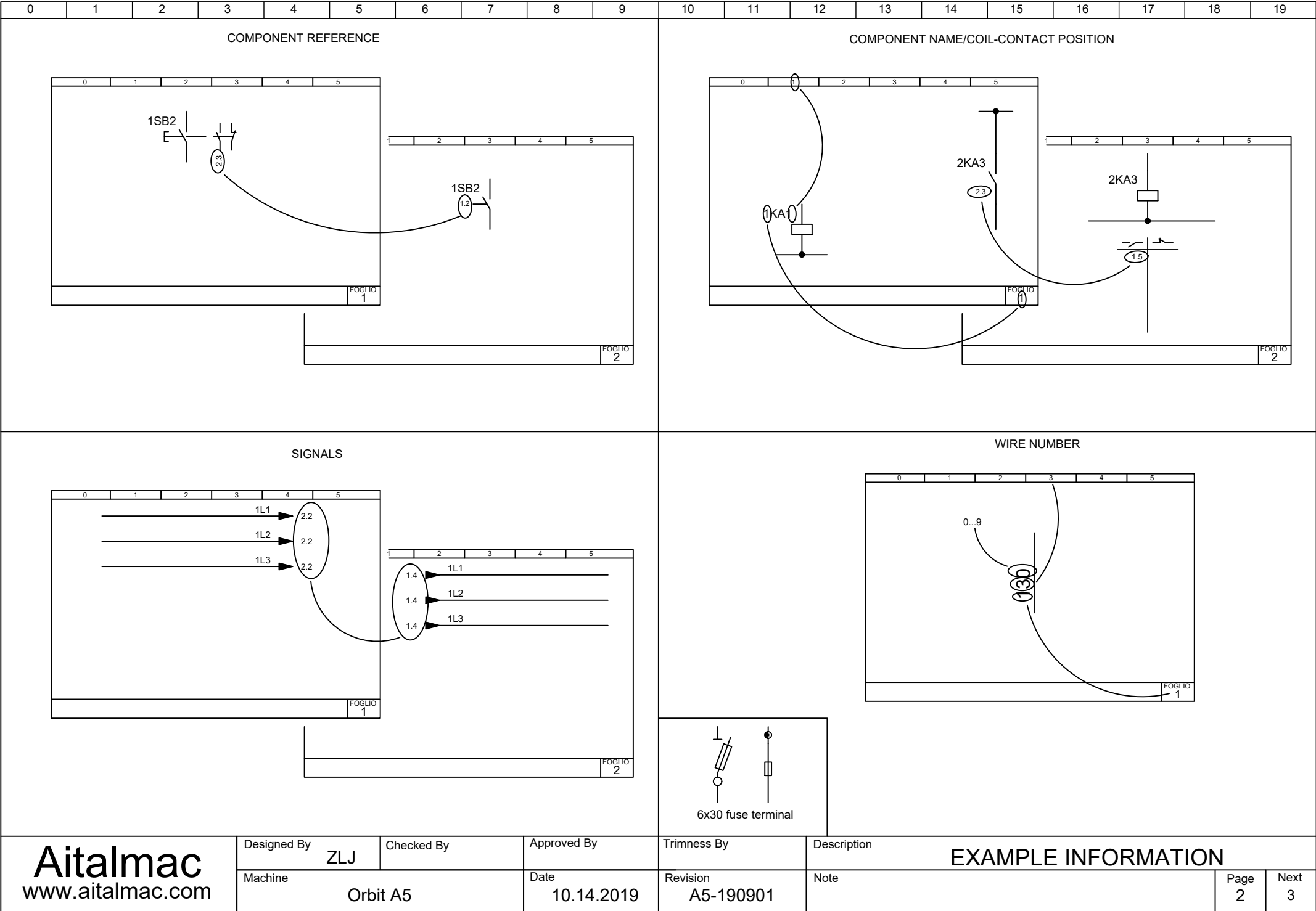
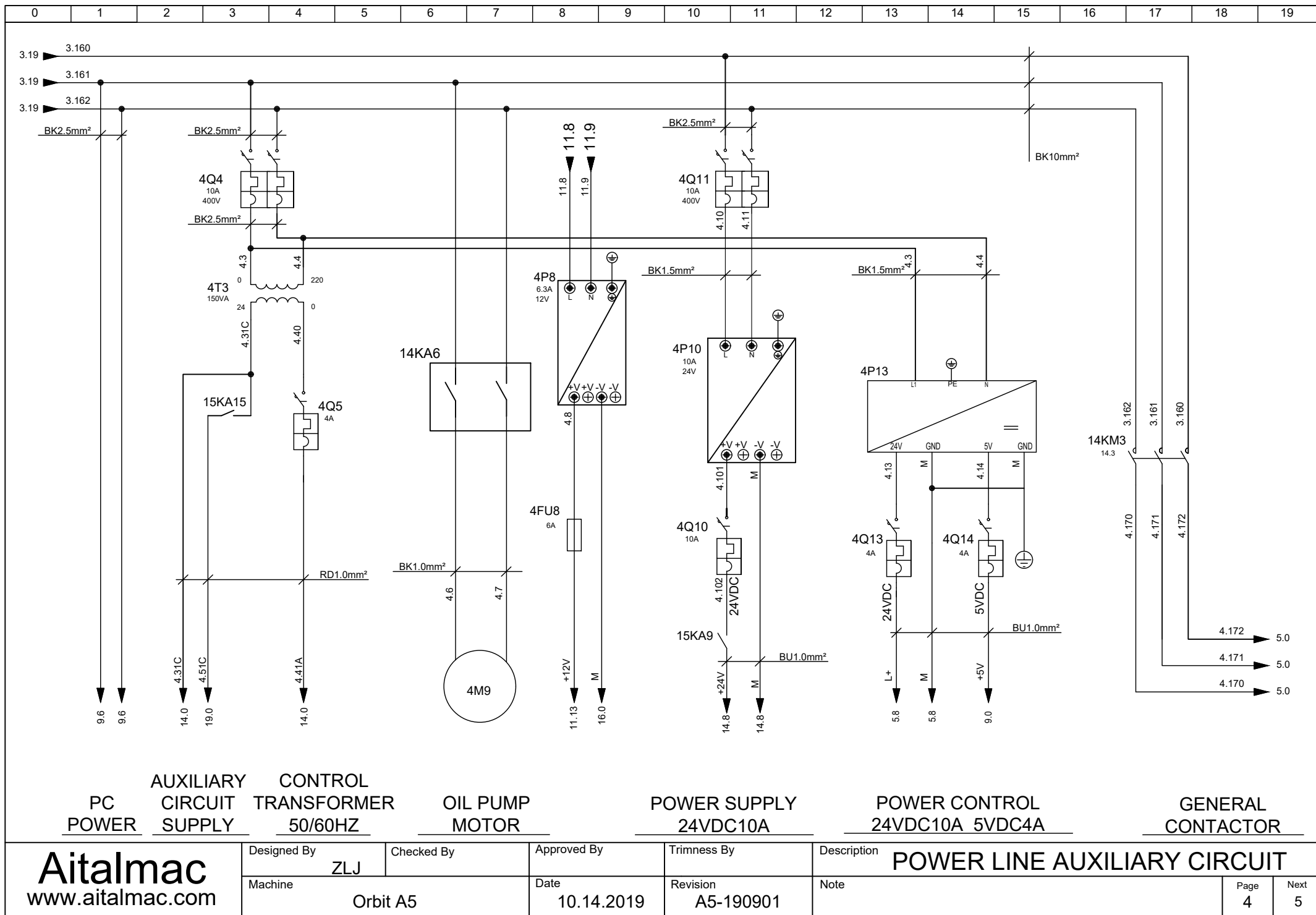
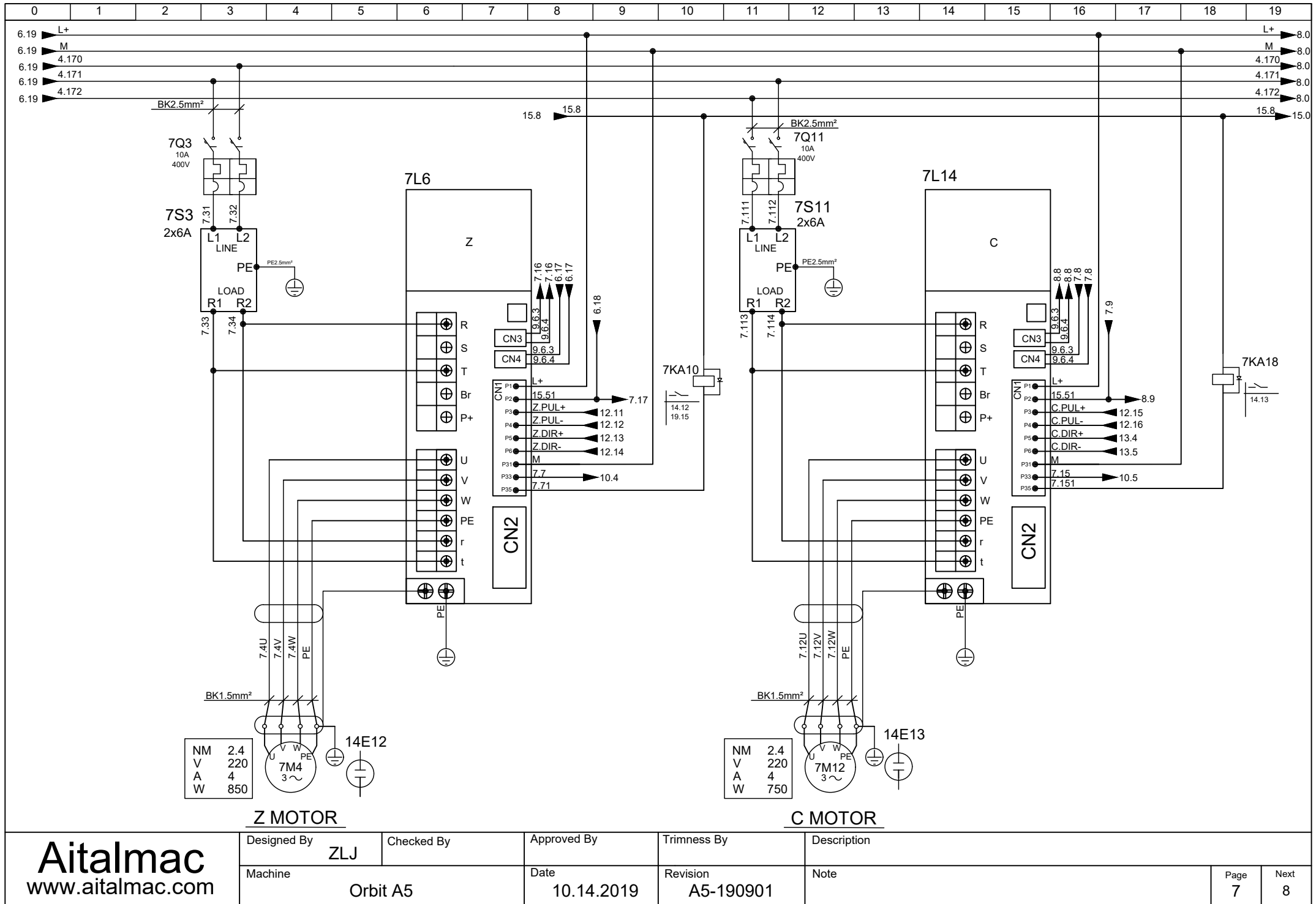
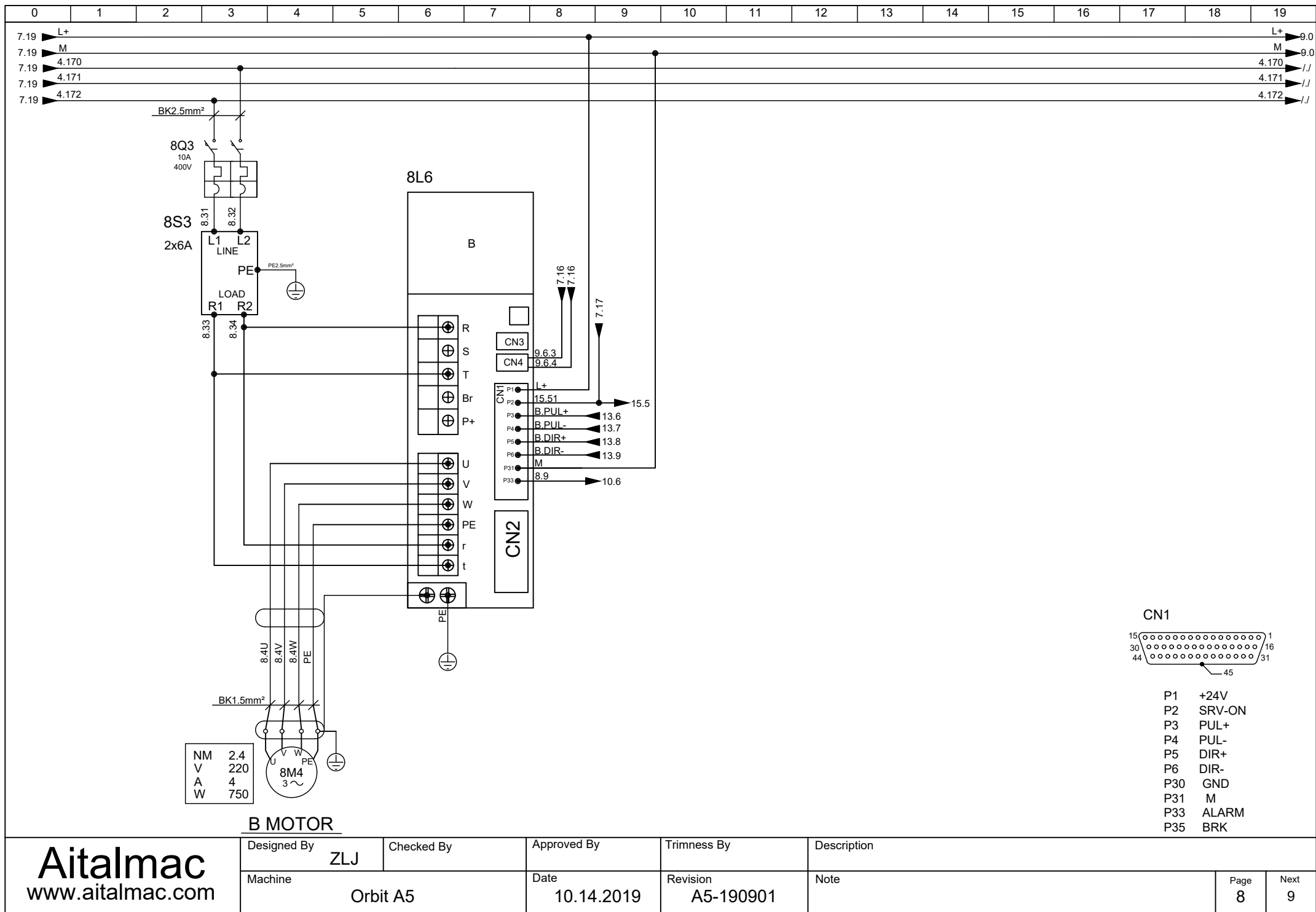


