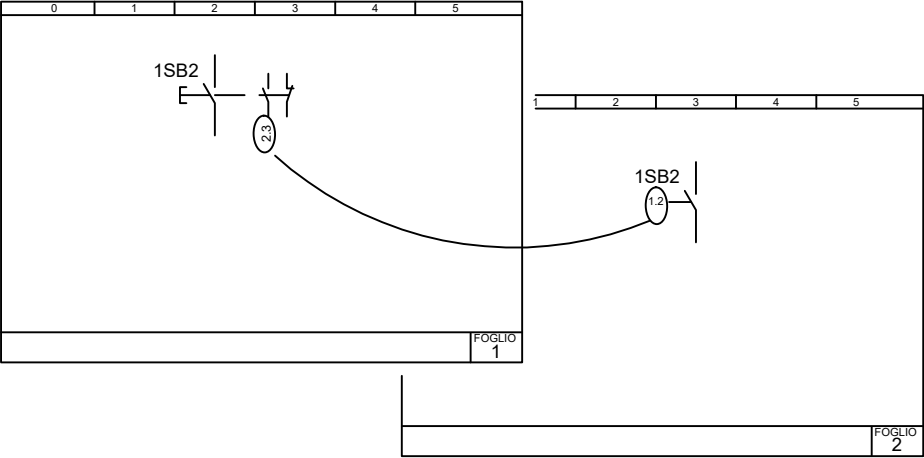
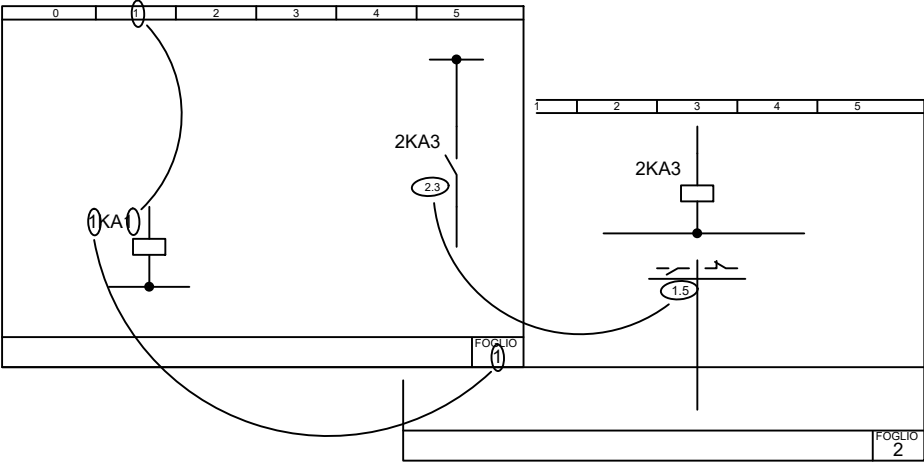


0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
AITALMAC Heng Sheng Road , Gao Chun Economic Development Zone , NANJING,211300 P.R.CHINA										LOCATION SYMBOLS ☐ Components on the door ☐ Components inside the cubicle (usually omitted) ☐ Machine components (usually omitted)									

