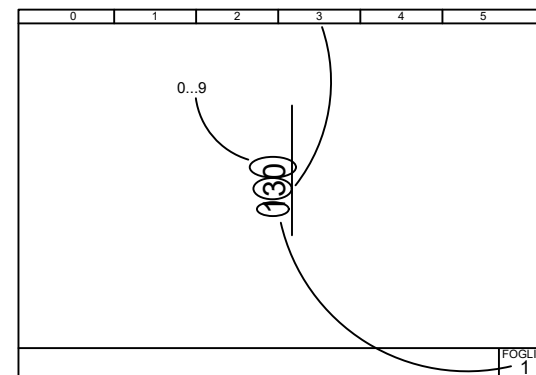
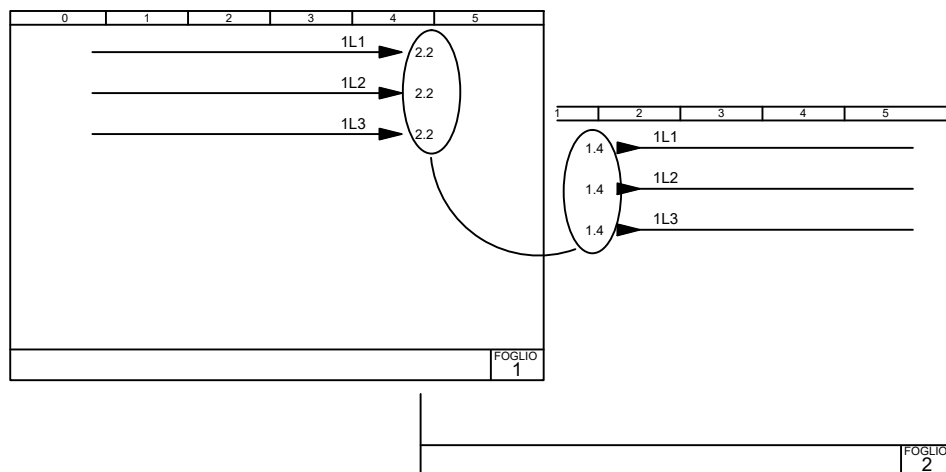
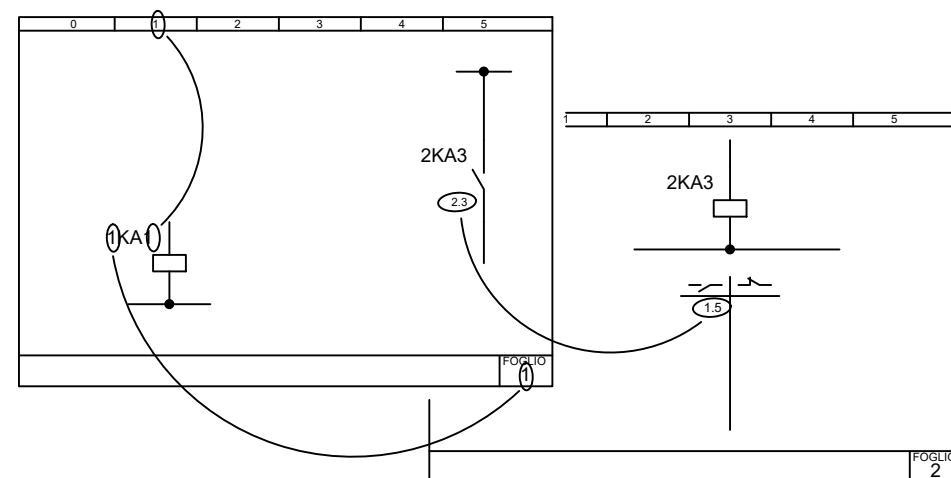
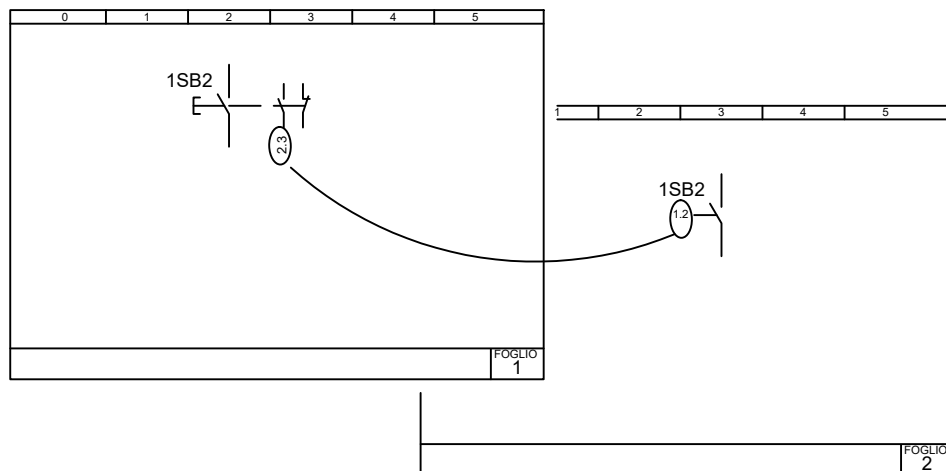
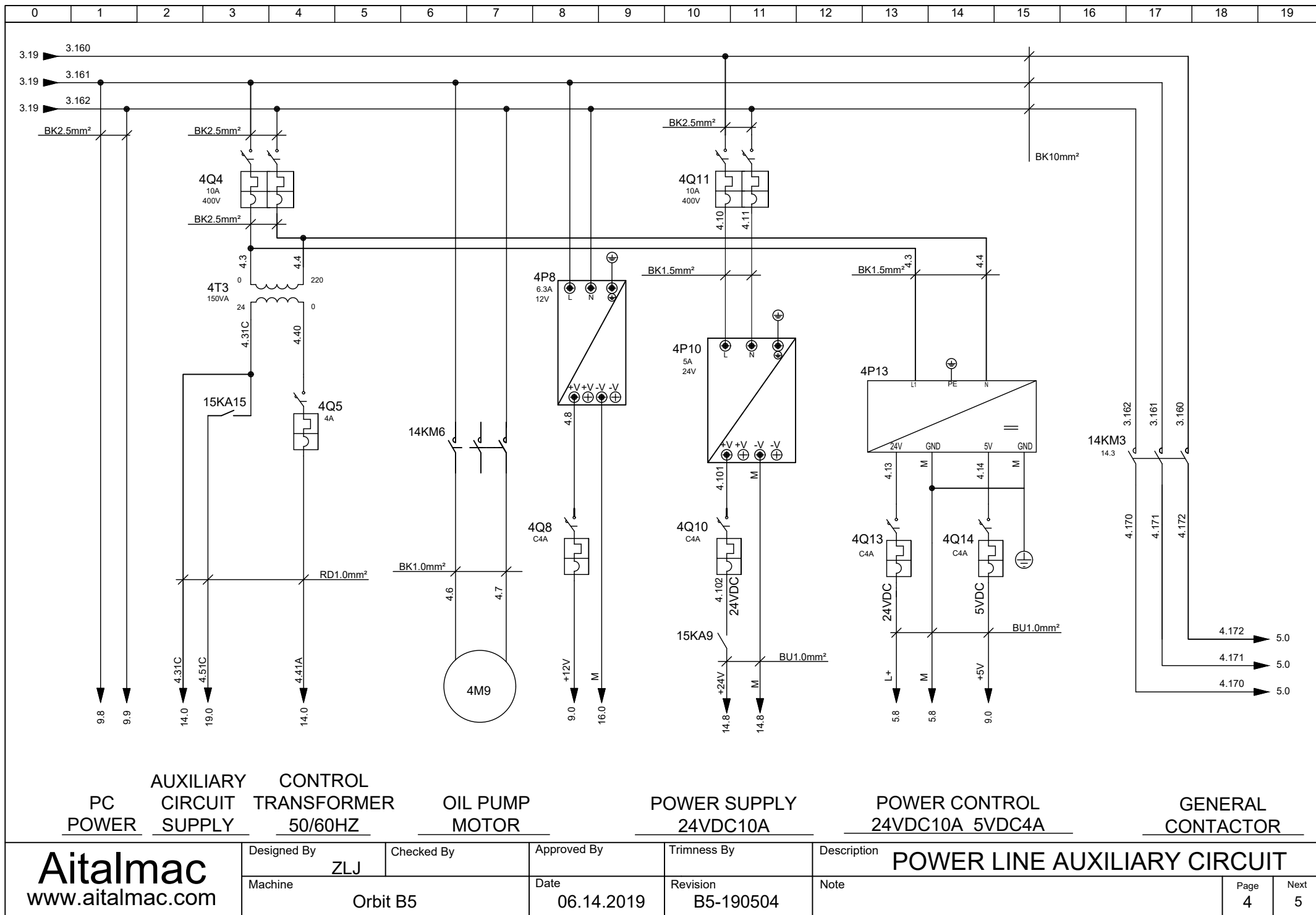
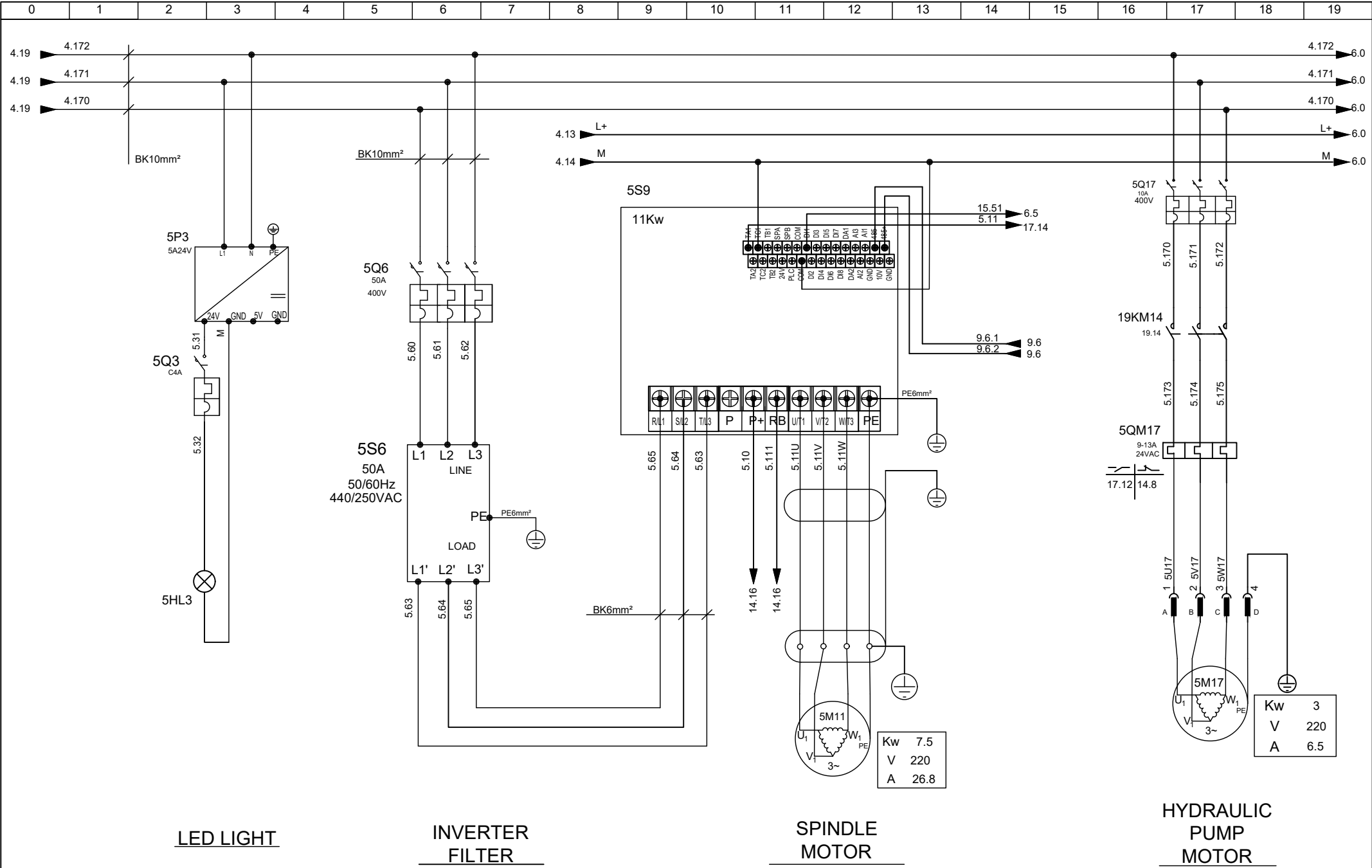
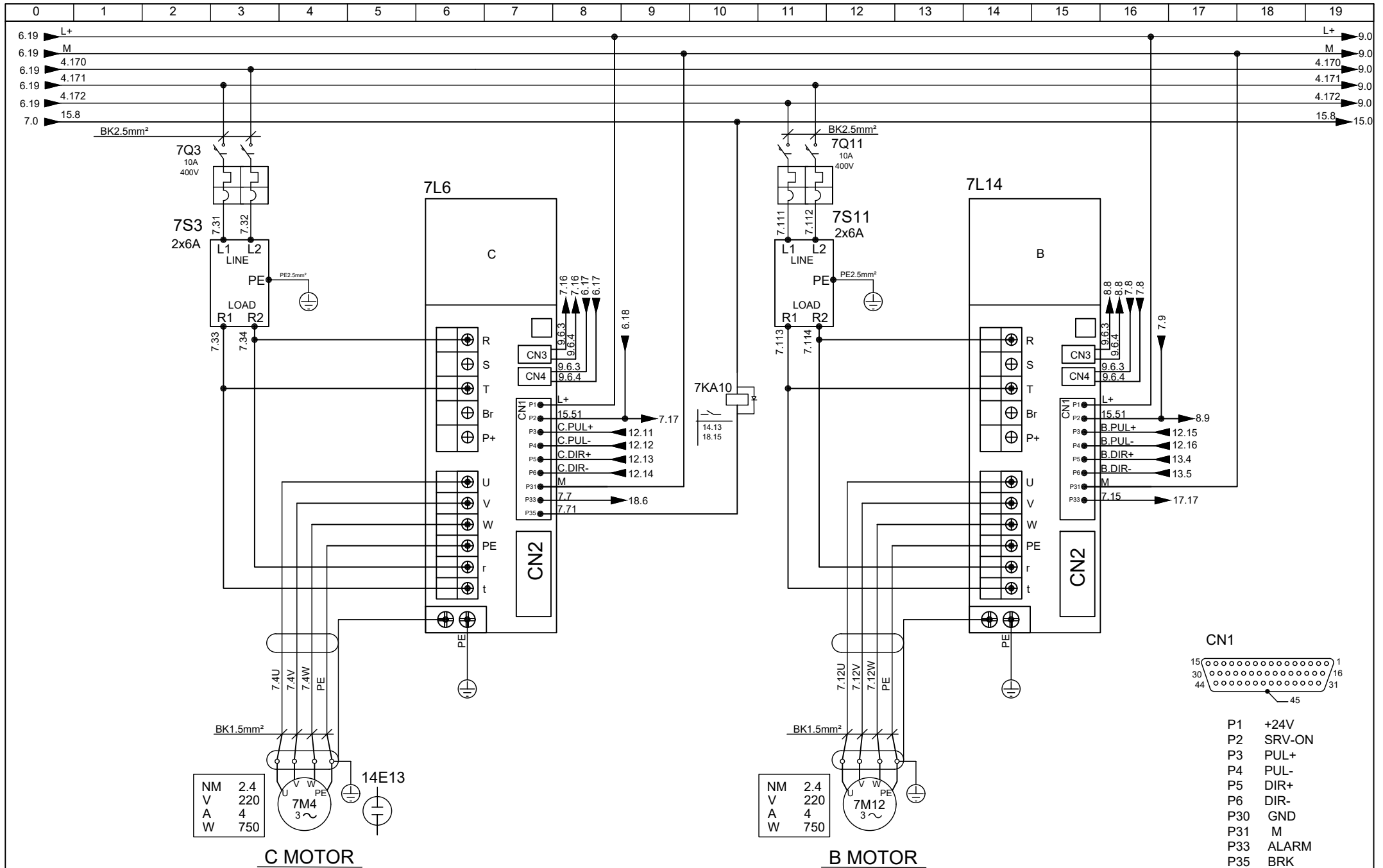


