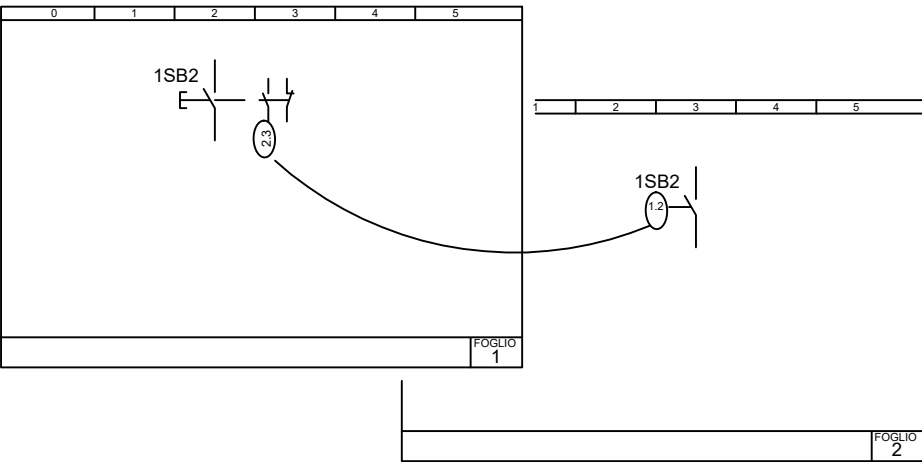
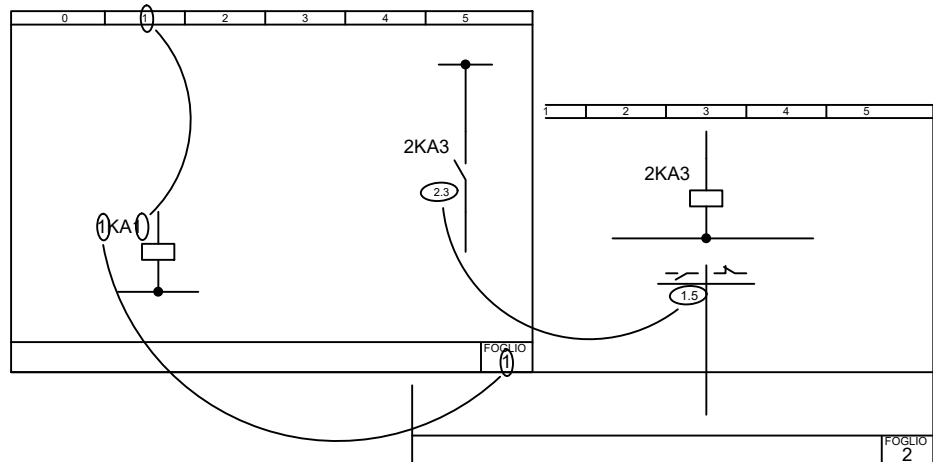


0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
AITALMAC Heng Sheng Road , Gao Chun Economic Development Zone , NANJING,211300 P.R.CHINA										LOCATION SYMBOLS ☐ Components on the door ☐ Components inside the cubicle (usually omitted) ☐ Machine components (usually omitted)									