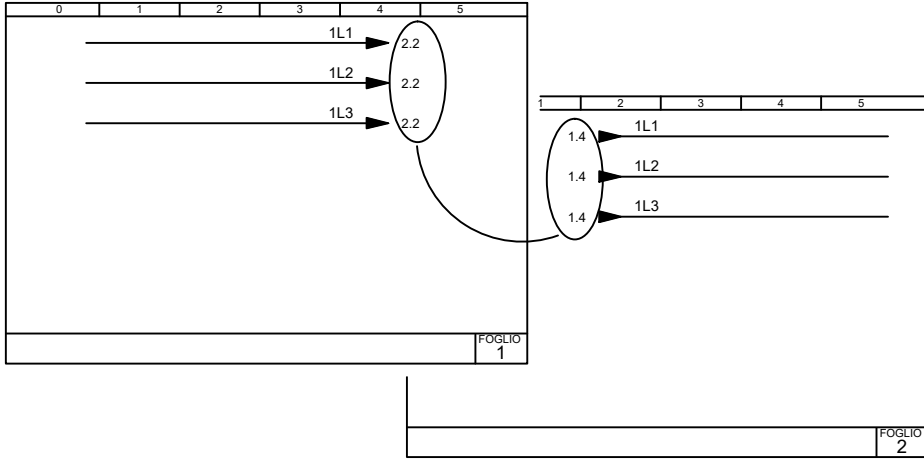
COMPONENT REFERENCE



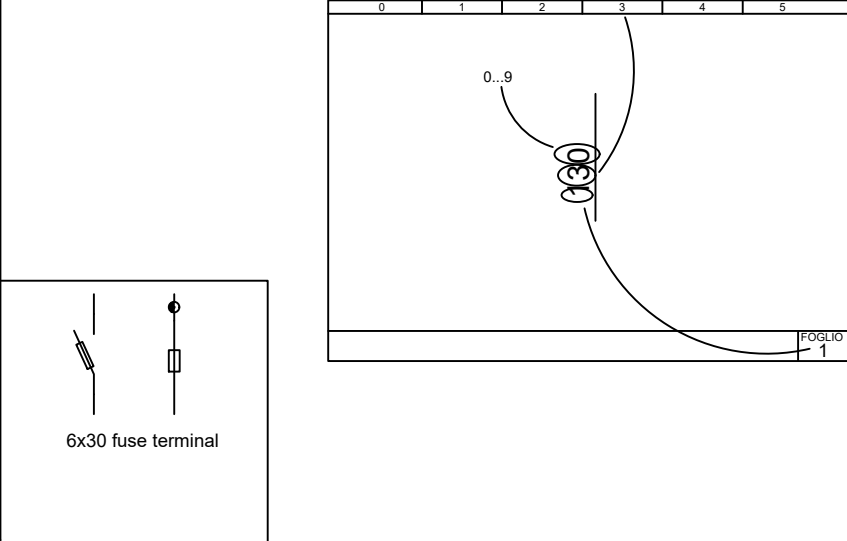
COMPONENT NAME/COIL-CONTACT POSITION

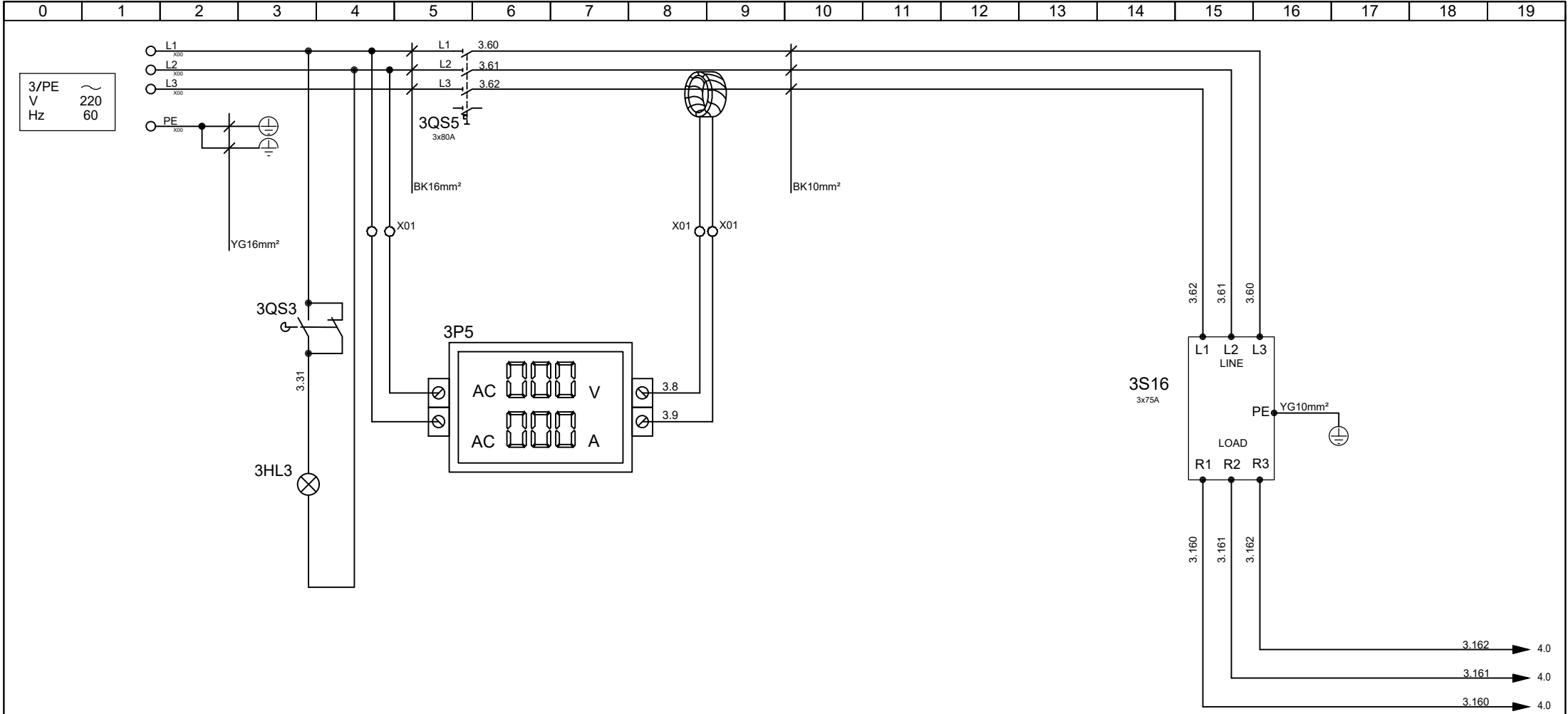


SIGNALS



WIRE NUMBER



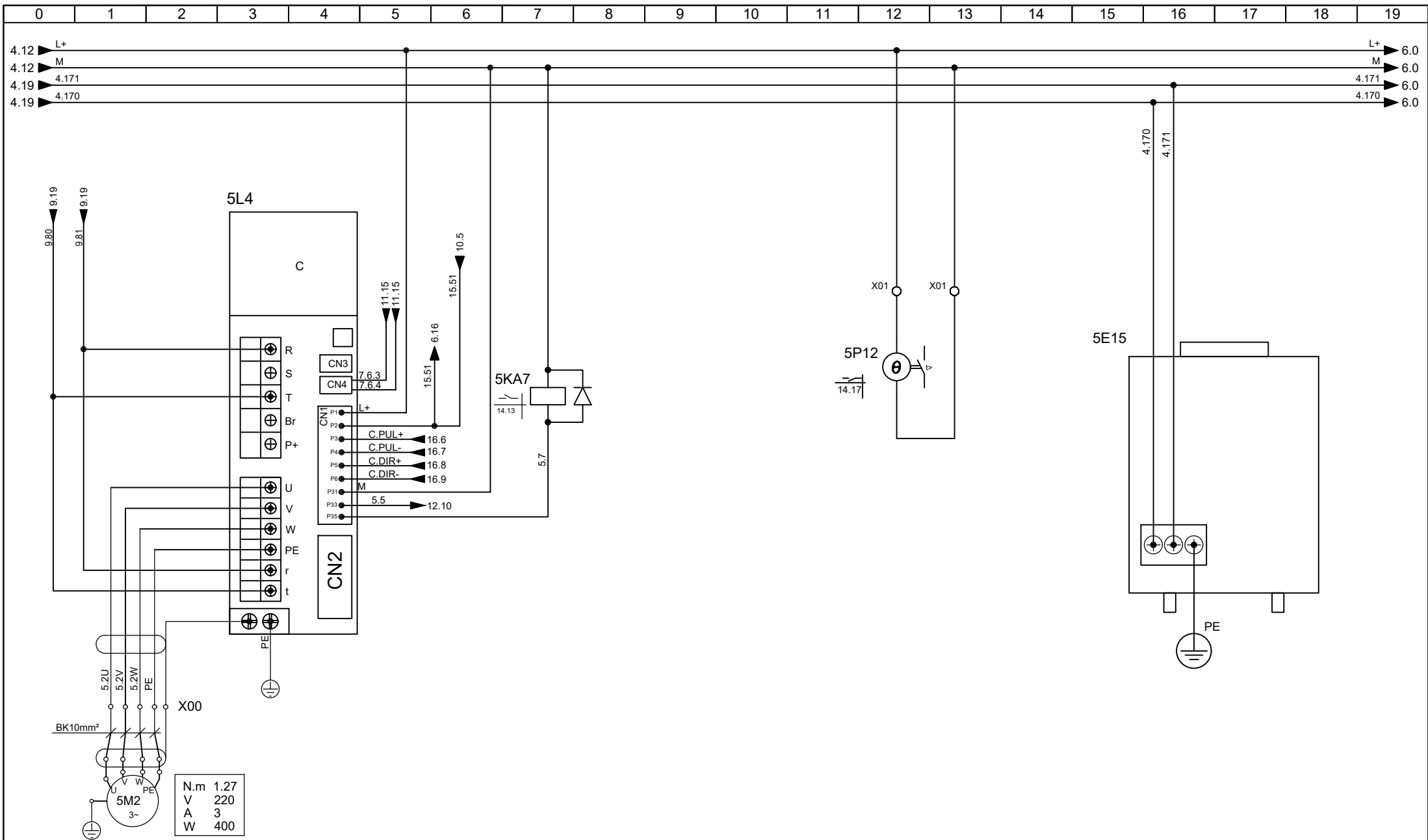


OPEN DOOR
LIGHT ON

GENERAL
SWITCH

