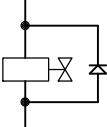
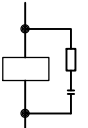
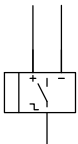
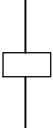
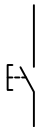
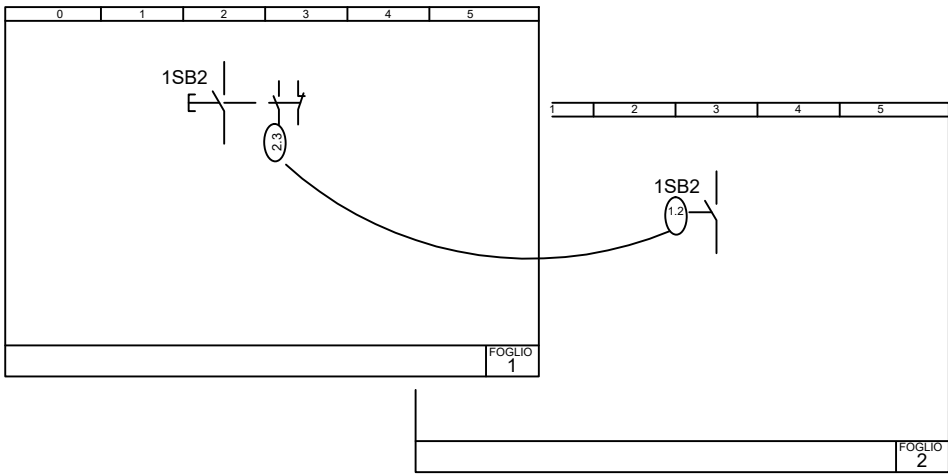


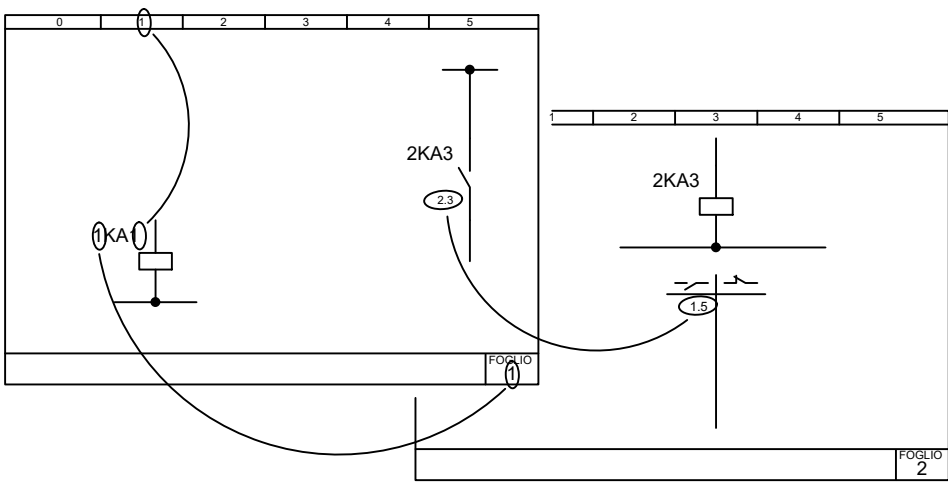
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19																									
AITALMAC										LOCATION SYMBOLS ☐ Components on the door ☐ Components inside the cubicle (usually omitted) ☒ Machine components (usually omitted)				COMPONENTS DESIGNATION C Condensers D CNC control model E Component not in this list F Protection Devices FU Fuses G Generators, feeders H Signalling devices KA Relays KM Contactors L Drives M Motors N Analog integrated circuits P Switching power supply Q Circuit breaker QS Highly versatile change over switch R Resistors SQ Sensor, Limit S Filter SB Buttons T Transformers U Modulators converters V Rectifiers, semiconductors EV Solenoid valves X Terminal wire clamps, connectors Y Electricity actuating devices																														
CLIENTE																																												
AITALMAC CO.,LTD																																												
MACHINE					MAIN POWER SUPPLY																																							
CNC					VOLT. 380																																							
ORBITA5					FREQ. 50-60																																							
WIRING DIAGRAM					CUBICLE DIMENSION																																							
WJ5-220801					L (mm) 1835																																							
					H (mm) 560																																							
					P (mm) 320																																							
CONDUCTORS DESIGNATION																				COLORS WH White GY Gray YE Yellow BU Blue RD Red BK Black OG Orange GNYE GreenYellow																								
<table><thead><tr><th>COLOR</th><th>FUNCTION</th><th>MINIMUM SECTION</th></tr></thead><tbody><tr><td>BLACK</td><td>power circuit A.C./D.C.</td><td>1,0mm²</td></tr><tr><td>RED</td><td>A.C. auxiliary circuit</td><td>1,0mm²</td></tr><tr><td>WHITE</td><td>D.C. auxiliary circuit</td><td>1,0mm²</td></tr><tr><td>BLUE</td><td>N</td><td>2.5mm²</td></tr><tr><td>YELLOW GREEN</td><td>protection earth</td><td>2,5mm²</td></tr><tr><td>SCREEN CABLE</td><td>reference - signal</td><td>0.75 mm²</td></tr><tr><td>RED +/-BLUE -</td><td>thermocouples</td><td>COMPENSATED CABLE</td></tr><tr><td></td><td>PLC circuit</td><td>0,25mm² (0,5mm² I<2A)</td></tr></tbody></table>																								COLOR	FUNCTION	MINIMUM SECTION	BLACK	power circuit A.C./D.C.	1,0mm²	RED	A.C. auxiliary circuit	1,0mm²	WHITE	D.C. auxiliary circuit	1,0mm²	BLUE	N	2.5mm²	YELLOW GREEN	protection earth	2,5mm²	SCREEN CABLE	reference - signal	0.75 mm²
COLOR	FUNCTION	MINIMUM SECTION																																										
BLACK	power circuit A.C./D.C.	1,0mm²																																										
RED	A.C. auxiliary circuit	1,0mm²																																										
WHITE	D.C. auxiliary circuit	1,0mm²																																										
BLUE	N	2.5mm²																																										
YELLOW GREEN	protection earth	2,5mm²																																										
SCREEN CABLE	reference - signal	0.75 mm²																																										
RED +/-BLUE -	thermocouples	COMPENSATED CABLE																																										
	PLC circuit	0,25mm² (0,5mm² I<2A)																																										
THE WIRING DIAGRAM IS INDICATED WITHOUT TENSION, AIR, OIL AND WATER FLOW.										MAIN CIRCUIT BREAKER OPERATING TIME: _____ SYMMETRICAL SHORT-CIRCUIT CURRENT: _____ WARNING: THE PROTECTION OF THE MAIN POWER SUPPLY AND THE CONNECTION TO THE EARTH'S SYSTEM ARE DEPENDANT ON THE CUSTOMER. IN RESPECT TO THE EUROPEAN STANDARD EN60439-1 SPECIFICATIONS - CEI 17-13.1 DOSSIER 1433 - AND DPR 547 DD 27/04/1955, THE MAIN POWER SUPPLY MUST BE PROTECTED WITH A PROPER MAGNETIC-THERMAL SWITCH HAVING BREAKING CAPACITY NOT LOWER THAN 10 KILOAMPERE.																																		
AitalMac www.aitalmac.com			Designed By : ZLJ			Checked By :			Trimness By :			Description :																																
Machine : Sawjet						Date: 10.18.2022			Revision: WJ5-220801			Approved By :			Pag. 1		Next. 1.1																											

SYMBOL	MEANING	SYMBOL	MEANING
	NORMALLY OPEN CONTACT		SOLENOID VALVE
	NORMALLY CLOSED CONTACT		AC CONTACTOR
	SENSOR		RELAY
	BUTTON		
	LAMP		

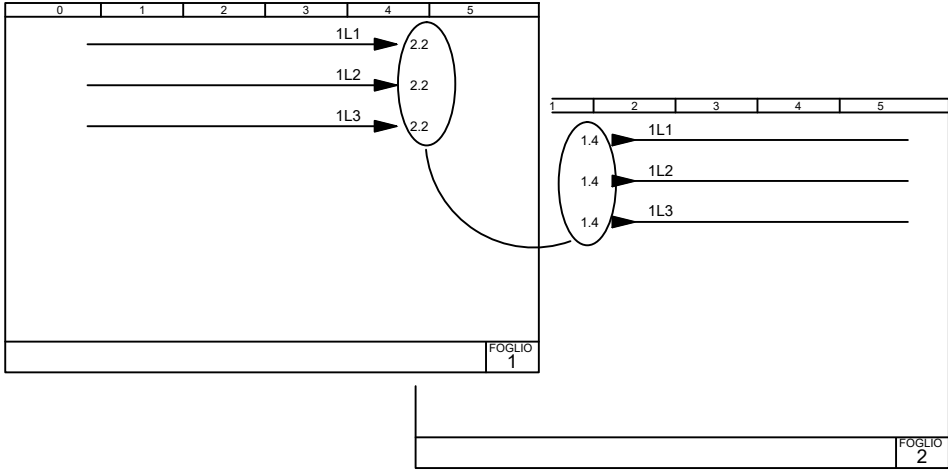
COMPONENT REFERENCE



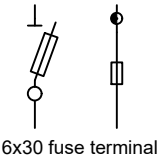
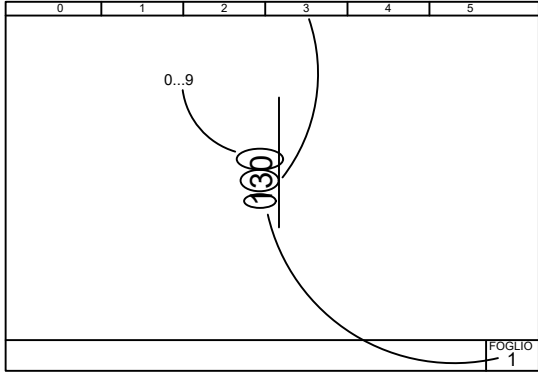
COMPONENT NAME/COIL-CONTACT POSITION

