

Project : 06-043

Description	MB20G
Order-number	06-043
Drawing-number	University of Montreal
Created by	K.Prince
Date	04.11.06
Number of pages	21

Copies only with our written authorization

	Revision	Date	Name		Date	Name
a				drawn.	04.11.06	K.Prince
b						
c				test.		
d						

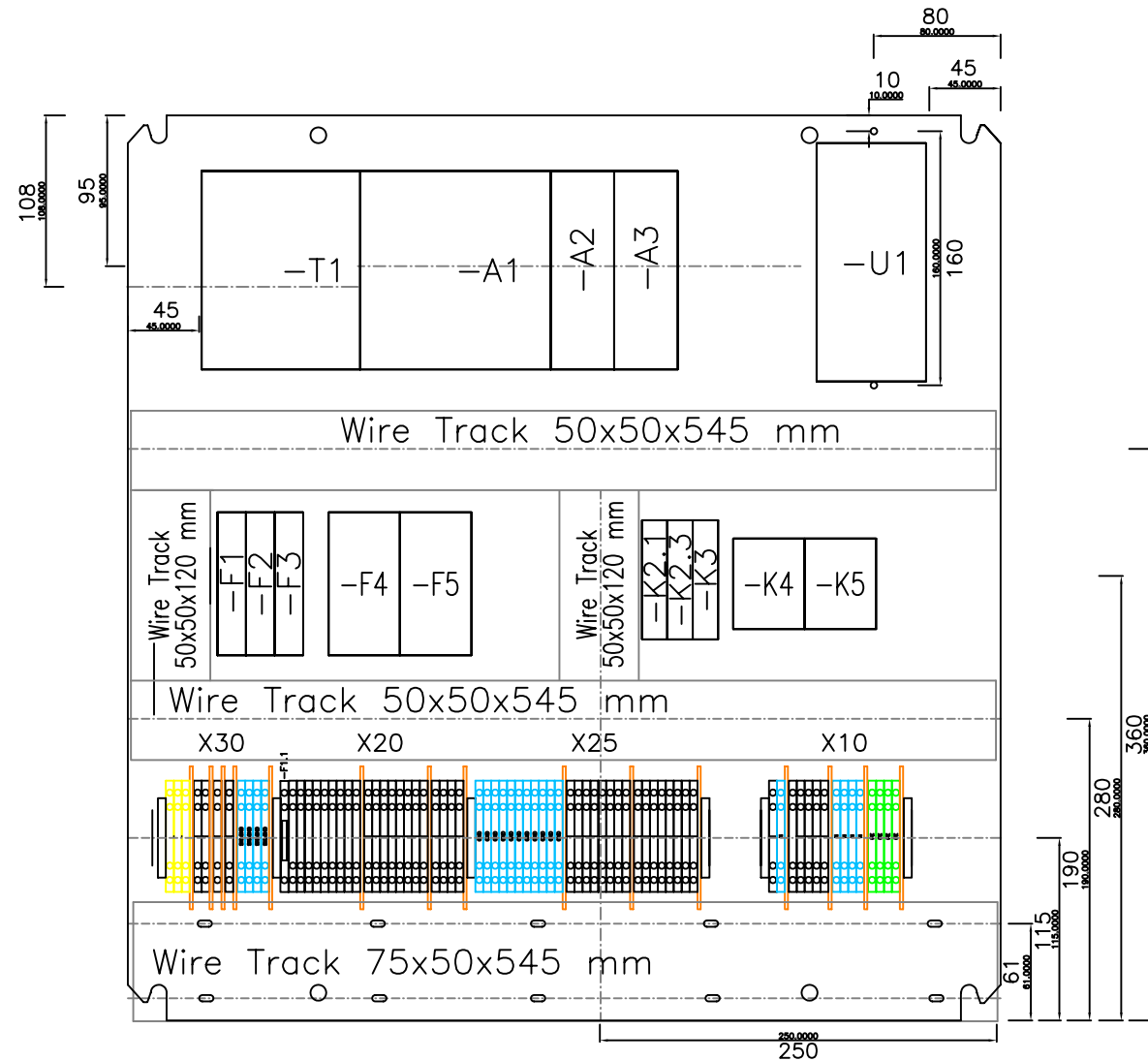


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Cover

Projectdesc. MB20G		=00 +10	
Order-no. 06-043	Drawing-no. University of Montreal	Page 21	1 Pg.

1 2 3 4 5 6 7 8



	Revision	Date	Name		Date	Name
a				drawn	04.11.06	K.Prince
b						
c				check		
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Panel Layout