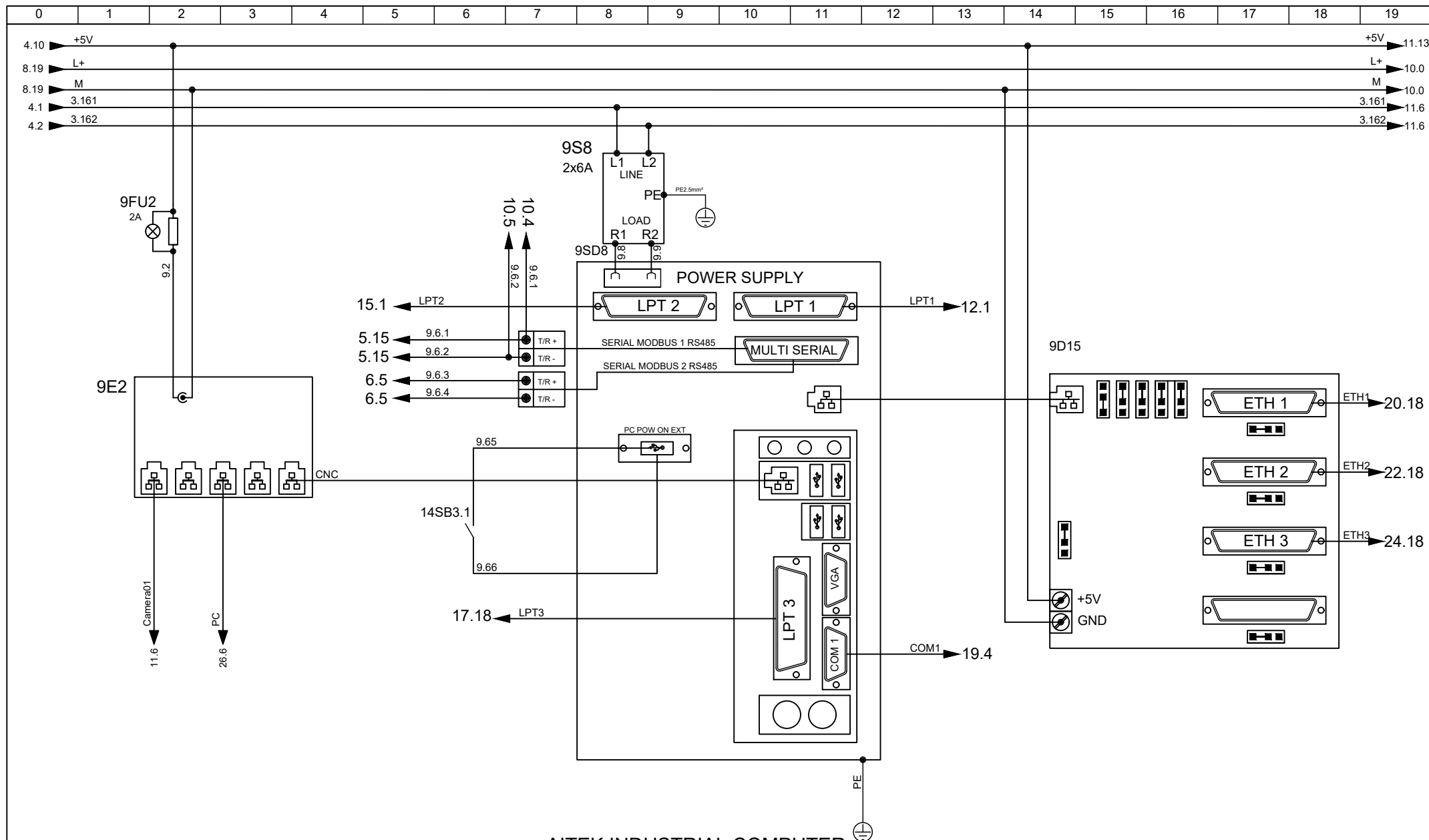
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AITALMAC										LOCATION SYMBOLS ☐ Components on the door ☐ Components inside the cubicle (usually omitted) ☒ Machine components (usually omitted)				COMPONENTS DESIGNATION C Condensers D CNC control model E Component not in this list F Protection 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. 220																																				
ORBITA5					FREQ. 50-60																																				
WIRING DIAGRAM					CUBICLE DIMENSION																																				
A5-190901					L (mm) 1835																																				
					H (mm) 560																																				
					P (mm) 320																																				
CONDUCTORS DESIGNATION																				COLORS WH White GN Gray YE Yellow BU Blue RD Red BK Black OG Orange GY 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>BLUE</td><td>D.C. auxiliary circuit</td><td>1,0mm²</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	BLUE	D.C. auxiliary circuit	1,0mm²	YELLOW GREEN	protection earth	2,5mm²	SCREEN CABLE	reference - signal	0.75 mm²
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THE WIRING DIAGRAM IS INDICATED WITHOUT TENSION, AIR, OIL AND WATER FLOW.																																									
AitalMac www.aitalmac.com		Designed By : ZLJ			Checked By :			Trimness By :			Description :																														
Machine : Orbit A5					Date: 10.14.2019			Revision: A5-190901			Approved By :			Pag. 1	Next. 1.1																										

