB0/306
=LCB0-X30	supply voltage LCB 24V	1	7	7	Connector, 7 Pole, Female, 12A 250V 5.08mm, MSTB 2.5/ 7-ST-5.08	=LCB0/307
=LCB0-X32	Water leak sensor	1	SH	7	Connector, 6Pole female series 680 Socket, front fastened, solder	=LCB0/308
=LCB0-X33	Spare	1	SH	6	Connector, 5Pole female series 680 Socket, front fastened, solder	
=LCB0-X35	interlock input LCB	1	8	8	Connector, 8 Pole, male, 160V 8A 3.81mm, IMC1,5/ 8-ST-3,81	=LCB0/309
=LCB0-X40	interlock input LCB	1	8	8	Connector, 8 Pole, male, 160V 8A 3.81mm, IMC1,5/ 8-ST-3,81	=LCB0/310
=LCB0-X50	Temperature sensor tube	1	3	3	Connector, 3 Pole, male, 160V 8A 3.81mm, IMC1,5/ 3-ST-3,81	
=LCB0-X52	Tube Pressure Sensor	1	4	4	Connector, 4 Pole, male, 160V 8A 3.81mm, IMC1,5/ 4-ST-3,81	=LCB0/311
=LCB0-X53	spare (valveblock pressure sensor)	1	4	4	Connector, 4 Pole, male, 160V 8A 3.81mm, IMC1,5/ 4-ST-3,81	=LCB0/312
=LCB0-X54	Spare	1	3	3		=LCB0/313
=LCB0-X60	Internal laser ratiation lamp	1	2	2	Connector, 2 Pole, male, 160V 8A 3.81mm, IMC1,5/ 2-ST-3,81	=LCB0/314
=LCB0-X82	Vacuum pump	1	2	2	Connector, 2 Pole, male, 160V 8A 3.81mm, IMC1,5/ 2-ST-3,81	=LCB0/315

COHERENT_Steckerübersicht_1

Project: COMPex Pro 100		Sub Schematics
Sub Schematics: General		=GENERAL
Part Number	Document Number	sheet 31
D125314	D125314	of 31 sh.

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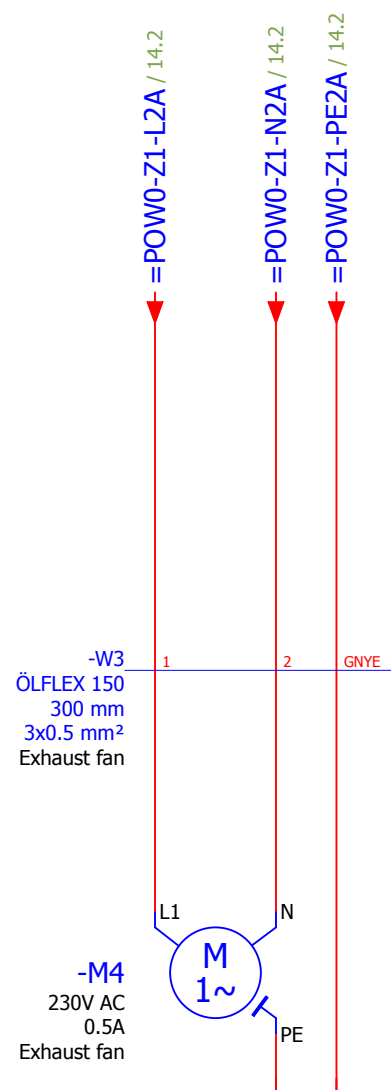
Modification	Date	Name	Date	24.03.2015
AN 11320-05	23.01.2014	Dirk Marschke	Editor	Dirk Marschke
AM 13032-09	20.11.2013	Dirk Marschke	Plot	08.04.2015
AL 13032-04	27.08.2013	Dirk Marschke		



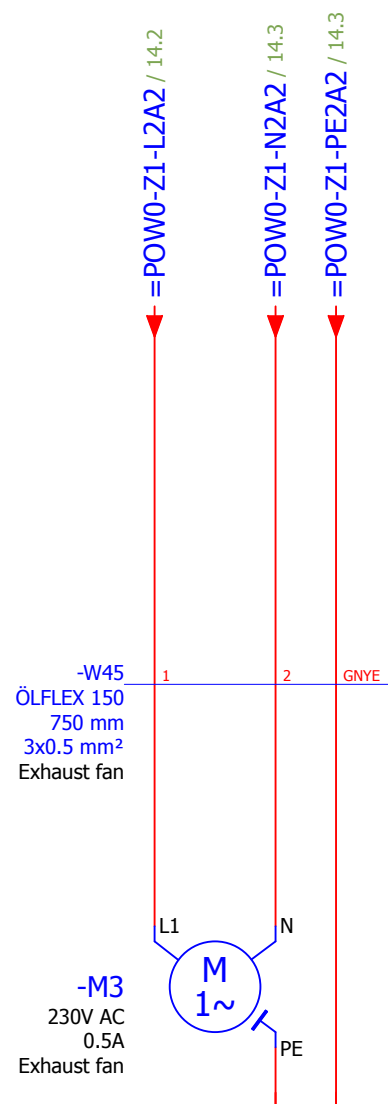
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PE-distribution housing

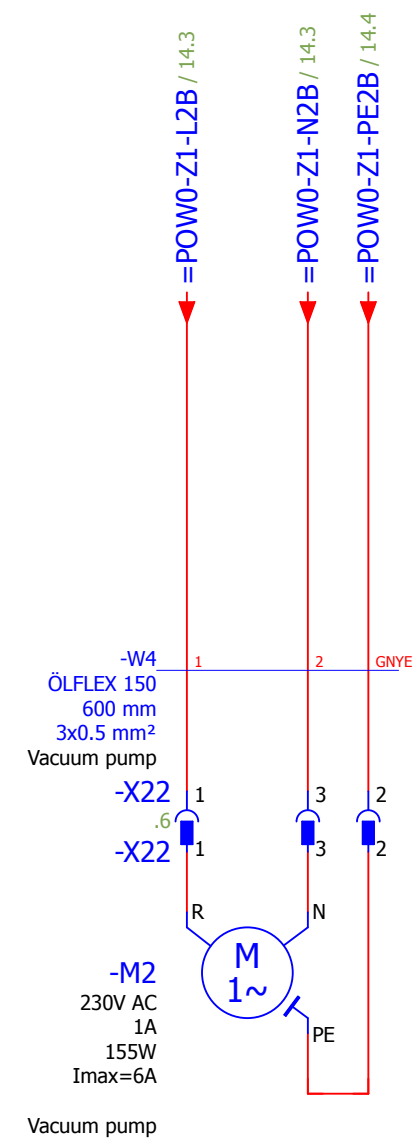
Project:	COMPex Pro 100	Sub Schematics:	LASERHOUSING ELT. COMPEX BASIC DEVICE	Sub Schematics	=LHS0
Part Number	1104568	Document Number	D125314	sheet	12
				of	329 sh.



Exhaust fan



Exhaust fan



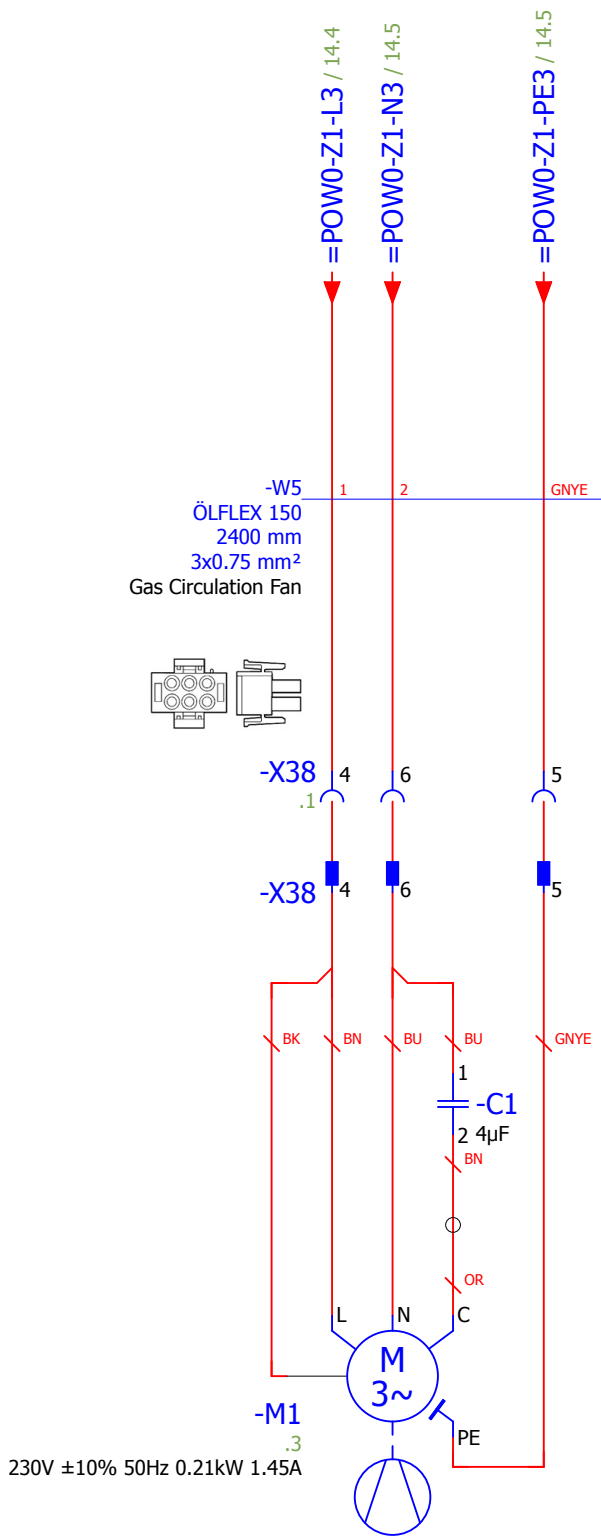
Vacuum pump

Modification	Date	Name	Date	24.03.2015
AN 11320-05	23.01.2014	Dirk Marschke	Editor	Dirk Marschke
AM 13032-09	20.11.2013	Dirk Marschke	Plot	08.04.2015
AL 13032-04	27.08.2013	Dirk Marschke		

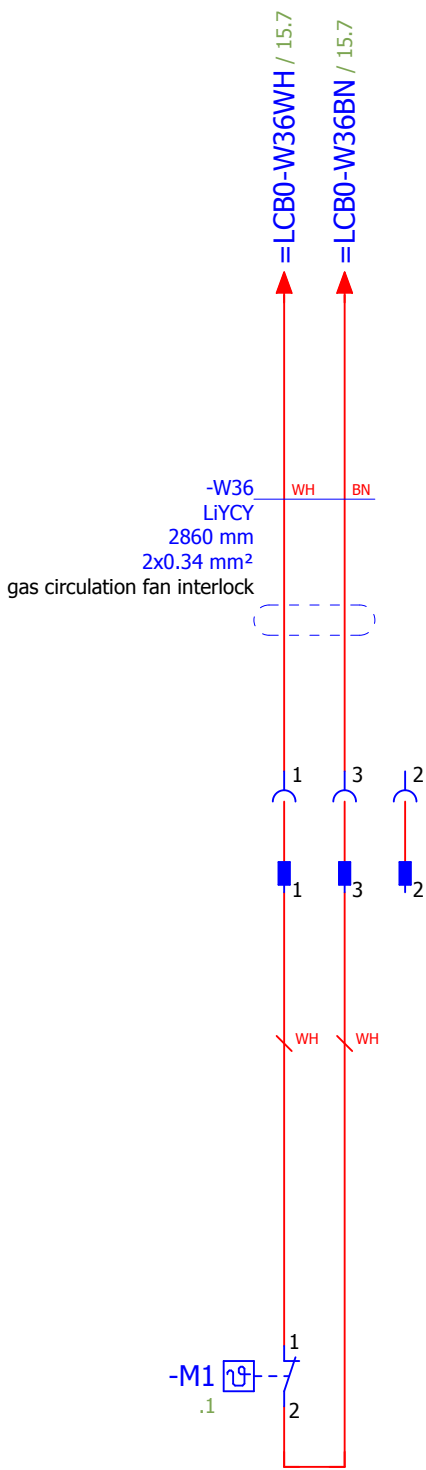


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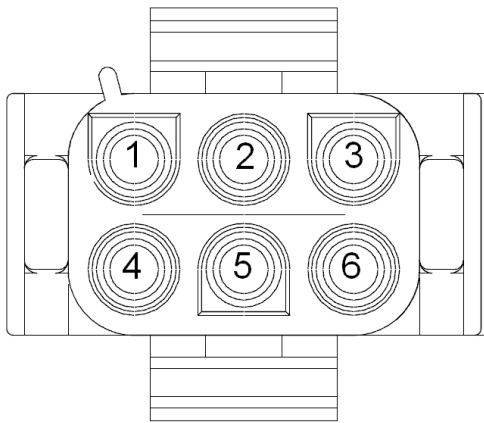
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Gas Circulation Fan



gas circulation fan interlock



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Modification	Date	Name	Date	24.03.2015
AN	11320-05	23.01.2014	Dirk Marschke	Editor
AM	13032-09	20.11.2013	Dirk Marschke	Plot
AL	13032-04	27.08.2013	Dirk Marschke	