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=05
+10

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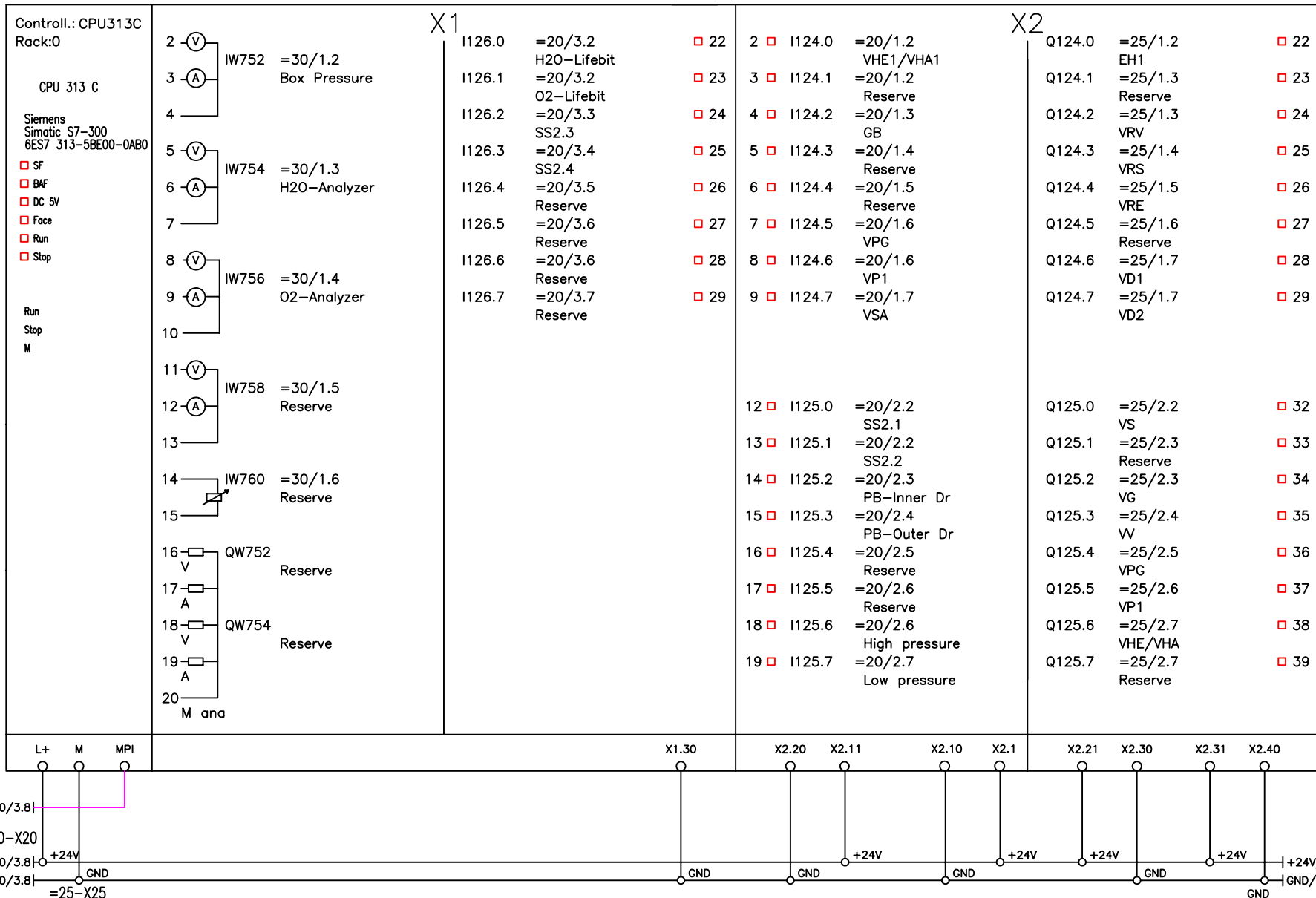


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	$=10$
	$+10$

1 2 3 4 5 6 7 8

=15-A1



Revision	Date	Name	Date	Name
a			drawn	04.11.06 K.Prince
b				
c			check	
d				



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PLC Layout

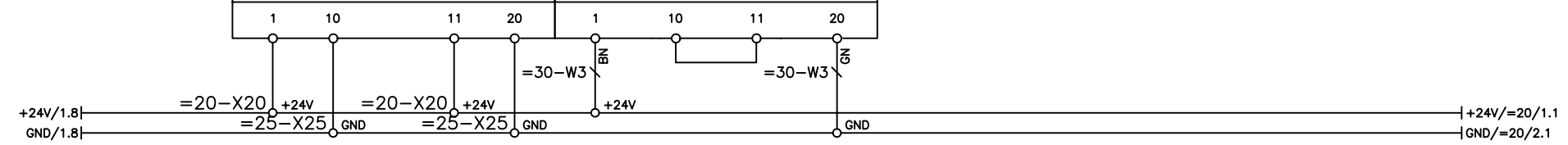
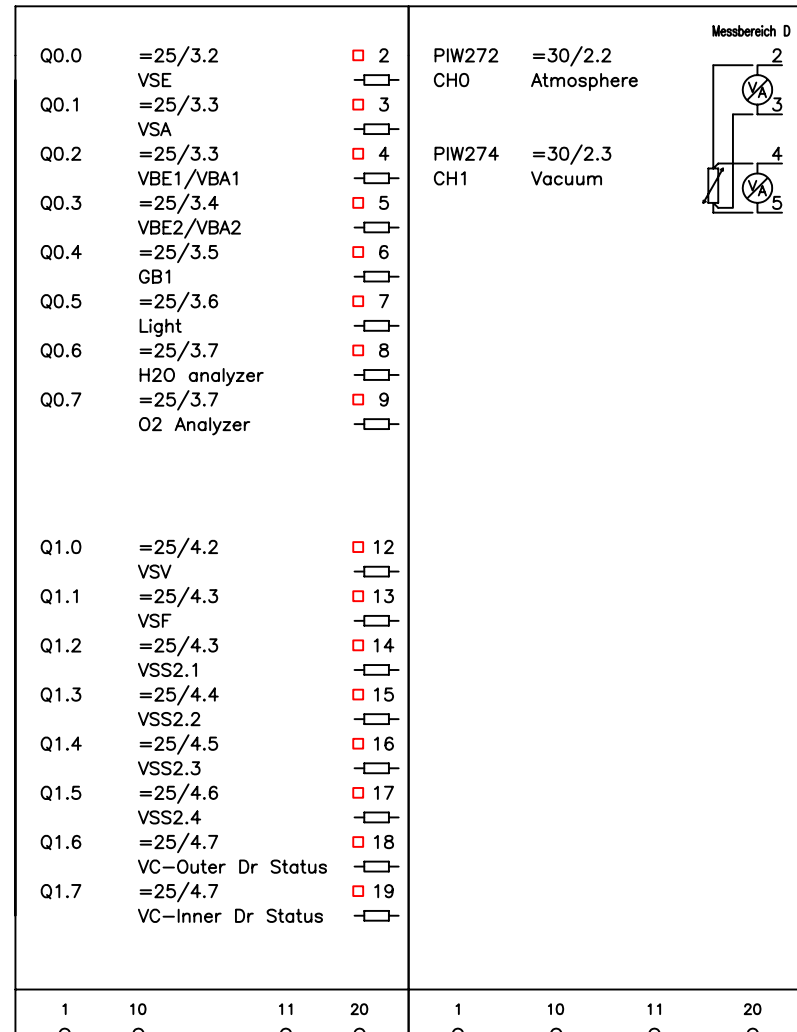
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1 2 3 4 5 6 7 8

