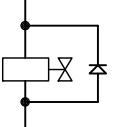
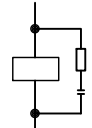
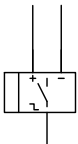
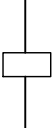
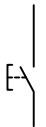
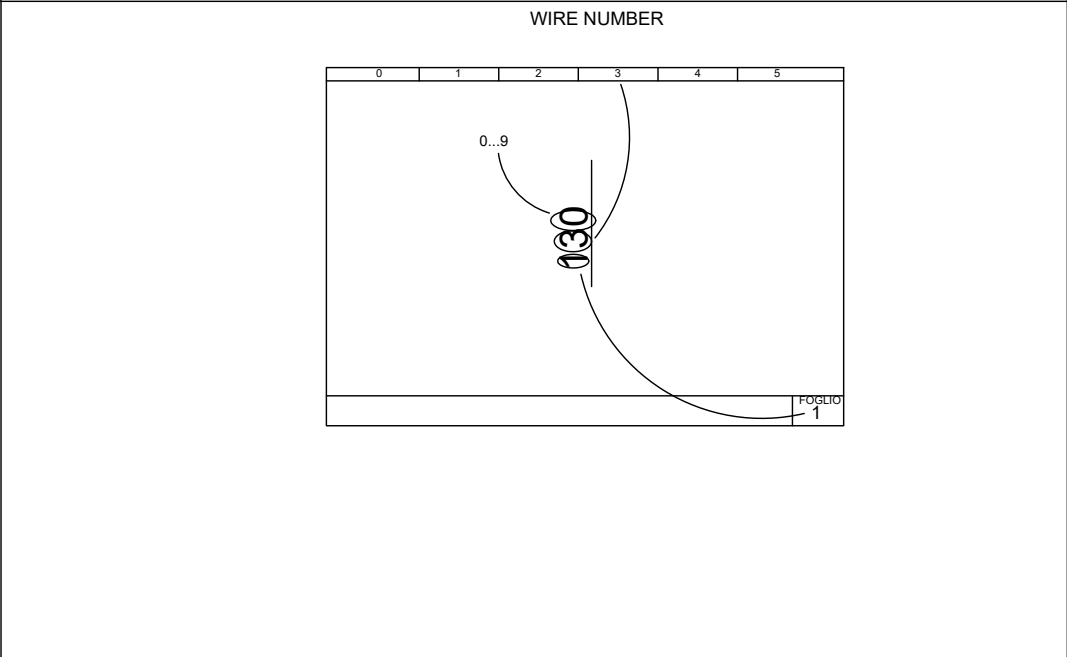
