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Job number	620100-620400 0 004.dwg
Edited by	Ferenc Baracsi

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=DOC				
	0	DOC: Cover sheet	2023. 10. 11.	BaF
	1	DOC: Table of contents	2023. 10. 11.	BaF
	1.a	DOC: Table of contents	2023. 10. 11.	BaF
	1.b	DOC: Table of contents	2023. 10. 11.	BaF
	1.c	DOC: Table of contents	2023. 10. 11.	BaF
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	1.e	DOC: Table of contents	2023. 10. 11.	BaF
	1.f	DOC: Table of contents	2023. 10. 11.	BaF
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	1.l	DOC: Table of contents	2023. 10. 11.	BaF
	1.m	DOC: Table of contents	2023. 10. 11.	BaF
	1.n	DOC: Table of contents	2023. 10. 11.	BaF
	2	DOC: Project information	2023. 10. 11.	BaF
	3	DOC: Wiring colours	2023. 10. 11.	BaF
	4	DOC: Explanation diagram (Frame)	2023. 10. 11.	BaF
	5	DOC: Explanation component labelling	2023. 10. 11.	BaF
	6	DOC: Structure identifier overview	2023. 10. 11.	BaF
	7	DOC: Structure identifier overview	2023. 10. 11.	BaF
	10	DOC: Layout	2023. 10. 11.	BaF
	45	DOC: Control cabinet outside	2023. 10. 11.	BaF
	50	DOC: Mounting plates	2023. 10. 11.	BaF
	051	DOC: Enclosure legend	2023. 10. 11.	BaF
	052	DOC: Enclosure legend	2023. 10. 11.	BaF
	053	DOC: Enclosure legend	2023. 10. 11.	BaF

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=DOC				
	125	DOC: S-bus overview - line 1	2023. 10. 11.	BaF
	126	DOC: S-bus overview - line 2	2023. 10. 11.	BaF
	140	DOC: ASI-overview / Line 1	2023. 10. 11.	BaF
	141	DOC: ASI-overview / Line 2	2023. 10. 11.	BaF
=GEN +COP1		Control panel (location)		
	1	GEN: Supply control panel	2023. 10. 11.	BaF
	5	GEN: Transformers	2023. 10. 11.	BaF
	6	GEN: Control voltage 230VAC	2023. 10. 11.	BaF
	10	GEN: 24VDC supply	2023. 10. 11.	BaF
	11	GEN: 24VDC supply	2023. 10. 11.	BaF
	12	GEN: 24VDC supply	2023. 10. 11.	BaF
	13	GEN: 24VDC Potential -X5	2023. 10. 11.	BaF
	14	GEN: 24VDC Potential -X5	2023. 10. 11.	BaF
	15	GEN: 24VDC Potential -X51	2023. 10. 11.	BaF
	16	GEN: 24VDC Potential -X51	2023. 10. 11.	BaF
	18	GEN: 24VDC Potential -X52	2023. 10. 11.	BaF
	25	GEN: Control cabinet cooling	2023. 10. 11.	BaF
	30	GEN: Panel-lamp	2023. 10. 11.	BaF
	50	GEN: SEW Gateways	2023. 10. 11.	BaF
	51	GEN: SEW Gateways	2023. 10. 11.	BaF
	53	GEN: Profinet switch	2023. 10. 11.	BaF
	58	GEN: ASi-Masters	2023. 10. 11.	BaF
	59	GEN: ASi signal distribution	2023. 10. 11.	BaF
	70	GEN: Emergency-Stop modul safety area Emergency Stop	2023. 10. 11.	BaF
	71	GEN: Emergency-Stop modul safety guard area Semitech	2023. 10. 11.	BaF
	73	GEN: Emergency-Stop module Layer former	2023. 10. 11.	BaF
	74	GEN: Emergency-Stop module Layer sheet inserter	2023. 10. 11.	BaF
	78	GEN: Control elements	2023. 10. 11.	BaF

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=GEN +COP1		Control panel (location)		
	79	GEN: Control elements	2023. 10. 11.	BaF
	85	GEN: Signals 24VDC potential	2023. 10. 11.	BaF
	90	GEN: Circuit breaker overview	2023. 10. 11.	BaF
	91	GEN: Motor circuit breaker overview	2023. 10. 11.	BaF
	92	GEN: Signal 24VDC	2023. 10. 11.	BaF
=GEN +TER		Terminal diagram		
	200	Terminal diagram =+COP1-PE3	2023. 10. 11.	BaF
	201	Terminal diagram =GEN+COP1-X0	2023. 10. 11.	BaF
	202	Terminal diagram =GEN+COP1-X2	2023. 10. 11.	BaF
	203	Terminal diagram =GEN+COP1-X5	2023. 10. 11.	BaF
	204	Terminal diagram =GEN+COP1-X5	2023. 10. 11.	BaF
	205	Terminal diagram =GEN+COP1-X5.0	2023. 10. 11.	BaF
	206	Terminal diagram =GEN+COP1-X6	2023. 10. 11.	BaF
	207	Terminal diagram =GEN+COP1-X7	2023. 10. 11.	BaF
	209	Terminal diagram =GEN+COP1-X51	2023. 10. 11.	BaF
	210	Terminal diagram =GEN+COP1-X51	2023. 10. 11.	BaF
	211	Terminal diagram =GEN+COP1-X52	2023. 10. 11.	BaF
=GEN +CBL		Cable overview		
	400	Cable overview : =GEN+COP1-50W1 - =GEN+COP1-58W5	2023. 10. 11.	BaF
=PLC1				
	1	PLC1: PLC-overview	2023. 10. 11.	BaF
	2	PLC1: PLC-overview power supply	2023. 10. 11.	BaF
	3	PLC1: PLC-overview CPU	2023. 10. 11.	BaF
	5	PLC1: PLC-overview input	2023. 10. 11.	BaF
	6	PLC1: PLC-overview input	2023. 10. 11.	BaF
	7	PLC1: PLC-overview input	2023. 10. 11.	BaF
	8	PLC1: PLC-overview input	2023. 10. 11.	BaF
	10	PLC1: PLC-overview output	2023. 10. 11.	BaF

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=PLC1				
	11	PLC1: PLC-overview output	2023. 10. 11.	BaF
	12	PLC1: PLC-overview output	2023. 10. 11.	BaF
	40	PLC1: ASI-Line 1 / Slave 2-11	2023. 10. 11.	BaF
	41	PLC1: ASI-Line 1 / Slave 12-21	2023. 10. 11.	BaF
	42	PLC1: ASI-Line 1 / Slave 22-31	2023. 10. 11.	BaF
	43	PLC1: ASI-Line 2 / Slave 2-11	2023. 10. 11.	BaF
	44	PLC1: ASI-Line 2 / Slave 12-21	2023. 10. 11.	BaF
	45	PLC1: ASI-Line 2 / Slave 22-31	2023. 10. 11.	BaF
=PLC1 +COP1		Control panel (location)		
	100	PLC1: Control unit	2023. 10. 11.	BaF
	105	PLC1: PLC input card	2023. 10. 11.	BaF
	110	PLC1: PLC output card	2023. 10. 11.	BaF
=SPLC1				
	1	DOC: SICK-Flexi-soft overview	2023. 10. 11.	BaF
	2	DOC: SICK-Overview CPU	2023. 10. 11.	BaF
	3	DOC: SICK-Overview Inputs/Outputs	2023. 10. 11.	BaF
	4	DOC: SICK-Overview Inputs/Outputs	2023. 10. 11.	BaF
	5	DOC: SICK-Overview Inputs/Outputs	2023. 10. 11.	BaF
=SPLC1 +COP1		Control panel (location)		
	11	SPLC1: 24VDC power supply	2023. 10. 11.	BaF
	13	SPLC1: 24VDC Potential -X9	2023. 10. 11.	BaF
	20	SPLC1: Test signals -X9	2023. 10. 11.	BaF
	21	SPLC1: Test signals -X9	2023. 10. 11.	BaF
	25	SPLC1: Test signals -X9	2023. 10. 11.	BaF
	30	SPLC1: Safety PLC	2023. 10. 11.	BaF
	35	SPLC1: Extension modules - emergency-stop zone	2023. 10. 11.	BaF
	36	SPLC1: Extension modules - inside safety guard zone	2023. 10. 11.	BaF
	37	SPLC1: Extension modules - Layer former zone	2023. 10. 11.	BaF

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=SPLC1 +COP1		Control panel (location)		
	38	SPLC1: Extension modules - Layer sheet inserter zone	2023. 10. 11.	BaF
=SPLC1 +TER		Terminal diagram		
	200	Terminal diagram =+	2023. 10. 11.	BaF
	201	Terminal diagram =SPLC1+COP1-X9	2023. 10. 11.	BaF
	202	Terminal diagram =SPLC1+COP1-X9.1	2023. 10. 11.	BaF
	203	Terminal diagram =SPLC1+COP1-X9.2	2023. 10. 11.	BaF
	204	Terminal diagram =SPLC1+COP1-X9.3	2023. 10. 11.	BaF
	205	Terminal diagram =SPLC1+COP1-X9.4	2023. 10. 11.	BaF
=SPLC1 +CBL		Cable overview		
	400	Cable overview : =SPLC1+COP1-30W2 - =SPLC1+COP1-30W2	2023. 10. 11.	BaF
=CLI1 +COP1		Control panel (location)		
	2	CLI1: 24VDC power supply	2023. 10. 11.	BaF
	10	CLI1: Contact exchange MSK <-> Client Shuttle Car	2023. 10. 11.	BaF
	12	CLI1: Contact exchange MSK <-> Client Shuttle Car	2023. 10. 11.	BaF
=CLI1 +F		Field		
	400	Cable overview : =OPD1+F-1W1 - =AC+F-15W1	2023. 10. 11.	BaF
	401	Cable overview : =AC+F-19W0 - =PT222+F-12W1	2023. 10. 11.	BaF
=CLI1 +TER		Terminal diagram		
	200	Terminal diagram =CLI1+COP1-X8	2023. 10. 11.	BaF
=CLI1 +CF		Centering frame		
	400	Cable overview : =F+CF-W15B0 - =F+CF-W15B0	2023. 10. 11.	BaF
=LAMP +F		Field		
	3	LAMP: Sensors/actuators/ASI	2023. 10. 11.	BaF
=OPD1				
	1	OPD1: Operator desk	2023. 10. 11.	BaF
	2	OPD1: Operator desk inside	2023. 10. 11.	BaF
	3	OPD1: Beckhoff CP2716	2023. 10. 11.	BaF

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=OPD1 +F		Field		
	1	OPD1: 230VAC infeed	2023. 10. 11.	BaF
	2	OPD1: 24VDC infeed	2023. 10. 11.	BaF
	4	OPD1: Human machine interface	2023. 10. 11.	BaF
	5	OPD1: Control elements	2023. 10. 11.	BaF
	6	OPD1: Control elements	2023. 10. 11.	BaF
	7	OPD1: Control elements	2023. 10. 11.	BaF
=OPD1 +TER		Terminal diagram		
	200	Terminal diagram =OPD1+JB1-X2	2023. 10. 11.	BaF
	201	Terminal diagram =OPD1+JB1-X5	2023. 10. 11.	BaF
	202	Terminal diagram =OPD1+JB1-X5	2023. 10. 11.	BaF
=OPD1 +PLG		Plug diagram		
	300	Plug diagram =OPD1+COP1-1X1	2023. 10. 11.	BaF
	301	Plug diagram =OPD1+COP1-2X1	2023. 10. 11.	BaF
	302	Plug diagram =OPD1+COP1-7X2	2023. 10. 11.	BaF
=OPD1 +CBL		Cable overview		
	400	Cable overview : =OPD1+F-1W1 - =OPD1+F-7W1	2023. 10. 11.	BaF
=HCU1				
	0	HCU1: Hand-control-unit outside	2023. 10. 11.	BaF
=HCU1 +F		Field		
	2	HCU1: Control elements	2023. 10. 11.	BaF
	5	HCU1: Control elements	2023. 10. 11.	BaF
	6	HCU1: Control elements	2023. 10. 11.	BaF
=HCU1 +TER		Terminal diagram		
	200	Terminal diagram =HCU1+JB1-X5	2023. 10. 11.	BaF
	201	Terminal diagram =HCU1+JB1-X6	2023. 10. 11.	BaF
=HCU1 +PLG		Plug diagram		
	300	Plug diagram =HCU1+COP1-2X1	2023. 10. 11.	BaF

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=HCU1 +CBL		Cable overview		
	400	Cable overview : =HCU1+F-4W1 - =HCU1+JB1-6W0	2023. 10. 11.	BaF
=HCU2				
	0	HCU2: Hand-control-unit outside	2023. 10. 11.	BaF
=HCU2 +F		Field		
	2	HCU2: Control elements	2023. 10. 11.	BaF
	5	HCU2: Control elements	2023. 10. 11.	BaF
	6	HCU2: Control elements	2023. 10. 11.	BaF
=HCU2 +TER		Terminal diagram		
	200	Terminal diagram =HCU2+JB1-X5	2023. 10. 11.	BaF
	201	Terminal diagram =HCU2+JB1-X6	2023. 10. 11.	BaF
=HCU2 +PLG		Plug diagram		
	300	Plug diagram =HCU2+COP1-2X1	2023. 10. 11.	BaF
=HCU2 +CBL		Cable overview		
	400	Cable overview : =HCU2+F-4W1 - =HCU2+JB1-6W0	2023. 10. 11.	BaF
=HCU3				
	0	HCU3: Hand-control-unit outside	2023. 10. 11.	BaF
=HCU3 +F		Field		
	5	HCU3: Control elements	2023. 10. 11.	BaF
=HCU3 +PLG		Plug diagram		
	300	Plug diagram =HCU3+COP1-5X3	2023. 10. 11.	BaF
=HCU3 +CBL		Cable overview		
	400	Cable overview : =HCU3+F-5W3 - =HCU3+F-5W3	2023. 10. 11.	BaF
=HCU4				
	0	HCU4: Hand-control-unit outside	2023. 10. 11.	BaF
=HCU4 +F		Field		
	5	HCU4: Control elements	2023. 10. 11.	BaF

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=HCU4 +PLG		Plug diagram		
	300	Plug diagram =HCU4+COP1-5X1	2023. 10. 11.	BaF
=HCU4 +CBL		Cable overview		
	400	Cable overview : =HCU4+F-5W1 - =HCU4+F-5W1	2023. 10. 11.	BaF
=HCU5				
	0	HCU5: Hand-control-unit outside	2023. 10. 11.	BaF
=HCU5 +F		Field		
	2	HCU5: Control elements	2023. 10. 11.	BaF
	5	HCU5: Control elements	2023. 10. 11.	BaF
	6	HCU5: Control elements	2023. 10. 11.	BaF
	7	HCU5: Control elements	2023. 10. 11.	BaF
=HCU5 +TER		Terminal diagram		
	200	Terminal diagram =HCU5+JB1-X5	2023. 10. 11.	BaF
	201	Terminal diagram =HCU5+JB1-X6	2023. 10. 11.	BaF
=HCU5 +PLG		Plug diagram		
	300	Plug diagram =HCU5+COP1-2X1	2023. 10. 11.	BaF
=HCU5 +CBL		Cable overview		
	400	Cable overview : =HCU5+F-2W1 - =HCU5+JB1-6W0	2023. 10. 11.	BaF
=SG1 +F		Field		
	2	SG1: 24VDC infeed Palletizer area	2023. 10. 11.	BaF
	3	SG1: Swing door pallet infeed	2023. 10. 11.	BaF
	4	SG1: Safety guard Palletizer area	2023. 10. 11.	BaF
	6	SG1: Safety guard Palletizer area	2023. 10. 11.	BaF
	7	SG1: Safety guard at Accumulation table	2023. 10. 11.	BaF
=SG1 +TER		Terminal diagram		
	200	Terminal diagram =SG1+COP1-X10	2023. 10. 11.	BaF
	201	Terminal diagram =SG1+COP1-X10	2023. 10. 11.	BaF

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=SG1 +CBL		Cable overview		
	400	Cable overview : =SG1+F-3W1 - =SG1+F-7W5	2023. 10. 11.	BaF
=SLB1				
	0	SLB1: Hand-control-unit outside	2023. 10. 11.	BaF
=SLB1 +F		Field		
	3	SLB1: 24VDC infeed safety-LB infeed	2023. 10. 11.	BaF
	4	SLB1: Safety-LB infeed	2023. 10. 11.	BaF
	5	SLB1: Control elements	2023. 10. 11.	BaF
=SLB1 +TER		Terminal diagram		
	200	Terminal diagram =SLB1+JB1-X5	2023. 10. 11.	BaF
=SLB1 +PLG		Plug diagram		
	300	Plug diagram =SLB1+COP1-3X1	2023. 10. 11.	BaF
=SLB1 +CBL		Cable overview		
	400	Cable overview : =SLB1+F-4COM3 - =SLB1+F-4W9	2023. 10. 11.	BaF
=SLB2				
	0	SLB2: Hand-control-unit outside	2023. 10. 11.	BaF
=SLB2 +F		Field		
	3	SLB2: 24VDC infeed safety-LB outfeed	2023. 10. 11.	BaF
	4	SLB2: Safety-LB infeed	2023. 10. 11.	BaF
	5	SLB2: Control elements	2023. 10. 11.	BaF
	6	SLB2: Control elements	2023. 10. 11.	BaF
=SLB2 +TER		Terminal diagram		
	200	Terminal diagram =SLB2+JB1-X5	2023. 10. 11.	BaF
=SLB2 +PLG		Plug diagram		
	300	Plug diagram =SLB2+COP1-3X1	2023. 10. 11.	BaF
=SLB2 +CBL		Cable overview		
	400	Cable overview : =SLB2+F-4COM3 - =SLB2+F-4W9	2023. 10. 11.	BaF

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=SLB3				
	0	JB1: junction box outside	2023. 10. 11.	BaF
=SLB3 +F		Field		
	3	SLB3: 24VDC infeed safety-LB at sheet	2023. 10. 11.	BaF
	4	SLB3: Safety-LB at sheet	2023. 10. 11.	BaF
	5	SLB3: Safety-LB at sheet	2023. 10. 11.	BaF
=SLB3 +TER		Terminal diagram		
	200	Terminal diagram =SLB3+JB1-X5	2023. 10. 11.	BaF
=SLB3 +PLG		Plug diagram		
	300	Plug diagram =SLB3+COP1-3X1	2023. 10. 11.	BaF
=SLB3 +CBL		Cable overview		
	400	Cable overview : =SLB3+F-3W1 - =SLB3+F-4W3	2023. 10. 11.	BaF
=BT22 +F		Field		
	11	BT137: Bottle-conveyor inverter	2023. 10. 11.	BaF
	12	BT137: Bottle-conveyor motor	2023. 10. 11.	BaF
	15	BT137: Bottle-conveyor positioning	2023. 10. 11.	BaF
	16	BT137: Bottle-conveyor positioning	2023. 10. 11.	BaF
=LF +F		Field		
	2	LF: 24VDC infeed	2023. 10. 11.	BaF
	3	LF: 24VDC infeed	2023. 10. 11.	BaF
	4	LF: Safety guard	2023. 10. 11.	BaF
	5	LF: Safety guard	2023. 10. 11.	BaF
	6	LF: Safety guard	2023. 10. 11.	BaF
	7	LF: Safety guard	2023. 10. 11.	BaF
	8	LF: Safety valve Layer former	2023. 10. 11.	BaF
	9	LF: AS-i distribution	2023. 10. 11.	BaF
	11	LF: Horizontal drive	2023. 10. 11.	BaF
	12	LF: Horizontal drive	2023. 10. 11.	BaF
	15	LF: Horizontal drive impulse sensor	2023. 10. 11.	BaF

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=LF +F		Field		
	16	LF: AS-i distribution	2023. 10. 11.	BaF
	17	LF: AS-i distribution	2023. 10. 11.	BaF
	21	LF: Vertical drive	2023. 10. 11.	BaF
	22	LF: Vertical drive	2023. 10. 11.	BaF
	25	LF: Vertical drive impulse sensor	2023. 10. 11.	BaF
	26	LF: Layer former sensors/actuators	2023. 10. 11.	BaF
	27	LF: Layer former sensors/actuators	2023. 10. 11.	BaF
	28	LF: Layer former sensors/actuators	2023. 10. 11.	BaF
	29	LF: Layer former sensors/actuators	2023. 10. 11.	BaF
	30	LF: Layer former sensors/actuators	2023. 10. 11.	BaF
	31	LF: Layer former sensors/actuators	2023. 10. 11.	BaF
	32	LF: Layer former sensors/actuators	2023. 10. 11.	BaF
	33	LF: Layer former sensors/actuators	2023. 10. 11.	BaF
	36	LF: Layer former sensors/actuators	2023. 10. 11.	BaF
	37	LF: Layer former sensors/actuators	2023. 10. 11.	BaF
	38	LF: Layer former sensors/actuators	2023. 10. 11.	BaF
	39	LF: Layer former sensors/actuators	2023. 10. 11.	BaF
	40	LF: Layer former sensors/actuators	2023. 10. 11.	BaF
=LF +TER		Terminal diagram		
	200	Terminal diagram =LF+JB1-X5	2023. 10. 11.	BaF
	201	Terminal diagram =LF+JB1-X5	2023. 10. 11.	BaF
	202	Terminal diagram =LF+JB1-X5	2023. 10. 11.	BaF
	203	Terminal diagram =LF+JB2-X5	2023. 10. 11.	BaF
	204	Terminal diagram =LF+JB2-X5	2023. 10. 11.	BaF
=LF +PLG		Plug diagram		
	300	Plug diagram =LF+COP1-2X1	2023. 10. 11.	BaF
	301	Plug diagram =LF+COP1-3X1	2023. 10. 11.	BaF
	302	Plug diagram =LF+COP1-12X1	2023. 10. 11.	BaF

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=LF +PLG		Plug diagram		
	303	Plug diagram =LF+COP1-22X1	2023. 10. 11.	BaF
=LF +CBL		Cable overview		
	400	Cable overview : =LF+F-2W1 - =LF+F-39W0.1	2023. 10. 11.	BaF
=AC +F		Field		
	6	AC: Accumulation tabel AS-i distribution	2023. 10. 11.	BaF
	11	AC: accumulation-table bottle-belt inverter	2023. 10. 11.	BaF
	12	AC: accumulation-table bottle-belt motor	2023. 10. 11.	BaF
	15	AC: accumulation-table bottle-belt positioning	2023. 10. 11.	BaF
	16	AC: accumulation-table bottle-belt sensors/actuators/ASI	2023. 10. 11.	BaF
	17	AC: accumulation-table bottle-belt sensors/actuators/ASI	2023. 10. 11.	BaF
	19	AC: accumulation-table bottle-belt sensors/actuators/ASI	2023. 10. 11.	BaF
=AC +PLG		Plug diagram		
	300	Plug diagram =AC+COP1-12X1	2023. 10. 11.	BaF
	301	Plug diagram =AC+COP1-19X0	2023. 10. 11.	BaF
	302	Plug diagram =AC+F-12X1	2023. 10. 11.	BaF
=AC +CBL		Cable overview		
	400	Cable overview : =AC+F-12W1 - =AC+F-19W0	2023. 10. 11.	BaF
=LI +F		Field		
	6	LI: Layer inserter AS-i distribution	2023. 10. 11.	BaF
	7	LI: Layer inserter AS-i distribution	2023. 10. 11.	BaF
	8	LI: Safety valve layer inserter	2023. 10. 11.	BaF
	11	LI: Liftmotor	2023. 10. 11.	BaF
	12	LI: Liftmotor	2023. 10. 11.	BaF
	14	LI: Liftmotor brake	2023. 10. 11.	BaF
	15	LI: Layer inserter impulse sensor	2023. 10. 11.	BaF
	16	LI: Liftmotor sensors/actuators/ASI	2023. 10. 11.	BaF
	17	LI: Liftmotor sensors/actuators/ASI	2023. 10. 11.	BaF
	18	LI: Liftmotor impulse sensor	2023. 10. 11.	BaF

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Assignment	Page	Page description	Date	Edited by
=LI +F		Field		
	21	LI: Sledge motor	2023. 10. 11.	BaF
	22	LI: Sledge motor	2023. 10. 11.	BaF
	25	LI: Sledge impulse sensor	2023. 10. 11.	BaF
	26	LI: Sledge sensors/actuators/ASI	2023. 10. 11.	BaF
	32	LI: palletizing-head motor	2023. 10. 11.	BaF
	34	LI: palletizing-head motor	2023. 10. 11.	BaF
	36	LI: Palletizing-head sensors/actuators/ASI	2023. 10. 11.	BaF
	37	LI: Palletizing-head sensors/actuators/ASI	2023. 10. 11.	BaF
	38	LI: Palletizing-head sensors/actuators/ASI	2023. 10. 11.	BaF
	39	LI: Palletizing-head sensors/actuators/ASI	2023. 10. 11.	BaF
=LI +PLG		Plug diagram		
	300	Plug diagram =LI+COP1-12X1	2023. 10. 11.	BaF
	301	Plug diagram =LI+COP1-18X1	2023. 10. 11.	BaF
	302	Plug diagram =LI+COP1-22X1	2023. 10. 11.	BaF
	303	Plug diagram =LI+COP1-32X1	2023. 10. 11.	BaF
	304	Plug diagram =LI+F-32X1	2023. 10. 11.	BaF
=LI +CBL		Cable overview		
	400	Cable overview : =LI+COP1-11W5 - =LI+F-39W1	2023. 10. 11.	BaF
	401	Cable overview : =LI+F-39W1 - =LI+F-39W6	2023. 10. 11.	BaF
=CF +F		Field		
	3	CF: 24VDC infeed	2023. 10. 11.	BaF
	9	CF: Centering frame belt control	2023. 10. 11.	BaF
	11	CF: Liftmotor inverter	2023. 10. 11.	BaF
	12	CF: Liftmotor motor	2023. 10. 11.	BaF
	15	CF: Liftmotor impulse sensor	2023. 10. 11.	BaF
	16	CF: Liftmotor sensors/actuators/ASI	2023. 10. 11.	BaF
	21	CF: Centering bars transversal	2023. 10. 11.	BaF
	22	CF: Centering bars transversal	2023. 10. 11.	BaF

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Assignment	Page	Page description	Date	Edited by
=CF +F		Field		
	25	CF: Centering bars transversal	2023. 10. 11.	BaF
	31	CF: Centering bars longitudinal	2023. 10. 11.	BaF
	32	CF: Centering bars longitudinal	2023. 10. 11.	BaF
	35	CF: Centering bars longitudinal HTL sensor	2023. 10. 11.	BaF
=CF +TER		Terminal diagram		
	200	Terminal diagram =CF+JB1-X5	2023. 10. 11.	BaF
	201	Terminal diagram =CF+JB1-X6	2023. 10. 11.	BaF
=CF +PLG		Plug diagram		
	300	Plug diagram =CF+COP1-3X1	2023. 10. 11.	BaF
	301	Plug diagram =CF+COP1-12X1	2023. 10. 11.	BaF
	302	Plug diagram =CF+COP1-22X1	2023. 10. 11.	BaF
	303	Plug diagram =CF+COP1-32X1	2023. 10. 11.	BaF
=CF +CBL		Cable overview		
	400	Cable overview : =CF+COP1-11W5 - =F+CF-W15B0	2023. 10. 11.	BaF
=PM +F		Field		
	6	PM: AS-i distribution	2023. 10. 11.	BaF
	8	PM: Safety valve pallet magazine	2023. 10. 11.	BaF
	16	PM: Pallet magazine sensors/actuators	2023. 10. 11.	BaF
	17	PM: Pallet magazine sensors/actuators	2023. 10. 11.	BaF
	18	PM: Pallet magazine sensors/actuators	2023. 10. 11.	BaF
=PM +CBL		Cable overview		
	400	Cable overview : =PM+F-8W1.1 - =PM+F-18W0.1	2023. 10. 11.	BaF
=PT216 +F		Field		
	11	PT216: Roller conveyor	2023. 10. 11.	BaF
	12	PT216: Roller conveyor	2023. 10. 11.	BaF
	16	PT216: Roller conveyor sensors/actuators	2023. 10. 11.	BaF
=PT217 +F		Field		
	11	PT217: Roller conveyor	2023. 10. 11.	BaF

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Assignment	Page	Page description	Date	Edited by
=PT217 +F		Field		
	12	PT217: Roller conveyor	2023. 10. 11.	BaF
	16	PT217: Roller conveyor sensors/actuators	2023. 10. 11.	BaF
=PT218 +F		Field		
	11	PT218: Roller conveyor	2023. 10. 11.	BaF
	12	PT218: Roller conveyor	2023. 10. 11.	BaF
	16	PT218: Roller conveyor sensors/actuators	2023. 10. 11.	BaF
=PT219 +F		Field		
	11	PT219: Chain conveyor	2023. 10. 11.	BaF
	12	PT219: Chain conveyor	2023. 10. 11.	BaF
	15	PT219: Chain conveyor impulse sensor	2023. 10. 11.	BaF
	16	PT219: Chain conveyor sensors/actuators	2023. 10. 11.	BaF
=PT220 +F		Field		
	11	PT220: Roller conveyor	2023. 10. 11.	BaF
	12	PT220: Roller conveyor	2023. 10. 11.	BaF
	14	PT220: Roller conveyor brake	2023. 10. 11.	BaF
	16	PT220: Roller conveyor sensors/actuators	2023. 10. 11.	BaF
=PT221 +F		Field		
	11	PT221: Chain conveyor	2023. 10. 11.	BaF
	12	PT221: Chain conveyor	2023. 10. 11.	BaF
	16	PT221: Chain conveyor sensors/actuators	2023. 10. 11.	BaF
=PT222 +F		Field		
	11	PT222: Chain conveyor	2023. 10. 11.	BaF
	12	PT222: Chain conveyor	2023. 10. 11.	BaF
	16	PT222: Chain conveyor sensors/actuators	2023. 10. 11.	BaF

MSK Verpackungs-Syteme GmbH
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D-47533 Kleve
TEL: +49 (0)2821 / 506 - 0
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Operating voltage	3x400V/N/PE 50Hz
Brake voltage	24 VDC / 230 VAC
Power	29,29 kVA
Rated current	42,28 A
Control voltage	24 VDC

Control Siemens S7-1500	**Contactor** Schneider-Electric
Frequency converter SEW - Movitrac / SEW - Movidrive	**Motor overload switch** Schneider-Electric
Light barrier Sick	**Miniature circuit-breaker** Schneider-Electric
Proximity switch Sick	**Terminals** Weidmüller
Pulse generator HTL (SEW)	**Operation panel** MSK EMSY
Control elements Schneider-Electric	**Solenoid valve** SMC
Safety-module Sick FlexiSoft	**Relay** Omron

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Load circuit

L1	black
L2	black
L3	black
N	light-blue
PE	green/yellow

Control-circuit DC

24V DC / +	dark-blue
24V DC / -	dark-blue
24V DC / Switched	dark-blue
24V DC / Input signal	dark-blue
24V DC / Output signal	dark-blue

Control-circuit AC (isolating transformer)

230V AC	red
0V AC	red

Analog measurement signals

0-10V	LiYCY
4-20mA	LiYCY

Other

Welding-voltage (<=55V AC)	black
Welding-voltage (<=55V AC)	white-blue
Function-earth	blue/white
External voltage	orange

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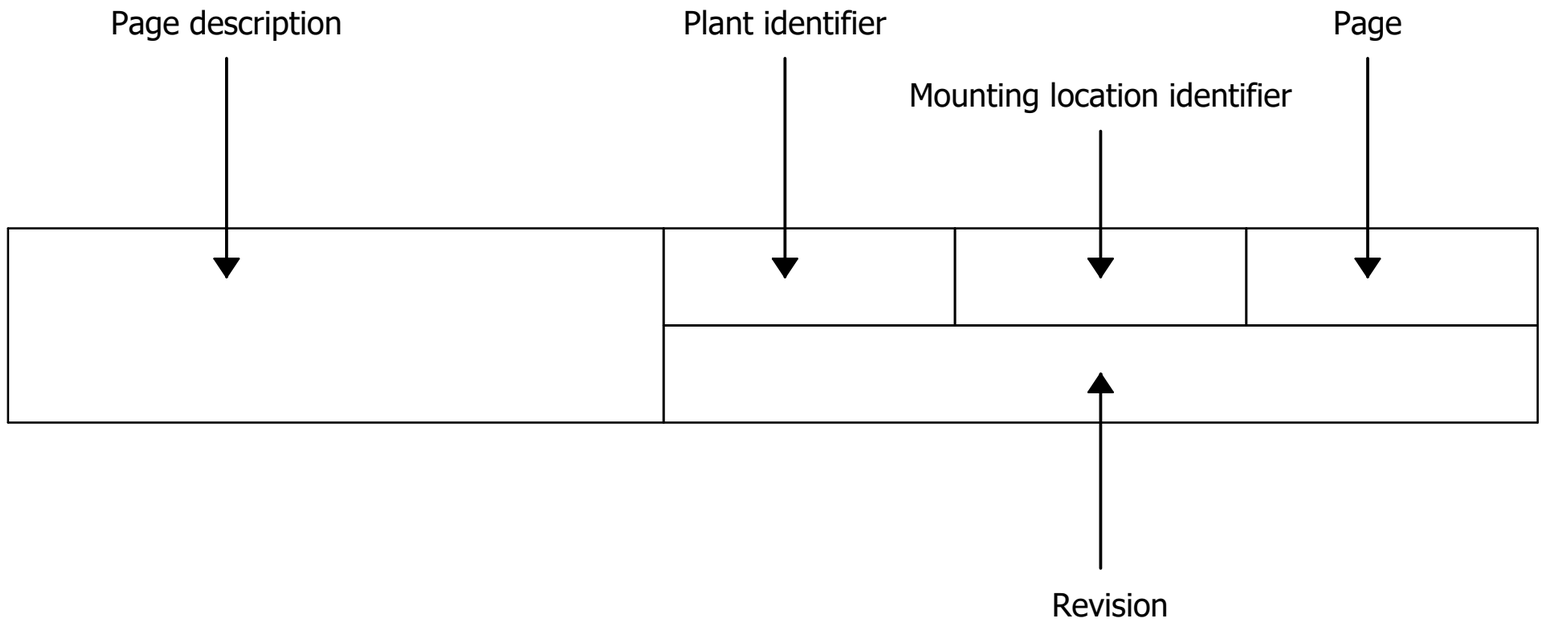

Creator	Ferenc Baracsi	Commission 620300.11.2023		DOC: Explanation diagram (Frame)	= DOC	+	Page 4
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 11.						

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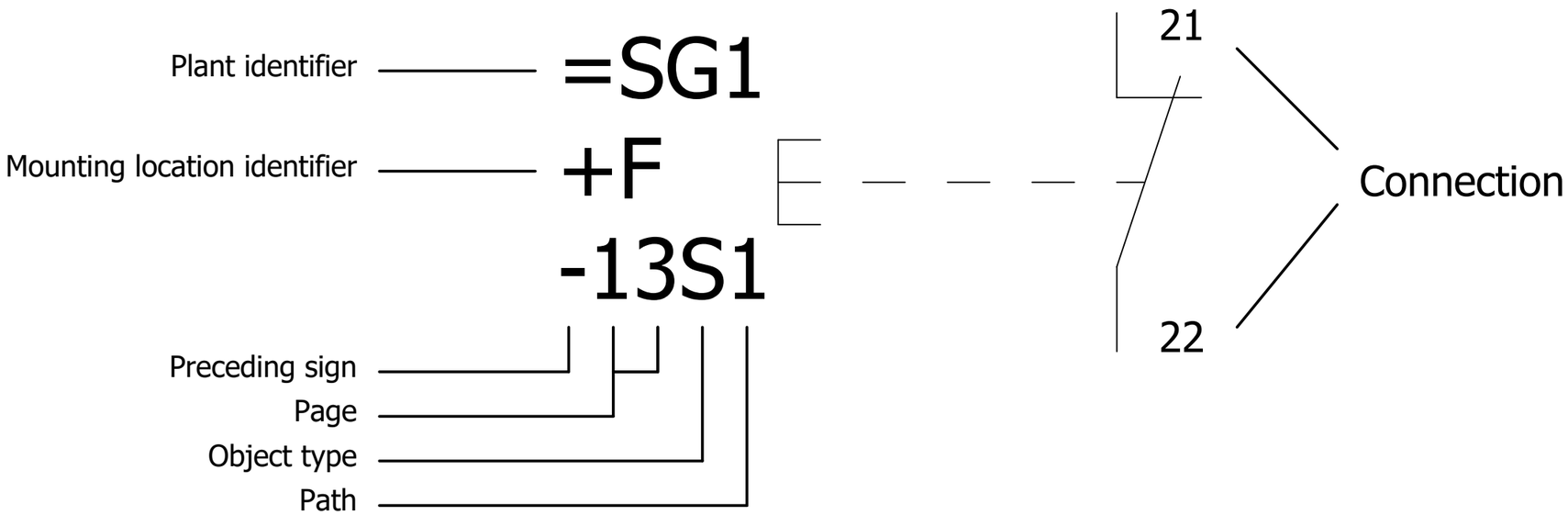


Creator	Ferenc Baracsi	Commission	620300.11.2023	DOC: Explanation component labelling	= DOC	+	Page 5
Edited by	BaF	Type	MSK - Semitech		Revision		
Modification date	2023. 10. 11.						

Structure identifier overview

Plant identifier	Plant description	Assembly-group code	Assembly-group description
=DOC	Documentation	+COP1	Control panel (location)
=GEN	General	+F	Field
=PLC1	PLC-documentation	+AC	Accumulation table
=SPLC1	SICK Flexi-soft documentation	+LF	Layer former
=CLIENT	Client	+TER	Terminal diagram
=CLI1	Contact exchange	+PLG	Plug diagram
=LAMP	LAMP	+CBL	Cable overview
=OPD1	Operator desk	+JB1	Junction box
=HCU1	Hand control unit	+JB2	Junction box
=HCU2	Hand control unit	+LAMP	Lamp
=HCU3	Hand control unit	+CF	Centering frame
=HCU4	Hand control unit	+LSI	Layer sheet inserter
=HCU5	Hand control unit	+TM2	Tray magazine Pos. 608
=HCU6	Hand control unit		
=SG1	Safety guard		
=SG2	Safety guard		
=SLB1	Safety light beam		
=SLB2	Safety light beam		
=SLB3	Safety light beam		
=BT137	Bottle transport		
=BT22	Bottle transport		
=LF	Layer former		
=AC	Accumulation table		
=LI	Layer inserter		
=CF	Centering frame		
=LSI	Layer sheet inserter		
=PM	Pallet magazine		
=LSM	Layer sheet magazine		
=PT316	Pallet transport		
=PT317	Pallet transport		
=PT318	Pallet transport		
=PT319	Pallet transport		
=PT320	Pallet transport		

Structure identifier overview

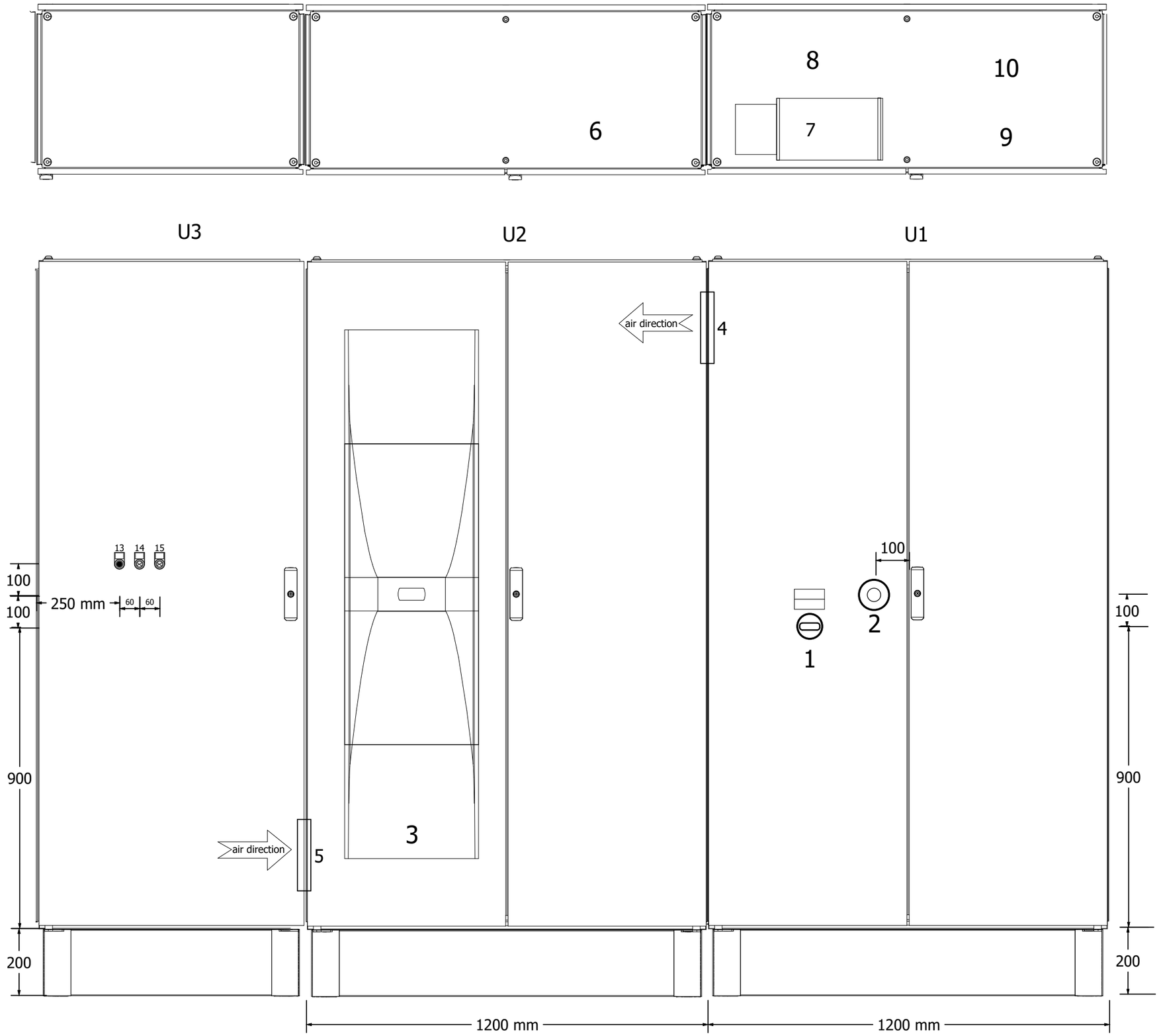
Plant identifier	Plant description	Assembly-group code	Assembly-group description
=PT321	Pallet transport		
=PT322	Pallet transport		
=PT216	Pallet transport		
=PT217	Pallet transport		
=PT218	Pallet transport		
=PT219	Pallet transport		
=PT220	Pallet transport		
=PT221	Pallet transport		
=PT222	Pallet transport		
=F	Field		

Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	DOC: Structure identifier overview	= DOC	+	Page 7
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 11.						

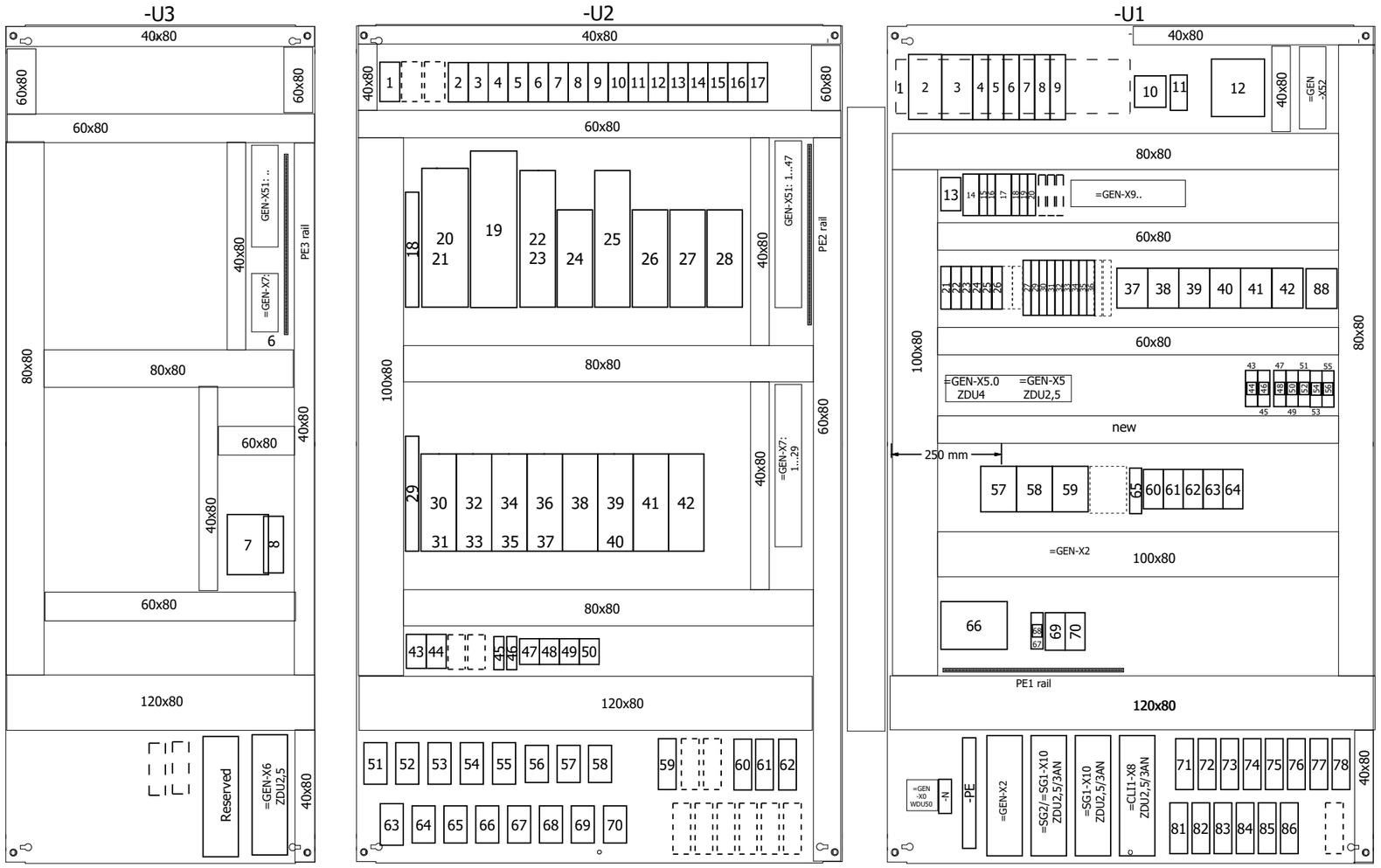
0	1	2	3	4	5	6	7	8	9

Operating element

Number	Device tag	Function text
1	=GEN+COP1-1Q0	Main-switch
2	=GEN+COP1-75S1	Emergency-stop
3	=GEN+COP1-25M1	Air-conditioner
4	=GEN+COP1-25M7	Internal fan -1-
5	=GEN+COP1-25M8	Internal fan -1-
6	=LF+COP1-21R3	
7	=LF+COP1-11R3	
8	=CF+COP1-11R3	
9	=LI+COP1-21R3	
10	=LI+COP1-11R3	
13	=GEN+COP1-78S3	Reset inside SG Palletizer
14	=GEN+COP1-78S4	Request acces
15	=GEN+COP1-78S6	Request acces



Creator	Ferenc Baracsi	Commission	620300.11.2023	DOC: Control cabinet outside	= DOC	+	Page 45
Edited by	BaF	Type	MSK - Semitech		Revision		
Modification date	2023. 11. 23.						



Creator	Ferenc Baracsi	Commission	620300.11.2023	MSK COVERTECH GROUP	DOC: Mounting plates	= DOC	+	Page 50
Edited by	BaF	Type	MSK - Semitech			Revision		
Modification date	2023. 11. 23.							

DOC: Enclosure legend

U1 Mounting panel

Item number	Device tag list	Type number
1	=PLC1+COP1-RACK	6ES7590-1AF30-0AA0
2	=PLC1+COP1-100T1	6EP1333-4BA00
3	=PLC1+COP1-100K3	6ES7515-2AN03-0AB0
4	=PLC1+COP1-DI1	6ES7521-1BL00-0AB0
5	=PLC1+COP1-DI2	6ES7521-1BL00-0AB0
6	=PLC1+COP1-DI3	6ES7521-1BL00-0AB0
7	=PLC1+COP1-DI4	6ES7521-1BL00-0AB0
8	=PLC1+COP1-DO1	6ES7522-1BL00-0AB0
9	=PLC1+COP1-DO2	6ES7522-1BL00-0AB0
10	=GEN+COP1-25B7	SK3112.000
11	=GEN+COP1-53K2	108TX
12	=GEN+COP1-10G1	2904623
13	=GEN+COP1-30X8	67900
14	=GEN+COP1-30F1	iID type A, A9Z21225
15	=PLC1+COP1-100F1	iC60H-C4, A9F07104
16	=GEN+COP1-5F1.1	iC60H-C2, A9F07102
17	=GEN+COP1-30F1.1	A9F04202
18	=GEN+COP1-30F8	iC60H-B6, A9F06106
19	=GEN+COP1-25F7	iC60H-C2, A9F07102
20	=OPD1+COP1-1F1	iC60H-B6, A9F06106
21	=SPLC1+COP1-30K1	1043783
22	=SPLC1+COP1-30K2	FX0-GPNT00000
23	=SPLC1+COP1-DIS1	FX3-XTIO84002
24	=SPLC1+COP1-DIS2	FX3-XTIO84002
25	=SPLC1+COP1-DIS3	FX3-XTDI80002
26	=SPLC1+COP1-DIS4	FX3-XTDI80002
27	=SPLC1+COP1-35K1	1099971
29	=SPLC1+COP1-36K1	1099971
30	=SPLC1+COP1-36K2	1099971
31	=SPLC1+COP1-36K4	1099971
32	=SPLC1+COP1-37K1	1099971
33	=SPLC1+COP1-37K2	1099971
34	=SPLC1+COP1-38K1	1099971
35	=SPLC1+COP1-38K2	1099971
36	=SPLC1+COP1-38K3	1099971
37	=GEN+COP1-11F0	9000-41034-0401000
38	=GEN+COP1-11F2.1	9000-41034-0401000
39	=GEN+COP1-11F4.1	9000-41034-0401000
40	=GEN+COP1-11F6	9000-41034-0401000
41	=GEN+COP1-12F0	9000-41034-0401000
42	=GEN+COP1-12F2.1	9000-41034-0401000
43	=LSI+COP1-10K4	PYF14-ESN-B
44	=LSI+COP1-10K4	MY4IN1-D2-24DCS
45	=LSI+COP1-10K5	PYF14-ESN-B
46	=LSI+COP1-10K5	MY4IN1-D2-24DCS
47	=CLI1+COP1-12K1	PYF14-ESN-B
48	=CLI1+COP1-12K1	MY4IN1-D2-24DCS
49	=CLI1+COP1-12K3	PYF14-ESN-B
50	=CLI1+COP1-12K3	MY4IN1-D2-24DCS
51	=CLI1+COP1-12K4	PYF14-ESN-B
52	=CLI1+COP1-12K4	MY4IN1-D2-24DCS
53	=CLI1+COP1-12K5	PYF14-ESN-B
54	=CLI1+COP1-12K5	MY4IN1-D2-24DCS
55	=CLI1+COP1-12K7	PYF14-ESN-B
56	=CLI1+COP1-12K7	MY4IN1-D2-24DCS
57	=GEN+COP1-1Q0	18639
58	=GEN+COP1-1F4	18638
59	=GEN+COP1-1F6	NG125N 32A
60	=GEN+COP1-1F5	GV2-P14

Item number	Device tag list	Type number
61	=GEN+COP1-1F8	GV2-P20
62	=GEN+COP1-25F1	GV2-P14
63	=GEN+COP1-10F1	GV2-RT08
64	=GEN+COP1-5F1	GV2-RT07
65	=GEN+COP1-1F2	NG125N 16A
66	=GEN+COP1-5T1	ST630.3
67	=GEN+COP1-5K3	PYF14-ESN-B
68	=GEN+COP1-5K3	MY4IN-CR-220-240VACS
69	=GEN+COP1-71Q1	LC1D12BL
70	=GEN+COP1-71Q2	LC1D12BL
71	=OPD1+COP1-2X1	24P Plug Plastic
72	=OPD1+COP1-7X2	6P Plug Plastic
73	=LF+COP1-2X1	24P Plug Plastic
74	=LF+COP1-3X1	24P Plug Plastic
75	=AC+COP1-19X0	6P Plug Plastic
76	=LI+COP1-18X1	6P Plug Plastic
77	=CF+COP1-3X1	10P Plug Plastic
78	=LSI+COP1-3X1	24P Plug Plastic
79	=GEN+COP1-PE	
80	+COP1-N	
81	=OPD1+COP1-1X1	6P Plug Plastic
82	=HCU1+COP1-2X1	16P Plug Plastic
83	=HCU2+COP1-2X1	16P Plug Plastic
84	=HCU3+COP1-5X3	6P Plug Plastic
85	=HCU4+COP1-5X3	6P Plug Plastic
86	=HCU5+COP1-2X1	16P Plug Plastic

DOC: Enclosure legend

U2 Mounting panel

Item number	Device tag list	Type number
1	=LI+COP1-32F1	GV2-P06
2	=BT137+COP1-11F1	GV2-P08
3	=LF+COP1-11F1	GV2-P14
4	=LF+COP1-21F1	GV2-P16
5	=AC+COP1-11F1	GV2-P08
6	=LI+COP1-11F1	GV2-P14
7	=LI+COP1-21F1	GV2-P08
8	=CF+COP1-11F1	GV2-P14
9	=CF+COP1-21F1	GV2-P07
10	=CF+COP1-31F1	GV2-P07
11	=PT216+COP1-11F1	GV2-P07
12	=PT217+COP1-11F1	GV2-P07
13	=PT218+COP1-11F1	GV2-P07
14	=PT219+COP1-11F1	GV2-P07
15	=PT220+COP1-11F1	GV2-P08
16	=PT221+COP1-11F1	GV2-P08
17	=PT222+COP1-11F1	GV2-P08
18	=GEN+COP1-50K1	18213456+18207510
19	=LF+COP1-21T0	MDX61B0055-5A3-4-0T
20	=LF+COP1-11T0	MDX61B0040-5A3-4-0T
21	=LF+COP1-11T0	DBG60B-01
22	=LI+COP1-11T0	MC07B0040-5A3-4-S0/T
23	=LI+COP1-11T0	FBG11B
24	=LI+COP1-21T0	MC07B0015-5A3-4-S0/T
25	=CF+COP1-11T0	MC07B0030-5A3-4-S0/T
26	=CF+COP1-21T0	MC07B0005-5A3-4-S0/T
27	=CF+COP1-31T0	MC07B0005-5A3-4-S0/T
28	=AC+COP1-11T0	MC07B0015-5A3-4-S0/T
29	=GEN+COP1-50K4	18213456+18207510
30	=BT137+COP1-11T0	MC07B0015-5A3-4-S0/T
31	=BT137+COP1-11R3	BW072-003
32	=PT216+COP1-11T0	MC07B0005-5A3-4-S0/T
33	=PT216+COP1-11R3	BW072-003
34	=PT217+COP1-11T0	MC07B0005-5A3-4-S0/T
35	=PT217+COP1-11R3	BW072-003
36	=PT218+COP1-11T0	MC07B0005-5A3-4-S0/T
37	=PT218+COP1-11R3	BW072-003
38	=PT219+COP1-11T0	MC07B0005-5A3-4-S0/T
39	=PT220+COP1-11T0	MC07B0015-5A3-4-S0/T
40	=PT220+COP1-11R3	BW072-003
41	=PT221+COP1-11T0	MC07B0015-5A3-4-S0/T
42	=PT222+COP1-11T0	MC07B0015-5A3-4-S0/T
43	=LI+COP1-34Q1	LC1-D09BL
44	=LI+COP1-34Q2	LC1-D09BL
45	=LF+COP1-12T3	BMV5
46	=LF+COP1-22T3	BME 1.5
47	=LI+COP1-14Q1	LP1-K0601BD3
48	=LI+COP1-21Q5	LP1-K0601BD3
49	=LI+COP1-34Q3	LP1-K0601BD3
50	=CF+COP1-11Q5	LP1-K0601BD3
51	=LF+COP1-12X1	10P Metal EMV
52	=LF+COP1-22X1	10P Metal EMV
53	=LI+COP1-12X1	10P Metal EMV
54	=LI+COP1-22X1	10P Metal EMV
55	=CF+COP1-12X1	10P Metal EMV
56	=CF+COP1-22X1	6P Metal EMV
57	=CF+COP1-32X1	6P Metal EMV
58	=AC+COP1-12X1	6P Metal EMV
59	=LI+COP1-32X1	10P Plug Plastic

Item number	Device tag list	Type number
60	=SLB1+COP1-3X1	16P Plug Plastic
61	=SLB2+COP1-3X1	16P Plug Plastic
62	=SLB3+COP1-3X1	16P Plug Plastic
63	=PT220+COP1-12X1	10P Metal EMV
64	=BT137+COP1-12X1	6P Metal EMV
65	=PT216+COP1-12X1	6P Metal EMV
66	=PT217+COP1-12X1	6P Metal EMV
67	=PT218+COP1-12X1	6P Metal EMV
68	=PT219+COP1-12X1	6P Metal EMV
69	=PT221+COP1-12X1	6P Metal EMV
70	=PT222+COP1-12X1	6P Metal EMV

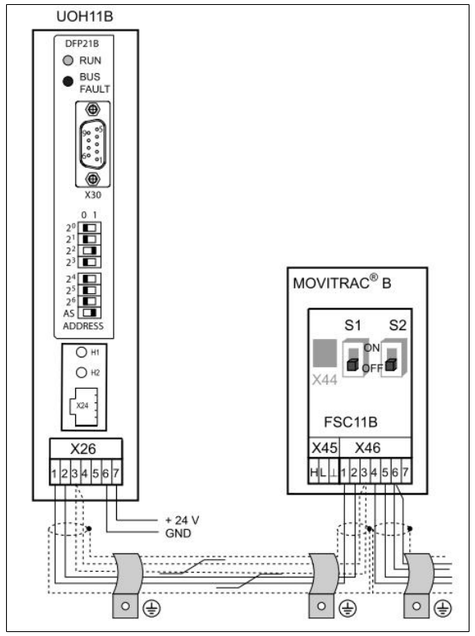
DOC: Enclosure legend

U3 Mounting panel

Item number	Device tag list	Type number
6	+COP1-PE2	275452
7	=GEN+COP1-58A2	AC1402
8	=GEN+COP1-58X1	AC1250

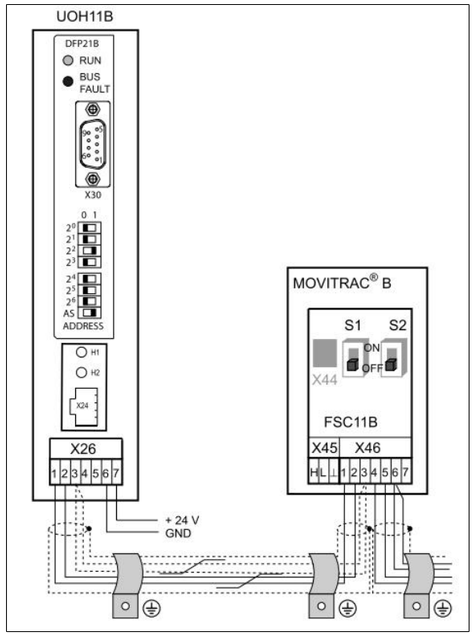
Item number	Device tag list	Type number

S-bus Overview

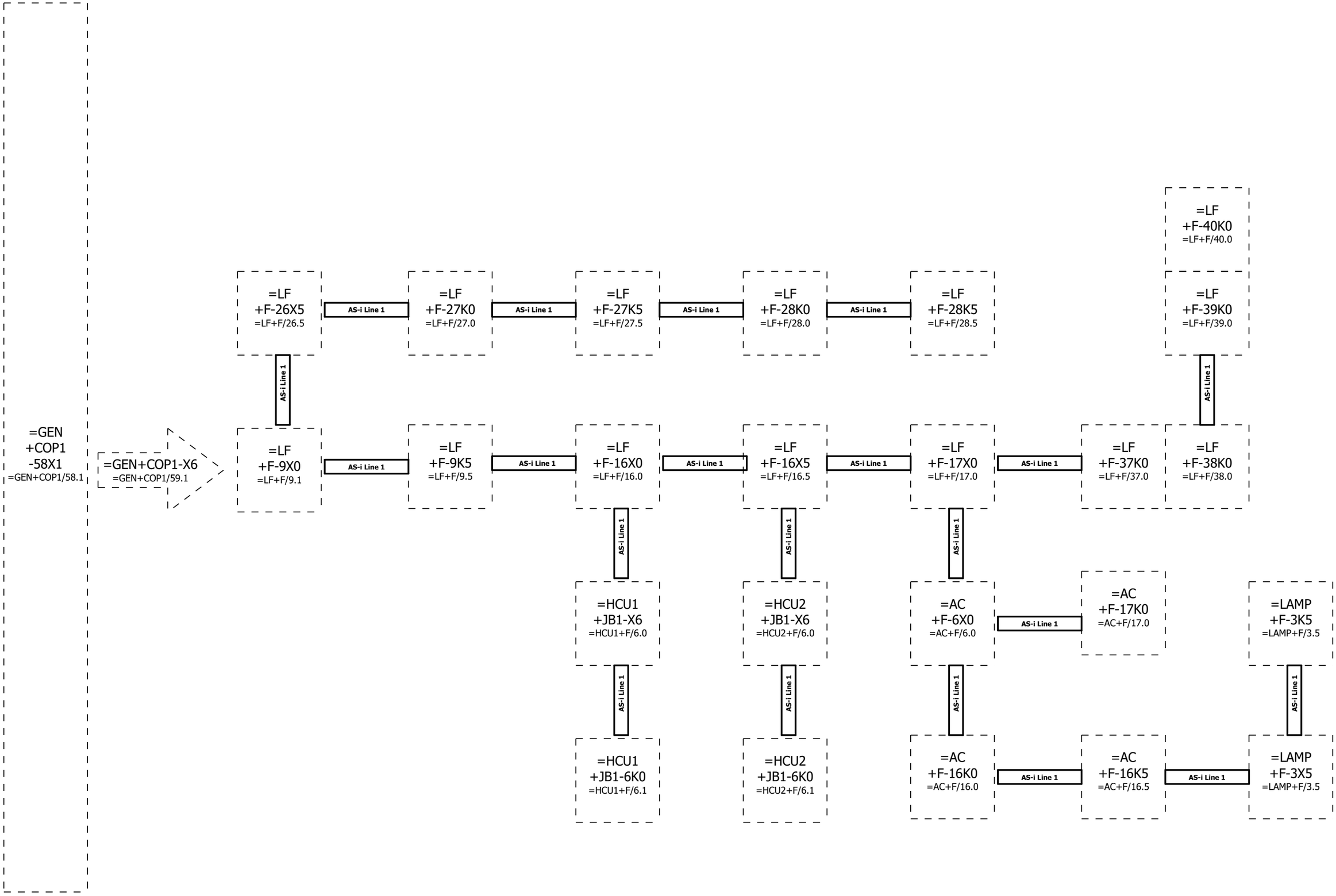


Source (from)	Cable name (Page / path)	Cable type	Length	Target	S-Bus address
=GEN+COP1-50K1 =GEN+COP1/50.1	=LF+COP1-11W7 =LF+F/11.8	UNITRONIC Li2YCY PiMF 2x2x0,5 mm²	0,5	=LF+COP1-11T0 =LF+F/11.7	1
=LF+COP1-11T0 =LF+F/11.7	=LF+COP1-21W7 =LF+F/21.8	UNITRONIC Li2YCY PiMF 2x2x0,5 mm²	0,5	=LF+COP1-21T0 =LF+F/21.7	2
=LF+COP1-21T0 =LF+F/21.7	=LI+COP1-11W7 =LI+F/11.8	UNITRONIC Li2YCY PiMF 2x2x0,5 mm²	0,5	=LI+COP1-11T0 =LI+F/11.7	3
=LI+COP1-11T0 =LI+F/11.8	=LI+COP1-21W7 =LI+F/21.7	UNITRONIC Li2YCY PiMF 2x2x0,5 mm²	0,5	=LI+COP1-21T0 =LI+F/21.7	4
=LI+COP1-21T0 =LI+F/21.8	=CF+COP1-11W7 =CF+F/11.7	UNITRONIC Li2YCY PiMF 2x2x0,5 mm²	0,5	=CF+COP1-11T0 =CF+F/11.7	5
=CF+COP1-11T0 =CF+F/11.8	=CF+COP1-21W7 =CF+F/21.7	UNITRONIC Li2YCY PiMF 2x2x0,5 mm²	0,5	=CF+COP1-21T0 =CF+F/21.6	6
=CF+COP1-21T0 =CF+F/21.7	=CF+COP1-31W7 =CF+F/31.7	UNITRONIC Li2YCY PiMF 2x2x0,5 mm²	0,5	=CF+COP1-31T0 =CF+F/31.6	7
=CF+COP1-31T0 =CF+F/31.7	=AC+COP1-11W7 =AC+F/11.7	UNITRONIC Li2YCY PiMF 2x2x0,5 mm²	0,5	=AC+COP1-11T0 =AC+F/11.7	8

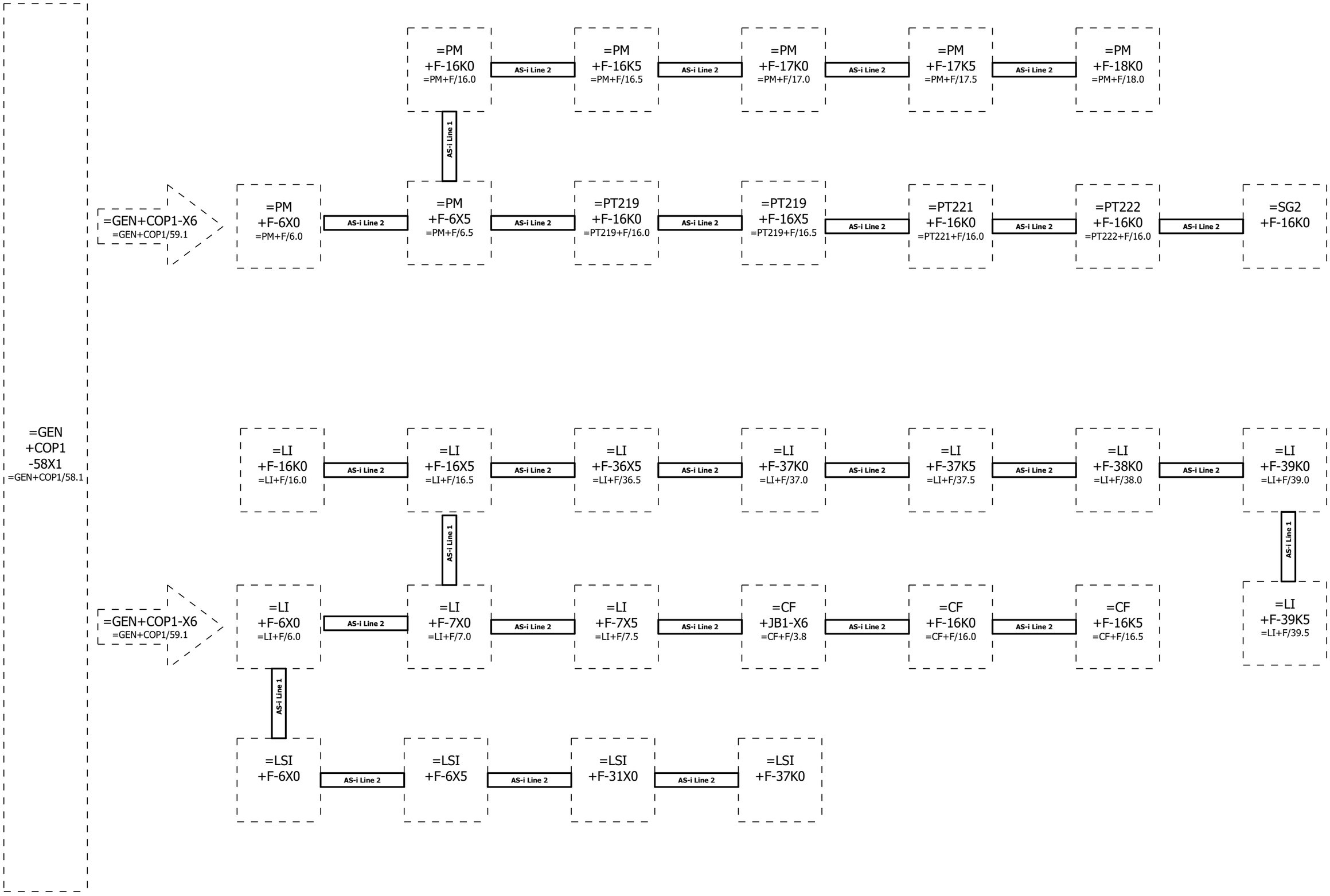
S-bus Overview

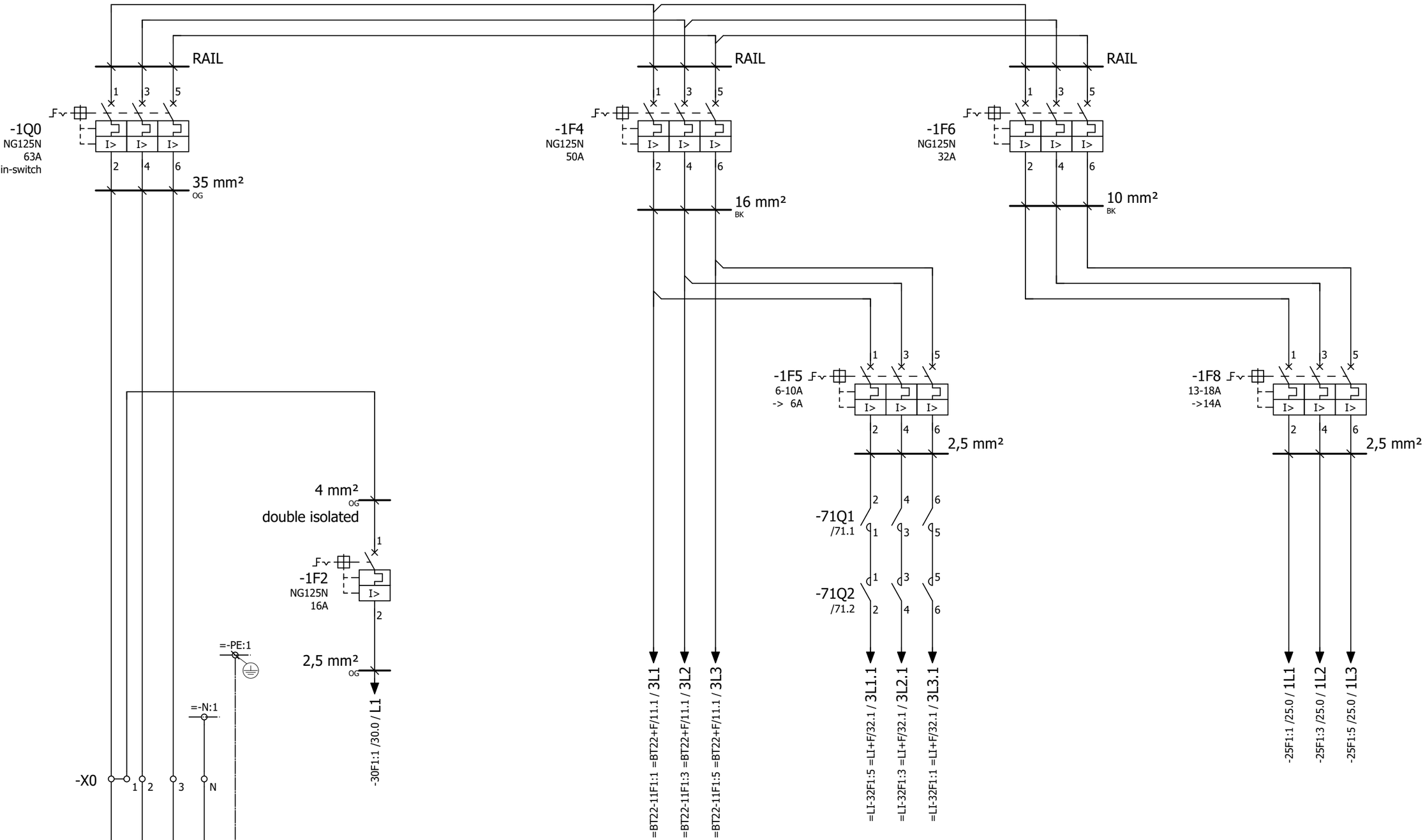


Source (from)	Cable name (Page / path)	Cable type	Length	Target	S-Bus address
=GEN+COP1-50K4 =GEN+COP1/50.4	=BT22+COP1-11W7 =BT22+F/11.7	UNITRONIC Li2YCY PiMF 2x2x0,5 mm²	0,5	=BT22+COP1-11T0 =BT22+F/11.7	1
=BT22+COP1-11T0 =BT22+F/11.8	=PT216+COP1-11W7 =PT216+F/11.7	UNITRONIC Li2YCY PiMF 2x2x0,5 mm²	0,5	=PT216+COP1-11T0 =PT216+F/11.7	2
=PT216+COP1-11T0 =PT216+F/11.8	=PT217+COP1-11W7 =PT217+F/11.7	UNITRONIC Li2YCY PiMF 2x2x0,5 mm²	0,5	=PT217+COP1-11T0 =PT217+F/11.7	3
=PT217+COP1-11T0 =PT217+F/11.8	=PT218+COP1-11W7 =PT218+F/11.7	UNITRONIC Li2YCY PiMF 2x2x0,5 mm²	0,5	=PT218+COP1-11T0 =PT218+F/11.7	4
=PT218+COP1-11T0 =PT218+F/11.8	=PT219+COP1-11W7 =PT219+F/11.8	UNITRONIC Li2YCY PiMF 2x2x0,5 mm²	0,5	=PT219+COP1-11T0 =PT219+F/11.7	5
=PT219+COP1-11T0 =PT219+F/11.8	=PT220+COP1-11W7 =PT220+F/11.7	UNITRONIC Li2YCY PiMF 2x2x0,5 mm²	0,5	=PT220+COP1-11T0 =PT220+F/11.7	6
=PT220+COP1-11T0 =PT220+F/11.8	=PT221+COP1-11W7 =PT221+F/11.7	UNITRONIC Li2YCY PiMF 2x2x0,5 mm²	0,5	=PT221+COP1-11T0 =PT221+F/11.7	7
=PT221+COP1-11T0 =PT221+F/11.8	=PT222+COP1-11W7 =PT222+F/11.7	UNITRONIC Li2YCY PiMF 2x2x0,5 mm²	0,5	=PT222+COP1-11T0 =PT222+F/11.7	8

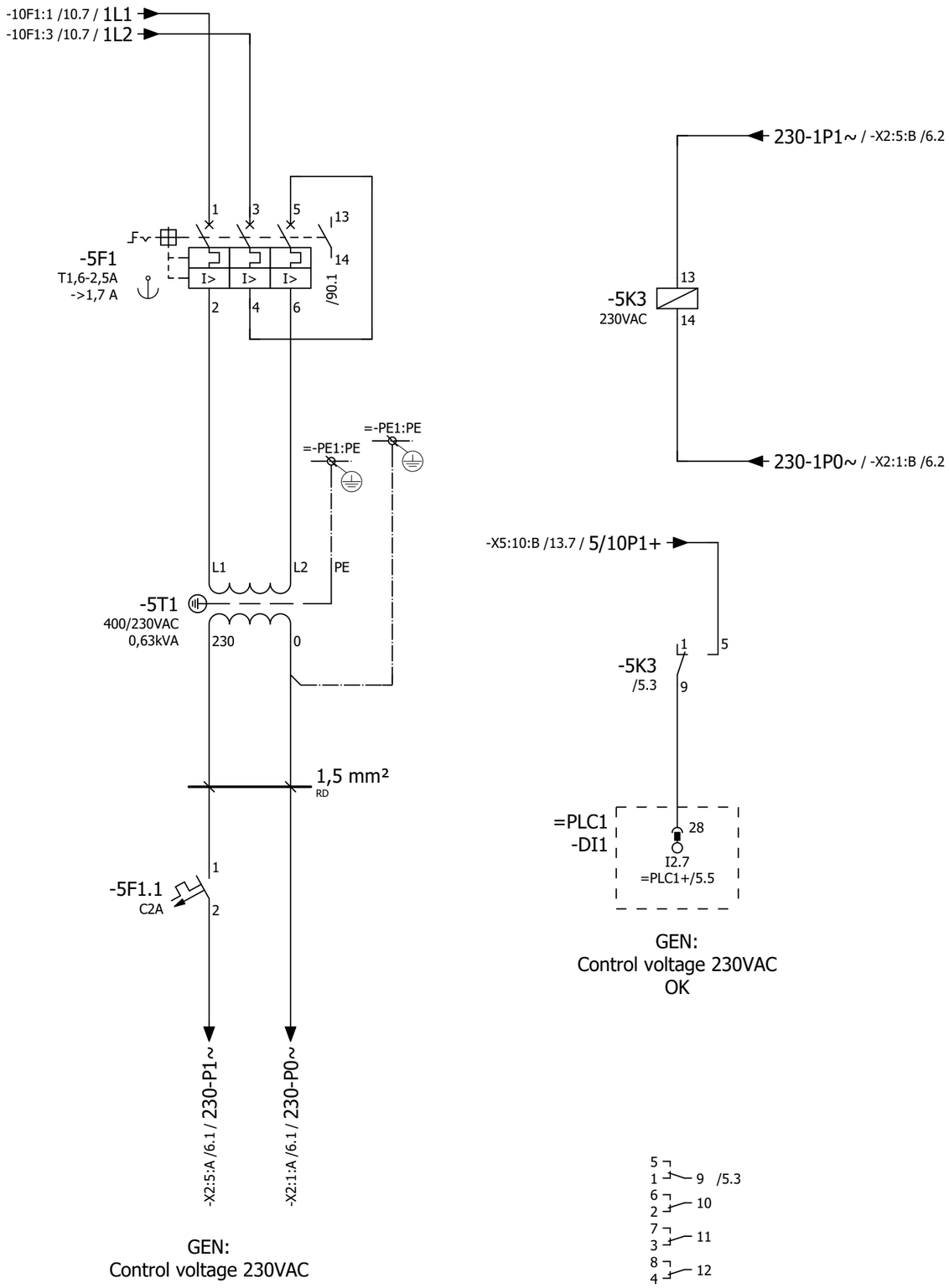


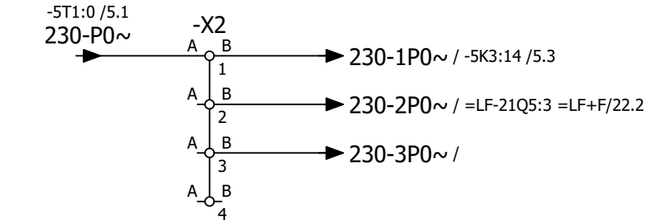
Creator	Ferenc Baracsi	Commission	620300.11.2023	MSK COVERTECH GROUP	DOC: ASI-overview / Line 1	= DOC	+	Page 140
Edited by	BaF	Type	MSK - Semitech			Revision		
Modification date	2023. 10. 11.							


0
1
2
3
4
5
6
7
8
9
=GEN
+COP1
-58X1
=GEN+COP1/58.1
=GEN+COP1-X6
=GEN+COP1/59.1
=PM
+F-16K0
=PM+F/16.0
=PM
+F-16K5
=PM+F/16.5
=PM
+F-17K0
=PM+F/17.0
=PM
+F-17K5
=PM+F/17.5
=PM
+F-18K0
=PM+F/18.0
=PM
+F-6X0
=PM+F/6.0
=PM
+F-6X5
=PM+F/6.5
=PT219
+F-16K0
=PT219+F/16.0
=PT219
+F-16X5
=PT219+F/16.5
=PT221
+F-16K0
=PT221+F/16.0
=PT222
+F-16K0
=PT222+F/16.0
=SG2
+F-16K0
=LI
+F-16K0
=LI+F/16.0
=LI
+F-16X5
=LI+F/16.5
=LI
+F-36X5
=LI+F/36.5
=LI
+F-37K0
=LI+F/37.0
=LI
+F-37K5
=LI+F/37.5
=LI
+F-38K0
=LI+F/38.0
=LI
+F-39K0
=LI+F/39.0
=LI
+F-6X0
=LI+F/6.0
=LI
+F-7X0
=LI+F/7.0
=LI
+F-7X5
=LI+F/7.5
=CF
+JB1-X6
=CF+F/3.8
=CF
+F-16K0
=CF+F/16.0
=CF
+F-16K5
=CF+F/16.5
=LI
+F-39K5
=LI+F/39.5
=LSI
+F-6X0
=LSI
+F-6X5
=LSI
+F-31X0
=LSI
+F-37K0
AS-i Line 2
AS-i Line 1

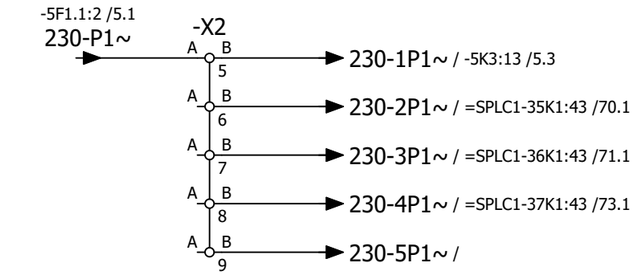


Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	GEN: Supply control panel	= GEN	+COP1	Page 1
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 11.						

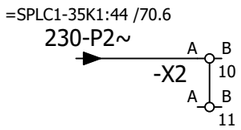

-10F1:1 /10.7 / 1L1
-10F1:3 /10.7 / 1L2
-5F1
T1,6-2,5A
->1,7 A
I>
/90.1
=-PE1:PE
=-PE1:PE
-5T1
400/230VAC
0,63kVA
L1
L2
PE
230
0
1,5 mm²
RD
-5F1.1
C2A
-X2:5:A /6.1 / 230-P1~
-X2:1:A /6.1 / 230-P0~
GEN:
Control voltage 230VAC
230-1P1~ / -X2:5:B /6.2
-5K3
230VAC
230-1P0~ / -X2:1:B /6.2
-X5:10:B /13.7 / 5/10P1+
-5K3
/5.3
=PLC1
-DI1
I2.7
=PLC1+/5.5
GEN:
Control voltage 230VAC
OK
/5.3



230VAC Potential P0~ (Multiple junction)

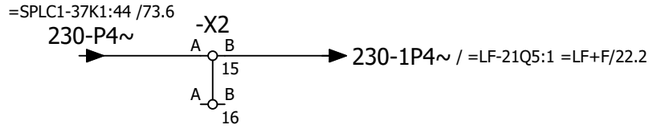


230VAC Potential P1~ (Permanent supply)

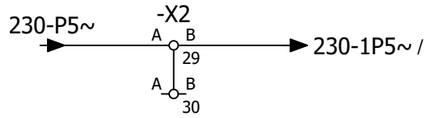


230VAC Potential P2~ interrupted by Emergency-Stop fault

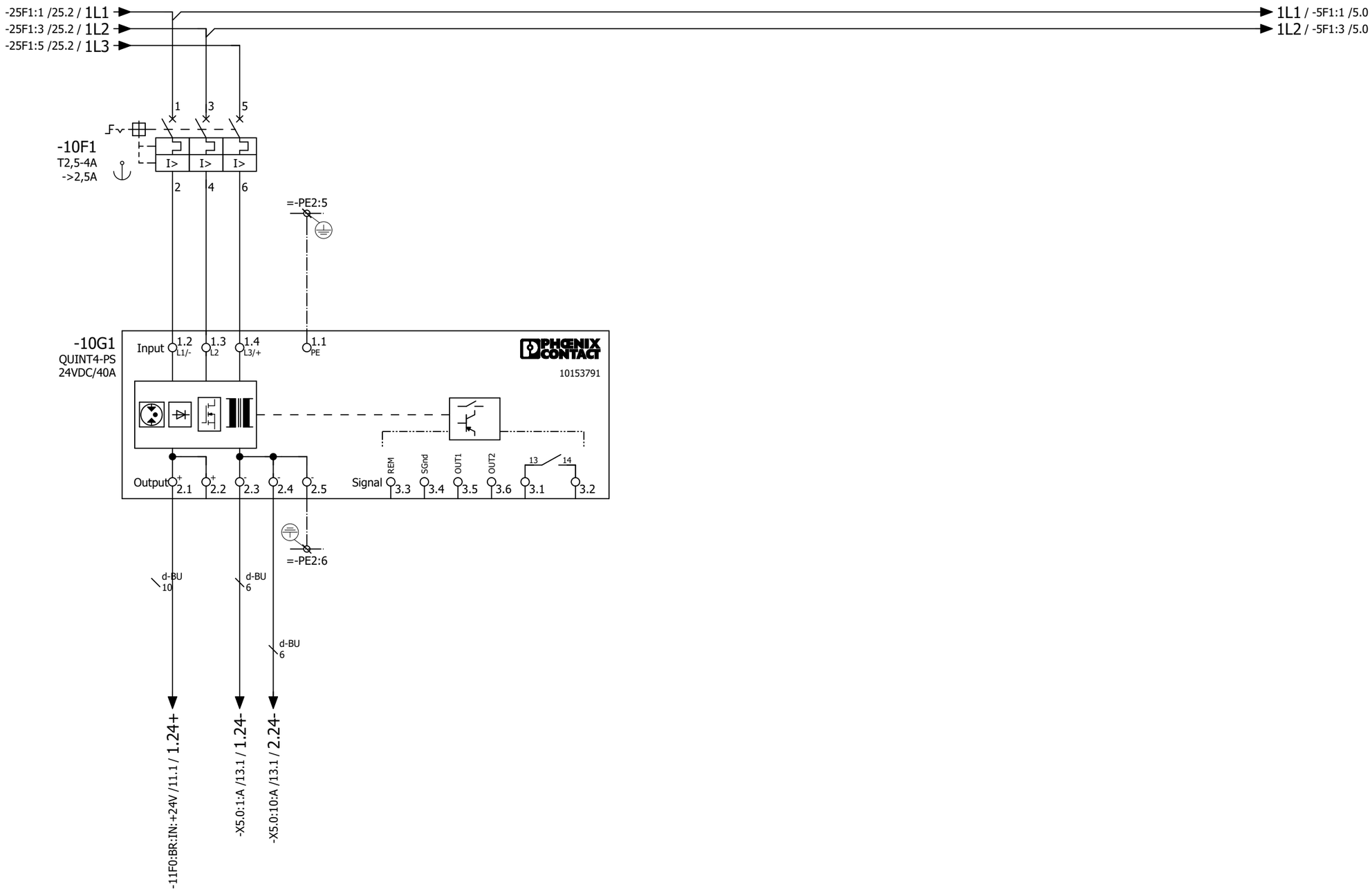
230VAC Potential P3~ interrupted by safety area fault (Semitech)



230VAC Potential P4~ interrupted by safety area fault (Layer former)

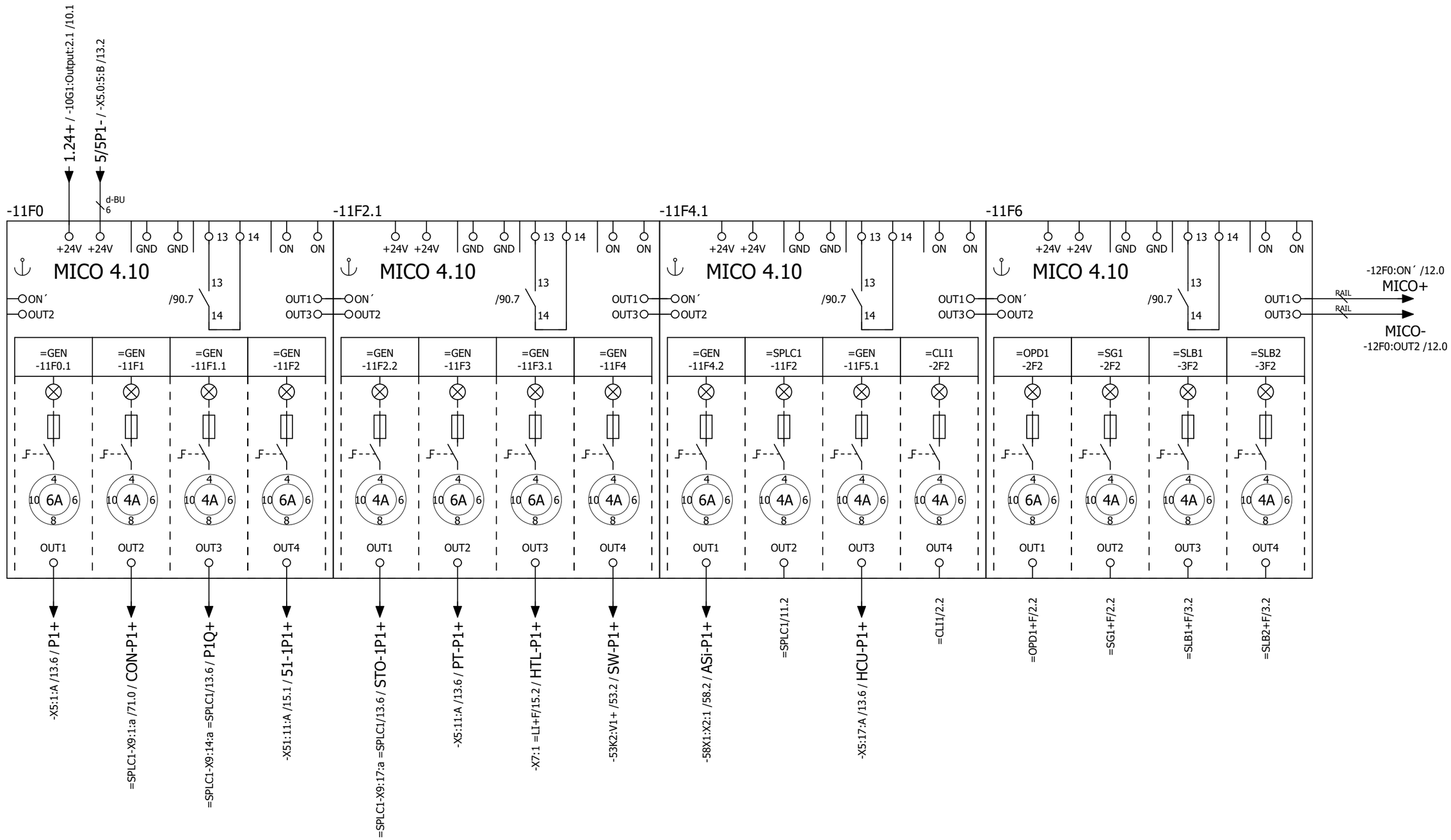


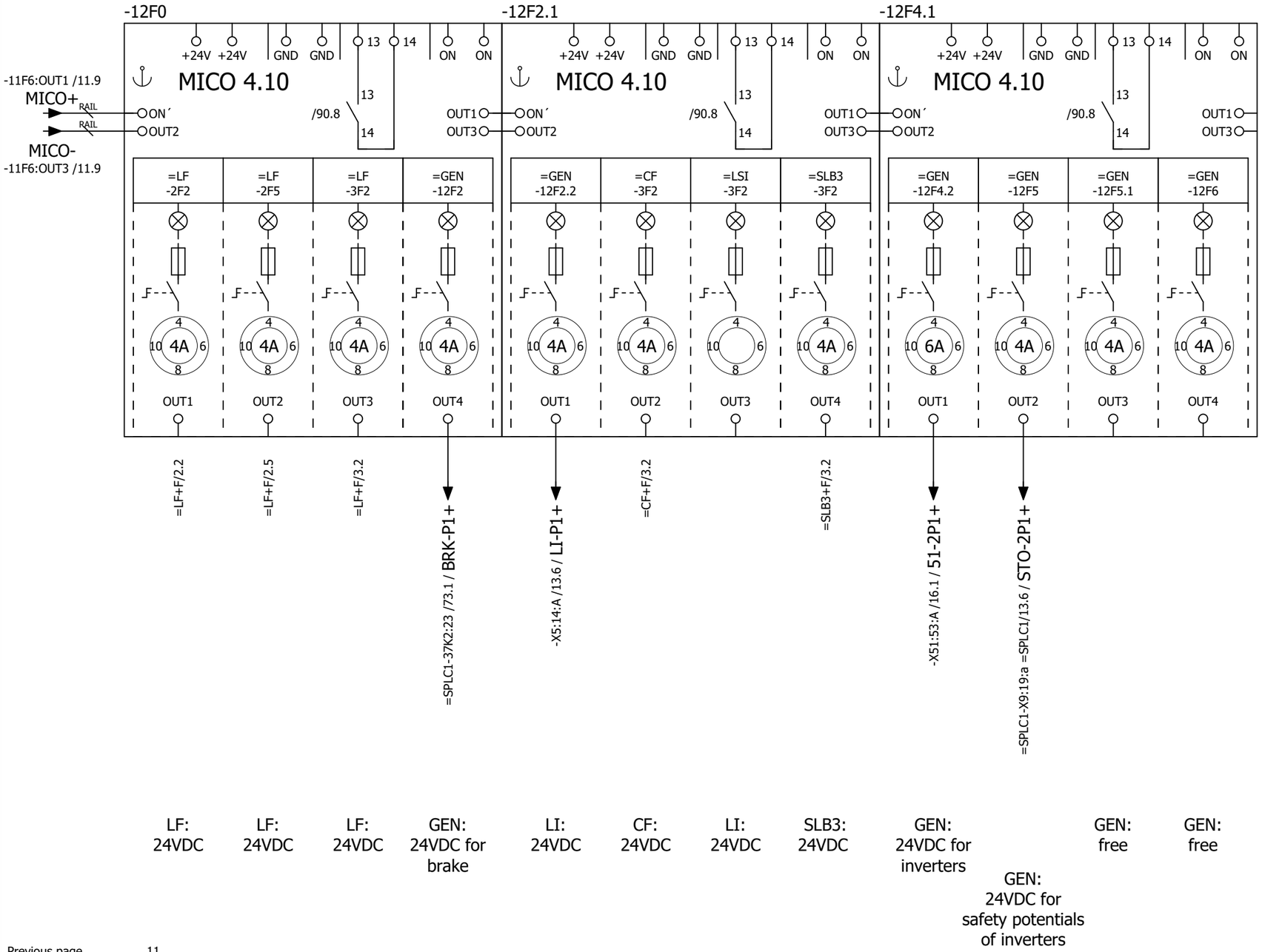
230VAC Potential P5~ interrupted by safety area fault (?area)



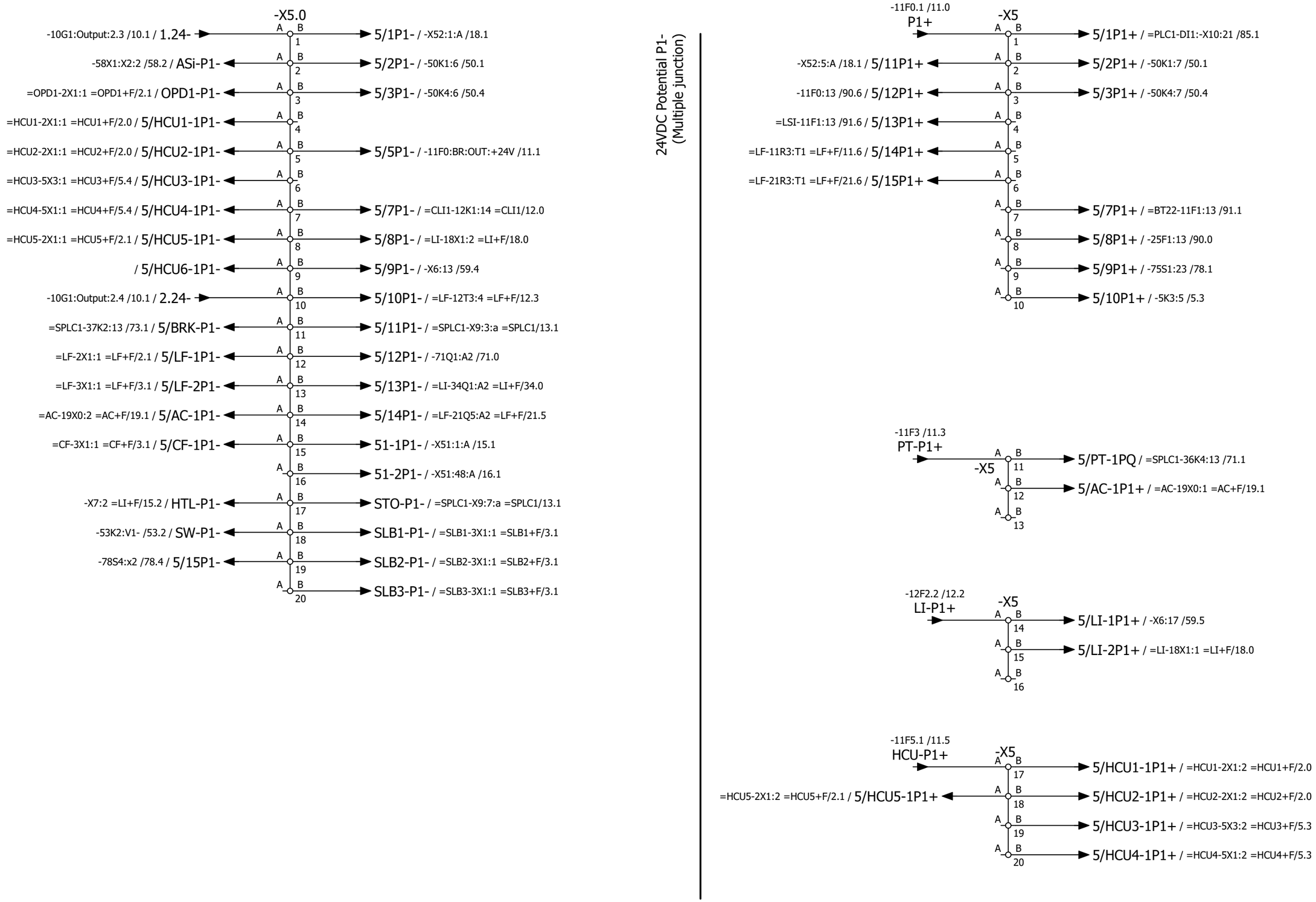
GEN:
Control voltage
24VDC
generally

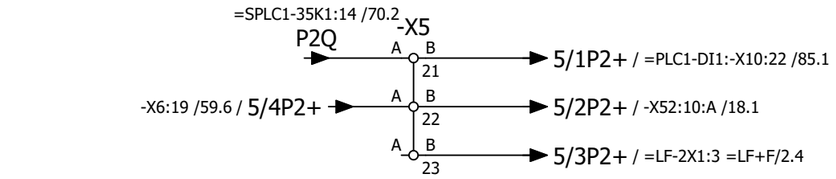
Creator	Ferenc Baracsi	Commission	620300.11.2023	GEN: 24VDC supply	= GEN	+COP1	Page 10
Edited by	BaF	Type	MSK - Semitech		Revision		
Modification date	2023. 10. 11.						


1.24+ / -10G1:Output:2.1 /10.1
5/5P1- / -X5.0:5:B /13.2
d-BU
6
-11F0
-11F2.1
-11F4.1
-11F6
+24V +24V GND GND 13 14 ON ON
MICO 4.10
ON´
OUT2
/90.7
OUT1
OUT3
-12F0:ON´ /12.0
MICO+
RAIL
MICO-
-12F0:OUT2 /12.0
=GEN -11F0.1
=GEN -11F1
=GEN -11F1.1
=GEN -11F2
=GEN -11F2.2
=GEN -11F3
=GEN -11F3.1
=GEN -11F4
=GEN -11F4.2
=SPLC1 -11F2
=GEN -11F5.1
=CLI1 -2F2
=OPD1 -2F2
=SG1 -2F2
=SLB1 -3F2
=SLB2 -3F2
6A
4A
OUT1
OUT2
OUT3
OUT4
-X5:1:A /13.6 / P1+
=SPLC1-X9:1:a /71.0 / CON-P1+
=SPLC1-X9:14:a =SPLC1/13.6 / P1Q+
-X51:11:A /15.1 / 51-1P1+
=SPLC1-X9:17:a =SPLC1/13.6 / STO-1P1+
-X5:11:A /13.6 / PT-P1+
-X7:1 =LI+F/15.2 / HTL-P1+
-53K2:V1+ /53.2 / SW-P1+
-58X1:X2:1 /58.2 / ASi-P1+
=SPLC1/11.2
-X5:17:A /13.6 / HCU-P1+
=CLI1/2.2
=OPD1+F/2.2
=SG1+F/2.2
=SLB1+F/3.2
=SLB2+F/3.2
GEN:
24VDC general
GEN:
24VDC for safety
potencials
GEN:
24VDC for
safety potentials
of inverters
GEN:
24VDC for
HTL encoders
GEN:
24VDC for
ASi power supply
GEN:
24VDC for
hand control units
OPD1:
24VDC for
EMSY
SLB1:
24VDC
GEN:
24VDC for main
contactors
GEN:
24VDC for
inverters
GEN:
24VDC for
pallet transport
GEN:
24VDC for
switch
CLI1:
24VDC for
Contact exchange
SG1:
24VDC for
safety guard doors
SLB2:
24VDC

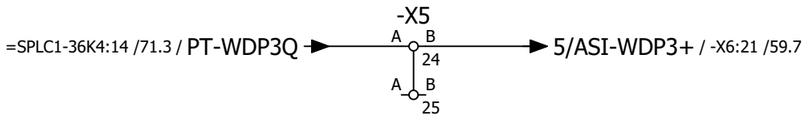


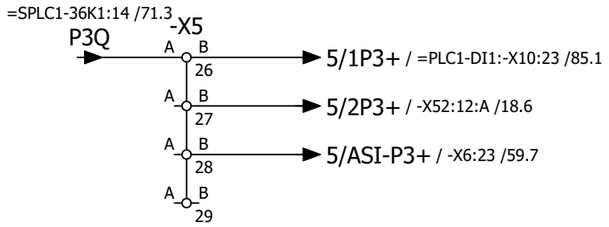
Creator	Ferenc Baracsi	Commission	620300.11.2023	GEN: 24VDC supply	= GEN	+COP1	Page 12
Edited by	BaF	Type	MSK - Semitech		Revision	
Modification date	2023. 10. 11.					


-X5.0
-10G1:Output:2.3 /10.1 / 1.24-
5/1P1- / -X52:1:A /18.1
-58X1:X2:2 /58.2 / ASi-P1-
5/2P1- / -50K1:6 /50.1
=OPD1-2X1:1 =OPD1+F/2.1 / OPD1-P1-
5/3P1- / -50K4:6 /50.4
=HCU1-2X1:1 =HCU1+F/2.0 / 5/HCU1-1P1-
=HCU2-2X1:1 =HCU2+F/2.0 / 5/HCU2-1P1-
5/5P1- / -11F0:BR:OUT:+24V /11.1
=HCU3-5X3:1 =HCU3+F/5.4 / 5/HCU3-1P1-
=HCU4-5X1:1 =HCU4+F/5.4 / 5/HCU4-1P1-
5/7P1- / =CLI1-12K1:14 =CLI1/12.0
=HCU5-2X1:1 =HCU5+F/2.1 / 5/HCU5-1P1-
5/8P1- / =LI-18X1:2 =LI+F/18.0
/ 5/HCU6-1P1-
5/9P1- / -X6:13 /59.4
-10G1:Output:2.4 /10.1 / 2.24-
5/10P1- / =LF-12T3:4 =LF+F/12.3
=SPLC1-37K2:13 /73.1 / 5/BRK-P1-
5/11P1- / =SPLC1-X9:3:a =SPLC1/13.1
=LF-2X1:1 =LF+F/2.1 / 5/LF-1P1-
5/12P1- / -71Q1:A2 /71.0
=LF-3X1:1 =LF+F/3.1 / 5/LF-2P1-
5/13P1- / =LI-34Q1:A2 =LI+F/34.0
=AC-19X0:2 =AC+F/19.1 / 5/AC-1P1-
5/14P1- / =LF-21Q5:A2 =LF+F/21.5
=CF-3X1:1 =CF+F/3.1 / 5/CF-1P1-
51-1P1- / -X51:1:A /15.1
51-2P1- / -X51:48:A /16.1
-X7:2 =LI+F/15.2 / HTL-P1-
STO-P1- / =SPLC1-X9:7:a =SPLC1/13.1
-53K2:V1- /53.2 / SW-P1-
SLB1-P1- / =SLB1-3X1:1 =SLB1+F/3.1
-78S4:x2 /78.4 / 5/15P1-
SLB2-P1- / =SLB2-3X1:1 =SLB2+F/3.1
SLB3-P1- / =SLB3-3X1:1 =SLB3+F/3.1
24VDC Potential P1-
(Multiple junction)
-11F0.1 /11.0
P1+
-X5
5/1P1+ / =PLC1-DI1:-X10:21 /85.1
-X52:5:A /18.1 / 5/11P1+
5/2P1+ / -50K1:7 /50.1
-11F0:13 /90.6 / 5/12P1+
5/3P1+ / -50K4:7 /50.4
=LSI-11F1:13 /91.6 / 5/13P1+
=LF-11R3:T1 =LF+F/11.6 / 5/14P1+
=LF-21R3:T1 =LF+F/21.6 / 5/15P1+
5/7P1+ / =BT22-11F1:13 /91.1
5/8P1+ / -25F1:13 /90.0
5/9P1+ / -75S1:23 /78.1
5/10P1+ / -5K3:5 /5.3
24VDC Potential P1+
(Permanent supply)
-11F3 /11.3
PT-P1+
-X5
5/PT-1PQ / =SPLC1-36K4:13 /71.1
5/AC-1P1+ / =AC-19X0:1 =AC+F/19.1
24VDC Potential P1+
(Permanent supply)
-12F2.2 /12.2
LI-P1+
-X5
5/LI-1P1+ / -X6:17 /59.5
5/LI-2P1+ / =LI-18X1:1 =LI+F/18.0
24VDC Potential P1+
(Permanent supply)
-11F5.1 /11.5
HCU-P1+
-X5
5/HCU1-1P1+ / =HCU1-2X1:2 =HCU1+F/2.0
=HCU5-2X1:2 =HCU5+F/2.1 / 5/HCU5-1P1+
5/HCU2-1P1+ / =HCU2-2X1:2 =HCU2+F/2.0
5/HCU3-1P1+ / =HCU3-5X3:2 =HCU3+F/5.3
5/HCU4-1P1+ / =HCU4-5X1:2 =HCU4+F/5.3
24VDC Potential P1+
(Permanent supply)

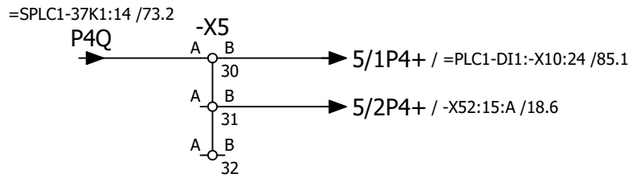


24VDC Potential P2+ interrupted by Emergency-Stop fault



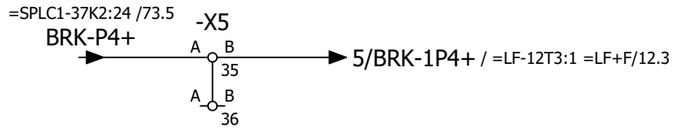


24VDC Potential P3+ interrupted by Palletizing area fault

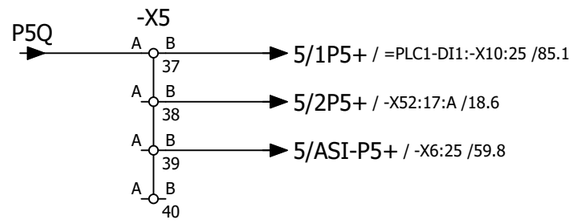


24VDC Potential P4+ interrupted by layer former fault

24VDC Potential P4- interrupted by layer former fault (servo drive brake)



24VDC Potential P4+ interrupted by layer former fault (servo drive brake)



24VDC Potential P5+ interrupted by layer sheet inserter fault

-X5.0:15:B /13.2
51-1P1-
-X51

		1	51/BT22-1P1- / =BT22-11T0:9 =BT22+F/11.4
=PT216-11T0:9 =PT216+F/11.4 /	51/PT216-1P1-	2	51/AC-1P1- / =AC-11T0:9 =AC+F/11.4
=PT217-11T0:9 =PT217+F/11.4 /	51/PT217-1P1-	3	51/LF-1P1- / =LF-11T0:X10:10 =LF+F/11.4
=PT218-11T0:9 =PT218+F/11.4 /	51/PT218-1P1-	4	51/LF-2P1- / =LF-21T0:X10:10 =LF+F/21.5
		5	51/LI-1P1- / =LI-11T0:9 =LI+F/11.4
=PT220-11T0:9 =PT220+F/11.4 /	51/PT220-1P1-	6	51/LI-2P1- / =LI-21T0:9 =LI+F/21.4
=PT221-11T0:9 =PT221+F/11.4 /	51/PT221-1P1-	7	51/CF-1P1- / =CF-11T0:X12:9 =CF+F/11.4
=PT222-11T0:9 =PT222+F/11.4 /	51/PT222-1P1-	8	51/CF-2P1- / =CF-31T0:9 =CF+F/31.4
		9	51/CF-3P1- / =CF-21T0:9 =CF+F/21.4
		10	51/PT219-1P1- / =PT219-11T0:9 =PT219+F/11.4

24VDC Potential 51P1-
(Variable frequency drive junction)

-11F2 /11.2
51-1P1+
-X51

		11	51/BT22-1P1+ / =BT22-11T0:8 =BT22+F/11.4
=PT216-11T0:8 =PT216+F/11.4 /	51/PT216-1P1+	12	51/AC-1P1+ / =AC-11T0:8 =AC+F/11.4
=PT217-11T0:8 =PT217+F/11.4 /	51/PT217-1P1+	13	51/LF-1P1+ / =LF-11T0:9 =LF+F/11.5
=PT218-11T0:8 =PT218+F/11.4 /	51/PT218-1P1+	14	51/LF-2P1+ / =LF-21T0:X10:9 =LF+F/21.5
=PT219-11T0:8 =PT219+F/11.4 /	51/PT219-1P1+	15	51/LI-1P1+ / =LI-11T0:8 =LI+F/11.4
=PT220-11T0:8 =PT220+F/11.4 /	51/PT220-1P1+	16	51/LI-2P1+ / =LI-21T0:8 =LI+F/21.4
=PT221-11T0:8 =PT221+F/11.4 /	51/PT221-1P1+	17	51/CF-1P1+ / =CF-11T0:X12:8 =CF+F/11.4
=PT222-11T0:8 =PT222+F/11.4 /	51/PT222-1P1+	18	51/CF-2P1+ / =CF-31T0:8 =CF+F/31.4
		19	51/CF-3P1+ / =CF-21T0:8 =CF+F/21.4
		20	

24VDC Potential 51P1+
(Variable frequency drive junction)

=SPLC1-35K1:24 /70.3
SOVP2-

21	51/BT22-1SOVP2- / =BT22-11T0:3 =BT22+F/11.3	
22	51/AC-1SOVP2- / =AC-11T0:3 =AC+F/11.3	
23		

24VDC Potential 51P2-
(Variable frequency drive junction)
interrupted by
Emergency area fault

=SPLC1-35K1:34 /70.3
STOP2+
-X51

24	51/BT22-1P2+ / =BT22-11T0:4 =BT22+F/11.3	
25	51/AC-1P2+ / =AC-11T0:4 =AC+F/11.3	
26		

24VDC Potential 51P2+
(Variable frequency drive junction)
interrupted by
Emergency area fault

=SPLC1-36K1:24 /71.4
SOVP3-
-X51

27	51/LI-1SOVP3- / =LI-11T0:3 =LI+F/11.3	
=PT220-11T0:3 =PT220+F/11.3 / 28	51/PT220-1SOVP3-	51/LI-2SOVP3- / =LI-21T0:3 =LI+F/21.3
=PT221-11T0:3 =PT221+F/11.3 / 29	51/PT221-1SOVP3-	51/CF-1SOVP3- / =CF-11T0:X17:3 =CF+F/11.2
=PT222-11T0:3 =PT222+F/11.3 / 30	51/PT222-1SOVP3-	51/CF-2SOVP3- / =CF-21T0:3 =CF+F/21.2
31		51/CF-3SOVP3- / =CF-31T0:3 =CF+F/31.2
32		51/PT216-1SOVP3- / =PT216-11T0:3 =PT216+F/11.3
33		51/PT217-1SOVP3- / =PT217-11T0:3 =PT217+F/11.3
34		51/PT218-1SOVP3- / =PT218-11T0:3 =PT218+F/11.3
35		51/PT219-1SOVP3- / =PT219-11T0:3 =PT219+F/11.3

24VDC Potential 51P3-
(Variable frequency drive junction)
interrupted by
safety area fault
(Semitech)

=SPLC1-36K1:34 /71.5
STOP3+
-X51

36	51/LI-1P3+ / =LI-11T0:4 =LI+F/11.3	
=PT219-11T0:4 =PT219+F/11.3 / 37	51/PT219-1P3+	51/LI-2P3+ / =LI-21T0:4 =LI+F/21.3
=PT220-11T0:4 =PT220+F/11.3 / 38	51/PT220-1P3+	51/CF-1P3+ / =CF-11T0:X17:4 =CF+F/11.3
=PT221-11T0:4 =PT221+F/11.3 / 39	51/PT221-1P3+	51/CF-2P3+ / =CF-21T0:4 =CF+F/21.3
=PT222-11T0:4 =PT222+F/11.3 / 40	51/PT222-1P3+	51/CF-3P3+ / =CF-31T0:4 =CF+F/31.3
41		51/PT216-1P3+ / =PT216-11T0:4 =PT216+F/11.3
42		51/PT217-1P3+ / =PT217-11T0:4 =PT217+F/11.3
43		51/PT218-1P3+ / =PT218-11T0:4 =PT218+F/11.3

24VDC Potential 51P3+
(Variable frequency drive junction)
interrupted by
safety area fault
(Semitech)

=SPLC1-37K1:24 /73.3
SOVP4-

44	51/LF-1SOVP4- / =LF-11T0:3 =LF+F/11.2
45	51/LF-2SOVP4- / =LF-21T0:X17:3 =LF+F/21.3

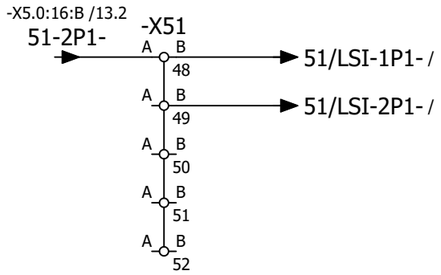
24VDC Potential 51P4-
(Variable frequency drive junction)
interrupted by
safety area fault
(layer former)

=SPLC1-37K1:34 /73.3
STOP4+

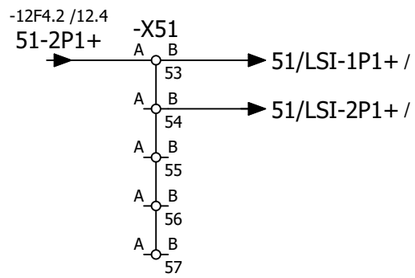
46	51/LF-1P4+ / =LF-11T0:X13:1 =LF+F/11.3
47	51/LF-2P4+ / =LF-21T0:X13:1 =LF+F/21.3

24VDC Potential 51P4+
(Variable frequency drive junction)
interrupted by
safety area fault
(layer former)

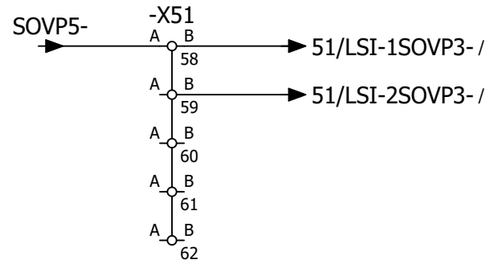
Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	GEN: 24VDC Potential -X51	= GEN	+COP1	Page 15
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 11. 02.						