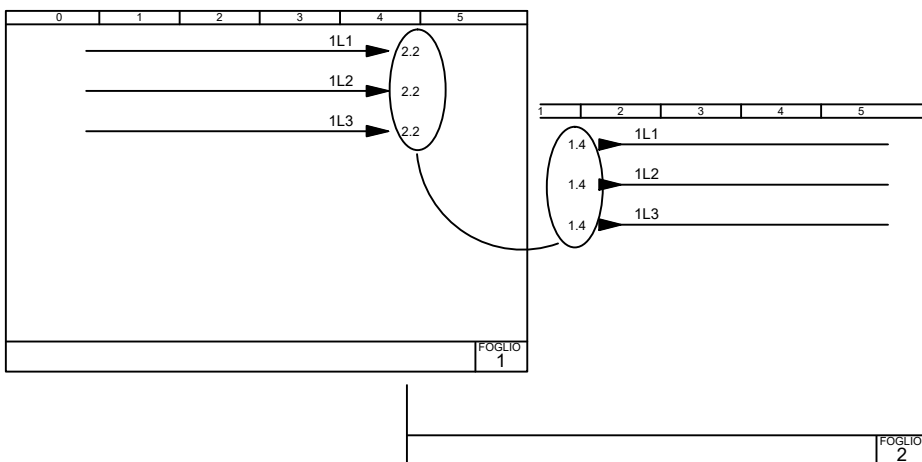
COMPONENT REFERENCE



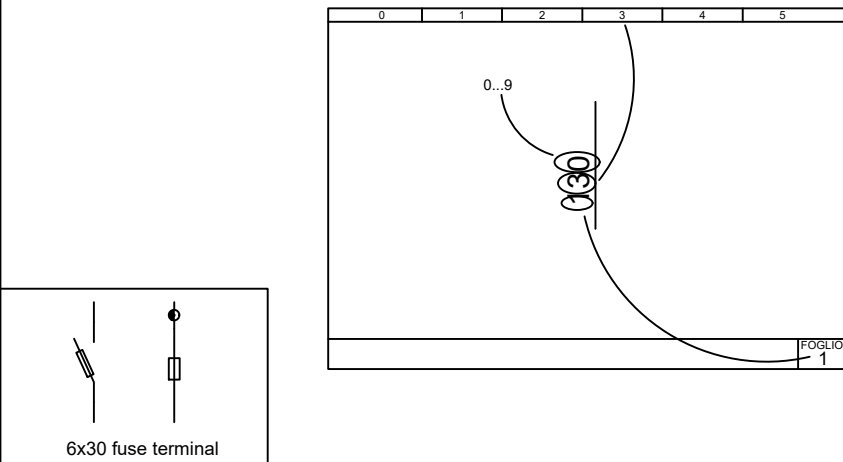
COMPONENT NAME/COIL-CONTACT POSITION

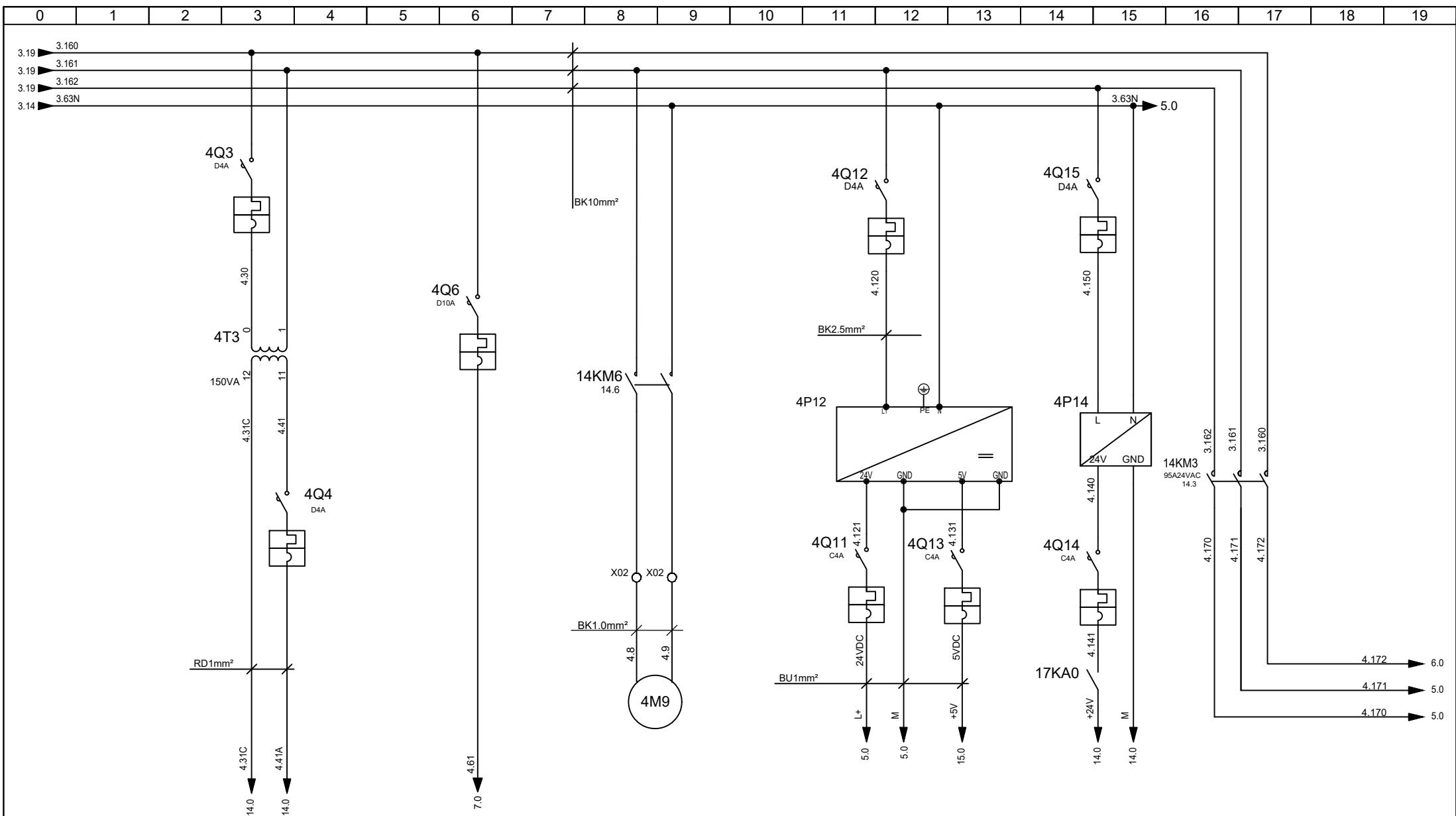


SIGNALS



WIRE NUMBER





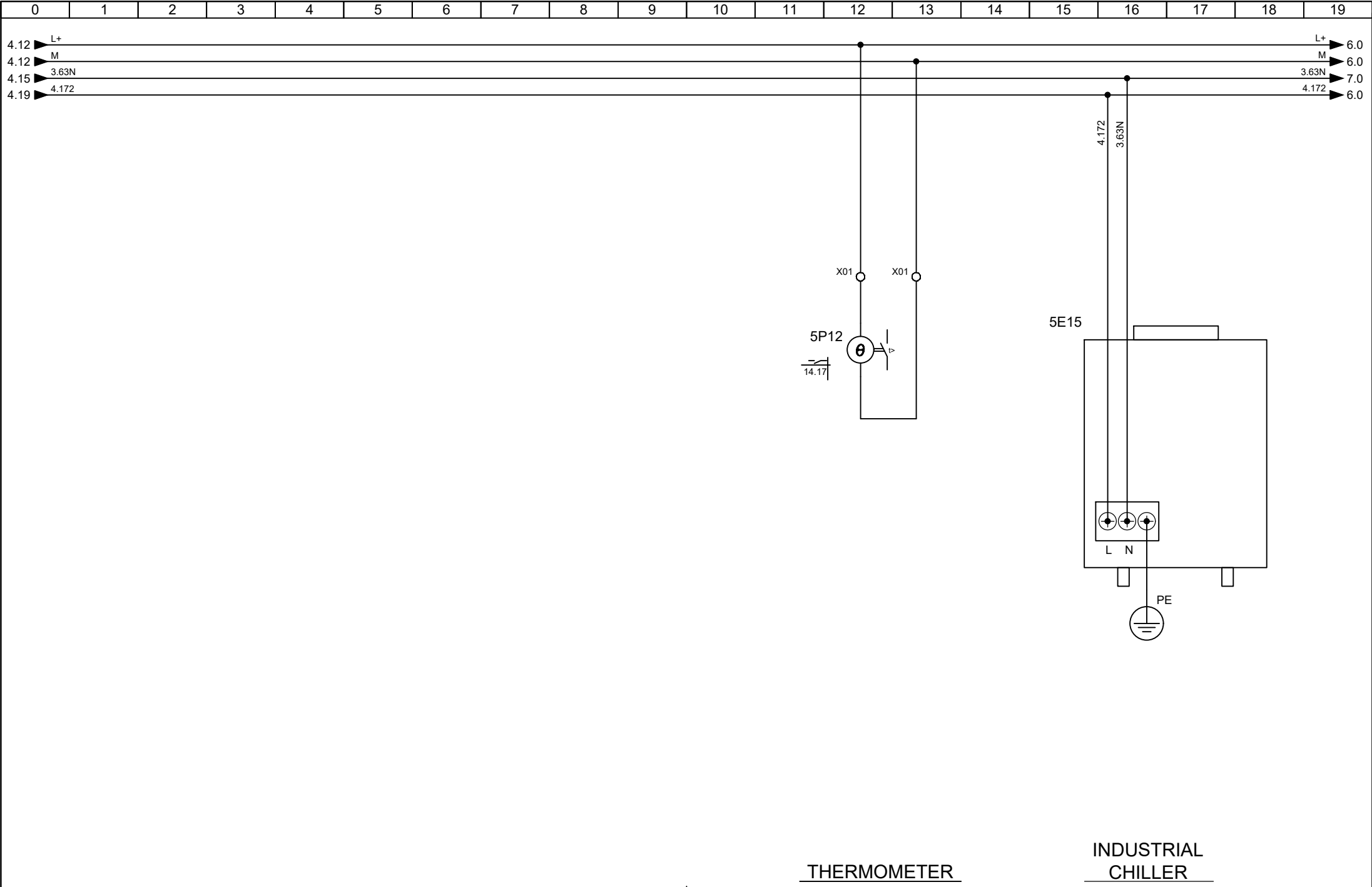
AUXILIARY CIRCUIT
POWER SUPPLY

CNC POWER

GREASE
PUMP MOTOR

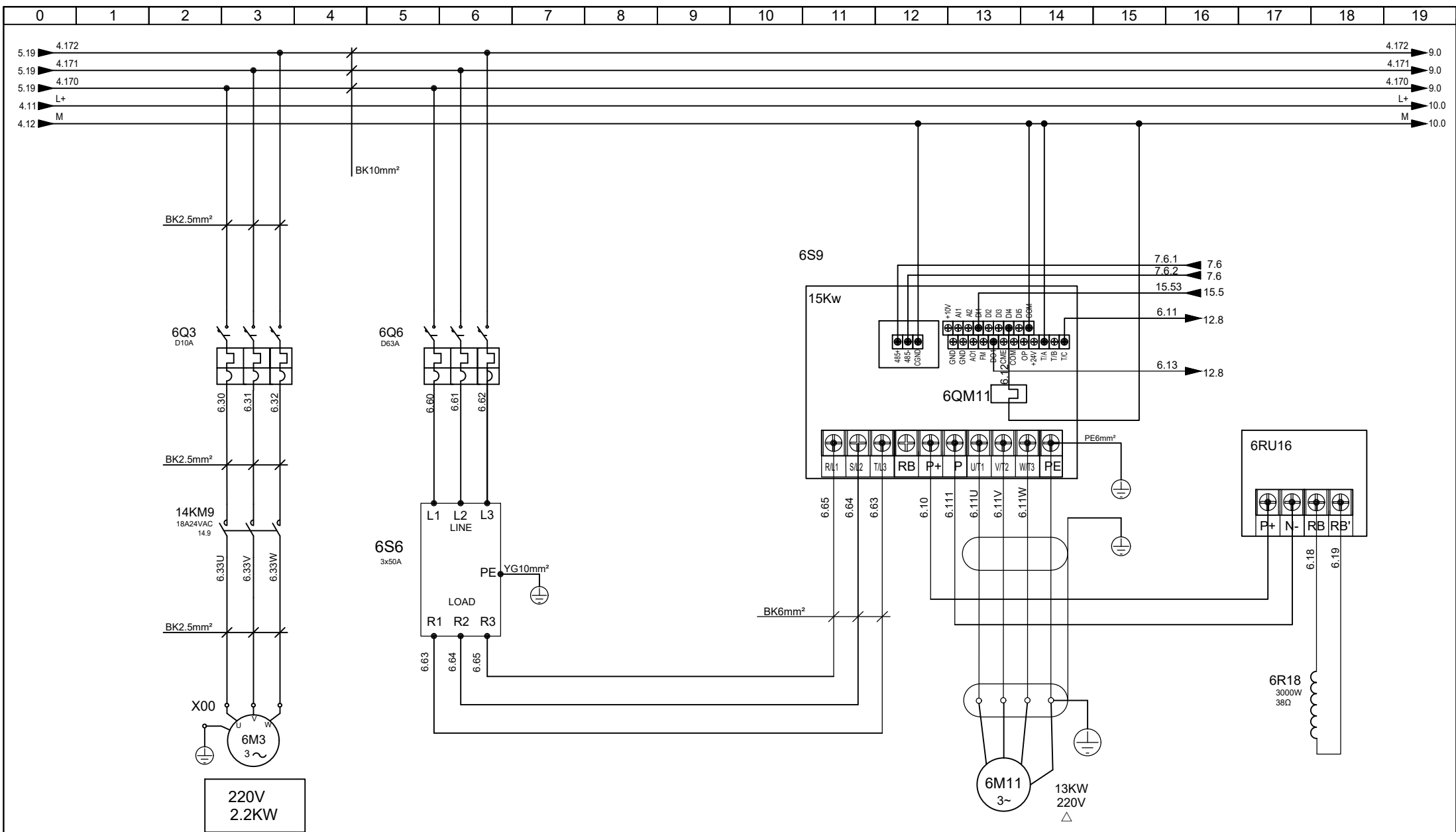
POWER SUPPLY
