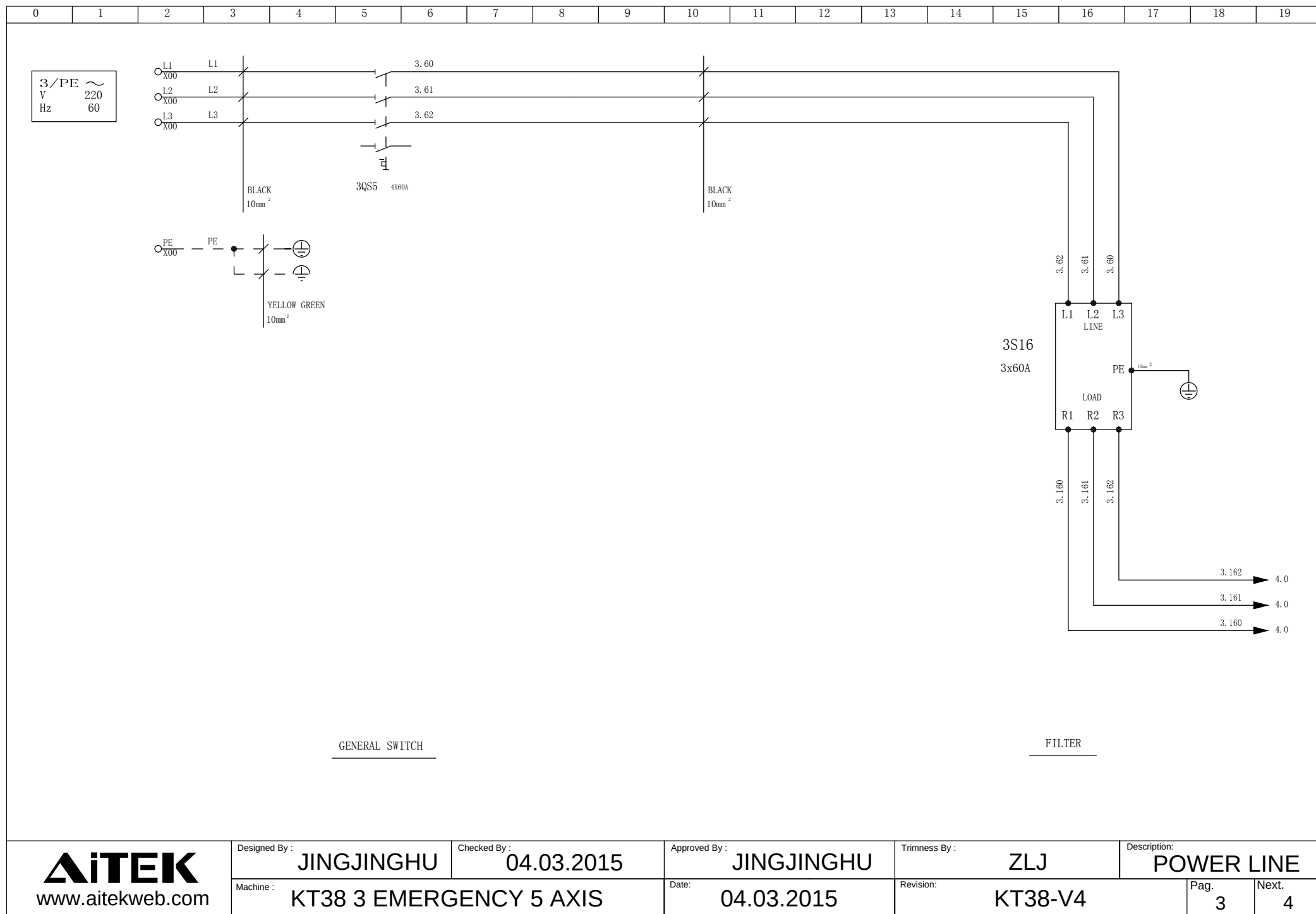
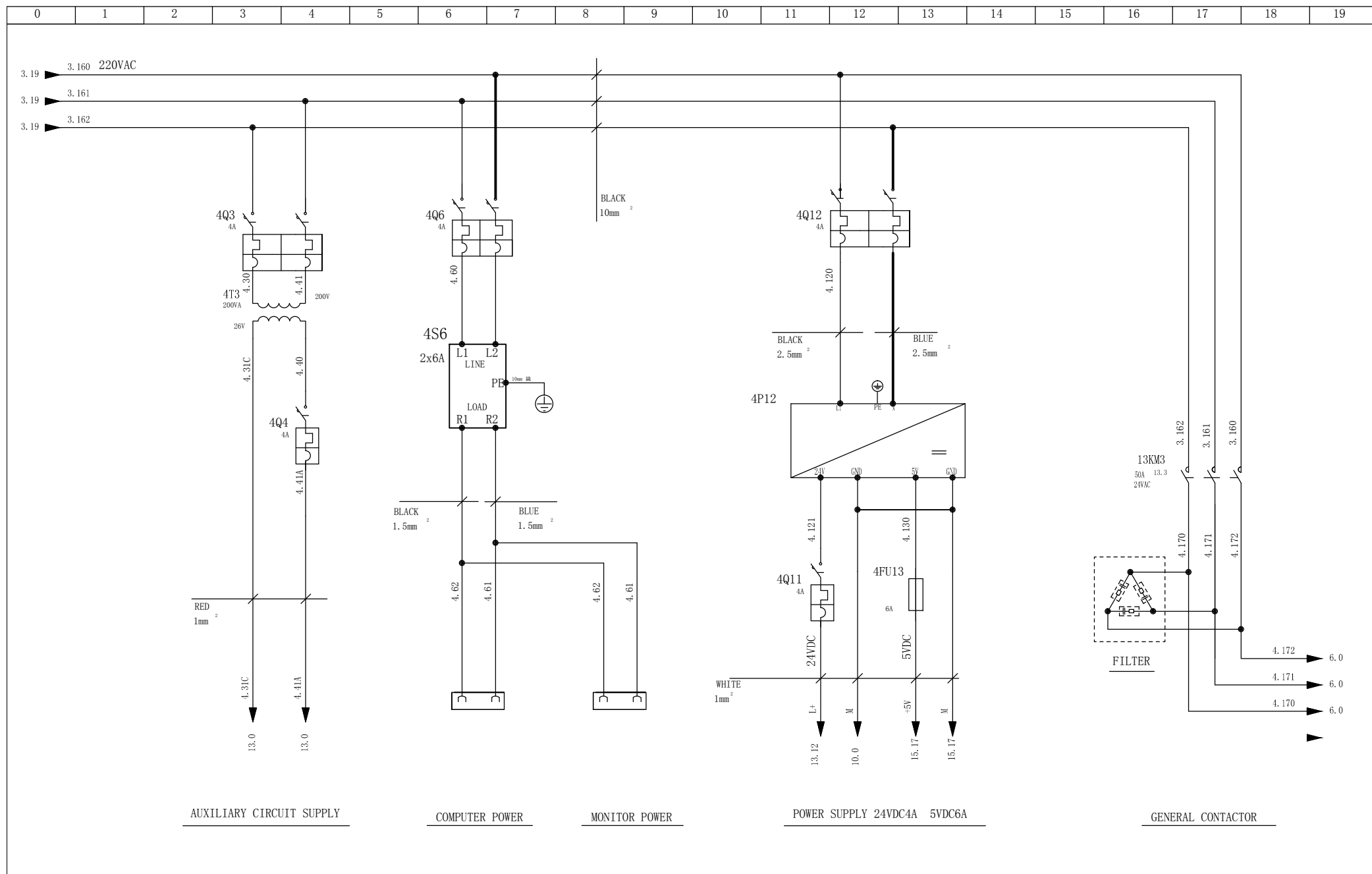