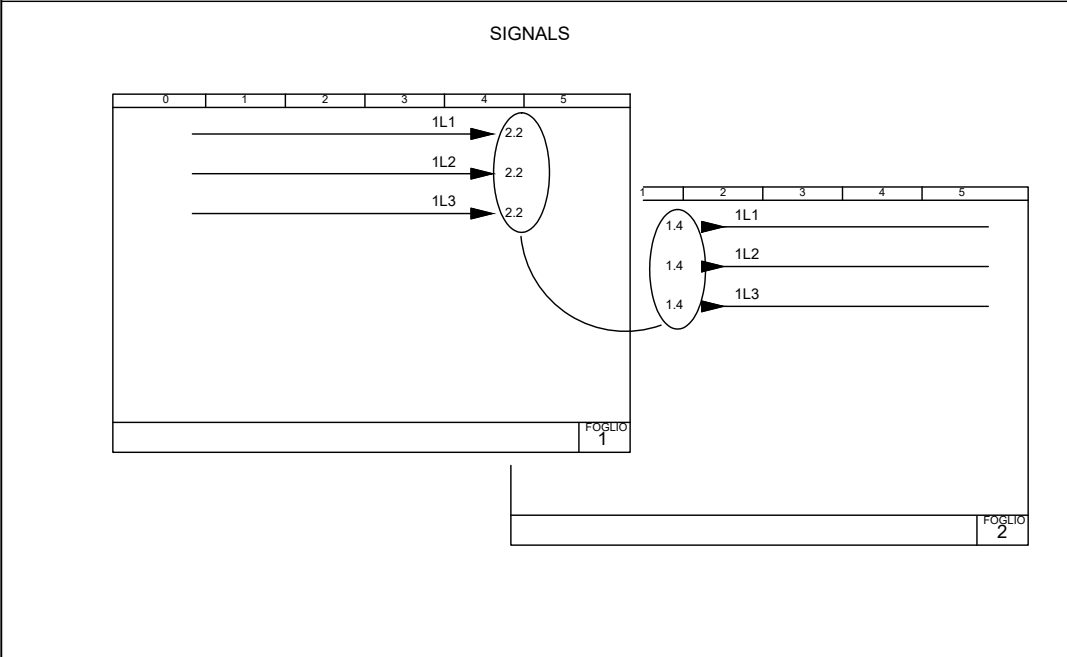
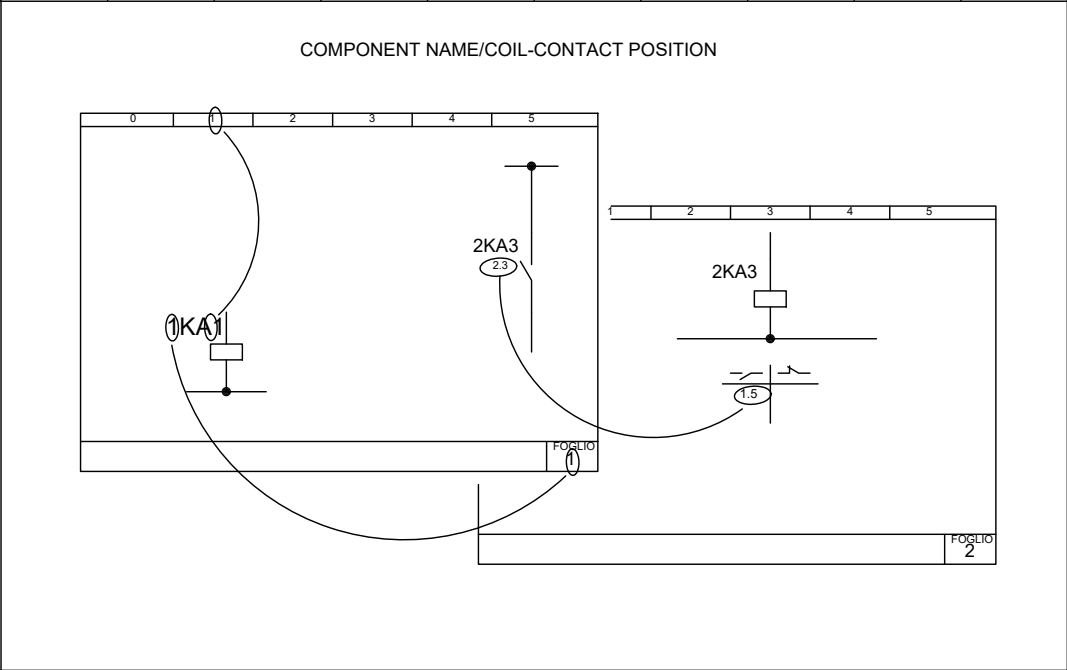
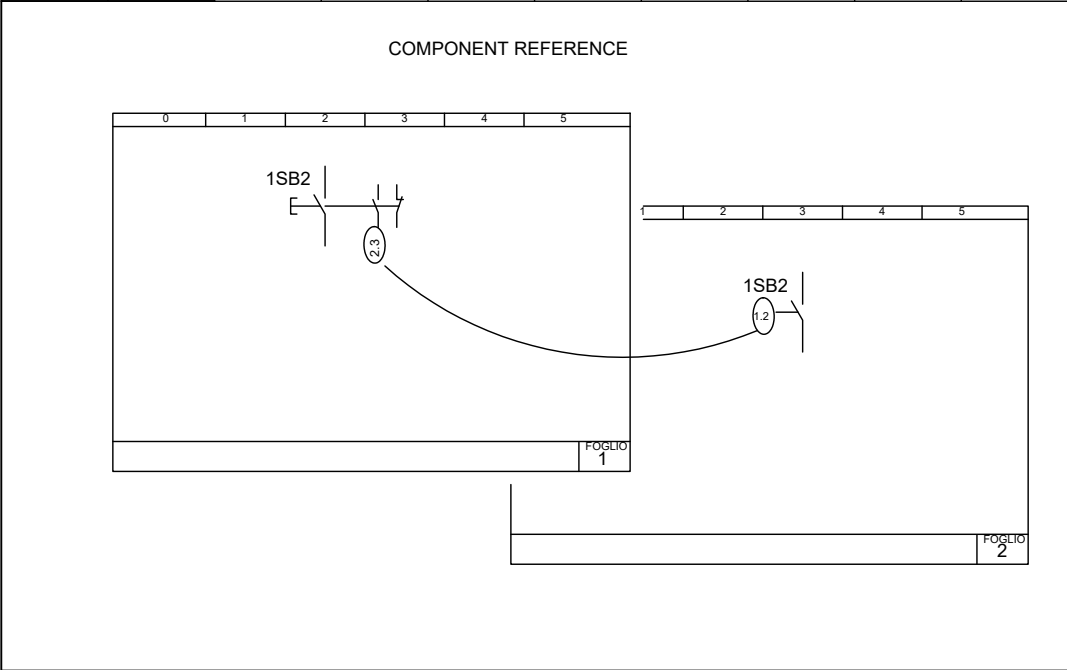
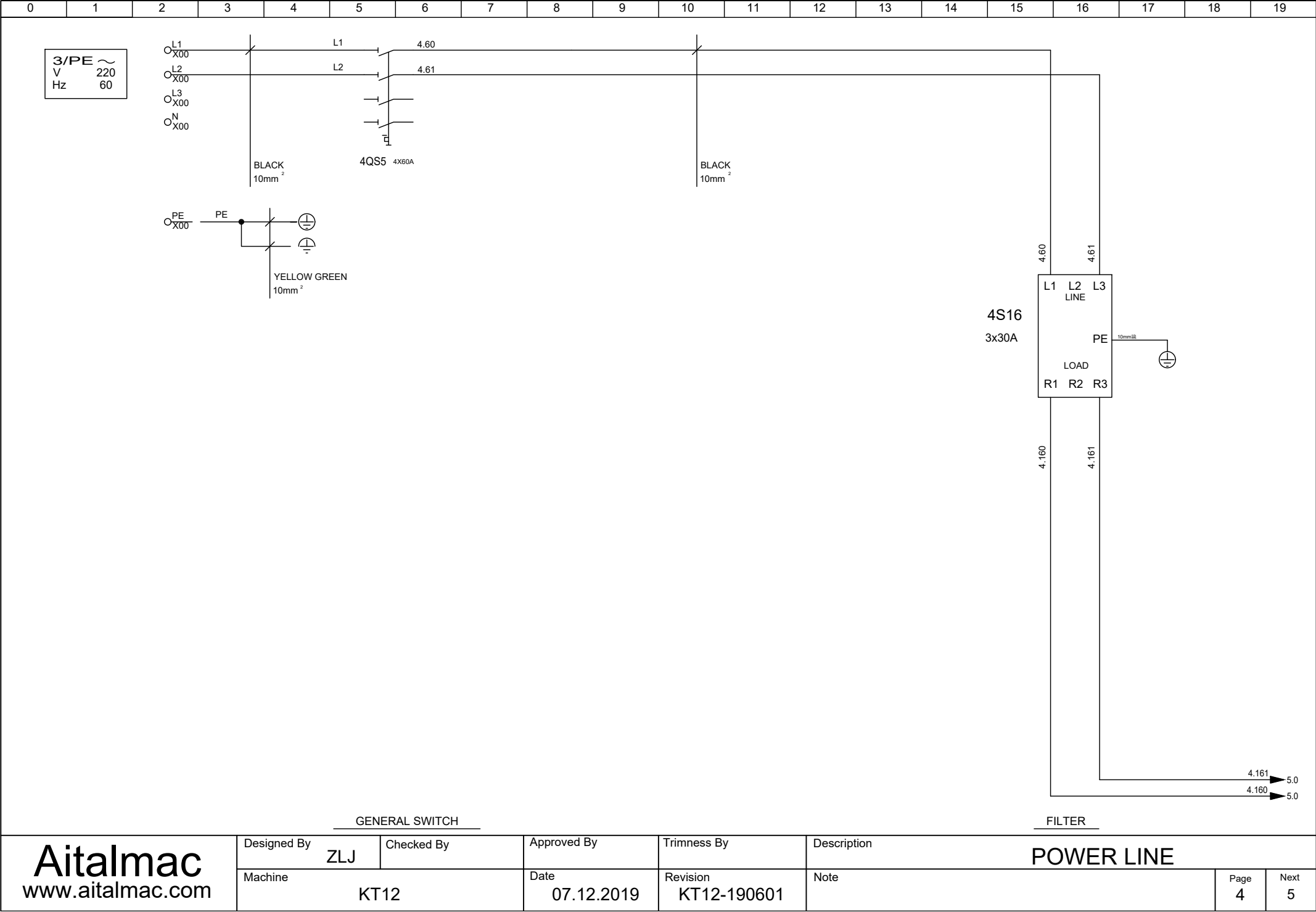
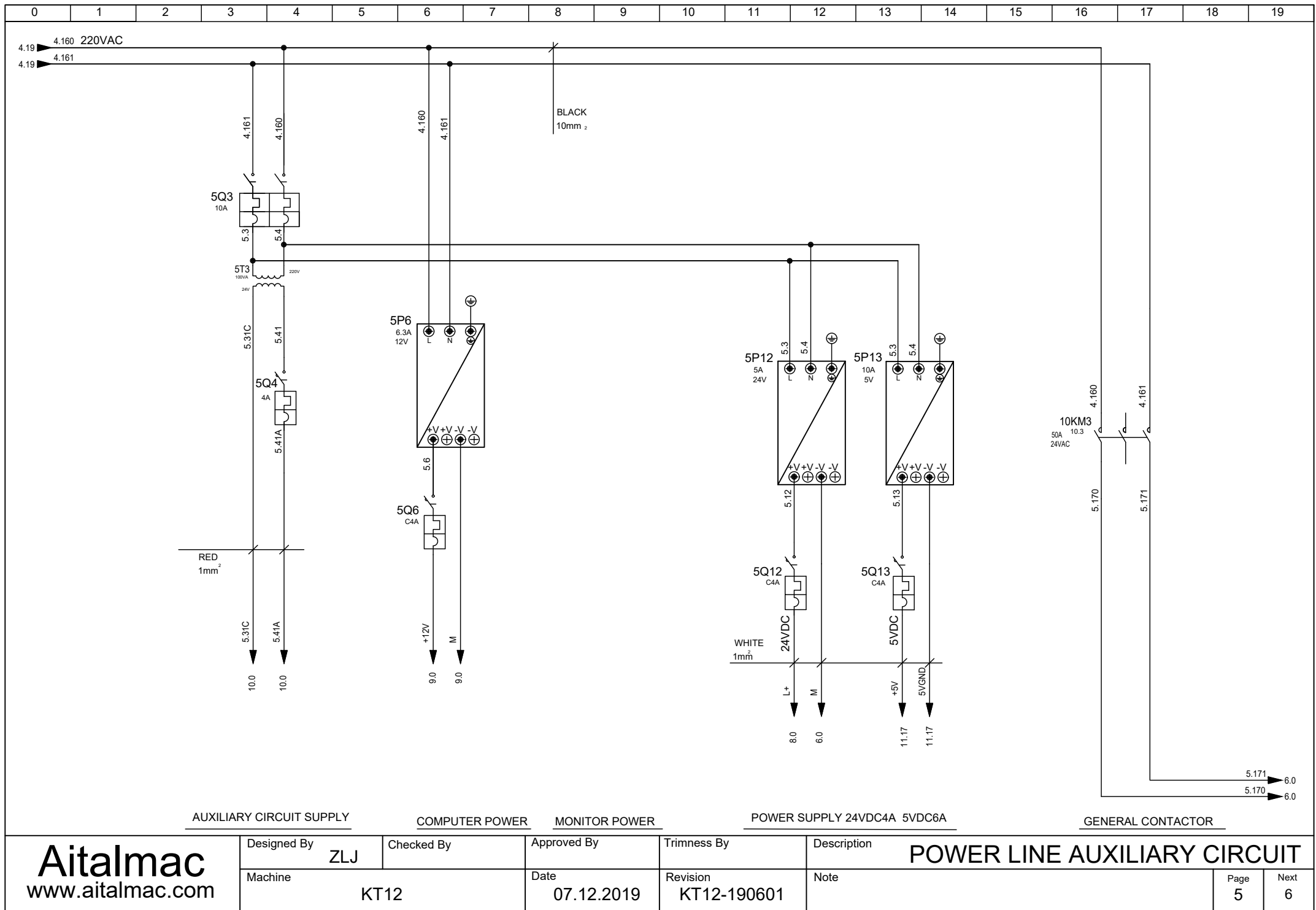