24VDC4A 5VDC6A

GENERAL
CONTACTOR



THERMOMETER

INDUSTRIAL
CHILLER

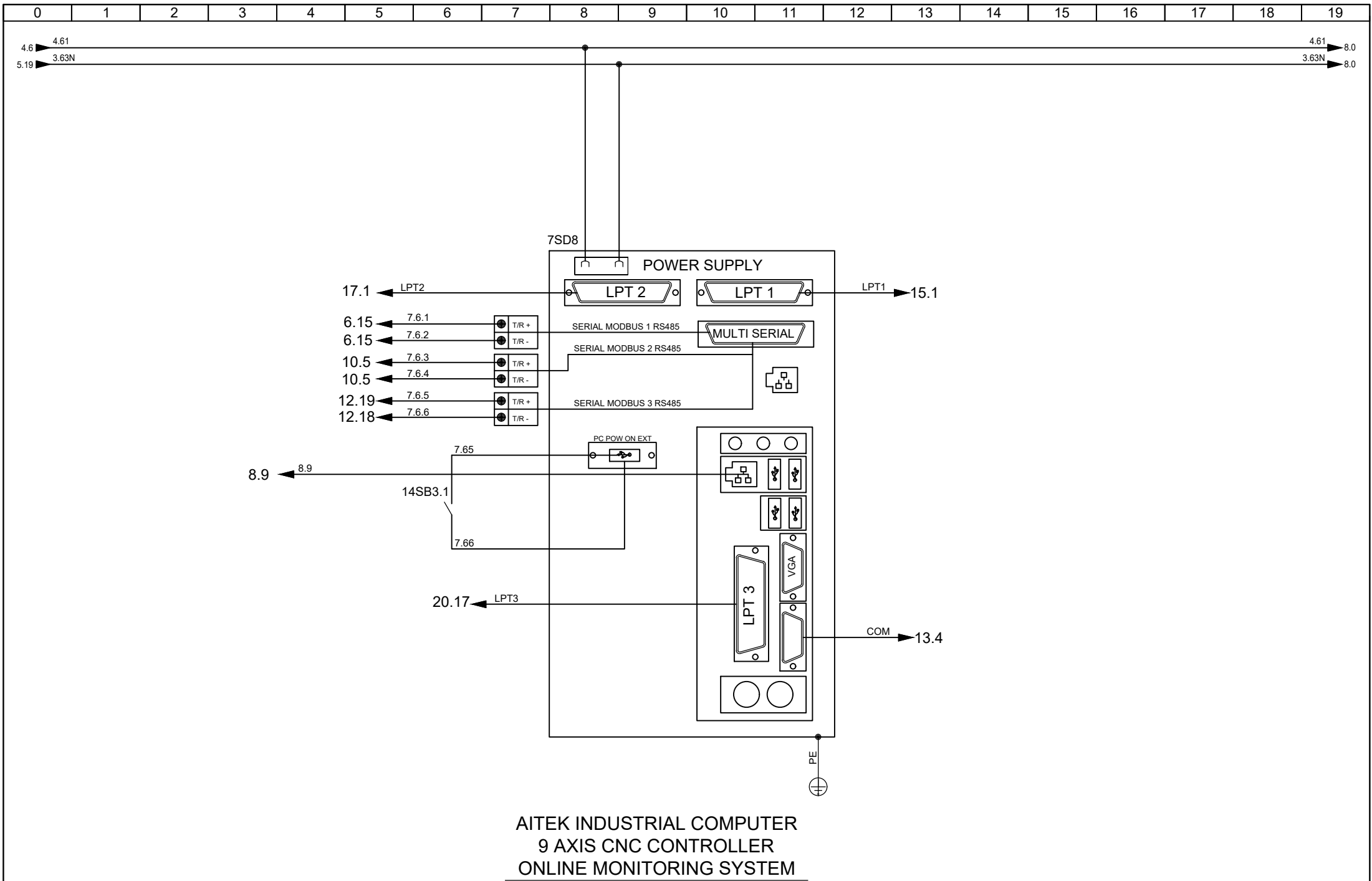


VACUUM PUMP
MOTOR

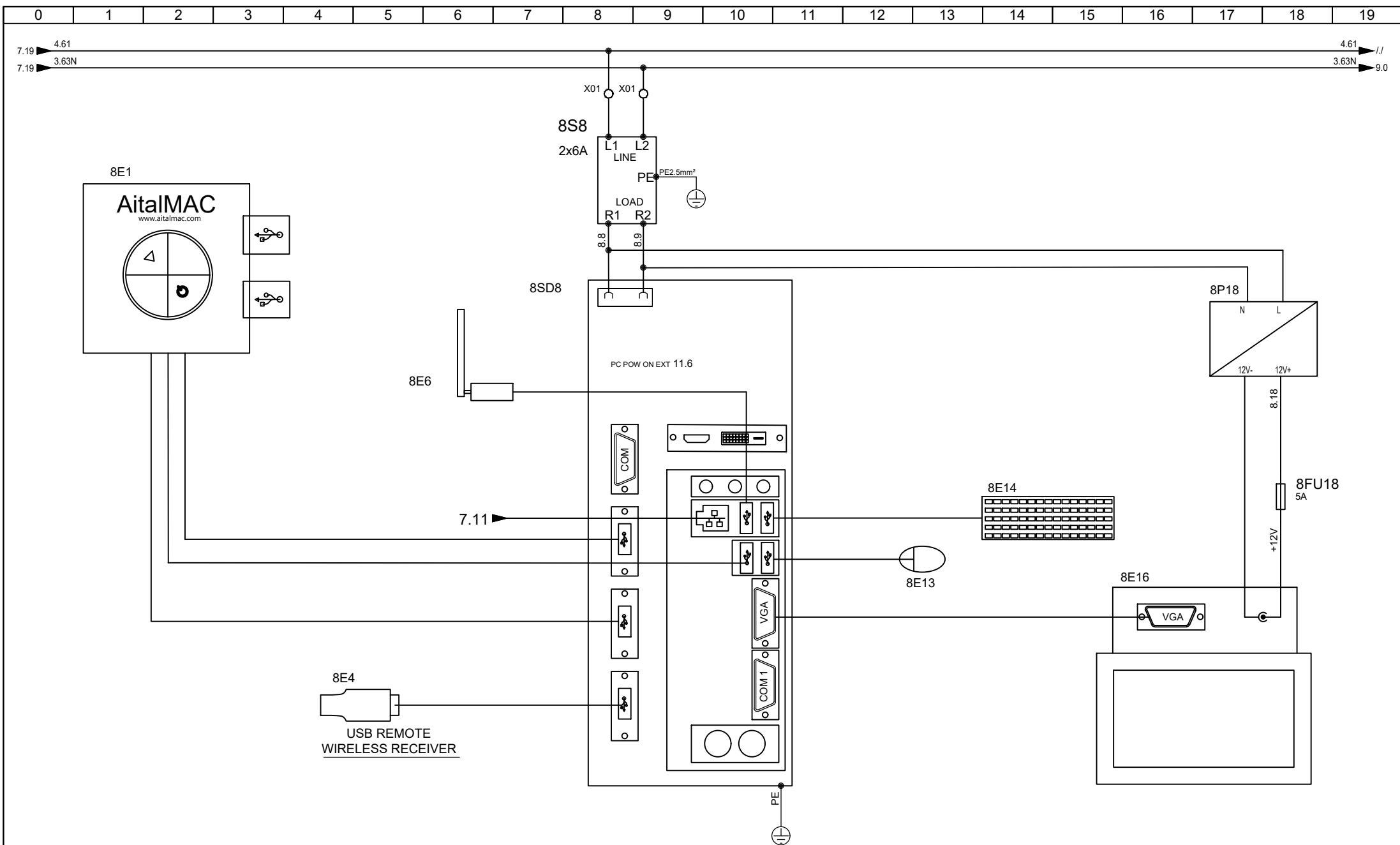
INVERTER FILTER

SPINDLE MOTOR

BRAKING UNIT



AITEK INDUSTRIAL COMPUTER
9 AXIS CNC CONTROLLER
ONLINE MONITORING SYSTEM



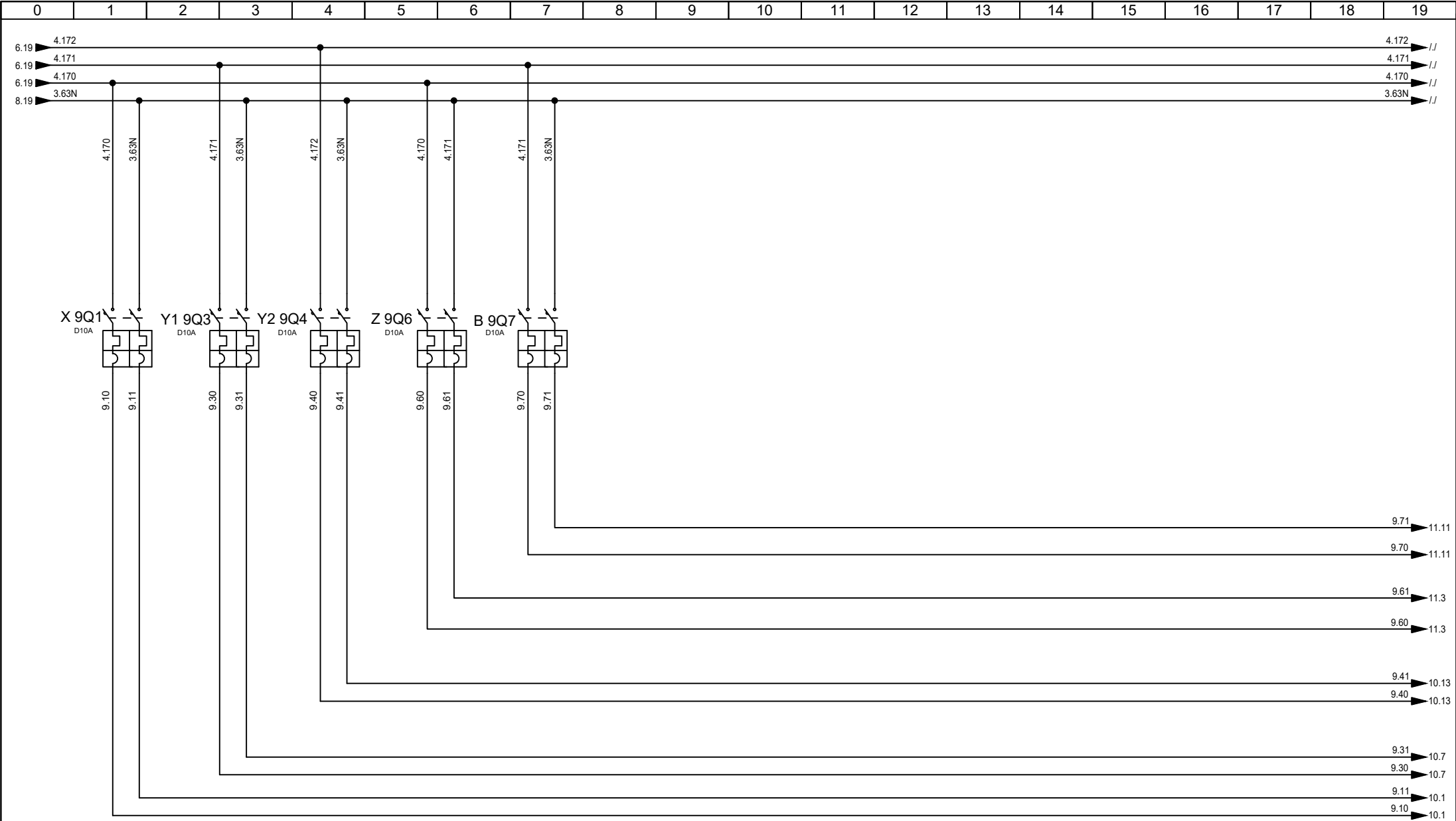
COMPUTER POWER
ON/OFF BUTTON

USB WIFI