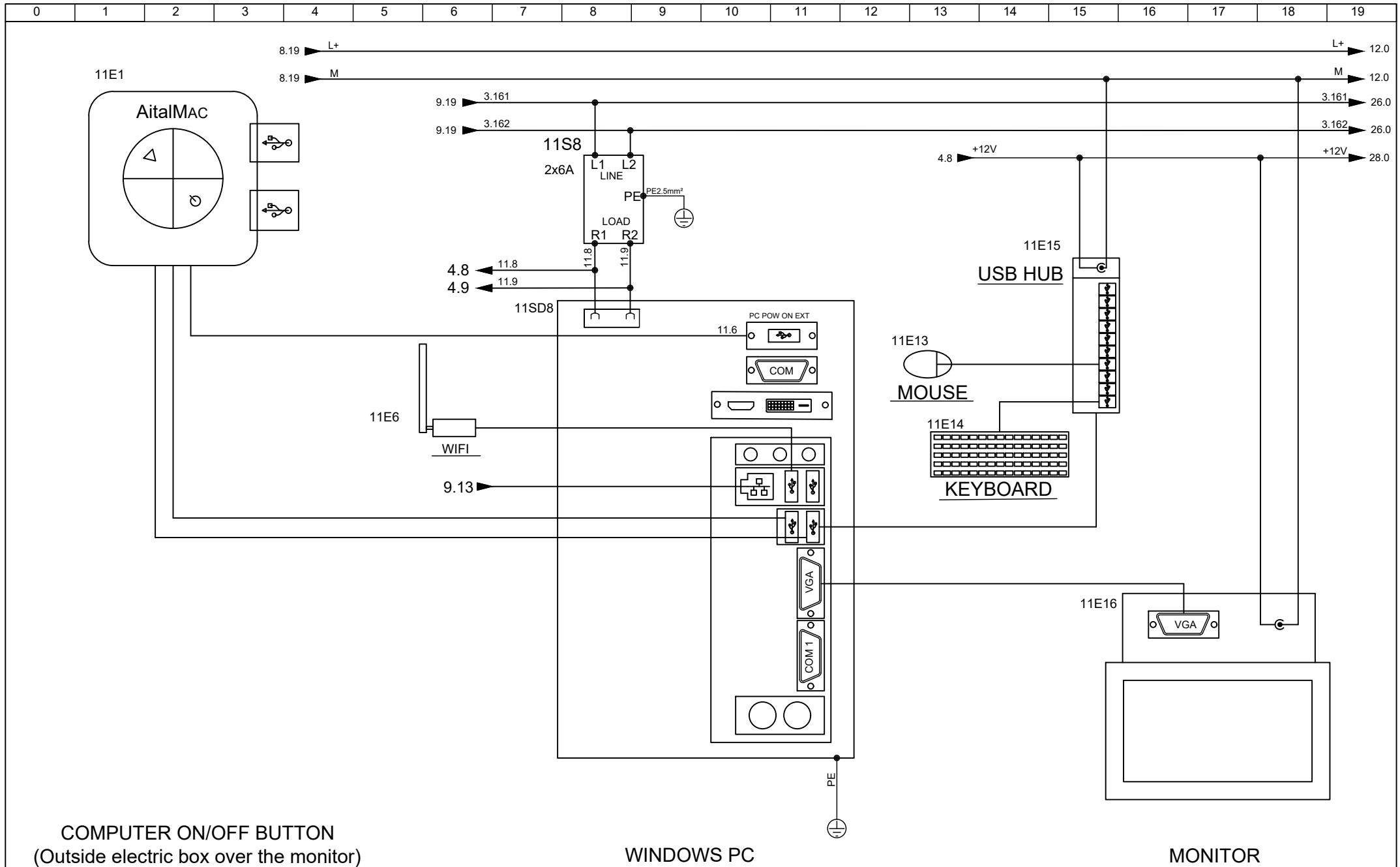








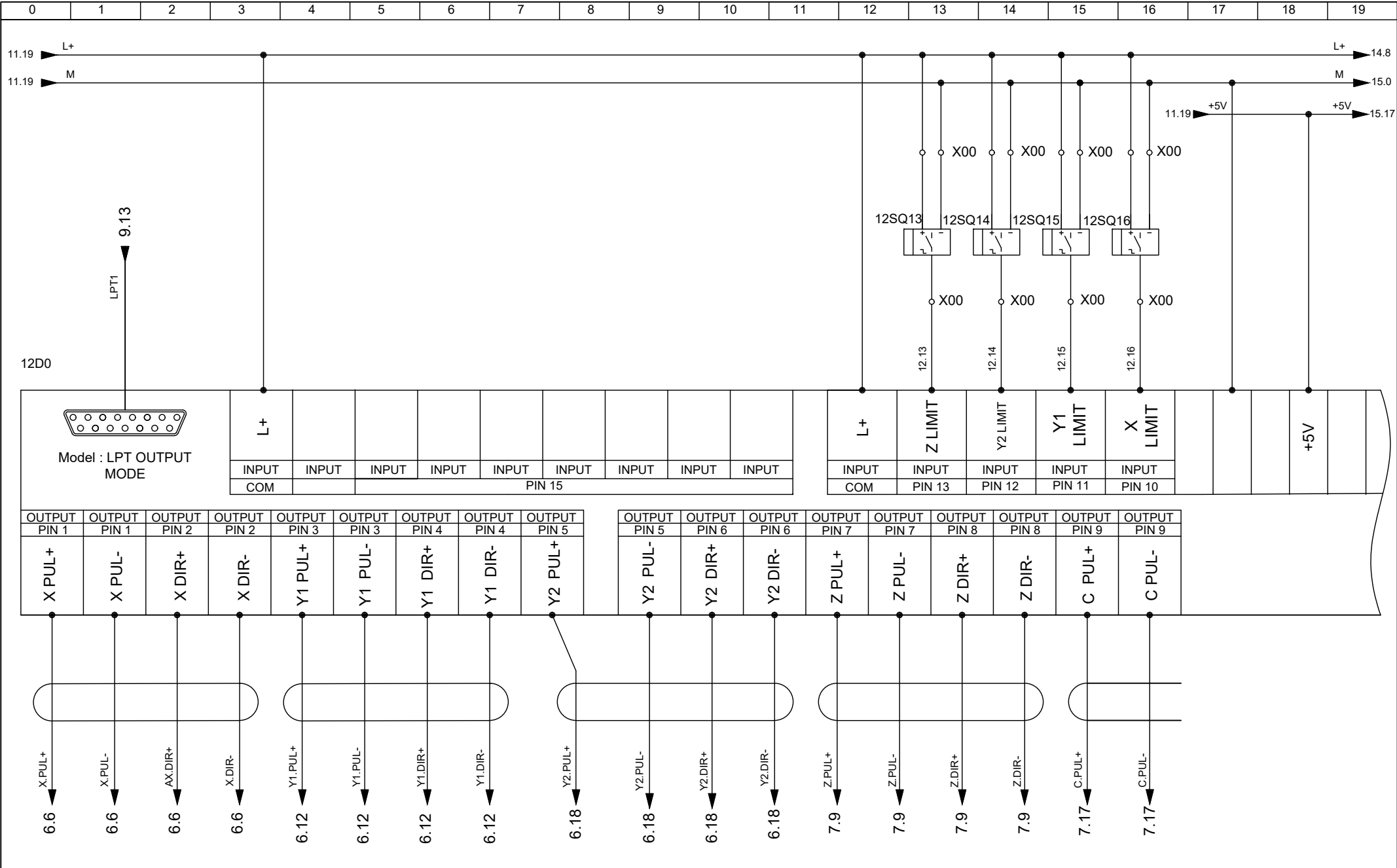




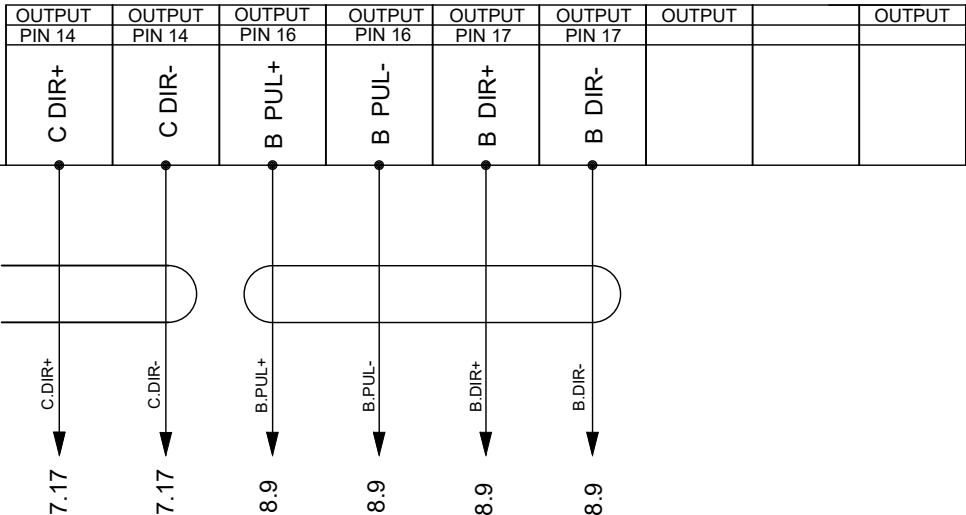
COMPUTER ON/OFF BUTTON
(Outside electric box over the monitor)

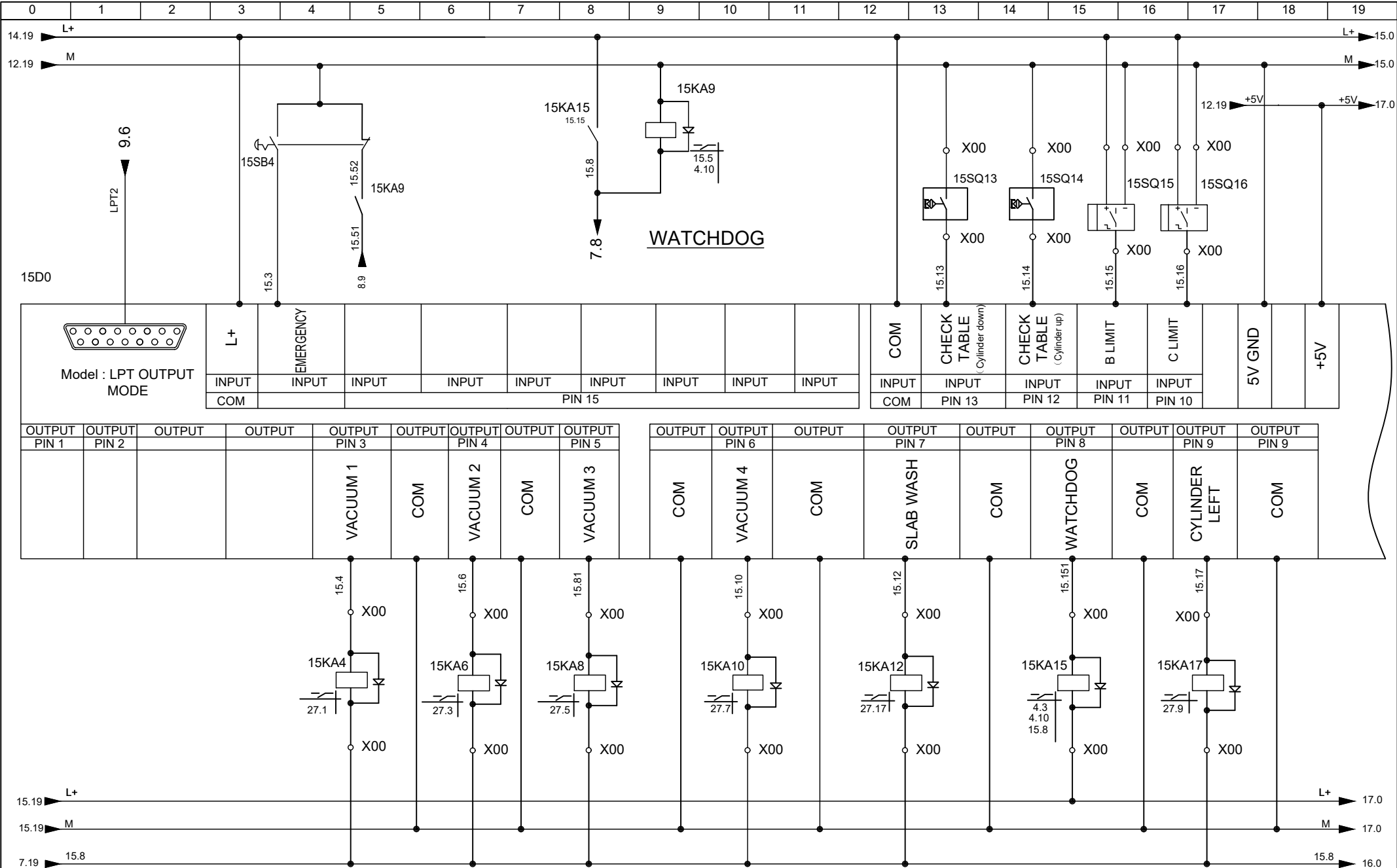
WINDOWS PC

MONITOR



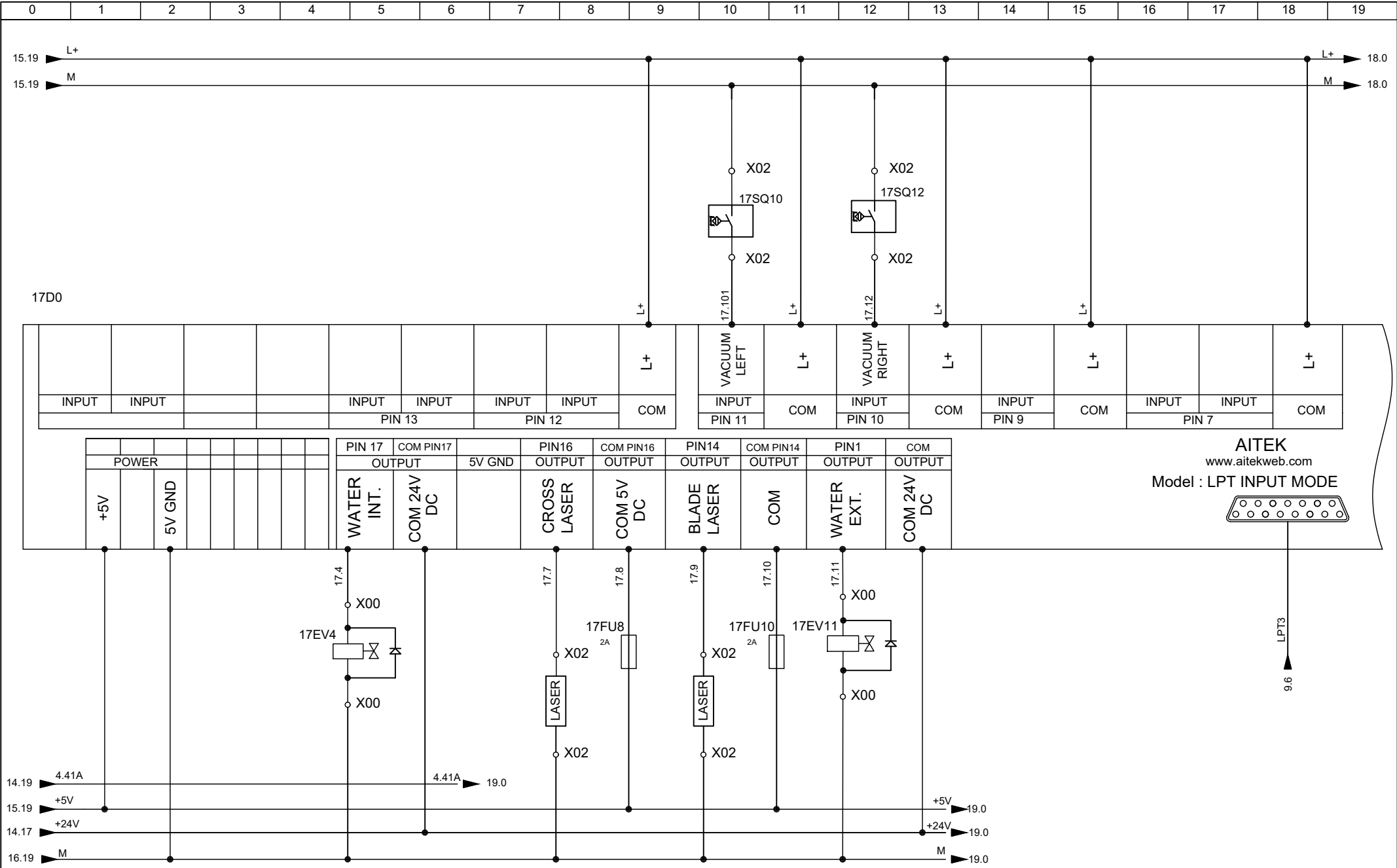
12D0



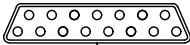


• CYLINDER RIGHT	• COM	SLAB PROBE	• COM	• GREASE PUMP	• COM			
OUTPUT PIN 14	OUTPUT PIN 14	OUTPUT PIN 16	OUTPUT PIN 16	OUTPUT PIN 17	OUTPUT PIN 17	OUTPUT	OUTPUT	OUTPUT