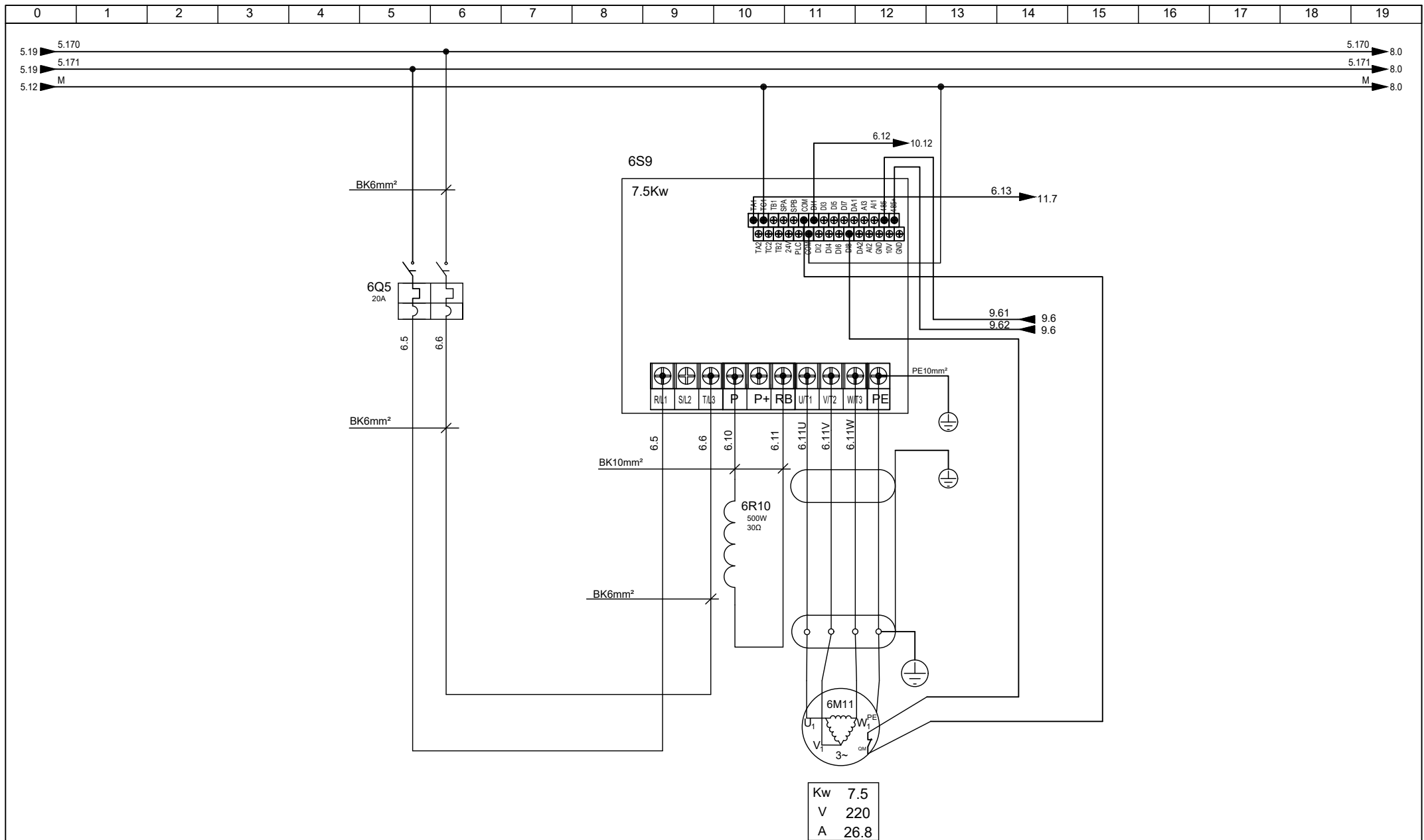
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AITALMAC										LOCATION SYMBOLS ☐ Components on the door ☐ Components inside the cubicle (usually omitted) ☒ Machine components (usually omitted)				COMPONENTS DESIGNATION C Condensers D CNC control model E Component not in this list F Protection 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																																																										
KT12					FREQ. 50-60																																																										
WIRING DIAGRAM					CUBICLE DIMENSION																																																										
KT12-190601					L (mm) 1835																																																										
					H (mm) 560																																																										
					P (mm) 320																																																										
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>WHITE</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	WHITE	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)	COLORS <table><tr><td>WH</td><td>White</td><td>GN</td><td>Gray</td></tr><tr><td>YE</td><td>Yellow</td><td>BU</td><td>Blue</td></tr><tr><td>RD</td><td>Red</td><td>BK</td><td>Black</td></tr><tr><td>OG</td><td>Orange</td><td>GY</td><td>GreenYellow</td></tr></table>				WH	White	GN	Gray	YE	Yellow	BU	Blue	RD	Red	BK	Black	OG	Orange	GY	GreenYellow										
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										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.																																																					
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 : KT12				Date: 07.12.2019				Revision: KT12-190601				Approved By :				Pag. 1		Next. 2																																											