0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19																								
AITALMAC										LOCATION SYMBOLS ☐ Components on the door ☐ Components inside the cubicle (usually omitted) ☒ Machine components (usually omitted)				COMPONENTS DESIGNATION C Condensers D CNC control model E Component not in 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. 220																																						
ORBITB5					FREQ. 50-60																																						
WIRING DIAGRAM					CUBICLE DIMENSION																																						
B5-190504					L (mm) 1876																																						
					H (mm) 1116																																						
					P (mm) 302																																						
CONDUCTORS DESIGNATION <table><tr><th>COLOR</th><th>FUNCTION</th><th>MINIMUM SECTION</th></tr><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></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	RED +/-BLUE -	thermocouples	COMPENSATED CABLE		PLC circuit	0,25mm² (0,5mm² I<2A)
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THE WIRING DIAGRAM IS INDICATED WITHOUT TENSION, AIR, OIL AND WATER FLOW.										COLORS <table><tr><td>WH White</td><td>GN Gray</td></tr><tr><td>YE Yellow</td><td>BU Blue</td></tr><tr><td>RD Red</td><td>BK Black</td></tr><tr><td>OG Orange</td><td>GY GreenYellow</td></tr></table>										WH White	GN Gray	YE Yellow	BU Blue	RD Red	BK Black	OG Orange	GY GreenYellow																
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OG Orange	GY GreenYellow																																										
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 : Orbit B5				Date: 06.14.2019				Revision: B5-190504				Approved By :				Pag. 1		Next. 1.1																							



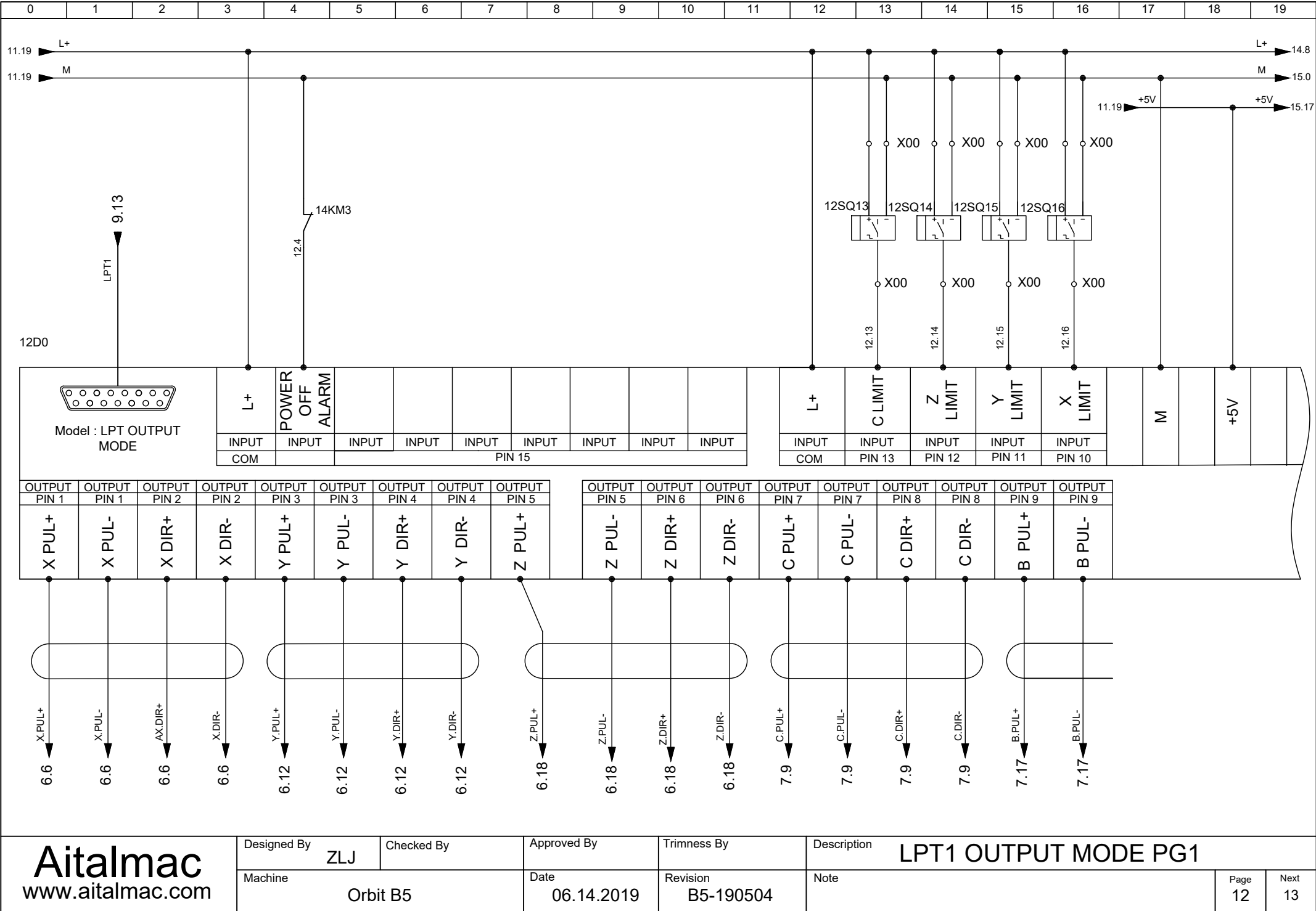






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Aitalmac www.aitalmac.com			Designed By		ZLJ		Checked By		Approved By		Trimness By		Description						
			Machine				Date		Revision		Note				Page	Next			
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Aitalmac www.aitalmac.com			Designed By		ZLJ		Checked By		Approved By		Trimness By		Description						
			Machine				Date		Revision		Note				Page	Next			
				Orbit B5				06.14.2019		B5-190504						10	11		