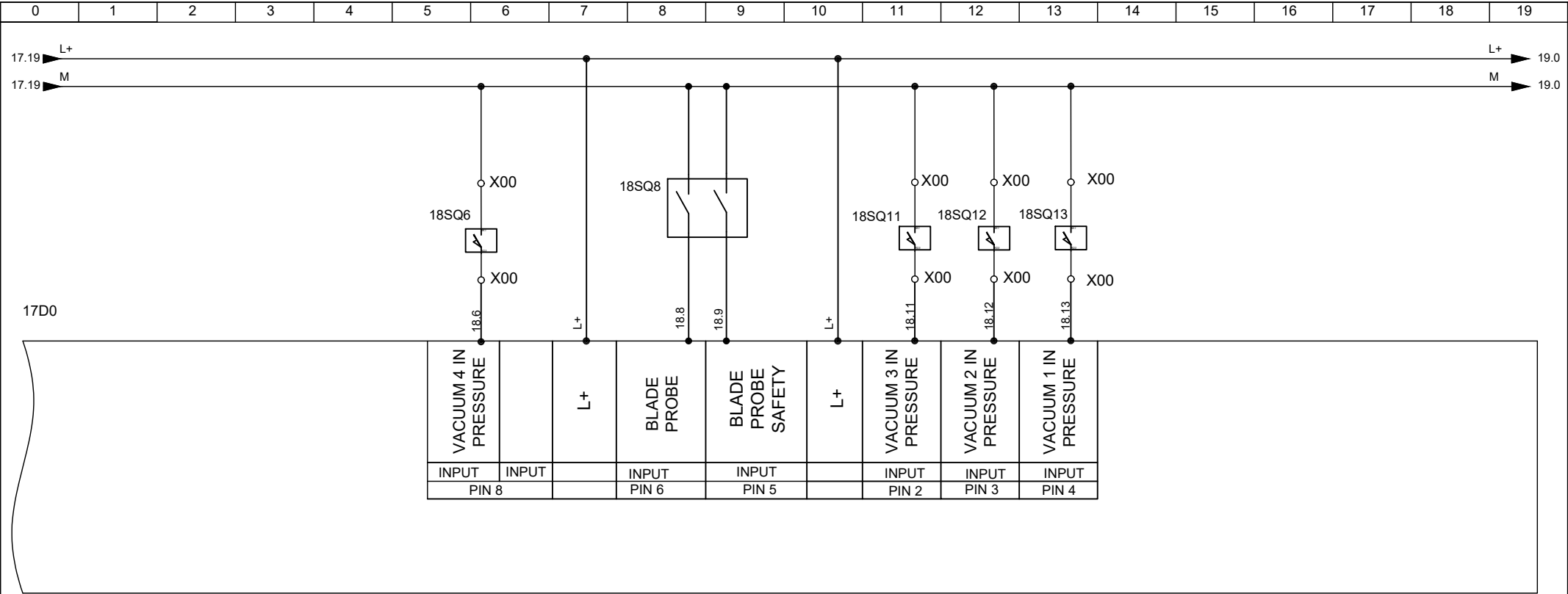


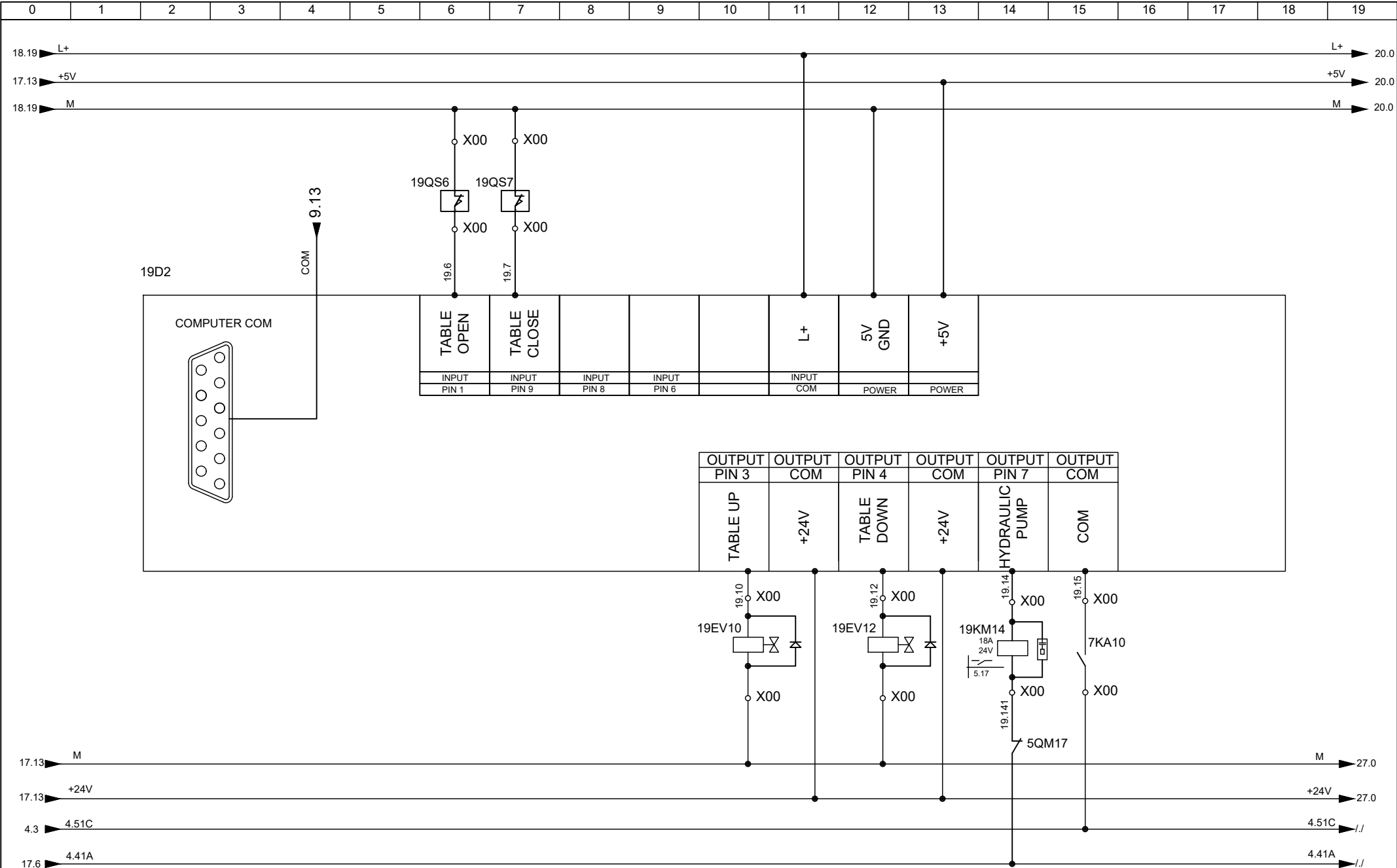


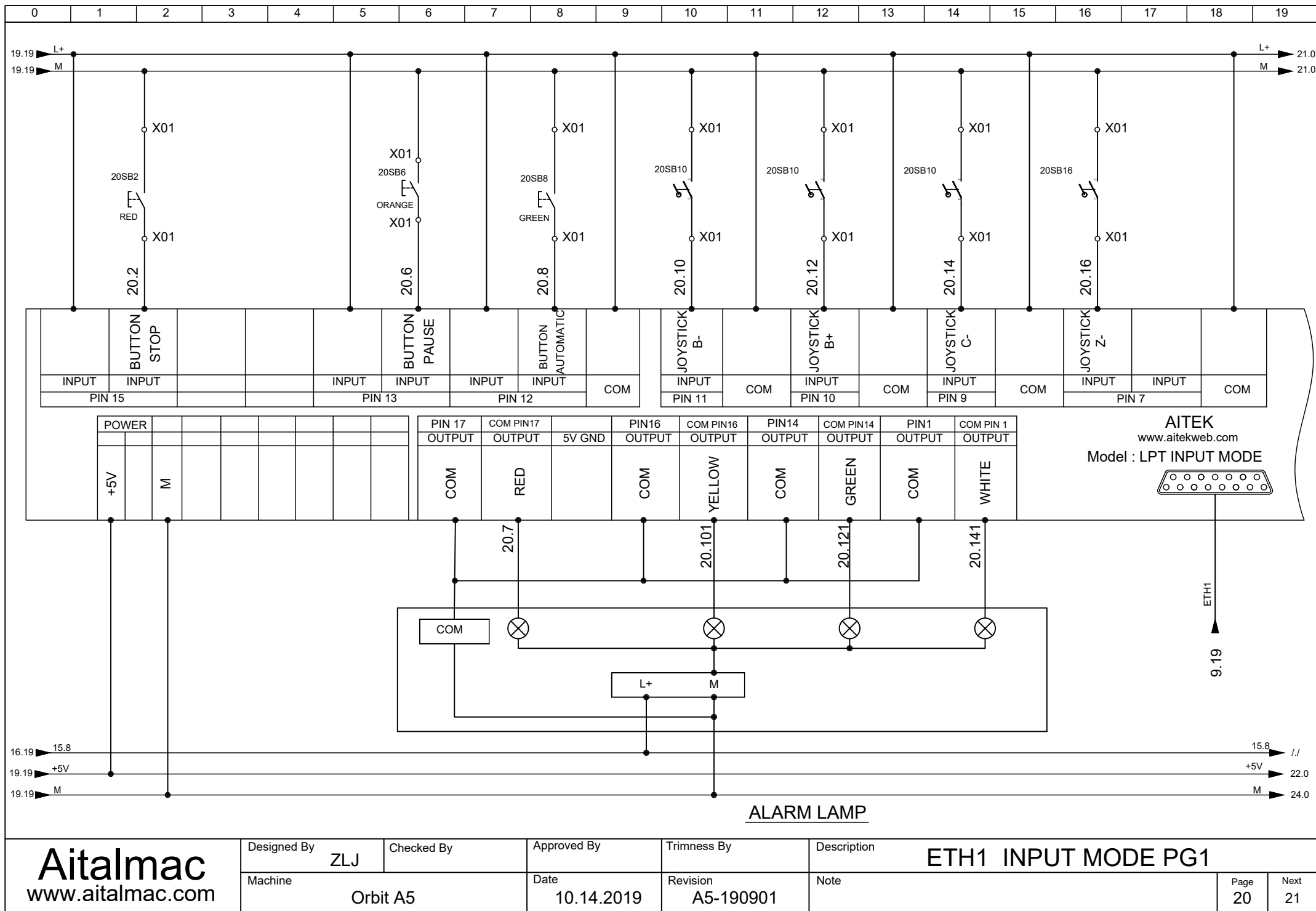
AITEK
www.aitekweb.com
Model : LPT INPUT MODE