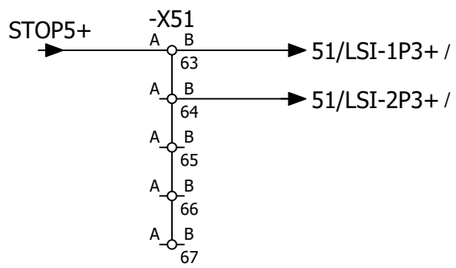
24VDC Potential 51P1-
(Variable frequency drive junction)



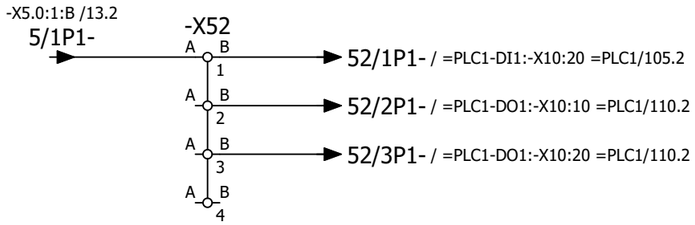
24VDC Potential 51P1+
(Variable frequency drive junction)



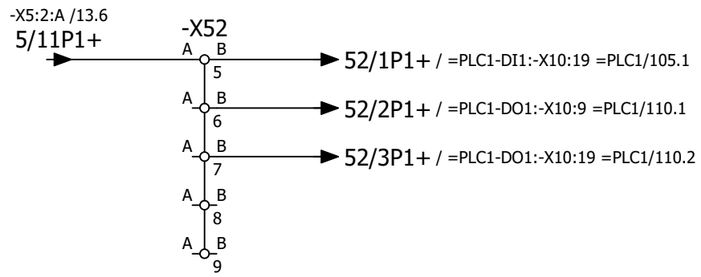
24VDC Potential 51P5-
(Variable frequency drive junction)
interrupted by
safety area fault
(Layer sheet inserter)



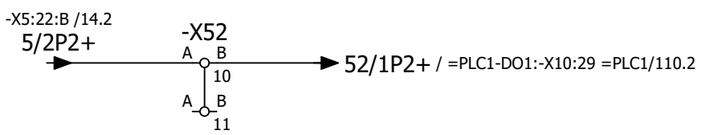
24VDC Potential 51P5+
(Variable frequency drive junction)
interrupted by
safety area fault
(Layer sheet inserter)



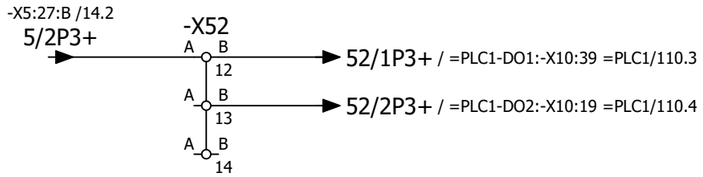
24VDC Potential 52P1-
(Multiple junction)
PLC cards



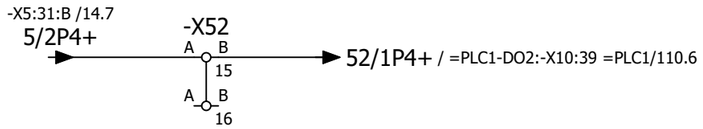
24VDC Potential 52P1+
(Permanent supply)
PLC cards



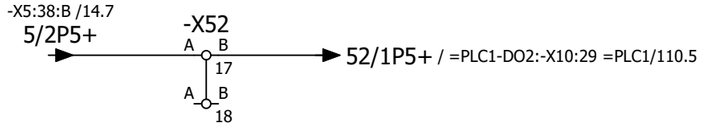
24VDC Potential 52P2+
PLC cards
interrupted by
safety area fault
(outside SG)



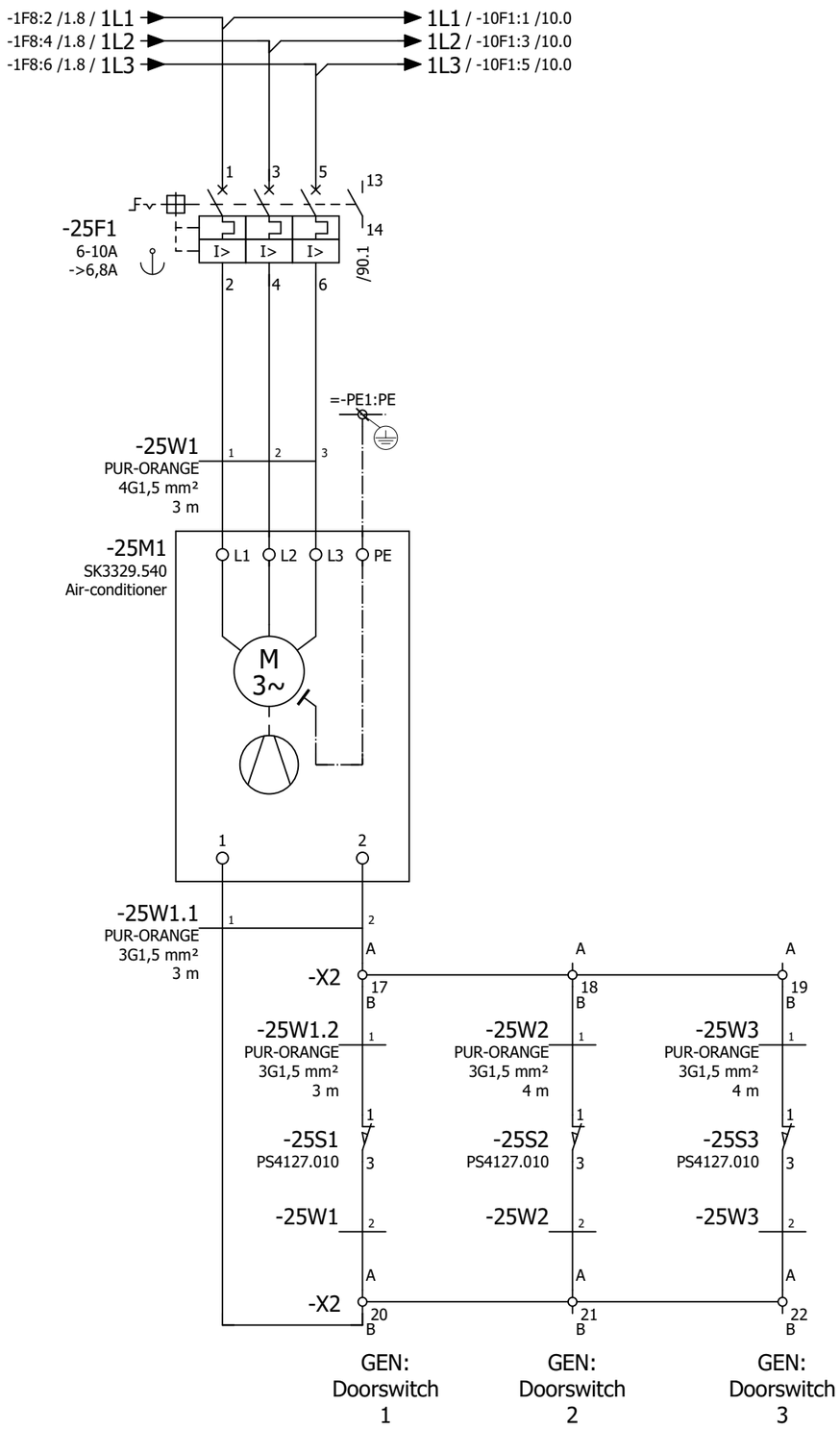
24VDC Potential 52P3+
PLC cards
interrupted by
safety area fault

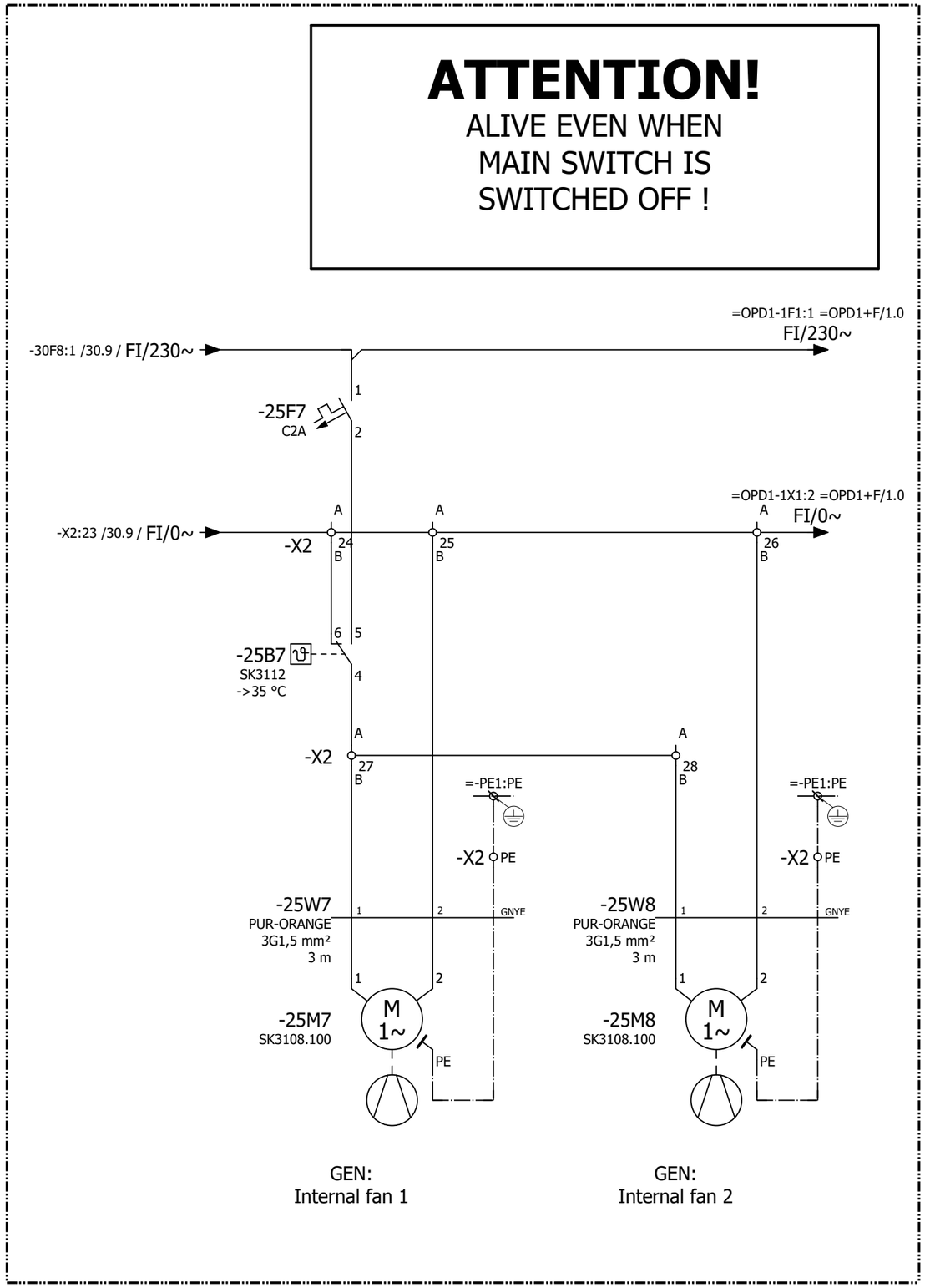


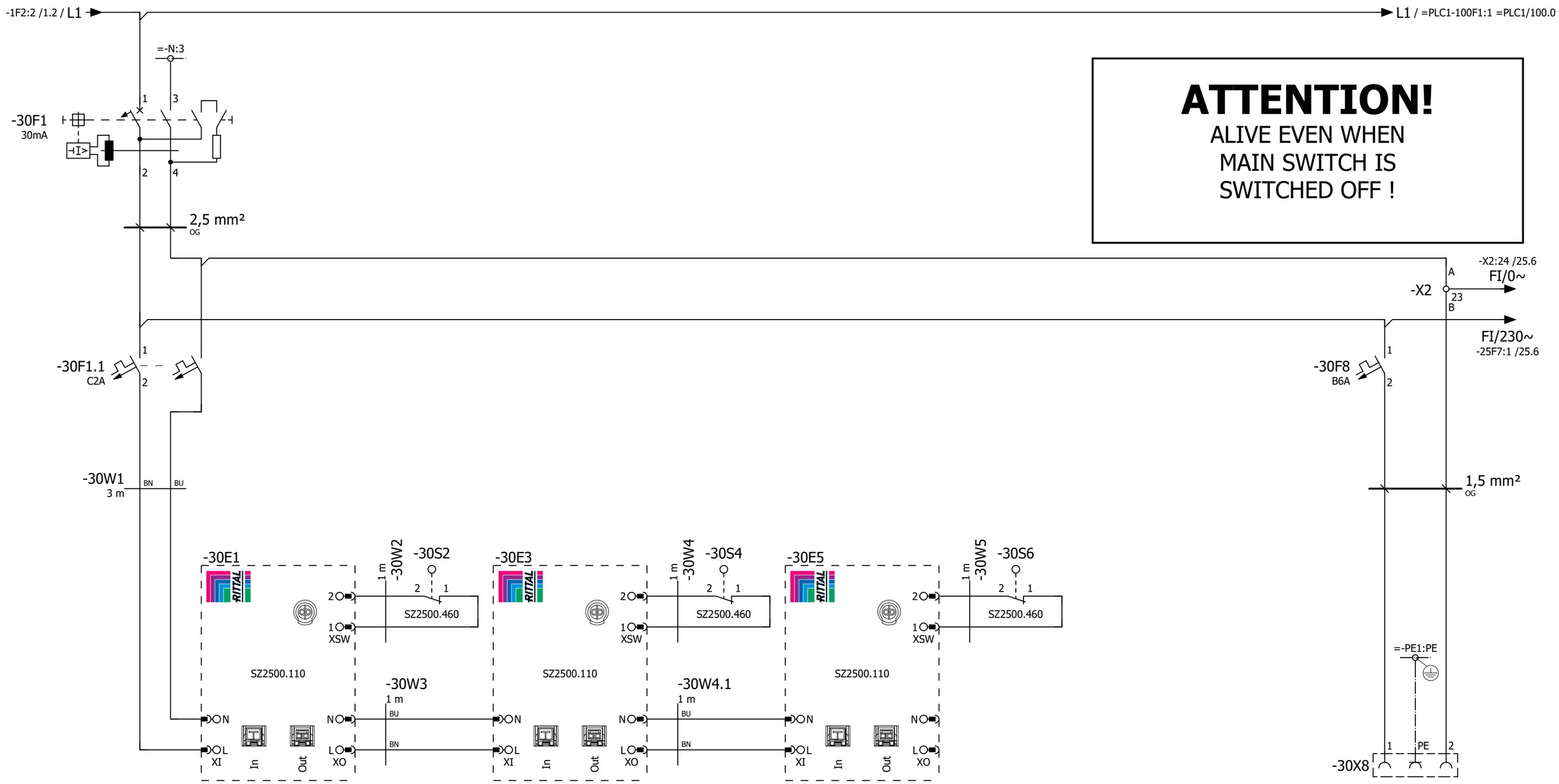
24VDC Potential 52P4+
PLC cards
interrupted by
layer former fault



24VDC Potential 52P5+
PLC cards
interrupted by
layer sheet inserter fault


-1F8:2 /1.8 / 1L1
-1F8:4 /1.8 / 1L2
-1F8:6 /1.8 / 1L3
1L1 / -10F1:1 /10.0
1L2 / -10F1:3 /10.0
1L3 / -10F1:5 /10.0
-25F1
6-10A
->6,8A
I>
/90.1
=-PE1:PE
-25W1
PUR-ORANGE
4G1,5 mm²
3 m
-25M1
SK3329.540
Air-conditioner
L1
L2
L3
PE
M
3~
-25W1.1
PUR-ORANGE
3G1,5 mm²
3 m
-X2
-25W1.2
PUR-ORANGE
3G1,5 mm²
3 m
-25W2
PUR-ORANGE
3G1,5 mm²
4 m
-25W3
PUR-ORANGE
3G1,5 mm²
4 m
-25S1
PS4127.010
-25S2
PS4127.010
-25S3
PS4127.010
-25W1
-25W2
-25W3
GEN:
Doorswitch
1
GEN:
Doorswitch
2
GEN:
Doorswitch
3


ATTENTION!
ALIVE EVEN WHEN
MAIN SWITCH IS
SWITCHED OFF !
=OPD1-1F1:1 =OPD1+F/1.0
FI/230~
-30F8:1 /30.9 / FI/230~
-25F7
C2A
=OPD1-1X1:2 =OPD1+F/1.0
FI/0~
-X2:23 /30.9 / FI/0~
-X2
-25B7
SK3112
->35 °C
=-PE1:PE
-X2
PE
-25W7
PUR-ORANGE
3G1,5 mm²
3 m
-25W8
PUR-ORANGE
3G1,5 mm²
3 m
GNYE
-25M7
SK3108.100
-25M8
SK3108.100
M
1~
PE
GEN:
Internal fan 1
GEN:
Internal fan 2

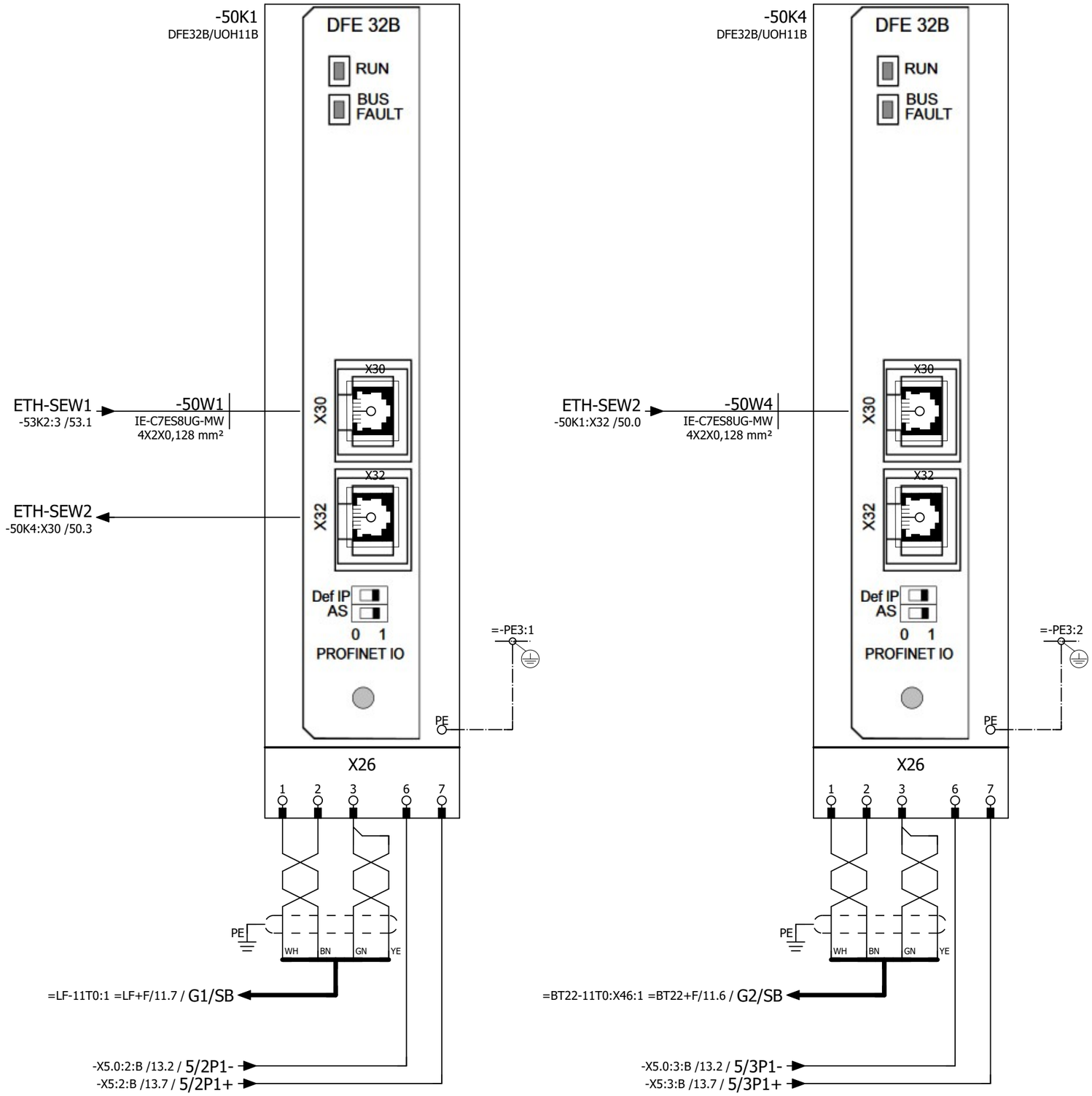


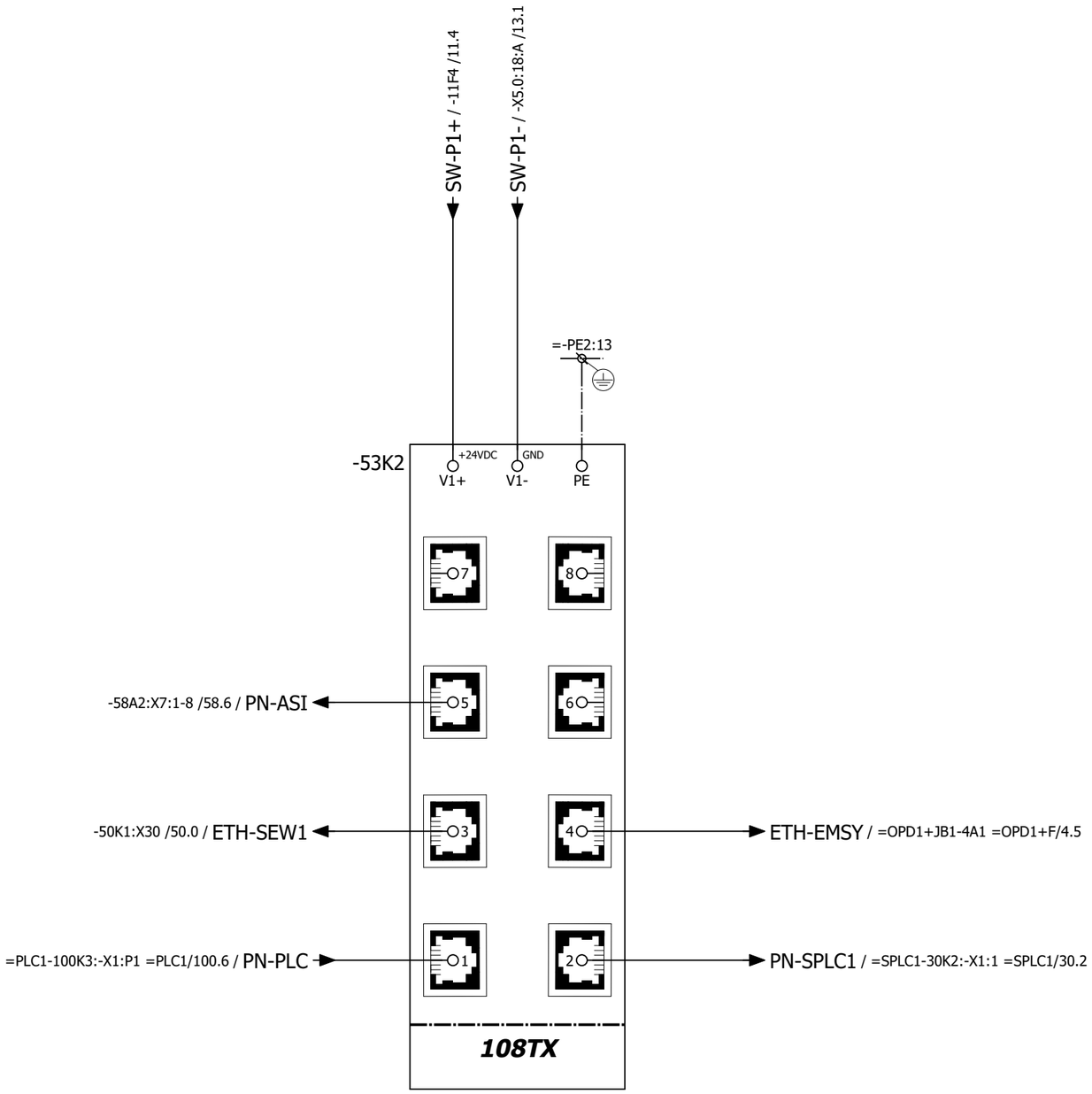
GEN:
Panel-lamp

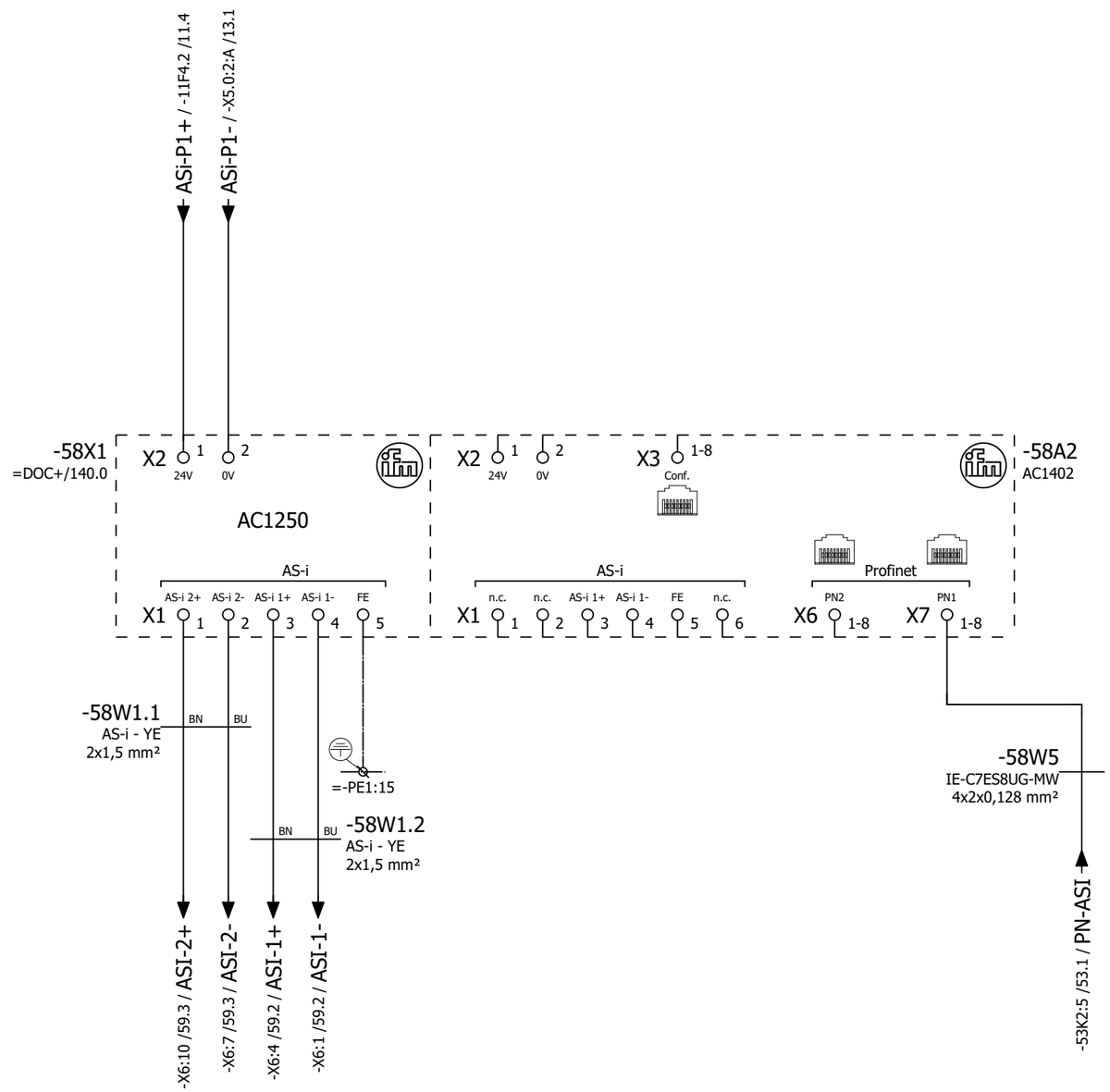
GEN:
Panel-lamp

GEN:
Panel-lamp

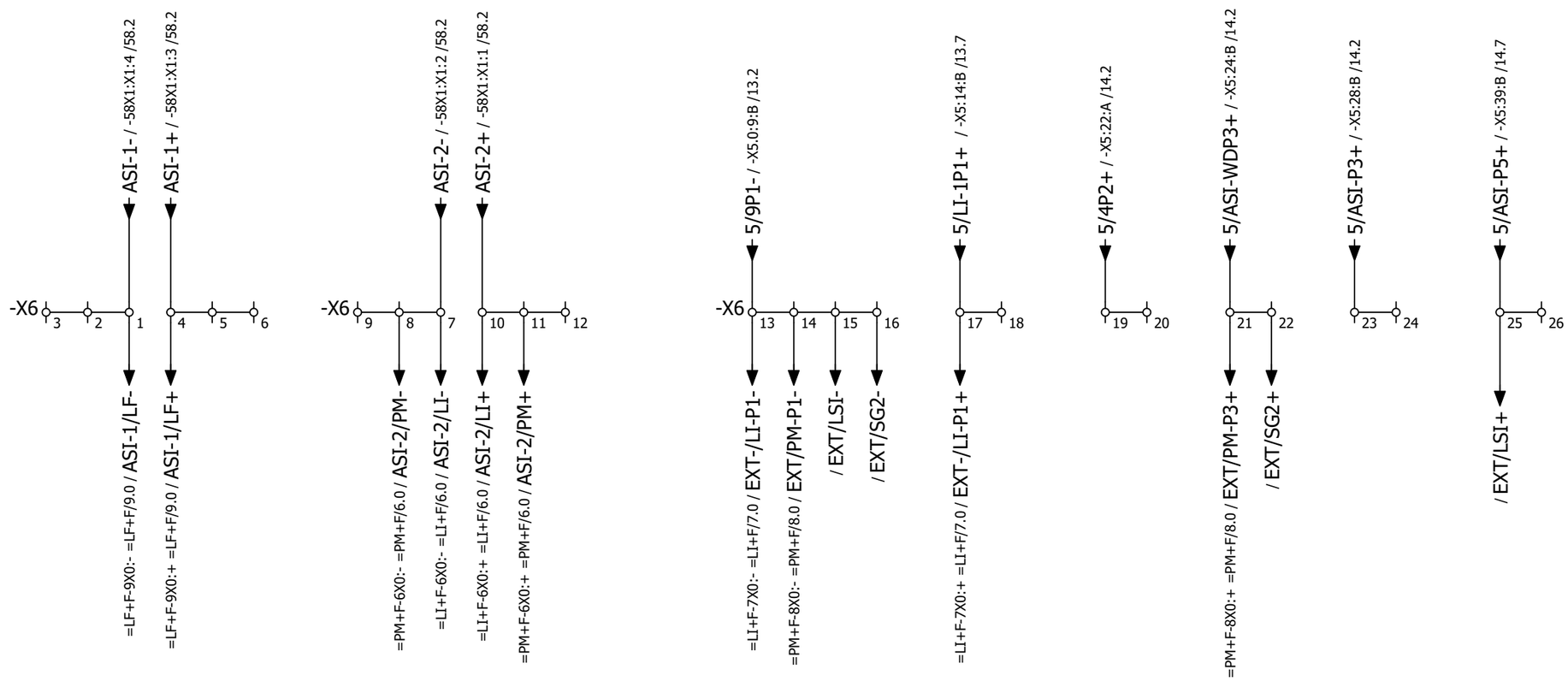
GEN:
Socket

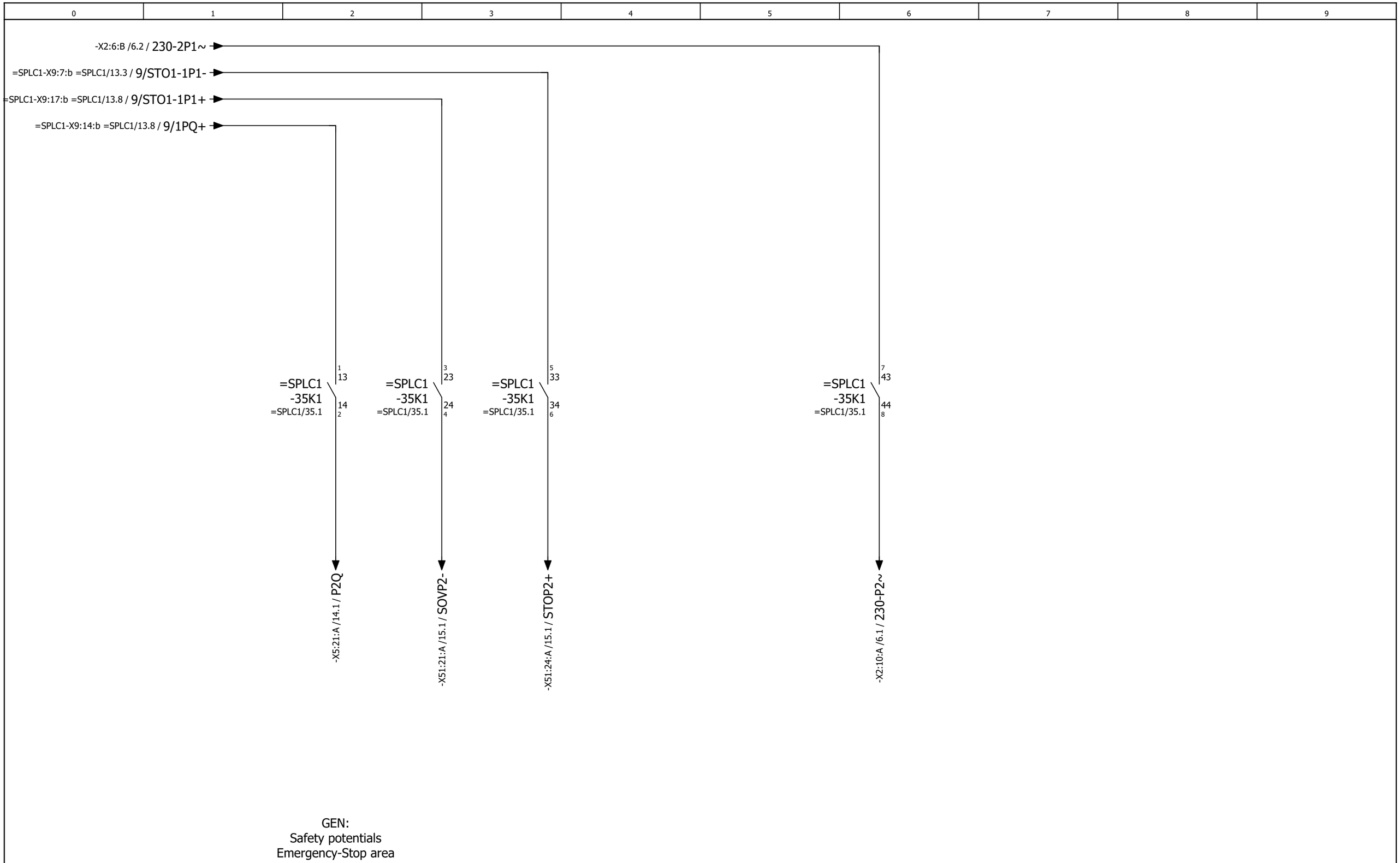

-50K1
DFE32B/UOH11B
DFE 32B
RUN
BUS FAULT
X30
X32
Def IP
AS
0 1
PROFINET IO
PE
=-PE3:1
X26
1 2 3 6 7
ETH-SEW1
-53K2:3 /53.1
-50W1
IE-C7ES8UG-MW
4X2X0,128 mm²
ETH-SEW2
-50K4:X30 /50.3
PE
WH BN GN YE
=LF-11T0:1 =LF+F/11.7 / G1/SB
-X5.0:2:B /13.2 / 5/2P1-
-X5:2:B /13.7 / 5/2P1+
-50K4
DFE32B/UOH11B
DFE 32B
RUN
BUS FAULT
X30
X32
Def IP
AS
0 1
PROFINET IO
PE
=-PE3:2
X26
1 2 3 6 7
ETH-SEW2
-50K1:X32 /50.0
-50W4
IE-C7ES8UG-MW
4X2X0,128 mm²
PE
WH BN GN YE
=BT22-11T0:X46:1 =BT22+F/11.6 / G2/SB
-X5.0:3:B /13.2 / 5/3P1-
-X5:3:B /13.7 / 5/3P1+


SW-P1+ / -11F4 /11.4
SW-P1- / -X5.0:18:A /13.1
=-PE2:13
-53K2
+24VDC
GND
V1+
V1-
PE
7
8
5
6
3
4
1
2
-58A2:X7:1-8 /58.6 / PN-ASI
-50K1:X30 /50.0 / ETH-SEW1
ETH-EMSY / =OPD1+JB1-4A1 =OPD1+F/4.5
=PLC1-100K3:-X1:P1 =PLC1/100.6 / PN-PLC
PN-SPLC1 / =SPLC1-30K2:-X1:1 =SPLC1/30.2
108TX

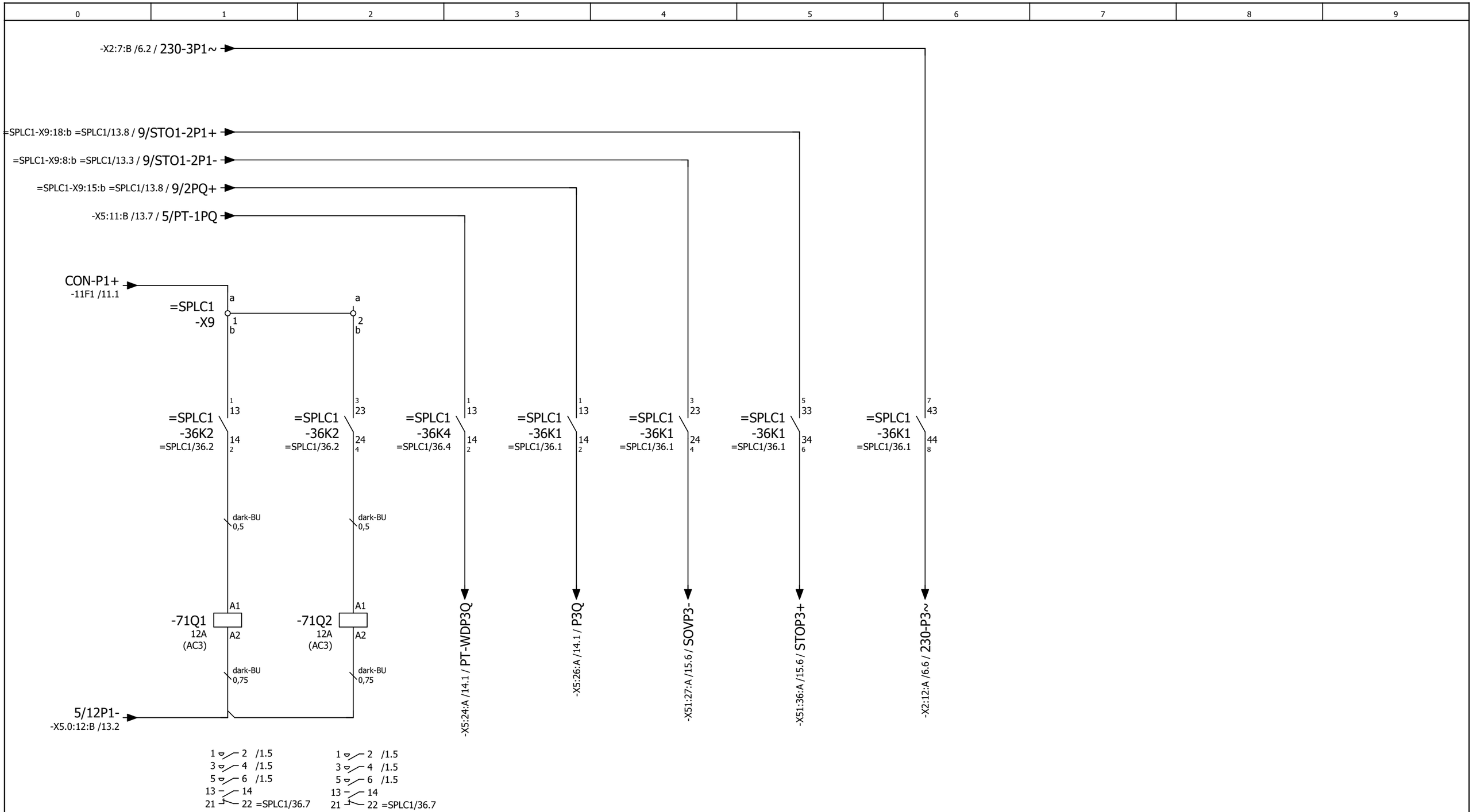


Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	GEN: ASi-Masters	= GEN	+COP1	Page 58
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 11.						

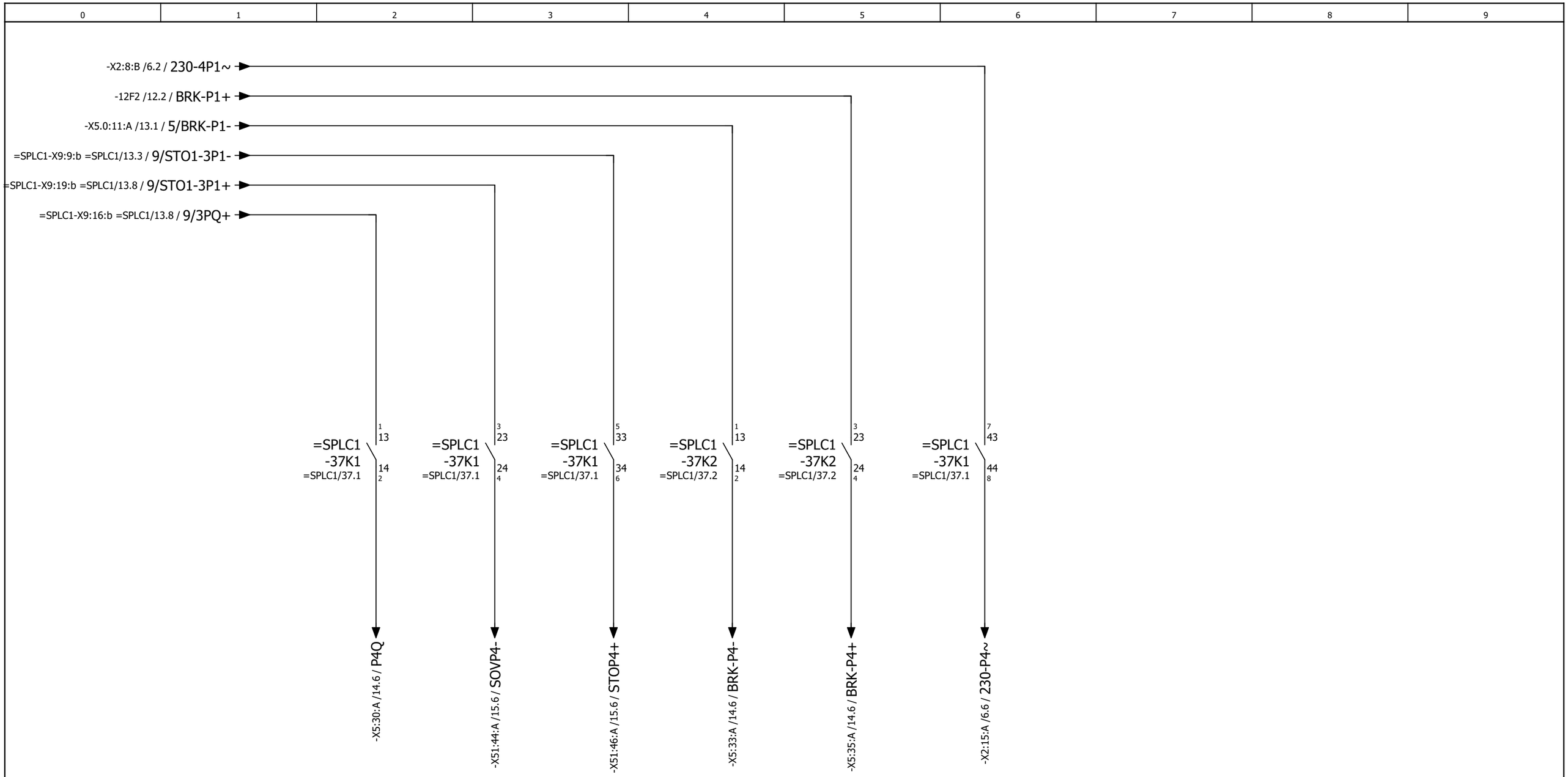

-X6
3
2
1
ASI-1- / -58X1:X1:4 /58.2
=LF+F-9X0:- =LF+F/9.0 / ASI-1/LF-
4
5
6
ASI-1+ / -58X1:X1:3 /58.2
=LF+F-9X0:+ =LF+F/9.0 / ASI-1/LF+
-X6
9
8
7
ASI-2- / -58X1:X1:2 /58.2
=PM+F-6X0:- =PM+F/6.0 / ASI-2/PM-
=LI+F-6X0:- =LI+F/6.0 / ASI-2/LI-
10
11
12
ASI-2+ / -58X1:X1:1 /58.2
=LI+F-6X0:+ =LI+F/6.0 / ASI-2/LI+
=PM+F-6X0:+ =PM+F/6.0 / ASI-2/PM+
-X6
13
14
15
16
5/9P1- / -X5.0:9:B /13.2
=LI+F-7X0:- =LI+F/7.0 / EXT-/LI-P1-
=PM+F-8X0:- =PM+F/8.0 / EXT/PM-P1-
/ EXT/LSI-
/ EXT/SG2-
17
18
5/LI-1P1+ / -X5:14:B /13.7
=LI+F-7X0:+ =LI+F/7.0 / EXT-/LI-P1+
19
20
5/4P2+ / -X5:22:A /14.2
21
22
5/ASI-WDP3+ / -X5:24:B /14.2
=PM+F-8X0:+ =PM+F/8.0 / EXT/PM-P3+
/ EXT/SG2+
23
24
5/ASI-P3+ / -X5:28:B /14.2
25
26
5/ASI-P5+ / -X5:39:B /14.7
/ EXT/LSI+



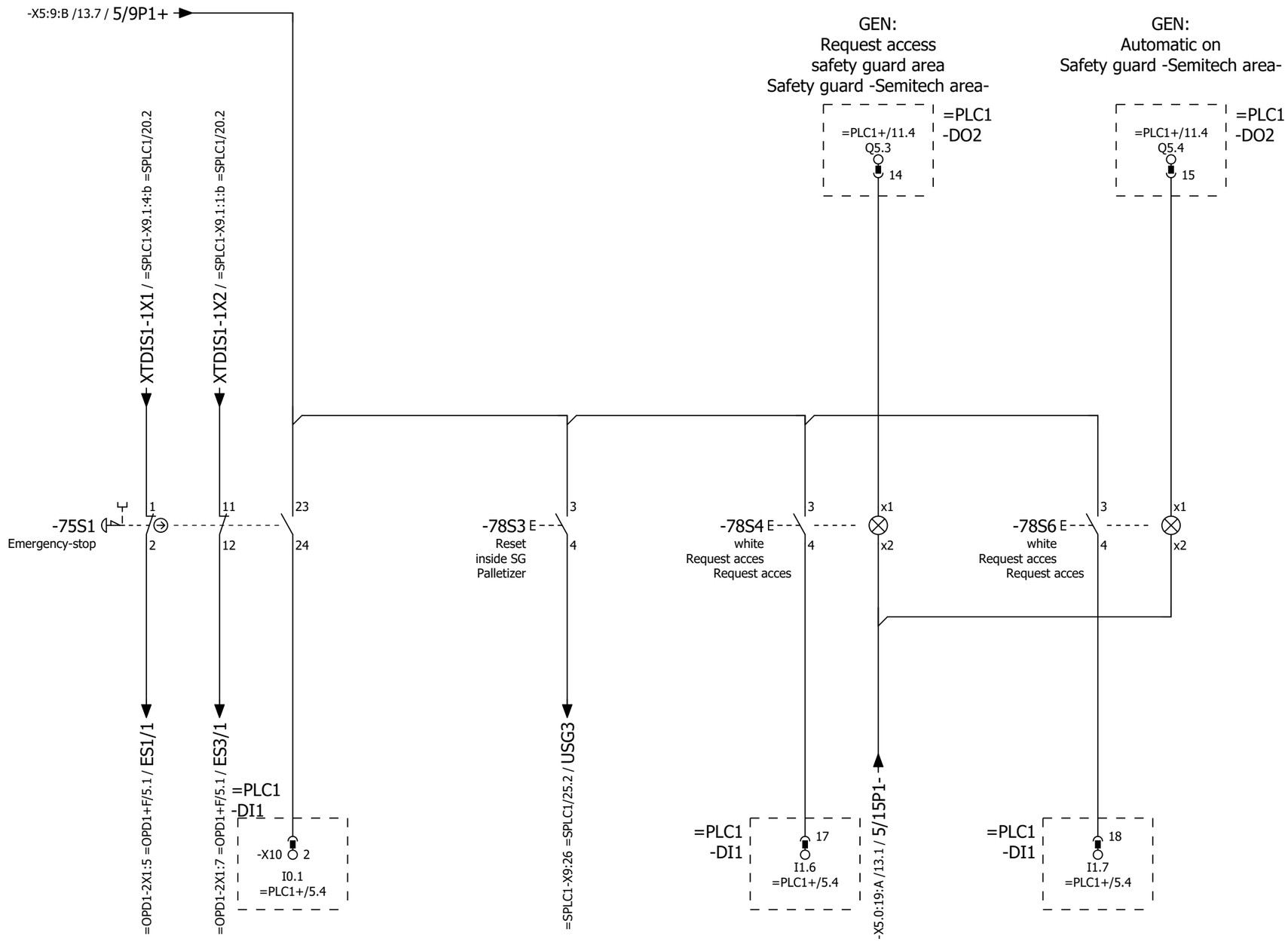
Creator	Ferenc Baracsi	Commission	620300.11.2023	MSK COVERTECH GROUP	GEN: Emergency-Stop modul safety area Emergency Stop	= GEN	+COP1	Page 70
Edited by	BaF	Type	MSK - Semitech			Revision		
Modification date	2023. 10. 11.							



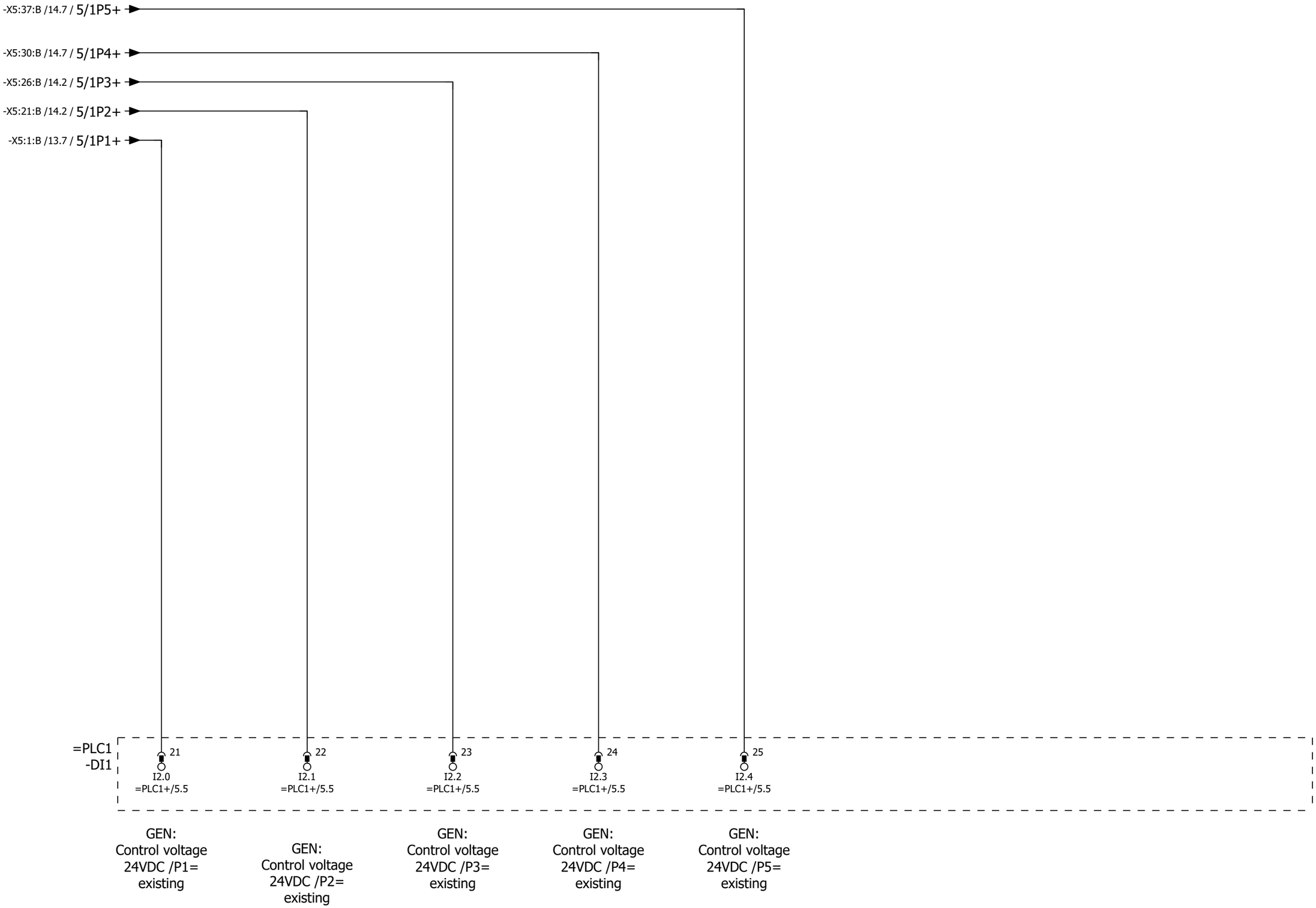
GEN:
Safety potentials
inside safety guard

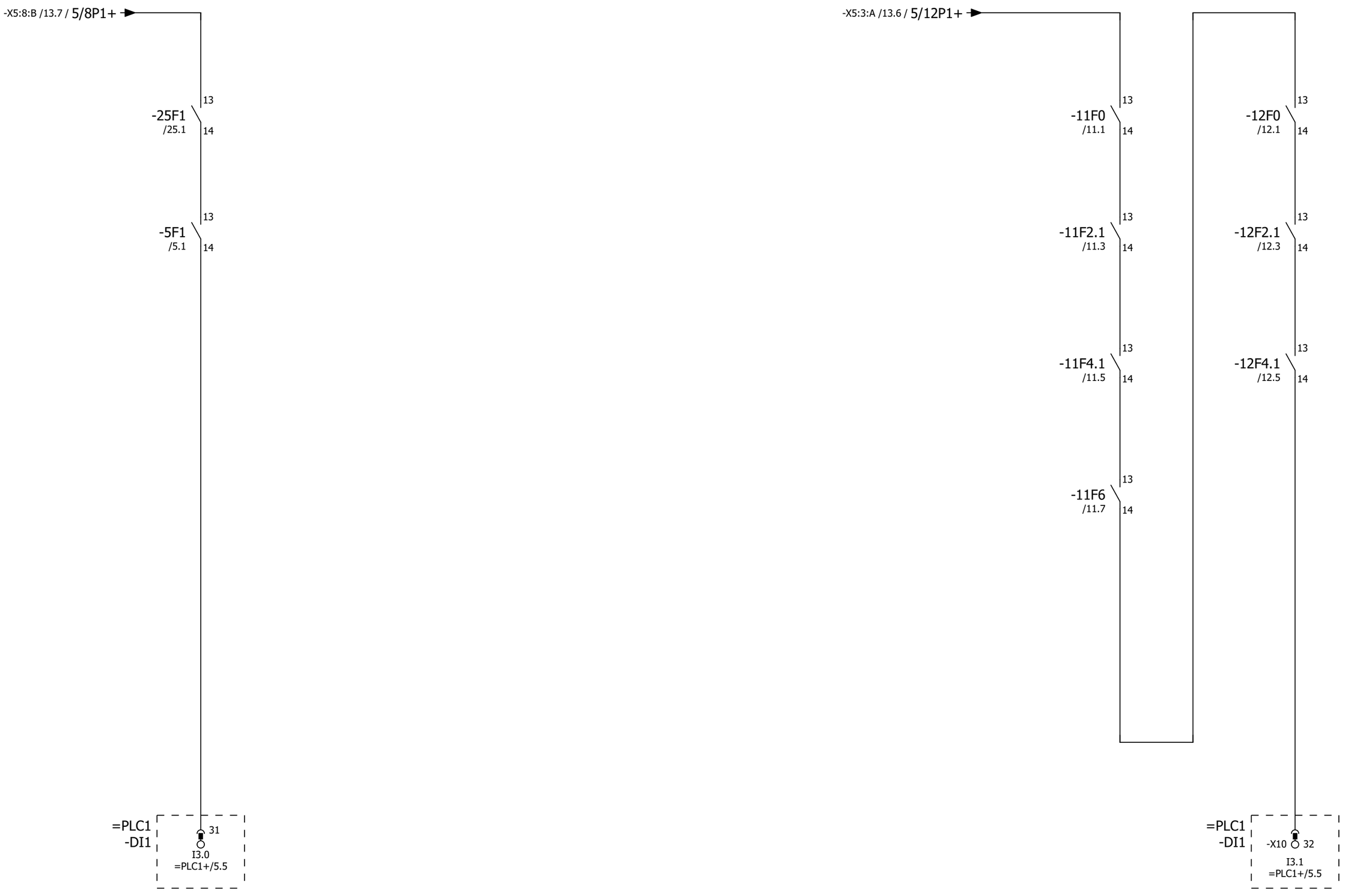

0
1
2
3
4
5
6
7
8
9
-X2:8:B /6.2 / 230-4P1~
-12F2 /12.2 / BRK-P1+
-X5.0:11:A /13.1 / 5/BRK-P1-
=SPLC1-X9:9:b =SPLC1/13.3 / 9/STO1-3P1-
=SPLC1-X9:19:b =SPLC1/13.8 / 9/STO1-3P1+
=SPLC1-X9:16:b =SPLC1/13.8 / 9/3PQ+
=SPLC1 -37K1 =SPLC1/37.1
=SPLC1 -37K1 =SPLC1/37.1
=SPLC1 -37K1 =SPLC1/37.1
=SPLC1 -37K2 =SPLC1/37.2
=SPLC1 -37K2 =SPLC1/37.2
=SPLC1 -37K1 =SPLC1/37.1
-X5:30:A /14.6 / P4Q
-X51:44:A /15.6 / SOVP4-
-X51:46:A /15.6 / STOP4+
-X5:33:A /14.6 / BRK-P4-
-X5:35:A /14.6 / BRK-P4+
-X2:15:A /6.6 / 230-P4~

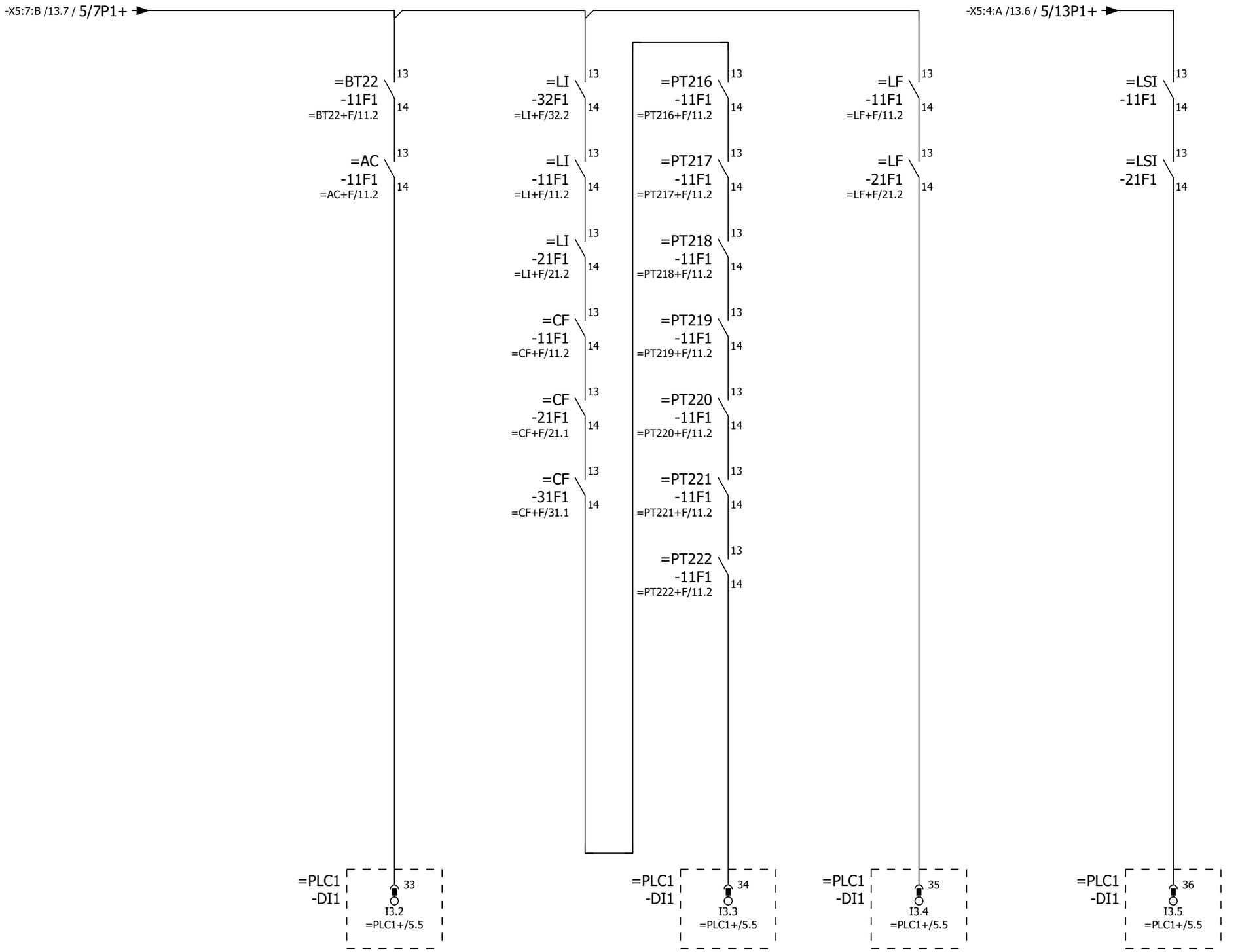
0	1	2	3	4	5	6	7	8	9


-X5:9:B /13.7 / 5/9P1+
XTDIS1-1X1 / =SPLC1-X9.1:4:b =SPLC1/20.2
XTDIS1-1X2 / =SPLC1-X9.1:1:b =SPLC1/20.2
-75S1
Emergency-stop
1
2
11
12
23
24
=OPD1-2X1:5 =OPD1+F/5.1 / ES1/1
=OPD1-2X1:7 =OPD1+F/5.1 / ES3/1
=PLC1
-DI1
-X10
2
I0.1
=PLC1+/5.4
-78S3
Reset
inside SG
Palletizer
3
4
=SPLC1-X9:26 =SPLC1/25.2 / USG3
-78S4
white
Request acces
Request acces
3
4
x1
x2
=PLC1
-DI1
17
I1.6
=PLC1+/5.4
-X5.0:19:A /13.1 / 5/15P1-
GEN:
Request access
safety guard area
Safety guard -Semitech area-
=PLC1+/11.4
Q5.3
14
=PLC1
-DO2
-78S6
white
Request acces
Request acces
3
4
x1
x2
=PLC1
-DI1
18
I1.7
=PLC1+/5.4
GEN:
Automatic on
Safety guard -Semitech area-
=PLC1+/11.4
Q5.4
15
=PLC1
-DO2
GEN:
Emergency-stop control cabinet
GEN:
Reset
inside SG area
GEN:
Request access
safety guard area
Safety guard -Semitech area-
GEN:
Automatic on
Safety guard -Semitech area-

0	1	2	3	4	5	6	7	8	9


-X5:37:B /14.7 / 5/1P5+
-X5:30:B /14.7 / 5/1P4+
-X5:26:B /14.2 / 5/1P3+
-X5:21:B /14.2 / 5/1P2+
-X5:1:B /13.7 / 5/1P1+
=PLC1
-DI1
21
I2.0
=PLC1+/5.5
22
I2.1
=PLC1+/5.5
23
I2.2
=PLC1+/5.5
24
I2.3
=PLC1+/5.5
25
I2.4
=PLC1+/5.5
GEN:
Control voltage
24VDC /P1=
existing
GEN:
Control voltage
24VDC /P2=
existing
GEN:
Control voltage
24VDC /P3=
existing
GEN:
Control voltage
24VDC /P4=
existing
GEN:
Control voltage
24VDC /P5=
existing


-X5:8:B /13.7 / 5/8P1+
-25F1
/25.1
13
14
-5F1
/5.1
13
14
=PLC1
-DI1
31
I3.0
=PLC1+/5.5
GEN:
Circuit breaker power supply
tripped
-X5:3:A /13.6 / 5/12P1+
-11F0
/11.1
13
14
-11F2.1
/11.3
13
14
-11F4.1
/11.5
13
14
-11F6
/11.7
13
14
-12F0
/12.1
13
14
-12F2.1
/12.3
13
14
-12F4.1
/12.5
13
14
=PLC1
-DI1
-X10
32
I3.1
=PLC1+/5.5
GEN:
24VDC circuit breaker
tripped



GEN:
Motor protection
tripped
safety area
Bottle conveyors

GEN:
Motor protection
tripped
safety area
Semitech

GEN:
Motor protection
tripped
safety area
layer former

GEN:
Motor protection
tripped
safety area
layer sheet inserter

0	1	2	3	4	5	6	7	8	9

Terminal diagram

Strip

=+COP1-PE3

Function text	Cable name	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable name	Cable type	Page / column
			=LF-21T0	X1:PE	10						=LF+F/21.2
			=GEN-50K1	PE	1						=GEN/50.2
			=GEN-51K1	PE	1						=GEN/51.2
			=GEN-50K4	PE	2						=GEN/50.5

Terminal diagram

Function text										Cable name	Strip =GEN+COP1-X0						Cable name					Page / column
										Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type					
Feed-In 3x380VAC/N/PE 50Hz												L1	1		-1Q0	2						/1.0
															-1F2	1						
Feed-In 3x380VAC/N/PE 50Hz												L2	2		-1Q0	4						/1.1
=												L3	3		-1Q0	6						/1.1
=												N	N		-N	1						/1.1

Terminal diagram

Function text				-25W8	-25W7	-25W1	-25W3	-25W2	-25W1.2	Cable name	Strip =GEN+COP1-X2 Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable name	-25W1.1				Page / column
				PUR-ORANGE 3G1,5 mm²	PUR-ORANGE 3G1,5 mm²	PUR-ORANGE 4G1,5 mm²	PUR-ORANGE 3G1,5 mm²	PUR-ORANGE 3G1,5 mm²	PUR-ORANGE 3G1,5 mm²	Cable type							Cable type	PUR-ORANGE 3G1,5 mm²				
230-P0~											-5K3	14	1		-5T1	0						/6.2
=											=LF-21Q5	3	2									/6.2
=													3									/6.2
=													4									/6.2
230-P1~											-5K3	13	5		-5F1.1	2						/6.2
=											=SPLC1-35K1	43	6									/6.2
=											=SPLC1-36K1	43	7									/6.2
=											=SPLC1-37K1	43	8									/6.2
=													9									/6.2
													10		=SPLC1-35K1	44						/6.2
													11									/6.2
230-P3~											=LI-14Q1	1	12		=SPLC1-36K1	44						/6.6
=													13									/6.6
=													14									/6.6
230-P4~											=LF-21Q5	1	15		=SPLC1-37K1	44						/6.6
=													16									/6.6
									1		-25S1	1	17		-25M1	2		2				/25.1
GEN: Doorswitch 2								1			-25S2	1	18									/25.2
GEN: Doorswitch 3							1				-25S3	1	19									/25.3
						2					-25S1	3	20		-25M1	1		1				/25.1
GEN: Doorswitch 2								2			-25S2	3	21									/25.2
GEN: Doorswitch 3							2				-25S3	3	22									/25.3
GEN: Socket											-30X8	2	23		-30F1.1							/30.9
GEN: Doorswitch 3											-25B7	6	24									/25.7
GEN: Internal fan 1					2						-25M7	2	25									/25.7
GEN: Internal fan 2				2							-25M8	2	26		=OPD1-1X1	2						/25.9
GEN: Internal fan 1					1						-25M7	1	27		-25B7	4						/25.7
GEN: Internal fan 2				1							-25M8	1	28									/25.8
230-P5~													29									/6.6
=													30									/6.6
GEN: Internal fan 1					GNYE						-25M7	PE	PE		-PE1	PE						/25.7
GEN: Internal fan 2				GNYE							-25M8	PE	PE		-PE1	PE						/25.9

Terminal diagram

Function text										Cable name	Strip =GEN+COP1-X5						Cable name					Page / column
										Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type					
P1+											=PLC1-DI1	-X10:21	1		-11F0.1							/13.6
=											-50K1	7	2		-X52	5:A						/13.6
=											-50K4	7	3		-11F0	13						/13.6
=													4		=LSI-11F1	13						/13.6
=											-51K1	7	5		=LF-11R3	T1						/13.6
=													6		=LF-21R3	T1						/13.6
=											=BT137-11F1	13	7									/13.6
=											-25F1	13	8									/13.6
=											-75S1	23	9									/13.6
=											-5K3	5	10									/13.6
PT-P1+											=SPLC1-36K4	13	11		-11F3							/13.6
=											=AC-19X0	1	12									/13.6
=													13									/13.6
LI-P1+											-X6	17	14		-12F2.2							/13.6
P1+											=LI-18X1	1	15									/13.6
=													16									/13.6
HCU-P1+											-11F5.1		17		=HCU1-2X1	2						/13.6
P1+											=HCU2-2X1	2	18		=HCU5-2X1	2						/13.6
=											=HCU3-5X3	2	19									/13.6
=											=HCU4-5X1	2	20									/13.6
HCU-P1+											=PLC1-DI1	-X10:22	21		=SPLC1-35K1	14						/14.2
=											-X52	10:A	22		-X6	19						/14.2
=											=LF-2X1	3	23									/14.2
P3+											-X6	21	24		=SPLC1-36K4	14						/14.2
HCU-P1+													25									/14.2
P4+											=PLC1-DI1	-X10:23	26		=SPLC1-36K1	14						/14.2
P3+											-X52	12:A	27									/14.2
P4+											-X6	23	28									/14.2
=													29									/14.2
PT-WDP3+											=PLC1-DI1	-X10:24	30		=SPLC1-37K1	14						/14.7
=											-X52	15:A	31									/14.7
=													32									/14.7
=											=LF-12T3	2	33		=SPLC1-37K2	14						/14.7
=													34									/14.7
P5+											=LF-12T3	1	35		=SPLC1-37K2	24						/14.7

Terminal diagram

Strip

=GEN+COP1-X5

Function text	Cable name / Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable name / Cable type	Page / column
				36					/14.7
P5+		=PLC1-DI1	-X10:25	37					/14.7
		-X52	17:A	38					/14.7
		-X6	25	39					/14.7
				40					/14.7

Terminal diagram

Strip

=GEN+COP1-X5.0

Function text	Cable name / Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable name / Cable type	Page / column
P1-		-X52	1:A	1		-10G1	Output:2.3		/13.2
		-50K1	6	2		-58X1	X2:2		/13.2
		-50K4	6	3		=OPD1-2X1	1		/13.2
				4		=HCU1-2X1	1		/13.2
		-11F0	BR:OUT:+24V	5		=HCU2-2X1	1		/13.2
		-51K1	6	6		=HCU3-5X3	1		/13.2
		=CLI1-12K1	14	7		=HCU4-5X1	1		/13.2
		=LI-18X1	2	8		=HCU5-2X1	1		/13.2
		-X6	13	9					/13.2
		=LF-12T3	4	10		-10G1	Output:2.4		/13.2
		=SPLC1-X9	3:a	11		=SPLC1-37K2	13		/13.2
		-71Q1	A2	12		=LF-2X1	1		/13.2
		-53K2	V1-	13		=LF-3X1	1		/13.2
		=LF-21Q5	A2	14		=AC-19X0	2		/13.2
		-X51	1:A	15		=CF-3X1	1		/13.2
		-X51	48:A	16					/13.2
		=SPLC1-X9	7:a	17		-X7	2		/13.2
		=SLB1-3X1	1	18					/13.2
		=SLB2-3X1	1	19					/13.2
		=SLB3-3X1	1	20					/13.2

Terminal diagram

Function text					-8W0	-7W0.1	-6W00	-6W0	-9W0	Cable name	Strip =GEN+COP1-X6						Cable name	-58W1.2	-58W1.1			Page / column
					AS-i Black 2X1,5 mm²	AS-i Black 2X1,5 mm²	AS-i Yellow 2X1,5 mm²	AS-i Yellow 2X1,5 mm²	AS-i Yellow 2X1,5 mm²	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type	AS-i - YE 2x1,5 mm²	AS-i - YE 2x1,5 mm²			
ASI-1-									BU		=LF+F-9X0	-	1		-58X1	X1:4		BU				/59.2
=													2									/59.1
=													3									/59.1
ASI-1+									BN		=LF+F-9X0	+	4		-58X1	X1:3		BN				/59.2
=													5									/59.2
=													6									/59.2
ASI-2-								BU			=LI+F-6X0	-	7		-58X1	X1:2			BU			/59.3
=							BU				=PM+F-6X0	-	8									/59.3
=													9									/59.3
ASI-2+								BN			=LI+F-6X0	+	10		-58X1	X1:1			BN			/59.3
=							BN				=PM+F-6X0	+	11									/59.3
=													12									/59.4
PT-1P1-						BU					=LI+F-7X0	-	13		-X5.0	9:B						/59.4
=					BU						=PM+F-8X0	-	14									/59.5
=													15									/59.5
PT-WDP3+													16									/59.5
=						BN					=LI+F-7X0	+	17		-X5	14:B						/59.5
=													18									/59.6
=													19		-X5	22:A						/59.6
=													20									/59.6
=					BN						=PM+F-8X0	+	21		-X5	24:B						/59.7
=													22									/59.7
=													23		-X5	28:B						/59.7
=													24									/59.7
=													25		-X5	39:B						/59.8
=													26									/59.8

Terminal diagram

Function text					-15W1	-35W0	-25W0	=F+CF -W15B0	-25W1	Cable name	Strip =GEN+COP1-X7						Cable name	-11W5	-11W5			Page / column
					PUR/500m 4X0,34 mm²	2x2x0,25 mm² CF211.02.02 Chainflex	2x2x0,25 mm² CF211.02.02 Chainflex	3X2X0,25 mm² Unitronic LiYCY (TP)	3x2x0,25 mm² Unitronic LiYCY (TP)	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type	2X0,75 mm² Ölflex Classic 115 CY	2X0,75 mm² Ölflex Classic 115 CY			
LI: Lift motor HTL-sensor									BN		=LI+F-15B1	5	1		-11F3.1							=LI+F/15.2
=									WH		=LI+F-15B1	6	2		-X5.0	17:A						=LI+F/15.2
=									GN		=LI+F-15B1	7	3		=LI-11T0	4		1				=LI+F/15.2
=									YE		=LI+F-15B1	9	4		=LI-11T0	5		2				=LI+F/15.2
=									GY		=LI+F-12M1		5		=LI-11T0	7						=LI+F/15.3
=									PK		=LI+F-12M1		6		=LI-11T0	6						=LI+F/15.3
LI: Sledge impulse sensor									GY		=LI+F-25B0	5	7									=LI+F/25.2
=									PK		=LI+F-25B0	6	8									=LI+F/25.2
=									GN		=LI+F-25B0	7	9		=LI-21T0	4						=LI+F/25.2
=									YE		=LI+F-25B0	9	10		=LI-21T0	5						=LI+F/25.2
=									WH		=LI+F-22M1	TH1	11		=LI-21R3	T1						=LI+F/25.3
=									BN		=LI+F-22M1	TH2	12		=LI-21T0	6						=LI+F/25.3
CF: Liftmotor HTL sensor								GY			=F+CF-15B0	5	13									=CF+F/15.1
=								PK			=F+CF-15B0	6	14									=CF+F/15.1
=								GN			=F+CF-15B0	7	15		=CF-11T0	X12:4			1			=CF+F/15.2
=								YE			=F+CF-15B0	9	16		=CF-11T0	X12:5			2			=CF+F/15.2
=								WH			=CF+F-12M1	TH1	17		=CF-11R3	T1						=CF+F/15.2
=								BN			=CF+F-12M1	TH2	18		=CF-11T0	X12:6						=CF+F/15.3
CF: Centering bars transversal HTL encoder							GN				=CF+F-25B0	5	19									=CF+F/25.1
=							YE				=CF+F-25B0	6	20									=CF+F/25.1
=							BN				=CF+F-25B0	7	21		=CF-21T0	4						=CF+F/25.1
=							WH				=CF+F-25B0	9	22		=CF-21T0	5						=CF+F/25.2
CF: Centering bars longitudinal HTL encoder						GN					=CF+F-35B0	5	23									=CF+F/35.1
=						YE					=CF+F-35B0	6	24									=CF+F/35.1
=						BN					=CF+F-35B0	7	25		=CF-31T0	4						=CF+F/35.2
=						WH					=CF+F-35B0	9	26		=CF-31T0	5						=CF+F/35.2
PT219: Chain conveyor impulse sensor					BN						=PT219+F-15B1	5	27									=PT219+F/15.2
=					BU						=PT219+F-15B1	6	28									=PT219+F/15.2
=					BK						=PT219+F-15B1	7	29		=PLC1-DI3	-X10:8						=PT219+F/15.2

Terminal diagram

Function text										Cable name	Strip =GEN+COP1-X51						Cable name					Page / column
										Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type					
51P1-											=BT22-11T0	9	1		-X5.0	15:B						/15.2
=											=AC-11T0	9	2		=PT216-11T0	9						/15.2
=											=LF-11T0	X10:10	3		=PT217-11T0	9						/15.2
=											=LF-21T0	X10:10	4		=PT218-11T0	9						/15.2
=											=LI-11T0	9	5									/15.2
=											=LI-21T0	9	6		=PT220-11T0	9						/15.2
=											=CF-11T0	X12:9	7		=PT221-11T0	9						/15.2
=											=CF-31T0	9	8		=PT222-11T0	9						/15.2
=											=CF-21T0	9	9									/15.2
=											=PT219-11T0	9	10									/15.2
51P1+											=BT22-11T0	8	11		-11F2							/15.2
=											=AC-11T0	8	12		=PT216-11T0	8						/15.2
=											=LF-11T0	9	13		=PT217-11T0	8						/15.2
=											=LF-21T0	X10:9	14		=PT218-11T0	8						/15.2
=											=LI-11T0	8	15		=PT219-11T0	8						/15.2
=											=LI-21T0	8	16		=PT220-11T0	8						/15.2
=											=CF-11T0	X12:8	17		=PT221-11T0	8						/15.2
=											=CF-31T0	8	18		=PT222-11T0	8						/15.2
=											=CF-21T0	8	19									/15.2
=													20									/15.2
51P2-											=BT22-11T0	3	21		=SPLC1-35K1	24						/15.2
=											=AC-11T0	3	22									/15.2
=													23									/15.2
51P2+											=BT22-11T0	4	24		=SPLC1-35K1	34						/15.2
=											=AC-11T0	4	25									/15.2
=													26									/15.2
51SOVP3-											=LI-11T0	3	27		=SPLC1-36K1	24						/15.6
=											=LI-21T0	3	28		=PT220-11T0	3						/15.6
=											=CF-11T0	X17:3	29		=PT221-11T0	3						/15.6
=											=CF-21T0	3	30		=PT222-11T0	3						/15.6
=											=CF-31T0	3	31									/15.6
=											=PT216-11T0	3	32									/15.6
=											=PT217-11T0	3	33									/15.6
=											=PT218-11T0	3	34									/15.6
=											=PT219-11T0	3	35									/15.6

Terminal diagram

Function text										Cable name	Strip =GEN+COP1-X51						Cable name					Page / column
										Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type					
51P3+											=LI-11T0	4	36		=SPLC1-36K1	34						/15.6
=											=LI-21T0	4	37		=PT219-11T0	4						/15.6
=											=CF-11T0	X17:4	38		=PT220-11T0	4						/15.6
=											=CF-21T0	4	39		=PT221-11T0	4						/15.6
=											=CF-31T0	4	40		=PT222-11T0	4						/15.6
=											=PT216-11T0	4	41									/15.6
=											=PT217-11T0	4	42									/15.6
=											=PT218-11T0	4	43									/15.6
51P4-											=LF-11T0	3	44		=SPLC1-37K1	24						/15.6
=											=LF-21T0	X17:3	45									/15.6
=											=LF-11T0	X13:1	46		=SPLC1-37K1	34						/15.6
=											=LF-21T0	X13:1	47									/15.6
51P1-													48		-X5.0	16:B						/16.2
=													49									/16.2
=													50									/16.2
=													51									/16.2
=													52									/16.2
51P1+													53		-12F4.2							/16.2
=													54									/16.2
=													55									/16.2
=													56									/16.2
=													57									/16.2
51SOVP3-													58									/16.6
=													59									/16.6
=													60									/16.6
=													61									/16.6
=													62									/16.6
51P3+													63									/16.6
=													64									/16.6
=													65									/16.6
=													66									/16.6
=													67									/16.6

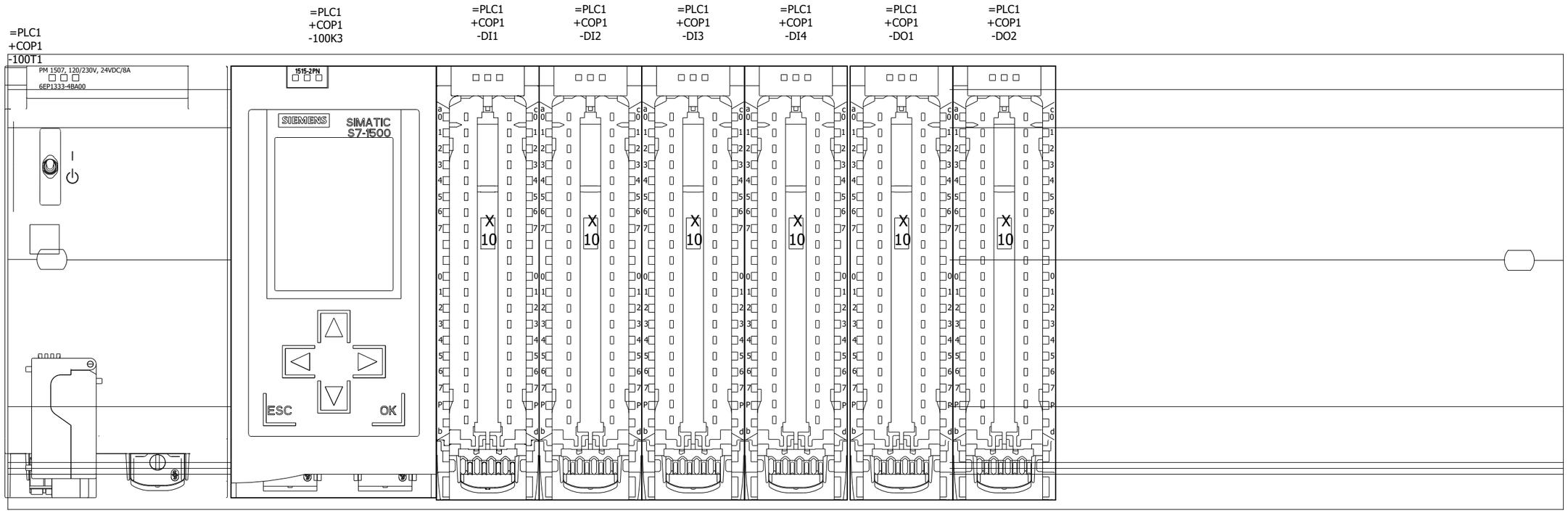
Terminal diagram

Function text	Cable name	Cable type	Strip =GEN+COP1-X52 Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable name	Cable type	Page / column
52P1-			=PLC1-DI1	-X10:20	1		-X5.0	1:B			/18.2
=			=PLC1-DO1	-X10:10	2						/18.2
=			=PLC1-DO1	-X10:20	3						/18.2
=					4						/18.2
52P1+			=PLC1-DI1	-X10:19	5		-X5	2:A			/18.2
=			=PLC1-DO1	-X10:9	6						/18.2
=			=PLC1-DO1	-X10:19	7						/18.2
=					8						/18.2
=					9						/18.2
52P2+			=PLC1-DO1	-X10:29	10		-X5	22:B			/18.2
=					11						/18.2
52P3+			=PLC1-DO1	-X10:39	12		-X5	27:B			/18.6
=			=PLC1-DO2	-X10:19	13						/18.6
=					14						/18.6
52P4+			=PLC1-DO2	-X10:39	15		-X5	31:B			/18.6
=					16						/18.6
52P5+			=PLC1-DO2	-X10:29	17		-X5	38:B			/18.6
=					18						/18.6

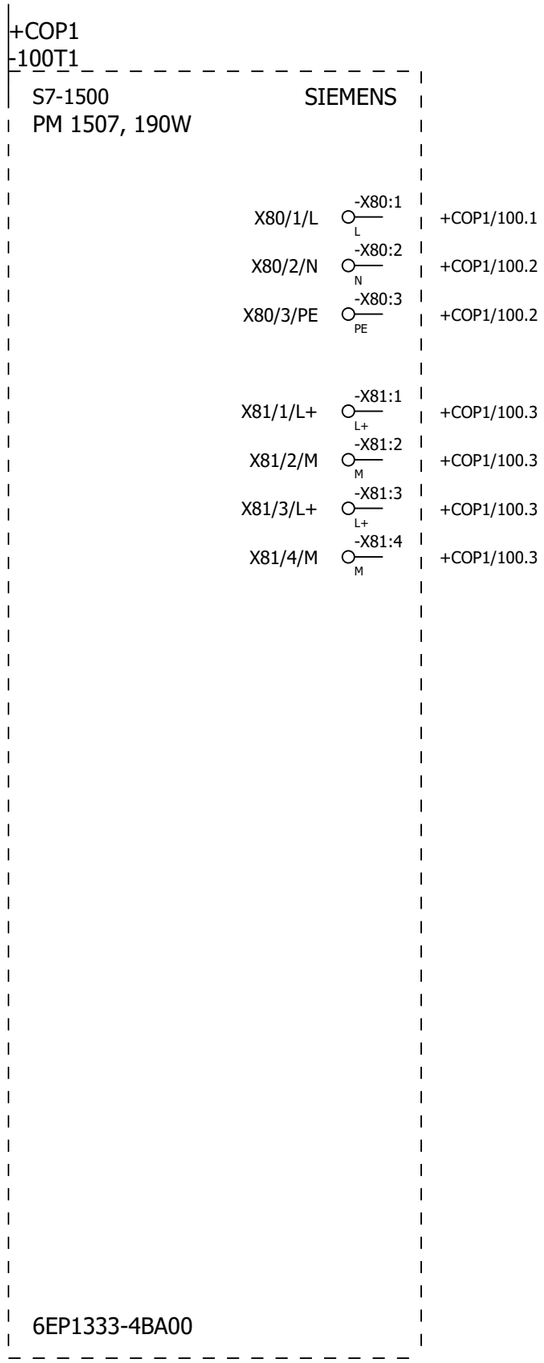
Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
-50W1			10150516	IE-C7ES8UG-MW	4X2X	1	0,128		GEN: Profinet SEW 1
-50W4			10150516	IE-C7ES8UG-MW	4X2X	1	0,128		GEN: Profinet SEW 2
-51W1			10150516	IE-7CC4x2/7-PUR	4x2	1	0,128	0,5	EtherNet SEW Gateway 4
-58W5			10150516	IE-C7ES8UG-MW	4x2	0	0,128		GEN: Profinet - ASI Master

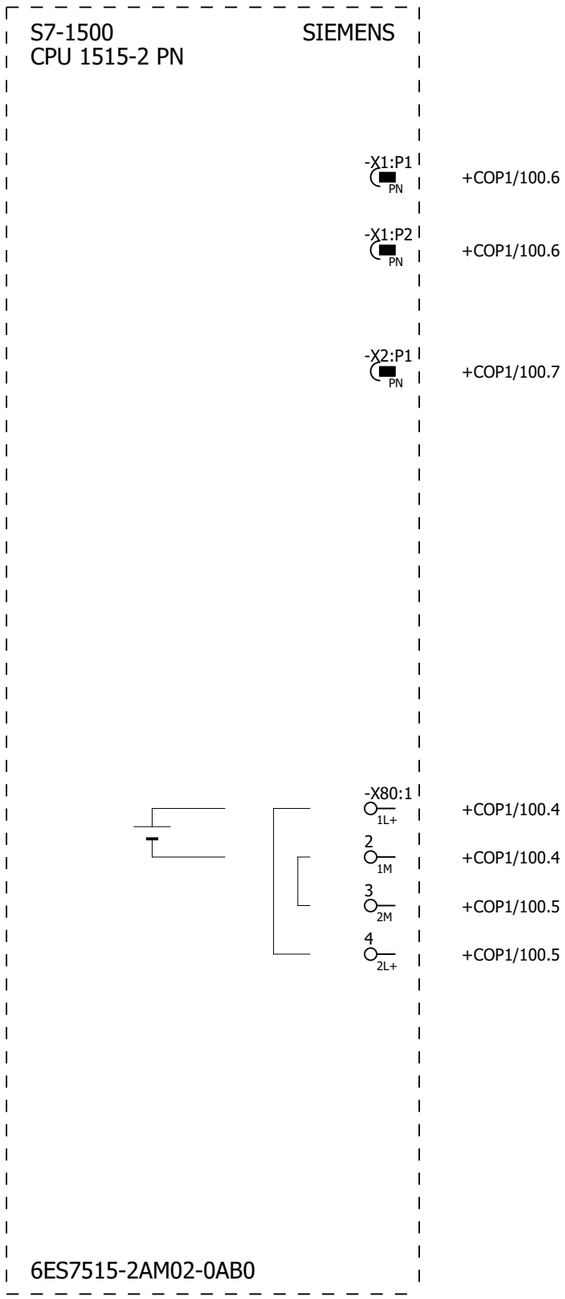
Rack 1



Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	PLC1: PLC-overview	= PLC1	+	Page 1
Edited by	BaF	Type MSK - Semitech			Revision	
Modification date	2023. 10. 11.					


+COP1
-100T1
S7-1500
SIEMENS
PM 1507, 190W
X80/1/L
-X80:1
L
+COP1/100.1
X80/2/N
-X80:2
N
+COP1/100.2
X80/3/PE
-X80:3
PE
+COP1/100.2
X81/1/L+
-X81:1
L+
+COP1/100.3
X81/2/M
-X81:2
M
+COP1/100.3
X81/3/L+
-X81:3
L+
+COP1/100.3
X81/4/M
-X81:4
M
+COP1/100.3
6EP1333-4BA00

+COP1-100K3
+COP1/100.4
Siemens
CPU 1515-2 PN
_D700.SIE.1219



Creator	Ferenc Baracsi	Commission	620300.11.2023	PLC1: PLC-overview CPU	= PLC1	+	Page 3
Edited by	BaF	Type	MSK - Semitech		Revision		
Modification date	2023. 10. 11.						

0	1	2	3	4	5	6	7	8	9

+COP1-DI1
=GEN+COP1/5.3

S7-1500 SIEMENS
DI 32x24VDC HF

				-X10:1 DI a	I0.0 X10/1/IX.0	I2.0 X10/21/IX+2.0	-X10:21 DI c	=GEN+COP1/85.1	I2.0	GEN: Control voltage 24VDC /P1= existing
GEN: Emergency-stop control cabinet	=GEN+COP1-75S1:24	=GEN+COP1/78.1	-X10:2 DI a	I0.1 X10/2/IX.1	I2.1 X10/22/IX+2.1	-X10:22 DI c	=GEN+COP1/85.2	=SPLC1+COP1-35K1:14	GEN: Control voltage 24VDC /P2= existing
OPD1: Emergency-stop Operator desk	=OPD1+JB1-5S1:24	=OPD1+F/5.2	-X10:3 DI a	I0.2 X10/3/IX.2	I2.2 X10/23/IX+2.2	-X10:23 DI c	=GEN+COP1/85.3	=SPLC1+COP1-36K1:14	GEN: Control voltage 24VDC /P3= existing
SLB1: Reserved Emergency-stop	I0.3	=SLB1+F/5.2	-X10:4 DI a	I0.3 X10/3/IX.3	I2.3 X10/24/IX+2.3	-X10:24 DI c	=GEN+COP1/85.4	=SPLC1+COP1-37K1:14	GEN: Control voltage 24VDC /P4= existing
SLB2: Emergency-Stop operated	=SLB2+JB1-5S1:24	=SLB2+F/5.2	-X10:5 DI a	I0.4 X10/5/IX.4	I2.4 X10/25/IX+2.4	-X10:25 DI c	=GEN+COP1/85.5	I2.4	GEN: Control voltage 24VDC /P5= existing
SLB3: Reserved Emergency-stop	I0.5	=SLB3+F/5.2	-X10:6 DI a	I0.5 X10/6/IX.5	I2.5 X10/26/IX+2.5	-X10:26 DI c	=SLB1+F/3.3	=SLB1+JB1-4S3:13	SLB1: Safety light barrier 24VDC power supply OK
SLB3: Safety light barrier 24VDC power supply OK	=SLB3+JB1-4S3:13	=SLB3+F/3.3	-X10:7 DI a	I0.6 X10/7/IX.6	I2.6 X10/27/IX+2.6	-X10:27 DI c	=SLB2+F/3.3	=SLB2+JB1-4S3:13	SLB2: Safety light barrier 24VDC power supply OK
			-X10:8 DI a	I0.7 X10/8/IX.7	I2.7 X10/28/IX+2.7	-X10:28 DI c	=GEN+COP1/5.3	=GEN+COP1-5K3:9	GEN: Control voltage 230VAC OK
HCU1: Request access safety guard area layer former (in front)	=HCU1+JB1-5S4:4	=HCU1+F/5.4	-X10:11 DI b	I1.0 X10/11/IX+1.0	I3.0 X10/31/IX+3.0	-X10:31 DI d	=GEN+COP1/90.1	=GEN+COP1-5F1:14	GEN: Circuit breaker power supply tripped
HCU2: Request access safety guard area layer former (left)	=HCU2+JB1-5S4:4	=HCU2+F/5.4	-X10:12 DI b	I1.1 X10/12/IX+1.1	I3.1 X10/32/IX+3.1	-X10:32 DI d	=GEN+COP1/90.8	=GEN+COP1-12F4.1:14	GEN: 24VDC circuit breaker tripped
HCU3: Request access safety guard area (at AC right side)	=HCU3+JB1-5S3:4	=HCU3+F/5.3	-X10:13 DI b	I1.2 X10/13/IX+1.2	I3.2 X10/33/IX+3.2	-X10:33 DI d	=GEN+COP1/91.2	=AC+COP1-11F1:14	GEN: Motor protection tripped safety area Bottle conveyors
HCU4: Request access safety guard area (at AC left side)	=HCU4+JB1-5S3:4	=HCU4+F/5.3	-X10:14 DI b	I1.3 X10/14/IX+1.3	I3.3 X10/34/IX+3.3	-X10:34 DI d	=GEN+COP1/91.4	=PT222+COP1-11F1:14	GEN: Motor protection tripped safety area Semitech
HCU5: Request access safety guard area Safety guard -Semitech area-	=HCU5+JB1-5S4:4	=HCU5+F/5.4	-X10:15 DI b	I1.4 X10/15/IX+1.4	I3.4 X10/35/IX+3.4	-X10:35 DI d	=GEN+COP1/91.5	=LF+COP1-21F1:14	GEN: Motor protection tripped safety area layer former
			-X10:16 DI b	I1.5 X10/16/IX+1.5	I3.5 X10/36/IX+3.5	-X10:36 DI d	=GEN+COP1/91.7	=LSI+COP1-21F1:14	GEN: Motor protection tripped safety area layer sheet inserter
GEN: Request access safety guard area Safety guard -Semitech area-	=GEN+COP1-78S4:4	=GEN+COP1/78.4	-X10:17 DI b	I1.6 X10/17/IX+1.6	I3.6 X10/37/IX+3.6	-X10:37 DI d			
GEN: Automatic on Safety guard -Semitech area-	=GEN+COP1-78S6:4	=GEN+COP1/78.6	-X10:18 DI b	I1.7 X10/18/IX+1.7	I3.7 X10/38/IX+3.7	-X10:38 DI d			
	52P1+	+COP1/105.1	-X10:19 1L+	X10/19/1L+	X10/39/2L+	-X10:39 2L+	+COP1/105.2		52P1+
	52P1-	+COP1/105.2	-X10:20 1M	X10/20/1M	X10/40/2M	-X10:40 2M	+COP1/105.3		52P1-

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0	1	2	3	4	5	6	7	8	9

+COP1-DI2
+COP1/105.3

S7-1500 SIEMENS
DI 32x24VDC HF

	OPD1: Preselection on	=OPD1+JB1-5S5:4	=OPD1+F/5.5	-X10:1 DI a	I4.0 X10/1/IX.0	-X10:21 DI c	I6.0 X10/21/IX+2.0	=SG1+F/3.6	I6.0	SG1: Swing doors pallet infeed opened
	OPD1: Setting mode on	=OPD1+JB1-5S6:4	=OPD1+F/5.6	-X10:2 DI a	I4.1 X10/2/IX.1	-X10:22 DI c	I6.1 X10/22/IX+2.1	=SG1+F/4.2	I6.1	SG1: Safety guard door Semitech area opened
	OPD1: Request access safety guard area	=OPD1+JB1-7S1:4	=OPD1+F/7.1	-X10:3 DI a	I4.2 X10/3/IX.2	-X10:23 DI c	I6.2 X10/23/IX+2.2	=SG1+F/4.6	I6.2	SG1: Safety guard door opened (pallet magazine)
	OPD1: Sheet / Tray OK	=OPD1+JB1-7S2:4	=OPD1+F/7.2	-X10:4 DI a	I4.3 X10/3/IX.3	-X10:24 DI c	I6.3 X10/24/IX+2.3	=SG1+F/6.6	I6.3	SG1: Swing doors pallet outfeed opened
	OPD1: Pallet finished	=OPD1+JB1-7S4:4	=OPD1+F/7.4	-X10:5 DI a	I4.4 X10/5/IX.4	-X10:25 DI c	I6.4 X10/25/IX+2.4	=SG1+F/7.2	I6.4	SG1: Safety guard door Accumulation-table (at left) opened
	OPD1: free	I4.5	=OPD1+F/5.8	-X10:6 DI a	I4.5 X10/6/IX.5	-X10:26 DI c	I6.5 X10/26/IX+2.5	=SG1+F/7.6	I6.5	SG1: Safety guard door Accumulation-table (at left) opened
				-X10:7 DI a	I4.6 X10/7/IX.6	-X10:27 DI c	I6.6 X10/27/IX+2.6			
				-X10:8 DI a	I4.7 X10/8/IX.7	-X10:28 DI c	I6.7 X10/28/IX+2.7			
	CLI1: Shuttle car -> MSK Shulle car at Empty stack receiver	=CLI1+F-K1	=CLI1+COP1/10.1	-X10:11 DI b	I5.0 X10/11/IX+1.0	-X10:31 DI d	I7.0 X10/31/IX+3.0	=HCU5+F/5.5	=HCU5+JB1-5S5:4	HCU5: Sheet OK
	uttle car -> MSK Shulle car conveyor running at Empty stack receiver	=CLI1+F-K2	=CLI1+COP1/10.2	-X10:12 DI b	I5.1 X10/12/IX+1.1	-X10:32 DI d	I7.1 X10/32/IX+3.1			
	MSK Shuttle car conveyor running at full pallet conveyor of palletizer	=CLI1+F-K3	=CLI1+COP1/10.3	-X10:13 DI b	I5.2 X10/13/IX+1.2	-X10:33 DI d	I7.2 X10/33/IX+3.2			
	CLI1: Shuttle car -> MSK Full pallet transfer to Shuttle car complete	=CLI1+F-K4	=CLI1+COP1/10.4	-X10:14 DI b	I5.3 X10/14/IX+1.3	-X10:34 DI d	I7.3 X10/34/IX+3.3	=SLB1+F/4.8	I7.3	SLB1: Safety-LB diagnostic
	MSK Shuttle car running in auto mode (to override forklift detection)	=CLI1+F-K5	=CLI1+COP1/10.5	-X10:15 DI b	I5.4 X10/15/IX+1.4	-X10:35 DI d	I7.4 X10/35/IX+3.4			
				-X10:16 DI b	I5.5 X10/16/IX+1.5	-X10:36 DI d	I7.5 X10/36/IX+3.5			
				-X10:17 DI b	I5.6 X10/17/IX+1.6	-X10:37 DI d	I7.6 X10/37/IX+3.6	=SLB2+F/4.8	I7.6	SLB2: Safety-LB diagnostic
				-X10:18 DI b	I5.7 X10/18/IX+1.7	-X10:38 DI d	I7.7 X10/38/IX+3.7	=SLB3+F/4.8	I7.7	SLB3: Safety-LBat tray sheet magazine diagnostic
	52P1+		+COP1/105.3	-X10:19 1L+	X10/19/1L+	-X10:39 2L+	X10/39/2L+	+COP1/105.4		52P1+
	52P1-		+COP1/105.4	-X10:20 1M	X10/20/1M	-X10:40 2M	X10/40/2M	+COP1/105.4		52P1-

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0	1	2	3	4	5	6	7	8	9

+COP1-DI3
+COP1/105.4

S7-1500 SIEMENS
DI 32x24VDC HF

LF: Canding control Reserved	I8.0	=LF+F/26.1	-X10:1 DI a	I8.0	X10/1/IX.0	I10.0	X10/21/IX+2.0	-X10:21 DI c			
LF: Air pressure =P4 OK	=LF+F-8B4:2	=LF+F/8.4	-X10:2 DI a	I8.1	X10/2/IX.1	I10.1	X10/22/IX+2.1	-X10:22 DI c			
LF: Reserved Air pressure =P2 OK	I8.2	=LF+F/8.8	-X10:3 DI a	I8.2	X10/3/IX.2	I10.2	X10/23/IX+2.2	-X10:23 DI c			
			-X10:4 DI a	I8.3	X10/3/IX.3	I10.3	X10/24/IX+2.3	-X10:24 DI c			
			-X10:5 DI a	I8.4	X10/5/IX.4	I10.4	X10/25/IX+2.4	-X10:25 DI c			
			-X10:6 DI a	I8.5	X10/6/IX.5	I10.5	X10/26/IX+2.5	-X10:26 DI c			
			-X10:7 DI a	I8.6	X10/7/IX.6	I10.6	X10/27/IX+2.6	-X10:27 DI c	=PT220+F/11.5	I10.6	PT220: Roller conveyor Q-min
PT219: Chain conveyor impulse sensor	I8.7	=PT219+F/15.3	-X10:8 DI a	I8.7	X10/8/IX.7	I10.7	X10/28/IX+2.7	-X10:28 DI c			
AC: Accumulation-table HTL encoder	I9.0	=AC+F/19.2	-X10:11 DI b	I9.0	X10/11/IX+1.0	I11.0	X10/31/IX+3.0	-X10:31 DI d			
BT120: Bottle-conveyor HTL encoder	I9.1	=AC+F/19.3	-X10:12 DI b	I9.1	X10/12/IX+1.1	I11.1	X10/32/IX+3.1	-X10:32 DI d			
AC1: Free	I9.2	=AC+F/19.4	-X10:13 DI b	I9.2	X10/13/IX+1.2	I11.2	X10/33/IX+3.2	-X10:33 DI d			
LI: Liftmotor impulse sensor	I9.3	=LI+F/18.2	-X10:14 DI b	I9.3	X10/14/IX+1.3	I11.3	X10/34/IX+3.3	-X10:34 DI d			
			-X10:15 DI b	I9.4	X10/15/IX+1.4	I11.4	X10/35/IX+3.4	-X10:35 DI d			
			-X10:16 DI b	I9.5	X10/16/IX+1.5	I11.5	X10/36/IX+3.5	-X10:36 DI d			
			-X10:17 DI b	I9.6	X10/21/IX+2.0	I11.6	X10/37/IX+3.6	-X10:37 DI d	=LI+F/11.5	I11.6	LI: Liftmotor Q-min
			-X10:18 DI b	I9.7	X10/18/IX+1.7	I11.7	X10/38/IX+3.7	-X10:38 DI d	=LI+F/8.2	=LI+F-8B2:2	LI: Air pressure OK
52P1+		+COP1/105.5	-X10:19 1L+		X10/19/1L+		X10/39/2L+	-X10:39 2L+	+COP1/105.6		52P1+
52P1-		+COP1/105.5	-X10:20 1M		X10/20/1M		X10/40/2M	-X10:40 2M	+COP1/105.6		52P1-

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0	1	2	3	4	5	6	7	8	9

+COP1-DI4
+COP1/105.6

S7-1500 SIEMENS
DI 32x24VDC HF

			-X10:1 DI a	I12.0 X10/1/IX.0	-X10:21 DI c	I14.0 X10/21/IX+2.0	=LF+F/36.1	=LF+F-36B0:2	LF: Bottle counting infeed zone -1-
LI: Sledge point of reference at accumlation table	I12.1	=LI+F/18.3	-X10:2 DI a	I12.1 X10/2/IX.1	-X10:22 DI c	I14.1 X10/22/IX+2.1	=LF+F/36.1	=LF+F-36B1:2	LF: Bottle counting infeed zone -2-
LI: Stop palletizing-head (bottle pick up at AC)	I12.2	=LI+F/18.4	-X10:3 DI a	I12.2 X10/3/IX.2	-X10:23 DI c	I14.2 X10/23/IX+2.2	=LF+F/36.2	I14.2	LF: Free
LI: free	I12.3	=LI+F/18.5	-X10:4 DI a	I12.3 X10/3/IX.3	-X10:24 DI c	I14.3 X10/24/IX+2.3	=LF+F/36.3	I14.3	LF: Free
			-X10:5 DI a	I12.4 X10/5/IX.4	-X10:25 DI c	I14.4 X10/25/IX+2.4	=LF+F/36.4	I14.4	LF: Free
			-X10:6 DI a	I12.5 X10/6/IX.5	-X10:26 DI c	I14.5 X10/26/IX+2.5	=LF+F/36.4	I14.5	LF: Free
			-X10:7 DI a	I12.6 X10/7/IX.6	-X10:27 DI c	I14.6 X10/27/IX+2.6	=LF+F/36.5	=LF+F-36B5:2	LF: Bottle counting outfeed zone -1-
			-X10:8 DI a	I12.7 X10/8/IX.7	-X10:28 DI c	I14.7 X10/28/IX+2.7	=LF+F/36.6	=LF+F-36B6:2	LF: Bottle counting outfeed zone -2-
Test signal -2-	I13.0	=LF+F/4.2	-X10:11 DI b	I13.0 X10/11/IX+1.0	-X10:31 DI d	I15.0 X10/31/IX+3.0	=LF+F/36.7	I15.0	LF: Free
LF: Safety switch row stopper hinged door -frontopened	I13.1	=LF+F/4.6	-X10:12 DI b	I13.1 X10/12/IX+1.1	-X10:32 DI d	I15.1 X10/32/IX+3.1	=LF+F/36.8	I15.1	LF: Free
LF: Safety switch row stopper sliding door -left side 1-	I13.2	=LF+F/5.1	-X10:13 DI b	I13.2 X10/13/IX+1.2	-X10:33 DI d	I15.2 X10/33/IX+3.2	=LF+F/36.8	I15.2	LF: Free
LF: Safety switch row stopper sliding door -left side 2opened	I13.3	=LF+F/5.6	-X10:14 DI b	I13.3 X10/14/IX+1.3	-X10:34 DI d	I15.3 X10/34/IX+3.3	=LF+F/36.9	I15.3	LF: Free
LF: Safety switch row stopper sliding door -left side 3-	I13.4	=LF+F/6.1	-X10:15 DI b	I13.4 X10/15/IX+1.4	-X10:35 DI d	I15.4 X10/35/IX+3.4	=AC+F/19.5	I15.4	AC1: Free
LF: Safety switch row stopper sliding door -left side 4opened	I13.5	=LF+F/6.6	-X10:16 DI b	I13.5 X10/16/IX+1.5	-X10:36 DI d	I15.5 X10/36/IX+3.5			
LF: Safety-switch bottle-infeed sliding window -leftopened	I13.6	=LF+F/7.1	-X10:17 DI b	I13.6 X10/17/IX+1.6	-X10:37 DI d	I15.6 X10/37/IX+3.6			
LF: Safety-switch bottle-infeed sliding window -rightopened	I13.7	=LF+F/7.6	-X10:18 DI b	I13.7 X10/18/IX+1.7	-X10:38 DI d	I15.7 X10/38/IX+3.7			
52P1+		+COP1/105.7	-X10:19 1L+	X10/19/1L+	-X10:39 2L+	X10/39/2L+	+COP1/105.7	52P1+	
52P1-		+COP1/105.7	-X10:20 1M	X10/20/1M	-X10:40 2M	X10/40/2M	+COP1/105.8	52P1-	

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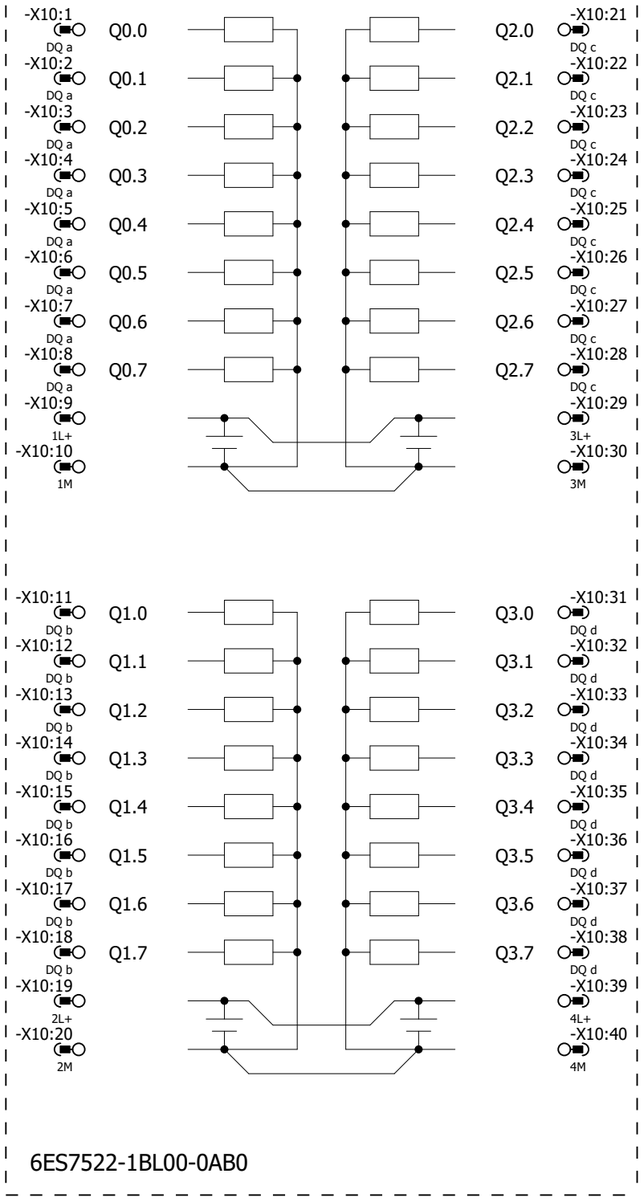
0	1	2	3	4	5	6	7	8	9

+COP1-DO1
+COP1/110.1

S7-1500 SIEMENS
DQ 32x24VDC/0.5A ST



6ES7522-1BL00-0AB0

OPD1: Sheet / Tray OK	=OPD1+JB1-7S2:x1	=OPD1+F/7.3					
OPD1: Pallet finished	=OPD1+JB1-7S4:x1	=OPD1+F/7.4					
52P1+		+COP1/110.1			+COP1/110.2		52P2+
52P1-		+COP1/110.2			+COP1/110.3		52P1-
uttle car Empthy pallet stack needed (Machine in running auto mode)	=CLI1+COP1-12K1:13	=CLI1+COP1/12.1			=LI+F/11.4	=LI+COP1-11R3:T1	LI: Liftmotor controller release
CLI1: MSK -> Shuttle car Empthy pallet stack conveyor running	=CLI1+COP1-12K3:13	=CLI1+COP1/12.3			=LI+F/14.1	=LI+COP1-14Q1:A1	LI: Liftmotor brake
nsfer complete (Copy sensor state of palletizer empty stack conveyor)	=CLI1+COP1-12K4:13	=CLI1+COP1/12.4			=LI+F/34.1	=LI+COP1-34Q2:21	LI: palletizing-head to pos. 90°
tle car Full pallet ready to dispatch (Machine in running in auto mode)	=CLI1+COP1-12K5:13	=CLI1+COP1/12.5			=LI+F/34.2	=LI+COP1-34Q1:21	LI: palletizing-head to pos. 0°
ttle car Shuttle car running in auto mode to override forklift detection)	=CLI1+COP1-12K7:13	=CLI1+COP1/12.7			=LI+F/34.3	=LI+COP1-34Q3:A1	LI: palletizing-head brake
					=PT220+F/14.2	=PT220+COP1-14Q1:A1	PT220: Roller conveyor brake
52P1+		+COP1/110.2			+COP1/110.3		52P3+
52P1-		+COP1/110.2			+COP1/110.3		52P1-

0	1	2	3	4	5	6	7	8	9

+COP1-DO2
=GEN+COP1/78.4

S7-1500 SIEMENS
DQ 32x24VDC/0.5A ST

HCU1: Request access safety guard area	=HCU1+JB1-5S4:x1	=HCU1+F/5.4	-X10:1 DQ a	Q4.0	Q6.0	-X10:21 DQ c
HCU2: Request access safety guard area	=HCU2+JB1-5S4:x1	=HCU2+F/5.4	-X10:2 DQ a	Q4.1	Q6.1	-X10:22 DQ c
HCU3: Request access safety guard area	=HCU3+JB1-5S3:x1	=HCU3+F/5.4	-X10:3 DQ a	Q4.2	Q6.2	-X10:23 DQ c
HCU4: Request access safety guard area	=HCU4+JB1-5S3:x1	=HCU4+F/5.4	-X10:4 DQ a	Q4.3	Q6.3	-X10:24 DQ c
HCU5: Request access safety guard area at safety LB	=HCU5+JB1-5S4:x1	=HCU5+F/5.4	-X10:5 DQ a	Q4.4	Q6.4	-X10:25 DQ c
			-X10:6 DQ a	Q4.5	Q6.5	-X10:26 DQ c
			-X10:7 DQ a	Q4.6	Q6.6	-X10:27 DQ c
OPD1: Request access safety guard area	=OPD1+JB1-7S1:x1	=OPD1+F/7.1	-X10:8 DQ a	Q4.7	Q6.7	-X10:28 DQ c
52P1-		+COP1/110.4	-X10:9 1L+			-X10:29 3L+ +COP1/110.5 52P5+
52P1-		+COP1/110.4	-X10:10 1M			-X10:30 3M +COP1/110.5 52P1-

HCU5: Sheet OK	=HCU5+JB1-5S5:x1	=HCU5+F/5.6	-X10:11 DQ b	Q5.0	Q7.0	-X10:31 DQ d
HCU1: Reset Emergency-Stop (AC/BT/PT)	=HCU1+JB1-5S5:x1	=HCU1+F/5.6	-X10:12 DQ b	Q5.1	Q7.1	-X10:32 DQ d
HCU2: Reset Emergency-Stop (AC/BT/PT)	=HCU2+JB1-5S5:x1	=HCU2+F/5.6	-X10:13 DQ b	Q5.2	Q7.2	-X10:33 DQ d
GEN: Request access safety guard area Safety guard -Semitech area-	=GEN+COP1-78S4:x1	=GEN+COP1/78.4	-X10:14 DQ b	Q5.3	Q7.3	-X10:34 DQ d
GEN: Automatic on Safety guard -Semitech area-	=GEN+COP1-78S6:x1	=GEN+COP1/78.6	-X10:15 DQ b	Q5.4	Q7.4	-X10:35 DQ d
			-X10:16 DQ b	Q5.5	Q7.5	-X10:36 DQ d
			-X10:17 DQ b	Q5.6	Q7.6	-X10:37 DQ d
			-X10:18 DQ b	Q5.7	Q7.7	-X10:38 DQ d
52P3+		+COP1/110.4	-X10:19 2L+			-X10:39 4L+ +COP1/110.6 52P4+
52P1-		+COP1/110.5	-X10:20 2M			-X10:40 4M +COP1/110.6 52P1-

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0	1	2	3	4	5	6	7	8	9

0	1	2	3	4	5	6	7	8	9

LF: Free	-[ASI-1-02-I1]	=LF+F/28.1	I65.4	=LF+F-28K0 =LF+F/28.0 Line 1 / Slave 2	Q65.4	=LF+F/28.2	-[ASI-1-02-O1]	LF: Movable row 1 staggered forward
LF: Free	-[ASI-1-02-I2]	=LF+F/28.2	I65.5		Q65.5	=LF+F/28.3	-[ASI-1-02-O2]	LF: Movable row 1 staggered backward
	-[ASI-1-02-I3]		I65.6		Q65.6		-[ASI-1-02-O3]	
	-[ASI-1-02-I4]		I65.7		Q65.7		-[ASI-1-02-O4]	
LF: Free	-[ASI-1-03-I1]	=LF+F/28.5	I65.0	=LF+F-28K5 =LF+F/28.5 Line 1 / Slave 3	Q65.0	=LF+F/28.7	-[ASI-1-03-O1]	LF: Movable row 2 staggered forward
LF: Free	-[ASI-1-03-I2]	=LF+F/28.6	I65.1		Q65.1	=LF+F/28.8	-[ASI-1-03-O2]	LF: Movable row 2 staggered backward
	-[ASI-1-03-I3]		I65.2		Q65.2		-[ASI-1-03-O3]	
	-[ASI-1-03-I4]		I65.3		Q65.3		-[ASI-1-03-O4]	
	-[ASI-1-04-I1]		I66.4	Line 1 / Slave 4	Q66.4		-[ASI-1-04-O1]	
	-[ASI-1-04-I2]		I66.5		Q66.5		-[ASI-1-04-O2]	
	-[ASI-1-04-I3]		I66.6		Q66.6		-[ASI-1-04-O3]	
	-[ASI-1-04-I4]		I66.7		Q66.7		-[ASI-1-04-O4]	
	-[ASI-1-05-I1]		I66.0	Line 1 / Slave 5	Q66.0		-[ASI-1-05-O1]	
	-[ASI-1-05-I2]		I66.1		Q66.1		-[ASI-1-05-O2]	
	-[ASI-1-05-I3]		I66.2		Q66.2		-[ASI-1-05-O3]	
	-[ASI-1-05-I4]		I66.3		Q66.3		-[ASI-1-05-O4]	
	-[ASI-1-06-I1]		I67.4	Line 1 / Slave 6	Q67.4		-[ASI-1-06-O1]	
	-[ASI-1-06-I2]		I67.5		Q67.5		-[ASI-1-06-O2]	
	-[ASI-1-06-I3]		I67.6		Q67.6		-[ASI-1-06-O3]	
	-[ASI-1-06-I4]		I67.7		Q67.7		-[ASI-1-06-O4]	
	-[ASI-1-07-I1]		I67.0	Line 1 / Slave 7	Q67.0		-[ASI-1-07-O1]	
	-[ASI-1-07-I2]		I67.1		Q67.1		-[ASI-1-07-O2]	
	-[ASI-1-07-I3]		I67.2		Q67.2		-[ASI-1-07-O3]	
	-[ASI-1-07-I4]		I67.3		Q67.3		-[ASI-1-07-O4]	
LF: Free	-[ASI-1-08-I1]	=LF+F/27.5	I68.4	=LF+F-27K5 =LF+F/27.5 Line 1 / Slave 8	Q68.4	=LF+F/27.7	-[ASI-1-08-O1]	LF: Clamping device forward
LF: Free	-[ASI-1-08-I2]	=LF+F/27.6	I68.5		Q68.5	=LF+F/27.8	-[ASI-1-08-O2]	LF: Clamping device backward
	-[ASI-1-08-I3]		I68.6		Q68.6		-[ASI-1-08-O3]	
	-[ASI-1-08-I4]		I68.7		Q68.7		-[ASI-1-08-O4]	
	-[ASI-1-09-I1]	=LF+F/27.1	I68.0	=LF+F-27K0 =LF+F/27.0 Line 1 / Slave 9	Q68.0	=LF+F/27.2	-[ASI-1-09-O1]	LF: Clamping device forward
LF: Free	-[ASI-1-09-I2]	=LF+F/27.2	I68.1		Q68.1	=LF+F/27.3	-[ASI-1-09-O2]	LF: Clamping device backward
	-[ASI-1-09-I3]		I68.2		Q68.2		-[ASI-1-09-O3]	
	-[ASI-1-09-I4]		I68.3		Q68.3		-[ASI-1-09-O4]	
LF: Free	-[ASI-1-10-I1]	=LF+F/38.1	I69.4	=LF+F-38K0 =LF+F/38.0 Line 1 / Slave 10	Q69.4	=LF+F/38.5	-[ASI-1-10-O1]	LF: Row stopper 1 row outfeed open (Z1.1.3)
LF: Free	-[ASI-1-10-I2]	=LF+F/38.2	I69.5		Q69.5	=LF+F/38.6	-[ASI-1-10-O2]	LF: Row stopper 1 row outfeed close
LF: Free	-[ASI-1-10-I3]	=LF+F/38.3	I69.6		Q69.6	=LF+F/38.7	-[ASI-1-10-O3]	LF: Free
LF: Free	-[ASI-1-10-I4]	=LF+F/38.4	I69.7		Q69.7	=LF+F/38.8	-[ASI-1-10-O4]	LF: Free
LF: Free	-[ASI-1-11-I1]	=LF+F/37.1	I69.0	=LF+F-37K0 =LF+F/37.0 Line 1 / Slave 11	Q69.0	=LF+F/37.5	-[ASI-1-11-O1]	LF: Row stopper 1 row infeed -1open (Z1.1.1)
LF: Free	-[ASI-1-11-I2]	=LF+F/37.2	I69.1		Q69.1	=LF+F/37.6	-[ASI-1-11-O2]	LF: Row stopper 1 row infeed -1close
LF: Free	-[ASI-1-11-I3]	=LF+F/37.3	I69.2		Q69.2	=LF+F/37.7	-[ASI-1-11-O3]	LF: Row stopper 1 row infeed -2open (Z1.1.2)
LF: Free	-[ASI-1-11-I4]	=LF+F/37.4	I69.3		Q69.3	=LF+F/37.8	-[ASI-1-11-O4]	LF: Row stopper 1 row infeed -2close

0	1	2	3	4	5	6	7	8	9

=LF+F-40K0
=LF+F/40.0
Line 1 / Slave 12

LF: Free	-[ASI-1-12-I1]	=LF+F/40.1	I70.4	Q70.4	=LF+F/40.5	-[ASI-1-12-O1]	LF: Row stopper 2 row outfeed open (Z1.2.2)
LF: Free	-[ASI-1-12-I2]	=LF+F/40.2	I70.5	Q70.5	=LF+F/40.6	-[ASI-1-12-O2]	LF: Row stopper 2 row outfeed close
LF: Free	-[ASI-1-12-I3]	=LF+F/40.3	I70.6	Q70.6	=LF+F/40.7	-[ASI-1-12-O3]	LF: Free
LF: Free	-[ASI-1-12-I4]	=LF+F/40.4	I70.7	Q70.7	=LF+F/40.8	-[ASI-1-12-O4]	LF: Free

=LF+F-39K0
=LF+F/39.0
Line 1 / Slave 13

LF: Free	-[ASI-1-13-I1]	=LF+F/39.1	I70.0	Q70.0	=LF+F/39.5	-[ASI-1-13-O1]	LF: Row stopper 2 row infeed -1open (Z1.2.1)
LF: Free	-[ASI-1-13-I2]	=LF+F/39.2	I70.1	Q70.1	=LF+F/39.6	-[ASI-1-13-O2]	LF: Row stopper 2 row infeed -1close
LF: Free	-[ASI-1-13-I3]	=LF+F/39.3	I70.2	Q70.2	=LF+F/39.7	-[ASI-1-13-O3]	LF: Row stopper 2 row infeed -2open(Z1.2.2)
LF: Free	-[ASI-1-13-I4]	=LF+F/39.4	I70.3	Q70.3	=LF+F/39.8	-[ASI-1-13-O4]	LF: Row stopper 2 row infeed -2close

Line 1 / Slave 14

	-[ASI-1-14-I1]		I71.4	Q71.4		-[ASI-1-14-O1]	
	-[ASI-1-14-I2]		I71.5	Q71.5		-[ASI-1-14-O2]	
	-[ASI-1-14-I3]		I71.6	Q71.6		-[ASI-1-14-O3]	
	-[ASI-1-14-I4]		I71.7	Q71.7		-[ASI-1-14-O4]	

=LF+F-31K0
=LF+F/31.0
Line 1 / Slave 15

Pick and place head vaccum existing	-[ASI-1-15-I1]	=LF+F/31.1	I71.0	Q71.0		-[ASI-1-15-O1]	
Pick and place head air-pressure existing	-[ASI-1-15-I2]	=LF+F/31.2	I71.1	Q71.1		-[ASI-1-15-O2]	
Cylinder inner position	-[ASI-1-15-I3]	=LF+F/31.3	I71.2	Q71.2		-[ASI-1-15-O3]	
LF: Free	-[ASI-1-15-I4]	=LF+F/31.4	I71.3	Q71.3		-[ASI-1-15-O4]	

=LF+F-32K0
=LF+F/32.0
Line 1 / Slave 16

LF: Free	-[ASI-1-16-I1]	=LF+F/32.1	I72.4	Q72.4	=LF+F/32.5	-[ASI-1-16-O1]	LF: Pick and palce head evacuate valve open
LF: Free	-[ASI-1-16-I2]	=LF+F/32.2	I72.5	Q72.5	=LF+F/32.6	-[ASI-1-16-O2]	LF: Pick and palce head evacuate valve open
LF: Free	-[ASI-1-16-I3]	=LF+F/32.3	I72.6	Q72.6	=LF+F/32.7	-[ASI-1-16-O3]	LF: Pick and palce head evacuate valve close
LF: Free	-[ASI-1-16-I4]	=LF+F/32.4	I72.7	Q72.7	=LF+F/32.8	-[ASI-1-16-O4]	LF: Pick and palce head vacuum-valve open

=LF+F-33K0
=LF+F/33.0
Line 1 / Slave 17

LF: Free	-[ASI-1-17-I1]	=LF+F/33.1	I72.0	Q72.0	=LF+F/33.5	-[ASI-1-17-O1]	LF: Pick and palce head working-valve PIAP on
LF: Free	-[ASI-1-17-I2]	=LF+F/33.2	I72.1	Q72.1	=LF+F/33.6	-[ASI-1-17-O2]	LF: Pick and palce head working-valve PIAP on
LF: Free	-[ASI-1-17-I3]	=LF+F/33.3	I72.2	Q72.2	=LF+F/33.7	-[ASI-1-17-O3]	LF: Pick and palce head working-valve PIAP off
LF: Free	-[ASI-1-17-I4]	=LF+F/33.4	I72.3	Q72.3	=LF+F/33.8	-[ASI-1-17-O4]	LF: Linear cylinder forward (pick and place head)

Line 1 / Slave 18

	-[ASI-1-18-I1]		I73.4	Q73.4		-[ASI-1-18-O1]	
	-[ASI-1-18-I2]		I73.5	Q73.5		-[ASI-1-18-O2]	
	-[ASI-1-18-I3]		I73.6	Q73.6		-[ASI-1-18-O3]	
	-[ASI-1-18-I4]		I73.7	Q73.7		-[ASI-1-18-O4]	

Line 1 / Slave 19

	-[ASI-1-19-I1]		I73.0	Q73.0		-[ASI-1-19-O1]	
	-[ASI-1-19-I2]		I73.1	Q73.1		-[ASI-1-19-O2]	
	-[ASI-1-19-I3]		I73.2	Q73.2		-[ASI-1-19-O3]	
	-[ASI-1-19-I4]		I73.3	Q73.3		-[ASI-1-19-O4]	

Line 1 / Slave 20

	-[ASI-1-20-I1]		I74.4	Q74.4		-[ASI-1-20-O1]	
	-[ASI-1-20-I2]		I74.5	Q74.5		-[ASI-1-20-O2]	
	-[ASI-1-20-I3]		I74.6	Q74.6		-[ASI-1-20-O3]	
	-[ASI-1-20-I4]		I74.7	Q74.7		-[ASI-1-20-O4]	

=LF+F-9K5
=LF+F/9.5
Line 1 / Slave 21

LF: EDM Safety valve layer stopper (AC) -1-	-[ASI-1-21-I1]	=LF+F/9.5	I74.0	Q74.0		-[ASI-1-21-O1]	
LF: EDM Safety valve layer stopper (AC) -2-	-[ASI-1-21-I2]	=LF+F/9.6	I74.1	Q74.1		-[ASI-1-21-O2]	
LF: Free	-[ASI-1-21-I3]	=LF+F/9.7	I74.2	Q74.2		-[ASI-1-21-O3]	
LF: Free	-[ASI-1-21-I4]	=LF+F/9.8	I74.3	Q74.3		-[ASI-1-21-O4]	

0	1	2	3	4	5	6	7	8	9

AC: accumulation-table pickup-place occupied (at layer-stopper)	-[ASI-1-22-I1]	=AC+F/16.5	I75.4	=AC+F-16K5 =AC+F/16.5 Line 1 / Slave 22	Q75.4		-[ASI-1-22-O1]	
AC: accumulation-table pickup-place behind layer free	-[ASI-1-22-I2]	=AC+F/16.6	I75.5		Q75.5		-[ASI-1-22-O2]	
AC: accumulation-table pickup-place bottleneck (last row)	-[ASI-1-22-I3]	=AC+F/16.7	I75.6		Q75.6		-[ASI-1-22-O3]	
AC: Reserve accumulation-table pickup-place behind 2.place free	-[ASI-1-22-I4]	=AC+F/16.8	I75.7		Q75.7		-[ASI-1-22-O4]	
AC: accumulation-table 1.place occupied (at layer-stopper)	-[ASI-1-23-I1]	=AC+F/16.1	I75.0	=AC+F-16K0 =AC+F/16.0 Line 1 / Slave 23	Q75.0		-[ASI-1-23-O1]	
AC: accumulation-table 1.place last row occupied	-[ASI-1-23-I2]	=AC+F/16.2	I75.1		Q75.1		-[ASI-1-23-O2]	
AC: Accumulation-table bottle layer slow down	-[ASI-1-23-I3]	=AC+F/16.2	I75.2		Q75.2		-[ASI-1-23-O3]	
AC: accumulation-table sluice infeed-zone free	-[ASI-1-23-I4]	=AC+F/16.3	I75.3		Q75.3		-[ASI-1-23-O4]	
	-[ASI-1-24-I1]		I76.4	Line 1 / Slave 24	Q76.4		-[ASI-1-24-O1]	
	-[ASI-1-24-I2]		I76.5		Q76.5		-[ASI-1-24-O2]	
	-[ASI-1-24-I3]		I76.6		Q76.6		-[ASI-1-24-O3]	
	-[ASI-1-24-I4]		I76.7		Q76.7		-[ASI-1-24-O4]	
AC: Layer stopper -1- top position	-[ASI-1-25-I1]	=AC+F/17.1	I76.0	=AC+F-17K0 =AC+F/17.0 Line 1 / Slave 25	Q76.0	=AC+F/17.5	-[ASI-1-25-O1]	AC: Layer stopper -1- down
AC: Layer stopper -1- bottom position	-[ASI-1-25-I2]	=AC+F/17.2	I76.1		Q76.1	=AC+F/17.6	-[ASI-1-25-O2]	AC: Layer stopper -1- up
AC: Free	-[ASI-1-25-I3]	=AC+F/17.2	I76.2		Q76.2		-[ASI-1-25-O3]	
AC: Free	-[ASI-1-25-I4]	=AC+F/17.3	I76.3		Q76.3		-[ASI-1-25-O4]	
	-[ASI-1-26-I1]		I77.4	Line 1 / Slave 26	Q77.4		-[ASI-1-26-O1]	
	-[ASI-1-26-I2]		I77.5		Q77.5		-[ASI-1-26-O2]	
	-[ASI-1-26-I3]		I77.6		Q77.6		-[ASI-1-26-O3]	
	-[ASI-1-26-I4]		I77.7		Q77.7		-[ASI-1-26-O4]	
	-[ASI-1-27-I1]		I77.0	Line 1 / Slave 27	Q77.0		-[ASI-1-27-O1]	
	-[ASI-1-27-I2]		I77.1		Q77.1		-[ASI-1-27-O2]	
	-[ASI-1-27-I3]		I77.2		Q77.2		-[ASI-1-27-O3]	
	-[ASI-1-27-I4]		I77.3		Q77.3		-[ASI-1-27-O4]	
HCU2: Start/stop automatic layer former (right)	-[ASI-1-28-I1]	=HCU2+F/6.1	I78.4	=HCU2+JB1-6K0 =HCU2+F/6.1 Line 1 / Slave 28	Q78.4	=HCU2+F/6.6	-[ASI-1-28-O1]	HCU2: Reset layer former (right)
HCU2: Reset fault layer former (right)	-[ASI-1-28-I2]	=HCU2+F/6.2	I78.5		Q78.5	=HCU2+F/6.6	-[ASI-1-28-O2]	HCU2: Start/stop automatic layer former (right)
HCU2: Automatic on layer former (right)	-[ASI-1-28-I3]	=HCU2+F/6.3	I78.6		Q78.6	=HCU2+F/6.7	-[ASI-1-28-O3]	HCU2: Automatic on layer former (right)
HCU2: Emergency-stop layer former (right)	-[ASI-1-28-I4]	=HCU2+F/6.4	I78.7		Q78.7	=HCU2+F/6.8	-[ASI-1-28-O4]	HCU2: Fault layer former (right)
HCU1: Start/stop automatic layer former (front)	-[ASI-1-29-I1]	=HCU1+F/6.1	I78.0	=HCU1+JB1-6K0 =HCU1+F/6.1 Line 1 / Slave 29	Q78.0	=HCU1+F/6.6	-[ASI-1-29-O1]	HCU1: Reset layer former (front)
HCU1: Reset fault layer former (front)	-[ASI-1-29-I2]	=HCU1+F/6.2	I78.1		Q78.1	=HCU1+F/6.6	-[ASI-1-29-O2]	HCU1: Start/stop automatic layer former (front)
HCU1: Automatic on layer former (front)	-[ASI-1-29-I3]	=HCU1+F/6.3	I78.2		Q78.2	=HCU1+F/6.7	-[ASI-1-29-O3]	HCU1: Automatic on layer former (front)
HCU1: Emergency-stop layer former (front)	-[ASI-1-29-I4]	=HCU1+F/6.4	I78.3		Q78.3	=HCU1+F/6.8	-[ASI-1-29-O4]	HCU1: Fault layer former (front)
	-[ASI-1-30-I1]		I79.4	Line 1 / Slave 30	Q79.4		-[ASI-1-30-O1]	
	-[ASI-1-30-I2]		I79.5		Q79.5		-[ASI-1-30-O2]	
	-[ASI-1-30-I3]		I79.6		Q79.6		-[ASI-1-30-O3]	
	-[ASI-1-30-I4]		I79.7		Q79.7		-[ASI-1-30-O4]	
	-[ASI-1-31-I1]		I79.0	Line 1 / Slave 31	Q79.0		-[ASI-1-31-O1]	
	-[ASI-1-31-I2]		I79.1		Q79.1		-[ASI-1-31-O2]	
	-[ASI-1-31-I3]		I79.2		Q79.2		-[ASI-1-31-O3]	
	-[ASI-1-31-I4]		I79.3		Q79.3		-[ASI-1-31-O4]	

0	1	2	3	4	5	6	7	8	9

LI: Free	-[ASI-2-02-I1]	=LI+F/16.1	I81.4	=LI+F-16K0 =LI+F/16.0 Line 2 / Slave 2	Q81.4		-[ASI-2-02-O1]	
LI: Free	-[ASI-2-02-I2]	=LI+F/16.2	I81.5		Q81.5		-[ASI-2-02-O2]	
LI: Gripper-head in top position	-[ASI-2-02-I3]	=LI+F/16.3	I81.6		Q81.6		-[ASI-2-02-O3]	
LI: Gripper-head emergency-stop at the top	-[ASI-2-02-I4]	=LI+F/16.4	I81.7		Q81.7		-[ASI-2-02-O4]	
LI: Palletizing-head canded 1	-[ASI-2-03-I1]	=LI+F/37.1	I81.0	=LI+F-37K0 =LI+F/37.0 Line 2 / Slave 3	Q81.0		-[ASI-2-03-O1]	
LI: Palletizing-head canded 2	-[ASI-2-03-I2]	=LI+F/37.2	I81.1		Q81.1		-[ASI-2-03-O2]	
LI: Palletizing-head canded 3	-[ASI-2-03-I3]	=LI+F/37.3	I81.2		Q81.2		-[ASI-2-03-O3]	
LI: Palletizing-head canded 4	-[ASI-2-03-I4]	=LI+F/37.4	I81.3		Q81.3		-[ASI-2-03-O4]	
LI: Palletizing-head vaccum existing	-[ASI-2-04-I1]	=LI+F/37.5	I82.4	=LI+F-37K5 =LI+F/37.5 Line 2 / Slave 4	Q82.4		-[ASI-2-04-O1]	
LI: Palletizing-head air-pressure existing	-[ASI-2-04-I2]	=LI+F/37.6	I82.5		Q82.5		-[ASI-2-04-O2]	
LI: Free	-[ASI-2-04-I3]	=LI+F/37.7	I82.6		Q82.6		-[ASI-2-04-O3]	
LI: Free	-[ASI-2-04-I4]	=LI+F/37.8	I82.7		Q82.7		-[ASI-2-04-O4]	
LI: Gripper head turn head at 90 degree	-[ASI-2-05-I1]	=LI+F/38.1	I82.0	=LI+F-38K0 =LI+F/38.0 Line 2 / Slave 5	Q82.0	=LI+F/38.4	-[ASI-2-05-O1]	LI: Palletizing-head evacuate valve open
LI: Gripper head turn head at 0 degree	-[ASI-2-05-I2]	=LI+F/38.2	I82.1		Q82.1	=LI+F/38.6	-[ASI-2-05-O2]	LI: Palletizing-head vacuum-valve open
LI: Gripper head positioning	-[ASI-2-05-I3]	=LI+F/38.3	I82.2		Q82.2	=LI+F/38.7	-[ASI-2-05-O3]	LI: Palletizing-head working-valve PIAP off
LI: Free	-[ASI-2-05-I4]	=LI+F/38.4	I82.3		Q82.3	=LI+F/38.8	-[ASI-2-05-O4]	LI: Palletizing-head pressure-valve grab-tubes closed
LI: Clamping head cylinder opened -1-	-[ASI-2-06-I1]	=LI+F/39.1	I83.4	=LI+F-39K0 =LI+F/39.0 Line 2 / Slave 6	Q83.4		-[ASI-2-06-O1]	
LI: Clamping head cylinder opened -2-	-[ASI-2-06-I2]	=LI+F/39.2	I83.5		Q83.5		-[ASI-2-06-O2]	
LI: Clamping head cylinder opened -3-	-[ASI-2-06-I3]	=LI+F/39.2	I83.6		Q83.6		-[ASI-2-06-O3]	
LI: Clamping head cylinder opened -4-	-[ASI-2-06-I4]	=LI+F/39.3	I83.7		Q83.7		-[ASI-2-06-O4]	
	-[ASI-2-07-I1]		I83.0	=LI+F-39K5 =LI+F/39.5 Line 2 / Slave 7	Q83.0	=LI+F/39.5	-[ASI-2-07-O1]	LI: Palletizing-head clamping head cylinder open
	-[ASI-2-07-I2]		I83.1		Q83.1	=LI+F/39.6	-[ASI-2-07-O2]	LI: Palletizing-head clamping head cylinder close
	-[ASI-2-07-I3]		I83.2		Q83.2	=LI+F/39.7	-[ASI-2-07-O3]	LI: Palletizing-head clamping head cylinder close
	-[ASI-2-07-I4]		I83.3		Q83.3	=LI+F/39.8	-[ASI-2-07-O4]	LI: Free
CF: Centering frame height scanner	-[ASI-2-08-I1]	=CF+F/16.1	I84.4	=CF+F-16K0 =CF+F/16.0 Line 2 / Slave 8	Q84.4		-[ASI-2-08-O1]	
CF: Change - over palletizing-head slowly	-[ASI-2-08-I2]	=CF+F/16.2	I84.5		Q84.5		-[ASI-2-08-O2]	
CF: Stop palletizing-head (bottle deposition)	-[ASI-2-08-I3]	=CF+F/16.3	I84.6		Q84.6		-[ASI-2-08-O3]	
CF: Free	-[ASI-2-08-I4]	=CF+F/16.4	I84.7		Q84.7		-[ASI-2-08-O4]	
CF: Centering frame belt control -1-	-[ASI-2-09-I1]	=CF+F/16.5	I84.0	=CF+F-16K5 =CF+F/16.5 Line 2 / Slave 9	Q84.0		-[ASI-2-09-O1]	
CF: Centering frame belt control -2-	-[ASI-2-09-I2]	=CF+F/16.6	I84.1		Q84.1		-[ASI-2-09-O2]	
CF: Free	-[ASI-2-09-I3]	=CF+F/16.7	I84.2		Q84.2		-[ASI-2-09-O3]	
CF: Free	-[ASI-2-09-I4]	=CF+F/16.8	I84.3		Q84.3		-[ASI-2-09-O4]	
	-[ASI-2-10-I1]		I85.4	Line 2 / Slave 10	Q85.4		-[ASI-2-10-O1]	
	-[ASI-2-10-I2]		I85.5		Q85.5		-[ASI-2-10-O2]	
	-[ASI-2-10-I3]		I85.6		Q85.6		-[ASI-2-10-O3]	
	-[ASI-2-10-I4]		I85.7		Q85.7		-[ASI-2-10-O4]	
	-[ASI-2-11-I1]		I85.0	=SG2+F-16K0 Line 2 / Slave 11	Q85.0		-[ASI-2-11-O1]	
	-[ASI-2-11-I2]		I85.1		Q85.1		-[ASI-2-11-O2]	
	-[ASI-2-11-I3]		I85.2		Q85.2		-[ASI-2-11-O3]	
	-[ASI-2-11-I4]		I85.3		Q85.3		-[ASI-2-11-O4]	