WINDOWS PC

MOUSE&KEYBOARD

MONITOR&MONITOR
POWER SUPPLY



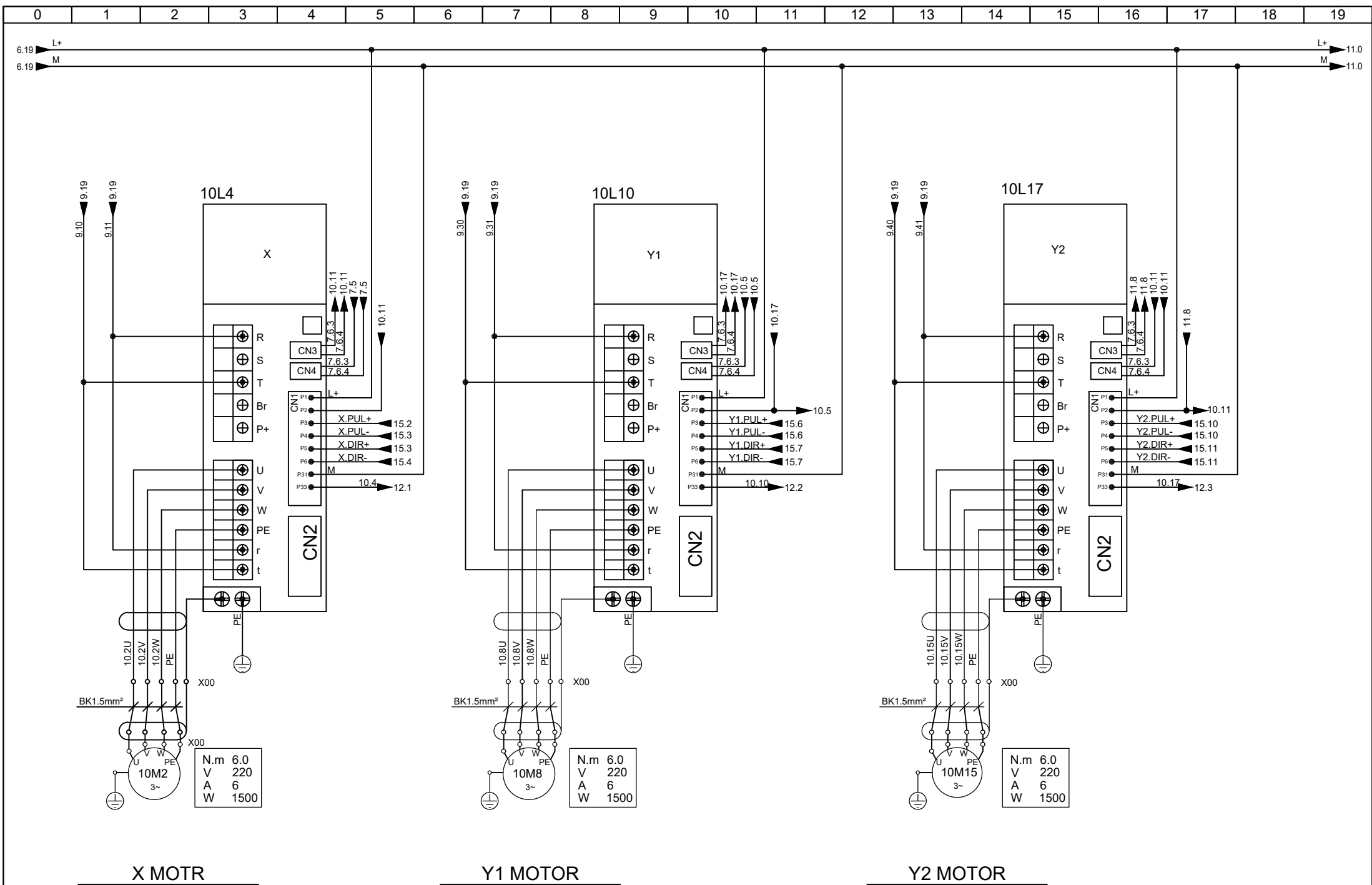
X

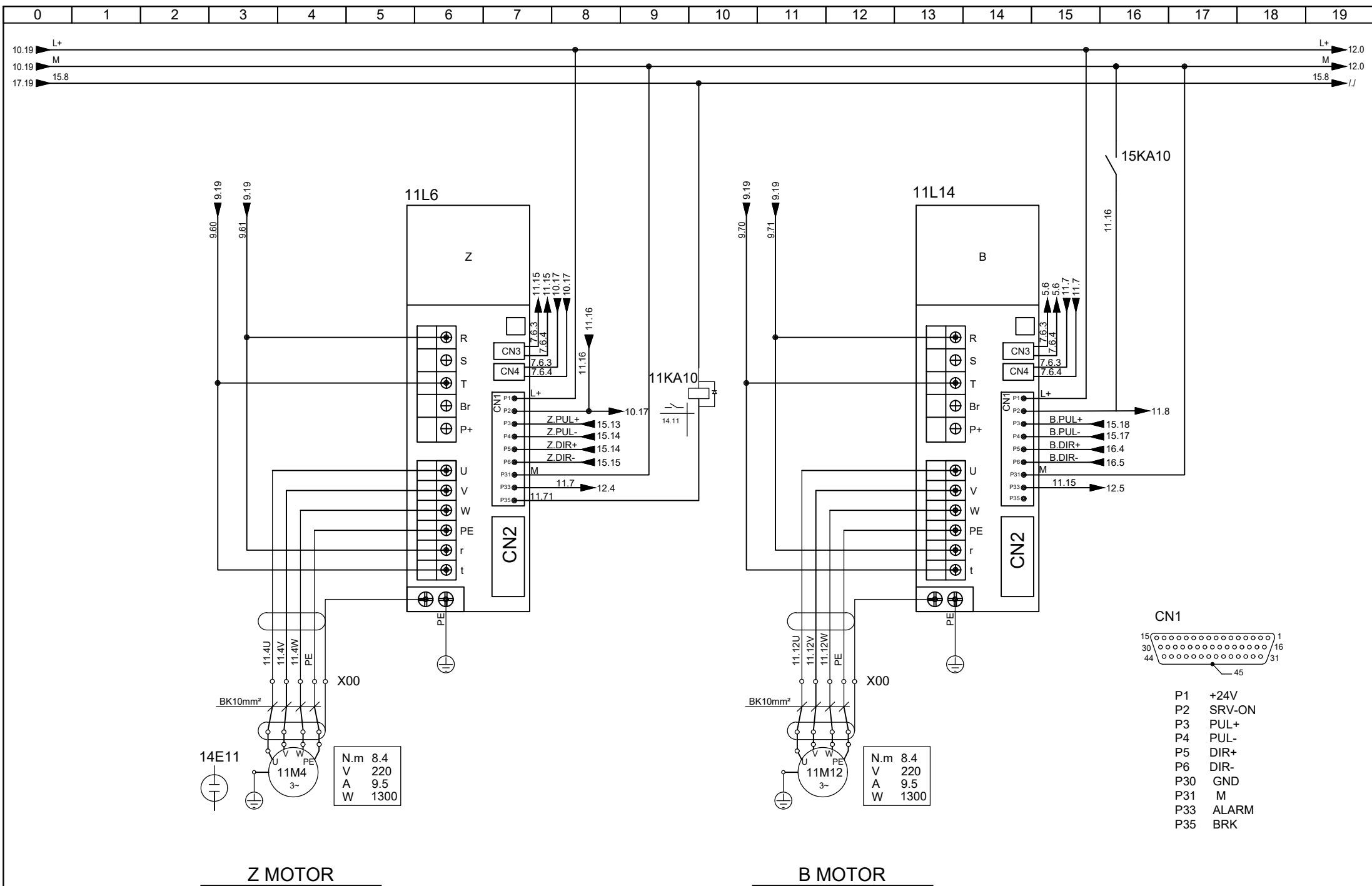
Y1

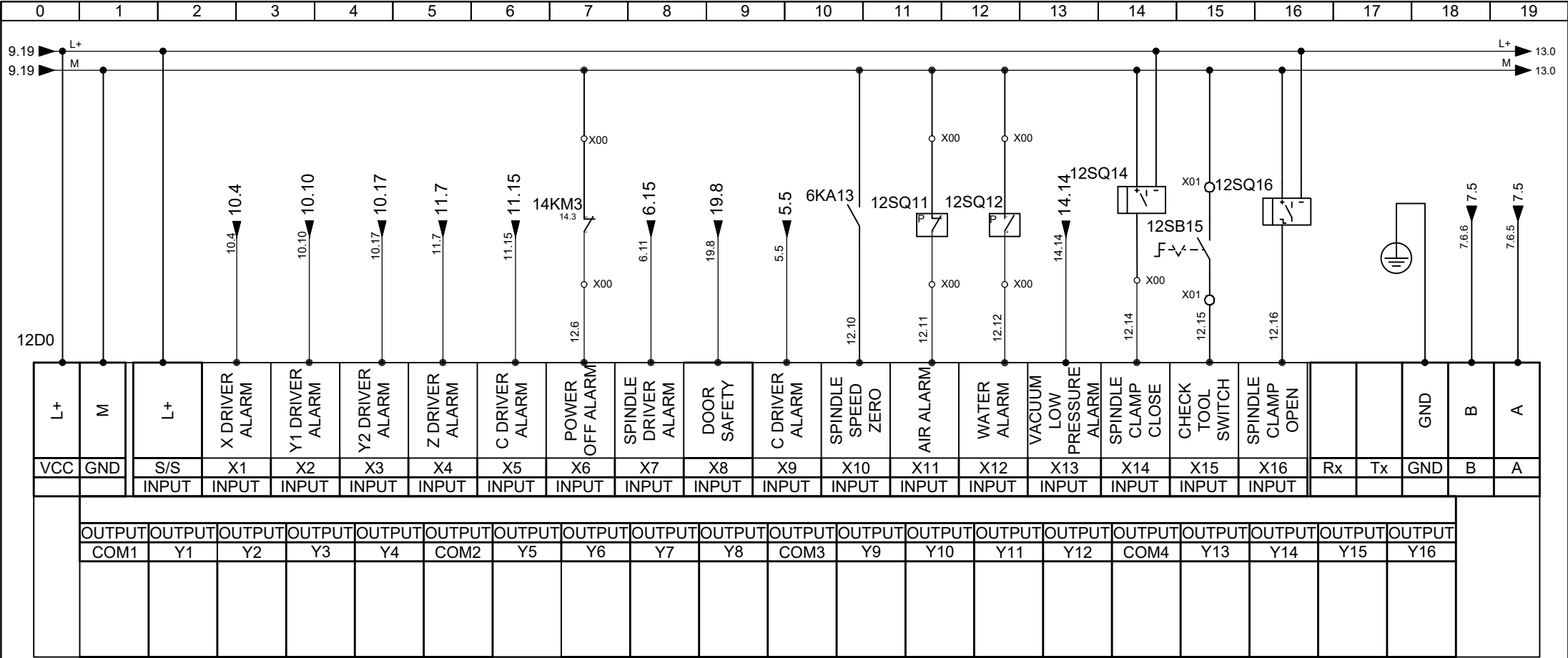
Y2

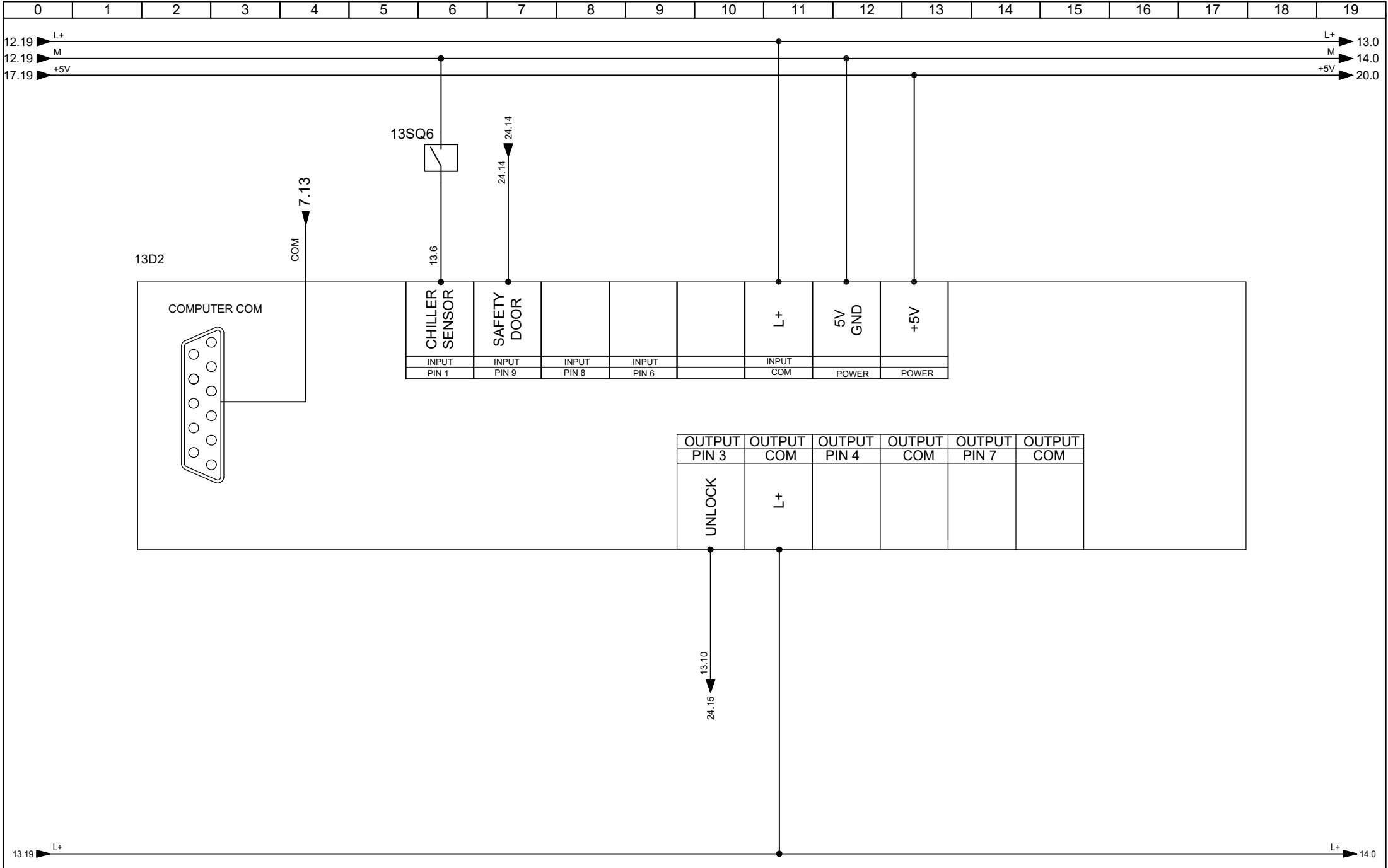
Z

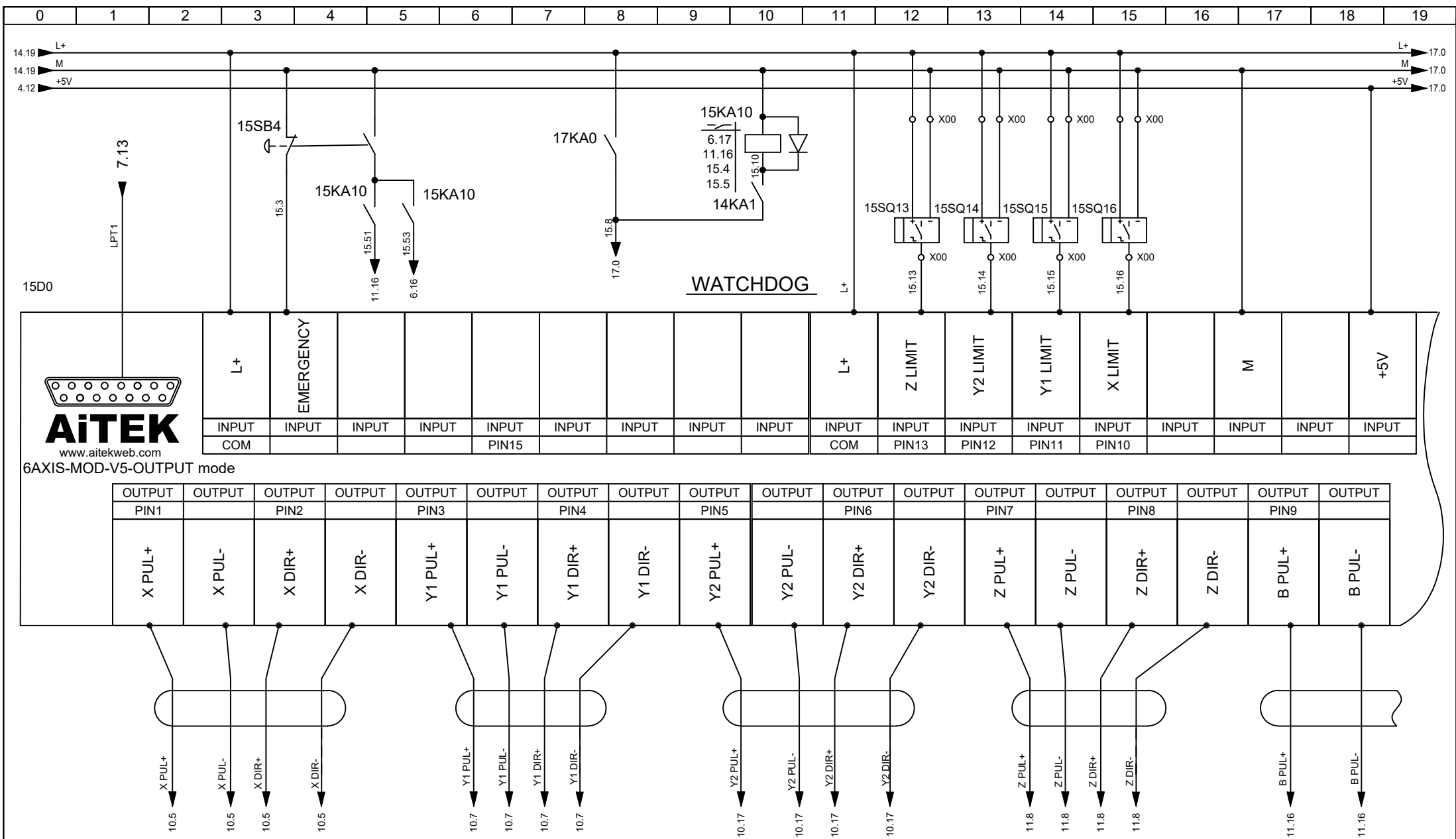
B



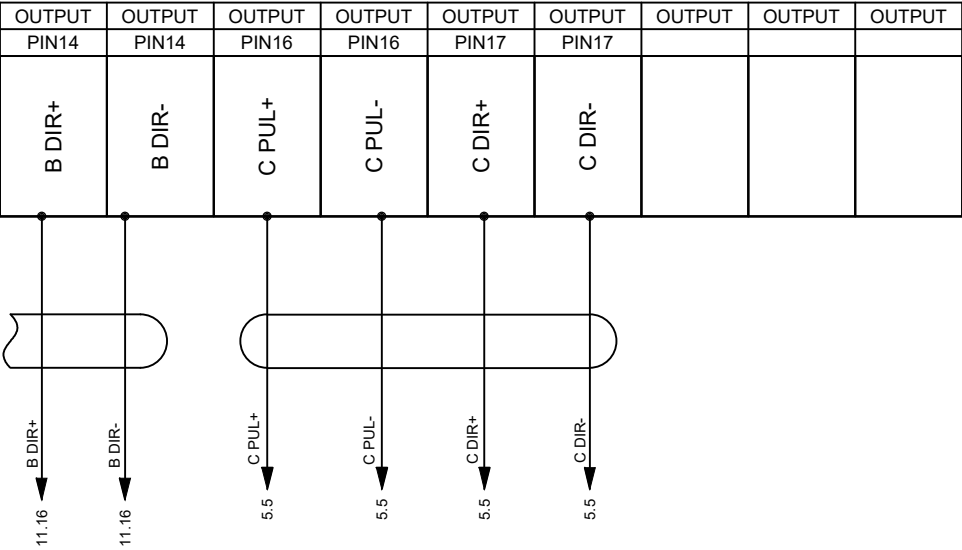






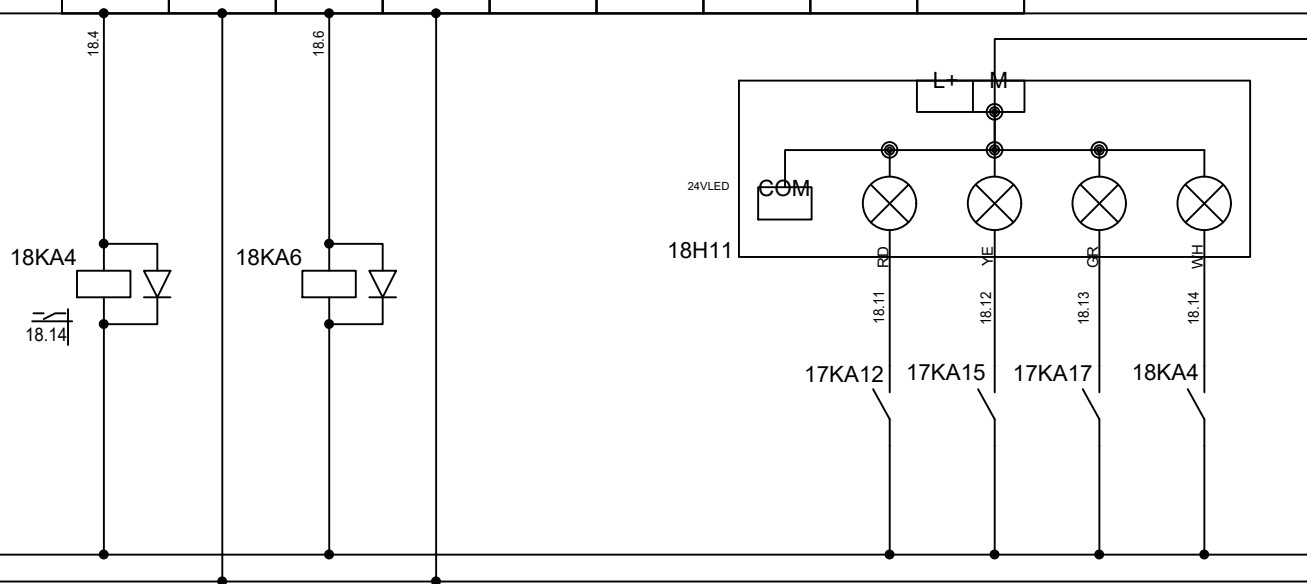