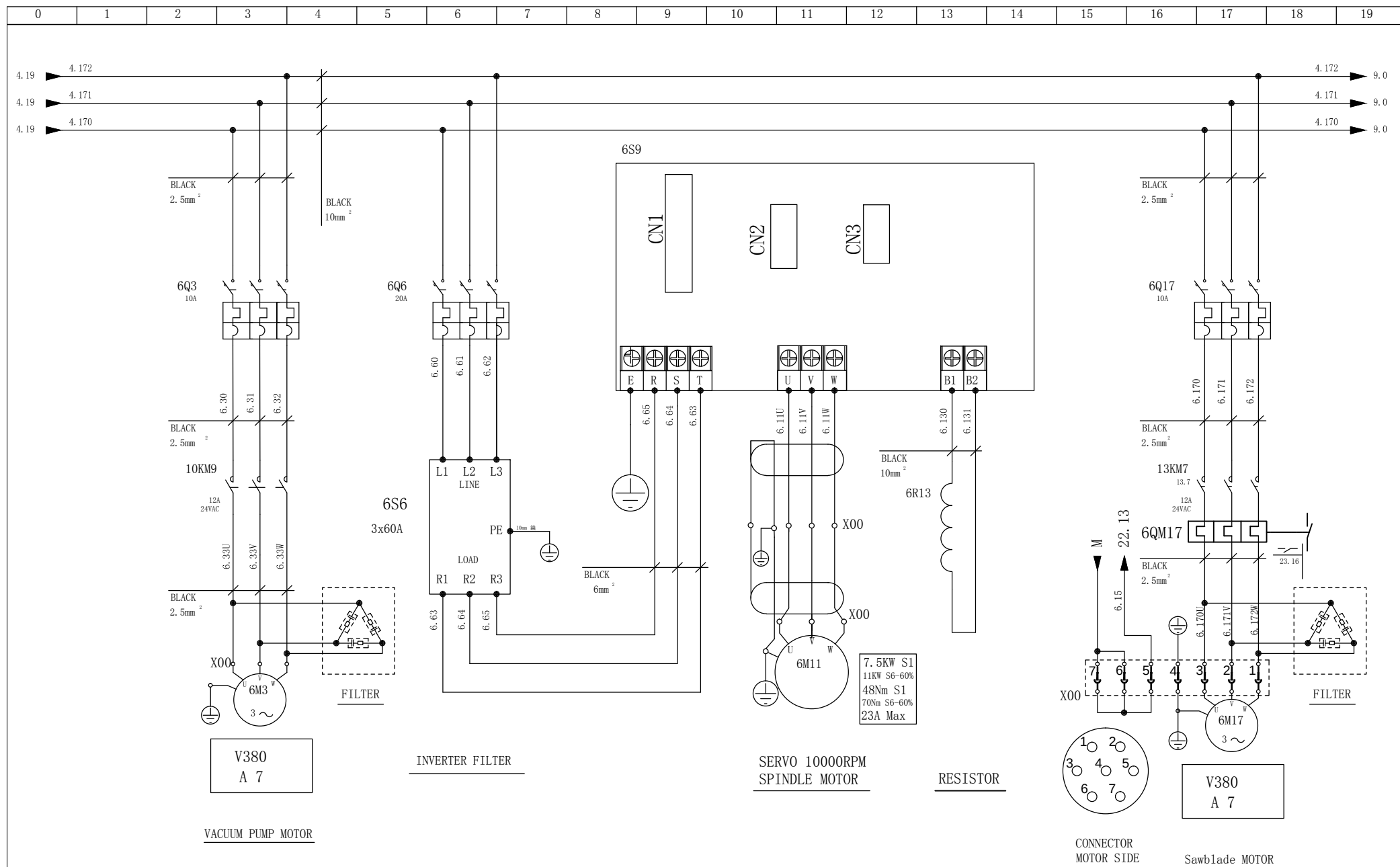
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 001 Heng Sheng Road , Gao Chun Economic Development Zone , NANJING,211300 P.R.CHINA										LOCATION SYMBOLS ☐ Components on the door ☐ Components inside the cubicle (usually omitted) ☒ Machine components (usually omitted)				COMPONENTS DESIGNATION A Complexes, assemblies(amplifiers, regulators, analog boards) B Transducer C Condensers D Logical devices E Component not in this list F Sefety device G Generators, feeders H Signalling devices K Relays, contactors L Inductor M Motors N Analog integrated circuits P Measuring instruments Q Switches R Resistors S Control devices T Transformers U Modulators converters V Rectifiers, semiconductors W Conductors X Terminal wire clamps, connectors Y Electricity actuating devices Z Impedance adapters, equalizers																																						
COMPANY																																																				
AITEK CO.,LTD																																																				
MACHINE					MAIN POWER SUPPLY																																															
CNC KT38					VOLT. 220 FREQ. 60																																															
WIRING DIAGRAM					CUBICLE DIMENSION																																															
KT38-150205					L (mm) 800 H (mm) 1800 W (mm) 500																																															
CONDUCTORS DESIGNATION <table border="1"> <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>1,5 mm²</td> </tr> <tr> <td>BLUE</td> <td>neutral wire</td> <td>1,5 mm²</td> </tr> <tr> <td>RED</td> <td>A.C. auxiliary circuit</td> <td>1,5 mm²</td> </tr> <tr> <td>BLUE</td> <td>D.C. auxiliary circuit</td> <td>1,5 mm²</td> </tr> <tr> <td>WHITE or GRAY</td> <td>D.C. auxiliary circuit (with blue neutral wire)</td> <td>1,5 mm²</td> </tr> <tr> <td>ORANGE</td> <td>outside circuit</td> <td>2,5 mm²</td> </tr> <tr> <td>YELLOW-GREEN</td> <td>protection earth</td> <td>1,5 mm²</td> </tr> <tr> <td>SCREENED 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>0,75mm₂(0,5mm₂l<2A)</td> </tr> </tbody> </table>										COLOR	FUNCTION	MINIMUM SECTION	BLACK	power circuit A.C./D.C.	1,5 mm ²	BLUE	neutral wire	1,5 mm ²	RED	A.C. auxiliary circuit	1,5 mm ²	BLUE	D.C. auxiliary circuit	1,5 mm ²	WHITE or GRAY	D.C. auxiliary circuit (with blue neutral wire)	1,5 mm ²	ORANGE	outside circuit	2,5 mm ²	YELLOW-GREEN	protection earth	1,5 mm ²	SCREENED CABLE	reference - signal	0,75 mm ²	RED + / BLUE -	thermocouples	COMPENSATED CABLE		PLC circuit	0,75mm ₂ (0,5mm ₂ l<2A)	COLORS WH White GN Verde YE Yellow BU Blue RD Red BK Black OG Orange									
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	PLC circuit	0,75mm ₂ (0,5mm ₂ l<2A)																																																		
										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.																																																				
 www.aitekweb.com					Designed By : JINGJINGHU					Checked By : 04.03.2015					Approved By : JINGJINGHU					Trimness By : ZLJ					Description:																											
					Machine : KT38 3 EMERGENCY 5 AXIS										Date: 04.03.2015					Revision: KT38-V4					Pag. 1		Next. 2																									