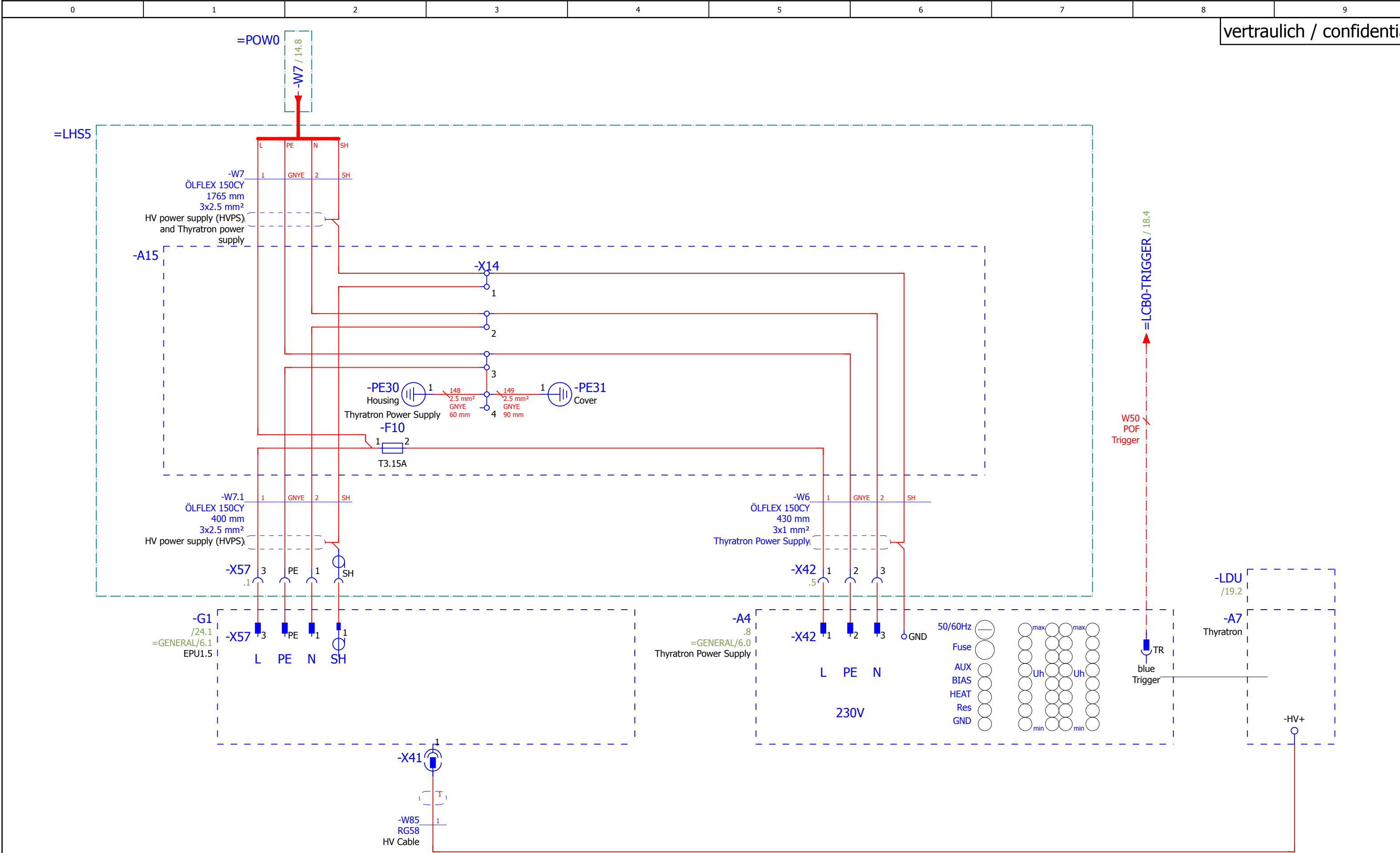


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Gas Circulation Fan

Project:	COMPex Pro 100	Sub Schematics:	LASERHOUSING ELT. COMPEX BASIC DEVICE	Sub Schematics	=LHS0
Part Number	1104568	Document Number	D125314	sheet	14
				of	329 sh.

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AM	13032-09	20.11.2013	Dirk Marschke	Plot
AL	13032-04	27.08.2013	Dirk Marschke	



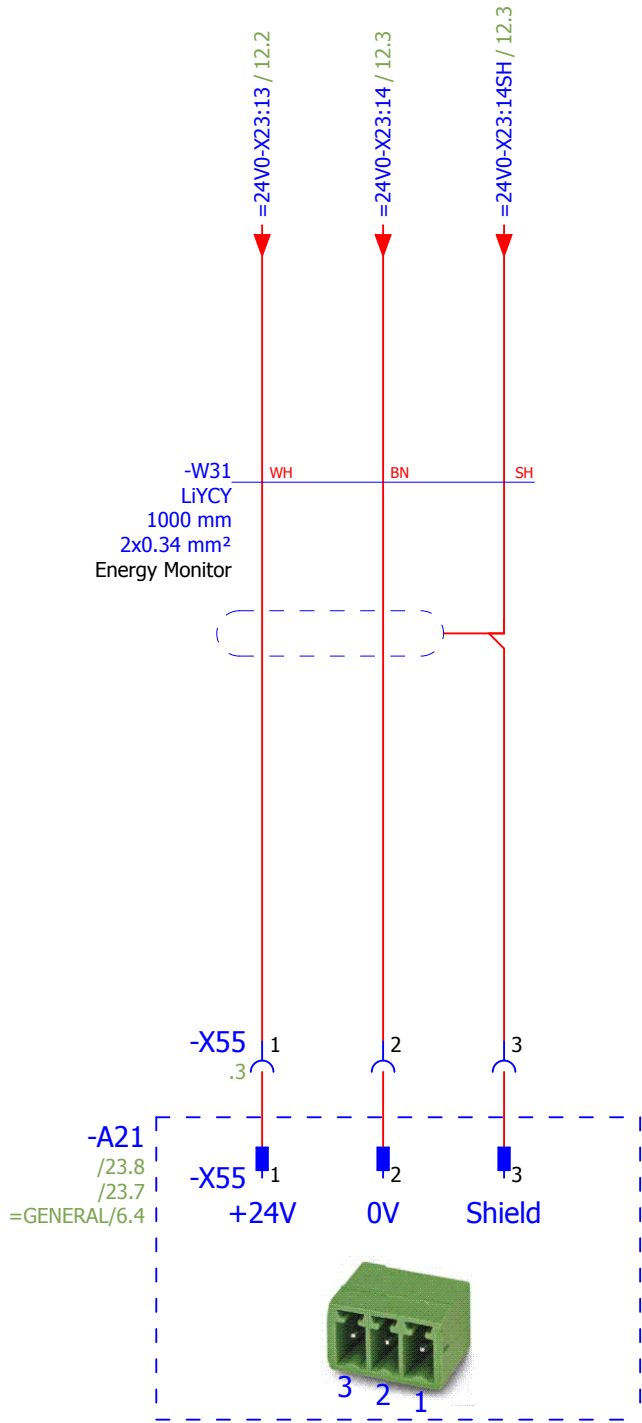
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HV Power Supply / Thyatron Power Supply

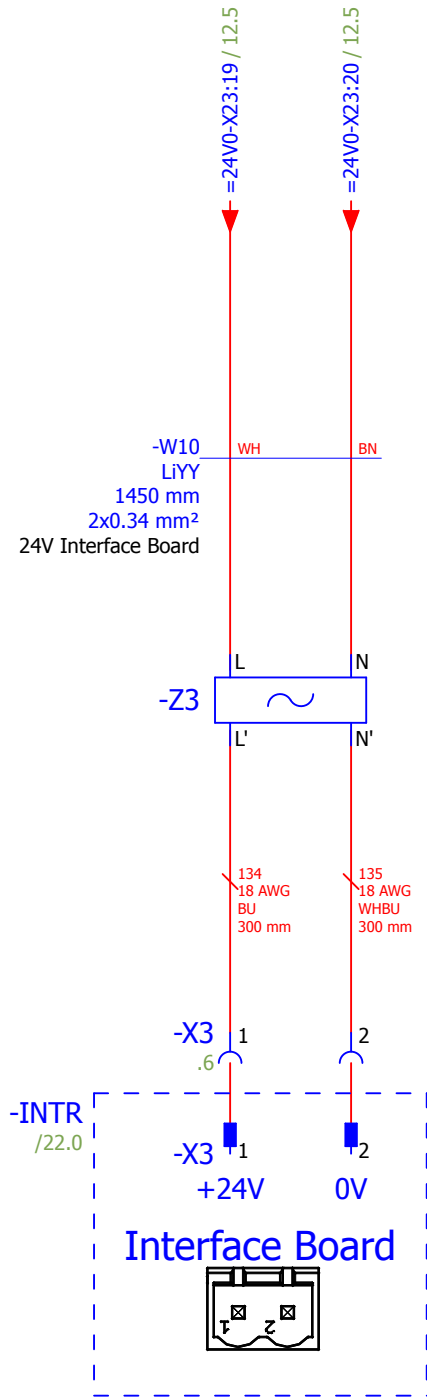
Project:	COMPex Pro 100	Sub Schematics:	LASERHOUSING ELT. COMPEX BASIC DEVICE	Part Number	1104568	Document Number	D125314	sheet	16
								of	329 sh.

Sub Schematics
=LHS0

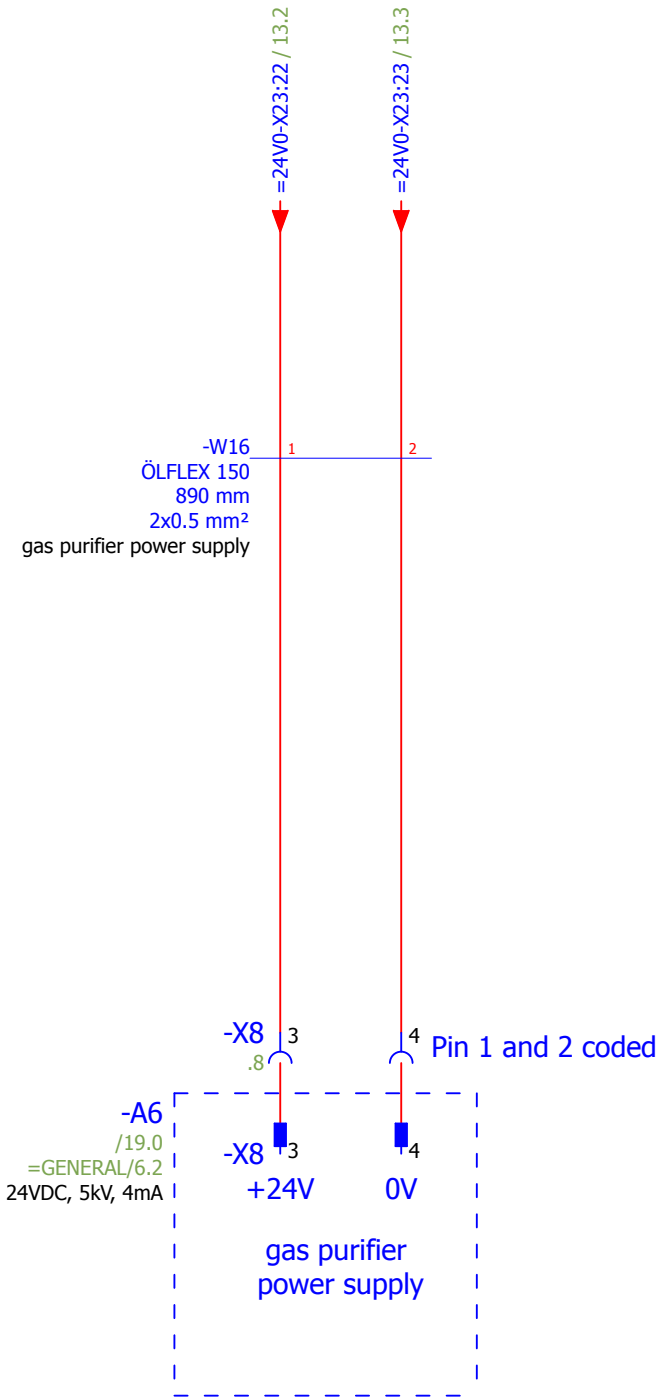
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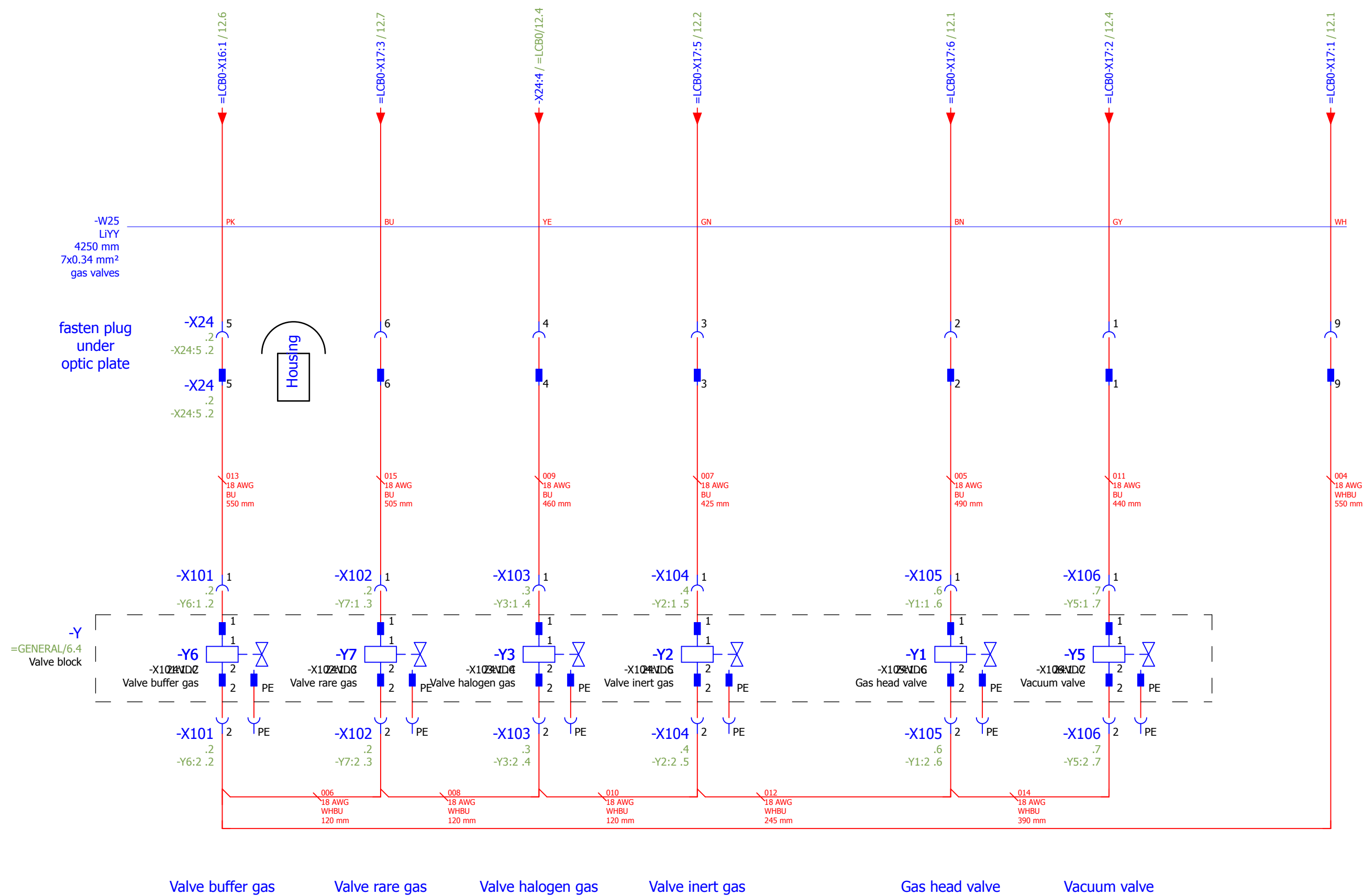
Energy Monitor