15D0



15D0

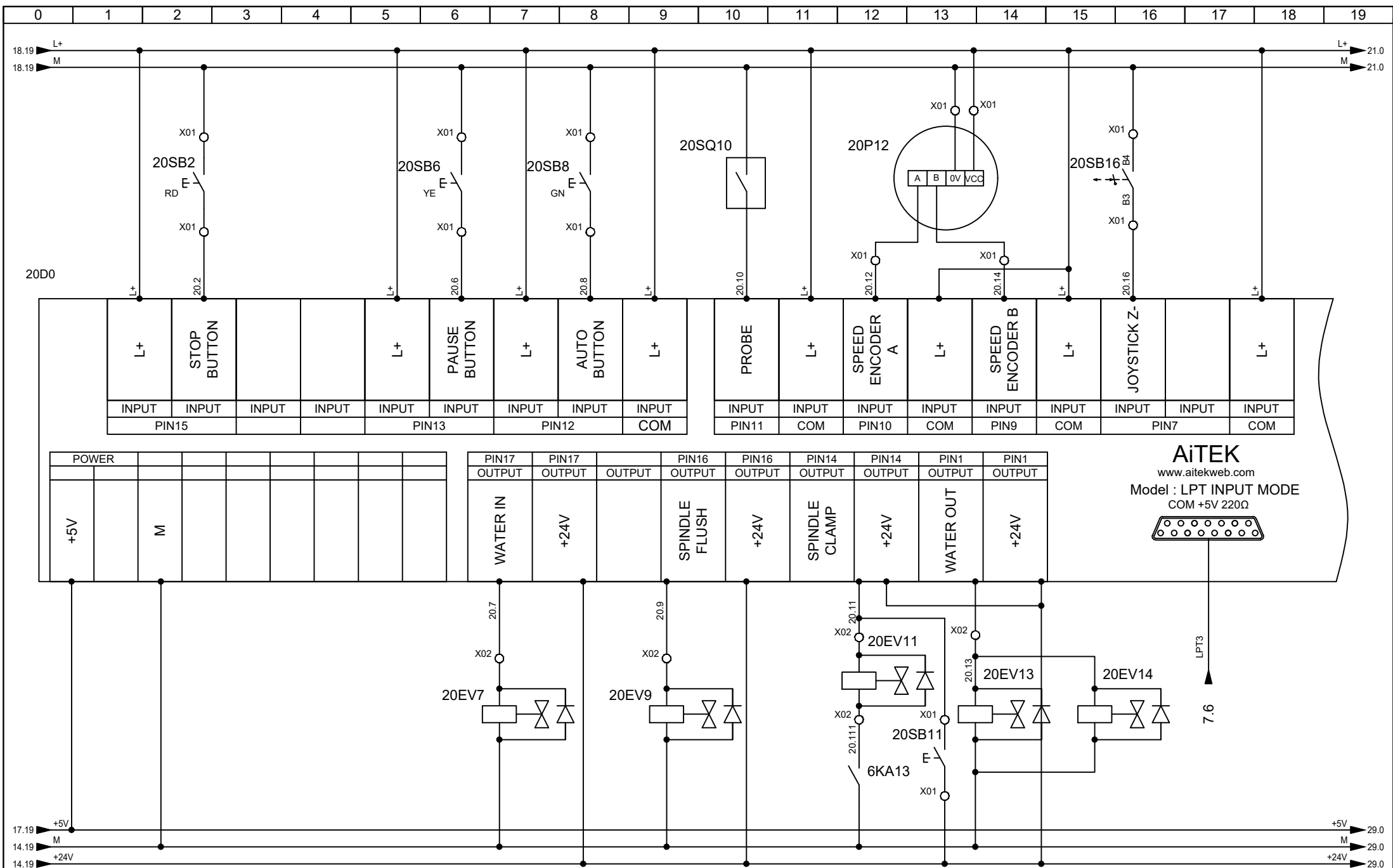
OUTPUT	OUTPUT	OUTPUT	OUTPUT	OUTPUT	OUTPUT	OUTPUT	OUTPUT	OUTPUT
PIN14	PIN14	PIN16	PIN16	PIN17	PIN17			
WHITE	M	SPINDLE SEAL	M					

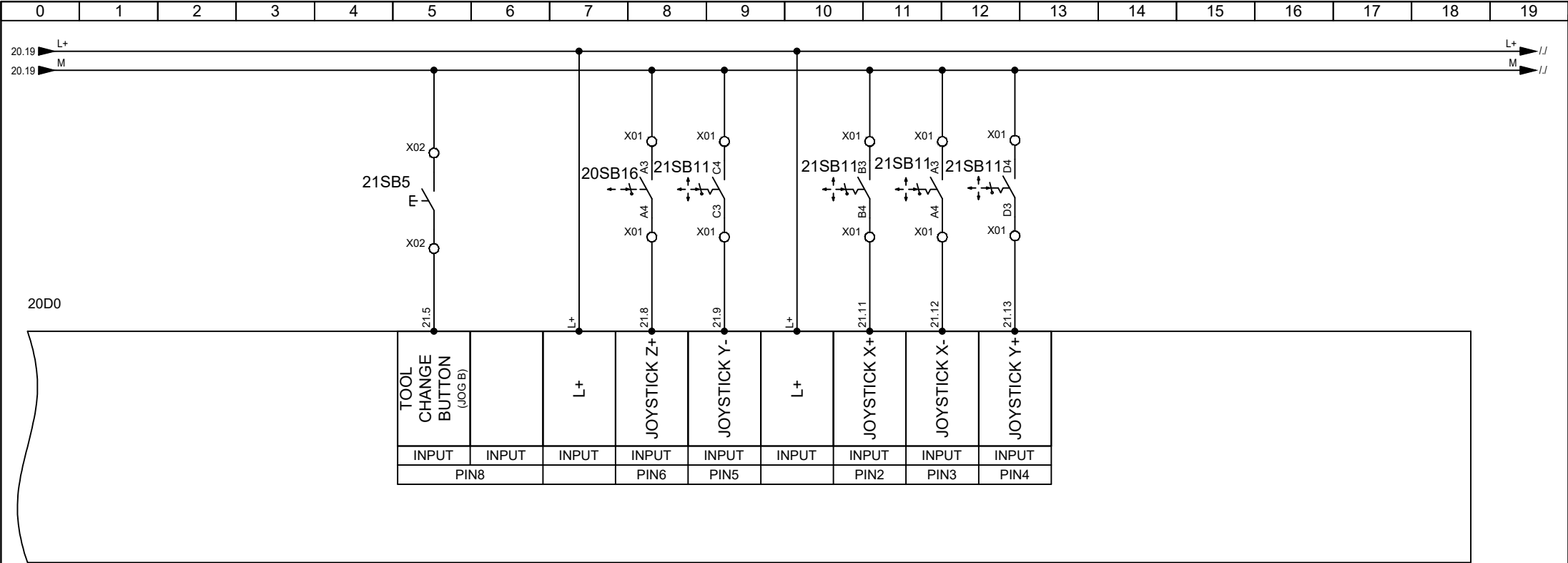


ALARM LAMP

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 : KT38 2019	Date: 09.02.2022		Revision: KT38-220602		Approved By :		Pag. 19