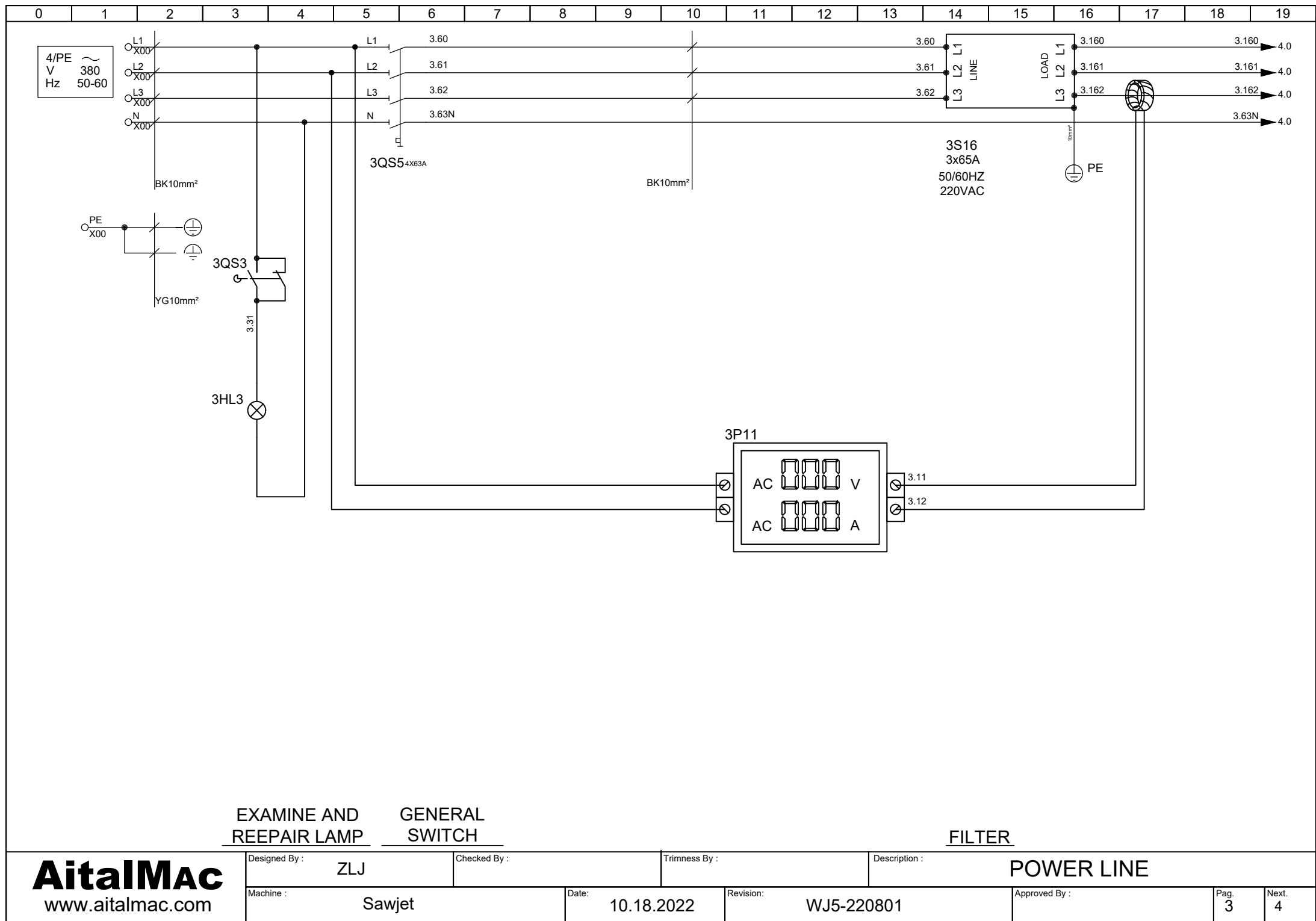


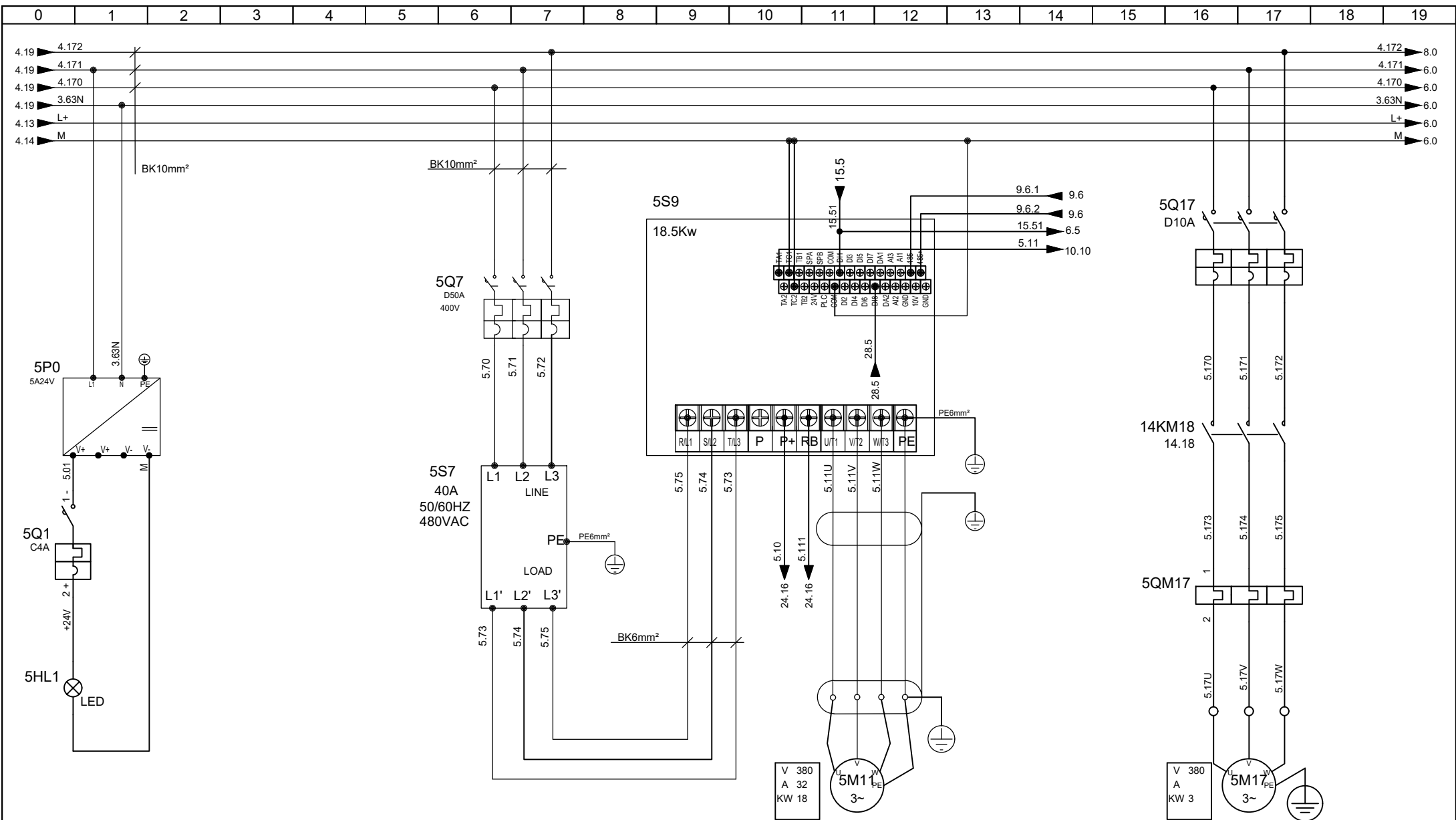
SIGNALS



WIRE NUMBER







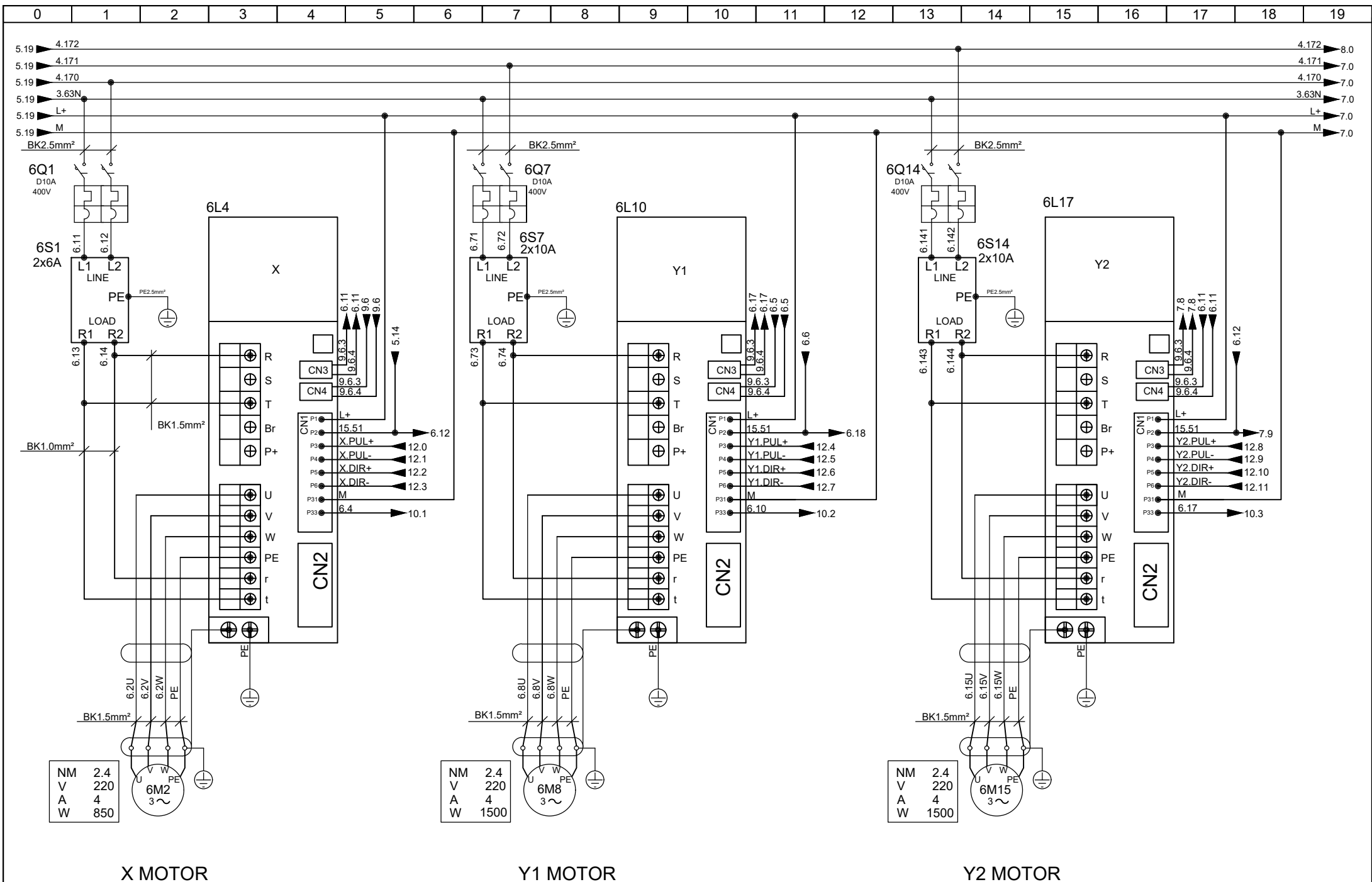
LED LIGHT

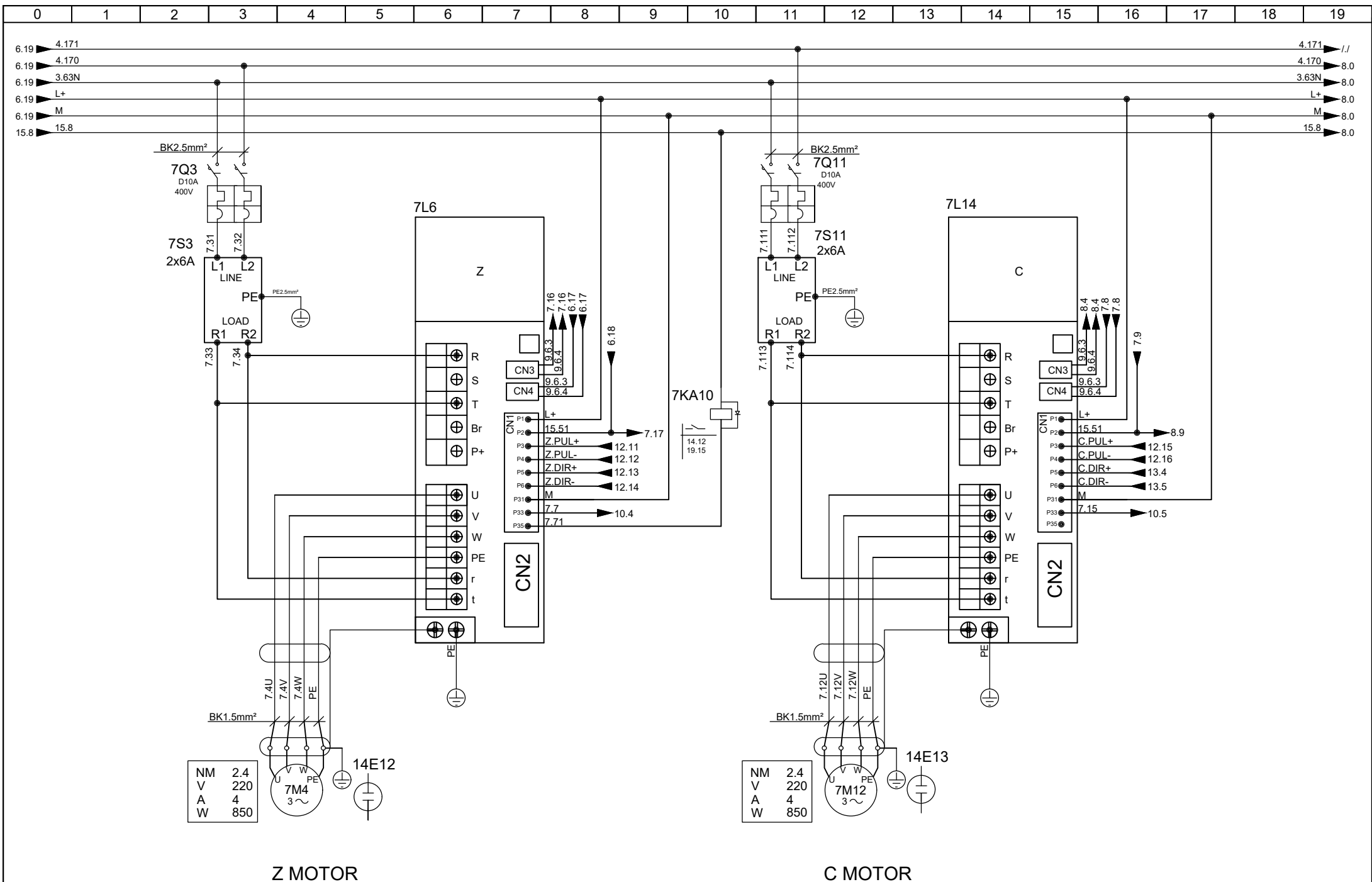