0	1	2	3	4	5	6	7	8	9

		-[ASI-2-12-I1]	I86.4	Line 2 / Slave 12	Q86.4	-[ASI-2-12-O1]
		-[ASI-2-12-I2]	I86.5		Q86.5	-[ASI-2-12-O2]
		-[ASI-2-12-I3]	I86.6		Q86.6	-[ASI-2-12-O3]
		-[ASI-2-12-I4]	I86.7		Q86.7	-[ASI-2-12-O4]
		-[ASI-2-13-I1]	I86.0	Line 2 / Slave 13	Q86.0	-[ASI-2-13-O1]
		-[ASI-2-13-I2]	I86.1		Q86.1	-[ASI-2-13-O2]
		-[ASI-2-13-I3]	I86.2		Q86.2	-[ASI-2-13-O3]
		-[ASI-2-13-I4]	I86.3		Q86.3	-[ASI-2-13-O4]
		-[ASI-2-14-I1]	I87.4	Line 2 / Slave 14	Q87.4	-[ASI-2-14-O1]
		-[ASI-2-14-I2]	I87.5		Q87.5	-[ASI-2-14-O2]
		-[ASI-2-14-I3]	I87.6		Q87.6	-[ASI-2-14-O3]
		-[ASI-2-14-I4]	I87.7		Q87.7	-[ASI-2-14-O4]
		-[ASI-2-15-I1]	I87.0	Line 2 / Slave 15	Q87.0	-[ASI-2-15-O1]
		-[ASI-2-15-I2]	I87.1		Q87.1	-[ASI-2-15-O2]
		-[ASI-2-15-I3]	I87.2		Q87.2	-[ASI-2-15-O3]
		-[ASI-2-15-I4]	I87.3		Q87.3	-[ASI-2-15-O4]
		-[ASI-2-16-I1]	I88.4	Line 2 / Slave 16	Q88.4	-[ASI-2-16-O1]
		-[ASI-2-16-I2]	I88.5		Q88.5	-[ASI-2-16-O2]
		-[ASI-2-16-I3]	I88.6		Q88.6	-[ASI-2-16-O3]
		-[ASI-2-16-I4]	I88.7		Q88.7	-[ASI-2-16-O4]
		-[ASI-2-17-I1]	I88.0	Line 2 / Slave 17	Q88.0	-[ASI-2-17-O1]
		-[ASI-2-17-I2]	I88.1		Q88.1	-[ASI-2-17-O2]
		-[ASI-2-17-I3]	I88.2		Q88.2	-[ASI-2-17-O3]
		-[ASI-2-17-I4]	I88.3		Q88.3	-[ASI-2-17-O4]
		-[ASI-2-18-I1]	I89.4	Line 2 / Slave 18	Q89.4	-[ASI-2-18-O1]
		-[ASI-2-18-I2]	I89.5		Q89.5	-[ASI-2-18-O2]
		-[ASI-2-18-I3]	I89.6		Q89.6	-[ASI-2-18-O3]
		-[ASI-2-18-I4]	I89.7		Q89.7	-[ASI-2-18-O4]
PM: EDM Safety valve - 1 -	=PM+F/17.5	-[ASI-2-19-I1]	I89.0	=PM+F-17K5 =PM+F/17.5	Q89.0	-[ASI-2-19-O1]
PM: EDM Safety valve - 1 -	=PM+F/17.6	-[ASI-2-19-I2]	I89.1		Q89.1	-[ASI-2-19-O2]
PM: free	=PM+F/17.7	-[ASI-2-19-I3]	I89.2		Q89.2	-[ASI-2-19-O3]
PM: free	=PM+F/17.8	-[ASI-2-19-I4]	I89.3	Line 2 / Slave 19	Q89.3	-[ASI-2-19-O4]
PM: Empty	=PM+F/16.1	-[ASI-2-20-I1]	I90.4	=PM+F-16K0 =PM+F/16.0	Q90.4	-[ASI-2-20-O1]
PM: Stop pallet	=PM+F/16.2	-[ASI-2-20-I2]	I90.5		Q90.5	-[ASI-2-20-O2]
PT216: Roller conveyor occupied	=PM+F/16.3	-[ASI-2-20-I3]	I90.6		Q90.6	-[ASI-2-20-O3]
PT216: Shuttle car in position	=PM+F/16.4	-[ASI-2-20-I4]	I90.7	Line 2 / Slave 20	Q90.7	-[ASI-2-20-O4]
PM: Pallet gripper -1- open	=PM+F/16.5	-[ASI-2-21-I1]	I90.0	=PM+F-16K5 =PM+F/16.5	Q90.0	-[ASI-2-21-O1]
PM: Pallet gripper -2- open	=PM+F/16.6	-[ASI-2-21-I2]	I90.1		Q90.1	-[ASI-2-21-O2]
PM: Pallet gripper -1- close	=PM+F/16.7	-[ASI-2-21-I3]	I90.2		Q90.2	-[ASI-2-21-O3]
PM: Pallet gripper -2- close	=PM+F/16.8	-[ASI-2-21-I4]	I90.3	Line 2 / Slave 21	Q90.3	-[ASI-2-21-O4]

0	1	2	3	4	5	6	7	8	9

=PM+F-17K0
=PM+F/17.0
Line 2 / Slave 22

PM: Pallet gripper at top	-[ASI-2-22-I1]	=PM+F/17.1	I91.4	Q91.4	-[ASI-2-22-O1]
PM: Pallet gripper at middle	-[ASI-2-22-I2]	=PM+F/17.2	I91.5	Q91.5	-[ASI-2-22-O2]
PM: Pallet gripper down	-[ASI-2-22-I3]	=PM+F/17.3	I91.6	Q91.6	-[ASI-2-22-O3]
PM: Air pressure OK	-[ASI-2-22-I4]	=PM+F/17.4	I91.7	Q91.7	-[ASI-2-22-O4]

=PM+F-18K0
=PM+F/18.0
Line 2 / Slave 23

-[ASI-2-23-I1]	I91.0	Q91.0	=PM+F/18.5	-[ASI-2-23-O1]	PM: Pallet gripper open
-[ASI-2-23-I2]	I91.1	Q91.1	=PM+F/18.6	-[ASI-2-23-O2]	PM: Pallet gripper close
-[ASI-2-23-I3]	I91.2	Q91.2	=PM+F/18.7	-[ASI-2-23-O3]	PM: Lifting down
-[ASI-2-23-I4]	I91.3	Q91.3	=PM+F/18.8	-[ASI-2-23-O4]	PM: Lifting up

Line 2 / Slave 24

-[ASI-2-24-I1]	I92.4	Q92.4	-[ASI-2-24-O1]
-[ASI-2-24-I2]	I92.5	Q92.5	-[ASI-2-24-O2]
-[ASI-2-24-I3]	I92.6	Q92.6	-[ASI-2-24-O3]
-[ASI-2-24-I4]	I92.7	Q92.7	-[ASI-2-24-O4]

=PT219+F-16K0
=PT219+F/16.0
Line 2 / Slave 25

PT219: Pallet draw finger at back	-[ASI-2-25-I1]=PT219+F/16.1	I92.0	Q92.0	-[ASI-2-25-O1]
PT219: Centering frame infeed free	-[ASI-2-25-I2]=PT219+F/16.2	I92.1	Q92.1	-[ASI-2-25-O2]
PT218: Roller conveyor occupied	-[ASI-2-25-I3]=PT219+F/16.3	I92.2	Q92.2	-[ASI-2-25-O3]
PT219: Free	-[ASI-2-25-I4]=PT219+F/16.4	I92.3	Q92.3	-[ASI-2-25-O4]

=PT222+F-16K0
=PT222+F/16.0
Line 2 / Slave 26

PT222: Chain conveyor occupied	-[ASI-2-26-I1]=PT222+F/16.1	I93.4	Q93.4	-[ASI-2-26-O1]
PT222: Shuttle car in position	-[ASI-2-26-I2]=PT222+F/16.2	I93.5	Q93.5	-[ASI-2-26-O2]
PT222: Free	-[ASI-2-26-I3]=PT222+F/16.3	I93.6	Q93.6	-[ASI-2-26-O3]
PT222: Free	-[ASI-2-26-I4]=PT222+F/16.4	I93.7	Q93.7	-[ASI-2-26-O4]

=PT221+F-16K0
=PT221+F/16.0
Line 2 / Slave 27

PT221: Chain conveyor occupied	-[ASI-2-27-I1]=PT221+F/16.1	I93.0	Q93.0	-[ASI-2-27-O1]
PT221: Centering frame outfeed free	-[ASI-2-27-I2]=PT221+F/16.2	I93.1	Q93.1	-[ASI-2-27-O2]
PT220: Roller conveyor occupied	-[ASI-2-27-I3]=PT221+F/16.3	I93.2	Q93.2	-[ASI-2-27-O3]
PT221: Free	-[ASI-2-27-I4]=PT221+F/16.4	I93.3	Q93.3	-[ASI-2-27-O4]

=HCU5+JB1-6K0
=HCU5+F/6.1
Line 2 / Slave 28

HCU5: Start/stop automatic Safety guard -Semitech area-	-[ASI-2-28-I1]	=HCU5+F/6.1	I94.4	Q94.4	=HCU5+F/6.6	-[ASI-2-28-O1]	HCU5: Reset Safety guard -Semitech area-
HCU5: Reset fault Safety guard -Semitech area-	-[ASI-2-28-I2]	=HCU5+F/6.2	I94.5	Q94.5	=HCU5+F/6.6	-[ASI-2-28-O2]	HCU5: Start/stop automatic Safety guard -Semitech area-
HCU5: Automatic on Safety guard -Semitech area-	-[ASI-2-28-I3]	=HCU5+F/6.3	I94.6	Q94.6	=HCU5+F/6.7	-[ASI-2-28-O3]	HCU5: Automatic on Safety guard -Semitech area-
HCU5: Emergency-stop Safety guard -Semitech area-	-[ASI-2-28-I4]	=HCU5+F/6.4	I94.7	Q94.7	=HCU5+F/6.8	-[ASI-2-28-O4]	HCU5: Fault Safety guard -Semitech area-

=HCU6+JB1-6K0
Line 2 / Slave 29

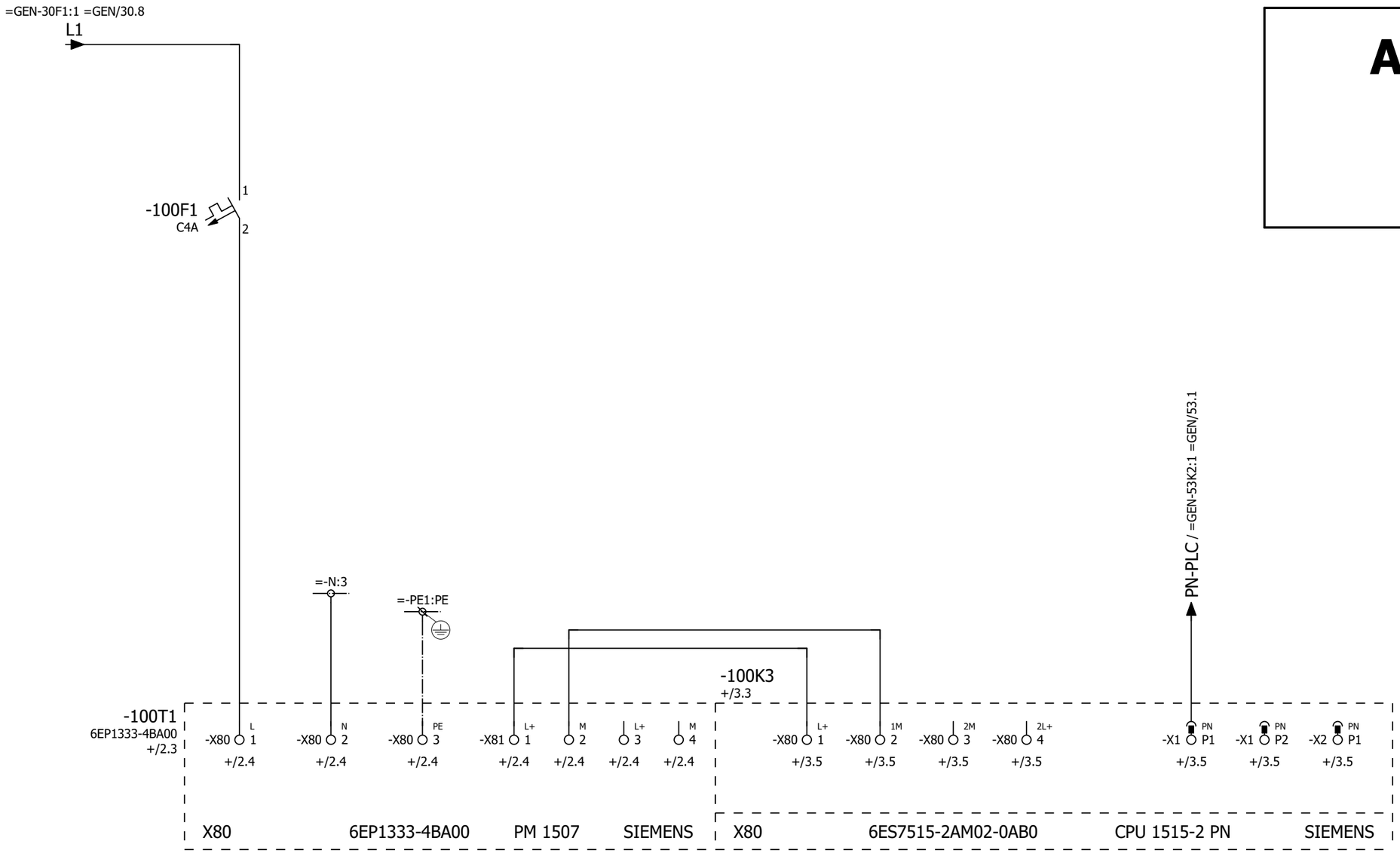
-[ASI-2-29-I1]	I94.0	Q94.0	-[ASI-2-29-O1]
-[ASI-2-29-I2]	I94.1	Q94.1	-[ASI-2-29-O2]
-[ASI-2-29-I3]	I94.2	Q94.2	-[ASI-2-29-O3]
-[ASI-2-29-I4]	I94.3	Q94.3	-[ASI-2-29-O4]

Line 2 / Slave 30

-[ASI-2-30-I1]	I95.4	Q95.4	-[ASI-2-30-O1]
-[ASI-2-30-I2]	I95.5	Q95.5	-[ASI-2-30-O2]
-[ASI-2-30-I3]	I95.6	Q95.6	-[ASI-2-30-O3]
-[ASI-2-30-I4]	I95.7	Q95.7	-[ASI-2-30-O4]

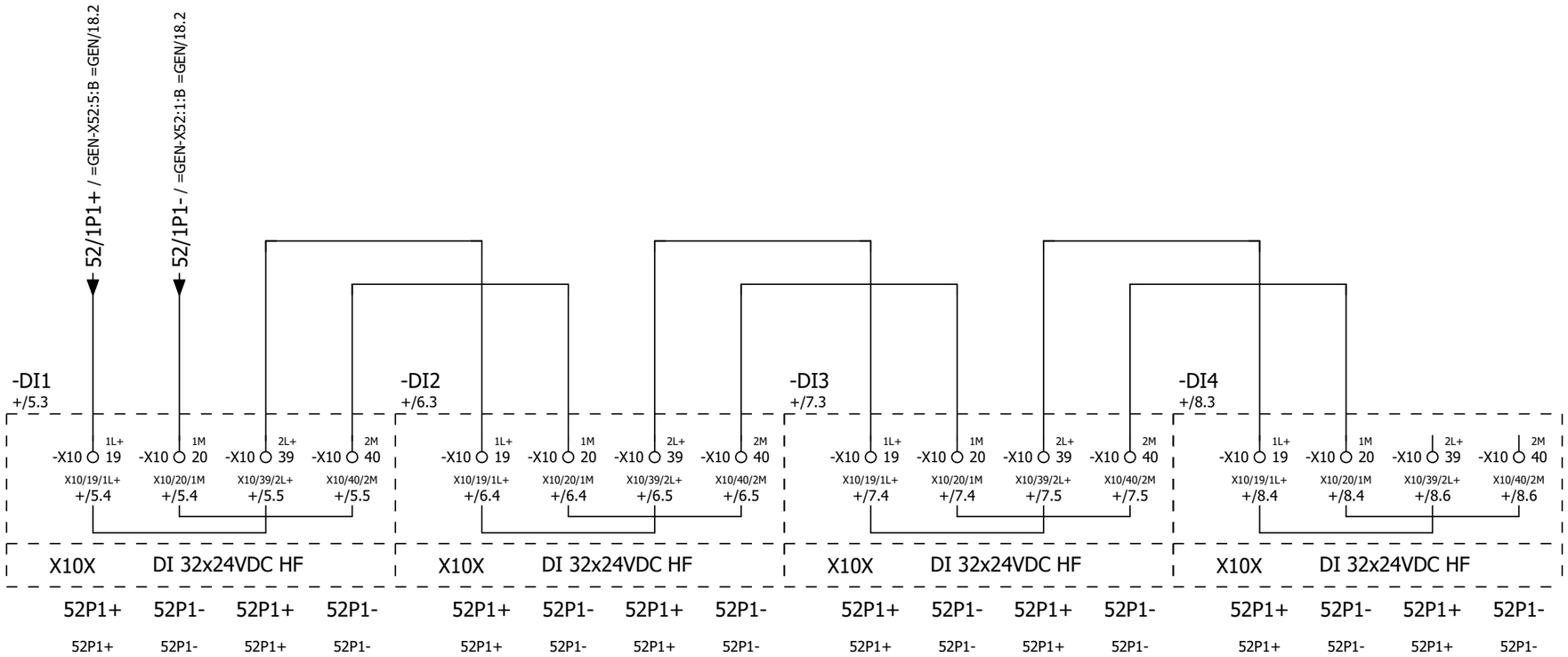
=LAMP+F-3K5
=LAMP+F/3.5
Line 2 / Slave 31

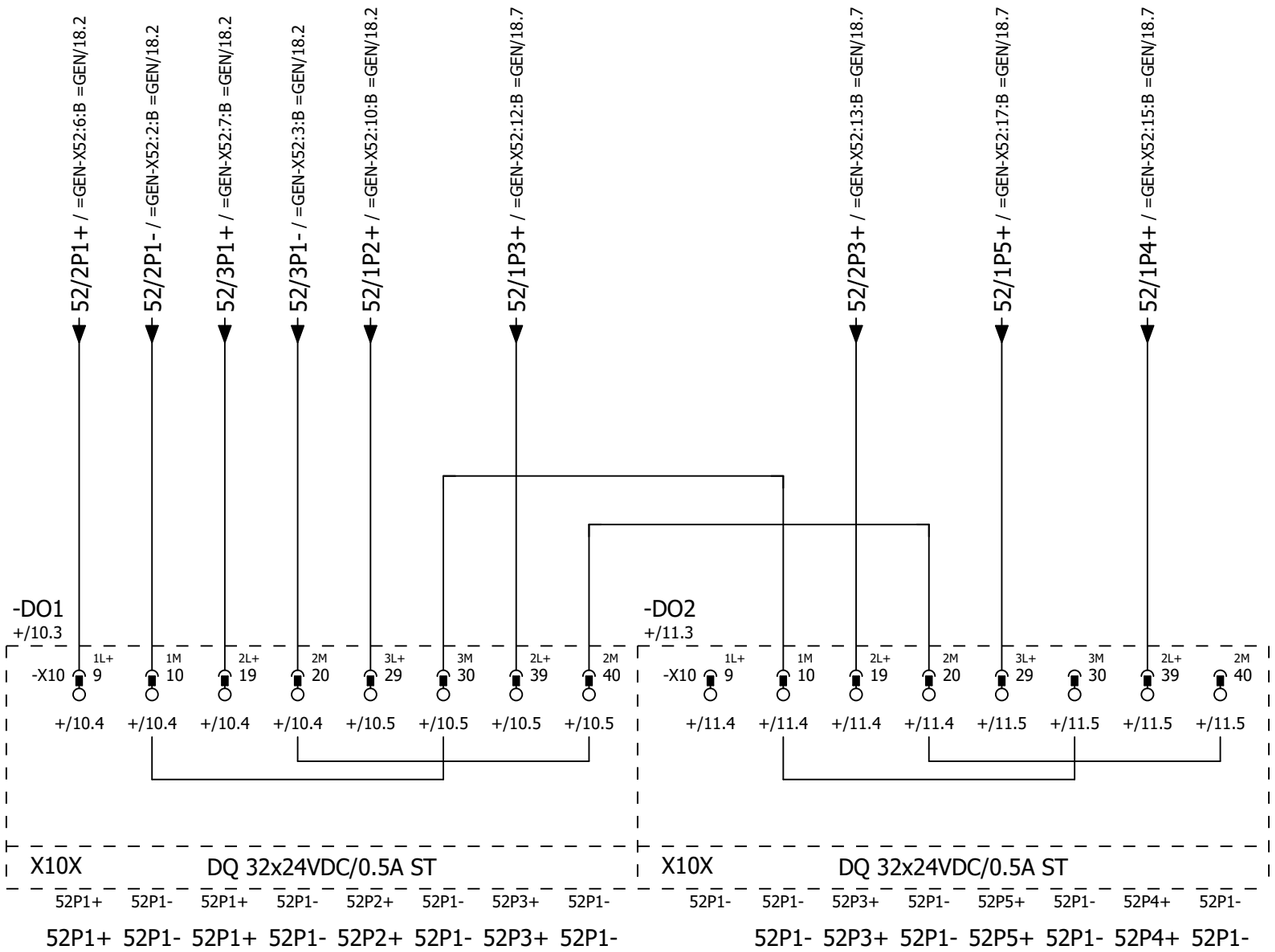
-[ASI-2-31-I1]	I95.0	Q95.0	=LAMP+F/3.5	-[ASI-2-31-O1]	LAMP: Fault
-[ASI-2-31-I2]	I95.1	Q95.1	=LAMP+F/3.6	-[ASI-2-31-O2]	LAMP: Abnormal condition
-[ASI-2-31-I3]	I95.2	Q95.2	=LAMP+F/3.7	-[ASI-2-31-O3]	LAMP: Mandatory action
-[ASI-2-31-I4]	I95.3	Q95.3	=LAMP+F/3.8	-[ASI-2-31-O4]	LAMP: Horn

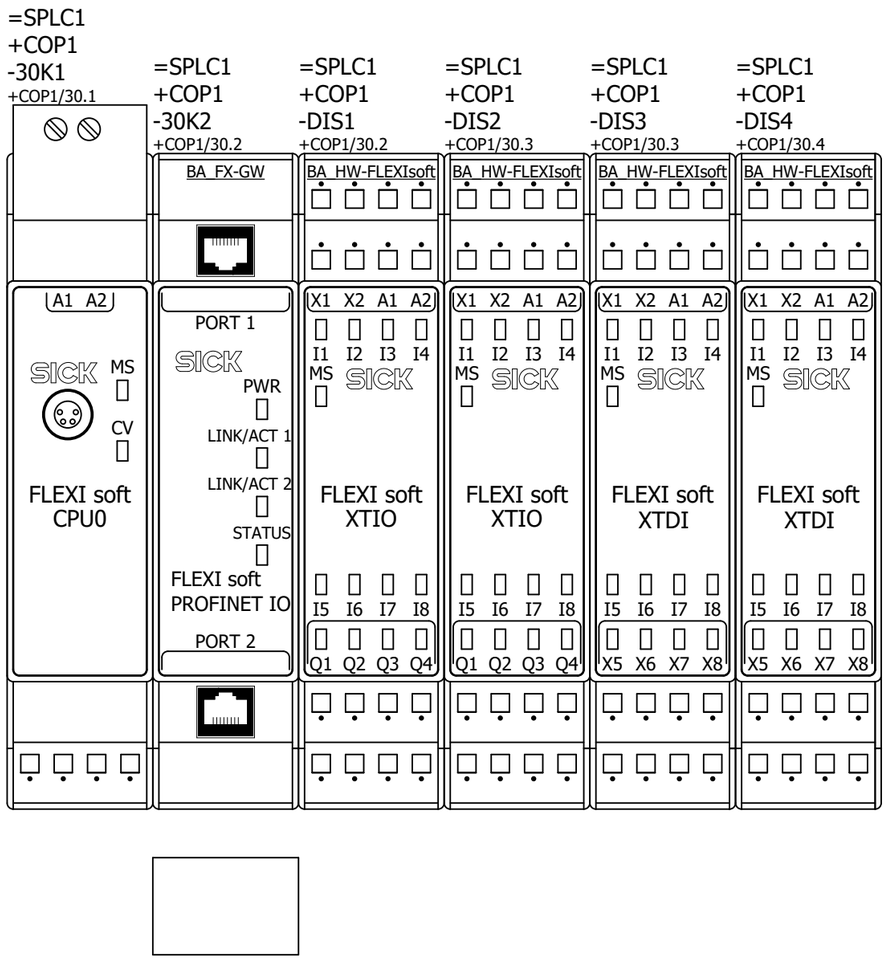


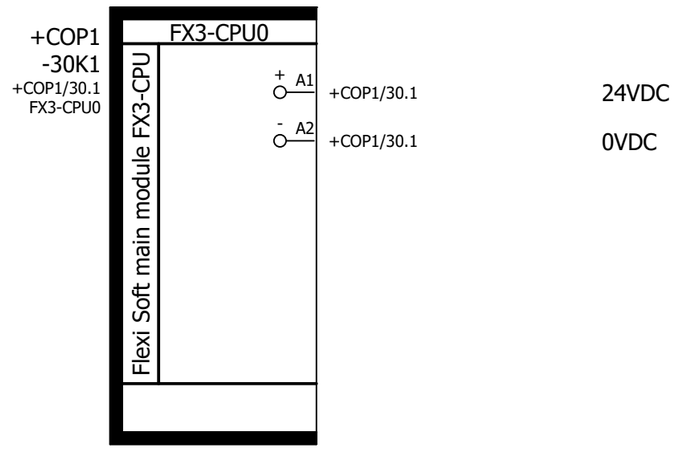
ATTENTION!

ALIVE EVEN WHEN
MAIN SWITCH IS
SWITCHED OFF !


52/1P1+ / =GEN-X52:5:B =GEN/18.2
52/1P1- / =GEN-X52:1:B =GEN/18.2
-DI1
+/5.3
-DI2
+/6.3
-DI3
+/7.3
-DI4
+/8.3
-X10 1L+ 19 X10/19/1L+ +/5.4
-X10 1M 20 X10/20/1M +/5.4
-X10 2L+ 39 X10/39/2L+ +/5.5
-X10 2M 40 X10/40/2M +/5.5
-X10 1L+ 19 X10/19/1L+ +/6.4
-X10 1M 20 X10/20/1M +/6.4
-X10 2L+ 39 X10/39/2L+ +/6.5
-X10 2M 40 X10/40/2M +/6.5
-X10 1L+ 19 X10/19/1L+ +/7.4
-X10 1M 20 X10/20/1M +/7.4
-X10 2L+ 39 X10/39/2L+ +/7.5
-X10 2M 40 X10/40/2M +/7.5
-X10 1L+ 19 X10/19/1L+ +/8.4
-X10 1M 20 X10/20/1M +/8.4
-X10 2L+ 39 X10/39/2L+ +/8.6
-X10 2M 40 X10/40/2M +/8.6
X10X DI 32x24VDC HF
X10X DI 32x24VDC HF
X10X DI 32x24VDC HF
X10X DI 32x24VDC HF
52P1+ 52P1- 52P1+ 52P1-
52P1+ 52P1- 52P1+ 52P1-
52P1+ 52P1- 52P1+ 52P1-
52P1+ 52P1- 52P1+ 52P1-
52P1+ 52P1- 52P1+ 52P1-
52P1+ 52P1- 52P1+ 52P1-
52P1+ 52P1- 52P1+ 52P1-
52P1+ 52P1- 52P1+ 52P1-


52/2P1+ / =GEN-X52:6:B =GEN/18.2
52/2P1- / =GEN-X52:2:B =GEN/18.2
52/3P1+ / =GEN-X52:7:B =GEN/18.2
52/3P1- / =GEN-X52:3:B =GEN/18.2
52/1P2+ / =GEN-X52:10:B =GEN/18.2
52/1P3+ / =GEN-X52:12:B =GEN/18.7
52/2P3+ / =GEN-X52:13:B =GEN/18.7
52/1P5+ / =GEN-X52:17:B =GEN/18.7
52/1P4+ / =GEN-X52:15:B =GEN/18.7
-DO1
+/10.3
-X10
1L+ 9
1M 10
2L+ 19
2M 20
3L+ 29
3M 30
2L+ 39
2M 40
+/10.4 +/10.4 +/10.4 +/10.4 +/10.5 +/10.5 +/10.5 +/10.5
-DO2
+/11.3
-X10
1L+ 9
1M 10
2L+ 19
2M 20
3L+ 29
3M 30
2L+ 39
2M 40
+/11.4 +/11.4 +/11.4 +/11.4 +/11.5 +/11.5 +/11.5 +/11.5
X10X
DQ 32x24VDC/0.5A ST
52P1+ 52P1- 52P1+ 52P1- 52P2+ 52P1- 52P3+ 52P1-
X10X
DQ 32x24VDC/0.5A ST
52P1- 52P1- 52P3+ 52P1- 52P5+ 52P1- 52P4+ 52P1-
52P1+ 52P1- 52P1+ 52P1- 52P2+ 52P1- 52P3+ 52P1-
52P1- 52P3+ 52P1- 52P5+ 52P1- 52P4+ 52P1-


=SPLC1
+COP1
-30K1
+COP1/30.1
A1 A2
SICK
MS
CV
FLEXI soft
CPU0
=SPLC1
+COP1
-30K2
+COP1/30.2
BA_FX-GW
PORT 1
SICK
PWR
LINK/ACT 1
LINK/ACT 2
STATUS
FLEXI soft
PROFINET IO
PORT 2
=SPLC1
+COP1
-DIS1
+COP1/30.2
BA_HW-FLEXIsoft
X1 X2 A1 A2
I1 I2 I3 I4
MS
SICK
FLEXI soft
XTIO
I5 I6 I7 I8
Q1 Q2 Q3 Q4
=SPLC1
+COP1
-DIS2
+COP1/30.3
BA_HW-FLEXIsoft
X1 X2 A1 A2
I1 I2 I3 I4
MS
SICK
FLEXI soft
XTIO
I5 I6 I7 I8
Q1 Q2 Q3 Q4
=SPLC1
+COP1
-DIS3
+COP1/30.3
BA_HW-FLEXIsoft
X1 X2 A1 A2
I1 I2 I3 I4
MS
SICK
FLEXI soft
XTDI
I5 I6 I7 I8
X5 X6 X7 X8
=SPLC1
+COP1
-DIS4
+COP1/30.4
BA_HW-FLEXIsoft
X1 X2 A1 A2
I1 I2 I3 I4
MS
SICK
FLEXI soft
XTDI
I5 I6 I7 I8
X5 X6 X7 X8



Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	DOC: SICK-Overview CPU	= SPLC1	+	Page 2
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 11.						

+COP1
-DIS1
+COP1/30.2
FX3-XTIO84002

FX3-XTIO

Safety modul: 8 inputs / 4 outputs

	X1	+COP1/20.0	Test signal -1-
	X2	+COP1/20.1	Test signal -2-
	A1	+COP1/30.2	24VDC
	A2	+COP1/30.3	0VDC
I1	I1	=SLB2+F/5.1	SLB2: Emergency-Stop Chanel -1-
I2	I2	=SLB2+F/5.2	SLB2: Emergency-Stop Chanel -2-
I3	I3	=OPD1+F/5.3	OPD1: Control voltage ON channel -1-
I4	I4	=OPD1+F/5.4	OPD1: Control voltage ON channel -2-
I5	I5	+COP1/35.8	SPLC1: EDM emergency-stop zone
I6	I6	+COP1/36.8	SPLC1: EDM inside SG
I7	I7	+COP1/37.8	SPLC1: EDM Layer former
I8	I8		
Q1	Q1	+COP1/35.1	SPLC1: Safety output emergency-stop zone
Q2	Q2	+COP1/36.1	SPLC1: Safety output inside SG WITH delay
Q3	Q3	+COP1/36.4	SPLC1: Safety output inside SG WITHOUT delay
Q4	Q4	+COP1/37.1	SPLC1: Safety output Layer former

+COP1
-DIS2
+COP1/30.3
FX3-XTIO84002

FX3-XTIO

Safety modul: 8 inputs / 4 outputs

	X1	+COP1/20.4	Test signal -1-
	X2	+COP1/20.4	Test signal -2-
	A1	+COP1/30.3	24VDC
	A2	+COP1/30.3	0VDC
I9	I1	=SLB1+F/4.5	SLB1: Safety-LB infeed OSSD 1
I10	I2	=SLB1+F/4.6	SLB1: Safety-LB infeed OSSD 2
I11	I3	=SLB2+F/4.5	SLB2: Safety-LB outfeed OSSD 1
I12	I4	=SLB2+F/4.6	SLB2: Safety-LB outfeed OSSD 2
I13	I5	=SG1+F/6.7	SG1: Safety guard doors CH -1-
I14	I6	=SG1+F/6.8	SG1: Safety guard doors CH -2-
I15	I7	=SG1+F/7.7	SG1: Safety guard doors Accumulation-table CH -1-
I16	I8	=SG1+F/7.8	SG1: Safety guard doors Accumulation-table CH -2-
Q5	Q1		
Q6	Q2		
Q7	Q3		
Q8	Q4		

Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	DOC: SICK-Overview Inputs/Outputs	= SPLC1	+	Page 3
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 11.						

+COP1
-DIS3
+COP1/30.3
FX3-XTDI80002

FX3-XTDI

Safety input modul: 8 inputs

	X1	+COP1/20.7	Test signal -1-
	X2	+COP1/20.7	Test signal -2-
	X3	+COP1/20.7	Test signal -3-
	X4	+COP1/20.7	Test signal -4-
I17	I1	+COP1/25.1	GEN: Reset Emergency-Stop (AC/BT/PT)
I18	I2	+COP1/25.2	GEN: Reset inside SG
I19	I3	+COP1/25.3	GEN: Reset Layer former
I20	I4	+COP1/25.4	GEN: Reserved Reset Layer sheet station
I21	I5		
I22	I6		
I23	I7	=SLB3+F/4.5	SLB3: Safety-LB layer sheet magazine OSSD 1
I24	I8	=SLB3+F/4.6	SLB3: Safety-LB layer sheet magazine OSSD 2
	X5		
	X6		
	X7		
	X8		

+COP1
-DIS4
+COP1/30.4
FX3-XTDI80002

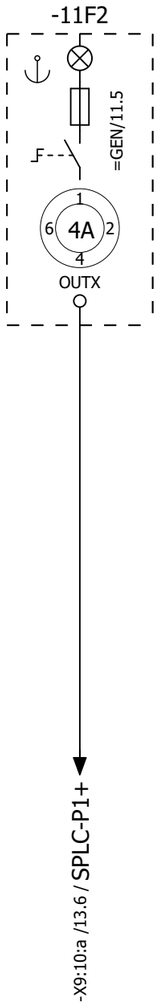
FX3-XTDI

Safety input modul: 8 inputs

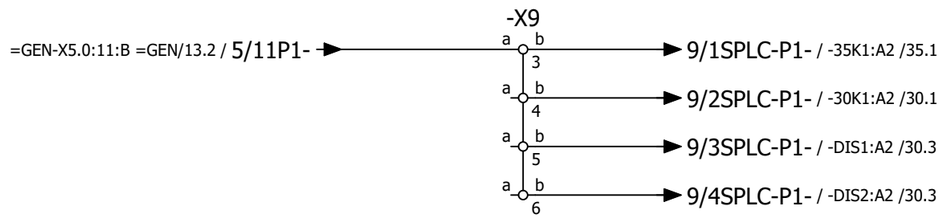
	X1	=LF+F/4.0	Test signal -1-
	X2	=LF+F/4.1	Test signal -2-
	X3		
	X4		
I25	I1	=LF+F/7.7	LF: Safety doors CH -1-
I26	I2	=LF+F/7.8	LF: Safety doors CH -1-
I27	I3		
I28	I4		
I29	I5		
I30	I6		
I31	I7		
I32	I8		
	X5		
	X6		
	X7		
	X8		

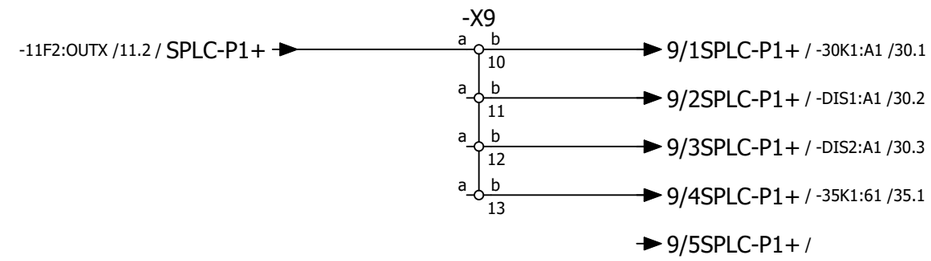
Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	DOC: SICK-Overview Inputs/Outputs	= SPLC1	+	Page 4
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 11.						

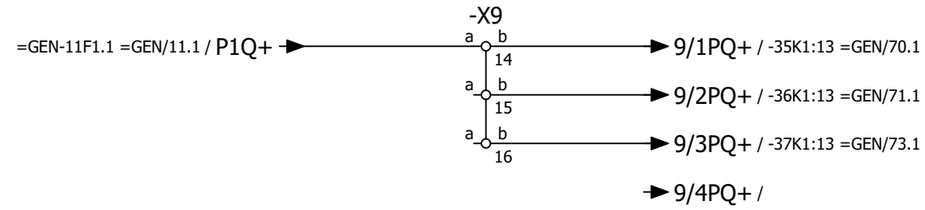
0	1	2	3	4	5	6	7	8	9



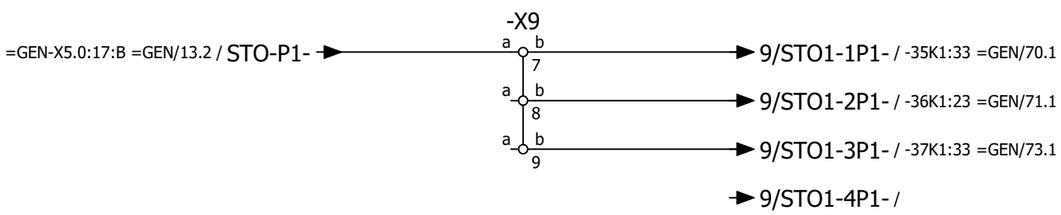
GEN:
24VDC
Safety controller



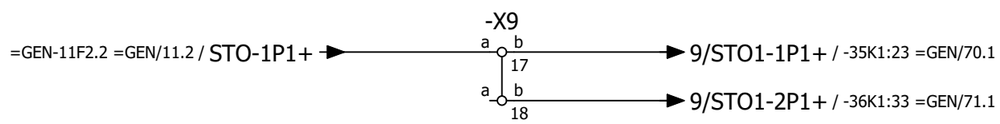


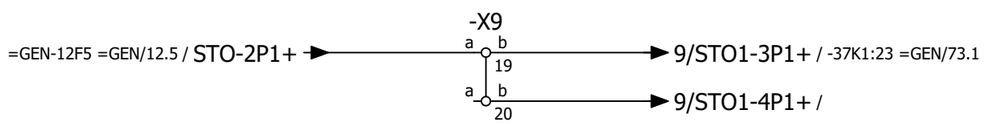


24VDC Potential P1+
for safety potentials

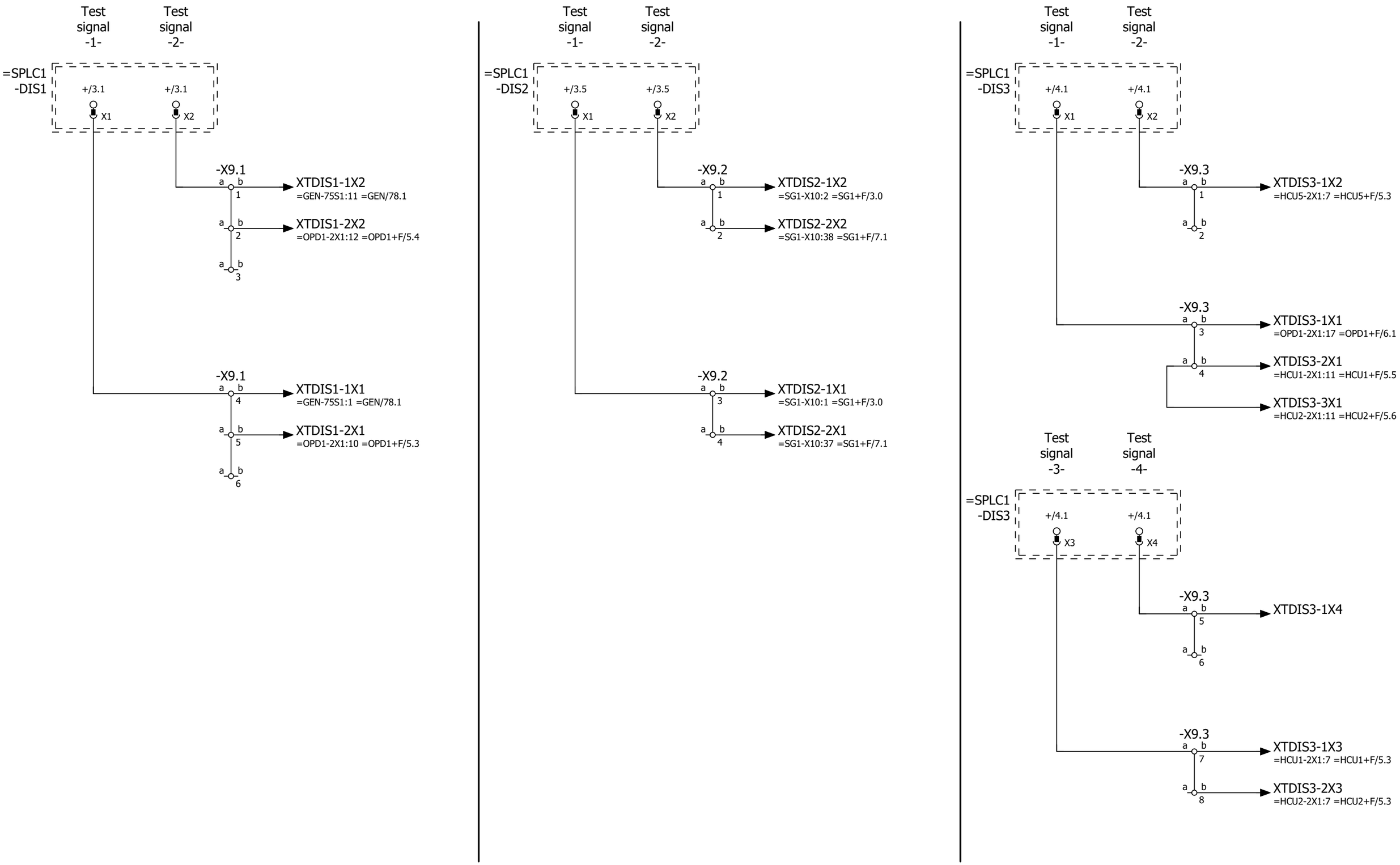


24VDC Potential 51P1-
for safety potentials of inverters

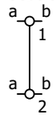




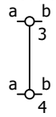
24VDC Potential 51P1+
for safety potentials of inverters


Test signal -1-
Test signal -2-
=SPLC1 -DIS1
+/3.1
+/3.1
X1
X2
-X9.1
XTDIS1-1X2
=GEN-75S1:11 =GEN/78.1
XTDIS1-2X2
=OPD1-2X1:12 =OPD1+F/5.4
-X9.1
XTDIS1-1X1
=GEN-75S1:1 =GEN/78.1
XTDIS1-2X1
=OPD1-2X1:10 =OPD1+F/5.3
Test signal -1-
Test signal -2-
=SPLC1 -DIS2
+/3.5
+/3.5
X1
X2
-X9.2
XTDIS2-1X2
=SG1-X10:2 =SG1+F/3.0
XTDIS2-2X2
=SG1-X10:38 =SG1+F/7.1
-X9.2
XTDIS2-1X1
=SG1-X10:1 =SG1+F/3.0
XTDIS2-2X1
=SG1-X10:37 =SG1+F/7.1
Test signal -1-
Test signal -2-
=SPLC1 -DIS3
+/4.1
+/4.1
X1
X2
-X9.3
XTDIS3-1X2
=HCU5-2X1:7 =HCU5+F/5.3
-X9.3
XTDIS3-1X1
=OPD1-2X1:17 =OPD1+F/6.1
XTDIS3-2X1
=HCU1-2X1:11 =HCU1+F/5.5
XTDIS3-3X1
=HCU2-2X1:11 =HCU2+F/5.6
Test signal -3-
Test signal -4-
=SPLC1 -DIS3
+/4.1
+/4.1
X3
X4
-X9.3
XTDIS3-1X4
-X9.3
XTDIS3-1X3
=HCU1-2X1:7 =HCU1+F/5.3
XTDIS3-2X3
=HCU2-2X1:7 =HCU2+F/5.3

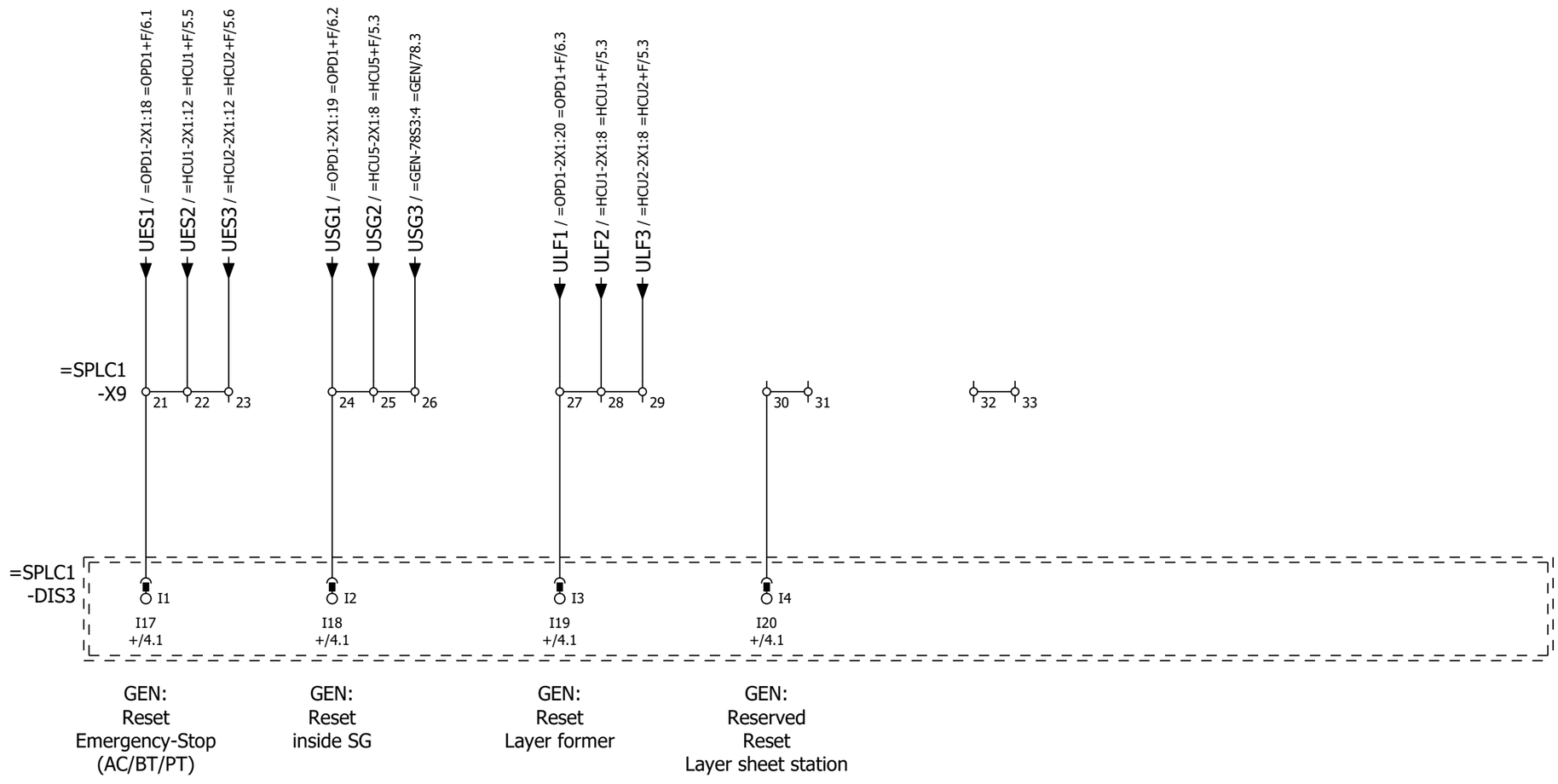
-X9.4

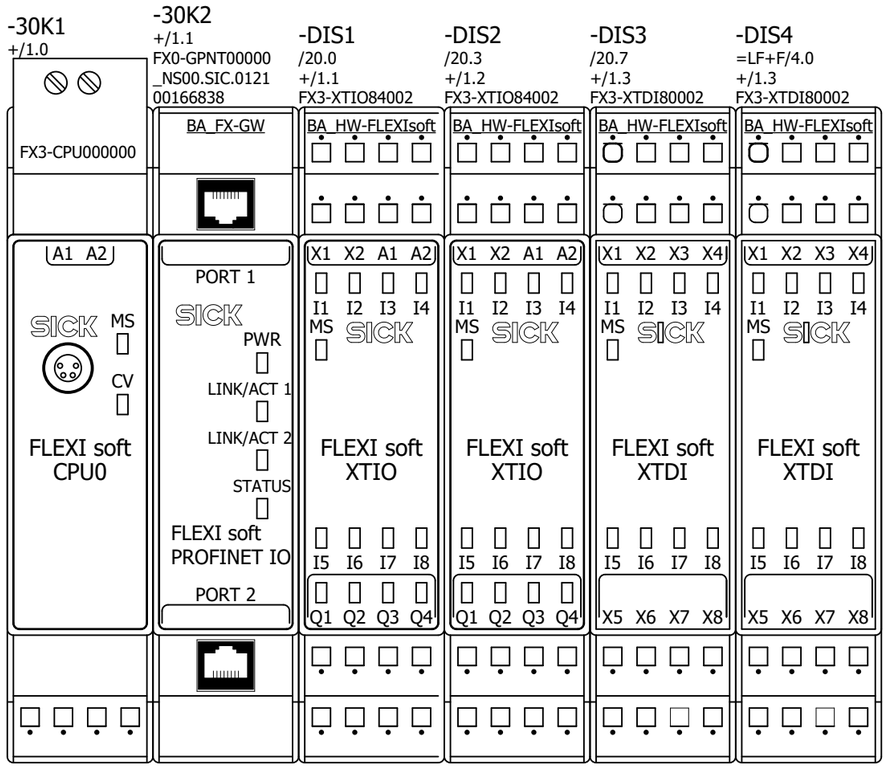


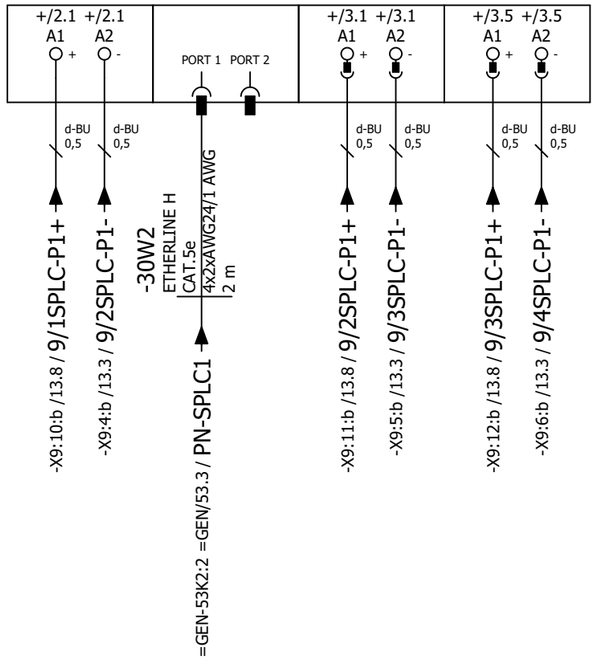
-X9.4

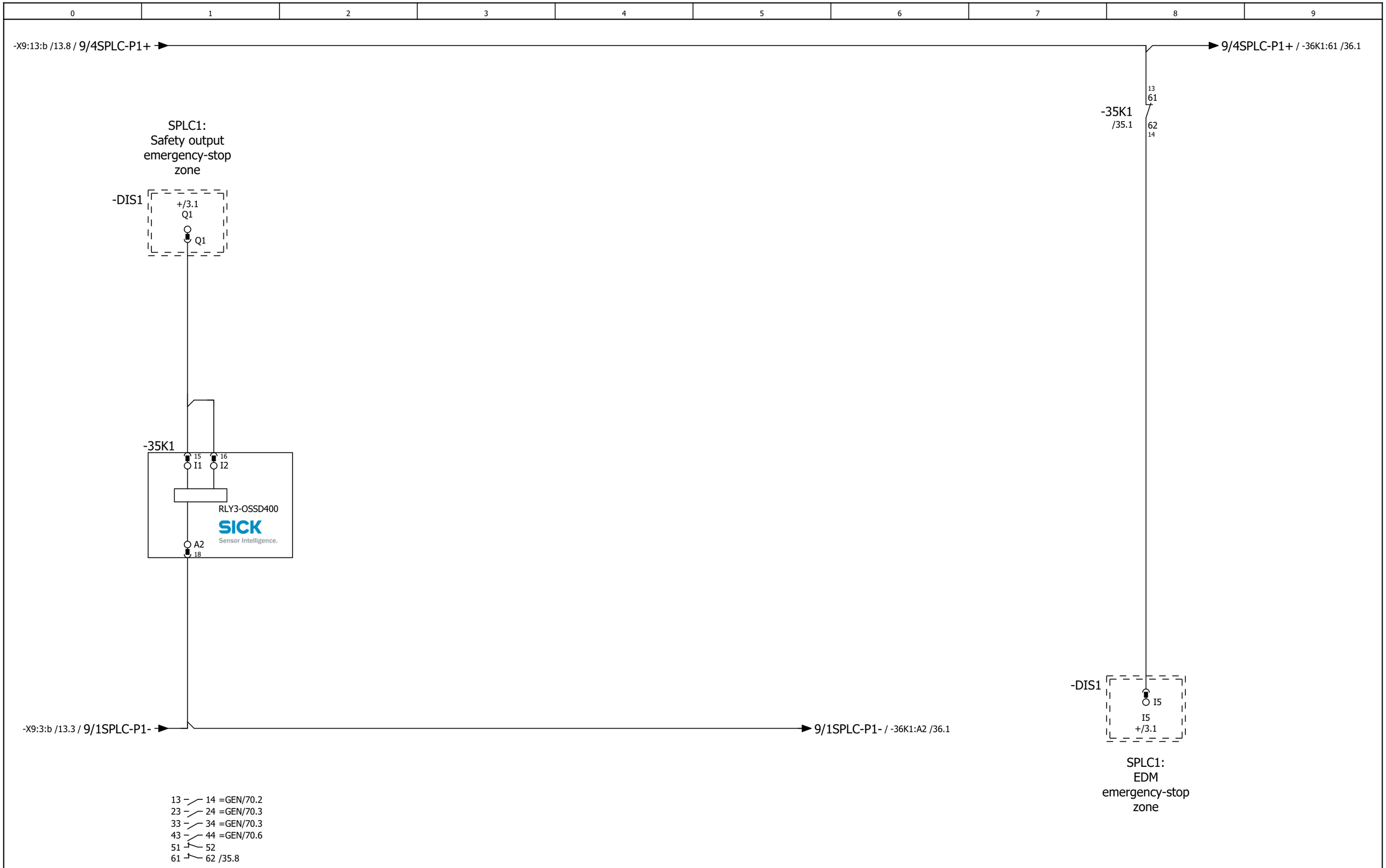


Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	SPLC1: Test signals -X9	= SPLC1	+COP1	Page 21
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 11.						

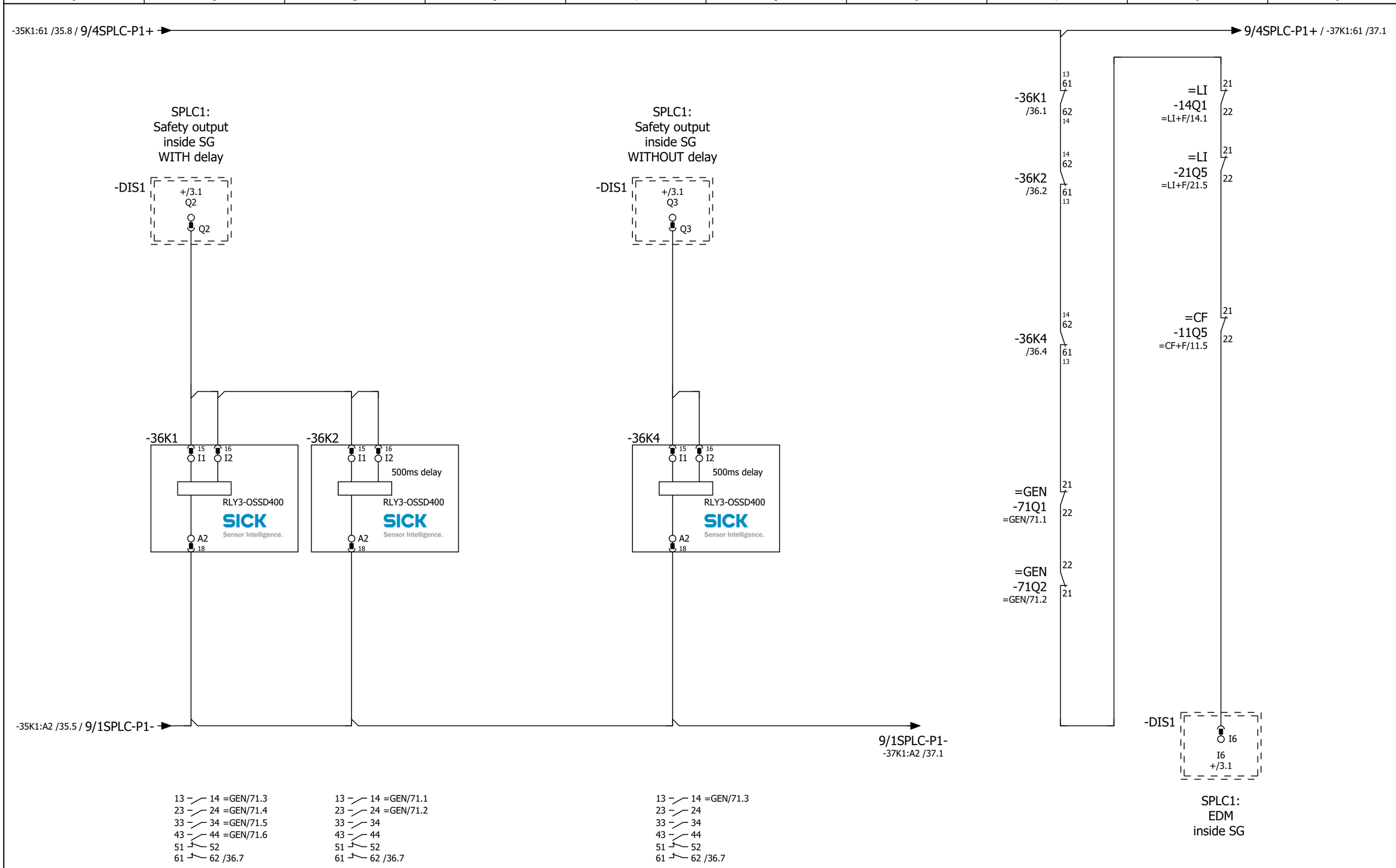

UES1 / =OPD1-2X1:18 =OPD1+F/6.1
UES2 / =HCU1-2X1:12 =HCU1+F/5.5
UES3 / =HCU2-2X1:12 =HCU2+F/5.6
USG1 / =OPD1-2X1:19 =OPD1+F/6.2
USG2 / =HCU5-2X1:8 =HCU5+F/5.3
USG3 / =GEN-78S3:4 =GEN/78.3
ULF1 / =OPD1-2X1:20 =OPD1+F/6.3
ULF2 / =HCU1-2X1:8 =HCU1+F/5.3
ULF3 / =HCU2-2X1:8 =HCU2+F/5.3
=SPLC1
-X9
21 22 23
24 25 26
27 28 29
30 31
32 33
=SPLC1
-DIS3
I1
I2
I3
I4
I17
+/4.1
I18
+/4.1
I19
+/4.1
I20
+/4.1
GEN:
Reset
Emergency-Stop
(AC/BT/PT)
GEN:
Reset
inside SG
GEN:
Reset
Layer former
GEN:
Reserved
Reset
Layer sheet station

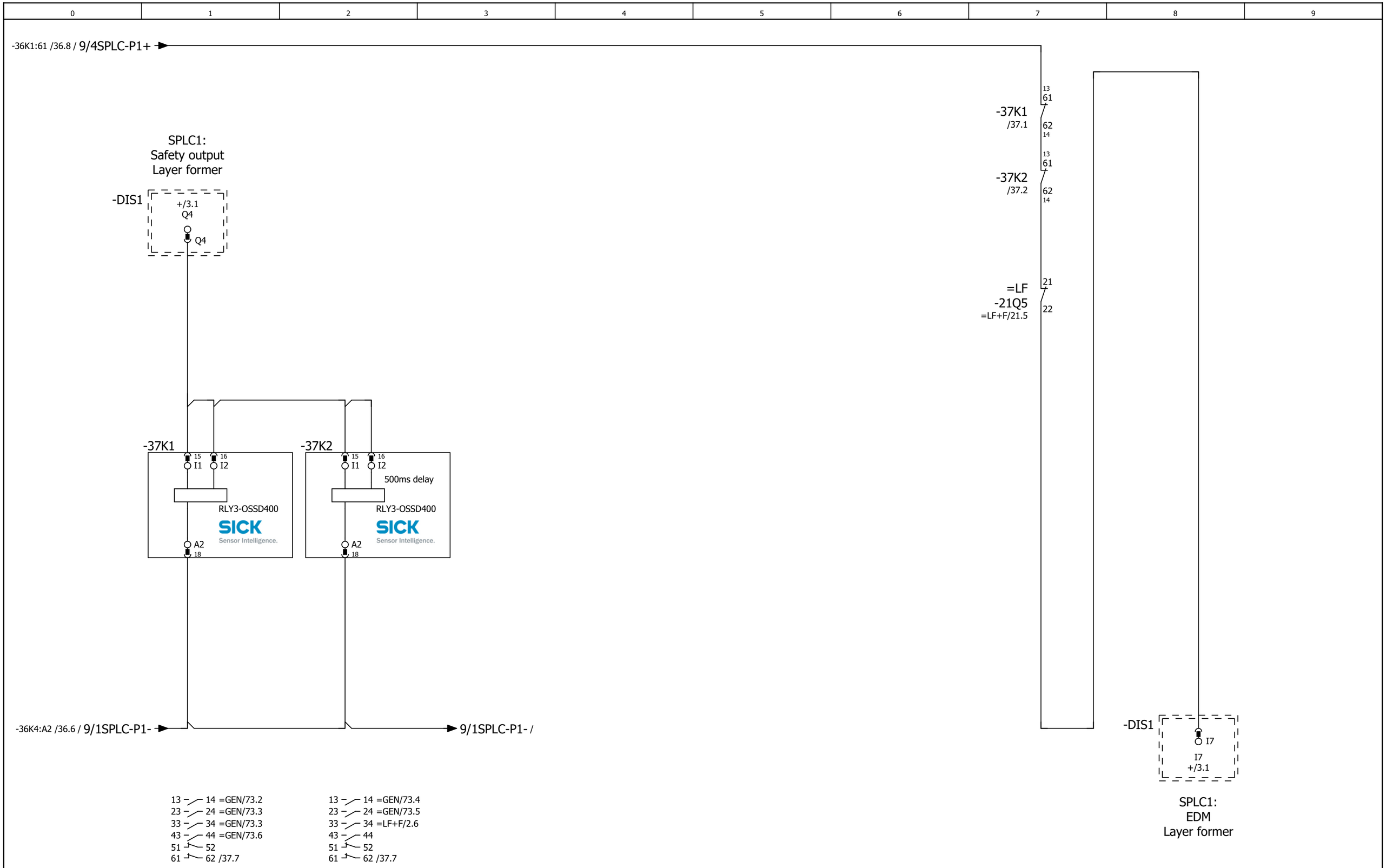

-30K1
+/1.0
FX3-CPU000000
A1 A2
SICK
MS
CV
FLEXI soft
CPU0
-30K2
+/1.1
FX0-GPNT00000
_NS00.SIC.0121
00166838
BA_FX-GW
PORT 1
SICK
PWR
LINK/ACT 1
LINK/ACT 2
STATUS
FLEXI soft
PROFINET IO
PORT 2
-DIS1
/20.0
+/1.1
FX3-XTIO84002
BA_HW-FLEXIsoft
X1 X2 A1 A2
I1 I2 I3 I4
MS
SICK
FLEXI soft
XTIO
I5 I6 I7 I8
Q1 Q2 Q3 Q4
-DIS2
/20.3
+/1.2
FX3-XTIO84002
BA_HW-FLEXIsoft
X1 X2 A1 A2
I1 I2 I3 I4
MS
SICK
FLEXI soft
XTIO
I5 I6 I7 I8
Q1 Q2 Q3 Q4
-DIS3
/20.7
+/1.3
FX3-XTDI80002
BA_HW-FLEXIsoft
X1 X2 X3 X4
I1 I2 I3 I4
MS
SICK
FLEXI soft
XTDI
I5 I6 I7 I8
X5 X6 X7 X8
-DIS4
=LF+F/4.0
+/1.3
FX3-XTDI80002
BA_HW-FLEXIsoft
X1 X2 X3 X4
I1 I2 I3 I4
MS
SICK
FLEXI soft
XTDI
I5 I6 I7 I8
X5 X6 X7 X8


+/2.1 +/2.1
A1 A2
+ -
PORT 1 PORT 2
+/3.1 +/3.1
A1 A2
+ -
+/3.5 +/3.5
A1 A2
+ -
d-BU
0,5
-X9:10:b /13.8 / 9/1SPLC-P1+
-X9:4:b /13.3 / 9/2SPLC-P1-
-30W2
ETHERLINE H
CAT.5e
4x2xAWG24/1 AWG
2 m
=GEN-53K2:2 =GEN/53.3 / PN-SPLC1
-X9:11:b /13.8 / 9/2SPLC-P1+
-X9:5:b /13.3 / 9/3SPLC-P1-
-X9:12:b /13.8 / 9/3SPLC-P1+
-X9:6:b /13.3 / 9/4SPLC-P1-



Creator	Ferenc Baracsi	Commission	620300.11.2023	SPLC1: Extension modules - emergency-stop zone	= SPLC1	+COP1	Page 35
					Revision		
Edited by	BaF	Type	MSK - Semitech				
Modification date	2023. 10. 11.						


-35K1:61 /35.8 / 9/4SPLC-P1+
9/4SPLC-P1+ / -37K1:61 /37.1
SPLC1:
Safety output
inside SG
WITH delay
-DIS1
+/3.1
Q2
Q2
SPLC1:
Safety output
inside SG
WITHOUT delay
-DIS1
+/3.1
Q3
Q3
-36K1
15 I1
16 I2
RLY3-OSSD400
SICK
Sensor Intelligence.
A2
18
-36K2
15 I1
16 I2
500ms delay
RLY3-OSSD400
SICK
Sensor Intelligence.
A2
18
-36K4
15 I1
16 I2
500ms delay
RLY3-OSSD400
SICK
Sensor Intelligence.
A2
18
-36K1
/36.1
13 61
62 14
-36K2
/36.2
14 62
61 13
-36K4
/36.4
14 62
61 13
=GEN
-71Q1
=GEN/71.1
21
22
=GEN
-71Q2
=GEN/71.2
22
21
=LI
-14Q1
=LI+F/14.1
21
22
=LI
-21Q5
=LI+F/21.5
21
22
=CF
-11Q5
=CF+F/11.5
21
22
-35K1:A2 /35.5 / 9/1SPLC-P1-
9/1SPLC-P1-
-37K1:A2 /37.1
-DIS1
I6
I6
+/3.1
SPLC1:
EDM
inside SG
13 14 =GEN/71.3
23 24 =GEN/71.4
33 34 =GEN/71.5
43 44 =GEN/71.6
51 52
61 62 /36.7
13 14 =GEN/71.1
23 24 =GEN/71.2
33 34
43 44
51 52
61 62 /36.7
13 14 =GEN/71.3
23 24
33 34
43 44
51 52
61 62 /36.7


-36K1:61 /36.8 / 9/4SPLC-P1+
SPLC1:
Safety output
Layer former
-DIS1
+/3.1
Q4
Q4
-37K1
/37.1
-37K2
/37.2
=LF
-21Q5
=LF+F/21.5
-37K1
15 16
I1 I2
RLY3-OSSD400
SICK
Sensor Intelligence.
A2
18
-37K2
15 16
I1 I2
500ms delay
RLY3-OSSD400
SICK
Sensor Intelligence.
A2
18
-36K4:A2 /36.6 / 9/1SPLC-P1-
9/1SPLC-P1- /
-DIS1
I7
I7
+/3.1
SPLC1:
EDM
Layer former
13 14 =GEN/73.2
23 24 =GEN/73.3
33 34 =GEN/73.3
43 44 =GEN/73.6
51 52
61 62 /37.7
13 14 =GEN/73.4
23 24 =GEN/73.5
33 34 =LF+F/2.6
43 44
51 52
61 62 /37.7

0	1	2	3	4	5	6	7	8	9

Terminal diagram

Function text										Cable name	Strip =+						Cable name					Page / column
										Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type					
DIS3 - TEST 2													6	,	=SPLC1+COP1-X9.3	5						=SPLC1+COP1/20.8
=											=HCU2+COP1-2X1	7	8	,	=SPLC1+COP1-X9.3	7						=SPLC1+COP1/20.8

Terminal diagram

Function text	Cable name	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable name	Cable type	Page / column
			Strip =SPLC1+COP1-X9								
GEN: Safety potentials inside safety guard			-36K2	13	1		=GEN-11F1				=GEN/71.1
=			-36K2	23	2						=GEN/71.2
SPLC-P1-			-35K1	A2	3		=GEN-X5.0	11:B			/13.2
=			-30K1	A2	4						/13.2
=			-DIS1	A2	5						/13.2
=			-DIS2	A2	6						/13.2
STO1-P1-			-35K1	33	7		=GEN-X5.0	17:B			/13.2
=			-36K1	23	8						/13.2
=			-37K1	33	9						/13.2
SPLC-P1+			-30K1	A1	10		-11F2	OUTX			/13.7
=			-DIS1	A1	11						/13.7
=			-DIS2	A1	12						/13.7
=			-35K1	61	13						/13.7
P1Q			-35K1	13	14		=GEN-11F1.1				/13.7
=			-36K1	13	15						/13.7
=			-37K1	13	16						/13.7
STO1-P1+			-35K1	23	17		=GEN-11F2.2				/13.7
=			-36K1	33	18						/13.7
=			-37K1	23	19		=GEN-12F5				/13.7
=					20						/13.7
GEN: Reset Emergency-Stop (AC/BT/PT)			=OPD1-2X1	18	21		-DIS3	I1			/25.1
=			=HCU1-2X1	12	22						/25.1
=			=HCU2-2X1	12	23						/25.1
GEN: Reset inside SG			=OPD1-2X1	19	24		-DIS3	I2			/25.2
=			=HCU5-2X1	8	25						/25.2
=					26						/25.2
GEN: Reset Layer former			=OPD1-2X1	20	27		-DIS3	I3			/25.3
=			=HCU1-2X1	8	28						/25.3
=			=HCU2-2X1	8	29						/25.3
GEN: Reserved Reset Layer sheet station					30		-DIS3	I4			/25.4
=					31						/25.4
=					32						/25.4
=					33						/25.5

Terminal diagram

Strip
=SPLC1+COP1-X9.1

Function text	Cable name	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable name	Cable type	Page / column
DIS1 - TEST 2			=GEN-75S1	11	1		-DIS1	X2			/20.1
=			=OPD1-2X1	12	2						/20.1
=					3						/20.1
DIS1 - TEST 1			=GEN-75S1	1	4		-DIS1	X1			/20.1
=			=OPD1-2X1	10	5						/20.1
=					6						/20.1

Terminal diagram

Function text	Cable name	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable name	Cable type	Page / column
			Strip =SPLC1+COP1-X9.2								
DIS2 - TEST 2			=SG1-X10	2	1		-DIS2	X2			/20.4
=			=SG1-X10	38	2						/20.4
DIS2 - TEST 1			=SG1-X10	1	3		-DIS2	X1			/20.4
=			=SG1-X10	37	4						/20.4

Terminal diagram

Function text	Cable name	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable name	Cable type	Page / column
			Strip =SPLC1+COP1-X9.3								
DIS3 - TEST 2			=HCU5-2X1	7	1		-DIS3	X2			/20.8
DIS1 - TEST 2					2						/20.8
DIS3 - TEST 2			=OPD1-2X1	17	3		-DIS3	X1			/20.8
DIS1 - TEST 2			=HCU1-2X1	11	4						/20.8
DIS3 - TEST 2					5		-DIS3	X4			/20.8
								6			
DIS3 - TEST 2			=HCU1-2X1	7	7		-DIS3	X3			/20.8
								8			

Terminal diagram

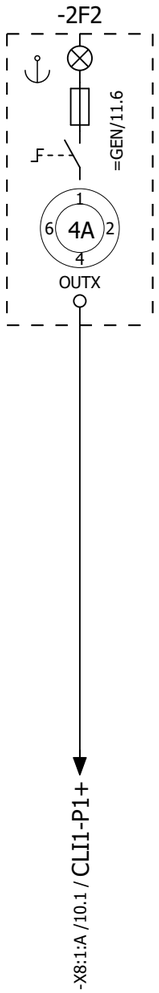
Strip
=SPLC1+COP1-X9.4

Function text	Cable name	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable name	Cable type	Page / column
DIS4 - TEST 2					1						/21.1
=					2						/21.1
DIS4 - TEST 1					3						/21.1
=					4						/21.1

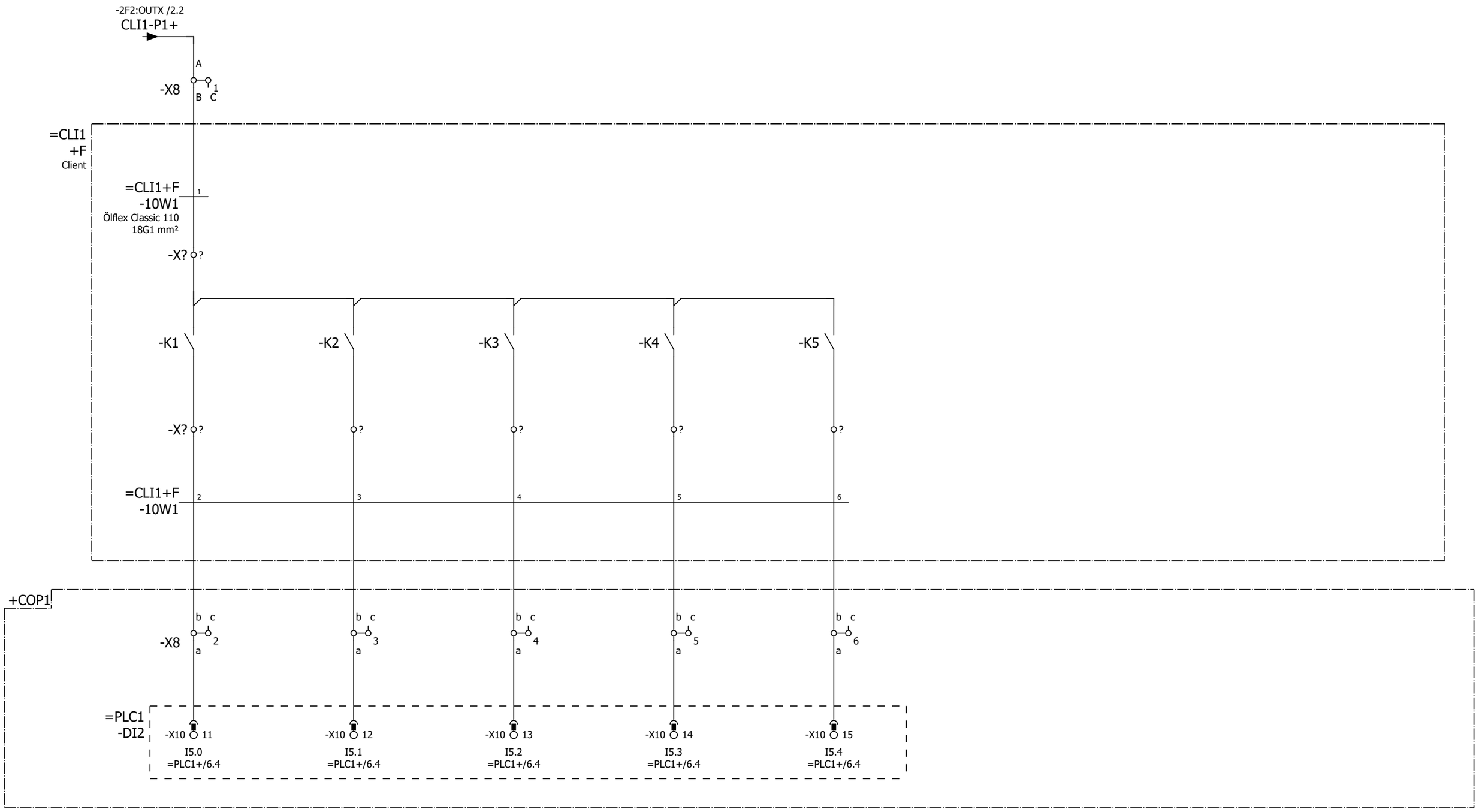
Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
-30W2			00142097	ETHERLINE H CAT.5e	4x2	1	AWG24/1	2	0VDC
			10036052						

Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	Cable overview : =SPLC1+COP1-30W2 - =SPLC1+COP1-30W2	= SPLC1	+CBL	Page 400
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 11.						



Creator	Ferenc Baracsi	Commission	620300.11.2023	MSK COVERTECH GROUP	CLI1: 24VDC power supply	= CLI1	+COP1	Page 2
Edited by	BaF	Type	MSK - Semitech			Revision		
Modification date	2023. 10. 11.							



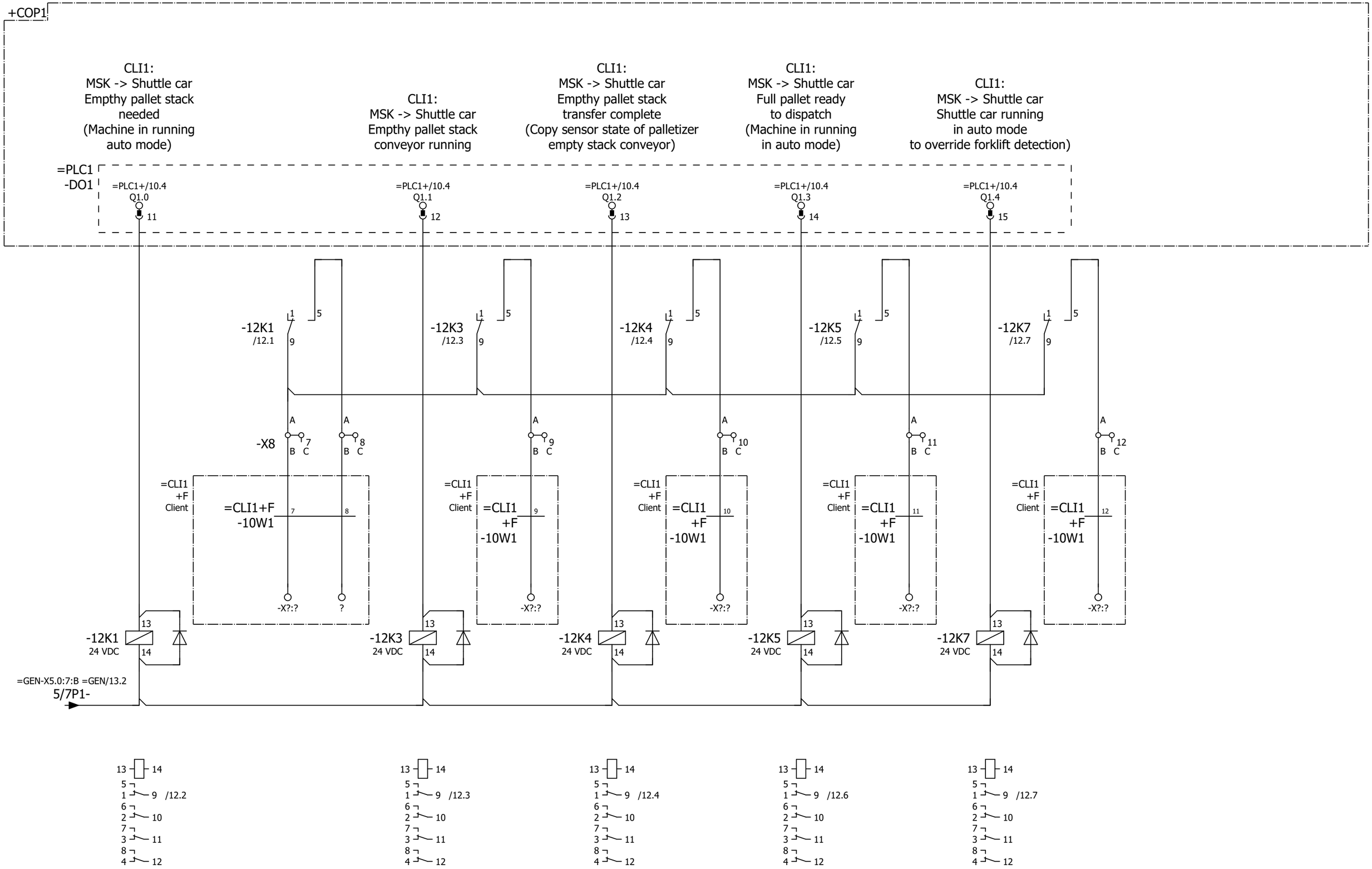
CLI1:
Shuttle car -> MSK
Shulle car at
Empty stack
receiver

CLI1:
Shuttle car -> MSK
Shulle car conveyor running at
Empty stack
receiver

CLI1:
Shuttle car -> MSK
Shuttle car conveyor running at
full pallet conveyor
of palletizer

CLI1:
Shuttle car -> MSK
Full pallet transfer
to Shuttle car
complete

CLI1:
Shuttle car -> MSK
Shuttle car running
in auto mode
(to override forklift detection)



Previous page	10					Next page +F/400
Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	CLI1: Contact exchange MSK <-> Client Shuttle Car	= CLI1	+COP1	Page 12
Edited by	BaF	Type MSK - Semitech			Revision	
Modification date	2023. 10. 11.					

Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
-1W1	-1X1	-X2	10047409	PUR-orange	3	3	1,5	28	OPD1: Socket (only programmer)
-2W1	-2X1	-X5	00060993	Ölflex Classic 110	25G	25	1,5	28	OPD1: 24VDC infeed -1-
-4W5			10150516	IE-C7ES8UG-MW	4x2	1	0,128	30	OPD1: Ethernet/IP EMSY
-7W1	-7X2	-X5	00067136	Ölflex Classic 110	7G	7	1,5	28	OPD1: 24VDC -2-
-4W1	-2X1	-X5	00150317	Ölflex Classic 110	18G	17	0,75	20	HCU1: 24VDC infeed
-4W1	-2X1	-X5	00150317	Ölflex Classic 110	18G	17	0,75	20	HCU2: 24VDC infeed
-5W3			10036999	Ölflex Classic 110	7G	7	0,75	18	HCU4: 24VDC infeed
-5W1			10036999	Ölflex Classic 110	7G	7	0,75	20	=
-2W1	-2X1	-X5	00150317	Ölflex Classic 110	18G	17	0,75	30	HCU5: 24VDC infeed
-3W1	-X10		10036999	Ölflex Classic 110	7G	7	0,75	16	SG1: Swing door pallet infeed left
-3W5	-X10		10036999	Ölflex Classic 110	7G	7	0,75	14	SG1: Swing door pallet infeed right
-4W1	-X10		10036999	Ölflex Classic 110	7G	7	0,75	28	SG1: Safety guard door at Semitech
-6W1	-X10		10036999	Ölflex Classic 110	7G	7	0,75	18	SG1: Swing door pallet outfeed left
-6W5	-X10		10036999	Ölflex Classic 110	7G	7	0,75	20	SG1: Swing door pallet outfeed right
-7W1	-X10		10036999	Ölflex Classic 110	7G	7	0,75	17	SG1: Safety guard door Accumulations-table (left)
-7W5	-X10		10036999	Ölflex Classic 110	7G	7	0,75	19	SG1: Safety guard door Accumulations-table (right)
-3W1	-3X1	-X5	00097838	Ölflex Classic 110 CY	12G	12	1,5	13	SLB1: 24VDC infeed safety-LB
-4W9		-4P9		PUR-OB\2m	4X	2	0,34	3	SLB1: Muting lamp
-3W1	-3X1	-X5	00097838	Ölflex Classic 110 CY	12G	12	1,5	20	SLB2: 24VDC infeed safety-LB
-4W9		-4P9		PUR-OB\2m	4X	2	0,34	2	SLB2: Muting lamp
-3W1	-3X1	-X5	00097838	Ölflex Classic 110 CY	12G	16	1,5	32	SLB3: 24VDC infeed safety-LB
-12W1	-12X1	-12X1	00141815	Ölflex Classic 110 CY	4G	4	2,5	17	BT137: Bottle-conveyor
-12W1.1	-12X1		00141815	Ölflex Classic 110 CY	4G	4	2,5	3	=
-15W1	-15X1		10150744	PUR/500m	4X	3	0,34	10	BT137: Bottle-conveyor HTL encoder
			00150353						
-15W1.1	-15X1		10150744	PUR/500m	4X	3	0,34	1	BT137: Bottle-conveyor HTL encoder
			00151848						
-2W1	-2X1	-X5	00060993	Ölflex Classic 110	25G	25	1,5	16	LF-JB1: 24VDC infeed
-3W1	-3X1	-X5	00060993	Ölflex Classic 110	25G	25	1,5	20	LF-JB2: 24VDC infeed
-4W1	-X5		10036999	Ölflex Classic 110	7G	7	0,75	8	LF: Safety switch row stopper Safety door -front-
-4W5	-X5		10036999	Ölflex Classic 110	7G	7	0,75	5	LF: Safety switch row stopper hinged door -right side-
-5W1	-X5		10036999	Ölflex Classic 110	7G	7	0,75	8	LF: Safety switch row stopper sliding door -left side 1-
-5W5	-X5		10036999	Ölflex Classic 110	7G	7	0,75	7	LF: Safety switch row stopper sliding door -left side 2-
-6W1	-X5		10036999	Ölflex Classic 110	7G	7	0,75	6	LF: Safety switch row stopper sliding door -left side 3-
-6W5	-X5		10036999	Ölflex Classic 110	7G	7	0,75	5	LF: Safety switch row stopper sliding door -left side 4-
-7W1	-X5		10036999	Ölflex Classic 110	7G	7	0,75	5	LF: Safety-switch bottle-infeed sliding window -left-
-7W5	-X5		10036999	Ölflex Classic 110	7G	7	0,75	7	LF: Safety-switch bottle-infeed sliding window -right-
-12W1	-12X1		00151205	13354353_20.0M	4G+3x	6	2,5/1,0	20	LF: Horizontal drive
-15W1			00151013	13324535_20,0m	6x2x	12	0,25	20	LF: Horizontal drive impulse sensor
-22W1	-22X1		00151238	13354396/25,0m	4G+3x	7	2,5	25	LF: Vertical drive
-25W1			00151046	13324551_25,0	6x2x	12	0,25	25	LF: Vertical drive impulse sensor
-26W6			00150617	Chainflex CF130 PVC	5G	4	1,5	10	LF: AS-i distribution
-12W1	-12X1	-12X1	00141815	Ölflex Classic 110 CY	4G	4	2,5	17	AC: Accumulation-table bottle-belt
-12W1.1	-12X1		00141815	Ölflex Classic 110 CY	4G	4	2,5	5	=
-15W1			10150744	PUR/PVC	4X	3	0,34	10	M12/8pin
			10148587						

Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
-19W0	-19X0		10036999	Ölflex Classic 110	7G	7	0,75	17	
-12W1	-12X1		10150929	Chainflex Servo¶CF210.UL.25	4G+2x2	8	2,5+1,0	33	LI: Liftmotor
-16W5			00150617	Chainflex CF130 PVC	5G	4	1,5	10	LI: AS-i distribution
-18W0	-18X1		10036999	Ölflex Classic 110	7G	7	0,75	25	LI: Impulse sensors
-22W1	-22X1		10151374	Ölflex Servo 719 CY	4G+4X	8	2,5+1,0	22	LI: Sledge motor
-25W1	=GEN -X7		10149963	Unitronic LiYCY (TP)	3x2	12	0,25	24	LI: Sledge impulse sensor
			10150927						
-32W1	-32X1	-32X1	10150930	Chainflex CF210	4G+4X	8	1,5+0,75	35	LI: palletizing-head
-32W1.1	-32X1		10150930	Chainflex CF210	4G+4X	8	1,5+0,75	10	=
-36W5			00150617	Chainflex CF130 PVC	5G	4	1,5	15	LI: AS-i distribution
-3W1	-3X1	-X5	00150618	Chainflex CF130 PVC	7G	7	1,5	22	CF: 24VDC infeed
-3W6	-X6		00150616	Chainflex CF130 PVC	4G	2	1,5	20	CF: AS-i distribution
-12W1	-12X1		10151374	Olflex-SERVO 719 CY	4G2,5+2x(2x1) ,	8	1,5+0,75	20	CF: Liftmotor
-22W1	-22X1		00150622	Chainflex CF140 PVC	4G	4	1,5	24	CF: Centering bars transversal
-25W0	=GEN -X7		10150928	Chainflex CF211.02.02.02	2x2	4	0,25	26	CF: Centering bars transversal HTL encoder
-32W1	-32X1		00150622	Chainflex CF140 PVC	4G	4	1,5	22	CF: Centering bars longitudinal
-35W0	=GEN -X7		10150928	Chainflex CF211.02.02.02	2x2	4	0,25	24	CF: Centering bars longitudinal HTL encoder
-12W1	-12X1		10149650	Ölflex Classic 110 CY	4G	4	1,5	12	PT216: Roller conveyor
-12W1	-12X1		10149650	Ölflex Classic 110 CY	4G	4	1,5	10	PT217: Roller conveyor
-12W1	-12X1		10149650	Ölflex Classic 110 CY	4G	4	1,5	10	PT218: Roller conveyor
-12W1	-12X1		10149650	Ölflex Classic 110 CY	4G	4	1,5	12	PT219: Chain conveyor
-12W1	-12X1		10151374	SERVO 719 CY	4G+2x2	8	2,5+1,0	14	PT220: Roller conveyor
-12W1	-12X1		00141815	Ölflex Classic 110 CY	4G	4	2,5	17	PT221: Chain conveyor
-12W1	-12X1		00141815	Ölflex Classic 110 CY	4G	4	2,5	17	PT222: Chain conveyor

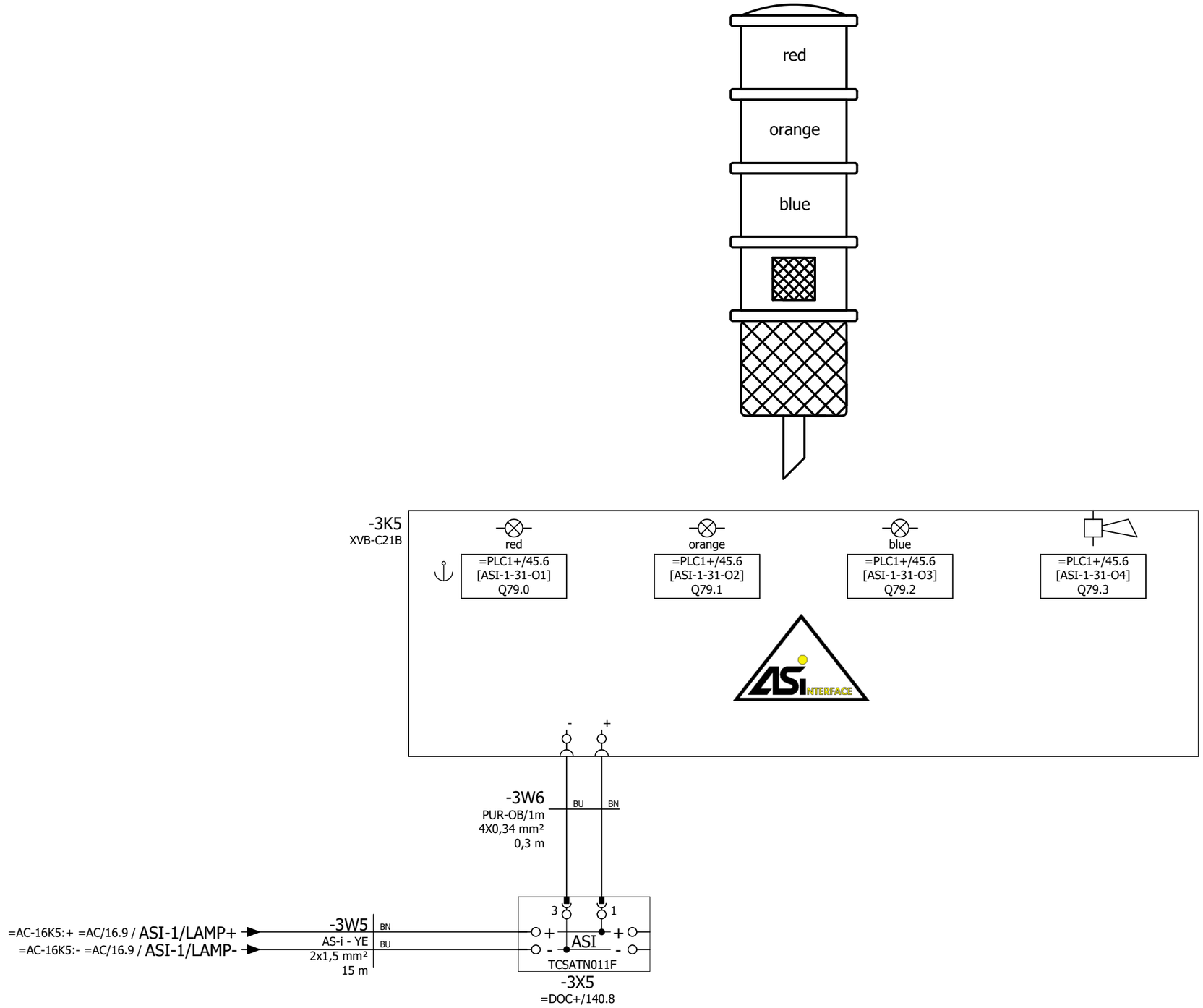
Terminal diagram

Function text	Cable name	Cable type	Strip =CLI1+COP1-X8 Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable name	Cable type	Page / column
CLI1: Shuttle car -> MSK Shulle car at Empty stack receiver			-2F2	OUTX	1	,	+F-X?	?			/10.1
=			+F-X?	?	2		=PLC1-DI2	-X10:11			/10.1
CLI1: Shuttle car -> MSK Shulle car conveyor running at Empty stack receiver			+F-X?	?	3		=PLC1-DI2	-X10:12			/10.2
CLI1: Shuttle car -> MSK Shuttle car conveyor running at full pallet conveyor of palletizer			+F-X?	?	4		=PLC1-DI2	-X10:13			/10.3
CLI1: Shuttle car -> MSK Full pallet transfer to Shuttle car complete			+F-X?	?	5		=PLC1-DI2	-X10:14			/10.4
CLI1: Shuttle car -> MSK Shuttle car running in auto mode (to override forklift detection)			+F-X?	?	6		=PLC1-DI2	-X10:15			/10.5
CLI1: MSK -> Shuttle car Empthy pallet stack needed (Machine in running auto mode)			-12K1	9	7	,	+F-X?	?			/12.2
=			-12K1	5	8	,	+F-X?	?			/12.2
CLI1: MSK -> Shuttle car Empthy pallet stack conveyor running			-12K3	5	9	,	+F-X?	?			/12.3
CLI1: MSK -> Shuttle car Empthy pallet stack transfer complete (Copy sensor state of palletizer empty stack conveyor)			-12K4	5	10	,	+F-X?	?			/12.5
CLI1: MSK -> Shuttle car Full pallet ready to dispatch (Machine in running in auto mode)			-12K5	5	11	,	+F-X?	?			/12.6
CLI1: MSK -> Shuttle car Shuttle car running in auto mode to override forklift detection)			-12K7	5	12	,	+F-X?	?			/12.7

Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
=F+CF -W15B0	=GEN -X7		10149963	Unitronic LiYCY (TP)	3X2X	6	0,25	22	CF: Liftmotor HTL sensor

Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	Cable overview : =F+CF-W15B0 - =F+CF-W15B0	= CLI1	+CF	Page 400
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 11.						



LAMP:
AS-i distribution

LAMP:
Fault

LAMP:
Abnormal condition

LAMP:
Mandatory action

LAMP:
Horn

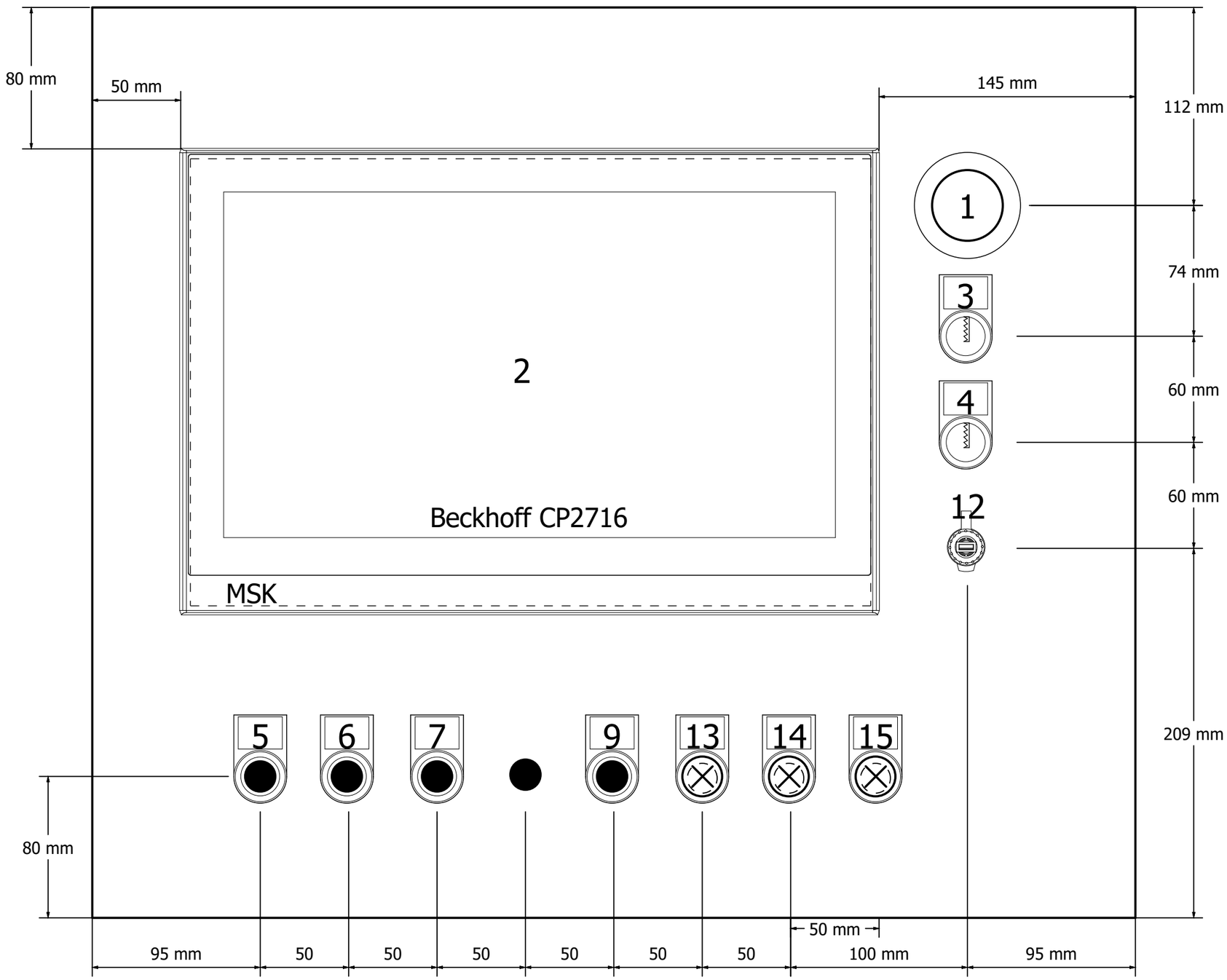
Operating element

Number	Device tag	Function text
1	-5S1	Emergency-stop
2	-4A1	EMSY
3	-5S3	Control voltage off
4	-5S6	Setting mode on
5	-6S1	Reset outside SG
6	-6S2	Reset inside SG Palletizer
7	-6S3	Reset Layer former
9	-5S5	Preselection on
12	-4X1	USB connector
13	-7S1	Request access
14	-7S2	Sheet/Tray OK
15	-7S4	Pallet finished

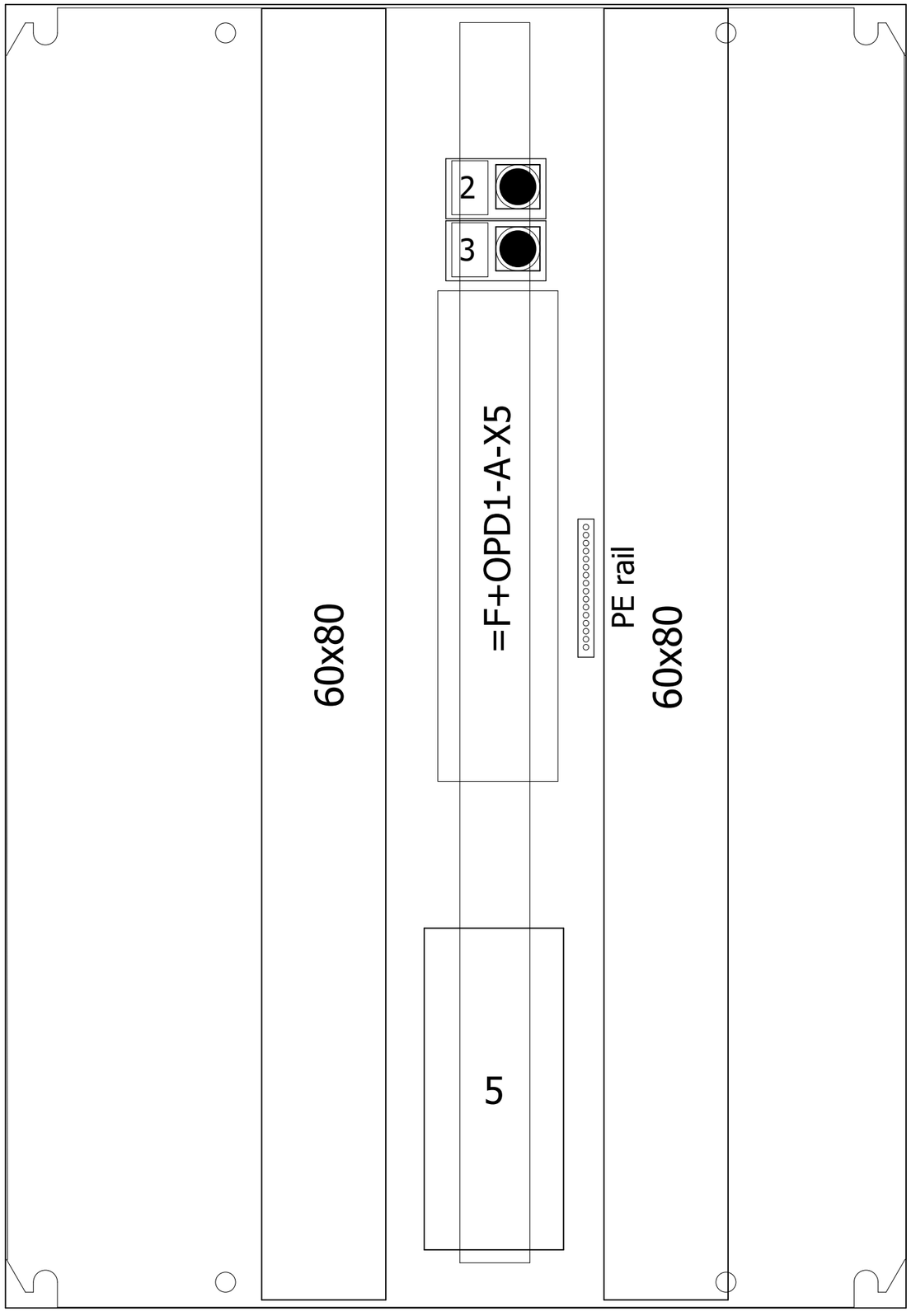
Enclosure legend

Item number	Device tag	Type number
1	-5S1	ZB5-AT4
2	-4A1	CP2716-1013-0010
3	-5S3	ZB5-AG212
4	-5S6	ZB5-AG212
5	-6S1	ZB5-AA6
6	-6S2	ZB5-AA6
7	-6S3	ZB5-AA6
9	-5S5	ZB5-AA2
12	-4X1	4000-73000-015000
13	-7S1	ZB5-AW313
14	-7S2	ZB5-AW313
15	-7S4	ZB5-AW313

+JB1



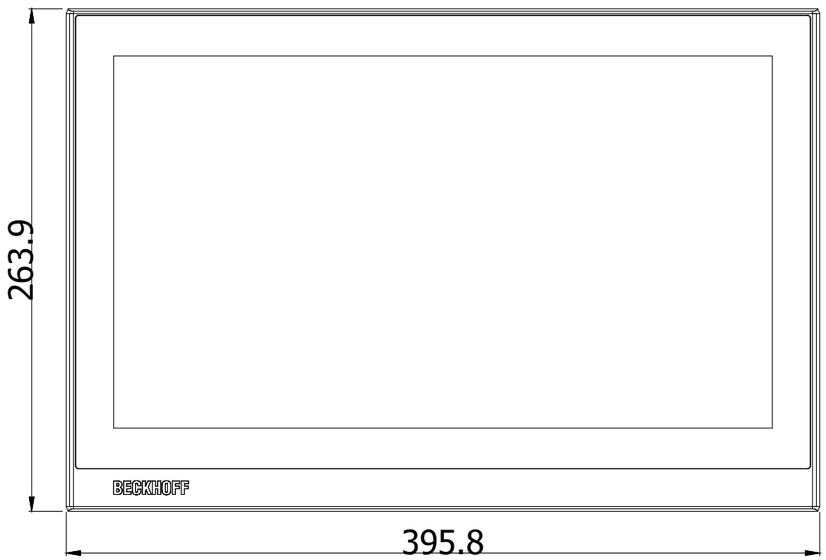
+JB1-U1

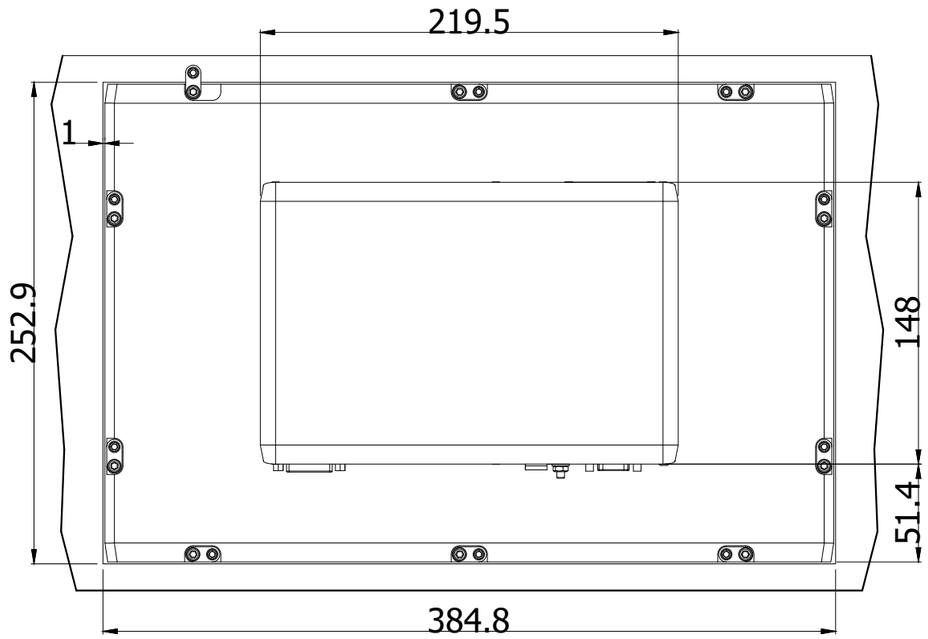


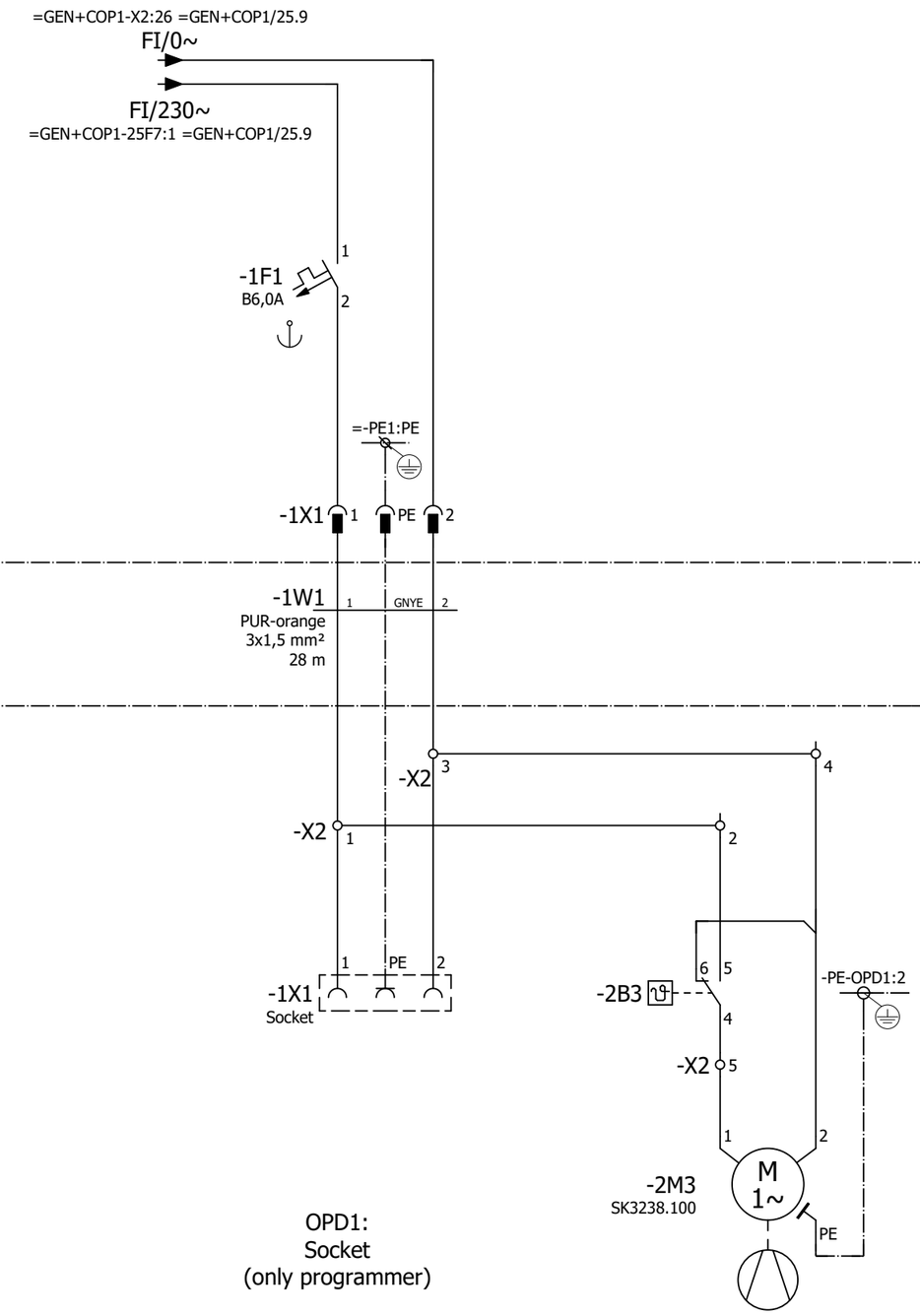
Operating element

Number	Device tag	Function text
2	-5S9	EMSY on
3	-4S2	EMSY Power off
5	-4G1	

Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	OPD1: Operator desk inside	= OPD1	+	Page 2
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 11.						


263.9
BECKHOFF
395.8

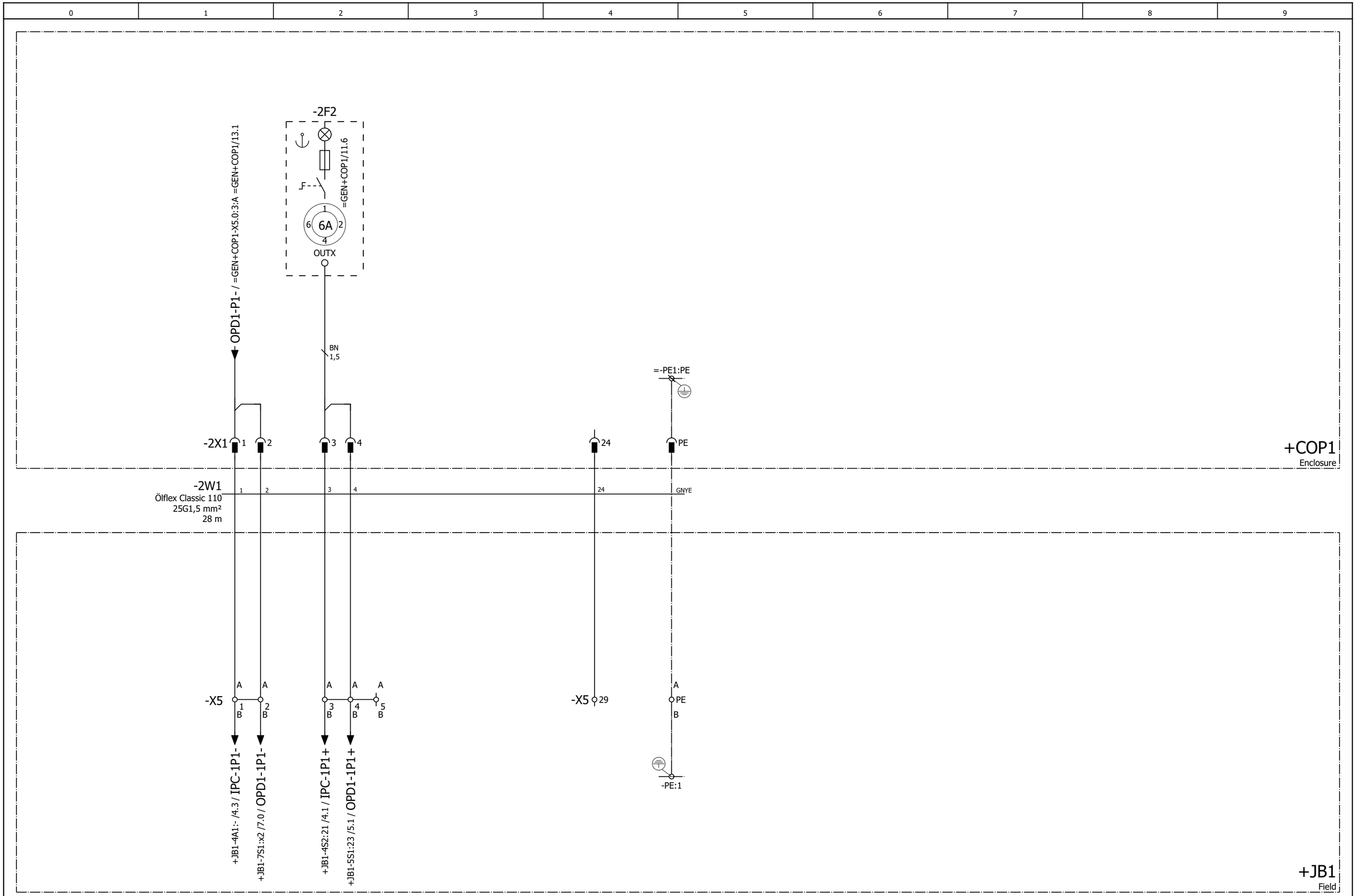

219.5
1
252.9
148
51.4
384.8



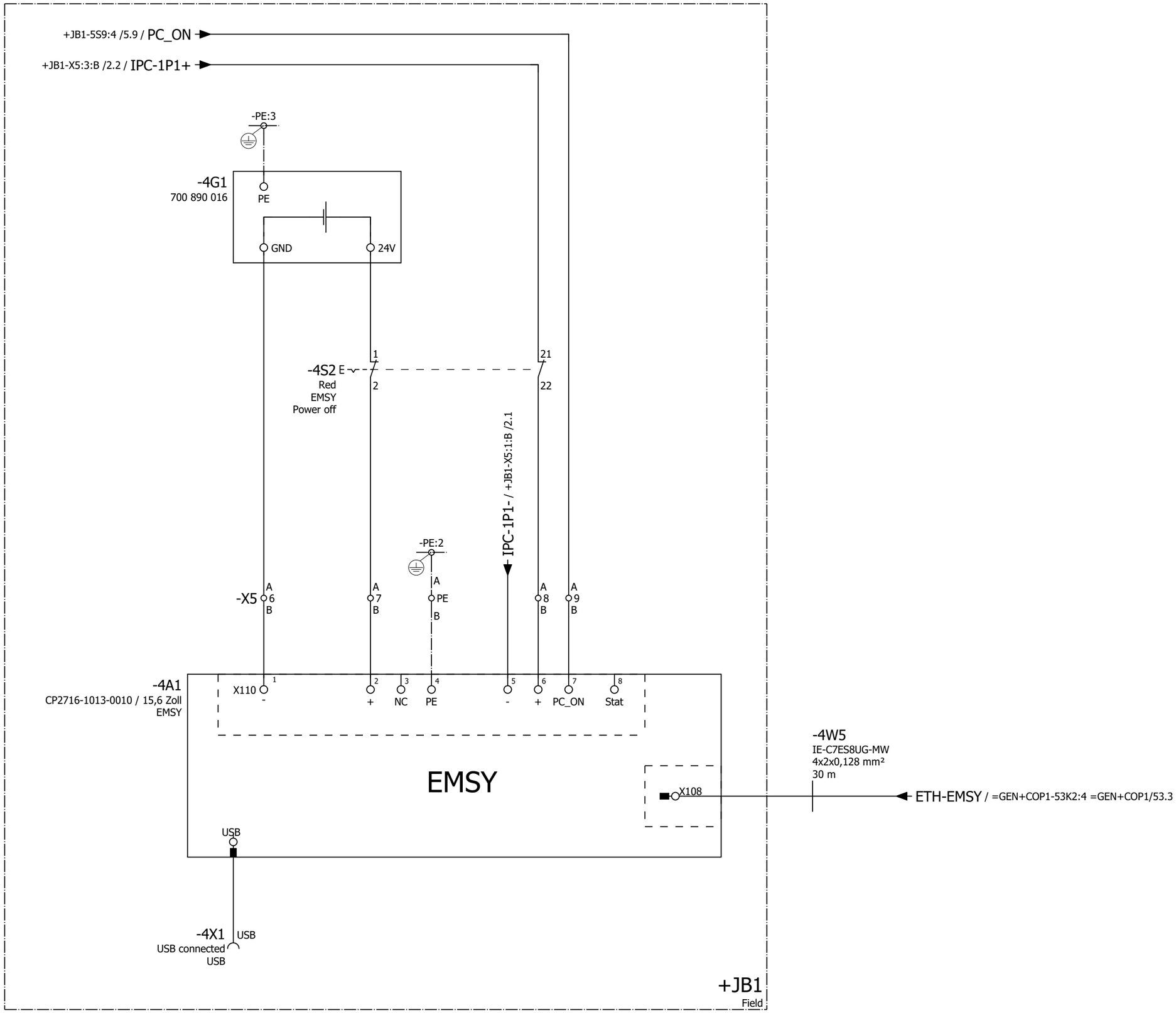
+COP1

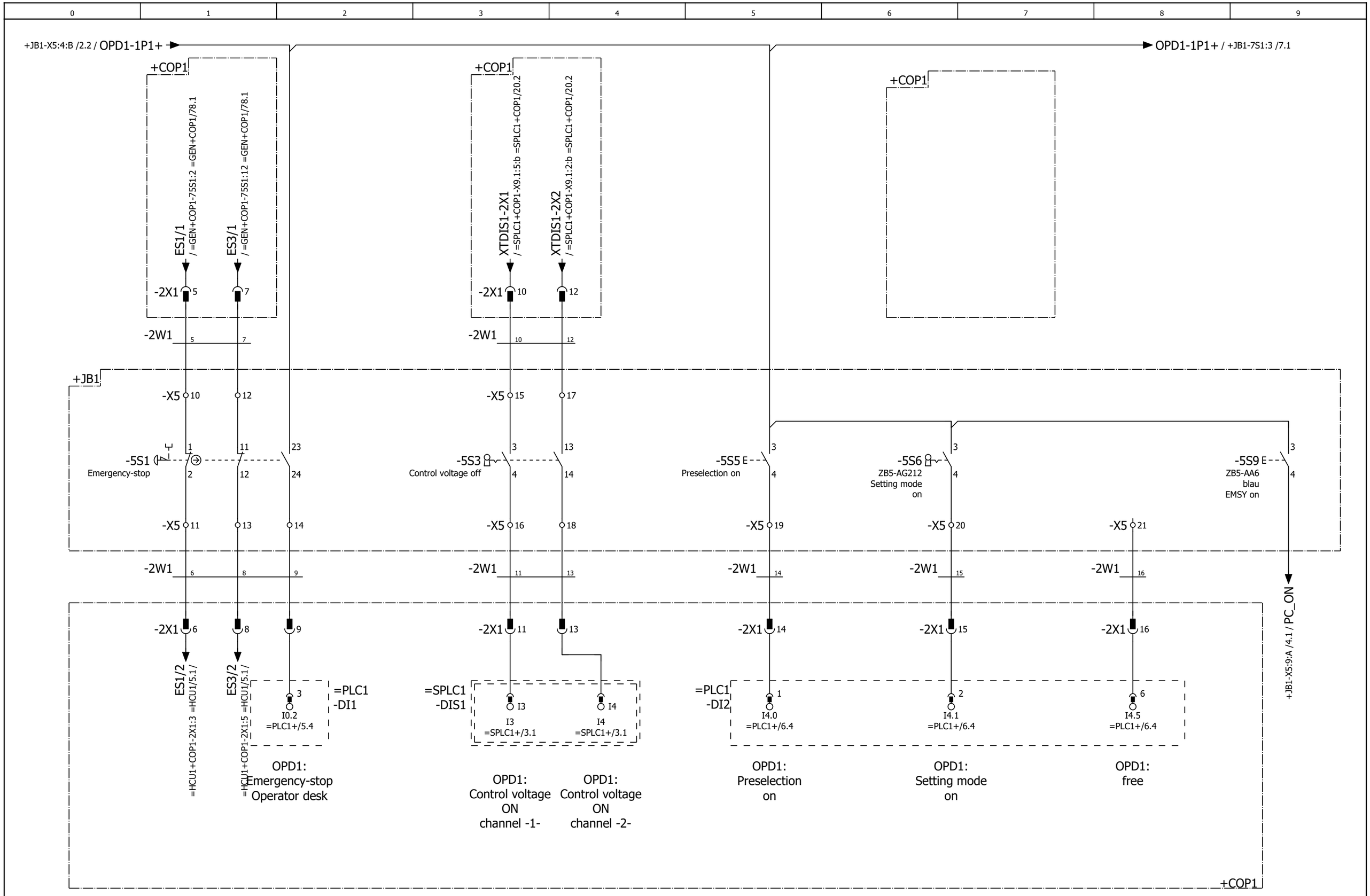
+JB1

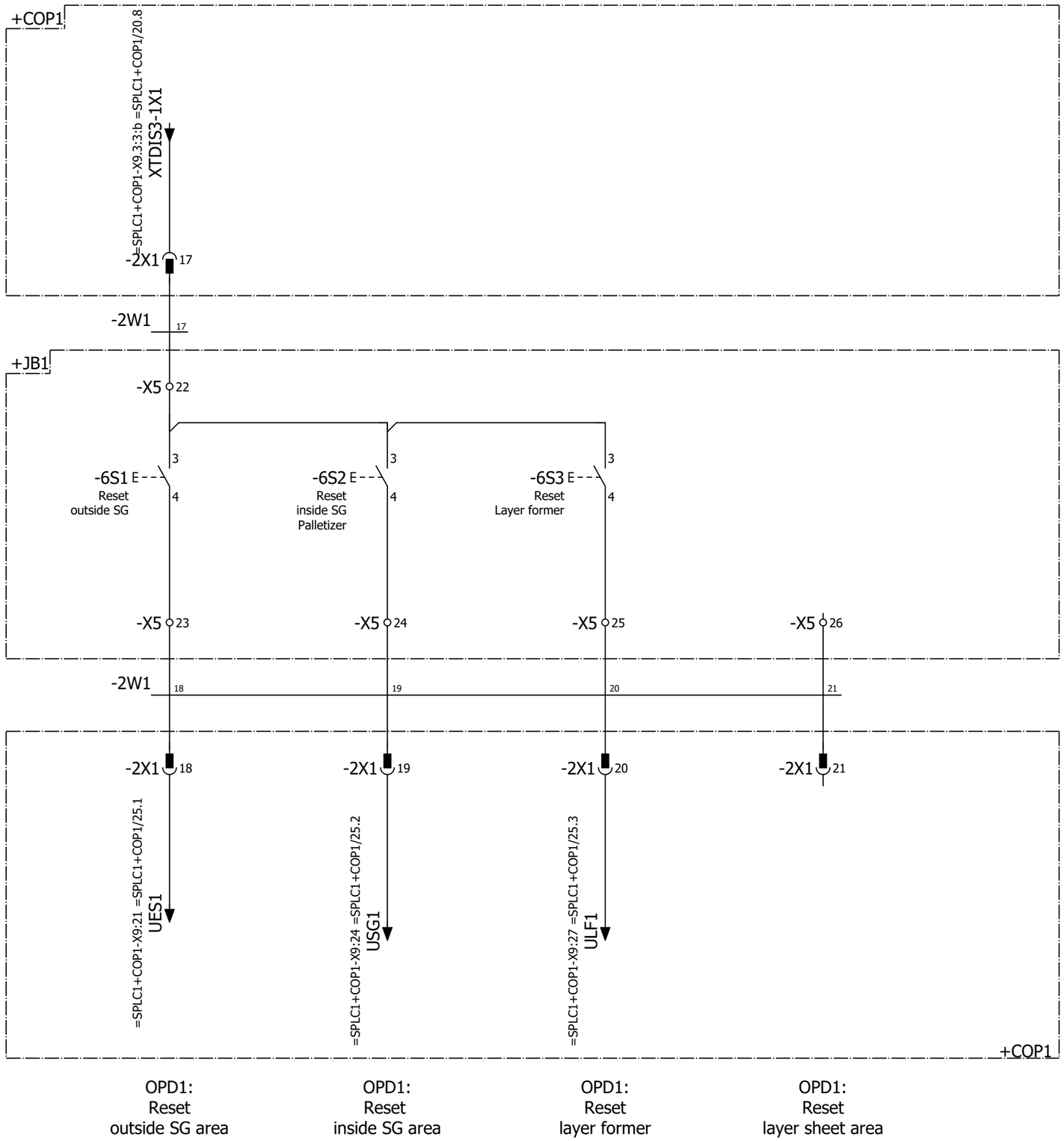
Creator	Ferenc Baracsi	Commission	620300.11.2023	MSK COVERTECH GROUP	OPD1: 230VAC infeed	= OPD1	+F	Page 1
Edited by	BaF	Type	MSK - Semitech			Revision	
Modification date	2023. 10. 11.						