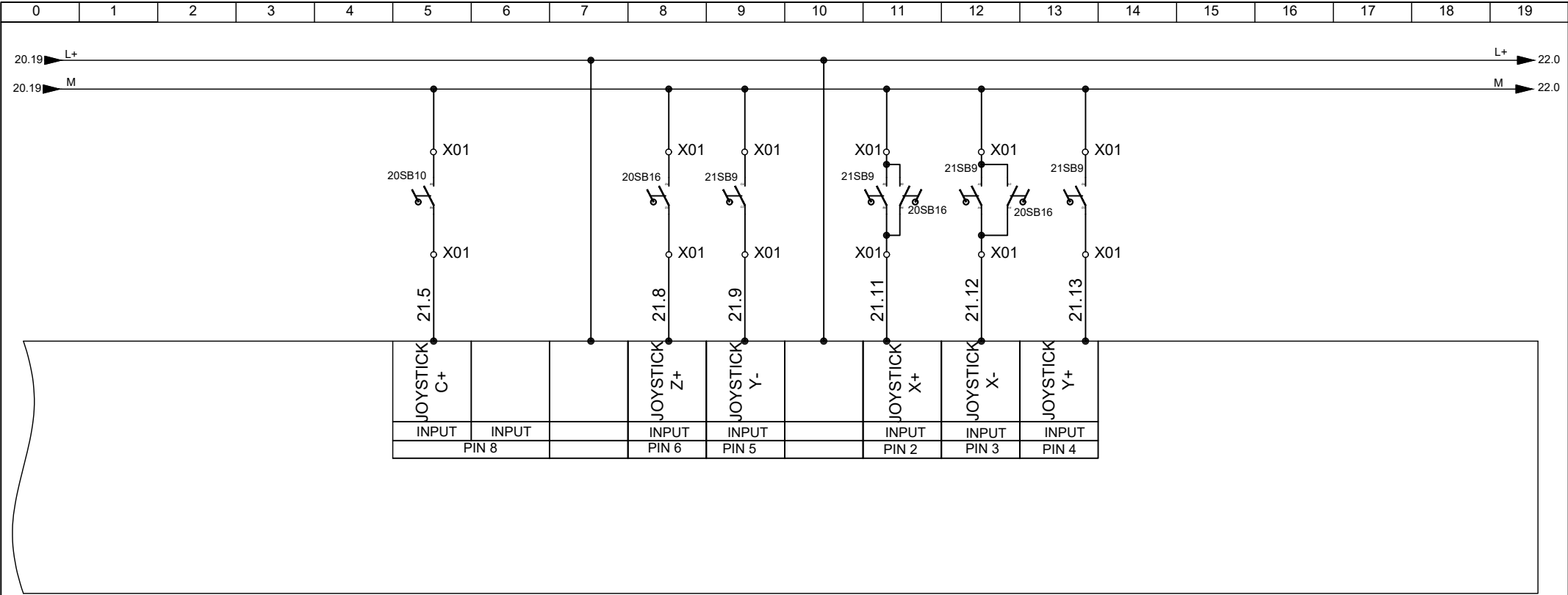


LPT3
9.6



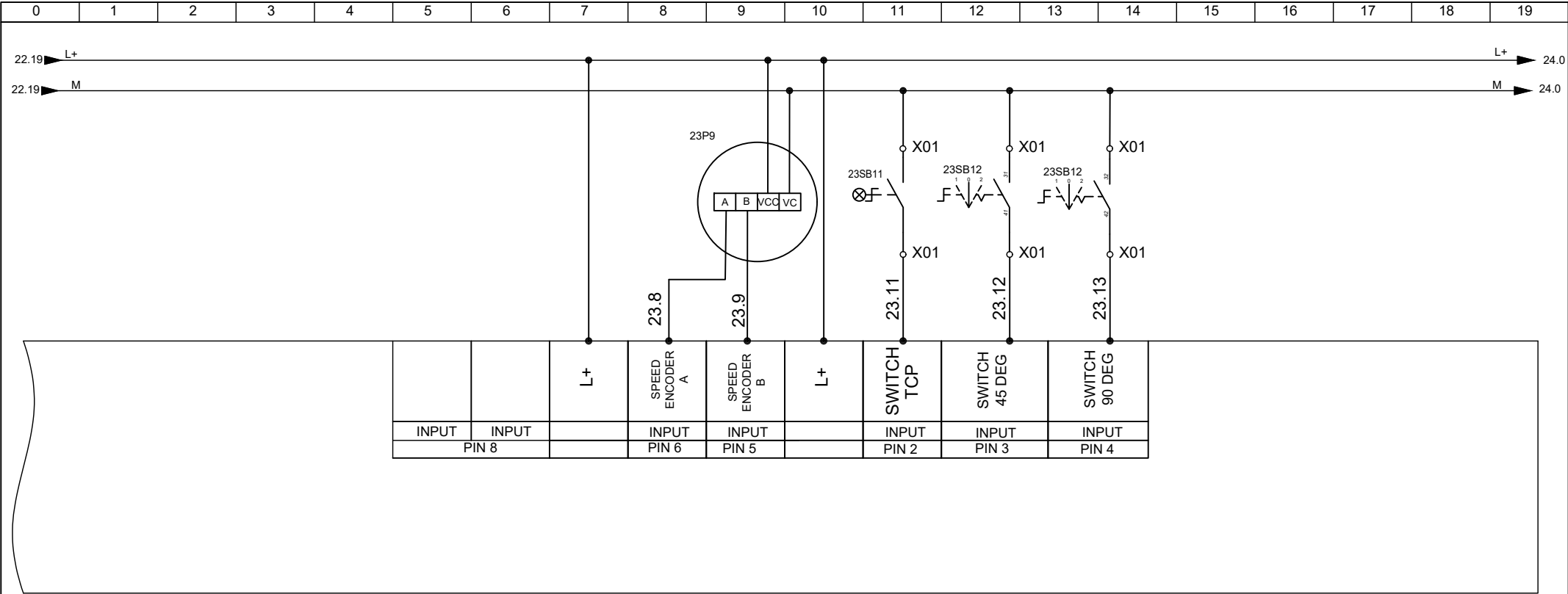




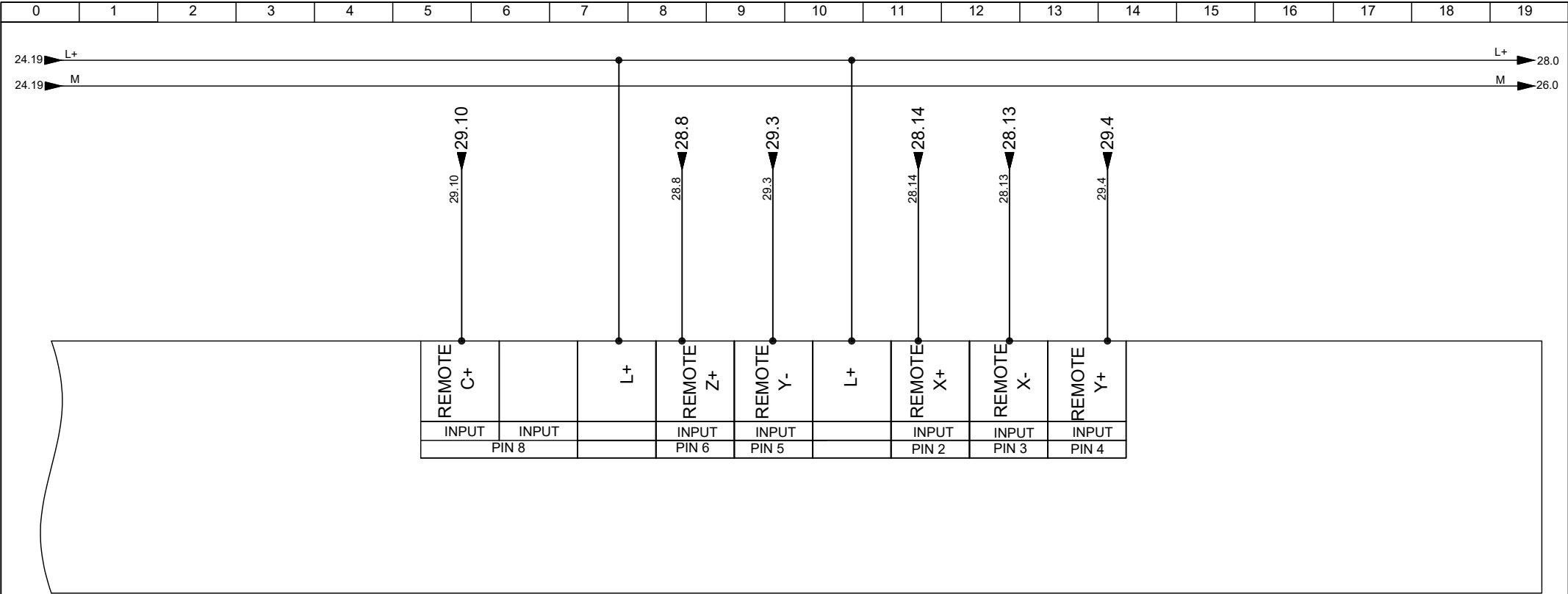


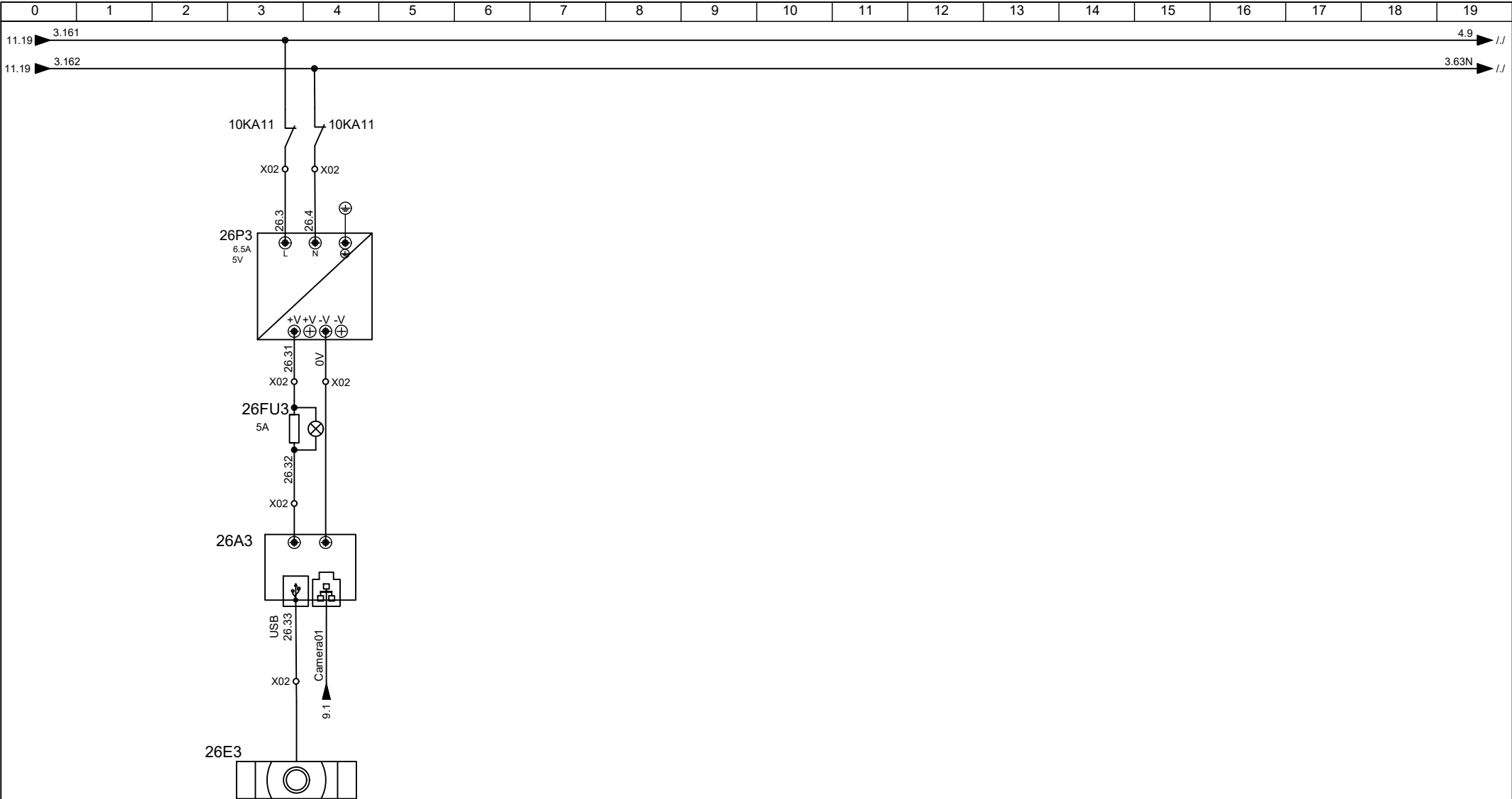
1. Project Name: _____	2. Project Manager: _____
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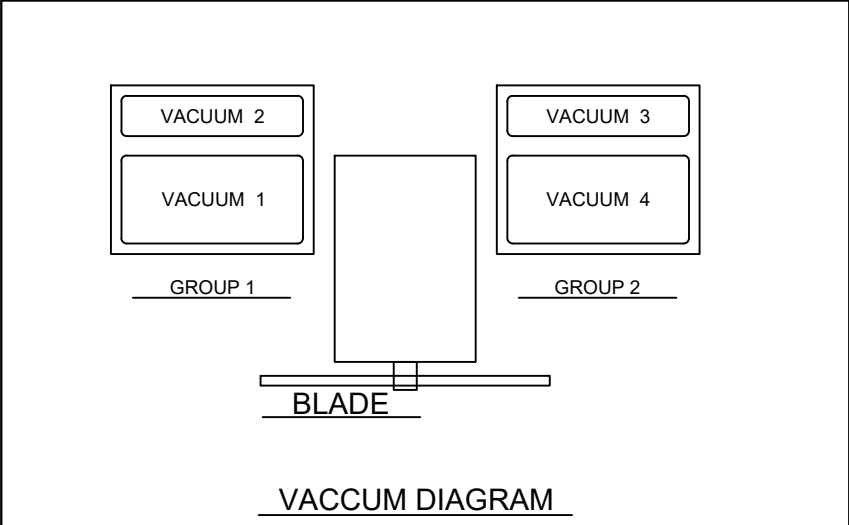
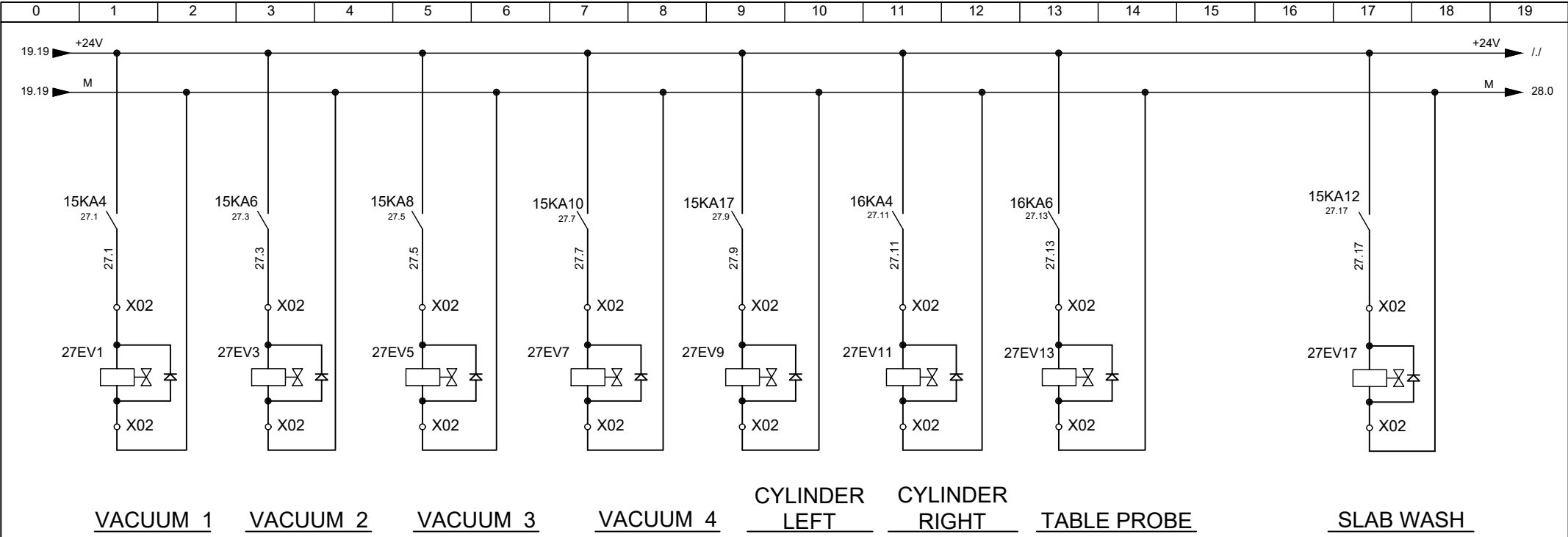
SPEED CONTROL WHEEL