INVERTER FILTER

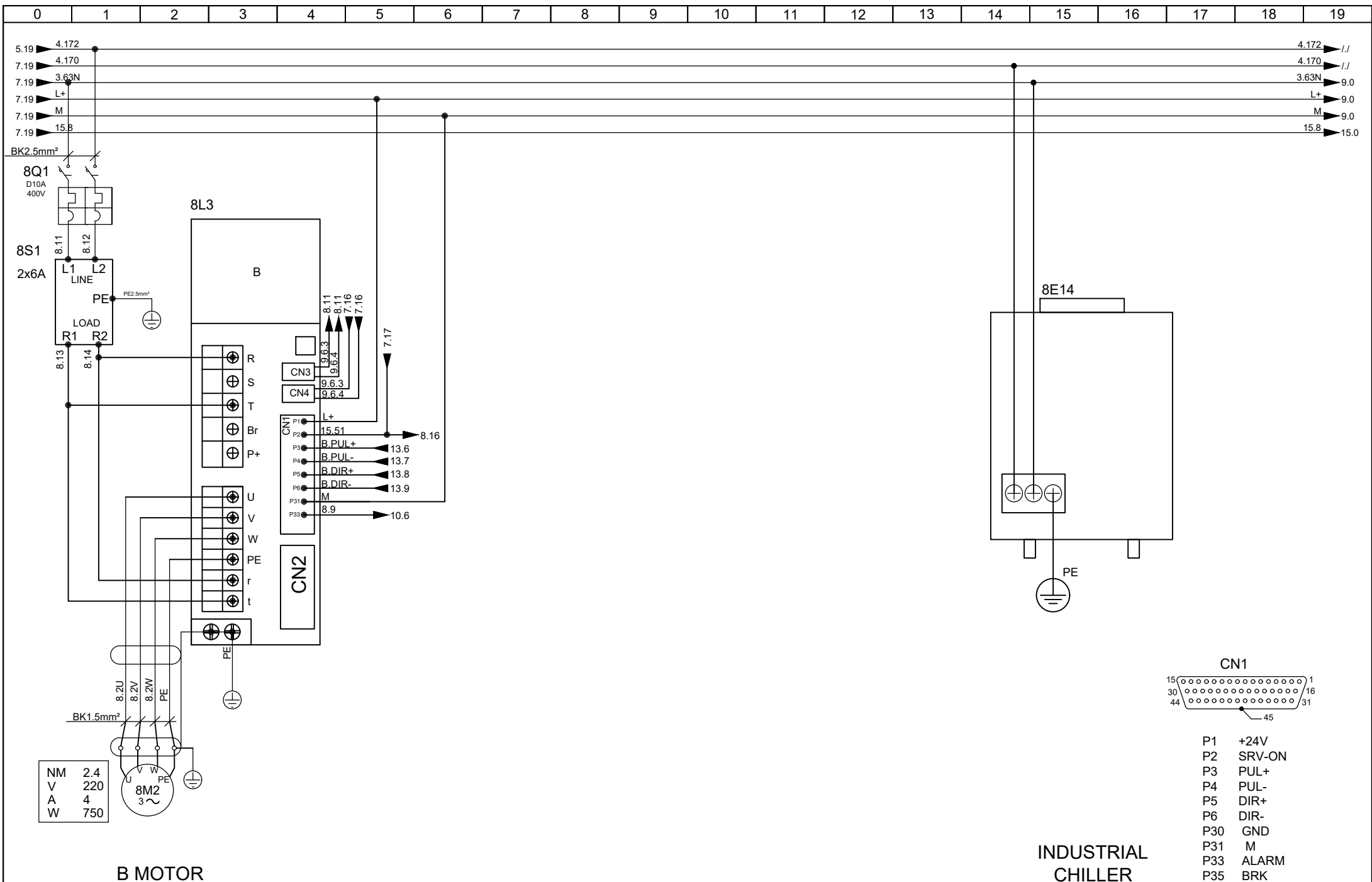
SPINDLE MOTOR

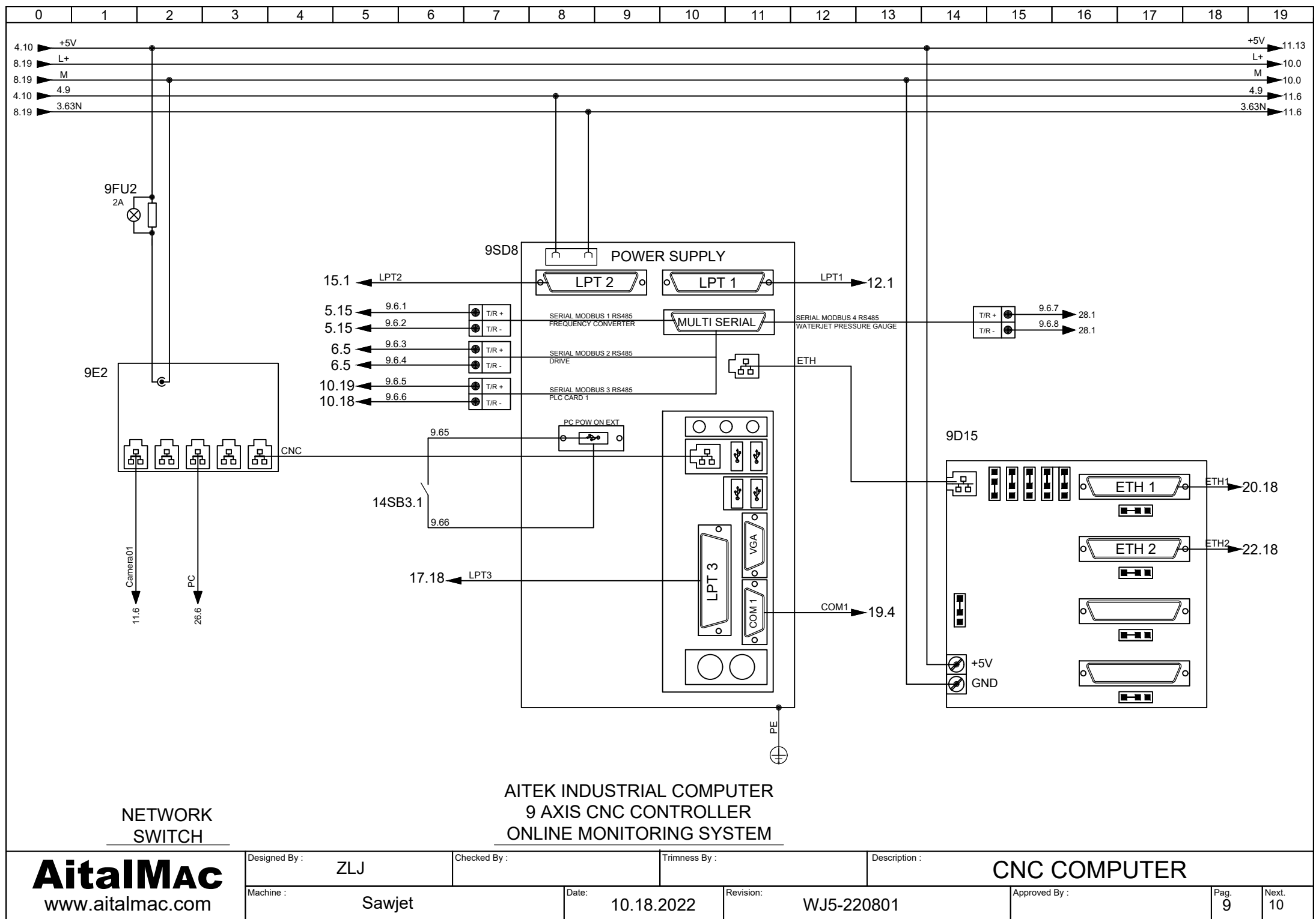
WATJET MOTOR

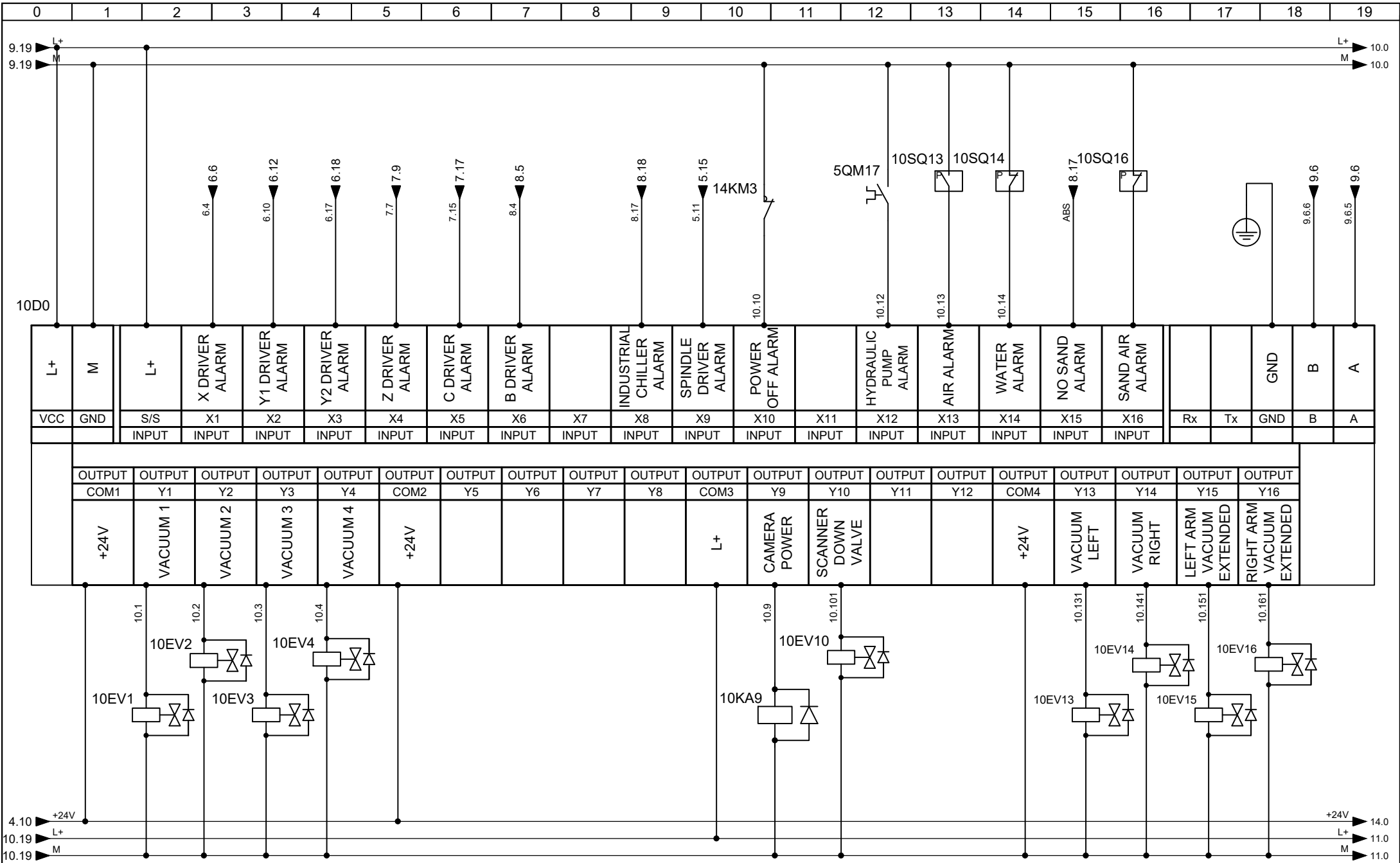
HYDRAULIC PUMP MOTOR