VOLT & AMPERE
DISPLAY

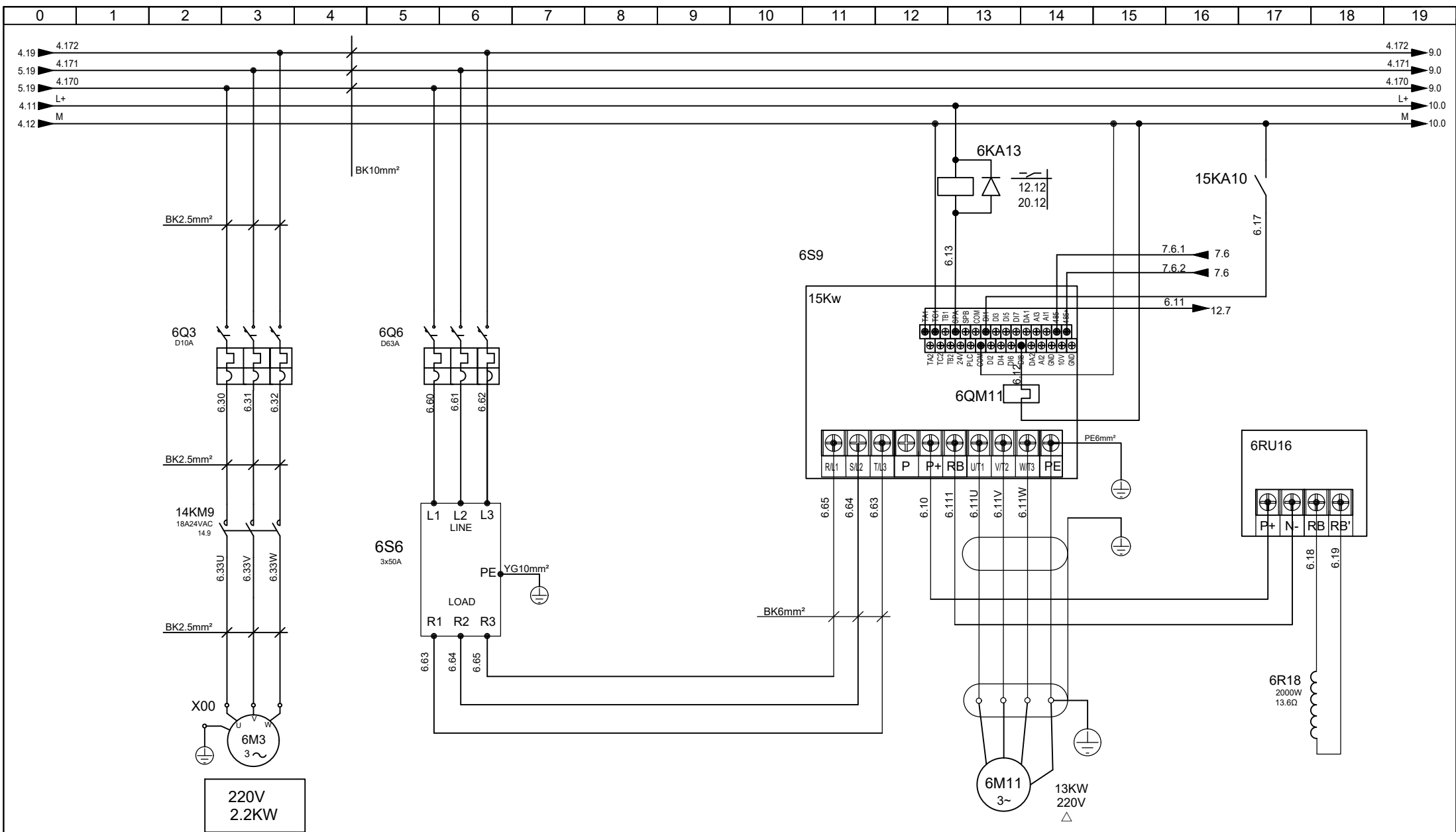
FILTER



C MOTOR

THERMOMETER

INDUSTRIAL
CHILLER

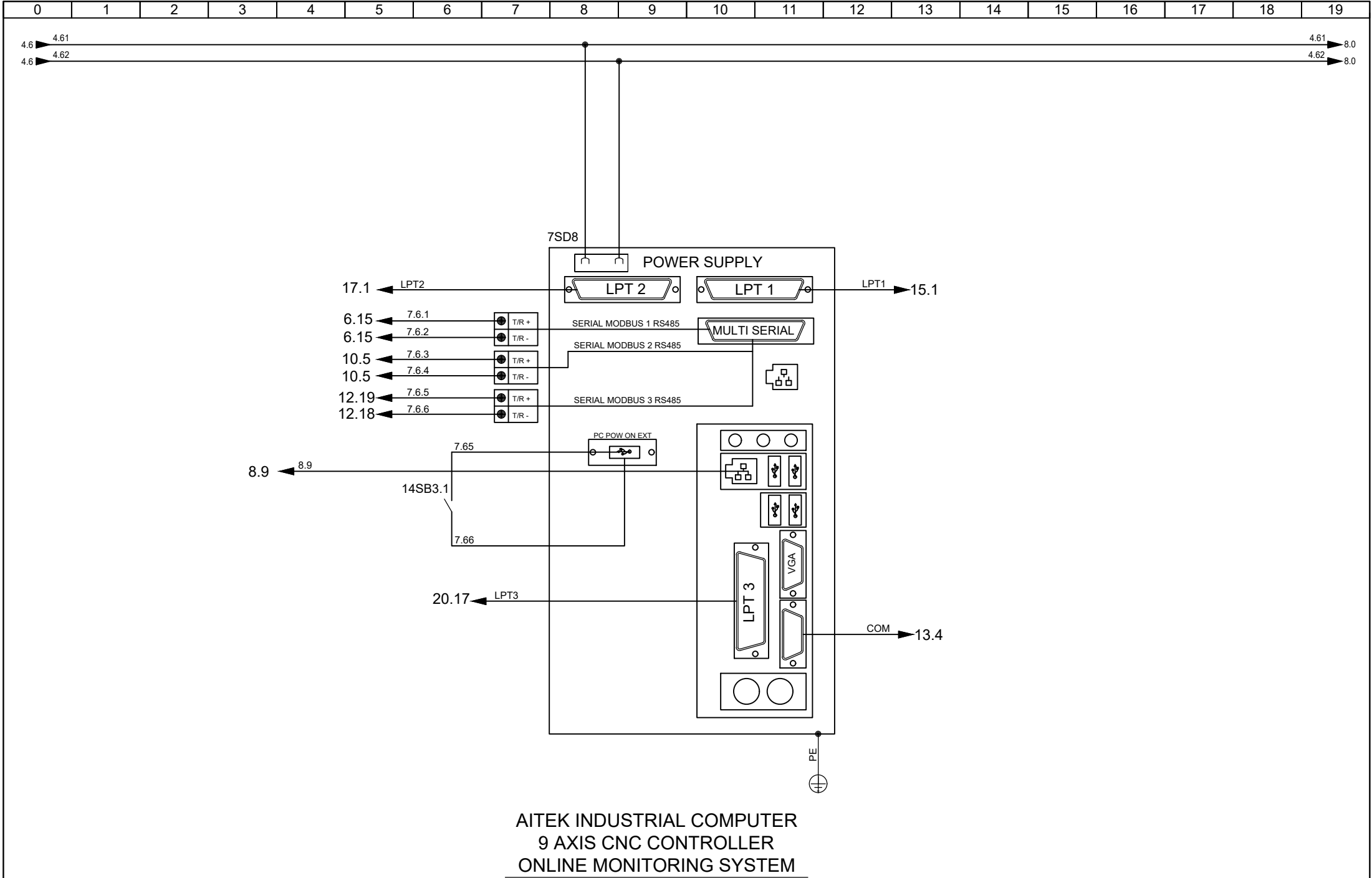


VACUUM PUMP
MOTOR

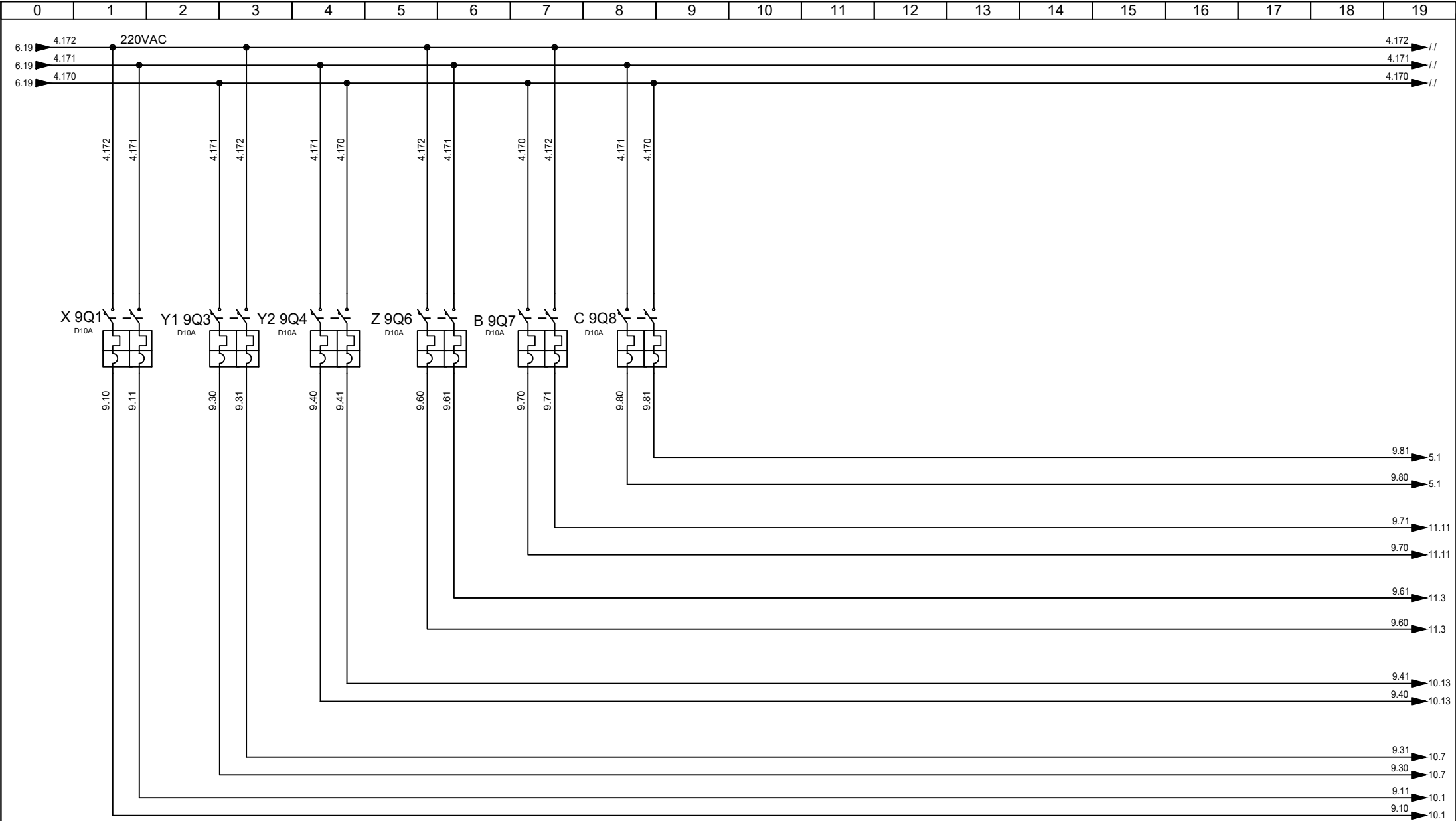
INVERTER FILTER

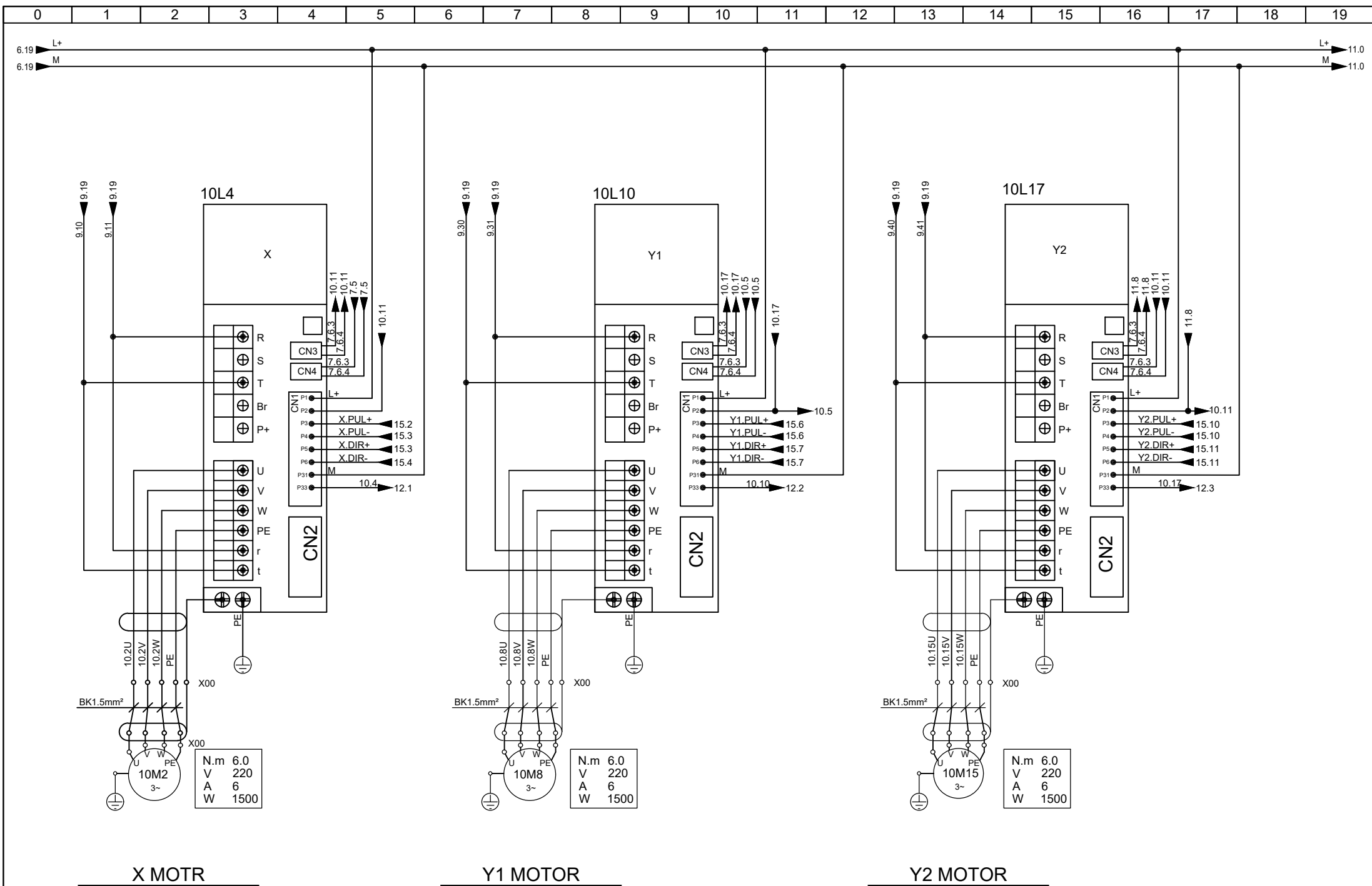
SPINDLE MOTOR