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





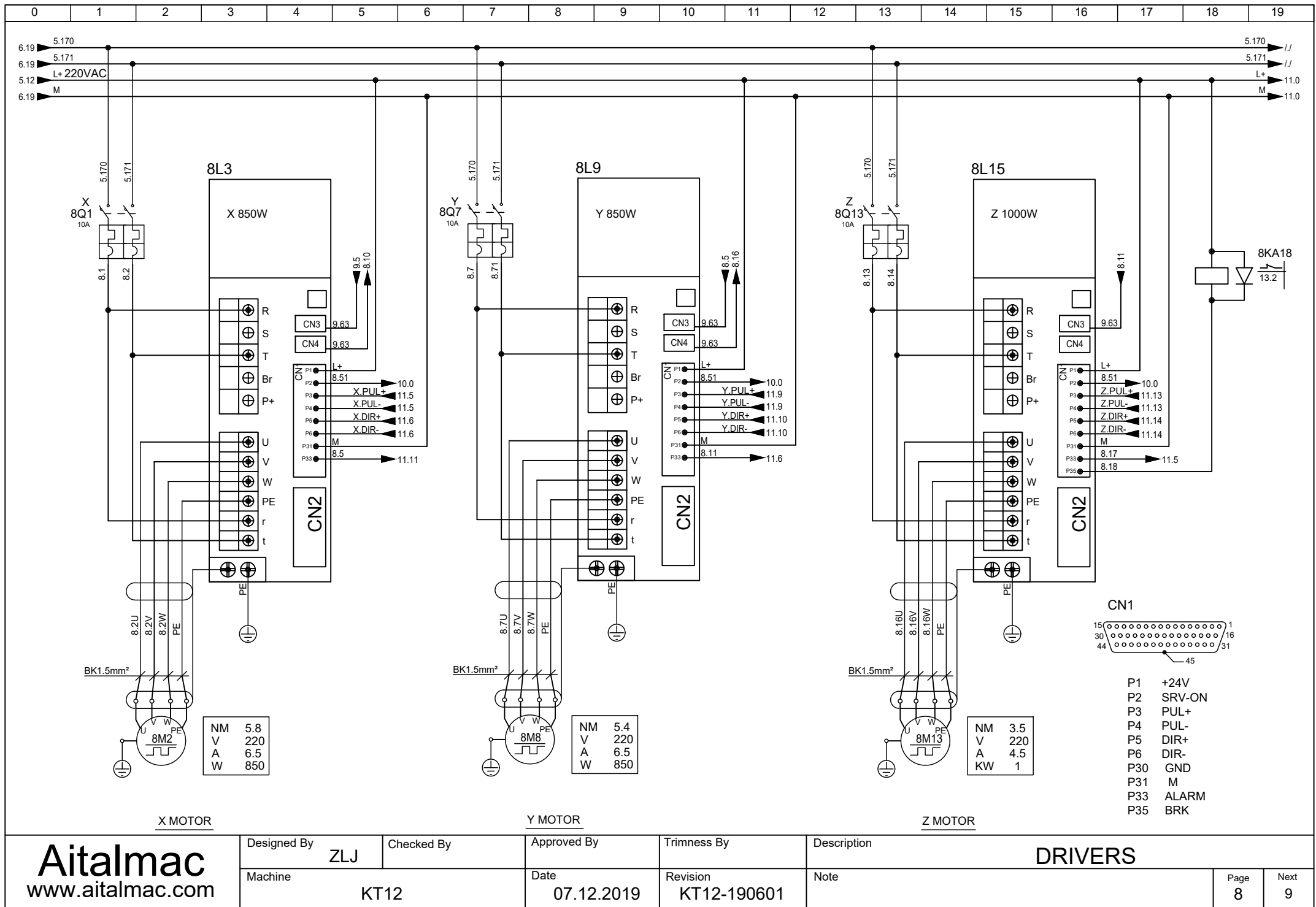


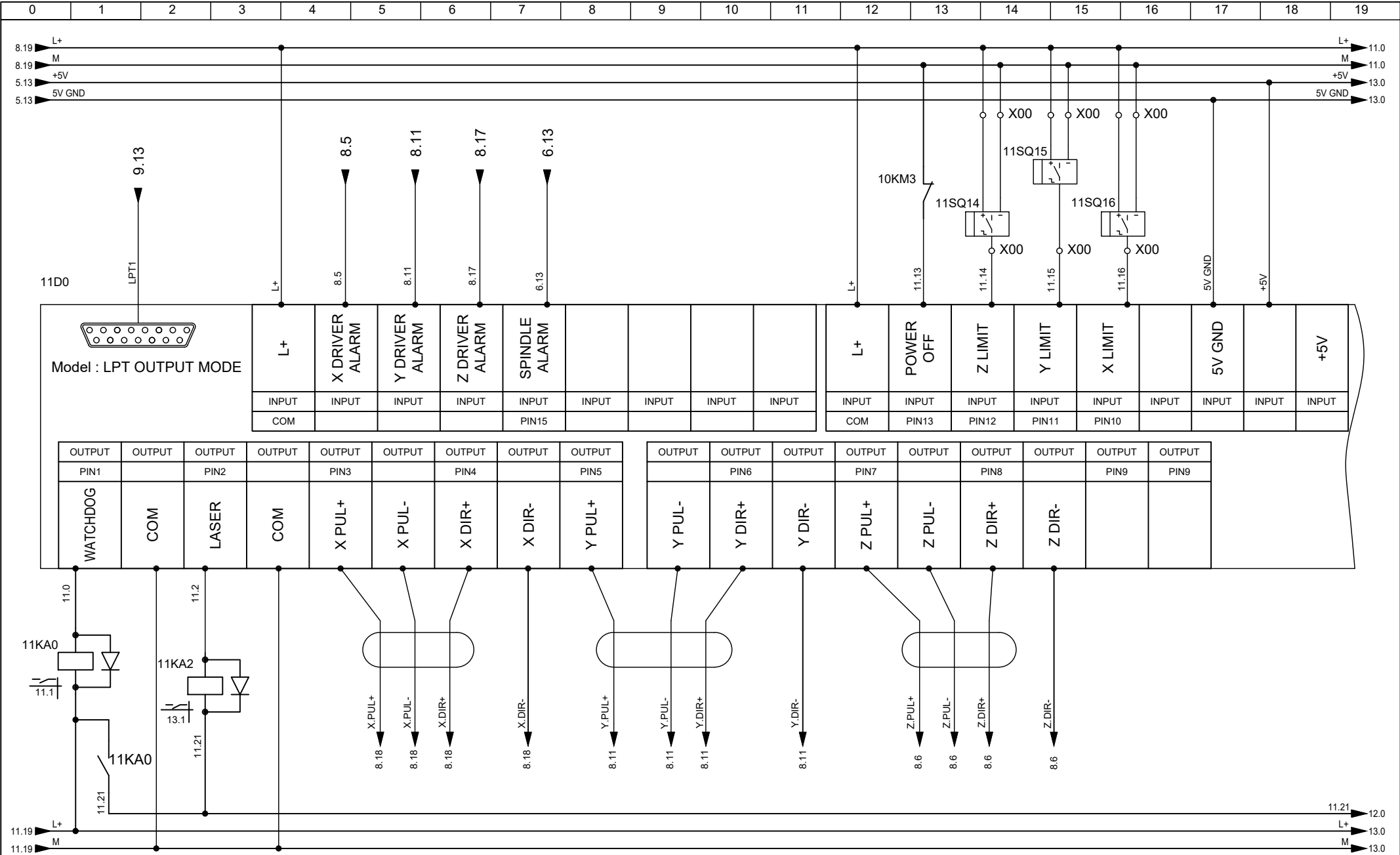


RESISTOR

SPINDLE MOTOR

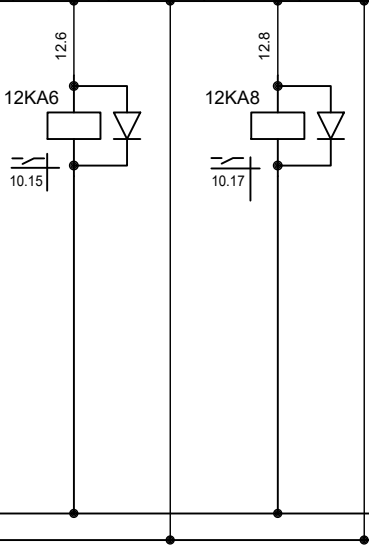
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Aitalmac www.aitalmac.com			Designed By		Checked By		Approved By		Trimness By		Description								
			Machine				Date		Revision		Note				Page	Next			
				KT12				07.12.2019		KT12-190601						7	8		