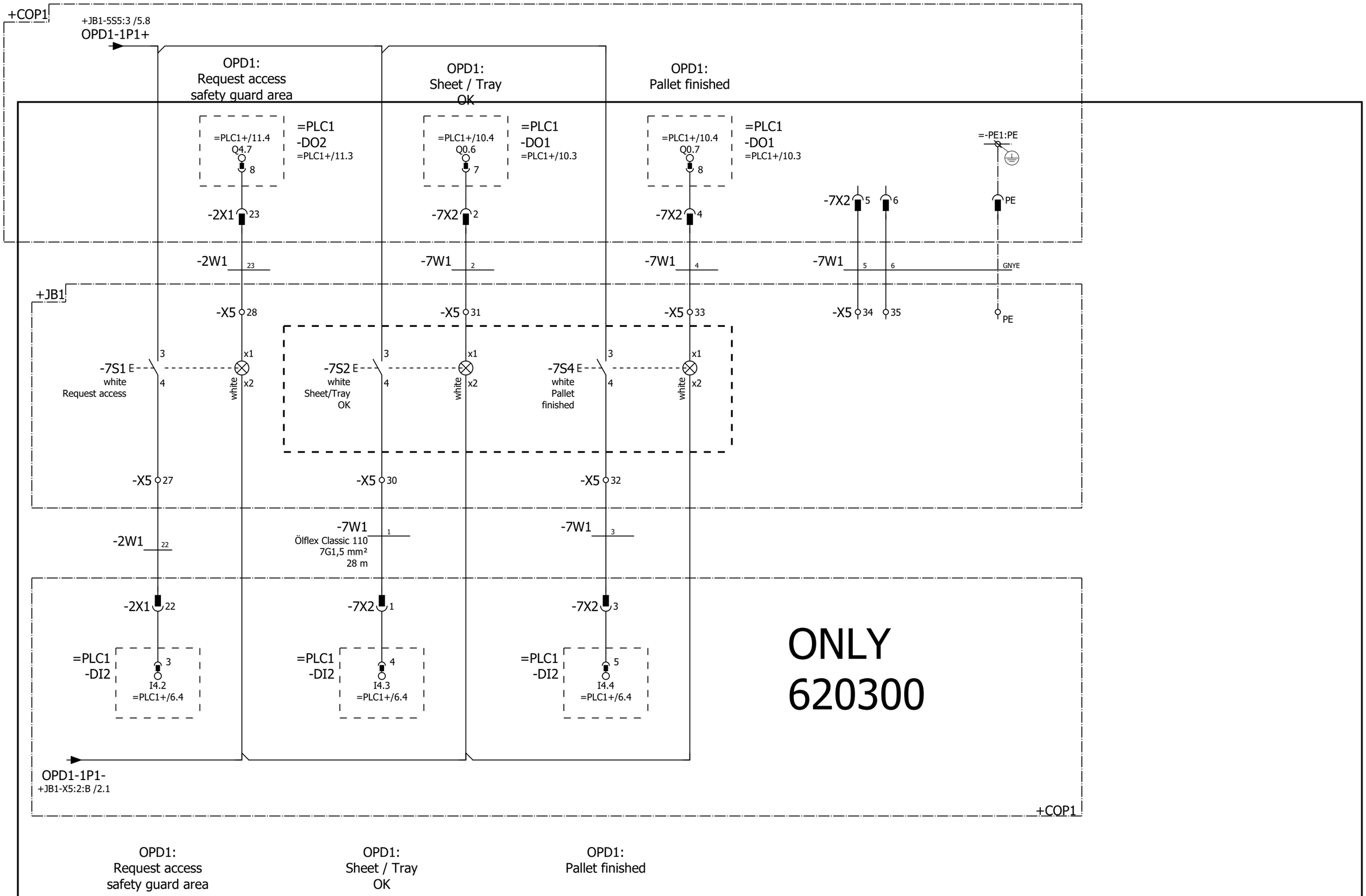


Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	OPD1: 24VDC infeed	= OPD1	+F	Page 2
Edited by	BaF	Type MSK - Semitech			Revision	
Modification date	2023. 10. 11.					


+JB1-5S9:4 /5.9 / PC_ON
+JB1-X5:3:B /2.2 / IPC-1P1+
-PE:3
-4G1
700 890 016
PE
GND
24V
-4S2 E
Red
EMSY
Power off
1
2
21
22
IPC-1P1- / +JB1-X5:1:B /2.1
-PE:2
-X5
A
6
B
A
7
B
A
PE
B
A
8
B
A
9
B
-4A1
CP2716-1013-0010 / 15,6 Zoll
EMSY
X110
-
+
NC
PE
-
+
PC_ON
Stat
EMSY
X108
-4W5
IE-C7ES8UG-MW
4x2x0,128 mm²
30 m
ETH-EMSY / =GEN+COP1-53K2:4 =GEN+COP1/53.3
USB
-4X1
USB
USB connected
USB
+JB1
Field


+JB1-X5:4:B /2.2 / OPD1-1P1+
OPD1-1P1+ / +JB1-7S1:3 /7.1
+COP1
ES1/1
/ =GEN+COP1-7SS1:2 =GEN+COP1/78.1
ES3/1
/ =GEN+COP1-7SS1:12 =GEN+COP1/78.1
-2X1
-2W1
XTDIS1-2X1
/ =SPLC1+COP1-X9.1:5:b =SPLC1+COP1/20.2
XTDIS1-2X2
/ =SPLC1+COP1-X9.1:2:b =SPLC1+COP1/20.2
+JB1
-X5
-5S1
Emergency-stop
-5S3
Control voltage off
-5S5
Preselection on
-5S6
ZB5-AG212
Setting mode
on
-5S9
ZB5-AA6
blau
EMSY on
+JB1-X5:9:A /4.1 / PC_ON
ES1/2
=HCU1+COP1-2X1:3 =HCU1/5.1 /
ES3/2
=HCU1+COP1-2X1:5 =HCU1/5.1 /
=PLC1
-DI1
I0.2
=PLC1+/5.4
OPD1:
Emergency-stop
Operator desk
=SPLC1
-DIS1
I3
=SPLC1+/3.1
I4
=SPLC1+/3.1
OPD1:
Control voltage
ON
channel -1-
OPD1:
Control voltage
ON
channel -2-
=PLC1
-DI2
I4.0
=PLC1+/6.4
OPD1:
Preselection
on
I4.1
=PLC1+/6.4
OPD1:
Setting mode
on
I4.5
=PLC1+/6.4
OPD1:
free
+COP1


+COP1
=SPLC1+COP1-X9:3:3:b =SPLC1+COP1/20.8
XTDIS3-1X1
-2X1 17
-2W1 17
+JB1
-X5 22
-6S1 E
Reset
outside SG
-6S2 E
Reset
inside SG
Palletizer
-6S3 E
Reset
Layer former
3
4
-X5 23
-X5 24
-X5 25
-X5 26
-2W1 18 19 20 21
-2X1 18
-2X1 19
-2X1 20
-2X1 21
=SPLC1+COP1-X9:21 =SPLC1+COP1/25.1
UES1
=SPLC1+COP1-X9:24 =SPLC1+COP1/25.2
USG1
=SPLC1+COP1-X9:27 =SPLC1+COP1/25.3
ULF1
+COP1
OPD1:
Reset
outside SG area
OPD1:
Reset
inside SG area
OPD1:
Reset
layer former
OPD1:
Reset
layer sheet area


+COP1
+JB1-5S5:3 /5.8
OPD1-1P1+
OPD1:
Request access
safety guard area
OPD1:
Sheet / Tray
OK
OPD1:
Pallet finished
=PLC1+/11.4
Q4.7
=PLC1
-DO2
=PLC1+/11.3
=PLC1+/10.4
Q0.6
=PLC1
-DO1
=PLC1+/10.3
=PLC1+/10.4
Q0.7
=PLC1
-DO1
=PLC1+/10.3
=-PE1:PE
-2X1
-7X2
-7X2
-7X2
PE
-2W1
-7W1
-7W1
-7W1
GNYE
+JB1
-X5
-X5
-X5
-X5
-X5
PE
-7S1
white
Request access
-7S2
white
Sheet/Tray
OK
-7S4
white
Pallet
finished
-X5
-X5
-X5
-2W1
-7W1
Ölflex Classic 110
7G1,5 mm²
28 m
-7W1
-2X1
-7X2
-7X2
=PLC1
-DI2
I4.2
=PLC1+/6.4
=PLC1
-DI2
I4.3
=PLC1+/6.4
=PLC1
-DI2
I4.4
=PLC1+/6.4
ONLY
620300
OPD1-1P1-
+JB1-X5:2:B /2.1
+COP1
OPD1:
Request access
safety guard area
OPD1:
Sheet / Tray
OK
OPD1:
Pallet finished

Terminal diagram

Function text										Cable name	Strip =OPD1+JB1-X2						Cable name	-1W1				Page / column
										Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type	PUR-orange 3x1,5 mm²				
OPD1: Socket (only programmer)											-1X1	1	1		+COP1-1X1	1		1				+F/1.1
=											-2B3	5	2									+F/1.3
=											-1X1	2	3		+COP1-1X1	2		2				+F/1.2
OPD1: Fan											-2M3	2	4									+F/1.3
OPD1: Socket (only programmer)											-2M3	1	5		-2B3	4						+F/1.3

Terminal diagram

Function text										Cable name	Strip =OPD1+JB1-X5						Cable name	-2W1	-7W1			Page / column
										Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type	Öflex Classic 110 25G1,5 mm²	Öflex Classic 110 7G1,5 mm²			
											-4A1	-	1		+COP1-2X1	1		1				+F/2.1
											-7S1	x2	2		+COP1-2X1	2		2				+F/2.1
											-4S2	21	3		+COP1-2X1	3		3				+F/2.2
											-5S1	23	4		+COP1-2X1	4		4				+F/2.2
													5									+F/2.2
											-4G1		6		-4A1	-						+F/4.1
											-4A1	+	7		-4S2	2						+F/4.2
											-4A1	+	8		-4S2	22						+F/4.3
											-5S9	4	9		-4A1	PC_ON						+F/4.3
OPD1: Emergency-stop Operator desk											-5S1	1	10		+COP1-2X1	5		5				+F/5.1
=											-5S1	2	11		+COP1-2X1	6		6				+F/5.1
=											-5S1	11	12		+COP1-2X1	7		7				+F/5.1
=											-5S1	12	13		+COP1-2X1	8		8				+F/5.1
=											-5S1	24	14		+COP1-2X1	9		9				+F/5.2
OPD1: Control voltage ON channel -1-											-5S3	3	15		+COP1-2X1	10		10				+F/5.3
=											-5S3	4	16		+COP1-2X1	11		11				+F/5.3
OPD1: Control voltage off											-5S3	13	17		+COP1-2X1	12		12				+F/5.4
=											-5S3	14	18		+COP1-2X1	13		13				+F/5.4
OPD1: Preselection on											-5S5	4	19		+COP1-2X1	14		14				+F/5.5
OPD1: Setting mode on											-5S6	4	20		+COP1-2X1	15		15				+F/5.6
OPD1: free													21		+COP1-2X1	16		16				+F/5.8
OPD1: Reset outside SG area											-6S1	3	22		+COP1-2X1	17		17				+F/6.1
=											-6S1	4	23		+COP1-2X1	18		18				+F/6.1
OPD1: Reset inside SG area											-6S2	4	24		+COP1-2X1	19		19				+F/6.2
OPD1: Reset layer former											-6S3	4	25		+COP1-2X1	20		20				+F/6.3
OPD1: Reset layer sheet area													26		+COP1-2X1	21		21				+F/6.4
OPD1: Request access safety guard area											-7S1	4	27		+COP1-2X1	22		22				+F/7.1
=											-7S1	x1	28		+COP1-2X1	23		23				+F/7.1
OPD1: Spare													29		+COP1-2X1	24		24				+F/2.4
OPD1: Sheet / Tray OK											-7S2	4	30		+COP1-7X2	1			1			+F/7.2
=											-7S2	x1	31		+COP1-7X2	2			2			+F/7.3
OPD1: Pallet finished											-7S4	4	32		+COP1-7X2	3			3			+F/7.4
=											-7S4	x1	33		+COP1-7X2	4			4			+F/7.4
=													34		+COP1-7X2	5			5			+F/7.6
=													35		+COP1-7X2	6			6			+F/7.6

Terminal diagram

Function text	Cable name	Cable type	Strip =OPD1+JB1-X5 Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable name	Cable type	-2W1 Öliflex Classic 110 25G1,5 mm²	-7W1 Öliflex Classic 110 7G1,5 mm²			Page / column
PE			-PE	1	PE		+COP1-2X1	PE			GNYE				+F/2.4
			-4A1	PE	PE		-PE	2							+F/4.2
OPD1: Pallet finished					PE		+COP1-7X2	PE				GNYE			+F/7.7

Plug diagram

Function text									-1W1	Cable name	Strip designation =OPD1+COP1-1X1							Cable name					Page / column
									PUR-orange 3x1,5 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					
OPD1: Socket (only programmer)									1		+JB1-X2	1	1			-1F1	2						+F/1.1
=									2		+JB1-X2	3	2			=GEN-X2	26						+F/1.2
													3										
													4										
													5										
													6										
OPD1: Socket (only programmer)									GNYE		+JB1-1X1	PE	PE			-PE1	PE						+F/1.1

Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	Plug diagram =OPD1+COP1-1X1	= OPD1	+PLG	Page 300
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 11.						

Plug diagram

Function text									-2W1	Cable name	Strip designation =OPD1+COP1-2X1							Cable name					
									Ölflex Classic 110 25G1,5 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					Page / column
									1		+JB1-X5	1:A	1			=GEN-X5.0	3:A						+F/2.1
									2		+JB1-X5	2:A	2			-2X1	1						+F/2.1
									3		+JB1-X5	3:A	3			-2F2	OUTX						+F/2.2
									4		+JB1-X5	4:A	4			-2X1	3						+F/2.2
OPD1: Emergency-stop Operator desk									5		+JB1-X5	10	5			=GEN-75S1	2						+F/5.1
=									6		+JB1-X5	11	6			=HCU1-2X1	3						+F/5.1
=									7		+JB1-X5	12	7			=GEN-75S1	12						+F/5.1
=									8		+JB1-X5	13	8			=HCU1-2X1	5						+F/5.1
=									9		+JB1-X5	14	9		I0.2	=PLC1-DI1	-X10:3						+F/5.2
OPD1: Control voltage ON channel -1-									10		+JB1-X5	15	10			=SPLC1-X9.1	5:b						+F/5.3
=									11		+JB1-X5	16	11		I3	=SPLC1-DIS1	I3						+F/5.3
OPD1: Control voltage off									12		+JB1-X5	17	12			=SPLC1-X9.1	2:b						+F/5.4
=									13		+JB1-X5	18	13		I4	=SPLC1-DIS1	I4						+F/5.4
OPD1: Preselection on									14		+JB1-X5	19	14		I4.0	=PLC1-DI2	-X10:1						+F/5.5
OPD1: Setting mode on									15		+JB1-X5	20	15		I4.1	=PLC1-DI2	-X10:2						+F/5.6
OPD1: free									16		+JB1-X5	21	16		I4.5	=PLC1-DI2	-X10:6						+F/5.8
OPD1: Reset outside SG area									17		+JB1-X5	22	17			=SPLC1-X9.3	3:b						+F/6.1
=									18		+JB1-X5	23	18		I17	=SPLC1-X9	21						+F/6.1
OPD1: Reset inside SG area									19		+JB1-X5	24	19		I18	=SPLC1-X9	24						+F/6.2
OPD1: Reset layer former									20		+JB1-X5	25	20		I19	=SPLC1-X9	27						+F/6.3
OPD1: Reset layer sheet area									21		+JB1-X5	26	21										+F/6.4
OPD1: Request access safety guard area									22		+JB1-X5	27	22		I4.2	=PLC1-DI2	-X10:3						+F/7.1
=									23		+JB1-X5	28	23		Q4.7	=PLC1-DO2	-X10:8						+F/7.1
OPD1: Spare									24		+JB1-X5	29	24										+F/2.4
PE									GNYE		+JB1-X5	PE:A	PE			-PE1	PE						+F/2.4

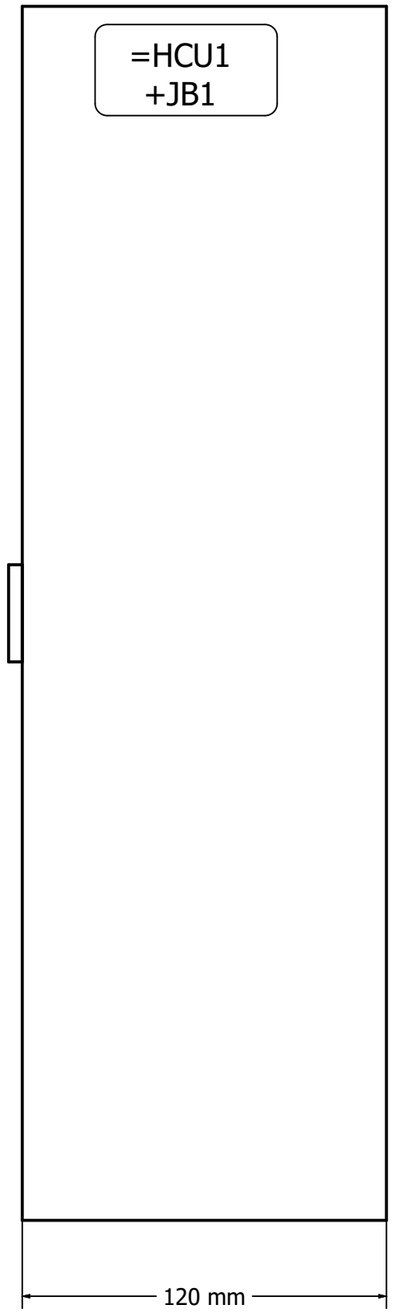
Plug diagram

Function text									-7W1	Cable name	Strip designation =OPD1+COP1-7X2							Cable name					
									Ölflex Classic 110 7G1,5 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					Page / column
OPD1: Sheet / Tray OK									1		+JB1-X5	30	1		I4.3	=PLC1-DI2	-X10:4						+F/7.2
=									2		+JB1-X5	31	2		Q0.6	=PLC1-DO1	-X10:7						+F/7.3
OPD1: Pallet finished									3		+JB1-X5	32	3		I4.4	=PLC1-DI2	-X10:5						+F/7.4
=									4		+JB1-X5	33	4		Q0.7	=PLC1-DO1	-X10:8						+F/7.4
=									5		+JB1-X5	34	5										+F/7.6
=									6		+JB1-X5	35	6										+F/7.6
=									GNYE		+JB1-X5	PE	PE			-PE1	PE						+F/7.7

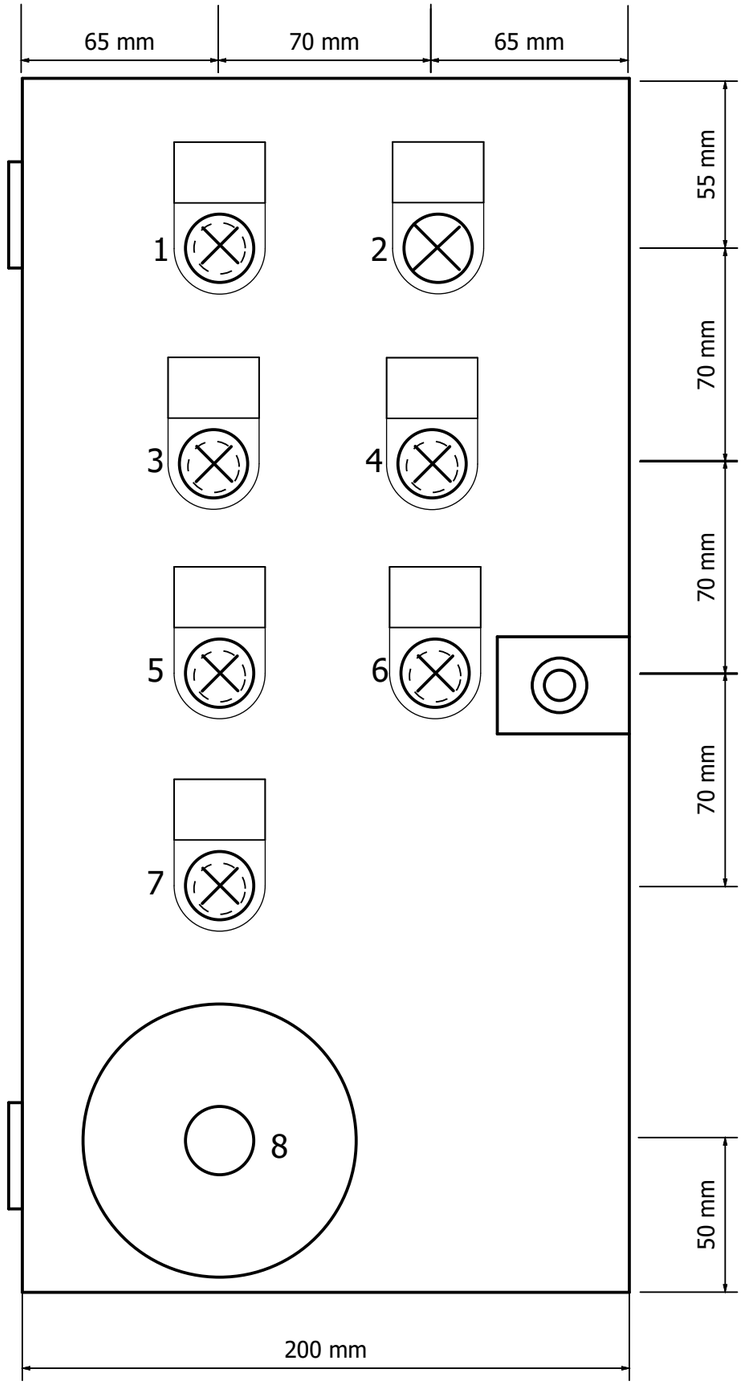
Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
-1W1	-1X1	-X2	10047409	PUR-orange	3	3	1,5	28	OPD1: Socket (only programmer)
-2W1	-2X1	-X5	00060993	Ölflex Classic 110	25G	25	1,5	28	OPD1: 24VDC infeed -1-
-4W5			10150516	IE-C7ES8UG-MW	4x2	1	0,128	30	OPD1: Ethernet/IP EMSY
-7W1	-7X2	-X5	00067136	Ölflex Classic 110	7G	7	1,5	28	OPD1: 24VDC -2-

on the Layer former
- front -



=HCU1
+JB1
EB 1550.500
Connected at the back

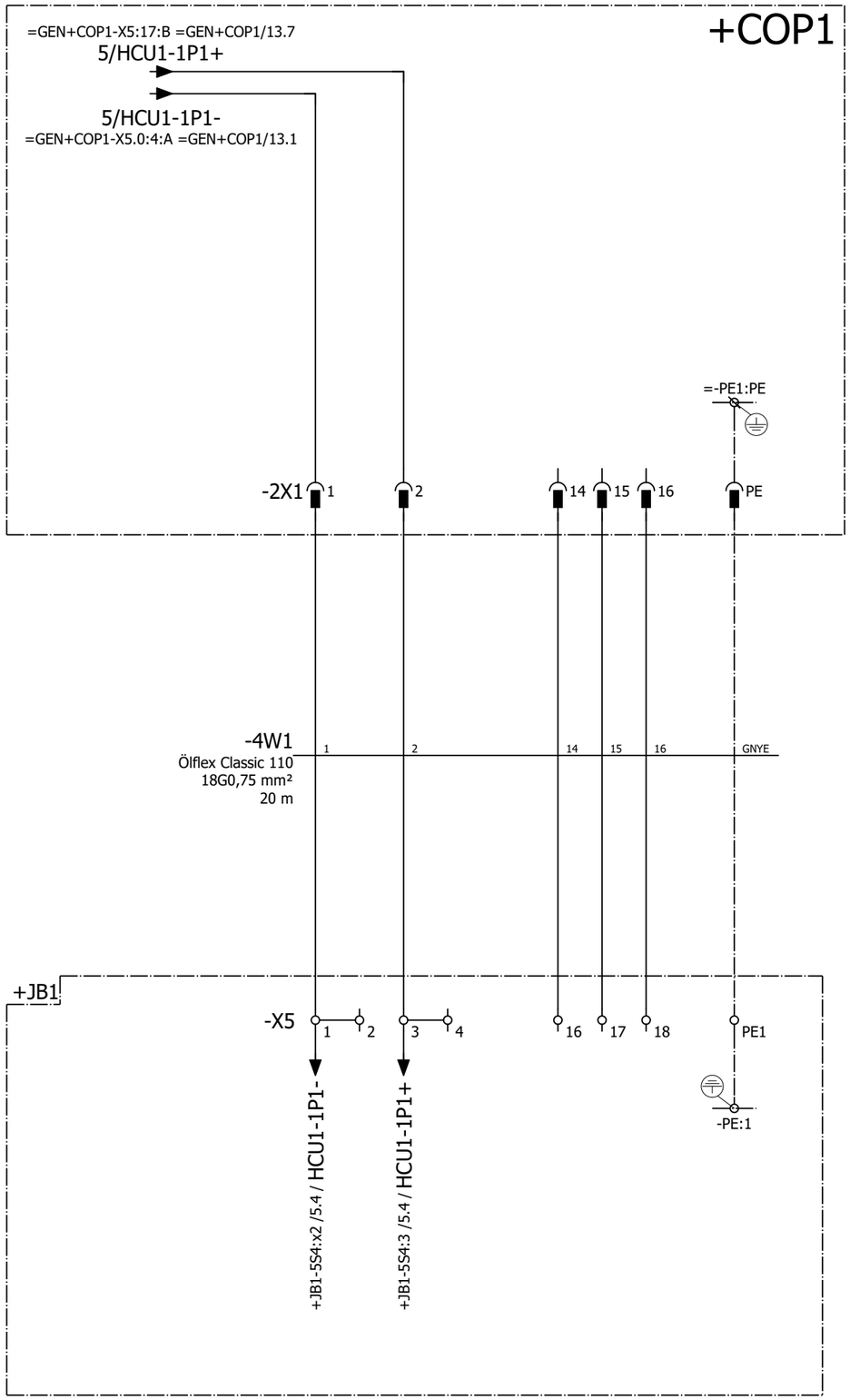


Operating element

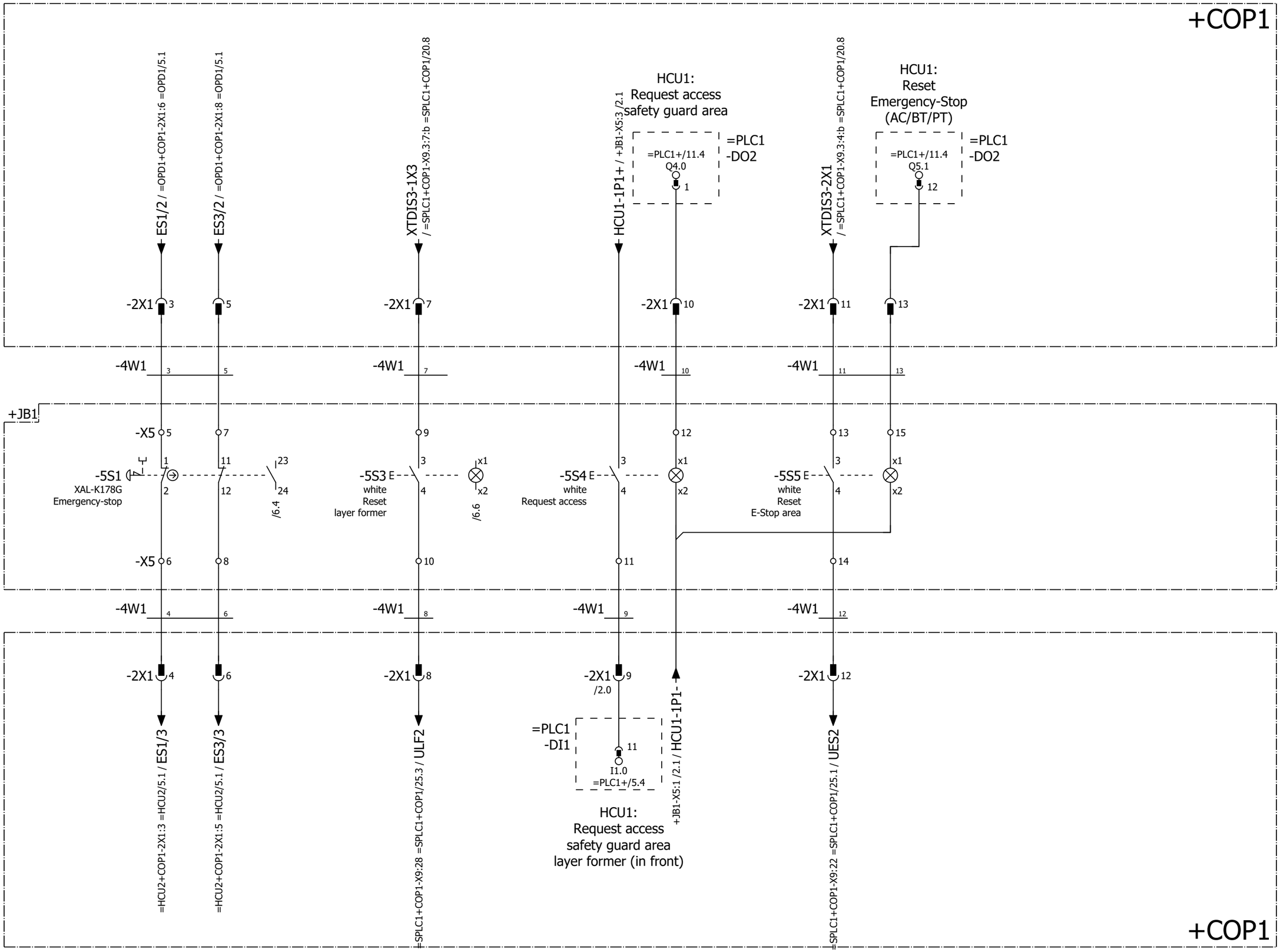
Number	Device tag	Function text
1	-6S2	Reset fault
2	-6P8	Fault
3	-6S3	Automatic on
4	-6S1	Start/Stop automatic
5	-5S3	Reset layer former
6	-5S4	Request access
7	-5S5	Reset E-Stop area
8	-5S1	Emergency-stop

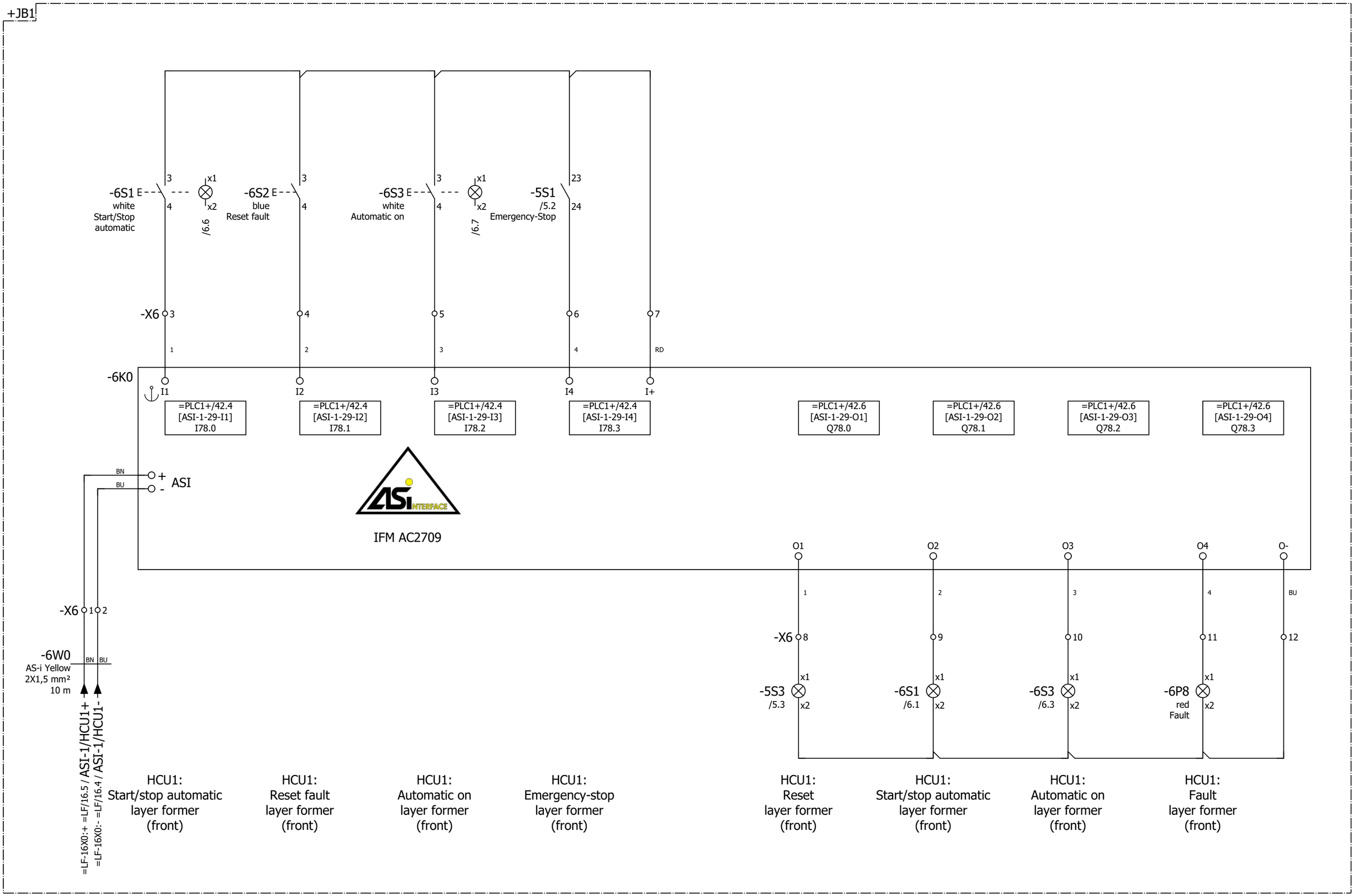
Enclosure legend

Item number	Device tag	Type number
1	-6S2	ZB5-AA6
2	-6P8	ZB5-AV043
3	-6S3	ZB5-AW313
4	-6S1	ZB5-AW313
5	-5S3	ZB5-AW313
6	-5S4	ZB5-AW313
7	-5S5	ZB5-AW313
8	-5S1	ZB5-AT4



Creator	Ferenc Baracsi	Commission	620300.11.2023	HCU1: Control elements	= HCU1	+F	Page 2
Edited by	BaF	Type	MSK - Semitech		Revision		
Modification date	2023. 10. 30.						


+COP1
ES1/2 / =OPD1+COP1-2X1:6 =OPD1/5.1
ES3/2 / =OPD1+COP1-2X1:8 =OPD1/5.1
XTDIS3-1X3 / =SPLC1+COP1-X9.3:7:b =SPLC1+COP1/20.8
HCU1-1P1+ / +JB1-X5:3 /2.1
HCU1:
Request access
safety guard area
=PLC1+/11.4
Q4.0
=PLC1
-DO2
XTDIS3-2X1 / =SPLC1+COP1-X9.3:4:b =SPLC1+COP1/20.8
HCU1:
Reset
Emergency-Stop
(AC/BT/PT)
=PLC1+/11.4
Q5.1
=PLC1
-DO2
-2X1
-4W1
+JB1
-X5
-5S1
XAL-K178G
Emergency-stop
/6.4
-5S3
white
Reset
layer former
/6.6
-5S4
white
Request access
-5S5
white
Reset
E-Stop area
=HCU2+COP1-2X1:3 =HCU2/5.1 / ES1/3
=HCU2+COP1-2X1:5 =HCU2/5.1 / ES3/3
=SPLC1+COP1-X9:28 =SPLC1+COP1/25.3 / ULF2
/2.0
=PLC1
-DI1
I1.0
=PLC1+/5.4
+JB1-X5:1 /2.1 / HCU1-1P1-
HCU1:
Request access
safety guard area
layer former (in front)
=SPLC1+COP1-X9:22 =SPLC1+COP1/25.1 / UES2
+COP1


+JB1
-6S1 E
white
Start/Stop
automatic
/6.6
-6S2 E
blue
Reset fault
-6S3 E
white
Automatic on
/6.7
-5S1
/5.2
Emergency-Stop
-X6
-6K0
I1
I2
I3
I4
I+
=PLC1+/42.4
[ASI-1-29-I1]
I78.0
=PLC1+/42.4
[ASI-1-29-I2]
I78.1
=PLC1+/42.4
[ASI-1-29-I3]
I78.2
=PLC1+/42.4
[ASI-1-29-I4]
I78.3
=PLC1+/42.6
[ASI-1-29-O1]
Q78.0
=PLC1+/42.6
[ASI-1-29-O2]
Q78.1
=PLC1+/42.6
[ASI-1-29-O3]
Q78.2
=PLC1+/42.6
[ASI-1-29-O4]
Q78.3
ASI
IFM AC2709
O1
O2
O3
O4
O-
-6W0
AS-i Yellow
2X1,5 mm²
10 m
=LF-16X0:+ =LF/16.5 / ASI-1/HCU1+
=LF-16X0:- =LF/16.4 / ASI-1/HCU1-
-5S3
/5.3
-6S1
/6.1
-6S3
/6.3
-6P8
red
Fault
HCU1:
Start/stop automatic
layer former
(front)
HCU1:
Reset fault
layer former
(front)
HCU1:
Automatic on
layer former
(front)
HCU1:
Emergency-stop
layer former
(front)
HCU1:
Reset
layer former
(front)
HCU1:
Start/stop automatic
layer former
(front)
HCU1:
Automatic on
layer former
(front)
HCU1:
Fault
layer former
(front)

Terminal diagram

Function text									-4W1	Cable name	Strip =HCU1+JB1-X5						Cable name	-4W1				Page / column
									Ölflex Classic 110 18G0,75 mm²	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type	Ölflex Classic 110 18G0,75 mm²				
											-5S4	x2	1		+COP1-2X1	1		1				+F/2.1
											-5S5	x2										
													2									+F/2.1
											-5S4	3	3		+COP1-2X1	2		2				+F/2.1
													4									+F/2.2
											-5S1	1	5		+COP1-2X1	3		3				+F/5.1
											-5S1	2	6		+COP1-2X1	4		4				+F/5.1
											-5S1	11	7		+COP1-2X1	5		5				+F/5.1
											-5S1	12	8		+COP1-2X1	6		6				+F/5.1
											-5S3	3	9		+COP1-2X1	7		7				+F/5.3
											-5S3	4	10		+COP1-2X1	8		8				+F/5.3
HCU1: Request access safety guard area layer former (in front)											-5S4	4	11		+COP1-2X1	9		9				+F/5.4
HCU1: Request access safety guard area											-5S4	x1	12		+COP1-2X1	10		10				+F/5.4
=											-5S5	3	13		+COP1-2X1	11		11				+F/5.5
HCU1: Reset Emergency-Stop (AC/BT/PT)											-5S5	x1	15		+COP1-2X1	13		13				+F/5.6
HCU1: Request access safety guard area											-5S5	4	14		+COP1-2X1	12		12				+F/5.5
													16		+COP1-2X1	14		14				+F/2.2
													17		+COP1-2X1	15		15				+F/2.2
													18		+COP1-2X1	16		16				+F/2.2
									GNYE		+COP1-2X1	PE	PE1		-PE	1						+F/2.3

Terminal diagram

Function text									-6W0	Cable name	Strip =HCU1+JB1-X6						Cable name					Page / column
									AS-i Yellow 2X1,5 mm²	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type					
									BN		=LF+F-16X0	+	1	,	-6K0	+						+F/6.0
									BU		=LF+F-16X0	-	2	,	-6K0	-						+F/6.1
HCU1: Start/stop automatic layer former (front)											-6S1	4	3	,	-6K0	I1						+F/6.1
HCU1: Reset fault layer former (front)											-6S2	4	4	,	-6K0	I2						+F/6.2
HCU1: Automatic on layer former (front)											-6S3	4	5	,	-6K0	I3						+F/6.3
HCU1: Emergency-stop layer former (front)											-5S1	24	6	,	-6K0	I4						+F/6.4
=											-5S1	23	7	,	-6K0	I+						+F/6.4
HCU1: Reset layer former (front)											-5S3	x1	8	,	-6K0	O1						+F/6.6
HCU1: Start/stop automatic layer former (front)											-6S1	x1	9	,	-6K0	O2						+F/6.6
HCU1: Automatic on layer former (front)											-6S3	x1	10	,	-6K0	O3						+F/6.7
HCU1: Fault layer former (front)											-6P8	x1	11	,	-6K0	O4						+F/6.8
=											-6P8	x2	12	,	-6K0	O-						+F/6.9

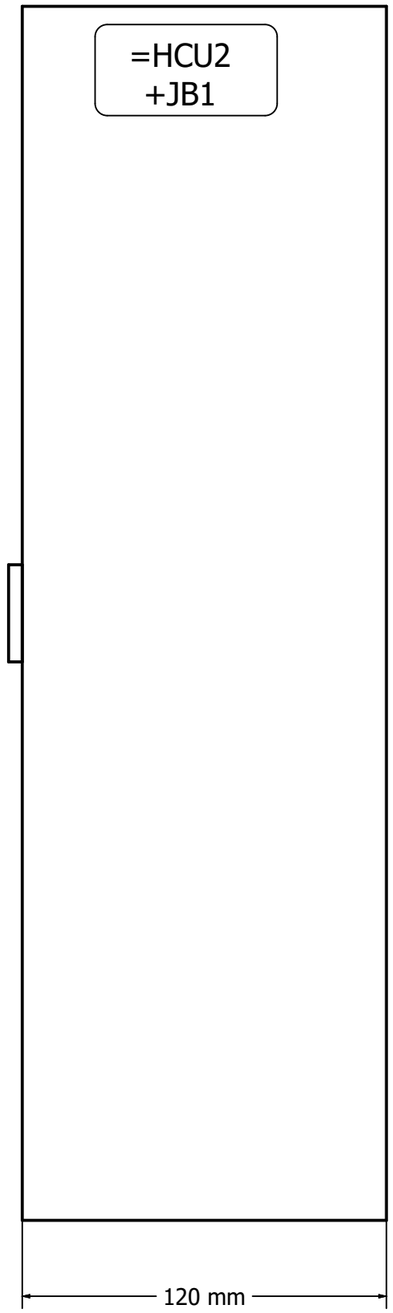
Plug diagram

Function text									-4W1	Cable name	Strip designation =HCU1+COP1-2X1							Cable name					Page / column
									Ölflex Classic 110 18G0,75 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					
									1		+JB1-X5	1	1			=GEN-X5.0	4:A						+F/2.1
									2		+JB1-X5	3	2			=GEN-X5	17:B						+F/2.1
									3		+JB1-X5	5	3			=OPD1-2X1	6						+F/5.1
									4		+JB1-X5	6	4			=HCU2-2X1	3						+F/5.1
									5		+JB1-X5	7	5			=OPD1-2X1	8						+F/5.1
									6		+JB1-X5	8	6			=HCU2-2X1	5						+F/5.1
									7		+JB1-X5	9	7			=SPLC1-X9.3	7:b						+F/5.3
									8		+JB1-X5	10	8		I19	=SPLC1-X9	28						+F/5.3
HCU1: Request access safety guard area layer former (in front)									9		+JB1-X5	11	9		I1.0	=PLC1-DI1	-X10:11						+F/5.4
HCU1: Request access safety guard area									10		+JB1-X5	12	10		Q4.0	=PLC1-DO2	-X10:1						+F/5.4
=									11		+JB1-X5	13	11			=SPLC1-X9.3	4:b						+F/5.5
=									12		+JB1-X5	14	12		I17	=SPLC1-X9	22						+F/5.5
HCU1: Reset Emergency-Stop (AC/BT/PT)									13		+JB1-X5	15	13		Q5.1	=PLC1-DO2	-X10:12						+F/5.6
									14		+JB1-X5	16	14										+F/2.2
									15		+JB1-X5	17	15										+F/2.2
									16		+JB1-X5	18	16										+F/2.2
									GNYE		+JB1-X5	PE1	PE			-PE1	PE						+F/2.3

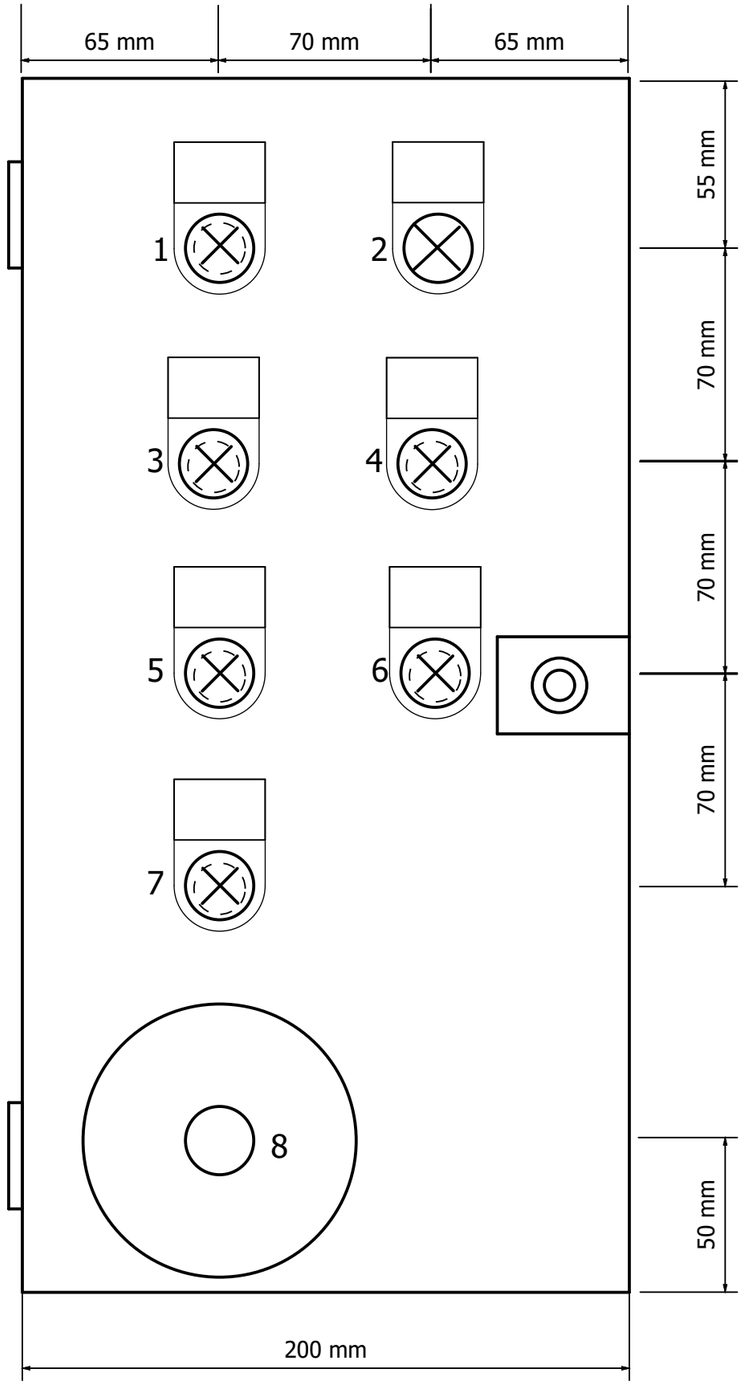
Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
-4W1	-2X1	-X5	00150317	Ölflex Classic 110	18G	17	0,75	20	HCU1: 24VDC infeed
-6W0	-X6		00101677	AS-i Yellow	2X	2	1,5	10	HCU1: ASi infeed

on the Layer former
- left side -



=HCU2
+JB1
EB 1550.500
Connected at the back

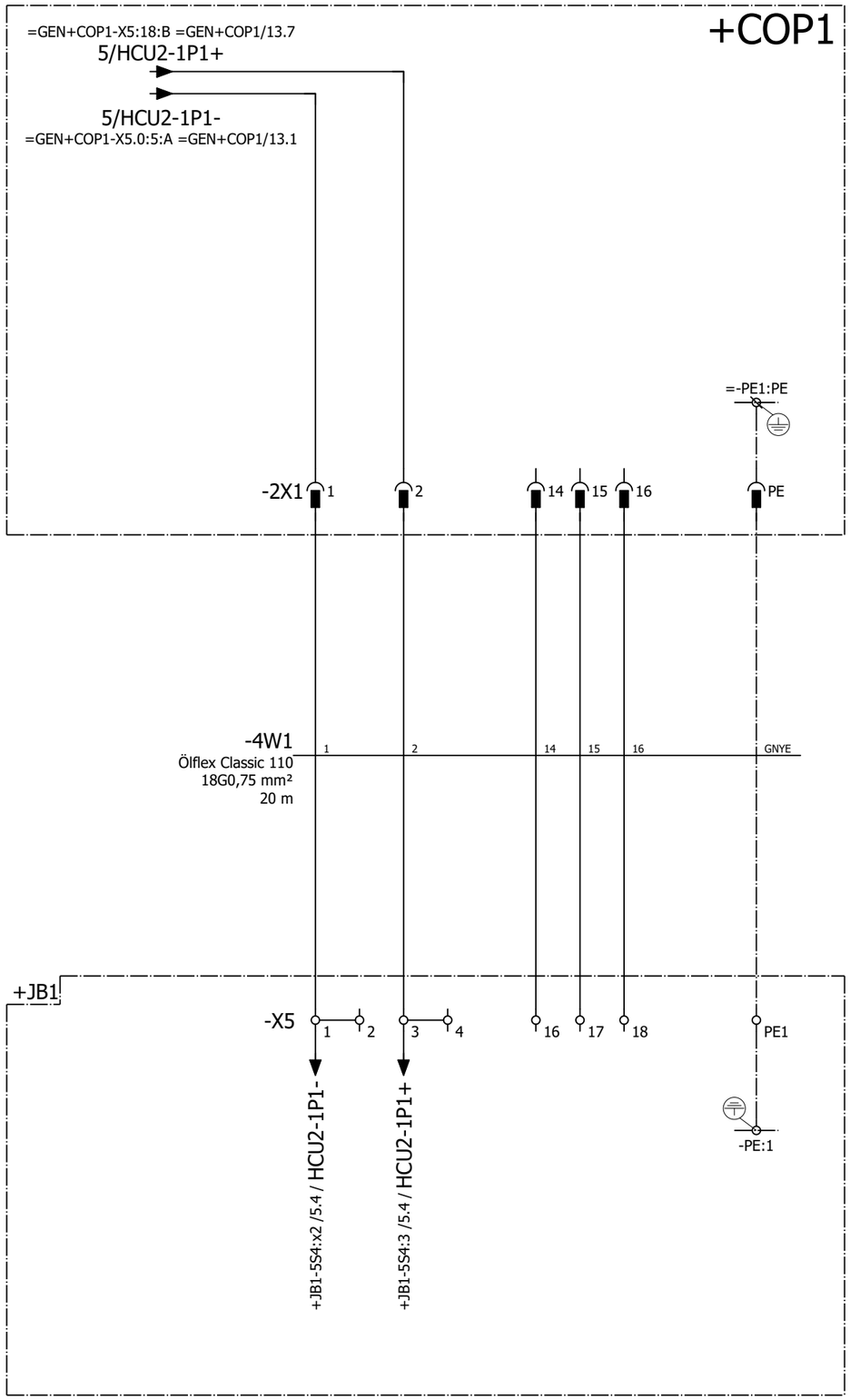


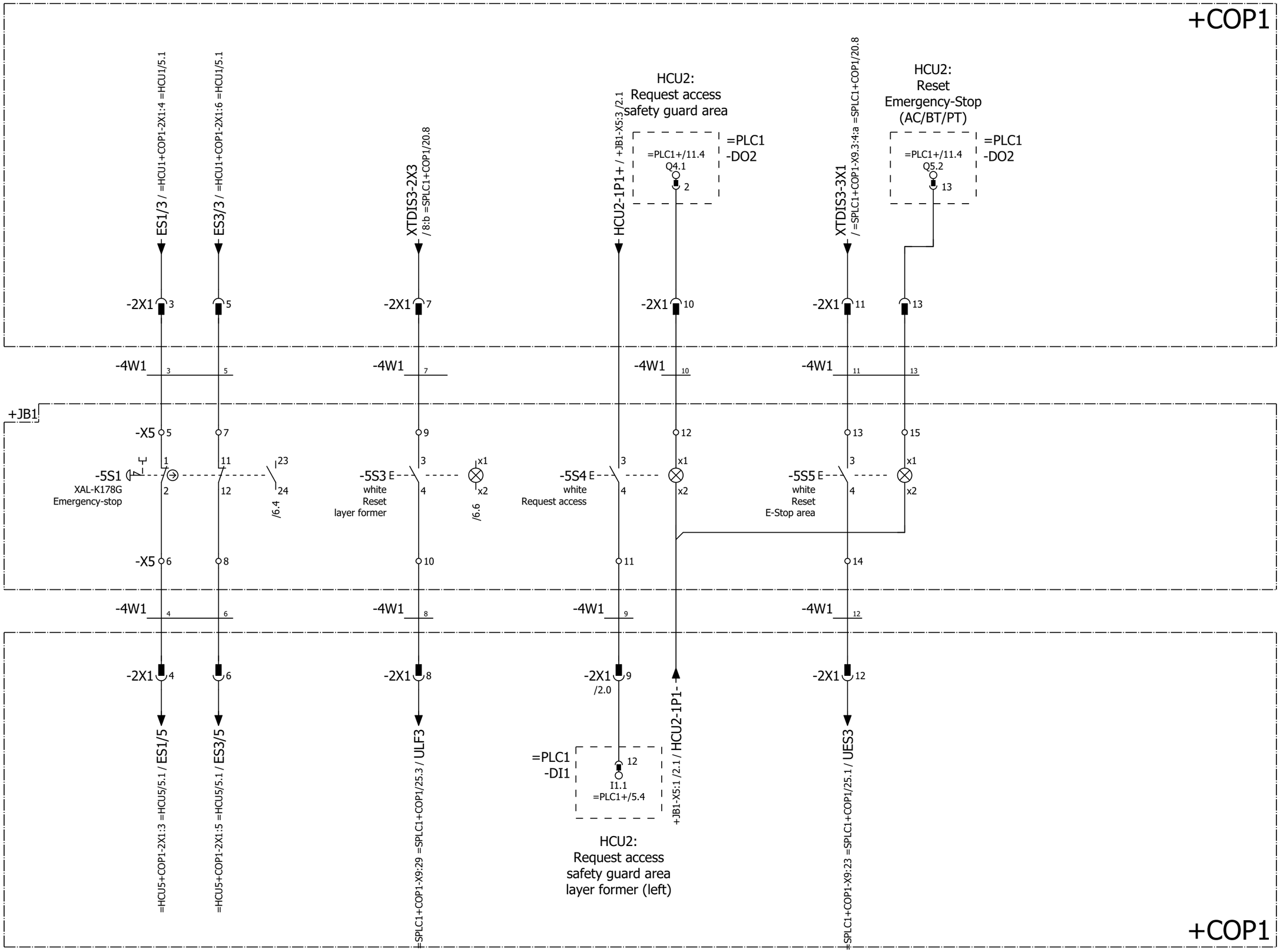
Operating element

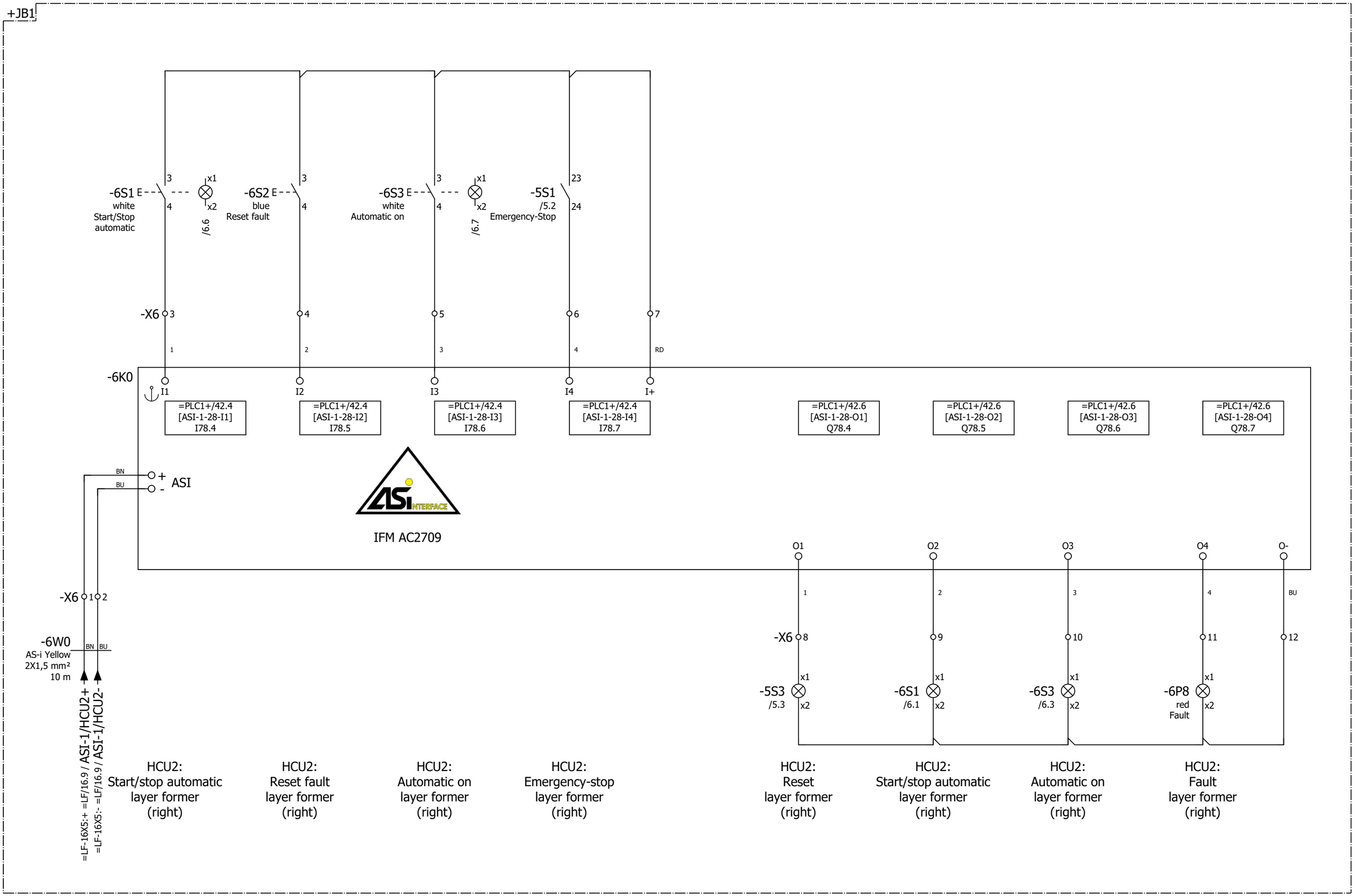
Number	Device tag	Function text
1	-6S2	Reset fault
2	-6P8	Fault
3	-6S3	Automatic on
4	-6S1	Start/Stop automatic
5	-5S3	Reset layer former
6	-5S4	Request access
7	-5S5	Reset E-Stop area
8	-5S1	Emergency-stop

Enclosure legend

Item number	Device tag	Type number
1	-6S2	ZB5-AA6
2	-6P8	ZB5-AV043
3	-6S3	ZB5-AW313
4	-6S1	ZB5-AW313
5	-5S3	ZB5-AW313
6	-5S4	ZB5-AW313
7	-5S5	ZB5-AW313
8	-5S1	ZB5-AT4


+COP1
=GEN+COP1-X5:18:B =GEN+COP1/13.7
5/HCU2-1P1+
5/HCU2-1P1-
=GEN+COP1-X5.0:5:A =GEN+COP1/13.1
=-PE1:PE
-2X1
1
2
14
15
16
PE
-4W1
Ölflex Classic 110
18G0,75 mm²
20 m
GNYE
+JB1
-X5
3
4
17
18
PE1
-PE:1
+JB1-5S4:x2 /5.4 / HCU2-1P1-
+JB1-5S4:3 /5.4 / HCU2-1P1+


+COP1
ES1/3 / =HCU1+COP1-2X1:4 =HCU1/5.1
ES3/3 / =HCU1+COP1-2X1:6 =HCU1/5.1
XTDIS3-2X3
/ 8:b =SPLC1+COP1/20.8
HCU2-1P1+ / +JB1-X5:3 /2.1
HCU2:
Request access
safety guard area
=PLC1
-DO2
=PLC1+/11.4
Q4.1
XTDIS3-3X1
/ =SPLC1+COP1-X9.3:4:a =SPLC1+COP1/20.8
HCU2:
Reset
Emergency-Stop
(AC/BT/PT)
=PLC1+/11.4
Q5.2
-2X1
-4W1
+JB1
-X5
-5S1
XAL-K178G
Emergency-stop
/6.4
-5S3
white
Reset
layer former
/6.6
-5S4
white
Request access
-5S5
white
Reset
E-Stop area
=HCU5+COP1-2X1:3 =HCU5/5.1 / ES1/5
=HCU5+COP1-2X1:5 =HCU5/5.1 / ES3/5
=SPLC1+COP1-X9:29 =SPLC1+COP1/25.3 / ULF3
/2.0
=PLC1
-DI1
I1.1
=PLC1+/5.4
+JB1-X5:1 /2.1 / HCU2-1P1-
HCU2:
Request access
safety guard area
layer former (left)
=SPLC1+COP1-X9:23 =SPLC1+COP1/25.1 / UES3
+COP1


+JB1
-6S1
white
Start/Stop
automatic
/6.6
-6S2
blue
Reset fault
-6S3
white
Automatic on
/6.7
-5S1
/5.2
Emergency-Stop
-X6
-6K0
I1
I2
I3
I4
I+
=PLC1+/42.4
[ASI-1-28-I1]
I78.4
=PLC1+/42.4
[ASI-1-28-I2]
I78.5
=PLC1+/42.4
[ASI-1-28-I3]
I78.6
=PLC1+/42.4
[ASI-1-28-I4]
I78.7
=PLC1+/42.6
[ASI-1-28-O1]
Q78.4
=PLC1+/42.6
[ASI-1-28-O2]
Q78.5
=PLC1+/42.6
[ASI-1-28-O3]
Q78.6
=PLC1+/42.6
[ASI-1-28-O4]
Q78.7
ASI
IFM AC2709
O1
O2
O3
O4
O-
-6W0
AS-i Yellow
2X1,5 mm²
10 m
=LF-16X5:+ =LF/16.9 / ASI-1/HCU2+
=LF-16X5:- =LF/16.9 / ASI-1/HCU2-
-5S3
/5.3
-6S1
/6.1
-6S3
/6.3
-6P8
red
Fault
HCU2:
Start/stop automatic
layer former
(right)
HCU2:
Reset fault
layer former
(right)
HCU2:
Automatic on
layer former
(right)
HCU2:
Emergency-stop
layer former
(right)
HCU2:
Reset
layer former
(right)
HCU2:
Start/stop automatic
layer former
(right)
HCU2:
Automatic on
layer former
(right)
HCU2:
Fault
layer former
(right)

Terminal diagram

Function text									-4W1	Cable name	Strip =HCU2+JB1-X5 Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable name	-4W1				Page / column
									Ölflex Classic 110 18G0,75 mm²	Cable type							Cable type	Ölflex Classic 110 18G0,75 mm²				
											-5S4	x2	1		+COP1-2X1	1		1				+F/2.1
											-5S5	x2										
													2									+F/2.1
											-5S4	3	3		+COP1-2X1	2		2				+F/2.1
													4									+F/2.2
HCU2: Emergency-stop											-5S1	1	5		+COP1-2X1	3		3				+F/5.1
=											-5S1	2	6		+COP1-2X1	4		4				+F/5.1
=											-5S1	11	7		+COP1-2X1	5		5				+F/5.1
=											-5S1	12	8		+COP1-2X1	6		6				+F/5.1
=											-5S3	3	9		+COP1-2X1	7		7				+F/5.3
=											-5S3	4	10		+COP1-2X1	8		8				+F/5.3
HCU2: Request access safety guard area layer former (left)											-5S4	4	11		+COP1-2X1	9		9				+F/5.4
HCU2: Request access safety guard area											-5S4	x1	12		+COP1-2X1	10		10				+F/5.4
=											-5S5	3	13		+COP1-2X1	11		11				+F/5.6
=											-5S5	x1	15		+COP1-2X1	13		13				+F/5.6
=											-5S5	4	14		+COP1-2X1	12		12				+F/5.6
													16		+COP1-2X1	14		14				+F/2.2
													17		+COP1-2X1	15		15				+F/2.2
													18		+COP1-2X1	16		16				+F/2.2
									GNYE		+COP1-2X1	PE	PE1		-PE	1						+F/2.3

Terminal diagram

Function text									-6W0	Cable name	Strip =HCU2+JB1-X6						Cable name					Page / column
									AS-i Yellow 2X1,5 mm²	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type					
									BN		=LF+F-16X5	+	1	,	-6K0	+						+F/6.0
									BU		=LF+F-16X5	-	2	,	-6K0	-						+F/6.1
HCU2: Start/stop automatic layer former (right)											-6S1	4	3	,	-6K0	I1						+F/6.1
HCU2: Reset fault layer former (right)											-6S2	4	4	,	-6K0	I2						+F/6.2
HCU2: Automatic on layer former (right)											-6S3	4	5	,	-6K0	I3						+F/6.3
HCU2: Emergency-stop layer former (right)											-5S1	24	6	,	-6K0	I4						+F/6.4
=											-5S1	23	7	,	-6K0	I+						+F/6.4
HCU2: Reset layer former (right)											-5S3	x1	8	,	-6K0	O1						+F/6.6
HCU2: Start/stop automatic layer former (right)											-6S1	x1	9	,	-6K0	O2						+F/6.6
HCU2: Automatic on layer former (right)											-6S3	x1	10	,	-6K0	O3						+F/6.7
HCU2: Fault layer former (right)											-6P8	x1	11	,	-6K0	O4						+F/6.8
=											-6P8	x2	12	,	-6K0	O-						+F/6.9

Plug diagram

Function text									-4W1	Cable name	Strip designation =HCU2+COP1-2X1							Cable name					Page / column
									Ölflex Classic 110 18G0,75 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					
									1		+JB1-X5	1	1			=GEN-X5.0	5:A						+F/2.1
									2		+JB1-X5	3	2			=GEN-X5	18:B						+F/2.1
HCU2: Emergency-stop									3		+JB1-X5	5	3			=HCU1-2X1	4						+F/5.1
=									4		+JB1-X5	6	4			=HCU5-2X1	3						+F/5.1
=									5		+JB1-X5	7	5			=HCU1-2X1	6						+F/5.1
=									6		+JB1-X5	8	6			=HCU5-2X1	5						+F/5.1
=									7		+JB1-X5	9	7				8:b						+F/5.3
=									8		+JB1-X5	10	8		I19	=SPLC1-X9	29						+F/5.3
HCU2: Request access safety guard area layer former (left)									9		+JB1-X5	11	9		I1.1	=PLC1-DI1	-X10:12						+F/5.4
HCU2: Request access safety guard area									10		+JB1-X5	12	10		Q4.1	=PLC1-DO2	-X10:2						+F/5.4
=									11		+JB1-X5	13	11			=SPLC1-X9.3	4:a						+F/5.6
=									12		+JB1-X5	14	12		I17	=SPLC1-X9	23						+F/5.6
=									13		+JB1-X5	15	13		Q5.2	=PLC1-DO2	-X10:13						+F/5.6
									14		+JB1-X5	16	14										+F/2.2
									15		+JB1-X5	17	15										+F/2.2
									16		+JB1-X5	18	16										+F/2.2
									GNYE		+JB1-X5	PE1	PE			-PE1	PE						+F/2.3

Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
-4W1	-2X1	-X5	00150317	Ölflex Classic 110	18G	17	0,75	20	HCU2: 24VDC infeed
-6W0	-X6		00101677	AS-i Yellow	2X	2	1,5	10	HCU2: ASi infeed

Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	Cable overview : =HCU2+F-4W1 - =HCU2+JB1-6W0	= HCU2	+CBL	Page 400
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 30.						

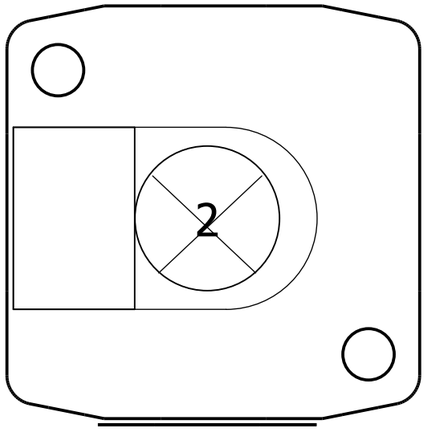
=HCU3

Operating element

Number	Device tag	Function text
2	+JB1-5S3	Request acces

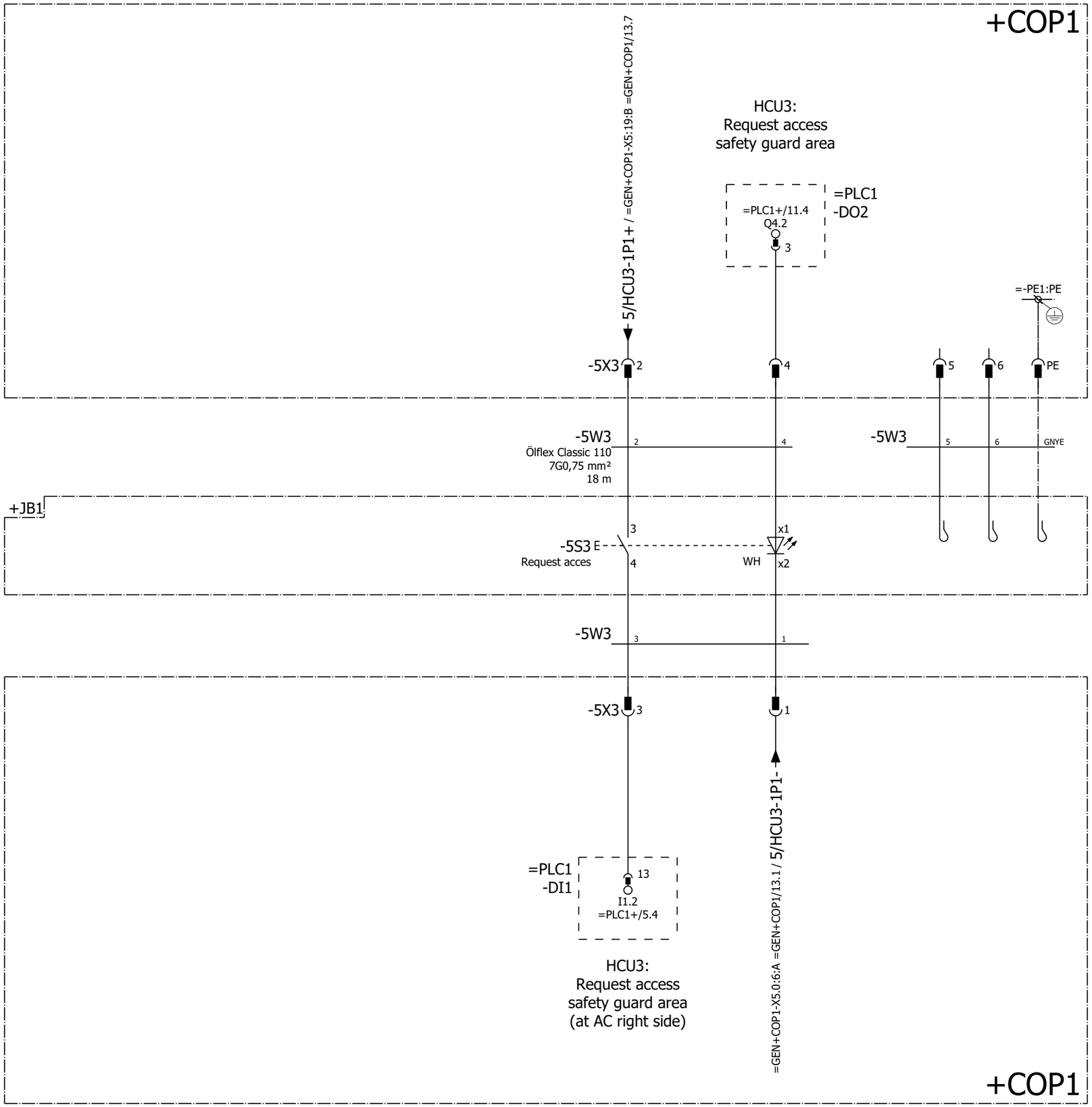
Enclosure legend

Item number	Device tag	Type number
2	+JB1-5S3	ZB5-AW313



At Accumulation table
right side

Creator	Ferenc Baracsi	Commission	620300.11.2023	MSK COVERTECH GROUP	HCU3: Hand-control-unit outside	= HCU3	+	Page 0
Edited by	BaF	Type	MSK - Semitech			Revision		
Modification date	2023. 10. 11.							


+COP1
5/HCU3-1P1+ / =GEN+COP1-X5:19:B =GEN+COP1/13.7
HCU3:
Request access
safety guard area
=PLC1+/11.4
Q4.2
3
=PLC1
-DO2
=-PE1:PE
-5X3
2
4
5
6
PE
-5W3
Ölflex Classic 110
7G0,75 mm²
18 m
2
4
-5W3
5
6
GNYE
+JB1
3
x1
-5S3 E
Request acces
4
WH
x2
-5W3
3
1
-5X3
3
1
=PLC1
-DI1
13
I1.2
=PLC1+/5.4
HCU3:
Request access
safety guard area
(at AC right side)
=GEN+COP1-X5.0:6:A =GEN+COP1/13.1 / 5/HCU3-1P1-
+COP1

Plug diagram

Function text									-5W3	Cable name	Strip designation =HCU3+COP1-5X3							Cable name					
									Ölflex Classic 110 7G0,75 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					Page / column
HCU3: Request access safety guard area									1		+JB1-5S3	x2	1			=GEN-X5.0	6:A						+F/5.4
HCU3: Request access safety guard area (at AC right side)									2		+JB1-5S3	3	2			=GEN-X5	19:B						+F/5.3
=									3		+JB1-5S3	4	3		I1.2	=PLC1-DI1	-X10:13						+F/5.3
HCU3: Request access safety guard area									4		+JB1-5S3	x1	4		Q4.2	=PLC1-DO2	-X10:3						+F/5.4
=									5				5										+F/5.5
=									6				6										+F/5.6
=									GNYE				PE			-PE1	PE						+F/5.6

Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
-5W3			10036999	Ölflex Classic 110	7G	7	0,75	18	HCU4: 24VDC infeed

Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	Cable overview : =HCU3+F-5W3 - =HCU3+F-5W3	= HCU3	+CBL	Page 400
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 11.						

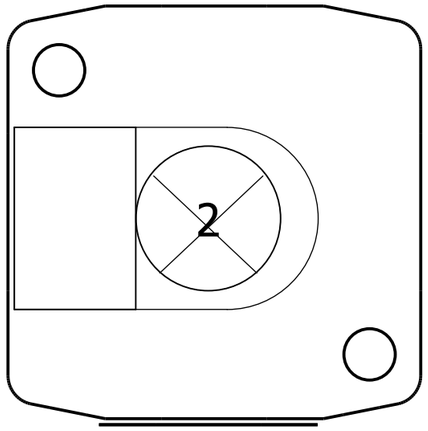
=HCU4

Operating element

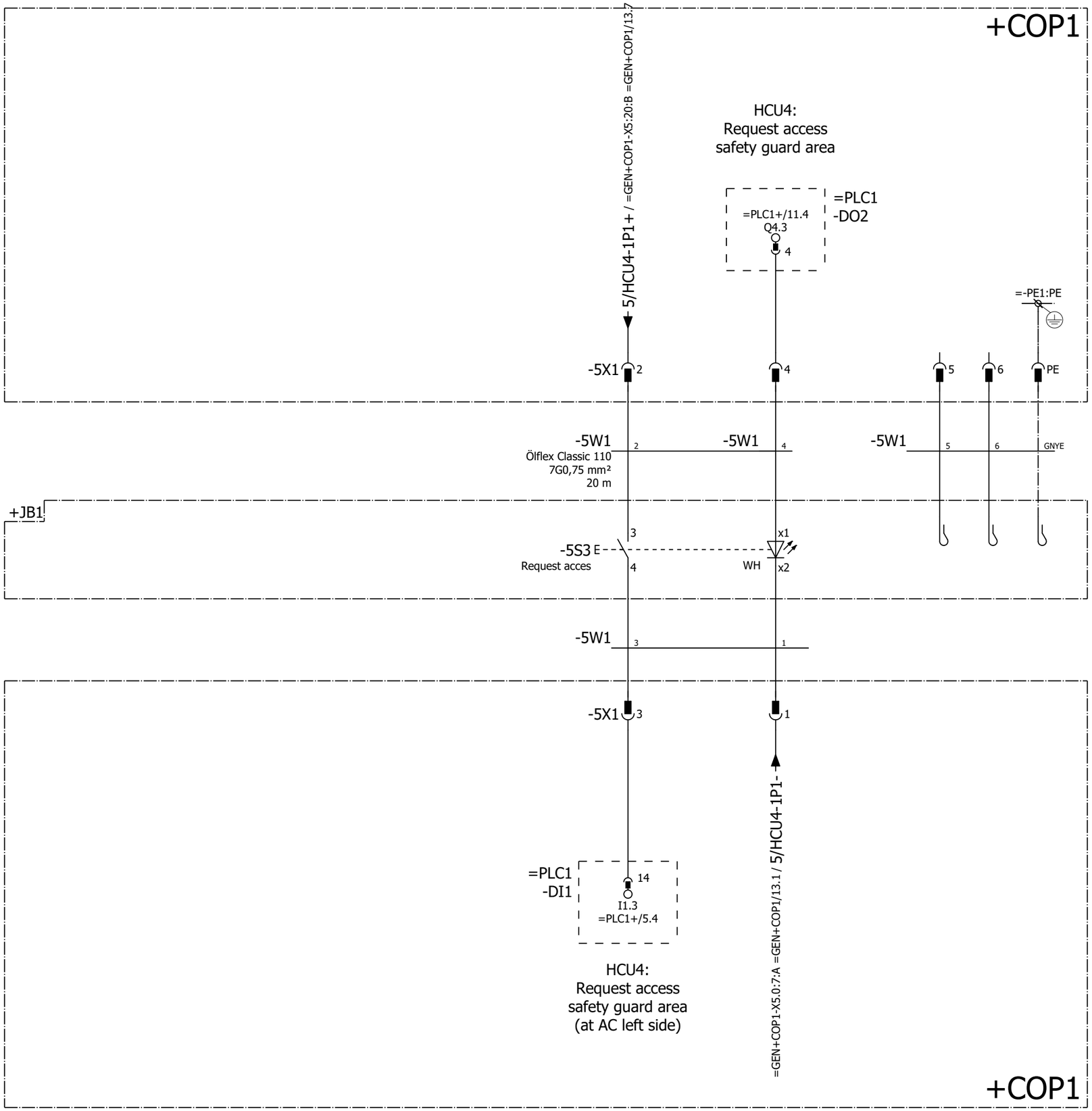
Number	Device tag	Function text
2	+JB1-5S3	Request acces

Enclosure legend

Item number	Device tag	Type number
2	+JB1-5S3	ZB5-AW313



At Accumulation table
left side


+COP1
5/HCU4-1P1+ / =GEN+COP1-X5:20:B =GEN+COP1/13.7
HCU4:
Request access
safety guard area
=PLC1+/11.4
Q4.3
4
=PLC1
-DO2
=-PE1:PE
-5X1
2
4
5
6
PE
-5W1
Ölflex Classic 110
7G0,75 mm²
20 m
2
-5W1
4
-5W1
5
6
GNYE
+JB1
3
-5S3
E
Request acces
4
x1
WH
x2
-5W1
3
1
-5X1
3
1
=PLC1
-DI1
14
I1.3
=PLC1+/5.4
HCU4:
Request access
safety guard area
(at AC left side)
=GEN+COP1-X5.0:7:A =GEN+COP1/13.1 / 5/HCU4-1P1-
+COP1

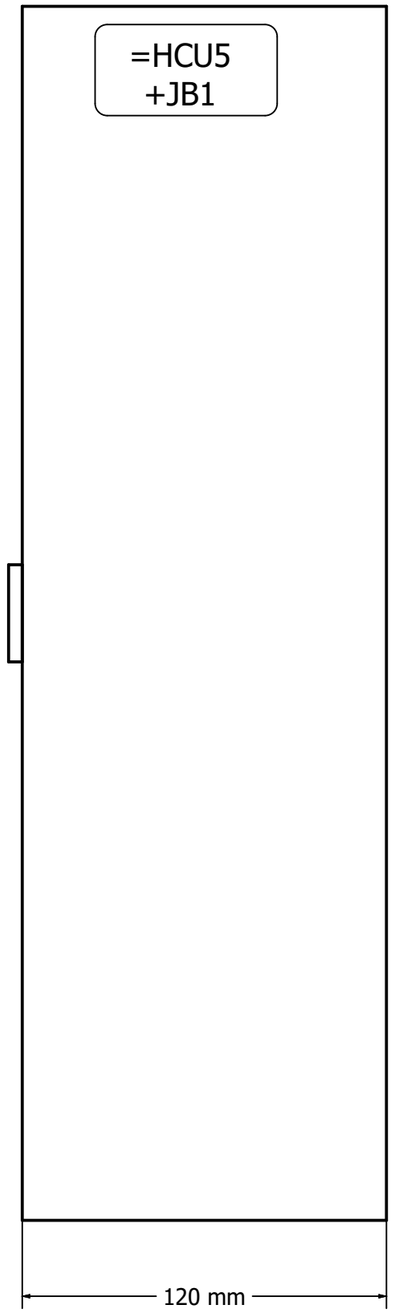
Plug diagram

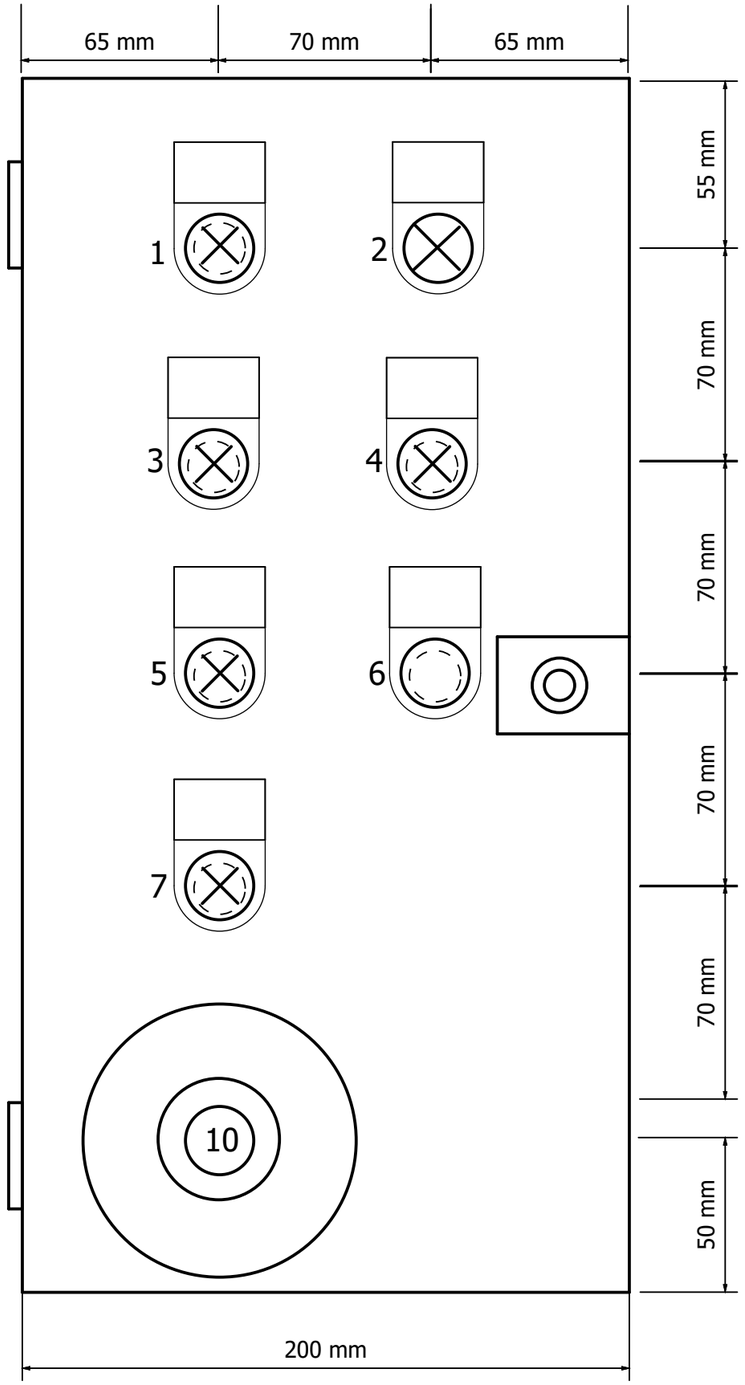
Function text									-5W1	Cable name	Strip designation =HCU4+COP1-5X1							Cable name					
									Ölflex Classic 110 7G0,75 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					Page / column
HCU4: Request access safety guard area									1		+JB1-5S3	x2	1			=GEN-X5.0	7:A						+F/5.4
HCU4: Request access safety guard area (at AC left side)									2		+JB1-5S3	3	2			=GEN-X5	20:B						+F/5.3
=									3		+JB1-5S3	4	3		I1.3	=PLC1-DI1	-X10:14						+F/5.3
HCU4: Request access safety guard area									4		+JB1-5S3	x1	4		Q4.3	=PLC1-DO2	-X10:4						+F/5.4
=									5				5										+F/5.5
=									6				6										+F/5.6
=									GNYE				PE			-PE1	PE						+F/5.6

Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
-5W1			10036999	Ölflex Classic 110	7G	7	0,75	20	HCU4: 24VDC infeed

=HCU5
+JB1
EB 1550.500 (connected at the top)
on the safety guard
before Semitech



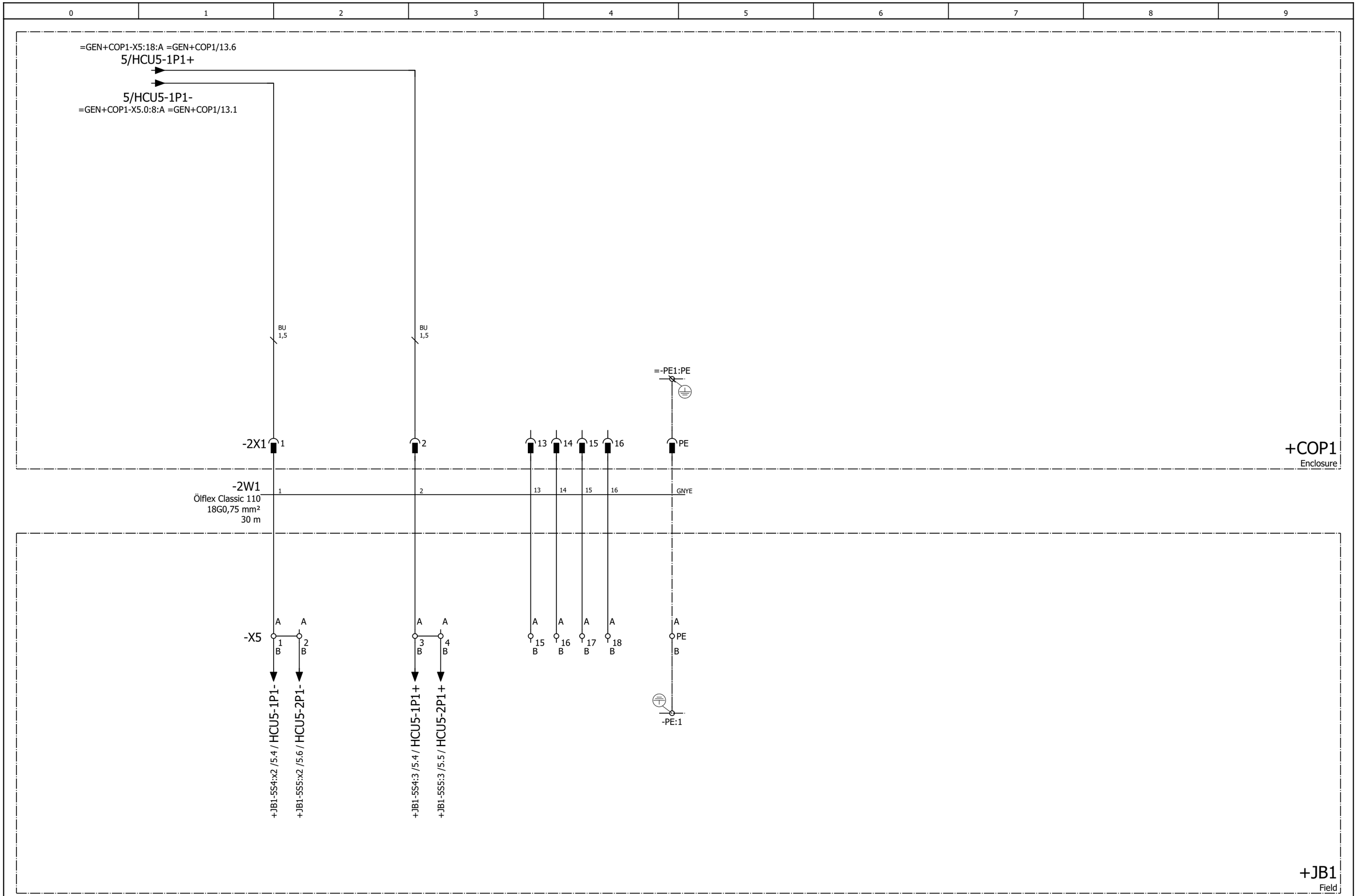


Operating element

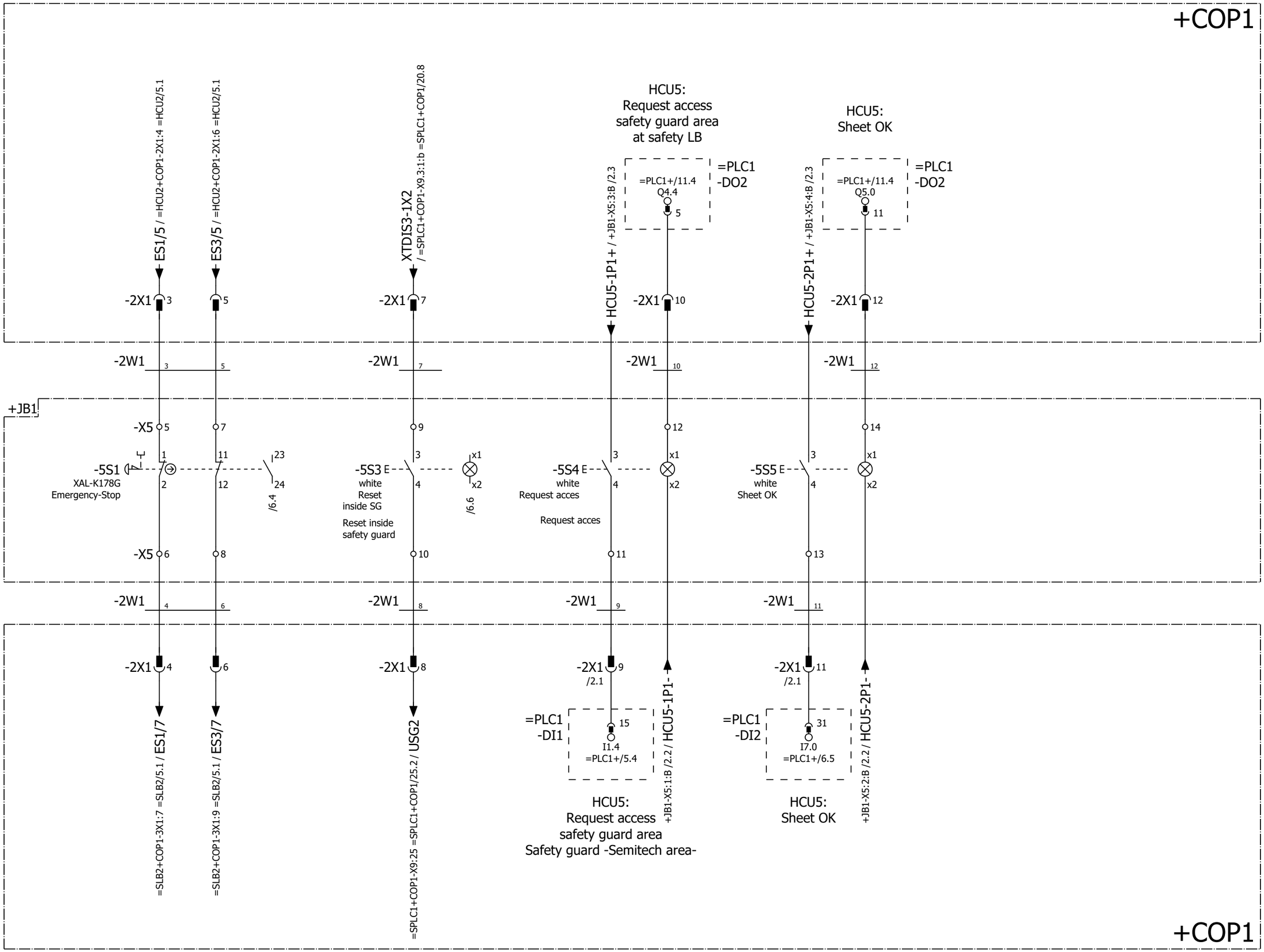
Number	Device tag	Function text
1	-5S3	Reset inside SG
2	-6P8	Fault
3	-6S3	Automatic on
4	-6S1	Start/Stop automatic
5	-5S4	Request acces
6	-6S2	Reset fault
7	-5S5	Sheet OK
10	-5S1	Emergency-Stop

Enclosure legend

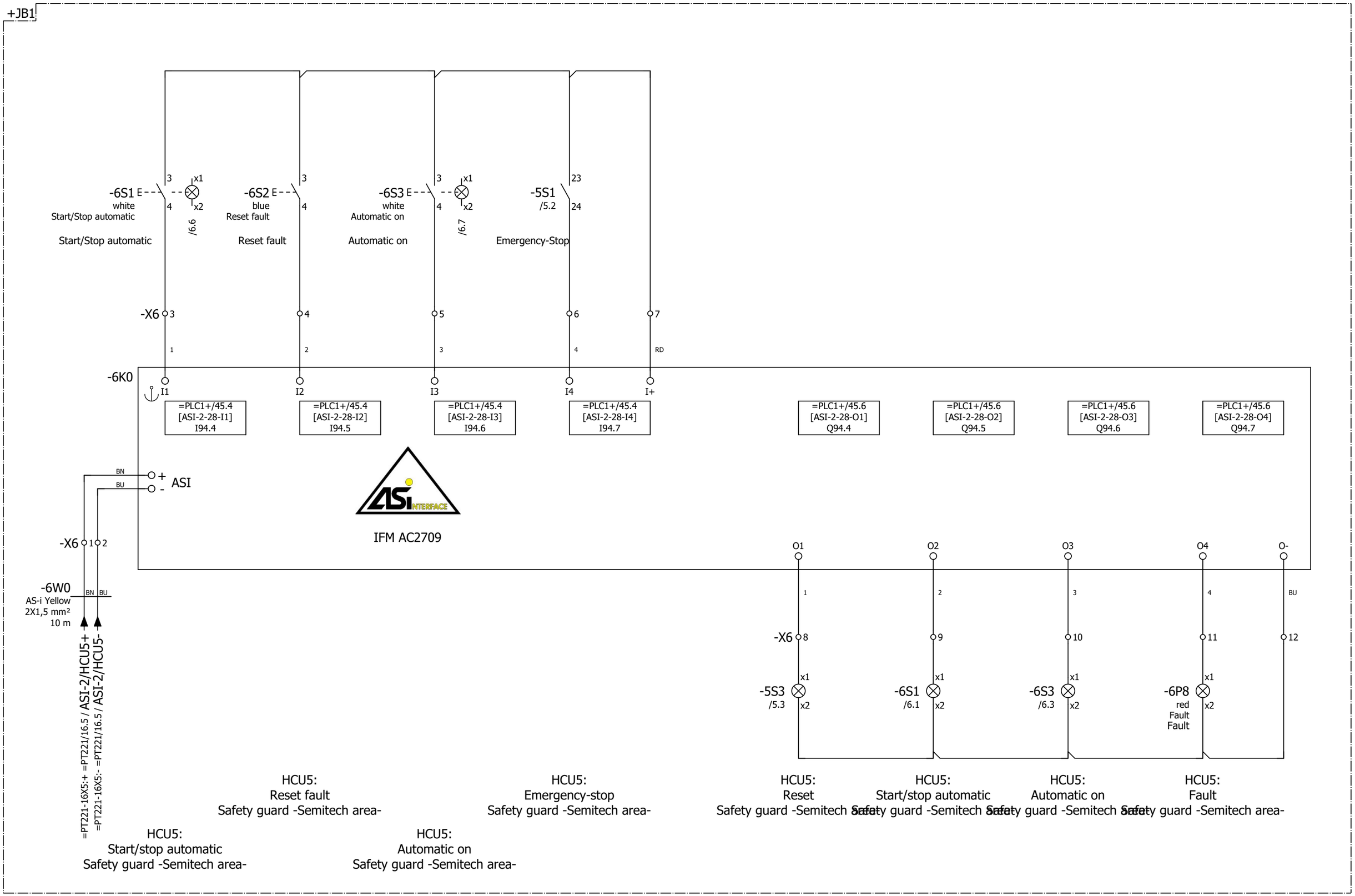
Item number	Device tag	Type number
1	-5S3	ZB5-AW313
2	-6P8	ZB5-AV043
3	-6S3	ZB5-AW313
4	-6S1	ZB5-AW313
5	-5S4	ZB5-AW313
6	-6S2	ZB5-AA6
7	-5S5	ZB5-AW313
10	-5S1	ZB5-AT4



Creator	Ferenc Baracsi	Commission	620300.11.2023	MSK COVERTECH GROUP	HCU5: Control elements	= HCU5	+F	Page 2
Edited by	BaF	Type	MSK - Semitech			Revision		
Modification date	2023. 10. 11.							



Previous page	2					Next page	6
Creator	Ferenc Baracsi	Commission	620300.11.2023	HCU5: Control elements	= HCU5	+F	Page 5
Edited by	BaF	Type	MSK - Semitech		Revision		
Modification date	2023. 10. 11.						


+JB1
-6S1 E
white
Start/Stop automatic
Start/Stop automatic
/6.6
-6S2 E
blue
Reset fault
Reset fault
-6S3 E
white
Automatic on
Automatic on
/6.7
-5S1
/5.2
Emergency-Stop
-X6
-6K0
I1
I2
I3
I4
I+
=PLC1+/45.4 [ASI-2-28-I1] I94.4
=PLC1+/45.4 [ASI-2-28-I2] I94.5
=PLC1+/45.4 [ASI-2-28-I3] I94.6
=PLC1+/45.4 [ASI-2-28-I4] I94.7
=PLC1+/45.6 [ASI-2-28-O1] Q94.4
=PLC1+/45.6 [ASI-2-28-O2] Q94.5
=PLC1+/45.6 [ASI-2-28-O3] Q94.6
=PLC1+/45.6 [ASI-2-28-O4] Q94.7
ASI
IFM AC2709
-6W0
AS-i Yellow
2X1,5 mm²
10 m
=PT221-16X5:+ =PT221/16.5 / ASI-2/HCU5+
=PT221-16X5:- =PT221/16.5 / ASI-2/HCU5-
O1
O2
O3
O4
O-
-5S3
/5.3
-6S1
/6.1
-6S3
/6.3
-6P8
red
Fault
Fault
HCU5:
Reset fault
Safety guard -Semitech area-
HCU5:
Emergency-stop
Safety guard -Semitech area-
HCU5:
Reset
Safety guard -Semitech area-
HCU5:
Start/stop automatic
Safety guard -Semitech area-
HCU5:
Automatic on
Safety guard -Semitech area-
HCU5:
Fault
Safety guard -Semitech area-
HCU5:
Start/stop automatic
Safety guard -Semitech area-
HCU5:
Automatic on
Safety guard -Semitech area-

0	1	2	3	4	5	6	7	8	9

Terminal diagram

Function text										Cable name	Strip =HCU5+JB1-X5						Cable name	-2W1				Page / column
										Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type	Ölflex Classic 110 18G0,75 mm²				
											-5S4	x2	1		+COP1-2X1	1		1				+F/2.2
											-5S5	x2	2									+F/2.2
											-5S4	3	3		+COP1-2X1	2		2				+F/2.3
											-5S5	3	4									+F/2.3
											-5S1	1	5		+COP1-2X1	3		3				+F/5.1
											-5S1	2	6		+COP1-2X1	4		4				+F/5.1
											-5S1	11	7		+COP1-2X1	5		5				+F/5.1
											-5S1	12	8		+COP1-2X1	6		6				+F/5.1
											-5S3	3	9		+COP1-2X1	7		7				+F/5.3
											-5S3	4	10		+COP1-2X1	8		8				+F/5.3
HCU5: Request access safety guard area Safety guard -Semitech area-											-5S4	4	11		+COP1-2X1	9		9				+F/5.4
HCU5: Sheet OK											-5S5	4	13		+COP1-2X1	11		11				+F/5.5
HCU5: Request access safety guard area at safety LB											-5S4	x1	12		+COP1-2X1	10		10				+F/5.4
HCU5: Sheet OK											-5S5	x1	14		+COP1-2X1	12		12				+F/5.6
													15		+COP1-2X1	13		13				+F/2.3
													16		+COP1-2X1	14		14				+F/2.4
													17		+COP1-2X1	15		15				+F/2.4
													18		+COP1-2X1	16		16				+F/2.4
PE											-PE	1	PE		+COP1-2X1	PE		GNYE				+F/2.4

Terminal diagram

Function text									-6W0	Cable name	Strip =HCU5+JB1-X6						Cable name					Page / column
									AS-i Yellow 2X1,5 mm²	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type					
									BN		=PT221+F-16X5	+	1	,	-6K0	+						+F/6.0
									BU		=PT221+F-16X5	-	2	,	-6K0	-						+F/6.1
HCU5: Start/stop automatic Safety guard -Semitech area-											-6S1	4	3	,	-6K0	I1						+F/6.1
HCU5: Reset fault Safety guard -Semitech area-											-6S2	4	4	,	-6K0	I2						+F/6.2
HCU5: Automatic on Safety guard -Semitech area-											-6S3	4	5	,	-6K0	I3						+F/6.3
HCU5: Emergency-stop Safety guard -Semitech area-											-5S1	24	6	,	-6K0	I4						+F/6.4
=											-5S1	23	7	,	-6K0	I+						+F/6.4
HCU5: Reset Safety guard -Semitech area-											-5S3	x1	8	,	-6K0	O1						+F/6.6
HCU5: Start/stop automatic Safety guard -Semitech area-											-6S1	x1	9	,	-6K0	O2						+F/6.6
HCU5: Automatic on Safety guard -Semitech area-											-6S3	x1	10	,	-6K0	O3						+F/6.7
HCU5: Fault Safety guard -Semitech area-											-6P8	x1	11	,	-6K0	O4						+F/6.8
=											-6P8	x2	12	,	-6K0	O-						+F/6.9

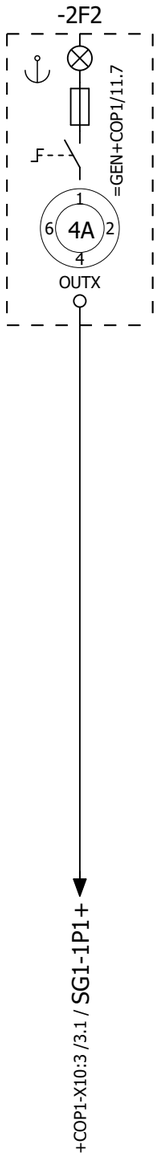
Plug diagram

Function text									-2W1	Cable name	Strip designation =HCU5+COP1-2X1							Cable name					Page / column
									Ölflex Classic 110 18G0,75 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					
									1		+JB1-X5	1:A	1			=GEN-X5.0	8:A						+F/2.2
									2		+JB1-X5	3:A	2			=GEN-X5	18:A						+F/2.3
									3		+JB1-X5	5	3			=HCU2-2X1	4						+F/5.1
									4		+JB1-X5	6	4			=SLB2-3X1	7						+F/5.1
									5		+JB1-X5	7	5			=HCU2-2X1	6						+F/5.1
									6		+JB1-X5	8	6			=SLB2-3X1	9						+F/5.1
									7		+JB1-X5	9	7			=SPLC1-X9.3	1:b						+F/5.3
									8		+JB1-X5	10	8		I18	=SPLC1-X9	25						+F/5.3
HCU5: Request access safety guard area Safety guard -Semitech area-									9		+JB1-X5	11	9		I1.4	=PLC1-DI1	-X10:15						+F/5.4
HCU5: Request access safety guard area at safety LB									10		+JB1-X5	12	10		Q4.4	=PLC1-DO2	-X10:5						+F/5.4
HCU5: Sheet OK									11		+JB1-X5	13	11		I7.0	=PLC1-DI2	-X10:31						+F/5.5
=									12		+JB1-X5	14	12		Q5.0	=PLC1-DO2	-X10:11						+F/5.6
									13		+JB1-X5	15:A	13										+F/2.3
									14		+JB1-X5	16:A	14										+F/2.4
									15		+JB1-X5	17:A	15										+F/2.4
									16		+JB1-X5	18:A	16										+F/2.4
PE									GNYE		+JB1-X5	PE:A	PE			-PE1	PE						+F/2.4

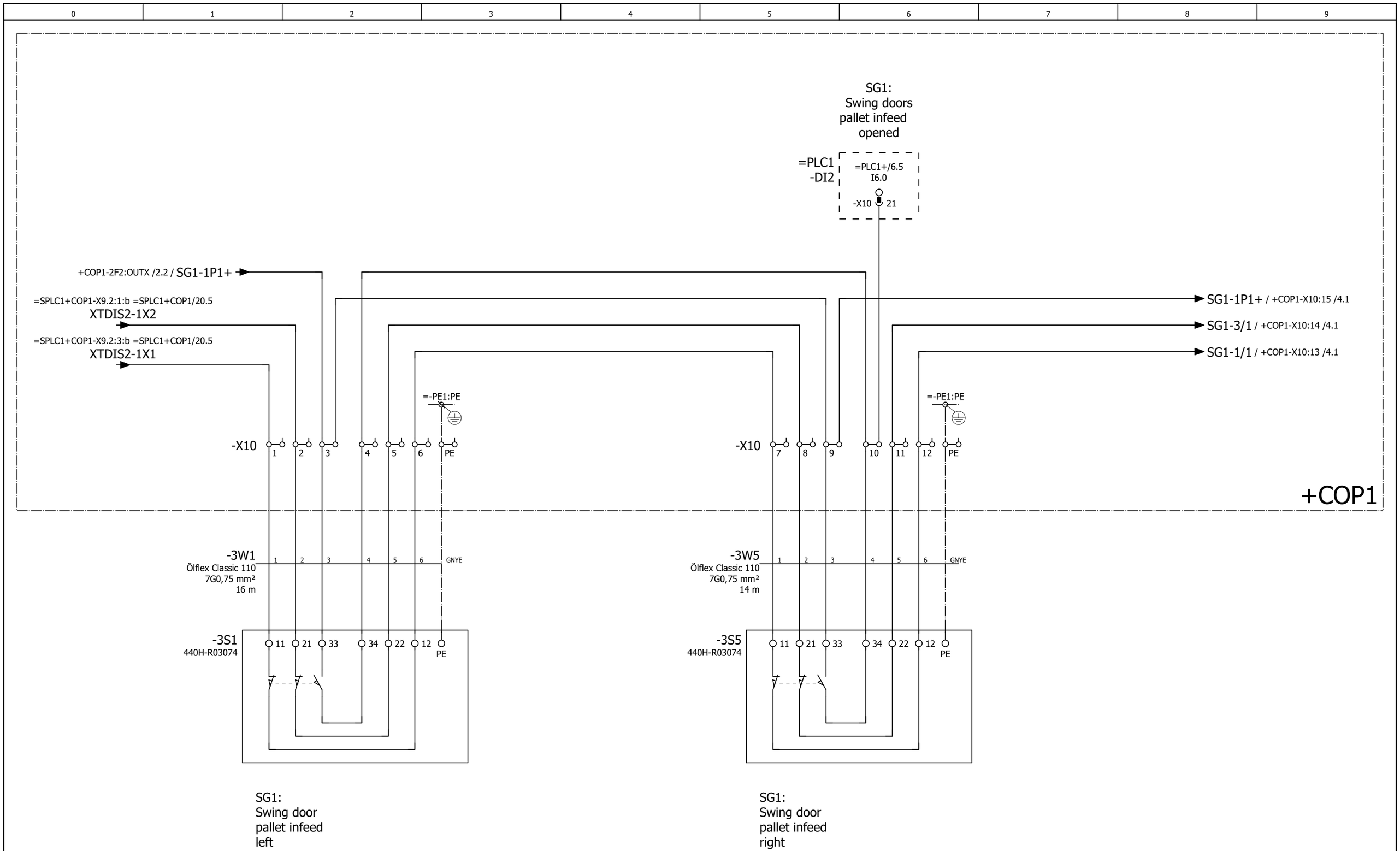
Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
-2W1	-2X1	-X5	00150317	Ölflex Classic 110	18G	17	0,75	30	HCU5: 24VDC infeed
-6W0	-X6		00101677	AS-i Yellow	2X	2	1,5	10	HCU5: ASi infeed

Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	Cable overview : =HCU5+F-2W1 - =HCU5+JB1-6W0	= HCU5	+CBL	Page 400
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 11.						



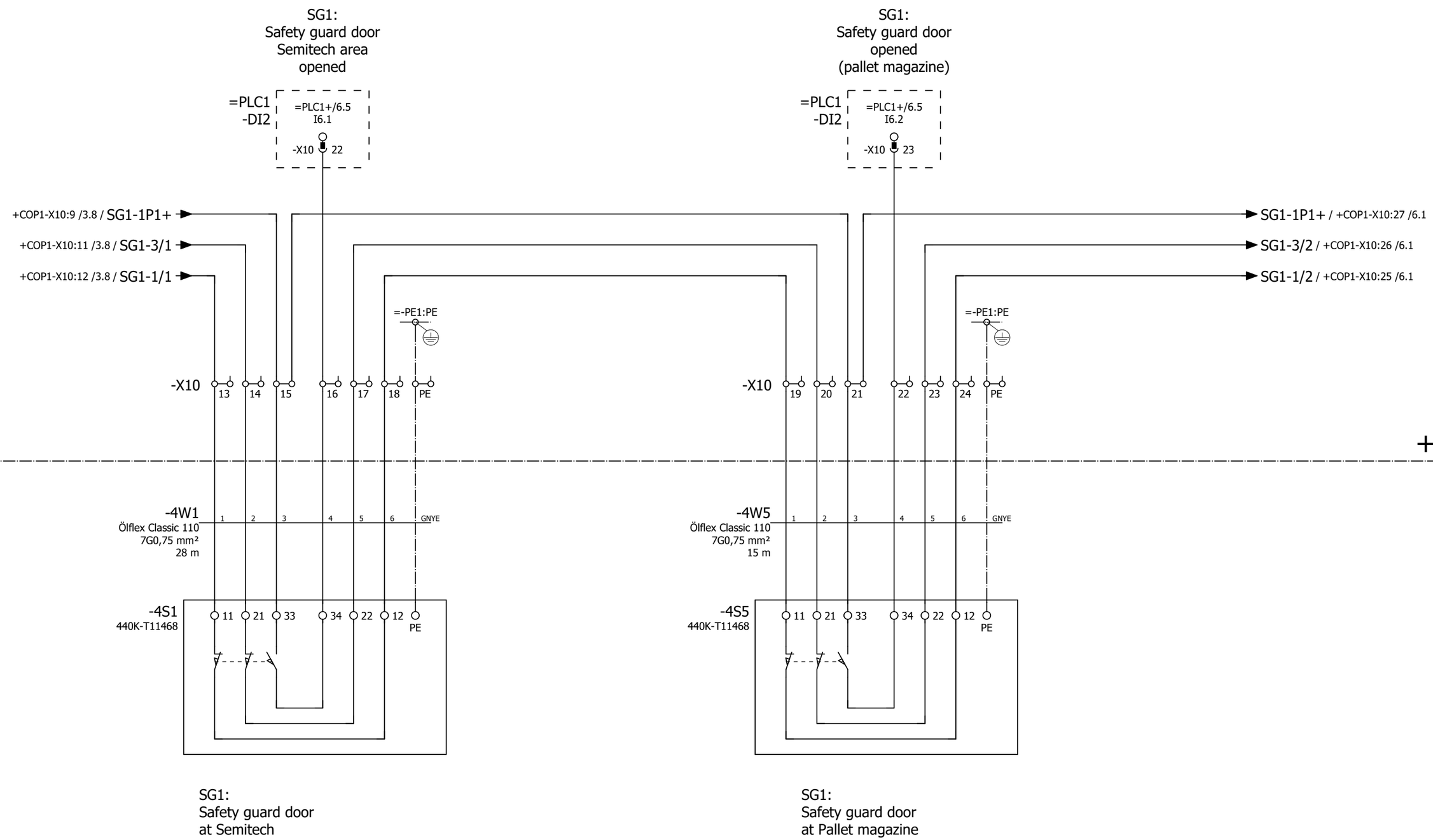
+COP1

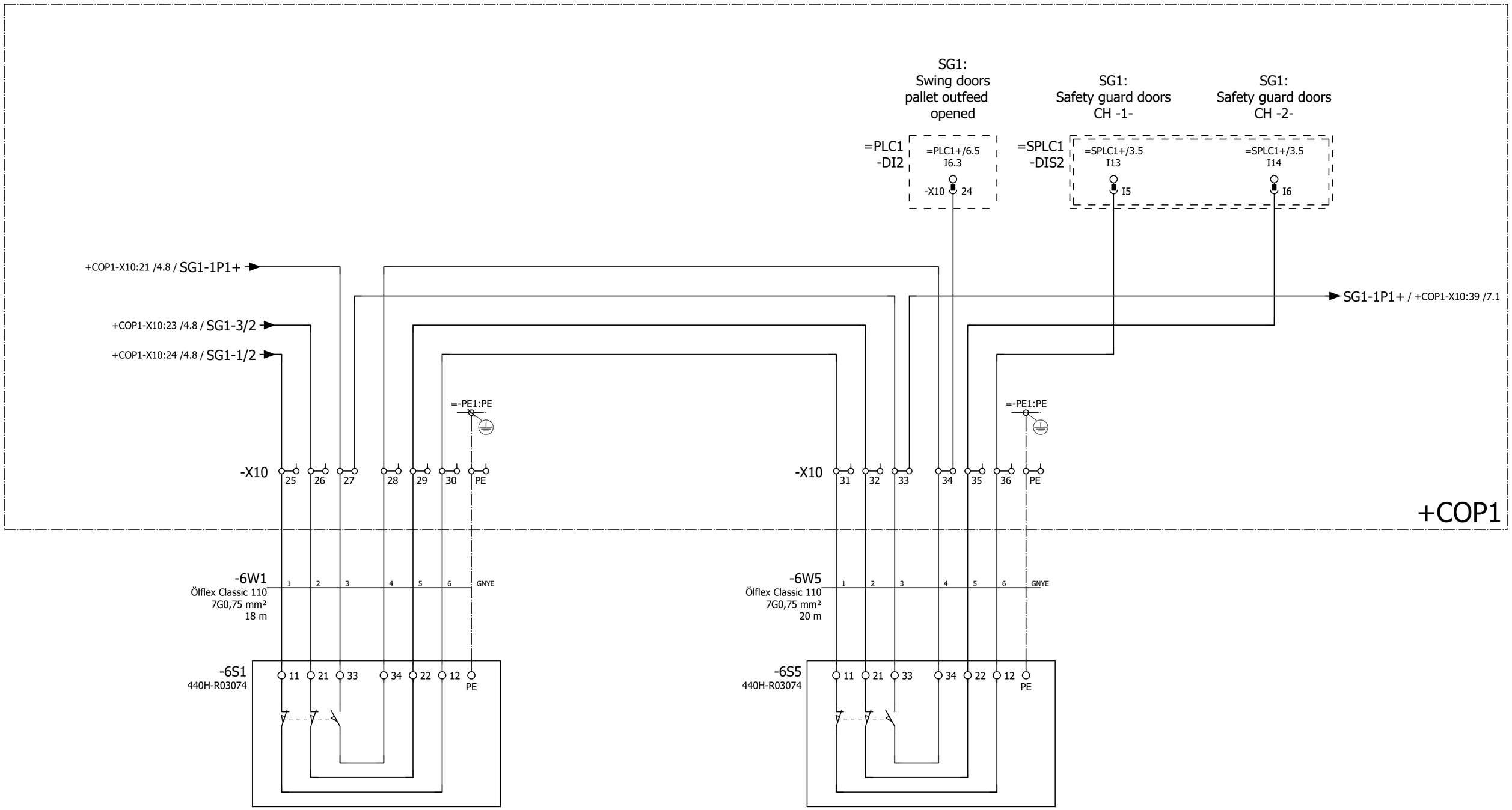


SG1:
Swing door
pallet infeed
left

SG1:
Swing door
pallet infeed
right

Creator	Ferenc Baracsi	Commission	620300.11.2023	MSK COVERTECH GROUP	SG1: Swing door pallet infeed	= SG1	+F	Page 3
						Revision	
Edited by	BaF	Type	MSK - Semitech				
Modification date	2023. 10. 11.						

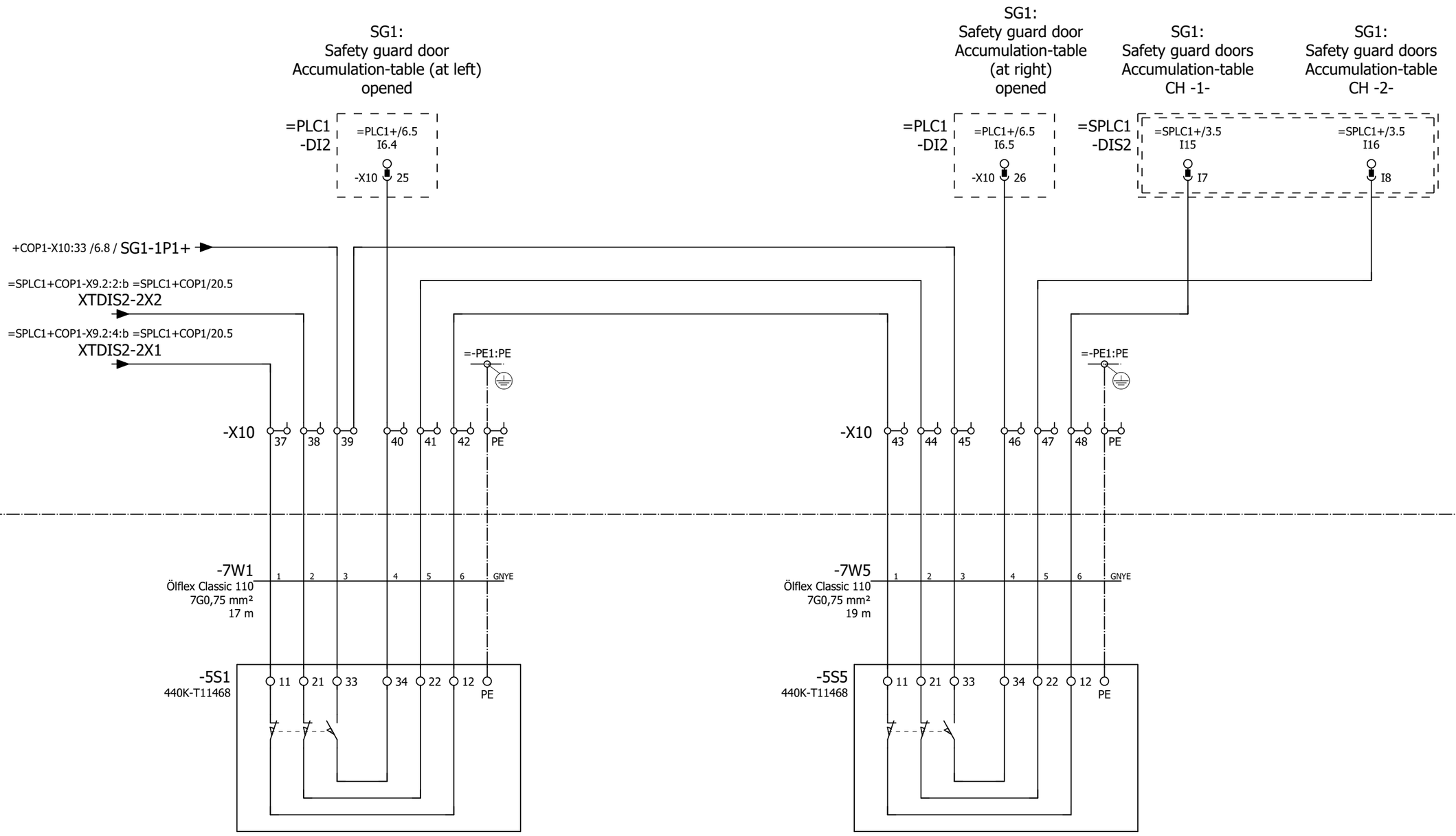

SG1:
Safety guard door
Semitech area
opened
=PLC1
-DI2
=PLC1+/6.5
I6.1
-X10 22
SG1:
Safety guard door
opened
(pallet magazine)
=PLC1
-DI2
=PLC1+/6.5
I6.2
-X10 23
+COP1-X10:9 /3.8 / SG1-1P1+
+COP1-X10:11 /3.8 / SG1-3/1
+COP1-X10:12 /3.8 / SG1-1/1
SG1-1P1+ / +COP1-X10:27 /6.1
SG1-3/2 / +COP1-X10:26 /6.1
SG1-1/2 / +COP1-X10:25 /6.1
=-PE1:PE
=-PE1:PE
-X10 13 14 15 16 17 18 PE
-X10 19 20 21 22 23 24 PE
+COP1
-4W1
Ölflex Classic 110
7G0,75 mm²
28 m
1 2 3 4 5 6 GNYE
-4W5
Ölflex Classic 110
7G0,75 mm²
15 m
1 2 3 4 5 6 GNYE
-4S1
440K-T11468
11 21 33 34 22 12 PE
-4S5
440K-T11468
11 21 33 34 22 12 PE
SG1:
Safety guard door
at Semitech
SG1:
Safety guard door
at Pallet magazine



SG1:
Swing door
pallet outfeed
left

SG1:
Swing door
pallet outfeed
right

Creator	Ferenc Baracsi	Commission	620300.11.2023	SG1: Safety guard Palletizer area	= SG1	+F	Page 6
Edited by	BaF	Type	MSK - Semitech		Revision		
Modification date	2023. 10. 11.						