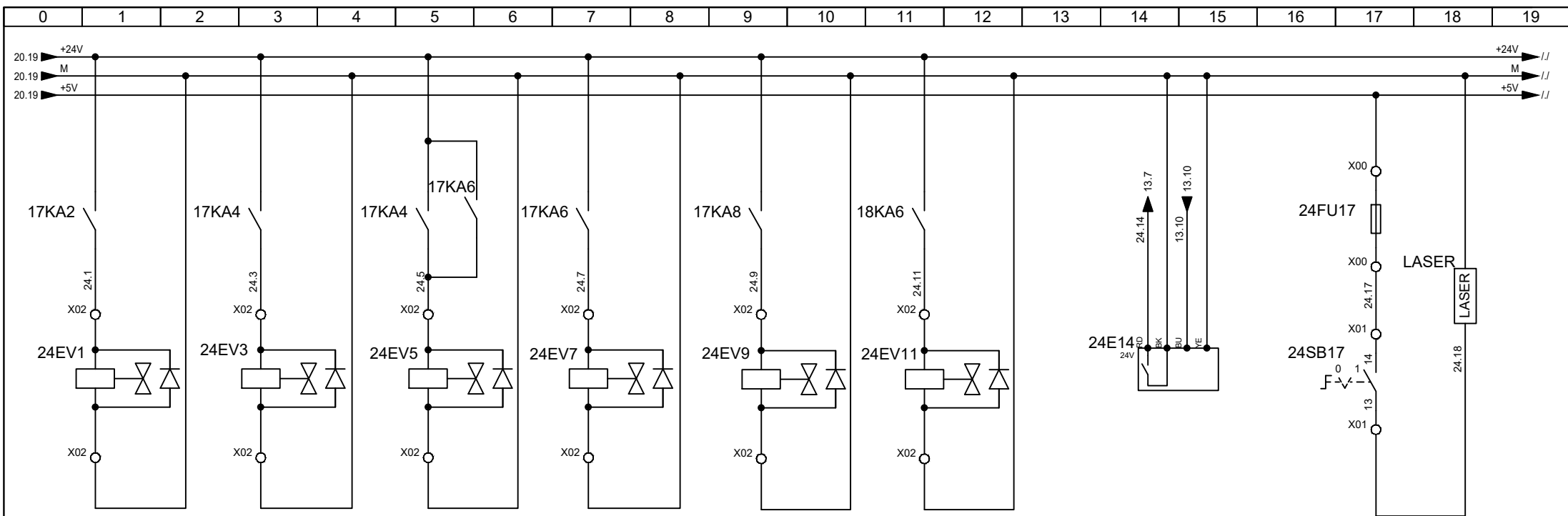




0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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 : KT38 2019	Date: 09.02.2022	Revision: KT38-220602	Approved By :	Pag. 23	Next. 24



SPINDLE
MAKE ZERO

+0.3°

0°

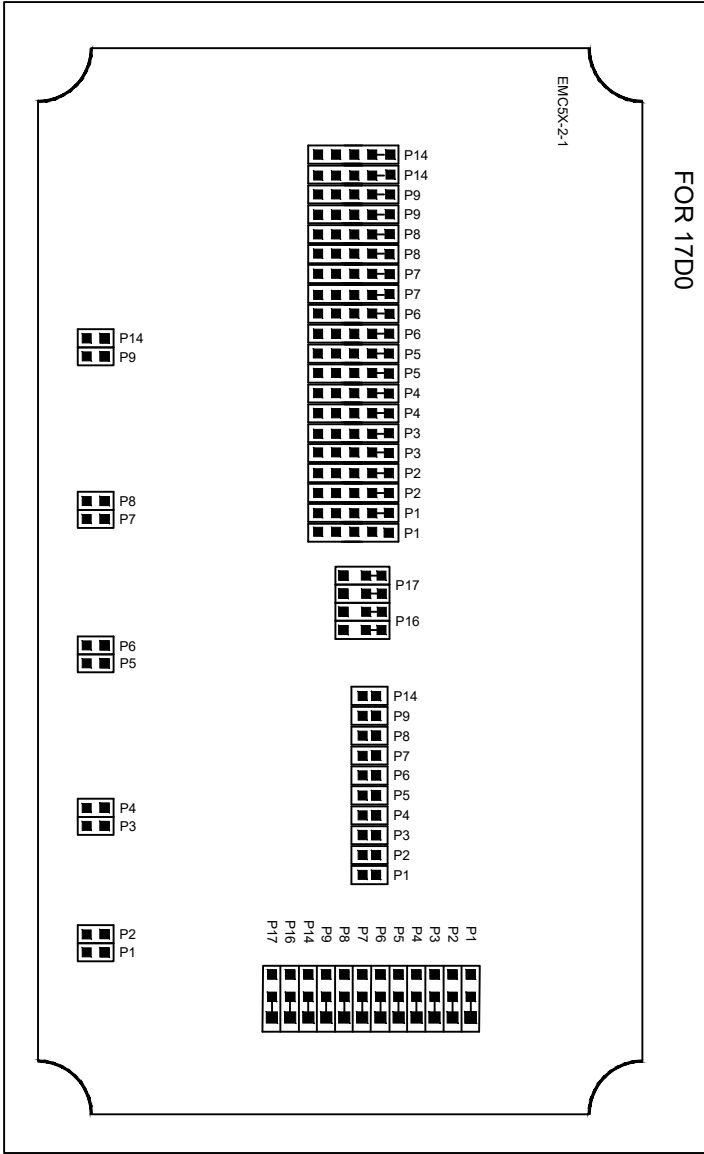
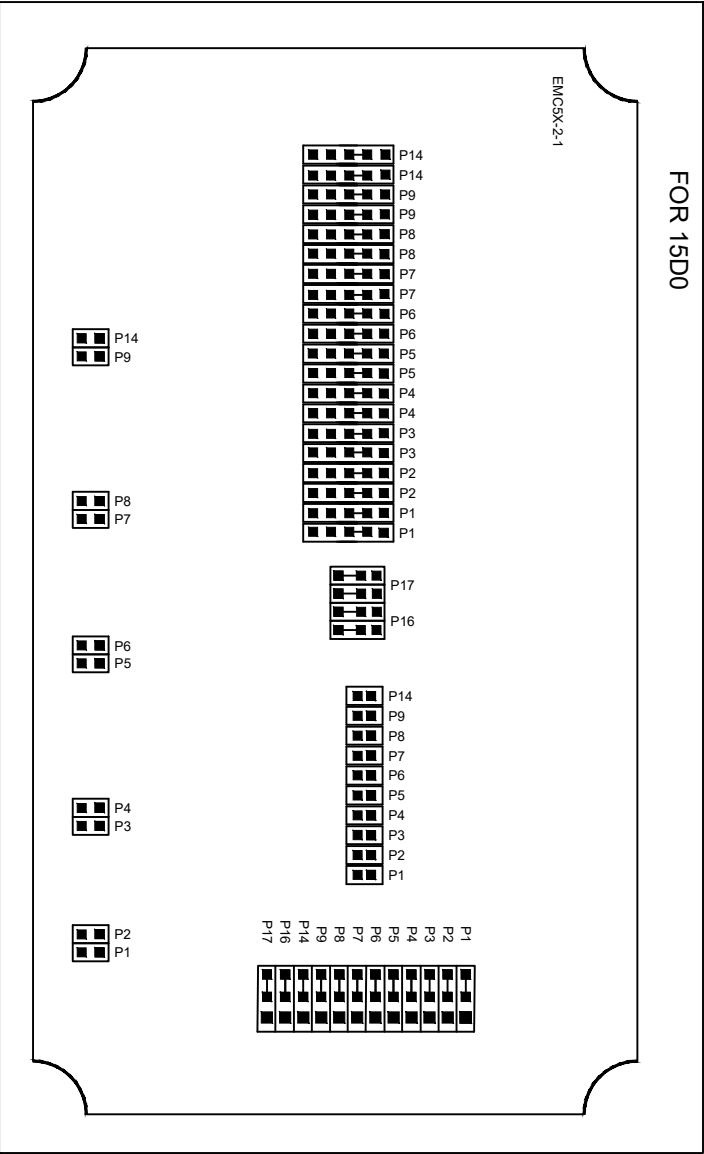
-0.3°