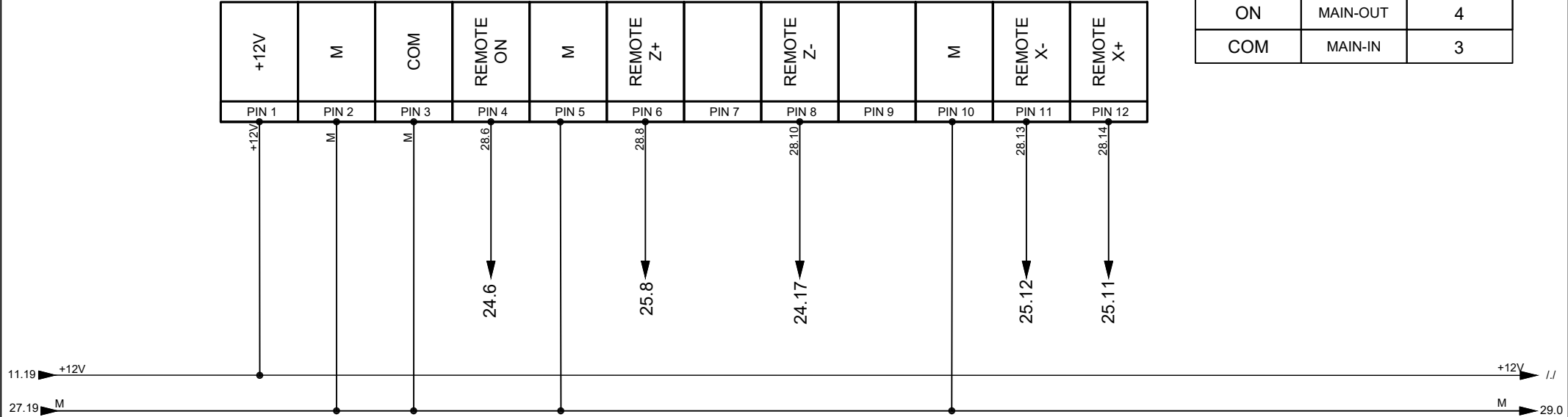


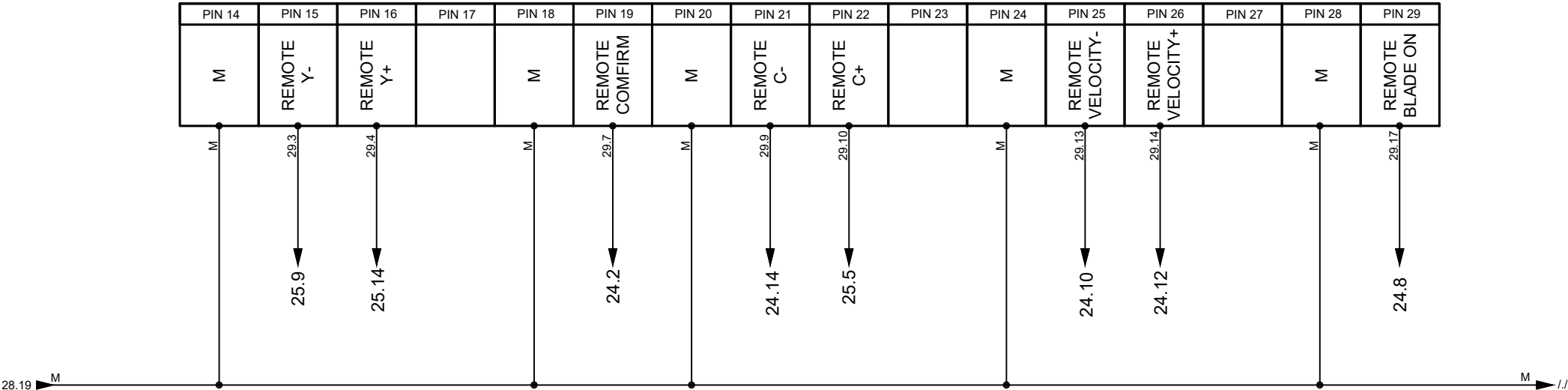
CAMERA

Aitalmac www.aitalmac.com	Designed By ZLJ	Checked By	Approved By	Trimness By	Description		
	Machine Orbit A5	Date 10.14.2019	Revision A5-190901	Note	Page 26	Next 27	



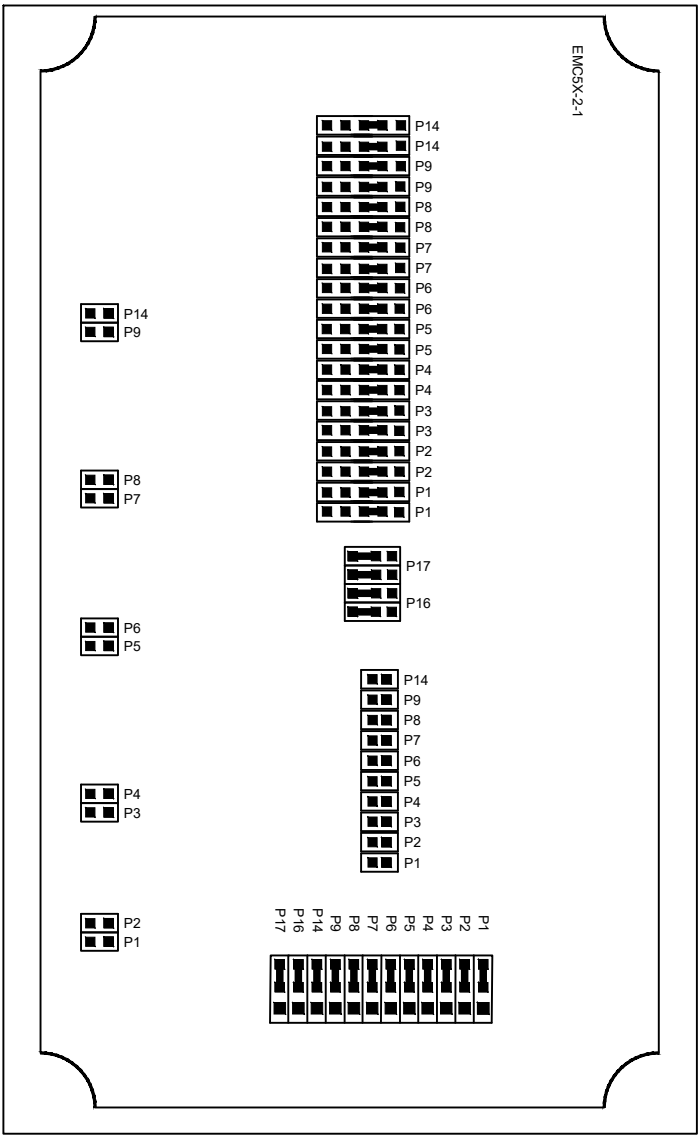
REMOTE	REMOTE CONTROL	PIN
Z+	UP	6
Z-	DOWN	8
X+	WEST	12
X-	EAST	11
Y-	SOUTH	15
Y+	NORTH	16
C-	R1	21
C+	R2	22
VELOCITY-	R3	25
VELOCITY+	R4	26
BLADE ON	F1	29
COMFIRM	R0	19
ON	MAIN-OUT	4
COM	MAIN-IN	3