11D0

OUTPUT	OUTPUT	OUTPUT	OUTPUT	OUTPUT	OUTPUT	OUTPUT	OUTPUT	OUTPUT
PIN14	PIN14	PIN16		PIN17				
		WATER	COM	CLAMP	COM			



Approved By

Revision

KT12-190601

Trimness By

Description

LPT1 OUTPUT MODE PG2

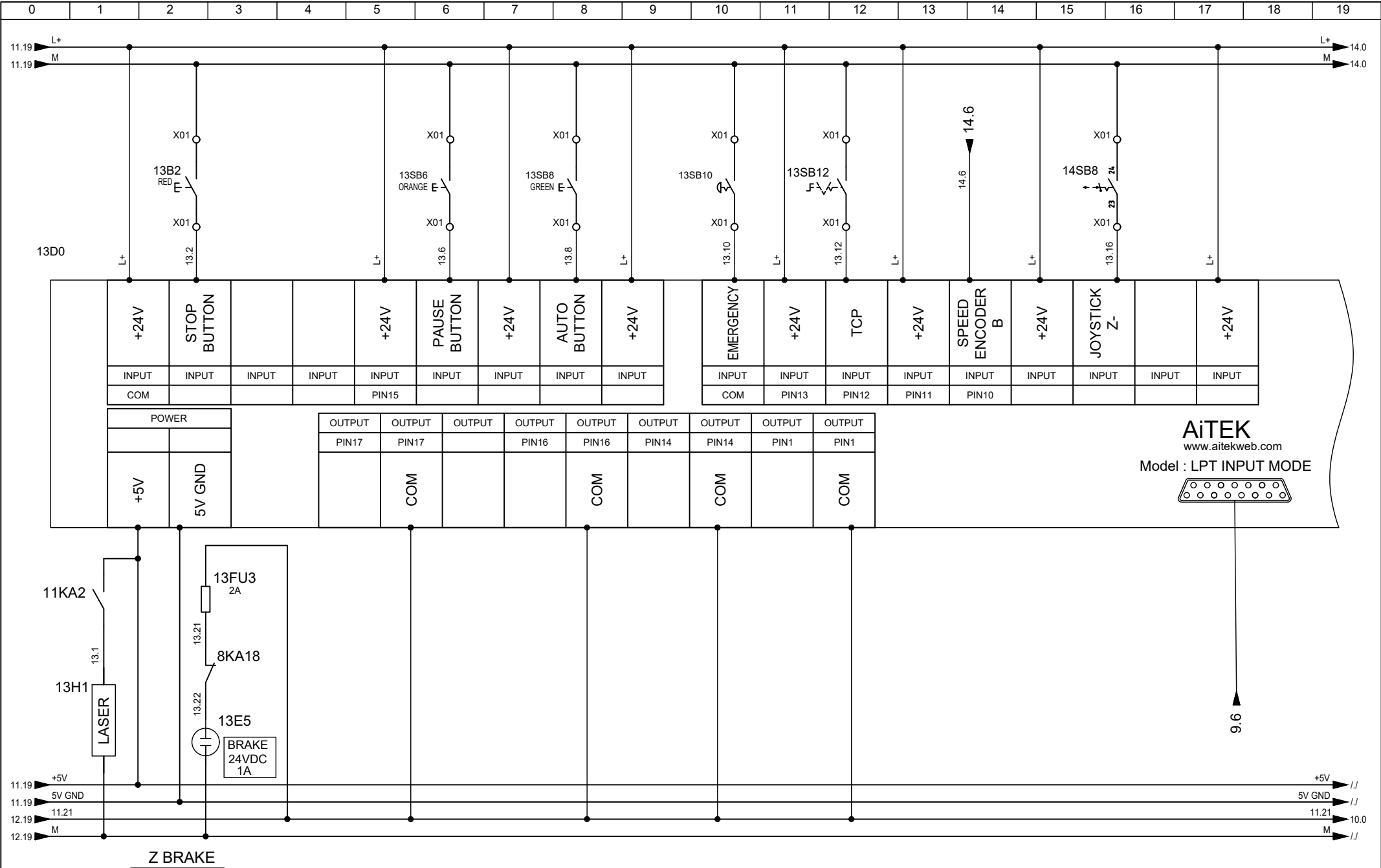