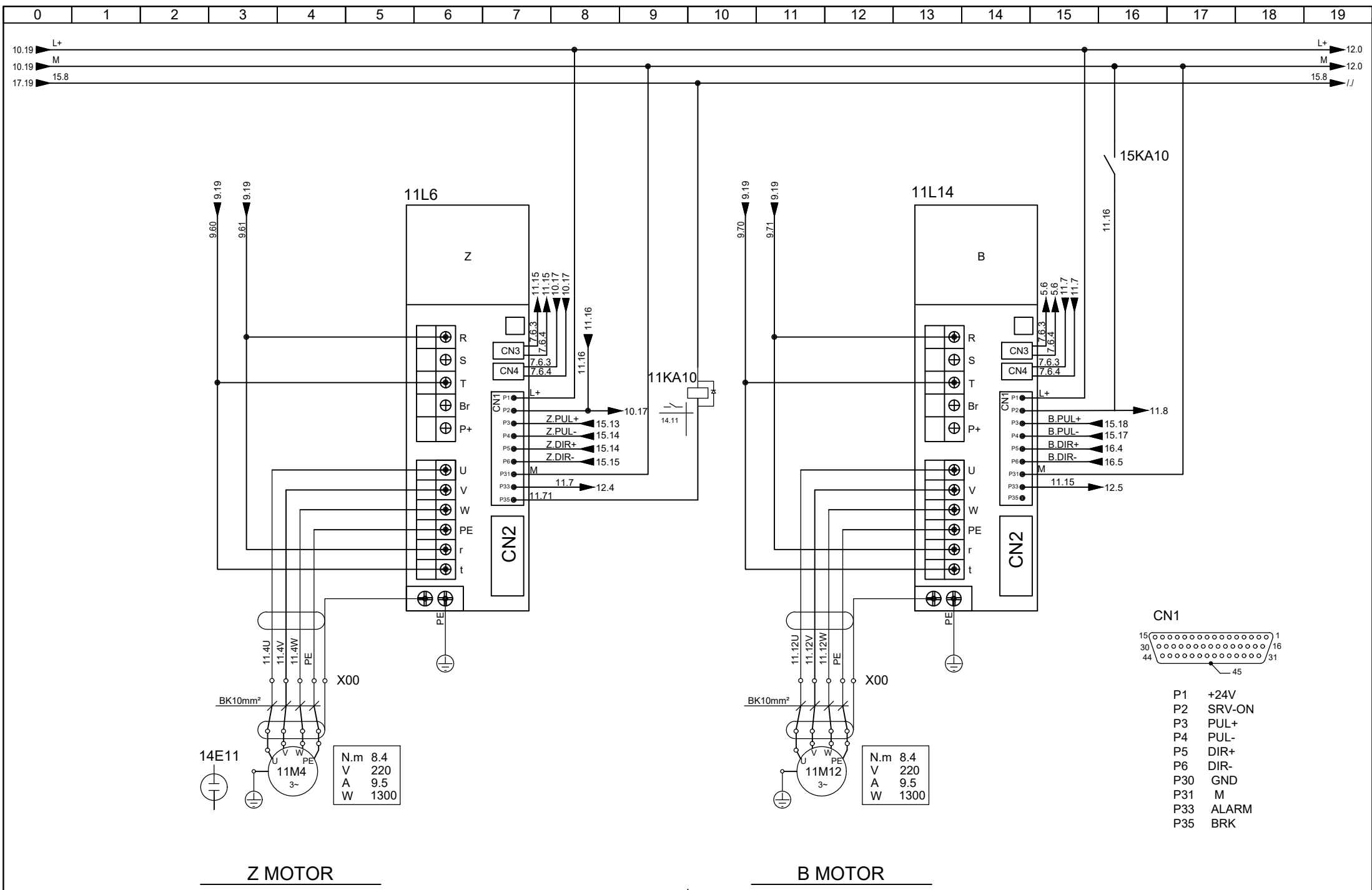
BRAKING UNIT

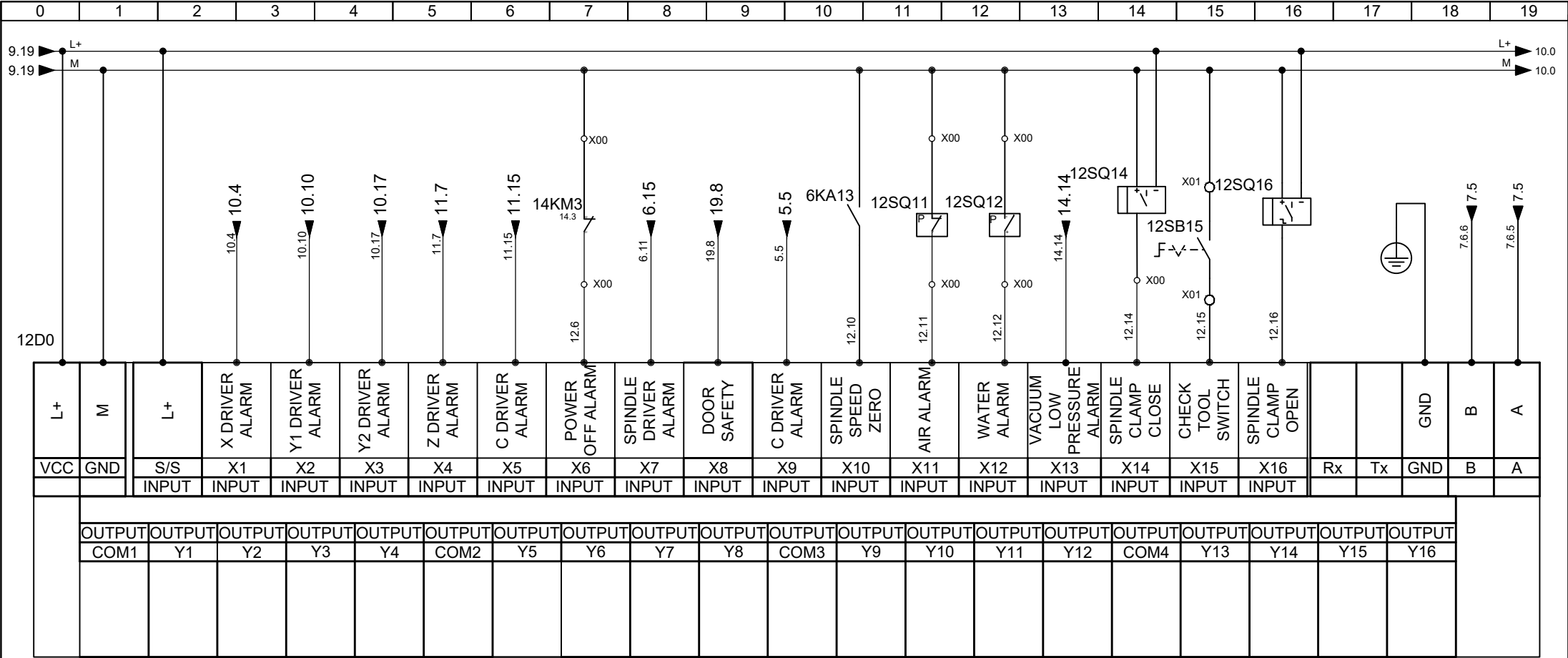


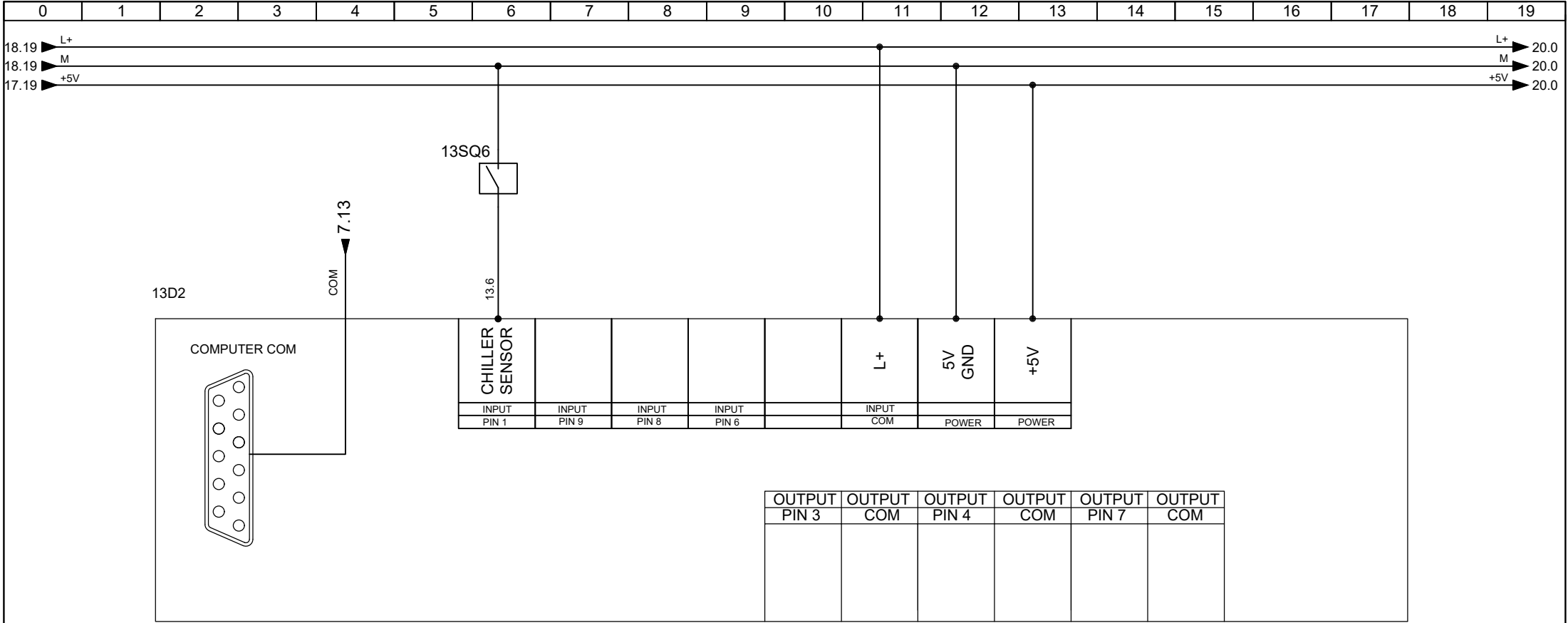
AITEK INDUSTRIAL COMPUTER
9 AXIS CNC CONTROLLER
ONLINE MONITORING SYSTEM

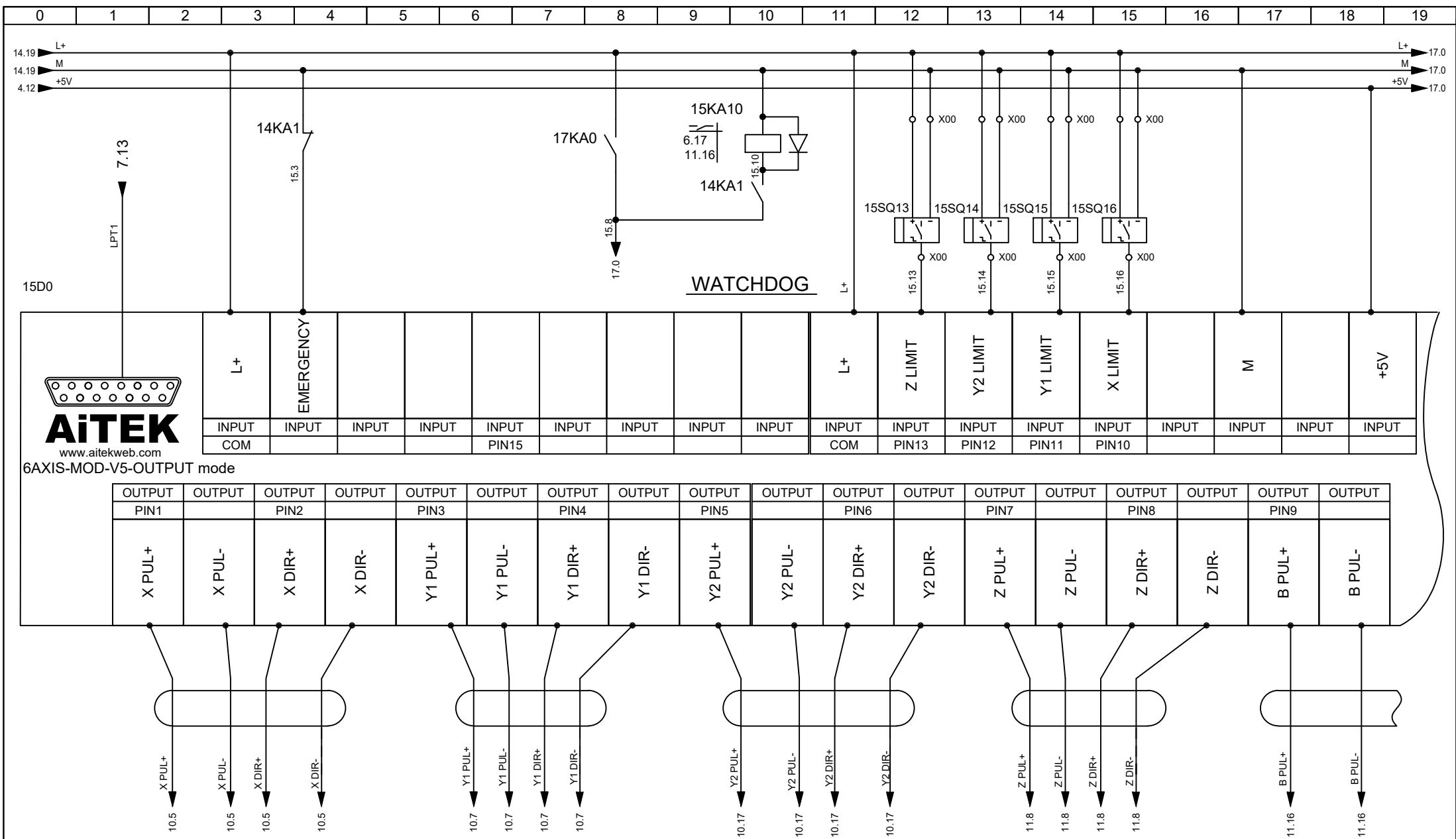




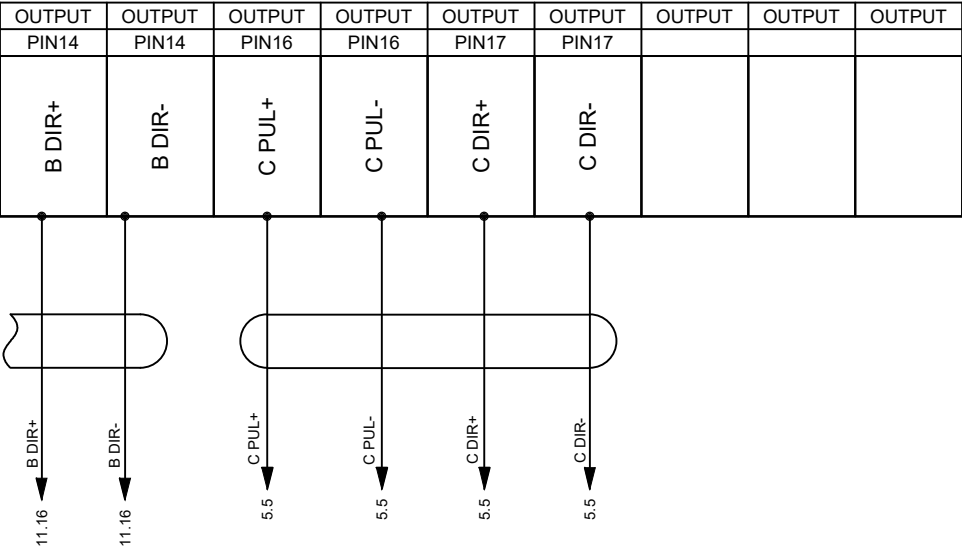






