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Plant 1504  
NX30C

Customer:	Constr.: CHG	Case no.:
Project title: Plant 1504 NX30C	Check.: BJR	Rev.: 00
Drawing: Diagram	Last plot: 21-02-2017 09:01:02	
Drawing no:	Last change: 20-02-2017 13:31:32	Sheet: 1 of 41

# Plant 1504 NX30C

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# Plant 1504 NX30C

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## Cable/Wire specification:

External Cables: Marine approved cables  
Motors(Pumps & Compressors): 4G 1,5mm2  
Other: 3G 1,5mm2

## Internal:

Main current BLACK 2,5mm2  
230 VAC: BLACK 0,75mm2  
Inverter power 1,5mm2  
Control current: RED 0,75mm2  
0 VAC: light blue

Cabinet to be grounded with 10mm2 Yellow/Green

Doorstop to be mounted

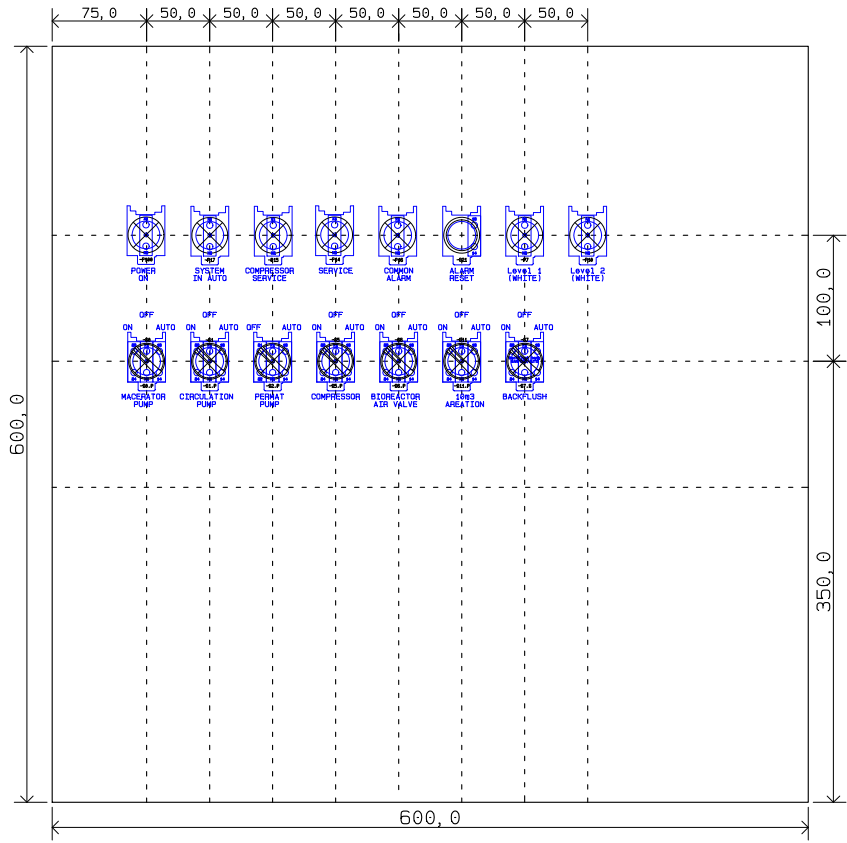
Cable Glands to be M20 and selected from diameter  
shown on layout page 6.  
IP Class 66/67

1 2 3 4 5 6 7 8

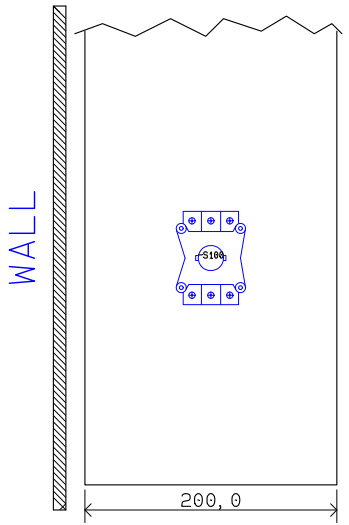
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# Layout