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Machine

Orbit B5

Checked By

Approved By

Date

06.14.2019

Trimness By

Revision

B5-190504

Description

LPT1 OUTPUT MODE PG1

Note

Page

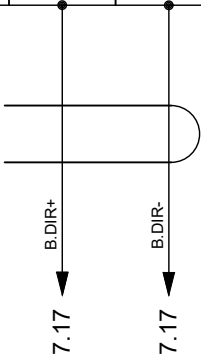
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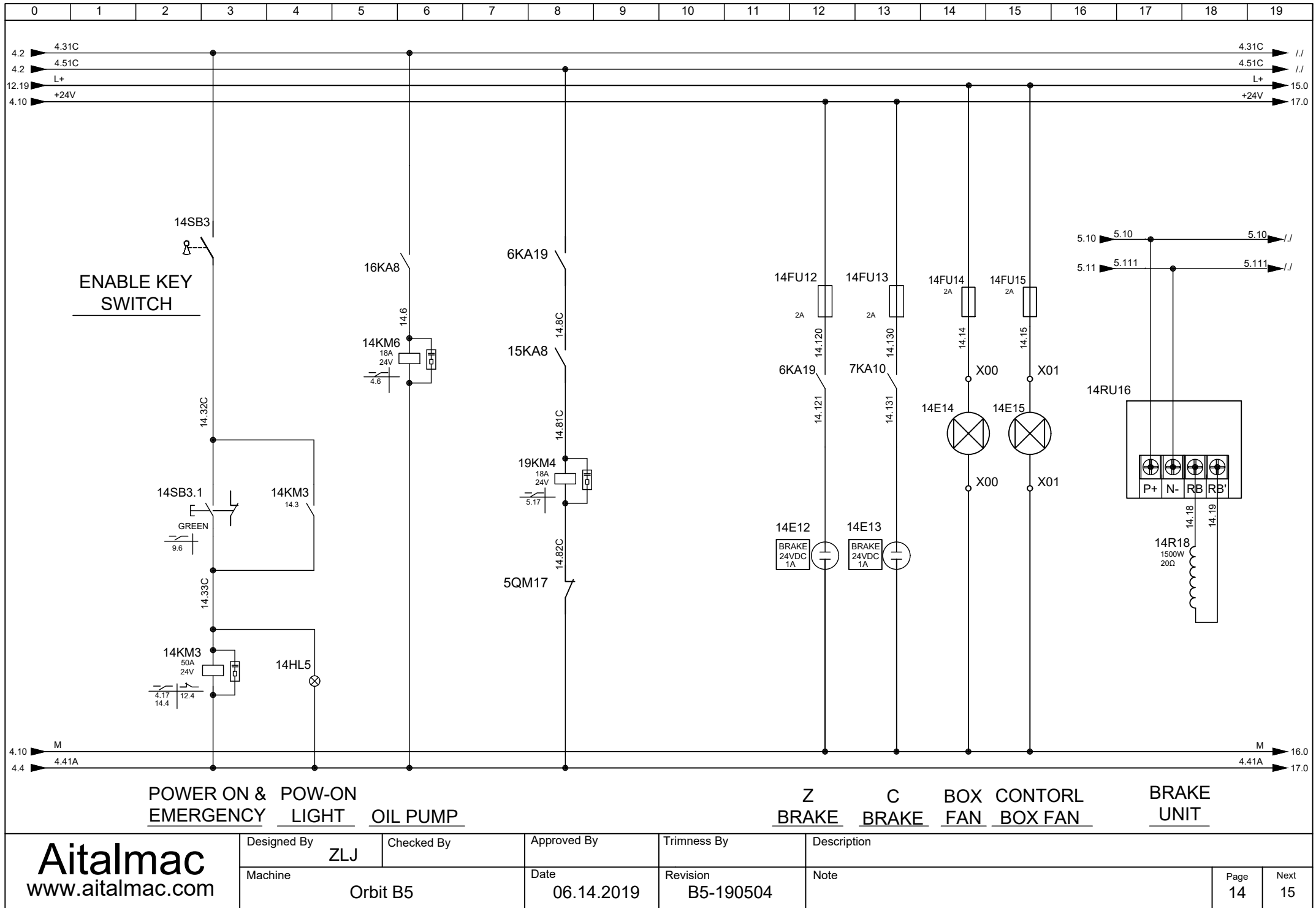
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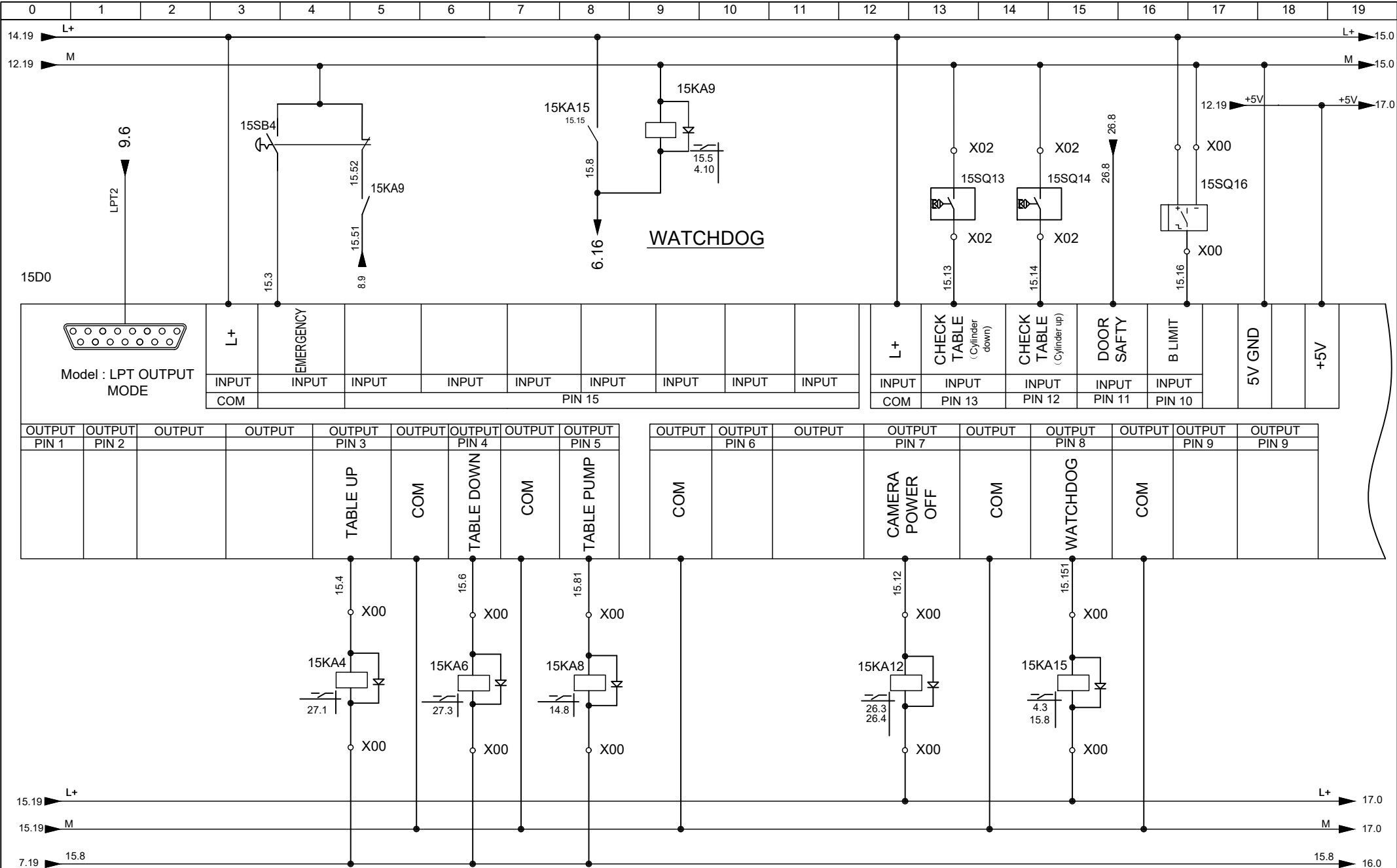
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12D0