Interface Board



gas purifier power supply



Localisation within the device

Pos.1

Pos.2

Pos.3

Pos.4

Pos.5

Pos.6

Modification		Date	Name	Date	24.03.2015
AN	11320-05	23.01.2014	Dirk Marschke	Editor	Dirk Marschke
AM	13032-09	20.11.2013	Dirk Marschke	Plot	08.04.2015
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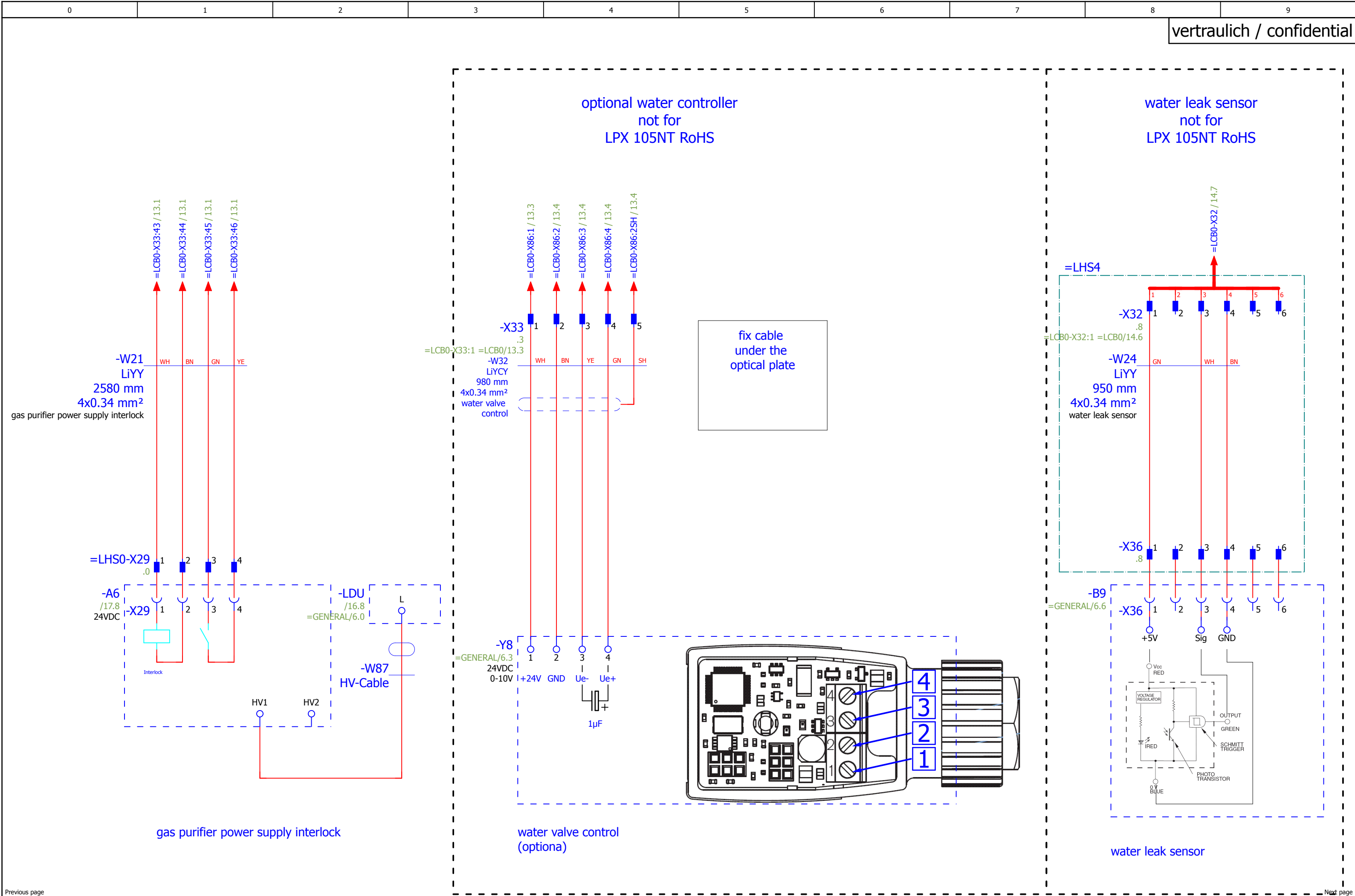


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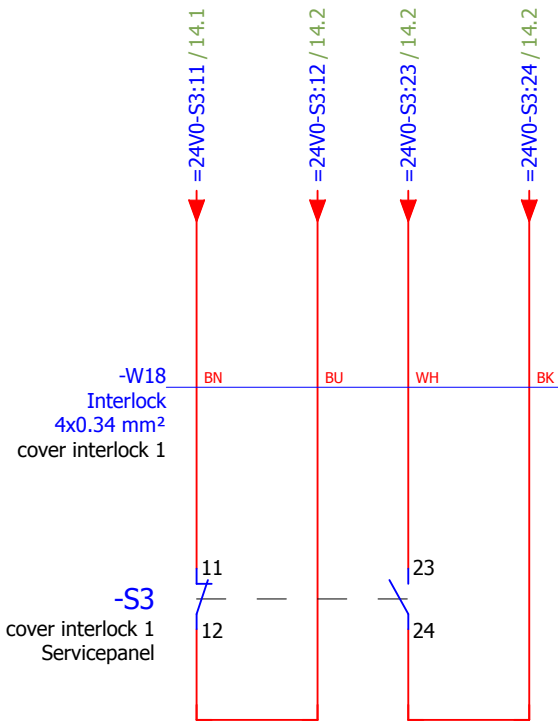
gas valves

Project: COMpex Pro 100		Sub Schematics
Sub Schematics: LASERHOUSING ELT. COMPEX BASIC DEVICE		=LHS0
Part Number	Document Number	sheet 18
1104568	D125314	of 329 sh.

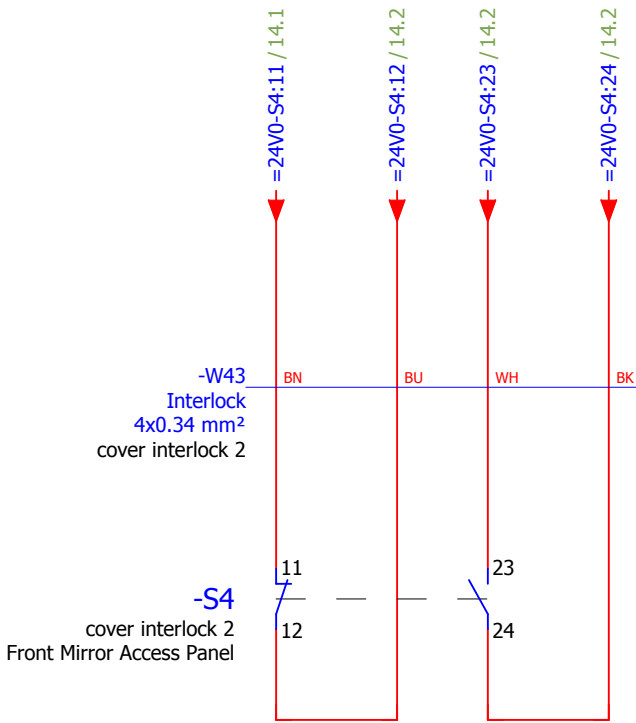
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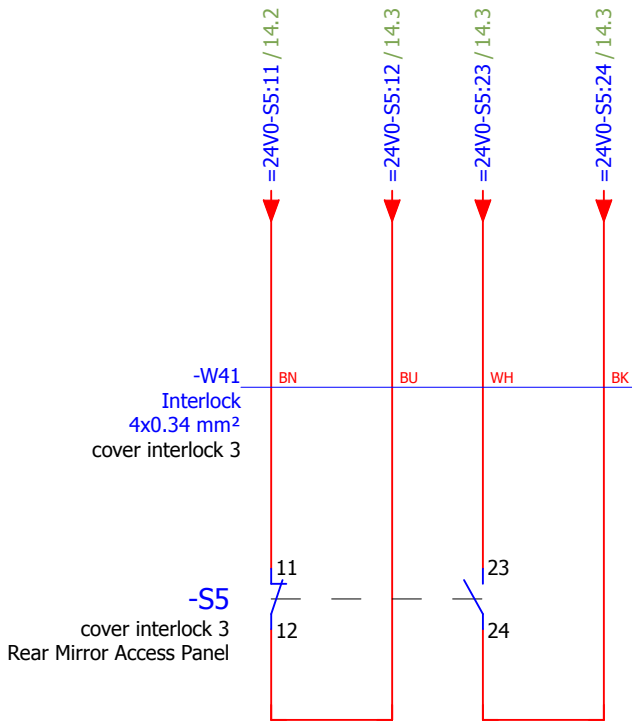
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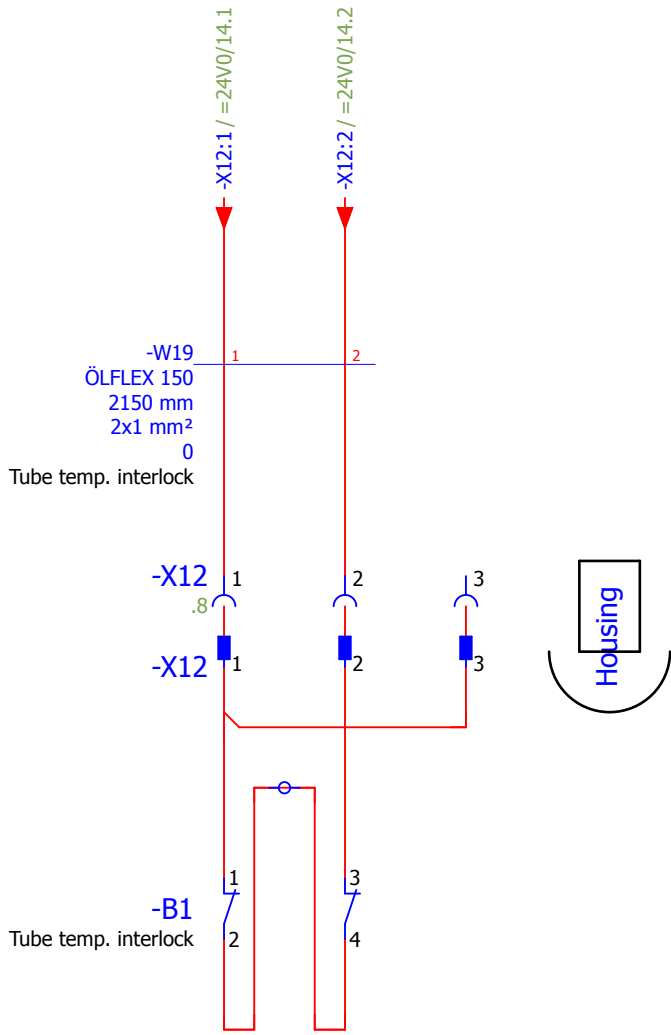
cover interlock 1
Servicepanel



cover interlock 2
Front Mirror Access Panel



cover interlock 3
Rear Mirror Access Panel



Tube temp. interlock

Modification		Date	Name	Date	24.03.2015
AN	11320-05	23.01.2014	Dirk Marschke	Editor	Dirk Marschke
AM	13032-09	20.11.2013	Dirk Marschke	Plot	08.04.2015
AL	13032-04	27.08.2013	Dirk Marschke		



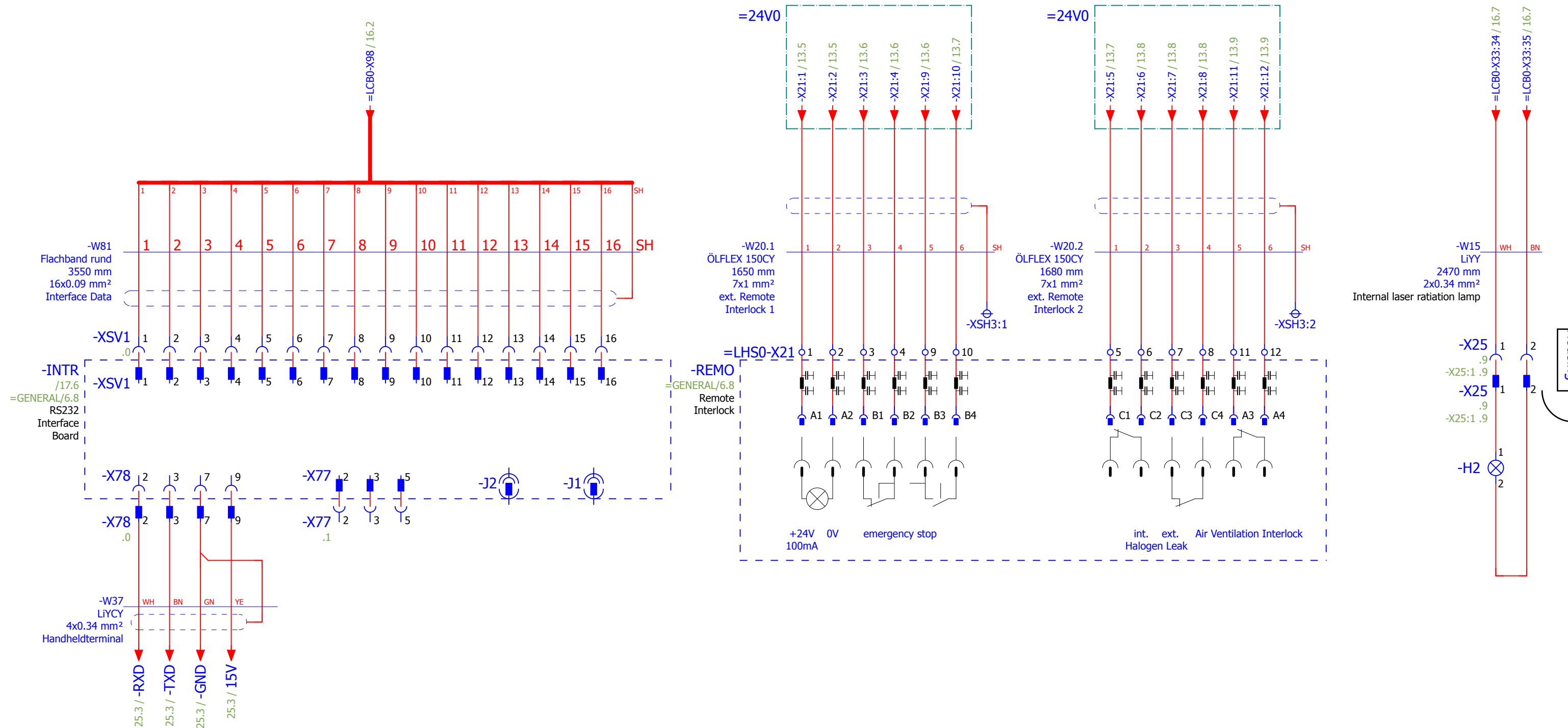
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LCB Interlock detection