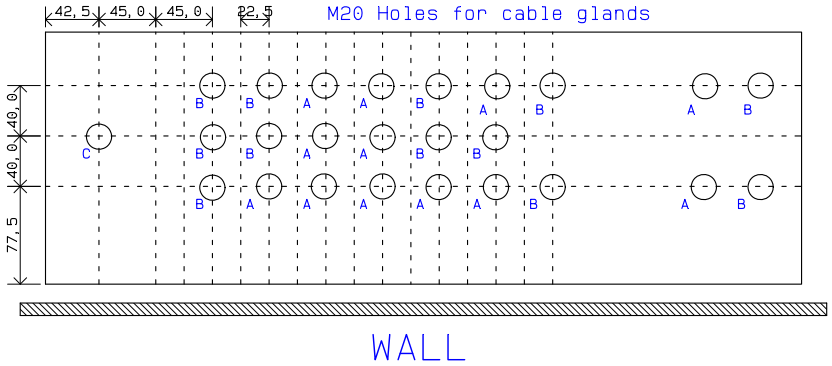
Viewed from front



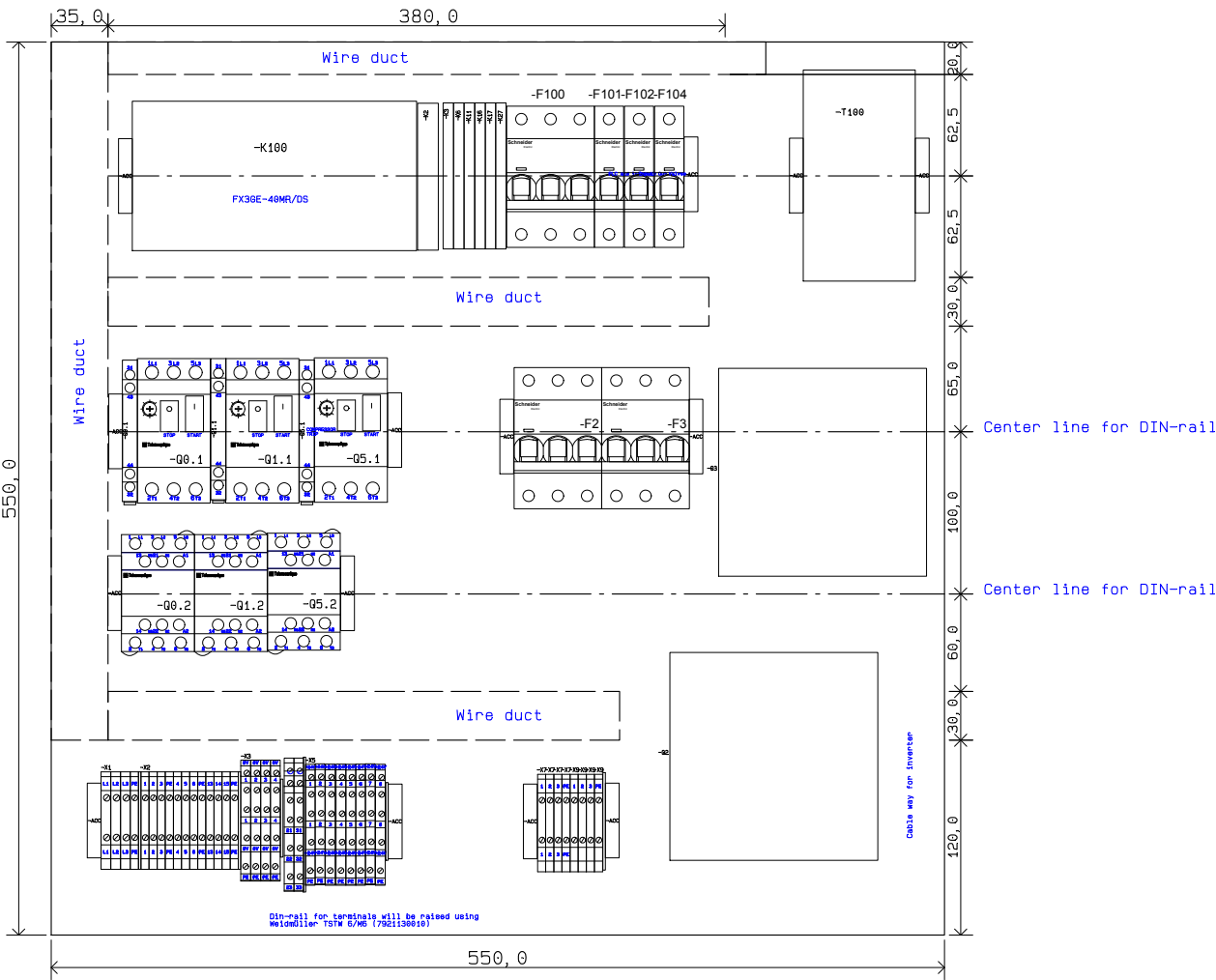
Viewed from the left side



Viewed from the bottom

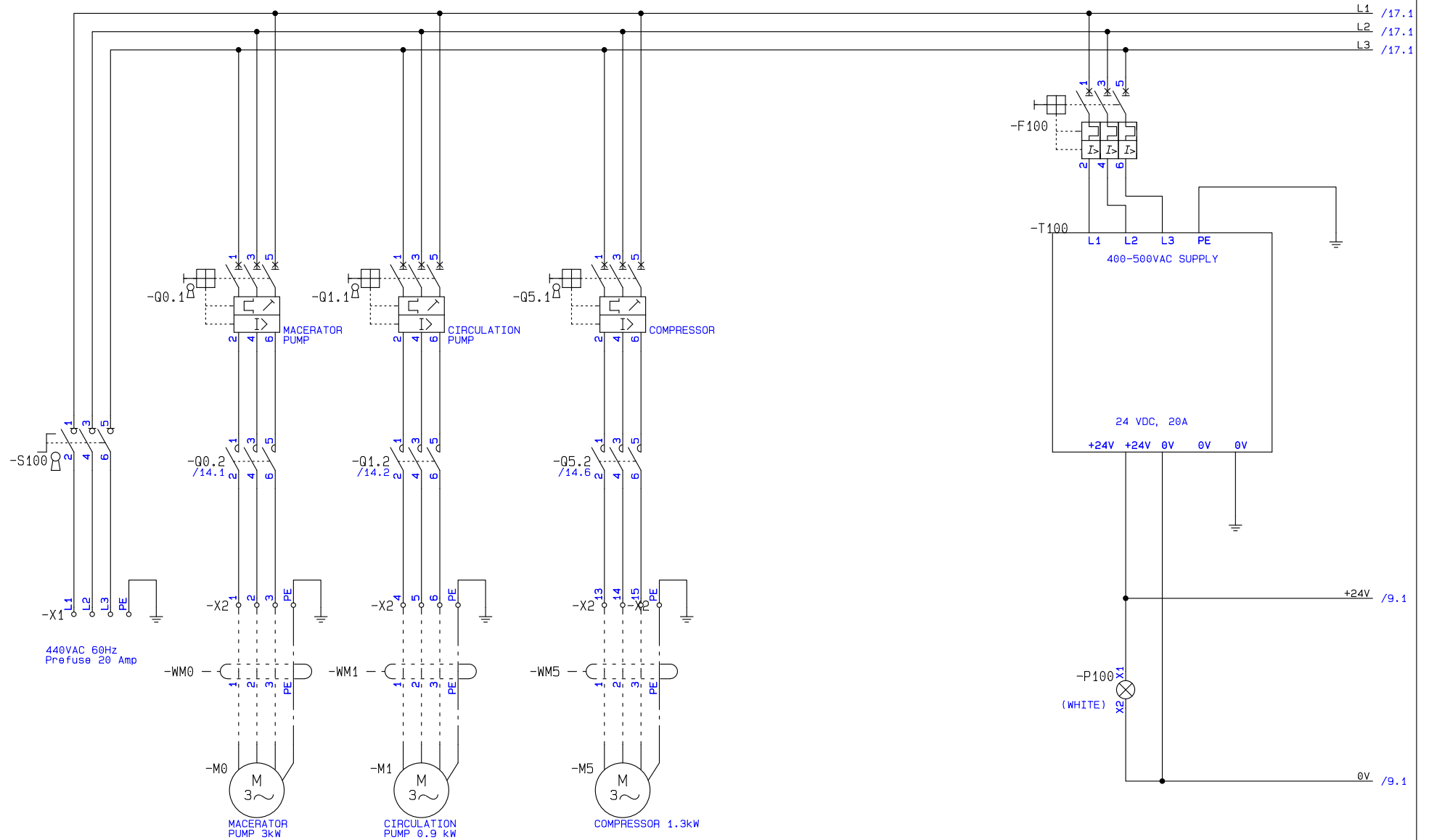


Cable Diameter  
a = 6 mm  
b = 10,2 mm  
c = 12,5 mm





**Main**



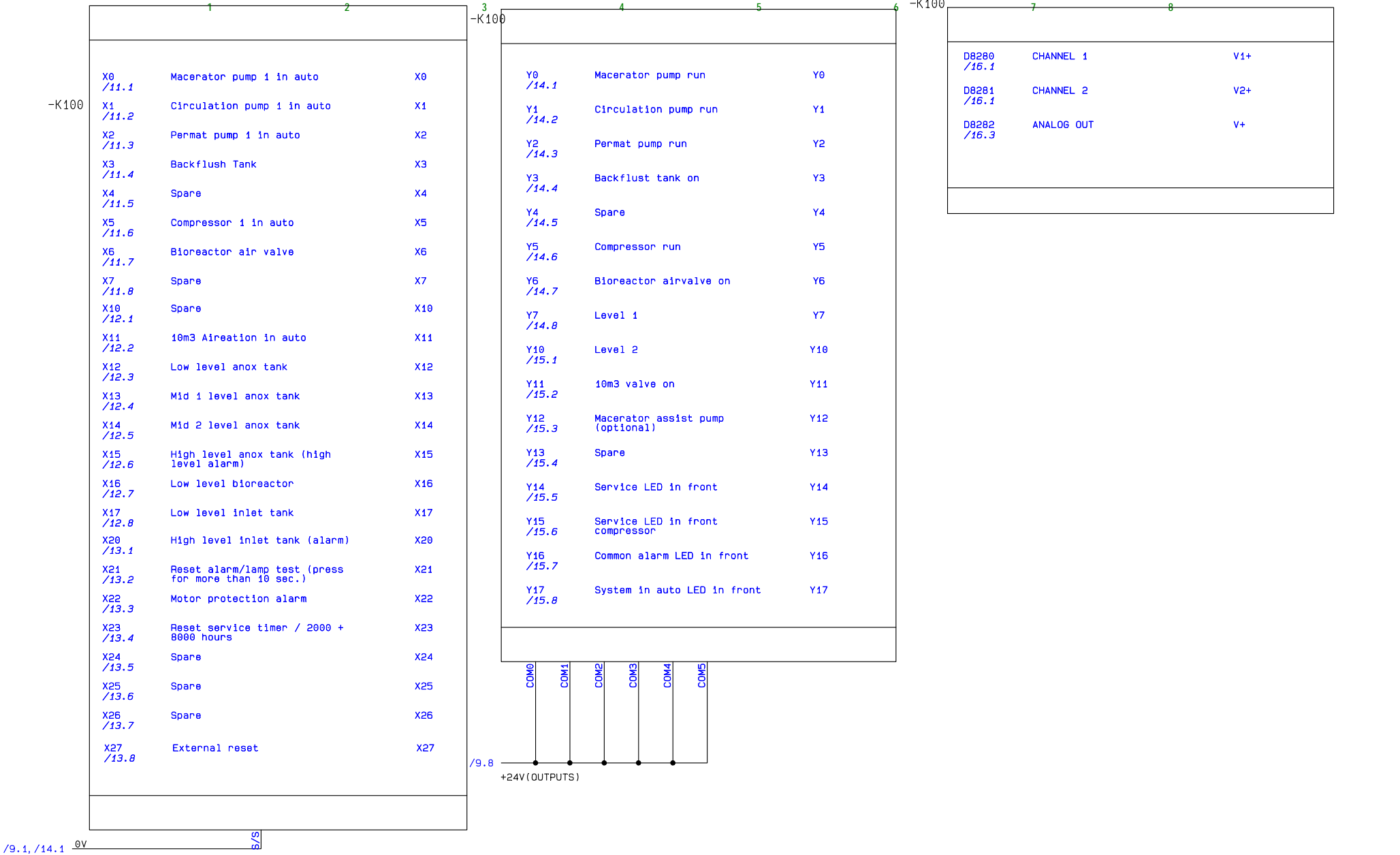


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Project title: Plant 1504 NX30C
Drawing:
Drawing no:

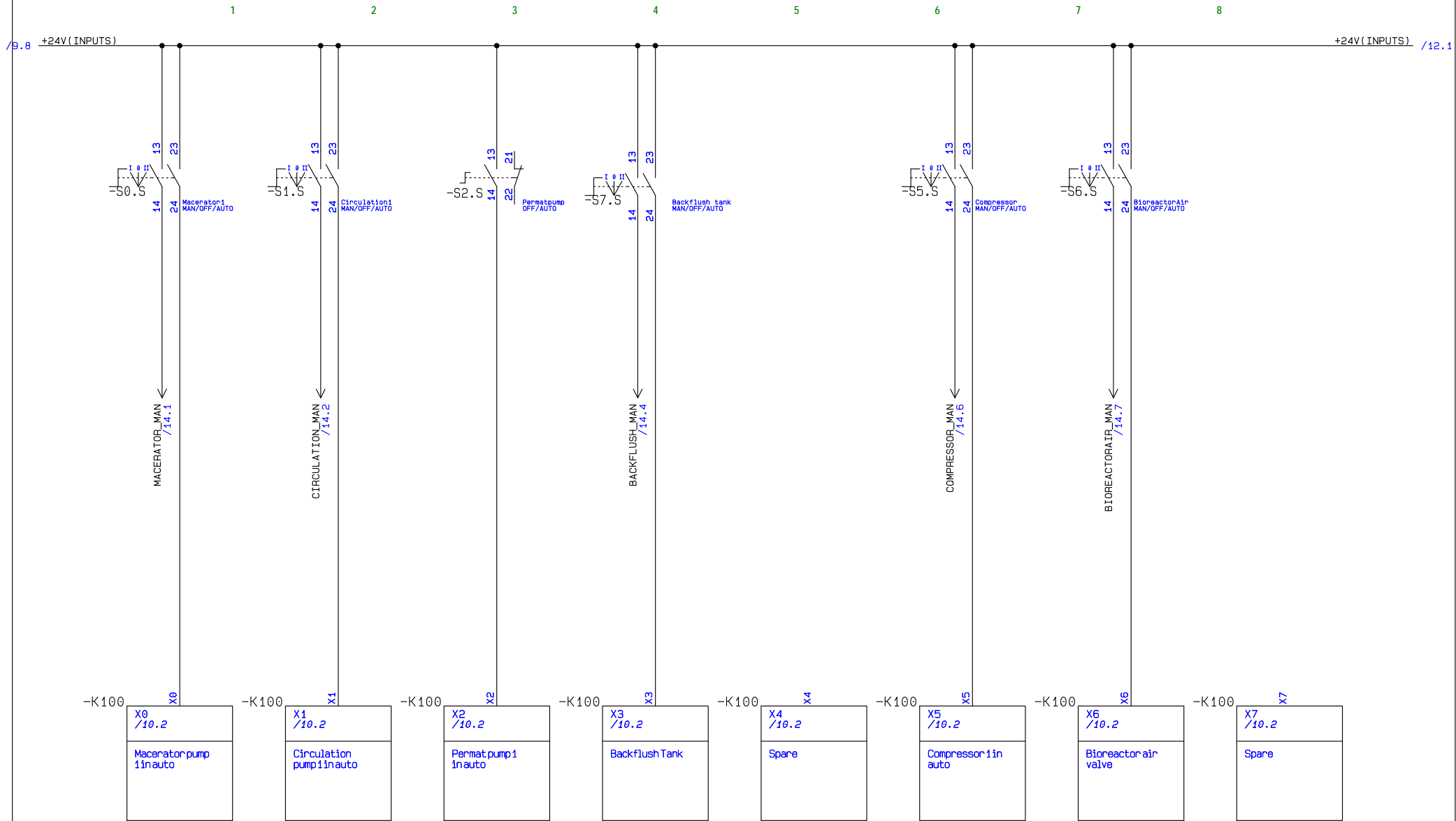
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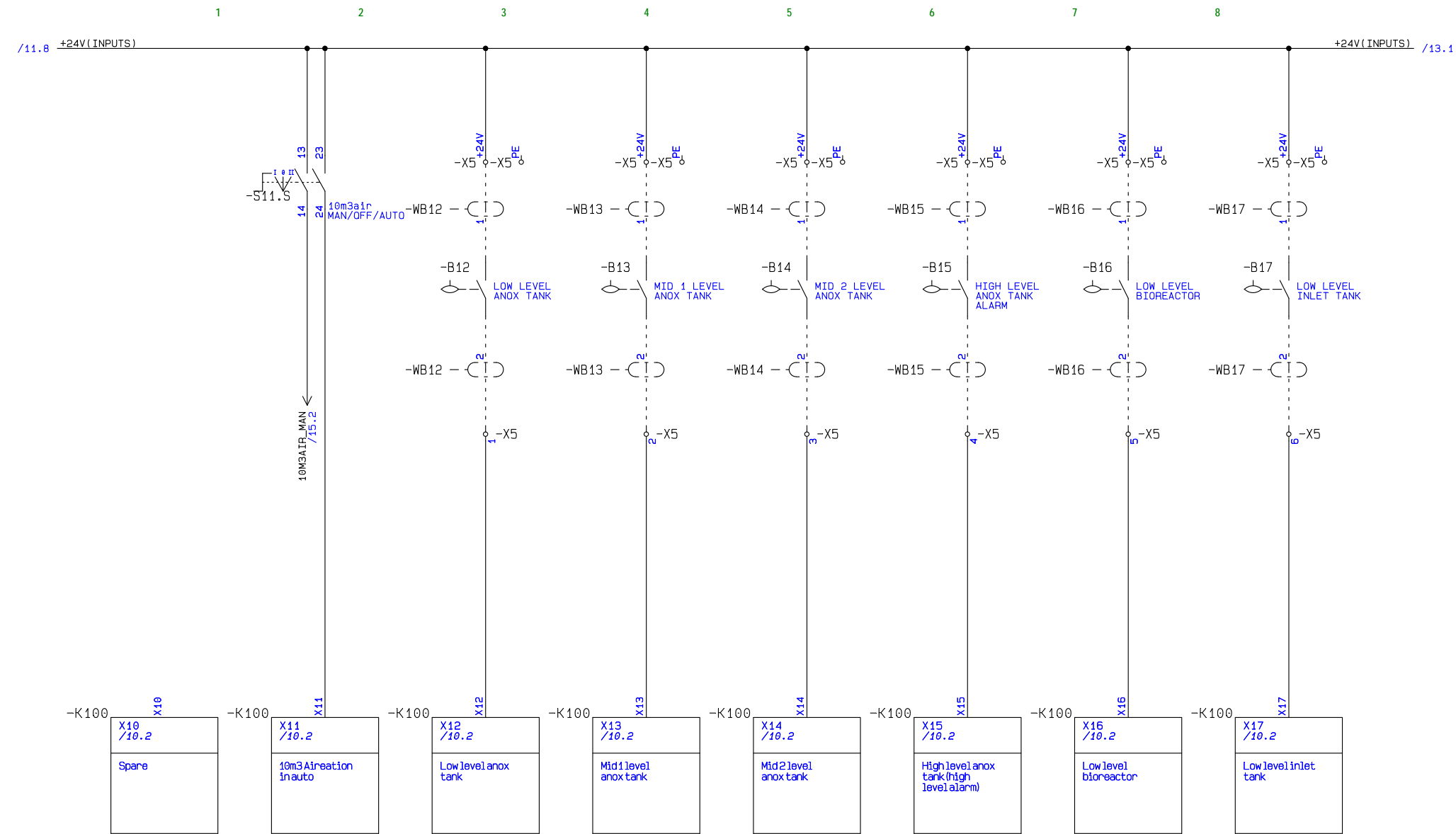
Sheet: 9 of 41