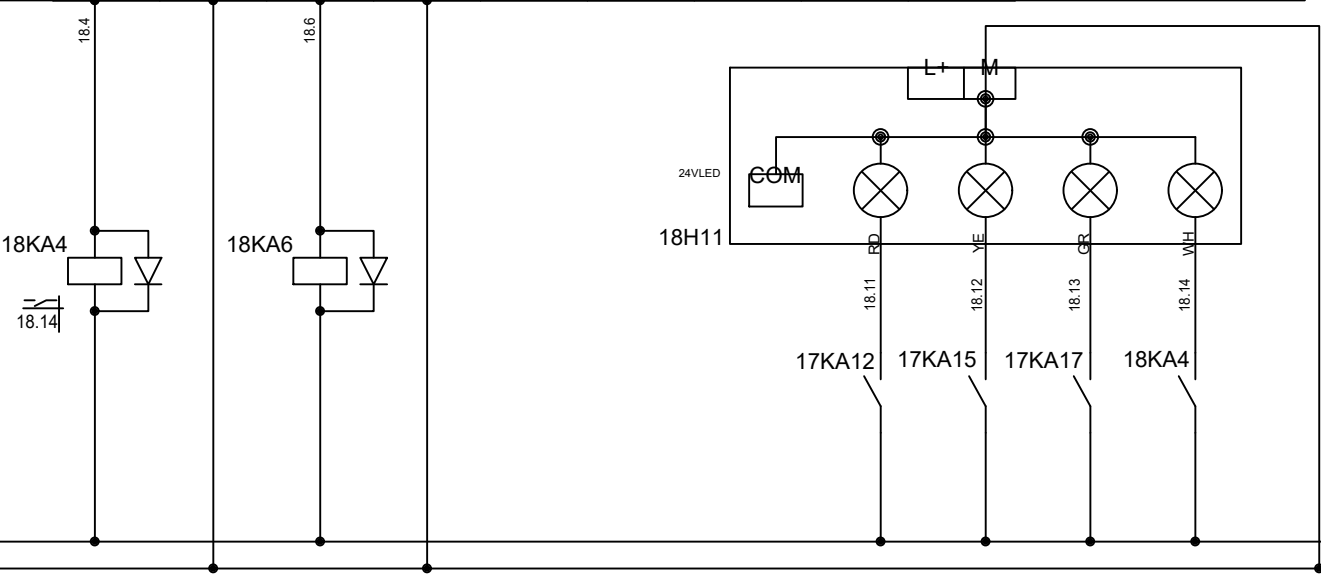


15D0

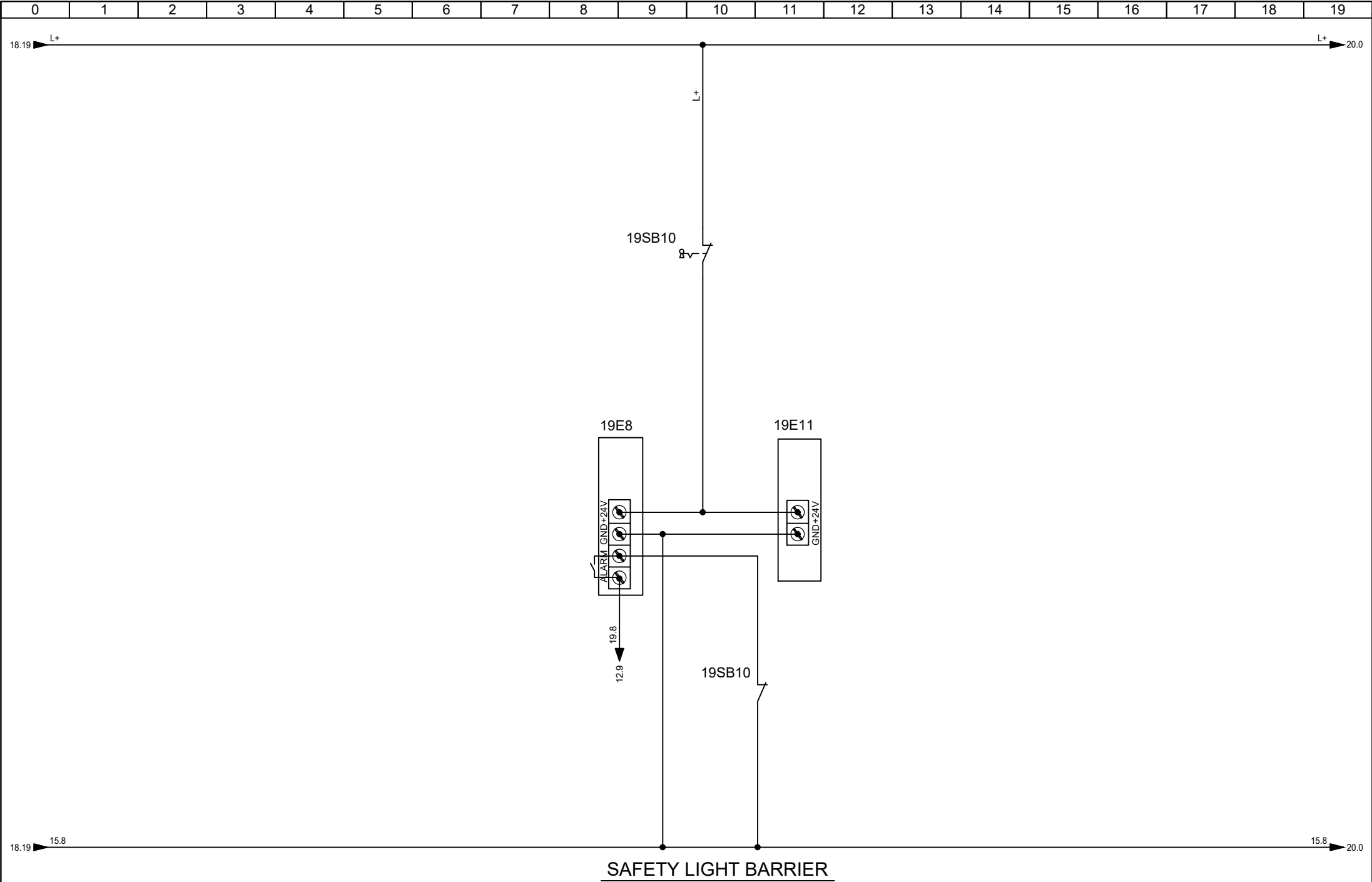


15D0

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



ALARM LAMP



19SB10

19SB10

19SB10

19SB10

19SB10

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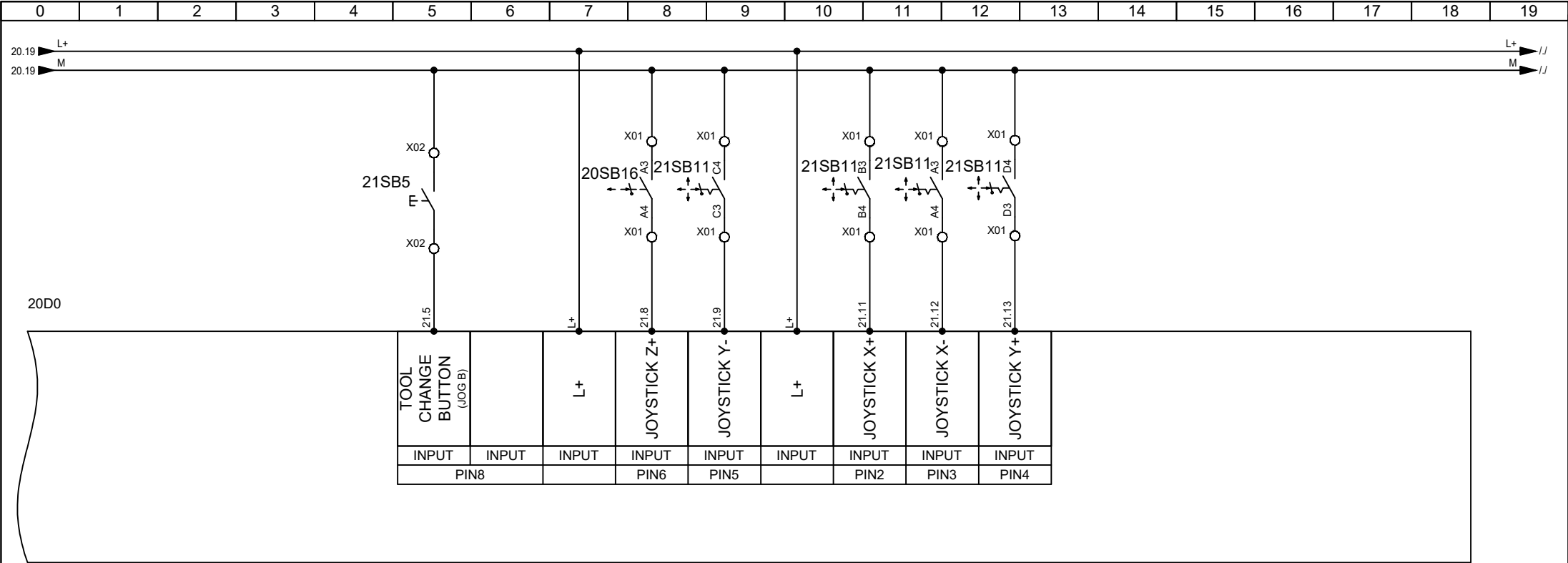