=15-A2
Module: SM322
Rack:0

=15-A3
Module: SM331
Rack:0

SM331



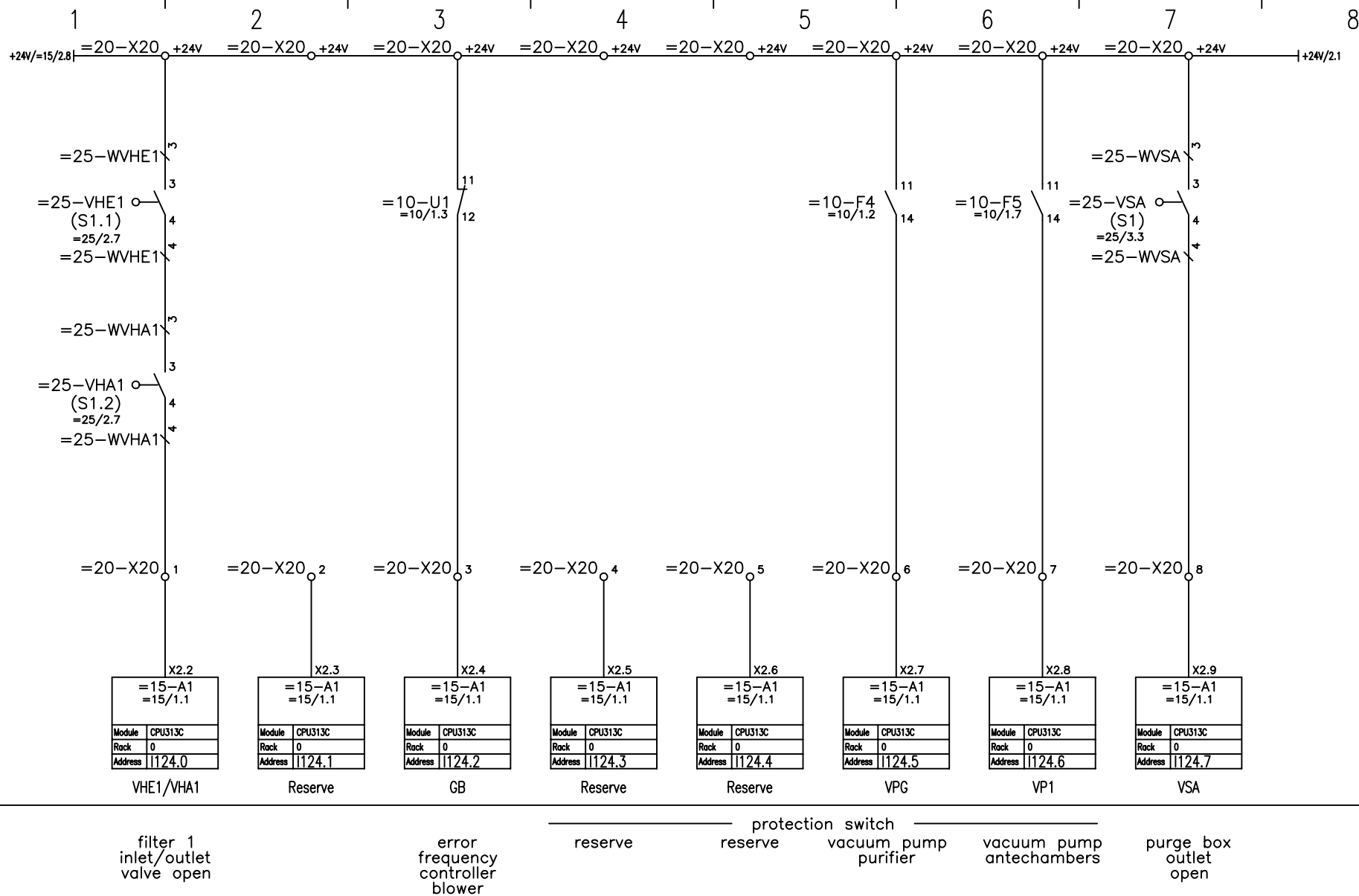
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PLC Layout