SG1:
Safety guard door
Accumulation-table (at left)
opened
=PLC1
-DI2
=PLC1+/6.5
I6.4
-X10 25
SG1:
Safety guard door
Accumulation-table
(at right)
opened
=PLC1
-DI2
=PLC1+/6.5
I6.5
-X10 26
SG1:
Safety guard doors
Accumulation-table
CH -1-
SG1:
Safety guard doors
Accumulation-table
CH -2-
=SPLC1
-DIS2
=SPLC1+/3.5
I15
=SPLC1+/3.5
I16
I7
I8
+COP1-X10:33 /6.8 / SG1-1P1+
=SPLC1+COP1-X9.2:2:b =SPLC1+COP1/20.5
XTDIS2-2X2
=SPLC1+COP1-X9.2:4:b =SPLC1+COP1/20.5
XTDIS2-2X1
=-PE1:PE
=-PE1:PE
-X10
37 38 39 40 41 42 PE
-X10
43 44 45 46 47 48 PE
+COP1
-7W1
Ölflex Classic 110
7G0,75 mm²
17 m
1 2 3 4 5 6 GNYE
-7W5
Ölflex Classic 110
7G0,75 mm²
19 m
1 2 3 4 5 6 GNYE
-5S1
440K-T11468
11 21 33 34 22 12 PE
-5S5
440K-T11468
11 21 33 34 22 12 PE
SG1:
Safety guard door
Accumulations-table (left)
SG1:
Safety guard door
Accumulations-table (right)

Terminal diagram

Function text						-6W1	-4W1	-3W5	-3W1	Cable name	Strip =SG1+COP1-X10						Cable name					Page / column
						Ölflex Classic 110 7G0,75 mm²	Ölflex Classic 110 7G0,75 mm²	Ölflex Classic 110 7G0,75 mm²	Ölflex Classic 110 7G0,75 mm²	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type					
SG1: Swing door pallet infeed left									1		+F-3S1	11	1		=SPLC1-X9.2	3:b						+F/3.1
=									2		+F-3S1	21	2		=SPLC1-X9.2	1:b						+F/3.2
=									3		+F-3S1	33	3		-2F2	OUTX						+F/3.2
=									4		+F-3S1	34	4									+F/3.2
=									5		+F-3S1	22	5									+F/3.2
=									6		+F-3S1	12	6									+F/3.2
=									GNYE		+F-3S1	PE	PE		-PE1	PE						+F/3.3
SG1: Swing door pallet infeed right								1			+F-3S5	11	7									+F/3.5
=								2			+F-3S5	21	8									+F/3.5
=								3			+F-3S5	33	9									+F/3.5
=								4			+F-3S5	34	10		=PLC1-DI2	-X10:21						+F/3.6
SG1: Swing doors pallet infeed opened								5			+F-3S5	22	11									+F/3.6
=								6			+F-3S5	12	12									+F/3.6
=								GNYE			+F-3S5	PE	PE		-PE1	PE						+F/3.6
SG1: Safety guard door at Semitech							1				+F-4S1	11	13									+F/4.1
=							2				+F-4S1	21	14									+F/4.2
=							3				+F-4S1	33	15									+F/4.2
SG1: Safety guard door Semitech area opened							4				+F-4S1	34	16		=PLC1-DI2	-X10:22						+F/4.2
=							5				+F-4S1	22	17									+F/4.2
=							6				+F-4S1	12	18									+F/4.2
=							GNYE				+F-4S1	PE	PE		-PE1	PE						+F/4.3
=													19									+F/4.5
SG1: Safety guard door													20									+F/4.5
=													21									+F/4.5
SG1: Reserved Safety guard door opened													22		=PLC1-DI2	-X10:23						+F/4.6
=													23									+F/4.6
=													24									+F/4.6
=													PE		-PE1	PE						+F/4.6
SG1: Swing door pallet outfeed left						1					+F-6S1	11	25									+F/6.1
=						2					+F-6S1	21	26									+F/6.2
=						3					+F-6S1	33	27									+F/6.2
=						4					+F-6S1	34	28									+F/6.2
=						5					+F-6S1	22	29									+F/6.2
=						6					+F-6S1	12	30									+F/6.2
=						GNYE					+F-6S1	PE	PE		-PE1	PE						+F/6.3

Terminal diagram

Function text							-7W5	-7W1	-6W5	Cable name	Strip =SG1+COP1-X10						Cable name					Page / column
							Öflex Classic 110 7G0,75 mm²	Öflex Classic 110 7G0,75 mm²	Öflex Classic 110 7G0,75 mm²	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type					
SG1: Swing door pallet outfeed right									1		+F-6S5	11	31									+F/6.5
=									2		+F-6S5	21	32									+F/6.5
=									3		+F-6S5	33	33									+F/6.5
=									4		+F-6S5	34	34		=PLC1-DI2	-X10:24						+F/6.6
SG1: Swing doors pallet outfeed opened									5		+F-6S5	22	35		=SPLC1-DIS2	I6						+F/6.6
=									6		+F-6S5	12	36		=SPLC1-DIS2	I5						+F/6.6
=									GNYE		+F-6S5	PE	PE		-PE1	PE						+F/6.6
SG1: Safety guard door Accumulations-table (left)								1			+F-5S1	11	37		=SPLC1-X9.2	4:b						+F/7.1
=								2			+F-5S1	21	38		=SPLC1-X9.2	2:b						+F/7.2
=								3			+F-5S1	33	39									+F/7.2
SG1: Safety guard door Accumulation-table (at left) opened								4			+F-5S1	34	40		=PLC1-DI2	-X10:25						+F/7.2
=								5			+F-5S1	22	41									+F/7.2
=								6			+F-5S1	12	42									+F/7.2
=								GNYE			+F-5S1	PE	PE		-PE1	PE						+F/7.3
SG1: Safety guard door Accumulations-table (right)							1				+F-5S5	11	43									+F/7.5
=							2				+F-5S5	21	44									+F/7.5
=							3				+F-5S5	33	45									+F/7.5
=							4				+F-5S5	34	46		=PLC1-DI2	-X10:26						+F/7.6
SG1: Safety guard door Accumulation-table (at right) opened							5				+F-5S5	22	47		=SPLC1-DIS2	I8						+F/7.6
=							6				+F-5S5	12	48		=SPLC1-DIS2	I7						+F/7.6
=							GNYE				+F-5S5	PE	PE		-PE1	PE						+F/7.6

Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
-3W1	-X10		10036999	Ölflex Classic 110	7G	7	0,75	16	SG1: Swing door pallet infeed left
-3W5	-X10		10036999	Ölflex Classic 110	7G	7	0,75	14	SG1: Swing door pallet infeed right
-4W1	-X10		10036999	Ölflex Classic 110	7G	7	0,75	28	SG1: Safety guard door at Semitech
-6W1	-X10		10036999	Ölflex Classic 110	7G	7	0,75	18	SG1: Swing door pallet outfeed left
-6W5	-X10		10036999	Ölflex Classic 110	7G	7	0,75	20	SG1: Swing door pallet outfeed right
-7W1	-X10		10036999	Ölflex Classic 110	7G	7	0,75	17	SG1: Safety guard door Accumulations-table (left)
-7W5	-X10		10036999	Ölflex Classic 110	7G	7	0,75	19	SG1: Safety guard door Accumulations-table (right)

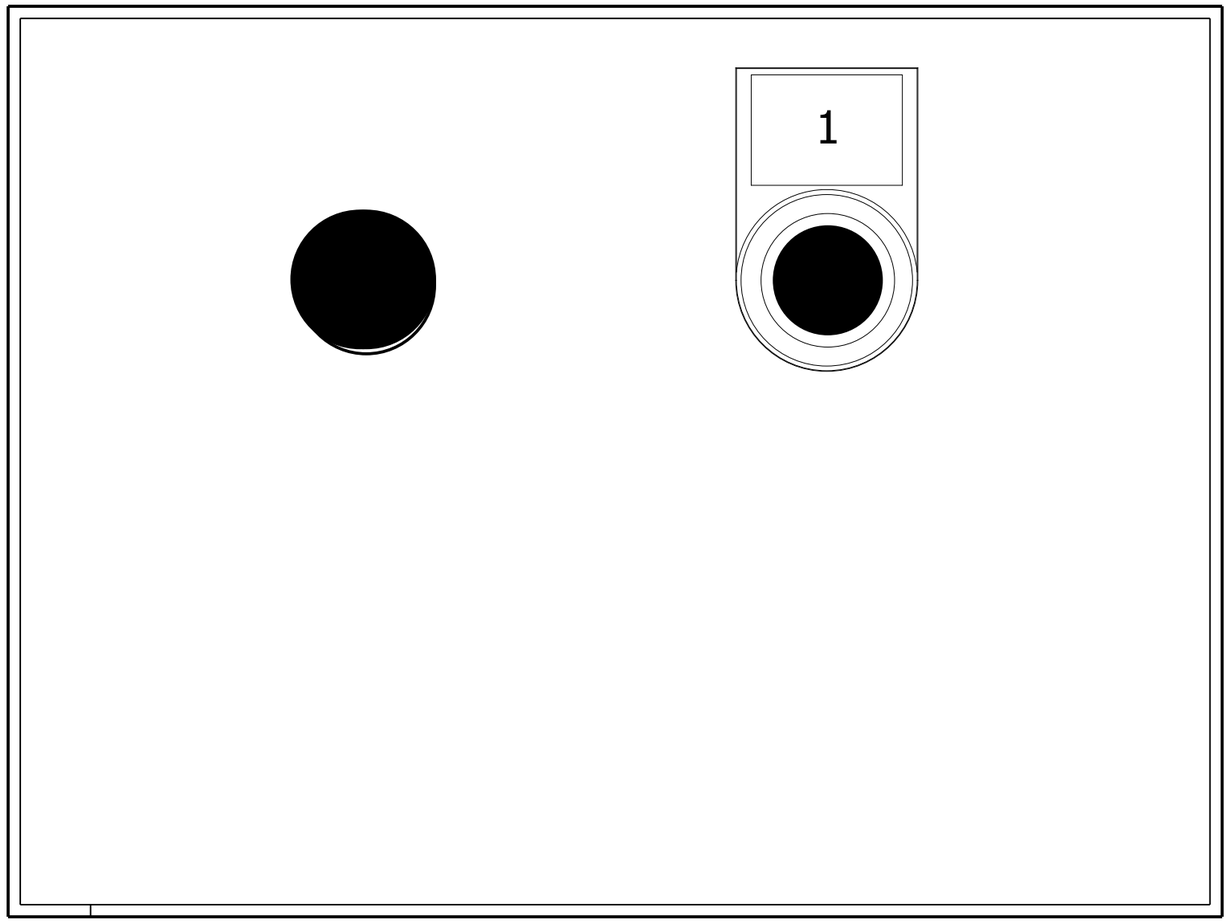
Operating element

Number	Device tag	Function text
1	-4S3	Reset/Override

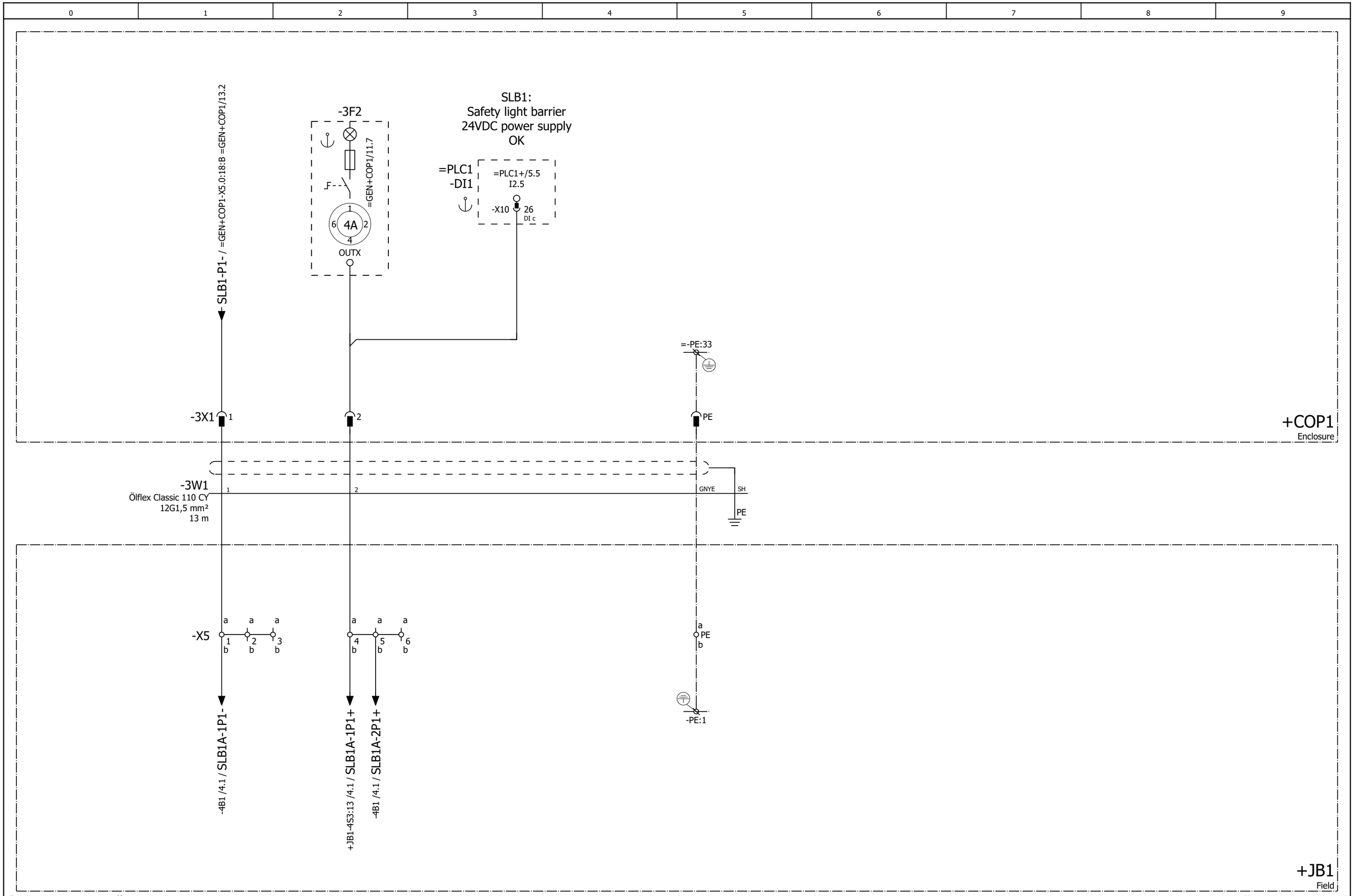
Enclosure legend

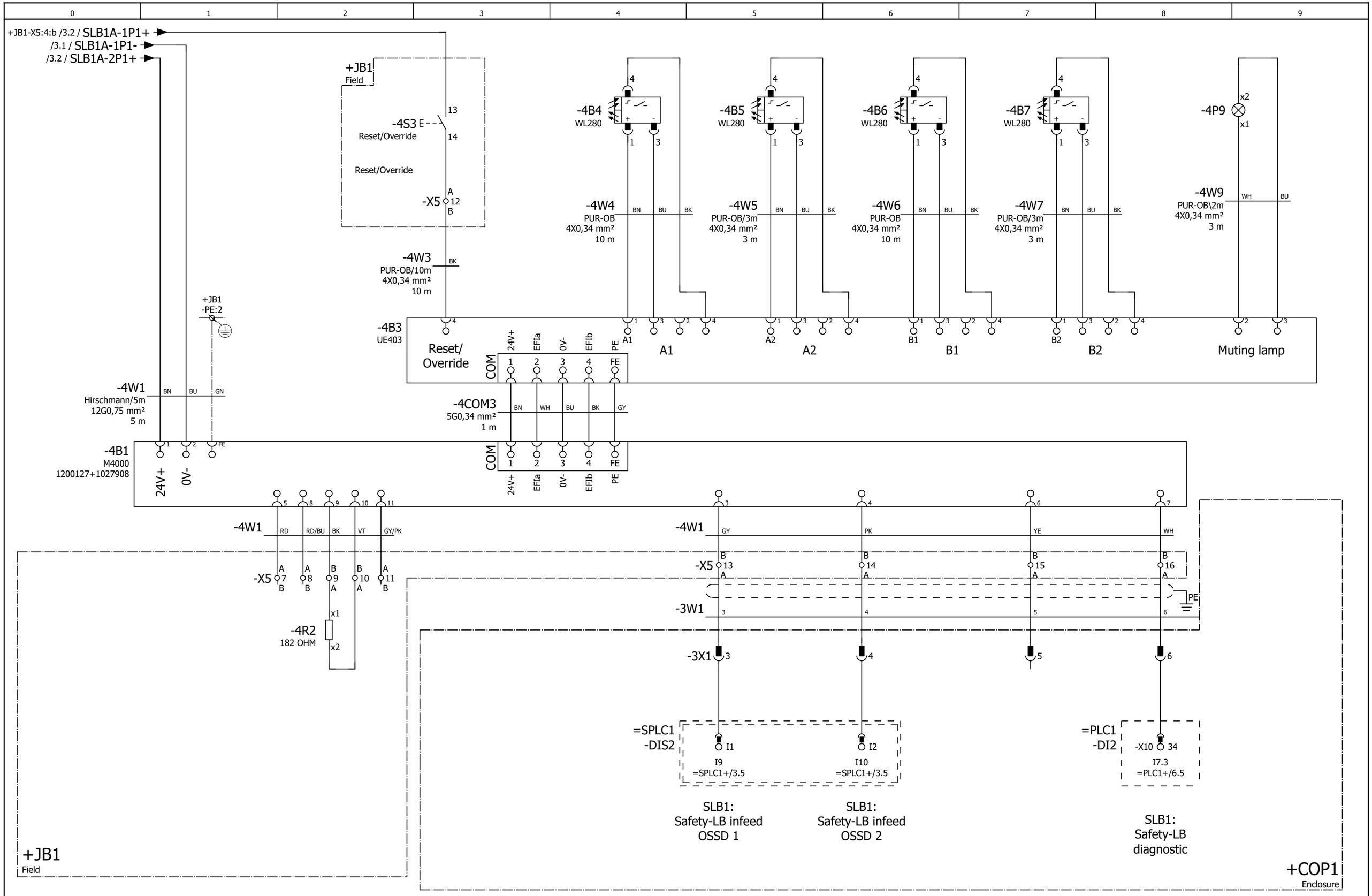
Item number	Device tag	Type number
1	-4S3	ZB5-AA6

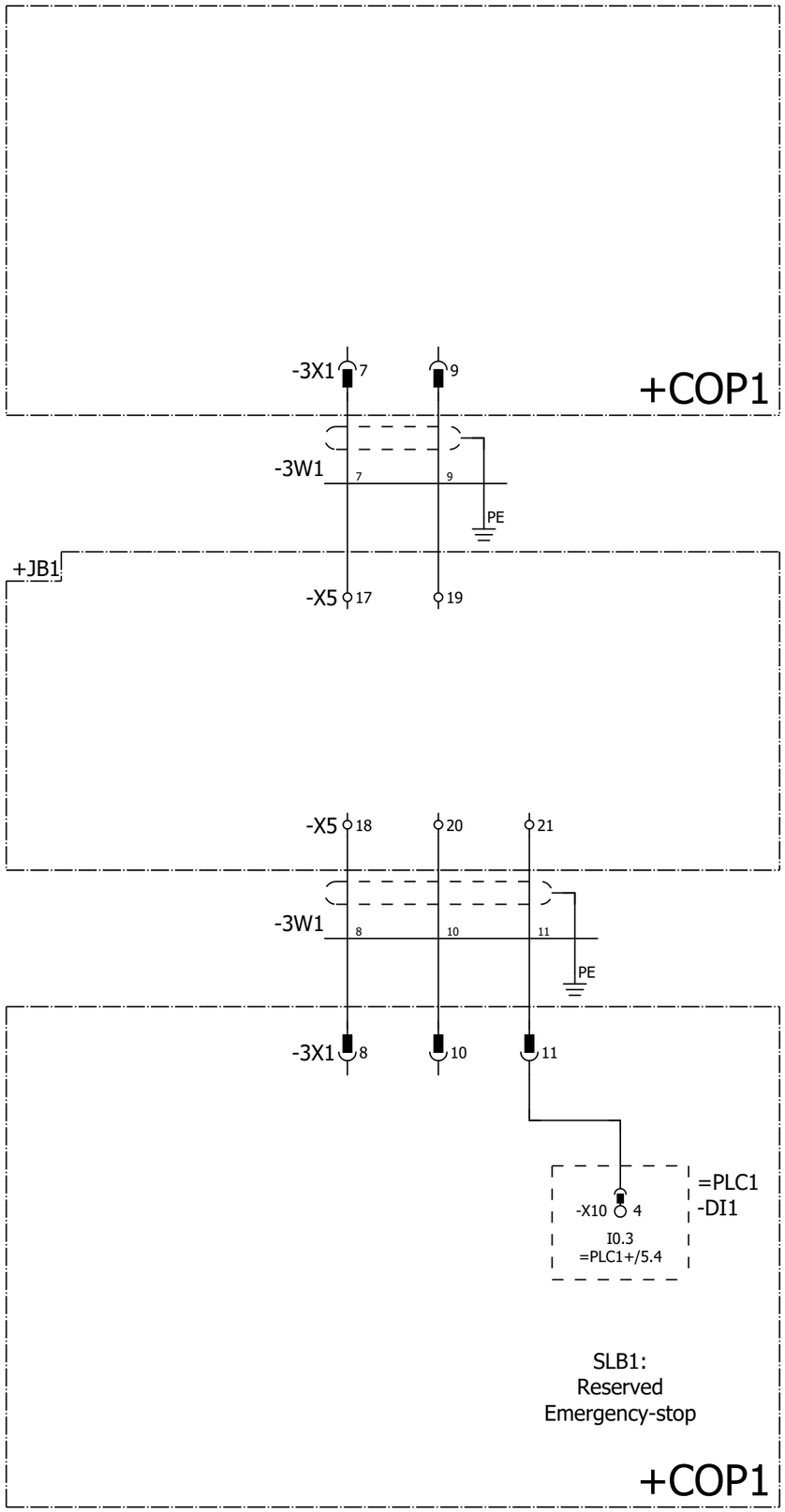
+JB1



Creator	Ferenc Baracsi	Commission	620300.11.2023	SLB1: Hand-control-unit outside	= SLB1	+	Page 0
Edited by	BaF	Type	MSK - Semitech		Revision		
Modification date	2023. 10. 11.						


SLB1:
Safety light barrier
24VDC power supply
OK
-3F2
=GEN+COP1/11.7
4A
OUTX
=PLC1
-DI1
=PLC1+/5.5
I2.5
-X10
26
DI c
SLB1-P1- / =GEN+COP1-X5.0:18:B =GEN+COP1/13.2
=-PE:33
-3X1
1
2
PE
+COP1
Enclosure
-3W1
Ölflex Classic 110 CY
12G1,5 mm²
13 m
GNYE
SH
PE
-X5
a
b
-4B1 /4.1 / SLB1A-1P1-
+JB1-4S3:13 /4.1 / SLB1A-1P1+
-4B1 /4.1 / SLB1A-2P1+
-PE:1
+JB1
Field


+JB1-X5:4:b /3.2 / SLB1A-1P1+
/3.1 / SLB1A-1P1-
/3.2 / SLB1A-2P1+
+JB1
Field
-4S3
Reset/Override
Reset/Override
-X5
-4W3
PUR-OB/10m
4X0,34 mm²
10 m
-4B4
WL280
-4B5
WL280
-4B6
WL280
-4B7
WL280
-4P9
-4W4
PUR-OB
4X0,34 mm²
10 m
-4W5
PUR-OB/3m
4X0,34 mm²
3 m
-4W6
PUR-OB
4X0,34 mm²
10 m
-4W7
PUR-OB/3m
4X0,34 mm²
3 m
-4W9
PUR-OB\2m
4X0,34 mm²
3 m
+JB1
-PE:2
-4B3
UE403
Reset/
Override
24V+
EFIa
0V-
EFIb
PE
COM
A1
A2
B1
B2
Muting lamp
-4W1
Hirschmann/5m
12G0,75 mm²
5 m
-4COM3
5G0,34 mm²
1 m
-4B1
M4000
1200127+1027908
24V+
0V-
-4W1
RD
RD/BU
BK
VT
GY/PK
-X5
-4R2
182 OHM
-4W1
GY
PK
YE
WH
-X5
-3W1
PE
-3X1
=SPLC1
-DIS2
I1
I2
I9
=SPLC1+/3.5
I10
=SPLC1+/3.5
=PLC1
-DI2
-X10
34
I7.3
=PLC1+/6.5
SLB1:
Safety-LB infeed
OSSD 1
SLB1:
Safety-LB infeed
OSSD 2
SLB1:
Safety-LB
diagnostic
+JB1
Field
+COP1
Enclosure


-3X1
7
9
+COP1
-3W1
7
9
PE
+JB1
-X5
17
19
-X5
18
20
21
-3W1
8
10
11
PE
-3X1
8
10
11
=PLC1
-DI1
-X10
4
I0.3
=PLC1+/5.4
SLB1:
Reserved
Emergency-stop
+COP1

Terminal diagram

Function text								-4W3	-4W1	Cable name	Strip =SLB1+JB1-X5						Cable name	-3W1				Page / column
								PUR-OB/10m 4X0,34 mm²	Hirschmann/5m 12G0,75 mm²	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type	Ölflex Classic 110 CY 12G1,5 mm²				
0VDC									BU		+F-4B1		1		+COP1-3X1	1		1				+F/3.1
24VDC													2									+F/3.1
=													3									+F/3.2
=											-4S3	13	4		+COP1-3X1	2		2				+F/3.2
=									BN		+F-4B1		5									+F/3.2
=													6									+F/3.2
									RD		+F-4B1		7									+F/4.2
									RD/BU		+F-4B1		8									+F/4.2
									BK		+F-4B1		9		-4R2	x1						+F/4.2
									VT		+F-4B1		10		-4R2	x2						+F/4.2
									GY/PK		+F-4B1		11									+F/4.2
								BK			+F-4B3		12		-4S3	14						+F/4.3
SLB1: Safety-LB infeed OSSD 1									GY		+F-4B1		13		+COP1-3X1	3		3				+F/4.5
SLB1: Safety-LB infeed OSSD 2									PK		+F-4B1		14		+COP1-3X1	4		4				+F/4.6
SLB1: Safety-LB infeed muting									YE		+F-4B1		15		+COP1-3X1	5		5				+F/4.7
SLB1: Safety-LB diagnostic									WH		+F-4B1		16		+COP1-3X1	6		6				+F/4.8
SLB1: Emergency-stop													17		+COP1-3X1	7		7				+F/5.1
=													18		+COP1-3X1	8		8				+F/5.1
=													19		+COP1-3X1	9		9				+F/5.2
=													20		+COP1-3X1	10		10				+F/5.2
=													21		+COP1-3X1	11		11				+F/5.2
SLB1: Safety light barrier 24VDC power supply OK											-PE	1	PE		+COP1-3X1	PE		GNYE				+F/3.5

Plug diagram

Function text									-3W1	Cable name	Strip designation =SLB1+COP1-3X1							Cable name					
									Ölflex Classic 110 CY 12G1,5 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					Page / column
									1		+JB1-X5	1:a	1			=GEN-X5.0	18:B						+F/3.1
									2		+JB1-X5	4:a	2		I2.5	-3F2	OUTX						+F/3.2
SLB1: Safety-LB infeed OSSD 1									3		+JB1-X5	13:A	3		I9	=SPLC1-DIS2	I1						+F/4.5
SLB1: Safety-LB infeed OSSD 2									4		+JB1-X5	14:A	4		I10	=SPLC1-DIS2	I2						+F/4.6
SLB1: Safety-LB infeed muting									5		+JB1-X5	15:A	5										+F/4.7
SLB1: Safety-LB diagnostic									6		+JB1-X5	16:A	6		I7.3	=PLC1-DI2	-X10:34						+F/4.8
SLB1: Emergency-stop									7		+JB1-X5	17	7										+F/5.1
=									8		+JB1-X5	18	8										+F/5.1
=									9		+JB1-X5	19	9										+F/5.2
=									10		+JB1-X5	20	10										+F/5.2
=									11		+JB1-X5	21	11		I0.3	=PLC1-DI1	-X10:4						+F/5.2
													12										
													13										
													14										
													15										
													16										
SLB1: Safety light barrier 24VDC power supply OK									GNYE		+JB1-X5	PE:a	PE			-PE	33						+F/3.5

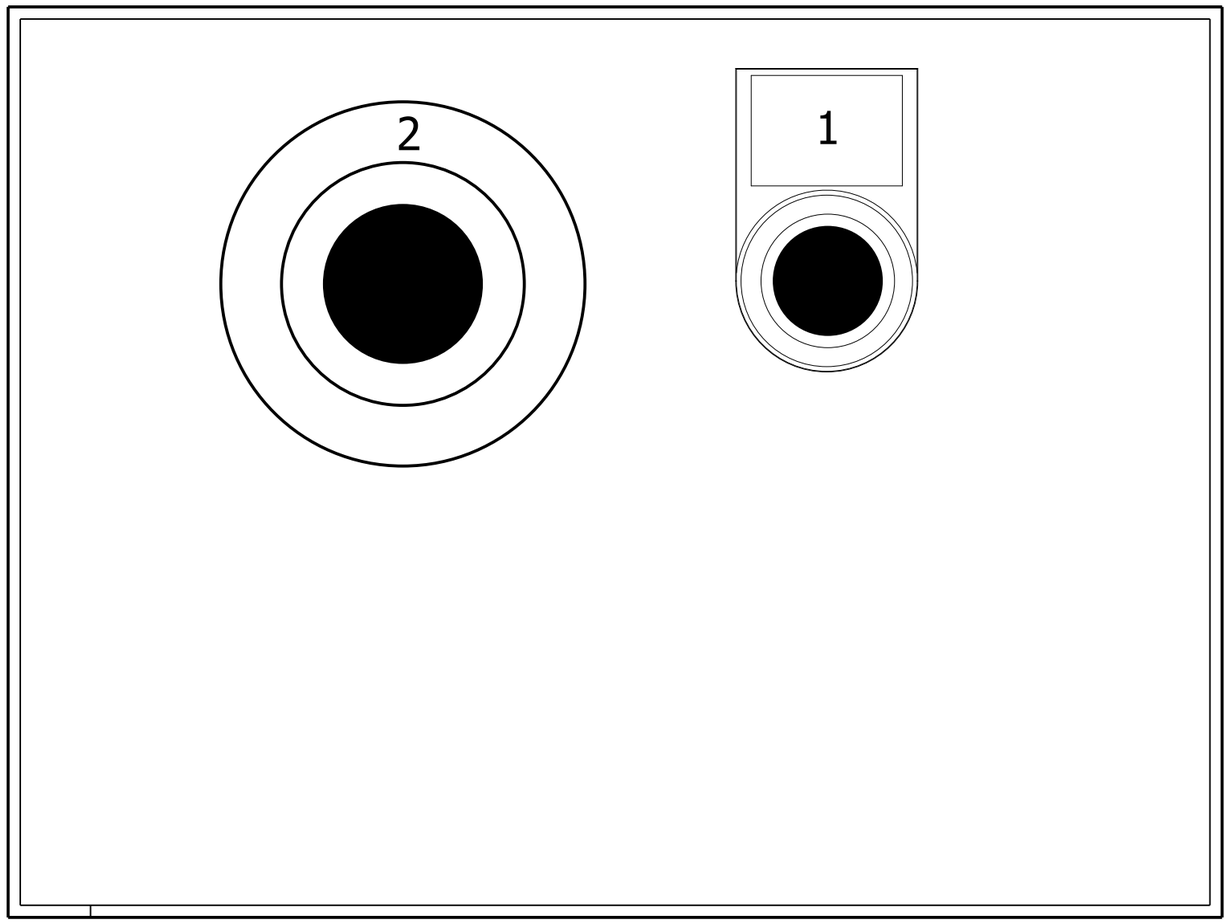
Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
-4COM3			00143287		5G	5	0,34	1	SLB1: Safety-LB infeed
-3W1	-3X1	-X5	00097838	Ölflex Classic 110 CY	12G	12	1,5	13	SLB1: 24VDC infeed safety-LB
-4W1	+JB1 -PE		10149825	Hirschmann/5m	12G	12	0,75	5	SLB1: Safety-LB infeed
-4W3	-X5		00143360	PUR-OB/10m	4X	1	0,34	10	SLB1: Safety-LB infeed Reset/Override
			00150353						
-4W4		-4B4	00143360	PUR-OB	4X	3	0,34	10	SLB1: Safety-LB infeed muting A1
			00150353						
-4W5		-4B5	10150609	PUR-OB/3m	4X	3	0,34	3	SLB1: Safety-LB infeed muting A2
			00150353						
-4W6		-4B6	00143360	PUR-OB	4X	3	0,34	10	SLB1: Safety-LB infeed muting B1
			00150353						
-4W7		-4B7	10150609	PUR-OB/3m	4X	3	0,34	3	SLB1: Safety-LB infeed muting B2
			00150353						
-4W9		-4P9		PUR-OB\2m	4X	2	0,34	3	SLB1: Muting lamp

Operating element

Number	Device tag	Function text
1	-4S3	Reset/Override
2	-5S1	Emergency-Stop

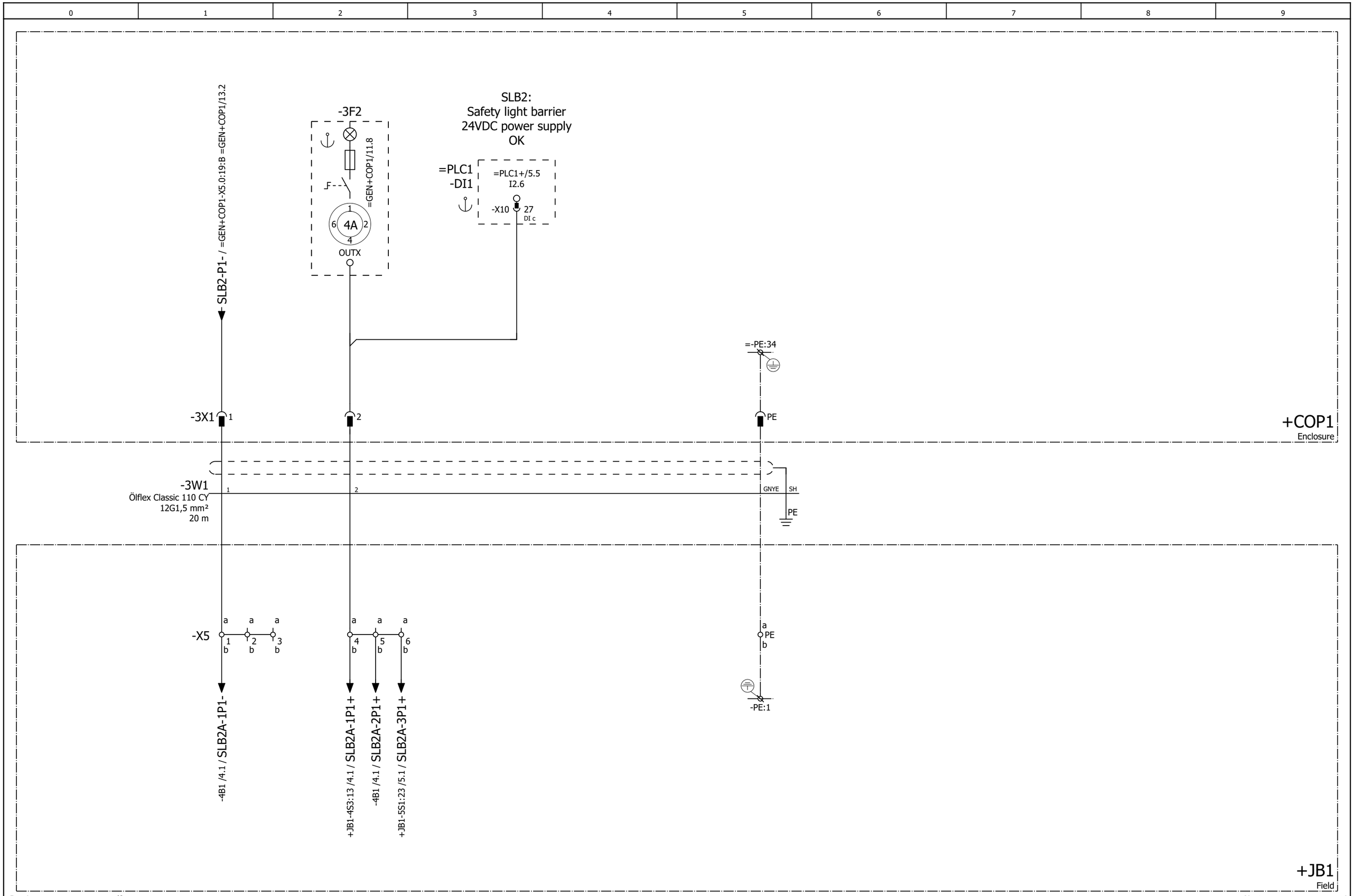
+JB1

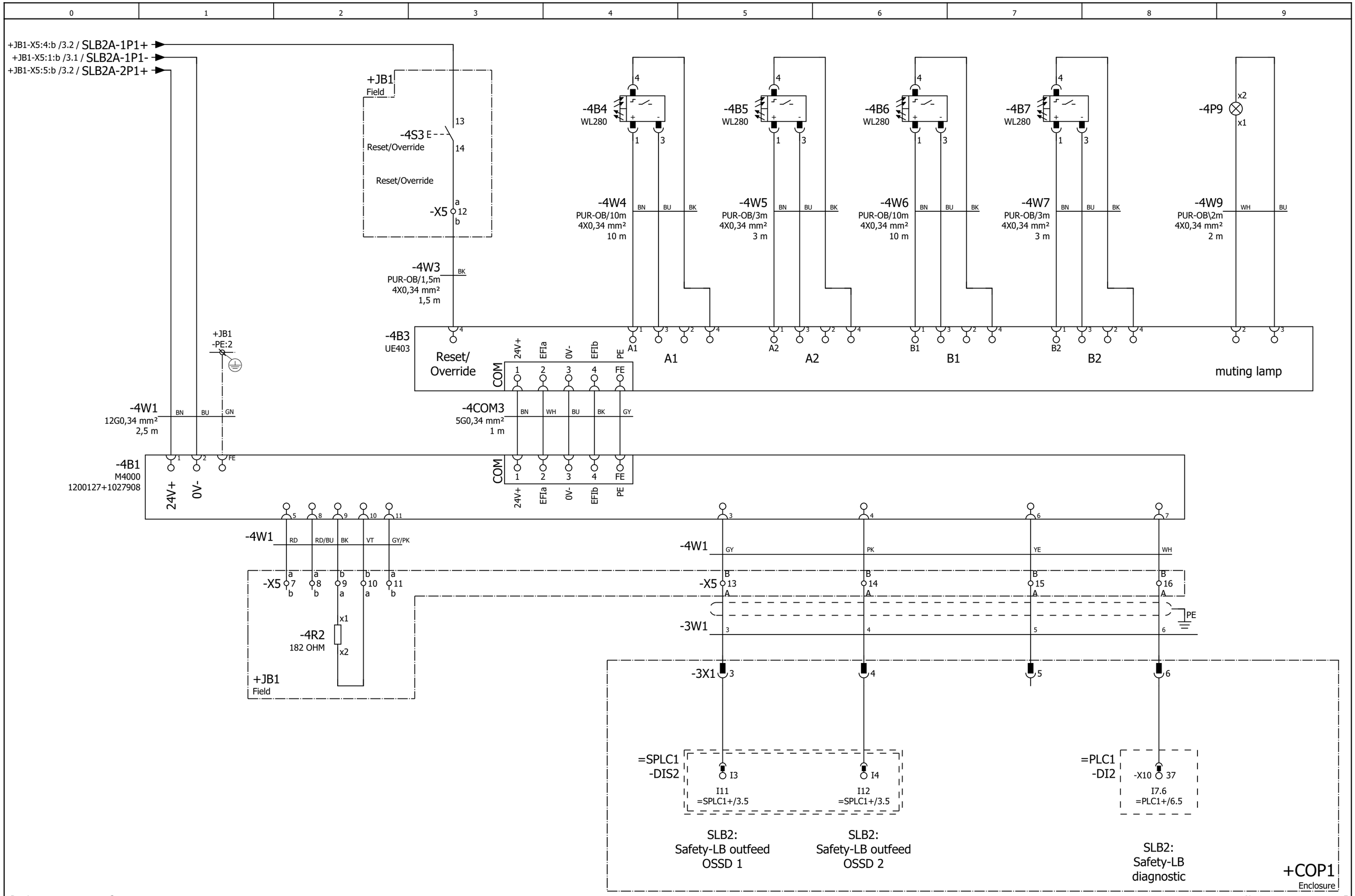


Enclosure legend

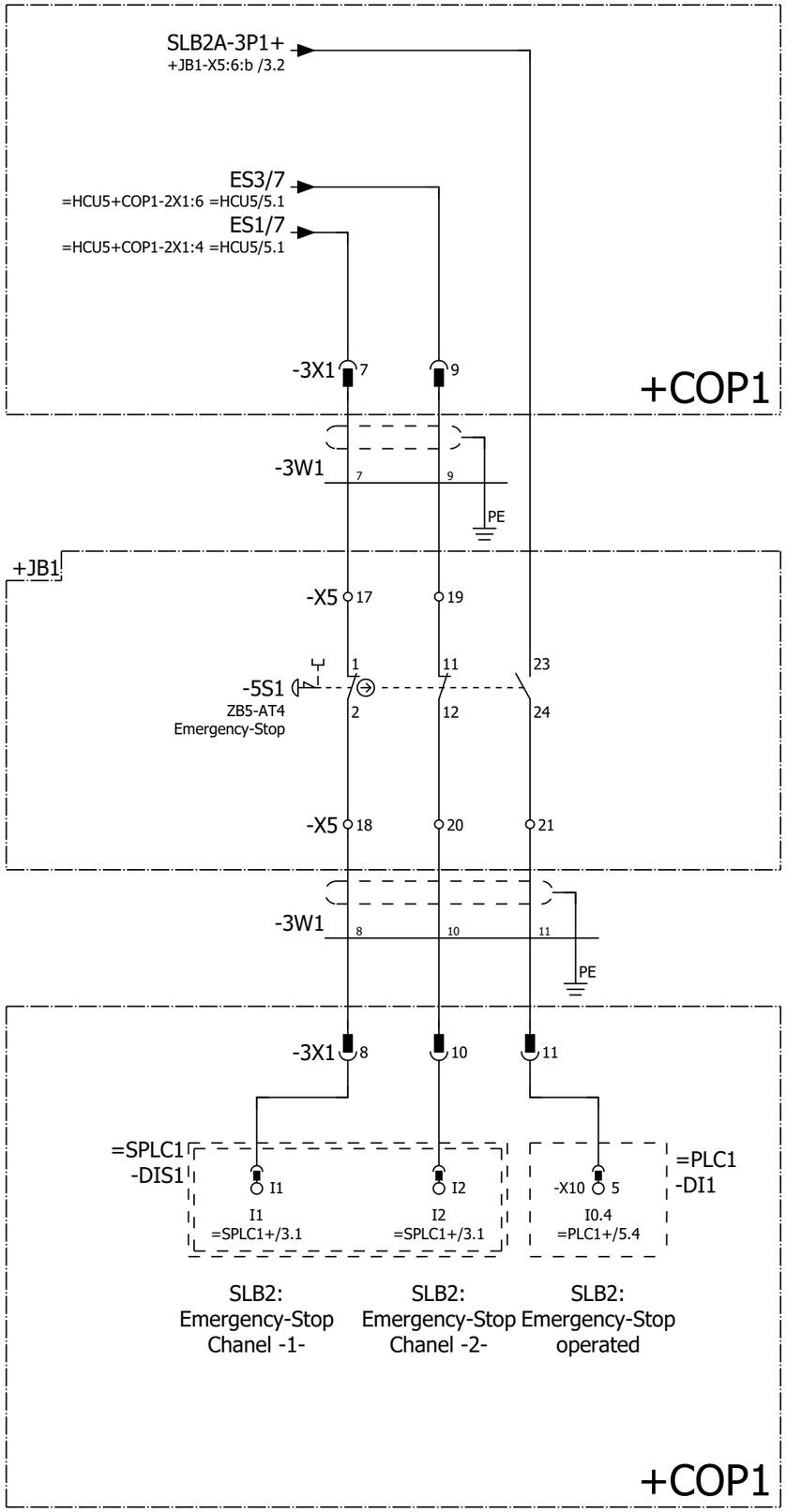
Item number	Device tag	Type number
1	-4S3	ZB5-AA6
2	-5S1	ZB5-AT4

Creator	Ferenc Baracsi	Commission	620300.11.2023	SLB2: Hand-control-unit outside	= SLB2	+	Page 0
Edited by	BaF	Type	MSK - Semitech		Revision		
Modification date	2023. 10. 11.						


SLB2:
Safety light barrier
24VDC power supply
OK
-3F2
=GEN+COP1/11.8
4A
OUTX
=PLC1
-DI1
=PLC1+/5.5
I2.6
-X10
27
DI c
SLB2-P1- / =GEN+COP1-X5.0:19:B =GEN+COP1/13.2
=-PE:34
-3X1
PE
+COP1
Enclosure
-3W1
Ölflex Classic 110 CY
12G1,5 mm²
20 m
GNYE
SH
PE
-X5
-PE:1
-4B1 /4.1 / SLB2A-1P1-
+JB1-4S3:13 /4.1 / SLB2A-1P1+
-4B1 /4.1 / SLB2A-2P1+
+JB1-5S1:23 /5.1 / SLB2A-3P1+
+JB1
Field



Creator	Ferenc Baracsi	Commission	620300.11.2023	SLB2: Safety-LB infeed	= SLB2	+F	Page 4
Edited by	BaF	Type	MSK - Semitech		Revision		
Modification date	2023. 10. 11.						



Creator	Ferenc Baracsi	Commission	620300.11.2023	SLB2: Control elements	= SLB2	+F	Page 5
Edited by	BaF	Type	MSK - Semitech		Revision		
Modification date	2023. 10. 11.						

0	1	2	3	4	5	6	7	8	9

Terminal diagram

Function text								-4W3	-4W1	Cable name	Strip =SLB2+JB1-X5						Cable name	-3W1				Page / column
								PUR-OB/1,5m 4X0,34 mm²	12G0,34 mm²	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type	Ölflex Classic 110 CY 12G1,5 mm²				
0VDC									BU		+F-4B1		1		+COP1-3X1	1		1				+F/3.1
24VDC													2									+F/3.1
=													3									+F/3.2
=											-4S3	13	4		+COP1-3X1	2		2				+F/3.2
=									BN		+F-4B1		5									+F/3.2
=											-5S1	23	6									+F/3.2
									RD		+F-4B1		7									+F/4.2
									RD/BU		+F-4B1		8									+F/4.2
									BK		+F-4B1		9		-4R2	x1						+F/4.2
									VT		+F-4B1		10		-4R2	x2						+F/4.2
									GY/PK		+F-4B1		11									+F/4.2
								BK			+F-4B3		12		-4S3	14						+F/4.3
SLB2: Safety-LB outfeed OSSD 1									GY		+F-4B1		13		+COP1-3X1	3		3				+F/4.5
SLB2: Safety-LB outfeed OSSD 2									PK		+F-4B1		14		+COP1-3X1	4		4				+F/4.6
SLB2: Safety-LB outfeed muting									YE		+F-4B1		15		+COP1-3X1	5		5				+F/4.7
SLB2: Safety-LB diagnostic									WH		+F-4B1		16		+COP1-3X1	6		6				+F/4.8
SLB2: Emergency-Stop Chanel -1-											-5S1	1	17		+COP1-3X1	7		7				+F/5.1
=											-5S1	2	18		+COP1-3X1	8		8				+F/5.1
SLB2: Emergency-Stop Chanel -2-											-5S1	11	19		+COP1-3X1	9		9				+F/5.2
=											-5S1	12	20		+COP1-3X1	10		10				+F/5.2
=											-5S1	24	21		+COP1-3X1	11		11				+F/5.2
SLB2: Safety light barrier 24VDC power supply OK											-PE	1	PE		+COP1-3X1	PE		GNYE				+F/3.5

Plug diagram

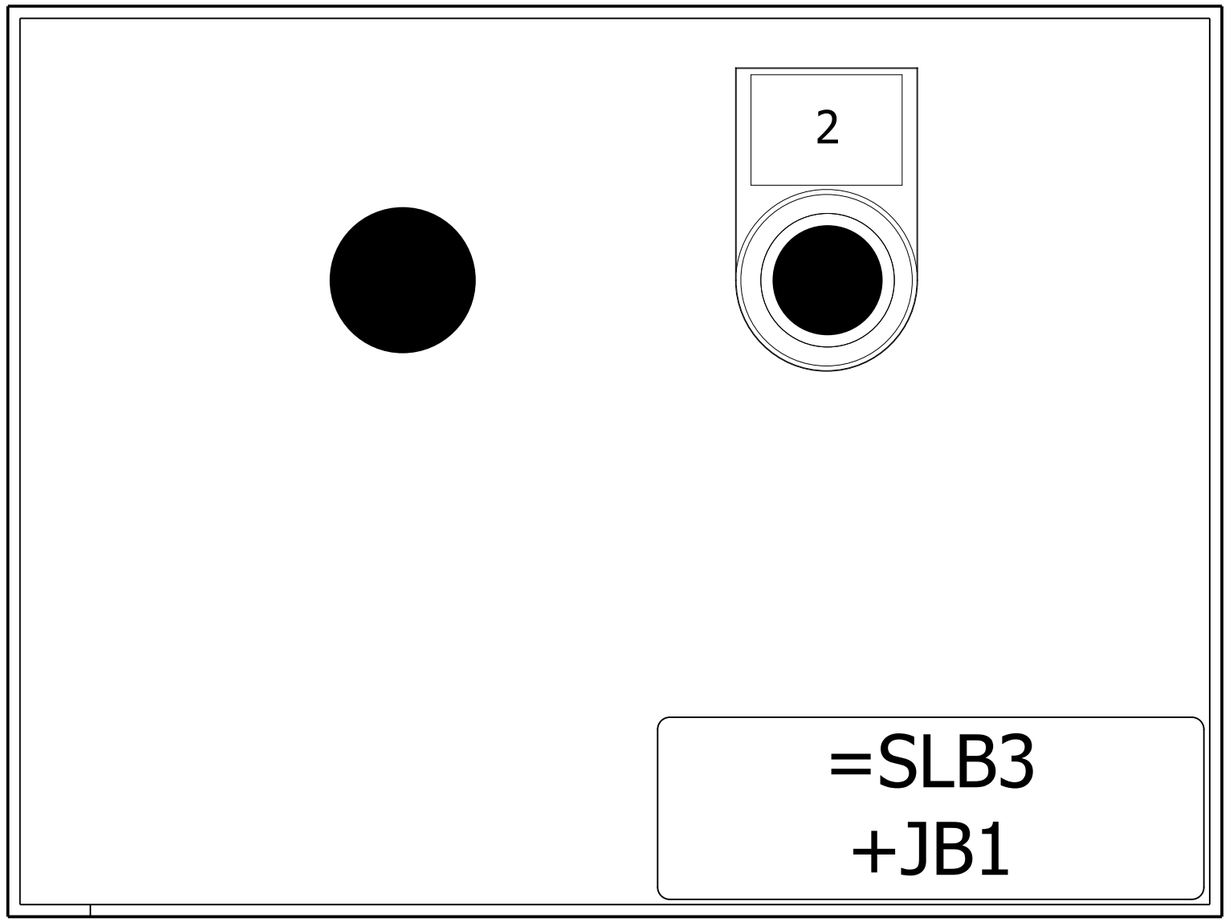
Function text									-3W1	Cable name	Strip designation =SLB2+COP1-3X1							Cable name					
									Ölflex Classic 110 CY 12G1,5 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					Page / column
									1		+JB1-X5	1:a	1			=GEN-X5.0	19:B						+F/3.1
									2		+JB1-X5	4:a	2		I2.6	-3F2	OUTX						+F/3.2
SLB2: Safety-LB outfeed OSSD 1									3		+JB1-X5	13:A	3		I11	=SPLC1-DIS2	I3						+F/4.5
SLB2: Safety-LB outfeed OSSD 2									4		+JB1-X5	14:A	4		I12	=SPLC1-DIS2	I4						+F/4.6
SLB2: Safety-LB outfeed muting									5		+JB1-X5	15:A	5										+F/4.7
SLB2: Safety-LB diagnostic									6		+JB1-X5	16:A	6		I7.6	=PLC1-DI2	-X10:37						+F/4.8
SLB2: Emergency-Stop Chanel -1-									7		+JB1-X5	17	7			=HCU5-2X1	4						+F/5.1
=									8		+JB1-X5	18	8		I1	=SPLC1-DIS1	I1						+F/5.1
SLB2: Emergency-Stop Chanel -2-									9		+JB1-X5	19	9			=HCU5-2X1	6						+F/5.2
=									10		+JB1-X5	20	10		I2	=SPLC1-DIS1	I2						+F/5.2
=									11		+JB1-X5	21	11		I0.4	=PLC1-DI1	-X10:5						+F/5.2
													12										
													13										
													14										
													15										
													16										
SLB2: Safety light barrier 24VDC power supply OK									GNYE		+JB1-X5	PE:a	PE			-PE	34						+F/3.5

Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
-4COM3			00143287		5G	5	0,34	1	SLB2: Safety-LB infeed
-3W1	-3X1	-X5	00097838	Ölflex Classic 110 CY	12G	12	1,5	20	SLB2: 24VDC infeed safety-LB
-4W1	+JB1 -PE		00143285		12G	12	0,34	2,5	SLB2: Safety-LB infeed
-4W3	-X5		10150127	PUR-OB/1,5m	4X	1	0,34	1,5	SLB2: Safety-LB infeed Reset/Override
			00150353						
-4W4		-4B4	00143360	PUR-OB/10m	4X	3	0,34	10	SLB2: Safety-LB infeed muting A1
			00150353						
-4W5		-4B5	10150609	PUR-OB/3m	4X	3	0,34	3	SLB2: Safety-LB infeed muting A2
			00150353						
-4W6		-4B6	00143360	PUR-OB/10m	4X	3	0,34	10	SLB2: Safety-LB infeed muting B1
			00150353						
-4W7		-4B7	10150609	PUR-OB/3m	4X	3	0,34	3	SLB2: Safety-LB infeed muting B2
			00150353						
-4W9		-4P9		PUR-OB\2m	4X	2	0,34	2	SLB2: Muting lamp

Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	Cable overview : =SLB2+F-4COM3 - =SLB2+F-4W9	= SLB2	+CBL	Page 400
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 11.						

+JB1



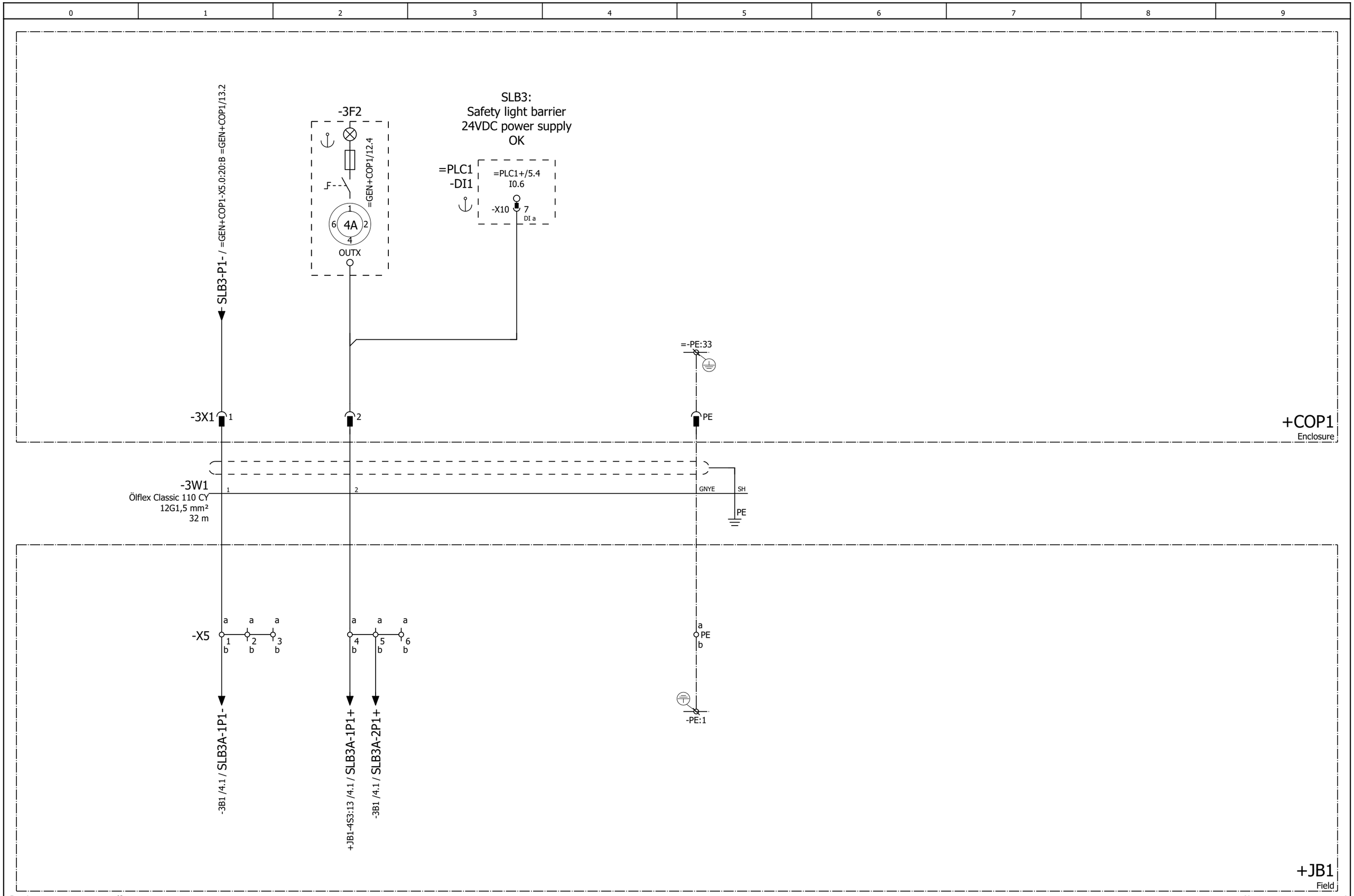
Operating element

Number	Device tag	Function text
1	-4S3	Reset/Override

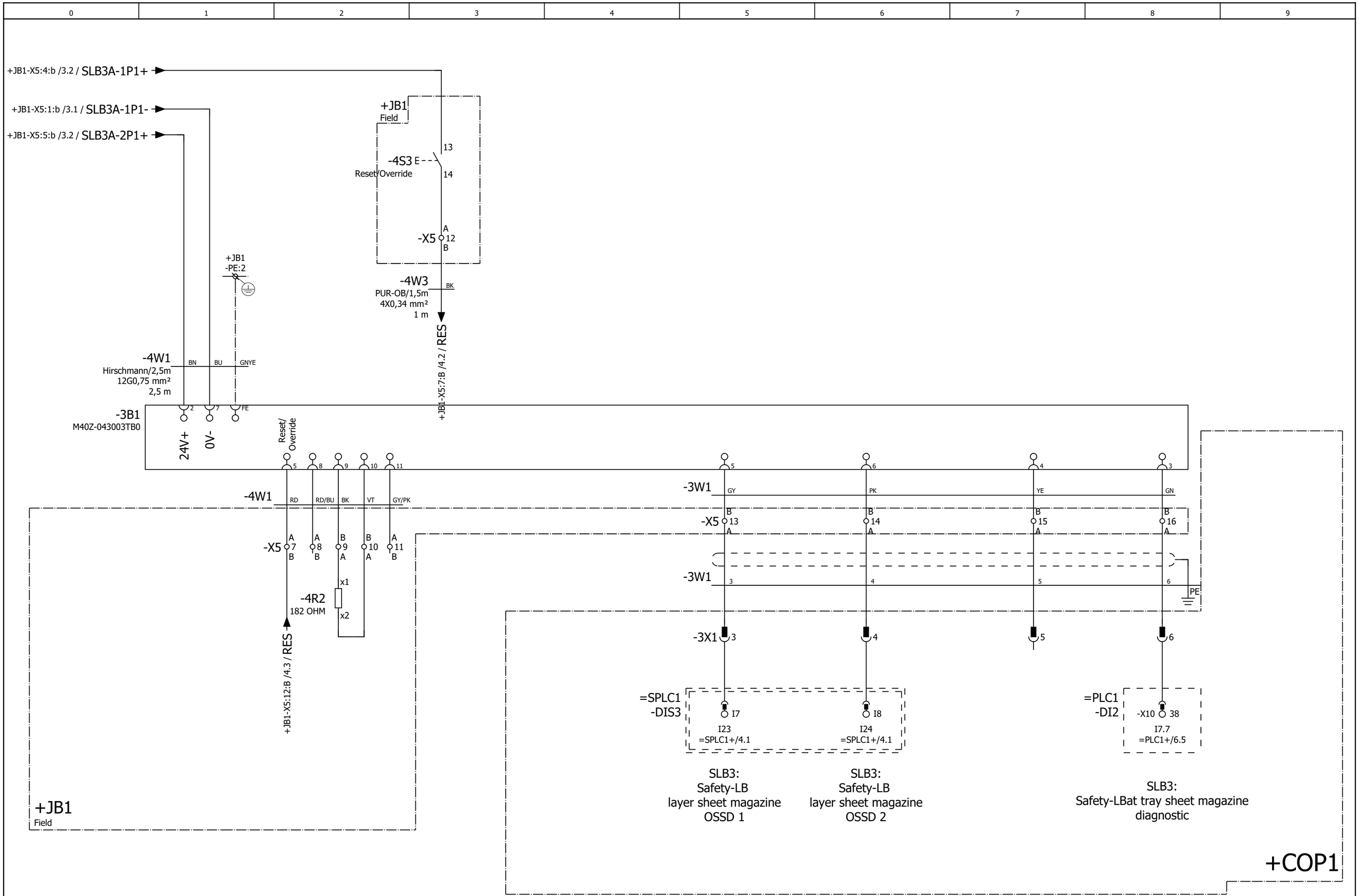
Enclosure legend

Item number	Device tag	Type number
1	-4S3	ZB5-AA6

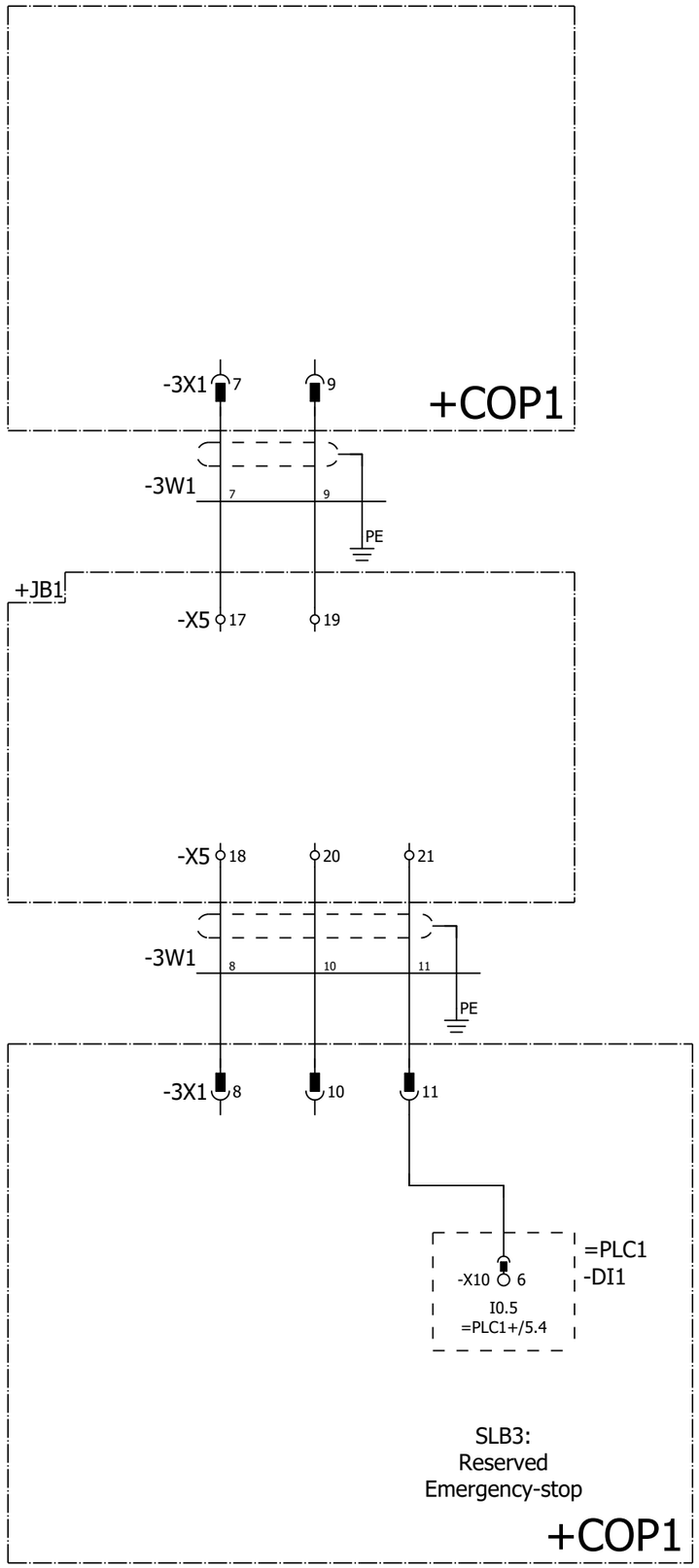
Creator	Ferenc Baracsi	Commission	620300.11.2023	JB1: junction box outside	= SLB3	+	Page 0
Edited by	BaF	Type	MSK - Semitech		Revision		
Modification date	2023. 10. 11.						



Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	SLB3: 24VDC infeed safety-LB at sheet	= SLB3	+F	Page 3
Edited by	BaF	Type MSK - Semitech			Revision	
Modification date	2023. 10. 11.					



Previous page	3						Next page 5
Creator	Ferenc Baracsi	Commission	620300.11.2023	MSK COVERTECH GROUP	SLB3: Safety-LB at sheet	= SLB3	+F	Page 4
Edited by	BaF	Type	MSK - Semitech			Revision	
Modification date	2023. 10. 11.						


-3X1
7
9
+COP1
-3W1
7
9
PE
+JB1
-X5
17
19
-X5
18
20
21
-3W1
8
10
11
PE
-3X1
8
10
11
=PLC1
-DI1
-X10
6
I0.5
=PLC1+/5.4
SLB3:
Reserved
Emergency-stop
+COP1

Terminal diagram

Function text							-3W1	-4W3	-4W1	Cable name	Strip =SLB3+JB1-X5						Cable name	-3W1	-4W3			Page / column
							Ölflex Classic 110 CY 12G1,5 mm²	PUR-OB/1,5m 4X0,34 mm²	Hirschmann/2,5m 12G0,75 mm²	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type	Ölflex Classic 110 CY 12G1,5 mm²	PUR-OB/1,5m 4X0,34 mm²			
0VDC									BU		+F-3B1		1		+COP1-3X1	1		1				+F/3.1
24VDC													2									+F/3.1
=													3									+F/3.2
=											-4S3	13	4		+COP1-3X1	2		2				+F/3.2
=									BN		+F-3B1		5									+F/3.2
=													6									+F/3.2
									RD		+F-3B1		7		-X5	12:B			BK			+F/4.2
									RD/BU		+F-3B1		8									+F/4.2
									BK		+F-3B1		9		-4R2	x1						+F/4.2
									VT		+F-3B1		10		-4R2	x2						+F/4.2
									GY/PK		+F-3B1		11									+F/4.2
								BK			-X5	7:B	12		-4S3	14						+F/4.3
SLB3: Safety-LB layer sheet magazine OSSD 1							GY				+F-3B1		13		+COP1-3X1	3		3				+F/4.5
SLB3: Safety-LB layer sheet magazine OSSD 2							PK				+F-3B1		14		+COP1-3X1	4		4				+F/4.6
=							YE				+F-3B1		15		+COP1-3X1	5		5				+F/4.7
SLB3: Safety-LBat tray sheet magazine diagnostic							GN				+F-3B1		16		+COP1-3X1	6		6				+F/4.8
SLB3: Emergency-stop													17		+COP1-3X1	7		7				+F/5.1
=													18		+COP1-3X1	8		8				+F/5.1
=													19		+COP1-3X1	9		9				+F/5.1
=													20		+COP1-3X1	10		10				+F/5.1
=													21		+COP1-3X1	11		11				+F/5.2
SLB3: Safety light barrier 24VDC power supply OK											-PE	1	PE		+COP1-3X1	PE		GNYE				+F/3.5

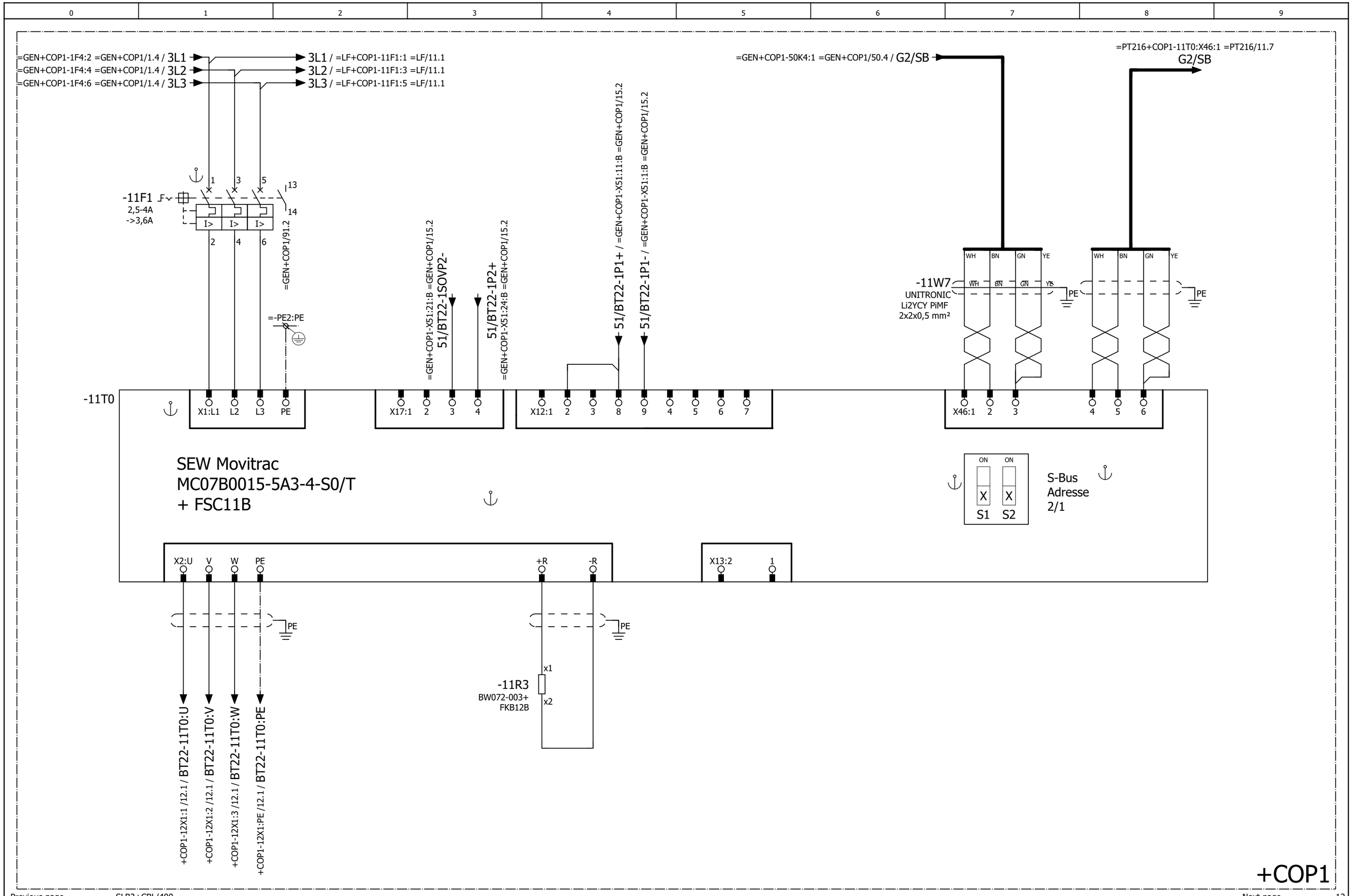
Plug diagram

Function text									-3W1	Cable name	Strip designation =SLB3+COP1-3X1							Cable name					Page / column
									Ölflex Classic 110 CY 12G1,5 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					
									1		+JB1-X5	1:a	1			=GEN-X5.0	20:B						+F/3.1
									2		+JB1-X5	4:a	2		I0.6	-3F2	OUTX						+F/3.2
SLB3: Safety-LB layer sheet magazine OSSD 1									3		+JB1-X5	13:A	3		I23	=SPLC1-DIS3	I7						+F/4.5
SLB3: Safety-LB layer sheet magazine OSSD 2									4		+JB1-X5	14:A	4		I24	=SPLC1-DIS3	I8						+F/4.6
=									5		+JB1-X5	15:A	5										+F/4.7
SLB3: Safety-LBat tray sheet magazine diagnostic									6		+JB1-X5	16:A	6		I7.7	=PLC1-DI2	-X10:38						+F/4.8
SLB3: Emergency-stop									7		+JB1-X5	17	7										+F/5.1
=									8		+JB1-X5	18	8										+F/5.1
=									9		+JB1-X5	19	9										+F/5.1
=									10		+JB1-X5	20	10										+F/5.1
=									11		+JB1-X5	21	11		I0.5	=PLC1-DI1	-X10:6						+F/5.2
													12										
													13										
													14										
													15										
													16										
SLB3: Safety light barrier 24VDC power supply OK									GNYE		+JB1-X5	PE:a	PE			-PE	33						+F/3.5

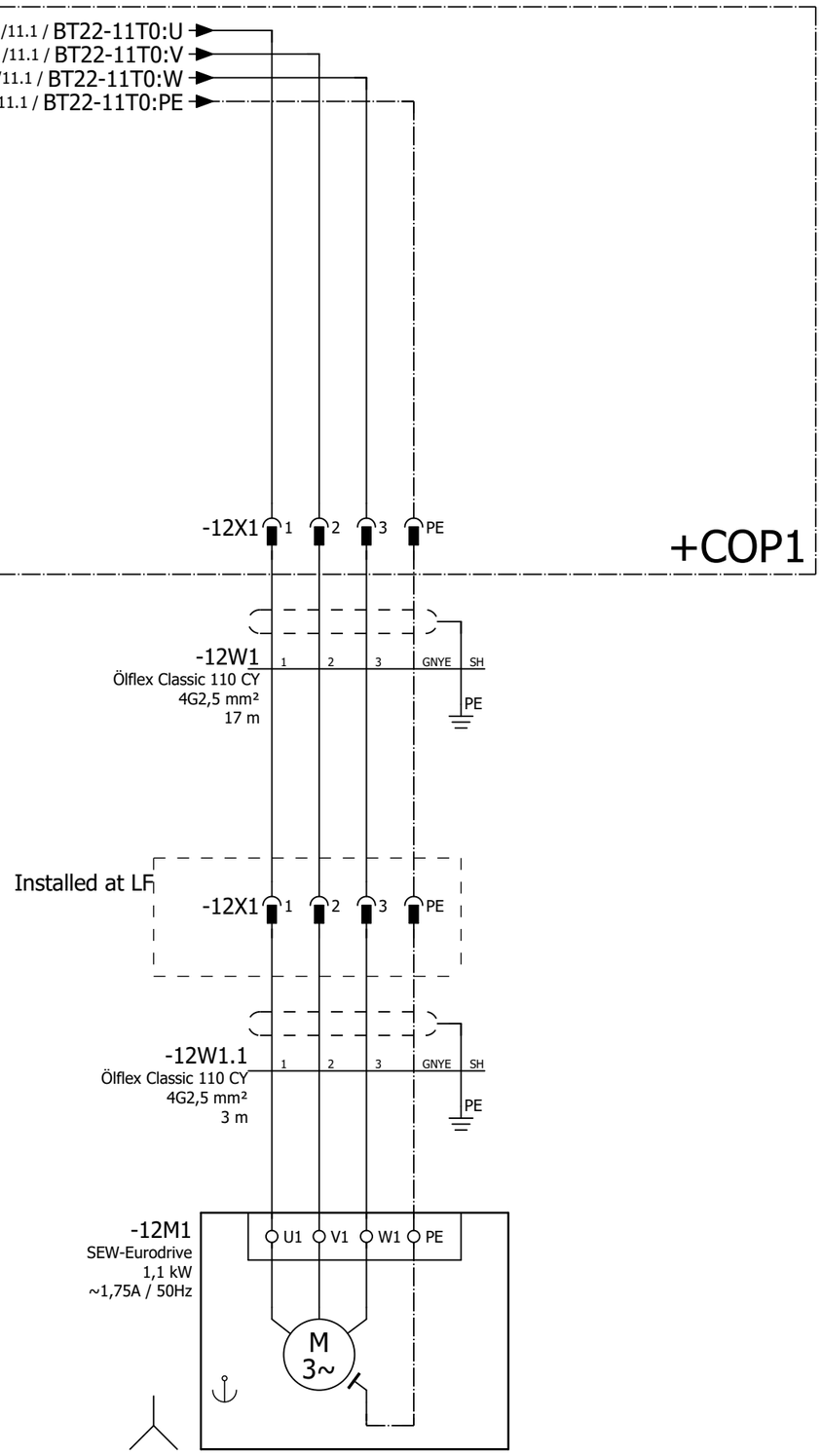
Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
-3W1	-3X1	-X5	00097838	Ölflex Classic 110 CY	12G	16	1,5	32	SLB3: 24VDC infeed safety-LB
-4W3	-X5	-X5	10150127	PUR-OB/1,5m	4X	1	0,34	1	SLB3: Safety-LB infeed Reset/Override
			00150353						

Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	Cable overview : =SLB3+F-3W1 - =SLB3+F-4W3	= SLB3	+CBL	Page 400
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 11.						

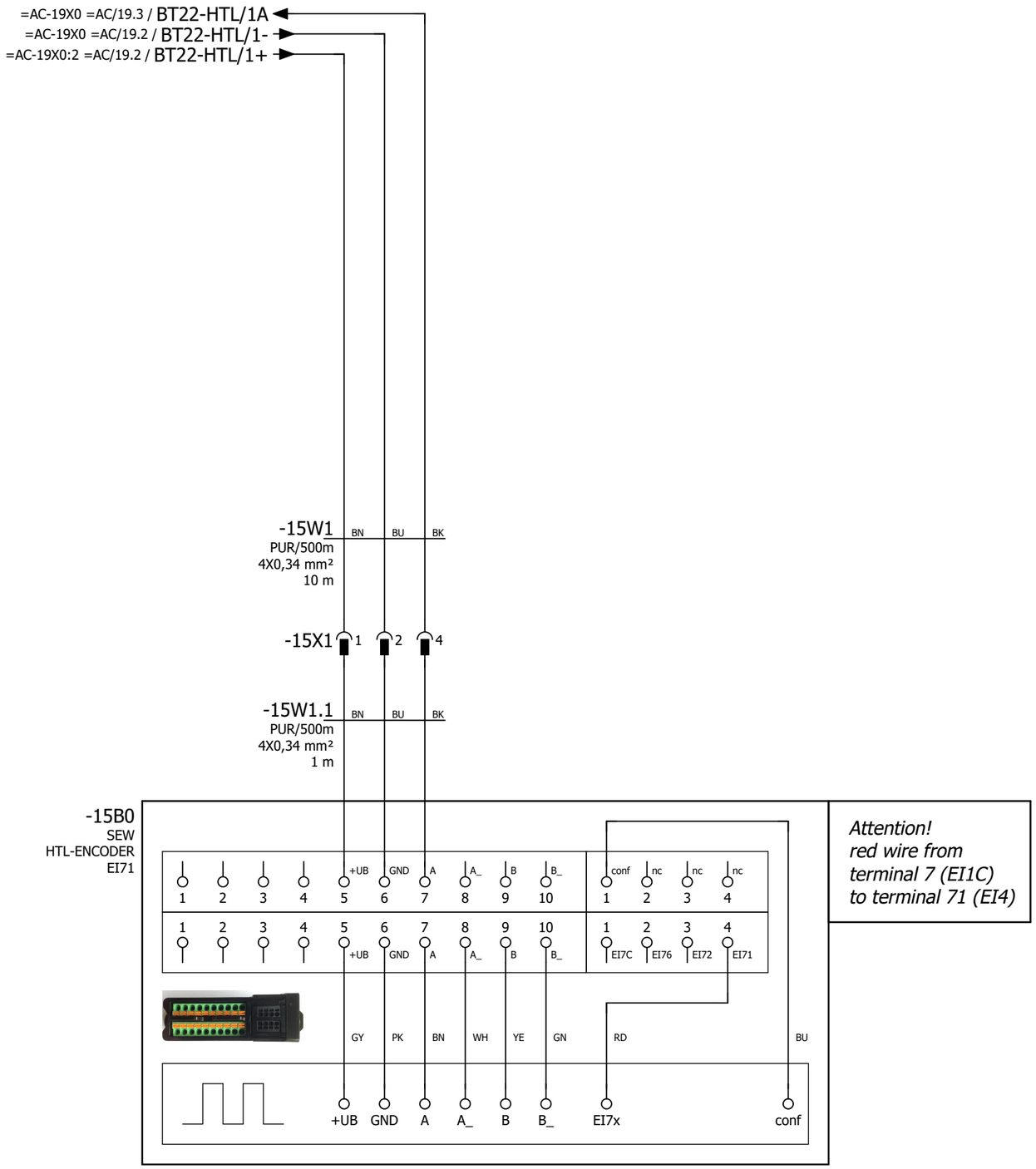


Previous page	=SLB3+CBL/400						Next page 12
Creator	Ferenc Baracsi	Commission	620300.11.2023	MSK COVERTECH GROUP	BT22: Bottle-conveyor inverter	= BT22	+F	Page 11
Edited by	BaF	Type	MSK - Semitech			Revision	
Modification date	2023. 11. 02.						



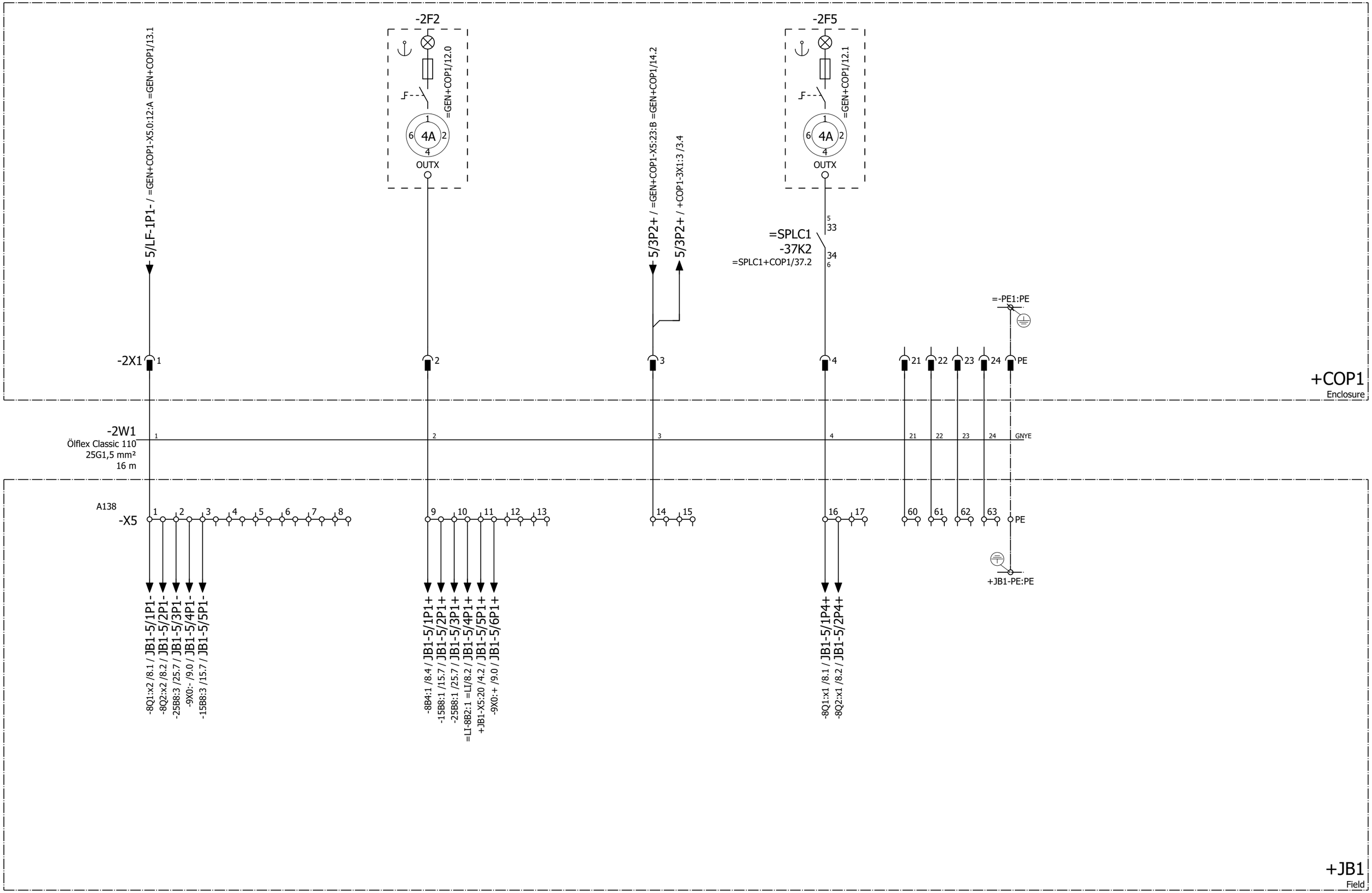
BT22:
Bottle-conveyor

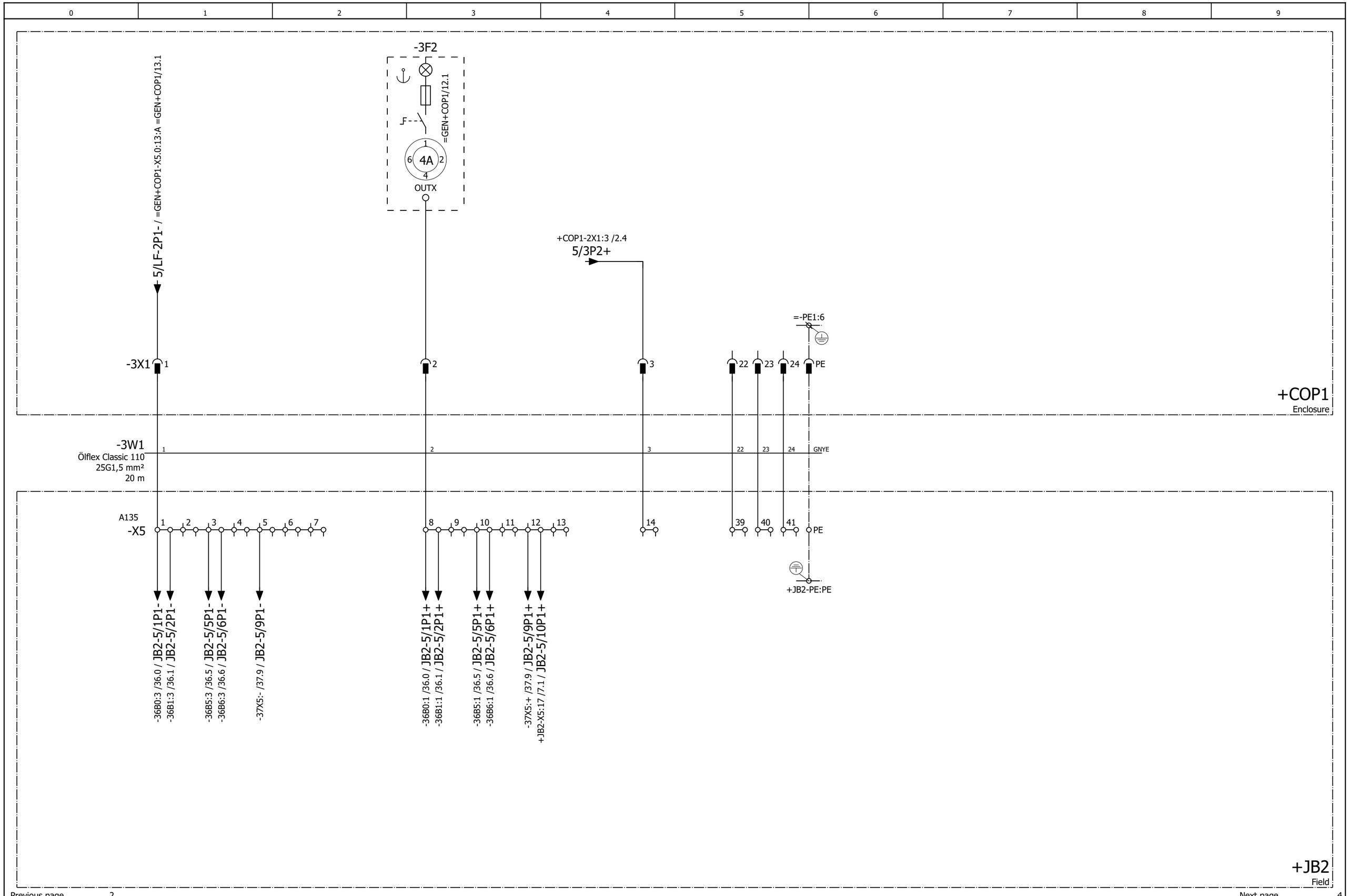
Creator	Ferenc Baracsi	Commission	620300.11.2023	BT22: Bottle-conveyor motor	= BT22	+F	Page 12
					Revision		
Edited by	BaF	Type	MSK - Semitech				
Modification date	2023. 11. 02.						

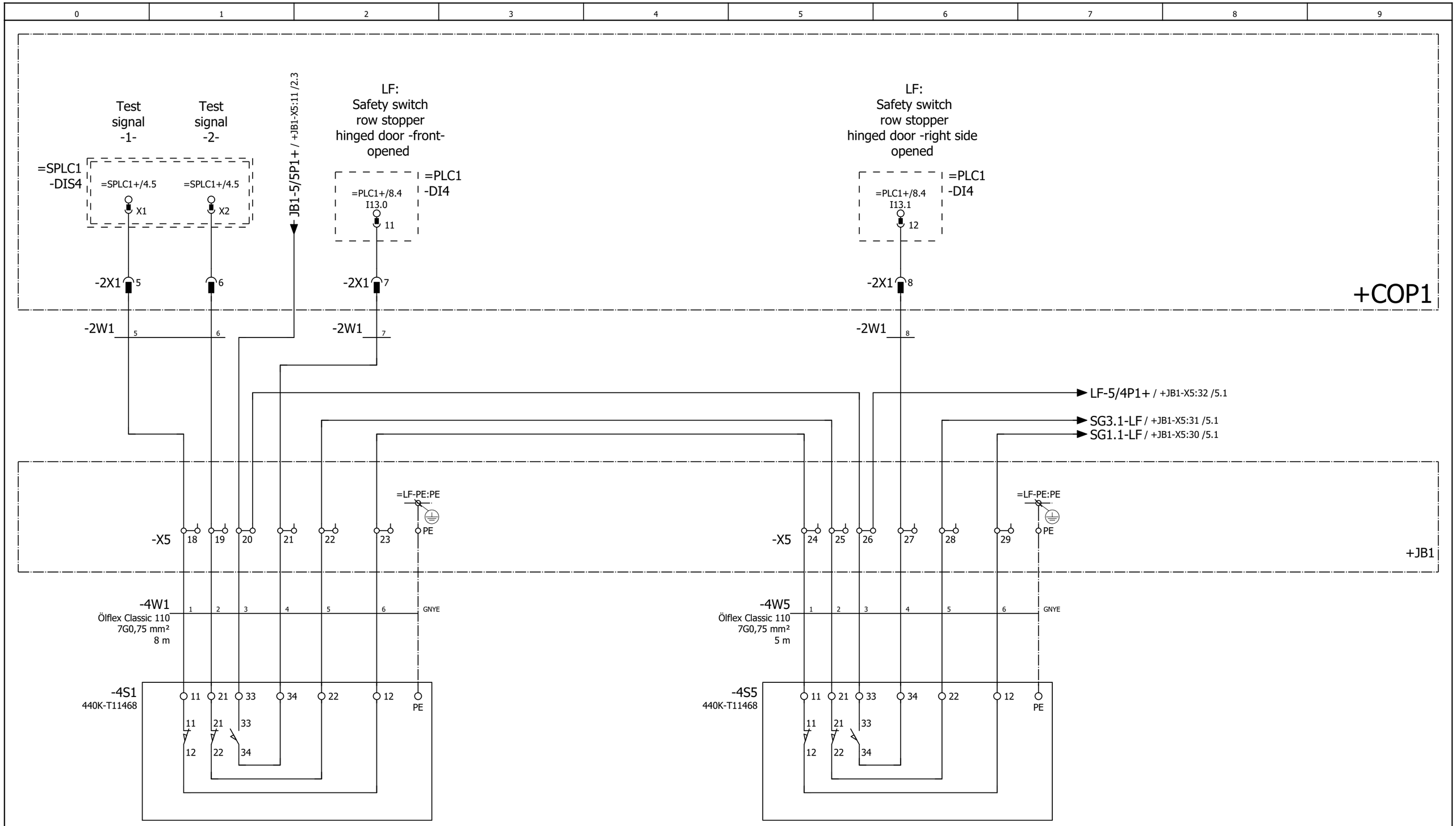


BT22:
Bottle-conveyor
HTL encoder

0	1	2	3	4	5	6	7	8	9


0
1
2
3
4
5
6
7
8
9
-2F2
=GEN+COP1/12.0
4A
OUTX
-2F5
=GEN+COP1/12.1
4A
OUTX
5/LF-1P1- / =GEN+COP1-X5.0:12:A =GEN+COP1/13.1
5/3P2+ / =GEN+COP1-X5:23:B =GEN+COP1/14.2
5/3P2+ / +COP1-3X1:3 /3.4
=SPLC1
-37K2
=SPLC1+COP1/37.2
33
34
=-PE1:PE
-2X1
1
2
3
4
21
22
23
24
PE
+COP1
Enclosure
-2W1
Ölflex Classic 110
25G1,5 mm²
16 m
GNYE
A138
-X5
60
61
62
63
+JB1-PE:PE
-8Q1:x2 /8.1 / JB1-5/1P1-
-8Q2:x2 /8.2 / JB1-5/2P1-
-25B8:3 /25.7 / JB1-5/3P1-
-9X0:- /9.0 / JB1-5/4P1-
-15B8:3 /15.7 / JB1-5/5P1-
-8B4:1 /8.4 / JB1-5/1P1+
-15B8:1 /15.7 / JB1-5/2P1+
-25B8:1 /25.7 / JB1-5/3P1+
=LI-8B2:1 =LI/8.2 / JB1-5/4P1+
+JB1-X5:20 /4.2 / JB1-5/5P1+
-9X0:+ /9.0 / JB1-5/6P1+
-8Q1:x1 /8.1 / JB1-5/1P4+
-8Q2:x1 /8.2 / JB1-5/2P4+
+JB1
Field

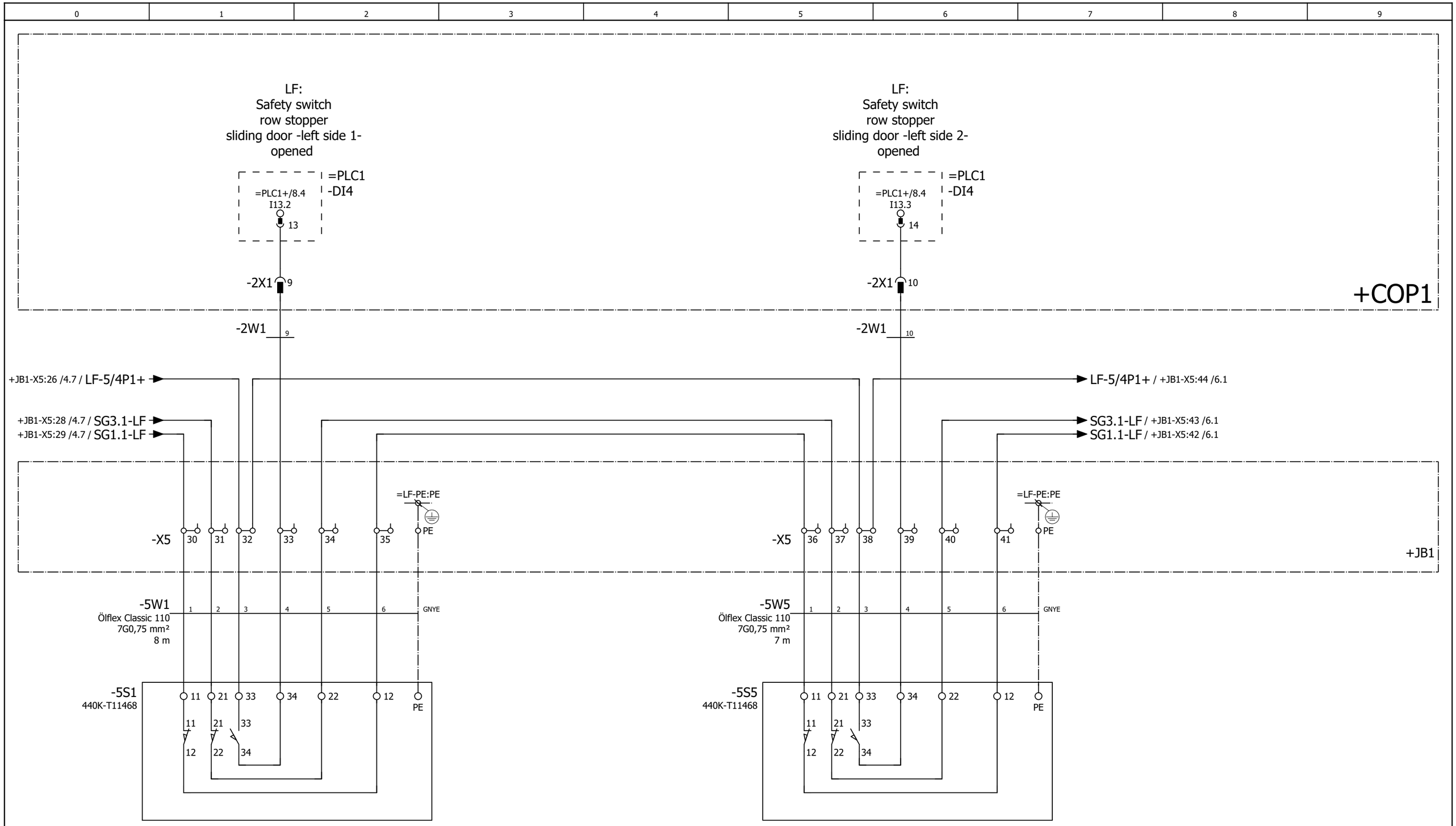

0
1
2
3
4
5
6
7
8
9
-3F2
=GEN+COP1/12.1
4A
OUTX
5/LF-2P1- / =GEN+COP1-X5.0:13:A =GEN+COP1/13.1
+COP1-2X1:3 /2.4
5/3P2+
=-PE1:6
-3X1
1
2
3
22
23
24
PE
+COP1
Enclosure
-3W1
Ölflex Classic 110
25G1,5 mm²
20 m
GNYE
A135
-X5
14
39
40
41
+JB2-PE:PE
-36B0:3 /36.0 / JB2-5/1P1-
-36B1:3 /36.1 / JB2-5/2P1-
-36B5:3 /36.5 / JB2-5/5P1-
-36B6:3 /36.6 / JB2-5/6P1-
-37X5:- /37.9 / JB2-5/9P1-
-36B0:1 /36.0 / JB2-5/1P1+
-36B1:1 /36.1 / JB2-5/2P1+
-36B5:1 /36.5 / JB2-5/5P1+
-36B6:1 /36.6 / JB2-5/6P1+
-37X5:+ /37.9 / JB2-5/9P1+
+JB2-X5:17 /7.1 / JB2-5/10P1+
+JB2
Field



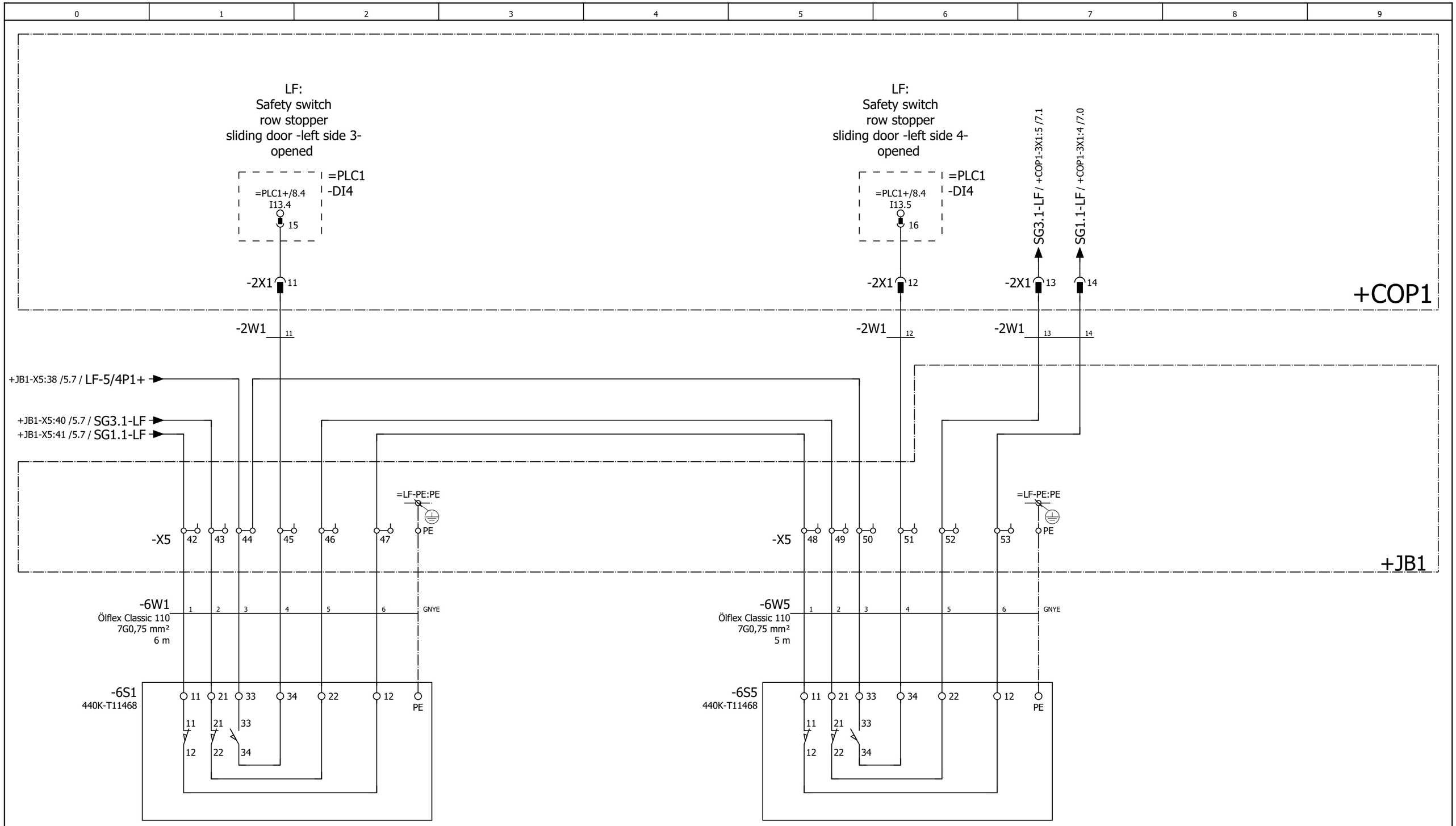
LF:
Safety switch
row stopper
Safety door -front-

LF:
Safety switch
row stopper
hinged door -right side-

Creator	Ferenc Baracsi	Commission	620300.11.2023	MSK COVERTECH GROUP	LF: Safety guard	= LF	+F	Page 4
Edited by	BaF	Type	MSK - Semitech			Revision	
Modification date	2023. 10. 11.						

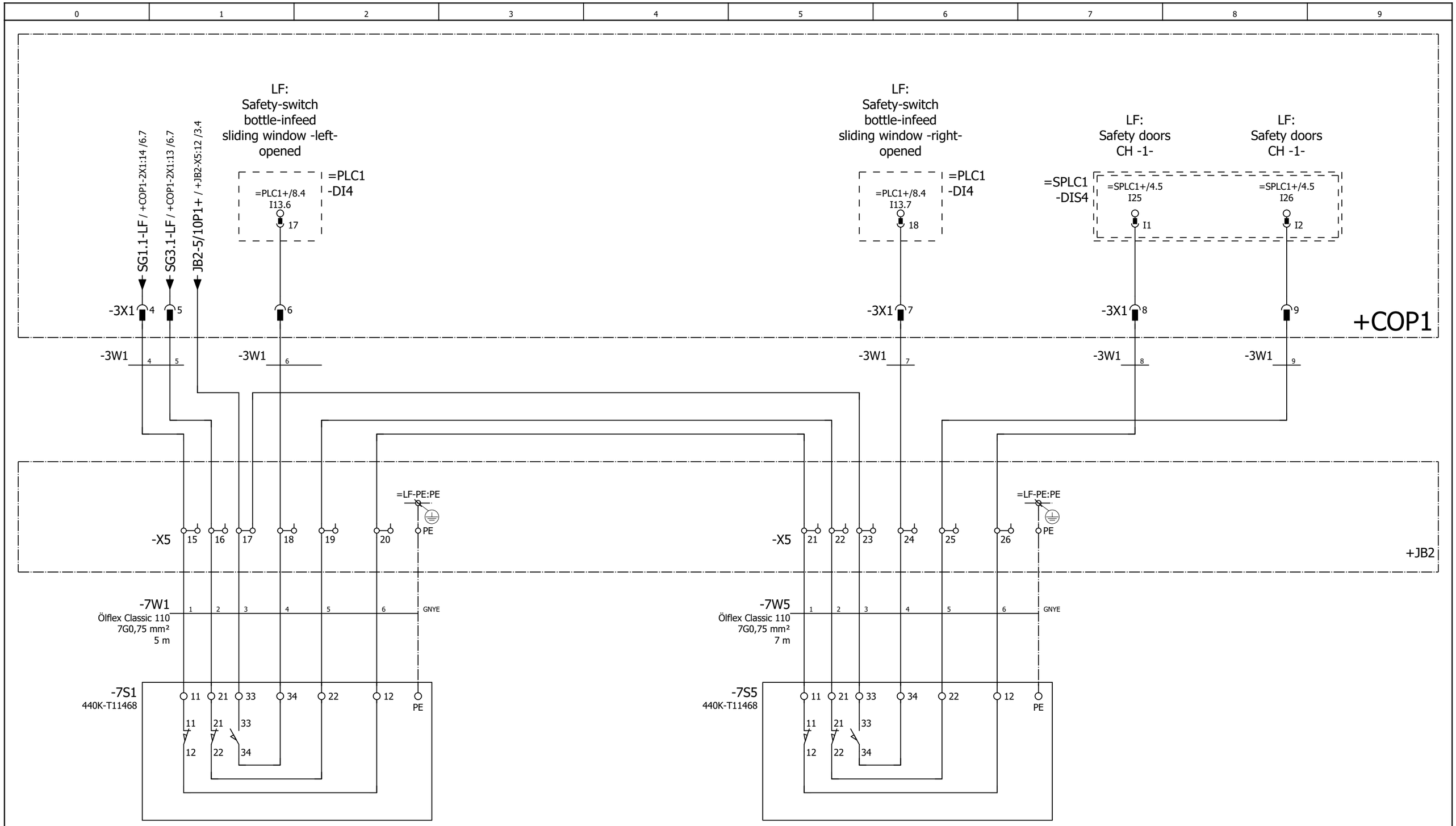


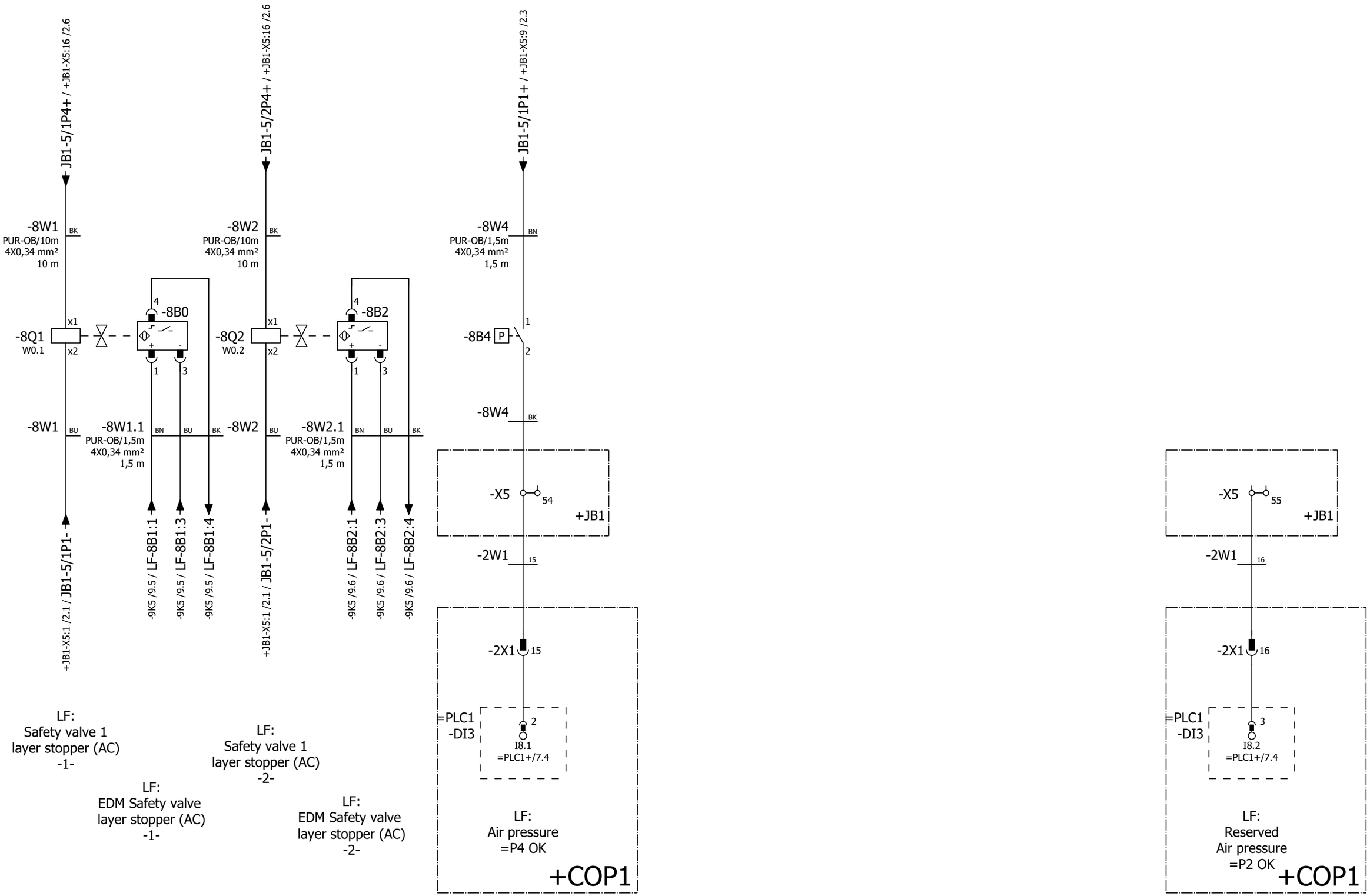
Creator	Ferenc Baracsi	Commission	620300.11.2023	MSK COVERTECH GROUP	LF: Safety guard	= LF	+F	Page 5
Edited by	BaF	Type	MSK - Semitech			Revision	
Modification date	2023. 10. 11.						

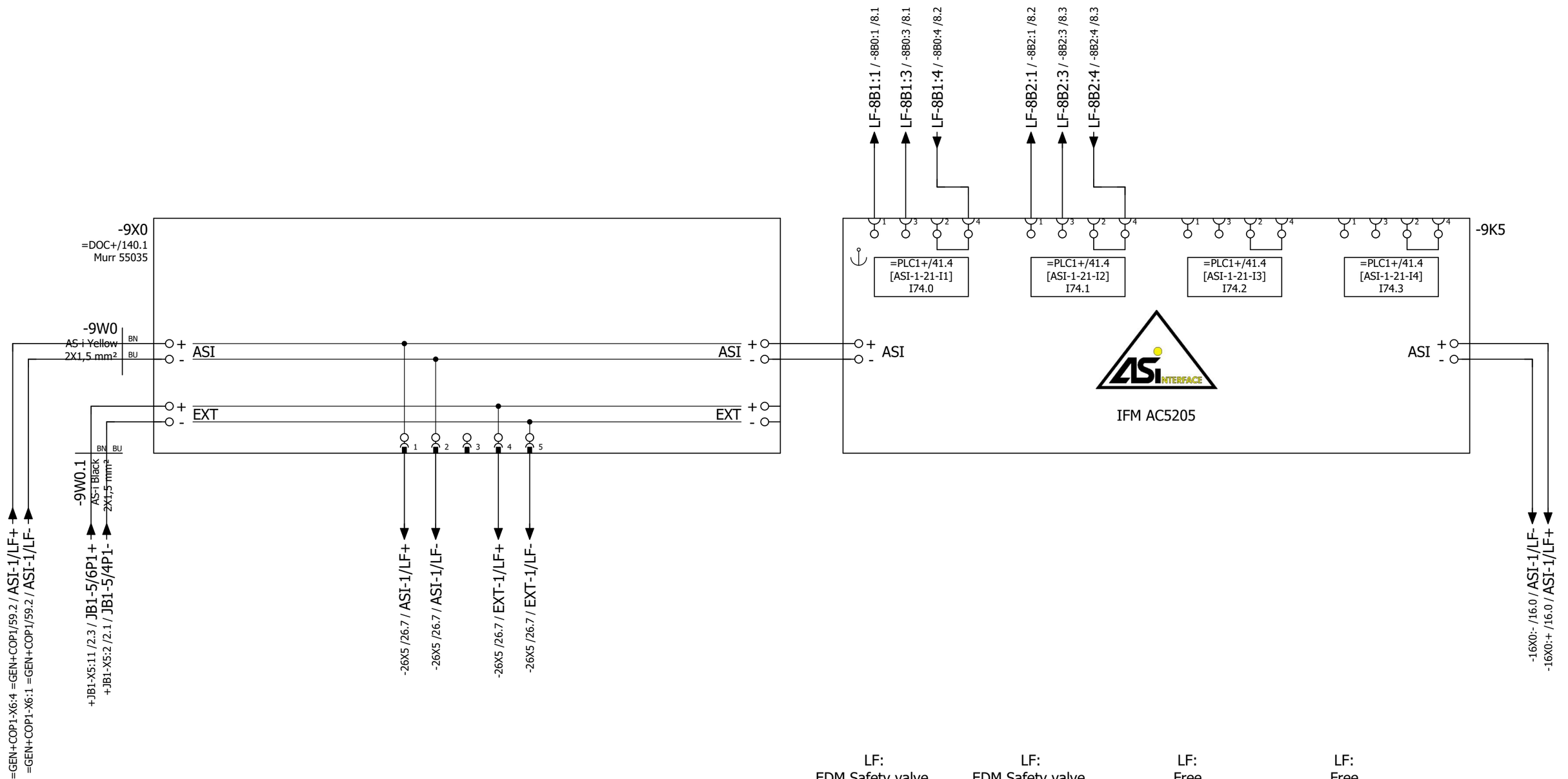


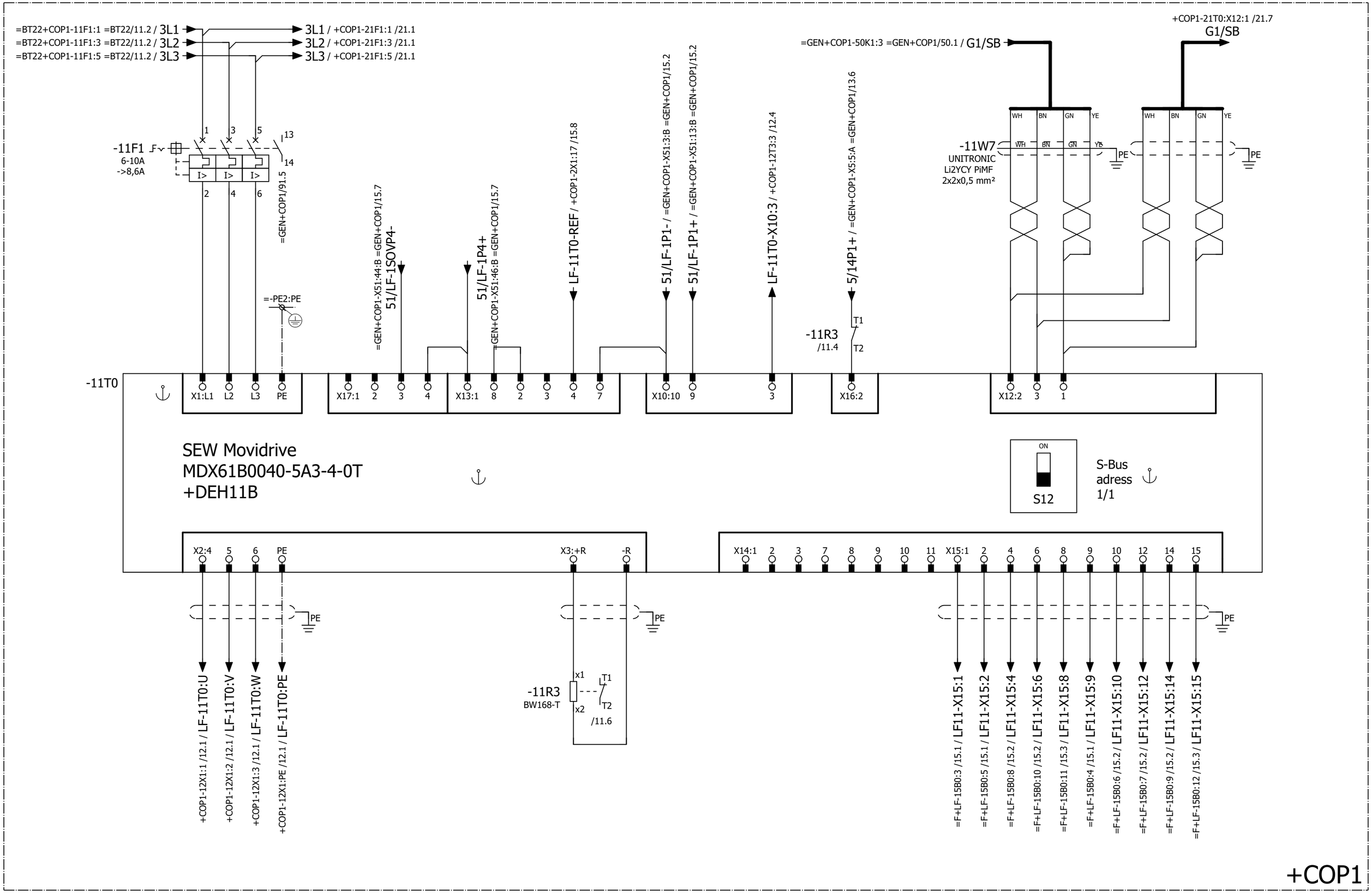
LF:
Safety switch
row stopper
sliding door -left side 3-

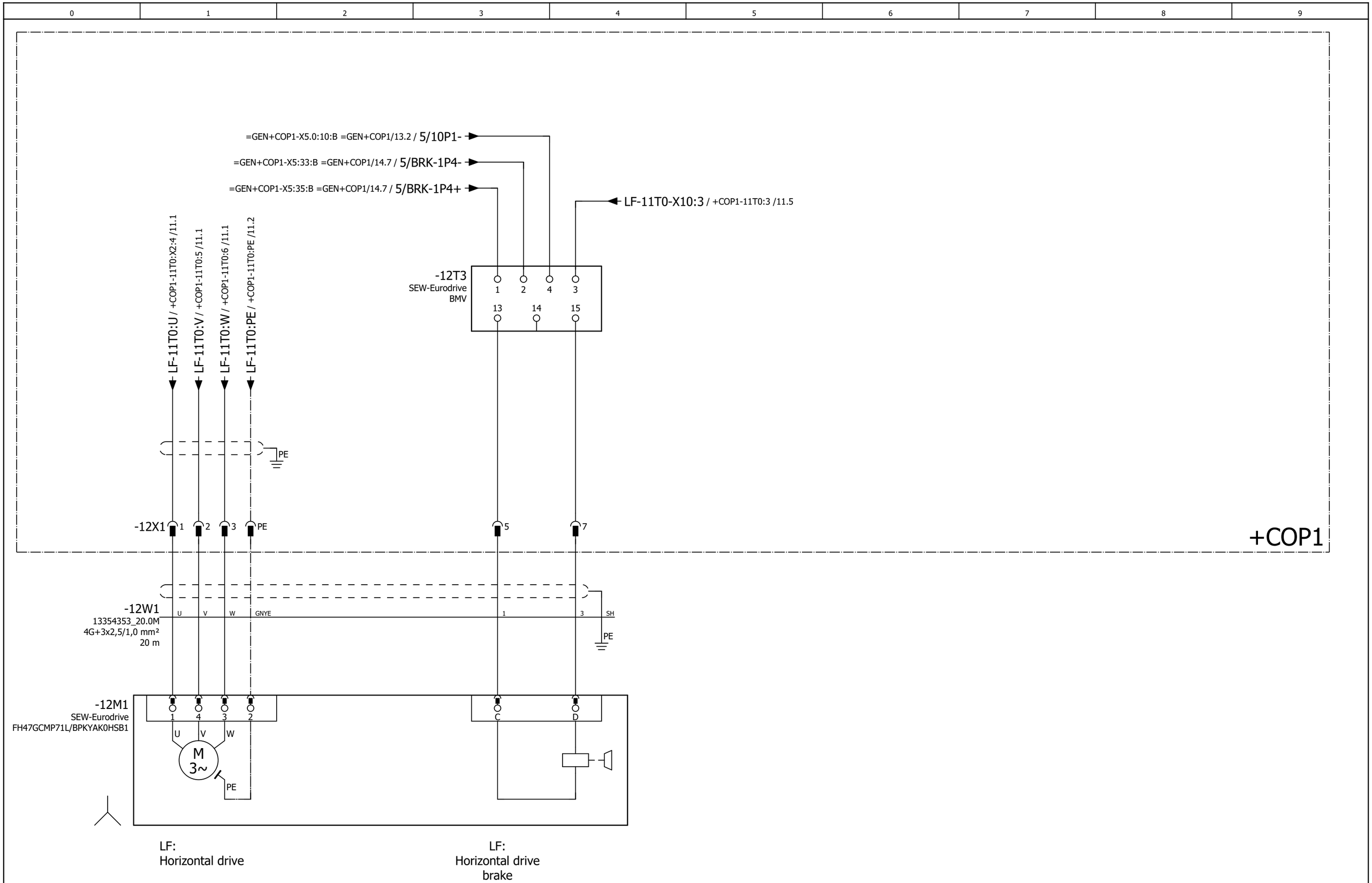
LF:
Safety switch
row stopper
sliding door -left side 4-


0
1
2
3
4
5
6
7
8
9
LF:
Safety-switch
bottle-infeed
sliding window -left-
opened
=PLC1
-DI4
=PLC1+/8.4
I13.6
17
SG1.1-LF / +COP1-2X1:14 /6.7
SG3.1-LF / +COP1-2X1:13 /6.7
JB2-5/10P1+ / +JB2-X5:12 /3.4
-3X1
4
5
6
-3W1
4
5
6
LF:
Safety-switch
bottle-infeed
sliding window -right-
opened
=PLC1
-DI4
=PLC1+/8.4
I13.7
18
-3X1
7
-3W1
7
LF:
Safety doors
CH -1-
LF:
Safety doors
CH -1-
=SPLC1
-DIS4
=SPLC1+/4.5
I25
=SPLC1+/4.5
I26
I1
I2
-3X1
8
9
-3W1
8
-3W1
9
+COP1
=LF-PE:PE
PE
-X5
15
16
17
18
19
20
=LF-PE:PE
PE
-X5
21
22
23
24
25
26
+JB2
-7W1
Ölflex Classic 110
7G0,75 mm²
5 m
1
2
3
4
5
6
GNYE
-7W5
Ölflex Classic 110
7G0,75 mm²
7 m
1
2
3
4
5
6
GNYE
-7S1
440K-T11468
11
21
33
34
22
12
PE
11
21
33
12
22
34
-7S5
440K-T11468
11
21
33
34
22
12
PE
11
21
33
12
22
34
LF:
Safety-switch
bottle-infeed
sliding window -left-
LF:
Safety-switch
bottle-infeed
sliding window -right-

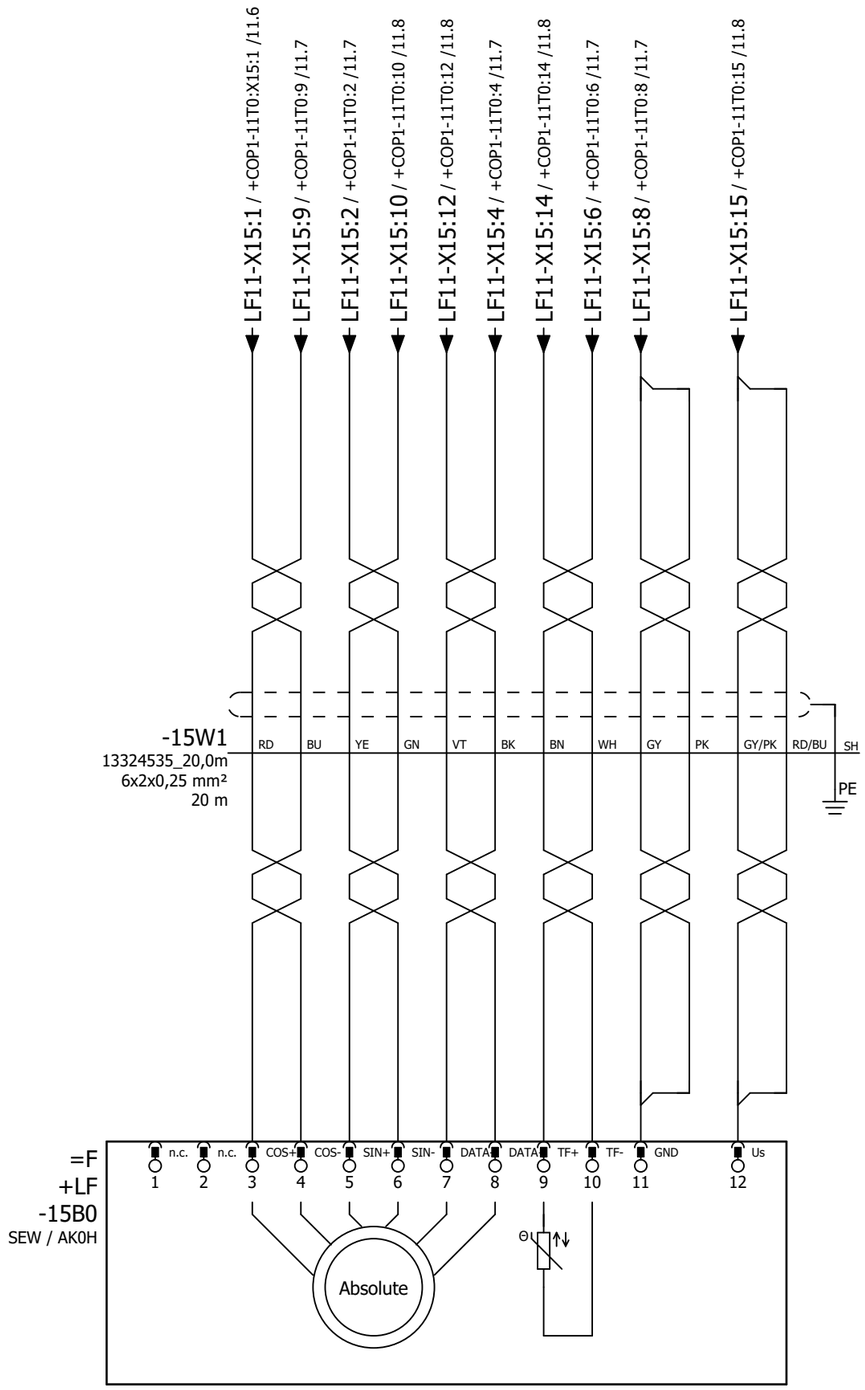

JB1-5/1P4+ / +JB1-X5:16 /2.6
JB1-5/2P4+ / +JB1-X5:16 /2.6
JB1-5/1P1+ / +JB1-X5:9 /2.3
-8W1
PUR-OB/10m
4X0,34 mm²
10 m
-8W2
PUR-OB/10m
4X0,34 mm²
10 m
-8W4
PUR-OB/1,5m
4X0,34 mm²
1,5 m
-8B0
-8B2
-8Q1
W0.1
-8Q2
W0.2
-8B4
-8W1
-8W1.1
PUR-OB/1,5m
4X0,34 mm²
1,5 m
-8W2
-8W2.1
PUR-OB/1,5m
4X0,34 mm²
1,5 m
-8W4
-X5
+JB1
-2W1
-2X1
=PLC1
-DI3
I8.1
=PLC1+/7.4
+JB1-X5:1 /2.1 / JB1-5/1P1-
-9K5 /9.5 / LF-8B1:1
-9K5 /9.5 / LF-8B1:3
-9K5 /9.5 / LF-8B1:4
+JB1-X5:1 /2.1 / JB1-5/2P1-
-9K5 /9.6 / LF-8B2:1
-9K5 /9.6 / LF-8B2:3
-9K5 /9.6 / LF-8B2:4
LF:
Safety valve 1
layer stopper (AC)
-1-
LF:
Safety valve 1
layer stopper (AC)
-2-
LF:
EDM Safety valve
layer stopper (AC)
-1-
LF:
EDM Safety valve
layer stopper (AC)
-2-
LF:
Air pressure
=P4 OK
+COP1
-X5
+JB1
-2W1
-2X1
=PLC1
-DI3
I8.2
=PLC1+/7.4
LF:
Reserved
Air pressure
=P2 OK
+COP1


-9X0
=DOC+/140.1
Murr 55035
-9W0
AS-i Yellow
2X1,5 mm²
BN
BU
ASI
EXT
-9W0.1
AS-i Black
2X1,5 mm²
=GEN+COP1-X6:4 =GEN+COP1/59.2 / ASI-1/LF+
=GEN+COP1-X6:1 =GEN+COP1/59.2 / ASI-1/LF-
+JB1-X5:11 /2.3 / JB1-5/6P1+
+JB1-X5:2 /2.1 / JB1-5/4P1-
-26X5 /26.7 / ASI-1/LF+
-26X5 /26.7 / ASI-1/LF-
-26X5 /26.7 / EXT-1/LF+
-26X5 /26.7 / EXT-1/LF-
LF-8B1:1 / -8B0:1 /8.1
LF-8B1:3 / -8B0:3 /8.1
LF-8B1:4 / -8B0:4 /8.2
LF-8B2:1 / -8B2:1 /8.2
LF-8B2:3 / -8B2:3 /8.3
LF-8B2:4 / -8B2:4 /8.3
-9K5
=PLC1+/41.4
[ASI-1-21-I1]
I74.0
=PLC1+/41.4
[ASI-1-21-I2]
I74.1
=PLC1+/41.4
[ASI-1-21-I3]
I74.2
=PLC1+/41.4
[ASI-1-21-I4]
I74.3
IFM AC5205
-16X0:- /16.0 / ASI-1/LF-
-16X0:+ /16.0 / ASI-1/LF+
LF:
AS-i distribution
LF:
EDM Safety valve
layer stopper (AC)
-1-
LF:
EDM Safety valve
layer stopper (AC)
-2-
LF:
Free
LF:
Free