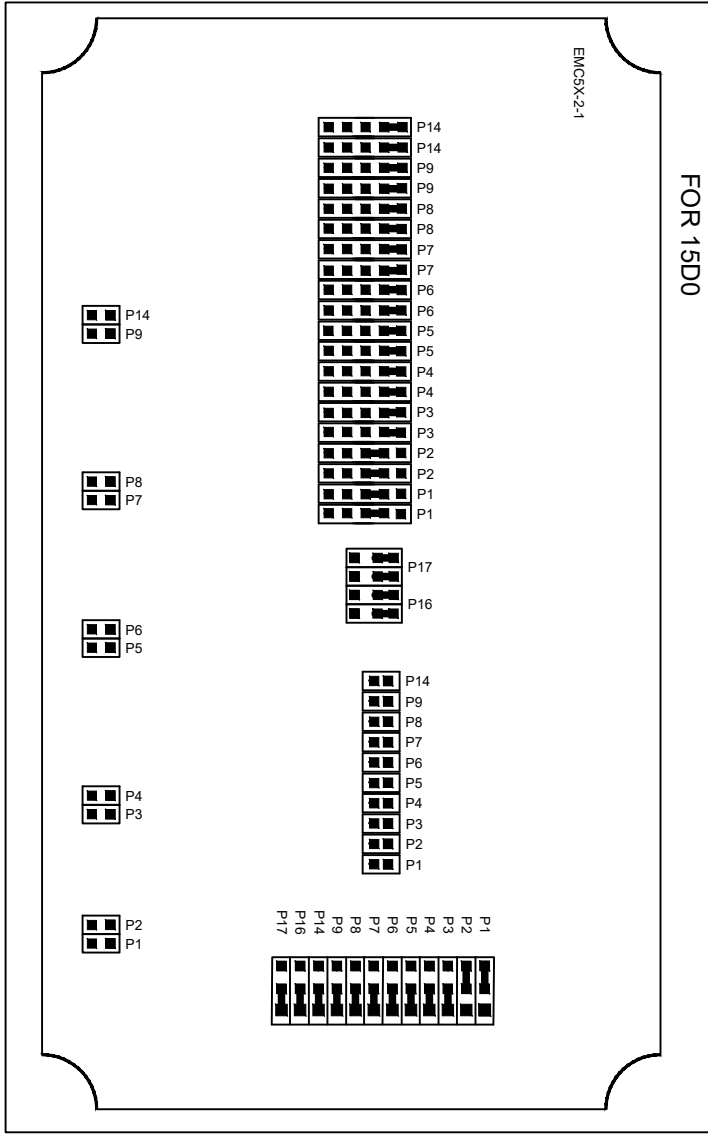


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Aitalmac www.aitalmac.com				Designed By		Checked By		Approved By		Trimness By		Description							
				Machine		Date		Revision		Note						Page	Next		
				ZLJ														30	31
				Orbit A5		10.14.2019		A5-190901											

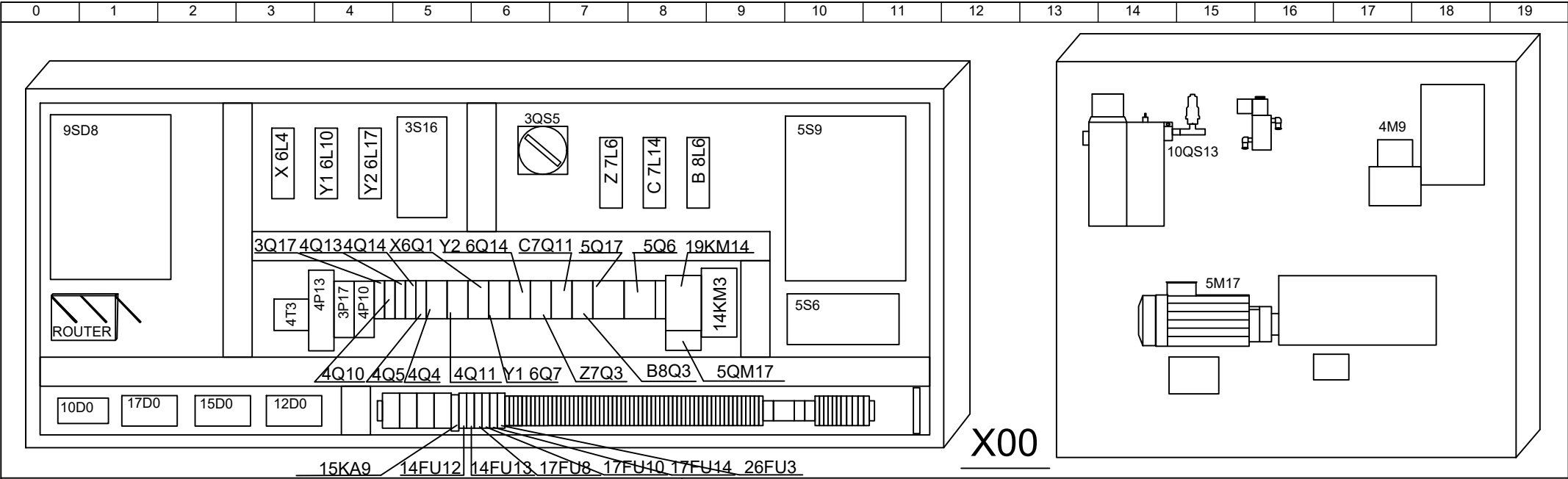
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Aitalmac www.aitalmac.com			Designed By		ZLJ		Checked By		Approved By		Trimness By		Description						
			Machine				Date		Revision		Note				Page	Next			
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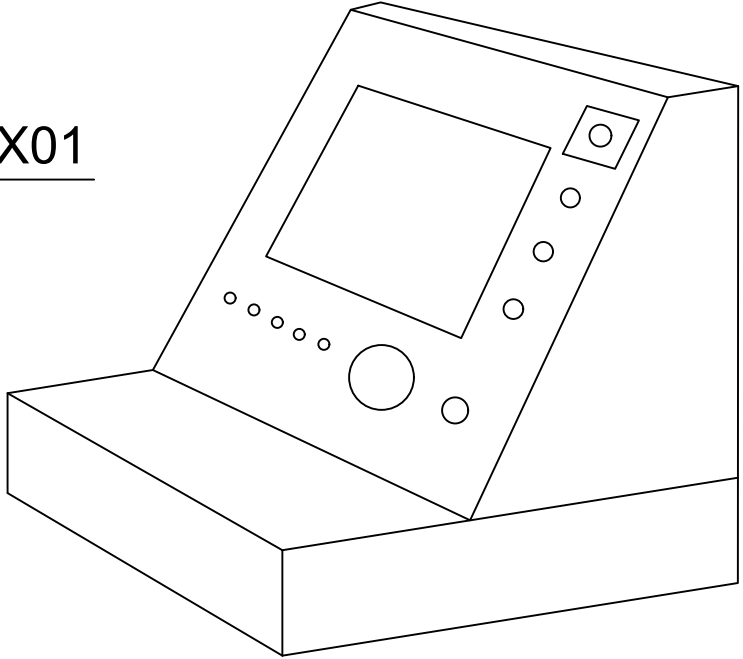
OUTPUT CONTROL CARD JUMPERS SETTINGS