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COMPONENT REFERENCE 012345 1SB2 2.3 1SB2 1.2 FOGLIO 1 FOGLIO 2										COMPONENT NAME/COIL-CONTACT POSITION 012345 0KA0 1 2KA3 2.3 2KA3 1.5 FOGLIO 1 FOGLIO 2									
SIGNALS 012345 1L1 1L2 1L3 2.2 2.2 2.2 1.4 1.4 1.4 1L1 1L2 1L3 FOGLIO 1 FOGLIO 2										WIRE NUMBER 012345 0...9 030 FOGLIO 1									
AiTEK www.aitekweb.com Designed By : JINGJINGHU Machine : KT38 3 EMERGENCY 5 AXIS Checked By : 04.03.2015										Approved By : JINGJINGHU Date: 04.03.2015 Trimness By : ZLJ Revision: KT38-V4 Description: DESCRIPTION Pag. 2 Next. 3									

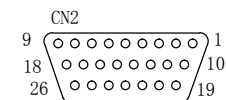
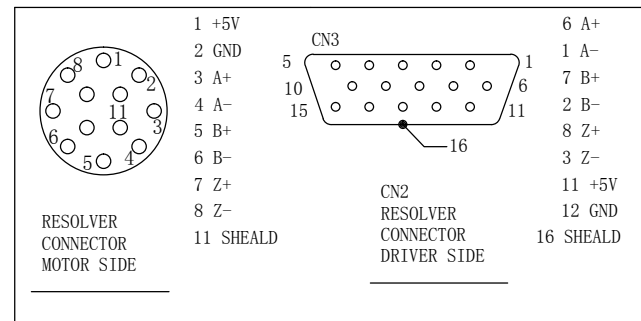
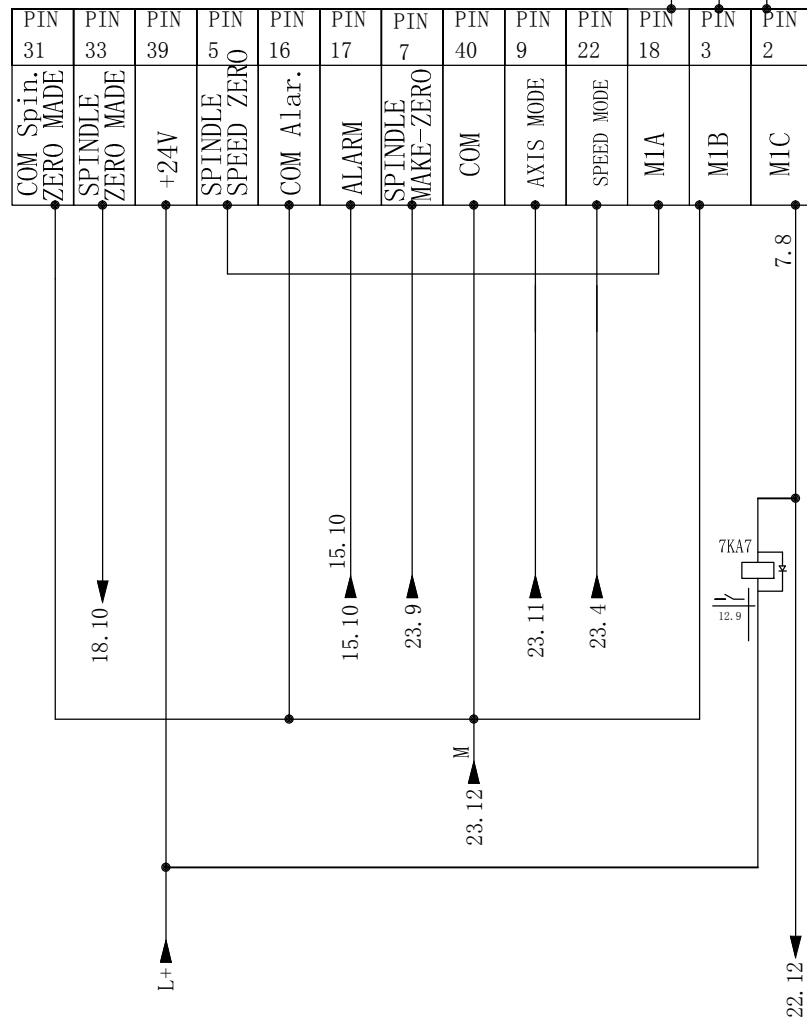
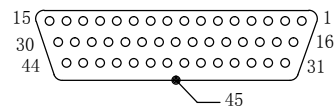