Project:	COMPex Pro 100	Sub Schematics:	LASERHOUSING ELT. COMPLEX BASIC DEVICE	Sub Schematics	=LHS0
Part Number	1104568	Document Number	D125314	sheet	21
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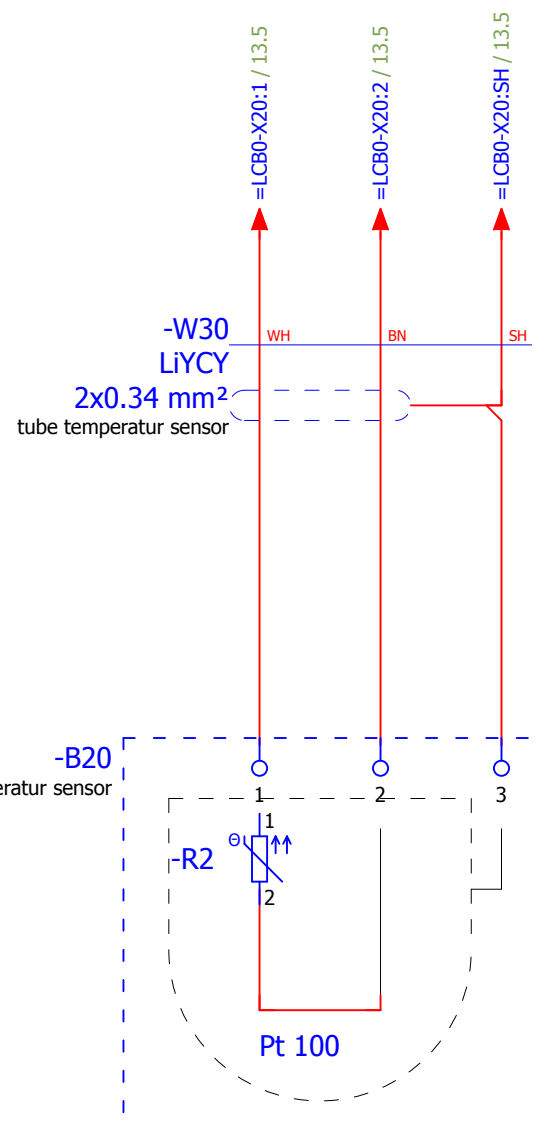
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AN	11320-05	23.01.2014	Dirk Marschke	Editor
AM	13032-09	20.11.2013	Dirk Marschke	Plot
AL	13032-04	27.08.2013	Dirk Marschke	



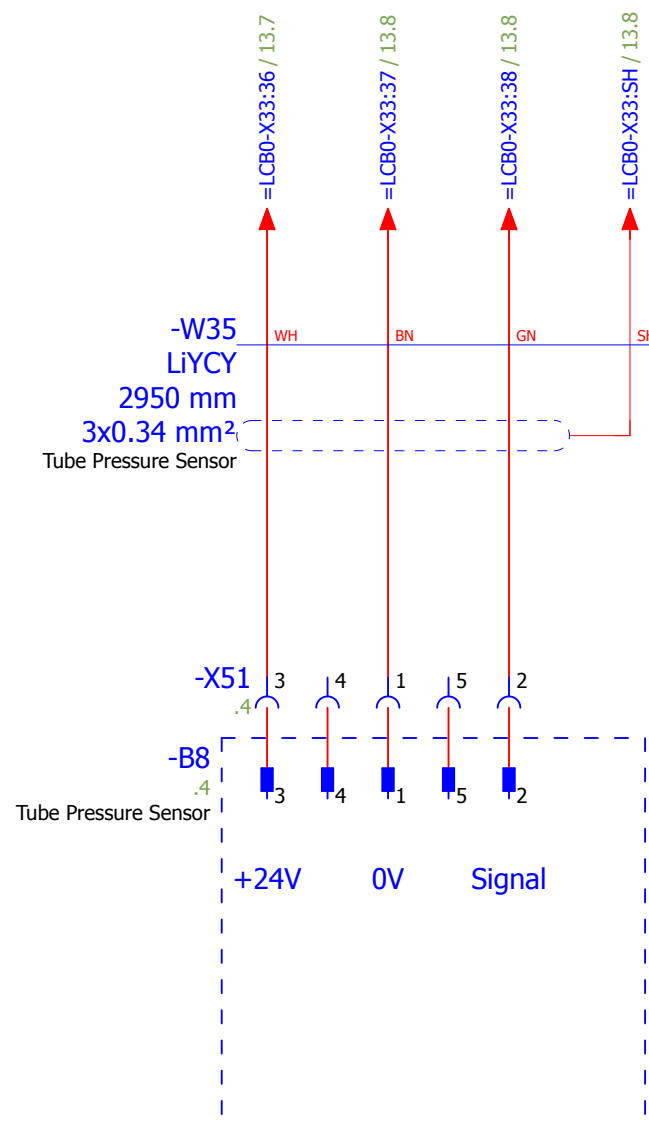
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Interface Board / Remote Interlock

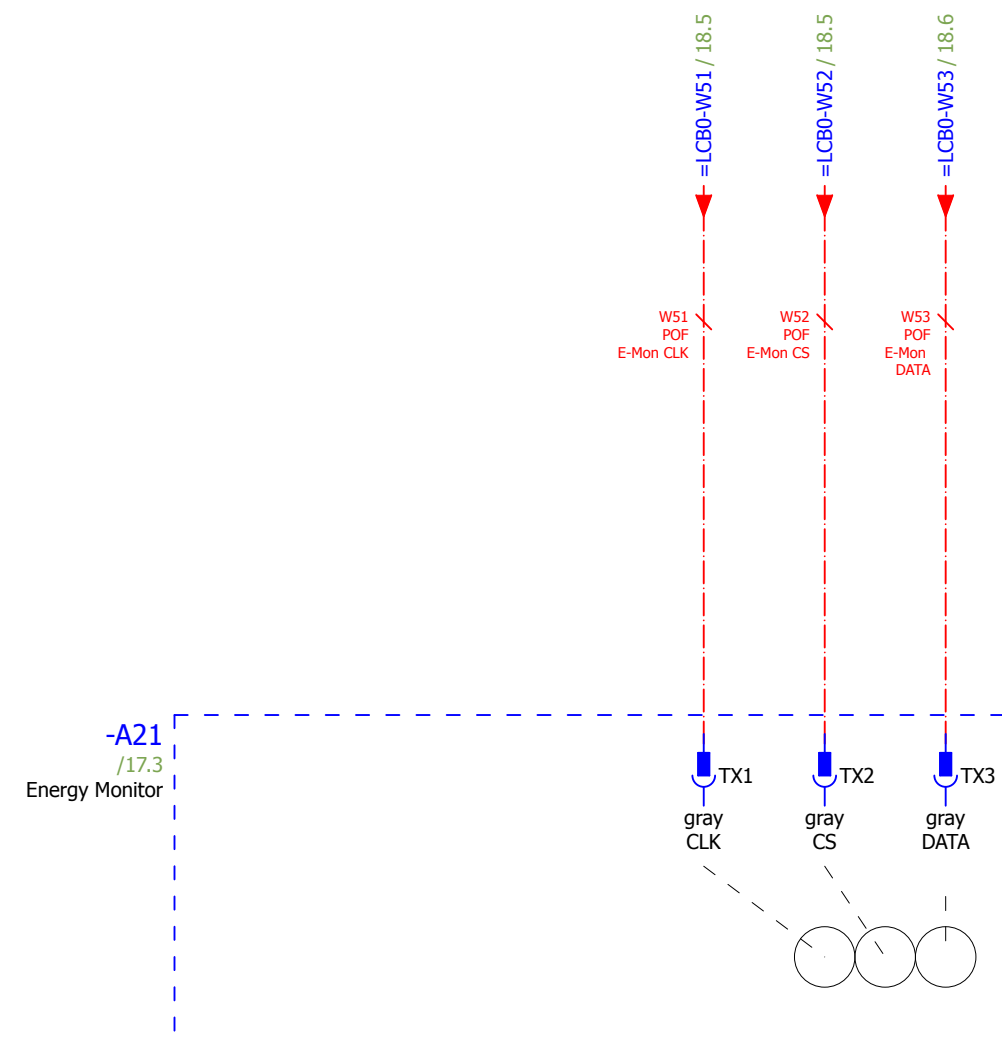
Project:	COMPex Pro 100	Sub Schematics:	LASERHOUSING ELT. COMPEX BASIC DEVICE	Document Number	D125314	sheet	22
Part Number	1104568	of	329 sh.				



tube temperatur sensor



Tube Pressure Sensor



Energy Monitor

Modification	Date	Name	Date	24.03.2015
AN 11320-05	23.01.2014	Dirk Marschke	Editor	Dirk Marschke
AM 13032-09	20.11.2013	Dirk Marschke	Plot	08.04.2015
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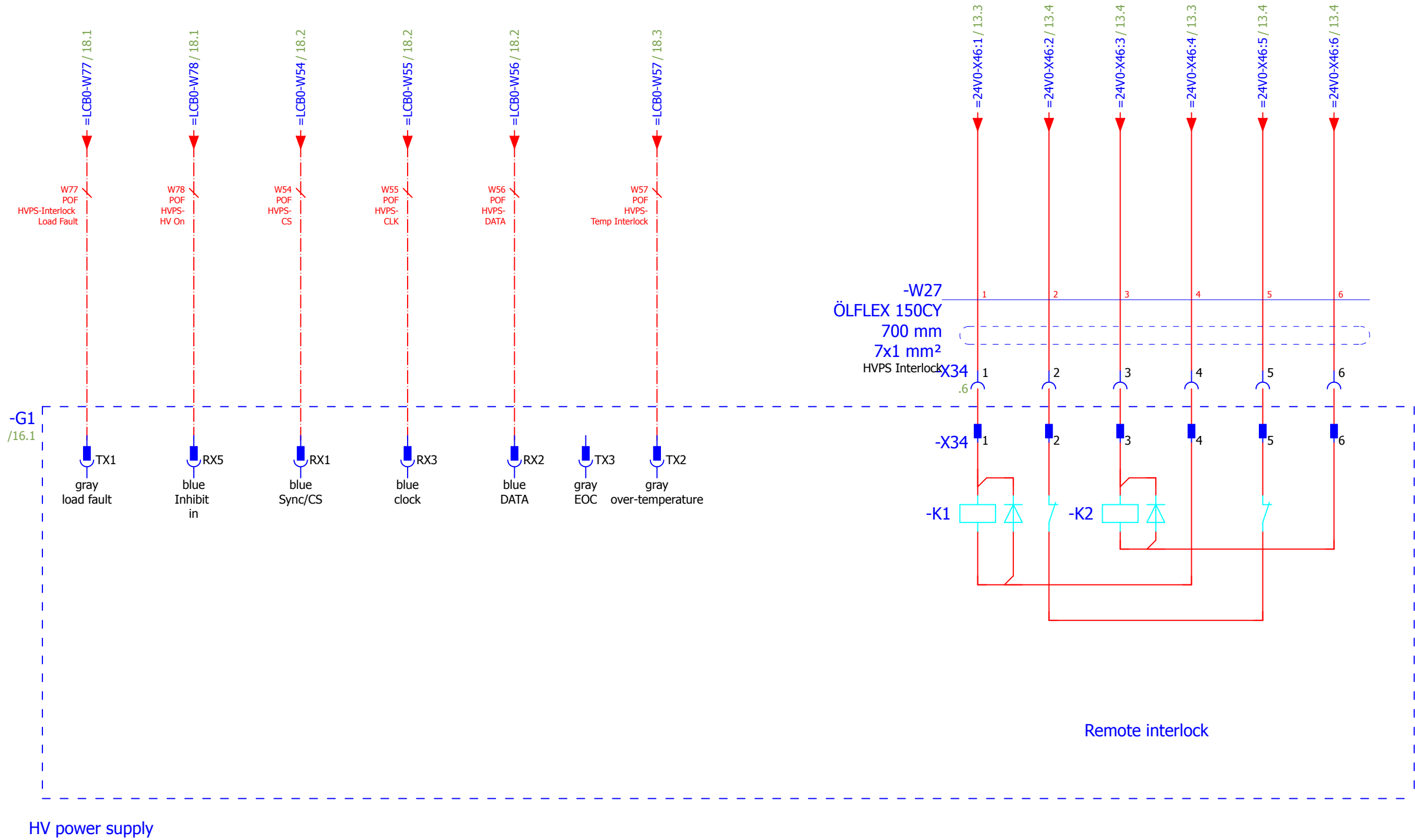


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LCB analog sensors

Project: COMPEX Pro 100		Sub Schematics
Sub Schematics: LASERHOUSING ELT. COMPEX BASIC DEVICE		=LHS0
Part Number	Document Number	sheet 23
1104568	D125314	of 329 sh.