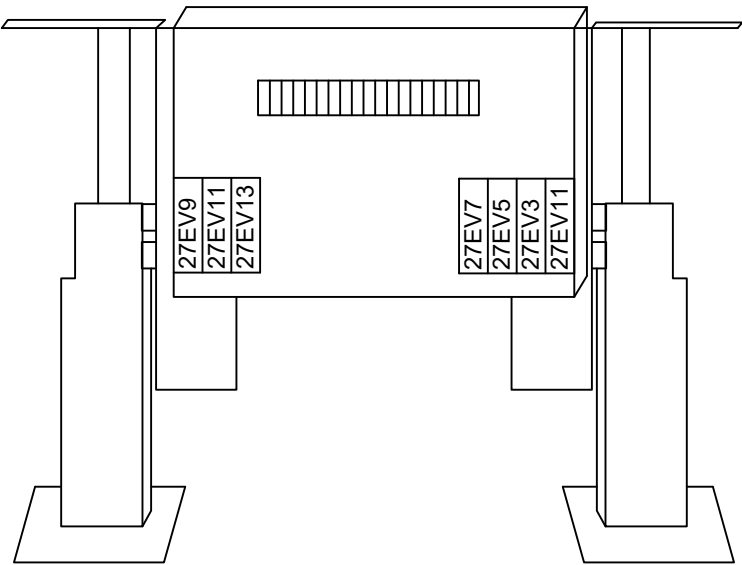
SECOND OUTPUT CONTROL CARD JUMPERS SETTINGS



X01

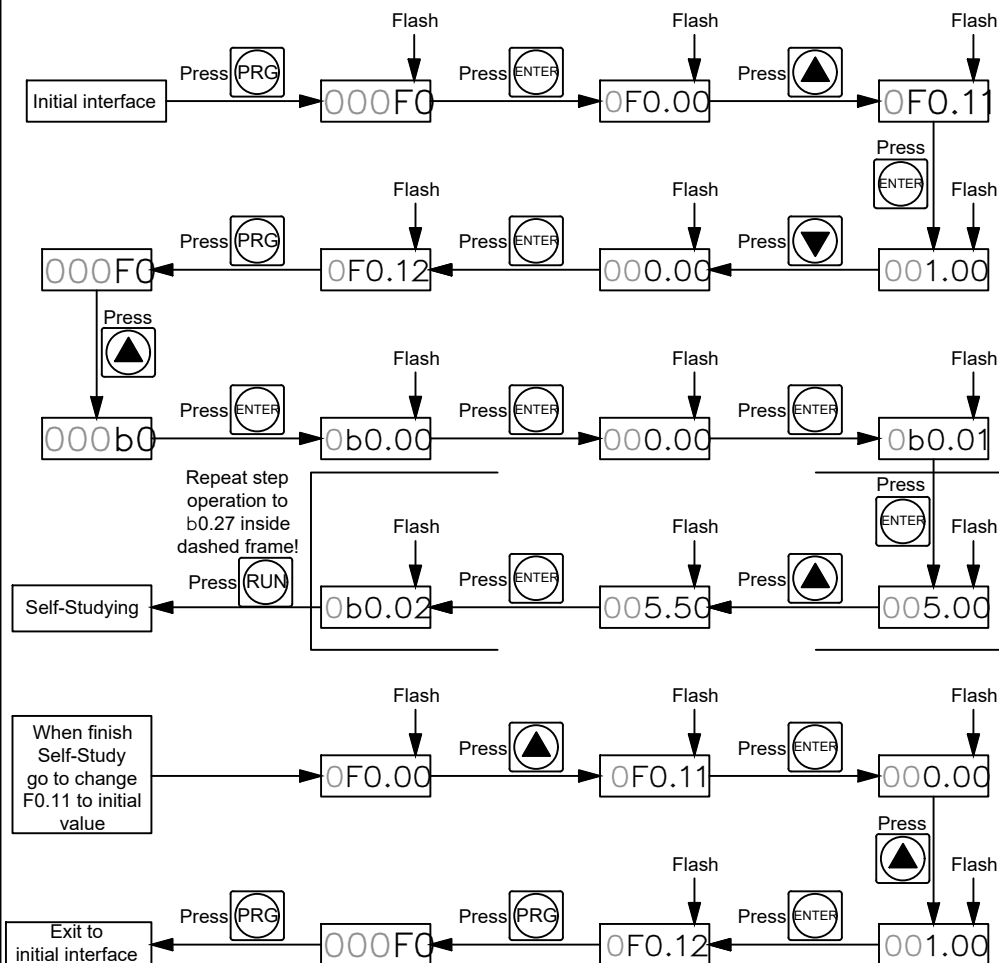


X02



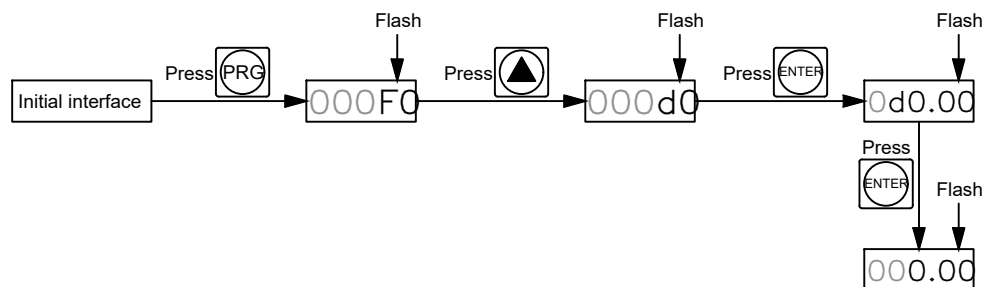
Motor Self-Study

F0.11=0	b0.03=18.2
b0.00=0	b0.04=60
b0.01=5.5	b0.05=1710
b0.02=220	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	
F9.00		6006	9200BPS
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	1	1	1	1	0	0
PA-008		5000	5000	5000	5000	5000	5000
PA-009						16384	16384
PA-010						1250	1250
PA-222		1250	1250	1250	1250	1250	1250
PA-410	101-181	181	181	181	181	181	181
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	3QS5	General Switch	GLELE	GLD11-63/08 +4P	8	8Q3	Circuit Breaker	Schneider	IC65N D20A 2P				
3	3S16	Mains Filter	DUOJI	NF312C36/16	8	8S3	Filter	Canny Well	CW1B-6A-L				
3					8	8M4	B Motor	Leadshine	ACM8008M2F-B1-L-SS 750W				
					8	8L6	B Servo Drive	Leadshine	L5-750Z				
					8								
4	4T3	Transformers	CHNT	NDK(BK)-150	9	9E2	Wireless Router	ASUS	RT-AC53				
4	4Q4	Circuit Breaker	Schneider	IC65N D10A 2P	9	9S8	Filter	Canny Well	CW1B-6A-L				
4	4Q5	Circuit Breaker	Schneider	IC65N D4A 1P	9	9SD8	CNC Controler	AITEK	9 AXIS CNC-A5				
4	4M9	Oil Pump Motor	ML	MYK-202-200-0 15W/220V 2L	9	9D15	ETH Card	--	7i80b				
4	4P8	Power Supply	MW	EDR-75-12 6.3A12VDC	9								
4	4FU8	FUSE	Schneider	LRD16C 9-13A									
4	4P10	Power Supply	MW	NDR-240-24 10A24VDC	10	10D0	Control Device	JUYING	DAM0816D RS232 485				
4	4Q10	Circuit Breaker	Schneider		10	10SQ13	Air Pressure Switch	SQW	QPM11-NC				
4	4Q11	Circuit Breaker	Schneider		10	10SQ14	Water Pressure Switch	SN	DN8 1.1-1.8kgf/m² (ON-OFF)				
4	4P13	Switching Power Supply	MW	EDR-75-12 6.3A12VDC	10								
4	4Q13	Circuit Breaker	Schneider										
4					11	11E1	Computer Power On/Off	Aitalmac	--				
5	5P3	Power Supply	MW	--	11	11E6	USB-WiFi	COMFAST	CF-7201ND				
5	5Q3	Circuit Breaker	Schneider	C65N-DC 1P C4A	11	11S8	Filter	Canny Well	CW1B-6A-L				
5	5LH3	LED Light	--	--	11	11SD8	Windows PC	AITEK	WIN-A5				
5	5Q6	Circuit Breaker	Schneider	IC65N D20A 3P	11	11E13	USB-Mouse	Lenovo	M300				
5	5S6	Filter	DUOJI	NF312C36/16	11	11E14	USB-Keyboard	Logitech	K310				
5	5S9	Frequency Converter	POWTRAN	PI9230 011G3 11KW	11	11E15	USB-HUB	ORICO	A3H7-bk				
5	5M11	Spindle Motor	--	--	11	11E16	PC Monitor	Anmite	AN-195W01D				
5	5Q17	Circuit Breaker	Schneider	IC65N D10A 3P	11								
5	5QM17	Thermal Relay	Schneider	LRD16C 9-13A									
5	5M17	Hydraulic Pump Motor	WANERF	4WE6J-6X/ED24 220V1.5KW	12	12D0	LPT1 Output Card	AITEK	6AXIS-Mod-V5-OUTPUT mode				
5					12	12SQ13	Z Limit Sensor	IBEST	IPLSI-12NO2B-L60mm(NPN NO 2mm 200mA)				
					12	12SQ14	Y2 Limit Sensor	IBEST	IPLSI-12NO2B-L60mm(NPN NO 2mm 200mA)				
					12	12SQ15	Y1 Limit Sensor	IBEST	IPLSI-12NO2B-L60mm(NPN NO 2mm 200mA)				
					12	12SQ16	X Limit Sensor	IBEST	IPLSI-12NO2B-L60mm(NPN NO 2mm 200mA)				
					12								
6	6Q1	Circuit Breaker	Schneider	IC65N D20A 2P	14	14SB3	Enable Key Switch	RENY	RBSNK-2				
6	6S1	Filter	Canny Well	CW1B-6A-L	14	14SB3.1	Power On Button	RENY	R2PIF-1D-2GL				
6	6M2	X Motor	Leadshine	ACM13009H2F-40-L 850W 3000r/min	14	14KM3	Contactor	Schneider	LC1D50AB7C-LADN11				
6	6L4	X Servo Drive	Leadshine	L5-850Z	14	14KA6	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V				
6	6Q7	Circuit Breaker	Schneider	IC65N D20A 2P	14	14FU12	Fuse	CHE	FS-101 DC24V 2A				
6	6S7	Filter	Canny Well	CW1B-6A-L	14	14FU13	Fuse	CHE	FS-101 DC24V 2A				
6	6M8	Y1 Motor	Leadshine	ACM13009H2F-40-L 850W 3000r/min	14	14E12	Z Brake	--	24VDC 1A				
6	6L10	Y1 Servo Drive	Leadshine	L5-850Z	14	14E13	C Brake	--	24VDC 1A				
6	6Q14	Circuit Breaker	Schneider	IC65N D20A 2P	14	14FU14	Fuse	CHE	FS-101 DC24V 2A				
6	6S14	Filter	Canny Well	CW1B-6A-L	14	14E14	FAN	PAPST	TYP4114N/12MR 24V 6W 12CM				
6	6M15	Y2 Motor	Leadshine	ACM13009H2F-40-L 850W 3000r/min	14	14FU15	Fuse	CHE	FS-101 DC24V 2A				
6	6L17	Y2 Servo Drive	Leadshine	L5-850Z	14	14E15	FAN	PAPST	TYP4114N/12MR 24V 6W 12CM				
6					14								
7	7Q3	Circuit Breaker	Schneider	IC65N D20A 2P									
7	7S3	Filter	Canny Well	CW1B-6A-L									
7	7M4	Z Motor	Leadshine	ACM13009H2E-40-L 850W Brake									
7	7L6	Z Servo Drive	Leadshine	L5-850Z									
7	7KA10	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V									
7	7Q11	Circuit Breaker	Schneider	IC65N D20A 2P									
7	7S11	Filter	Canny Well	CW1B-6A-L									
7	7M12	C Motor	Leadshine	ACM8008M2E-B1-L-SS 750W Brake									
7	7L14	C Servo Drive	Leadshine	L5-750Z									
7	7KA18	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V									
7													

Aitalmac www.aitalmac.com	Designed By ZLJ		Checked By		Approved By		Trimness By		Description			
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0	1	2	3	4	5	6	7	8	9	10	11	12	13
Pg.	Code	Name	Mfrs.	Model			Pg.	Code	Name	Mfrs.	Model		
15	15D0	LPT2 Output Card	AITEK	6AXIS-Mod-V5-OUTPUT mode			20	20D0	ETH1 Input Mode	AITEK	6AXIS-Mod-V5-INPUT mode		
15	15KA4	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V			20	20SB2	Control Box-Stop Button	RENY	RAPNF-1A-R		
15	15KA6	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V			20	20SB6	Control Box-Pause Button	RENY	RAPNF-1A-Y		
15	15KA8	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V			20	20HL6	Alarm Indicator lamp	TAYB	TB50-4T-D 24V		
15	15KA9	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V			20	20SB8	Control Box-Automatic Button	RENY	RAPNF-1A-G		
15	15KA10	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V			20	20SB10	B/C Axis-Joystick Controller	Schneider	XD2-PA24CR φ22mm		
15	15KA12	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V			20	20SB16	X/Z Axis-Joystick Controller	Schneider	XD2-PA24CR φ22mm		
15	15SQ13	Vacuum Up Sensor	CHVIRD	CS1-U			20						
15	15SQ14	Vacuum Down Sensor	CHVIRD	CS1-U									
15	15SQ15	B Limit Sensor	IBEST	IPSI-12NO2B-L60mm(NPN NO 2mm 200mA)			21	21SB9	X/Y Axis-Joystick Controller	Schneider	XD2-PA24CR φ22mm		
15	15KA15	Terminal Relay	OMRON	G2R-2-SND(S) DC24V+P2RF-08-E			21	21SB10	X/Y Axis-Joystick Controller	Schneider	XD2-PA24CR φ22mm		
15	15SQ16	C Limit Sensor	IBEST	IPSI-12NO2B-L60mm(NPN NO 2mm 200mA)			21						
15	15KA17	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V			22	22D0	ETH2 Input Mode	AITEK	6AXIS-Mod-V5-INPUT mode		
15							22	23HL11	TCP Knob Light	RENY	R2PIF-1D-2GL		
15							22						
16	16KA4	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V			23	23P9	Speed Control Wheel	AITEK	24VPLC		
16	16KA6	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V			23	23SB11	TCP On/Off Switch	RENY	R2SNS-2FE-1D-G		
16	16KA8	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V			23	23SB12	B Axis Angle Knob	RENY	R2SNS-3TB-2A-B		
16							23						
17	17D0	LPT3 Input Card	AITEK	6AXIS-Mod-V5-INPUT mode			24	24D0	ETH3 Input Mode	AITEK	6AXIS-Mod-V5-INPUT mode		
17	17EV4	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V			24	24SB2	Remote Confirm Button	Yuding	F24-12S TX 24V		
17	17A7	Laser	--	16mm cross			24	24SB6	Remote On Button	Yuding	F24-12S TX 24V		
17	17FU8	Fuse	CHE	FS-101 DC24V			24	24SB8	Remote Blade On Button	Yuding	F24-12S TX 24V		
17	17A9	Blade Laser	--	16mm			24	24SB10	Remote Velocity- Button	Yuding	F24-12S TX 24V		
17	17FU10	Fuse	CHE	FS-101 DC24V			24	24SB12	Remote Velocity+ Button	Yuding	F24-12S TX 24V		
17	17SQ10	Left Vacuum Sensor	CHVIRD	CS1-U			24	24SB14	Remote C- Button	Yuding	F24-12S TX 24V		
17	17EV11	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V			24	24SB17	Remote Z- Button	Yuding	F24-12S TX 24V		
17	17SQ12	Right Vacuum Sensor	CHVIRD	CS1-U			24						
17													
18	18SQ6	Vacuum4 Generator	SNS	SCV-10CK 0.1-0.6MPa			25	25SB5	Remote C+ Button	Yuding	F24-12S TX 24V		
18	18SQ8	Blade Probe	--	--			25	25SB8	Remote Z+ Button	Yuding	F24-12S TX 24V		
18	18SQ11	Vacuum3 Generator	SNS	SCV-10CK 0.1-0.6MPa			25	25SB9	Remote Y- Button	Yuding	F24-12S TX 24V		
18	18SQ12	Vacuum2 Generator	SNS	SCV-10CK 0.1-0.6MPa			25	25SB11	Remote X+ Button	Yuding	F24-12S TX 24V		
18	18SQ13	Vacuum1 Generator	SNS	SCV-10CK 0.1-0.6MPa			25	25SB12	Remote X- Button	Yuding	F24-12S TX 24V		
18							25	25SB13	Remote Y+ Button	Yuding	F24-12S TX 24V		
18							25						
19	19D2	COM1 COMPUTER MODE	AITEK	RS232-Mod-V1 4IN/3OUT			26	26FU3	Fuse	CHE	FS-101 DC24V		
19	19QS6	Table Limit Sensor	Moujen	ME-9101			26	26E3	CAMERA	LOGITECH	C930E		
19	19QS7	Table Limit Sensor	Moujen	ME-9101			26						
19	19EV10	Hydraulic Control Valve	WANERF	4WE6J-6X/ED24			27	27EV1	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V		
19	19EV12	Hydraulic Control Valve	WANERF	4WE6J-6X/ED24			27	27EV3	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V		
19	19KM14	Hydraulic Pump Contactor	Schneider	LC1-D18B7C 18A			27	27EV5	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V		
19							27	27EV7	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V		
20	20D0	ETH1 Input Mode	AITEK	6AXIS-Mod-V5-INPUT mode			27	27EV9	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V		
20	20SB2	Control Box-Stop Button	RENY	RAPNF-1A-R			27	27EV11	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V		
20	20SB6	Control Box-Pause Button	RENY	RAPNF-1A-Y			27	27EV13	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V		
20	20HL6	Alarm Indicator lamp	TAYB	TB50-4T-D 24V			27	27EV17	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V		
20	20SB8	Control Box-Automatic Button	RENY	RAPNF-1A-G			27						
20	20SB10	B/C Axis-Joystick Controller	Schneider	XD2-PA24CR φ22mm			33	33S2	Remote Control RX	Yuding	F24-12S RX 24V		
20	20SB16	X/Z Axis-Joystick Controller	Schneider	XD2-PA24CR φ22mm			33						
20							33						