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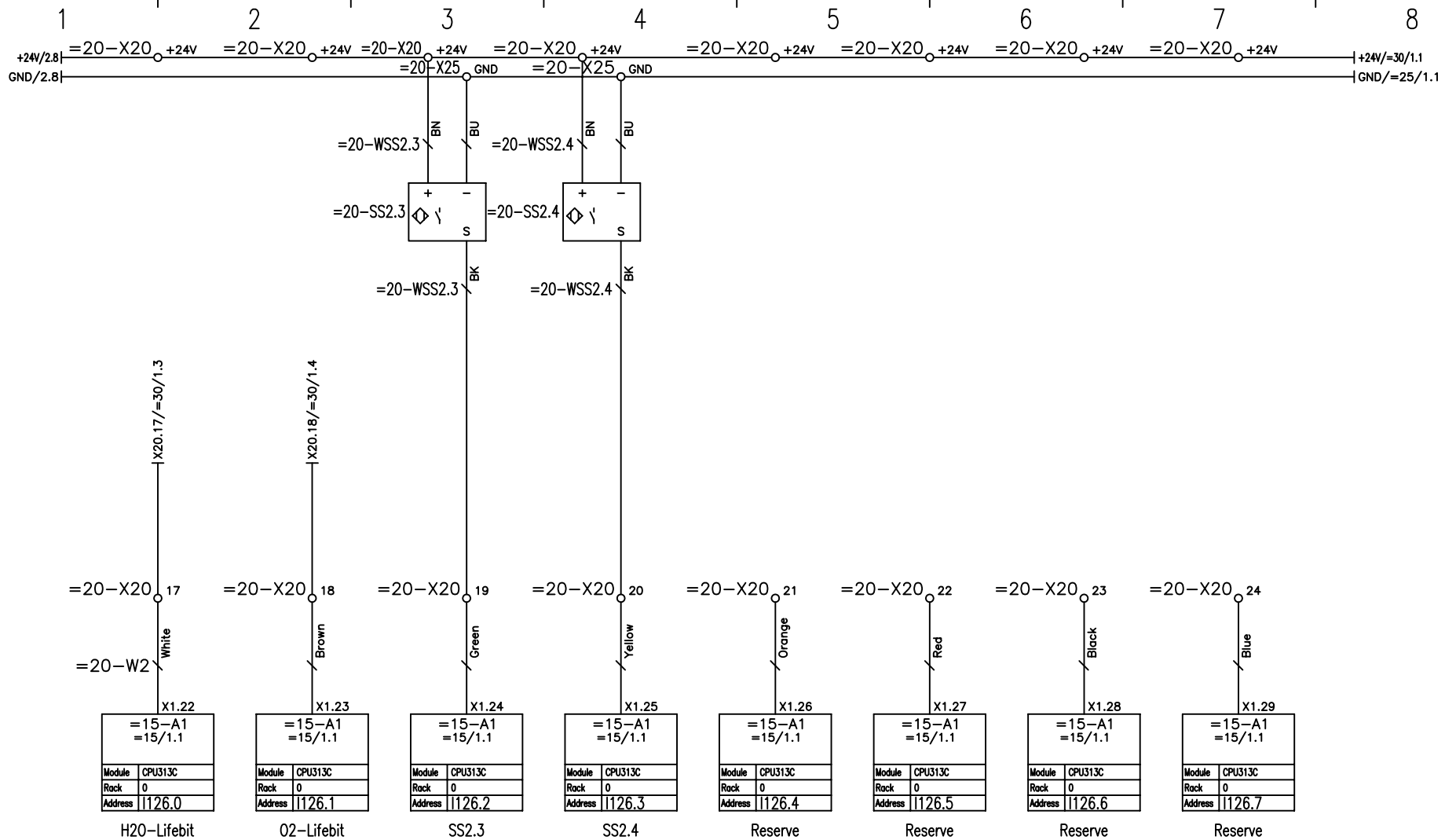
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Digital Input Byte 124

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lifebit
H20-analyzer

lifebit
O2-analyzer

vacuum chamber
outer door released inner door released

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Digital Input Byte 126

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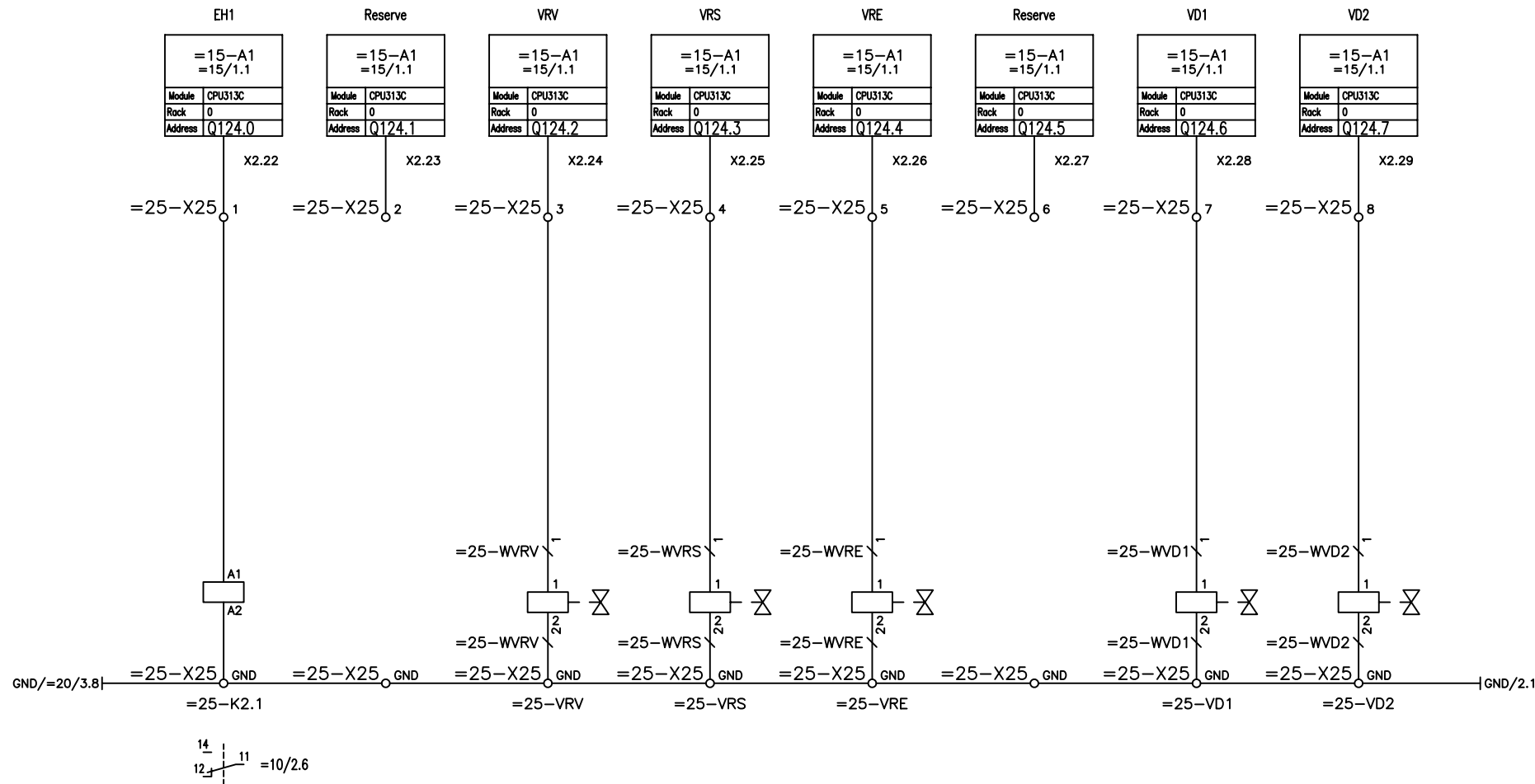
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=20
+10