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 www.aitekweb.com			Designed By : JINGJINGHU			Checked By : 04.03.2015			Approved By : JINGJINGHU			Trimness By : ZLJ			Description:				
			Machine : KT38 3 EMERGENCY 5 AXIS						Date: 04.03.2015			Revision: KT38-V4				Pag. 5		Next. 6	

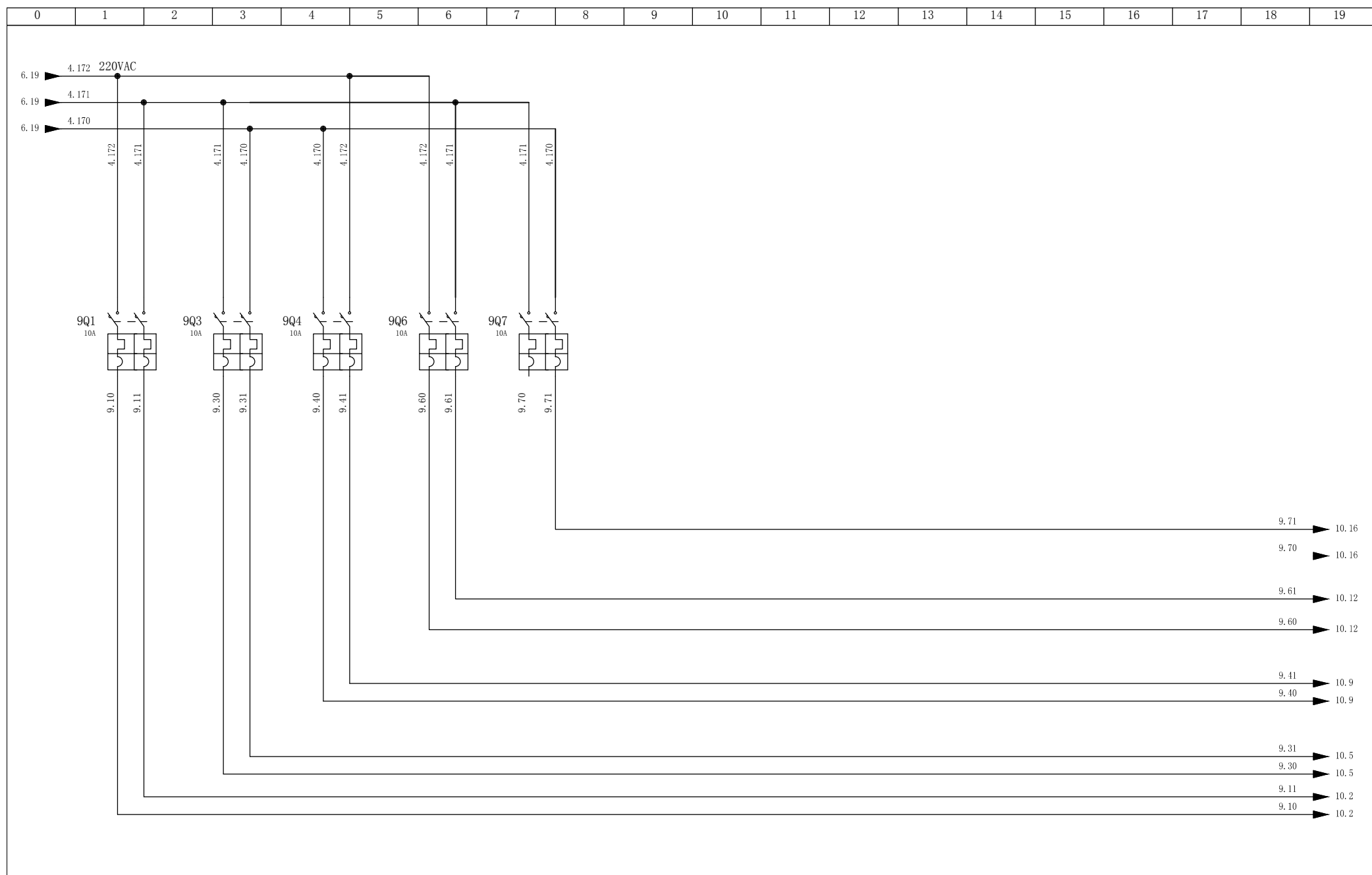


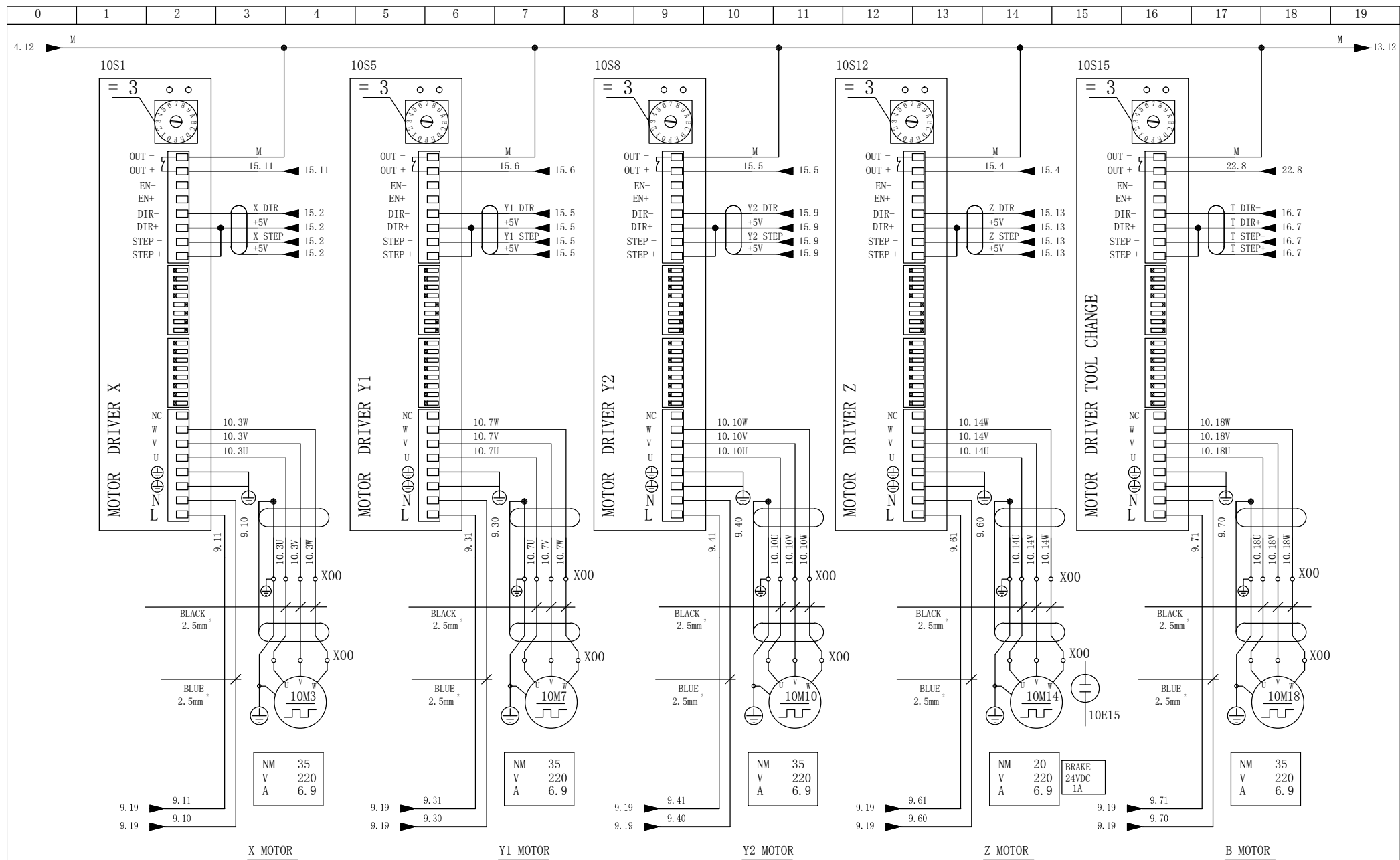
CN1



- 2 A+ SPINDLE PWM+
- 11 A- SPINDLE PWM-
- 4 B+ SPINDLE DIRECTION+