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AL	13032-04	27.08.2013	Dirk Marschke	



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Control HV power supply

Project:	COMPex Pro 100	Sub Schematics:	LASERHOUSING ELT. COMPEX BASIC DEVICE	Sub Schematics	=LHS0
Part Number	1104568	Document Number	D125314	sheet	24
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Handheldterminal

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AM	13032-09	20.11.2013	Dirk Marschke	Plot
AL	13032-04	27.08.2013	Dirk Marschke	

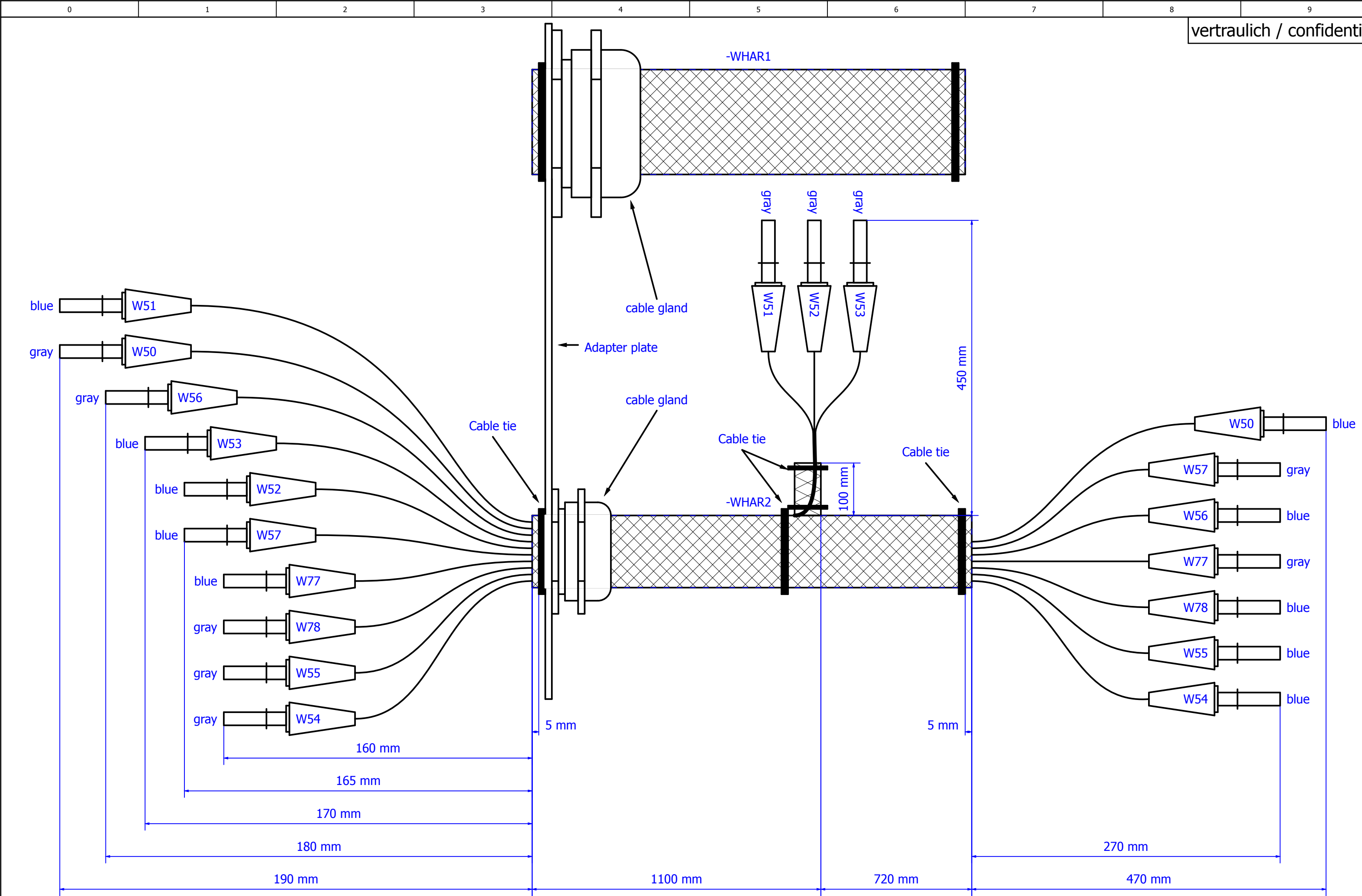


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Control handheldterminal

Project:	COMPex Pro 100	Sub Schematics:	LASERHOUSING ELT. COMPEX BASIC DEVICE	Sub Schematics	=LHS0
Part Number	1104568	Document Number	D125314	sheet	25
				of	329 sh.

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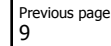
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AN 11320-05	23.01.2014	Dirk Marschke	Editor	Dirk Marschke
AM 13032-09	20.11.2013	Dirk Marschke	Plot	08.04.2015
AL 13032-04	27.08.2013	Dirk Marschke		



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wire harness POF

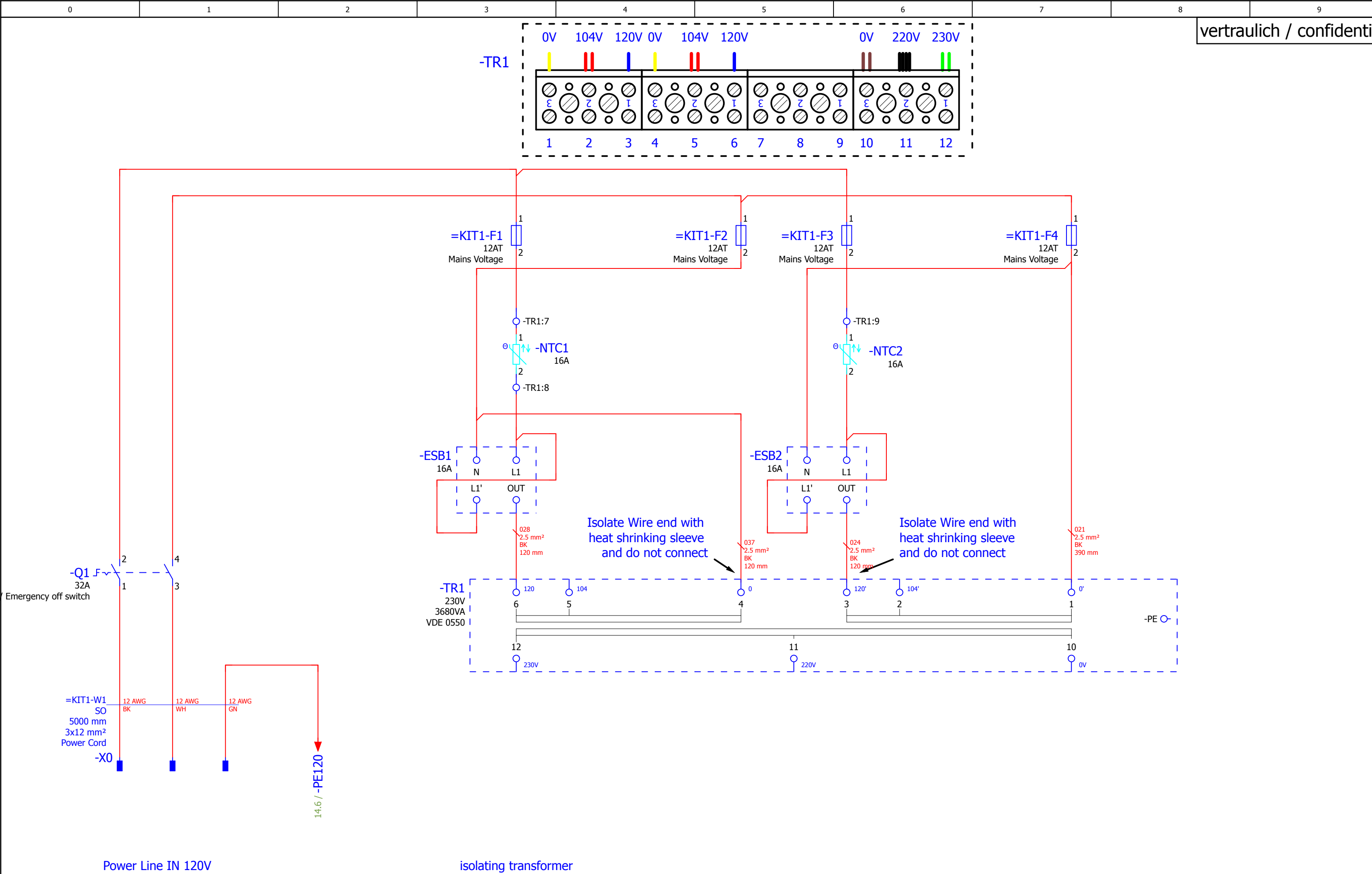
Project:	COMPex Pro 100	Sub Schematics:	LASERHOUSING ELT. COMPEX BASIC DEVICE	Sub Schematics	=LHS0
Part Number	1104568	Document Number	D125314	sheet	118
				of	329 sh.



Project: COMPex Pro 100		Sub Schematics
Sub Schematics: 230V-Distribution elt POW0		=POW0
Part Number	Document Number	sheet 10
1104569	D125314	of 250 sh.



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Modification	Date	Name	Date	24.03.2015
AH	11320-05	23.01.2014	Dirk Marschke	Editor
AG	13032-09	20.11.2013	Dirk Marschke	Plot
AF	12003-04	23.08.2013	Dirk Marschke	

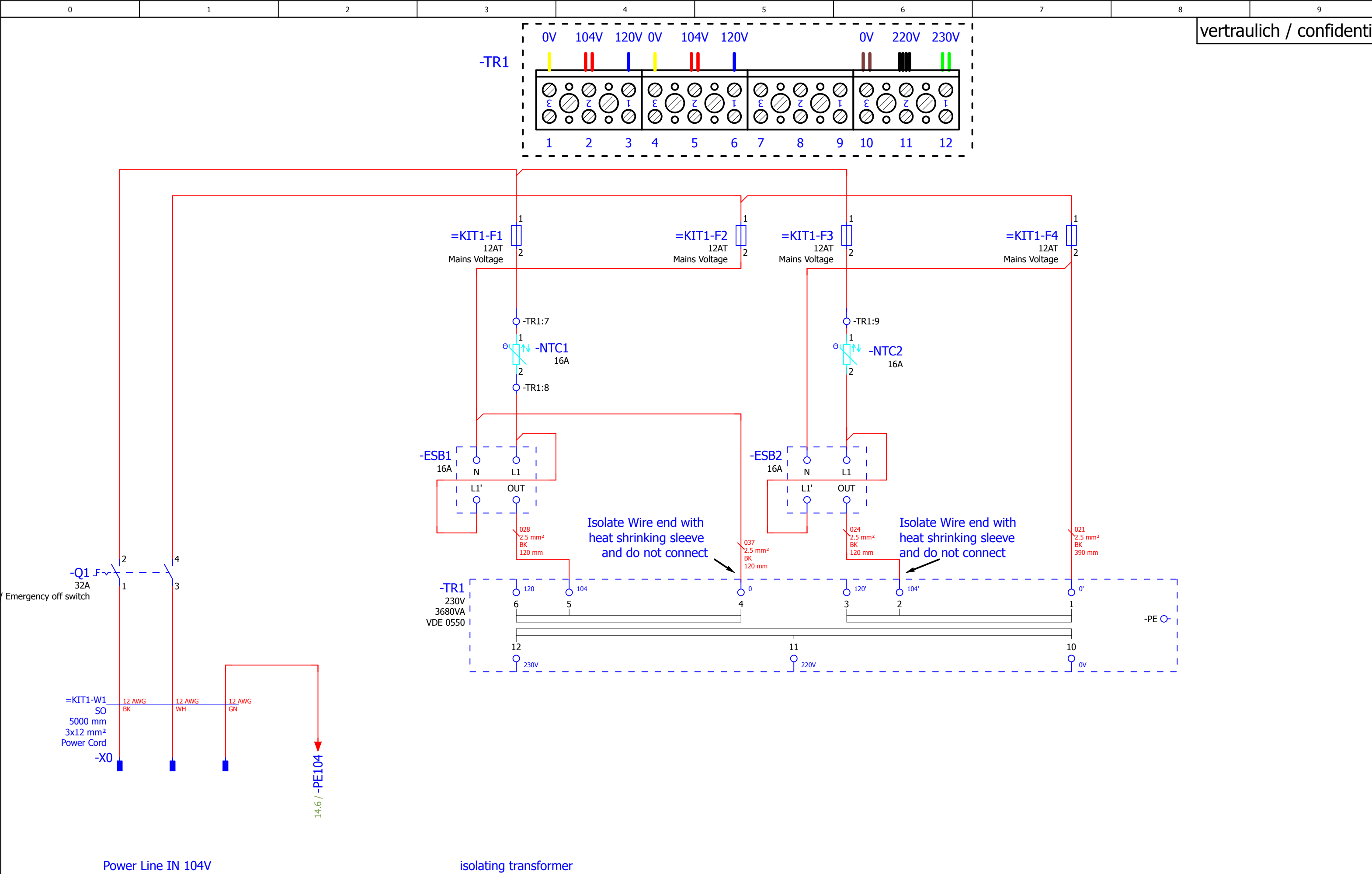


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power supply line 120V

Project:	COMPex Pro 100	Sub Schematics:	230V-Distribution elt POW0	Part Number	1104569	Document Number	D125314	sheet	12	of	250 sh.
								=POW0			