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EH1 heater filter 1

regeneration vacuum

regeneration purge regeneration gas

regeneration gas inlet

box isolation

pressure box 1

pressure box 2

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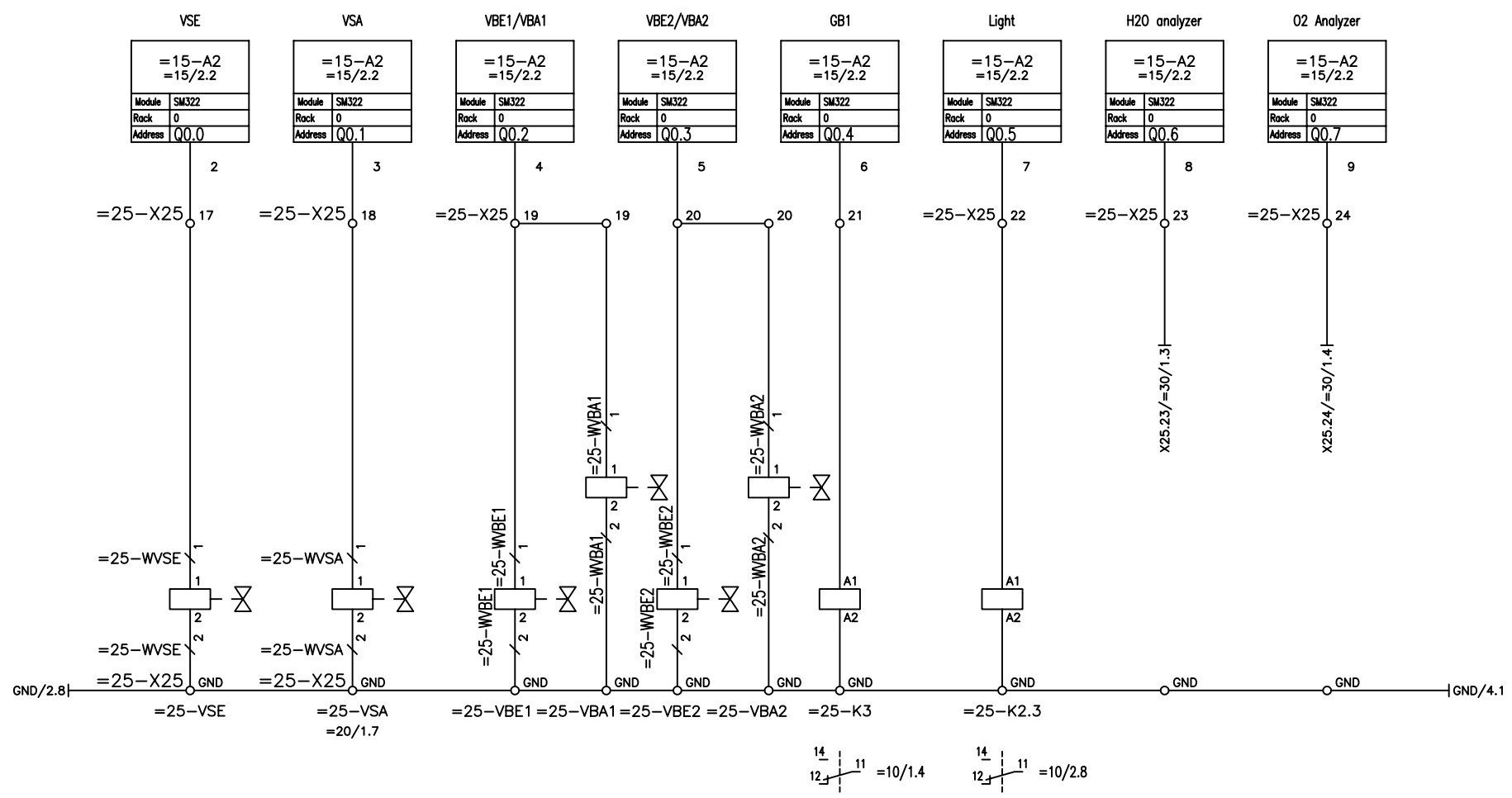