# PLC IO map

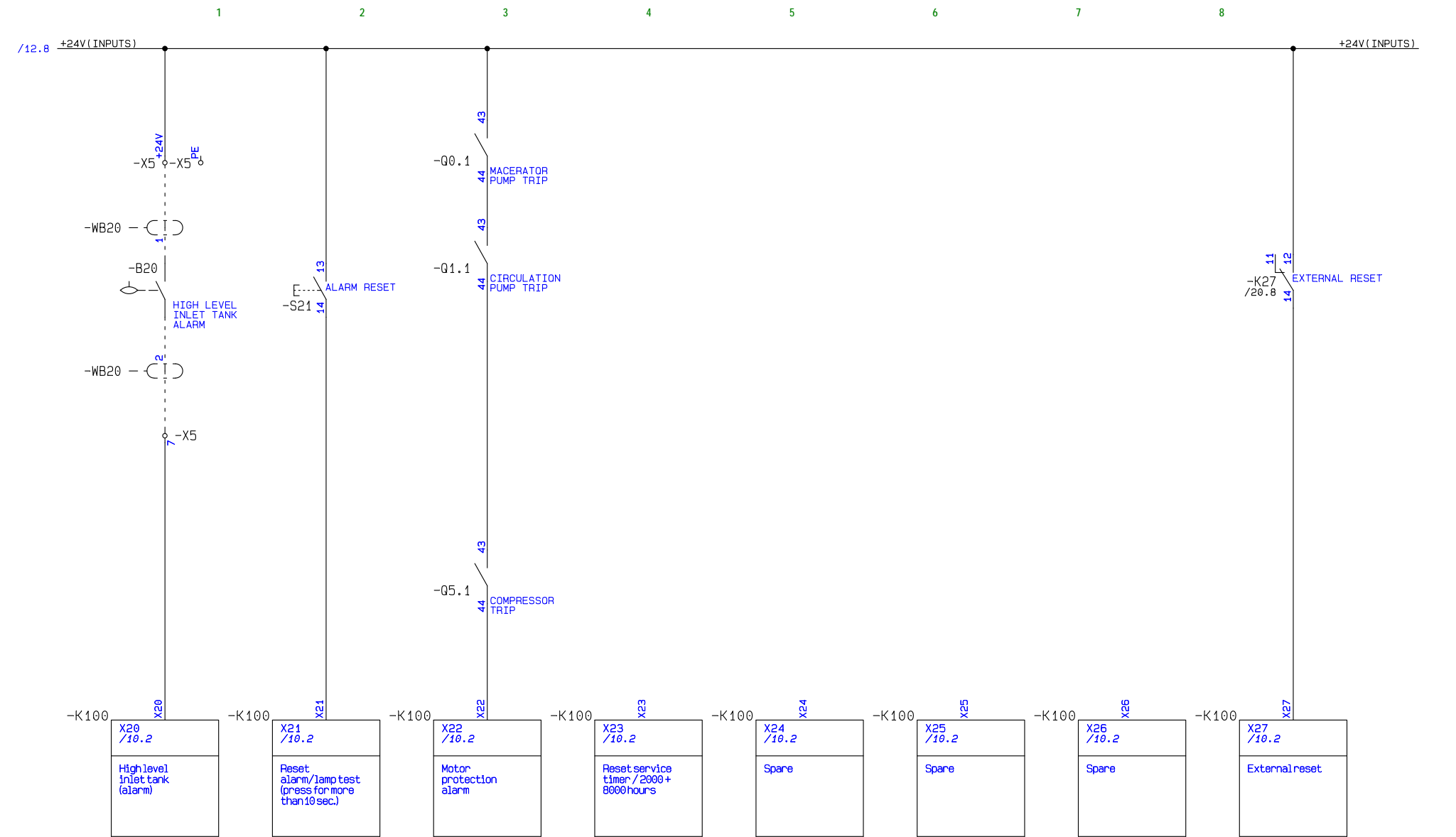


**PLC IN**

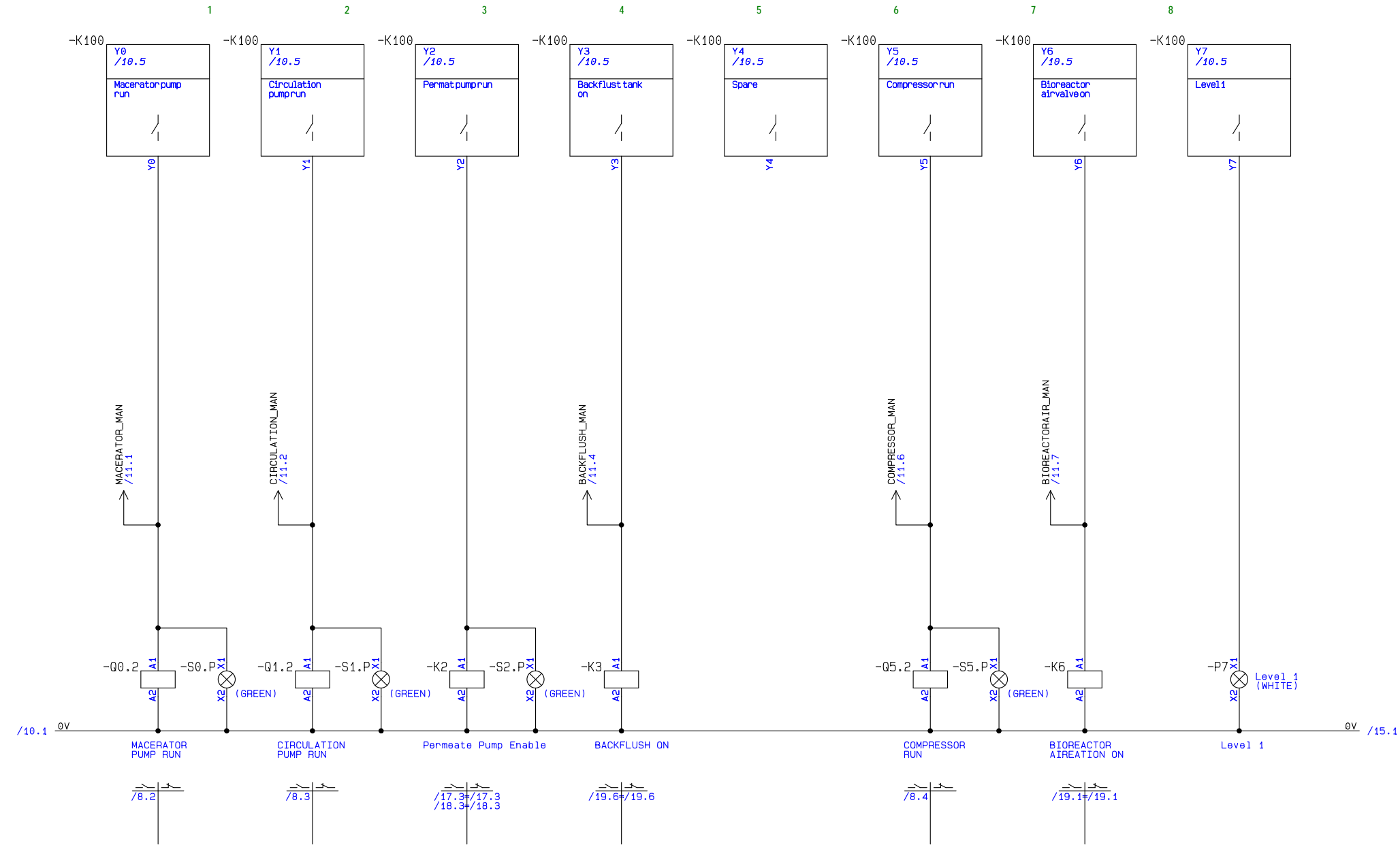


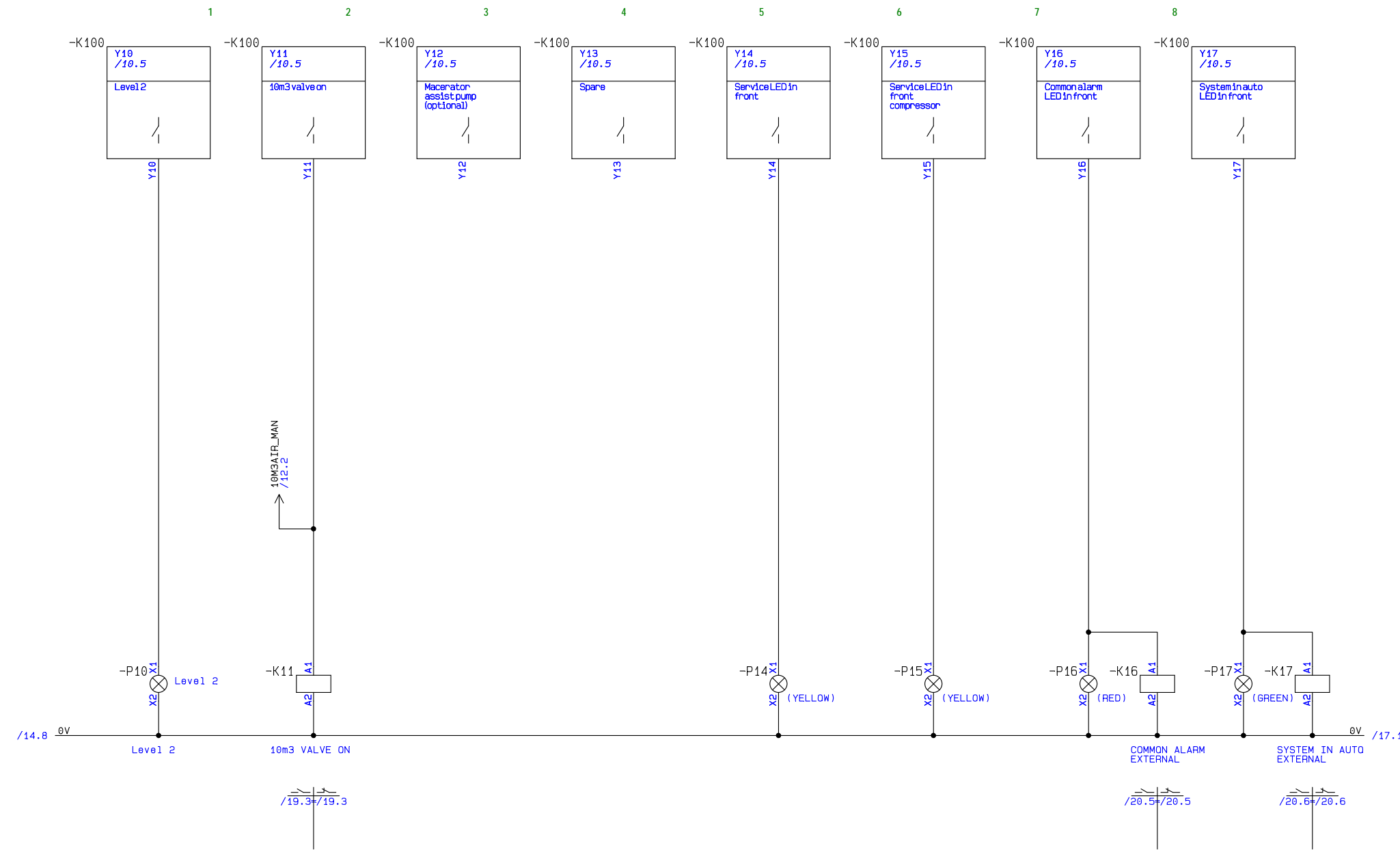






**PLC OUT**





**PLC ANA**

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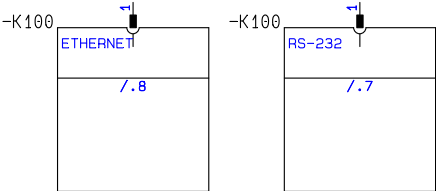
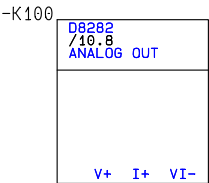
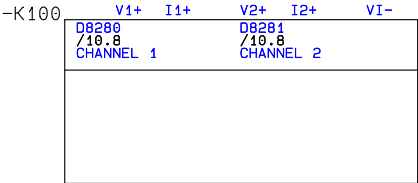
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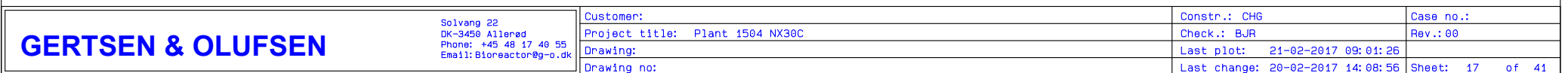
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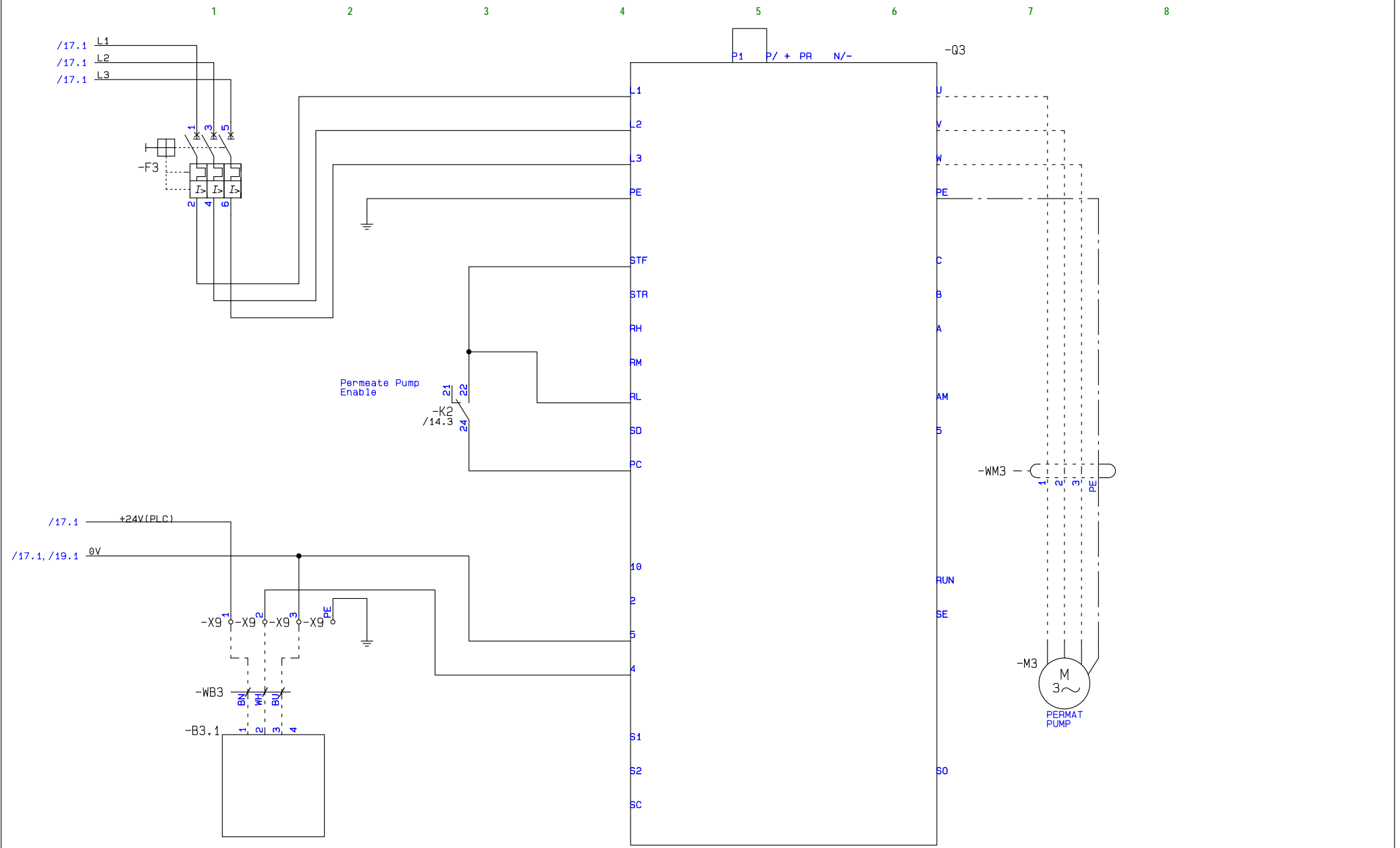
NOT USED