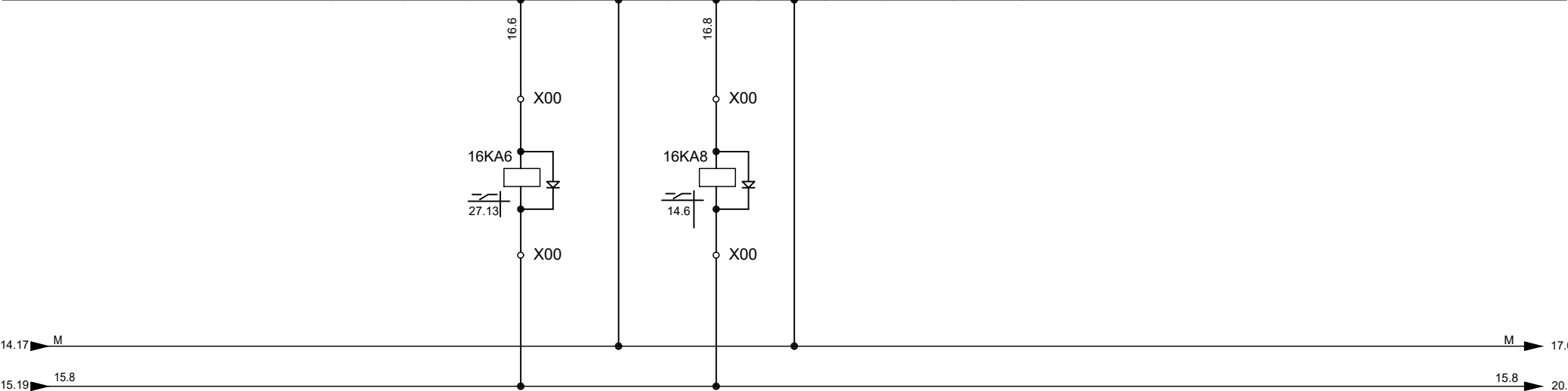
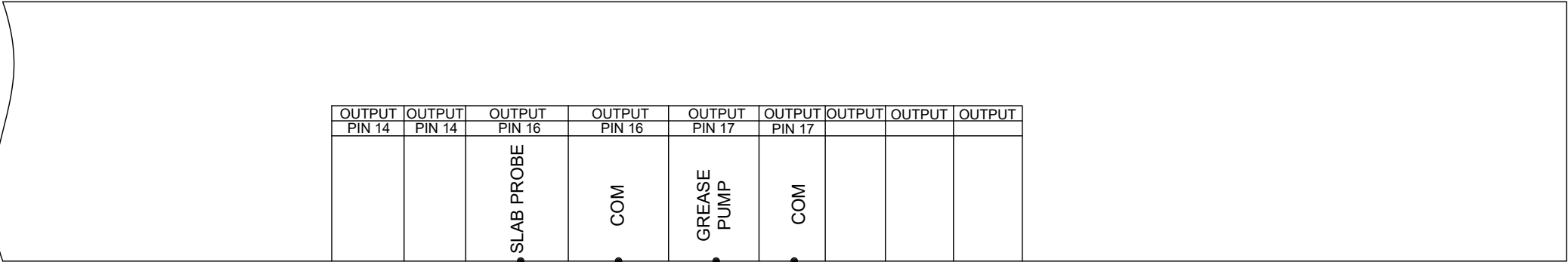
OUTPUT PIN 14	OUTPUT PIN 14	OUTPUT PIN 16	OUTPUT PIN 16	OUTPUT PIN 17	OUTPUT PIN 17	OUTPUT		OUTPUT
B DIR+	B DIR-							