- 13 B- SPINDLE DIRECTION-
- 9 0A+ SPINDLE ENCODER OUT A+
- 18 0A- SPINDLE ENCODER OUT A-
- 17 0B+ SPINDLE ENCODER OUT B+
- 8 0B- SPINDLE ENCODER OUT B-
- 7 0Z+ SPINDLE ENCODER OUT Z+
- 16 0Z- SPINDLE ENCODER OUT Z-
- 27 SHEALD

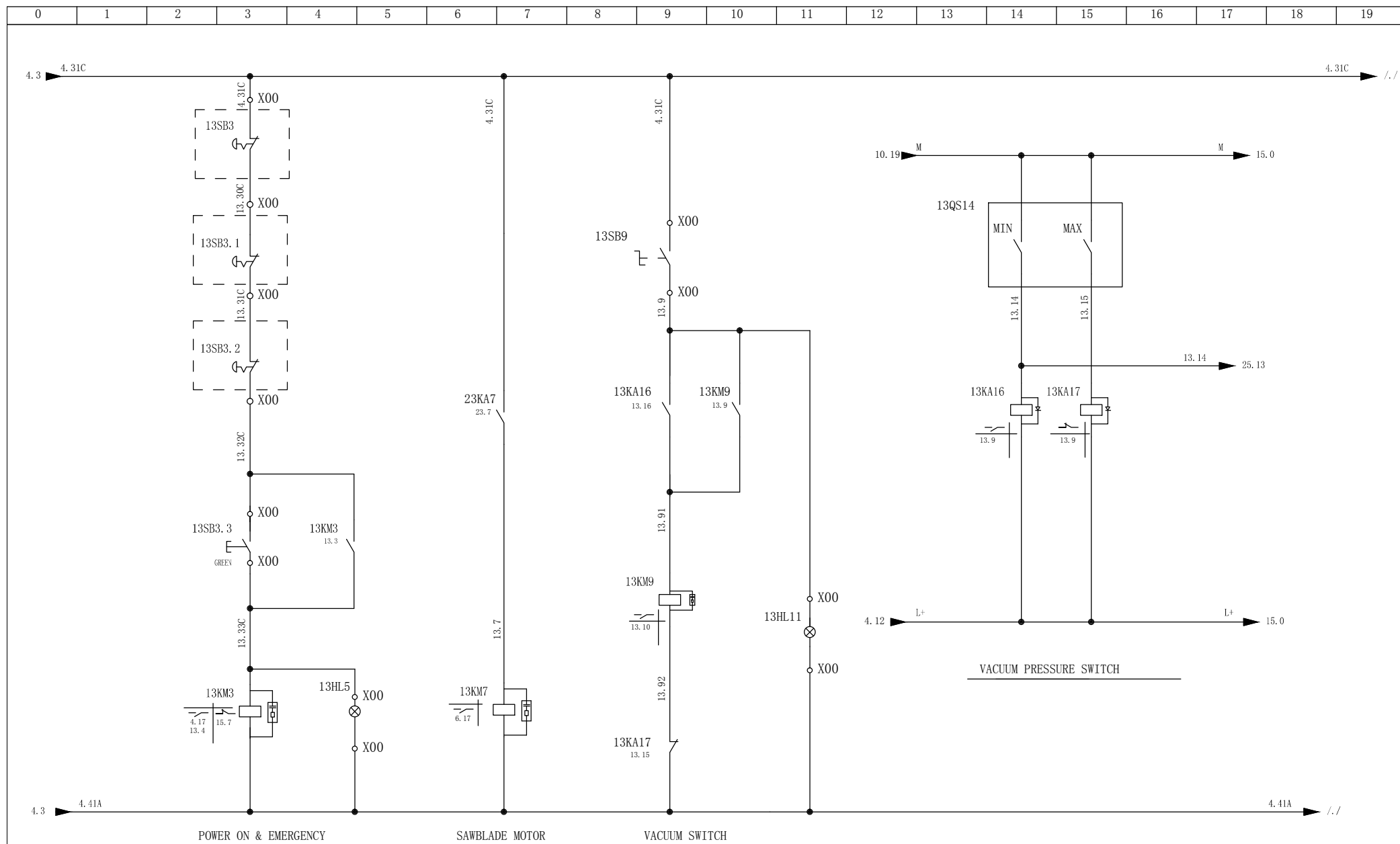
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			Machine : KT38 3 EMERGENCY 5 AXIS							Date: 04.03.2015			Revision: KT38-V4					Pag. 8		Next. 9			