19SB10

19SB10

19SB10

19SB10

19SB1

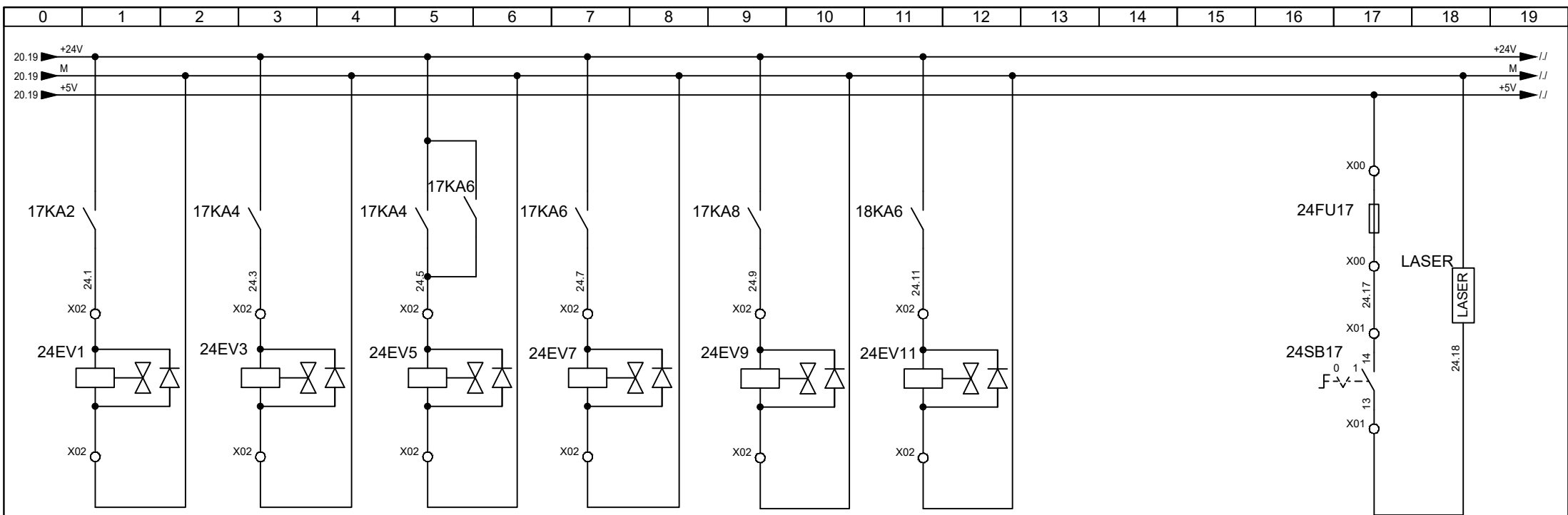


0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

AitalMac www.aitalmac.com	Designed By : ZLJ	Checked By :	Trimness By :	Description :