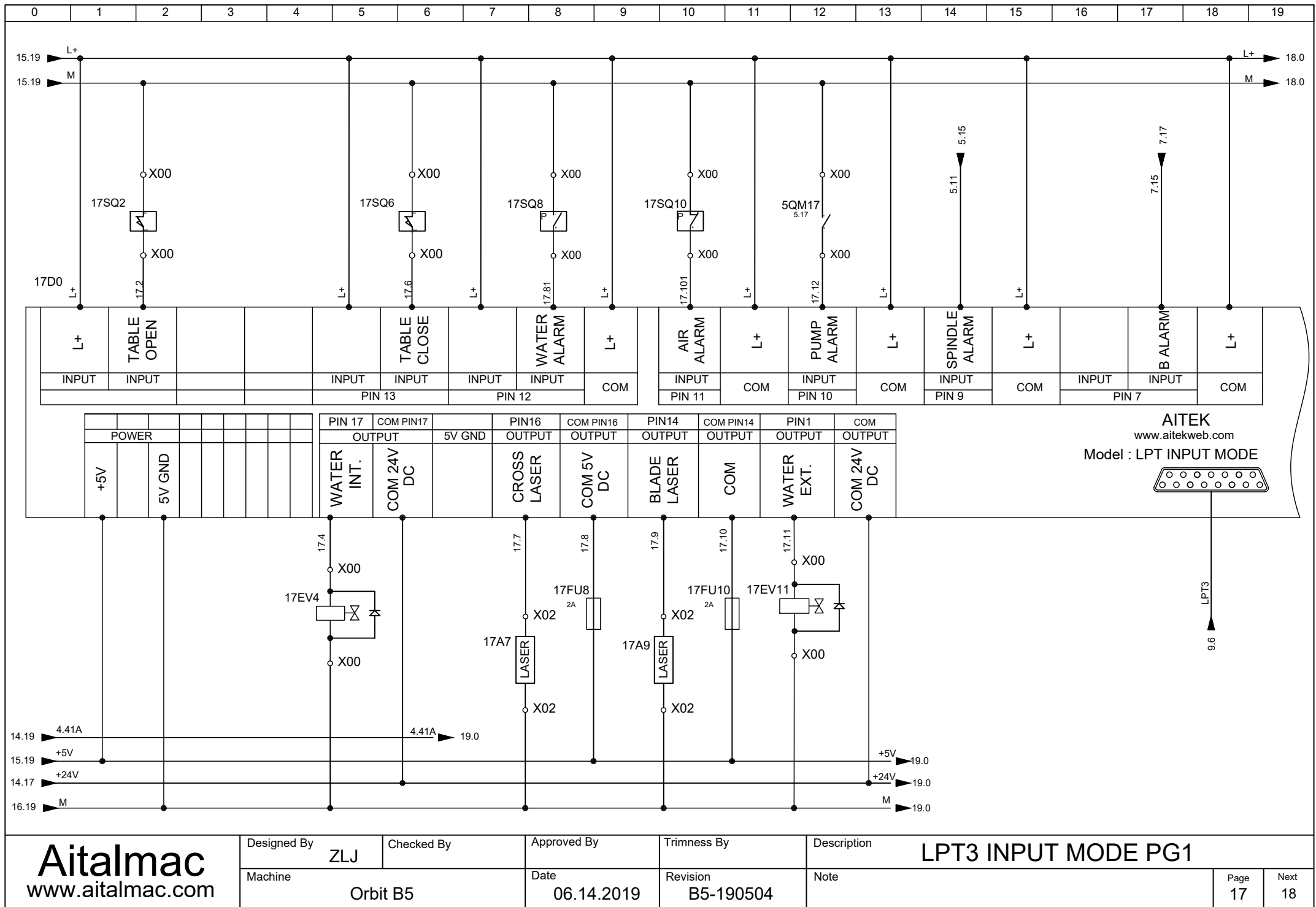


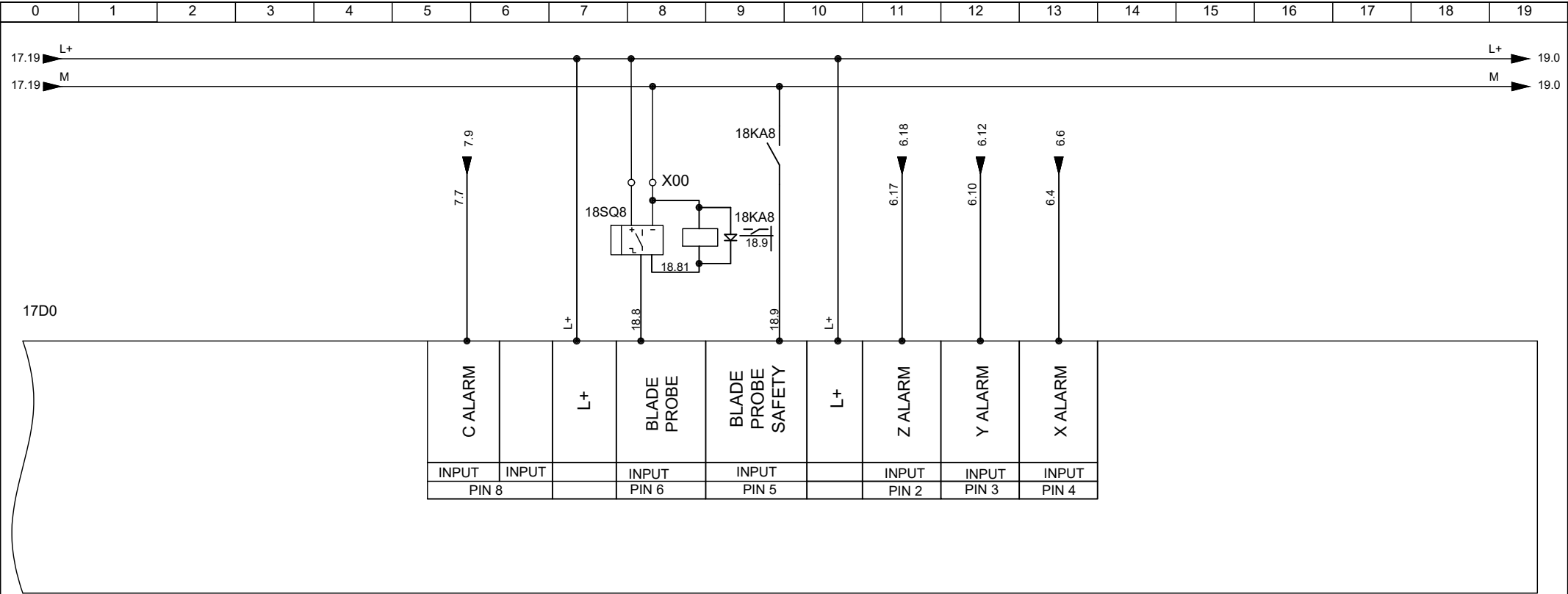




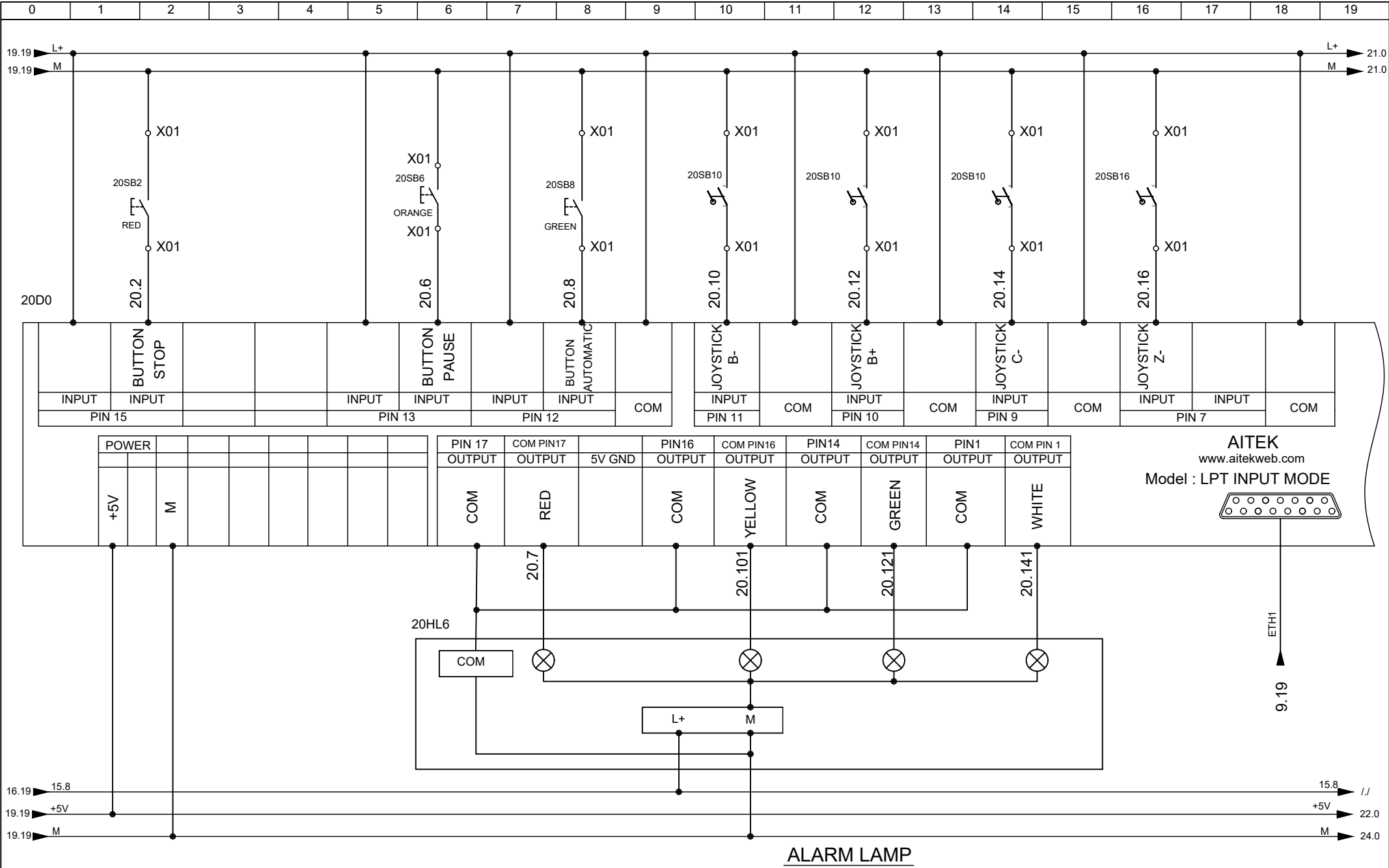
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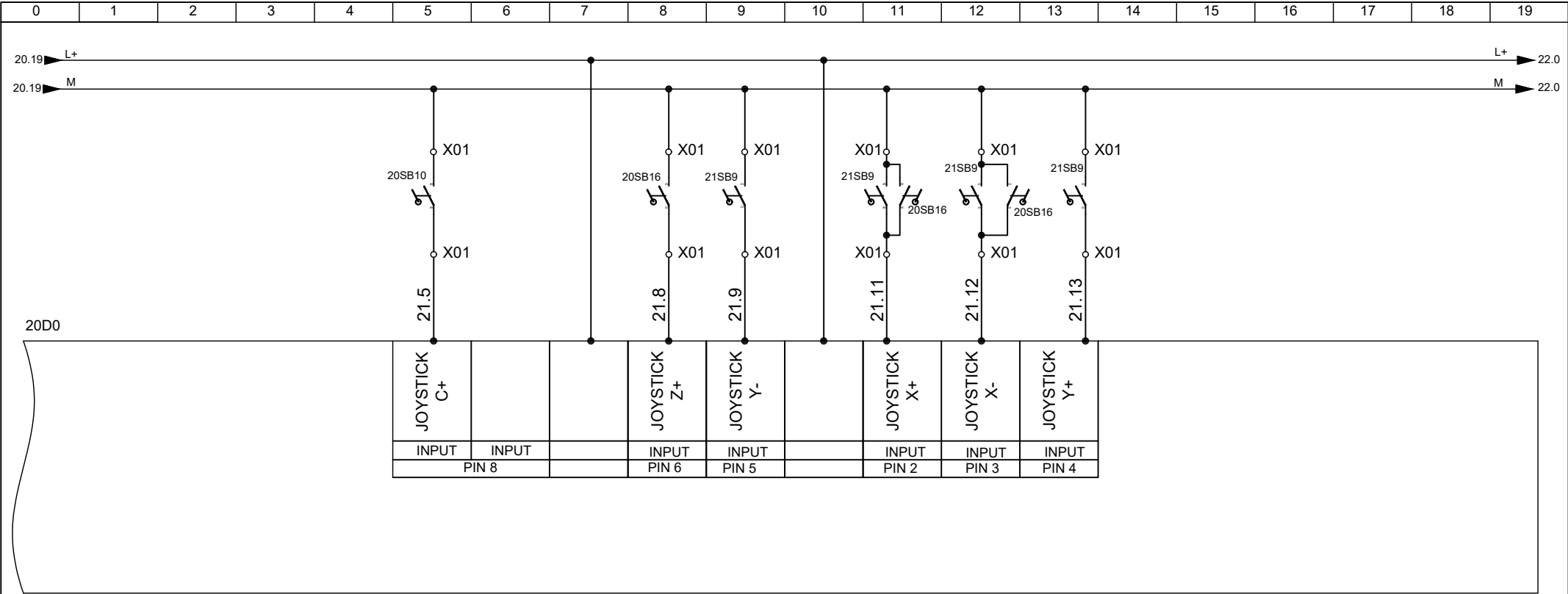




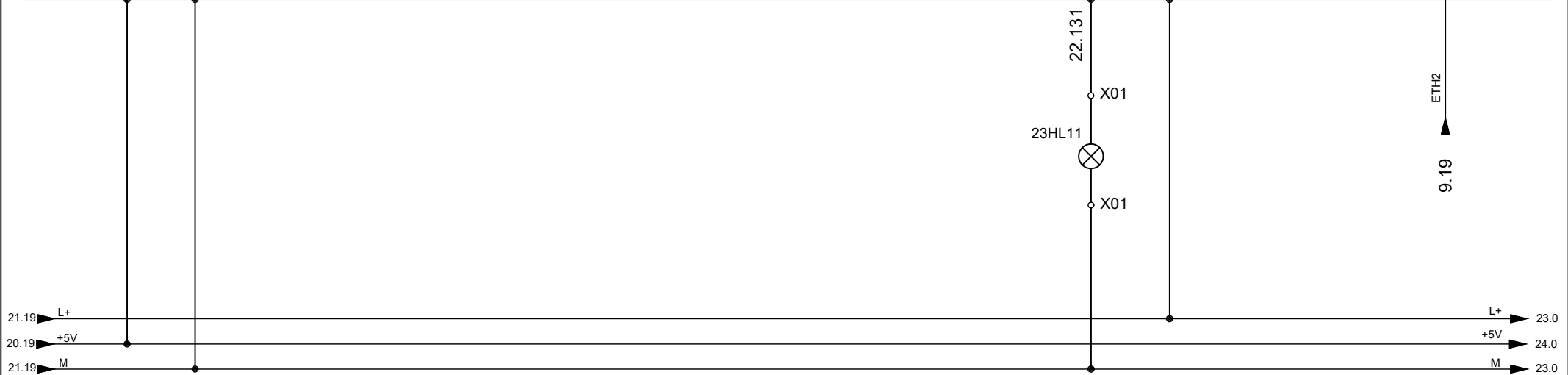
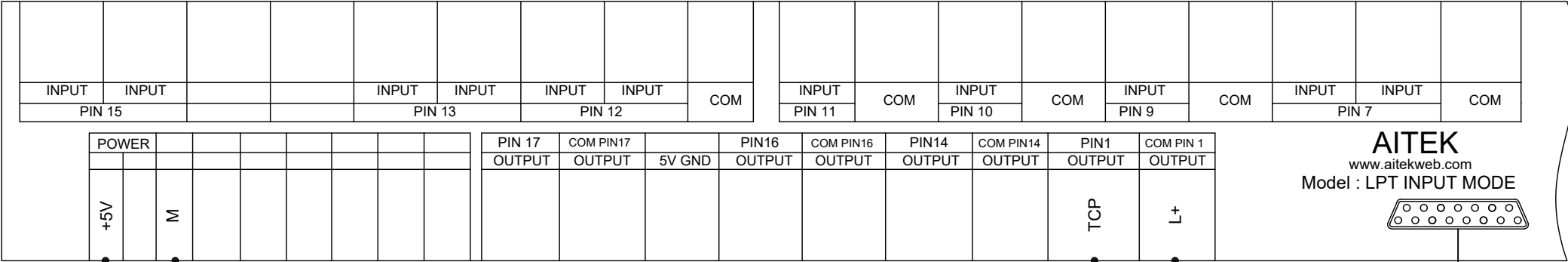


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		Machine		Orbit B5				Date		06.14.2019		Revision		B5-190504		Note			Page	Next
																	19		20	