TABLE PROBE

SPINDLE SEAL

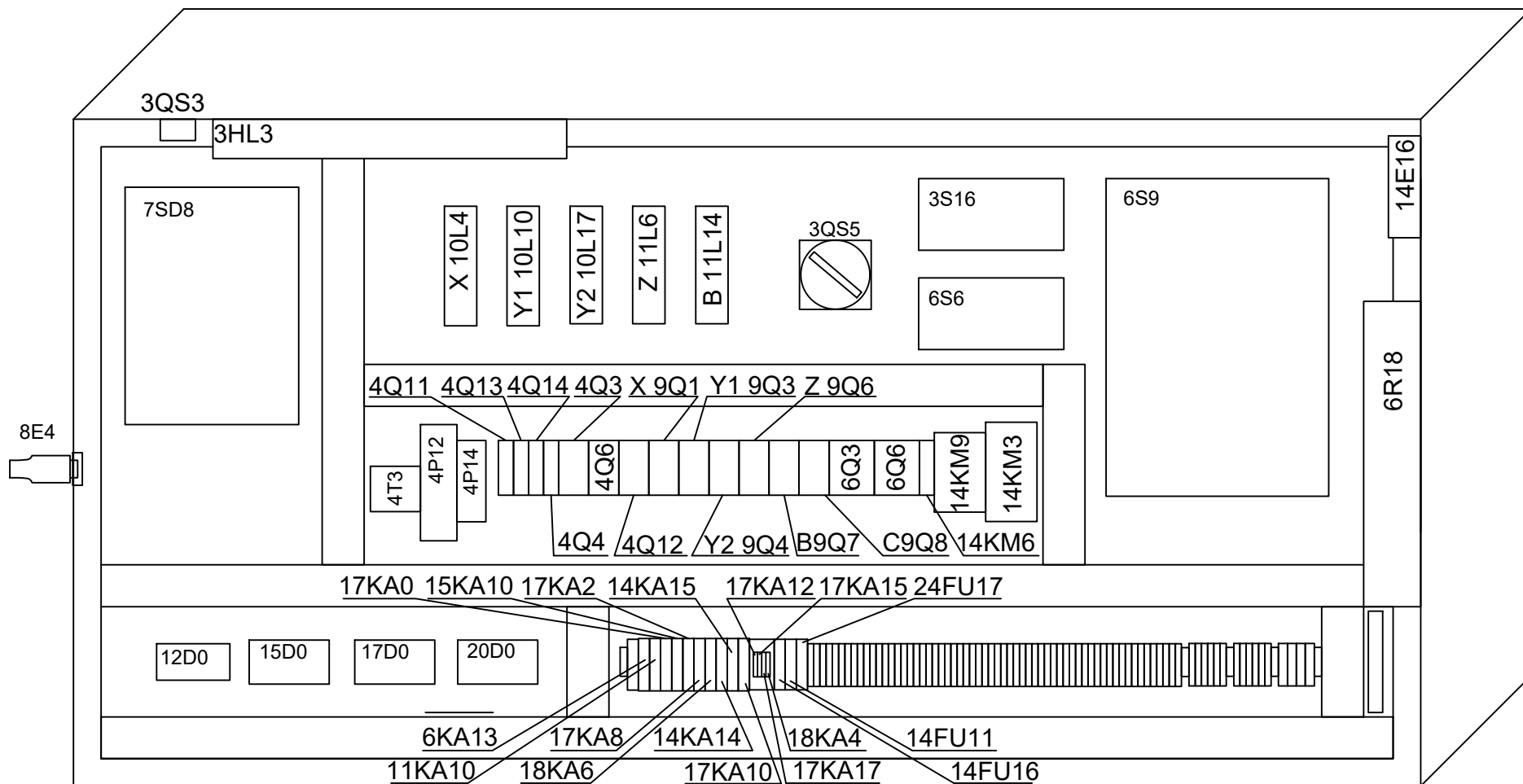
DOOR
SAFETY

LASER SWITCH

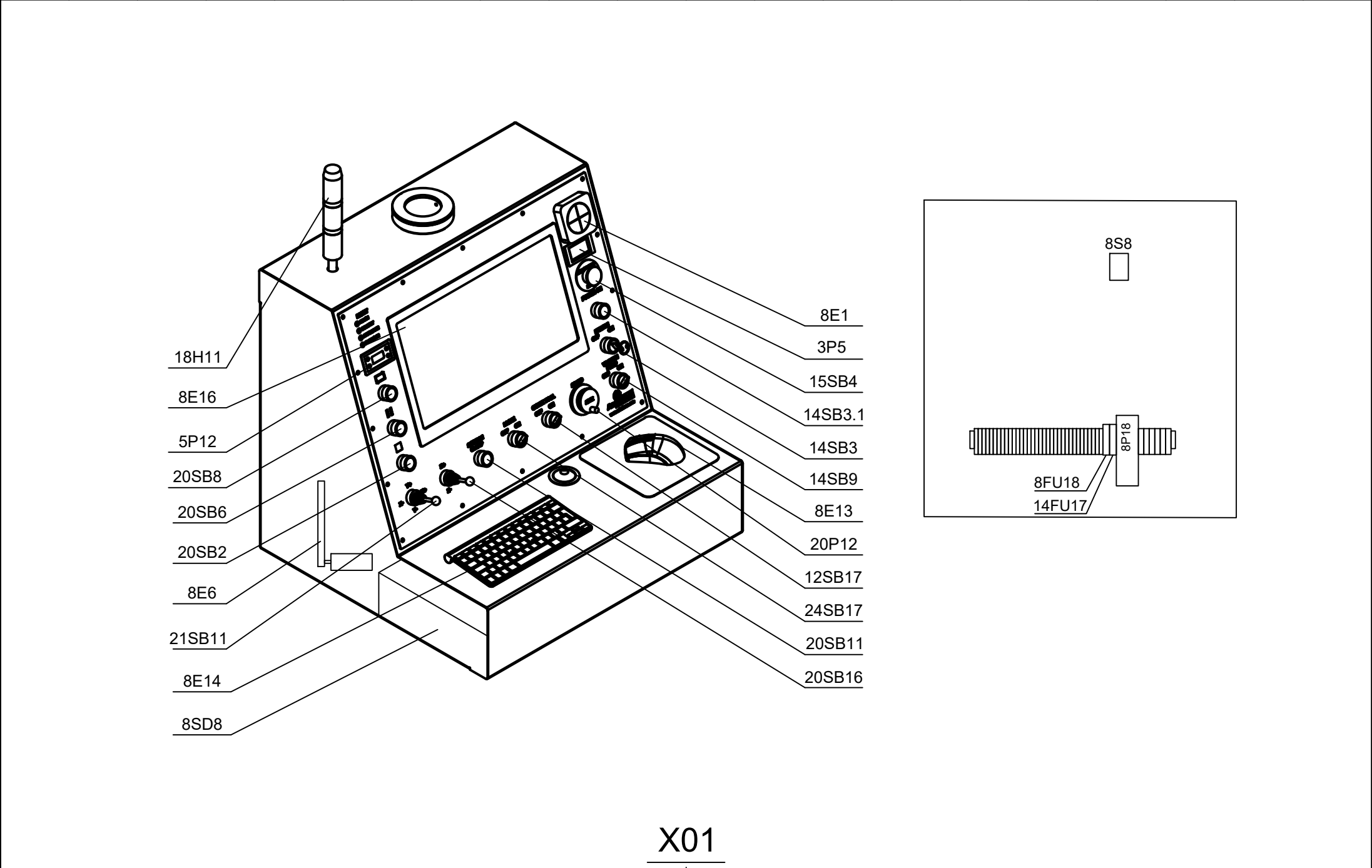


OUTPUT CONTROL CARD JUMPERS SETTINGS

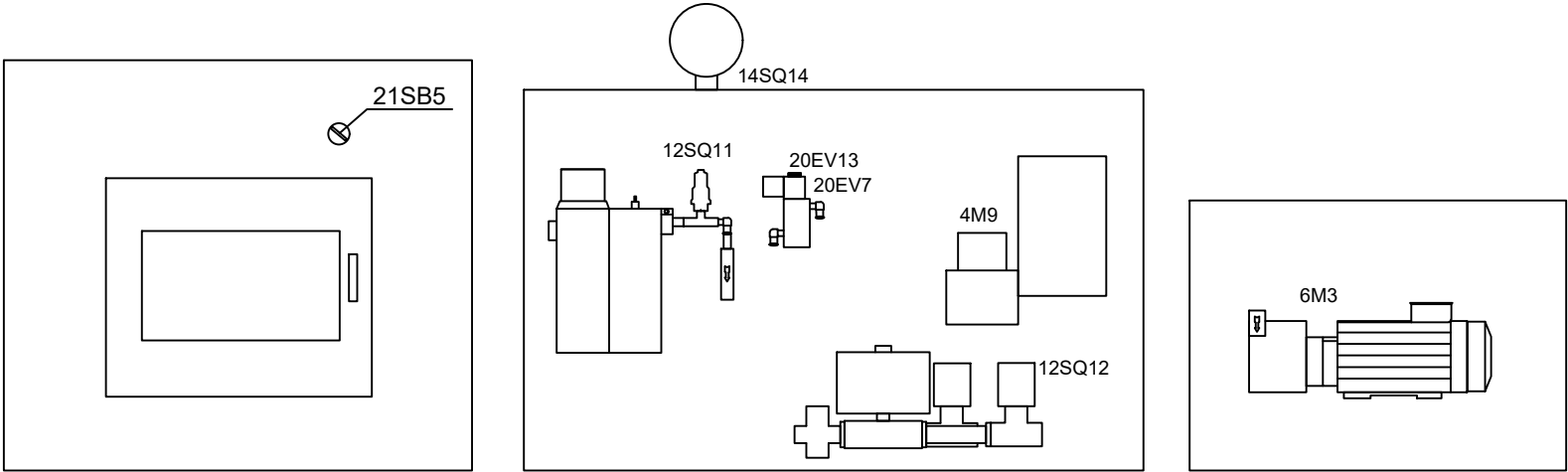
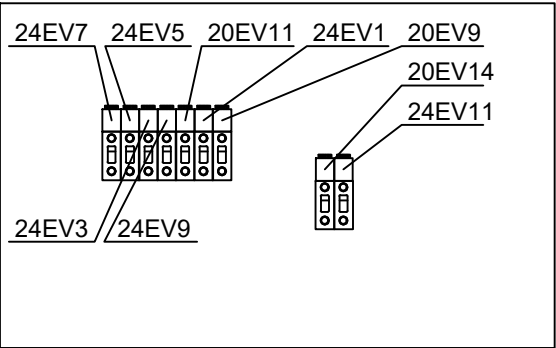
SECOND OUTPUT CONTROL CARD JUMPERS SETTINGS



X00



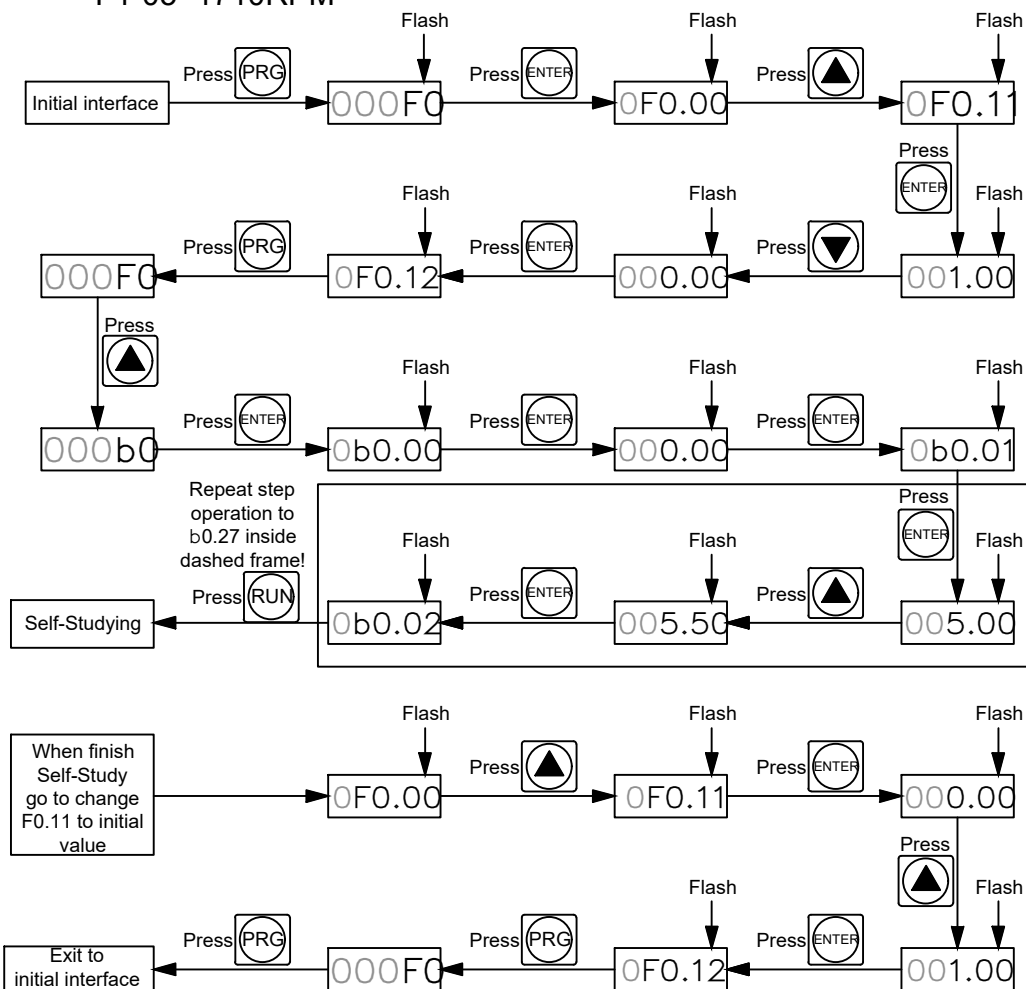
X01



X02

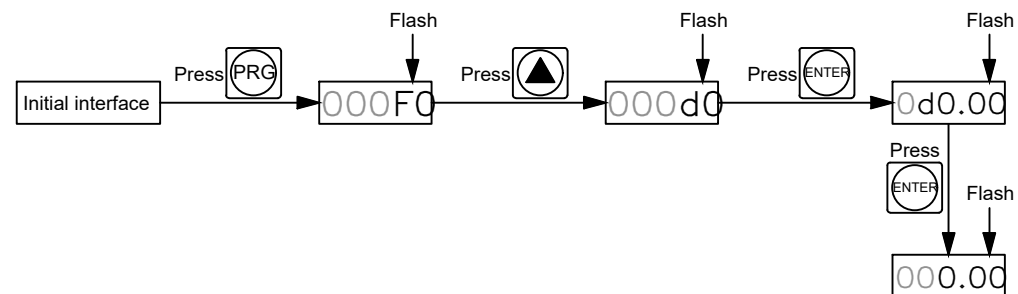
Motor Self-Study

F1-00=0
F1-01=13KW
F1-02=380V
F1-03=35A
F1-04=60Hz
F1-05=1710RPM



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
F0-01	0,1,2	2	
F0-12	0.00Hz~F0.19(MAX)	500	Hz
F0-22	1:0.1Hz,2:0.01Hz	2	
F0-03	0-9	9	
F0-04	0-9	0	
F0-02	0,1,2	1	
F0-17	0.0s~6500s	15	
F0-18	0.0s~6500s	15	
F0-15	0.5k~16k	6k	Hz
F0-10	50.00Hz~600.00Hz	500.00	Hz
F4-03	0-51	11	
F5-04	--	23	
FD-00	0000-6009	5	9600BPS
FD-01	0-3	3	(8-N-1)
FD-02	1-250	6	
FD-03	--	5	
FD-04	--	0	
FD-05	0-3	1	MODBUS
FD-06	--	1	0.1A