	Machine : KT38 2019	Date: 07.25.2022	Revision: KT38-220601	Approved By : Pag. 22 Next. 23

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: 07.25.2022		Revision: KT38-220601		Approved By :		Pag. 23	Next. 24



SPINDLE
MAKE ZERO

+0.3°

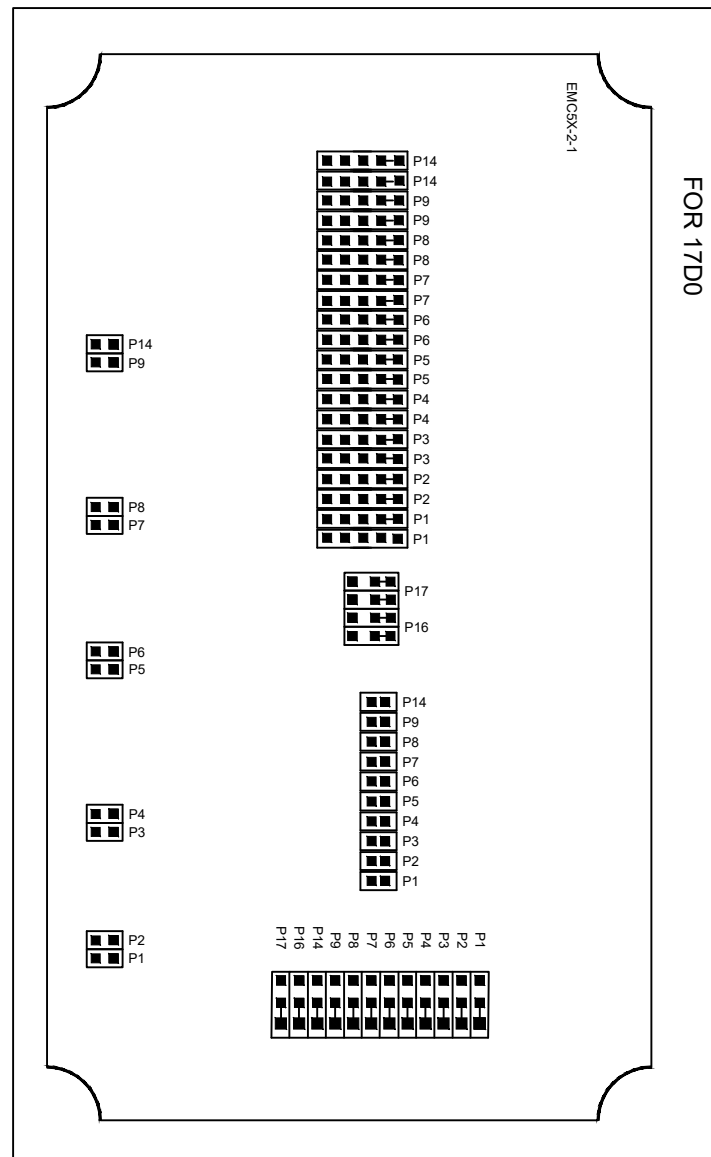
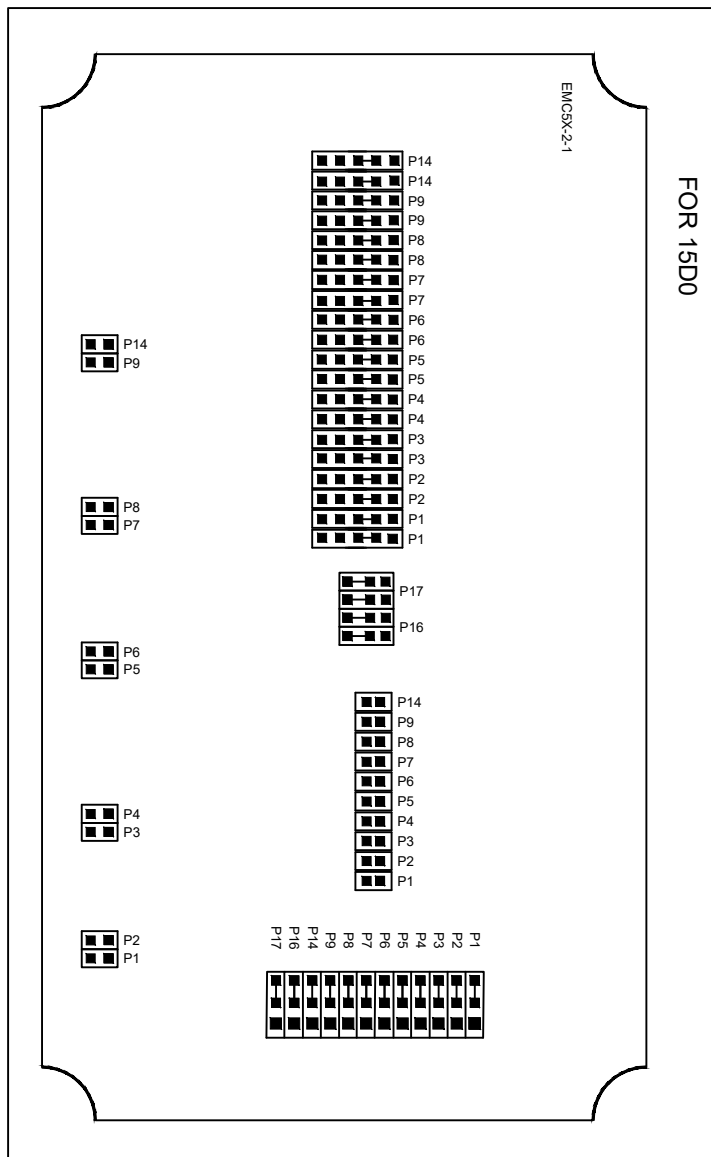
0°