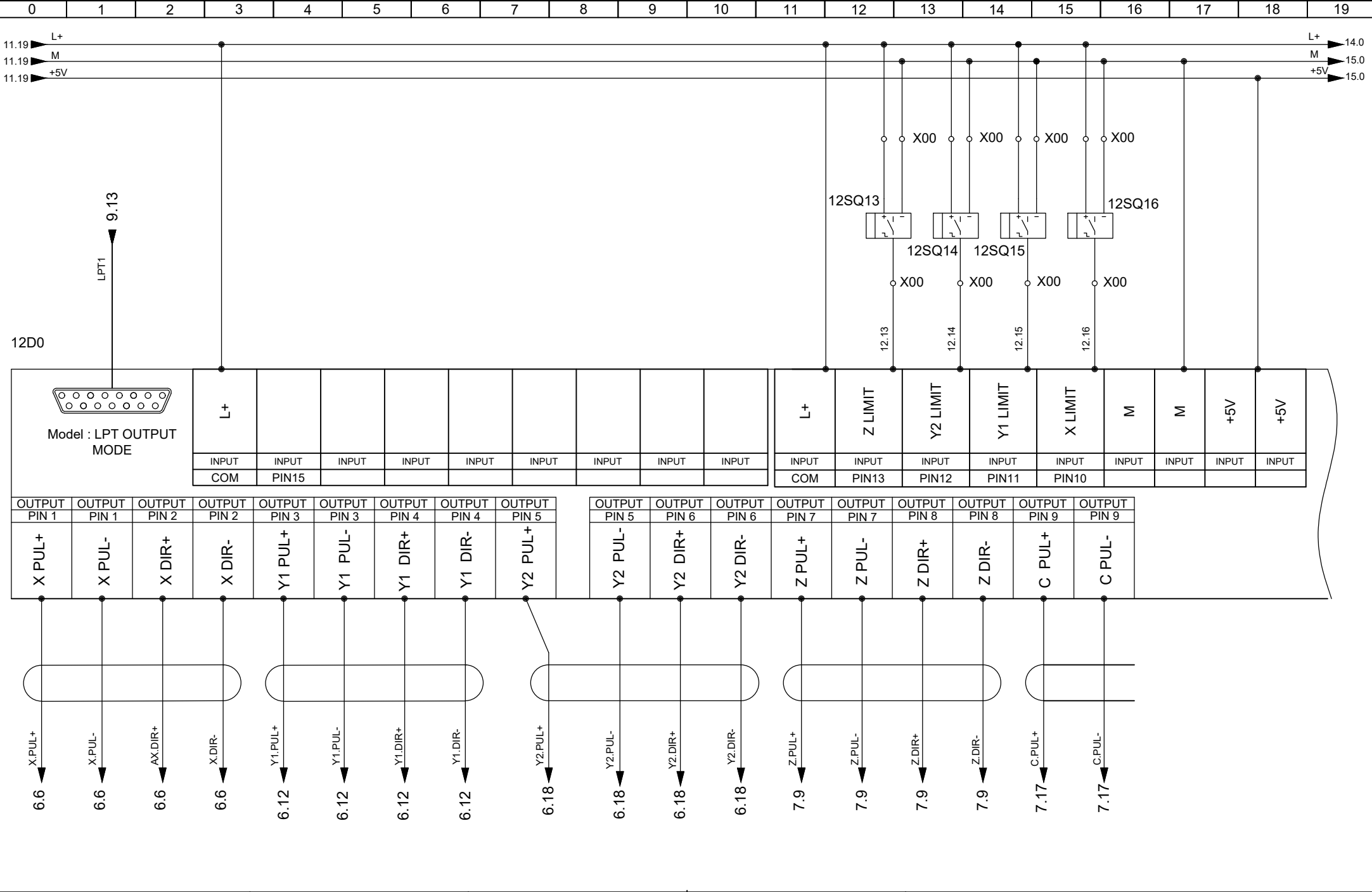




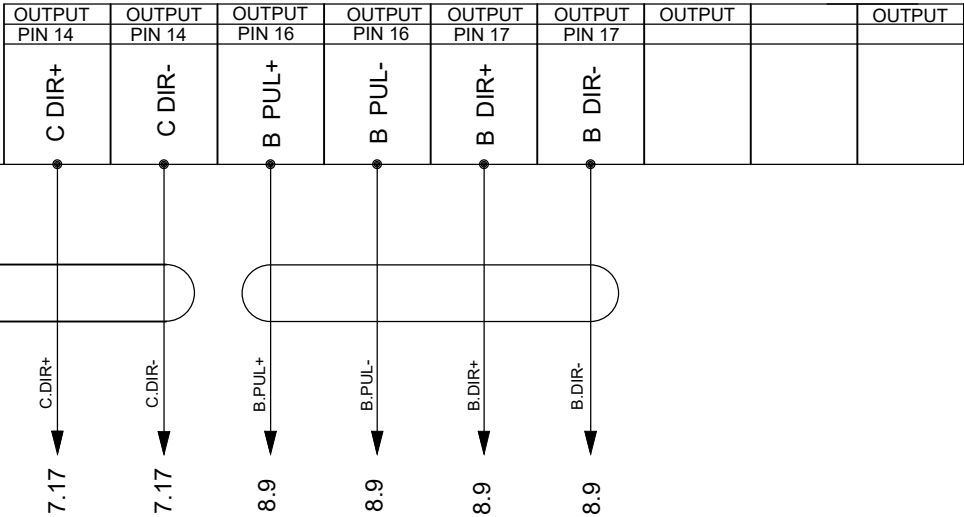


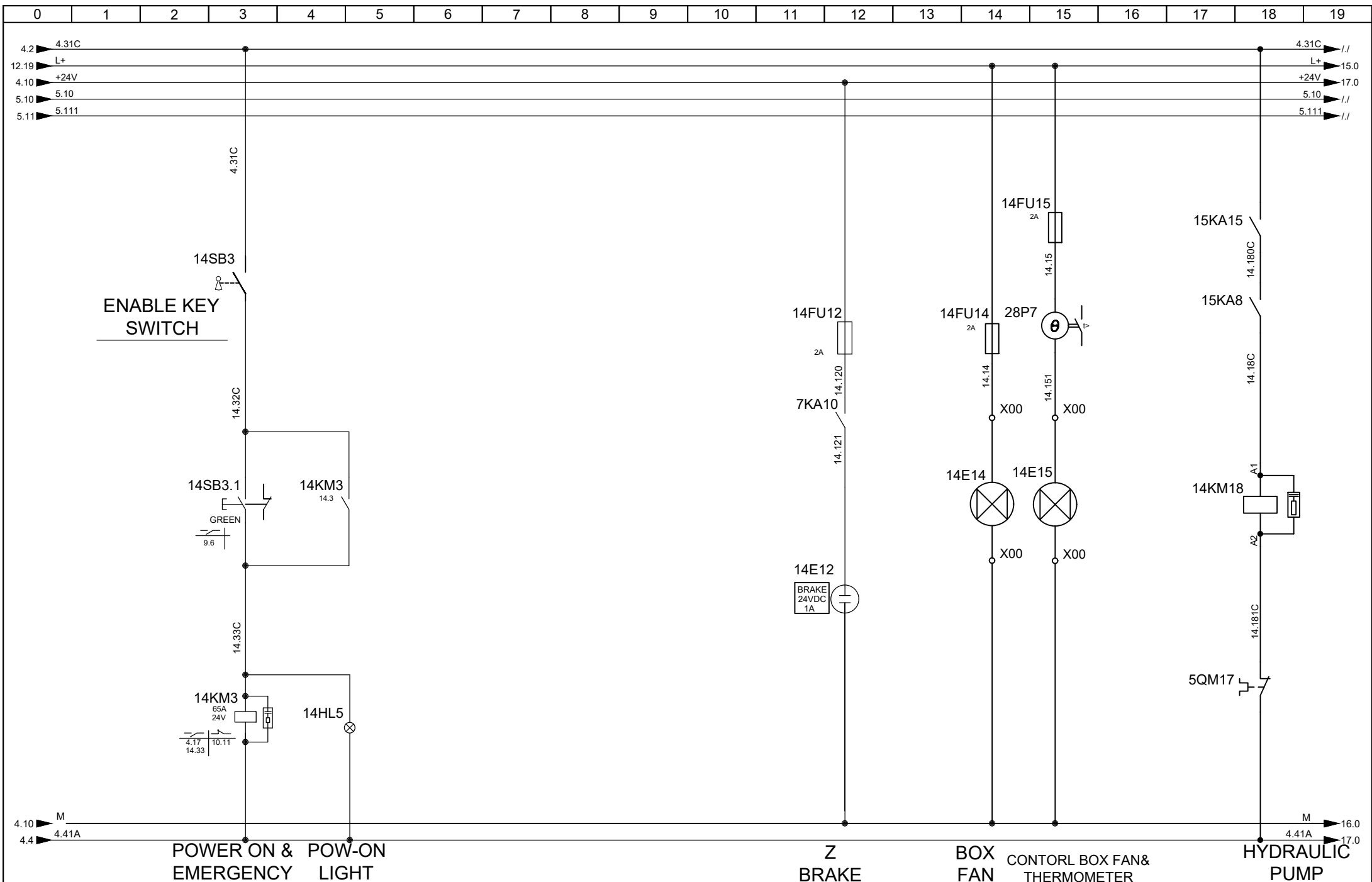






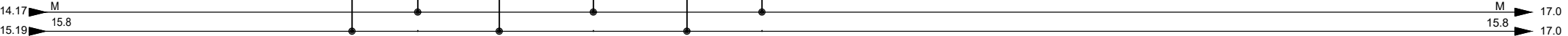
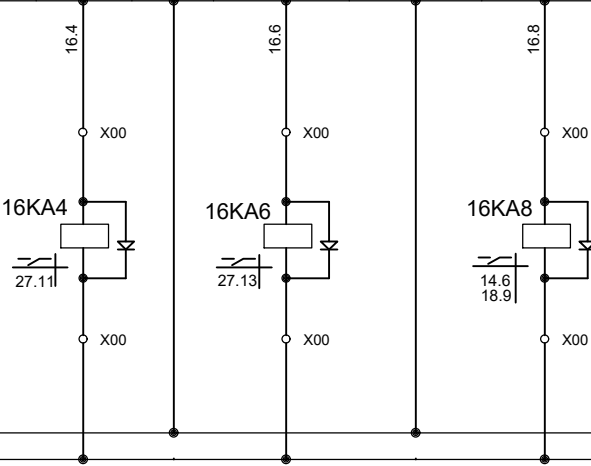
12D0