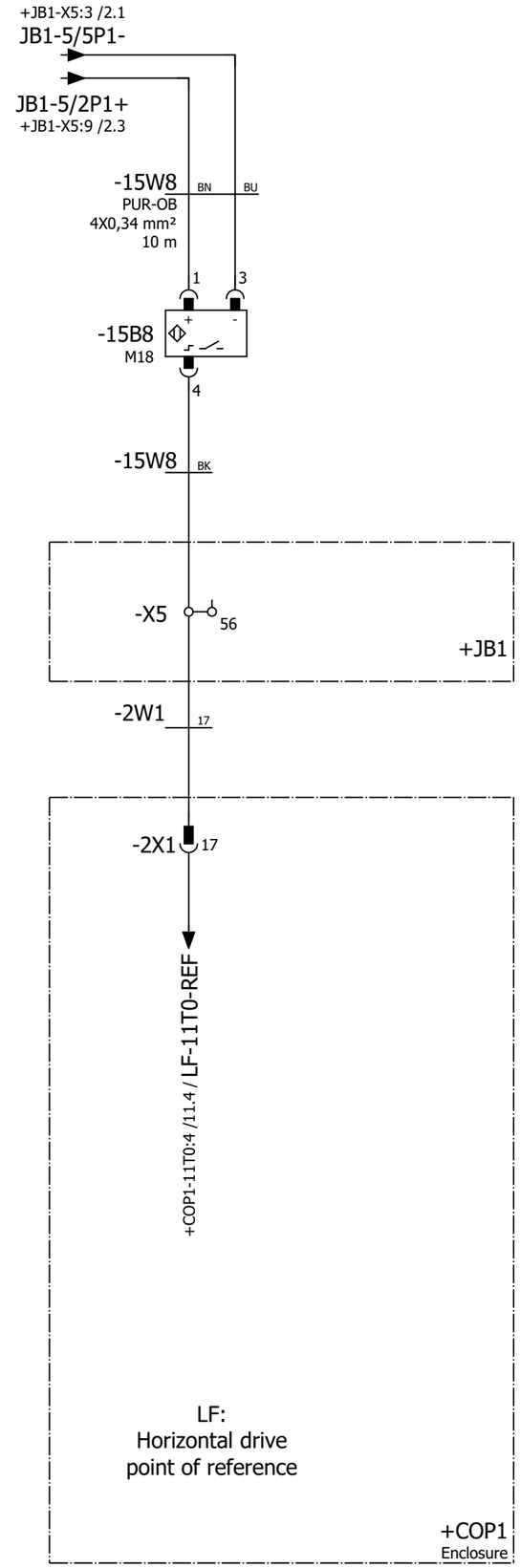

=BT22+COP1-11F1:1 =BT22/11.2 / 3L1
=BT22+COP1-11F1:3 =BT22/11.2 / 3L2
=BT22+COP1-11F1:5 =BT22/11.2 / 3L3
3L1 / +COP1-21F1:1 /21.1
3L2 / +COP1-21F1:3 /21.1
3L3 / +COP1-21F1:5 /21.1
-11F1
6-10A
->8,6A
=GEN+COP1/91.5
=-PE2:PE
=GEN+COP1-X51:44:B =GEN+COP1/15.7
51/LF-1SOVP4-
51/LF-1P4+
=GEN+COP1-X51:46:B =GEN+COP1/15.7
LF-11T0-REF / +COP1-2X1:17 /15.8
51/LF-1P1- / =GEN+COP1-X51:3:B =GEN+COP1/15.2
51/LF-1P1+ / =GEN+COP1-X51:13:B =GEN+COP1/15.2
LF-11T0-X10:3 / +COP1-12T3:3 /12.4
5/14P1+ / =GEN+COP1-X5:5:A =GEN+COP1/13.6
=GEN+COP1-50K1:3 =GEN+COP1/50.1 / G1/SB
+COP1-21T0:X12:1 /21.7
G1/SB
-11W7
UNITRONIC
Li2YCY PiMF
2x2x0,5 mm²
-11R3
/11.4
-11T0
SEW Movidrive
MDX61B0040-5A3-4-0T
+DEH11B
S12
S-Bus
adress
1/1
-11R3
BW168-T
/11.6
+COP1-12X1:1 /12.1 / LF-11T0:U
+COP1-12X1:2 /12.1 / LF-11T0:V
+COP1-12X1:3 /12.1 / LF-11T0:W
+COP1-12X1:PE /12.1 / LF-11T0:PE
=F+LF-15B0:3 /15.1 / LF11-X15:1
=F+LF-15B0:5 /15.1 / LF11-X15:2
=F+LF-15B0:8 /15.2 / LF11-X15:4
=F+LF-15B0:10 /15.2 / LF11-X15:6
=F+LF-15B0:11 /15.3 / LF11-X15:8
=F+LF-15B0:4 /15.1 / LF11-X15:9
=F+LF-15B0:6 /15.2 / LF11-X15:10
=F+LF-15B0:7 /15.2 / LF11-X15:12
=F+LF-15B0:9 /15.2 / LF11-X15:14
=F+LF-15B0:12 /15.3 / LF11-X15:15
+COP1

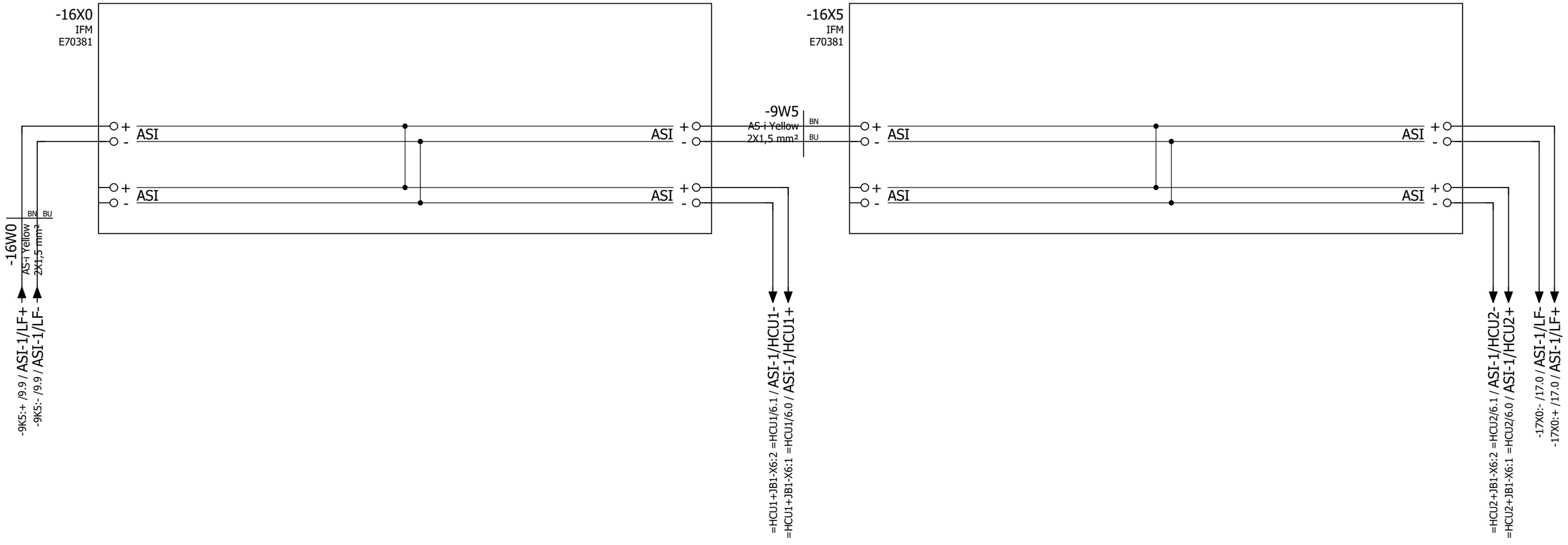

=GEN+COP1-X5.0:10:B =GEN+COP1/13.2 / 5/10P1-
=GEN+COP1-X5:33:B =GEN+COP1/14.7 / 5/BRK-1P4-
=GEN+COP1-X5:35:B =GEN+COP1/14.7 / 5/BRK-1P4+
LF-11T0-X10:3 / +COP1-11T0:3 /11.5
-12T3
SEW-Eurodrive
BMV
1 2 4 3
13 14 15
LF-11T0:U / +COP1-11T0:X2:4 /11.1
LF-11T0:V / +COP1-11T0:5 /11.1
LF-11T0:W / +COP1-11T0:6 /11.1
LF-11T0:PE / +COP1-11T0:PE /11.2
PE
-12X1
1 2 3 PE 5 7
+COP1
-12W1
13354353_20.0M
4G+3x2,5/1,0 mm²
20 m
U V W GNYE 1 3 SH
PE
-12M1
SEW-Eurodrive
FH47GCMP71L/BPKYAK0HSB1
1 4 3 2
C D
U V W
M
3~
PE
LF:
Horizontal drive
LF:
Horizontal drive
brake

Motor connection side					MOVIAXIS® MX, MOVIDRIVE® B connection	
Plug connector view X	Pin no.	Description	Cable core color	Description	Pin no.	Plug connector view Y
ASTA 021FR 0198 6732 12-pin with socket contacts	1	n. c.	n. c.	n. c.	3	D-sub 15-pole
	2	n. c.	n. c.	n. c.	5	
	3	S1 (cosine +)	(RD) Red	S1 (cosine +)	1	
	4	S3 (cosine -)	(BU) Blue	S3 (cosine -)	9	
	5	S2 (sine +)	(YE) Yellow	S2 (sine +)	2	
	6	S4 (sine -)	(GN) Green	S4 (sine -)	10	
	7	DATA-	(VT) Violet	DATA-	12	
	8	DATA+	(BK) Black	DATA+	4	
	9	TF/KTY +	(BN) Brown	TF/KTY +	14	
	10	TF/ KTY -	(WH) White	TF/ KTY -	6	
	11	GND	(GY/PK) Gray/Pink[1)]	GND	8	
	12	U_s	(RD/BU) Red/Blue[1)]	U_s	15	
		-	-	n. c.	7	
		-	-	n. c.	11	
		-	-	n. c.	13	



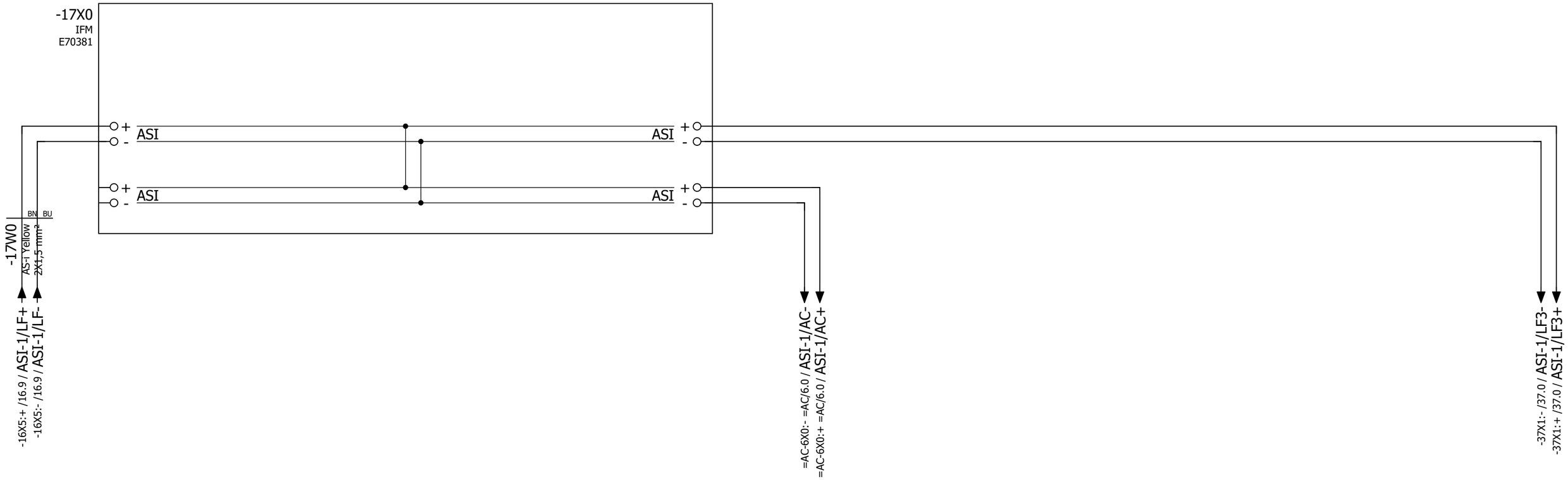
LF:
Horizontal drive
impulse sensor



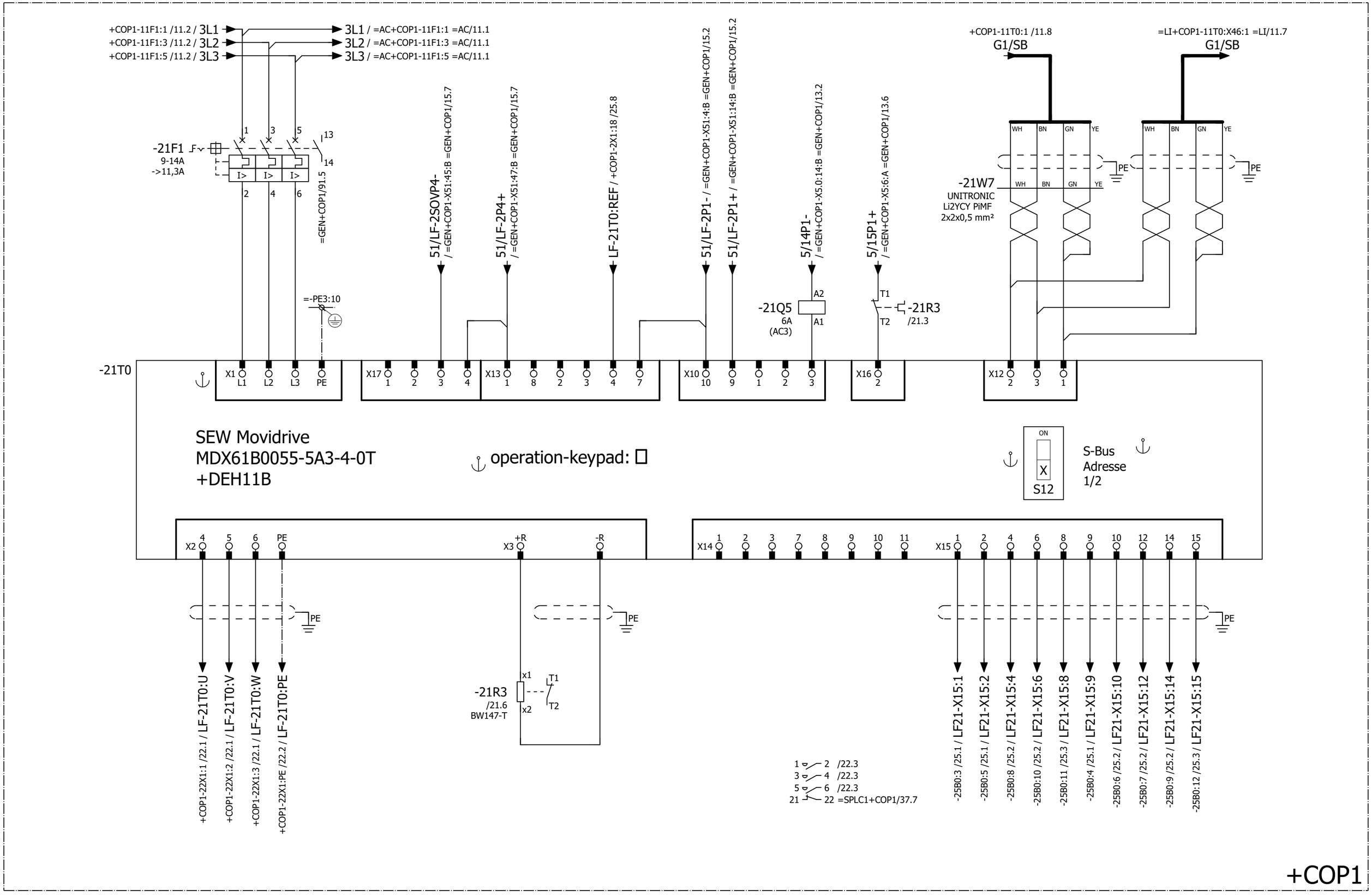


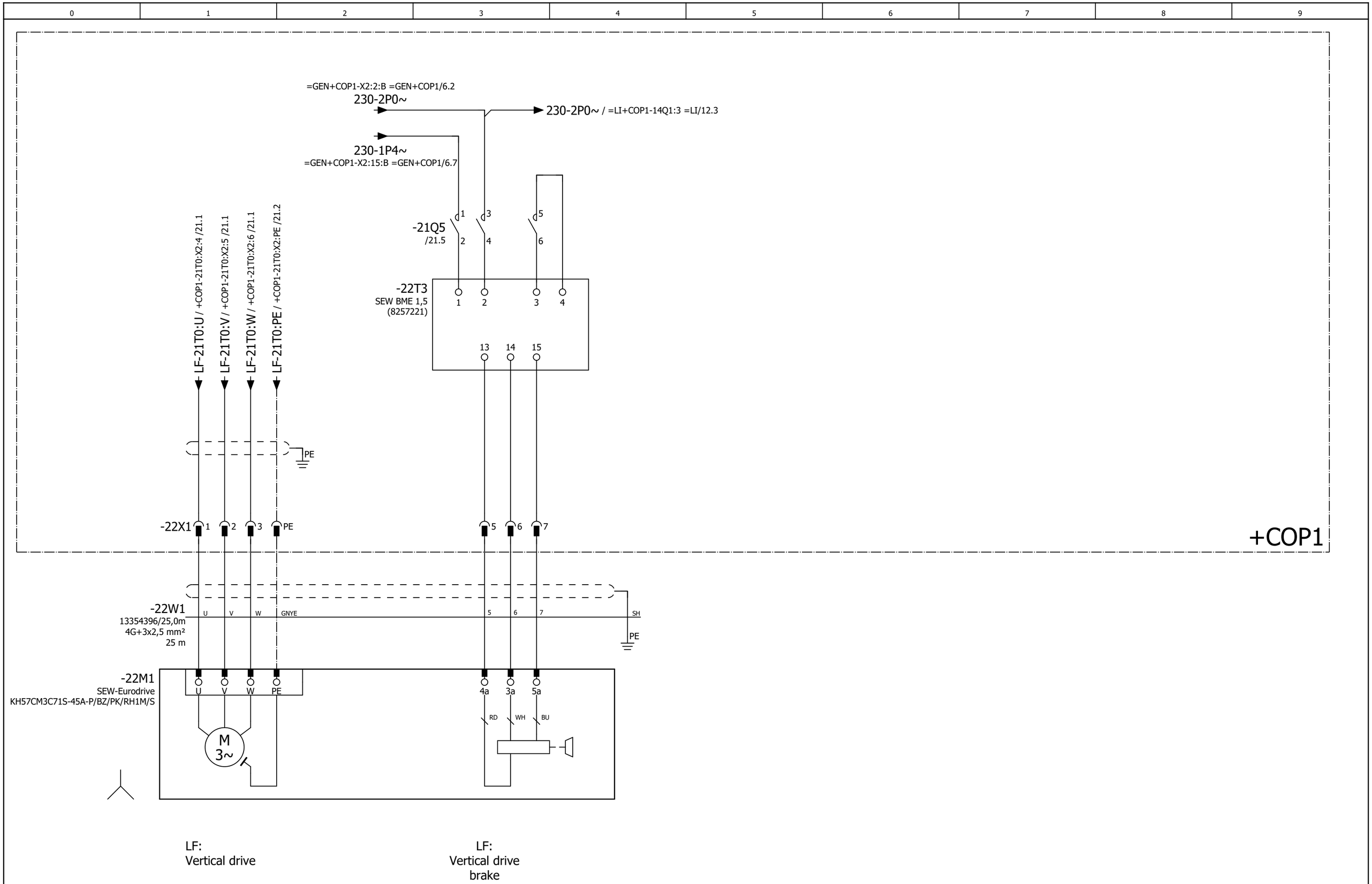
LF:
AS-i distribution

LF:
AS-i distribution

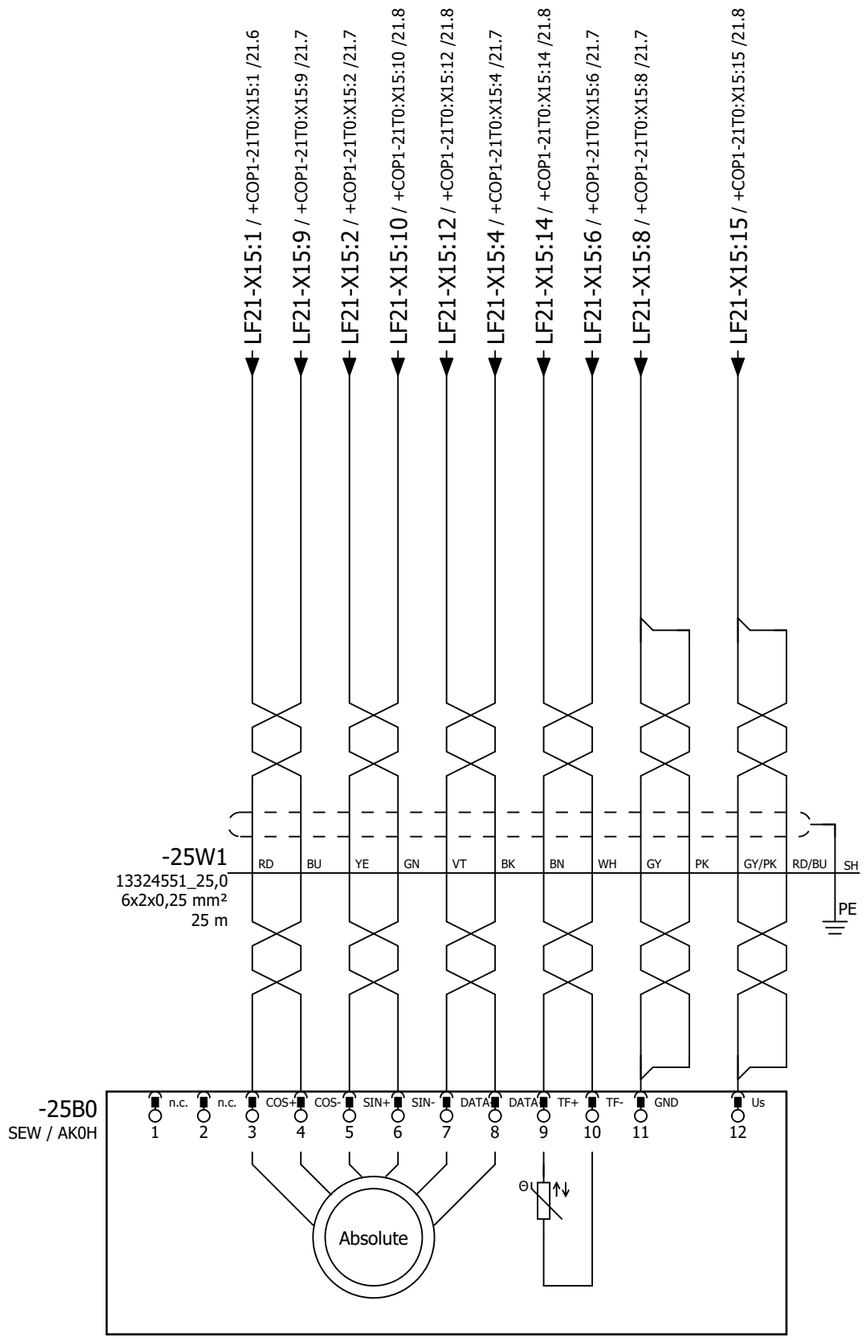


LF:
AS-i distribution

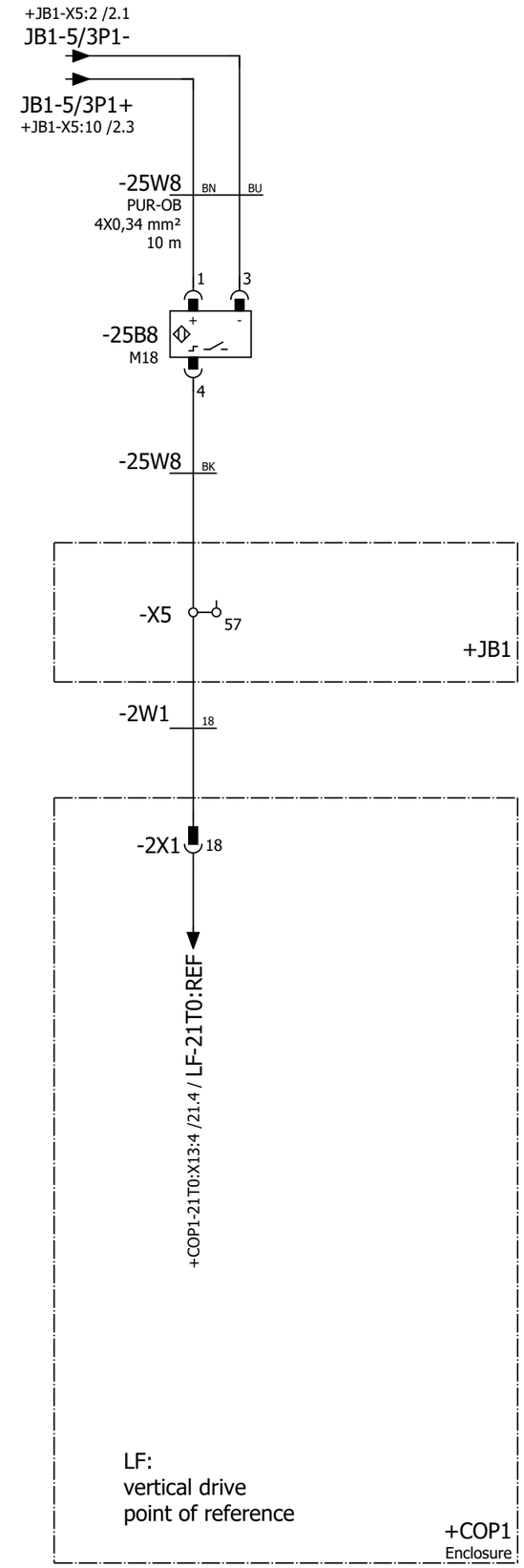

+COP1-11F1:1 /11.2 / 3L1
+COP1-11F1:3 /11.2 / 3L2
+COP1-11F1:5 /11.2 / 3L3
3L1 / =AC+COP1-11F1:1 =AC/11.1
3L2 / =AC+COP1-11F1:3 =AC/11.1
3L3 / =AC+COP1-11F1:5 =AC/11.1
-21F1
9-14A
->11,3A
=GEN+COP1/91.5
=-PE3:10
51/LF-2SOVP4- / =GEN+COP1-X51:45:B =GEN+COP1/15.7
51/LF-2P4+ / =GEN+COP1-X51:47:B =GEN+COP1/15.7
LF-21T0:REF / +COP1-2X1:18 /25.8
51/LF-2P1- / =GEN+COP1-X51:4:B =GEN+COP1/15.2
51/LF-2P1+ / =GEN+COP1-X51:14:B =GEN+COP1/15.2
5/14P1- / =GEN+COP1-X5.0:14:B =GEN+COP1/13.2
5/15P1+ / =GEN+COP1-X5:6:A =GEN+COP1/13.6
-21Q5
6A
(AC3)
-21R3
/21.3
+COP1-11T0:1 /11.8
G1/SB
=LI+COP1-11T0:X46:1 =LI/11.7
G1/SB
-21W7
UNITRONIC
Li2YCY PiMF
2x2x0,5 mm²
WH BN GN YE
PE
-21T0
X1 L1 L2 L3 PE
X17 1 2 3 4
X13 1 8 2 3 4 7
X10 10 9 1 2 3
X16 2
X12 2 3 1
SEW Movidrive
MDX61B0055-5A3-4-0T
+DEH11B
operation-keypad: ☐
ON
X
S12
S-Bus
Adresse
1/2
X2 4 5 6 PE
X3 +R -R
X14 1 2 3 7 8 9 10 11
X15 1 2 4 6 8 9 10 12 14 15
-21R3
/21.6
BW147-T
x1 x2 T1 T2
+COP1-22X1:1 /22.1 / LF-21T0:U
+COP1-22X1:2 /22.1 / LF-21T0:V
+COP1-22X1:3 /22.1 / LF-21T0:W
+COP1-22X1:PE /22.2 / LF-21T0:PE
1 2 /22.3
3 4 /22.3
5 6 /22.3
21 22 =SPLC1+COP1/37.7
-25B0:3 /25.1 / LF21-X15:1
-25B0:5 /25.1 / LF21-X15:2
-25B0:8 /25.2 / LF21-X15:4
-25B0:10 /25.2 / LF21-X15:6
-25B0:11 /25.3 / LF21-X15:8
-25B0:4 /25.1 / LF21-X15:9
-25B0:6 /25.2 / LF21-X15:10
-25B0:7 /25.2 / LF21-X15:12
-25B0:9 /25.2 / LF21-X15:14
-25B0:12 /25.3 / LF21-X15:15
+COP1

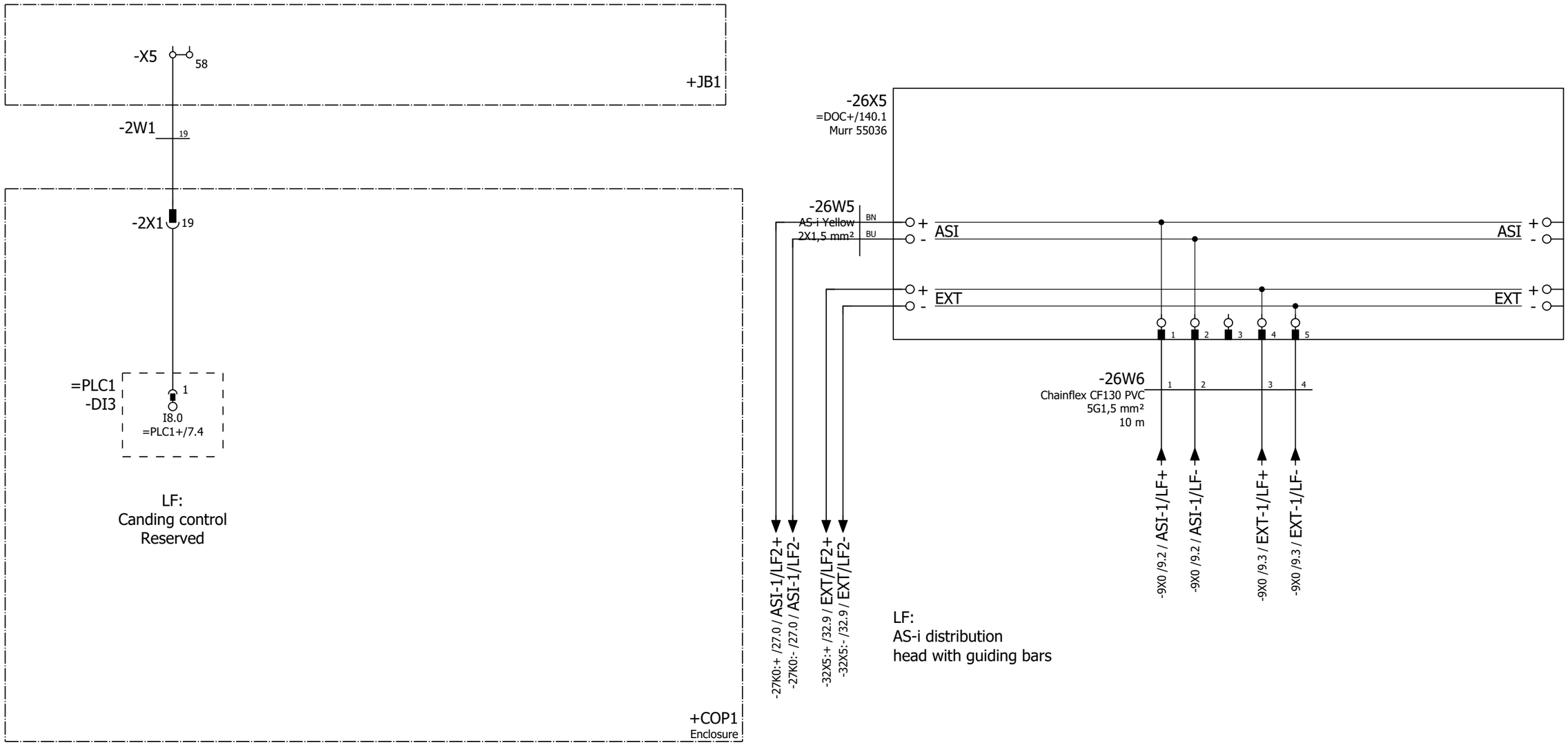

=GEN+COP1-X2:2:B =GEN+COP1/6.2
230-2P0~
230-2P0~ / =LI+COP1-14Q1:3 =LI/12.3
230-1P4~
=GEN+COP1-X2:15:B =GEN+COP1/6.7
-21Q5
/21.5
-22T3
SEW BME 1,5
(8257221)
LF-21T0:U / +COP1-21T0:X2:4 /21.1
LF-21T0:V / +COP1-21T0:X2:5 /21.1
LF-21T0:W / +COP1-21T0:X2:6 /21.1
LF-21T0:PE / +COP1-21T0:X2:PE /21.2
PE
-22X1
+COP1
-22W1
13354396/25,0m
4G+3x2,5 mm²
25 m
GNYE
SH
-22M1
SEW-Eurodrive
KH57CM3C71S-45A-P/BZ/PK/RH1M/S
M
3~
RD
WH
BU
LF:
Vertical drive
LF:
Vertical drive
brake

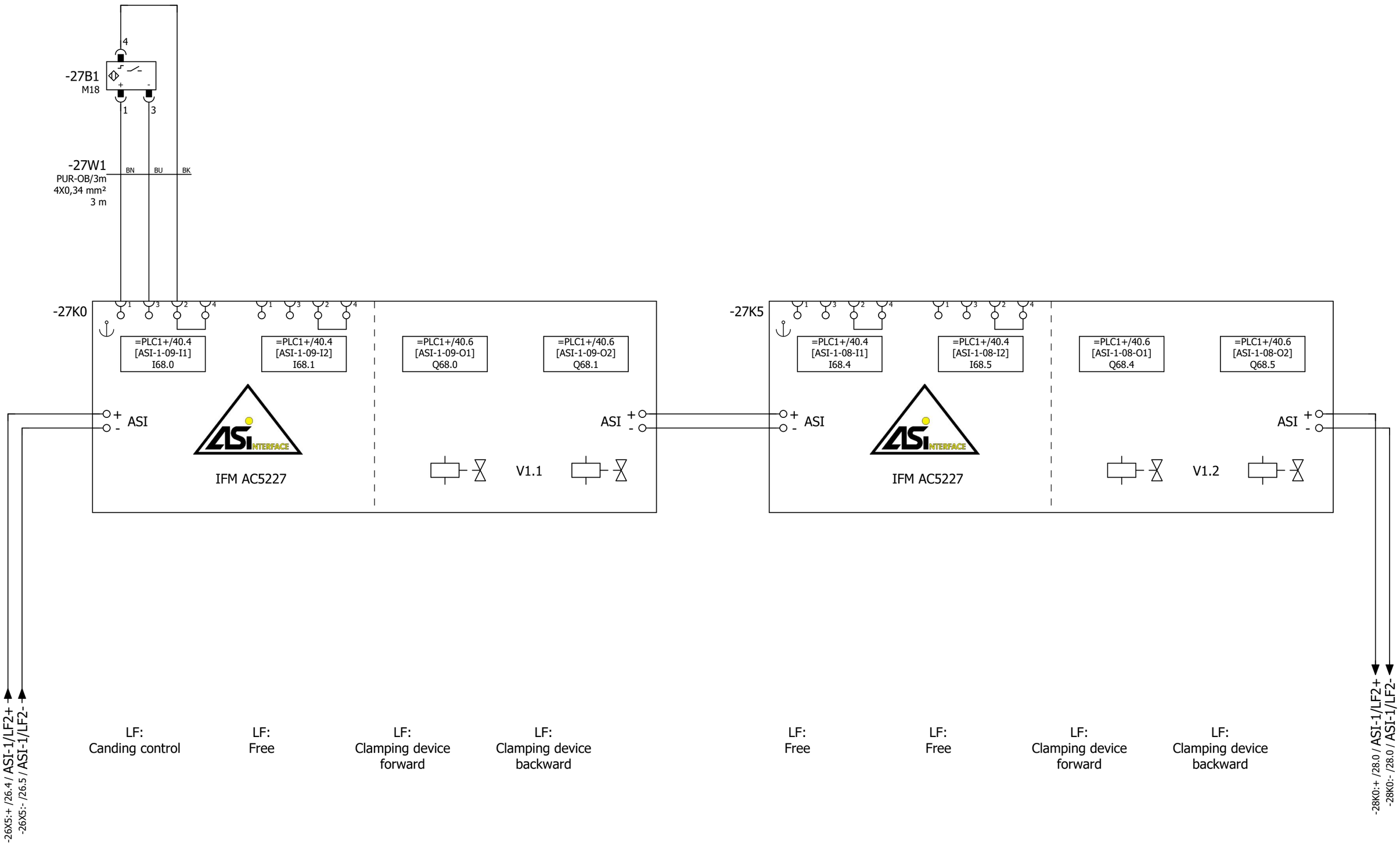
Motor connection side					MOVIAXIS® MX, MOVIDRIVE® B connection	
Plug connector view X	Pin no.	Description	Cable core color	Description	Pin no.	Plug connector view Y
ASTA 021FR 0198 6732 12-pin with socket contacts	1	n. c.	n. c.	n. c.	3	D-sub 15-pole
	2	n. c.	n. c.	n. c.	5	
	3	S1 (cosine +)	(RD) Red	S1 (cosine +)	1	
	4	S3 (cosine -)	(BU) Blue	S3 (cosine -)	9	
	5	S2 (sine +)	(YE) Yellow	S2 (sine +)	2	
	6	S4 (sine -)	(GN) Green	S4 (sine -)	10	
	7	DATA-	(VT) Violet	DATA-	12	
	8	DATA+	(BK) Black	DATA+	4	
	9	TF/KTY +	(BN) Brown	TF/KTY +	14	
	10	TF/ KTY -	(WH) White	TF/ KTY -	6	
	11	GND	(GY/PK) Gray/Pink[1)]	GND	8	
	12	U_s	(RD/BU) Red/Blue[1)]	U_s	15	
		-	-	n. c.	7	
		-	-	n. c.	11	
		-	-	n. c.	13	



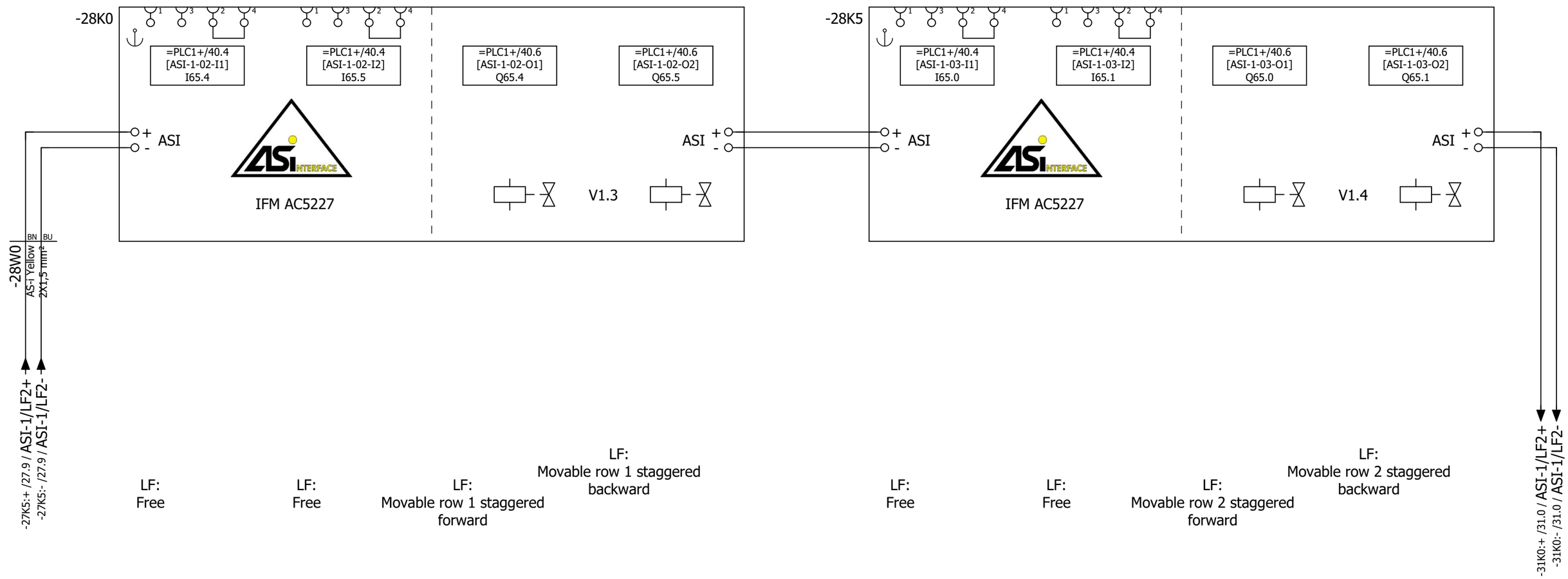
LF:
Vertical drive
impulse sensor




-X5
58
+JB1
-2W1
19
-2X1
19
=PLC1
-DI3
1
I8.0
=PLC1+/7.4
LF:
Canding control
Reserved
+COP1
Enclosure
-26X5
=DOC+/140.1
Murr 55036
-26W5
AS-i Yellow
2X1,5 mm²
BN
BU
ASI
EXT
-26W6
Chainflex CF130 PVC
5G1,5 mm²
10 m
-27K0:+ /27.0 / ASI-1/LF2+
-27K0:- /27.0 / ASI-1/LF2-
-32X5:+ /32.9 / EXT/LF2+
-32X5:- /32.9 / EXT/LF2-
-9X0 /9.2 / ASI-1/LF+
-9X0 /9.2 / ASI-1/LF-
-9X0 /9.3 / EXT-1/LF+
-9X0 /9.3 / EXT-1/LF-
LF:
AS-i distribution
head with guiding bars



Creator	Ferenc Baracsi	Commission	620300.11.2023	LF: Layer former sensors/actuators	= LF	+F	Page 27
Edited by	BaF	Type	MSK - Semitech		Revision	
Modification date	2023. 10. 11.					


-28K0
=PLC1+/40.4
[ASI-1-02-I1]
I65.4
=PLC1+/40.4
[ASI-1-02-I2]
I65.5
=PLC1+/40.6
[ASI-1-02-O1]
Q65.4
=PLC1+/40.6
[ASI-1-02-O2]
Q65.5
ASI
IFM AC5227
V1.3
-28K5
=PLC1+/40.4
[ASI-1-03-I1]
I65.0
=PLC1+/40.4
[ASI-1-03-I2]
I65.1
=PLC1+/40.6
[ASI-1-03-O1]
Q65.0
=PLC1+/40.6
[ASI-1-03-O2]
Q65.1
IFM AC5227
V1.4
-28W0
AS-i Yellow
2X1,5 mm²
BN
BU
-27K5:+ /27.9 / ASI-1/LF2+
-27K5:- /27.9 / ASI-1/LF2-
-31K0:+ /31.0 / ASI-1/LF2+
-31K0:- /31.0 / ASI-1/LF2-
LF:
Free
LF:
Free
LF:
Movable row 1 staggered
forward
LF:
Movable row 1 staggered
backward
LF:
Free
LF:
Free
LF:
Movable row 2 staggered
forward
LF:
Movable row 2 staggered
backward

0	1	2	3	4	5	6	7	8	9

OPTION

LF:
Free

LF:
Free

LF:
Free

LF:
Free

LF:
Free

LF:
Free

LF:
Free

LF:
Free

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OPTION

LF:
Free

LF:
Free

LF:
Free

LF:
Free

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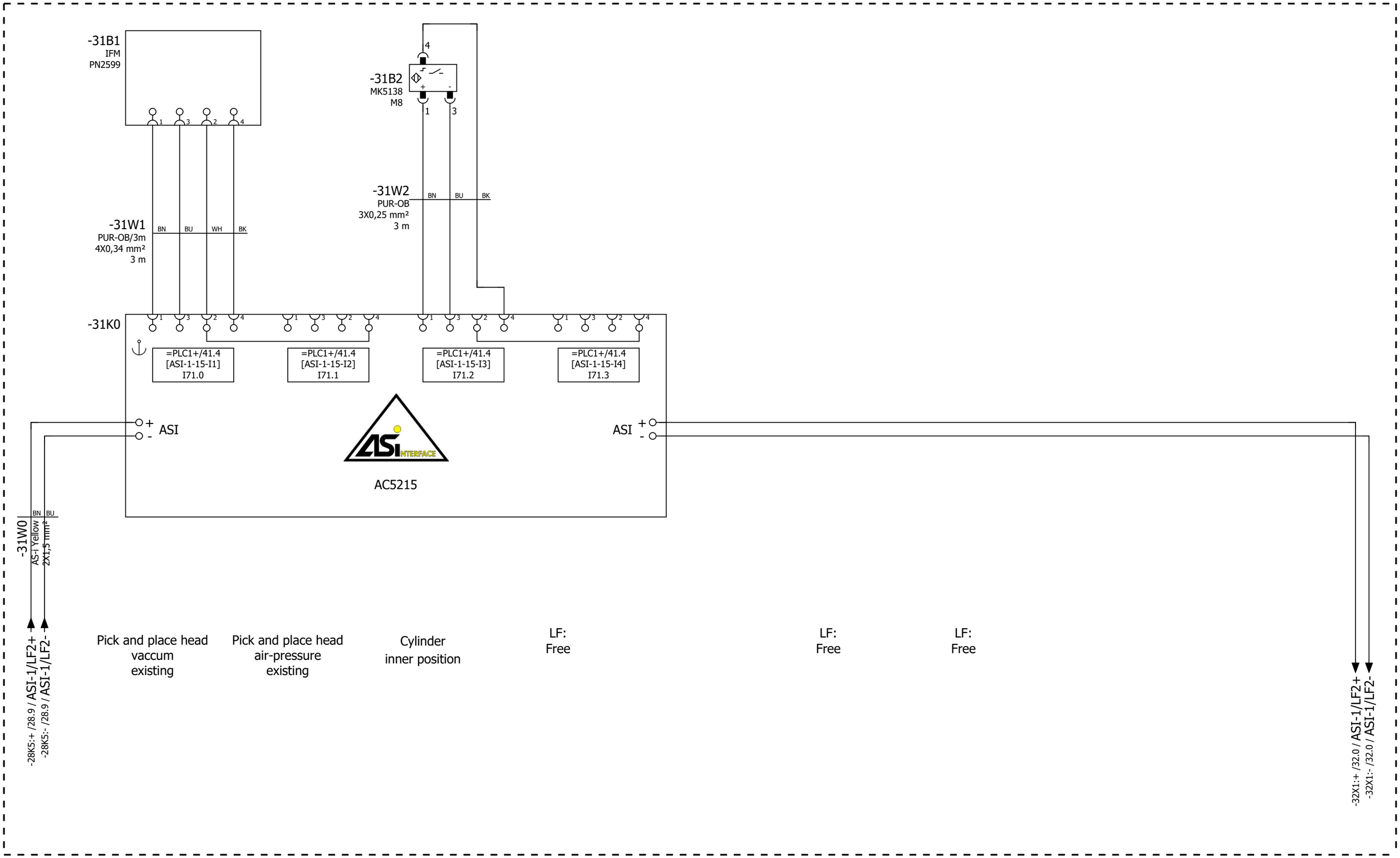
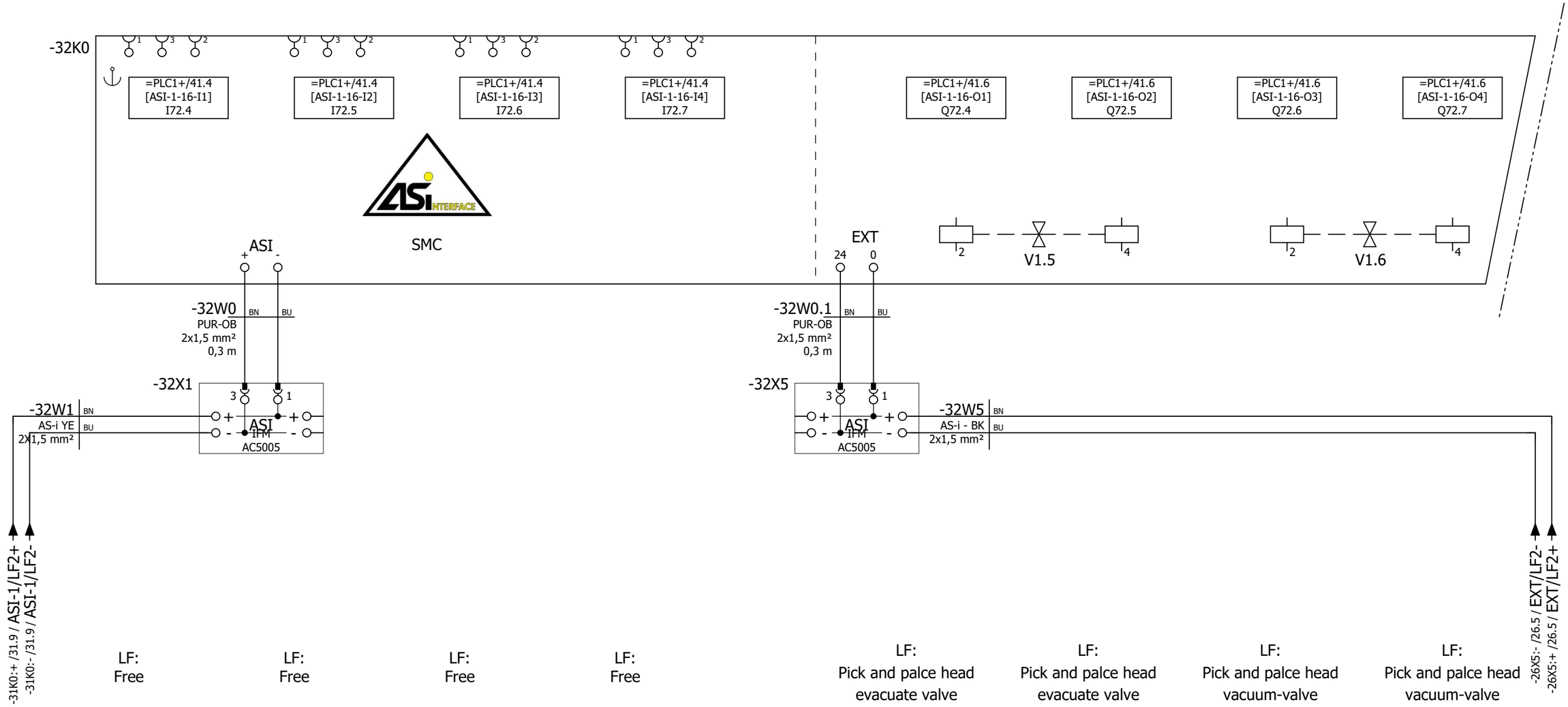
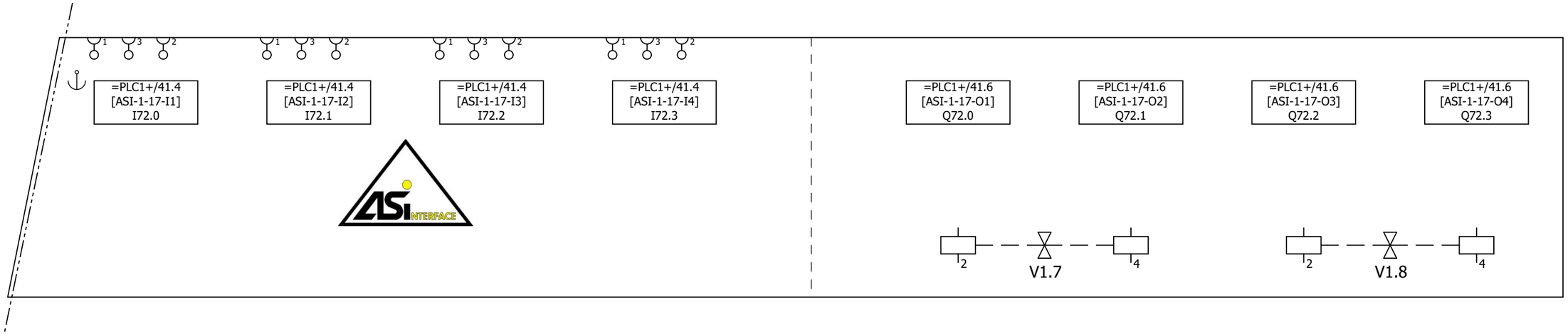

-31B1
IFM
PN2599
-31B2
MK5138
M8
-31W2
PUR-OB
3X0,25 mm²
3 m
-31W1
PUR-OB/3m
4X0,34 mm²
3 m
BN
BU
WH
BK
-31K0
=PLC1+/41.4
[ASI-1-15-I1]
I71.0
=PLC1+/41.4
[ASI-1-15-I2]
I71.1
=PLC1+/41.4
[ASI-1-15-I3]
I71.2
=PLC1+/41.4
[ASI-1-15-I4]
I71.3
ASI
AC5215
-31W0
AS-i Yellow
2X1,5 mm²
-28K5:+ /28.9 / ASI-1/LF2+
-28K5:- /28.9 / ASI-1/LF2-
Pick and place head
vaccum
existing
Pick and place head
air-pressure
existing
Cylinder
inner position
LF:
Free
LF:
Free
LF:
Free
-32X1:+ /32.0 / ASI-1/LF2+
-32X1:- /32.0 / ASI-1/LF2-


-32K0
=PLC1+/41.4
[ASI-1-16-I1]
I72.4
=PLC1+/41.4
[ASI-1-16-I2]
I72.5
=PLC1+/41.4
[ASI-1-16-I3]
I72.6
=PLC1+/41.4
[ASI-1-16-I4]
I72.7
=PLC1+/41.6
[ASI-1-16-O1]
Q72.4
=PLC1+/41.6
[ASI-1-16-O2]
Q72.5
=PLC1+/41.6
[ASI-1-16-O3]
Q72.6
=PLC1+/41.6
[ASI-1-16-O4]
Q72.7
SMC
ASI
EXT
24
0
V1.5
V1.6
-32W0
BN
BU
PUR-OB
2x1,5 mm²
0,3 m
-32W0.1
BN
BU
PUR-OB
2x1,5 mm²
0,3 m
-32X1
-32X5
-32W1
BN
AS-i YE
BU
2x1,5 mm²
ASI
IFM
AC5005
-32W5
BN
AS-i - BK
BU
2x1,5 mm²
-31K0:+ /31.9 / ASI-1/LF2+
-31K0:- /31.9 / ASI-1/LF2-
-26X5:- /26.5 / EXT/LF2-
-26X5:+ /26.5 / EXT/LF2+
LF:
Free
LF:
Free
LF:
Free
LF:
Free
LF:
Pick and palce head
evacuate valve
open
LF:
Pick and palce head
evacuate valve
close
LF:
Pick and palce head
vacuum-valve
open
LF:
Pick and palce head
vacuum-valve
close

-33K0



LF: Free	LF: Free	LF: Free	LF: Free	LF: Pick and palce head working-valve PIAP on	LF: Pick and palce head working-valve PIAP off	LF: Linear cylinder forward (pick and place head)	LF: Linear cylinder forward (pick and place head)

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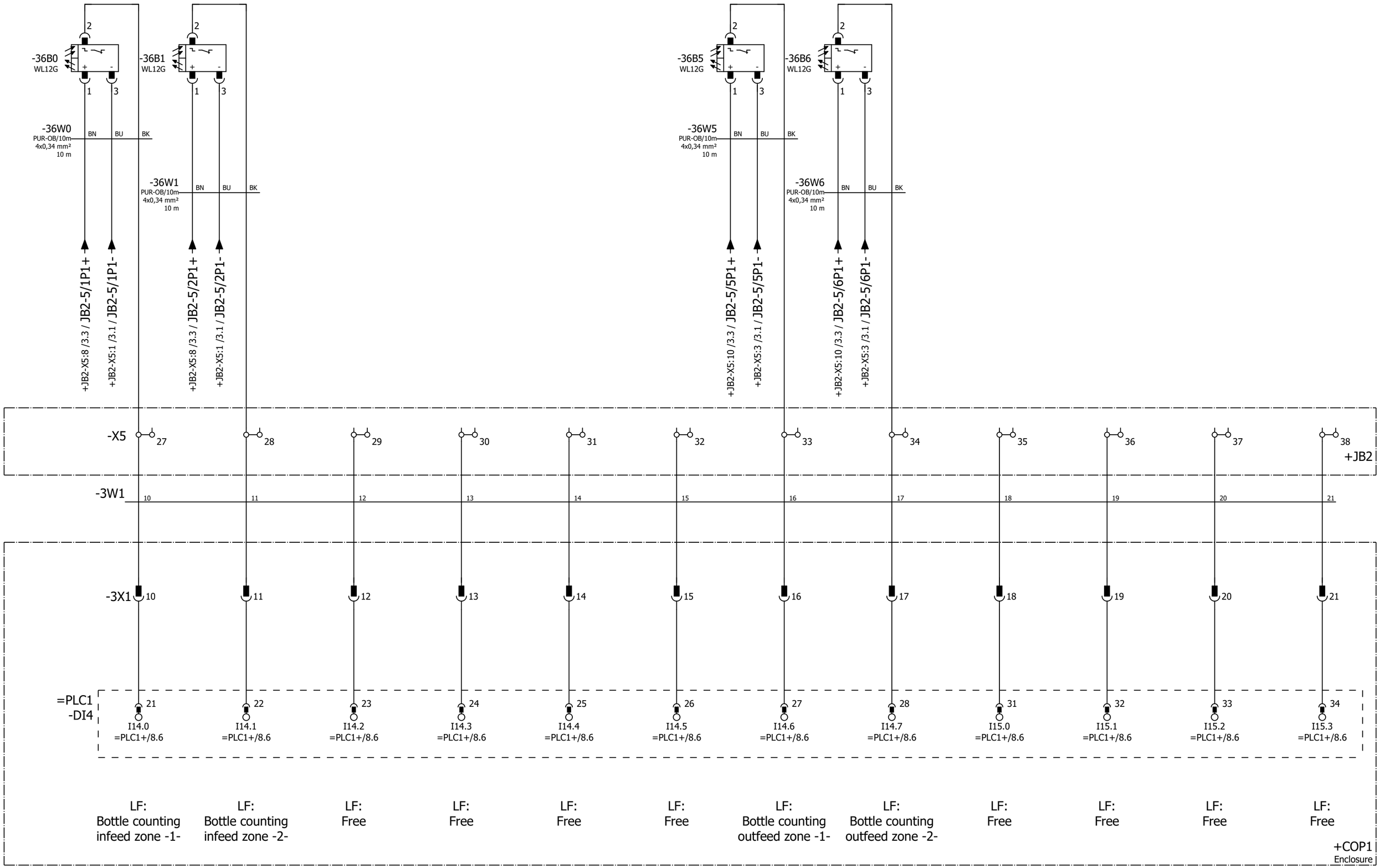

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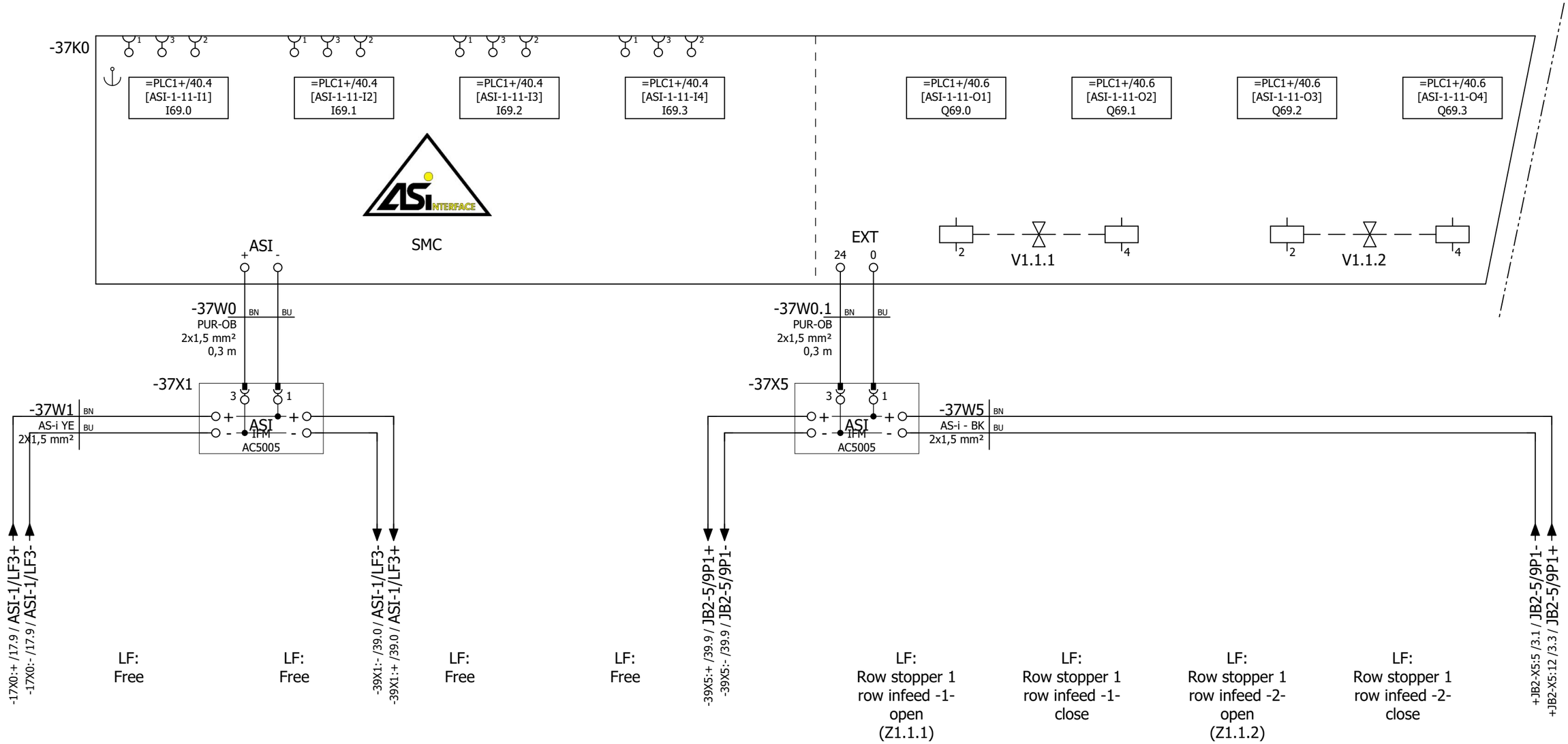
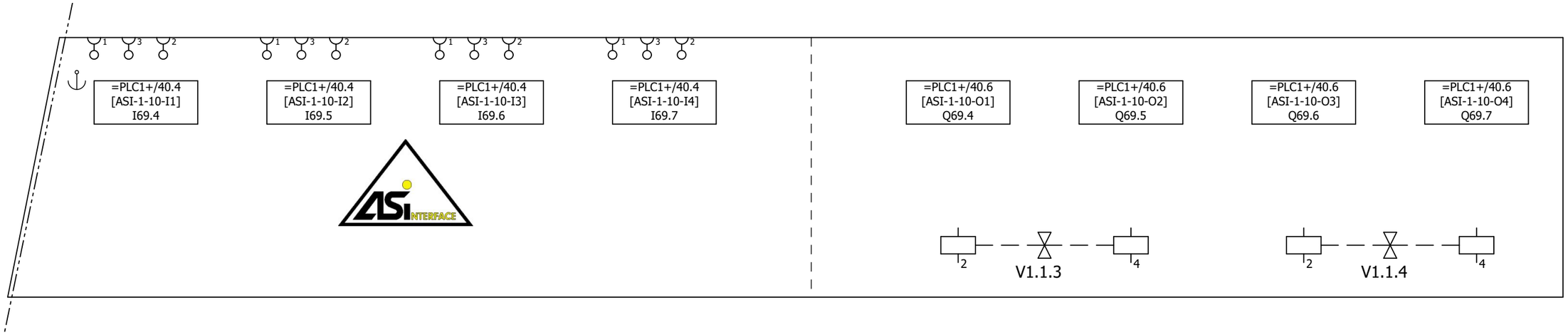

-37K0
=PLC1+/40.4
[ASI-1-11-I1]
I69.0
=PLC1+/40.4
[ASI-1-11-I2]
I69.1
=PLC1+/40.4
[ASI-1-11-I3]
I69.2
=PLC1+/40.4
[ASI-1-11-I4]
I69.3
=PLC1+/40.6
[ASI-1-11-O1]
Q69.0
=PLC1+/40.6
[ASI-1-11-O2]
Q69.1
=PLC1+/40.6
[ASI-1-11-O3]
Q69.2
=PLC1+/40.6
[ASI-1-11-O4]
Q69.3
SMC
ASI
EXT
24
0
V1.1.1
V1.1.2
-37W0
BN
BU
PUR-OB
2x1,5 mm²
0,3 m
-37W0.1
BN
BU
PUR-OB
2x1,5 mm²
0,3 m
-37X1
-37W1
BN
AS-i YE
BU
2x1,5 mm²
ASI
IFM
AC5005
-37X5
-37W5
BN
AS-i - BK
BU
2x1,5 mm²
-17X0:+ /17.9 / ASI-1/LF3+
-17X0:- /17.9 / ASI-1/LF3-
-39X1:- /39.0 / ASI-1/LF3-
-39X1:+ /39.0 / ASI-1/LF3+
-39X5:+ /39.9 / JB2-5/9P1+
-39X5:- /39.9 / JB2-5/9P1-
+JB2-X5:5 /3.1 / JB2-5/9P1-
+JB2-X5:12 /3.3 / JB2-5/9P1+
LF:
Free
LF:
Free
LF:
Free
LF:
Free
LF:
Row stopper 1
row infeed -1-
open
(Z1.1.1)
LF:
Row stopper 1
row infeed -1-
close
LF:
Row stopper 1
row infeed -2-
open
(Z1.1.2)
LF:
Row stopper 1
row infeed -2-
close

-38K0



LF: Free	LF: Free	LF: Free	LF: Free	LF: Row stopper 1 row outfeed open (Z1.1.3)	LF: Row stopper 1 row outfeed close	LF: Free	LF: Free

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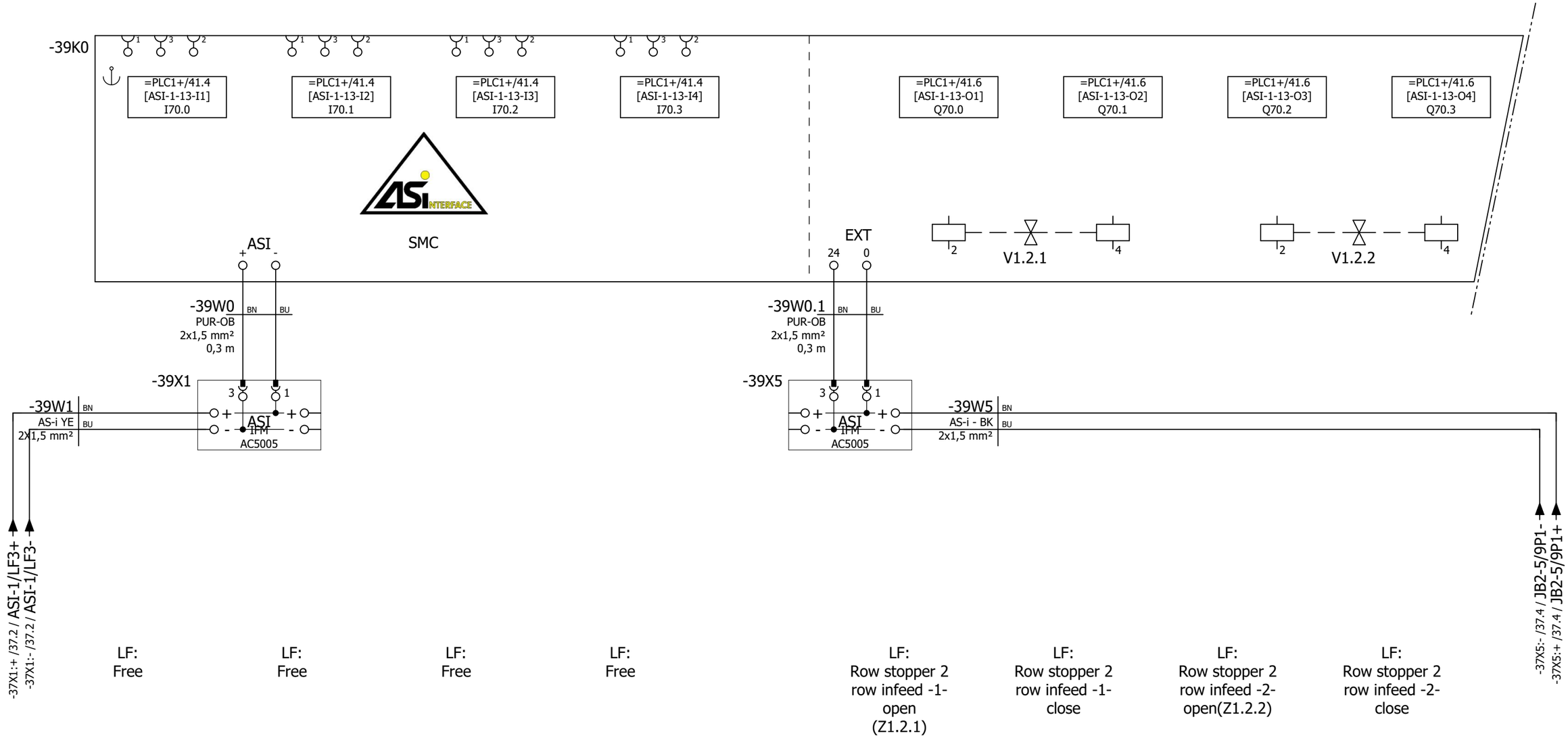
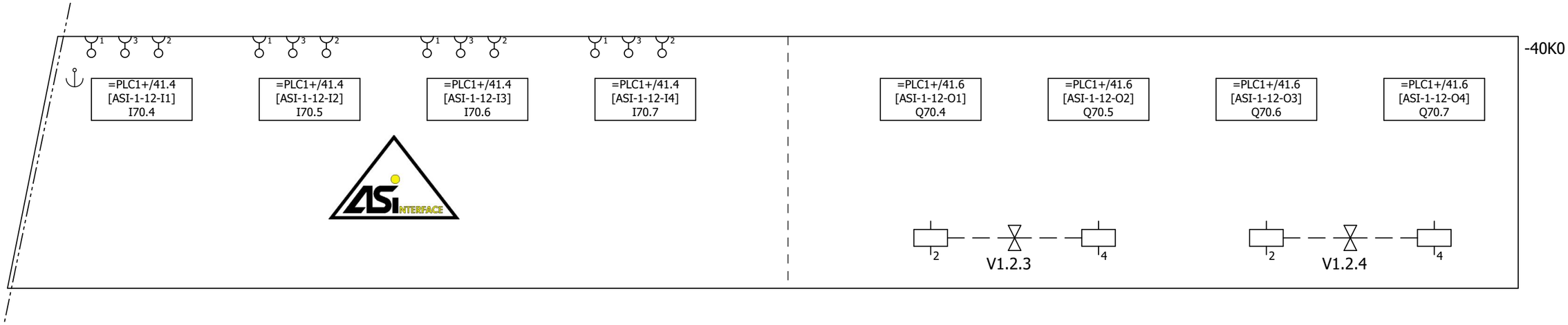

-39K0
=PLC1+/41.4
[ASI-1-13-I1]
I70.0
=PLC1+/41.4
[ASI-1-13-I2]
I70.1
=PLC1+/41.4
[ASI-1-13-I3]
I70.2
=PLC1+/41.4
[ASI-1-13-I4]
I70.3
=PLC1+/41.6
[ASI-1-13-O1]
Q70.0
=PLC1+/41.6
[ASI-1-13-O2]
Q70.1
=PLC1+/41.6
[ASI-1-13-O3]
Q70.2
=PLC1+/41.6
[ASI-1-13-O4]
Q70.3
SMC
ASI
EXT
24
0
V1.2.1
V1.2.2
-39W0
PUR-OB
2x1,5 mm²
0,3 m
BN
BU
-39W0.1
PUR-OB
2x1,5 mm²
0,3 m
-39X1
-39X5
-39W1
AS-i YE
2x1,5 mm²
-39W5
AS-i - BK
2x1,5 mm²
AC5005
-37X1:+ /37.2 / ASI-1/LF3+
-37X1:- /37.2 / ASI-1/LF3-
-37X5:- /37.4 / JB2-5/9P1-
-37X5:+ /37.4 / JB2-5/9P1+
LF:
Free
LF:
Free
LF:
Free
LF:
Free
LF:
Row stopper 2
row infeed -1-
open
(Z1.2.1)
LF:
Row stopper 2
row infeed -1-
close
LF:
Row stopper 2
row infeed -2-
open(Z1.2.2)
LF:
Row stopper 2
row infeed -2-
close



LF: Free	LF: Free	LF: Free	LF: Free	LF: Row stopper 2 row outfeed open (Z1.2.2)	LF: Row stopper 2 row outfeed close	LF: Free	LF: Free

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Terminal diagram

Function text	-5W1	-4W5	-4W1	-25W8	-8W4	-15W8	-9W0.1	-8W2	-8W1	Cable name	Strip =LF+JB1-X5 A138						Cable name	-2W1	-25W8	-8W2	-9W0.1	Page / column
	Ölflex Classic 110 7G0,75 mm²	Ölflex Classic 110 7G0,75 mm²	Ölflex Classic 110 7G0,75 mm²	PUR-OB 4X0,34 mm²	PUR-OB/1,5m 4X0,34 mm²	PUR-OB 4X0,34 mm²	AS-i Black 2X1,5 mm²	PUR-OB/10m 4X0,34 mm²	PUR-OB/10m 4X0,34 mm²	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type	Ölflex Classic 110 25G1,5 mm²	PUR-OB 4X0,34 mm²	PUR-OB/10m 4x0,34 mm²	AS-i Black 2X1,5 mm²	
									BU		+F-8Q1	x2	1		+COP1-2X1	1		1				+F/2.1
								BU			+F-8Q2	x2										
							BU				+F-9X0	-	2		+F-25B8	3			BU			+F/2.1
						BU					+F-15B8	3	3									+F/2.1
													4									+F/2.1
													5									+F/2.1
													6									+F/2.2
													7									+F/2.2
													8									+F/2.2
					BN						+F-8B4	1	9		+COP1-2X1	2		2				+F/2.3
						BN					+F-15B8	1										
				BN							+F-25B8	1	10		=LI+F-8B2	1				BN		+F/2.3
													11		+F-9X0	+					BN	+F/2.3
													12									+F/2.3
													13									+F/2.3
													14		+COP1-2X1	3		3				+F/2.4
													15									+F/2.4
									BK		+F-8Q1	x1	16		+COP1-2X1	4		4				+F/2.6
								BK			+F-8Q2	x1										
													17									+F/2.6
LF: Safety switch row stopper Safety door -front-			1								+F-4S1	11	18		+COP1-2X1	5		5				+F/4.1
Test signal -2-			2								+F-4S1	21	19		+COP1-2X1	6		6				+F/4.1
=			3								+F-4S1	33	20									+F/4.1
=			4								+F-4S1	34	21		+COP1-2X1	7		7				+F/4.1
=			5								+F-4S1	22	22									+F/4.2
=			6								+F-4S1	12	23									+F/4.2
LF: Safety switch row stopper hinged door -frontopened			GNYE								+F-4S1	PE	PE		-PE	PE						+F/4.2
LF: Safety switch row stopper hinged door -right side-		1									+F-4S5	11	24									+F/4.5
=		2									+F-4S5	21	25									+F/4.5
=		3									+F-4S5	33	26									+F/4.5
=		4									+F-4S5	34	27		+COP1-2X1	8		8				+F/4.6
LF: Safety switch row stopper hinged door -right side opened		5									+F-4S5	22	28									+F/4.6
=		6									+F-4S5	12	29									+F/4.6
=		GNYE									+F-4S5	PE	PE		-PE	PE						+F/4.7
LF: Safety switch row stopper sliding door -left side 1-	1										+F-5S1	11	30									+F/5.1

Terminal diagram

Function text		-8W2	-25W8	-15W8	-8W4	-6W5	-6W1	-5W5	-5W1	Cable name	Strip =LF+JB1-X5 A138						Cable name	-2W1				Page / column
		PUR-OB/10m 4x0,34 mm²	PUR-OB 4X0,34 mm²	PUR-OB 4X0,34 mm²	PUR-OB/1,5m 4X0,34 mm²	Ölflex Classic 110 7G0,75 mm²	Ölflex Classic 110 7G0,75 mm²	Ölflex Classic 110 7G0,75 mm²	Ölflex Classic 110 7G0,75 mm²	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type	Ölflex Classic 110 25G1,5 mm²				
LF: Safety switch row stopper sliding door -left side 1-									2		+F-5S1	21	31									+F/5.1
=									3		+F-5S1	33	32									+F/5.1
=									4		+F-5S1	34	33		+COP1-2X1	9		9				+F/5.1
LF: Safety switch row stopper sliding door -left side 1opened									5		+F-5S1	22	34									+F/5.2
=									6		+F-5S1	12	35									+F/5.2
=									GNYE		+F-5S1	PE	PE		-PE	PE						+F/5.2
LF: Safety switch row stopper sliding door -left side 2-								1			+F-5S5	11	36									+F/5.5
=								2			+F-5S5	21	37									+F/5.5
=								3			+F-5S5	33	38									+F/5.5
LF: Safety switch row stopper sliding door -left side 2opened								4			+F-5S5	34	39		+COP1-2X1	10		10				+F/5.6
=								5			+F-5S5	22	40									+F/5.6
=								6			+F-5S5	12	41									+F/5.6
=								GNYE			+F-5S5	PE	PE		-PE	PE						+F/5.7
LF: Safety switch row stopper sliding door -left side 3-							1				+F-6S1	11	42									+F/6.1
=							2				+F-6S1	21	43									+F/6.1
=							3				+F-6S1	33	44									+F/6.1
=							4				+F-6S1	34	45		+COP1-2X1	11		11				+F/6.1
LF: Safety switch row stopper sliding door -left side 3opened							5				+F-6S1	22	46									+F/6.2
=							6				+F-6S1	12	47									+F/6.2
=							GNYE				+F-6S1	PE	PE		-PE	PE						+F/6.2
LF: Safety switch row stopper sliding door -left side 4-						1					+F-6S5	11	48									+F/6.5
=						2					+F-6S5	21	49									+F/6.5
=						3					+F-6S5	33	50									+F/6.5
LF: Safety switch row stopper sliding door -left side 4opened						4					+F-6S5	34	51		+COP1-2X1	12		12				+F/6.6
=						5					+F-6S5	22	52		+COP1-2X1	13		13				+F/6.6
=						6					+F-6S5	12	53		+COP1-2X1	14		14				+F/6.6
=						GNYE					+F-6S5	PE	PE		-PE	PE						+F/6.7
LF: Air pressure =P4 OK					BK						+F-8B4	2	54		+COP1-2X1	15		15				+F/8.4
LF: Reserved Air pressure =P2 OK													55		+COP1-2X1	16		16				+F/8.8
LF: Horizontal drive point of reference				BK							+F-15B8	4	56		+COP1-2X1	17		17				+F/15.8
LF: vertical drive point of reference			BK								+F-25B8	4	57		+COP1-2X1	18		18				+F/25.8
LF: Canding control Reserved													58		+COP1-2X1	19		19				+F/26.1
LI: Air pressure OK		BK									=LI+F-8B2	2	59		+COP1-2X1	20		20				=LI+F/8.2
													60		+COP1-2X1	21		21				+F/2.6
													61		+COP1-2X1	22		22				+F/2.6

Terminal diagram

Function text										Cable name	Strip =LF+JB1-X5 A138						Cable name	-2W1				Page / column
										Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type	Öflex Classic 110 25G1,5 mm²				
													62		+COP1-2X1	23		23				+F/2.6
													63		+COP1-2X1	24		24				+F/2.7
													PE		+COP1-2X1	PE		GNYE				+F/2.7

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Terminal diagram

Function text			-7W5	-7W1	-37W5	-36W6	-36W5	-36W1	-36W0	Cable name	Strip =LF+JB2-X5 A135 Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable name	-3W1				Page / column
			Ölflex Classic 110 7G0,75 mm²	Ölflex Classic 110 7G0,75 mm²	AS-i - BK 2x1,5 mm²	PUR-OB/10m 4x0,34 mm²	PUR-OB/10m 4x0,34 mm²	PUR-OB/10m 4x0,34 mm²	PUR-OB/10m 4x0,34 mm²	Cable type							Cable type	Ölflex Classic 110 25G1,5 mm²				
									BU		+F-36B0	3	1		+COP1-3X1	1		1				+F/3.1
								BU			+F-36B1	3										
													2									+F/3.1
							BU				+F-36B5	3	3									+F/3.1
						BU					+F-36B6	3										
													4									+F/3.1
					BU						+F-37X5	-	5									+F/3.1
													6									+F/3.2
													7									+F/3.2
									BN		+F-36B0	1	8		+COP1-3X1	2		2				+F/3.3
								BN			+F-36B1	1										
													9									+F/3.3
							BN				+F-36B5	1	10									+F/3.3
						BN					+F-36B6	1										
													11									+F/3.3
					BN						+F-37X5	+	12									+F/3.3
													13									+F/3.4
													14		+COP1-3X1	3		3				+F/3.4
LF: Safety-switch bottle-infeed sliding window -left-				1							+F-7S1	11	15		+COP1-3X1	4		4				+F/7.1
=				2							+F-7S1	21	16		+COP1-3X1	5		5				+F/7.1
=				3							+F-7S1	33	17									+F/7.1
LF: Safety-switch bottle-infeed sliding window -leftopened				4							+F-7S1	34	18		+COP1-3X1	6		6				+F/7.1
=				5							+F-7S1	22	19									+F/7.2
=				6							+F-7S1	12	20									+F/7.2
=				GNYE							+F-7S1	PE	PE		-PE	PE						+F/7.2
LF: Safety-switch bottle-infeed sliding window -right-			1								+F-7S5	11	21									+F/7.5
=			2								+F-7S5	21	22									+F/7.5
=			3								+F-7S5	33	23									+F/7.5
LF: Safety-switch bottle-infeed sliding window -rightopened			4								+F-7S5	34	24		+COP1-3X1	7		7				+F/7.6
=			5								+F-7S5	22	25		+COP1-3X1	9		9				+F/7.6
=			6								+F-7S5	12	26		+COP1-3X1	8		8				+F/7.6
=			GNYE								+F-7S5	PE	PE		-PE	PE						+F/7.7
LF: Bottle counting infeed zone -1-									BK		+F-36B0	2	27		+COP1-3X1	10		10				+F/36.1
LF: Bottle counting infeed zone -2-								BK			+F-36B1	2	28		+COP1-3X1	11		11				+F/36.1
LF: Free													29		+COP1-3X1	12		12				+F/36.2

Terminal diagram

Function text								-36W6	-36W5	Cable name	Strip =LF+JB2-X5 A135						Cable name	-3W1				Page / column
								PUR-OB/10m 4x0,34 mm²	PUR-OB/10m 4x0,34 mm²	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type	Ölflex Classic 110 25G1,5 mm²				
LF: Free													30		+COP1-3X1	13		13				+F/36.3
=													31		+COP1-3X1	14		14				+F/36.4
=													32		+COP1-3X1	15		15				+F/36.4
LF: Bottle counting outfeed zone -1-									BK		+F-36B5	2	33		+COP1-3X1	16		16				+F/36.5
LF: Bottle counting outfeed zone -2-								BK			+F-36B6	2	34		+COP1-3X1	17		17				+F/36.6
LF: Free													35		+COP1-3X1	18		18				+F/36.7
=													36		+COP1-3X1	19		19				+F/36.8
=													37		+COP1-3X1	20		20				+F/36.8
=													38		+COP1-3X1	21		21				+F/36.9
													39		+COP1-3X1	22		22				+F/3.5
													40		+COP1-3X1	23		23				+F/3.5
													41		+COP1-3X1	24		24				+F/3.5
													PE		+COP1-3X1	PE		GNYE				+F/3.6

Plug diagram

Function text									-2W1	Cable name	Strip designation =LF+COP1-2X1							Cable name					
									Ölflex Classic 110 25G1,5 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					Page / column
									1		+JB1-X5	1	1			=GEN-X5.0	12:A						+F/2.1
									2		+JB1-X5	9	2			-2F2	OUTX						+F/2.3
									3		+JB1-X5	14	3			=GEN-X5	23:B						+F/2.4
									4		+JB1-X5	16	4			=SPLC1-37K2	14						+F/2.6
Test signal -1-									5		+JB1-X5	18	5			=SPLC1-DIS4	X1						+F/4.0
Test signal -2-									6		+JB1-X5	19	6			=SPLC1-DIS4	X2						+F/4.1
=									7		+JB1-X5	21	7		I13.0	=PLC1-DI4	-X10:11						+F/4.2
LF: Safety switch row stopper hinged door -right side-									8		+JB1-X5	27	8		I13.1	=PLC1-DI4	-X10:12						+F/4.6
LF: Safety switch row stopper sliding door -left side 1-									9		+JB1-X5	33	9		I13.2	=PLC1-DI4	-X10:13						+F/5.1
LF: Safety switch row stopper sliding door -left side 2opened									10		+JB1-X5	39	10		I13.3	=PLC1-DI4	-X10:14						+F/5.6
LF: Safety switch row stopper sliding door -left side 3-									11		+JB1-X5	45	11		I13.4	=PLC1-DI4	-X10:15						+F/6.1
LF: Safety switch row stopper sliding door -left side 4opened									12		+JB1-X5	51	12		I13.5	=PLC1-DI4	-X10:16						+F/6.6
=									13		+JB1-X5	52	13			-3X1	5						+F/6.7
=									14		+JB1-X5	53	14			-3X1	4						+F/6.7
LF: Air pressure =P4 OK									15		+JB1-X5	54	15		I8.1	=PLC1-DI3	-X10:2						+F/8.4
LF: Reserved Air pressure =P2 OK									16		+JB1-X5	55	16		I8.2	=PLC1-DI3	-X10:3						+F/8.8
LF: Horizontal drive point of reference									17		+JB1-X5	56	17			-11T0	4						+F/15.8
LF: vertical drive point of reference									18		+JB1-X5	57	18			-21T0	X13:4						+F/25.8
LF: Canding control Reserved									19		+JB1-X5	58	19		I8.0	=PLC1-DI3	-X10:1						+F/26.1
LI: Air pressure OK									20		+JB1-X5	59	20		I11.7	=PLC1-DI3	-X10:38						=LI+F/8.2
									21		+JB1-X5	60	21										+F/2.6
									22		+JB1-X5	61	22										+F/2.6
									23		+JB1-X5	62	23										+F/2.6
									24		+JB1-X5	63	24										+F/2.7
									GNYE		+JB1-X5	PE	PE			-PE1	PE						+F/2.7

Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	Plug diagram =LF+COP1-2X1	= LF	+PLG	Page 300
Edited by	BaF	Type MSK - Semitech			Revision	
Modification date	2023. 10. 11.					

Plug diagram

Function text									-3W1	Cable name	Strip designation =LF+COP1-3X1							Cable name					
									Ölflex Classic 110 25G1,5 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					Page / column
									1		+JB2-X5	1	1			=GEN-X5.0	13:A						+F/3.1
									2		+JB2-X5	8	2			-3F2	OUTX						+F/3.3
									3		+JB2-X5	14	3			-2X1	3						+F/3.4
LF: Safety-switch bottle-infeed sliding window -left-									4		+JB2-X5	15	4			-2X1	14						+F/7.0
=									5		+JB2-X5	16	5			-2X1	13						+F/7.1
LF: Safety-switch bottle-infeed sliding window -leftopened									6		+JB2-X5	18	6		I13.6	=PLC1-DI4	-X10:17						+F/7.1
LF: Safety-switch bottle-infeed sliding window -rightopened									7		+JB2-X5	24	7		I13.7	=PLC1-DI4	-X10:18						+F/7.6
LF: Safety doors CH -1-									8		+JB2-X5	26	8		I25	=SPLC1-DIS4	I1						+F/7.7
=									9		+JB2-X5	25	9		I26	=SPLC1-DIS4	I2						+F/7.8
LF: Bottle counting infeed zone -1-									10		+JB2-X5	27	10		I14.0	=PLC1-DI4	-X10:21						+F/36.1
LF: Bottle counting infeed zone -2-									11		+JB2-X5	28	11		I14.1	=PLC1-DI4	-X10:22						+F/36.1
LF: Free									12		+JB2-X5	29	12		I14.2	=PLC1-DI4	-X10:23						+F/36.2
=									13		+JB2-X5	30	13		I14.3	=PLC1-DI4	-X10:24						+F/36.3
=									14		+JB2-X5	31	14		I14.4	=PLC1-DI4	-X10:25						+F/36.4
=									15		+JB2-X5	32	15		I14.5	=PLC1-DI4	-X10:26						+F/36.4
LF: Bottle counting outfeed zone -1-									16		+JB2-X5	33	16		I14.6	=PLC1-DI4	-X10:27						+F/36.5
LF: Bottle counting outfeed zone -2-									17		+JB2-X5	34	17		I14.7	=PLC1-DI4	-X10:28						+F/36.6
LF: Free									18		+JB2-X5	35	18		I15.0	=PLC1-DI4	-X10:31						+F/36.7
=									19		+JB2-X5	36	19		I15.1	=PLC1-DI4	-X10:32						+F/36.8
=									20		+JB2-X5	37	20		I15.2	=PLC1-DI4	-X10:33						+F/36.8
=									21		+JB2-X5	38	21		I15.3	=PLC1-DI4	-X10:34						+F/36.9
									22		+JB2-X5	39	22										+F/3.5
									23		+JB2-X5	40	23										+F/3.5
									24		+JB2-X5	41	24										+F/3.5
									GNYE		+JB2-X5	PE	PE			-PE1	6						+F/3.6

Plug diagram

Function text									-12W1	Cable name	Strip designation =LF+COP1-12X1							Cable name					
									13354353_20.0M 4G+3x2,5/1,0 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					Page / column
LF: Horizontal drive									U		+F-12M1	1	1			-11T0	X2:4						+F/12.1
=									V		+F-12M1	4	2			-11T0	5						+F/12.1
=									W		+F-12M1	3	3			-11T0	6						+F/12.1
													4										
LF: Horizontal drive brake									1		+F-12M1	C	5			-12T3	13						+F/12.3
													6										
LF: Horizontal drive brake									3		+F-12M1	D	7			-12T3	15						+F/12.4
													8										
													9										
													10										
LF: Horizontal drive									GNYE		+F-12M1	2	PE			-11T0	PE						+F/12.1

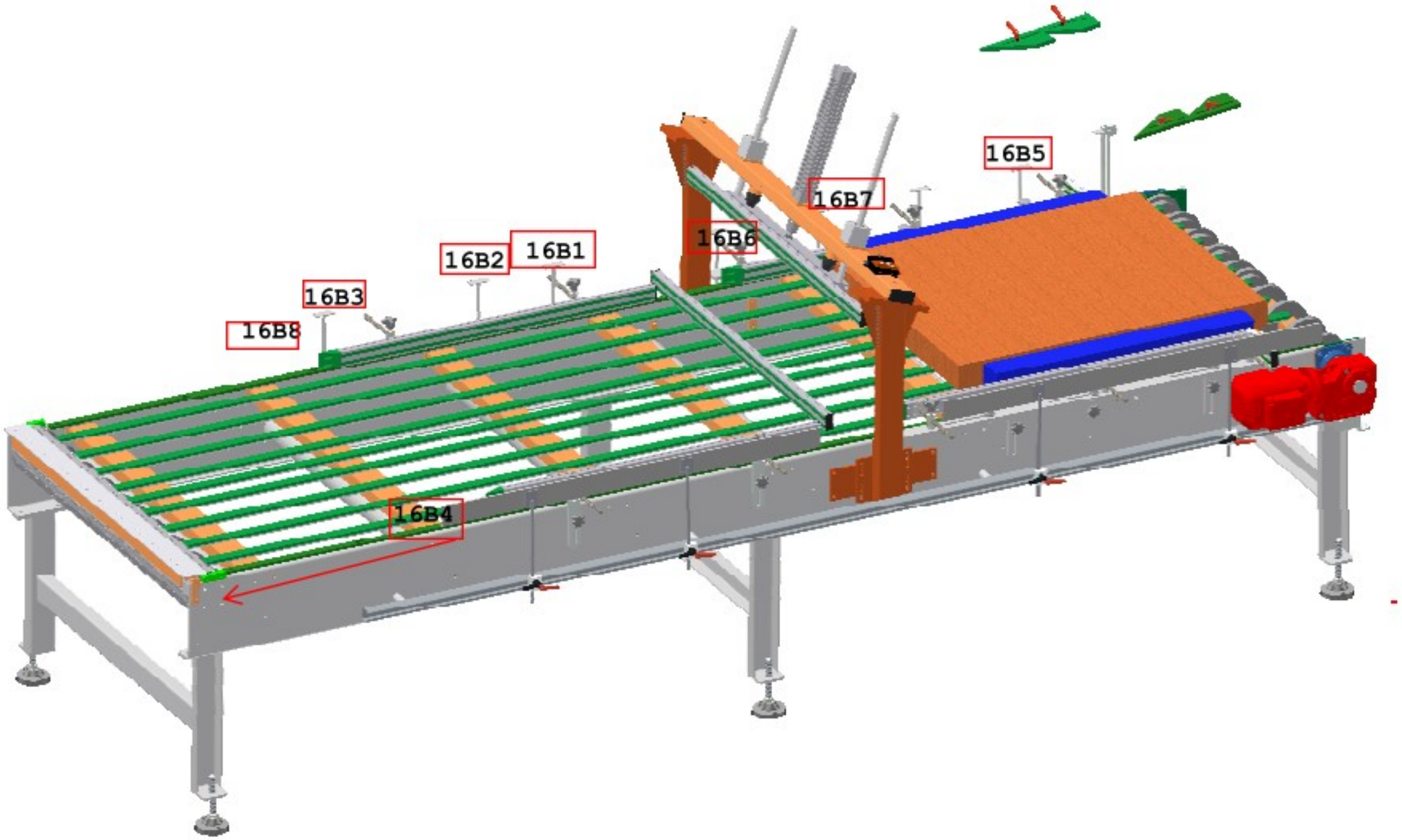
Creator	Ferenc Baracsi	Commission	620300.11.2023	Plug diagram =LF+COP1-12X1	= LF	+PLG	Page 302
Edited by	BaF	Type	MSK - Semitech		Revision	
Modification date	2023. 10. 11.					

Plug diagram

Function text									-22W1	Cable name	Strip designation =LF+COP1-22X1							Cable name					
									13354396/25,0m 4G+3x2,5 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					Page / column
LF: Vertical drive									U		+F-22M1	U	1			-21T0	X2:4						+F/22.1
=									V		+F-22M1	V	2			-21T0	X2:5						+F/22.1
=									W		+F-22M1	W	3			-21T0	X2:6						+F/22.1
													4										
LF: Vertical drive brake									5		+F-22M1	4a	5			-22T3	13						+F/22.3
=									6		+F-22M1	3a	6			-22T3	14						+F/22.3
=									7		+F-22M1	5a	7			-22T3	15						+F/22.3
													8										
													9										
													10										
LF: Vertical drive									GNYE		+F-22M1	PE	PE			-21T0	X2:PE						+F/22.2

Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
-2W1	-2X1	-X5	00060993	Ölflex Classic 110	25G	25	1,5	16	LF-JB1: 24VDC infeed
-3W1	-3X1	-X5	00060993	Ölflex Classic 110	25G	25	1,5	20	LF-JB2: 24VDC infeed
-4W1	-X5		10036999	Ölflex Classic 110	7G	7	0,75	8	LF: Safety switch row stopper Safety door -front-
-4W5	-X5		10036999	Ölflex Classic 110	7G	7	0,75	5	LF: Safety switch row stopper hinged door -right side-
-5W1	-X5		10036999	Ölflex Classic 110	7G	7	0,75	8	LF: Safety switch row stopper sliding door -left side 1-
-5W5	-X5		10036999	Ölflex Classic 110	7G	7	0,75	7	LF: Safety switch row stopper sliding door -left side 2-
-6W1	-X5		10036999	Ölflex Classic 110	7G	7	0,75	6	LF: Safety switch row stopper sliding door -left side 3-
-6W5	-X5		10036999	Ölflex Classic 110	7G	7	0,75	5	LF: Safety switch row stopper sliding door -left side 4-
-7W1	-X5		10036999	Ölflex Classic 110	7G	7	0,75	5	LF: Safety-switch bottle-infeed sliding window -left-
-7W5	-X5		10036999	Ölflex Classic 110	7G	7	0,75	7	LF: Safety-switch bottle-infeed sliding window -right-
-8W1	-X5	-8Q1	00143360	PUR-OB/10m	4X	2	0,34	10	LF: Safety valve 1 layer stopper (AC) -1-
-8W1.1	-8B0		10150127	PUR-OB/1,5m	4X	3	0,34	1,5	LF: EDM Safety valve layer stopper (AC) -1-
			00150353						
-8W2	-X5	-8Q2	00143360	PUR-OB/10m	4X	2	0,34	10	LF: Safety valve 1 layer stopper (AC) -2-
-8W2.1	-8B2		10150127	PUR-OB/1,5m	4X	3	0,34	1,5	LF: EDM Safety valve layer stopper (AC) -2-
			00150353						
-8W4		-8B4	10150127	PUR-OB/1,5m	4X	2	0,34	1,5	LF: Air pressure =P4 OK
-12W1	-12X1		00151205	13354353_20.0M	4G+3x	6	2,5/1,0	20	LF: Horizontal drive
-15W1			00151013	13324535_20,0m	6x2x	12	0,25	20	LF: Horizontal drive impulse sensor
-15W8		-15B8	00143360	PUR-OB	4X	3	0,34	10	LF: Horizontal drive point of reference
-22W1	-22X1		00151238	13354396/25,0m	4G+3x	7	2,5	25	LF: Vertical drive
-25W1			00151046	13324551_25,0	6x2x	12	0,25	25	LF: Vertical drive impulse sensor
-25W8		-25B8	00143360	PUR-OB	4X	3	0,34	10	LF: vertical drive point of reference
-26W6			00150617	Chainflex CF130 PVC	5G	4	1,5	10	LF: AS-i distribution
-27W1	-27B1		10150609	PUR-OB/3m	4X	3	0,34	3	
			00150353						
-28W0			00101677	AS-i Yellow	2X	2	1,5	1	
-31W0			00101677	AS-i Yellow	2X	2	1,5	1	
-31W1			10150609	PUR-OB/3m	4X	4	0,34	3	Pick and place head vaccum existing
			00150353						
-31W2	-31B2		10150603	PUR-OB	3X	3	0,25	3	Cylinder inner position
			00150353						
-32W0			00166580	PUR-OB	2x	2	1,5	0,3	LF: Free
-32W0.1			00166580	PUR-OB	2x	2	1,5	0,3	=
-37W0			00166580	PUR-OB	2x	2	1,5	0,3	=
-37W0.1			00166580	PUR-OB	2x	2	1,5	0,3	=
-39W0			00166580	PUR-OB	2x	2	1,5	0,3	=
-39W0.1			00166580	PUR-OB	2x	2	1,5	0,3	=


16B5
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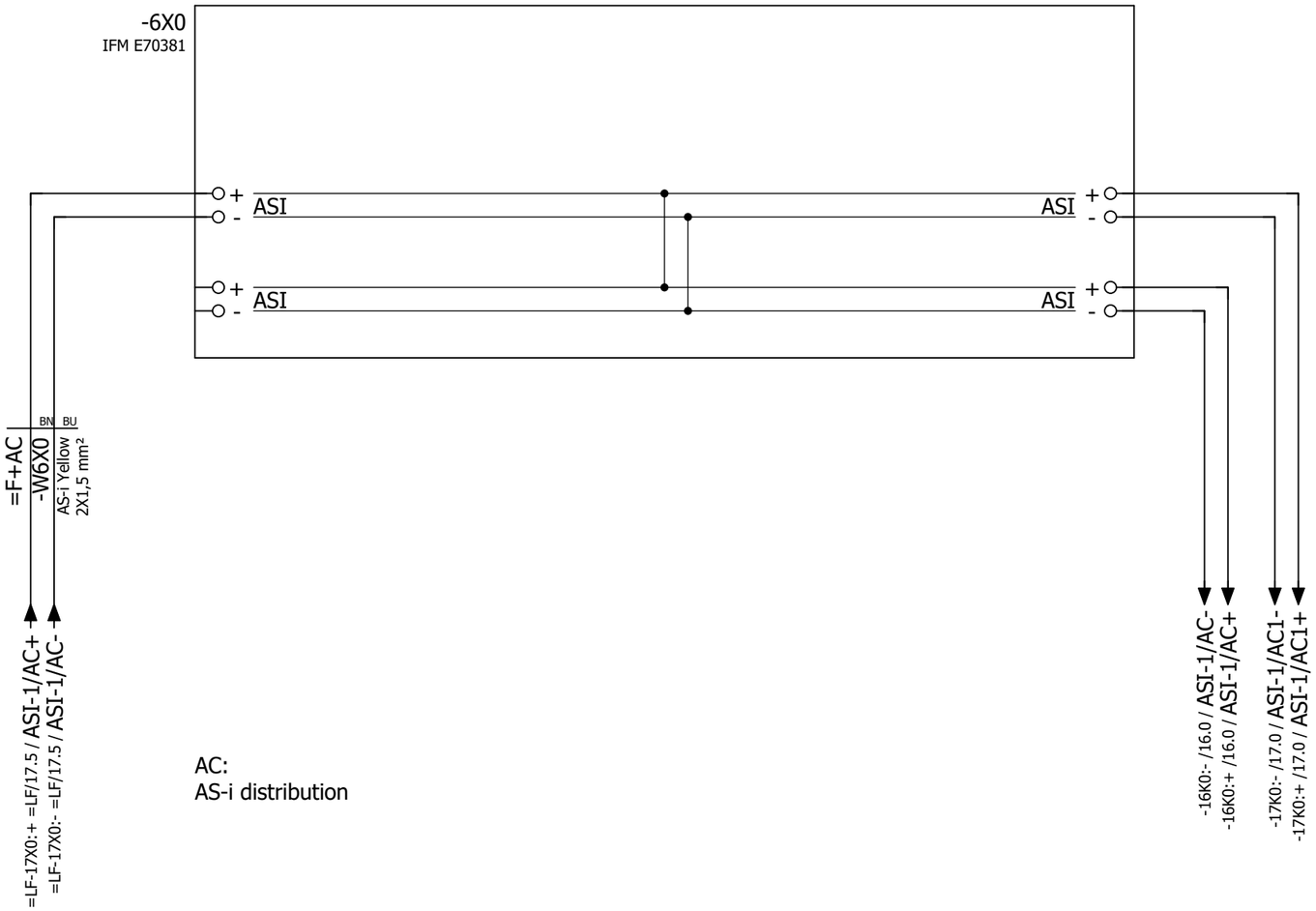
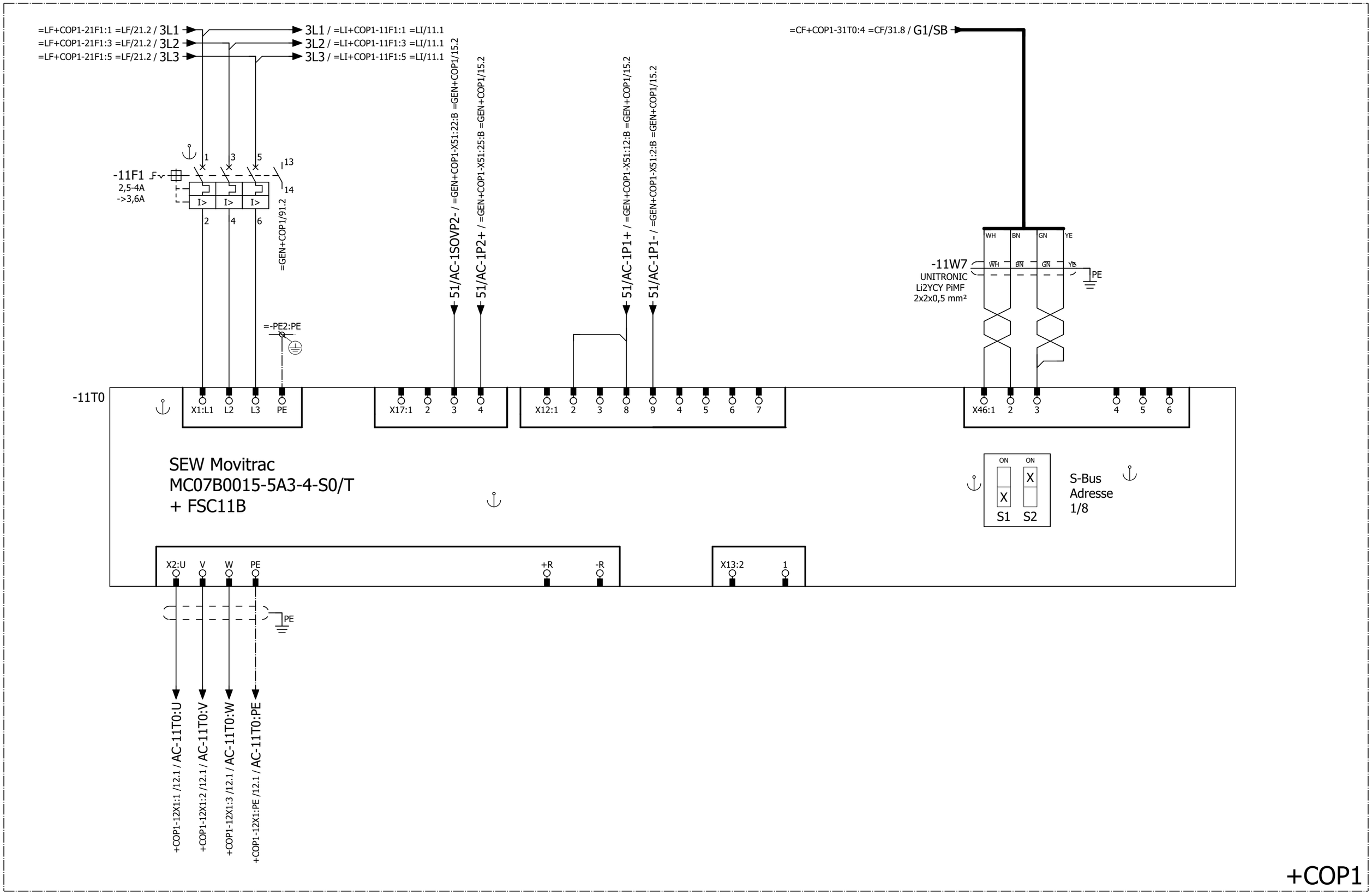
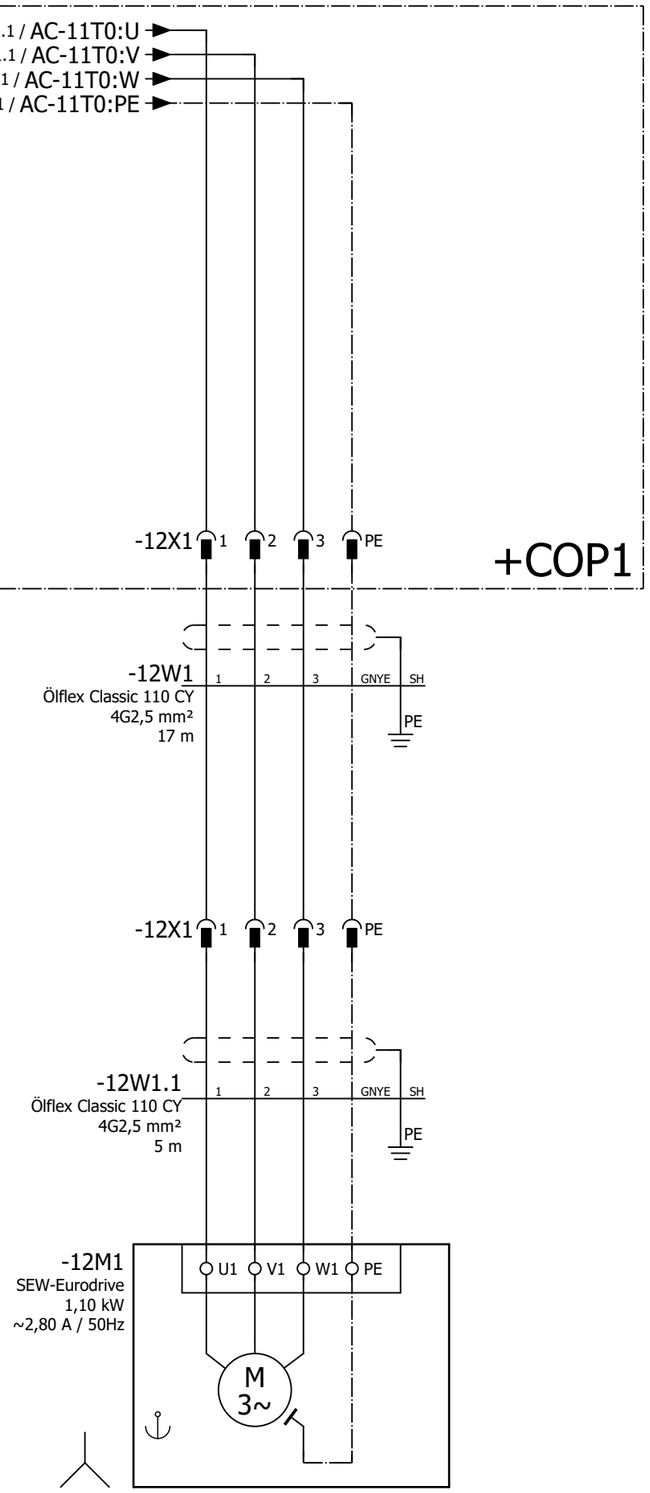
16B2
16B1
16B3
16B8
16B4

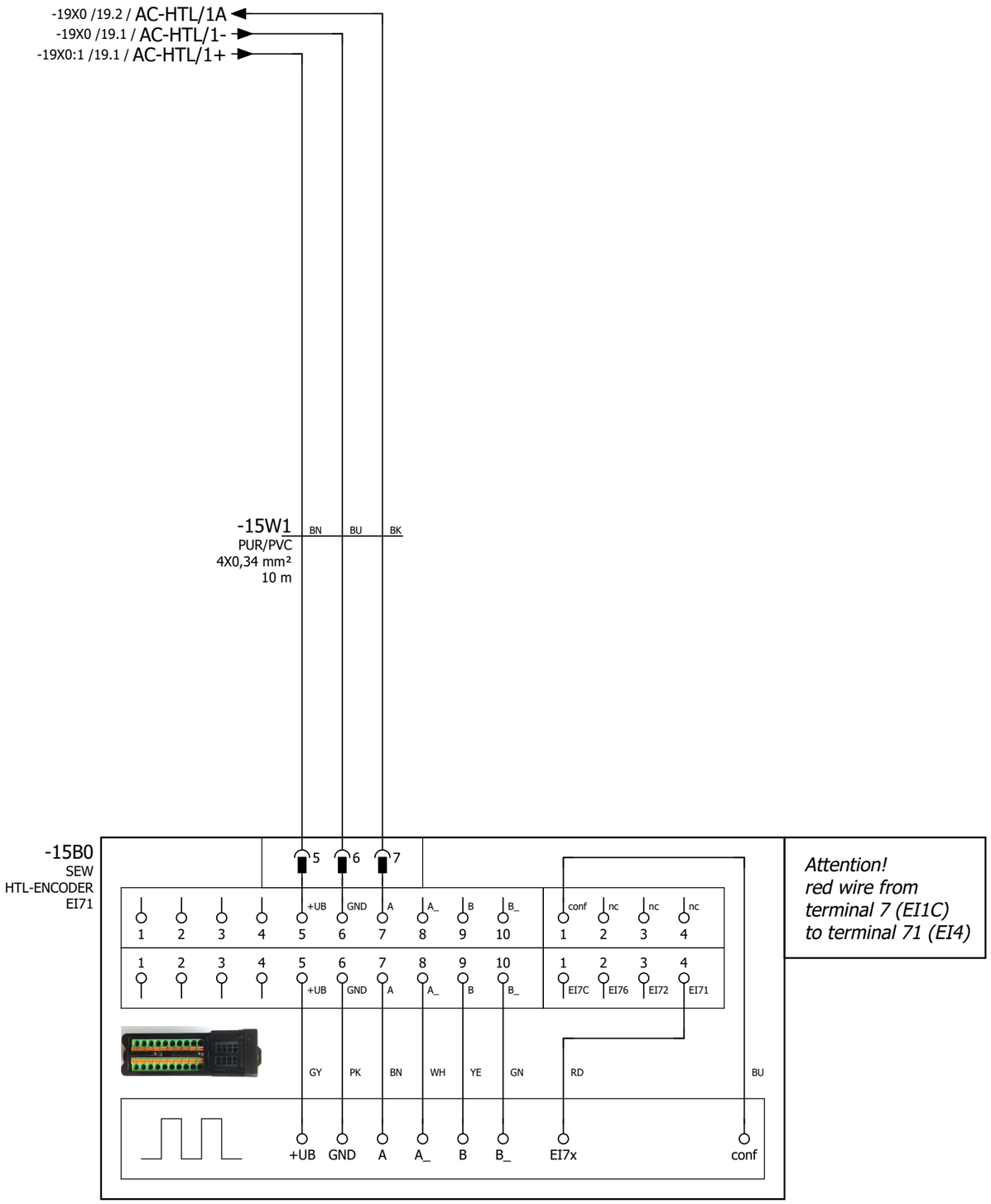


AC:
AS-i distribution

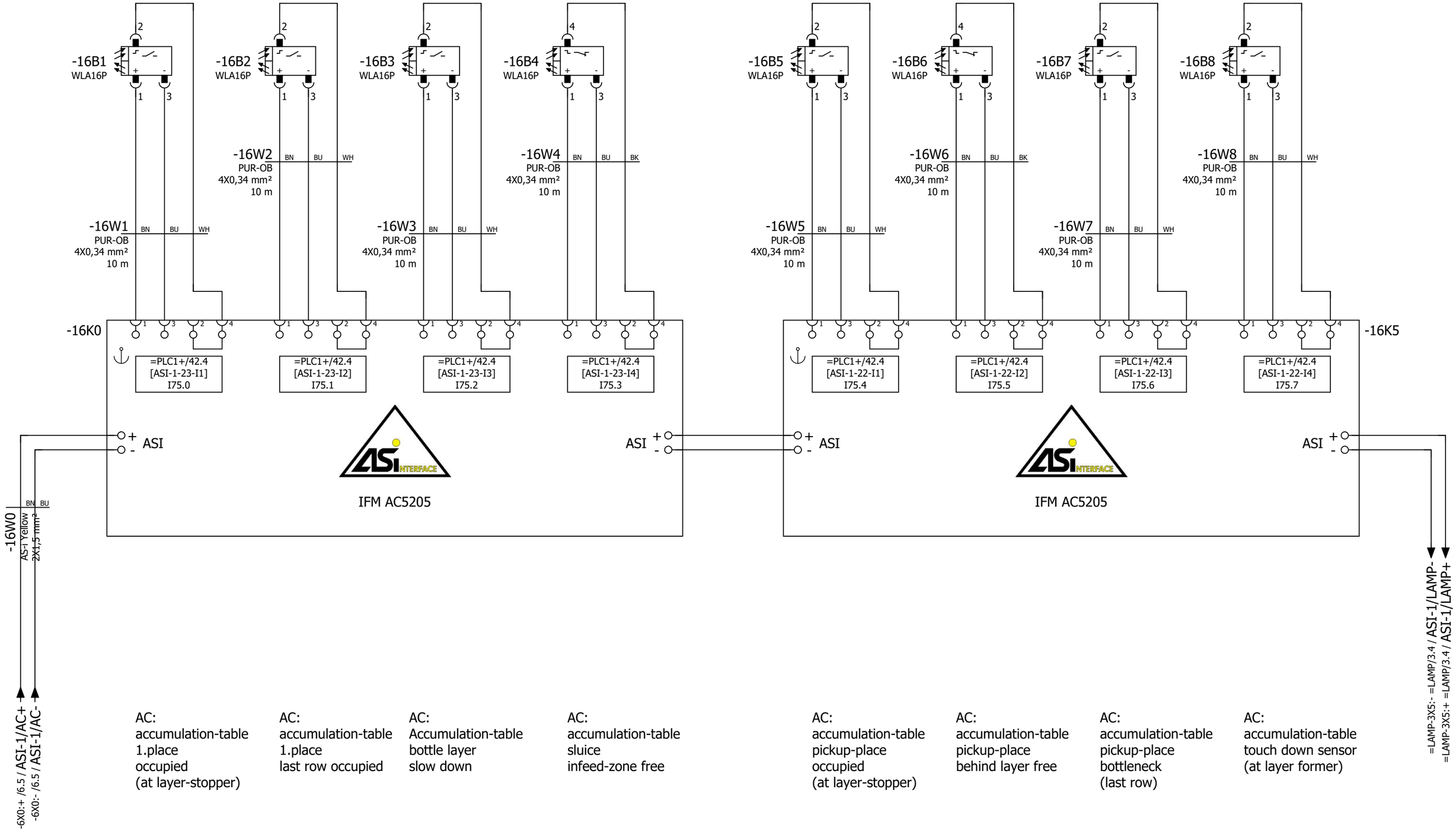

=LF+COP1-21F1:1 =LF/21.2 / 3L1
=LF+COP1-21F1:3 =LF/21.2 / 3L2
=LF+COP1-21F1:5 =LF/21.2 / 3L3
3L1 / =LI+COP1-11F1:1 =LI/11.1
3L2 / =LI+COP1-11F1:3 =LI/11.1
3L3 / =LI+COP1-11F1:5 =LI/11.1
=CF+COP1-31T0:4 =CF/31.8 / G1/SB
-11F1
2,5-4A
->3,6A
I>
=GEN+COP1/91.2
51/AC-1SOVP2- / =GEN+COP1-X51:22:B =GEN+COP1/15.2
51/AC-1P2+ / =GEN+COP1-X51:25:B =GEN+COP1/15.2
51/AC-1P1+ / =GEN+COP1-X51:12:B =GEN+COP1/15.2
51/AC-1P1- / =GEN+COP1-X51:2:B =GEN+COP1/15.2
=-PE2:PE
-11W7
UNITRONIC
Li2YCY PiMF
2x2x0,5 mm²
WH
BN
GN
YE
PE
-11T0
X1:L1 L2 L3 PE
X17:1 2 3 4
X12:1 2 3 8 9 4 5 6 7
X46:1 2 3 4 5 6
SEW Movitrac
MC07B0015-5A3-4-S0/T
+ FSC11B
ON
S1 S2
S-Bus
Adresse
1/8
X2:U V W PE
+R -R
X13:2 1
+COP1-12X1:1 /12.1 / AC-11T0:U
+COP1-12X1:2 /12.1 / AC-11T0:V
+COP1-12X1:3 /12.1 / AC-11T0:W
+COP1-12X1:PE /12.1 / AC-11T0:PE
+COP1



AC:
Accumulation-table
bottle-belt



AC:
accumulation
table HTL encoder



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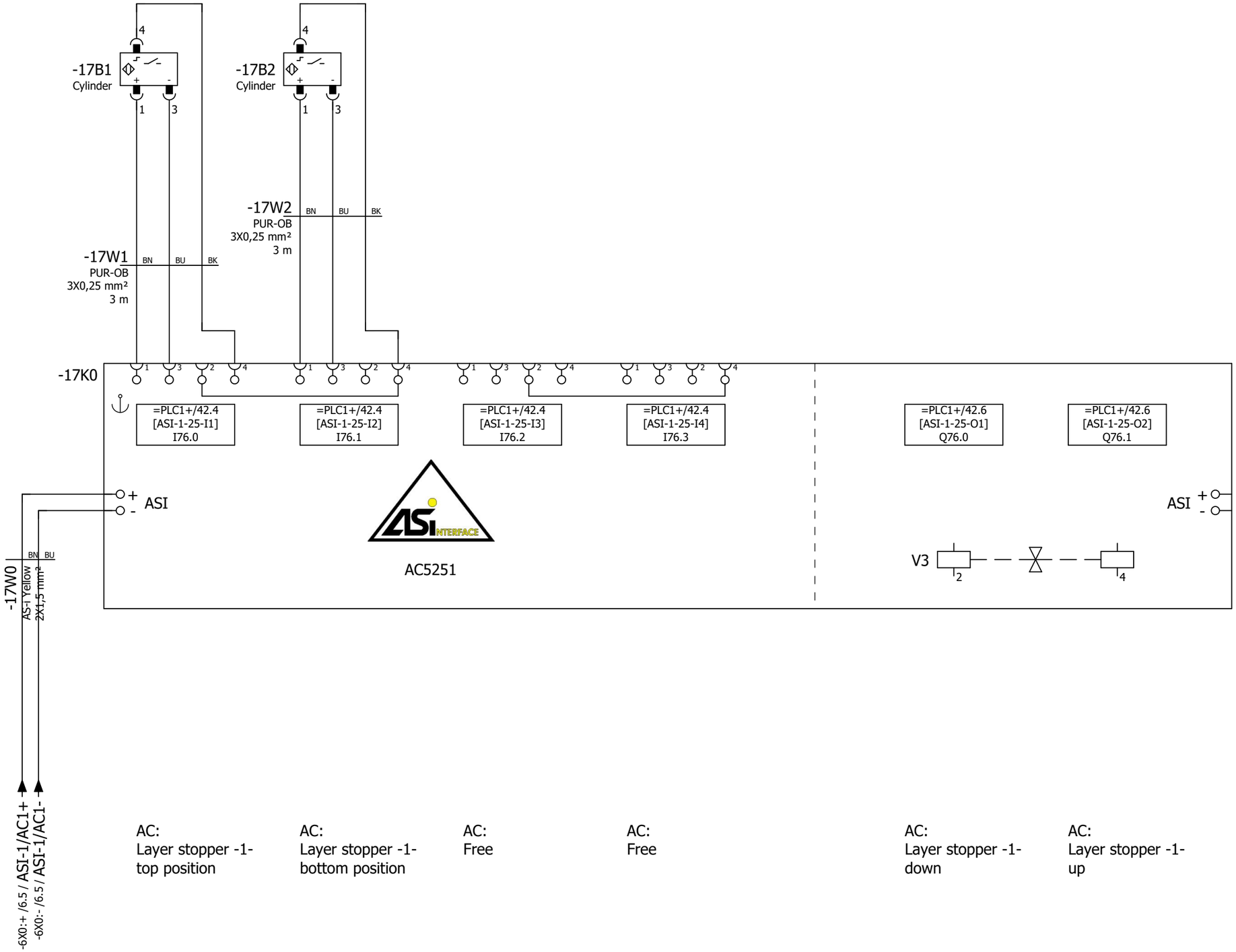
Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	AC: accumulation-table bottle-belt sensors/actuators/ASI	= AC	+F	Page 16
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 11.						



AC:
Layer stopper -1-
top position

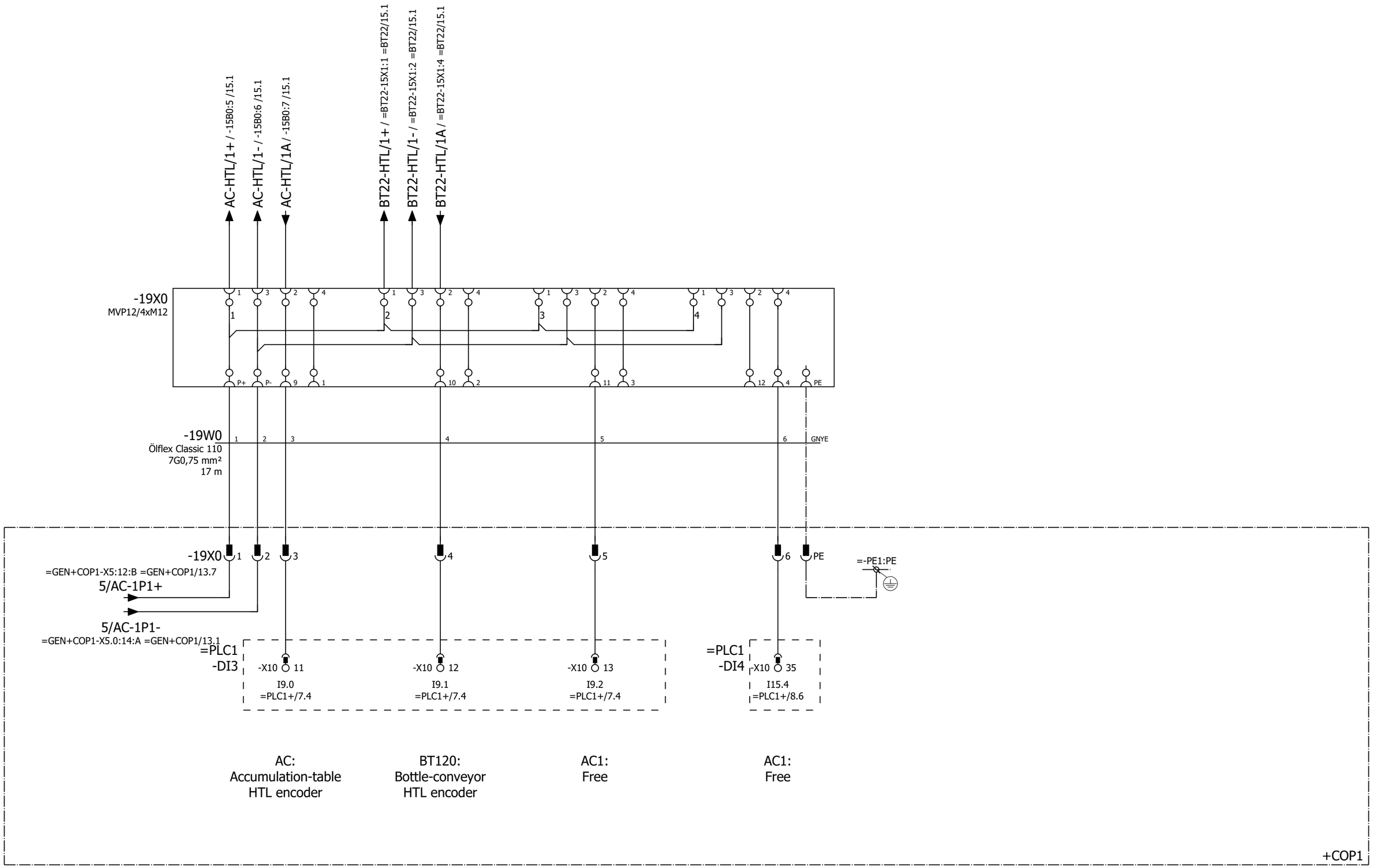
AC:
Layer stopper -1-
bottom position

AC:
Free

AC:
Free

AC:
Layer stopper -1-
down

AC:
Layer stopper -1-
up


AC-HTL/1+ / -15B0:5 /15.1
AC-HTL/1- / -15B0:6 /15.1
AC-HTL/1A / -15B0:7 /15.1
BT22-HTL/1+ / =BT22-15X1:1 =BT22/15.1
BT22-HTL/1- / =BT22-15X1:2 =BT22/15.1
BT22-HTL/1A / =BT22-15X1:4 =BT22/15.1
-19X0
MVP12/4xM12
P+
P-
PE
-19W0
Ölflex Classic 110
7G0,75 mm²
17 m
GNYE
-19X0
=GEN+COP1-X5:12:B =GEN+COP1/13.7
5/AC-1P1+
5/AC-1P1-
=GEN+COP1-X5.0:14:A =GEN+COP1/13.1
=-PE1:PE
=PLC1
-DI3
-X10 11
I9.0
=PLC1+/7.4
-X10 12
I9.1
=PLC1+/7.4
-X10 13
I9.2
=PLC1+/7.4
=PLC1
-DI4
-X10 35
I15.4
=PLC1+/8.6
AC:
Accumulation-table
HTL encoder
BT120:
Bottle-conveyor
HTL encoder
AC1:
Free
AC1:
Free
+COP1

Plug diagram

Function text									-12W1	Cable name	Strip designation =AC+COP1-12X1							Cable name					
									Ölflex Classic 110 CY 4G2,5 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					Page / column
AC: Accumulation-table bottle-belt									1		+F-12X1	1	1			-11T0	X2:U						+F/12.1
=									2		+F-12X1	2	2			-11T0	V						+F/12.1
=									3		+F-12X1	3	3			-11T0	W						+F/12.1
													4										
													5										
													6										
AC: Accumulation-table bottle-belt									GNYE		+F-12X1	PE	PE			-11T0	PE						+F/12.2

Creator	Ferenc Baracsi	Commission	620300.11.2023	Plug diagram =AC+COP1-12X1	= AC	+PLG	Page 300
Edited by	BaF	Type	MSK - Semitech		Revision		
Modification date	2023. 10. 11.						