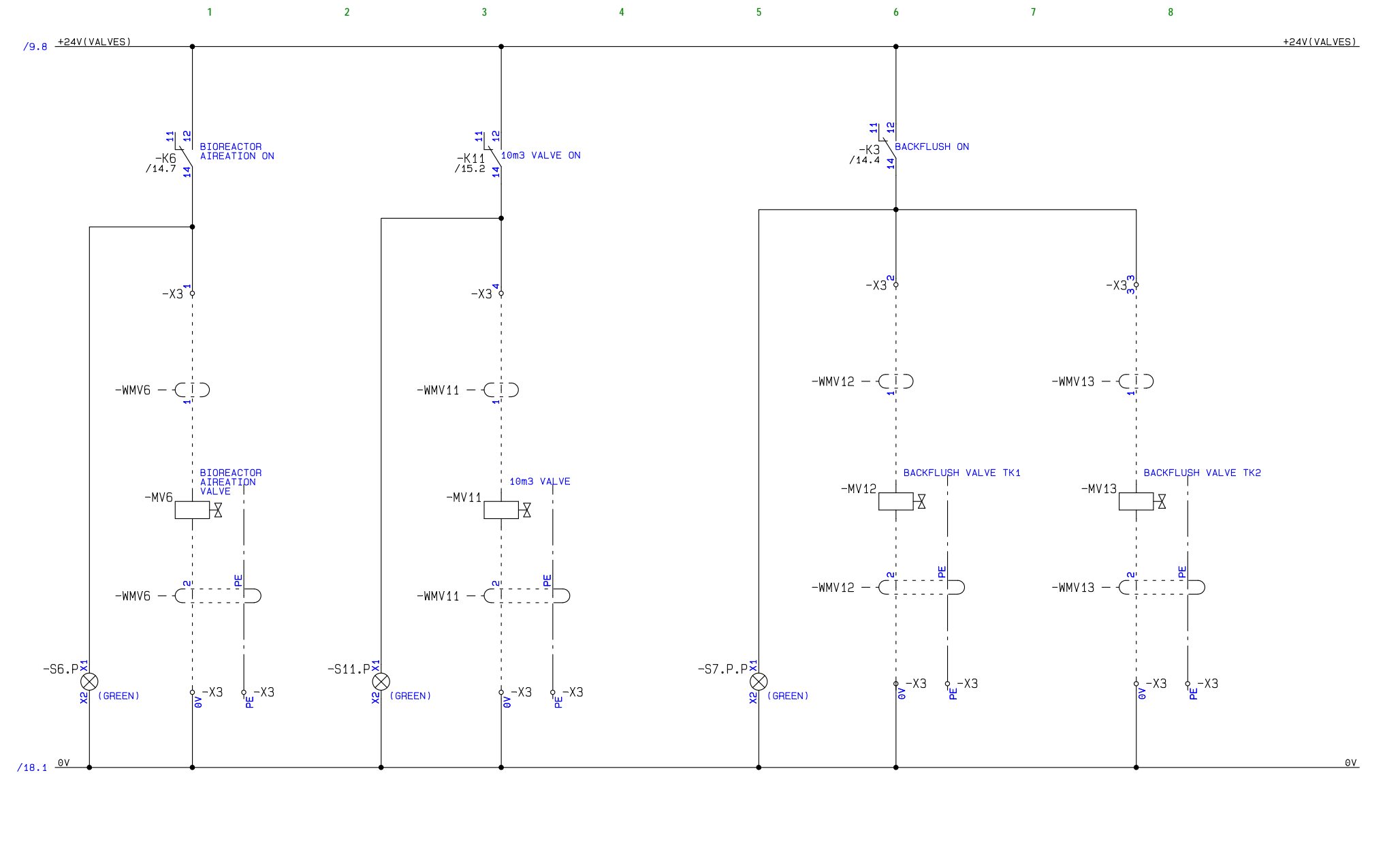
**Drive**







# Valves



# External Connections

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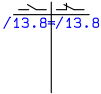
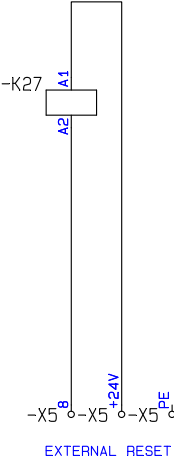
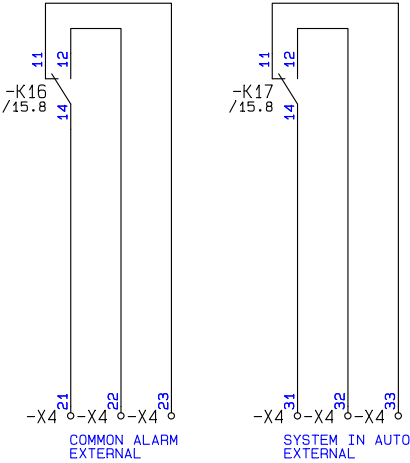
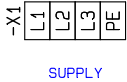