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AH	11320-05	23.01.2014	Dirk Marschke	Editor
AG	13032-09	20.11.2013	Dirk Marschke	Plot
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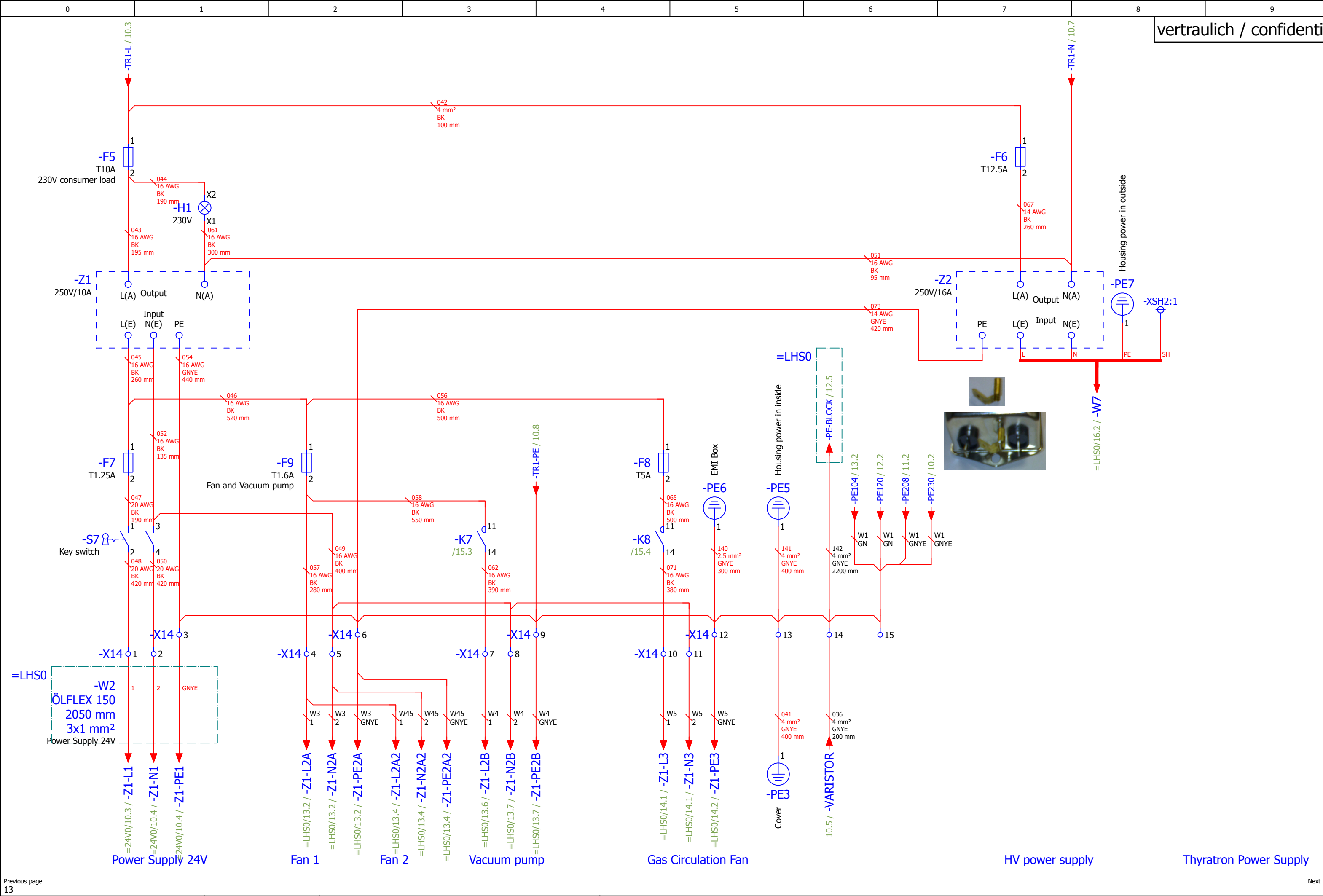


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power supply line 104V

Project:	COMPex Pro 100	Sub Schematics:	230V-Distribution elt POW0	Sub Schematics	=POW0
Part Number	1104569	Document Number	D125314	sheet	13
				of	250 sh.

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AH 11320-05	23.01.2014	Dirk Marschke	Editor	Dirk Marschke
AG 13032-09	20.11.2013	Dirk Marschke	Plot	08.04.2015
AF 12003-04	23.08.2013	Dirk Marschke		

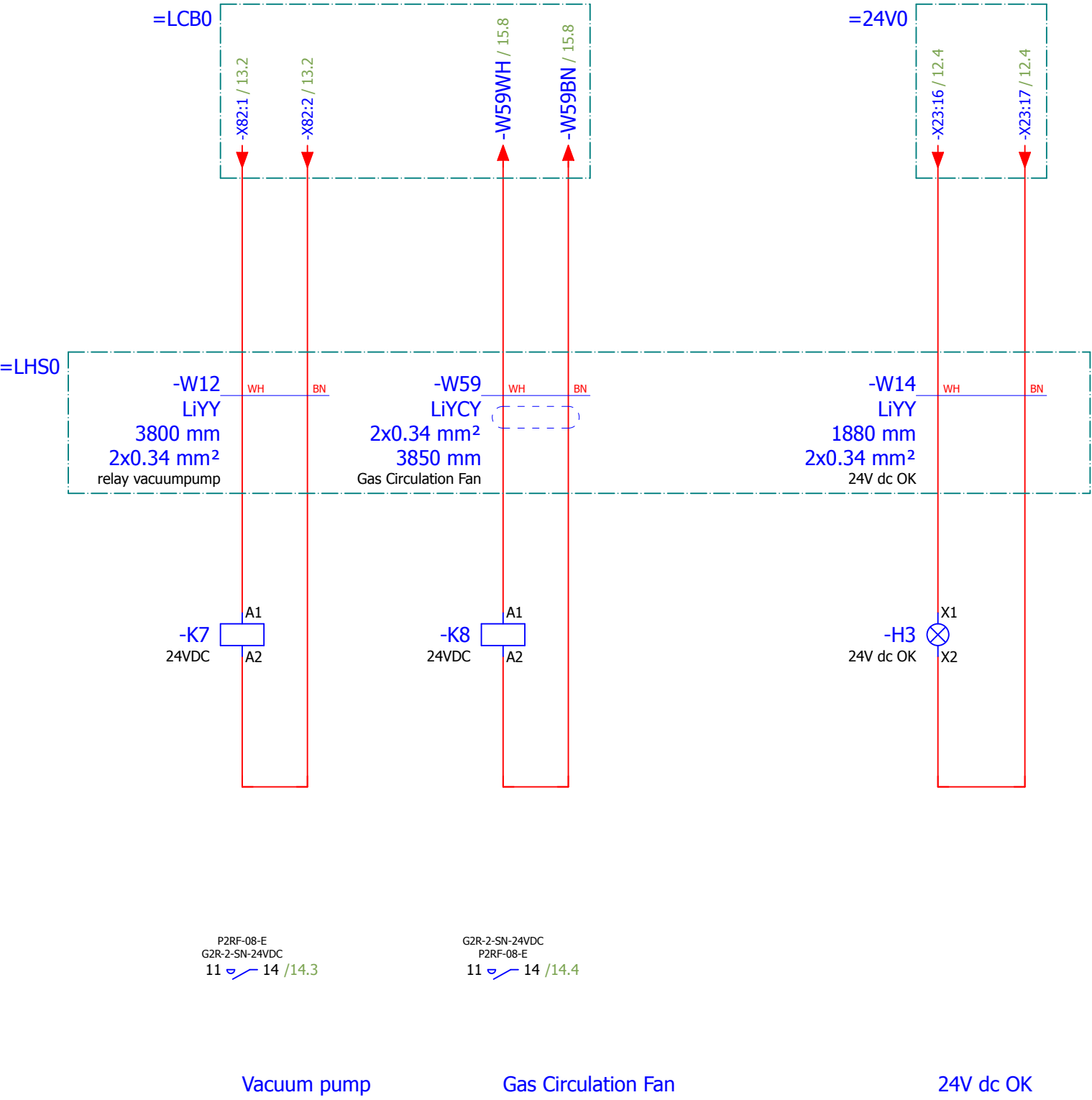


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Power distribution

Project:	COMPex Pro 100	Sub Schematics:	230V-Distribution elt POW0	Sub Schematics	=POW0
Part Number	1104569	Document Number	D125314	sheet	14
				of	250 sh.

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AH	11320-05	23.01.2014	Dirk Marschke	Editor
AG	13032-09	20.11.2013	Dirk Marschke	Plot
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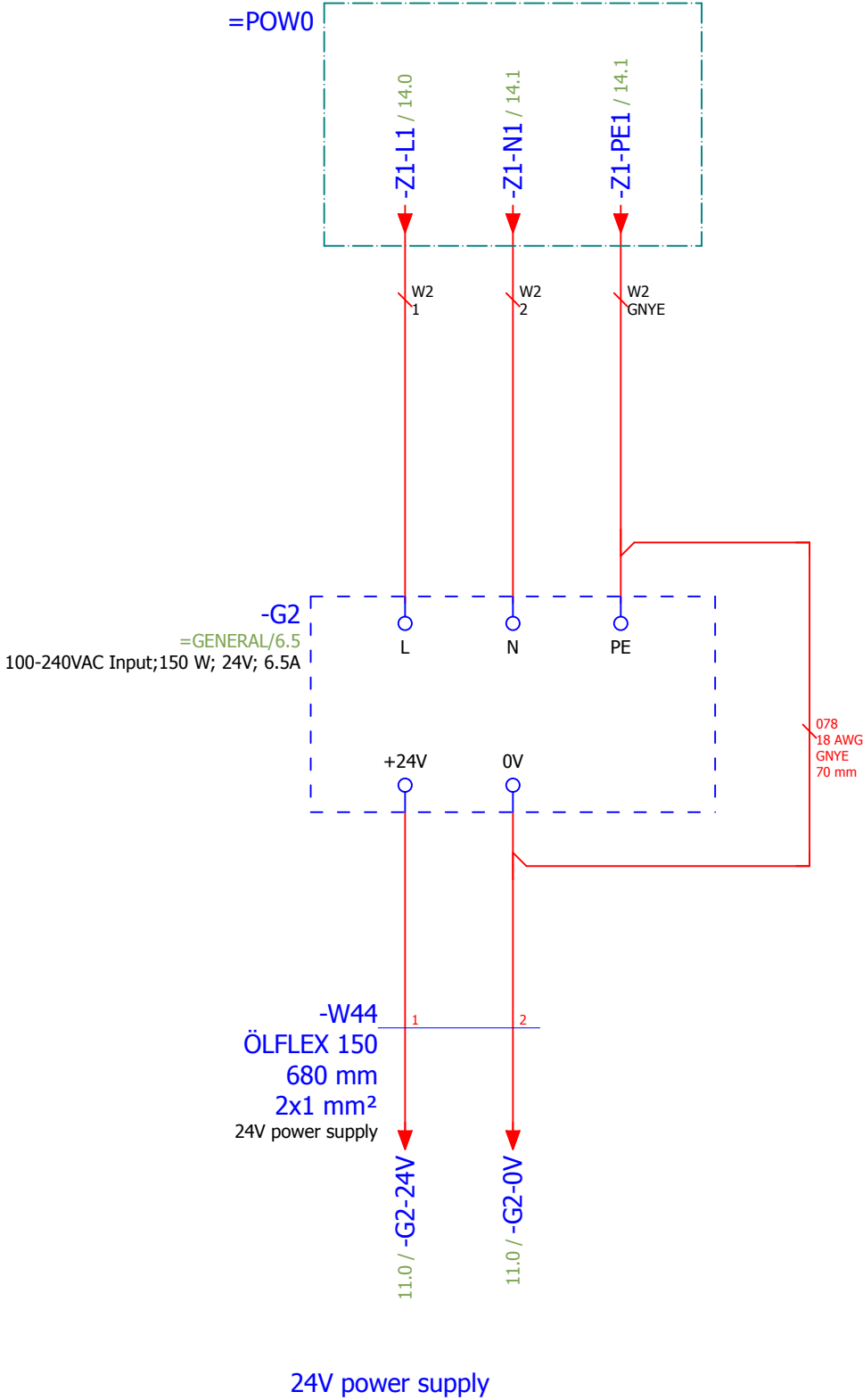


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Power distribution

Project:	COMPex Pro 100	Sub Schematics:	230V-Distribution elt POW0	Sub Schematics	=POW0
Part Number	1104569	Document Number	D125314	sheet	15
				of	250 sh.

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Modification	Date	Name	Date	24.03.2015
AE	13032-04	27.08.2013	Dirk Marschke	Editor
AD	09002-01	17.02.2009	Dirk Marschke	Plot
AC	08051-01	29.08.2008	L. Ambs	

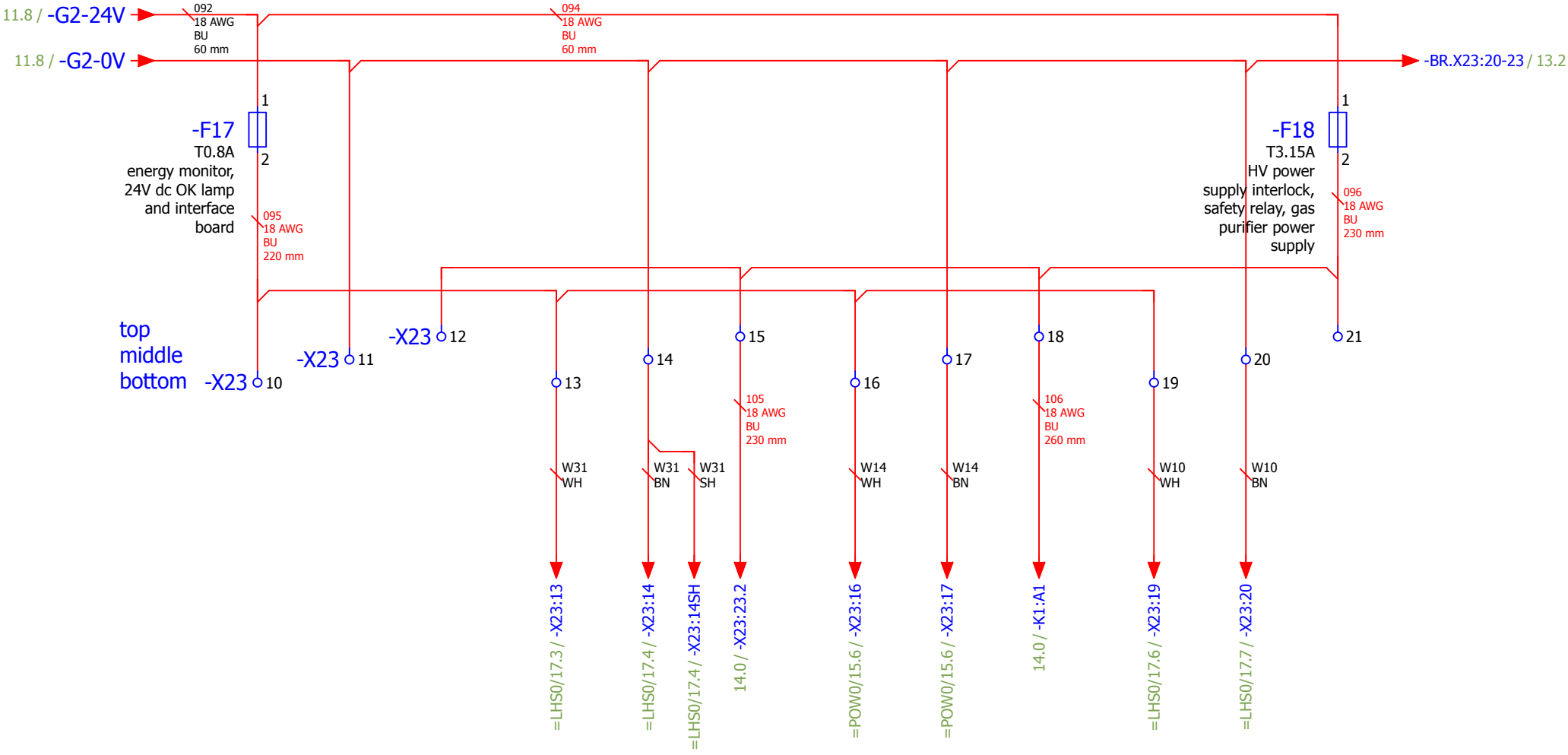


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24V power supply

Project: COMPex Pro 100		Sub Schematics: 24V-Distribution elt 24V0		Sub Schematics: =24V0	
Part Number: 1104570		Document Number: D125314		sheet 10	
				of 301 sh.	