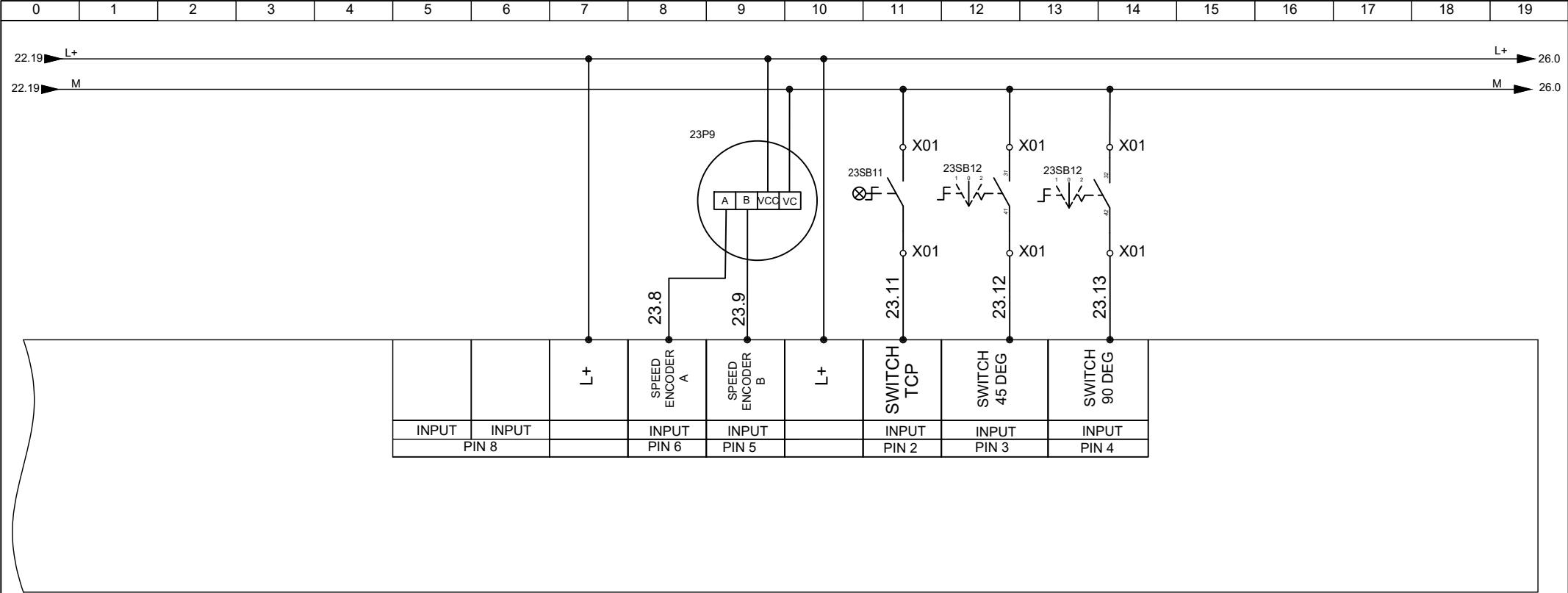




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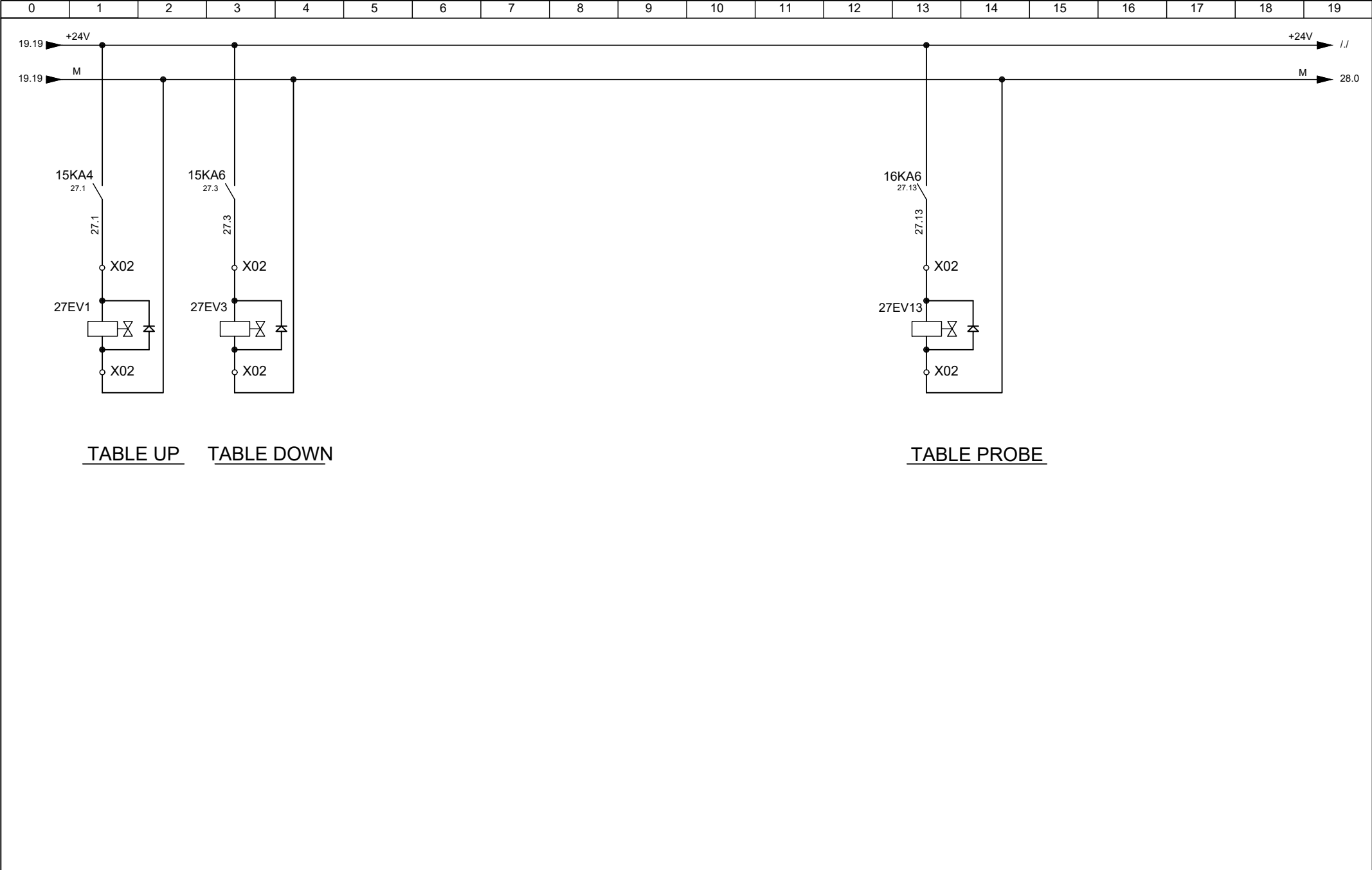
TCP LIGHT



SPEED CONTROL WHEEL

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Aitalmac www.aitalmac.com				Designed By ZLJ			Checked By		Approved By		Trimness By		Description						
				Machine Orbit B5			Date 06.14.2019		Revision B5-190504		Note					Page 24	Next 25		

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Aitalmac www.aitalmac.com				Designed By		ZLJ		Checked By		Approved By		Trimness By		Description					
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				Orbit B5				06.14.2019		B5-190504						25	26		

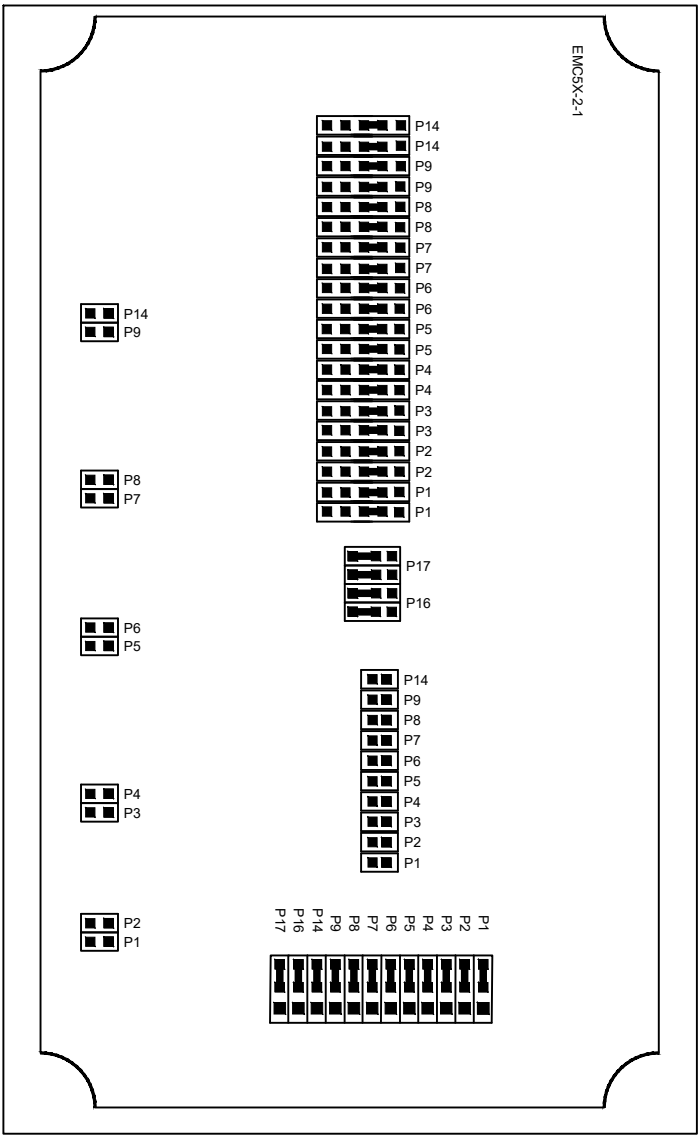


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			Machine				Date		Revision		Note				Page	Next			
				Orbit B5				06.14.2019		B5-190504						28	29		