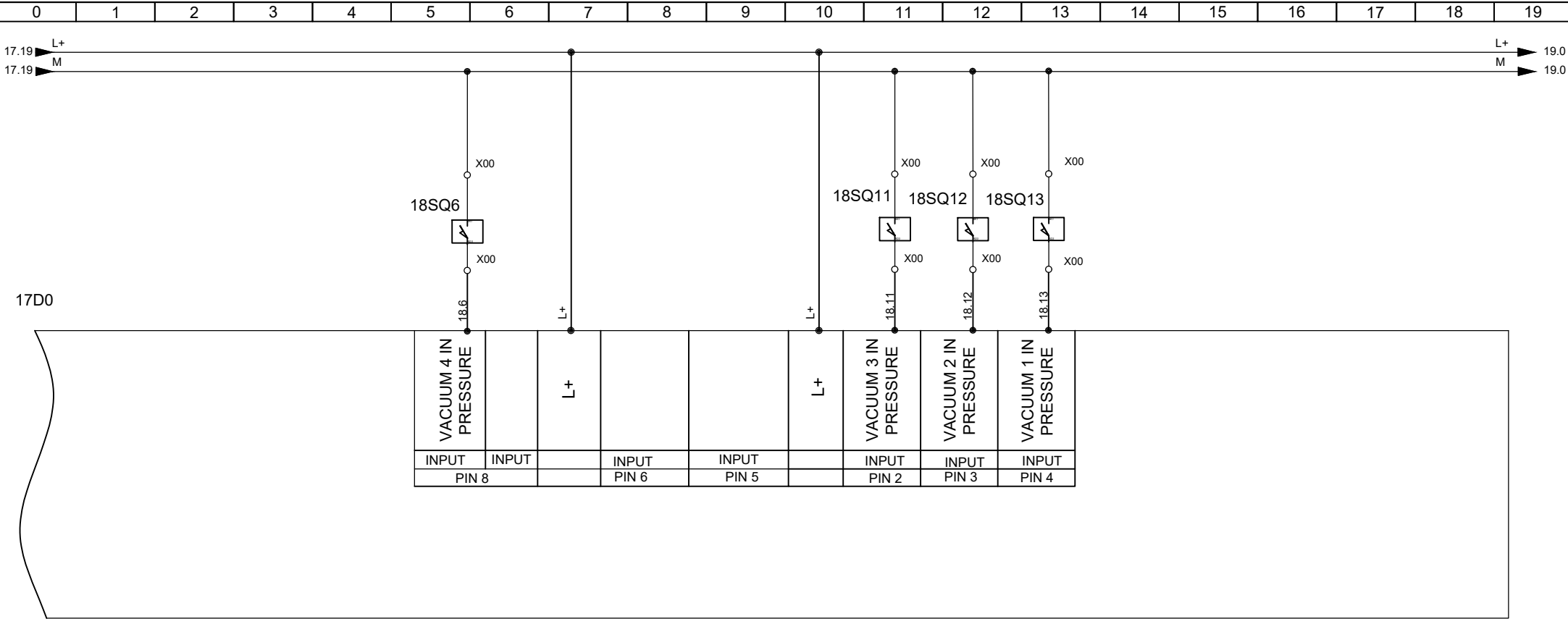


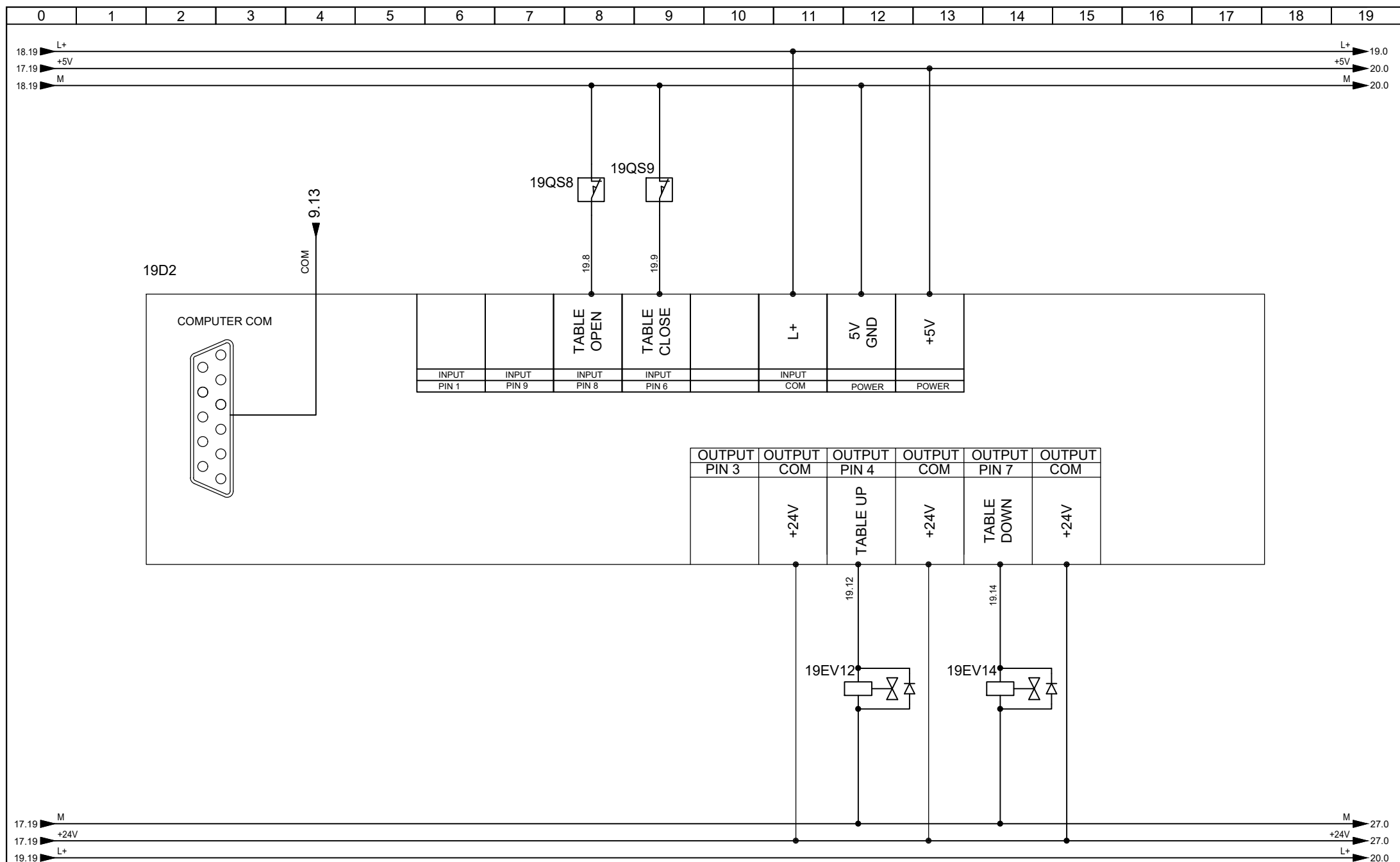


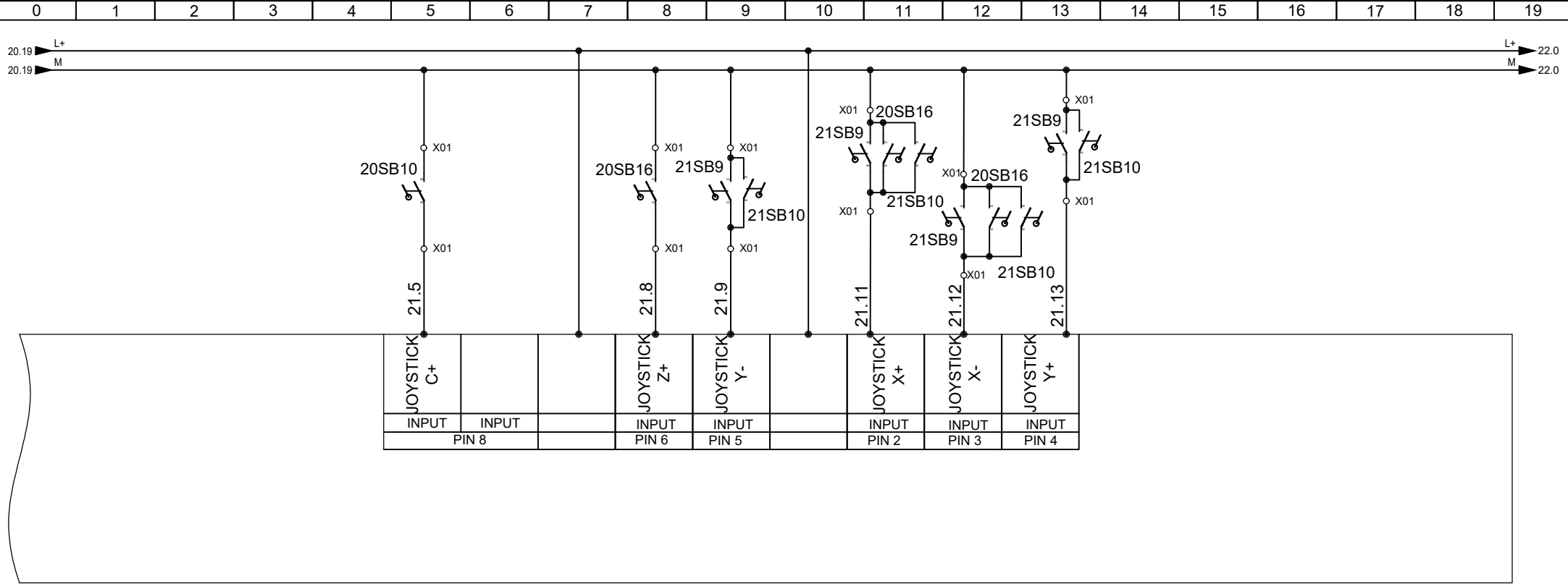
15D0

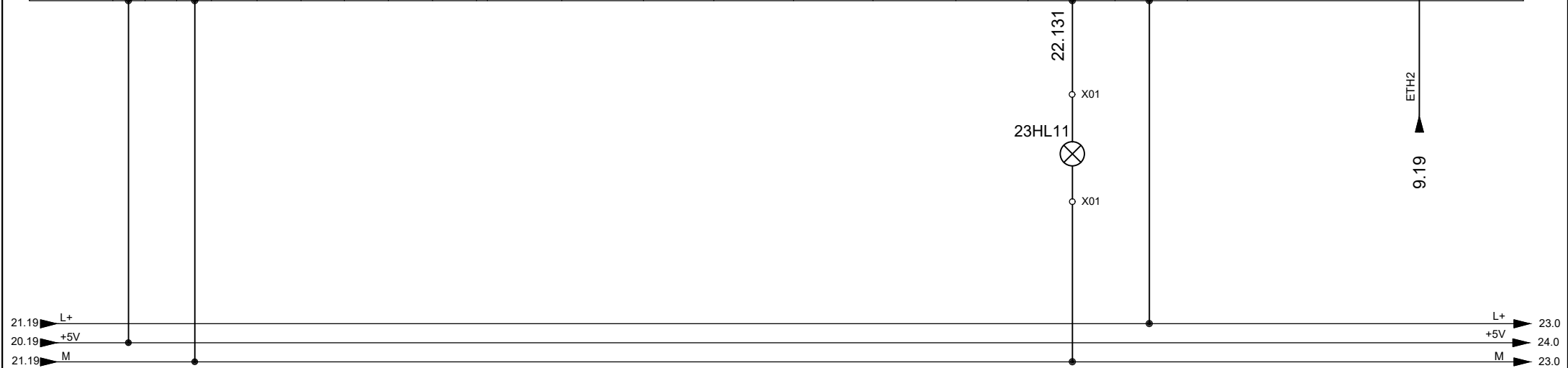
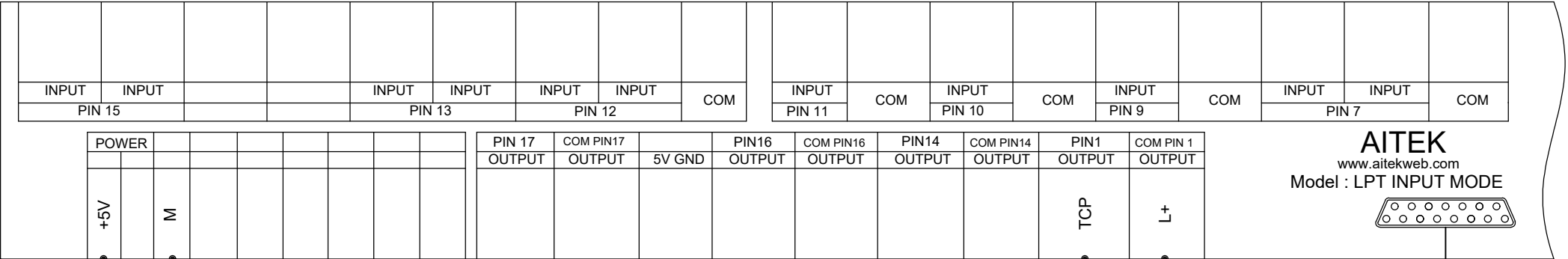
OUTPUT PIN 14	OUTPUT PIN 14	OUTPUT PIN 16	OUTPUT PIN 16	OUTPUT PIN 17	OUTPUT PIN 17	OUTPUT	OUTPUT	OUTPUT
SAWJET	COM	SLAB PROBE	COM	GREASE PUMP	COM			