Plug diagram

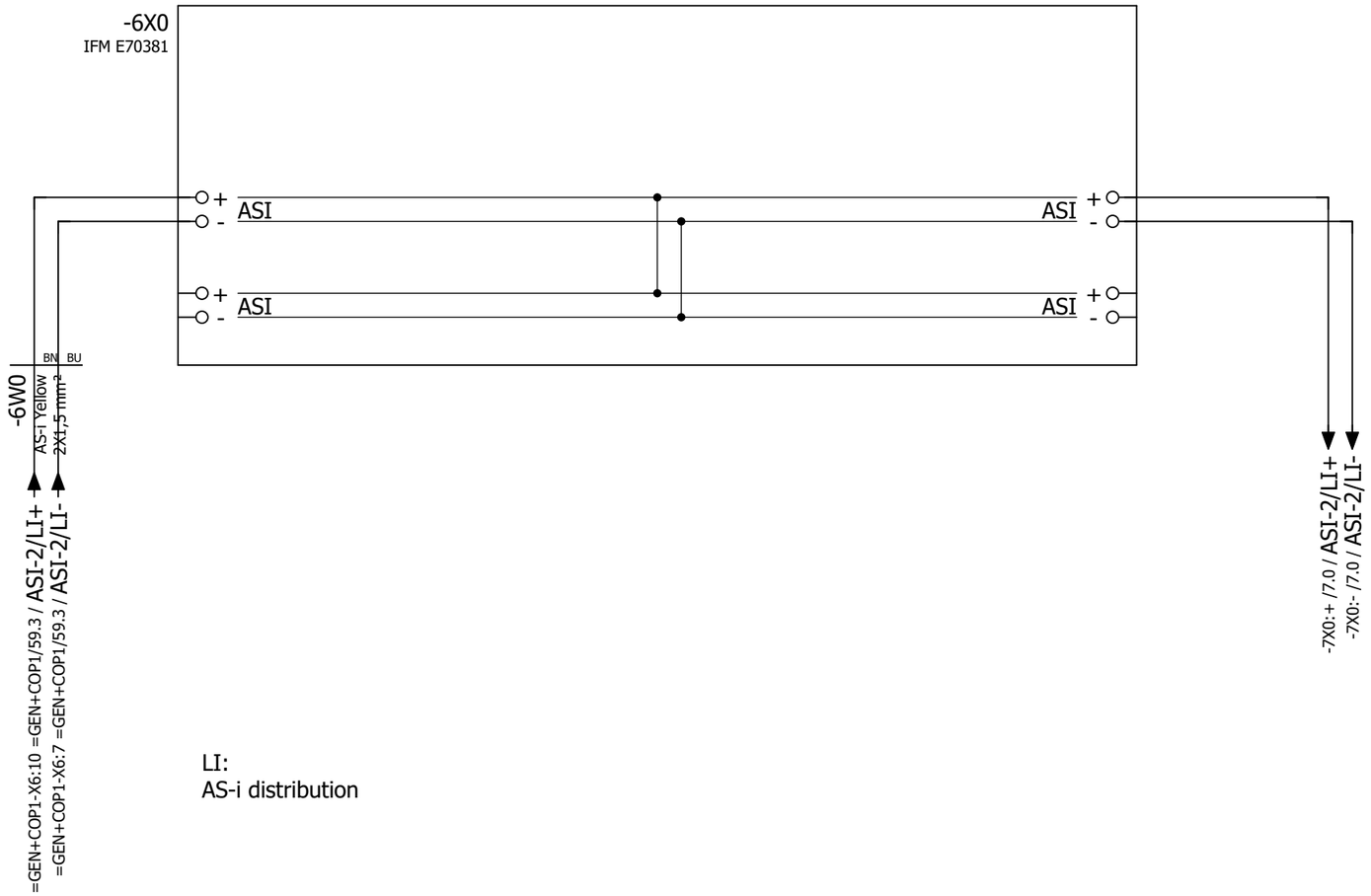
Function text									-19W0	Cable name	Strip designation =AC+COP1-19X0							Cable name					Page / column
									Ölflex Classic 110 7G0,75 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					
									1		+F-19X0		1			=GEN-X5	12:B						+F/19.1
									2		+F-19X0		2			=GEN-X5.0	14:A						+F/19.1
AC: Accumulation-table HTL encoder									3		+F-19X0		3		I9.0	=PLC1-DI3	-X10:11						+F/19.2
BT120: Bottle-conveyor HTL encoder									4		+F-19X0		4		I9.1	=PLC1-DI3	-X10:12						+F/19.3
=									5		+F-19X0		5		I9.2	=PLC1-DI3	-X10:13						+F/19.4
AC1: Free									6		+F-19X0		6		I15.4	=PLC1-DI4	-X10:35						+F/19.5
=									GNYE		+F-19X0		PE			-PE1	PE						+F/19.5

Plug diagram

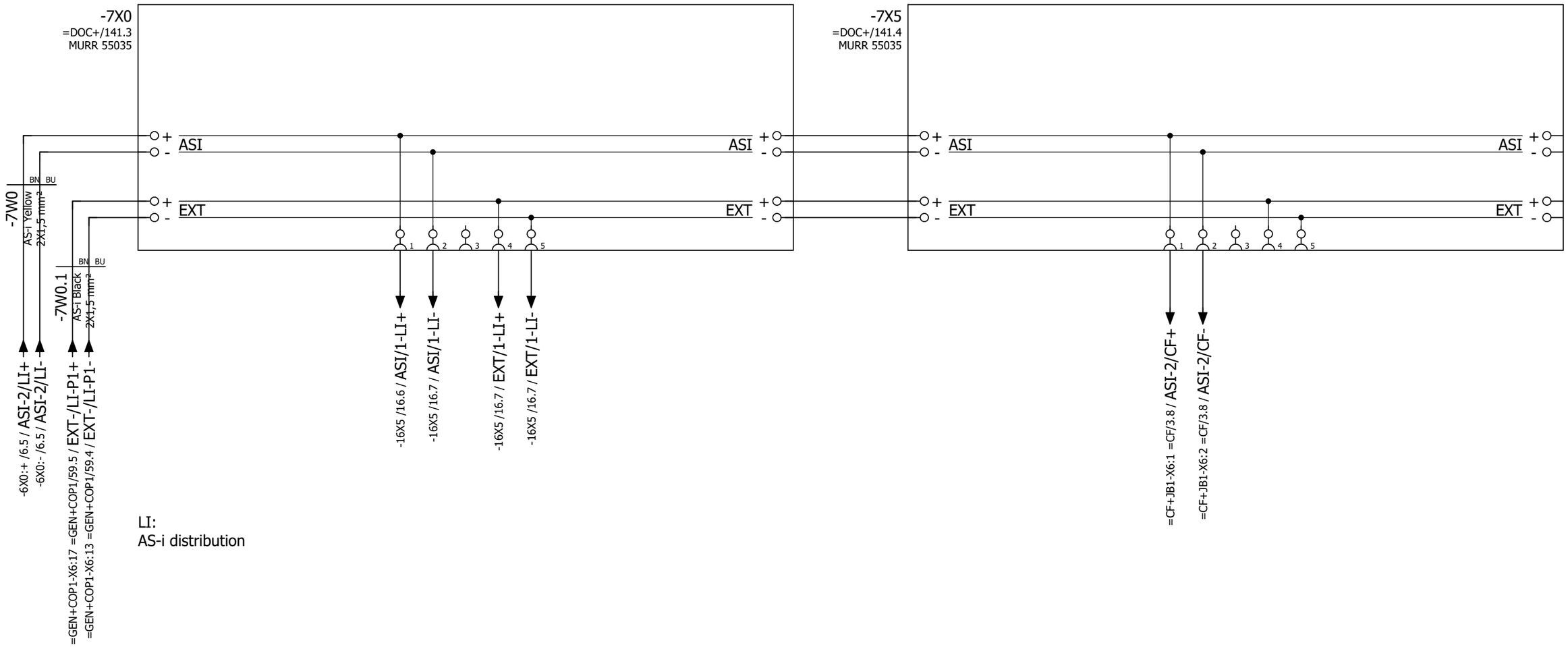
Function text									-12W1.1	Cable name	Strip designation =AC+F-12X1							Cable name	-12W1				Page / column
									Ölflex Classic 110 CY 4G2,5 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type	Ölflex Classic 110 CY 4G2,5 mm²				
AC: Accumulation-table bottle-belt									1		-12M1	U1	1			+COP1-12X1	1		1				/12.1
=									2		-12M1	V1	2			+COP1-12X1	2		2				/12.1
=									3		-12M1	W1	3			+COP1-12X1	3		3				/12.1
													4										
													5										
													6										
AC: Accumulation-table bottle-belt									GNYE		-12M1	PE	PE			+COP1-12X1	PE		GNYE				/12.2

Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
-12W1	-12X1	-12X1	00141815	Ölflex Classic 110 CY	4G	4	2,5	17	AC: Accumulation-table bottle-belt
-12W1.1	-12X1		00141815	Ölflex Classic 110 CY	4G	4	2,5	5	=
-15W1			10150744	PUR/PVC	4X	3	0,34	10	M12/8pin
			10148587						
-16W1	-16B1		00143360	PUR-OB	4X	3	0,34	10	AC: accumulation-table 1.place occupied (at layer-stopper)
			00150353						
-16W2	-16B2		00143360	PUR-OB	4X	3	0,34	10	AC: accumulation-table 1.place last row occupied
			00150353						
-16W3	-16B3		00143360	PUR-OB	4X	3	0,34	10	AC: Accumulation-table bottle layer slow down
			00150353						
-16W4	-16B4		00143360	PUR-OB	4X	3	0,34	10	AC: accumulation-table sluice infeed-zone free
			00150353						
-16W5	-16B5		00143360	PUR-OB	4X	3	0,34	10	AC: accumulation-table pickup-place occupied (at layer-stopper)
			00150353						
-16W6	-16B6		00143360	PUR-OB	4X	3	0,34	10	AC: accumulation-table pickup-place behind layer free
			00150353						
-16W7	-16B7		00143360	PUR-OB	4X	3	0,34	10	AC: accumulation-table pickup-place bottleneck (last row)
			00150353						
-16W8	-16B8		00143360	PUR-OB	4X	3	0,34	10	AC: Reserve accumulation-table pickup-place behind 2.place free
			00150353						
-17W1	-17B1		10150603	PUR-OB	3X	3	0,25	3	AC: Layer stopper -1- top position
			00150353						
-17W2	-17B2		10150603	PUR-OB	3X	3	0,25	3	AC: Layer stopper -1- bottom position
			00150353						
-19W0	-19X0		10036999	Ölflex Classic 110	7G	7	0,75	17	



LI:
AS-i distribution



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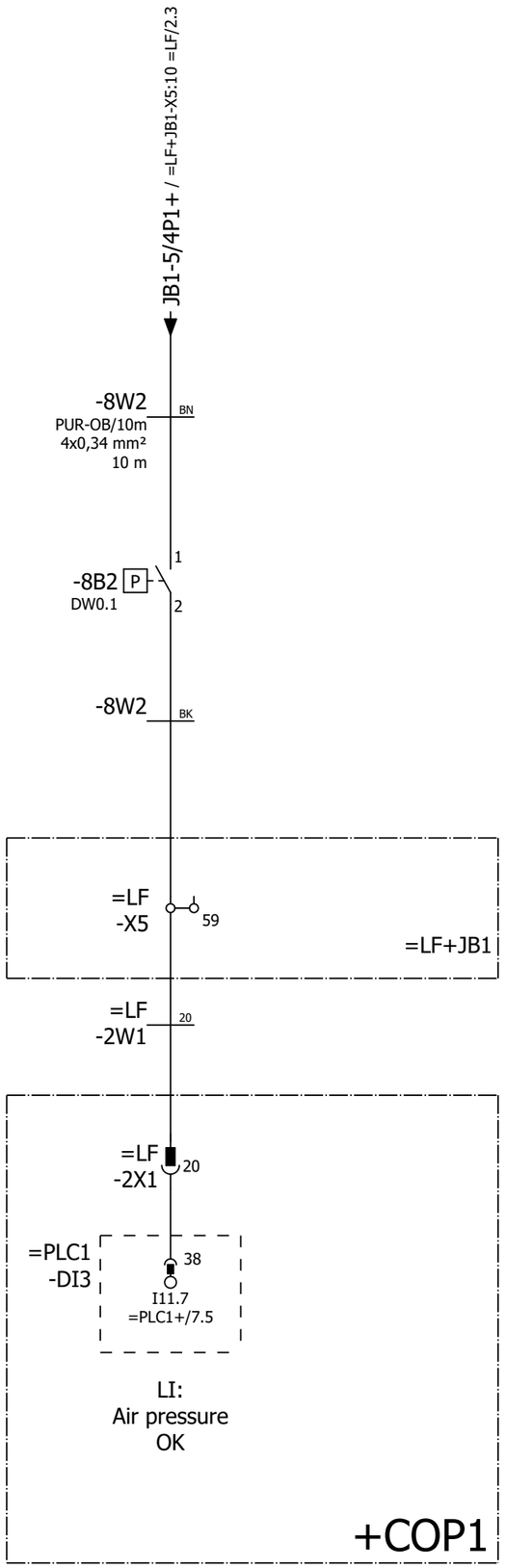
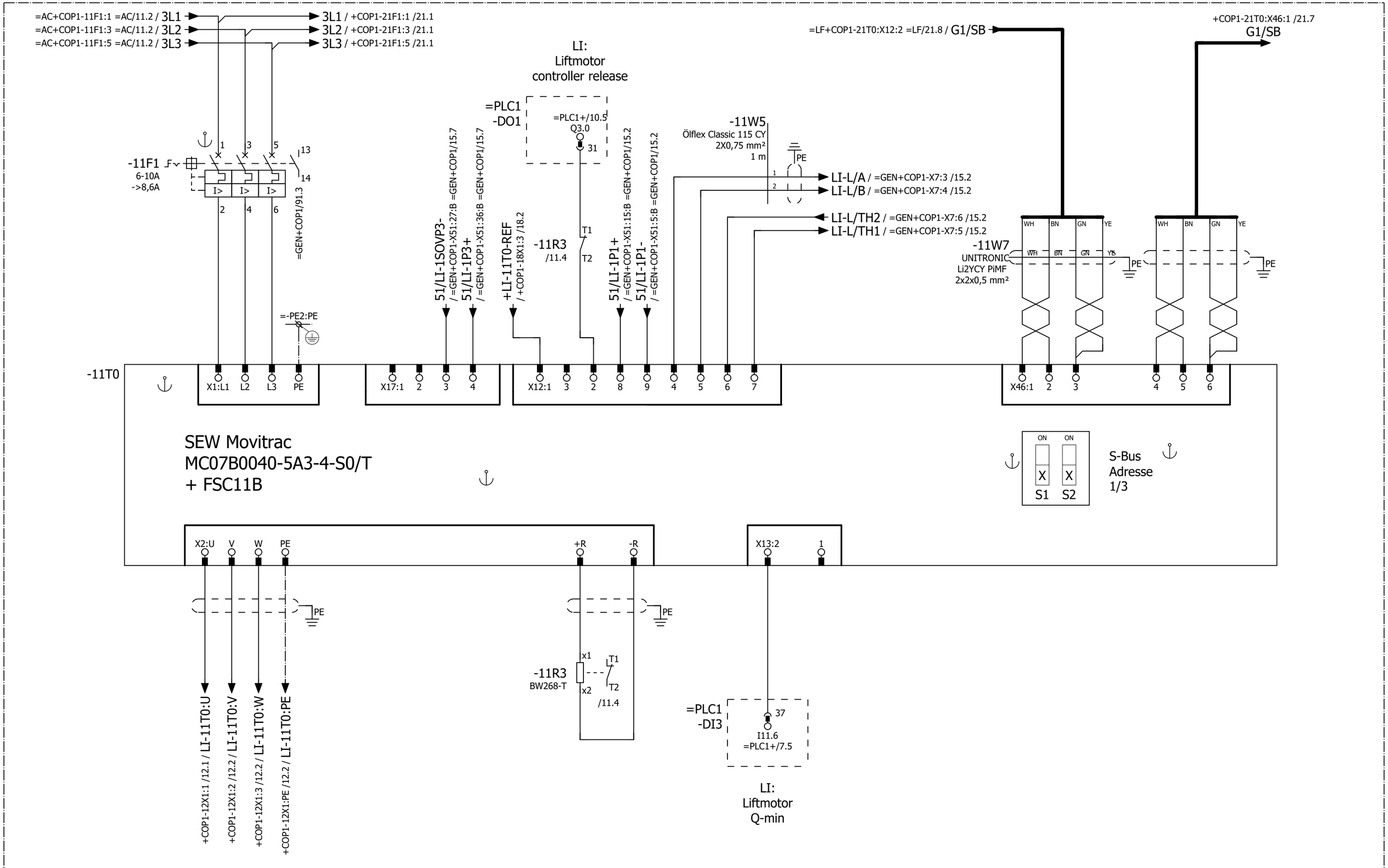
Next page 8

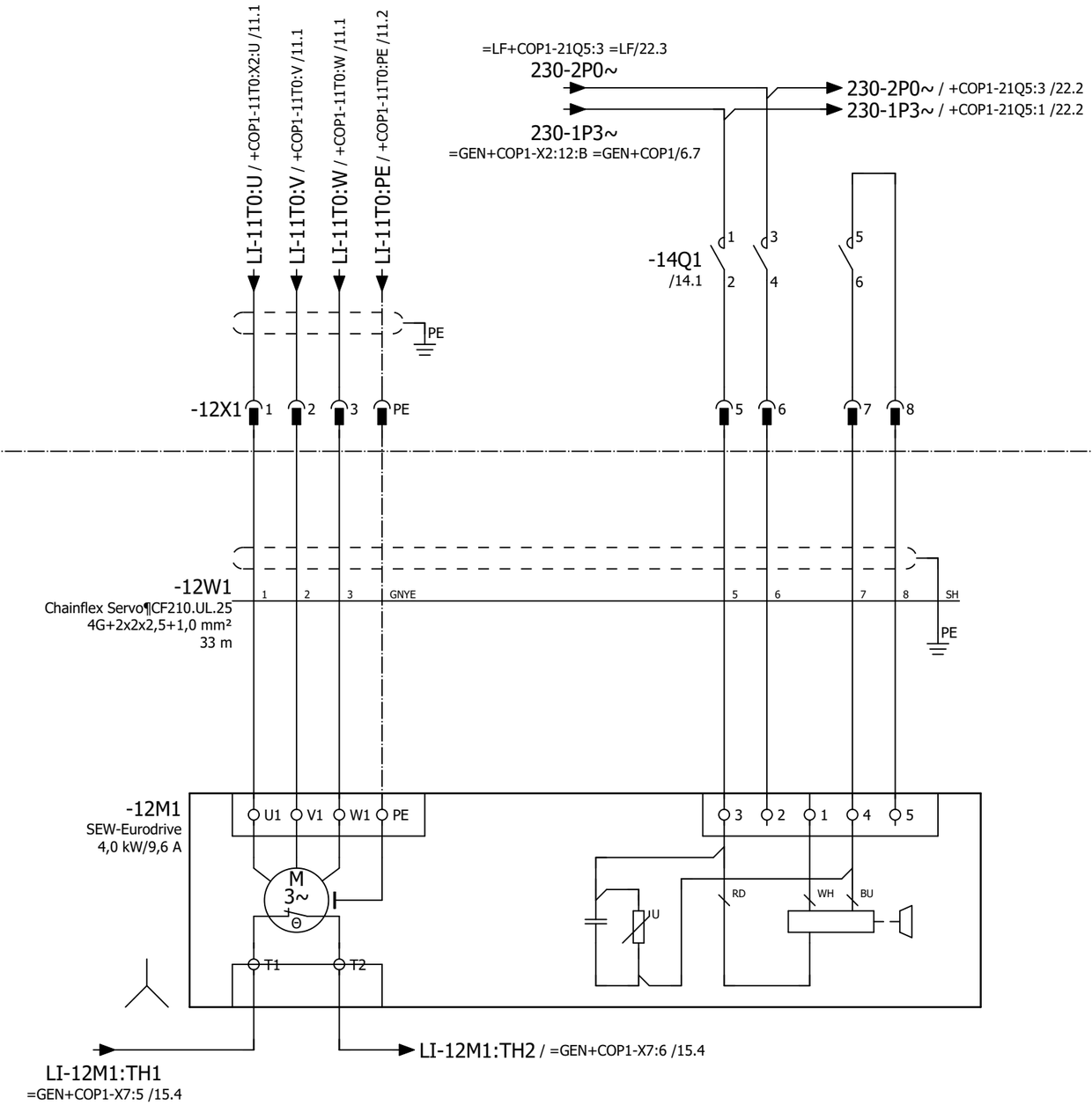
Creator	Ferenc Baracsi	Commission	620300.11.2023	LI: Layer inserter AS-i distribution	= LI	+F	Page 7
Edited by	BaF	Type	MSK - Semitech		Revision	
Modification date	2023. 10. 11.					

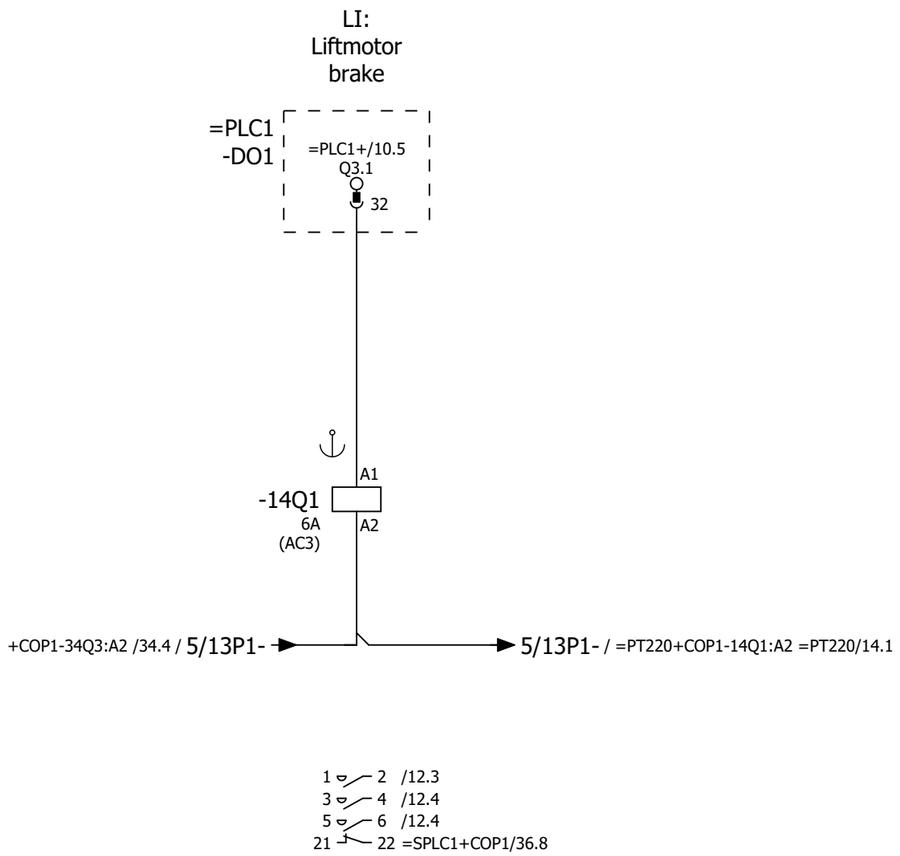


Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	LI: Safety valve layer inserter	= LI	+F	Page 8
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 11.						

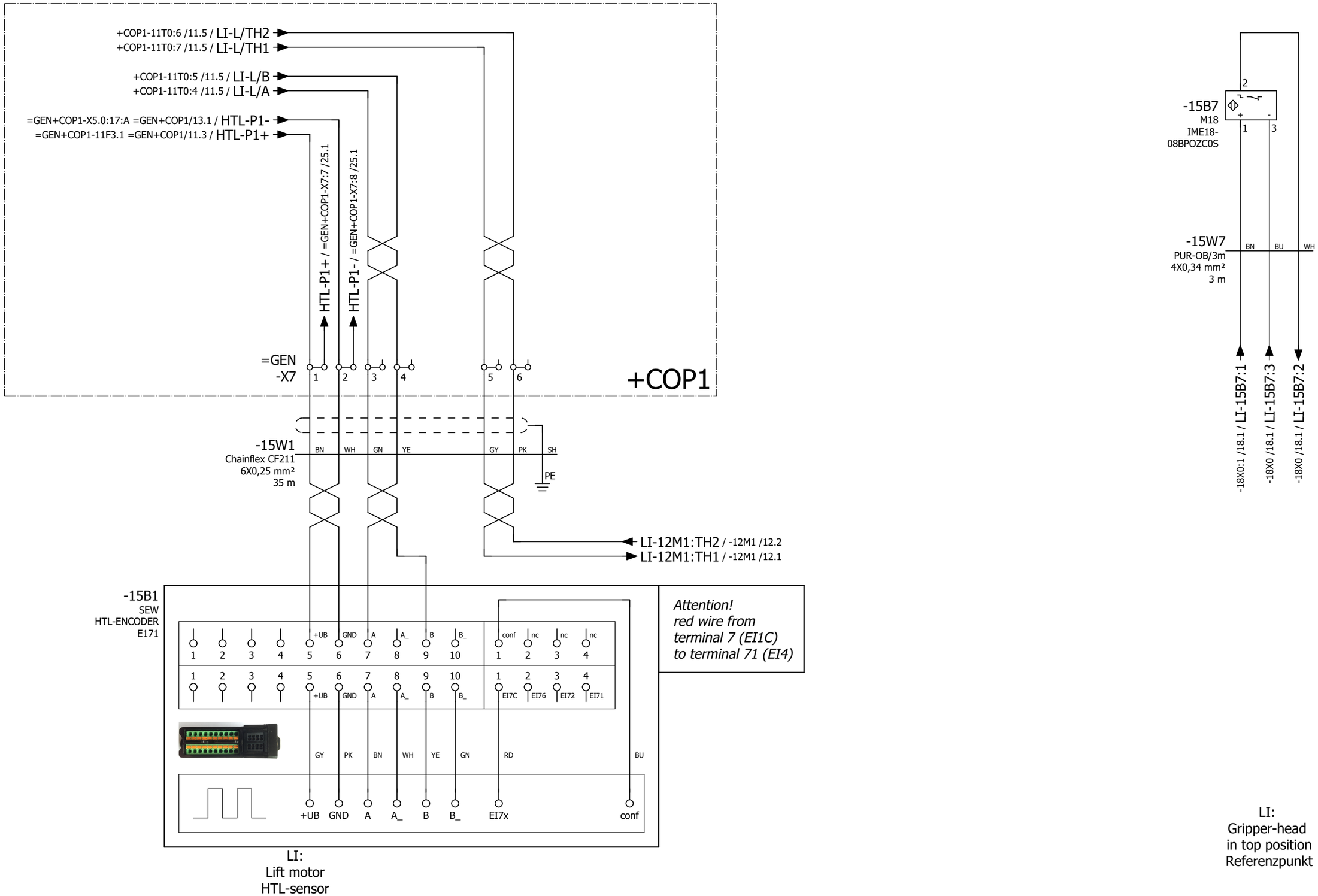


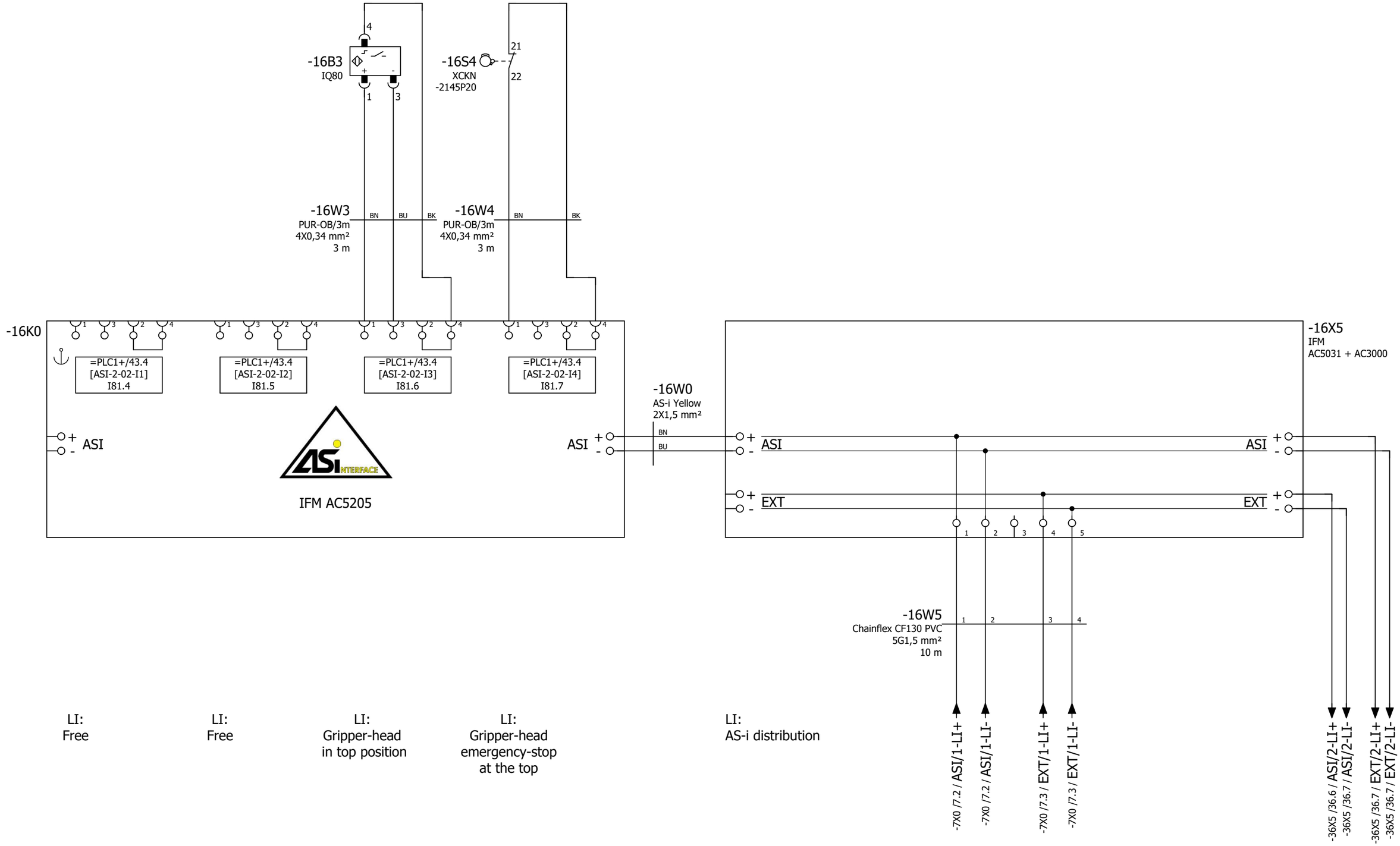
Previous page 8						Next page 12
Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	LI: Liftmotor	= LI	+F	Page 11
Edited by	BaF	Type MSK - Semitech			Revision	
Modification date	2023. 11. 23.					


LI-11T0:U / +COP1-11T0:X2:U /11.1
LI-11T0:V / +COP1-11T0:V /11.1
LI-11T0:W / +COP1-11T0:W /11.1
LI-11T0:PE / +COP1-11T0:PE /11.2
=LF+COP1-21Q5:3 =LF/22.3
230-2P0~
230-1P3~
=GEN+COP1-X2:12:B =GEN+COP1/6.7
230-2P0~ / +COP1-21Q5:3 /22.2
230-1P3~ / +COP1-21Q5:1 /22.2
-14Q1
/14.1
PE
-12X1
+COP1
-12W1
Chainflex Servo¶CF210.UL.25
4G+2x2x2,5+1,0 mm²
33 m
GNYE
SH
-12M1
SEW-Eurodrive
4,0 kW/9,6 A
U1
V1
W1
T1
T2
M
3~
RD
WH
BU
LI-12M1:TH2 / =GEN+COP1-X7:6 /15.4
LI-12M1:TH1
=GEN+COP1-X7:5 /15.4
LI:
Liftmotor
LI:
Liftmotor
brake


LI:
Liftmotor
brake
=PLC1
-DO1
=PLC1+/10.5
Q3.1
32
A1
-14Q1
6A
(AC3)
A2
+COP1-34Q3:A2 /34.4 / 5/13P1-
5/13P1- / =PT220+COP1-14Q1:A2 =PT220/14.1
1 2 /12.3
3 4 /12.4
5 6 /12.4
21 22 =SPLC1+COP1/36.8

+COP1


+COP1-11T0:6 /11.5 / LI-L/TH2
+COP1-11T0:7 /11.5 / LI-L/TH1
+COP1-11T0:5 /11.5 / LI-L/B
+COP1-11T0:4 /11.5 / LI-L/A
=GEN+COP1-X5.0:17:A =GEN+COP1/13.1 / HTL-P1-
=GEN+COP1-11F3.1 =GEN+COP1/11.3 / HTL-P1+
HTL-P1+ / =GEN+COP1-X7:7 /25.1
HTL-P1- / =GEN+COP1-X7:8 /25.1
=GEN
-X7
+COP1
-15W1
Chainflex CF211
6X0,25 mm²
35 m
BN WH GN YE GY PK SH
PE
LI-12M1:TH2 / -12M1 /12.2
LI-12M1:TH1 / -12M1 /12.1
-15B1
SEW
HTL-ENCODER
E171
+UB GND A A_ B B_ conf nc nc nc
EI7C EI76 EI72 EI71
GY PK BN WH YE GN RD BU
+UB GND A A_ B B_ EI7x conf
Attention!
red wire from
terminal 7 (EI1C)
to terminal 71 (EI4)
LI:
Lift motor
HTL-sensor
-15B7
M18
IME18-
08BPOZC0S
-15W7
PUR-OB/3m
4X0,34 mm²
3 m
BN BU WH
-18X0:1 /18.1 / LI-15B7:1
-18X0 /18.1 / LI-15B7:3
-18X0 /18.1 / LI-15B7:2
LI:
Gripper-head
in top position
Referenzpunkt



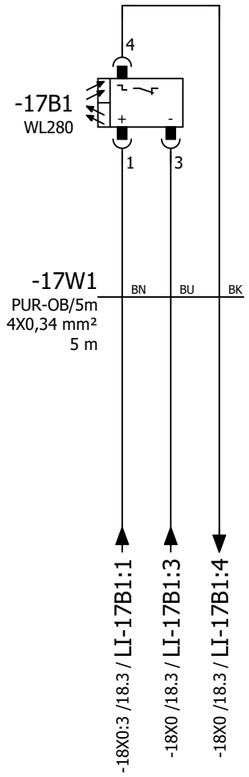
LI:
Free

LI:
Free

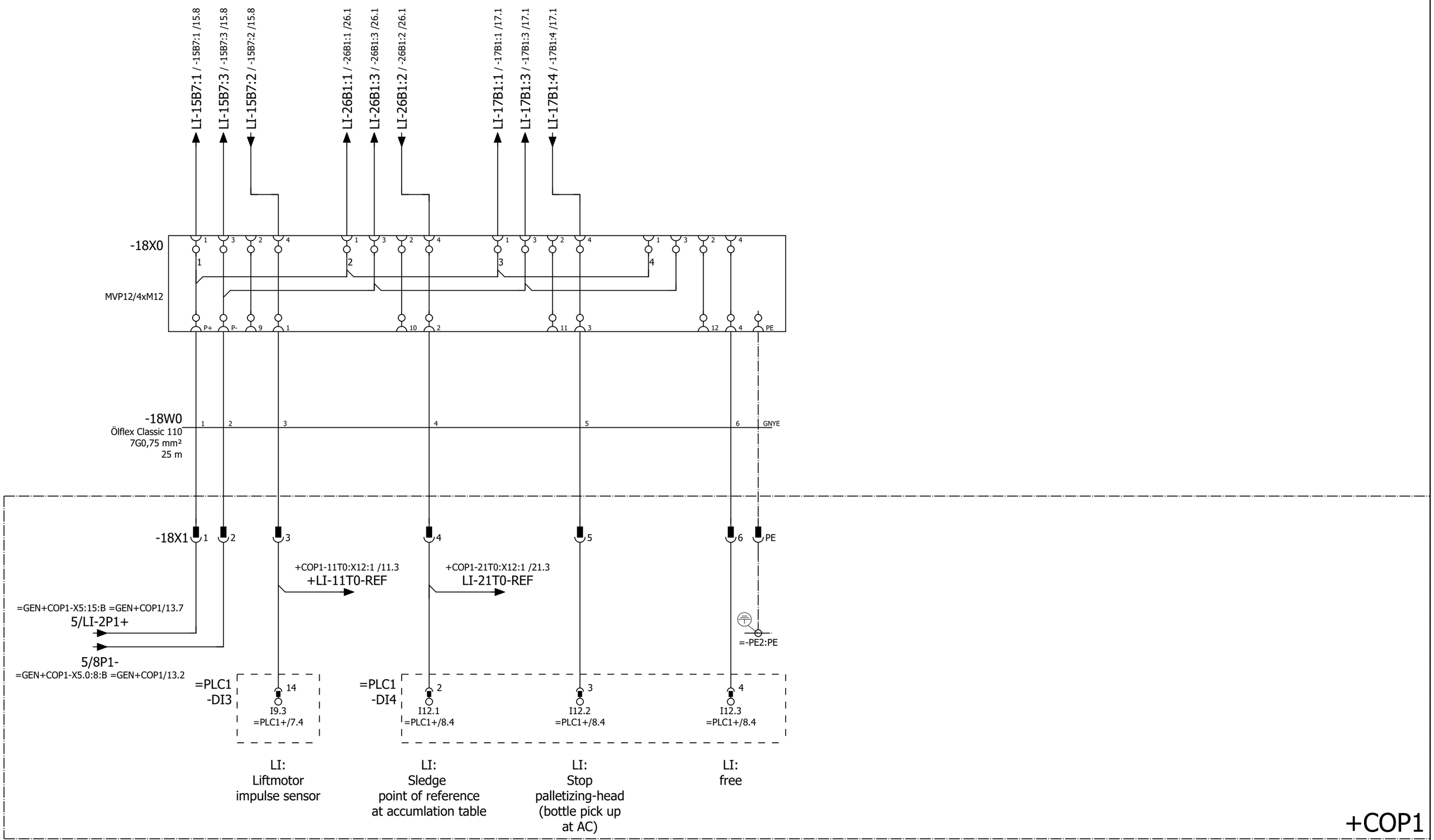
LI:
Gripper-head
in top position

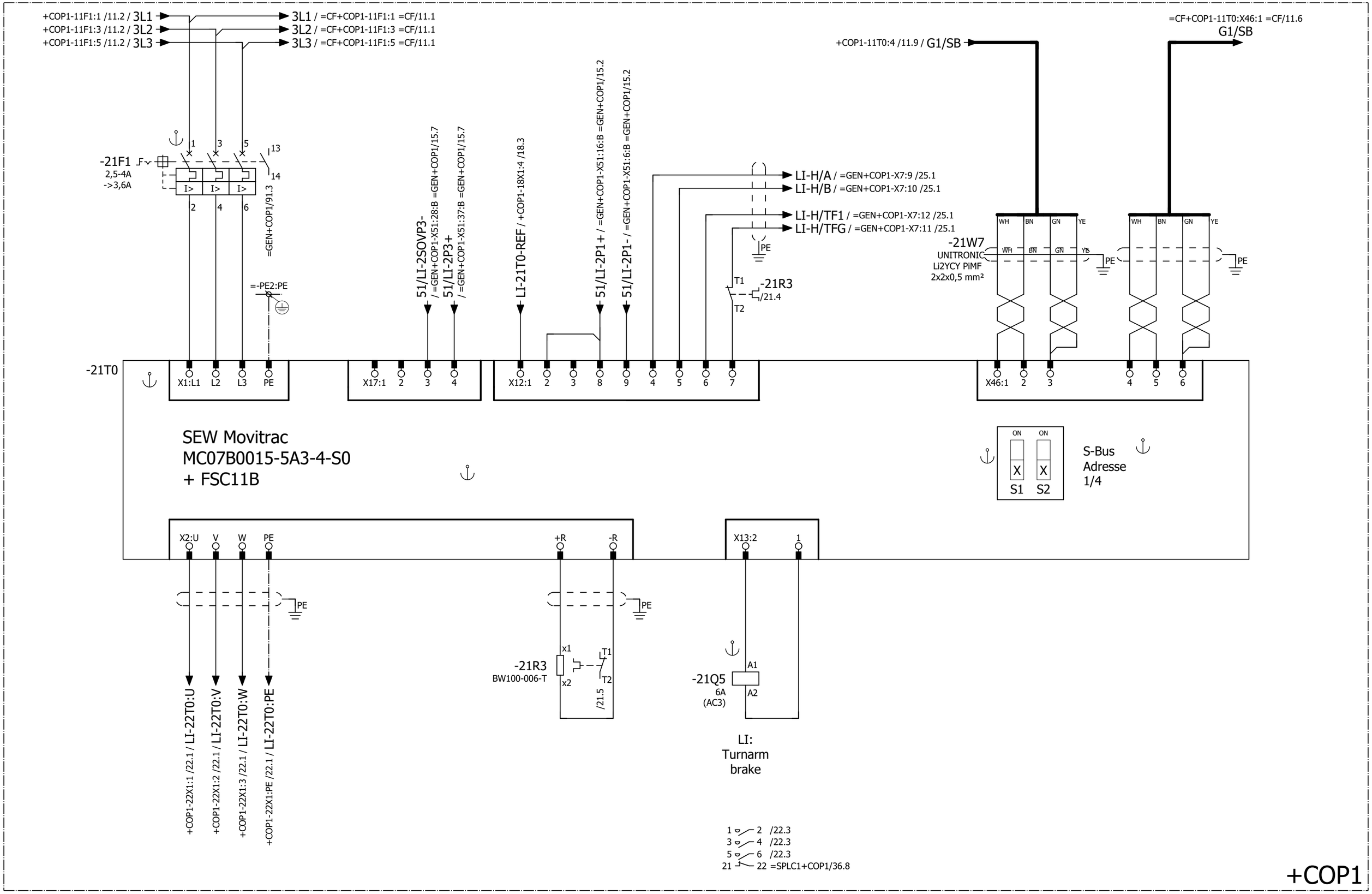
LI:
Gripper-head
emergency-stop
at the top

LI:
AS-i distribution

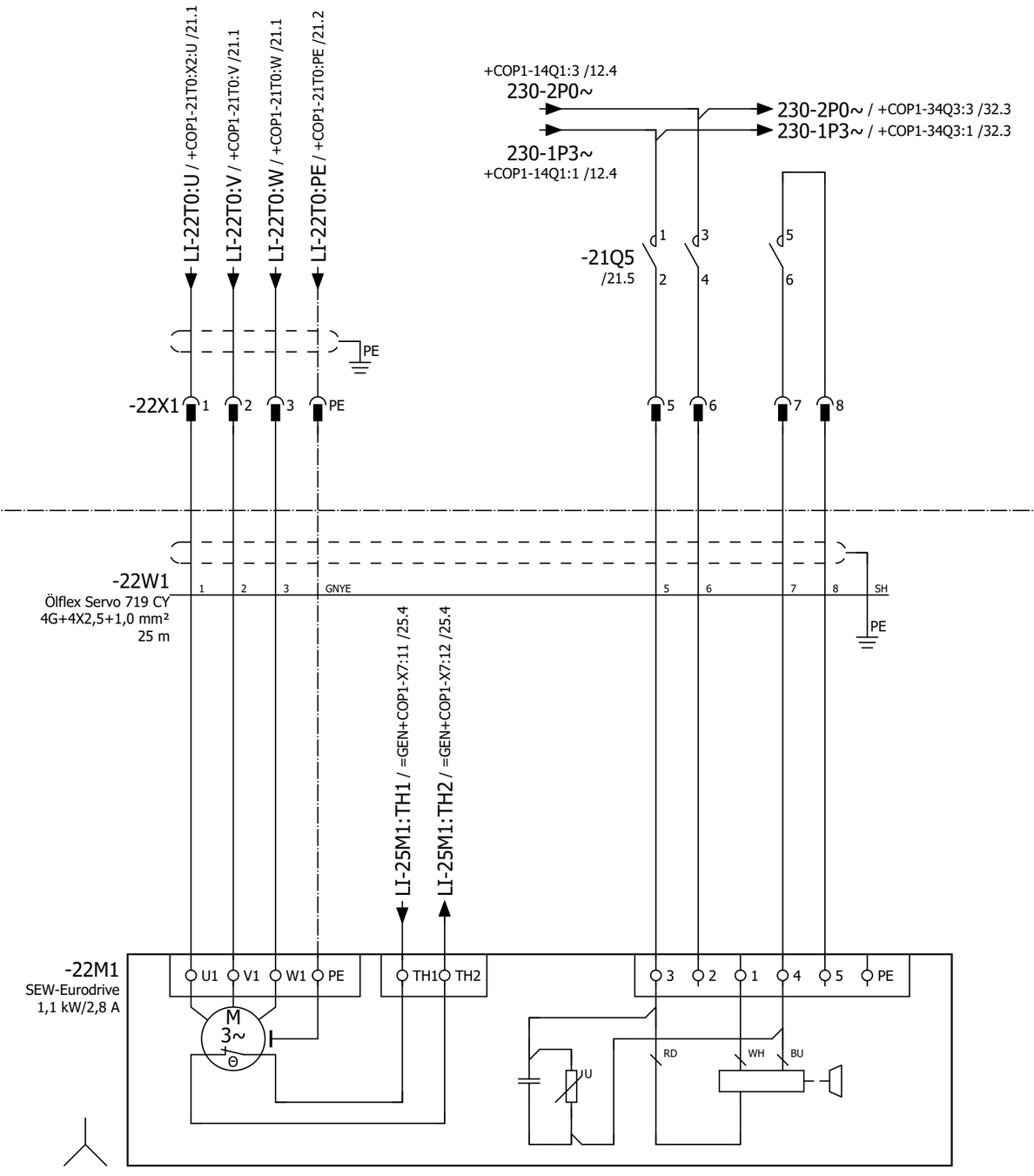


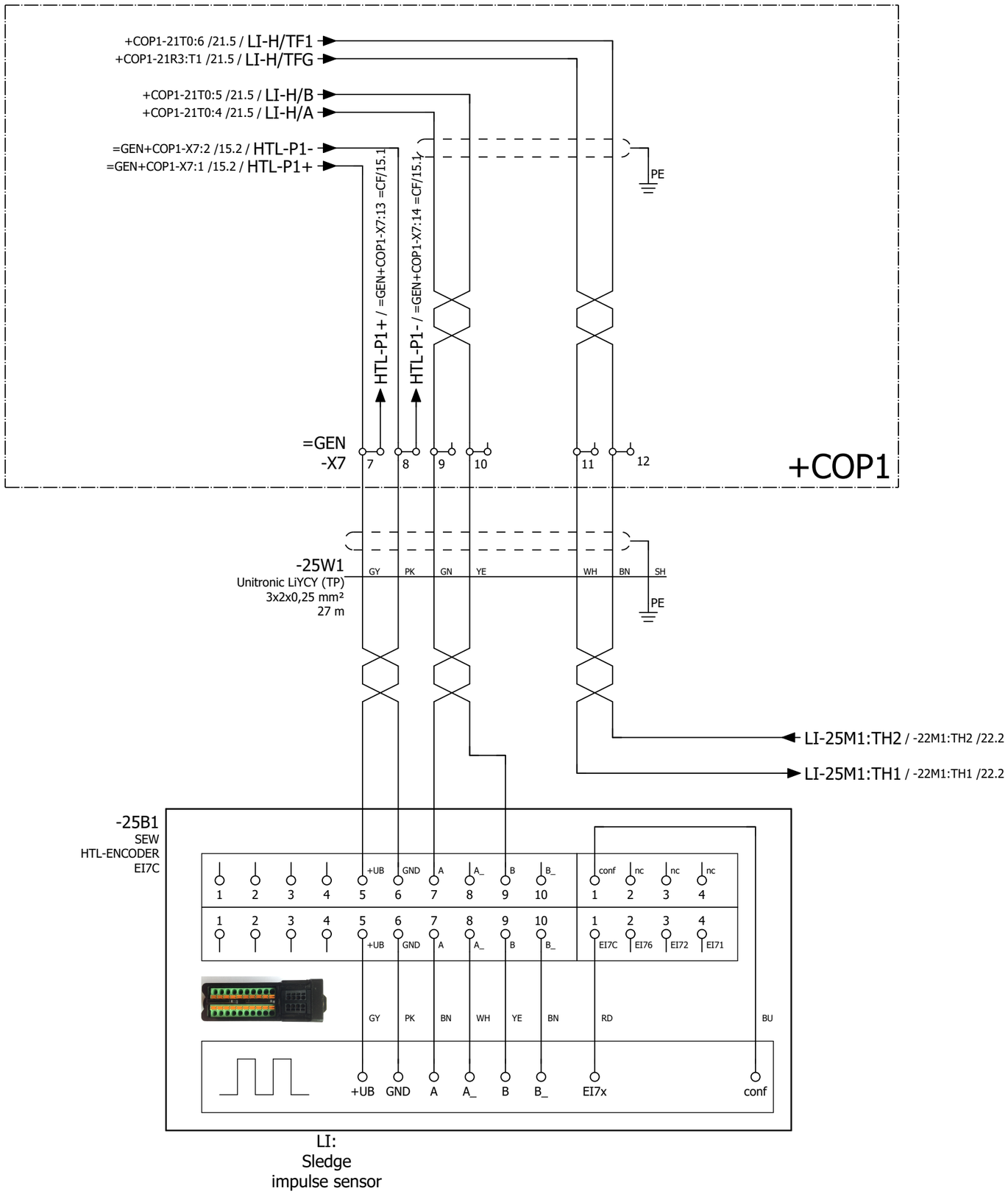
LI:
Stop
palletizing-head
(bottle pick up
at AC)

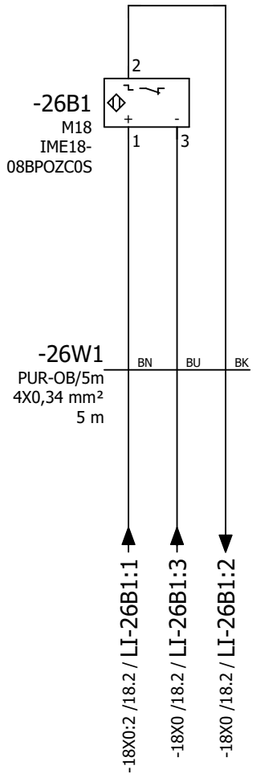

LI-15B7:1 / -15B7:1 /15.8
LI-15B7:3 / -15B7:3 /15.8
LI-15B7:2 / -15B7:2 /15.8
LI-26B1:1 / -26B1:1 /26.1
LI-26B1:3 / -26B1:3 /26.1
LI-26B1:2 / -26B1:2 /26.1
LI-17B1:1 / -17B1:1 /17.1
LI-17B1:3 / -17B1:3 /17.1
LI-17B1:4 / -17B1:4 /17.1
-18X0
MVP12/4xM12
P+
P-
PE
-18W0
Ölflex Classic 110
7G0,75 mm²
25 m
GNYE
-18X1
+COP1-11T0:X12:1 /11.3
+LI-11T0-REF
+COP1-21T0:X12:1 /21.3
LI-21T0-REF
=GEN+COP1-X5:15:B =GEN+COP1/13.7
5/LI-2P1+
5/8P1-
=GEN+COP1-X5.0:8:B =GEN+COP1/13.2
=-PE2:PE
=PLC1
-DI3
I9.3
=PLC1+/7.4
=PLC1
-DI4
I12.1
=PLC1+/8.4
I12.2
=PLC1+/8.4
I12.3
=PLC1+/8.4
LI:
Liftmotor
impulse sensor
LI:
Sledge
point of reference
at accumlation table
LI:
Stop
palletizing-head
(bottle pick up
at AC)
LI:
free
+COP1



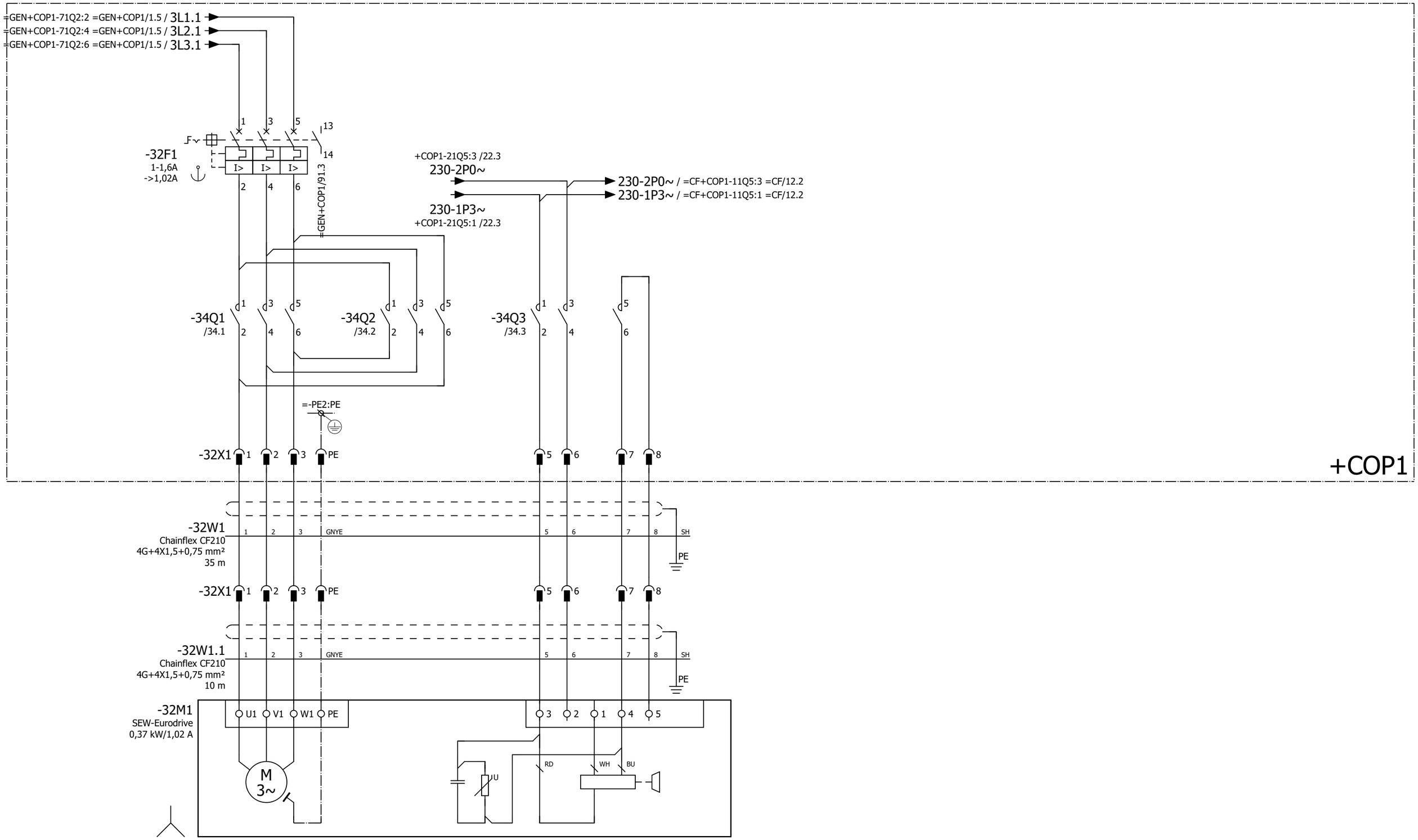
Previous page	18					Next page 22
Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	LI: Sledge motor	= LI	+F	Page 21
Edited by	BaF	Type MSK - Semitech			Revision	
Modification date	2023. 10. 27.					

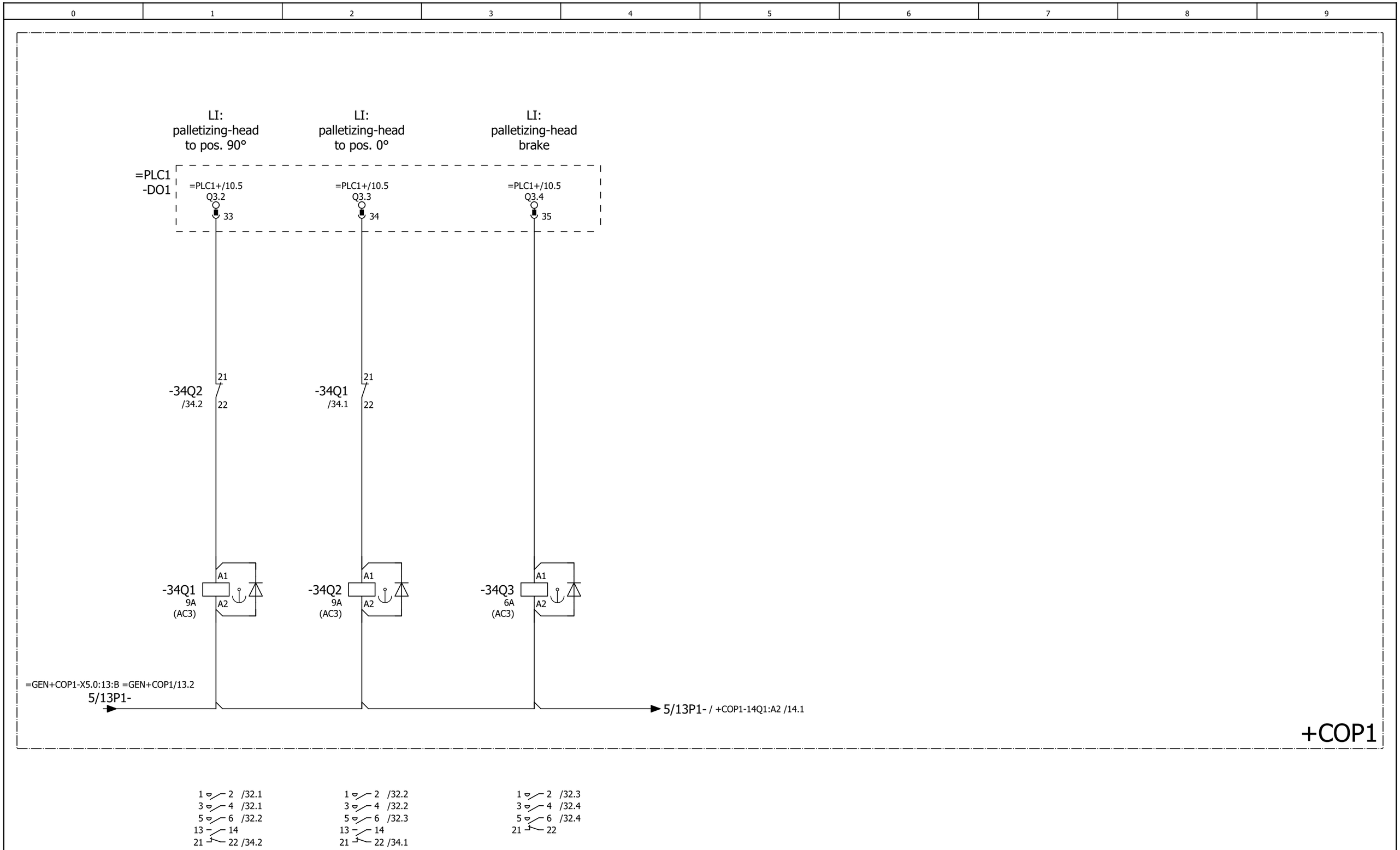

LI-22T0:U / +COP1-21T0:X2:U /21.1
LI-22T0:V / +COP1-21T0:V /21.1
LI-22T0:W / +COP1-21T0:W /21.1
LI-22T0:PE / +COP1-21T0:PE /21.2
+COP1-14Q1:3 /12.4
230-2P0~
230-1P3~
+COP1-14Q1:1 /12.4
230-2P0~ / +COP1-34Q3:3 /32.3
230-1P3~ / +COP1-34Q3:1 /32.3
-21Q5
/21.5
PE
-22X1
+COP1
-22W1
Ölflex Servo 719 CY
4G+4X2,5+1,0 mm²
25 m
GNYE
SH
LI-25M1:TH1 / =GEN+COP1-X7:11 /25.4
LI-25M1:TH2 / =GEN+COP1-X7:12 /25.4
-22M1
SEW-Eurodrive
1,1 kW/2,8 A
U1
V1
W1
TH1
TH2
RD
WH
BU
LI:
Sledge
motor
LI:
Sledge motor
brake

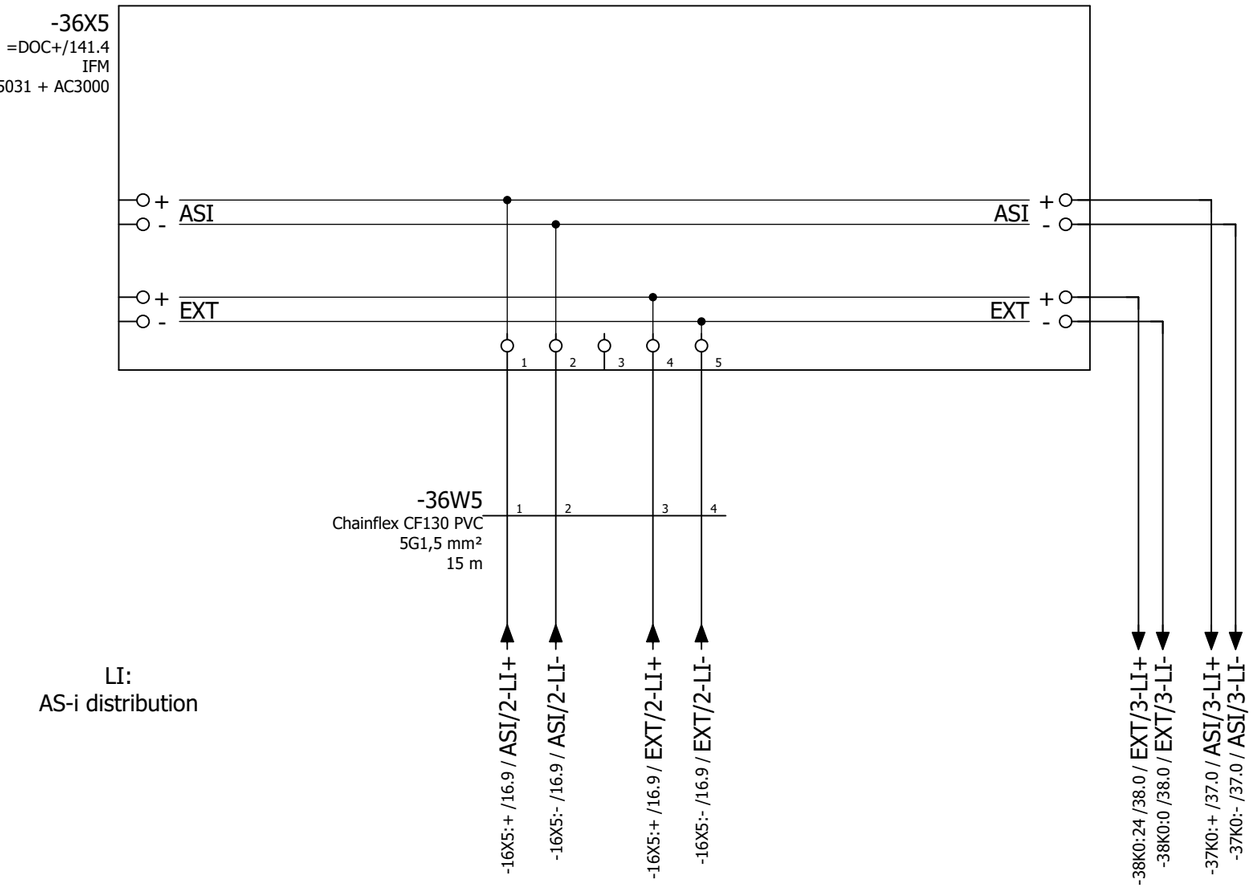

+COP1-21T0:6 /21.5 / LI-H/TF1
+COP1-21R3:T1 /21.5 / LI-H/TFG
+COP1-21T0:5 /21.5 / LI-H/B
+COP1-21T0:4 /21.5 / LI-H/A
=GEN+COP1-X7:2 /15.2 / HTL-P1-
=GEN+COP1-X7:1 /15.2 / HTL-P1+
HTL-P1+ / =GEN+COP1-X7:13 =CF/15.1
HTL-P1- / =GEN+COP1-X7:14 =CF/15.1
PE
=GEN
-X7
7
8
9
10
11
12
+COP1
-25W1
Unitronic LiYCY (TP)
3x2x0,25 mm²
27 m
GY
PK
GN
YE
WH
BN
SH
PE
LI-25M1:TH2 / -22M1:TH2 /22.2
LI-25M1:TH1 / -22M1:TH1 /22.2
-25B1
SEW
HTL-ENCODER
EI7C
+UB
GND
A
A_
B
B_
conf
nc
nc
nc
EI7C
EI76
EI72
EI71
GY
PK
BN
WH
YE
BN
RD
BU
+UB
GND
A
A_
B
B_
EI7x
conf
LI:
Sledge
impulse sensor



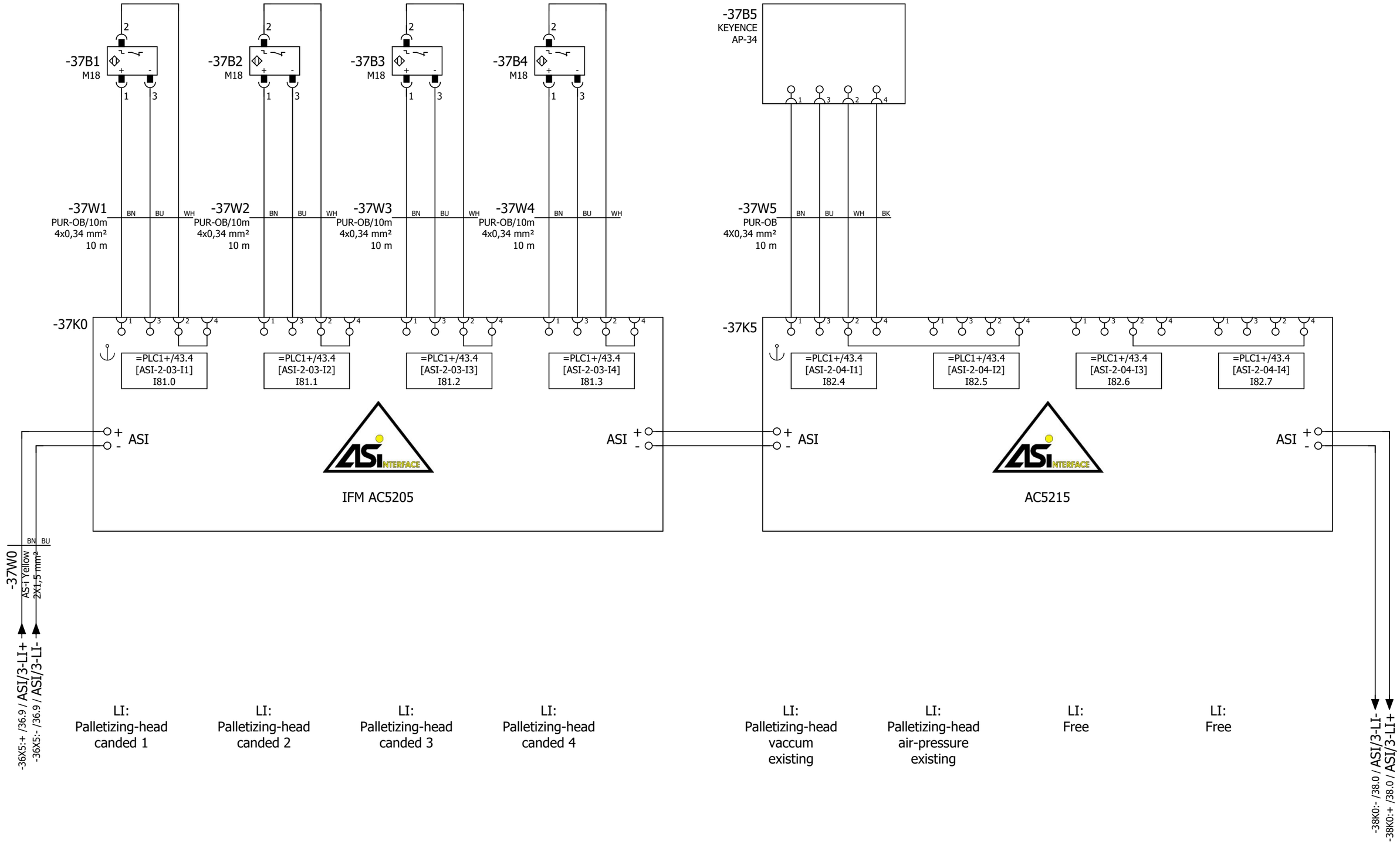
LI:
Sledge
point of reference
at accumlation table

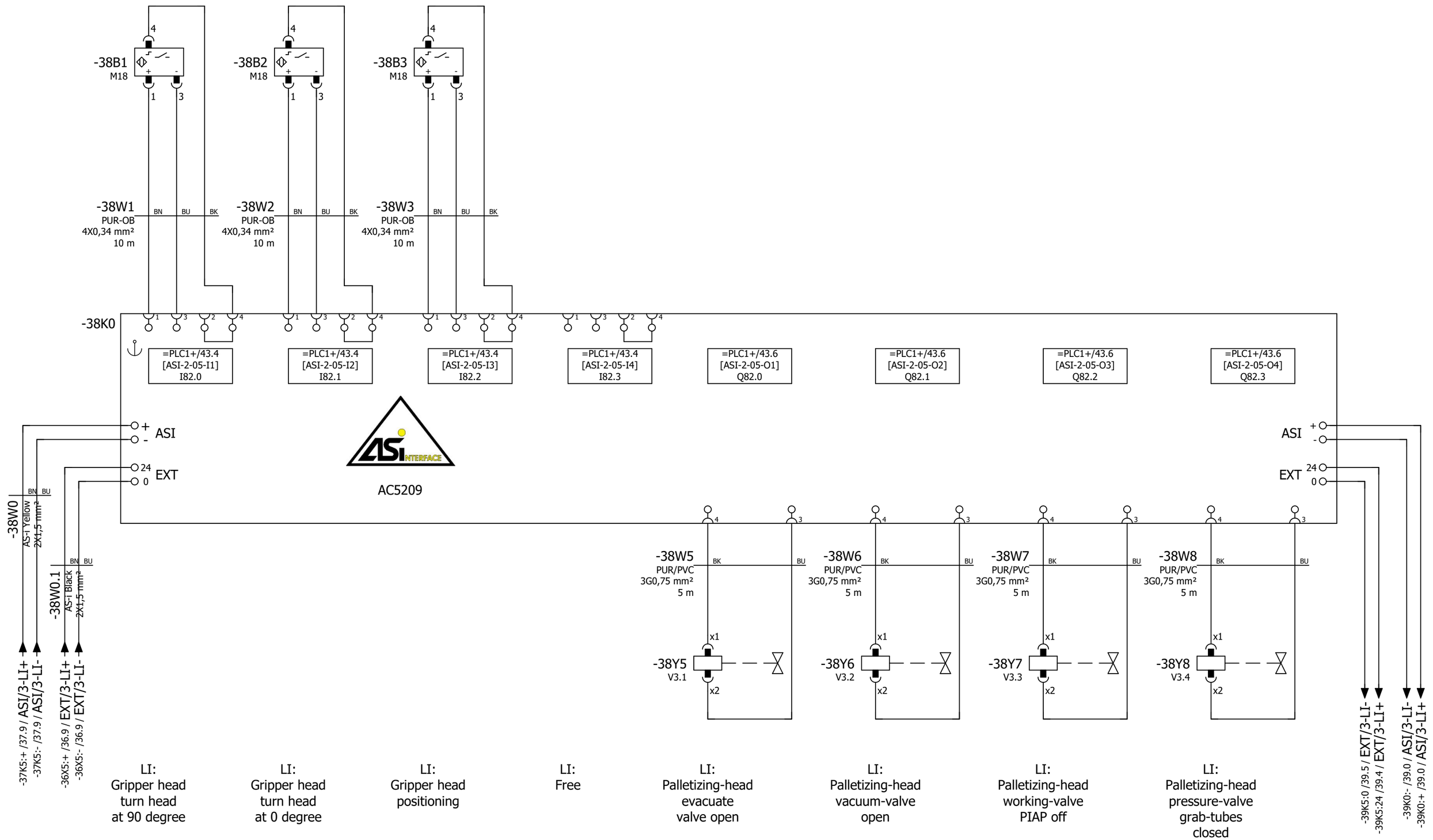

=GEN+COP1-71Q2:2 =GEN+COP1/1.5 / 3L1.1
=GEN+COP1-71Q2:4 =GEN+COP1/1.5 / 3L2.1
=GEN+COP1-71Q2:6 =GEN+COP1/1.5 / 3L3.1
-32F1
1-1,6A
->1,02A
I>
=GEN+COP1/91.3
+COP1-21Q5:3 /22.3
230-2P0~
230-1P3~
+COP1-21Q5:1 /22.3
230-2P0~ / =CF+COP1-11Q5:3 =CF/12.2
230-1P3~ / =CF+COP1-11Q5:1 =CF/12.2
-34Q1
/34.1
-34Q2
/34.2
-34Q3
/34.3
=-PE2:PE
-32X1
PE
+COP1
-32W1
Chainflex CF210
4G+4X1,5+0,75 mm²
35 m
GNYE
SH
-32X1
-32W1.1
Chainflex CF210
4G+4X1,5+0,75 mm²
10 m
-32M1
SEW-Eurodrive
0,37 kW/1,02 A
U1
V1
W1
M
3~
RD
WH
BU
LI:
palletizing-head
LI:
palletizing-head
brake


LI:
palletizing-head
to pos. 90°
LI:
palletizing-head
to pos. 0°
LI:
palletizing-head
brake
=PLC1
-DO1
=PLC1+/10.5
Q3.2
33
=PLC1+/10.5
Q3.3
34
=PLC1+/10.5
Q3.4
35
21
-34Q2
/34.2
22
21
-34Q1
/34.1
22
A1
-34Q1
9A
(AC3)
A2
A1
-34Q2
9A
(AC3)
A2
A1
-34Q3
6A
(AC3)
A2
=GEN+COP1-X5.0:13:B =GEN+COP1/13.2
5/13P1-
5/13P1- / +COP1-14Q1:A2 /14.1
+COP1
1 2 /32.1
3 4 /32.1
5 6 /32.2
13 14
21 22 /34.2
1 2 /32.2
3 4 /32.2
5 6 /32.3
13 14
21 22 /34.1
1 2 /32.3
3 4 /32.4
5 6 /32.4
21 22



LI:
AS-i distribution


-37B1
M18
-37B2
M18
-37B3
M18
-37B4
M18
-37B5
KEYENCE
AP-34
-37W1
PUR-OB/10m
4x0,34 mm²
10 m
-37W2
PUR-OB/10m
4x0,34 mm²
10 m
-37W3
PUR-OB/10m
4x0,34 mm²
10 m
-37W4
PUR-OB/10m
4x0,34 mm²
10 m
-37W5
PUR-OB
4X0,34 mm²
10 m
BN
BU
WH
BK
-37K0
=PLC1+/43.4
[ASI-2-03-I1]
I81.0
=PLC1+/43.4
[ASI-2-03-I2]
I81.1
=PLC1+/43.4
[ASI-2-03-I3]
I81.2
=PLC1+/43.4
[ASI-2-03-I4]
I81.3
ASI
IFM AC5205
-37K5
=PLC1+/43.4
[ASI-2-04-I1]
I82.4
=PLC1+/43.4
[ASI-2-04-I2]
I82.5
=PLC1+/43.4
[ASI-2-04-I3]
I82.6
=PLC1+/43.4
[ASI-2-04-I4]
I82.7
AC5215
-37W0
AS-i Yellow
2X1,5 mm²
-36X5:+ /36.9 / ASI/3-LI+
-36X5:- /36.9 / ASI/3-LI-
-38K0:- /38.0 / ASI/3-LI-
-38K0:+ /38.0 / ASI/3-LI+
LI:
Palletizing-head
canded 1
LI:
Palletizing-head
canded 2
LI:
Palletizing-head
canded 3
LI:
Palletizing-head
canded 4
LI:
Palletizing-head
vaccum
existing
LI:
Palletizing-head
air-pressure
existing
LI:
Free
LI:
Free



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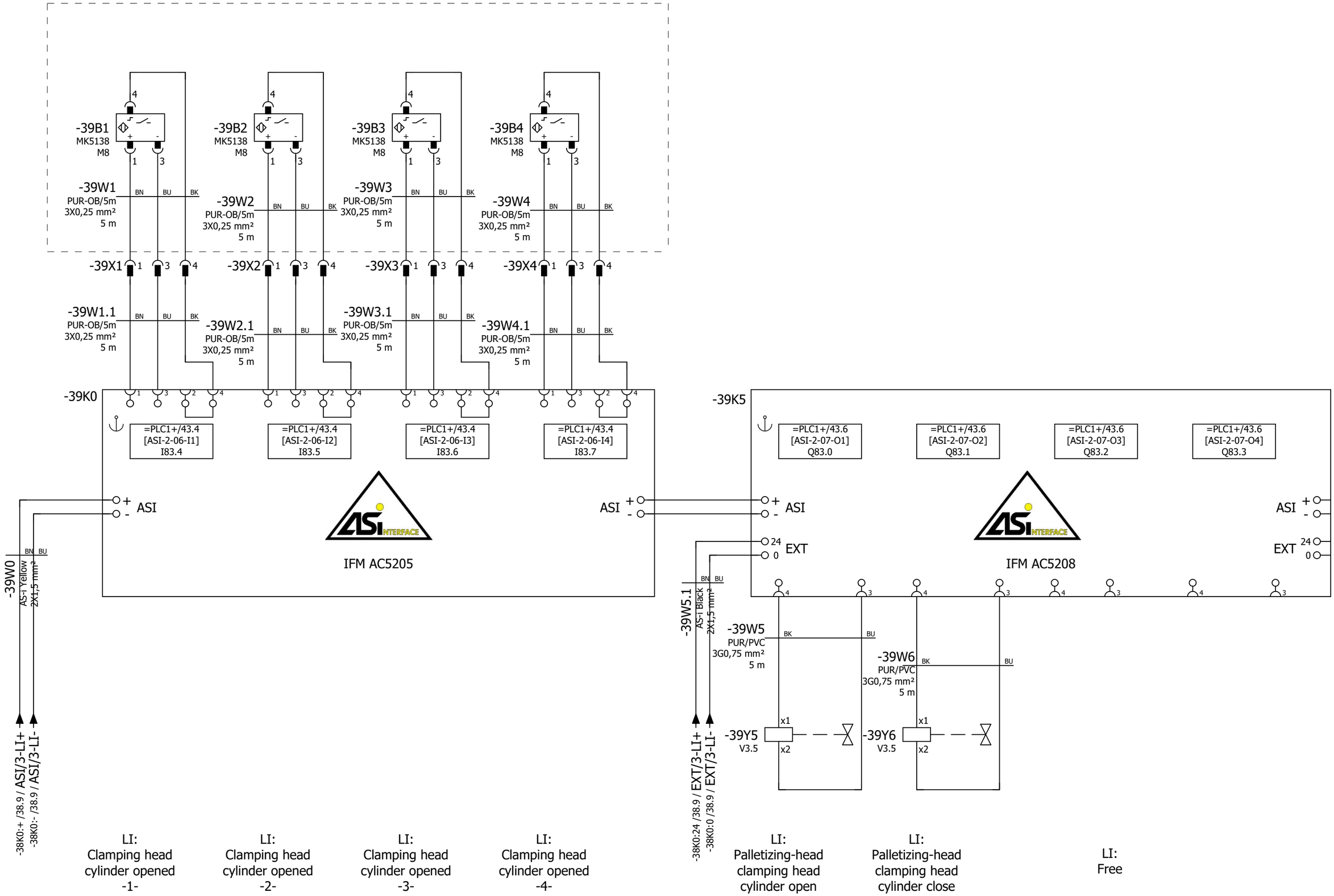
Creator	Ferenc Baracsi	Commission	620300.11.2023	LI: Palletizing-head sensors/actuators/ASI	= LI	+F	Page 38
Edited by	BaF	Type	MSK - Semitech		Revision	
Modification date	2023. 10. 11.					


-39B1
MK5138
M8
-39B2
MK5138
M8
-39B3
MK5138
M8
-39B4
MK5138
M8
-39W1
PUR-OB/5m
3X0,25 mm²
5 m
-39W2
PUR-OB/5m
3X0,25 mm²
5 m
-39W3
PUR-OB/5m
3X0,25 mm²
5 m
-39W4
PUR-OB/5m
3X0,25 mm²
5 m
-39X1
-39X2
-39X3
-39X4
-39W1.1
PUR-OB/5m
3X0,25 mm²
5 m
-39W2.1
PUR-OB/5m
3X0,25 mm²
5 m
-39W3.1
PUR-OB/5m
3X0,25 mm²
5 m
-39W4.1
PUR-OB/5m
3X0,25 mm²
5 m
-39K0
=PLC1+/43.4
[ASI-2-06-I1]
I83.4
=PLC1+/43.4
[ASI-2-06-I2]
I83.5
=PLC1+/43.4
[ASI-2-06-I3]
I83.6
=PLC1+/43.4
[ASI-2-06-I4]
I83.7
ASI
IFM AC5205
-39W0
AS-i Yellow
2X1,5 mm²
-38K0:+ /38.9 / ASI/3-LI+
-38K0:- /38.9 / ASI/3-LI-
-39K5
=PLC1+/43.6
[ASI-2-07-O1]
Q83.0
=PLC1+/43.6
[ASI-2-07-O2]
Q83.1
=PLC1+/43.6
[ASI-2-07-O3]
Q83.2
=PLC1+/43.6
[ASI-2-07-O4]
Q83.3
ASI
EXT
IFM AC5208
-39W5.1
AS-i Black
2X1,5 mm²
-38K0:24 /38.9 / EXT/3-LI+
-38K0:0 /38.9 / EXT/3-LI-
-39W5
PUR/PVC
3G0,75 mm²
5 m
-39W6
PUR/PVC
3G0,75 mm²
5 m
-39Y5
V3.5
-39Y6
V3.5
LI:
Clamping head
cylinder opened
-1-
LI:
Clamping head
cylinder opened
-2-
LI:
Clamping head
cylinder opened
-3-
LI:
Clamping head
cylinder opened
-4-
LI:
Palletizing-head
clamping head
cylinder open
LI:
Palletizing-head
clamping head
cylinder close
LI:
Free

Plug diagram

Function text									-12W1	Cable name	Strip designation =LI+COP1-12X1							Cable name					
									Chainflex Servo¶CF210.UL.25 4G+2x2x2,5+1,0 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					Page / column
LI: Liftmotor									1		+F-12M1	U1	1			-11T0	X2:U						+F/12.1
=									2		+F-12M1	V1	2			-11T0	V						+F/12.2
=									3		+F-12M1	W1	3			-11T0	W						+F/12.2
													4										
LI: Liftmotor brake									5		+F-12M1	3	5			-14Q1	2						+F/12.3
=									6		+F-12M1	2	6			-14Q1	4						+F/12.4
=									7		+F-12M1	4	7			-14Q1	6						+F/12.4
=									8		+F-12M1	5	8			-14Q1	5						+F/12.4
													9										
													10										
LI: Liftmotor									GNYE		+F-12M1	PE	PE			-11T0	PE						+F/12.2

Plug diagram

Function text									-18W0	Cable name	Strip designation =LI+COP1-18X1							Cable name					
									Ölflex Classic 110 7G0,75 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					Page / column
									1		+F-18X0		1			=GEN-X5	15:B						+F/18.1
									2		+F-18X0		2			=GEN-X5.0	8:B						+F/18.1
LI: Liftmotor impulse sensor									3		+F-18X0		3		I9.3	=PLC1-DI3	-X10:14						+F/18.2
LI: Sledge point of reference at accumlation table									4		+F-18X0		4		I12.1	=PLC1-DI4	-X10:2						+F/18.3
LI: Stop palletizing-head (bottle pick up at AC)									5		+F-18X0		5		I12.2	=PLC1-DI4	-X10:3						+F/18.4
LI: free									6		+F-18X0		6		I12.3	=PLC1-DI4	-X10:4						+F/18.5
=									GNYE		+F-18X0		PE										+F/18.5

Plug diagram

Function text									-22W1	Cable name	Strip designation =LI+COP1-22X1							Cable name					
									Öflex Servo 719 CY 4G+4X2,5+1,0 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					Page / column
LI: Sledge motor									1		+F-22M1	U1	1			-21T0	X2:U						+F/22.1
=									2		+F-22M1	V1	2			-21T0	V						+F/22.1
=									3		+F-22M1	W1	3			-21T0	W						+F/22.1
													4										
LI: Sledge motor brake									5		+F-22M1	3	5			-21Q5	2						+F/22.3
=									6		+F-22M1	2	6			-21Q5	4						+F/22.3
=									7		+F-22M1	4	7			-21Q5	6						+F/22.3
=									8		+F-22M1	5	8			-21Q5	5						+F/22.4
													9										
													10										
LI: Sledge motor									GNYE		+F-22M1	PE	PE			-21T0	PE						+F/22.1

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Modification date	2023. 10. 11.						

Plug diagram

Function text									-32W1	Cable name	Strip designation =LI+COP1-32X1							Cable name					
									Chainflex CF210 4G+4X1,5+0,75 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					Page / column
LI: palletizing-head									1		+F-32X1	1	1			-34Q1	2						+F/32.1
=									2		+F-32X1	2	2			-34Q1	4						+F/32.1
=									3		+F-32X1	3	3			-34Q1	6						+F/32.2
													4										
LI: palletizing-head brake									5		+F-32X1	5	5			-34Q3	2						+F/32.3
=									6		+F-32X1	6	6			-34Q3	4						+F/32.4
=									7		+F-32X1	7	7			-34Q3	6						+F/32.4
=									8		+F-32X1	8	8			-34Q3	5						+F/32.4
													9										
													10										
LI: palletizing-head									GNYE		+F-32X1	PE	PE			-PE2	PE						+F/32.2

Creator	Ferenc Baracsi	Commission	620300.11.2023	Plug diagram =LI+COP1-32X1	= LI	+PLG	Page 303
Edited by	BaF	Type	MSK - Semitech		Revision	
Modification date	2023. 10. 11.					

Plug diagram

Function text									-32W1.1	Cable name	Strip designation =LI+F-32X1							Cable name	-32W1				
									Chainflex CF210 4G+4X1,5+0,75 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type	Chainflex CF210 4G+4X1,5+0,75 mm²				Page / column
LI: palletizing-head									1		-32M1	U1	1			+COP1-32X1	1		1				/32.1
=									2		-32M1	V1	2			+COP1-32X1	2		2				/32.1
=									3		-32M1	W1	3			+COP1-32X1	3		3				/32.2
													4										
LI: palletizing-head brake									5		-32M1	3	5			+COP1-32X1	5		5				/32.3
=									6		-32M1	2	6			+COP1-32X1	6		6				/32.4
=									7		-32M1	4	7			+COP1-32X1	7		7				/32.4
=									8		-32M1	5	8			+COP1-32X1	8		8				/32.4
													9										
													10										
LI: palletizing-head									GNYE		-32M1	PE	PE			+COP1-32X1	PE		GNYE				/32.2

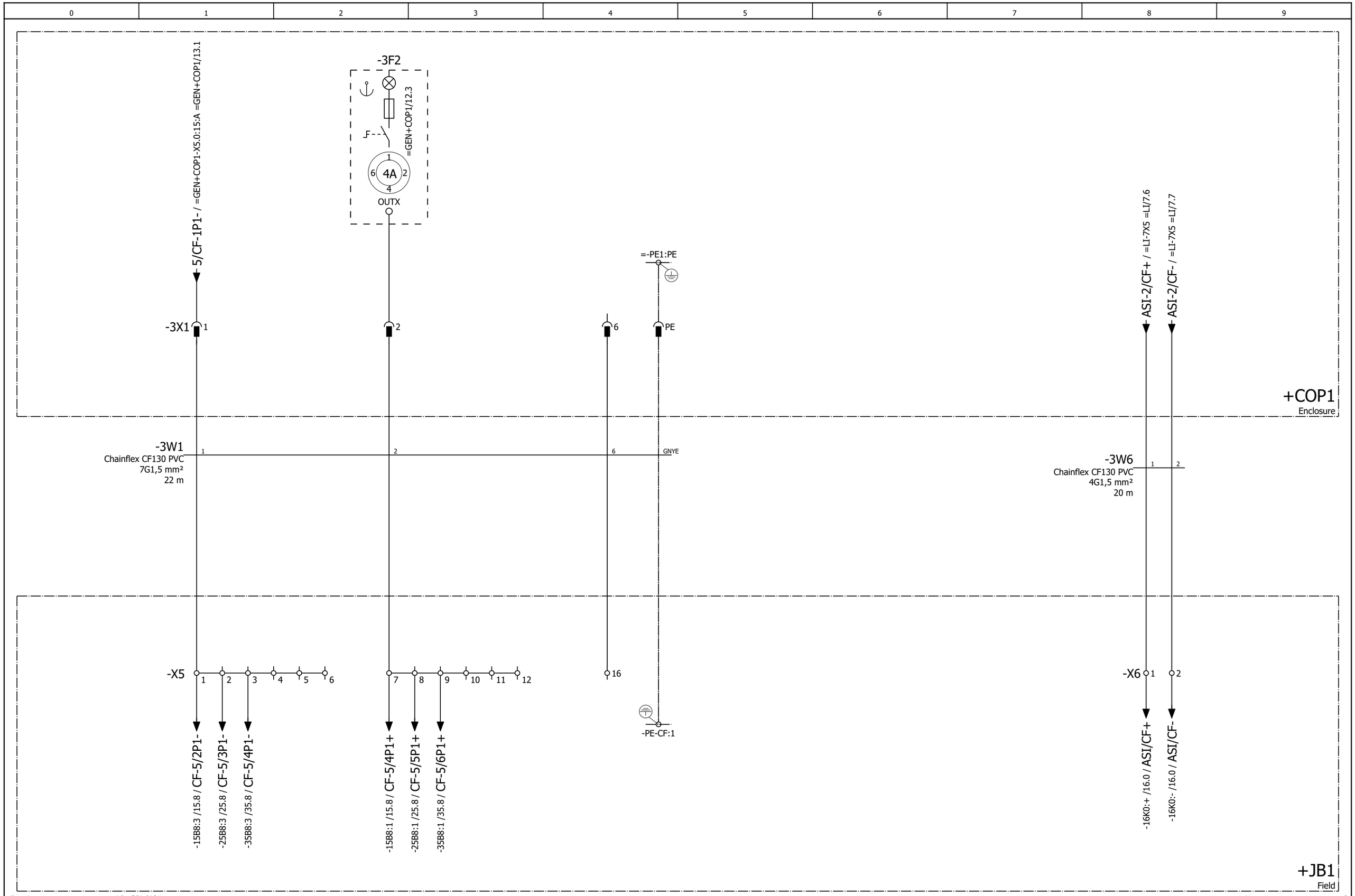
Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
-11W5			00069543	Ölflex Classic 115 CY	2X	2	0,75	1	LI: Liftmotor Q-min
-8W2		-8B2	00143360	PUR-OB/10m	4x	2	0,34	10	LI: Air pressure OK
-12W1	-12X1		10150929	Chainflex Servo¶CF210.UL.25	4G+2x2	8	2,5+1,0	33	LI: Liftmotor
-15W7	-15B7		10150609	PUR-OB/3m	4X	3	0,34	3	LI: Lift motor HTL-sensor
			00150353						
-16W3	-16B3		10150609	PUR-OB/3m	4X	3	0,34	3	LI: Gripper-head in top position
			00150353						
-16W4		-16S4	10150609	PUR-OB/3m	4X	2	0,34	3	LI: Gripper-head emergency-stop at the top
			00150353						
-16W5			00150617	Chainflex CF130 PVC	5G	4	1,5	10	LI: AS-i distribution
-17W1	-17B1		00143359	PUR-OB/5m	4X	3	0,34	5	LI: Stop palletizing-head (bottle pick up at AC)
			00150353						
-18W0	-18X1		10036999	Ölflex Classic 110	7G	7	0,75	25	LI: Impulse sensors
-22W1	-22X1		10151374	Ölflex Servo 719 CY	4G+4X	8	2,5+1,0	22	LI: Sledge motor
-25W1	=GEN -X7		10149963	Unitronic LiYCY (TP)	3x2	12	0,25	24	LI: Sledge impulse sensor
			10150927						
-26W1		-26B1	00143359	PUR-OB/5m	4X	3	0,34	5	LI: Sledge point of reference at accumlation table
			00150353						
-32W1	-32X1	-32X1	10150930	Chainflex CF210	4G+4X	8	1,5+0,75	35	LI: palletizing-head
-32W1.1	-32X1		10150930	Chainflex CF210	4G+4X	8	1,5+0,75	10	=
-36W5			00150617	Chainflex CF130 PVC	5G	4	1,5	15	LI: AS-i distribution
-37W1	-37B1		00143360	PUR-OB/10m	4x	3	0,34	10	LI: Palletizing-head canded 1
			00150353						
-37W2	-37B2		00143360	PUR-OB/10m	4x	3	0,34	10	LI: Palletizing-head canded 2
			00150353						
-37W3	-37B3		00143360	PUR-OB/10m	4x	3	0,34	10	LI: Palletizing-head canded 3
			00150353						
-37W4	-37B4		00143360	PUR-OB/10m	4x	3	0,34	10	LI: Palletizing-head canded 4
			00150353						
-37W5			00143360	PUR-OB	4X	4	0,34	10	LI: Palletizing-head vaccum existing
			00150353						
-38W1	-38B1		00143360	PUR-OB	4X	3	0,34	10	LI: Gripper head turn head at 90 degree
			00150353						
-38W2	-38B2		00143360	PUR-OB	4X	3	0,34	10	LI: Gripper head turn head at 0 degree
			00150353						
-38W3	-38B3		00143360	PUR-OB	4X	3	0,34	10	LI: Gripper head positioning
			00150353						
-38W5		-38Y5	10150602	PUR/PVC	3G	2	0,75	5	LI: Palletizing-head evacuate valve open
			00150353						
-38W6		-38Y6	10150602	PUR/PVC	3G	2	0,75	5	LI: Palletizing-head vacuum-valve open
			00150353						
-38W7		-38Y7	10150602	PUR/PVC	3G	2	0,75	5	LI: Palletizing-head working-valve PIAP off
			00150353						
-38W8		-38Y8	10150602	PUR/PVC	3G	2	0,75	5	LI: Palletizing-head pressure-valve grab-tubes closed
			00150353						
-39W1	-39X1	-39B1	10150604	PUR-OB/5m	3X	3	0,25	5	LI: Clamping head cylinder opened -1-

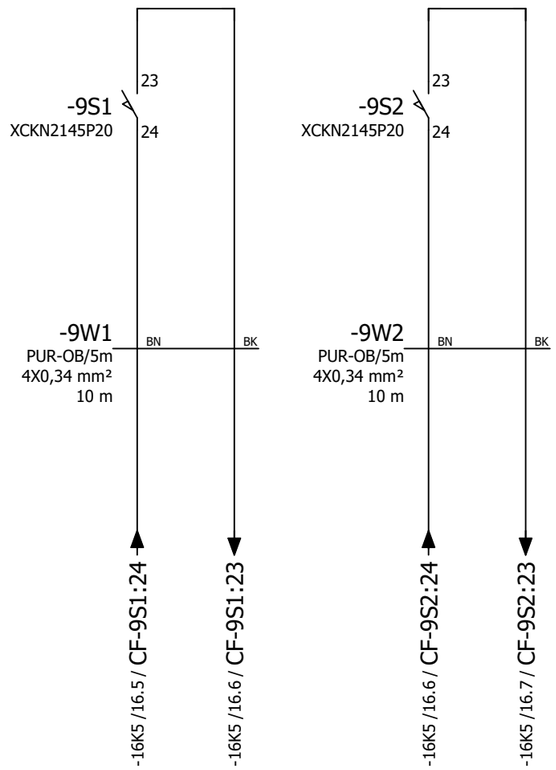
Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
			00150355						
-39W1.1	-39X1		10150604	PUR-OB/5m	3X	3	0,25	5	LI: Clamping head cylinder opened -1-
			00150353						
-39W2	-39X2	-39B2	10150604	PUR-OB/5m	3X	3	0,25	5	LI: Clamping head cylinder opened -2-
			00150355						
-39W2.1	-39X2		10150604	PUR-OB/5m	3X	3	0,25	5	LI: Clamping head cylinder opened -2-
			00150353						
-39W3	-39X3	-39B3	10150604	PUR-OB/5m	3X	3	0,25	5	LI: Clamping head cylinder opened -3-
			00150355						
-39W3.1	-39X3		10150604	PUR-OB/5m	3X	3	0,25	5	LI: Clamping head cylinder opened -3-
			00150353						
-39W4	-39X4	-39B4	10150604	PUR-OB/5m	3X	3	0,25	5	LI: Clamping head cylinder opened -4-
			00150355						
-39W4.1	-39X4		10150604	PUR-OB/5m	3X	3	0,25	5	LI: Clamping head cylinder opened -4-
			00150353						
-39W5		-39Y5	10150602	PUR/PVC	3G	2	0,75	5	LI: Palletizing-head clamping head cylinder open
			00150353						
-39W6		-39Y6	10150602	PUR/PVC	3G	2	0,75	5	LI: Palletizing-head clamping head cylinder close
			00150353						

Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	Cable overview : =LI+F-39W1 - =LI+F-39W6	= LI	+CBL	Page 401
Edited by	BaF	Type MSK - Semitech			Revision	
Modification date	2023. 10. 11.					

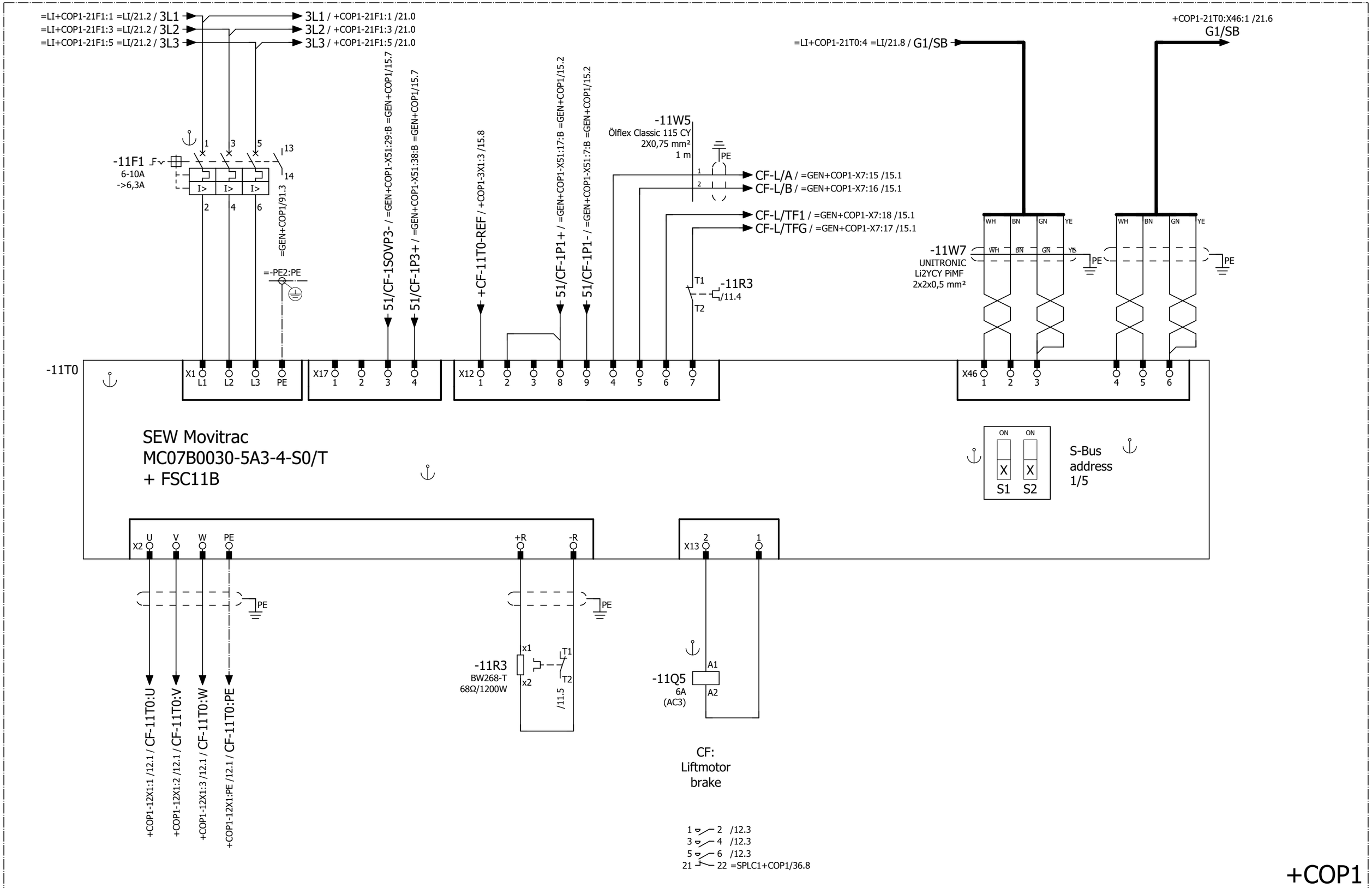


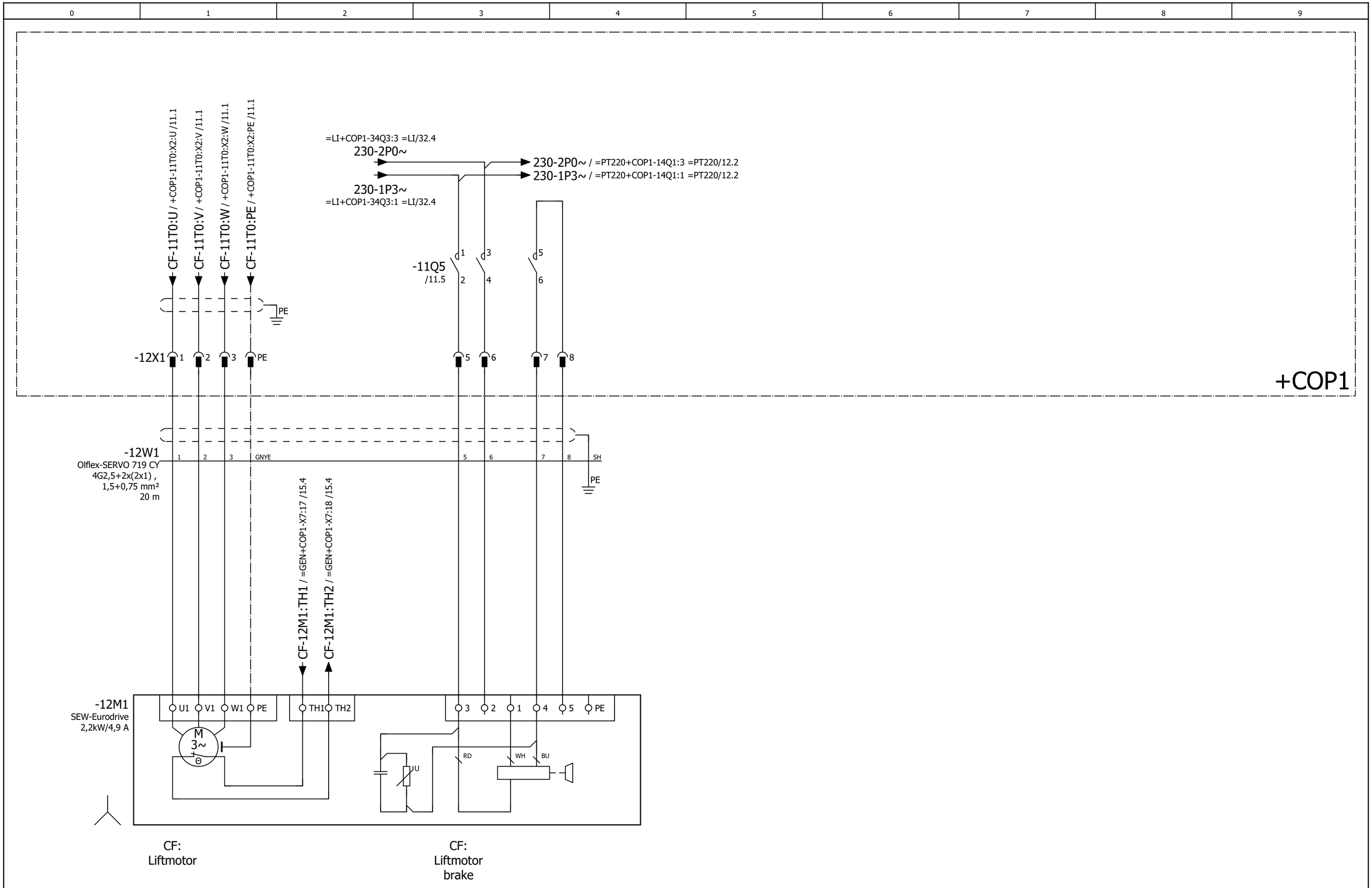
Creator	Ferenc Baracsi	Commission	620300.11.2023	CF: 24VDC infeed	= CF	+F	Page 3
Edited by	BaF	Type	MSK - Semitech		Revision	
Modification date	2023. 10. 11.					

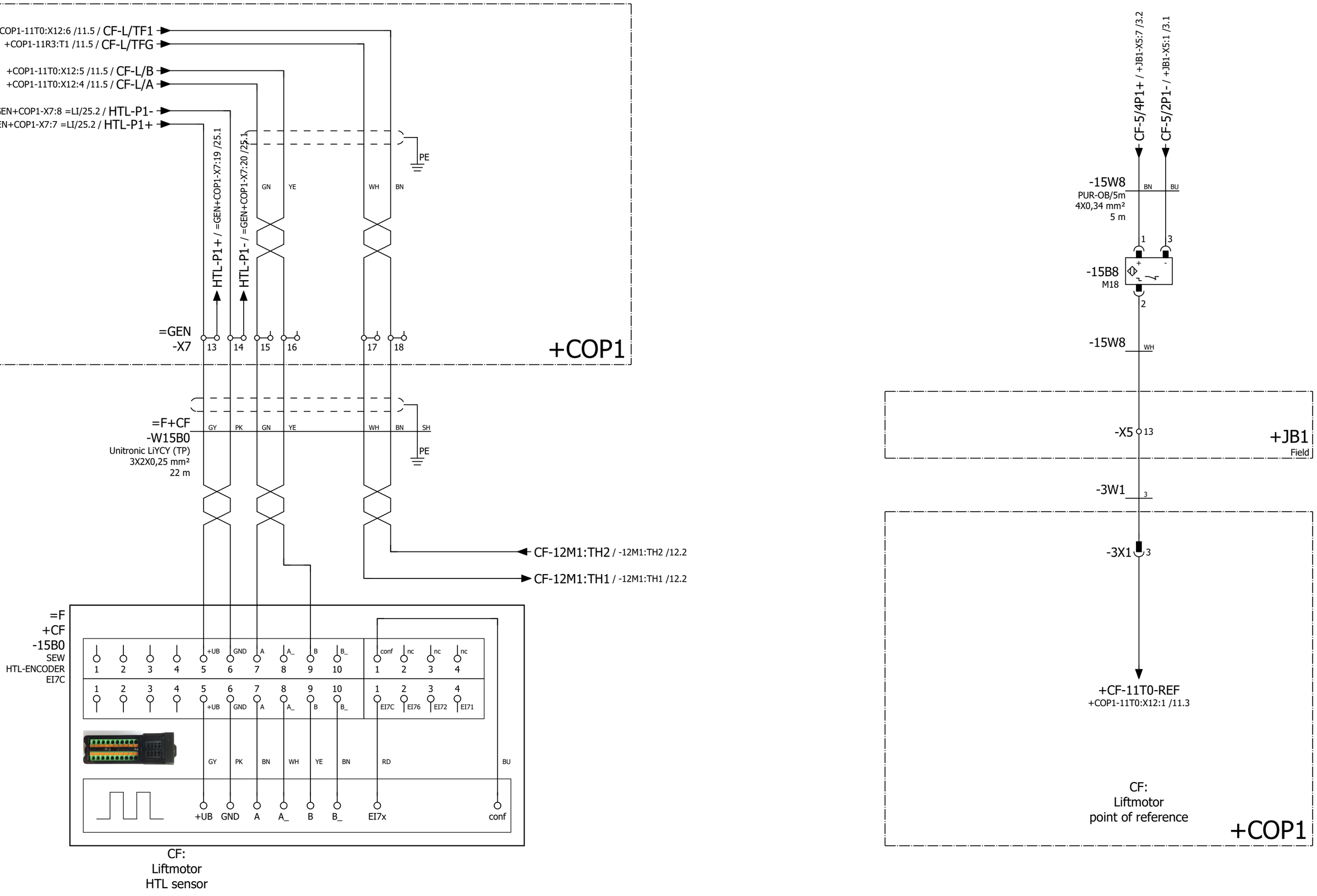


CF:
Centering frame
belt control
-1-

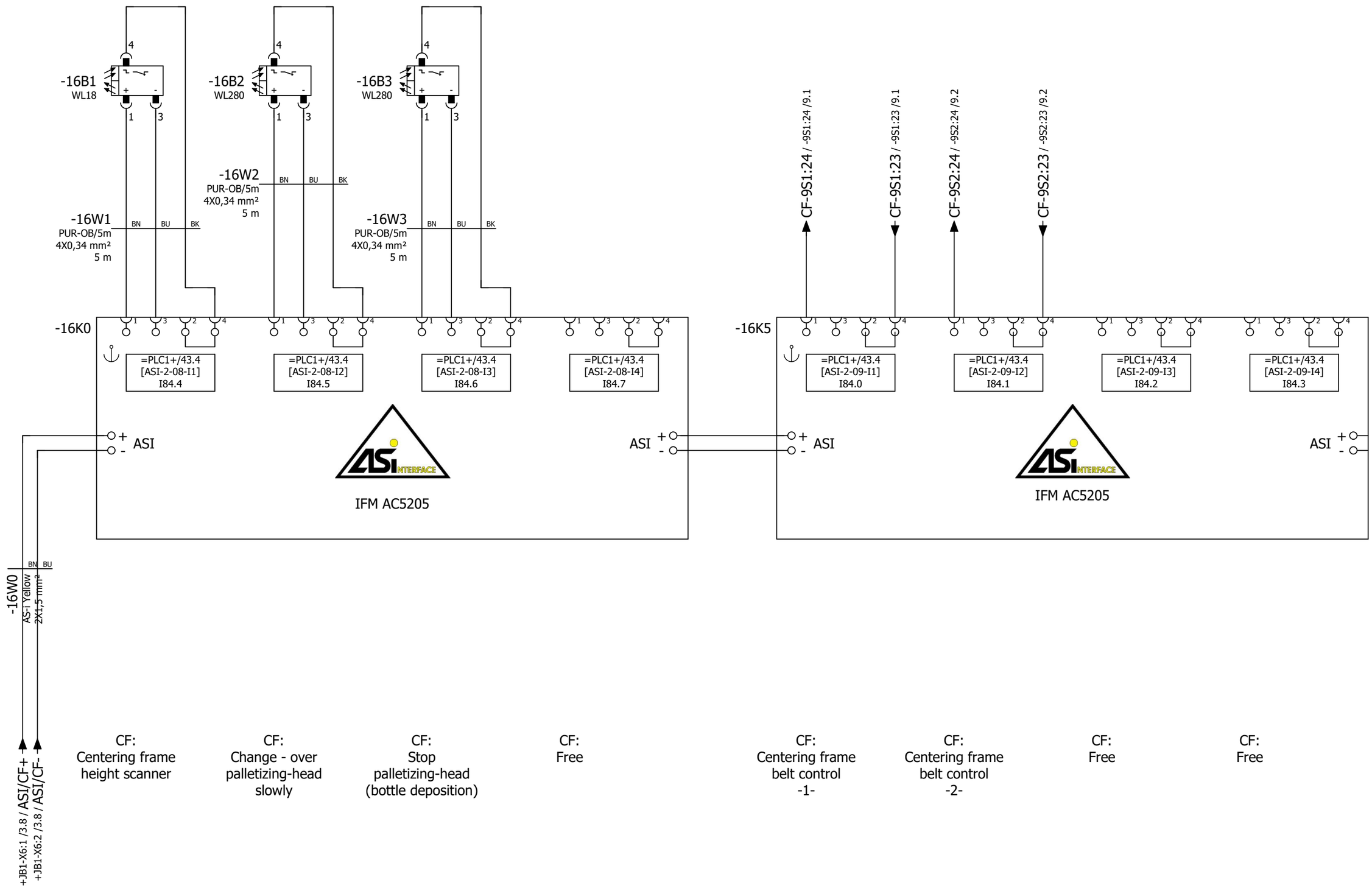
CF:
Centering frame
belt control
-2-

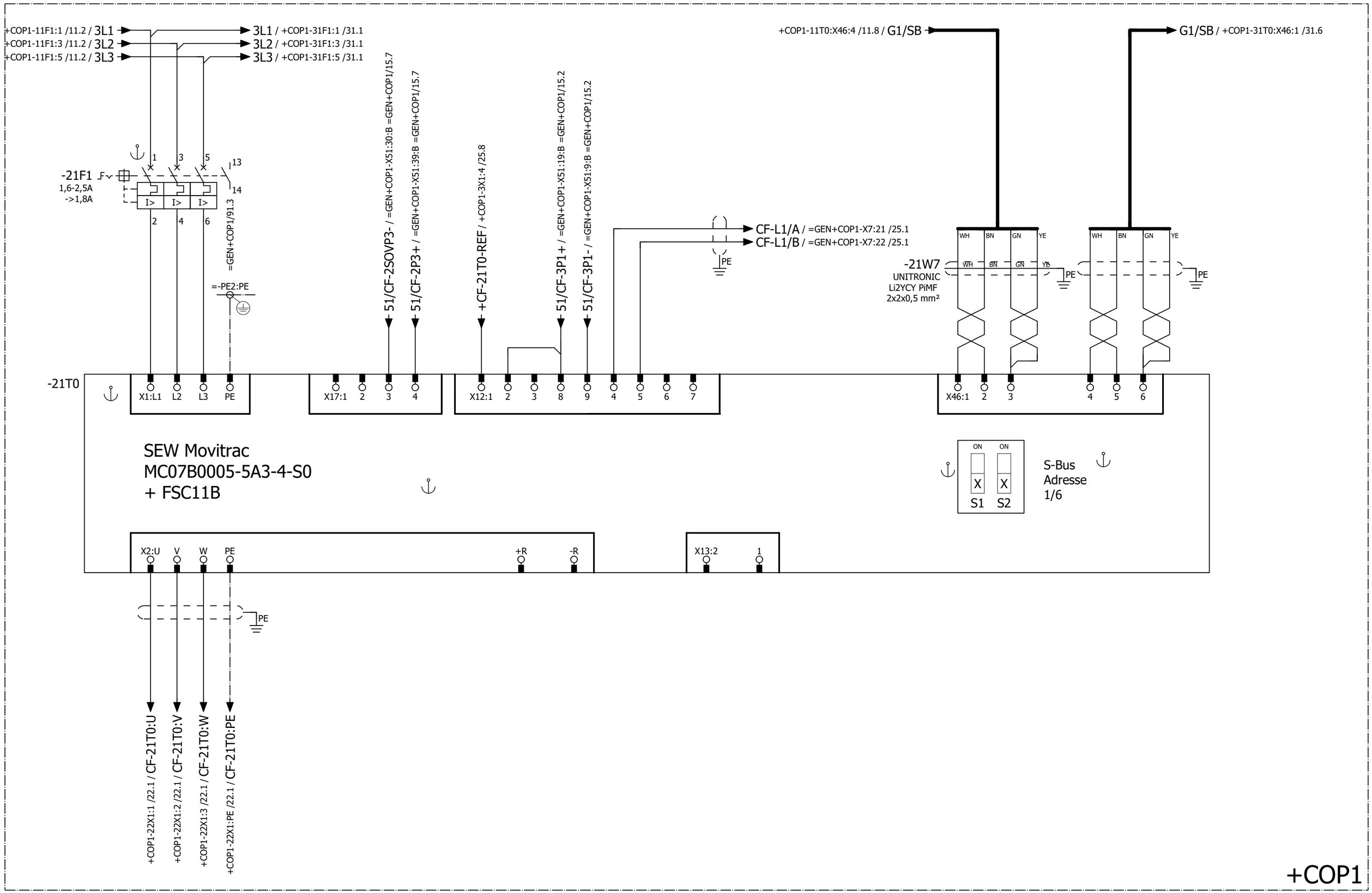

=LI+COP1-21F1:1 =LI/21.2 / 3L1
=LI+COP1-21F1:3 =LI/21.2 / 3L2
=LI+COP1-21F1:5 =LI/21.2 / 3L3
3L1 / +COP1-21F1:1 /21.0
3L2 / +COP1-21F1:3 /21.0
3L3 / +COP1-21F1:5 /21.0
=LI+COP1-21T0:4 =LI/21.8 / G1/SB
+COP1-21T0:X46:1 /21.6
G1/SB
-11F1
6-10A
->6,3A
=GEN+COP1/91.3
=-PE2:PE
51/CF-1SOVP3- / =GEN+COP1-X51:29:B =GEN+COP1/15.7
51/CF-1P3+ / =GEN+COP1-X51:38:B =GEN+COP1/15.7
+CF-11T0-REF / +COP1-3X1:3 /15.8
51/CF-1P1+ / =GEN+COP1-X51:17:B =GEN+COP1/15.2
51/CF-1P1- / =GEN+COP1-X51:7:B =GEN+COP1/15.2
-11W5
Ölflex Classic 115 CY
2X0,75 mm²
1 m
CF-L/A / =GEN+COP1-X7:15 /15.1
CF-L/B / =GEN+COP1-X7:16 /15.1
CF-L/TF1 / =GEN+COP1-X7:18 /15.1
CF-L/TFG / =GEN+COP1-X7:17 /15.1
-11R3
/11.4
-11W7
UNITRONIC
Li2YCY PiMF
2x2x0,5 mm²
-11T0
SEW Movitrac
MC07B0030-5A3-4-S0/T
+ FSC11B
S-Bus
address
1/5
+COP1-12X1:1 /12.1 / CF-11T0:U
+COP1-12X1:2 /12.1 / CF-11T0:V
+COP1-12X1:3 /12.1 / CF-11T0:W
+COP1-12X1:PE /12.1 / CF-11T0:PE
-11R3
BW268-T
68Ω/1200W
/11.5
-11Q5
6A
(AC3)
CF:
Liftmotor
brake
1 2 /12.3
3 4 /12.3
5 6 /12.3
21 22 =SPLC1+COP1/36.8
+COP1

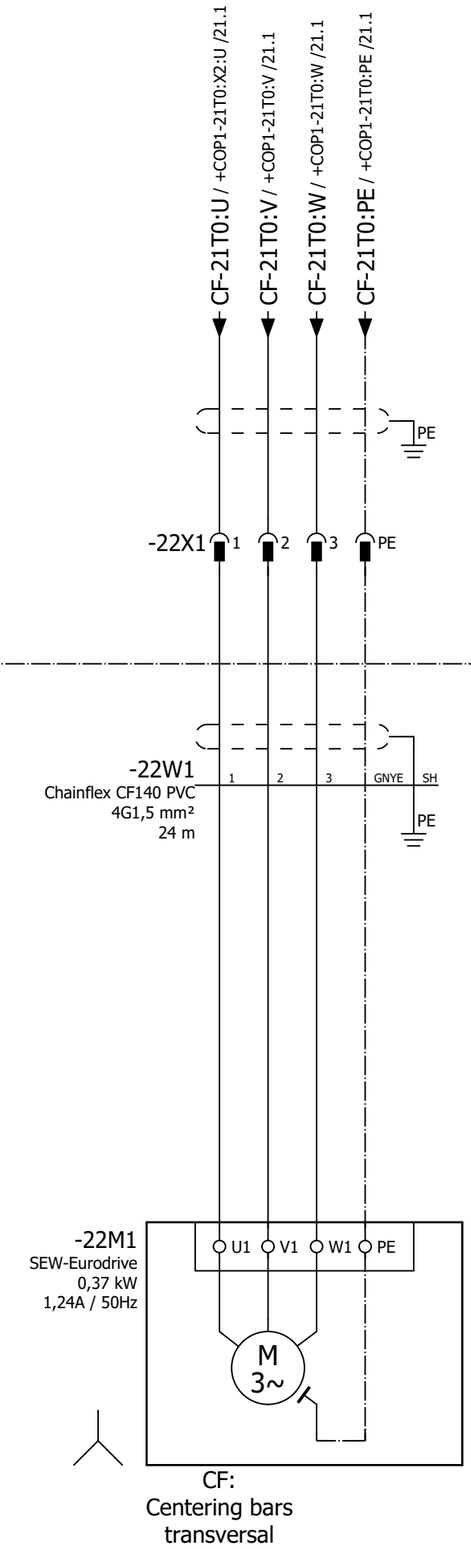

CF-11T0:U / +COP1-11T0:X2:U /11.1
CF-11T0:V / +COP1-11T0:X2:V /11.1
CF-11T0:W / +COP1-11T0:X2:W /11.1
CF-11T0:PE / +COP1-11T0:X2:PE /11.1
=LI+COP1-34Q3:3 =LI/32.4
230-2P0~
230-1P3~
=LI+COP1-34Q3:1 =LI/32.4
230-2P0~ / =PT220+COP1-14Q1:3 =PT220/12.2
230-1P3~ / =PT220+COP1-14Q1:1 =PT220/12.2
-11Q5
/11.5
PE
-12X1
+COP1
-12W1
Olflex-SERVO 719 CY
4G2,5+2x(2x1) ,
1,5+0,75 mm²
20 m
GNYE
SH
CF-12M1:TH1 / =GEN+COP1-X7:17 /15.4
CF-12M1:TH2 / =GEN+COP1-X7:18 /15.4
-12M1
SEW-Eurodrive
2,2kW/4,9 A
U1
V1
W1
TH1
TH2
M
3~
RD
WH
BU
U
CF:
Liftmotor
CF:
Liftmotor
brake

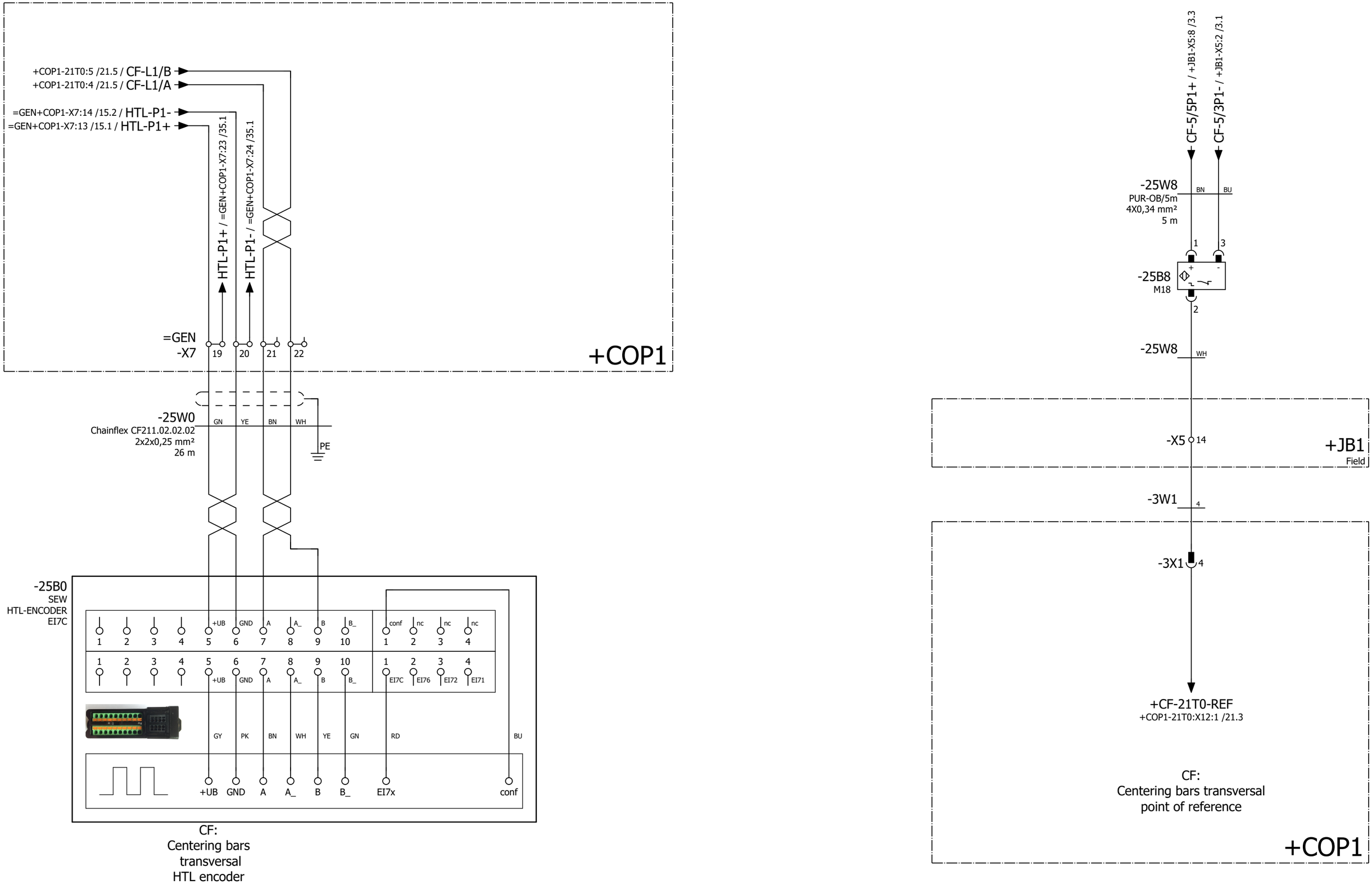


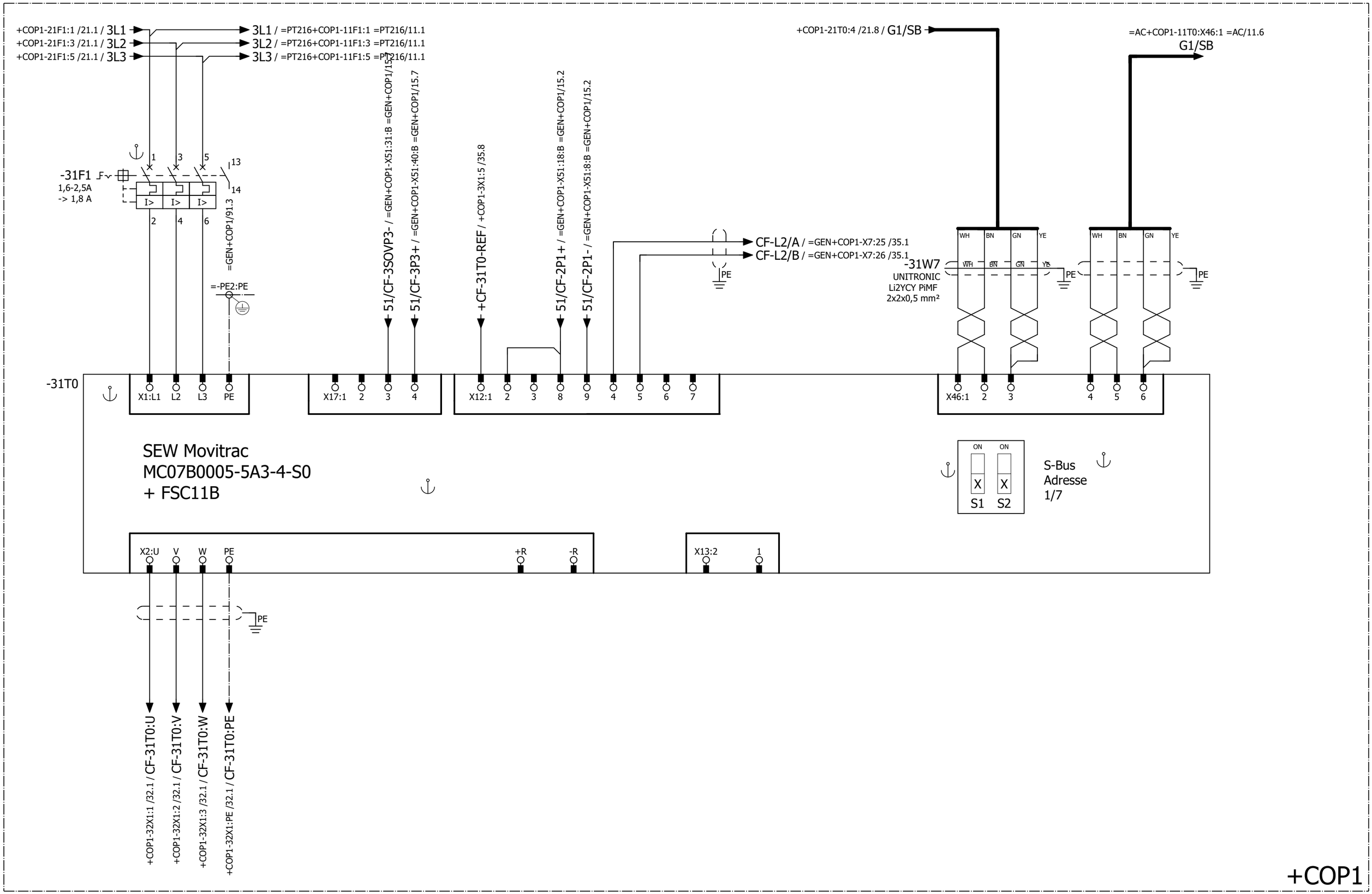
Creator	Ferenc Baracsi	Commission	620300.11.2023	MSK COVERTECH GROUP	CF: Liftmotor impulse sensor	= CF	+F	Page 15
Edited by	BaF	Type	MSK - Semitech			Revision	
Modification date	2023. 10. 11.						