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Spare

Energy Monitor

24V dc OK

Interface Board

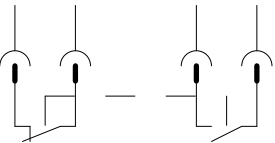
Modification	Date	Name	Date	24.03.2015
AE 13032-04	27.08.2013	Dirk Marschke	Editor	Dirk Marschke
AD 09002-01	17.02.2009	Dirk Marschke	Plot	08.04.2015
AC 08051-01	29.08.2008	L. Ambs		

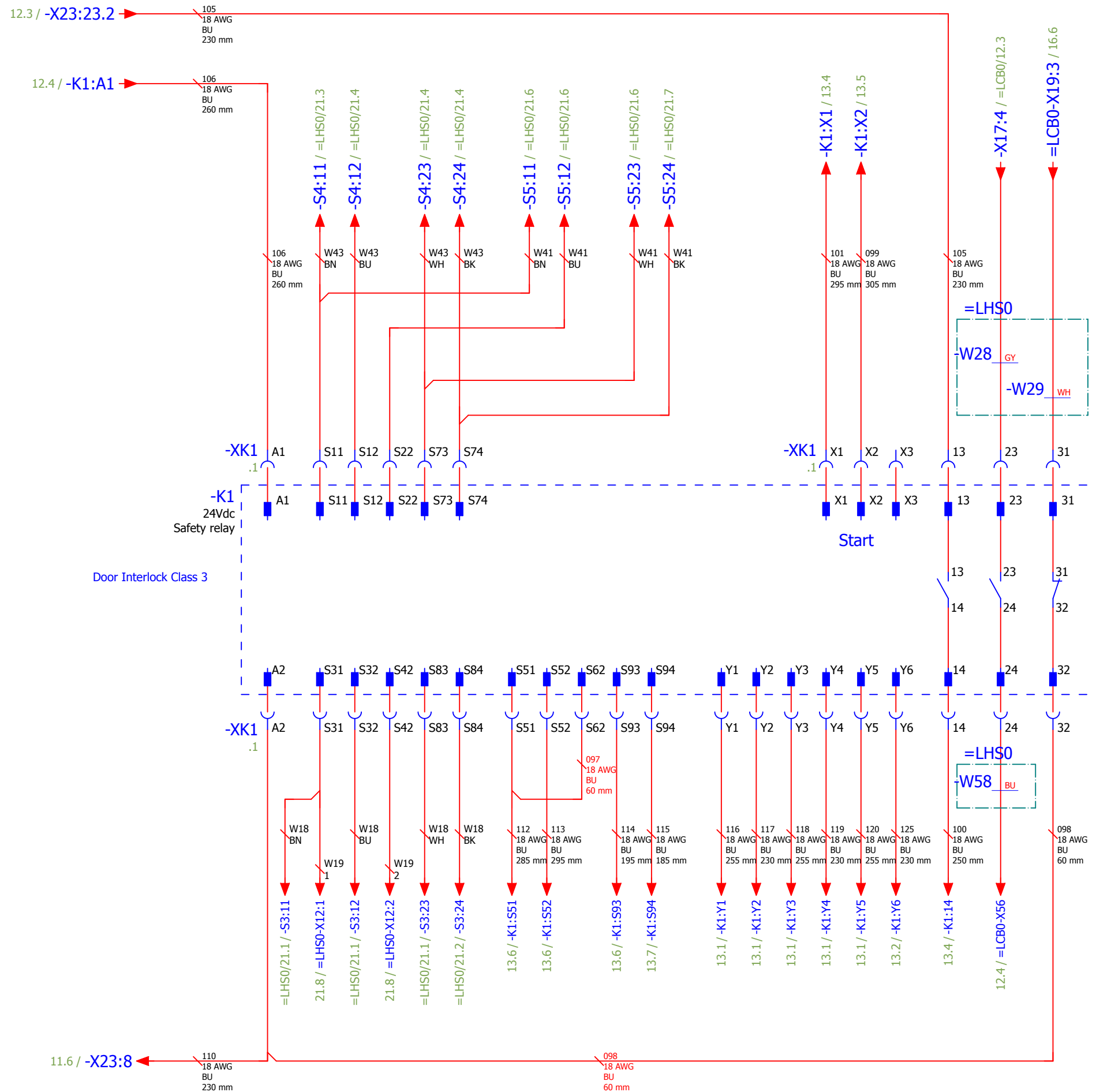


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24V junction

Project:	COMPex Pro 100	Sub Schematics:	24V-Distribution elt 24V0	Sub Schematics	=24V0
Part Number	1104570	Document Number	D125314	sheet	12
				of	301 sh.



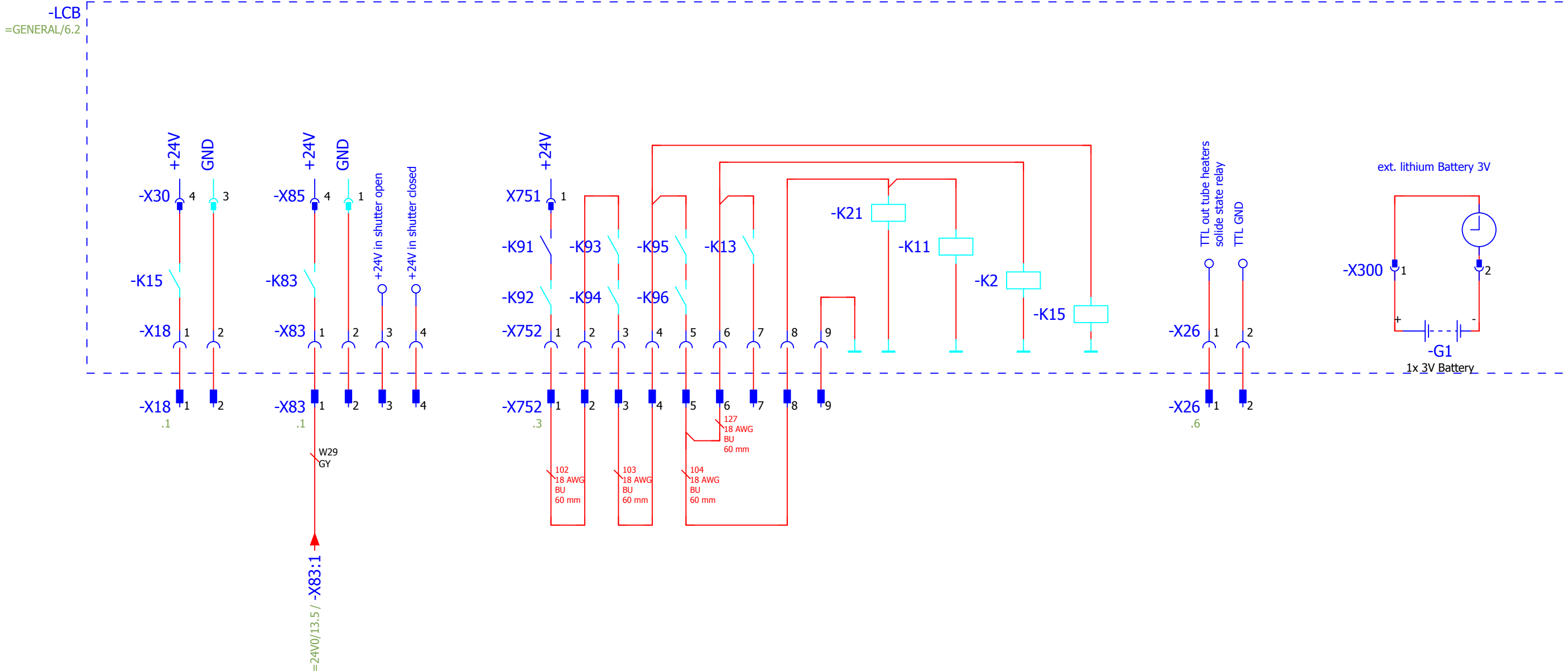


13	23	31	S11	S12	S31	S32	S42
A1	X1	X2	X3	S22	S51	S52	S62
-K1							
A2	S73	S74	S83	S93	Y1	Y3	Y5
14	24	32	S84	S94	Y2	Y4	Y6

Modification	Date	Name	Date	24.03.2015
AE 13032-04	27.08.2013	Dirk Marschke	Editor	Dirk Marschke
AD 09002-01	17.02.2009	Dirk Marschke	Plot	08.04.2015
AC 08051-01	29.08.2008	L. Ambs		



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Spare

start safety relais

Interlock Extension

temp. controller TTL out

Battery

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Modification	Date	Name	Date	24.03.2015
AI	14512-01	24.03.2015	Dirk Marschke	Editor
AH	11320-08	31.03.2014	Dirk Marschke	Plot
AG	13032-09	20.11.2013	Dirk Marschke	



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Interlock Extension

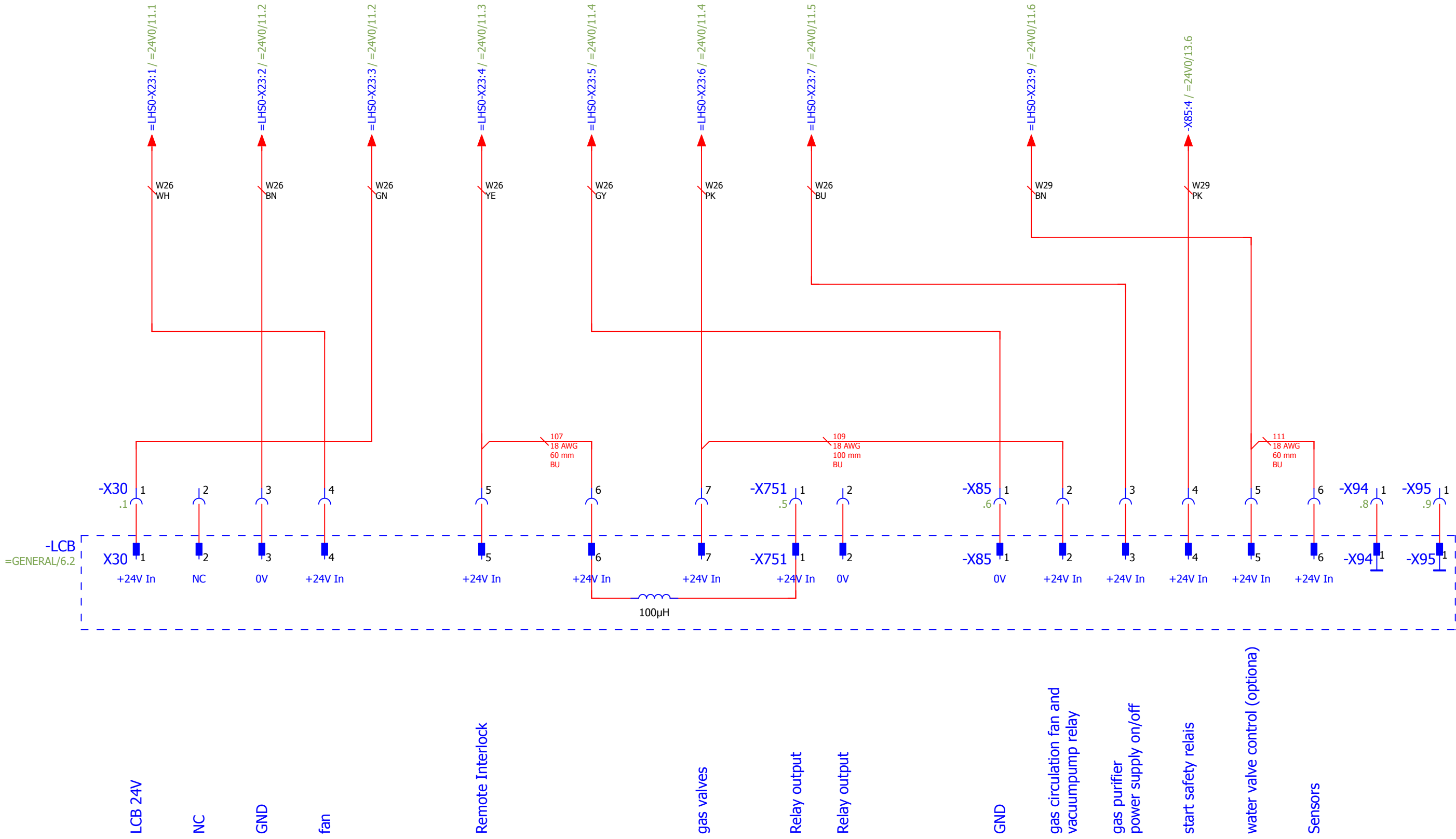
Project: COMPex Pro 100
Sub Schematics: LCB Box elt LCB0

Part Number
1104571

Document Number
D125314

Sub Schematics =LCB0	
sheet	10
of	326 sh.