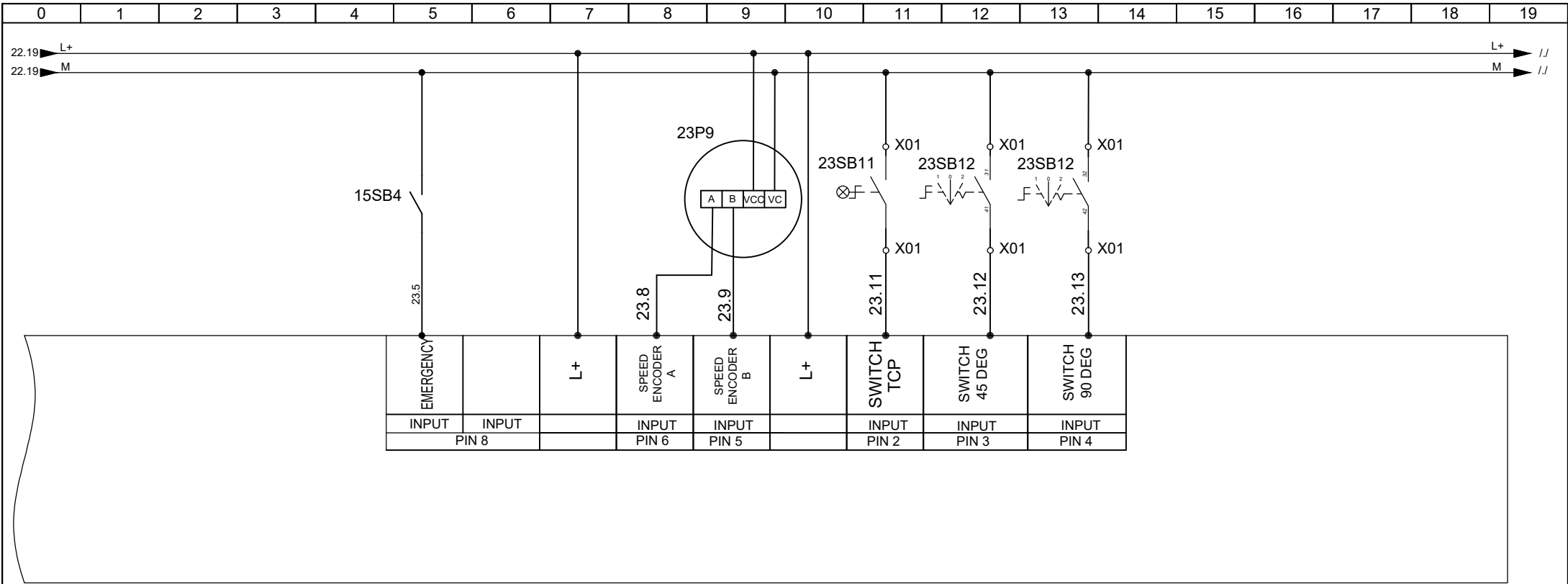




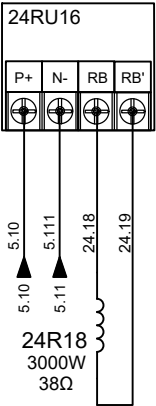




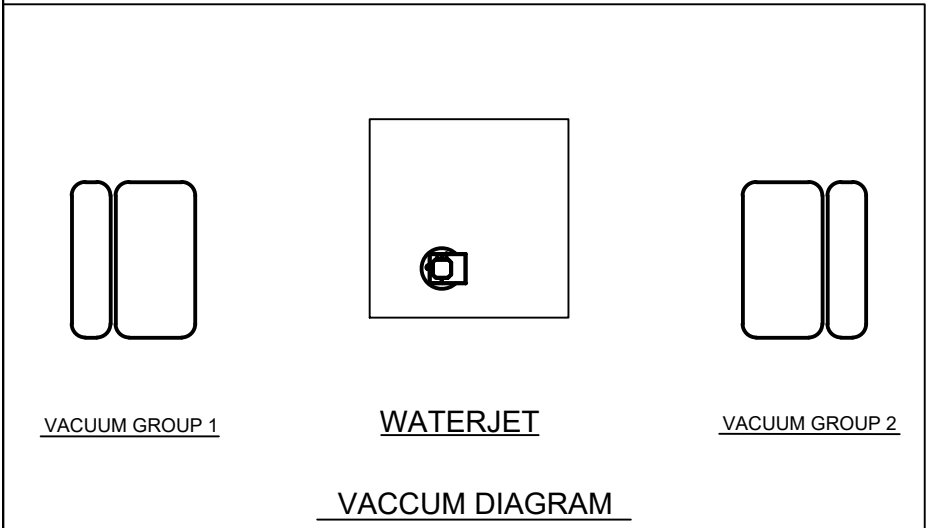
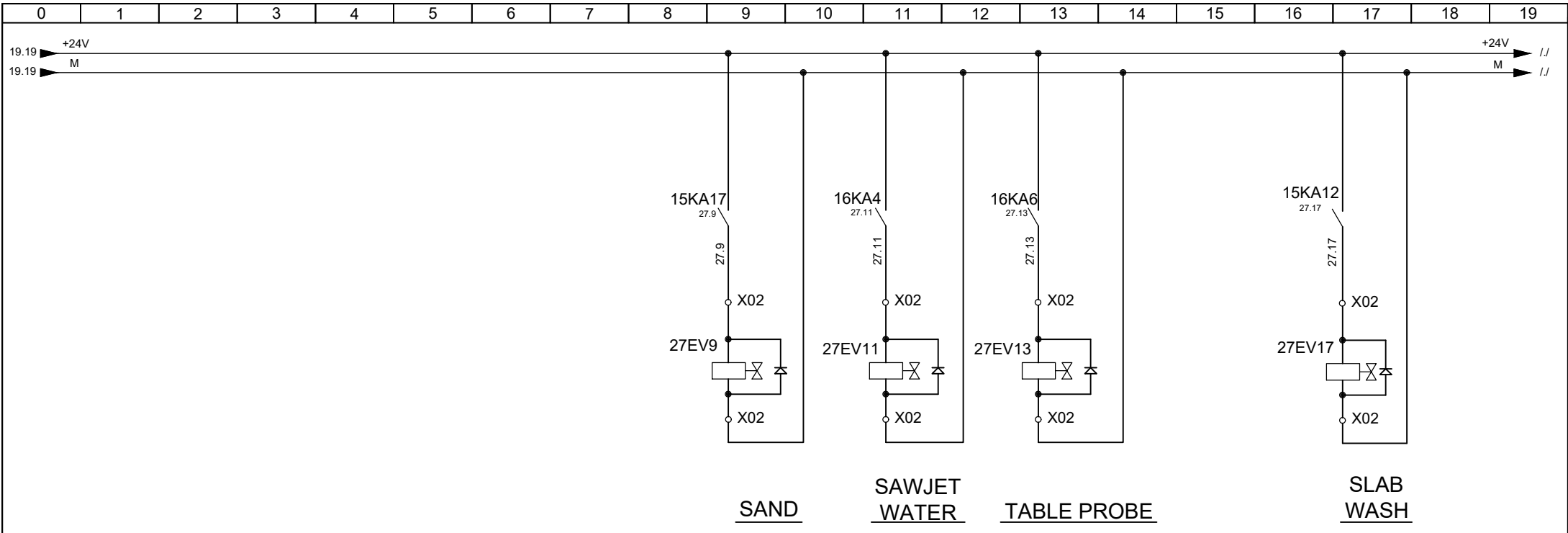


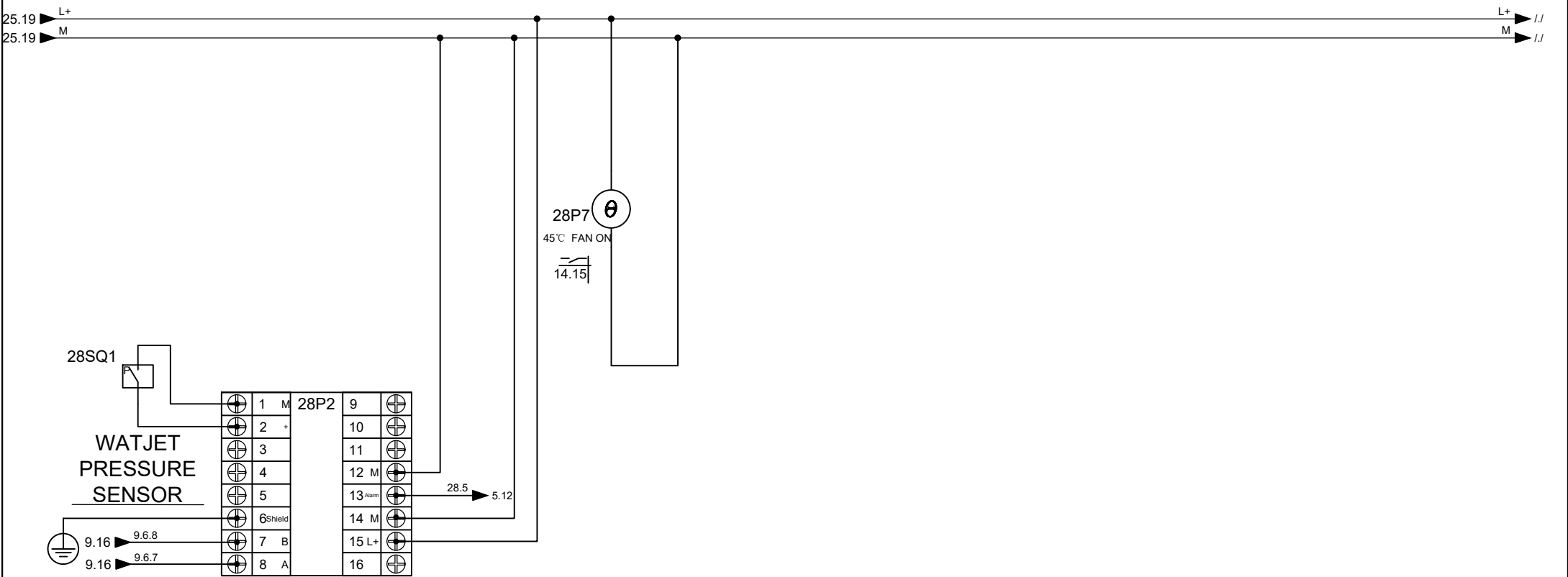


SPEED CONTROL WHEEL



**BRAKING
UNIT**

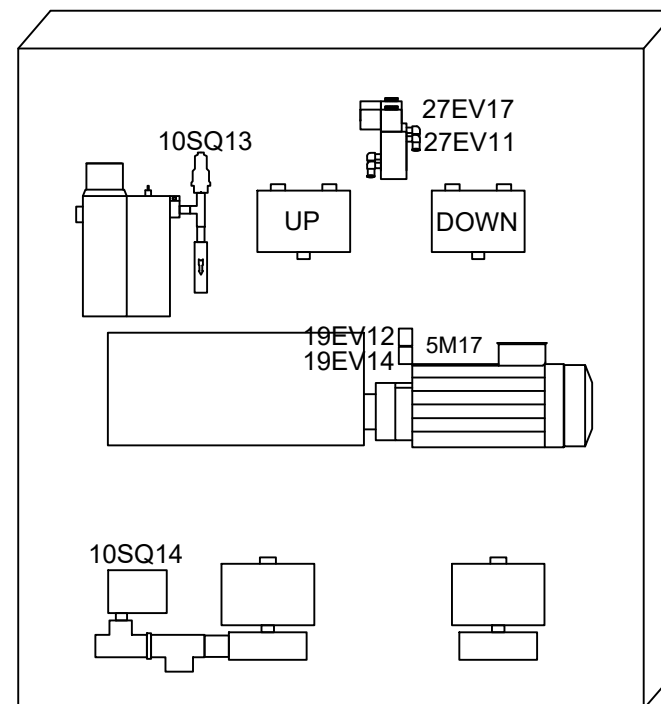
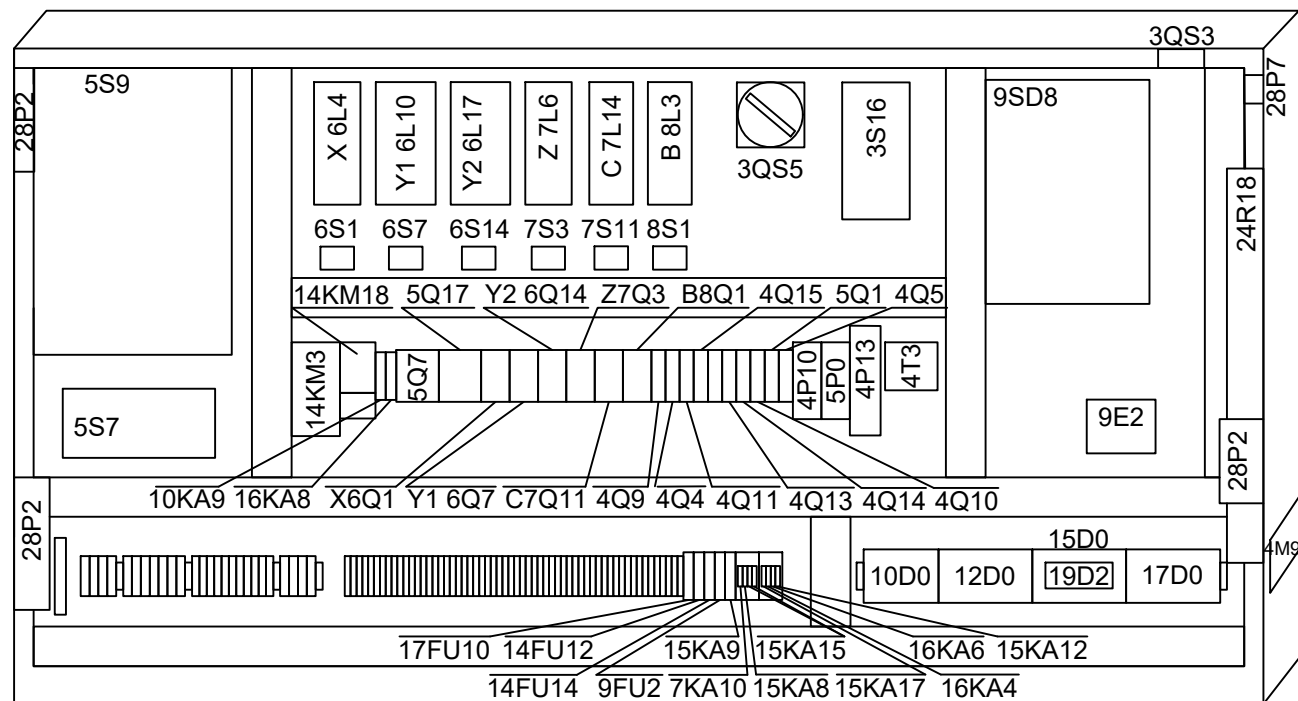