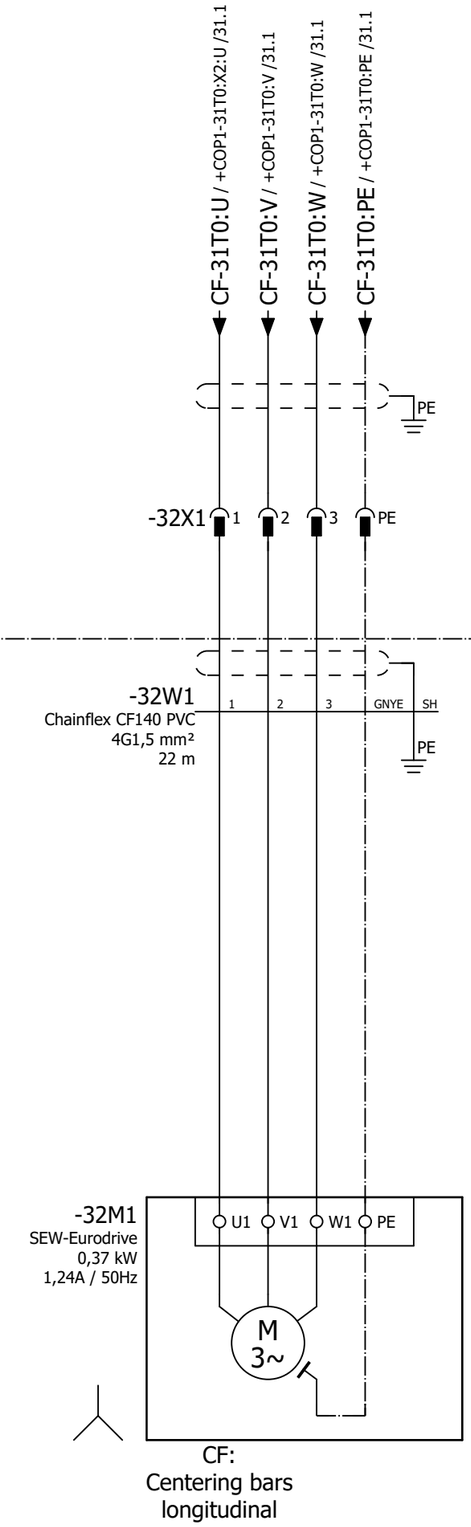

-16B1
WL18
-16B2
WL280
-16B3
WL280
-16W1
PUR-OB/5m
4X0,34 mm²
5 m
-16W2
PUR-OB/5m
4X0,34 mm²
5 m
-16W3
PUR-OB/5m
4X0,34 mm²
5 m
BN BU BK
-16K0
=PLC1+/43.4
[ASI-2-08-I1]
I84.4
=PLC1+/43.4
[ASI-2-08-I2]
I84.5
=PLC1+/43.4
[ASI-2-08-I3]
I84.6
=PLC1+/43.4
[ASI-2-08-I4]
I84.7
ASI
IFM AC5205
-16K5
CF-9S1:24 / -9S1:24 /9.1
CF-9S1:23 / -9S1:23 /9.1
CF-9S2:24 / -9S2:24 /9.2
CF-9S2:23 / -9S2:23 /9.2
=PLC1+/43.4
[ASI-2-09-I1]
I84.0
=PLC1+/43.4
[ASI-2-09-I2]
I84.1
=PLC1+/43.4
[ASI-2-09-I3]
I84.2
=PLC1+/43.4
[ASI-2-09-I4]
I84.3
ASI
IFM AC5205
-16W0
AS-i Yellow
2X1,5 mm²
BN BU
+JB1-X6:1 /3.8 / ASI/CF+
+JB1-X6:2 /3.8 / ASI/CF-
CF:
Centering frame
height scanner
CF:
Change - over
palletizing-head
slowly
CF:
Stop
palletizing-head
(bottle deposition)
CF:
Free
CF:
Centering frame
belt control
-1-
CF:
Centering frame
belt control
-2-
CF:
Free
CF:
Free

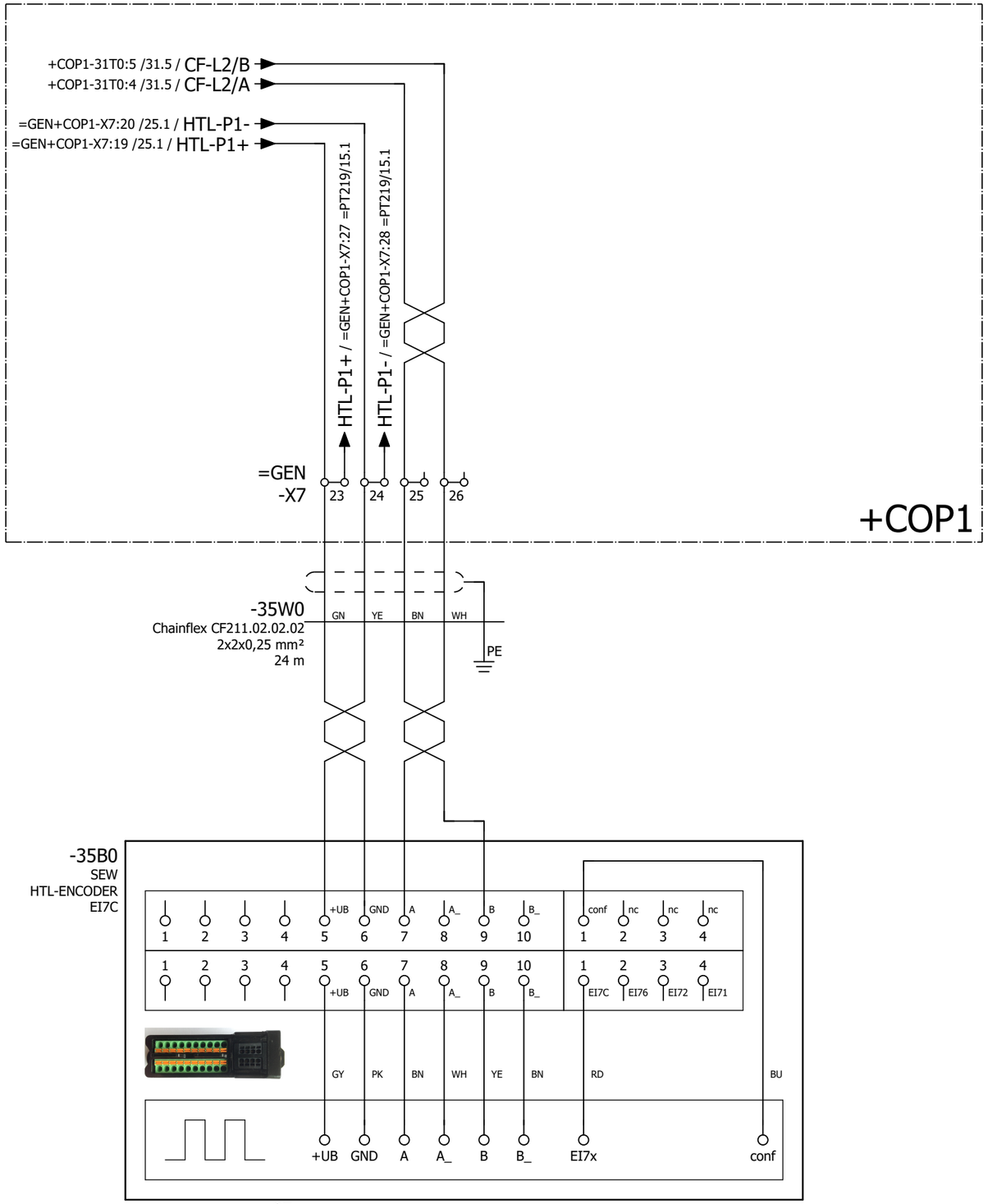

+COP1-11F1:1 /11.2 / 3L1
+COP1-11F1:3 /11.2 / 3L2
+COP1-11F1:5 /11.2 / 3L3
3L1 / +COP1-31F1:1 /31.1
3L2 / +COP1-31F1:3 /31.1
3L3 / +COP1-31F1:5 /31.1
+COP1-11T0:X46:4 /11.8 / G1/SB
G1/SB / +COP1-31T0:X46:1 /31.6
-21F1
1,6-2,5A
->1,8A
=GEN+COP1/91.3
=-PE2:PE
51/CF-2SOVP3- / =GEN+COP1-X51:30:B =GEN+COP1/15.7
51/CF-2P3+ / =GEN+COP1-X51:39:B =GEN+COP1/15.7
+CF-21T0-REF / +COP1-3X1:4 /25.8
51/CF-3P1+ / =GEN+COP1-X51:19:B =GEN+COP1/15.2
51/CF-3P1- / =GEN+COP1-X51:9:B =GEN+COP1/15.2
CF-L1/A / =GEN+COP1-X7:21 /25.1
CF-L1/B / =GEN+COP1-X7:22 /25.1
PE
-21W7
UNITRONIC
Li2YCY PiMF
2x2x0,5 mm²
WH BN GN YE
-21T0
X1:L1 L2 L3 PE
X17:1 2 3 4
X12:1 2 3 8 9 4 5 6 7
X46:1 2 3 4 5 6
SEW Movitrac
MC07B0005-5A3-4-S0
+ FSC11B
ON ON
X X
S1 S2
S-Bus
Adresse
1/6
X2:U V W PE
+R -R
X13:2 1
+COP1-22X1:1 /22.1 / CF-21T0:U
+COP1-22X1:2 /22.1 / CF-21T0:V
+COP1-22X1:3 /22.1 / CF-21T0:W
+COP1-22X1:PE /22.1 / CF-21T0:PE
+COP1

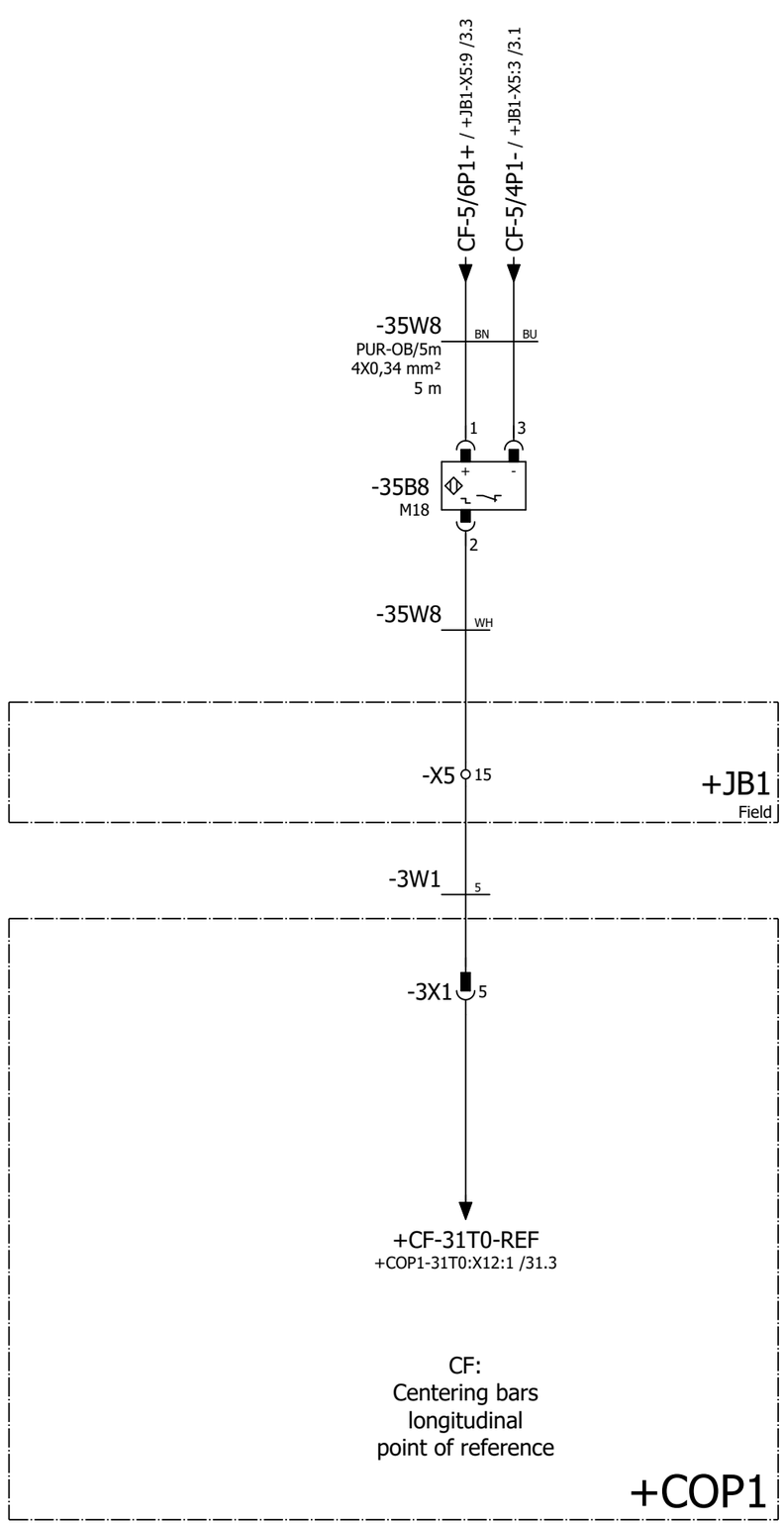

CF-21T0:U / +COP1-21T0:X2:U /21.1
CF-21T0:V / +COP1-21T0:V /21.1
CF-21T0:W / +COP1-21T0:W /21.1
CF-21T0:PE / +COP1-21T0:PE /21.1
PE
-22X1
1
2
3
PE
+COP1
-22W1
Chainflex CF140 PVC
4G1,5 mm²
24 m
1
2
3
GNYE
SH
PE
-22M1
SEW-Eurodrive
0,37 kW
1,24A / 50Hz
U1
V1
W1
PE
M
3~
CF:
Centering bars
transversal


+COP1-21T0:5 /21.5 / CF-L1/B
+COP1-21T0:4 /21.5 / CF-L1/A
=GEN+COP1-X7:14 /15.2 / HTL-P1-
=GEN+COP1-X7:13 /15.1 / HTL-P1+
HTL-P1+ / =GEN+COP1-X7:23 /35.1
HTL-P1- / =GEN+COP1-X7:24 /35.1
=GEN
-X7
19
20
21
22
+COP1
-25W0
Chainflex CF211.02.02.02
2x2x0,25 mm²
26 m
GN
YE
BN
WH
PE
-25B0
SEW
HTL-ENCODER
EI7C
+UB
GND
A
A_
B
B_
conf
nc
EI7C
EI76
EI72
EI71
GY
PK
BN
WH
YE
GN
RD
BU
EI7x
CF:
Centering bars
transversal
HTL encoder
CF-5/5P1+ / +JB1-X5:8 /3.3
CF-5/3P1- / +JB1-X5:2 /3.1
-25W8
PUR-OB/5m
4X0,34 mm²
5 m
BN
BU
-25B8
M18
-25W8
WH
-X5
14
+JB1
Field
-3W1
4
-3X1
4
+CF-21T0-REF
+COP1-21T0:X12:1 /21.3
CF:
Centering bars transversal
point of reference
+COP1


+COP1-21F1:1 /21.1 / 3L1
+COP1-21F1:3 /21.1 / 3L2
+COP1-21F1:5 /21.1 / 3L3
3L1 / =PT216+COP1-11F1:1 =PT216/11.1
3L2 / =PT216+COP1-11F1:3 =PT216/11.1
3L3 / =PT216+COP1-11F1:5 =PT216/11.1
+COP1-21T0:4 /21.8 / G1/SB
=AC+COP1-11T0:X46:1 =AC/11.6
G1/SB
-31F1
1,6-2,5A
-> 1,8 A
=GEN+COP1/91.3
=-PE2:PE
51/CF-3SOVP3- / =GEN+COP1-X51:31:B =GEN+COP1/15.2
51/CF-3P3+ / =GEN+COP1-X51:40:B =GEN+COP1/15.7
+CF-31T0-REF / +COP1-3X1:5 /35.8
51/CF-2P1+ / =GEN+COP1-X51:18:B =GEN+COP1/15.2
51/CF-2P1- / =GEN+COP1-X51:8:B =GEN+COP1/15.2
CF-L2/A / =GEN+COP1-X7:25 /35.1
CF-L2/B / =GEN+COP1-X7:26 /35.1
-31W7
UNITRONIC
Li2YCY PiMF
2x2x0,5 mm²
WH BN GN YE
PE
-31T0
X1:L1 L2 L3 PE
X17:1 2 3 4
X12:1 2 3 8 9 4 5 6 7
X46:1 2 3 4 5 6
SEW Movitrac
MC07B0005-5A3-4-S0
+ FSC11B
ON ON
X X
S1 S2
S-Bus
Adresse
1/7
X2:U V W PE
+R -R
X13:2 1
+COP1-32X1:1 /32.1 / CF-31T0:U
+COP1-32X1:2 /32.1 / CF-31T0:V
+COP1-32X1:3 /32.1 / CF-31T0:W
+COP1-32X1:PE /32.1 / CF-31T0:PE
+COP1


CF-31T0:U / +COP1-31T0:X2:U /31.1
CF-31T0:V / +COP1-31T0:V /31.1
CF-31T0:W / +COP1-31T0:W /31.1
CF-31T0:PE / +COP1-31T0:PE /31.1
PE
-32X1
1
2
3
PE
+COP1
-32W1
Chainflex CF140 PVC
4G1,5 mm²
22 m
1
2
3
GNYE
SH
PE
-32M1
SEW-Eurodrive
0,37 kW
1,24A / 50Hz
U1
V1
W1
PE
M
3~
CF:
Centering bars
longitudinal


+COP1-31T0:5 /31.5 / CF-L2/B
+COP1-31T0:4 /31.5 / CF-L2/A
=GEN+COP1-X7:20 /25.1 / HTL-P1-
=GEN+COP1-X7:19 /25.1 / HTL-P1+
HTL-P1+ / =GEN+COP1-X7:27 =PT219/15.1
HTL-P1- / =GEN+COP1-X7:28 =PT219/15.1
=GEN
-X7
23
24
25
26
+COP1
-35W0
Chainflex CF211.02.02.02
2x2x0,25 mm²
24 m
GN
YE
BN
WH
PE
-35B0
SEW
HTL-ENCODER
EI7C
+UB
GND
A
A_
B
B_
conf
nc
EI7C
EI76
EI72
EI71
GY
PK
BN
WH
YE
BN
RD
BU
EI7x
CF:
Centering bars
longitudinal
HTL encoder


CF-5/6P1+ / +JB1-X5:9 /3.3
CF-5/4P1- / +JB1-X5:3 /3.1
-35W8
PUR-OB/5m
4X0,34 mm²
5 m
BN
BU
1
3
-35B8
M18
2
-35W8
WH
-X5
15
+JB1
Field
-3W1
5
-3X1
5
+CF-31T0-REF
+COP1-31T0:X12:1 /31.3
CF:
Centering bars
longitudinal
point of reference
+COP1

Terminal diagram

Function text							-35W8	-25W8	-15W8	Cable name	Strip =CF+JB1-X5						Cable name	-3W1				Page / column
							PUR-OB/5m 4X0,34 mm²	PUR-OB/5m 4X0,34 mm²	PUR-OB/5m 4X0,34 mm²	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type	Chainflex CF130 PVC 7G1,5 mm²				
									BU		+F-15B8	3	1		+COP1-3X1	1		1				+F/3.1
								BU			+F-25B8	3	2									+F/3.1
							BU				+F-35B8	3	3									+F/3.1
													4									+F/3.2
													5									+F/3.2
													6									+F/3.2
									BN		+F-15B8	1	7		+COP1-3X1	2		2				+F/3.2
								BN			+F-25B8	1	8									+F/3.3
							BN				+F-35B8	1	9									+F/3.3
													10									+F/3.3
													11									+F/3.3
													12									+F/3.3
CF: Liftmotor point of reference									WH		+F-15B8	2	13		+COP1-3X1	3		3				+F/15.8
CF: Centering bars transversal point of reference								WH			+F-25B8	2	14		+COP1-3X1	4		4				+F/25.8
CF: Centering bars longitudinal point of reference							WH				+F-35B8	2	15		+COP1-3X1	5		5				+F/35.8
													16		+COP1-3X1	6		6				+F/3.4

Terminal diagram

Function text									-16W0	Cable name	Strip =CF+JB1-X6						Cable name	-3W6				Page / column
									AS-i Yellow 2X1,5 mm²	Cable type	Target designation	Connection	Terminal	Jumper	Target designation	Connection	Cable type	Chainflex CF130 PVC 4G1,5 mm²				
									BN		+F-16K0	+	1	,	=LI+F-7X5			1				+F/3.8
									BU		+F-16K0	-	2	,	=LI+F-7X5			2				+F/3.8

Plug diagram

Function text									-3W1	Cable name	Strip designation =CF+COP1-3X1							Cable name					
									Chainflex CF130 PVC 7G1,5 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					Page / column
									1		+JB1-X5	1	1			=GEN-X5.0	15:A						+F/3.1
									2		+JB1-X5	7	2			-3F2	OUTX						+F/3.2
CF: Liftmotor point of reference									3		+JB1-X5	13	3			-11T0	X12:1						+F/15.8
CF: Centering bars transversal point of reference									4		+JB1-X5	14	4			-21T0	X12:1						+F/25.8
CF: Centering bars longitudinal point of reference									5		+JB1-X5	15	5			-31T0	X12:1						+F/35.8
									6		+JB1-X5	16	6										+F/3.4
													7										
													8										
													9										
													10										
									GNYE		+JB1-PE-CF	1	PE										+F/3.4

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Modification date	2023. 10. 11.					

Plug diagram

Function text									-12W1	Cable name	Strip designation =CF+COP1-12X1							Cable name					
									Olflex-SERVO 719 CY 4G2,5+2x(2x1) , 1,5+0,75 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					Page / column
CF: Liftmotor									1		+F-12M1	U1	1			-11T0	X2:V						+F/12.1
=									2		+F-12M1	V1	2			-11T0	X2:W						+F/12.1
=									3		+F-12M1	W1	3			-11T0	X2:PE						+F/12.1
													4										
CF: Liftmotor brake									5		+F-12M1	3	5			-11Q5	2						+F/12.3
=									6		+F-12M1	2	6			-11Q5	4						+F/12.3
=									7		+F-12M1	4	7			-11Q5	6						+F/12.3
=									8		+F-12M1	5	8			-11Q5	5						+F/12.4
													9										
													10										
CF: Liftmotor									GNYE		+F-12M1	PE	PE										+F/12.1

Plug diagram

Function text									-22W1	Cable name	Strip designation =CF+COP1-22X1							Cable name					Page / column
									Chainflex CF140 PVC 4G1,5 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					
CF: Centering bars transversal									1		+F-22M1	U1	1			-21T0	X2:U						+F/22.1
=									2		+F-22M1	V1	2			-21T0	V						+F/22.1
=									3		+F-22M1	W1	3			-21T0	W						+F/22.1
													4										
													5										
													6										
CF: Centering bars transversal									GNYE		+F-22M1	PE	PE			-21T0	PE						+F/22.1

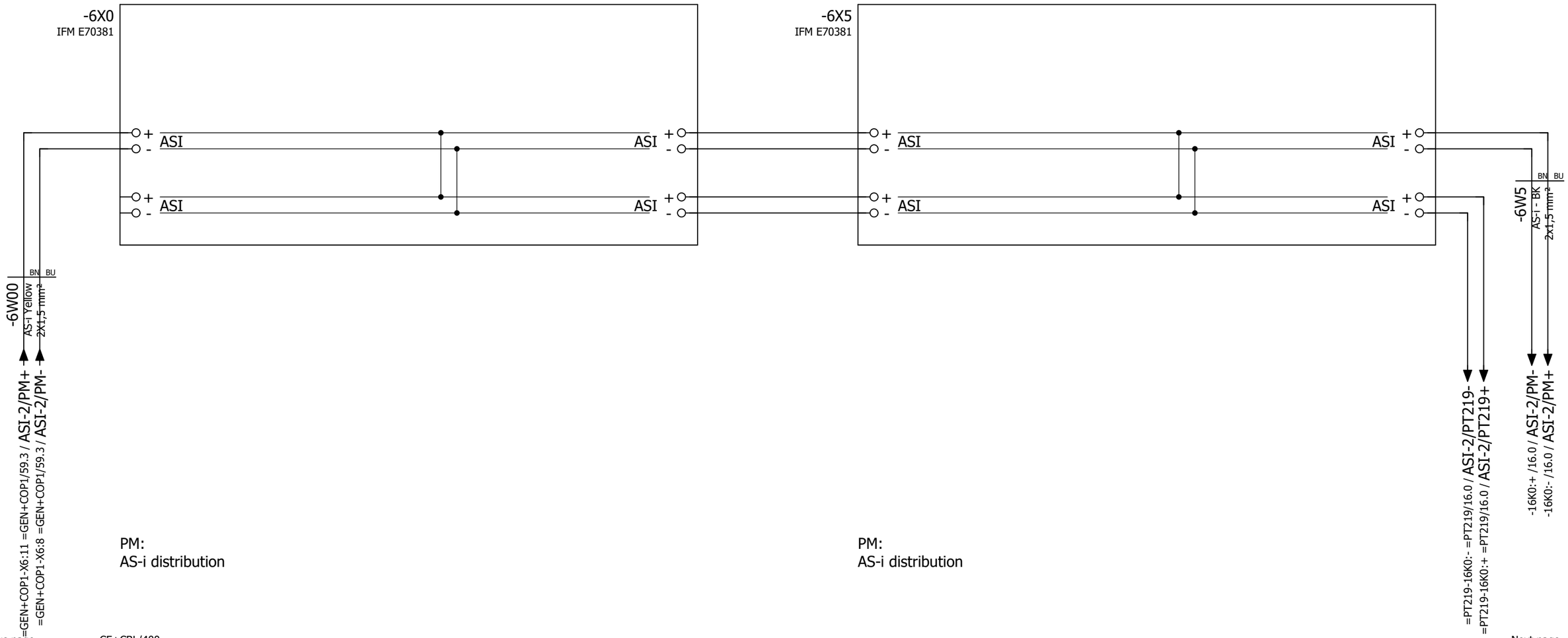
Creator	Ferenc Baracsi	Commission 620300.11.2023	MSK COVERTECH GROUP	Plug diagram =CF+COP1-22X1	= CF	+PLG	Page 302
Edited by	BaF	Type MSK - Semitech			Revision		
Modification date	2023. 10. 11.						

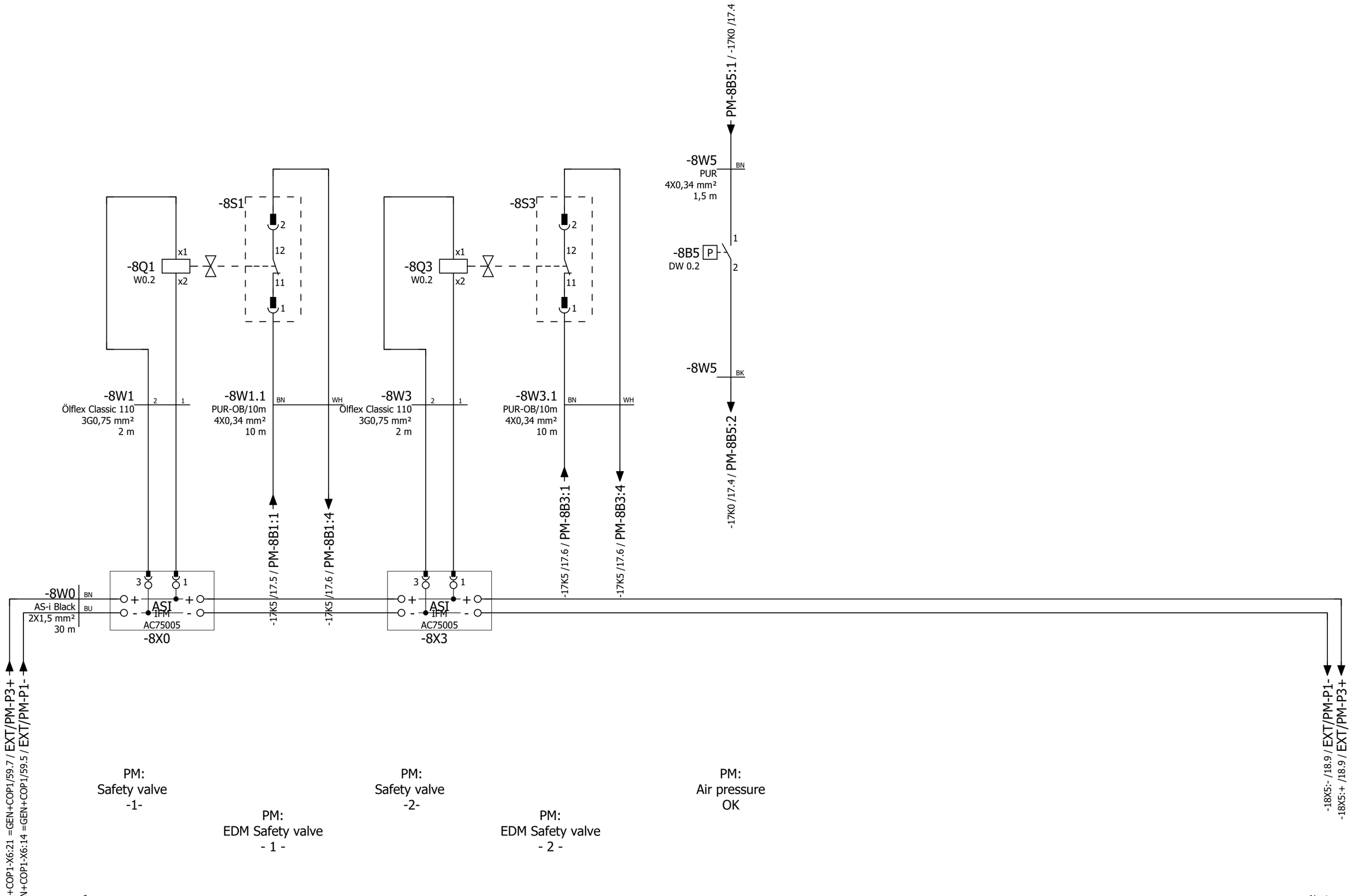
Plug diagram

Function text									-32W1	Cable name	Strip designation =CF+COP1-32X1							Cable name					Page / column
									Chainflex CF140 PVC 4G1,5 mm²	Cable type	Target designation	Connection	Plug designation	Jumper	Device connection point	Target designation	Connection	Cable type					
CF: Centering bars longitudinal									1		+F-32M1	U1	1			-31T0	X2:U						+F/32.1
=									2		+F-32M1	V1	2			-31T0	V						+F/32.1
=									3		+F-32M1	W1	3			-31T0	W						+F/32.1
													4										
													5										
													6										
CF: Centering bars longitudinal									GNYE		+F-32M1	PE	PE			-31T0	PE						+F/32.1

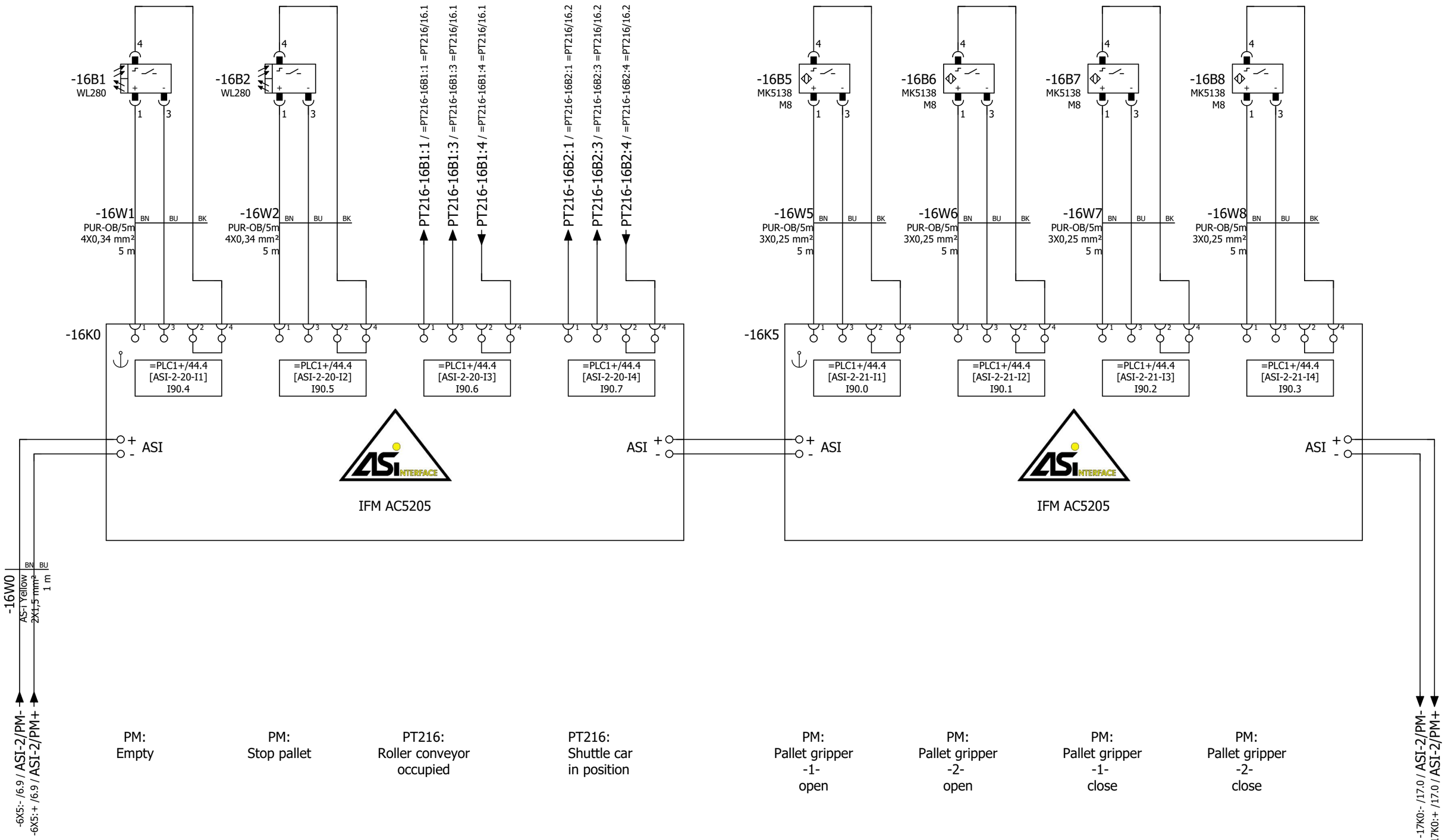
Cable overview

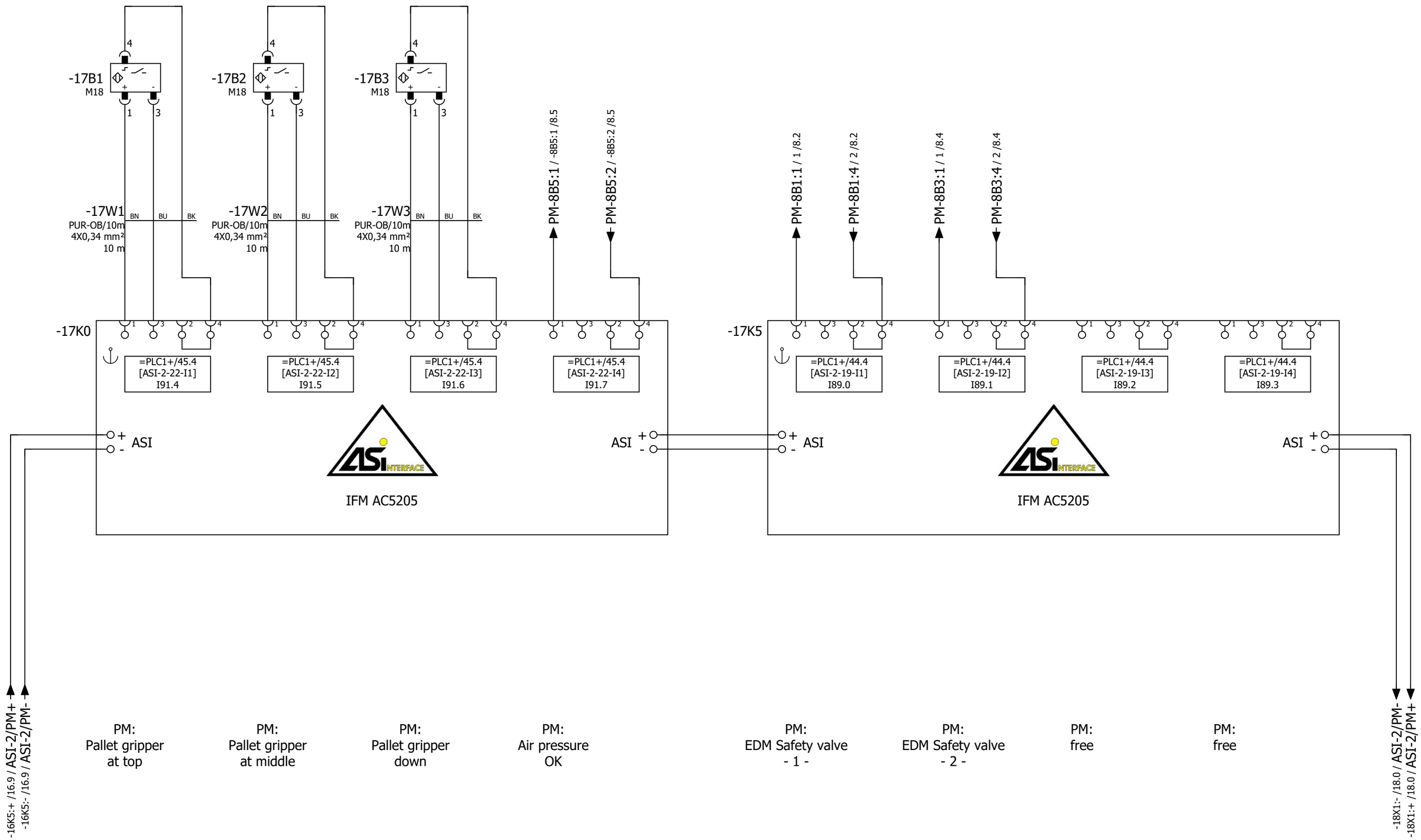
Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
-11W5			00069543	Ölflex Classic 115 CY	2X	2	0,75	1	
-3W1	-3X1	-X5	00150618	Chainflex CF130 PVC	7G	7	1,5	22	CF: 24VDC infeed
-3W6	-X6		00150616	Chainflex CF130 PVC	4G	2	1,5	20	CF: AS-i distribution
-12W1	-12X1		10151374	Olflex-SERVO 719 CY	4G2,5+2x(2x1) ,	8	1,5+0,75	20	CF: Liftmotor
-22W1	-22X1		00150622	Chainflex CF140 PVC	4G	4	1,5	24	CF: Centering bars transversal
-25W0	=GEN -X7		10150928	Chainflex CF211.02.02.02	2x2	4	0,25	26	CF: Centering bars transversal HTL encoder
-32W1	-32X1		00150622	Chainflex CF140 PVC	4G	4	1,5	22	CF: Centering bars longitudinal
-35W0	=GEN -X7		10150928	Chainflex CF211.02.02.02	2x2	4	0,25	24	CF: Centering bars longitudinal HTL encoder
=F+CF -W15B0	=GEN -X7		10149963	Unitronic LiYCY (TP)	3X2X	6	0,25	22	CF: Liftmotor HTL sensor

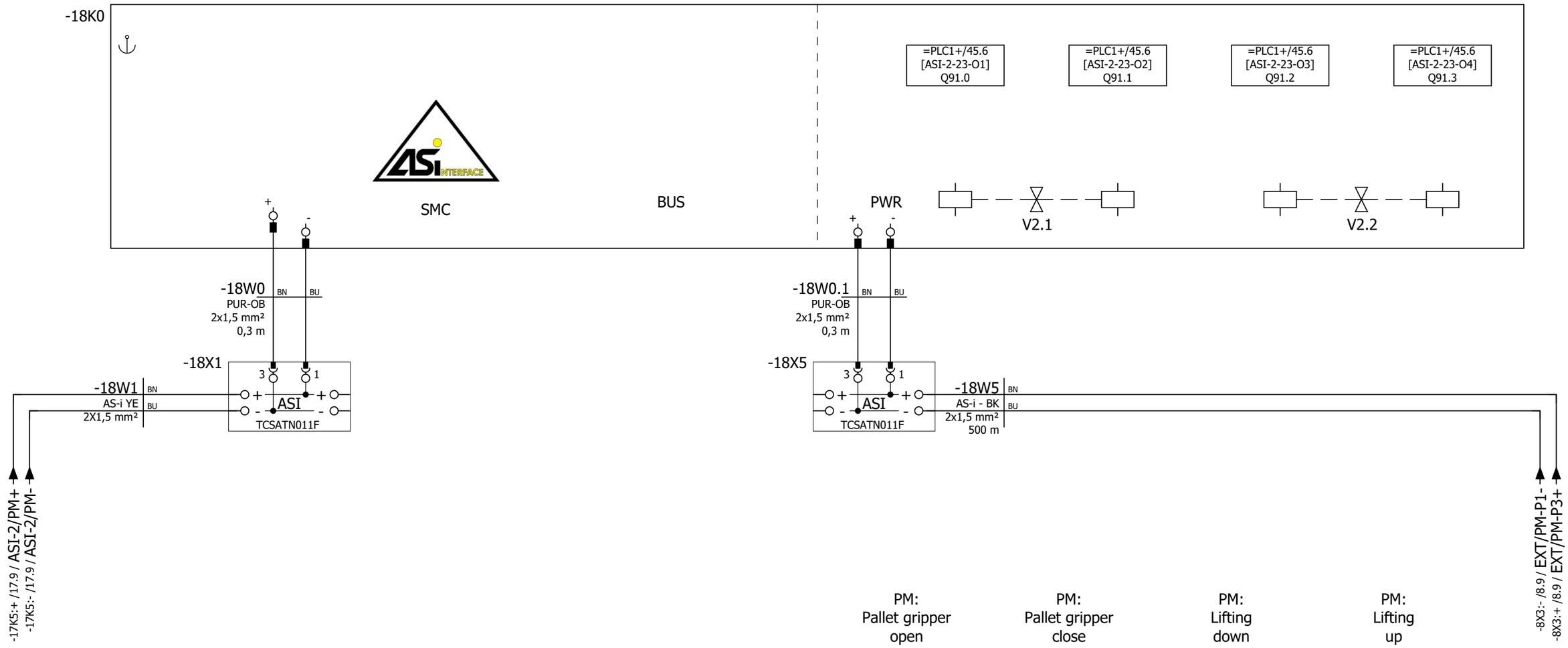

-6X0
IFM E70381
ASI
ASI
ASI
ASI
-6X5
IFM E70381
ASI
ASI
ASI
ASI
-6W00
AS-i Yellow
2x1,5 mm²
BN BU
=GEN+COP1-X6:11 =GEN+COP1/59.3 / ASI-2/PM+
=GEN+COP1-X6:8 =GEN+COP1/59.3 / ASI-2/PM-
-6W5
AS-i - BK
2x1,5 mm²
BN BU
=PT219-16K0:- =PT219/16.0 / ASI-2/PT219-
=PT219-16K0:+ =PT219/16.0 / ASI-2/PT219+
-16K0:+ /16.0 / ASI-2/PM-
-16K0:- /16.0 / ASI-2/PM+
PM:
AS-i distribution
PM:
AS-i distribution



Creator	Ferenc Baracsi	Commission	620300.11.2023	MSK COVERTECH GROUP	PM: Safety valve pallet magazine	= PM	+F	Page 8
Edited by	BaF	Type	MSK - Semitech			Revision		
Modification date	2023. 11. 22.							

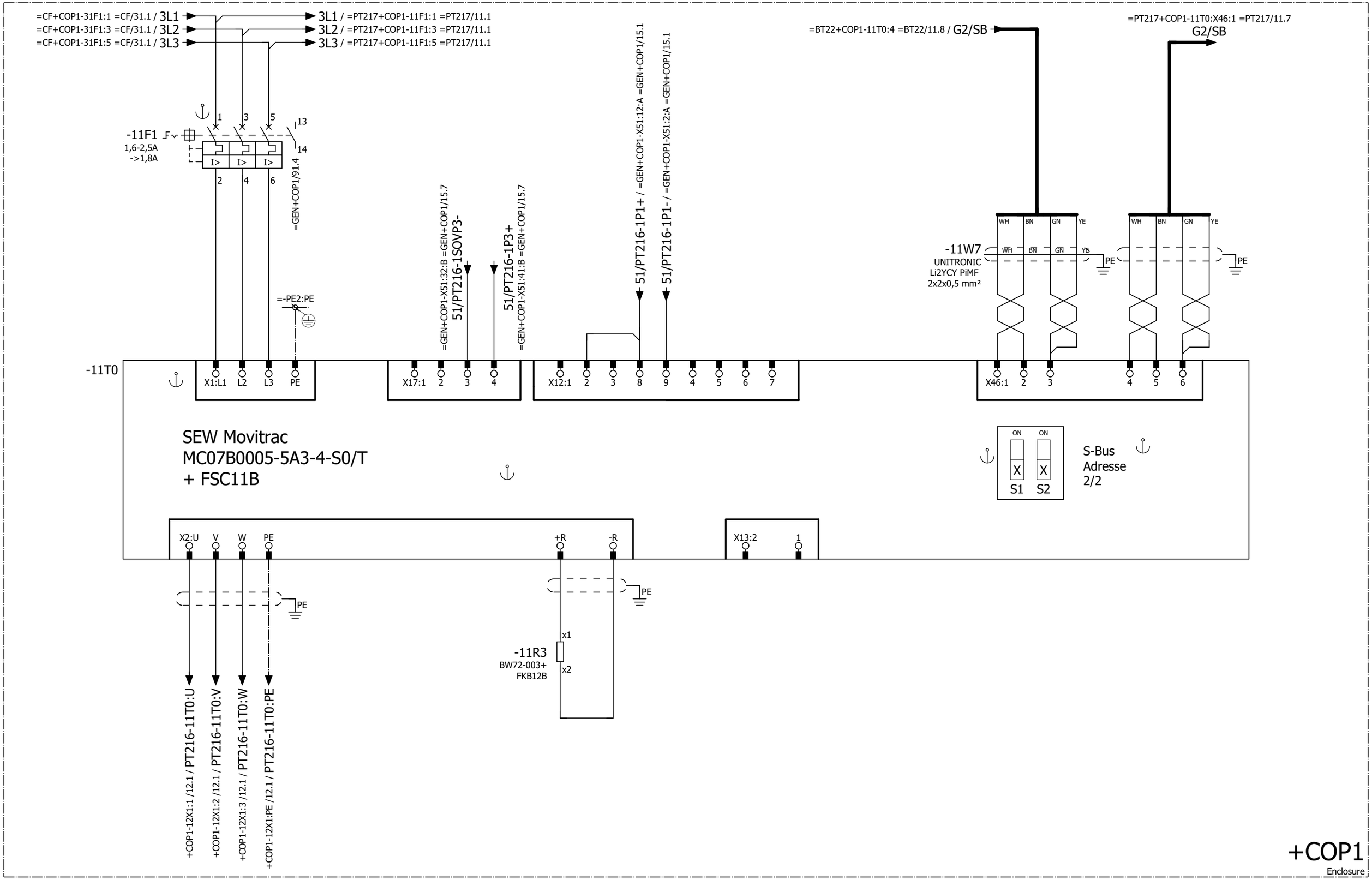

-16B1
WL280
-16B2
WL280
-16B5
MK5138
M8
-16B6
MK5138
M8
-16B7
MK5138
M8
-16B8
MK5138
M8
-16W1
PUR-OB/5m
4X0,34 mm²
5 m
-16W2
PUR-OB/5m
4X0,34 mm²
5 m
-16W5
PUR-OB/5m
3X0,25 mm²
5 m
-16W6
PUR-OB/5m
3X0,25 mm²
5 m
-16W7
PUR-OB/5m
3X0,25 mm²
5 m
-16W8
PUR-OB/5m
3X0,25 mm²
5 m
BN
BU
BK
PT216-16B1:1 / =PT216-16B1:1 =PT216/16.1
PT216-16B1:3 / =PT216-16B1:3 =PT216/16.1
PT216-16B1:4 / =PT216-16B1:4 =PT216/16.1
PT216-16B2:1 / =PT216-16B2:1 =PT216/16.2
PT216-16B2:3 / =PT216-16B2:3 =PT216/16.2
PT216-16B2:4 / =PT216-16B2:4 =PT216/16.2
-16K0
-16K5
=PLC1+/44.4
[ASI-2-20-I1]
I90.4
=PLC1+/44.4
[ASI-2-20-I2]
I90.5
=PLC1+/44.4
[ASI-2-20-I3]
I90.6
=PLC1+/44.4
[ASI-2-20-I4]
I90.7
=PLC1+/44.4
[ASI-2-21-I1]
I90.0
=PLC1+/44.4
[ASI-2-21-I2]
I90.1
=PLC1+/44.4
[ASI-2-21-I3]
I90.2
=PLC1+/44.4
[ASI-2-21-I4]
I90.3
ASI
IFM AC5205
-16W0
AS-i Yellow
2X1,5 mm²
1 m
-6X5:- /6.9 / ASI-2/PM-
-6X5:+ /6.9 / ASI-2/PM+
-17K0:- /17.0 / ASI-2/PM-
-17K0:+ /17.0 / ASI-2/PM+
PM:
Empty
PM:
Stop pallet
PT216:
Roller conveyor
occupied
PT216:
Shuttle car
in position
PM:
Pallet gripper
-1-
open
PM:
Pallet gripper
-2-
open
PM:
Pallet gripper
-1-
close
PM:
Pallet gripper
-2-
close


-17B1
M18
-17B2
M18
-17B3
M18
-17W1
PUR-OB/10m
4X0,34 mm²
10 m
-17W2
PUR-OB/10m
4X0,34 mm²
10 m
-17W3
PUR-OB/10m
4X0,34 mm²
10 m
BN
BU
BK
PM-8B5:1 / -8B5:1 /8.5
PM-8B5:2 / -8B5:2 /8.5
PM-8B1:1 / 1 /8.2
PM-8B1:4 / 2 /8.2
PM-8B3:1 / 1 /8.4
PM-8B3:4 / 2 /8.4
-17K0
=PLC1+/45.4
[ASI-2-22-I1]
I91.4
=PLC1+/45.4
[ASI-2-22-I2]
I91.5
=PLC1+/45.4
[ASI-2-22-I3]
I91.6
=PLC1+/45.4
[ASI-2-22-I4]
I91.7
ASI
IFM AC5205
-17K5
=PLC1+/44.4
[ASI-2-19-I1]
I89.0
=PLC1+/44.4
[ASI-2-19-I2]
I89.1
=PLC1+/44.4
[ASI-2-19-I3]
I89.2
=PLC1+/44.4
[ASI-2-19-I4]
I89.3
ASI
IFM AC5205
-16K5:+ /16.9 / ASI-2/PM+
-16K5:- /16.9 / ASI-2/PM-
-18X1:- /18.0 / ASI-2/PM-
-18X1:+ /18.0 / ASI-2/PM+
PM:
Pallet gripper
at top
PM:
Pallet gripper
at middle
PM:
Pallet gripper
down
PM:
Air pressure
OK
PM:
EDM Safety valve
- 1 -
PM:
EDM Safety valve
- 2 -
PM:
free
PM:
free

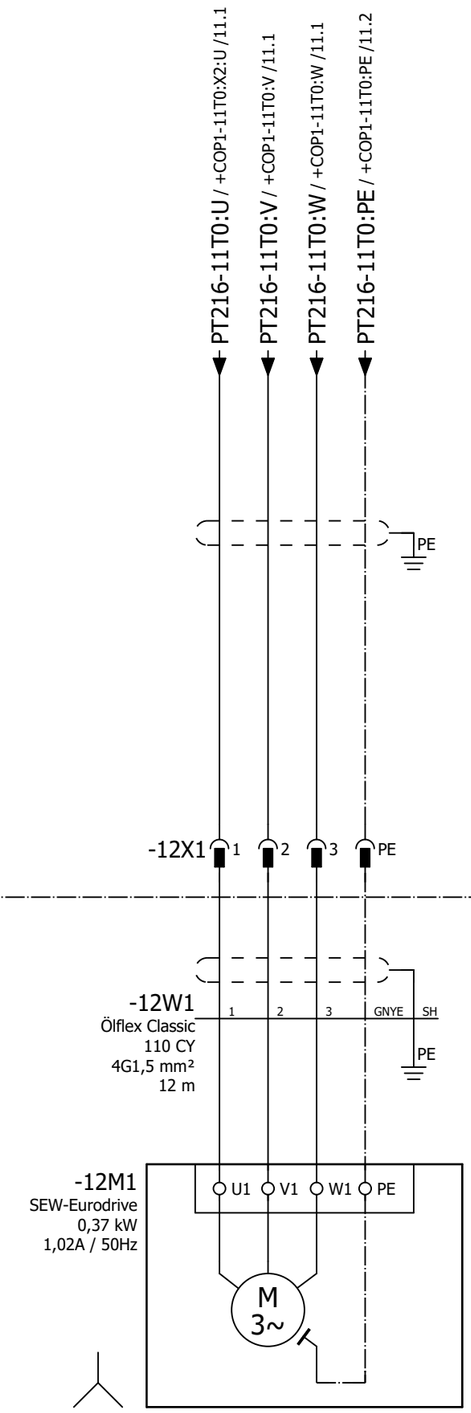

-18K0
SMC
BUS
PWR
=PLC1+/45.6
[ASI-2-23-O1]
Q91.0
=PLC1+/45.6
[ASI-2-23-O2]
Q91.1
=PLC1+/45.6
[ASI-2-23-O3]
Q91.2
=PLC1+/45.6
[ASI-2-23-O4]
Q91.3
V2.1
V2.2
-18W0
BN
BU
PUR-OB
2x1,5 mm²
0,3 m
-18W0.1
PUR-OB
2x1,5 mm²
0,3 m
-18X1
-18X5
ASI
TCSATN011F
-18W1
AS-i YE
2X1,5 mm²
-18W5
AS-i - BK
2x1,5 mm²
500 m
-17K5:+ /17.9 / ASI-2/PM+
-17K5:- /17.9 / ASI-2/PM-
-8X3:- /8.9 / EXT/PM-P1-
-8X3:+ /8.9 / EXT/PM-P3+
PM:
Pallet gripper
open
PM:
Pallet gripper
close
PM:
Lifting
down
PM:
Lifting
up

Cable overview

Cable name	Source	Target	MSK Part	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text
-8W1.1		-8B1	00143360	PUR-OB/10m	4X	3	0,34	10	PM: EDM Safety valve - 1 -
			00150353						
-8W3.1		-8B3	00143360	PUR-OB/10m	4X	3	0,34	10	PM: EDM Safety valve - 2 -
			00150353						
-16W1	-16B1		00143359	PUR-OB/5m	4X	3	0,34	5	PM: Empty
			00150353						
-16W2	-16B2		00143359	PUR-OB/5m	4X	3	0,34	5	PM: Stop pallet
			00150353						
-16W5	-16B5		10150604	PUR-OB/5m	3X	3	0,25	5	PM: Pallet gripper -1- open
			00150353						
-16W6	-16B6		10150604	PUR-OB/5m	3X	3	0,25	5	PM: Pallet gripper -2- open
			00150353						
-16W7	-16B7		10150604	PUR-OB/5m	3X	3	0,25	5	PM: Pallet gripper -1- close
			00150353						
-16W8	-16B8		10150604	PUR-OB/5m	3X	3	0,25	5	PM: Pallet gripper -2- close
			00150353						
-17W1	-17B1		10150604	PUR-OB/5m	3X	3	0,25	5	PM: Pallet gripper at top
			00150353						
-17W2	-17B2		10150604	PUR-OB/5m	3X	3	0,25	5	PM: Pallet gripper at middle
			00150353						
-17W3	-17B3		10150604	PUR-OB/5m	3X	3	0,25	5	PM: Pallet gripper down
			00150353						
-18W0			00166580	PUR-OB	2x	2	1,5	0,3	
-18W0.1			00166580	PUR-OB	2x	2	1,5	0,3	



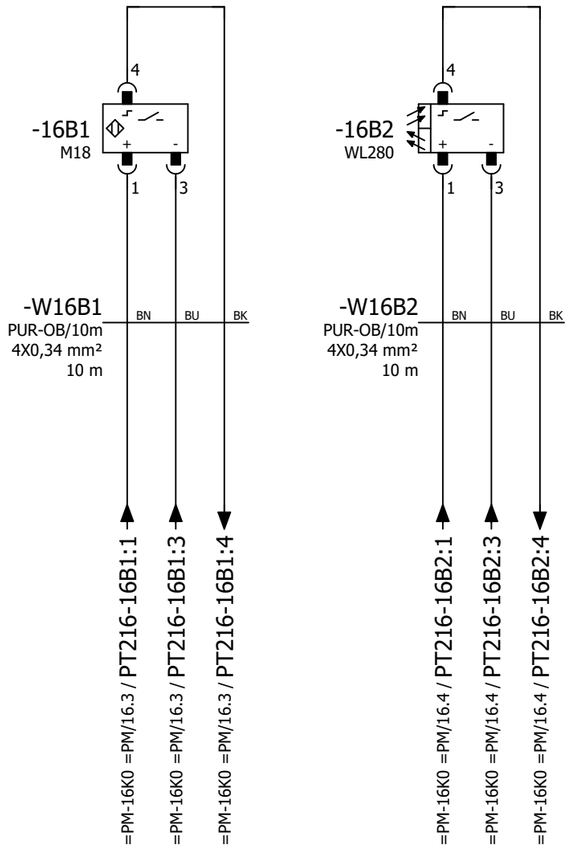
Previous page	=PM+CBL/400						Next page 12
Creator	Ferenc Baracsi	Commission	620300.11.2023	PT216: Roller conveyor	= PT216	+F	Page 11
Edited by	BaF	Type	MSK - Semitech		Revision		
Modification date	2023. 10. 11.						



+COP1
Enclosure

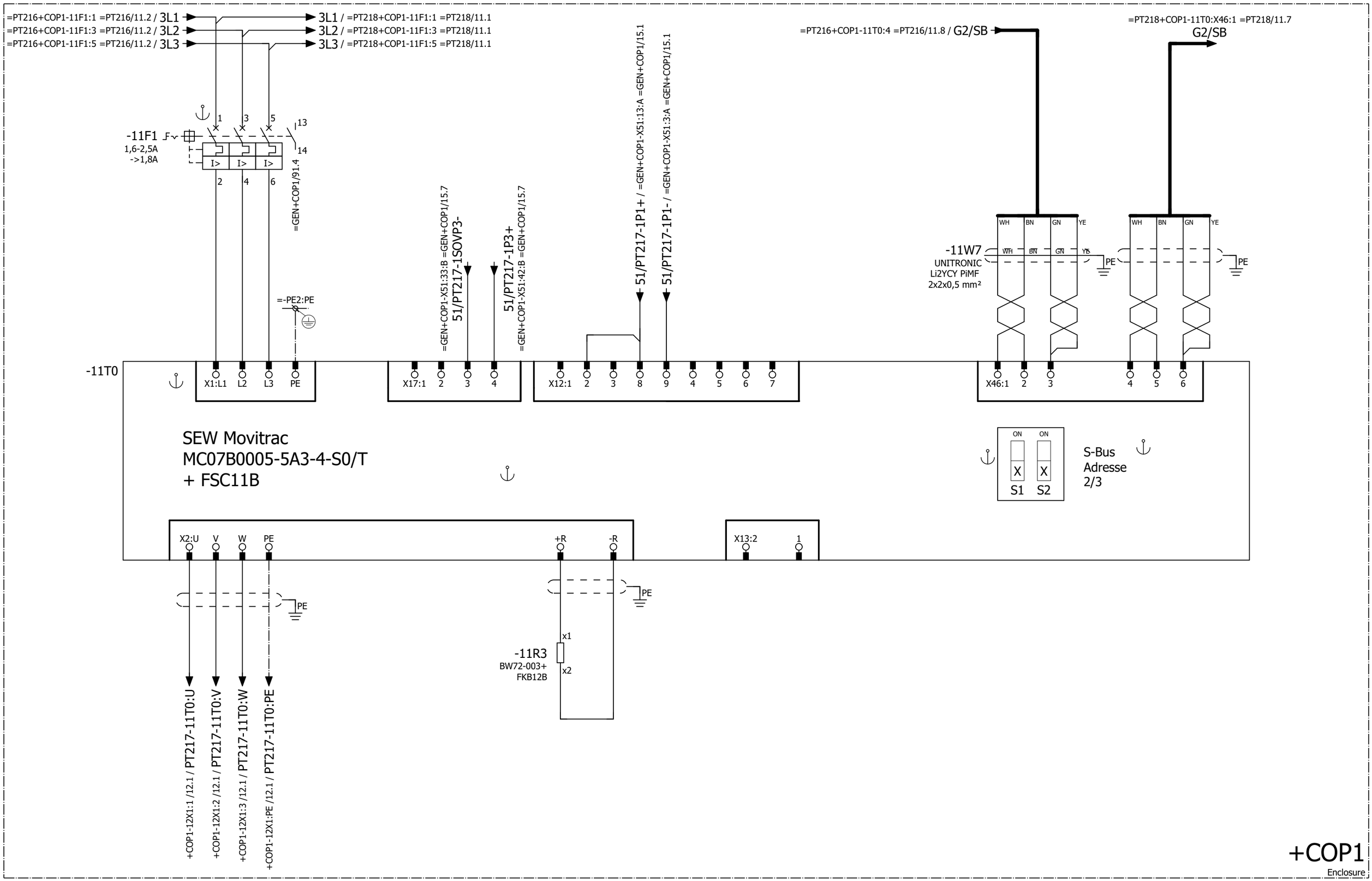
PT216:
Roller conveyor

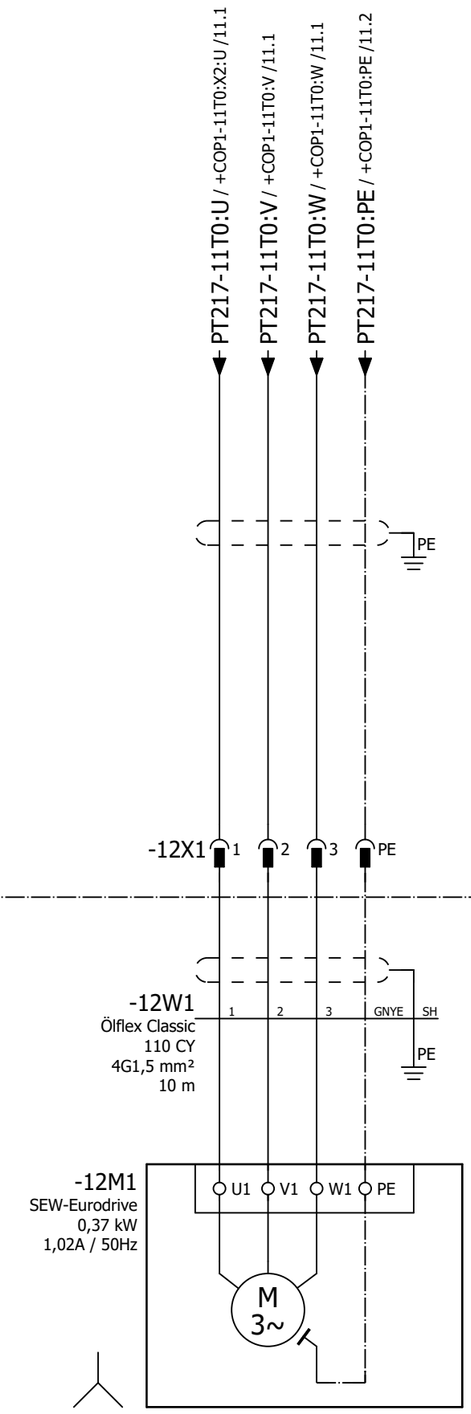
The reflector on the Shuttle car



PT216:
Roller conveyor
occupied

PT216:
Shuttle car
in position

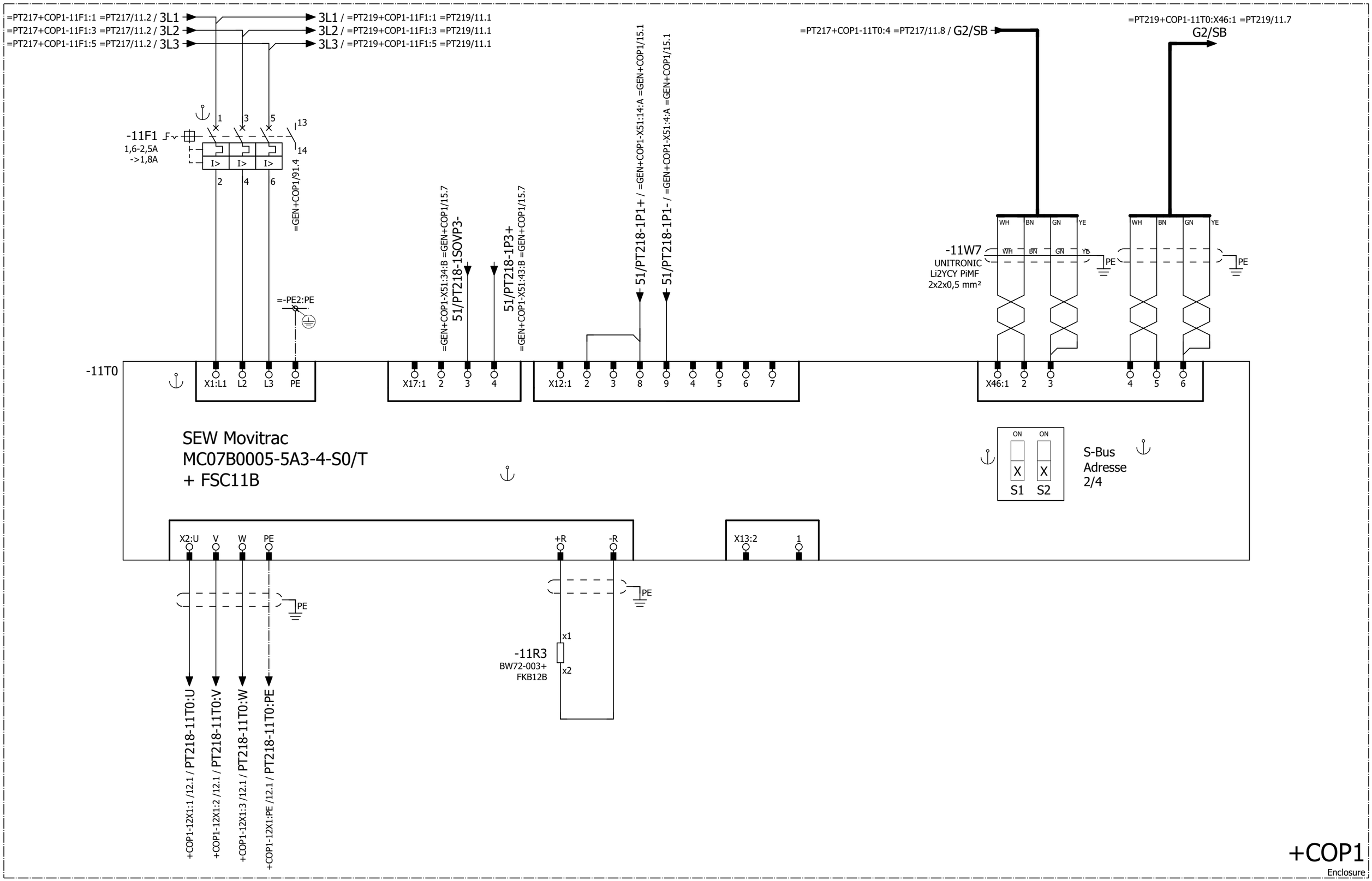

=PT216+COP1-11F1:1 =PT216/11.2 / 3L1
=PT216+COP1-11F1:3 =PT216/11.2 / 3L2
=PT216+COP1-11F1:5 =PT216/11.2 / 3L3
3L1 / =PT218+COP1-11F1:1 =PT218/11.1
3L2 / =PT218+COP1-11F1:3 =PT218/11.1
3L3 / =PT218+COP1-11F1:5 =PT218/11.1
=PT216+COP1-11T0:4 =PT216/11.8 / G2/SB
=PT218+COP1-11T0:X46:1 =PT218/11.7
G2/SB
-11F1
1,6-2,5A
->1,8A
I>
=GEN+COP1/91.4
=-PE2:PE
=GEN+COP1-X51:33:B =GEN+COP1/15.7
51/PT217-1SOVP3-
51/PT217-1P3+
=GEN+COP1-X51:42:B =GEN+COP1/15.7
51/PT217-1P1+ / =GEN+COP1-X51:13:A =GEN+COP1/15.1
51/PT217-1P1- / =GEN+COP1-X51:3:A =GEN+COP1/15.1
-11W7
UNITRONIC
Li2YCY PiMF
2x2x0,5 mm²
WH
BN
GN
YE
PE
-11T0
X1:L1
L2
L3
PE
X17:1
X12:1
X46:1
SEW Movitrac
MC07B0005-5A3-4-S0/T
+ FSC11B
ON
X
S1
S2
S-Bus
Adresse
2/3
X2:U
V
W
+R
-R
X13:2
-11R3
BW72-003+
FKB12B
x1
x2
+COP1-12X1:1 /12.1 / PT217-11T0:U
+COP1-12X1:2 /12.1 / PT217-11T0:V
+COP1-12X1:3 /12.1 / PT217-11T0:W
+COP1-12X1:PE /12.1 / PT217-11T0:PE
+COP1
Enclosure

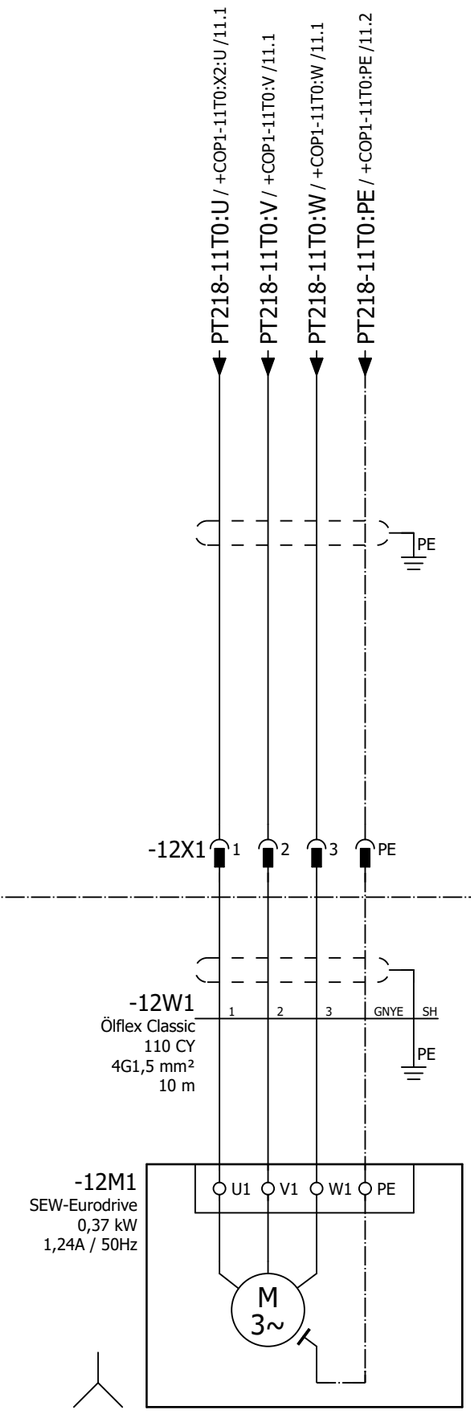


PT217:
Roller conveyor

+COP1
Enclosure

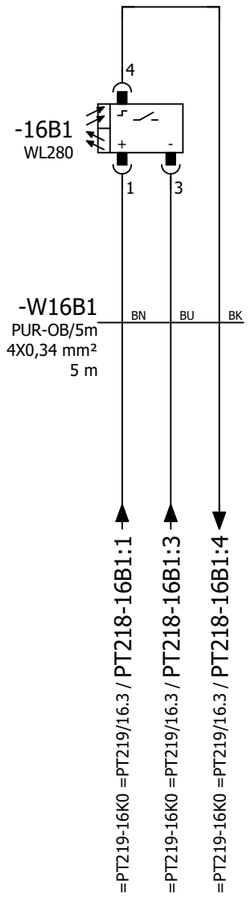
0	1	2	3	4	5	6	7	8	9


=PT217+COP1-11F1:1 =PT217/11.2 / 3L1
=PT217+COP1-11F1:3 =PT217/11.2 / 3L2
=PT217+COP1-11F1:5 =PT217/11.2 / 3L5
3L1 / =PT219+COP1-11F1:1 =PT219/11.1
3L2 / =PT219+COP1-11F1:3 =PT219/11.1
3L3 / =PT219+COP1-11F1:5 =PT219/11.1
-11F1
1,6-2,5A
->1,8A
I>
=GEN+COP1/91.4
=-PE2:PE
=GEN+COP1-X51:34:B =GEN+COP1/15.7
51/PT218-1SOVP3-
51/PT218-1P3+
=GEN+COP1-X51:43:B =GEN+COP1/15.7
51/PT218-1P1+ / =GEN+COP1-X51:14:A =GEN+COP1/15.1
51/PT218-1P1- / =GEN+COP1-X51:4:A =GEN+COP1/15.1
=PT217+COP1-11T0:4 =PT217/11.8 / G2/SB
=PT219+COP1-11T0:X46:1 =PT219/11.7
G2/SB
-11W7
UNITRONIC
Li2YCY PiMF
2x2x0,5 mm²
WH
BN
GN
YE
PE
-11T0
X1:L1
L2
L3
PE
X17:1
X12:1
X46:1
SEW Movitrac
MC07B0005-5A3-4-S0/T
+ FSC11B
ON
S1
S2
S-Bus
Adresse
2/4
X2:U
V
W
+R
-R
X13:2
-11R3
BW72-003+
FKB12B
x1
x2
+COP1-12X1:1 /12.1 / PT218-11T0:U
+COP1-12X1:2 /12.1 / PT218-11T0:V
+COP1-12X1:3 /12.1 / PT218-11T0:W
+COP1-12X1:PE /12.1 / PT218-11T0:PE
+COP1
Enclosure

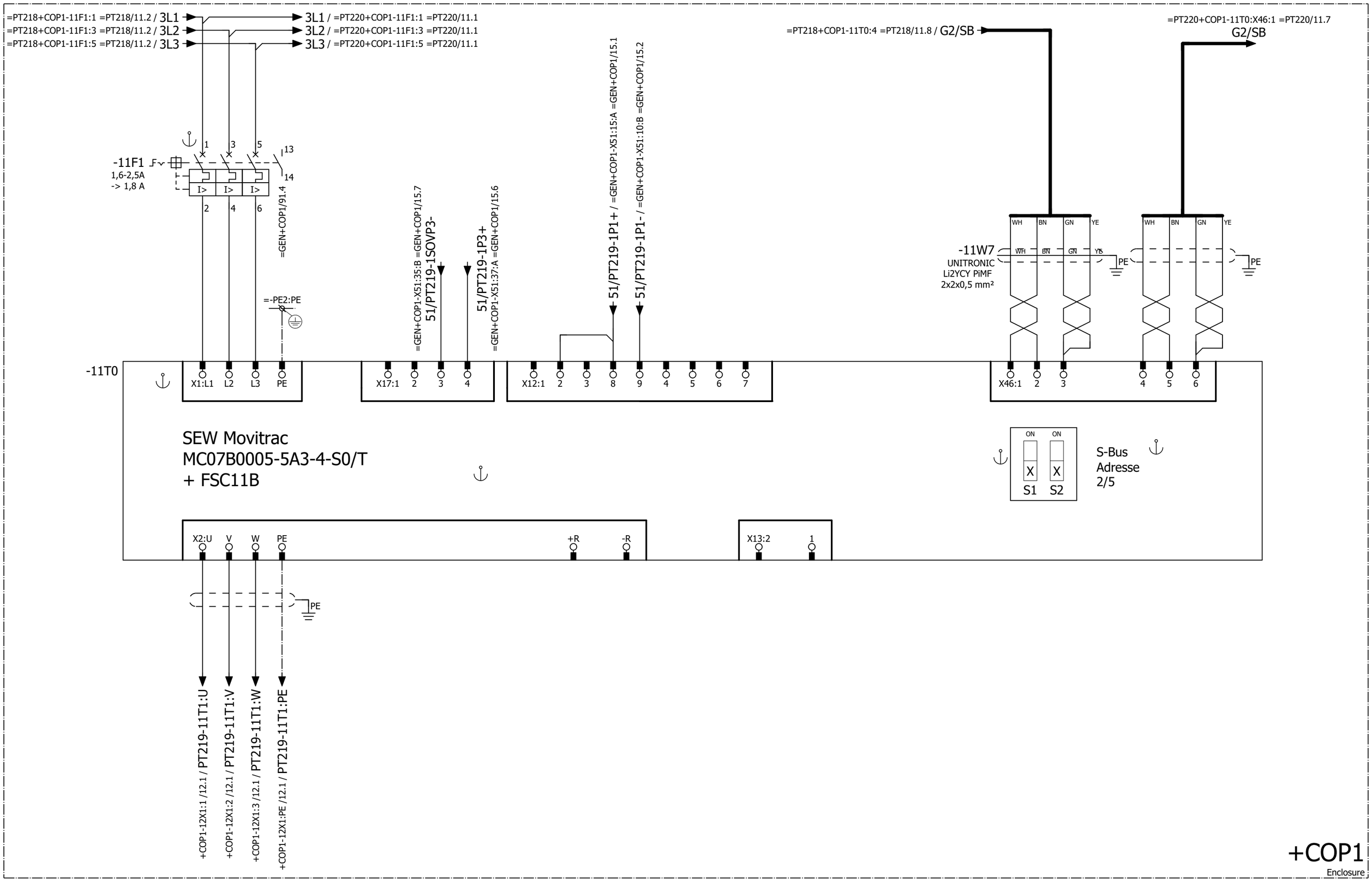


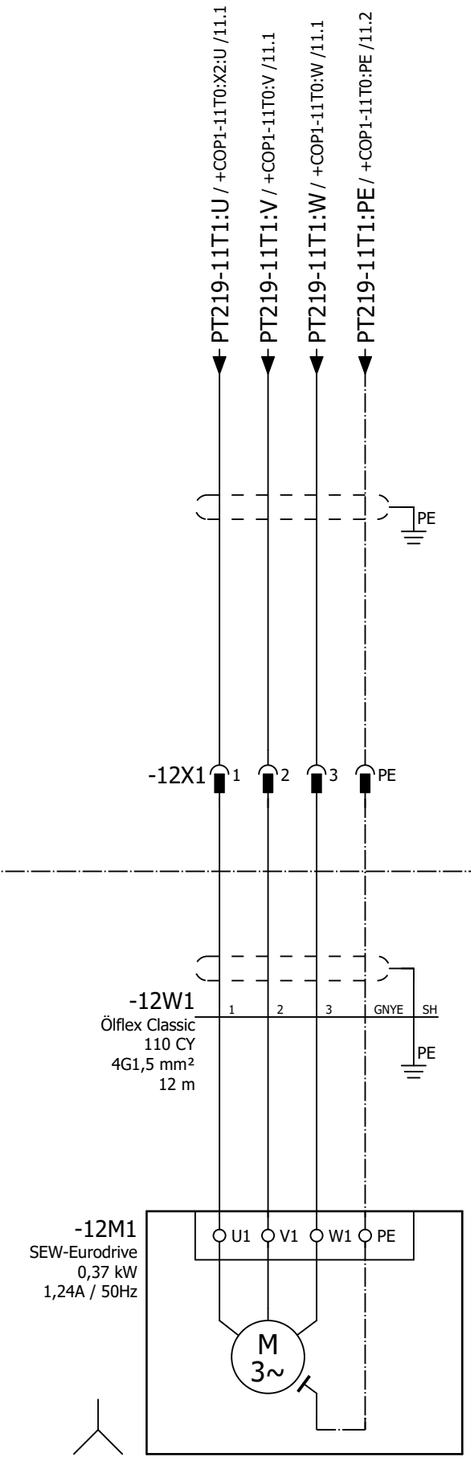
+COP1
Enclosure

PT218:
Roller conveyor

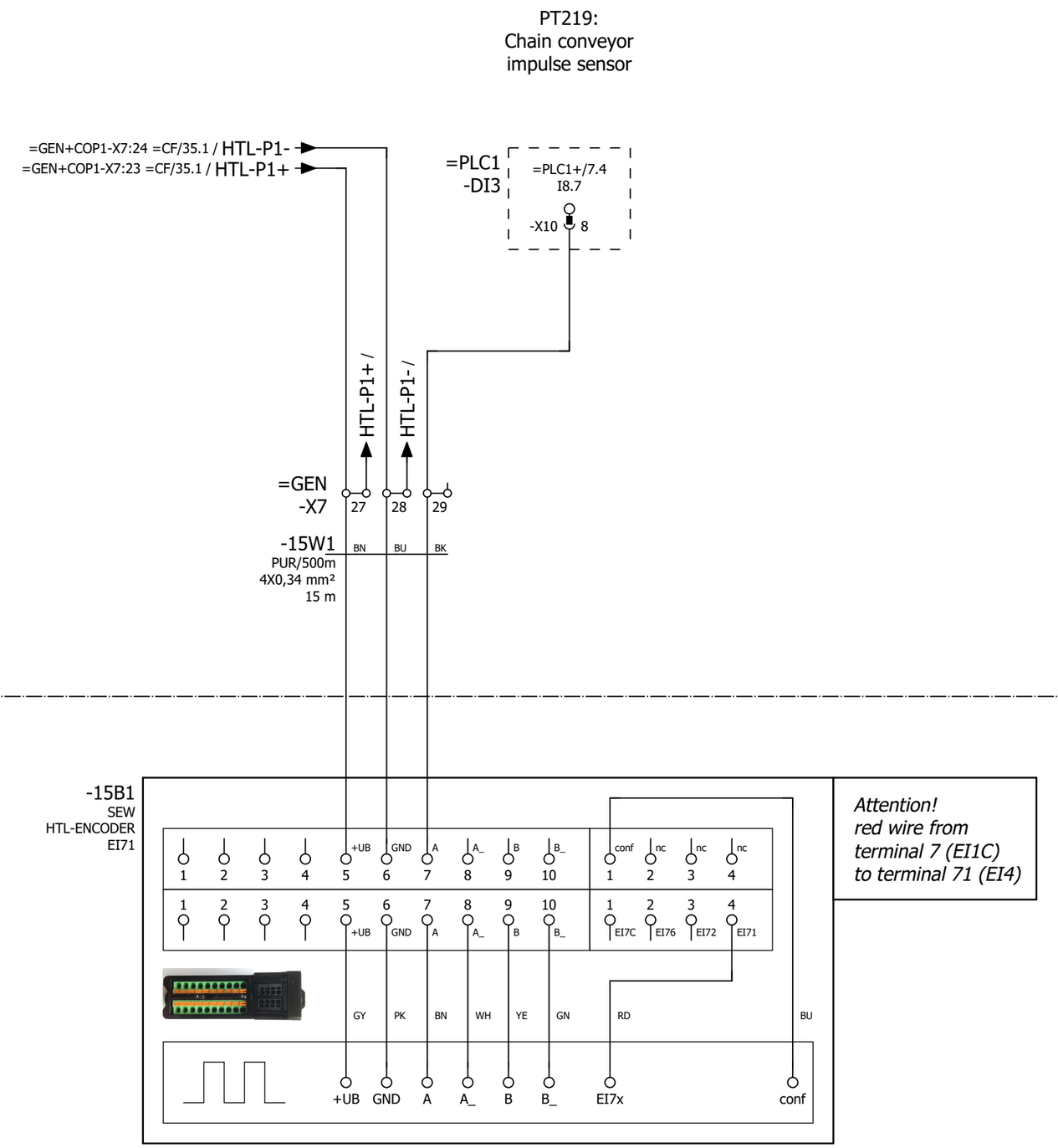


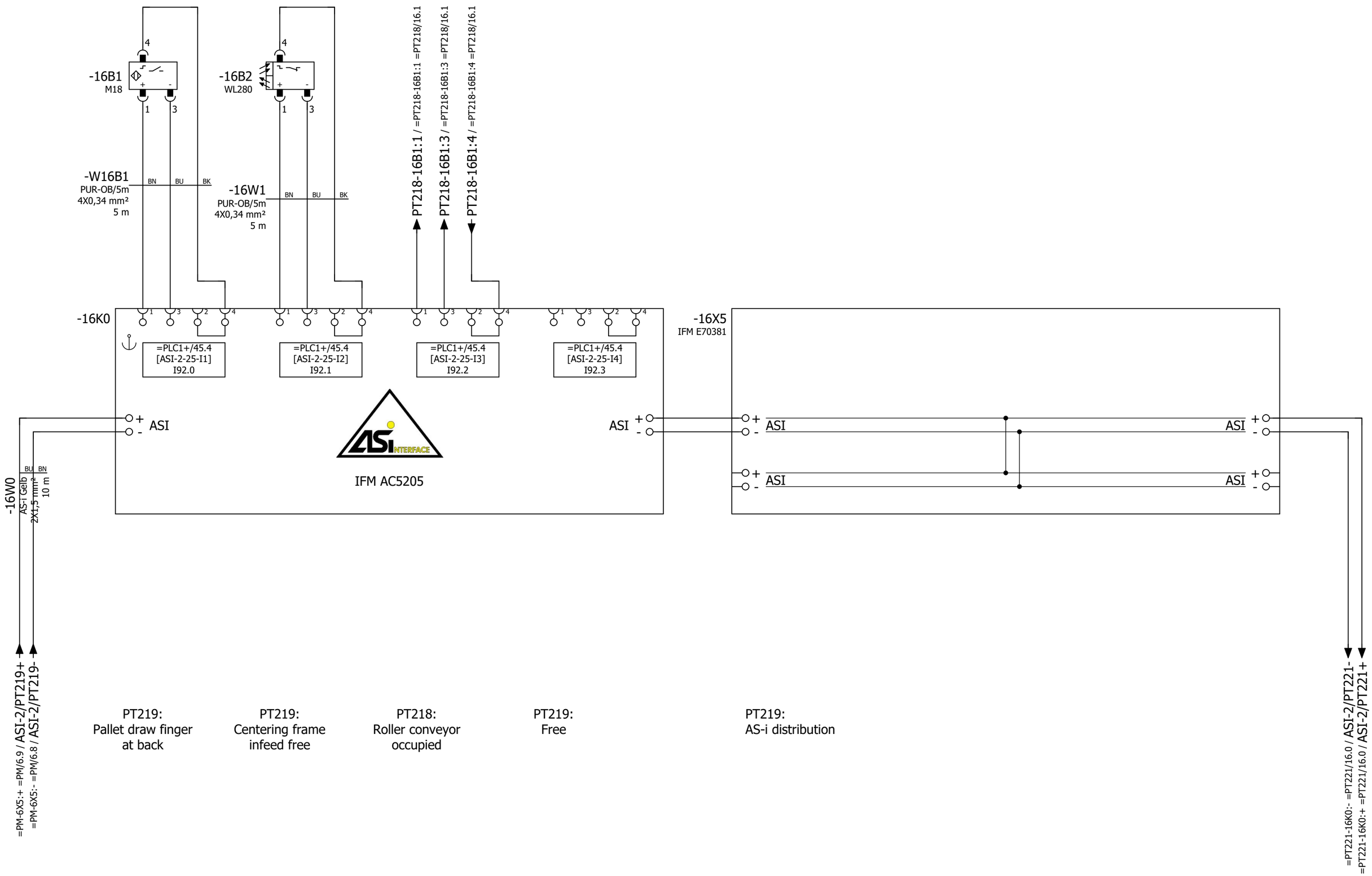
PT218:
Roller conveyor
occupied


=PT218+COP1-11F1:1 =PT218/11.2 / 3L1
=PT218+COP1-11F1:3 =PT218/11.2 / 3L2
=PT218+COP1-11F1:5 =PT218/11.2 / 3L3
3L1 / =PT220+COP1-11F1:1 =PT220/11.1
3L2 / =PT220+COP1-11F1:3 =PT220/11.1
3L3 / =PT220+COP1-11F1:5 =PT220/11.1
=PT218+COP1-11T0:4 =PT218/11.8 / G2/SB
=PT220+COP1-11T0:X46:1 =PT220/11.7
G2/SB
-11F1
1,6-2,5A
-> 1,8 A
=GEN+COP1/91.4
=-PE2:PE
=GEN+COP1-X51:35:B =GEN+COP1/15.7
51/PT219-1SOVP3-
51/PT219-1P3+
=GEN+COP1-X51:37:A =GEN+COP1/15.6
51/PT219-1P1+ / =GEN+COP1-X51:15:A =GEN+COP1/15.1
51/PT219-1P1- / =GEN+COP1-X51:10:B =GEN+COP1/15.2
-11W7
UNITRONIC
Li2YCY PiMF
2x2x0,5 mm²
WH BN GN YE
PE
-11T0
X1:L1 L2 L3 PE
X17:1 2 3 4
X12:1 2 3 8 9 4 5 6 7
X46:1 2 3 4 5 6
SEW Movitrac
MC07B0005-5A3-4-S0/T
+ FSC11B
ON ON
X X
S1 S2
S-Bus
Adresse
2/5
X2:U V W PE
+R -R
X13:2 1
PE
+COP1-12X1:1 /12.1 / PT219-11T1:U
+COP1-12X1:2 /12.1 / PT219-11T1:V
+COP1-12X1:3 /12.1 / PT219-11T1:W
+COP1-12X1:PE /12.1 / PT219-11T1:PE
+COP1
Enclosure



Creator	Ferenc Baracsi	Commission	620300.11.2023	MSK COVERTECH GROUP	PT219: Chain conveyor	= PT219	+F	Page 12
Edited by	BaF	Type	MSK - Semitech			Revision		
Modification date	2023. 10. 11.							


PT219:
Chain conveyor
impulse sensor
=GEN+COP1-X7:24 =CF/35.1 / HTL-P1-
=GEN+COP1-X7:23 =CF/35.1 / HTL-P1+
=PLC1
-DI3
=PLC1+/7.4
I8.7
-X10
8
HTL-P1+ /
HTL-P1- /
=GEN
-X7
27
28
29
-15W1
BN
BU
BK
PUR/500m
4X0,34 mm²
15 m
+COP1
Enclosure
-15B1
SEW
HTL-ENCODER
EI71
+UB
GND
A
A_
B
B_
conf
nc
EI7C
EI76
EI72
EI71
GY
PK
BN
WH
YE
GN
RD
BU
EI7x
Attention!
red wire from
terminal 7 (EI1C)
to terminal 71 (EI4)
PT219:
Chain conveyor
impulse sensor



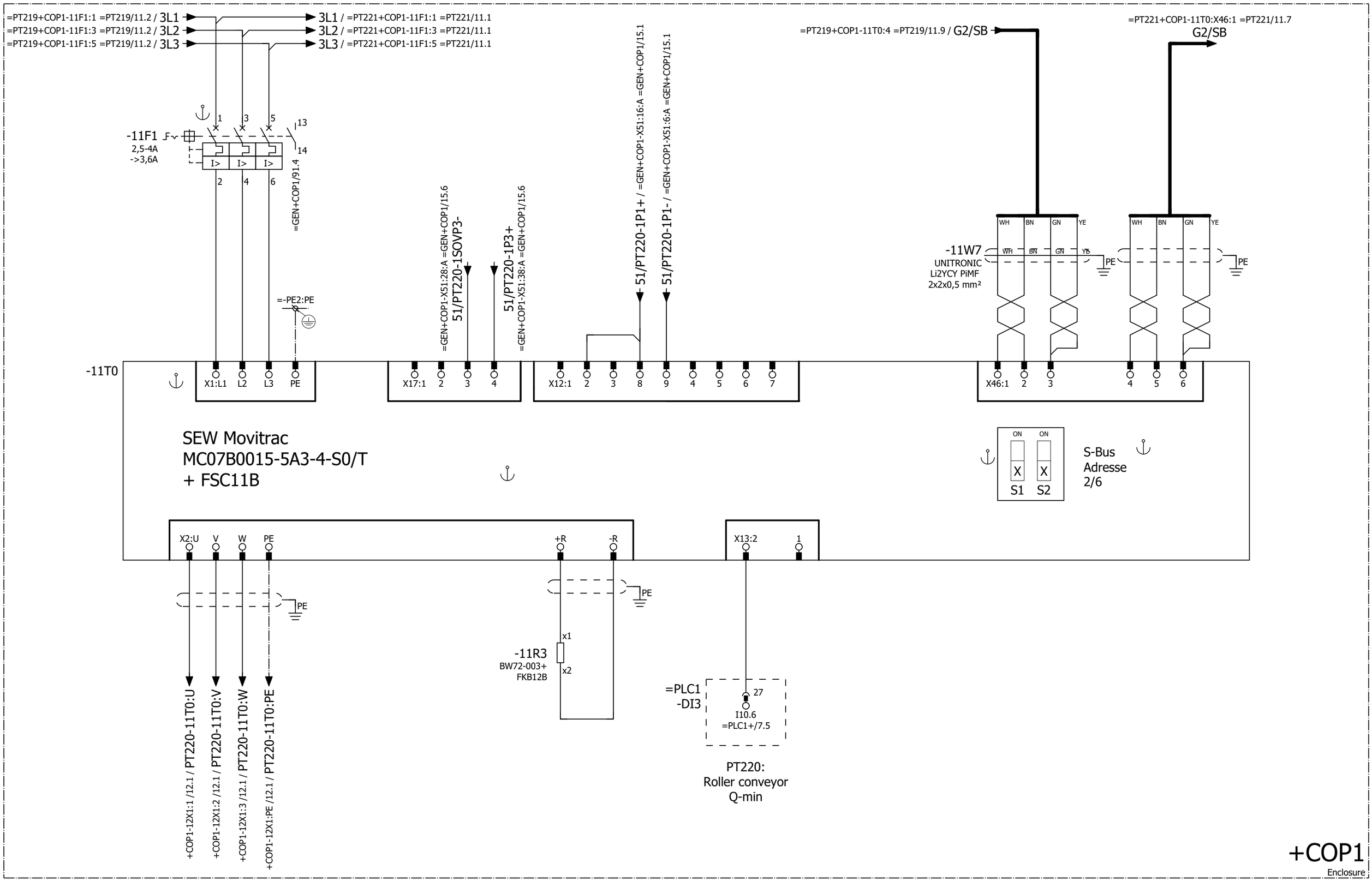
PT219:
Pallet draw finger
at back

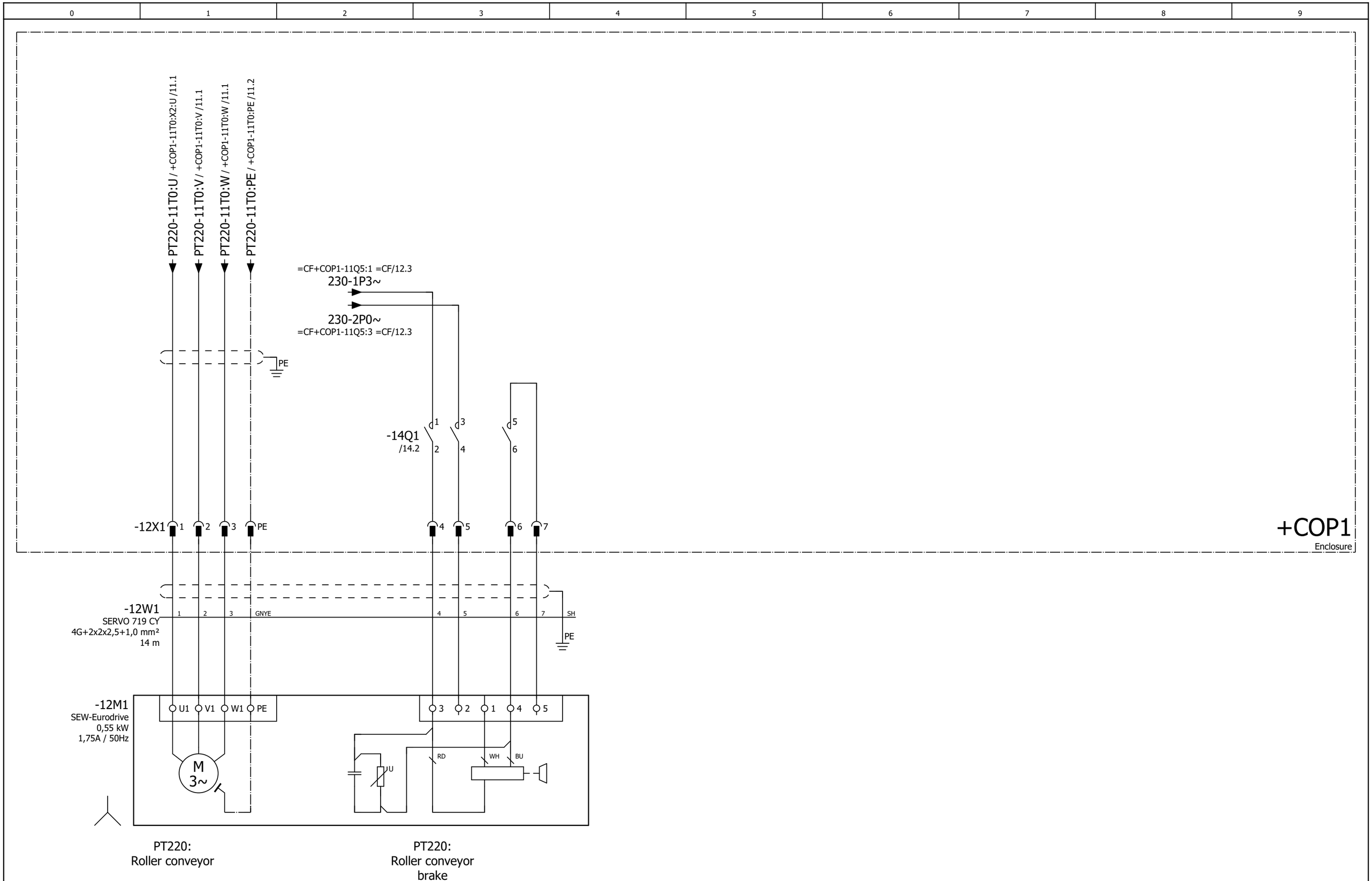
PT219:
Centering frame
infeed free

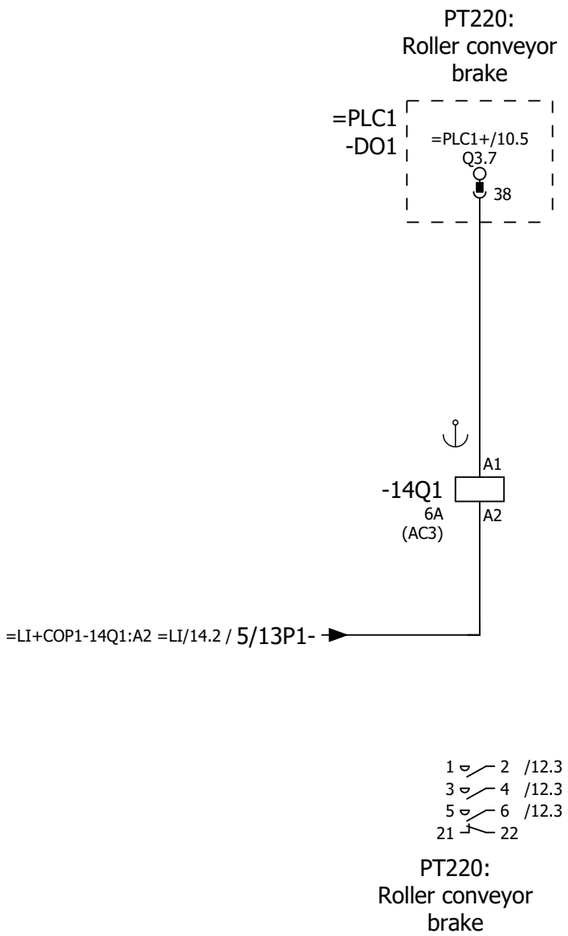
PT218:
Roller conveyor
occupied

PT219:
Free

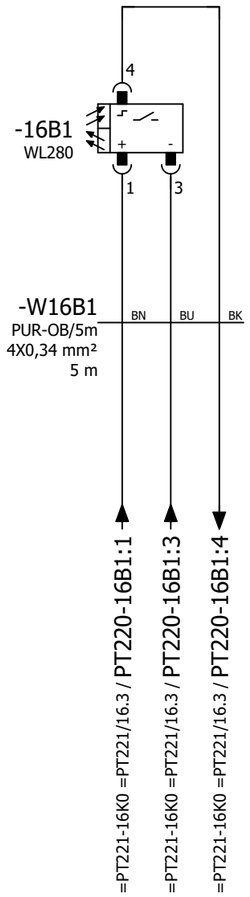
PT219:
AS-i distribution


=PT219+COP1-11F1:1 =PT219/11.2 / 3L1
=PT219+COP1-11F1:3 =PT219/11.2 / 3L2
=PT219+COP1-11F1:5 =PT219/11.2 / 3L5
3L1 / =PT221+COP1-11F1:1 =PT221/11.1
3L2 / =PT221+COP1-11F1:3 =PT221/11.1
3L3 / =PT221+COP1-11F1:5 =PT221/11.1
=PT219+COP1-11T0:4 =PT219/11.9 / G2/SB
=PT221+COP1-11T0:X46:1 =PT221/11.7
G2/SB
-11F1
2,5-4A
->3,6A
I>
=GEN+COP1/91.4
=-PE2:PE
=GEN+COP1-X51:28:A =GEN+COP1/15.6
51/PT220-1SOVP3-
51/PT220-1P3+
=GEN+COP1-X51:38:A =GEN+COP1/15.6
51/PT220-1P1+ / =GEN+COP1-X51:16:A =GEN+COP1/15.1
51/PT220-1P1- / =GEN+COP1-X51:6:A =GEN+COP1/15.1
-11W7
UNITRONIC
Li2YCY PiMF
2x2x0,5 mm²
WH BN GN YE
PE
-11T0
X1:L1 L2 L3 PE
X17:1 2 3 4
X12:1 2 3 8 9 4 5 6 7
X46:1 2 3 4 5 6
SEW Movitrac
MC07B0015-5A3-4-S0/T
+ FSC11B
ON ON
X X
S1 S2
S-Bus
Adresse
2/6
X2:U V W PE
+R -R
X13:2 1
-11R3
BW72-003+
FKB12B
x1
x2
=PLC1
-DI3
27
I10.6
=PLC1+/7.5
PT220:
Roller conveyor
Q-min
+COP1-12X1:1 /12.1 / PT220-11T0:U
+COP1-12X1:2 /12.1 / PT220-11T0:V
+COP1-12X1:3 /12.1 / PT220-11T0:W
+COP1-12X1:PE /12.1 / PT220-11T0:PE
+COP1
Enclosure

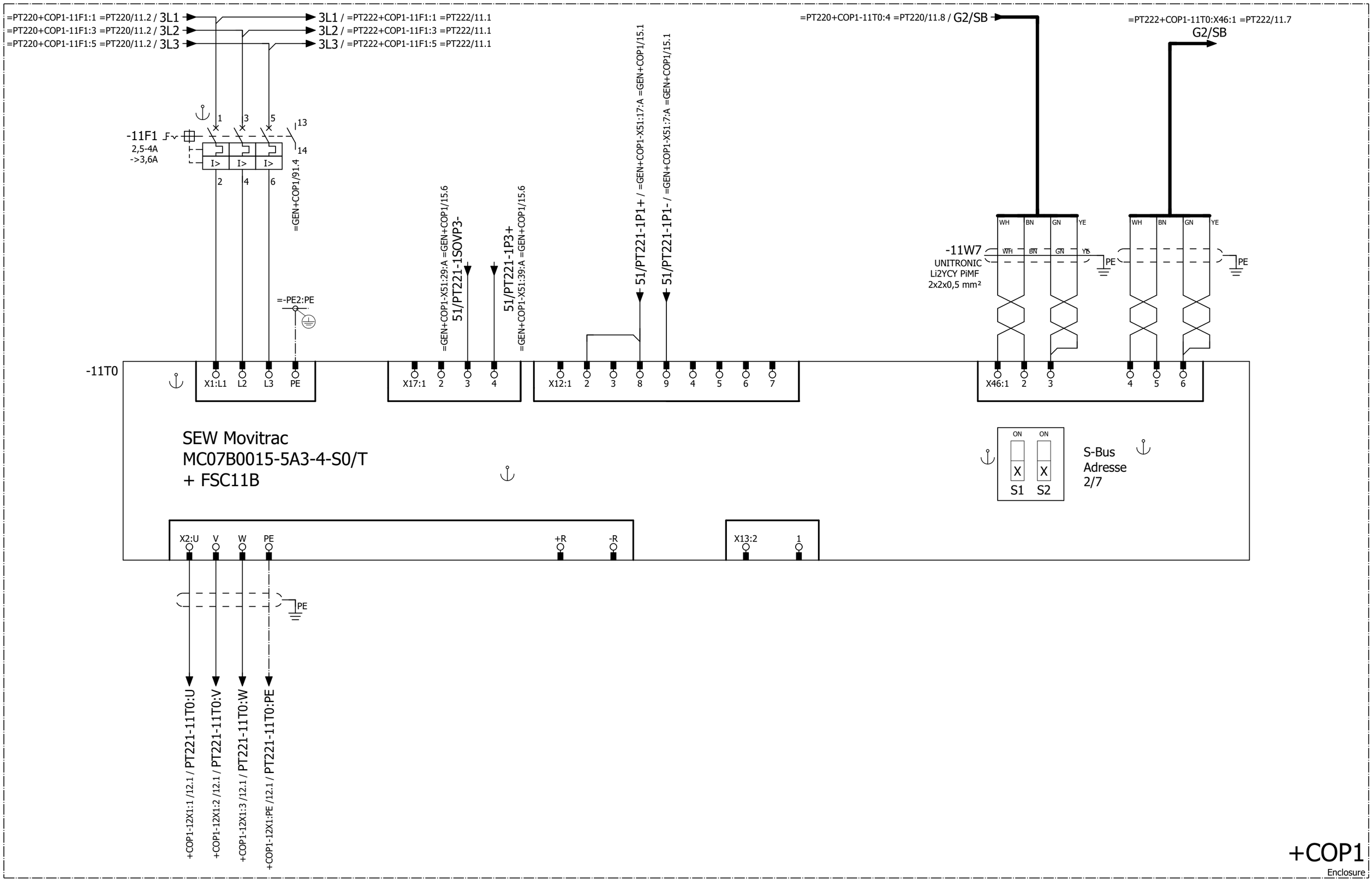

PT220-11T0:U / +COP1-11T0:X2:U /11.1
PT220-11T0:V / +COP1-11T0:V /11.1
PT220-11T0:W / +COP1-11T0:W /11.1
PT220-11T0:PE / +COP1-11T0:PE /11.2
=CF+COP1-11Q5:1 =CF/12.3
230-1P3~
230-2P0~
=CF+COP1-11Q5:3 =CF/12.3
PE
-14Q1
/14.2
-12X1
+COP1
Enclosure
-12W1
SERVO 719 CY
4G+2x2x2,5+1,0 mm²
14 m
GNYE
SH
-12M1
SEW-Eurodrive
0,55 kW
1,75A / 50Hz
U1
V1
W1
M
3~
U
RD
WH
BU
PT220:
Roller conveyor
PT220:
Roller conveyor
brake


PT220:
Roller conveyor
brake
=PLC1
-DO1
=PLC1+/10.5
Q3.7
38
A1
-14Q1
6A
(AC3)
A2
=LI+COP1-14Q1:A2 =LI/14.2 / 5/13P1-
1 2 /12.3
3 4 /12.3
5 6 /12.3
21 22
PT220:
Roller conveyor
brake

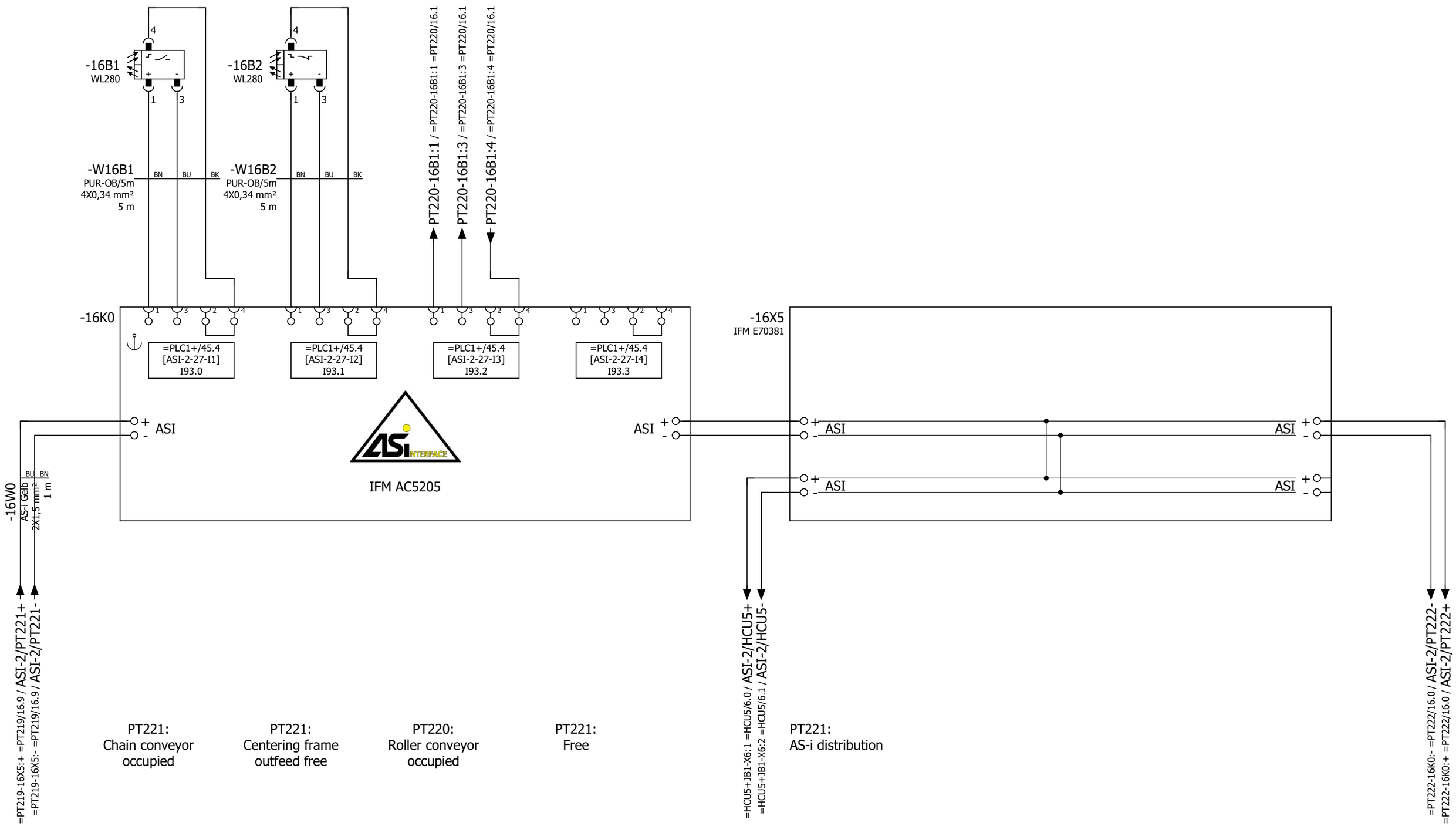
+COP1

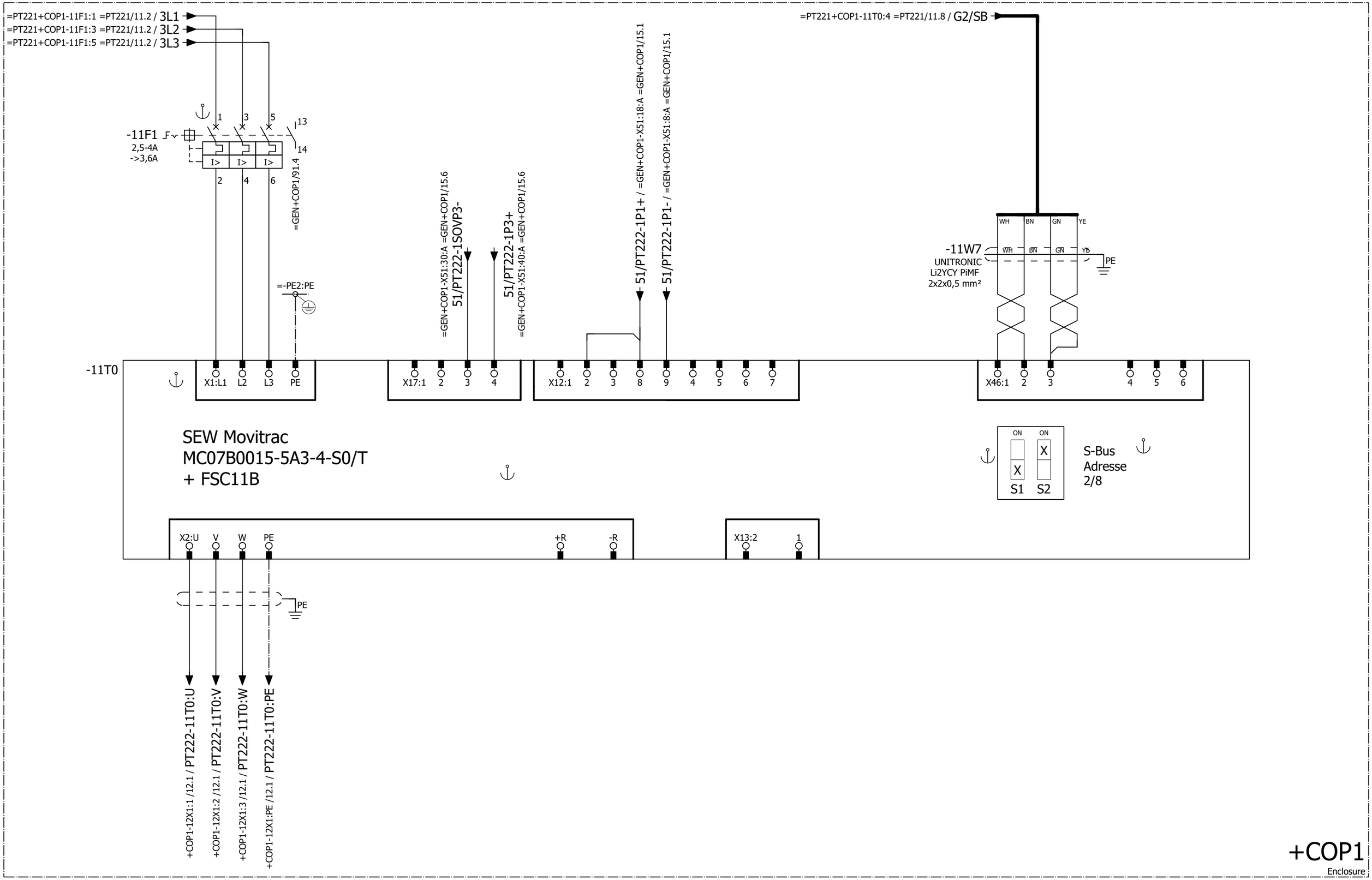


PT220:
Roller conveyor
occupied


=PT220+COP1-11F1:1 =PT220/11.2 / 3L1
=PT220+COP1-11F1:3 =PT220/11.2 / 3L2
=PT220+COP1-11F1:5 =PT220/11.2 / 3L3
3L1 / =PT222+COP1-11F1:1 =PT222/11.1
3L2 / =PT222+COP1-11F1:3 =PT222/11.1
3L3 / =PT222+COP1-11F1:5 =PT222/11.1
=PT220+COP1-11T0:4 =PT220/11.8 / G2/SB
=PT222+COP1-11T0:X46:1 =PT222/11.7
G2/SB
-11F1
2,5-4A
->3,6A
=GEN+COP1/91.4
=-PE2:PE
=GEN+COP1-X51:29:A =GEN+COP1/15.6
51/PT221-1SOVP3-
51/PT221-1P3+
=GEN+COP1-X51:39:A =GEN+COP1/15.6
51/PT221-1P1+ / =GEN+COP1-X51:17:A =GEN+COP1/15.1
51/PT221-1P1- / =GEN+COP1-X51:7:A =GEN+COP1/15.1
-11W7
UNITRONIC
Li2YCY PiMF
2x2x0,5 mm²
WH BN GN YE
PE
-11T0
X1:L1 L2 L3 PE
X17:1 2 3 4
X12:1 2 3 8 9 4 5 6 7
X46:1 2 3 4 5 6
SEW Movitrac
MC07B0015-5A3-4-S0/T
+ FSC11B
ON ON
X X
S1 S2
S-Bus
Adresse
2/7
X2:U V W PE
+R -R
X13:2 1
+COP1-12X1:1 /12.1 / PT221-11T0:U
+COP1-12X1:2 /12.1 / PT221-11T0:V
+COP1-12X1:3 /12.1 / PT221-11T0:W
+COP1-12X1:PE /12.1 / PT221-11T0:PE
+COP1
Enclosure

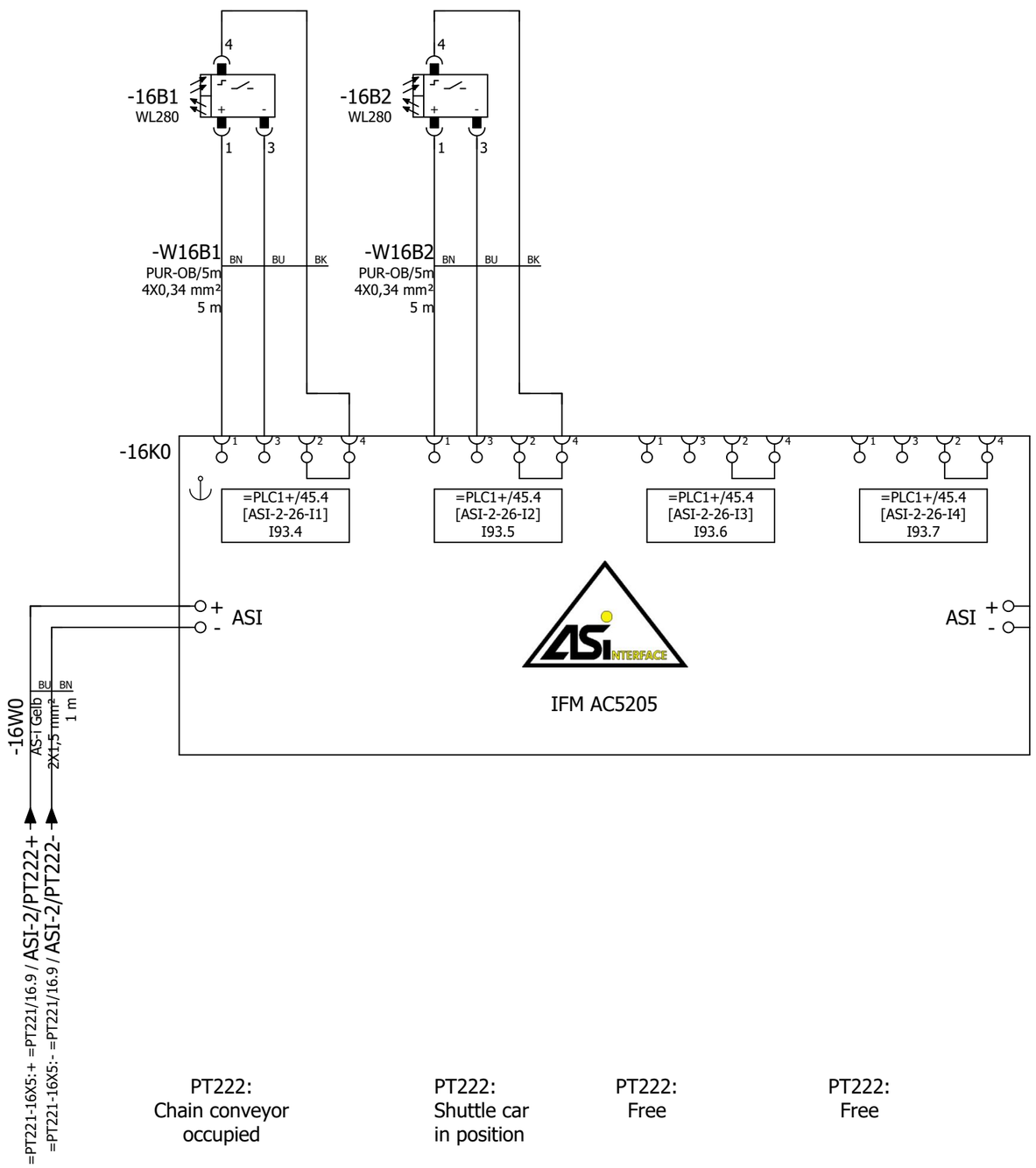
PT221-11T0:U / +COP1-11T0:X2:U /11.1
PT221-11T0:V / +COP1-11T0:V /11.1
PT221-11T0:W / +COP1-11T0:W /11.1
PT221-11T0:PE / +COP1-11T0:PE /11.2
PE
-12X1
1
2
3
PE
+COP1
Enclosure
-12W1
Ölflex Classic
110 CY
4G2,5 mm²
17 m
1
2
3
GNYE
SH
PE
-12M1
SEW-Eurodrive
1,1 kW
2,8A / 50Hz
U1
V1
W1
PE
M
3~
PT221:
Chain conveyor


-16B1
WL280
-16B2
WL280
-W16B1
PUR-OB/5m
4X0,34 mm²
5 m
-W16B2
PUR-OB/5m
4X0,34 mm²
5 m
BN
BU
BK
PT220-16B1:1 / =PT220-16B1:1 =PT220/16.1
PT220-16B1:3 / =PT220-16B1:3 =PT220/16.1
PT220-16B1:4 / =PT220-16B1:4 =PT220/16.1
-16K0
=PLC1+/45.4
[ASI-2-27-I1]
I93.0
=PLC1+/45.4
[ASI-2-27-I2]
I93.1
=PLC1+/45.4
[ASI-2-27-I3]
I93.2
=PLC1+/45.4
[ASI-2-27-I4]
I93.3
ASI
IFM AC5205
-16X5
IFM E70381
-16W0
AS-i Gelb
2X1,5 mm²
1 m
=PT219-16X5:+ =PT219/16.9 / ASI-2/PT221+
=PT219-16X5:- =PT219/16.9 / ASI-2/PT221-
=HCU5+JB1-X6:1 =HCU5/6.0 / ASI-2/HCU5+
=HCU5+JB1-X6:2 =HCU5/6.1 / ASI-2/HCU5-
=PT222-16K0:- =PT222/16.0 / ASI-2/PT222-
=PT222-16K0:+ =PT222/16.0 / ASI-2/PT222+
PT221:
Chain conveyor
occupied
PT221:
Centering frame
outfeed free
PT220:
Roller conveyor
occupied
PT221:
Free
PT221:
AS-i distribution


=PT221+COP1-11F1:1 =PT221/11.2 / 3L1
=PT221+COP1-11F1:3 =PT221/11.2 / 3L2
=PT221+COP1-11F1:5 =PT221/11.2 / 3L3
-11F1
2,5-4A
->3,6A
I>
=GEN+COP1/91.4
=-PE2:PE
=GEN+COP1-X51:30:A =GEN+COP1/15.6
51/PT222-1SOVP3-
51/PT222-1P3+
=GEN+COP1-X51:40:A =GEN+COP1/15.6
51/PT222-1P1+ / =GEN+COP1-X51:18:A =GEN+COP1/15.1
51/PT222-1P1- / =GEN+COP1-X51:8:A =GEN+COP1/15.1
=PT221+COP1-11T0:4 =PT221/11.8 / G2/SB
-11W7
UNITRONIC
Li2YCY PiMF
2x2x0,5 mm²
WH
BN
GN
YE
PE
-11T0
X1:L1
L2
L3
PE
X17:1
X12:1
X46:1
SEW Movitrac
MC07B0015-5A3-4-S0/T
+ FSC11B
ON
S1
S2
S-Bus
Adresse
2/8
X2:U
V
W
+R
-R
X13:2
+COP1-12X1:1 /12.1 / PT222-11T0:U
+COP1-12X1:2 /12.1 / PT222-11T0:V
+COP1-12X1:3 /12.1 / PT222-11T0:W
+COP1-12X1:PE /12.1 / PT222-11T0:PE
+COP1
Enclosure

PT222-11T0:U / +COP1-11T0:X2:U /11.1
PT222-11T0:V / +COP1-11T0:V /11.1
PT222-11T0:W / +COP1-11T0:W /11.1
PT222-11T0:PE / +COP1-11T0:PE /11.2
PE
-12X1
1
2
3
PE
+COP1
Enclosure
-12W1
Ölflex Classic
110 CY
4G2,5 mm²
17 m
1
2
3
GNYE
SH
PE
-12M1
SEW-Eurodrive
1,1 kW
2,8A / 50Hz
U1
V1
W1
PE
M
3~
PT222:
Chain conveyor

The reflector on the Shuttle car



PT222:	PT222:	PT222:	PT222:
Chain conveyor occupied	Shuttle car in position	Free	Free