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Digital Output Byte 124

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1 2 3 4 5 6 7 8



purge
inlet

purge
outlet

box isolation
VBE1/VBA1 box 1 inlet/outlet
VBE2/VBA2 box 2 inlet/outlet

GB1
blower

light

H2O
analyzer
on

O2
analyzer
on

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d				

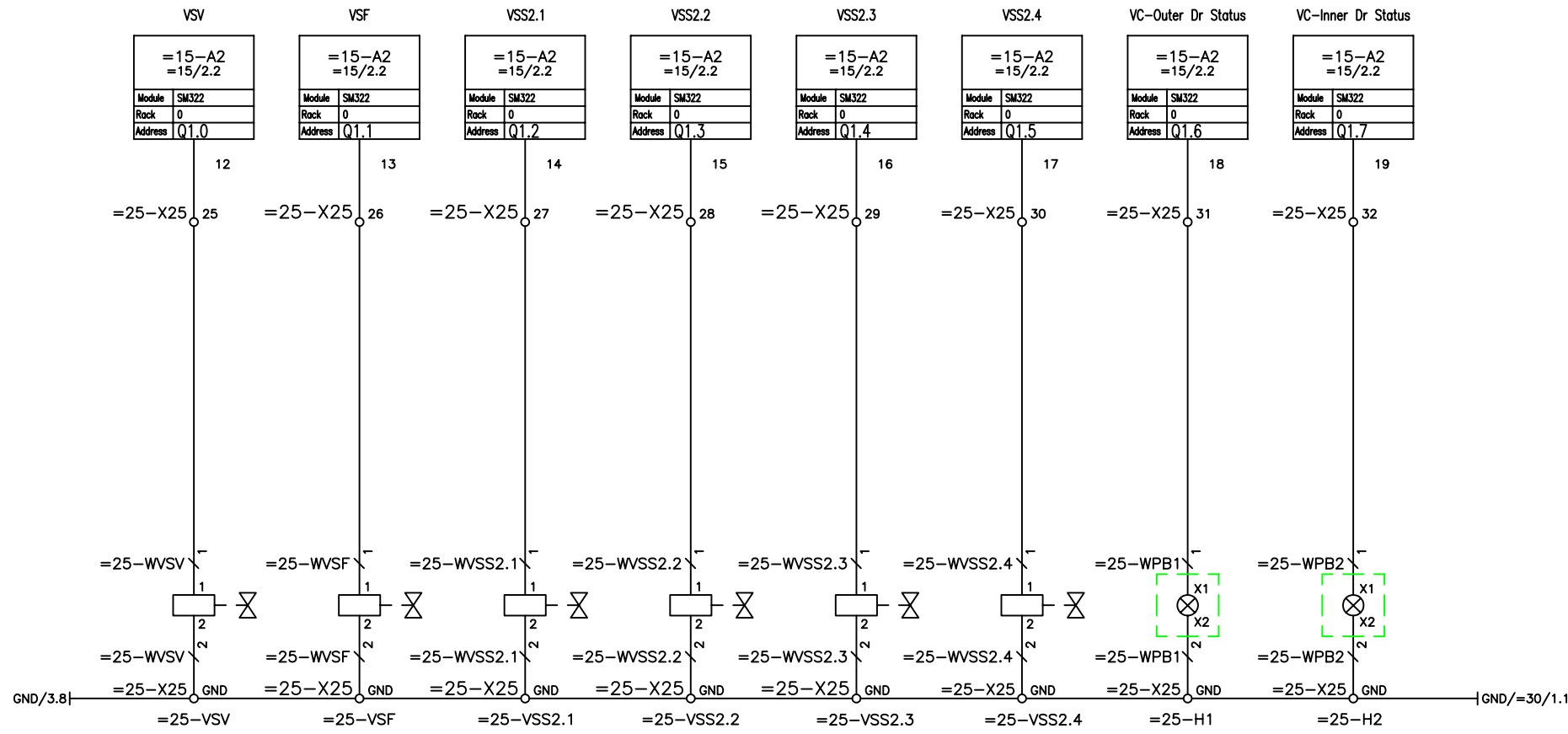


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Digital Output Byte 0

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1 2 3 4 5 6 7 8



————— "T" —chamber ————— vacuum chamber —————
evacuate refill release close release close outer door inner door
inner door inner door outer door outer door status status