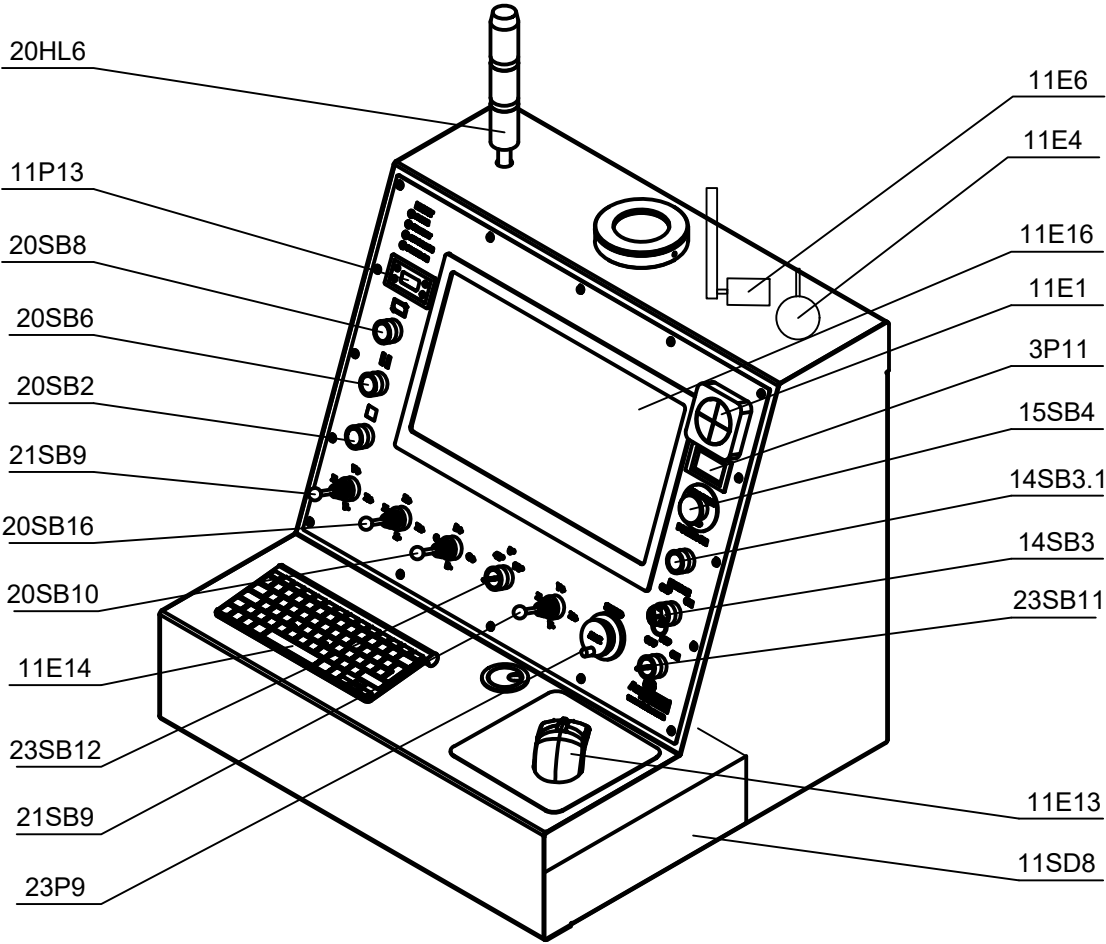
WATJET PRESSURE GAUGE

ELECTRIC BOX
THERMOMETER

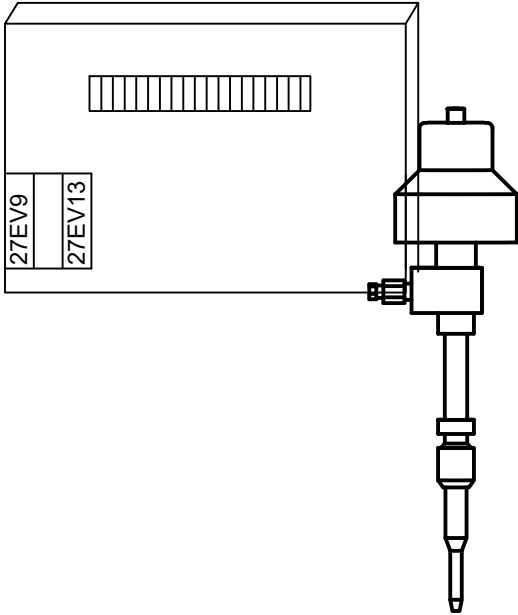
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
AitalMac www.aitalmac.com				Designed By : ZLJ			Checked By :			Trimness By :			Description :						
Machine : Sawjet								Date: 10.18.2022		Revision: WJ5-220801					Approved By :			Pag. 29	Next. 30



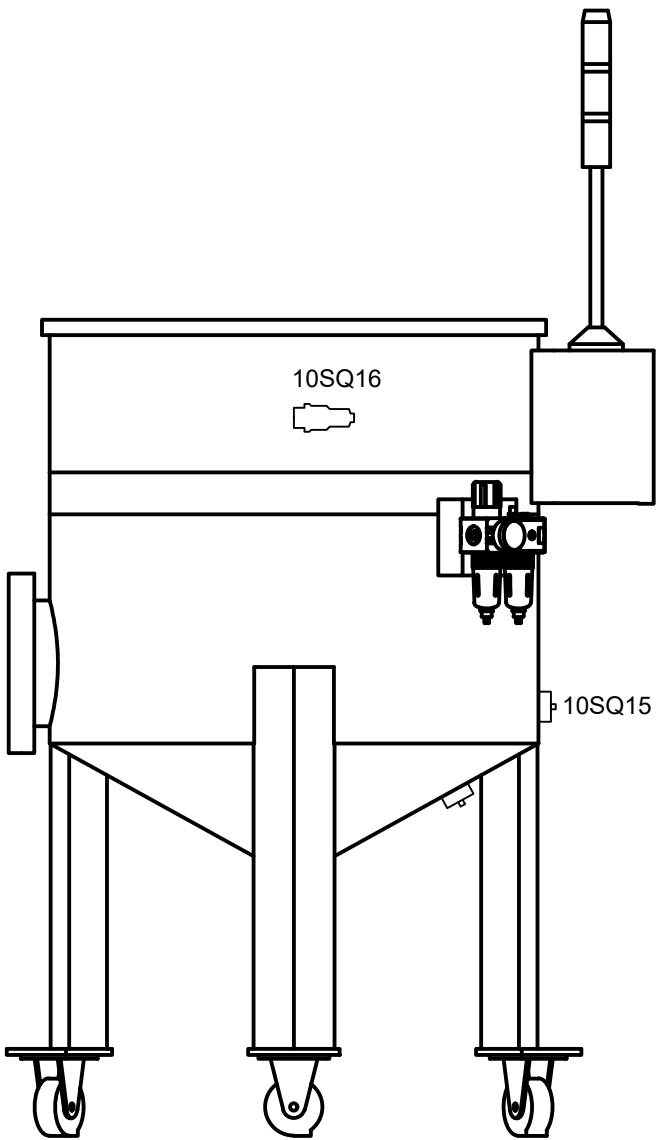
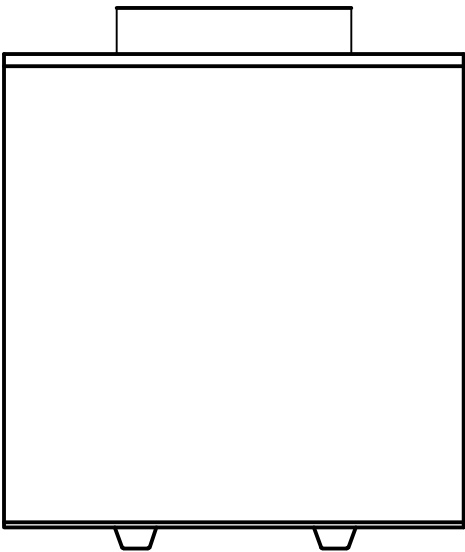
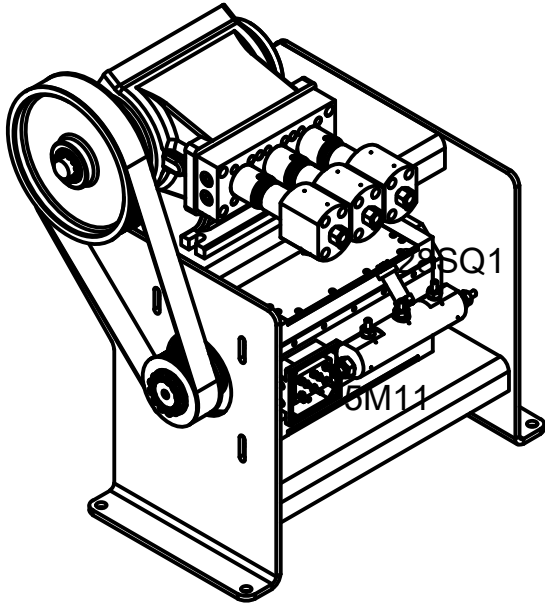
X00



X01



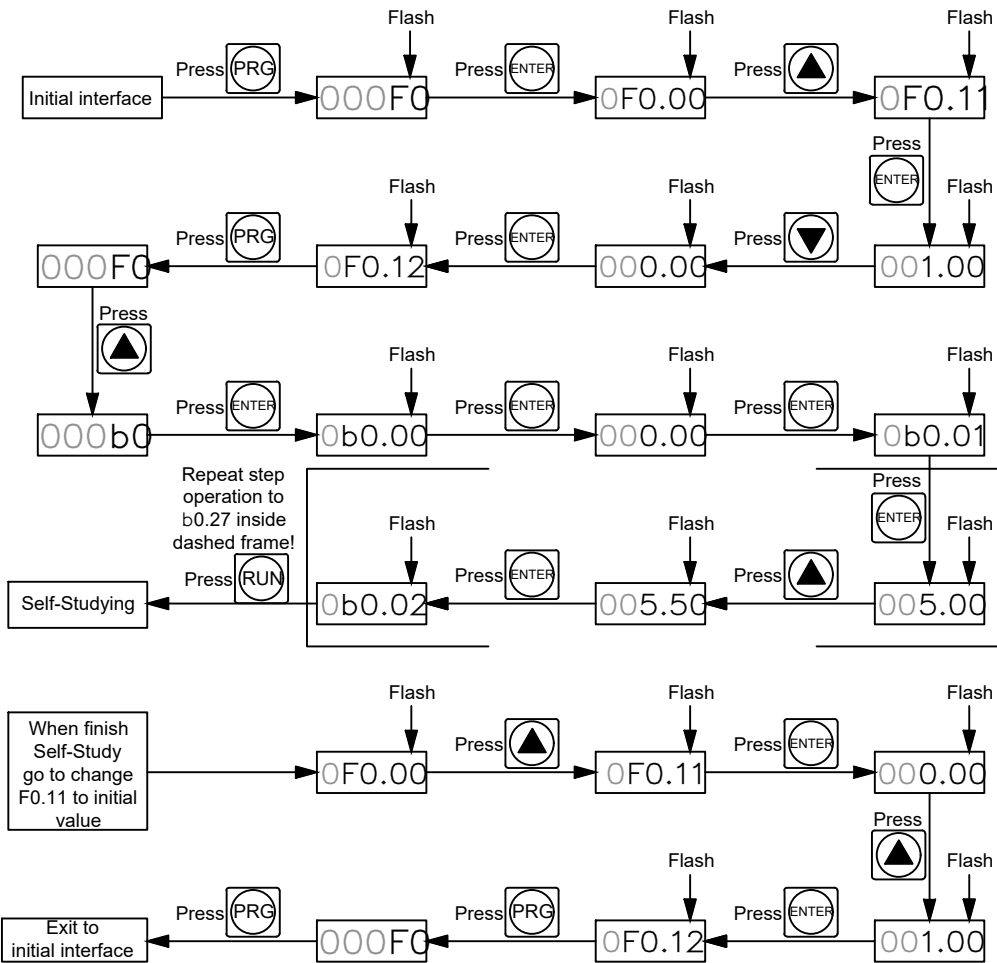
X02



X02

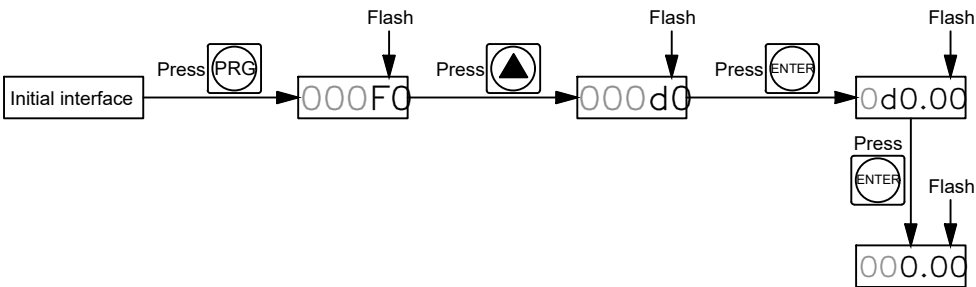
Motor Self-Study

F0.11=0 b0.03=26.8
b0.00=0 b0.04=60
b0.01=13 b0.05=1710
b0.02=380 b0.27=2



Monitoring Function

d0.00 Output Frequency
d0.01 Input Frequency
d0.14 Motor Speed
d0.18 High speed pulse input frequency



Inverter Parameter

Name	Range	Default	Units
F0.00	0,1,2	2	
F0.01	0.00Hz~F0.19(MAX)	1000	Hz
F0.02	1:0.1Hz,2:0.01Hz	1	
F0.03	0~9	9	
F0.04	0~9	0	
F0.11	0,1,2,3,4	1	
F0.13	0.0s~6500s	15	
F0.14	0.0s~6500s	35	
F0.18	0.5k~16k	10k	Hz
F0.19	50.00Hz~3200.00Hz	1000.00	Hz
F1.04	-	30	
F1.07	-	11	
F9.00		5	19200BPS
F9.01	0~3	3	(8-N-1)
F9.02	1~250	6	
F9.05	0~3	1	MODBUS
F9.07		0	MODBUS

Servo Driver Parameter

Name	Range	X	Y1	Y2	Z	B	C
PA-003		13	13	13	13	13	13
PA-004		750	750	750	750	750	750
PA-006	0/1	0	0	0	0	0	0
PA-008		5000	5000	5000	5000	5000	5000
PA-009						16384	16384
PA-010						1250	1250
PA-222		0	0	0	0	0	0
PA-410	101-181	81	81	81	81	81	81
PA-529		53	53	53	53	53	53
PA-531	1-256	1	2	3	4	7	5