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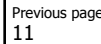
Modification	Date	Name	Date	24.03.2015
AI	14512-01	24.03.2015	Dirk Marschke	Editor
AH	11320-08	31.03.2014	Dirk Marschke	Plot
AG	13032-09	20.11.2013	Dirk Marschke	



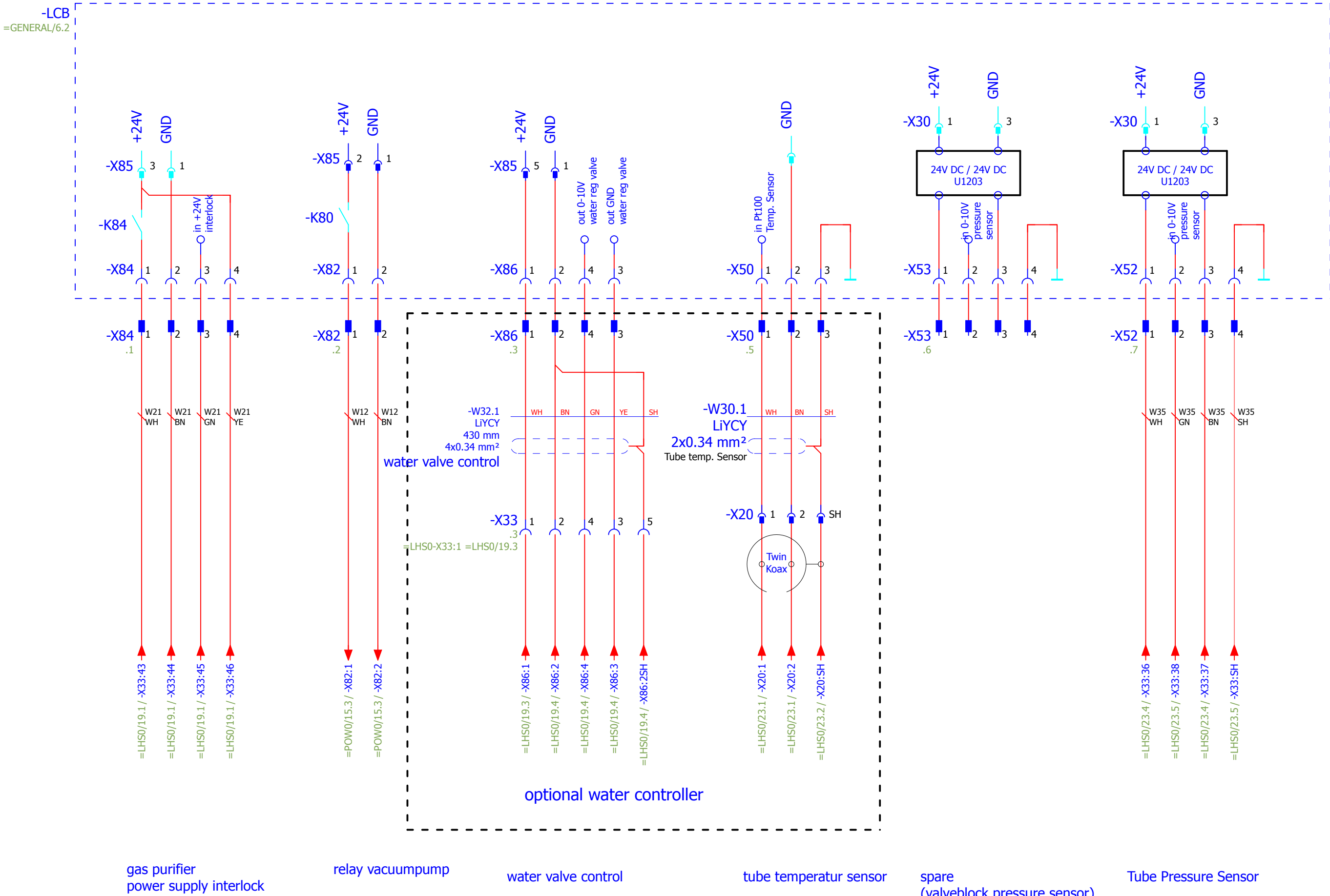
Hans-Böckler Str. 12
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Tel.: 0551 69380
Fax.: 0551 68691

LCB 24V

Project: COMPex Pro 100		Sub Schematics: LCB Box elt LCB0		Sub Schematics =LCB0	
Part Number 1104571		Document Number D125314		sheet 11	
				of 326 sh.	



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Modification	Date	Name	Date	24.03.2015
AI	14512-01	Dirk Marschke	Editor	Dirk Marschke
AH	11320-08	Dirk Marschke	Plot	08.04.2015
AG	13032-09	Dirk Marschke		

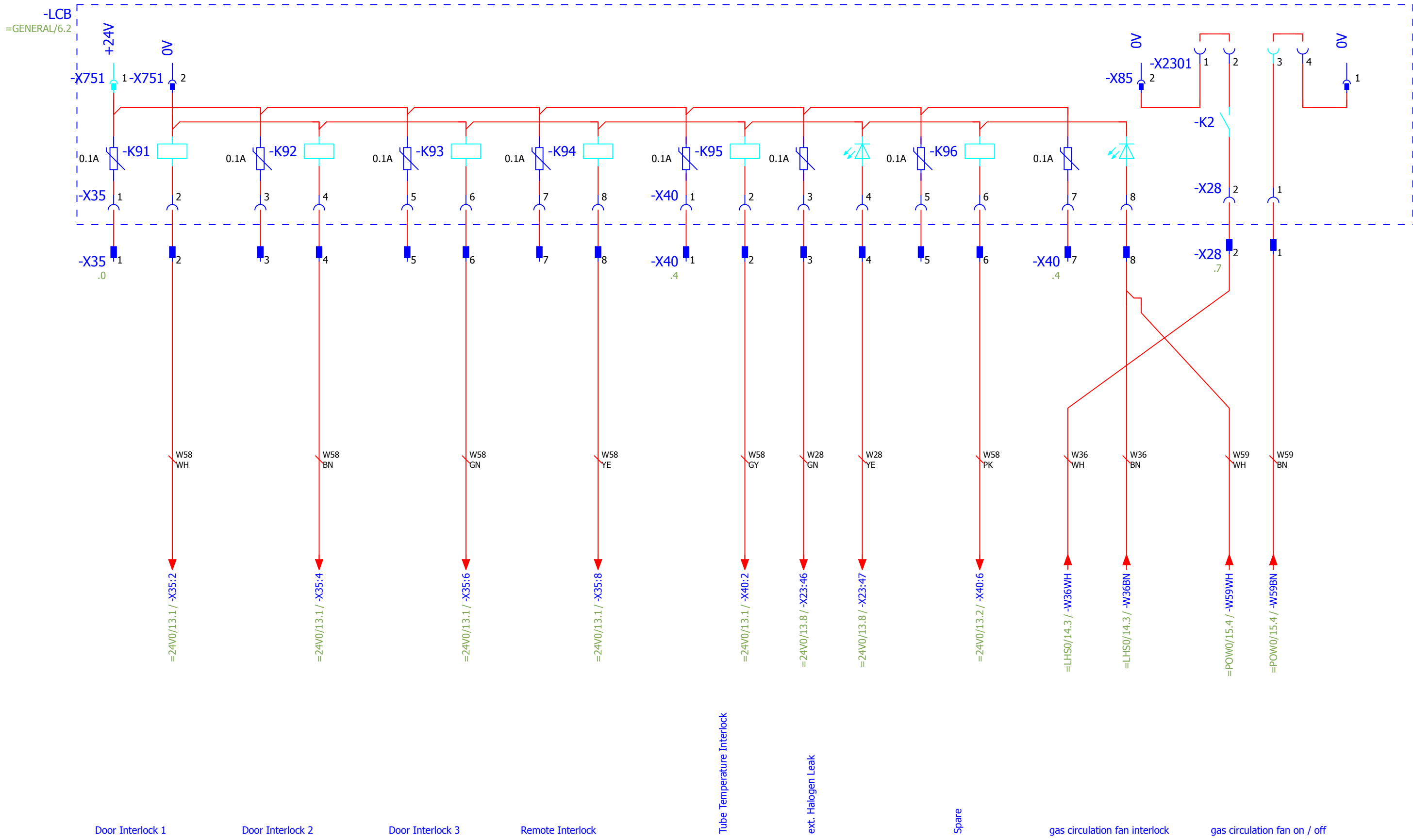


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LCB analog sensors

Project:	COMPex Pro 100	Sub Schematics:	LCB Box elt LCB0	Sub Schematics	=LCB0
Part Number	1104571	Document Number	D125314	sheet	13
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Modification	Date	Name	Date	24.03.2015
AI	14512-01	24.03.2015	Dirk Marschke	Editor
AH	11320-08	31.03.2014	Dirk Marschke	Plot
AG	13032-09	20.11.2013	Dirk Marschke	



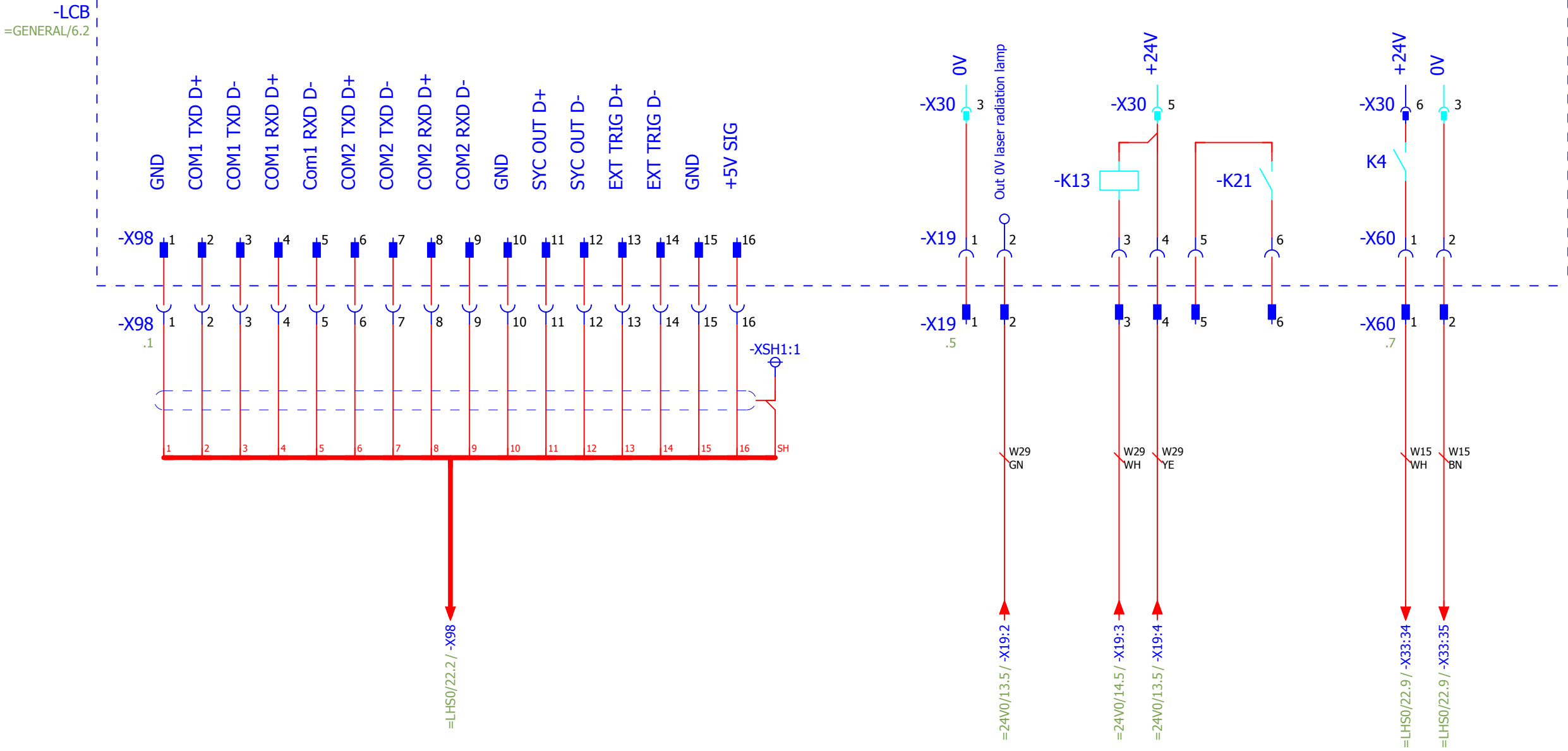
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Fax.: 0551 68691

LCB cover interlock

Project:	COMPex Pro 100	Sub Schematics:	LCB Box elt LCB0	Part Number	1104571	Document Number	D125314	sheet	15
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gas circulation fan on /

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Interface Data

External Laser Radiation Lamp

internal laser radiation lamp

Modification	Date	Name	Date	24.03.2015
AI	14512-01	24.03.2015	Dirk Marschke	Editor
AH	11320-08	31.03.2014	Dirk Marschke	Plot
AG	13032-09	20.11.2013	Dirk Marschke	



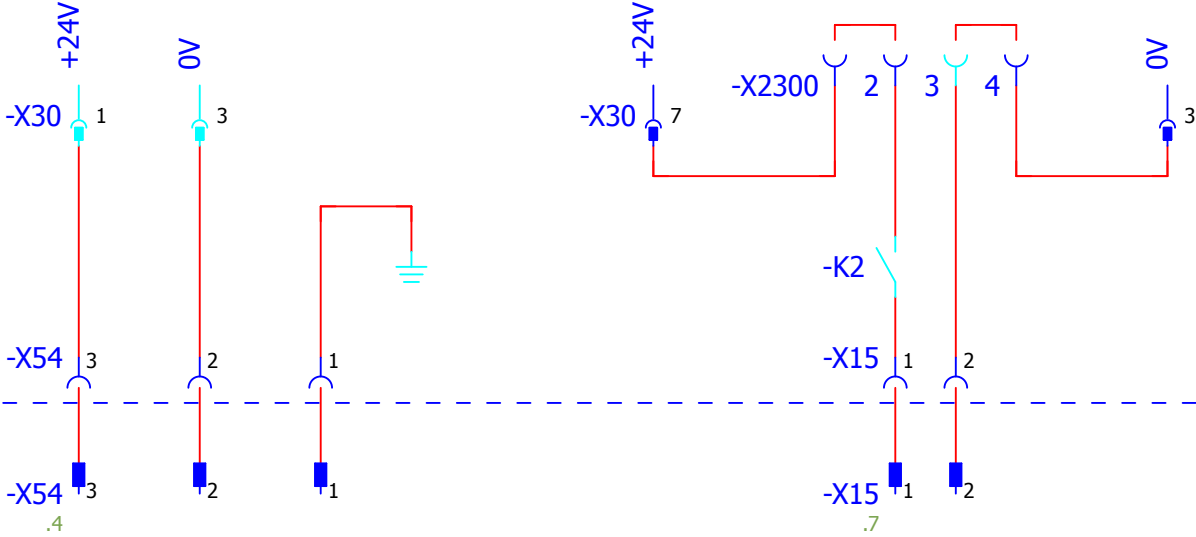
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LCB-Interface Data

Project:	COMPex Pro 100	Sub Schematics:	LCB Box elt LCB0	Document Number	D125314	sheet	16
Part Number	1104571					of	326 sh.

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-LCB
=GENERAL/6.2



Spare

HVPS
interlock
optional

Modification	Date	Name	Date	24.03.2015
AI	14512-01	24.03.2015	Dirk Marschke	Editor
AH	11320-08	31.03.2014	Dirk Marschke	Plot
AG	13032-09	20.11.2013	Dirk Marschke	



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HVPS interlock optional

Project:	COMPex Pro 100	Sub Schematics:	LCB Box elt LCB0	Sub Schematics	=LCB0
Part Number	1104571	Document Number	D125314	sheet	17
				of	326 sh.