Note

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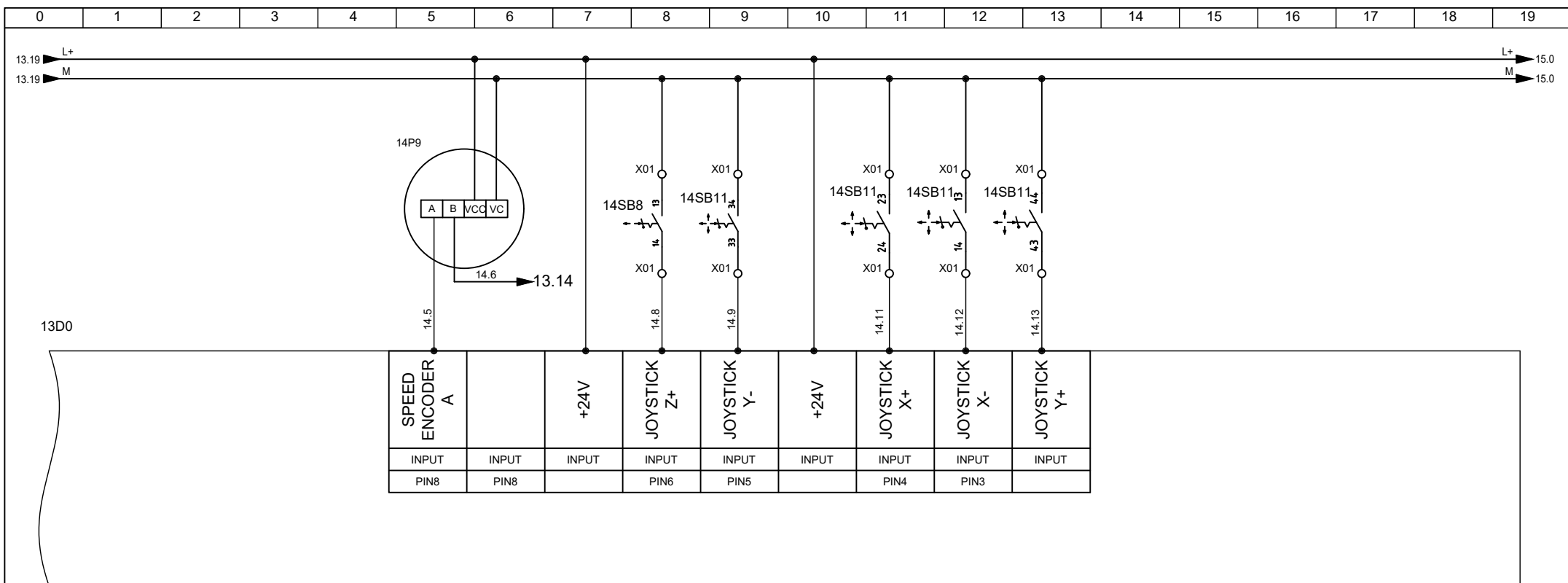
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13



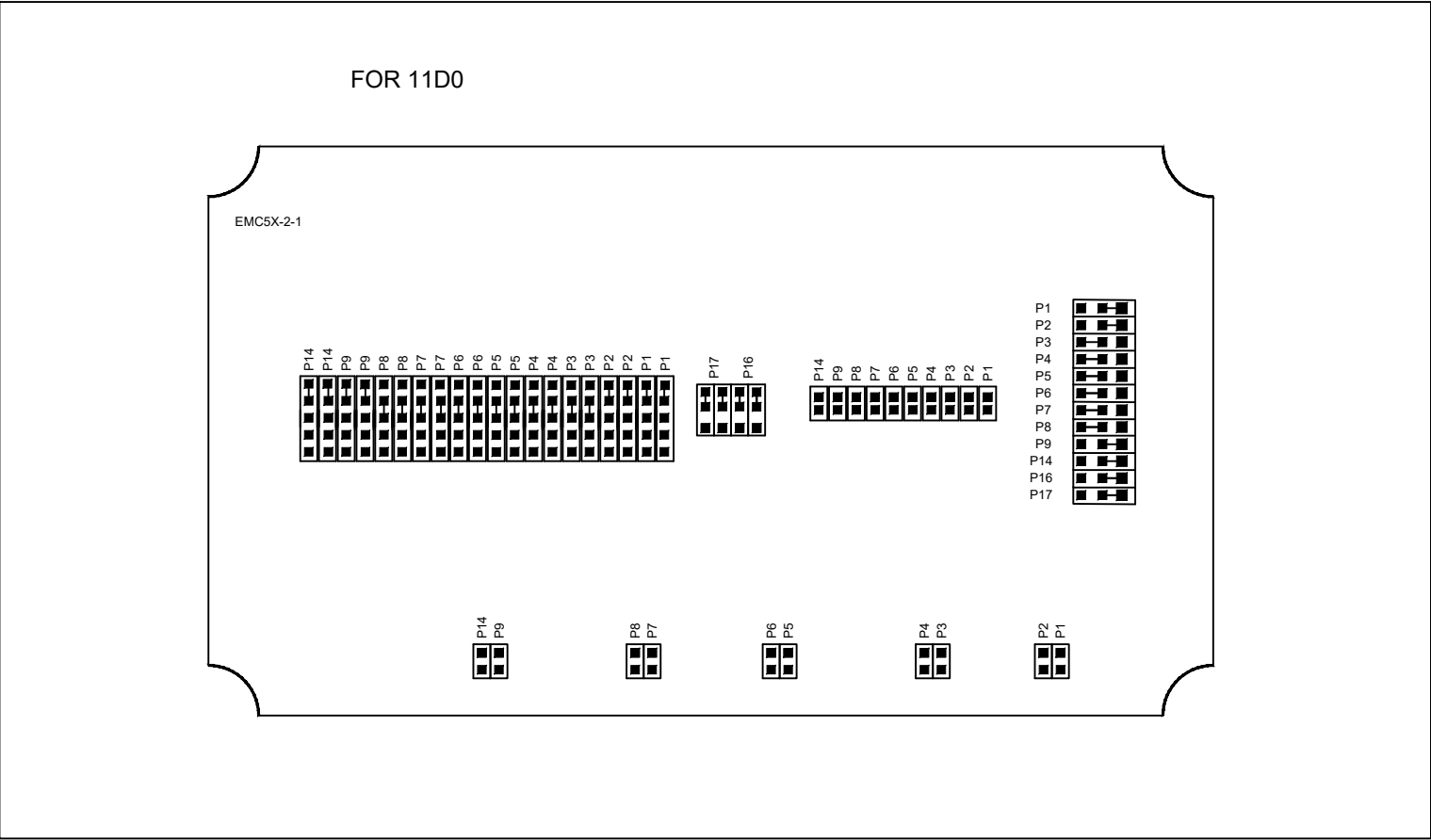
AiTEK
www.aitekweb.com
Model : LPT INPUT MODE