Servo Driver Parameter

NAME	RANGE	X	Y1	Y2	Z	B	C
PA003		13	13	13	13	12	13
PA004		750	750	750	750	1550	750
PA006	0-1	0	0	0	0	0	0
PA008		5000	5000	5000	5000	5000	5000
PA222		0	0	0	0	1000	0
PA410	101-181	81	81	81	81	81	81
PA529	0-5	4	4	4	4	4	4
PA530	0-6	2	2	2	2	2	2
PA531	1-256	1	2	3	4	5	6

0	1	2	3	4	5	6	7	8	9	10	11	12	13
---	---	---	---	---	---	---	---	---	---	----	----	----	----

Pg.	Code	Name	Mfrs.	Model
3	3QS3	Travel Switch	SNJDQ	LX19-001
3	3HL3	OPEN DOOR LIGHT ON	--	T5 12W/220V
3	3QS5	General Switch	GLELE	GLD11-100/08 +4P
3	3P5	Volt-ammeter	OUXIN	200-450V~0-100A
3	3S16	Filter	DOTHINK	DTT2121-75-S16-S77
3				

4	4T3	Transformers	CHNT	NDK(BK)-150
4	4Q3	Circuit Breaker	Schneider	IC65N D10A 2P
4	4Q4	Circuit Breaker	Schneider	IC65N D4A 1P
4	4Q6	Circuit Breaker	Schneider	IC65N D10A 2P
4	4M9	Grease Pump Motor	ML	MYK-202-200-0 15W/220V 2L
4	4Q12	Circuit Breaker	Schneider	IC65N D10A 2P
4	4P12	Power Supply	WEHO	D-120B
4	4Q11	Circuit Breaker	Schneider	C65H-DC C4A 1P
4	4Q13	Circuit Breaker	Schneider	C65H-DC C4A 1P
4	4P14	Power Supply	MW	EDR-120-24 24V
4	4Q14	Circuit Breaker	Schneider	C65H-DC C4A 1P

5	5P12	Thermometer	QUASON	XY-WT01
5	5E15	Industrial Chiller	TEYU	CW6000AN AC1P220V
5				
5				
5				

6	6Q3	Vacuum Pump Circuit Breaker	Schneider	IC65N D10A 3P
6	6M3	Vacuum Pump Motor	BOWANG	2BV2061 220V2.2KW
6	6Q6	Spindle Circuit Breaker	Schneider	IC65N D50A 3P
6	6S6	Filter	DOTHINK	DTT2121-50-S16-S77480V50A
6	6S9	Frequency Converter	INOVANCE	MD500T15GB
6	6M11	Spindle Motor	AITALMAC	13KW
6	6KA13	Terminal Relay	OMRON	G2R-2-SND(S) DC24V+P2RF-08-E
6	6RU16	Braking Unit	POWTRAN	CDBR-2015 50A
6	6R18	Braking Resistor	POWTRAN	RXLG2000W 13.6Ω

7	7SD8	CNC Controler	AITEK	9 AXIS CNC-KT38 2019
7				
7				

8	8E1	Computer Power on/off	AITALMAC	--
8	8E4	Remote Wireless Receiver	WH	WHB04B-4 USB
8	8E6	USB-WIFI	--	--
8	8S8	Filter	Canny Well	CW1B-6A-L
8	8SD8	WINDOWS PC	AITALMAC	PC-KT38 2019
8	8E13	USB-Mouse	Lenovo	M300
8	8E14	USB-Keyboard	Logitech	K310
8	8E16	Monitor	Anmite	AN-195W01D
8	8P18	Power Supply	MW	EDR-75-12
8	8FU18	Fuse	CHE	FS-101 DC24V 5A
8				
8				
8				
8				

Pg.	Code	Name	Mfrs.	Model
9	X 9Q1	Circuit Breaker	Schneider	IC65N D10A 2P
9	Y1 9Q3	Circuit Breaker	Schneider	IC65N D10A 2P
9	Y2 9Q4	Circuit Breaker	Schneider	IC65N D10A 2P
9	Z 9Q6	Circuit Breaker	Schneider	IC65N D10A 2P
9	B 9Q7	Circuit Breaker	Schneider	IC65N D10A 2P
9	C 9Q8	Circuit Breaker	Schneider	IC65N D10A 2P

10	10M2	X Motor	Leadshine	ACM13015M2F-71-E 1.5KW 2500r/min
10	X 10L4	X Servo Drive	Leadshine	L7-1500W
10	10M8	Y1 Motor	Leadshine	ACM13015M2F-71-E 1.5KW 2500r/min
10	Y1 10L10	Y1 Servo Drive	Leadshine	L7-1500W
10	10M15	Y2 Motor	Leadshine	ACM13015M2F-71-E 1.5KW 2500r/min
10	Y2 10L17	Y2 Servo Drive	Leadshine	L7-1500W

11	11M4	Z Motor	Leadshine	ACM13013H2E-40-L 1.3KW 1500r/min
11	Z 11L6	Z Servo Drive	Leadshine	L7-1500W
11	11KA10	Terminal Relay	OMRON	G2R-2-SND(S) DC24V+P2RF-08-E
11	11M12	B Motor	Leadshine	ACM13013H2F-40-L 1.3KW 1500r/min
11	B 11L14	B Servo Drive	Leadshine	L7-1500W
11				

12	12D0	Control Device	JUYING	DAM0816D RS232 485
12	12SQ11	Air Pressure Switch	SQW	QPM11-NC
12	12SQ12	Water Pressure Switch	SN	DN8 1.1-1.8kgf/m²(ON-OFF)
12	12SQ14	Sensor	--	--
12	12SB15	Check Tool Switch	RENY	RBSNK-2
12	12SQ16	Sensor	--	--
12				

13	13D2	COM COMPUTER MODE	AITEK	RS232-Mod-V1 4IN/3OUT
13	13SQ6	INDUSTRIAL CHILLER ALARM	S&A	CW-6000AN 220V

14	14SB3	Enable Key Switch	RENY	RBSNK-2
14	14SB3.1	Power On Button	RENY	R2PIF-1D-2GL
14	14KM3	Contactor	Schneider	LC1-D80B7C AC24V
14	14KM6	Contactor	Schneider	A9C20132 ICT 2NO 25A AC24V
14	14SB9	Vacuum Switch	RENY	RBSNK-2
14	14KM9	Contactor	Schneider	LC1D18B7C AC24V
14	14FU11	Fuse	CHE	FS-101 DC24V 2A
14	14E11	Z Brake	Leadshine	--
14	14FU13	Fuse	CHE	FS-101 DC24V 2A
14	14SQ14	Vacuum Pressure Switch	YXC	ZXC-100, -0.1-0MPA
14	14KA14	Terminal Relay	OMRON	G2R-2-SND(S) DC24V+P2RF-08-E
14	14KA15	Terminal Relay	OMRON	G2R-2-SND(S) DC24V+P2RF-08-E
14	14FU16	Fuse	CHE	FS-101 DC24V 2A
14	14E16	Box FAN	--	24V 6W 12CM
14	14FU17	Fuse	CHE	FS-101 DC24V 2A
14	14E17	Control Box FAN	--	24V 6W 12CM
14				

Aitalmac www.aitalmac.com	Designed By	Checked By	Approved By	Trimness By	Description			
	Machine	Date	Revision	Note	Page	Next		
	KT38 2019	09.02.2022	KT38-220602		31	32		

COMPONENTS INFORMATION

Pg.	Code	Name	Mfrs.	Model
15	15D0	LPT1 Output Card	AITEK	6AXIS-Mod-V5-OUTPUT mode
15	15SB4	Emergency Button	RENY	R2PNR4-1B-R
15	15KA10	Terminal Relay	OMRON	G2R-2-SND(S) DC24V+P2RF-08-E
15	15SQ13	Z Limit Sensor	IBEST	IPSI-12NO2B-L60mm(NPN NO 2mm 200mA)
15	15SQ14	Y2 Limit Sensor	IBEST	IPSI-12NO2B-L60mm(NPN NO 2mm 200mA)
15	15SQ15	Y1 Limit Sensor	IBEST	IPSI-12NO2B-L60mm(NPN NO 2mm 200mA)
15	15SQ16	X Limit Sensor	IBEST	IPSI-12NO2B-L60mm(NPN NO 2mm 200mA)
17	17D0	LPT2 Output Card	AITEK	6AXIS-Mod-V5-OUTPUT mode
17	17KA0	Terminal Relay	OMRON	G2R-2-SND(S) DC24V+P2RF-08-E
17	17KA2	Terminal Relay	OMRON	G2R-2-SND(S) DC24V+P2RF-08-E
17	17KA8	Terminal Relay	OMRON	G2R-2-SND(S) DC24V+P2RF-08-E
17	17KA10	Terminal Relay	OMRON	G2R-2-SND(S) DC24V+P2RF-08-E
17	17SQ11	Cylinder Sensor	CHVIRD	CS1-U
17	17KA12	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V
17	17SQ13	Cylinder Sensor	CHVIRD	CS1-U
17	17SQ14	Spindle make zero magnetic sensor	XINDE	CS1-J 2M
17	17KA15	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V
17	17SQ15	C Limit Sensor	IBEST	IPSI-12NO2B-L60mm(NPN NO 2mm 200mA)
17	17SQ16	B Limit Sensor	IBEST	IPSI-12NO2B-L60mm(NPN NO 2mm 200mA)
17	17KA17	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V
17				
18	18KA4	Terminal Relay Unit	Panasonic	PA1A-24V + AY33002 RT3S-24V
18	18KA6	Terminal Relay	OMRON	G2R-2-SND(S) DC24V+P2RF-08-E
18	18H11	Alarm Indicator lamp	TAYB	TB50-4T-D 24V
19				
19				
19				
20	20D0	LPT3 Input Card	AITEK	6AXIS-Mod-V5-INPUT mode
20	20SB1	Control Box-Stop Button	RENY	RAPNF-1A-R
20	20SB6	Control Box-Pause Button	RENY	RAPNF-1A-Y
20	20EV7	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V
20	20SB8	Control Box-Auto Button	RENY	RAPNF-1A-G
20	20EV9	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V
20	20SQ10	Blade Probe	WEIHONG	MACH3
20	20EV10	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V
20	20SB11	Spindle Clamp Button	RENY	RAPNF-1A-G
20	20EV11	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V
20	20P12	Speed Control Wheel	AITEK	24VPLC
20	20EV13	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V
20	20EV14	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V
20	20SB16	Z Axis-Joystick Controller	Schneider	XD2-PA22CR φ22mm
21	21SB5	Tool Change Button	RENY	RAPNF-1A-G
21	21SB11	X/Y Axis-Joystick Controller	Schneider	XD2-PA24CR φ22mm
21				

Pg.	Code	Name	Mfrs.	Model
24	24EV1	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V
24	24EV3	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V
24	24EV5	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V
24	24EV7	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V
24	24EV9	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V
24	24EV11	Solenoid Valve	CNSY	4V210-08 G1/4 DC24V
24	24E14	Door Safety	SARY	XG-6673 24V
24	24FU17	Fuse	CHE	FS-101 DC24V 2A
24	24SB17	Laser Switch	RENY	RBSNK-2
24	LASER	LASER	--	16mm