0	1	2	3	4	5	6	7	8	9	10	11	12	13
Pg.	Code	Name	Mfrs.	Model	Pg.	Code	Name	Mfrs.	Model				
3	3QS3	Examine and reepair lamp	- -	T5/12W 220V	7	Z 7Q3	Circuit Breaker	Schneider	IC65N D10A 2P				
3	3QS5	General Switch	GLELE	GLD11-63/08 +4P	7	7S3	Filter	Canny Well	CW1B-6A-L				
3	3P11	Volt-ammeter	OUXIN	200-450V~0-100A	7	7M4	Z Motor	Leadshine	ACM13009H2E-40-L 850W Brake				
3	3S16	Filter	DOTHINK	DTT2121-65-S16-S77	7	7L6	Z Servo Drive	Leadshine	L7-850Z				
					7	7KA10	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V				
4	4T3	Transformers	CHNT	NDK(BK)-150	7	C 7Q11	Circuit Breaker	Schneider	IC65N D10A 2P				
4	4Q4	Circuit Breaker	Schneider	IC65N D4A 1P	7	7S11	Filter	Canny Well	CW1B-6A-L				
4	4Q5	Circuit Breaker	Schneider	IC65N D4A 1P	7	7M12	C Motor	Leadshine	ACM13009H2E-40-L 850W Brake				
4	4P8	Power Supply	MW	EDR-75-12 6.3A12VDC	7	7L14	C Servo Drive	Leadshine	L7-850Z				
4	4FU8	FUSE	CHE	FS-101 DC24V 5A	7								
4	4Q9	Circuit Breaker	Schneider	IC65N D10A 1P	7								
4	4M9	Oil Pump Motor	ML	MYK-202-200-0 15W/220V 2L									
4	4P10	Power Supply	MW	EDR-120-24 5A	8	B 8Q1	Circuit Breaker	Schneider	IC65N D10A 2P				
4	4Q10	Circuit Breaker	Schneider	C65H-DC 1P C4A	8	8S1	Filter	Canny Well	CW1B-6A-L				
4	4Q11	Circuit Breaker	Schneider	IC65N D4A 1P	8	8M2	B Motor	Leadshine	ACM8008M2F-B1-L-SS 750W				
4	4P13	Switching Power Supply	WEHO	D-120B 5V24V	8	8L3	B Servo Drive	Leadshine	L5-750Z				
4	4Q13	Circuit Breaker	Schneider	C65H-DC 1P C4A	8								
4	4Q14	Circuit Breaker	Schneider	C65H-DC 1P C4A	8								
4	4Q15	Circuit Breaker	Schneider	IC65N D4A 1P	8								
4					8								
					8								
					8								
5	5P0	Power Supply	MW	EDR-120-24 5A	8								
5	5Q1	Circuit Breaker	Schneider	C65N-DC 1P C4A									
5	5Q7	Circuit Breaker	Schneider	IC65N D50A 3P	9	9FU2	Fuse	CHE	FS-101 DC24V 2A				
5	5S7	Filter	DOTHINK	DTT2121-65-S16-S77	9	9E2	Wireless Router	ASUS	RT-AC53				
5	5S9	Frequency Converter	POWTRAN	PI9230 018G3 18KW 380V	9	9SD8	CNC Controler	AITEK	9 AXIS CNC-A5				
5	5M11	Spindle Motor	AitalMac	380V 18KW	9	9D15	ETH Card	--	7i80b				
5	5M12	WATJET Motor	AitalMac	- -	9								
5	5Q17	Circuit Breaker	Schneider	IC65N D10A 3P	9								
5	5QM17	Thermal Relay	Schneider	LRD16C 9-13A									
5	5M17	Hydraulic Pump Motor	WANERF	4WE6J-6X/ED24 220V1.5KW	10	10D0	Control Device	JUYING	BSM-1616RB 232 485				
5					10	10EV1	Vacuum1 Valves	HIGHEND	T101 M DC24V NO/NC				
					10	10EV2	Vacuum2 Valves	HIGHEND	T101 M DC24V NO/NC				
6	X 6Q1	Circuit Breaker	Schneider	IC65N D10A 2P	10	10EV3	Vacuum3 Valves	HIGHEND	T101 M DC24V NO/NC				
6	6S1	Filter	Canny Well	CW1B-6A-L	10	10EV4	Vacuum4 Valves	HIGHEND	T101 M DC24V NO/NC				
6	6M2	X Motor	Leadshine	ACM13009H2F-40-L 850W 3000r/min	10	10KA9	Terminal Relay	OMRON	G2R-2-SND(S) DC24V+P2RF-08-E				
6	6L4	X Servo Drive	Leadshine	L7-850Z	10	10SQ13	Air Pressure Switch	SQW	QPM11-NC				
6	Y1 6Q7	Circuit Breaker	Schneider	IC65N D10A 2P	10	10EV13	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V				
6	6S7	Filter	Canny Well	CW1B-10A-L	10	10SQ14	Water Pressure Switch	SN	DN8 1.1-1.8kgf/m² (ON-OFF)				
6	6M8	Y1 Motor	Leadshine	ACM13009H2F-40-L1.5KW 3000r/min	10	10EV14	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V				
6	6L10	Y1 Servo Drive	Leadshine	L7-1500Z	10	10EV15	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V				
6	Y2 6Q14	Circuit Breaker	Schneider	IC65N D10A 2P	10	10EV16	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V				
6	6S14	Filter	Canny Well	CW1B-10A-L	10	10SQ16	SENSOR	SQW	QPM11-NC				
6	6M15	Y2 Motor	Leadshine	ACM13009H2F-40-L1.5KW 3000r/min	10								
6	6L17	Y2 Servo Drive	Leadshine	L7-1500Z	10								
6					10								
					10								
					10								
					10								

0	1	2	3	4	5	6	7	8	9	10	11	12	13
Pg.	Code	Name	Mfrs.	Model	Pg.	Code	Name	Mfrs.	Model				
11	11E1	Computer Power On/Off	Aitalmac	--	15								
11	11E4	USB-remote	Aitalmac	REMOTE-V2									
11	11E6	USB-WiFi	COMFAST	CF-7201ND	16	16KA4	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V				
11	11S8	Filter	Canny Well	CW1B-6A-L	16	16KA6	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V				
11	11SD8	Windows PC	AITEK	WIN-A5	16	16KA8	Terminal Relay	OMRON	G2R-2-SND(S) DC24V+P2RF-08-E				
11	11E13	USB-Mouse	Lenovo	M300	16								
11	11E14	USB-Keyboard	Logitech	K310									
11	11E16	PC Monitor	Anmite	AN-195W01D									
11					17	17D0	LPT3 Input Card	AITEK	6AXIS-Mod-V5-INPUT mode				
					17	17A9	Blade Laser	--	16mm				
					17	17FU10	Fuse	CHE	FS-101 DC24V				
12	12D0	LPT1 Output Card	AITEK	6AXIS-Mod-V5-OUTPUT mode	17	17SQ10	Right Vacuum Sensor	CHVIRD	CS1-U				
12	12SQ13	Z Limit Sensor	IBEST	IPSI-12NO2B-L60mm(NPN NO 2mm 200mA)	17	17SQ12	Left Vacuum Sensor	CHVIRD	CS1-U				
12	12SQ14	Y2 Limit Sensor	IBEST	IPSI-12NO2B-L60mm(NPN NO 2mm 200mA)	17	17SQ14	Left Arm Vacuum Extended Sensor	CHVIRD	CS1-U				
12	12SQ15	Y1 Limit Sensor	IBEST	IPSI-12NO2B-L60mm(NPN NO 2mm 200mA)	17	17SQ16	Right Arm Vacuum Extended Sensor	CHVIRD	CS1-U				
12	12SQ16	X Limit Sensor	IBEST	IPSI-12NO2B-L60mm(NPN NO 2mm 200mA)	17								
12					17								
					17								
					17								
14	14SB3	Enable Key Switch	RENY	RBSNK-2	17								
14	14SB3.1	Power On Button	RENY	R2PIF-1D-2GL	17								
14	14KM3	Contactior	Schneider	LC1-D65AB7C AC24V									
14	14KM8	Contactior	Schneider	LC1-D50AB7C AC24V	18	18SQ6	Vacuum4 Generator	SMDQ	QK-01F -80KPA				
14	14FU12	Fuse	CHE	FS-101 DC24V 2A	18	18SQ11	Vacuum3 Generator	SMDQ	QK-01F -80KPA				
14	14E12	Z Brake	--	24VDC 1A	18	18SQ12	Vacuum2 Generator	SMDQ	QK-01F -80KPA				
14	14FU14	Fuse	CHE	FS-101 DC24V 2A	18	18SQ13	Vacuum1 Generator	SMDQ	QK-01F -80KPA				
14	14E14	FAN	PAPST	TYP4114N/12MR 24V 6W 12CM	18								
14	14FU15	Fuse	CHE	FS-101 DC24V 2A									
14	14E15	FAN	PAPST	TYP4114N/12MR 24V 6W 12CM									
14	14KM18	Contactior	Schneider	LC1-D18B7C AC24V									
14					19	19D2	COM COMPUTER MODE	AITEK	RS232-Mod-V1 4IN/3OUT				
					19	19QS8	Table Limit Sensor	ENMG	ET8111-CF-2				
					19	19QS9	Table Limit Sensor	ENMG	ET8111-CF-2				
					19	19EV12	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V				
					19	19EV14	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V				
					19								
					19								
					19								
					19								
					19								
15	15D0	LPT2 Output Card	AITEK	6AXIS-Mod-V5-OUTPUT mode									
15	15SB4	Emergency button	RENY	--	20	20D0	ETH1 Input Mode	AITEK	6AXIS-Mod-V5-INPUT mode				
15	15SQ6	SAWJET Motor Hot	AITEK	--	20	20SB2	Control Box-Stop Button	RENY	RAPNF-1A-R				
15	15KA8	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V	20	20SB6	Control Box-Pause Button	RENY	RAPNF-1A-Y				
15	15KA9	Terminal Relay	OMRON	G2R-2-SND(S) DC24V+P2RF-08-E	20	20HL6	Alarm Indicator lamp	TAYB	TB50-4T-D 24V				
15	15KA12	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V	20	20SB8	Control Box-Automatic Button	RENY	RAPNF-1A-G				
15	15SQ13	Vacuum Up Sensor	CHVIRD	CS1-U	20	20SB10	B/C Axis-Joystick Controller	Schneider	XD2-PA24CR φ22mm				
15	15SQ14	Vacuum Down Sensor	CHVIRD	CS1-U	20	20SB16	X/Z Axis-Joystick Controller	Schneider	XD2-PA24CR φ22mm				
15	15SQ15	B Limit Sensor	IBEST	IPSI-12NO2B-L60mm(NPN NO 2mm 200mA)	20								
15	15KA15	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V									
15	15SQ16	C Limit Sensor	IBEST	IPSI-12NO2B-L60mm(NPN NO 2mm 200mA)	21	21SB9	X/Y Axis-Joystick Controller	Schneider	XD2-PA24CR φ22mm				
15	15KA17	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V	21	21SB10	X/Y Axis-Joystick Controller	Schneider	XD2-PA24CR φ22mm				
15					21								
15													
15													

0	1	2	3	4	5	6	7	8	9	10	11	12	13
Pg.	Code	Name	Mfrs.	Model		Pg.	Code	Name	Mfrs.	Model			
22	22D0	ETH2 Input Mode	AITEK	6AXIS-Mod-V5-INPUT mode									
22	23HL11	TCP Knob Light	RENY	R2PIF-1D-2GL									
22													
23	23P9	Speed Control Wheel	AITEK	24VPLC									
23	23SB11	TCP On/Off Switch	RENY	R2SNS-2FE-1D-G									
23	23SB12	B Axis Angle Knob	RENY	R2SNS-3TB-2A-B									
23													
24	24RU16	Brake Unit	POWTRAN	CDBR-4022 380V50A									
24	24R18	Braking Resistor	POWTRAN	3000W 38Ω									
24													
25													
25													
25													
25													
25													
25													
26	26P3	Power Supply	MW	5V									
26	26FU3	Fuse	CHE	FS-101 DC24V									
26	26A3	CARD	RASPBERRY PI	PI4-4G									
26	26E3	CAMERA	LOGITECH	C930E									
26	26E9	SAFETY DOOR	ALX	ABI10-482									
26	26E10	SAFETY DOOR	ALX	ABI10-482									
27	27EV9	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V									
27	27EV11	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V									
27	27EV13	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V									
27	27EV17	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V									
27													
27													
28	28SQ1	Waterjet Pressure Sensor	- -	- -									
28	28P2	Waterjet Pressure Gauge	- -	PY500									
28	28P7	Thermometer	JQS	XY-WT01									
28	28P9	Thermometer	JQS	XY-WT01									
28													