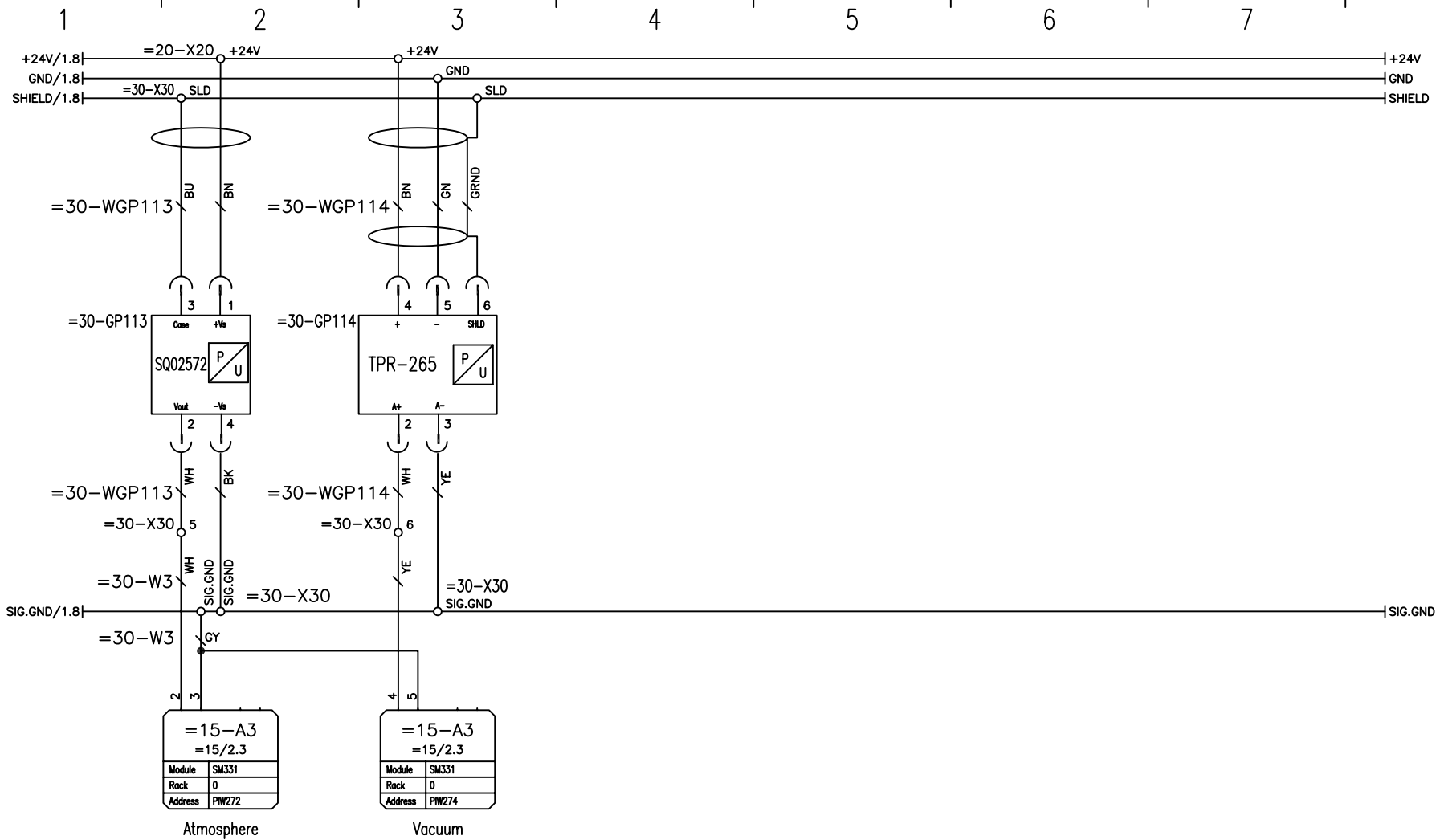
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Digital Output Byte 1

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————— "T" —chamber —————
 atmosphere vacuum
 antechamber antechamber

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Analog Input PIW 272 - 274

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#	Part No.	Description	Comments	Loc.	Inst.	Label	Loc.Pt.
1	EL2-218	Touch Panel color		+10	=10	-A1	3.4
2	EL2-251	S5-S7 Profibus Conn. 1 port		+10	=10	-A1	3.4
3	EL2-170	Simatic Profibus Cable		+10	=10	-A1	3.4
4	EL2-255	Circuit Breaker C6A/10kA 1pol		+10	=10	-F1	3.2
5	EL2-005	Grey 3 Conductor	4qmm	+10	=10	-F1.1	3.2
6	EL-81	Fuse Plug Module	4qmm	+10	=10	-F1.1	3.2
7	EL-98	Orange End Plate 3 conductor	4qmm	+10	=10	-F1.1	3.2
8	EL2-299	250V 10A Fuse		+10	=10	-F1.1	3.2
9	EL2-255	Circuit Breaker C6A/10kA 1pol		+10	=10	-F2	2.5
10	EL2-255	Circuit Breaker C6A/10kA 1pol		+10	=10	-F3	1.3
11	EL-11	Motor Prot. Switch 5.5...8.0A	3RV1011-1HA10	+10	=10	-F4	1.2
12	EL-44	Aux. switch on Motor Protection	10A / 24V	+10	=10	-F4	1.2
13	EL-11	Motor Prot. Switch 5.5...8.0A	3RV1011-1HA10	+10	=10	-F5	1.7
14	EL-44	Aux. switch on Motor Protection	10A / 24V	+10	=10	-F5	1.7
15	EL-47	Main Power Switch 3pol. 25A	9.5KW / 25A	+10	=10	-Q1	1.1
16	EL2-371	1k Resistor/MM410		+10	=10	-R1	1.4
17	EL2-220	SITOP Smart Power Supply	110V/230VAC//24VDC, 10A	+10	=10	-T1	3.2
18	EL2-222	Micromaster 410 control panel		+10	=10	-U1	1.3
19	EL2-221	MicroMaster 410 115 VAC		+10	=10	-U1	1.3
20	BL-11	Blower Motor Cable		+10	=10	-WXS1	1.4
21	EL2-270	S7-300 CPU313C	24DI,16DO,5AI,2AO	+10	=15	-A1	1.1
22	EL2-205	S7-300 40 Pin connector		+10	=15	-A1	1.1
23	EL2-204	S7-300 40 Pin connector w/ wire leads		+10	=15	-A1	1.1
24	EL2-158	S5/S7 Profibus Conn. w/ double port		+10	=15	-A1	1.1
25	EL2-314	Memory Card 64 KB for 313C	for S7-300/ET200S IT151	+10	=15	-A1	1.1
26	EL2-263	S7-300 20 Pin connector w/ wire leads		+10	=15	-A2	2.2
27	EL2-164	S7-300 Digital Output Module SM322 16DO		+10	=15	-A2	2.2
28	EL2-239	S7-300 20-pin connector for module		+10	=15	-A3	2.3
29	EL2-165	S7-300 Analog Input Module SM331 2AI		+10	=15	-A3	2.3
30	Mis2-89	1 Push Button Mounting Plate		+10	=20	-S1	2.3