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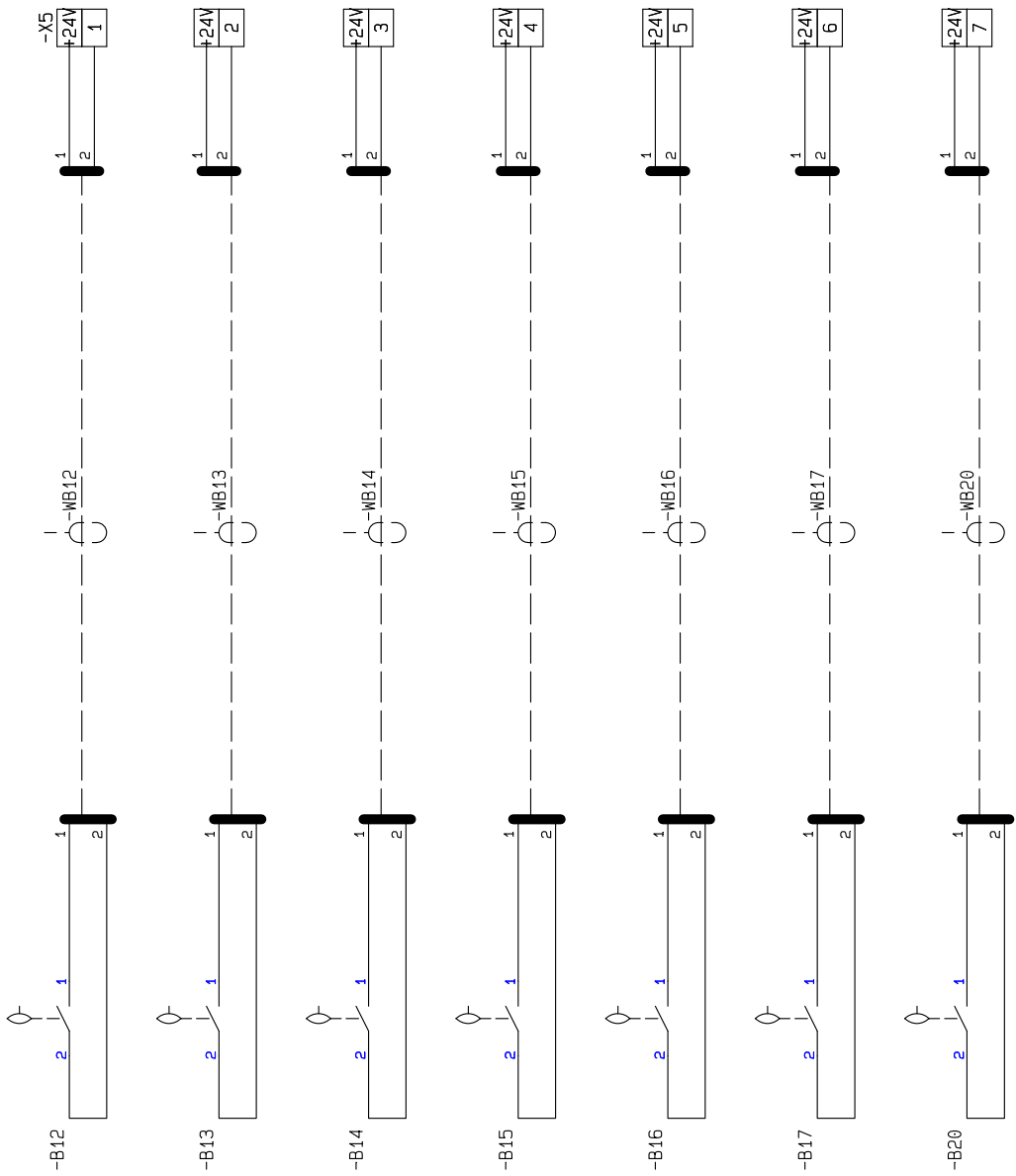
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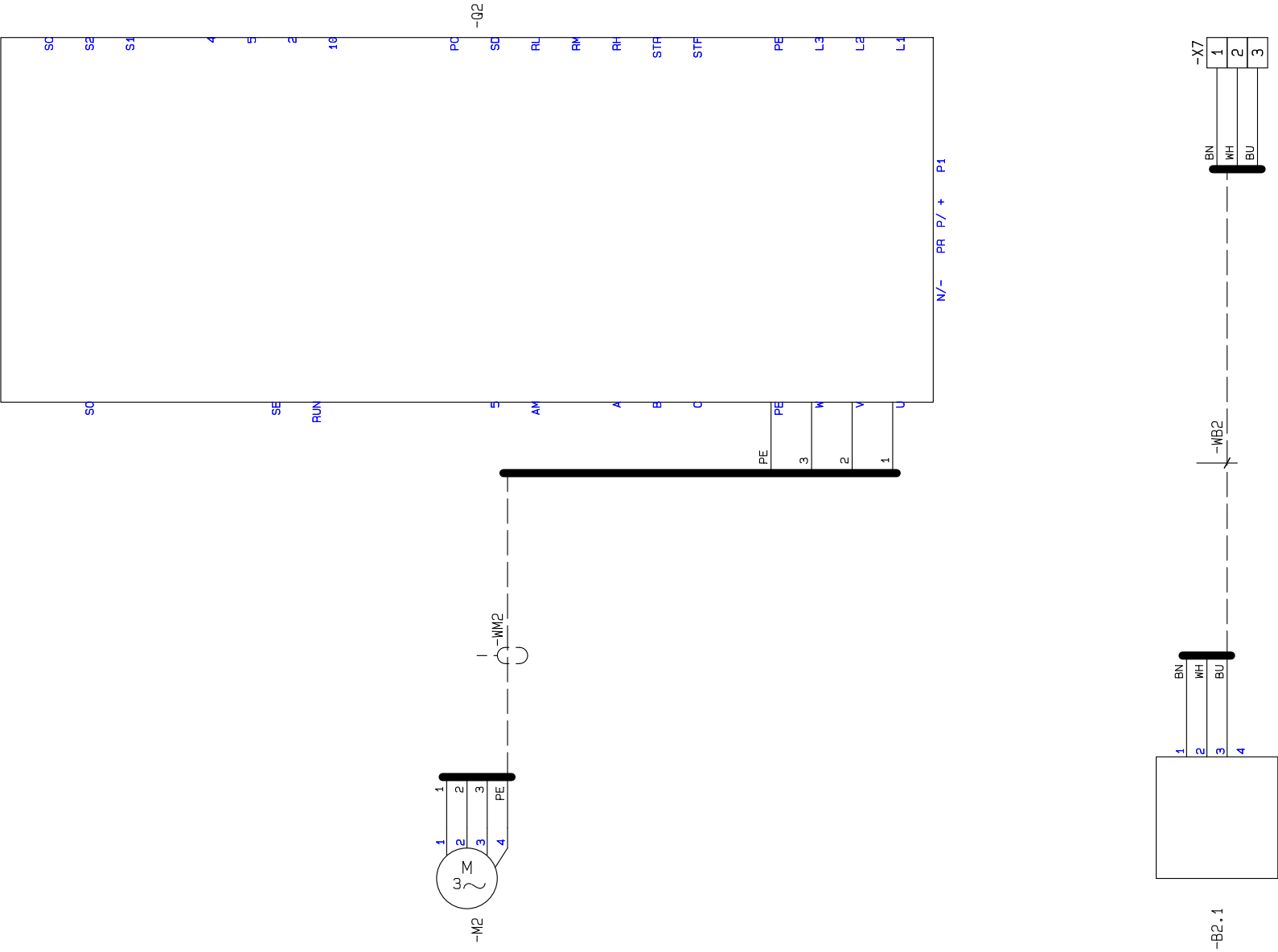
8

External connections

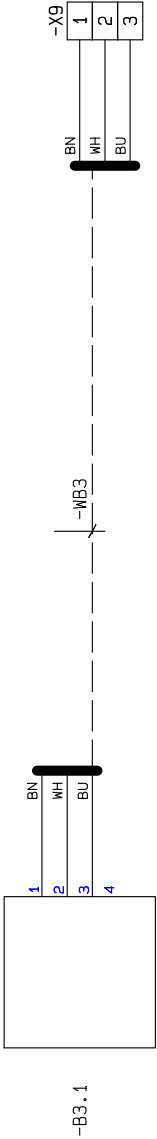
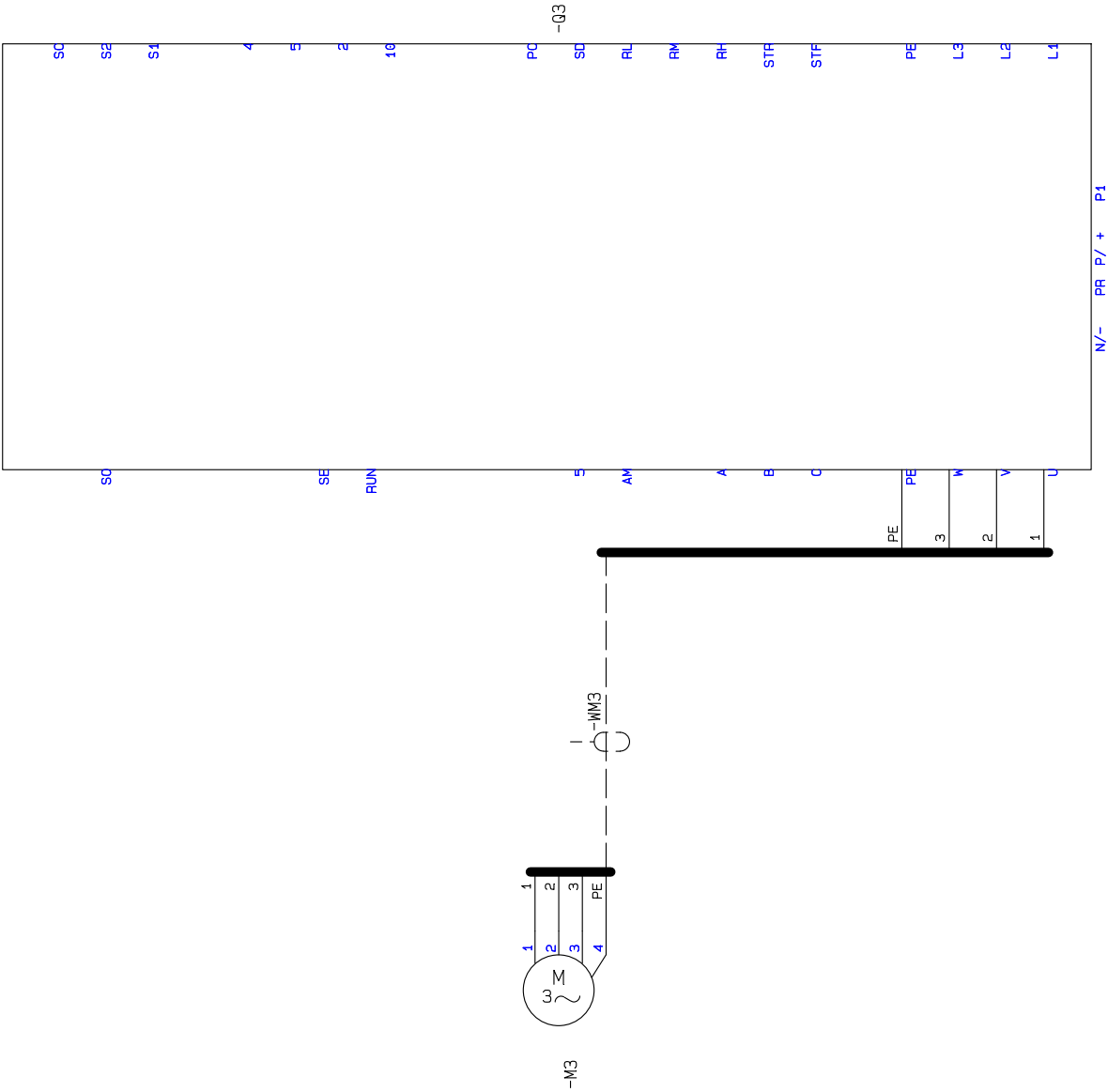