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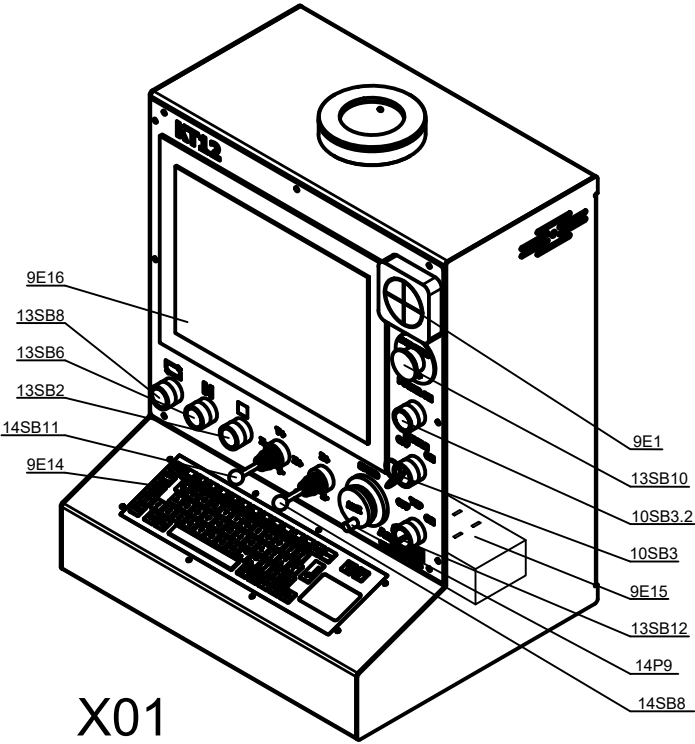
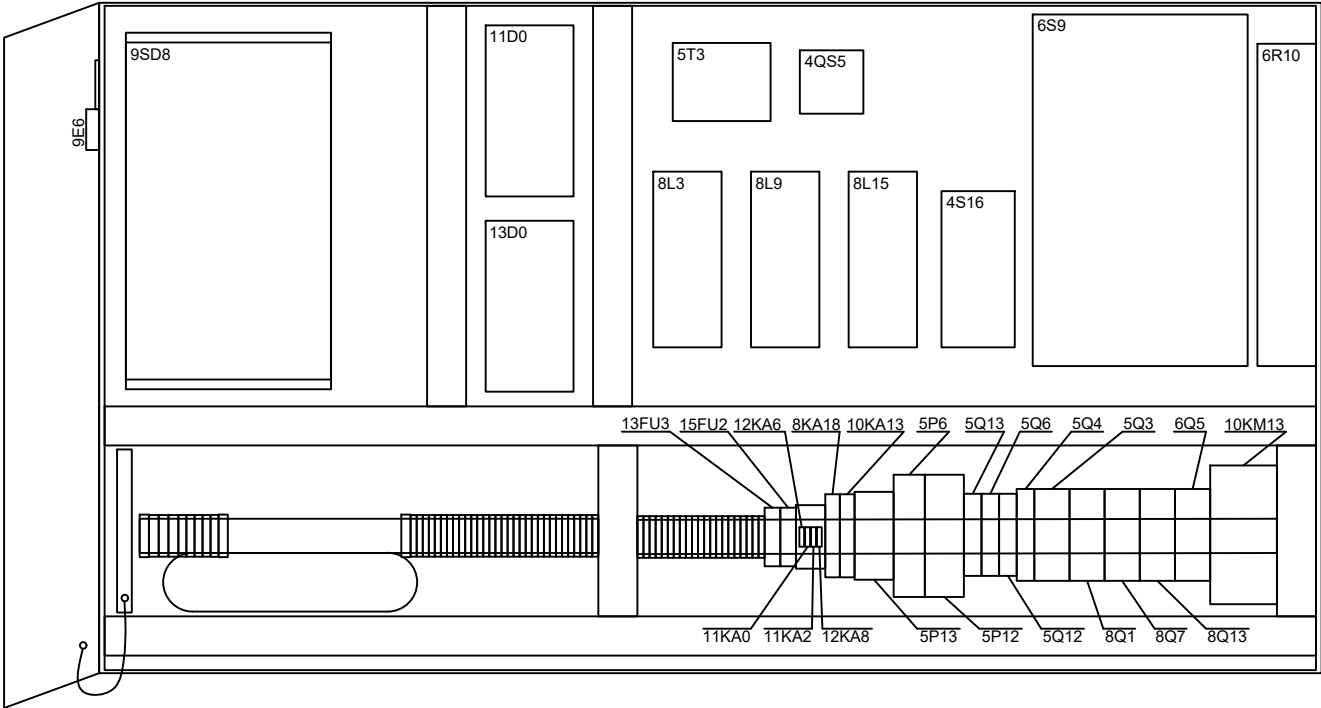
Aitalmac www.aitalmac.com	Designed By ZLJ	Checked By	Approved By	Trimness By	Description				
	Machine KT12	Date 07.12.2019	Revision KT12-190601	Note	Page 15	Next 16			



OUTPUT CONTROL CARD JUMPERS SETTINGS

Aitalmac www.aitalmac.com	Designed By ZLJ	Checked By	Approved By	Trimness By	Description		
	Machine KT12		Date 07.12.2019	Revision KT12-190601	Note		Page 16