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				Machine				Date		Revision		Note				Page	Next		
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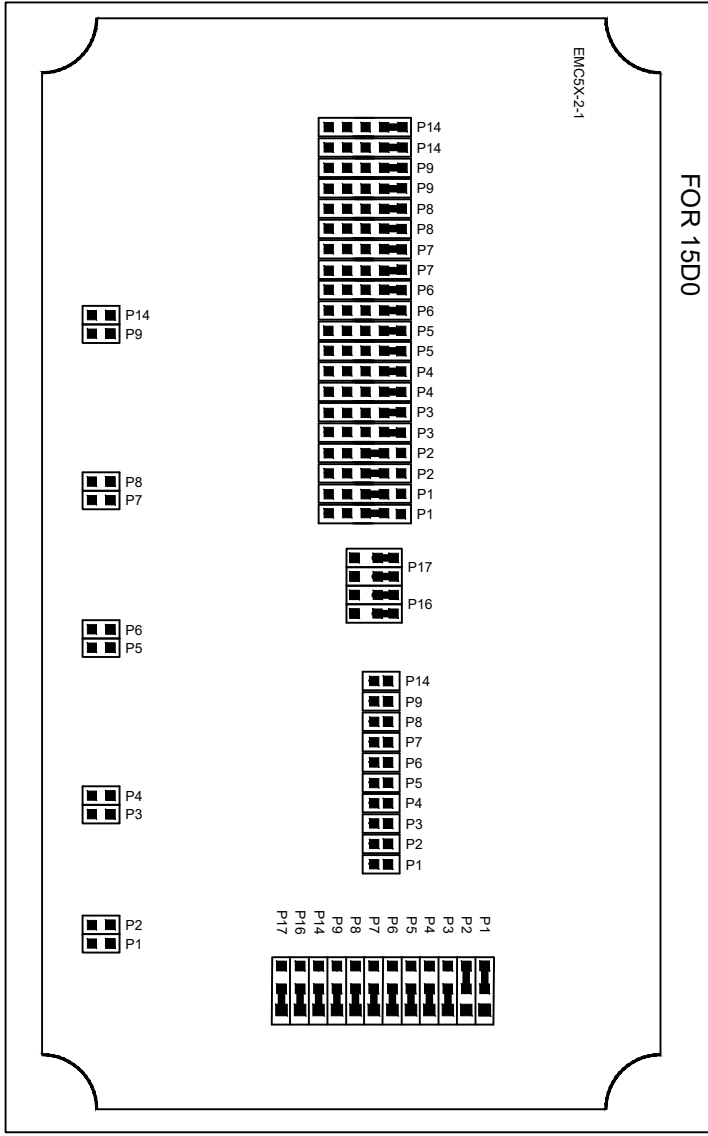
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				Machine				Date		Revision		Note				Page	Next		
				Orbit B5				06.14.2019		B5-190504						30	31		

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				Orbit B5				06.14.2019		B5-190504						31	32		



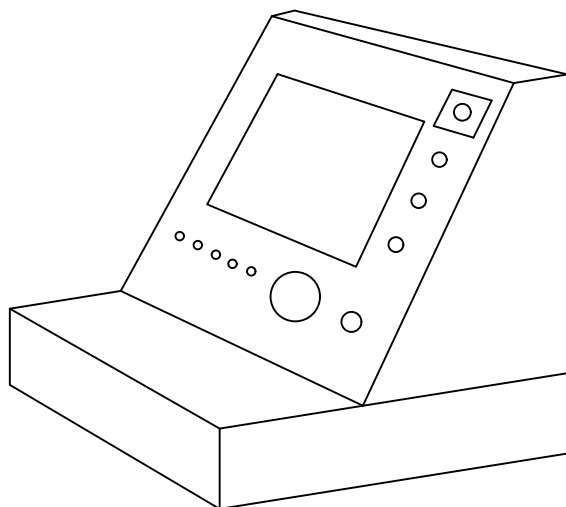
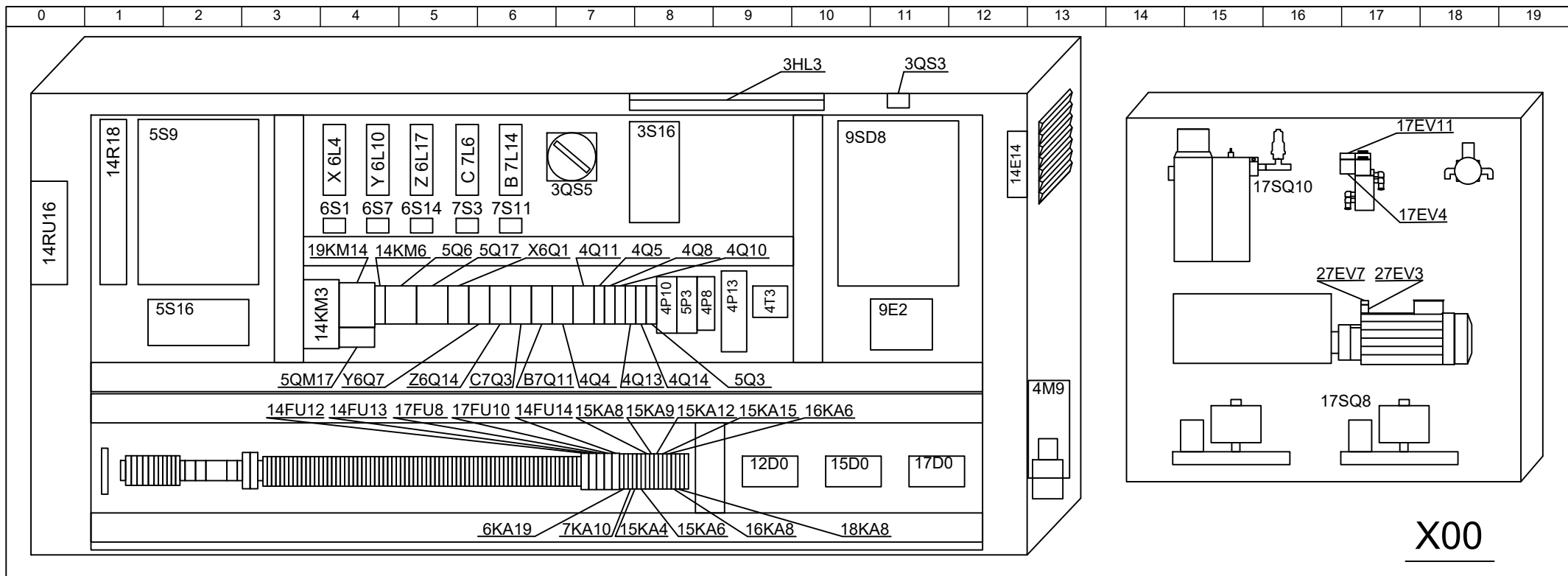
FOR 12D0