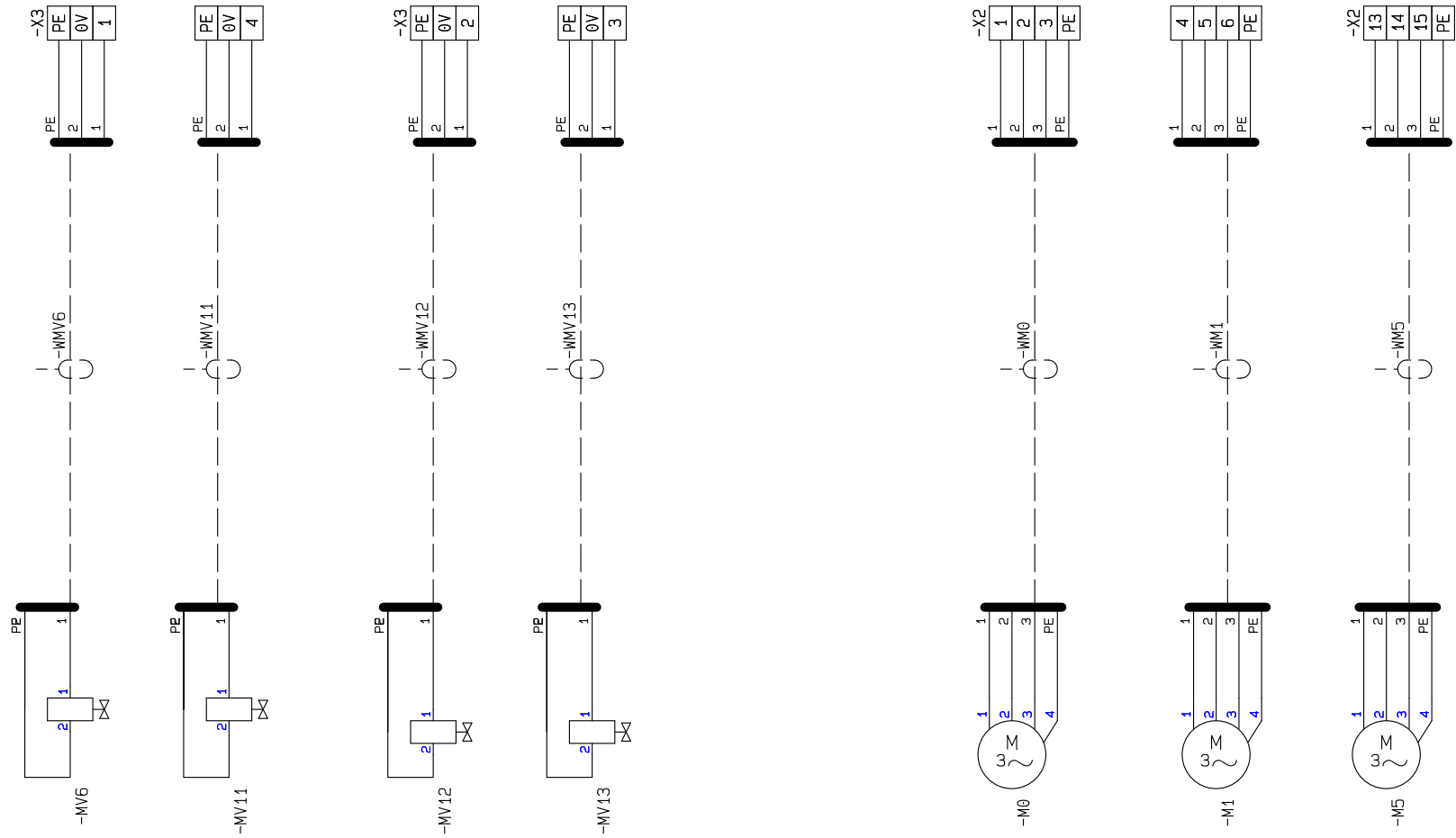
# Internal Cableplan











# Lists

1 2 3 4 5 6 7 8

Name	Order nr.	Type	Manufacturer	Supplier	Description	Position
-ACC	4008190181314	EW 35	Weidmüller	Weidmüller	End bracket , Locking for DIN-mounting	/7.2
-ACC	4008190181314	EW 35	Weidmüller	Weidmüller	End bracket , Locking for DIN-mounting	/7.1
-ACC	4008190181314	EW 35	Weidmüller	Weidmüller	End bracket , Locking for DIN-mounting	/7.1
-ACC	4008190181314	EW 35	Weidmüller	Weidmüller	End bracket , Locking for DIN-mounting	/7.3
-ACC	4008190181314	EW 35	Weidmüller	Weidmüller	End bracket , Locking for DIN-mounting	/7.2
-ACC	4008190181314	EW 35	Weidmüller	Weidmüller	End bracket , Locking for DIN-mounting	/7.1
-ACC	4008190181314	EW 35	Weidmüller	Weidmüller	End bracket , Locking for DIN-mounting	/7.3
-ACC	4008190181314	EW 35	Weidmüller	Weidmüller	End bracket , Locking for DIN-mounting	/7.4
-ACC	4008190181314	EW 35	Weidmüller	Weidmüller	End bracket , Locking for DIN-mounting	/7.3
-ACC	4008190181314	EW 35	Weidmüller	Weidmüller	End bracket , Locking for DIN-mounting	/7.1
-ACC	4008190181314	EW 35	Weidmüller	Weidmüller	End bracket , Locking for DIN-mounting	/7.5
-ACC	4008190181314	EW 35	Weidmüller	Weidmüller	End bracket , Locking for DIN-mounting	/7.2
-ACC	4008190181314	EW 35	Weidmüller	Weidmüller	End bracket , Locking for DIN-mounting	/7.3
-ACC	4008190181314	EW 35	Weidmüller	Weidmüller	End bracket , Locking for DIN-mounting	/7.2
-B2.1	PG2799	PG2799	IFM	IFM	Pressure sensor	/17.1
-B3.1	PG2799	PG2799	IFM	IFM	Pressure sensor	/18.1
-B12	NX.6010					/12.3
-B13	NX.6010					/12.4
-B14	NX.6010					/12.5
-B15	NX.6010					/12.6
-B16	NX.6010					/12.7
-B17	NX.6010					/12.8
-B20	NX.6010					/13.1
-F2	3606480440632	A9F04306	Schneider Electric	Schneider Electric	Miniature Circuit Breaker iC60N C6A 3P	/17.1
-F3	3606480440632	A9F04306	Schneider Electric	Schneider Electric	Miniature Circuit Breaker iC60N C6A 3P	/18.1
-F100	3606480440632	A9F04306	Schneider Electric	Schneider Electric	Miniature Circuit Breaker iC60N C6A 3P	/8.7
-F101	3606480440342	A9F04110	Schneider Electric	Schneider Electric	Miniature Circuit Breaker iC60N C 10A 1P	/9.1
-F102	3606480440304	A9F04102	Schneider Electric	Schneider Electric	Miniature Circuit Breaker iC60N C 2A 1P	/9.2

# GERTSEN & OLUFSEN

Solvang 22  
DK-3450 Allerød  
Phone: +45 48 17 40 55  
Email: Bioreactor@g-o.dk

Customer:

Project title: Plant 1504 NX30C

Drawing:

Drawing no:

Constr.: CHG

Check.: BJR

Last plot: 21-02-2017 09:01:28

Last change: 21-02-2017 08:59:24

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Name	Order nr.	Type	Manufacturer	Supplier	Description	Position
-F104	3606480440311	A9F04103	Schneider Electric	Schneider Electric	Miniature Circuit Breaker iC60N C 3A 1P	/9.4
-K2	4032248905492	TRZ 24VDC 2CO AU	Weidmüller	Weidmüller	Termseries, 12.8mm relay modul, coil 24VDC, 2CO 8A	/14.3
-K3	4032248905430	TRZ 24VDC 1CO AU	Weidmüller	Weidmüller		/14.4
-K6	4032248905430	TRZ 24VDC 1CO AU	Weidmüller	Weidmüller		/14.7
-K11	4032248905430	TRZ 24VDC 1CO AU	Weidmüller	Weidmüller		/15.2
-K16	4032248905430	TRZ 24VDC 1CO AU	Weidmüller	Weidmüller		/15.8
-K17	4032248905430	TRZ 24VDC 1CO AU	Weidmüller	Weidmüller		/15.8
-K27	4032248905430	TRZ 24VDC 1CO AU	Weidmüller	Weidmüller		/20.8
-K100	FX3GE-40MR/DS	FX3GE-40MR/DS	Mitsubishi		Micro PLC, 24IN, 16OUT, 2AnaIN, 1AnaOUT, ETHERNET, RS232	/9.7
-M0	NX.2300	Orpu KM100 G&O 2mm				/8.2
-M1	NX.2200	C22E-R				/8.3
-M2	NX.2150	NGX3/A G&O				/17.7
-M3	NX.2150	NGX3/A G&O				/18.7
-M5	NX.4025	DT4.25				/8.4
-MV6	1" Servo	Solenoid valve 24VDC				/19.1
-MV11	1" servo	Solenoid valve 24VDC				/19.3
-MV12	1/4" Direct acting	Solenoid valve 24VDC				/19.6
-MV13	1/4" Direct acting	Solenoid valve 24VDC				/19.8
-P7	3389110891928	XB4BVB3	Schneider Electric	Schneider Electric	Pilot light green 24V AC/DC	/14.8
-P10	3389110891928	XB4BVB3	Schneider Electric	Schneider Electric	Pilot light green 24V AC/DC	/15.1
-P14	3389110891942	XB4BVB5	Schneider Electric	Schneider Electric	Pilot light yellow 24V AC/DC	/15.5
-P15	3389110891942	XB4BVB5	Schneider Electric	Schneider Electric	Pilot light yellow 24V AC/DC	/15.6
-P16	3389110891935	XB4BVB4	Schneider Electric	Schneider Electric	Pilot light red 24V AC/DC	/15.7
-P17	3389110891928	XB4BVB3	Schneider Electric	Schneider Electric	Pilot light green 24V AC/DC	/15.8
-P100	3389110891928	XB4BVB3	Schneider Electric	Schneider Electric	Pilot light green 24V AC/DC	/8.8
-Q0.1	3389110343137	GV2ME14	Schneider Electric	Schneider Electric	Motor circuit breaker Ir 6,3-10A	/8.2
-Q0.1	3389110343489	GVAN11	Schneider Electric	Schneider Electric	Auxiliary contact 1NO+1NC	/13.3
-Q0.2	3389110361070	LC1D09BL	Schneider Electric	Schneider Electric	Contacto 9A 3P+1NO+1NC, Uc 24V DC	/14.1

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Name	Order nr.	Type	Manufacturer	Supplier	Description	Position
-Q1.1	3389110343076	GV2ME07	Schneider Electric	Schneider Electric	Motor circuit breaker Ir 1,6-2,5A	/8.3
-Q1.1	3389110343489	GVAN11	Schneider Electric	Schneider Electric	Auxiliary contact 1NO+1NC	/13.3
-Q1.2	3389110361070	LC1D09BL	Schneider Electric	Schneider Electric	Contactor 9A 3P+1NO+1NC, Uc 24V DC	/14.2
-Q2	FR-D740-022SC-EC	FR-D740-022SC-EC	Mitsubishi	Mitsubishi	440VAC inverter	/17.5
-Q3	FR-D740-022SC-EC	FR-D740-022SC-EC	Mitsubishi	Mitsubishi	440VAC inverter	/18.5
-Q5.1	3389110343090	GV2ME08	Schneider Electric	Schneider Electric	Motor circuit breaker Ir 2,5-4A	/8.4
-Q5.1	3389110343489	GVAN11	Schneider Electric	Schneider Electric	Auxiliary contact 1NO+1NC	/13.3
-Q5.2	3389110361070	LC1D09BL	Schneider Electric	Schneider Electric	Contactor 9A 3P+1NO+1NC, Uc 24V DC	/14.6
-S0	3389110890723	ZB4BK1333	Schneider Electric	Schneider Electric	Illum. operating head green, 3 stay put positions	/11.1
-S0	3389110893144	ZB4BW0B33	Schneider Electric	Schneider Electric	Illum. pushbutton body w/LED green, 24V AC/DC, 2NO	/11.1
-S1	3389110890723	ZB4BK1333	Schneider Electric	Schneider Electric	Illum. operating head green, 3 stay put positions	/11.2
-S1	3389110893144	ZB4BW0B33	Schneider Electric	Schneider Electric	Illum. pushbutton body w/LED green, 24V AC/DC, 2NO	/11.2
-S2	3389110892192	XB4BK123B5	Schneider Electric	Schneider Electric	Sel. switch w/LED green 2 pos., 1NO+1NC, 24V AC/DC	/11.3
-S5	3389110890723	ZB4BK1333	Schneider Electric	Schneider Electric	Illum. operating head green, 3 stay put positions	/11.6
-S5	3389110893144	ZB4BW0B33	Schneider Electric	Schneider Electric	Illum. pushbutton body w/LED green, 24V AC/DC, 2NO	/11.6
-S6	3389110890723	ZB4BK1333	Schneider Electric	Schneider Electric	Illum. operating head green, 3 stay put positions	/11.7
-S6	3389110893144	ZB4BW0B33	Schneider Electric	Schneider Electric	Illum. pushbutton body w/LED green, 24V AC/DC, 2NO	/11.7
-S7	3389110890723	ZB4BK1333	Schneider Electric	Schneider Electric	Illum. operating head green, 3 stay put positions	/11.4
-S7.P.P	3389110892192	XB4BK123B5	Schneider Electric	Schneider Electric	Sel. switch w/LED green 2 pos., 1NO+1NC, 24V AC/DC	/19.5
-S7.S	3389110893144	ZB4BW0B33	Schneider Electric	Schneider Electric	Illum. pushbutton body w/LED green, 24V AC/DC, 2NO	/11.4
-S11	3389110890723	ZB4BK1333	Schneider Electric	Schneider Electric	Illum. operating head green, 3 stay put positions	/12.2
-S11	3389110893144	ZB4BW0B33	Schneider Electric	Schneider Electric	Illum. pushbutton body w/LED green, 24V AC/DC, 2NO	/12.2
-S21	3389110118438	XB4BA61	Schneider Electric	Schneider Electric	Push button complete, flush blue, 1NO	/13.2
-S100	3389110449396	VCF0	Schneider Electric	Schneider Electric	Main switch disconnecter 25A 3P	/8.1
-T100	2866792	QUINT-PS/3AC/24DC/20	Phoenix			/8.8
-WB2	EVT004	EVT004				/17.1
-WB3	EVT004	EVT004				/18.1
-WB12	Part of Component					/12.3

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Name	Order nr.	Type	Manufacturer	Supplier	Description	Position
-WB13	Part of Component					/12.4
-WB14	Part of Component					/12.5
-WB15	Part of Component					/12.6
-WB16	Part of Component					/12.7
-WB17	Part of Component					/12.8
-WB20	Part of Component					/13.1
-WM0	1,5mm2	Marine Cable				/8.1
-WM1	1,5mm2	Marine Cable				/8.3
-WM2	1,5mm2	Marine Cable				/17.7
-WM3	1,5mm2	Marine Cable				/18.7
-WM5	1,5 mm2	Marine Cable				/8.4
-WMV6	1,5mm2	Marine Cable				/19.1
-WMV11	1,5mm2	Marine Cable				/19.3
-WMV12	1,5mm2	Marine Cable				/19.6
-WMV13	1,5mm2	Marine Cable				/19.8
-X	4032248189830	AP DLD 2.5/PE 178380	Weidmüller	Weidmüller	End plate	/7.1
-X1	4008190103149	WAP 2.5-10	Weidmüller	Weidmüller	Endplate	/7.1
-X1	4008190143640	WPE 2,5	Weidmüller	Weidmüller	PE terminal screw/screw	/20.1
-X1	4008190143640	WPE 2,5	Weidmüller	Weidmüller	PE terminal screw/screw	/8.1
-X1	4008190150617	WDU 4	Weidmüller	Weidmüller	Feed through terminal screw/screw	/8.1
-X1	4008190150617	WDU 4	Weidmüller	Weidmüller	Feed through terminal screw/screw	/20.1
-X2	4008190099633	WDU 2,5	Weidmüller	Weidmüller	Feed through terminal screw/screw	/8.2
-X2	4008190103149	WAP 2.5-10	Weidmüller	Weidmüller	Endplate	/7.1
-X2	4008190143640	WPE 2,5	Weidmüller	Weidmüller	PE terminal screw/screw	/8.2
-X3	4032248212514	DLD 2.5/PE DB 178379	Weidmüller	Weidmüller	Three layer terminal	/19.1
-X4	4032248189854	DLD 2.5 DB 178418	Weidmüller	Weidmüller	Initiator terminal	/20.5
-X4	4032248189878	AP DLD 178421	Weidmüller	Weidmüller	End plate	/7.1
-X5	4032248189830	AP DLD 2.5/PE 178380	Weidmüller	Weidmüller	End plate	/7.2

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Part num.	Type	Manufacturer	Amount
1" servo			1
1,5mm2			-
2866792	QUINT-PS/3AC/24DC/20	Phoenix	1
3389110343076	GV2ME07	Schneider Electric	1
3389110343137	GV2ME14	Schneider Electric	1
3389110361070	LC1D09BL	Schneider Electric	3
3389110890723	ZB4BK1333	Schneider Electric	6
3389110891935	XB4BVB4	Schneider Electric	1
3389110892192	XB4BK123B5	Schneider Electric	2
3606480440304	A9F04102	Schneider Electric	1
3606480440342	A9F04110	Schneider Electric	1
4008190099633	WDU 2,5	Weidmüller	15
4008190143640	WPE 2,5	Weidmüller	8
4008190181314	EW 35	Weidmüller	14
4032248189854	DLD 2.5 DB 178418	Weidmüller	2
4032248212514	DLD 2.5/PE DB 178379	Weidmüller	12
4032248905492	TRZ 24VDC 2CO AU	Weidmüller	1
FR-D740-022SC-EC	FR-D740-022SC-EC	Mitsubishi	2
NX.2150			2
NX.2300			1
NX.6010			7
Part of Component			-