X00



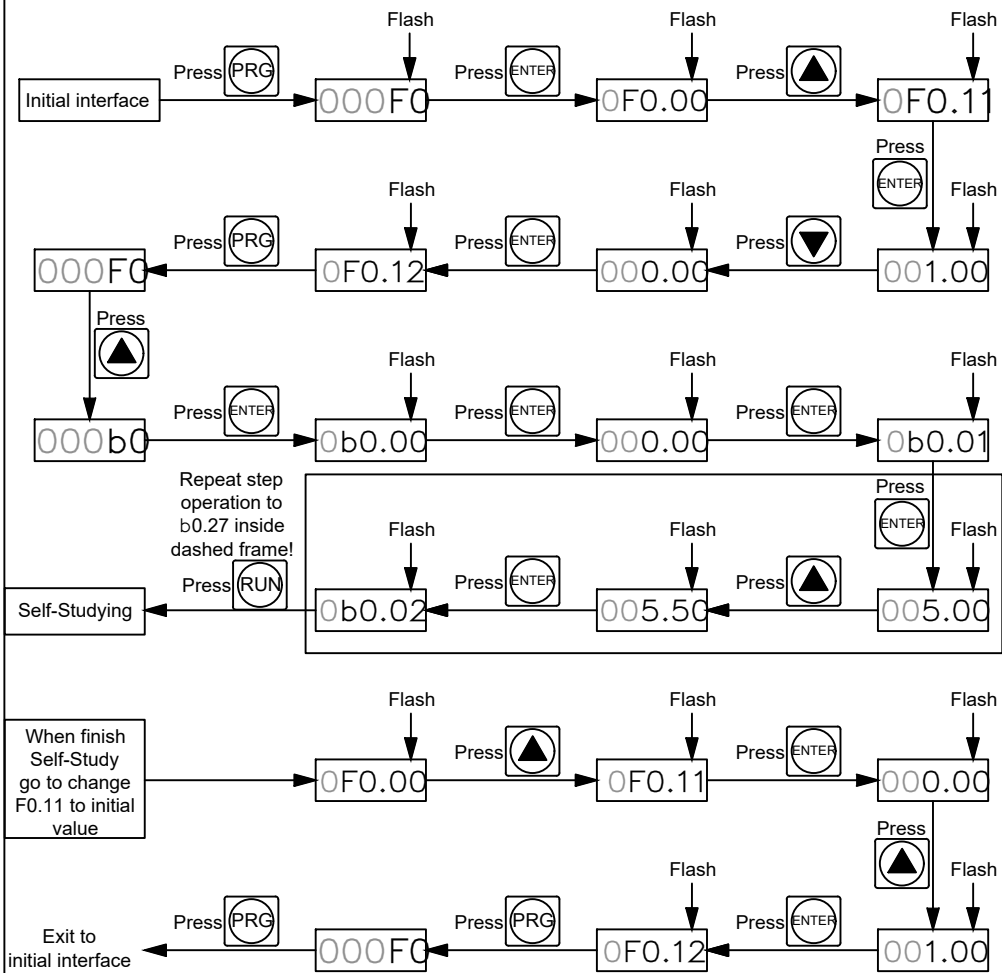
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Pg.	Code	Name	Mfrs.	Model	Pg.	Code	Name	Mfrs.	Model				
4	4QS5	General Switch	GLELE	GLD11-63/08 +4P	11	11D0	LPT1 Output Card	AITEK	6AXIS-Mod-V5-OUTPUT mode				
4	4S16	Mains Filter	DUOJI	DTT2121-30-S6-S47 30A	11	11KA0	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V				
4					11	11KA2	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V				
					11	11SQ14	Z Limit Sensor	IBEST	IPSI-12NO2B-L60mm (NPN NO 2mm 200mA)				
5	5Q3	Circuit Breaker	Schneider	IC65N D10A 2P	11	11SQ15	Y Limit Sensor	IBEST	IPSI-12NO2B-L60mm (NPN NO 2mm 200mA)				
5	5T3	Transformers	CHNT	NDK(BK)-100	11	11SQ16	X Limit Sensor	IBEST	IPSI-12NO2B-L60mm (NPN NO 2mm 200mA)				
5	5Q4	Circuit Breaker	Schneider	IC65N D4A 1P	11								
5	5P6	Switching Power Supply	MW	EDR-75-12 6.3A12VDC	11								
5	5Q6	Circuit Breaker	Schneider	C65N-DC C4A 1P	12	12KA6	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V				
5	5P12	Power Supply	MW	NDR-120-24 5A24VDC	12	12KA8	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V				
5	5Q12	Circuit Breaker	Schneider	C65N-DC C4A 1P	12								
5	5P13	Power Supply	MW	MDR-60-5 10A5VDC	13	13D0	LPT2 Input Card	AITEK	6AXIS-Mod-V5-INPUT mode				
5	5Q13	Circuit Breaker	Schneider	C65N-DC C4A 1P	13	13H1	LASER	--	--				
5					13	13SB2	Control Box-Stop Button	RENY	RAPNF-1A-R				
6	6Q5	Circuit Breaker	Schneider	IC65N D20A 2P	13	13FU3	Fuse	CHE	FS-101 DC24V 2A				
6	6S9	Frequency Converter	POWTRAN	PI9230 011G3 11KW	13	13E5	Z Brake	--	--				
6	6R10	AL Braking Resistor	POWTRAN	500W 30Ω	13	13SB6	Control Box-Pause Button	RENY	RAPNF-1A-Y				
6	6M11	Spindle Motor	AitalMAC	11kw S6 4Poli for KT12	13	13SB8	Control Box-Automatic Button	RENY	RAPNF-1A-G				
6					13	13SB10	Emergency Stop Button	RENY	R2PNR4D-1B-R R9C01VN 1NC				
					13	13SB12	TCP On/Off Switch	RENY	R2SNS-2FE-1D-G				
8	8Q1	Circuit Breaker	Schneider	IC65N D10A 2P	13								
8	8M2	X Motor	Leadshine	ACM13009H2F-40-L 850W									
8	8L3	X Servo Drive	Leadshine	L5-850Z	14	14P9	Speed Control Wheel	AITEK	24VPLC				
8	8Q7	Circuit Breaker	Schneider	IC65N D10A 2P	14	14SB8	Z Axis-Joystick Controller	Schneider	XD2-PA22CR φ22mm				
8	8M8	Y Motor	Leadshine	ACM13009H2F-40-L 850W	14	14SB11	X/Y Axis-Joystick Controller	Schneider	XD2-PA24CR φ22mm				
8	8L9	Y Servo Drive	Leadshine	L5-850Z	14								
8	8Q13	Circuit Breaker	Schneider	IC65N D10A 2P									
8	8M13	Z Motor	Leadshine	ACM8010M2G-71-E-SS 1KW	15	15FU2	Fuse	CHE	FS-101 DC24V 2A				
8	8L15	Z Servo Drive	Leadshine	L5-1000Z	15	15E2	Fan	--	--				
8	8KA18	Terminal Relay	OMRON	G2R-2-SND(S) DC24V+P2RF-08-E	15								
9	9E1	Computer Power On/Off	Aitalmac	--									
9	9E6	USB-WiFi	COMFAST	CF-7201ND									
9	9SD8	Windows PC	AITEK	WIN-KT12									
9	9E14	USB-KeyBoard&Mouse	YANLONG	HS330C5									
9	9E15	USB-HUB	UGREEN	CR116-7 12V2A									
9	9E16	Monitor	JAWEST	JWSJSXSQ-S150 15"									
10	10SB3	Enable Key Switch	RENY	RBSNK-2									
10	10SB3.2	Power On Button	RENY	R2PIF-1D-2GL									
10	10KM3	Contactor	Schneider	LC1D50AB7C									
10	10SB10	Emergency Stop Button	RENY	R2PNR4D-1B-R R9C01VN 1NC									
10	10KA13	Terminal Relay	OMRON	G2R-2-SND(S) DC24V+P2RF-08-E									
10	10EV15	Water Valve	CNSY	4V210-08 DC24V									
10	10EV17	Air Valve	CNSY	4V210-08 DC24V									
10													

Aitalmac www.aitalmac.com	Designed By	Checked By	Approved By	Trimness By	Description	COMPONENT LIST		
	Machine	Date	Revision	Note	Page			
	KT12	07.12.2019	KT12-190601		18		Next	19

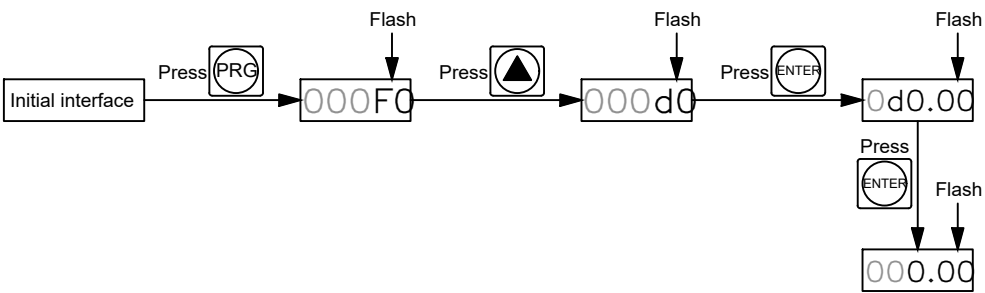
Motor Self-Study

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	
F1.07	0~51	33	--
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		15	15	15		
PA-004		750	750	750		
PA-006	0/1	1	1	1		
PA-008		5000	5000	5000		
PA-009						
PA-010						
PA-222		1250	1250	1250		
PA-410	101-181	181	181	181		
PA-529		53	53	53		
PA-531	1-256	1	2	3		