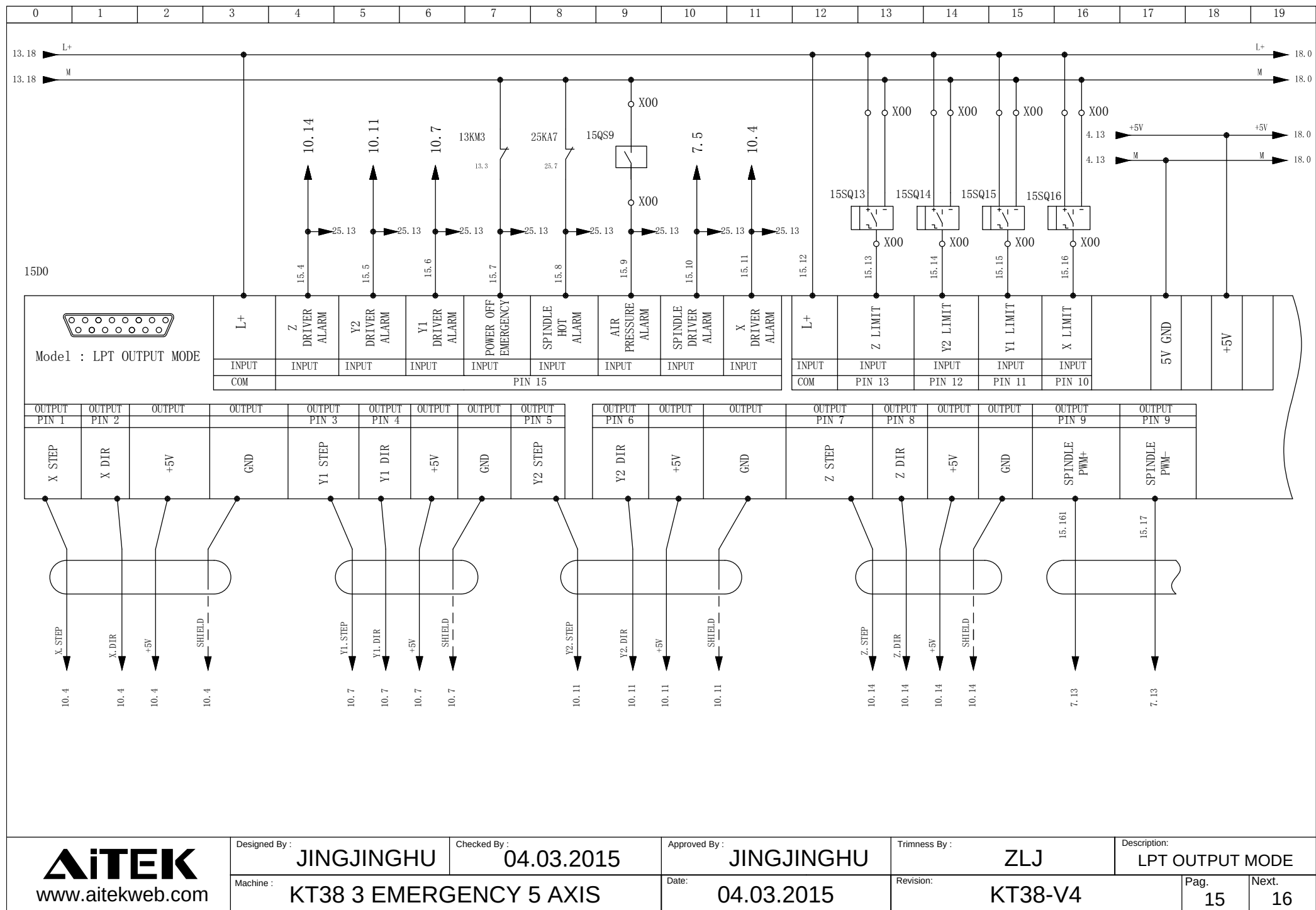


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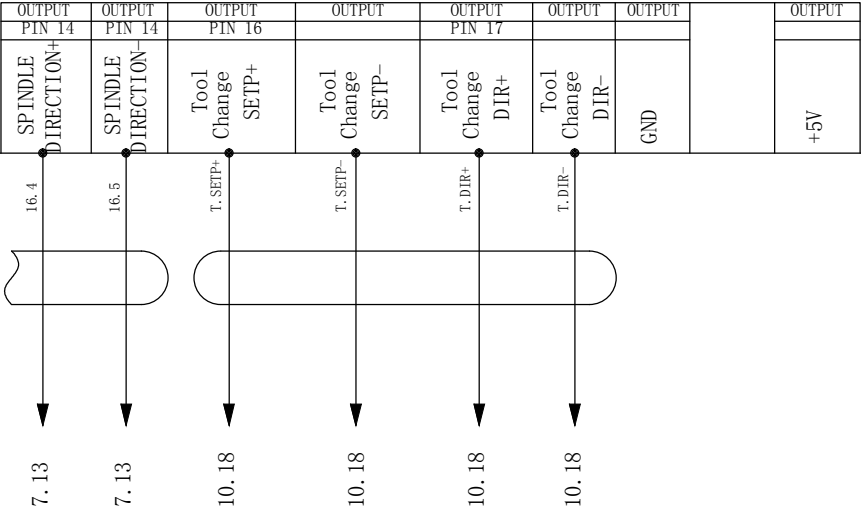
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			Machine : KT38 3 EMERGENCY 5 AXIS					Date: 04.03.2015			Revision: KT38-V4				Pag. 12	Next. 13			