-0.3°

TABLE PROBE

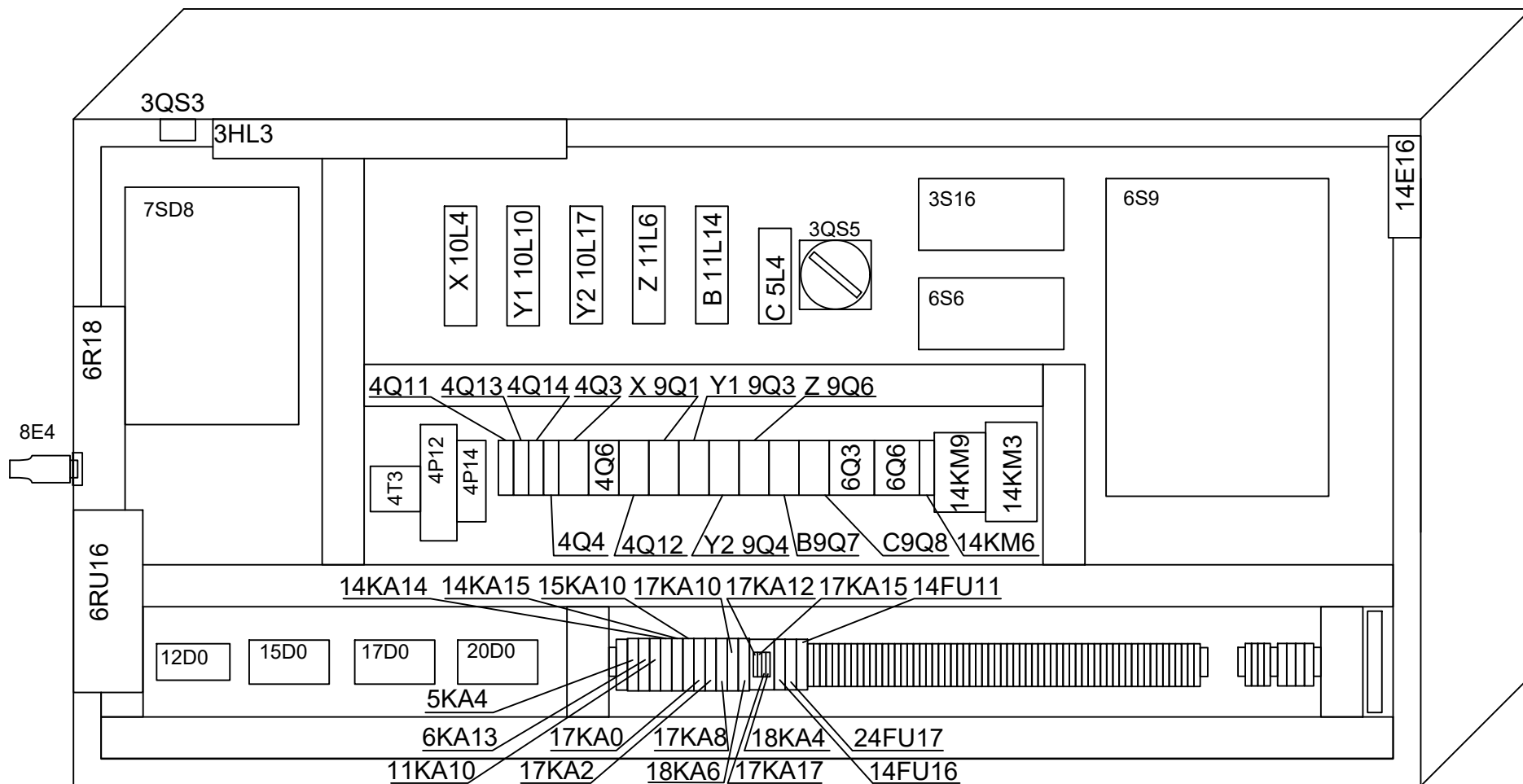
SPINDLE SEAL

LASER SWITCH

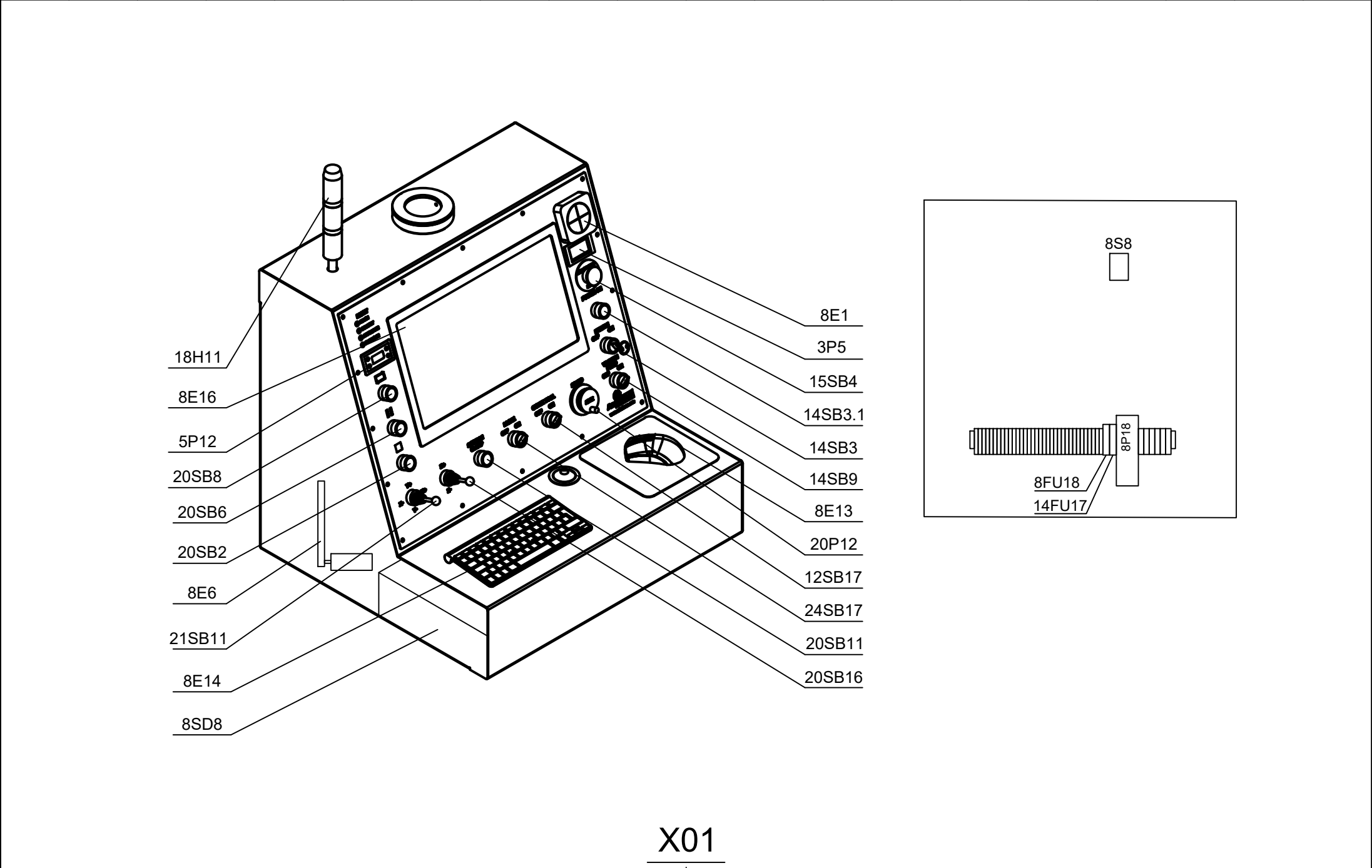


OUTPUT CONTROL CARD JUMPERS SETTINGS

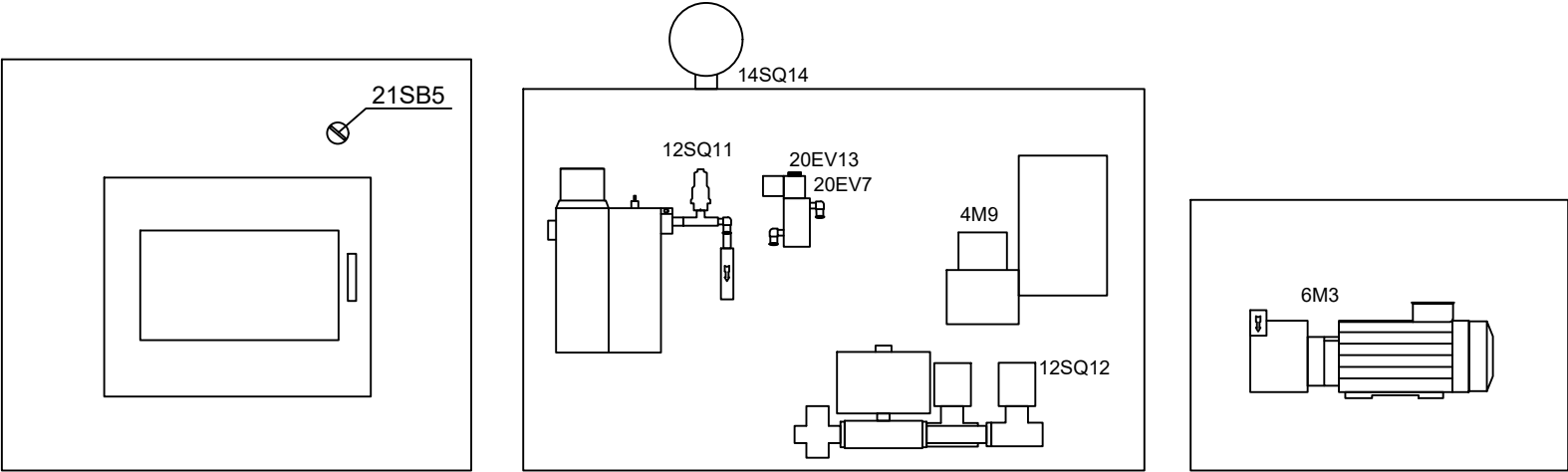
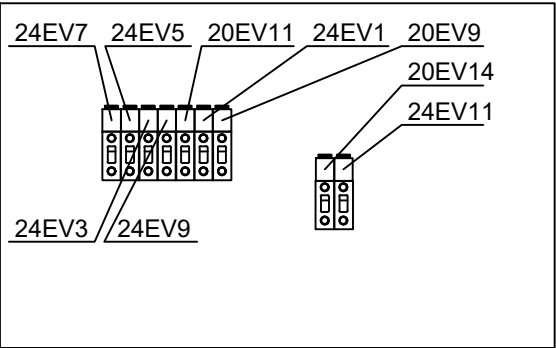
SECOND OUTPUT CONTROL CARD JUMPERS SETTINGS



X00



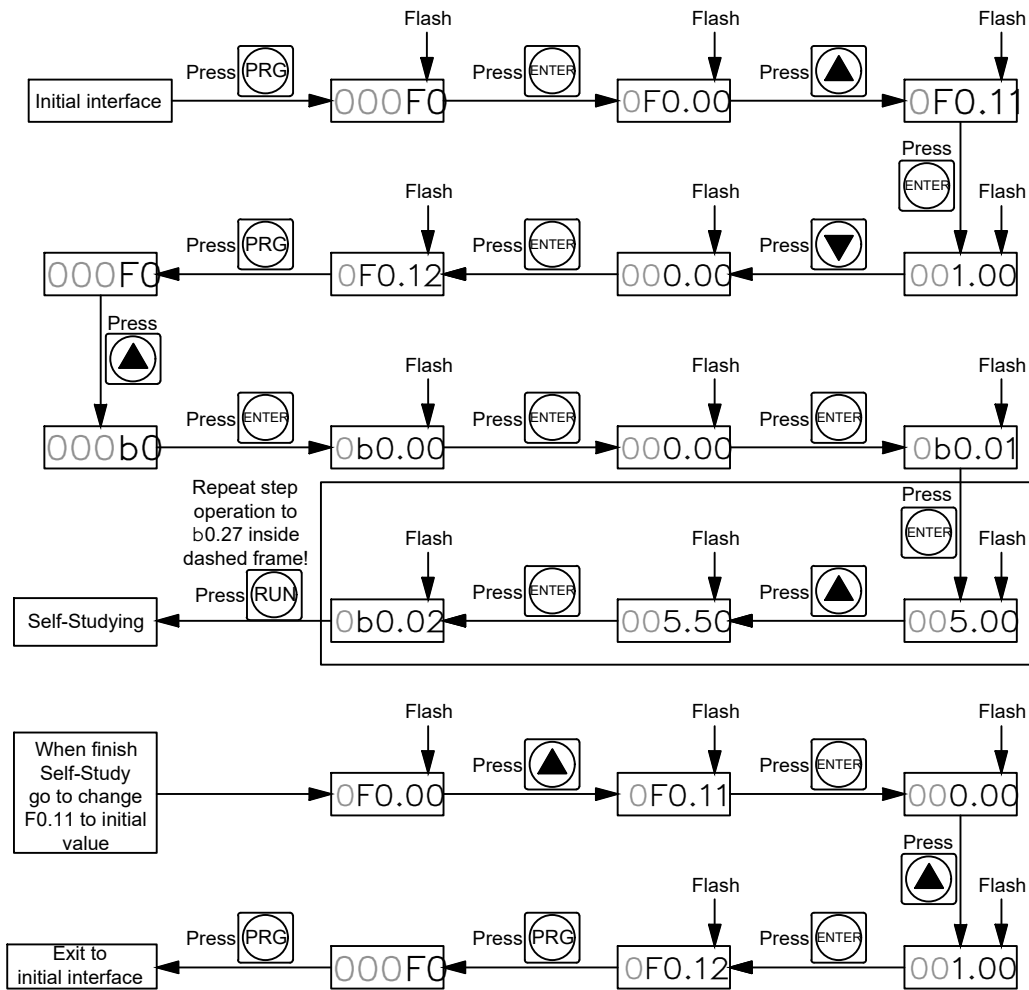
X01



X02

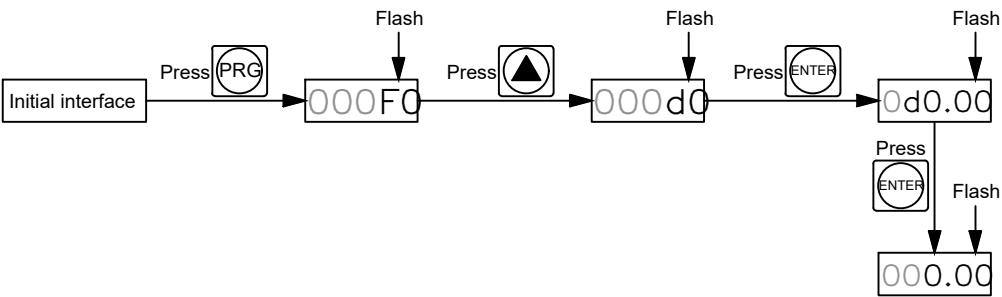
Motor Self-Study

F0.11=0 b0.03=50
b0.00=0 b0.04=60
b0.01=13 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	PARAMETER NAME	RANGE	DEFAULT	UNITS
F0.00	Motor control mode	0,1,2	2	
F0.01	Keyboard set frequency	0.00Hz~F0.19(MAX)	1000	Hz
F0.02	Frequency command resolution	1:0.1Hz,2:0.01Hz	1	
F0.03	Frequency source master setting	0-10	9	
F0.04	Frequency source auxiliary setting	0-10	0	
F0.11	Command source selection	0,1,2,3,4	1	
F0.13	Acceleration time 1	0.0s~6500s	15	
F0.14	Deceleration time 1	0.0s~6500s	35	
F0.18	Carrier Frequency	0.5k~16k	10k	Hz
F0.19	Maximum output frequency	50.00Hz~3200.00Hz	1000.00	Hz
F1.04	DI5 terminal function selection	0-51	30	
F2.04		0-40	23	
F9.00	Baud rate	0-9	5	9600BPS
F9.01	data format	0-3	3	(8-N-1)
F9.02	This unit address	1-247	6	
F9.03	Response delay	0-20ms	5	
F9.04	Reserved	--	0	
F9.05	Data transfer format selection	0, 1	1	MODBUS
F9.06	Communication read current resolution	0,1	1	0.1A
F9.07	Communication card type	0,1,2,3	0	MODBUS

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	14	15	16	17	18	19
AitalMac www.aitalmac.com				Designed By : ZLJ			Checked By :			Trimness By :			Description :						
Machine : KT38 2019								Date: 07.25.2022		Revision: KT38-220601				Approved By :			Pag. 31	Next. 32	

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

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	Machine : KT38 2019	Date: 07.25.2022	Revision: KT38-220601	Approved By :	Pag. 32	Next. 33			

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: 07.25.2022	Revision: KT38-220601	Approved By : Pag. 34 Next. 35

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: 07.25.2022	Revision: KT38-220601	Approved By : Pag. 34 Next. 35

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	5M2	C Motor	Leadshine	ACM6004M2F-B0-L-SS MS11 400W
5	C 5L4	C Servo Drive	Leadshine	L7-400W
5	5Q4	Terminal Relay	OMRON	G2R-2-SND(S) DC24V+P2RF-08-E
5	5P12	Thermometer	QUASON	XY-WT01
5	5E15	Industrial Chiller	TEYU	CW6000AN AC1P220V

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	POWTRAN	PI9230 015G2 15KW220V
6	6M11	Spindle Motor	AITALMAC	210803 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			
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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	I PSI-12NO2B-L60mm(NPN NO 2mm 200mA)
15	15SQ14	Y2 Limit Sensor	IBEST	I PSI-12NO2B-L60mm(NPN NO 2mm 200mA)
15	15SQ15	Y1 Limit Sensor	IBEST	I PSI-12NO2B-L60mm(NPN NO 2mm 200mA)
15	15SQ16	X Limit Sensor	IBEST	I PSI-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	I PSI-12NO2B-L60mm(NPN NO 2mm 200mA)
17	17SQ16	B Limit Sensor	IBEST	I PSI-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	19E8	Safety Door	ALX	ABI10-482
19	19SB10	Safety Door Switch	RENY	RASNK-2
19	19E11	Safety Door	ALX	ABI10-482
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	24FU17	Fuse	CHE	FS-101 DC24V 2A
24	24SB17	Laser Switch	RENY	RBSNK-2
24	LASER	LASER	--	16mm