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#	Part No.	Description	Comments	Loc.	Inst.	Label	Loc.Pt.
31	EL2-215	Momentary Switch		+10	=20	-S1	2.3
32	EL2-141	N.O. Contact		+10	=20	-S1	2.3
33	EL2-089	1 Switch Push Button Assembly		+10	=20	-S1	2.3
34	Mis2-89	1 Push Button Mounting Plate		+10	=20	-S2	2.4
35	EL2-215	Momentary Switch		+10	=20	-S2	2.4
36	EL2-141	N.O. Contact		+10	=20	-S2	2.4
37	EL2-089	1 Switch Push Button Assembly		+10	=20	-S2	2.4
38	Misc-03	Foot Pedal GF2 10ES/10ES		+10	=20	-SF	2.6
39	EL2-136	Omron Proximity Switch		+10	=20	-SS2.1	2.2
40	TFD-28	Vac. Chamber Dr Position indicator		+10	=20	-SS2.2	2.2
41	EL2-136	Omron Proximity Switch		+10	=20	-SS2.3	3.3
42	EL2-136	Omron Proximity Switch		+10	=20	-SS2.4	3.4
43	EL2-276	Proximity Switch Cable 5m		+10	=20	-WSS2.1	2.2
44	EL2-276	Proximity Switch Cable 5m		+10	=20	-WSS2.3	3.3
45	EL2-276	Proximity Switch Cable 5m		+10	=20	-WSS2.4	3.4
46	EL2-140	Lamp Holder		+10	=25	-H1	4.7
47	LI-25	28V Bulb		+10	=25	-H1	4.7
48	LI-25	28V Bulb		+10	=25	-H2	4.7
49	EL2-140	Lamp Holder		+10	=25	-H2	4.7
50	AN-11	Relay 24V DC, 10A 1pol.	LR 26716	+10	=25	-K2.1	1.2
51	AN-11	Relay 24V DC, 10A 1pol.	LR 26716	+10	=25	-K2.3	3.6
52	AN-11	Relay 24V DC, 10A 1pol.	LR 26716	+10	=25	-K3	3.5
53	EL-45	3 pole 24VDC 9A contactor		+10	=25	-K4	2.5
54	EL-45	3 pole 24VDC 9A contactor		+10	=25	-K5	2.6
55	VA-47	Box Isolation Press. Vlv		+10	=25	-VD1	1.7
56	VA-47	Box Isolation Press. Vlv		+10	=25	-VD2	1.7
57	VA-01	24VDC Burkert Valve		+10	=25	-VG	2.3
58	VA-05	24VDC KF40 E-Valve		+10	=25	-VHA1	2.7
59	VA-05	24VDC KF40 E-Valve		+10	=25	-VHE1	2.7
60	VA-01	24VDC Burkert Valve		+10	=25	-VRE	1.5

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#	Part No.	Description	Comments	Loc.	Inst.	Label	Loc.Pt.
61	VA-01	24VDC Burkert Valve		+10	=25	-VRS	1.4
62	VA-01	24VDC Burkert Valve		+10	=25	-VRV	1.3
63	VA-01	24VDC Burkert Valve		+10	=25	-VS	2.2
64	VA-05	24VDC KF40 E-Valve		+10	=25	-VSA	3.3
65	VA-01	24VDC Burkert Valve		+10	=25	-VSE	3.2
66	VA-01	24VDC Burkert Valve		+10	=25	-VSF	4.3
67	VEE0068	Double Festo Solenoid valve 5/3 CPE14		+10	=25	-VSS2.1	4.3
68	VEE0068	Double Festo Solenoid valve 5/3 CPE14		+10	=25	-VSS2.3	4.5
69	VA-05	24VDC KF40 E-Valve		+10	=25	-VSV	4.2
70	VA-01	24VDC Burkert Valve		+10	=25	-W	2.4
71	VA-48	Box Isolation Valve Plug		+10	=25	-WVD1	1.7
72	VA-48	Box Isolation Valve Plug		+10	=25	-WVD2	1.7
73	EL2-055	Short Burkert Valve wire w/LED	l=2m	+10	=25	-WVG	2.3
74	EL2-081	KF40 Pneumatic Valve wire	l=5m	+10	=25	-WVHA1	2.7
75	EL2-081	KF40 Pneumatic Valve wire	l=5m	+10	=25	-WVHE1	2.7
76	EL2-055	Short Burkert Valve wire w/LED	l=2m	+10	=25	-WVRE	1.5
77	EL2-055	Short Burkert Valve wire w/LED	l=2m	+10	=25	-WVRS	1.4
78	EL2-055	Short Burkert Valve wire w/LED	l=2m	+10	=25	-WVRV	1.3
79	EL2-055	Short Burkert Valve wire w/LED	l=2m	+10	=25	-WVS	2.2
80	EL2-081	KF40 Pneumatic Valve wire	l=5m	+10	=25	-WVSA	1.7
81	EL2-055	Short Burkert Valve wire w/LED	l=2m	+10	=25	-WVSE	3.2
82	EL2-054	Long Burkert Valve wire w/LED	l=5m	+10	=25	-WVSF	4.3
83	VA-63	Solenoid valve connector w/cable CPE's	5m	+10	=25	-WVSS2.1	4.3
84	VA-63	Solenoid valve connector w/cable CPE's	5m	+10	=25	-WVSS2.2	4.4
85	VA-63	Solenoid valve connector w/cable CPE's	5m	+10	=25	-WVSS2.3	4.5
86	VA-63	Solenoid valve connector w/cable CPE's	5m	+10	=25	-WVSS2.4	4.6
87	EL2-081	KF40 Pneumatic Valve wire	l=5m	+10	=25	-WVSV	4.2
88	EL2-055	Short Burkert Valve wire w/LED	l=2m	+10	=25	-WVV	2.4
89	AN-03	H20-Sensor		+10	=30	-GM101	1.3
90	EL2-110	Box Pressure Sensor	+/-20mbar 24VDC/0-10V	+10	=30	-GP101	1.2

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