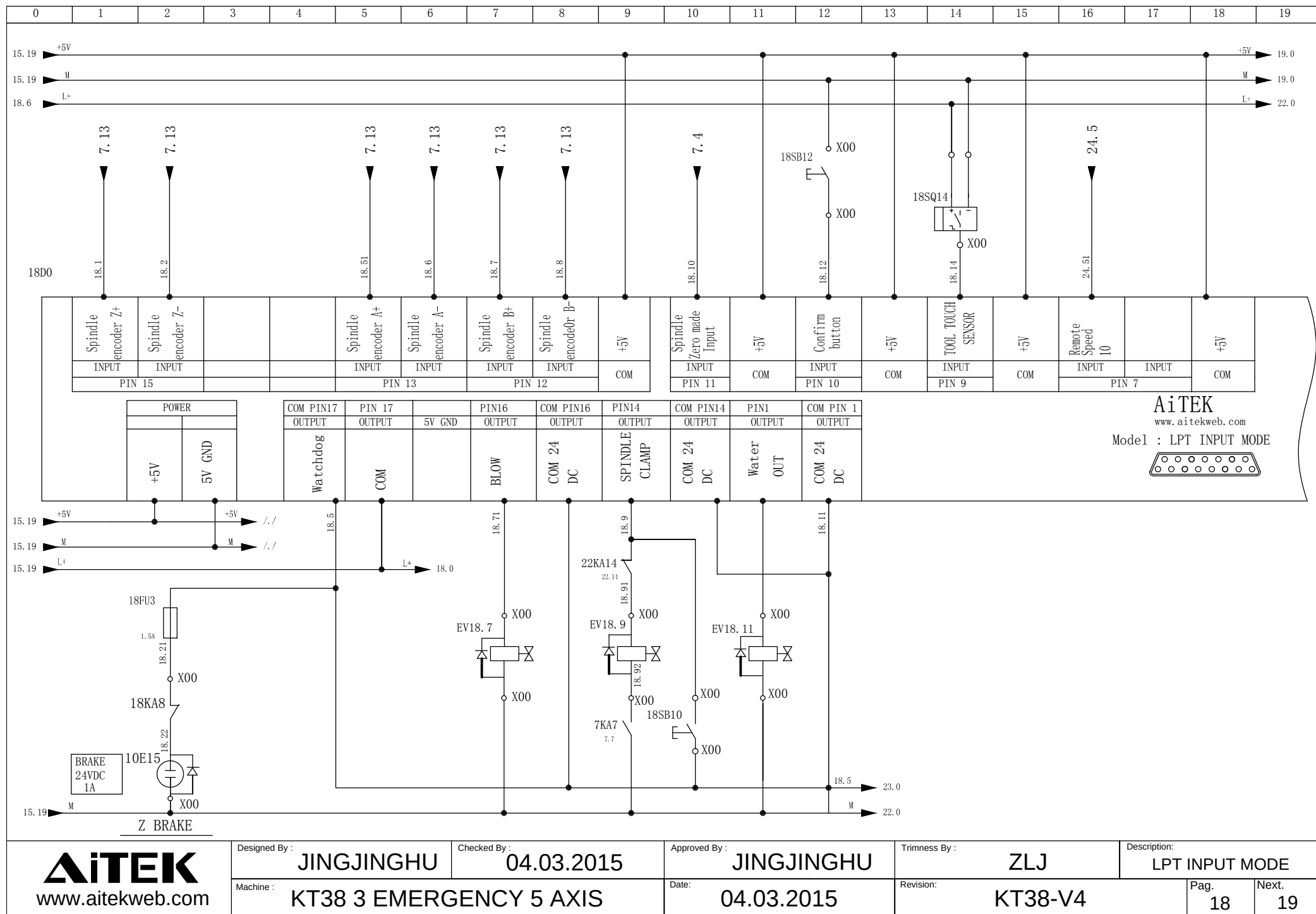
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			Machine : KT38 3 EMERGENCY 5 AXIS						Date: 04.03.2015			Revision: KT38-V4				Pag. 14		Next. 15	



15D0



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 www.aitekweb.com			Designed By : JINGJINGHU			Checked By : 04.03.2015			Approved By : JINGJINGHU			Trimness By : ZLJ			Description:				
			Machine : KT38 3 EMERGENCY 5 AXIS						Date: 04.03.2015			Revision: KT38-V4				Pag. 17		Next. 18	



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Designed By : **JINGJINGHU**