OUTPUT CONTROL CARD JUMPERS SETTINGS

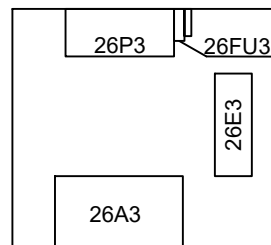


FOR 15D0

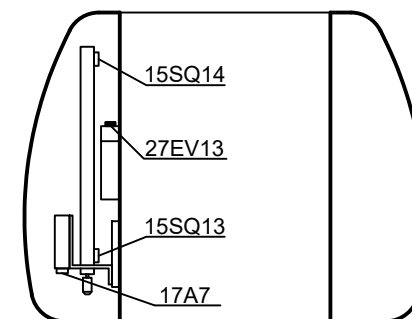
SECOND OUTPUT CONTROL CARD JUMPERS SETTINGS



X01

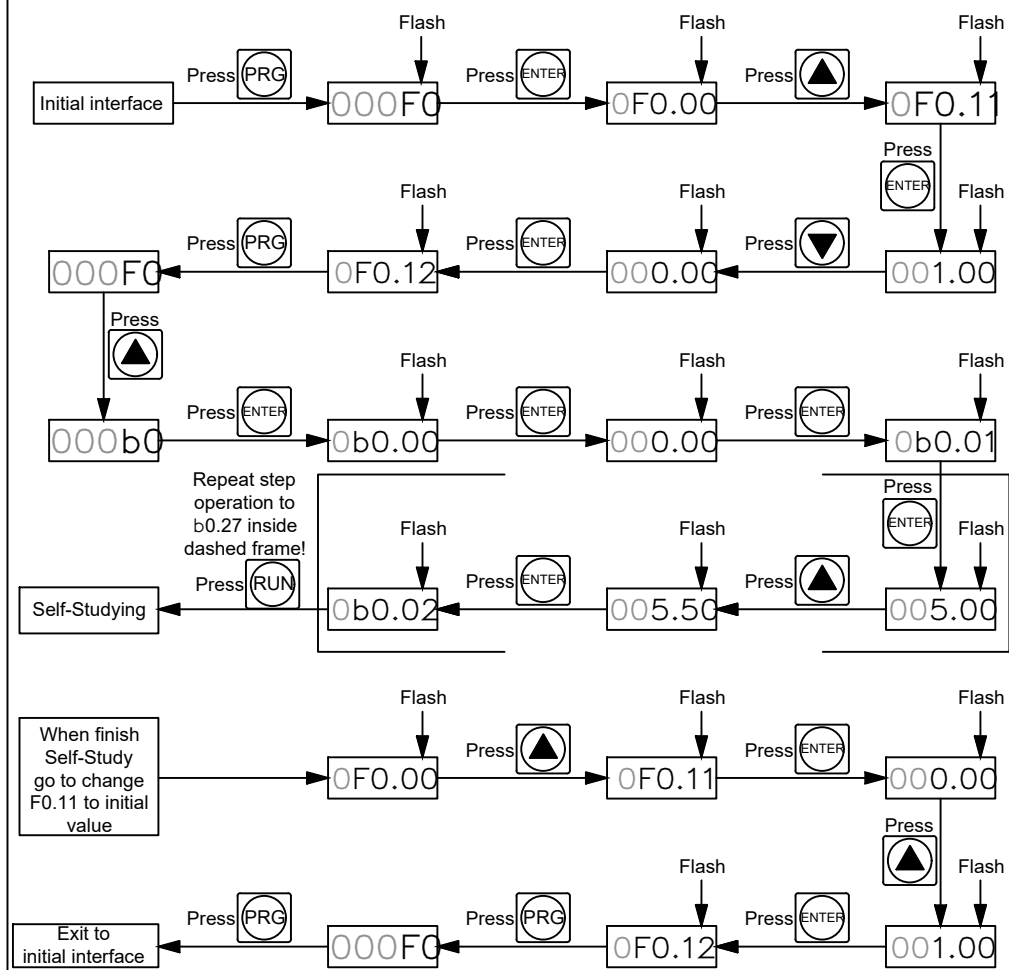


X02



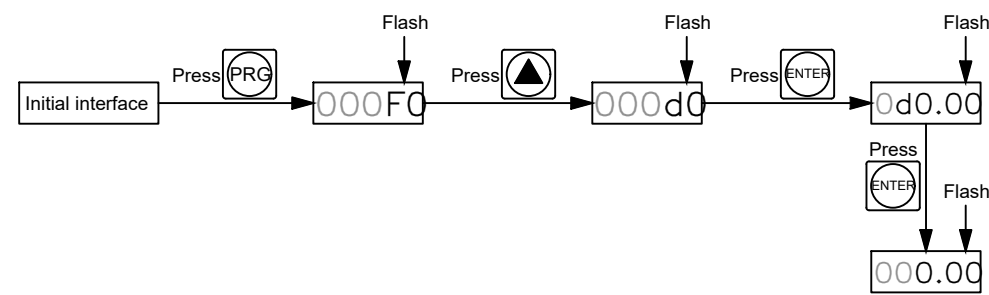
Motor Self-Study

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	Y	Z	B	C
PA-003		13	13	13	13	13
PA-004		750	750	750	750	750
PA-006	0/1	1	1	1	0	0
PA-008		5000	5000	5000	5000	5000
PA-009					16384	16384
PA-010					1250	1250
PA-222		1250	1250	1250	1250	1250
PA-410	101-181	181	181	181	181	181
PA-529		53	53	53	53	53
PA-531	1-256	1	2	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						
3	3S16	Mains Filter	DUOJI	DTT2121-50-S16-S77 50A 480VAC			8						
3							8						
4	4T3	Transformers	CHNT	NDK(BK)-150			8						
4	4Q4	Circuit Breaker	Schneider	IC65N D10A 2P			8						
4	4Q5	Circuit Breaker	Schneider	IC65N D4A 1P			9	9E2	Network Switch	TP-Link	TL-SF1005D 5V		
4	4M9	Oil Pump Motor	ML	MYK-202-200-0 15W/220V 2L			9	9SD8	CNC Controler	AITEK	9 AXIS CNC-A5		
4	4P8	Power Supply	MW	EDR-75-12 6.3A12VDC			9	9D15	ETH Card	--	7i80b		
4	4Q8	Circuit Breaker	Schneider	C65N-DC C4A 1P			9						
4	4P10	Power Supply	MW	NDR-120-24 5A24VDC			9						
4	4Q10	Circuit Breaker	Schneider	C65N-DC C4A 1P			10						
4	4Q11	Circuit Breaker	Schneider	IC65N D10A 2P			10						
4	4P13	Switching Power Supply	MW	D-120B			10						
4	4Q13	Circuit Breaker	Schneider	C65N-DC C4A 1P			10						
4	4Q14	Circuit Breaker	Schneider	C65N-DC C4A 1P			11	11E1	Computer Power On/Off	Aitalmac	--		
4							11	11E6	USB-WiFi	COMFAST	CF-7201ND		
5	5P3	Power Supply	MW	NDR-120-24 5A24V			11						
5	5Q3	Circuit Breaker	Schneider	C65N-DC 1P C4A			11	11SD8	Windows PC	AITEK	WIN-A5		
5	5HL3	LED Light	--	--			11	11E13	USB-Mouse	Lenovo	M300		
5	5Q6	Circuit Breaker	Schneider	IC65N D50A 3P			11	11E14	USB-Keyboard	Logitech	K310		
5	5S6	Filter	DUOJI	DTT2121-50-S16-S77 50A 480VAC			11	11E15	USB-HUB	UGREEN	CR116		
5	5S9	Frequency Converter	POWTRAN	PI9230 011G3 11KW			11	11E16	PC Monitor	Anmite	AN-195W01D		
5	5M11	Spindle Motor	--	--			11						
5	5Q17	Circuit Breaker	Schneider	IC65N D10A 3P			12	12D0	LPT1 Output Card	AITEK	6AXIS-Mod-V5-OUTPUT mode		
5	5QM17	Thermal Relay	Schneider	LRD16C 9-13A			12	12SQ13	C Limit Sensor	IBEST	I PSI-12NO2B-L60mm(NPN NO 2mm 200mA)		
5	5M17	Hydraulic Pump Motor	WANERF	4WE6J-6X/ED24 220V1.5KW			12	12SQ14	Z Limit Sensor	IBEST	I PSI-12NO2B-L60mm(NPN NO 2mm 200mA)		
5							12	12SQ15	Y Limit Sensor	IBEST	I PSI-12NO2B-L60mm(NPN NO 2mm 200mA)		
6	6Q1	Circuit Breaker	Schneider	IC65N D10A 2P			12	12SQ16	X Limit Sensor	IBEST	I PSI-12NO2B-L60mm(NPN NO 2mm 200mA)		
6	6S1	Filter	Canny Well	CW1B-6A-L			12						
6	6M2	X Motor	Leadshine	ACM13009H2F-40-L 850W1500rpm			14	14SB3	Enable Key Switch	RENY	RBSNK-2		
6	6L4	X Servo Drive	Leadshine	L5-850Z			14	14SB3.1	Power On Button	RENY	R2PIF-1D-2GL		
6	6Q7	Circuit Breaker	Schneider	IC65N D10A 2P			14	14KM3	Contactactor	Schneider	LC1D50AB7C-LADN11		
6	6S7	Filter	Canny Well	CW1B-6A-L			14	14KM6	Contactactor	Schneider	ICT 25A 24VAC 1P		
6	6M8	Y Motor	Leadshine	ACM13009H2F-40-L 850W 3000r/min			14	14FU12	Fuse	CHE	FS-101 DC24V 2A		
6	6L10	Y Servo Drive	Leadshine	L5-850Z			14	14FU13	Fuse	CHE	FS-101 DC24V 2A		
6	6Q14	Circuit Breaker	Schneider	IC65N D10A 2P			14	14E12	Z Brake	--	24VDC 1A		
6	6S14	Filter	Canny Well	CW1B-6A-L			14	14E13	C Brake	--	24VDC 1A		
6	6M15	Z Motor	Leadshine	ACM13009H2F-40-L 850W 3000r/min			14	14FU14	Fuse	CHE	FS-101 DC24V 2A		
6	6L17	Z Servo Drive	Leadshine	L5-850Z			14	14E14	FAN	PAPST	TYP4114N/12MR 24V 6W 12CM		
6	6KA19	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V			14	14FU15	Fuse	CHE	FS-101 DC24V 2A		
6							14	14E15	FAN	PAPST	TYP4114N/12MR 24V 6W 12CM		
7	7Q3	Circuit Breaker	Schneider	IC65N D10A 2P			14	14RU16					
7	7S3	Filter	Canny Well	CW1B-6A-L			14	14R18					
7	7M4	C Motor	Leadshine	ACM13009H2E-40-L 850W Brake									
7	7L6	C Servo Drive	Leadshine	L5-750Z									
7	7KA10	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V									
7	7Q11	Circuit Breaker	Schneider	IC65N D10A 2P									
7	7S11	Filter	Canny Well	CW1B-6A-L									
7	7M12	B Motor	Leadshine	ACM8008M2E-B1-L-SS 750W Brake									
7	7L14	B Servo Drive	Leadshine	L5-750Z									
7													

0	1	2	3	4	5	6	7	8	9	10	11	12	13	
Pg.	Code	Name	Mfrs.	Model	Pg.	Code	Name	Mfrs.	Model	Pg.	Code	Name	Mfrs.	Model
15	15D0	LPT2 Output Card	AITEK	6AXIS-Mod-V5-OUTPUT mode	21	21SB9	X/Y Axis-Joystick Controller	Schneider	XD2-PA24CR φ22mm	22	22D0	ETH2 Input Mode	AITEK	6AXIS-Mod-V5-INPUT mode
15	15KA4	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V	21	21SB9	X/Y Axis-Joystick Controller	Schneider	XD2-PA24CR φ22mm	22	23HL11	TCP Knob Light	RENY	R2PIF-1D-2GL
15	15SB4	Emergency Stop Button	RENY	R2PNR4	21					22				
15	15KA6	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V										
15	15KA8	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V										
15	15KA9	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V										
15	15KA12	Terminal Relay Unit	OMRON	G2R-2-SND(S) DC24V+P2RF-08-E										
15	15SQ13	Vacuum Down Sensor	CHVIRD	CS1-U										
15	15SQ14	Vacuum Up Sensor	CHVIRD	CS1-U										
15	15KA15	Terminal Relay	Panasonic	PA1A-24V + AY33002 RT3S-24V										
15	15SQ16	B Limit Sensor	IBEST	IPSI-12NO2B-L60mm(NPN NO 2mm 200mA)										
15														
15														
16	16KA6	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V	23	23P9	Speed Control Wheel	AITEK	24VPLC	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	23				
16					23									
16														
16														
17	17D0	LPT3 Input Card	AITEK	6AXIS-Mod-V5-INPUT mode										
17	17QS2	Table Open Limit Sensor	Moujen	ME-9101	26	26P3	Power Supply	MW	DR-60-5 5V 6.5A	26	26FU3	Fuse	CHE	FS-101 DC24V 5A
17	17QS6	Table Close Limit Sensor	Moujen	ME-9101	26	26A3	NanoPi For Camera	FriendlyElec	NanoPi M4-4GB+eMMC-16GB	26	26E3	CAMERA	LOGITECH	C930E
17	17EV4	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V	26	26FU9	Fuse	CHE	FS-101 DC24V 2A	26	26E9	Safety Light Barrier/T	ANLIAN	ABI10-482 6L10M DC24V
17	17A7	Laser	--	16mm cross	26	26E10	Safety Light Barrier/R	ANLIAN	ABI10-482 6L10M DC24V					
17	17SQ8	Water Pressure Switch	SN	DN8 1.1-1.8kgf/m² (ON-OFF)										
17	17FU8	Fuse	CHE	FS-101 DC24V										
17	17A9	Blade Laser	--	16mm										
17	17FU10	Fuse	CHE	FS-101 DC24V										
17	17SQ10	Air Pressure Switch	SQW	QPM11-NC										
17	17EV11	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V										
17														
17														
18	18SQ8	Blade Probe	--	--	27	27EV1	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V	27	27EV3	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V
18	18KA8	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V	27	27EV13	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V	27				
18					27					27				
18					27					27				
19	19KM14	Contactor	Schneider	LC1-D18B7C 18A	27					27				
19					27					27				
20	20D0	ETH1 Input Mode	AITEK	6AXIS-Mod-V5-INPUT mode	27					27				
20	20SB2	Control Box-Stop Button	RENY	RAPNF-1A-R	27					27				
20	20SB6	Control Box-Pause Button	RENY	RAPNF-1A-Y	27					27				
20	20HL6	Alarm Indicator lamp	TAYB	TB50-4T-D 24V	27					27				
20	20SB8	Control Box-Automatic Button	RENY	RAPNF-1A-G										
20	20SB10	B/C Axis-Joystick Controller	Schneider	XD2-PA24CR φ22mm										
20	20SB16	X/Z Axis-Joystick Controller	Schneider	XD2-PA24CR φ22mm										
20														