Machine : **KT38 3 EMERGENCY 5 AXIS**

Checked By : **04.03.2015**

Approved By : **JINGJINGHU**

Date: **04.03.2015**

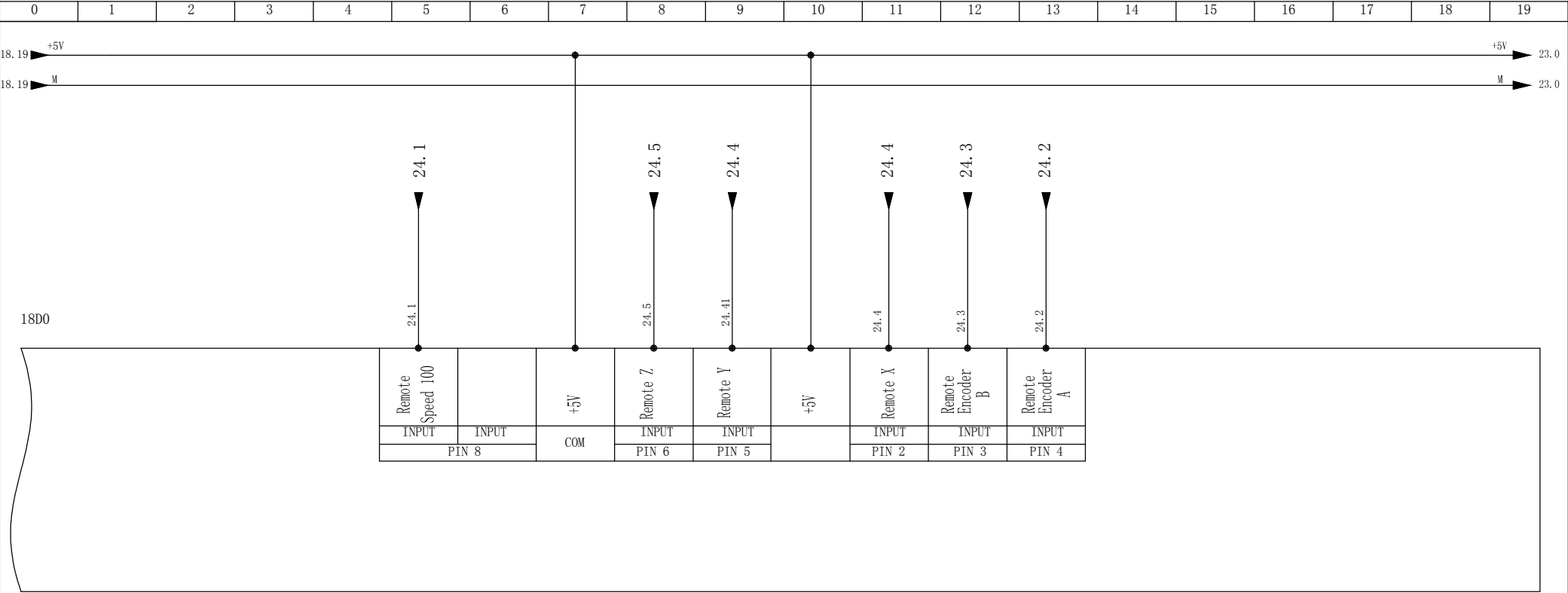
Trimness By : **ZLJ**

Revision: **KT38-V4**

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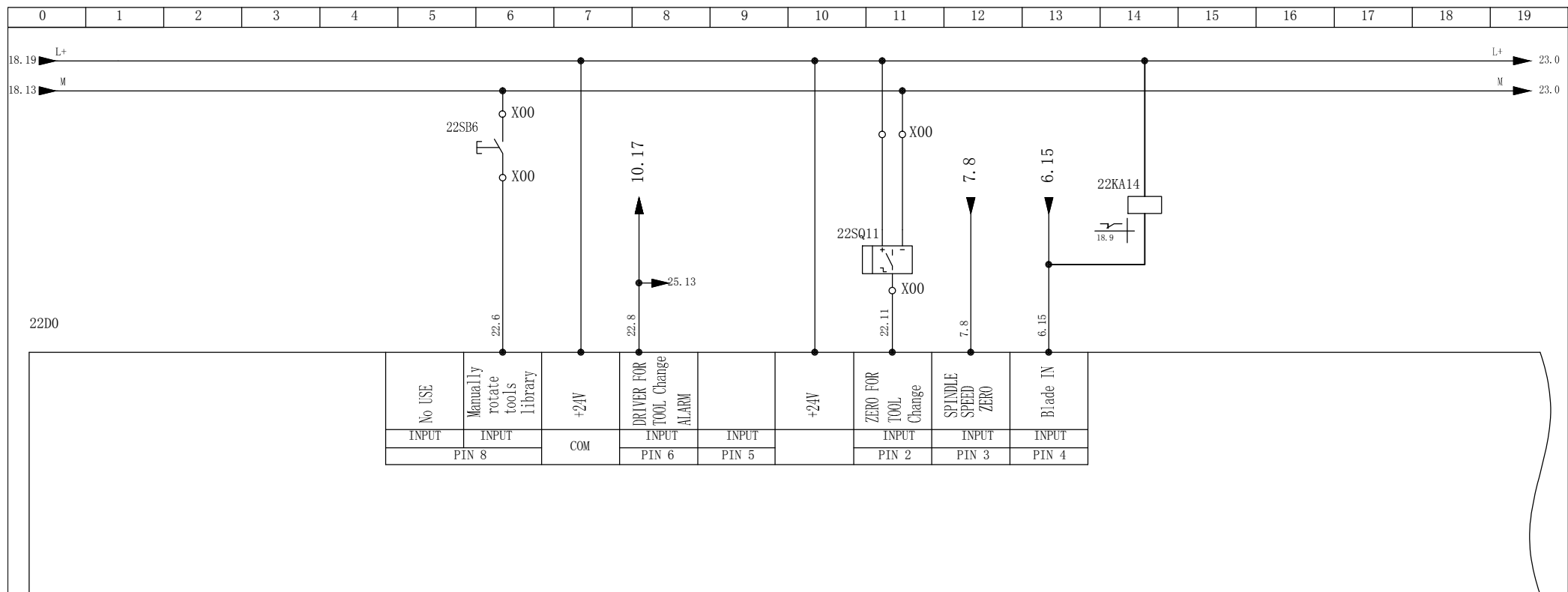
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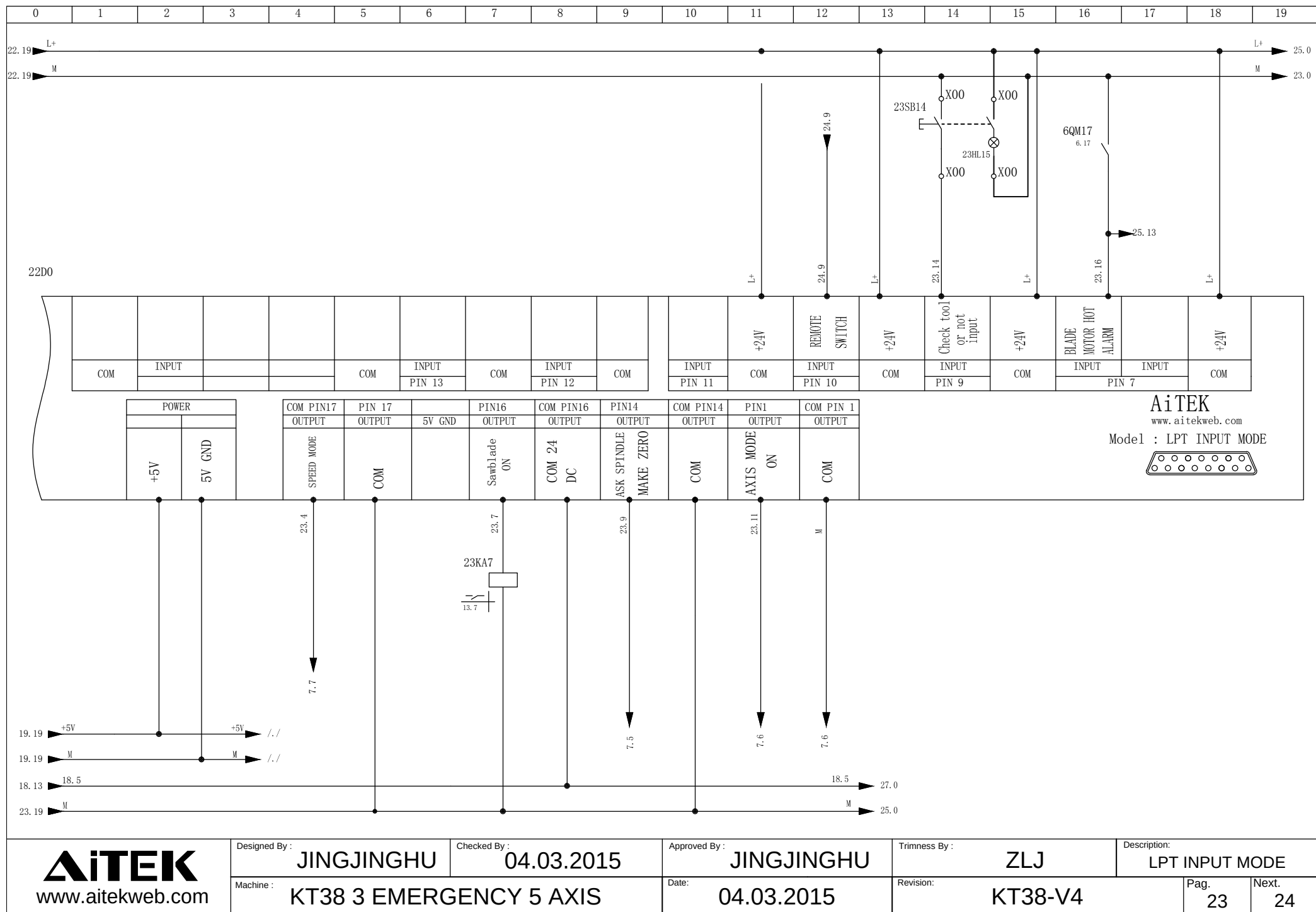
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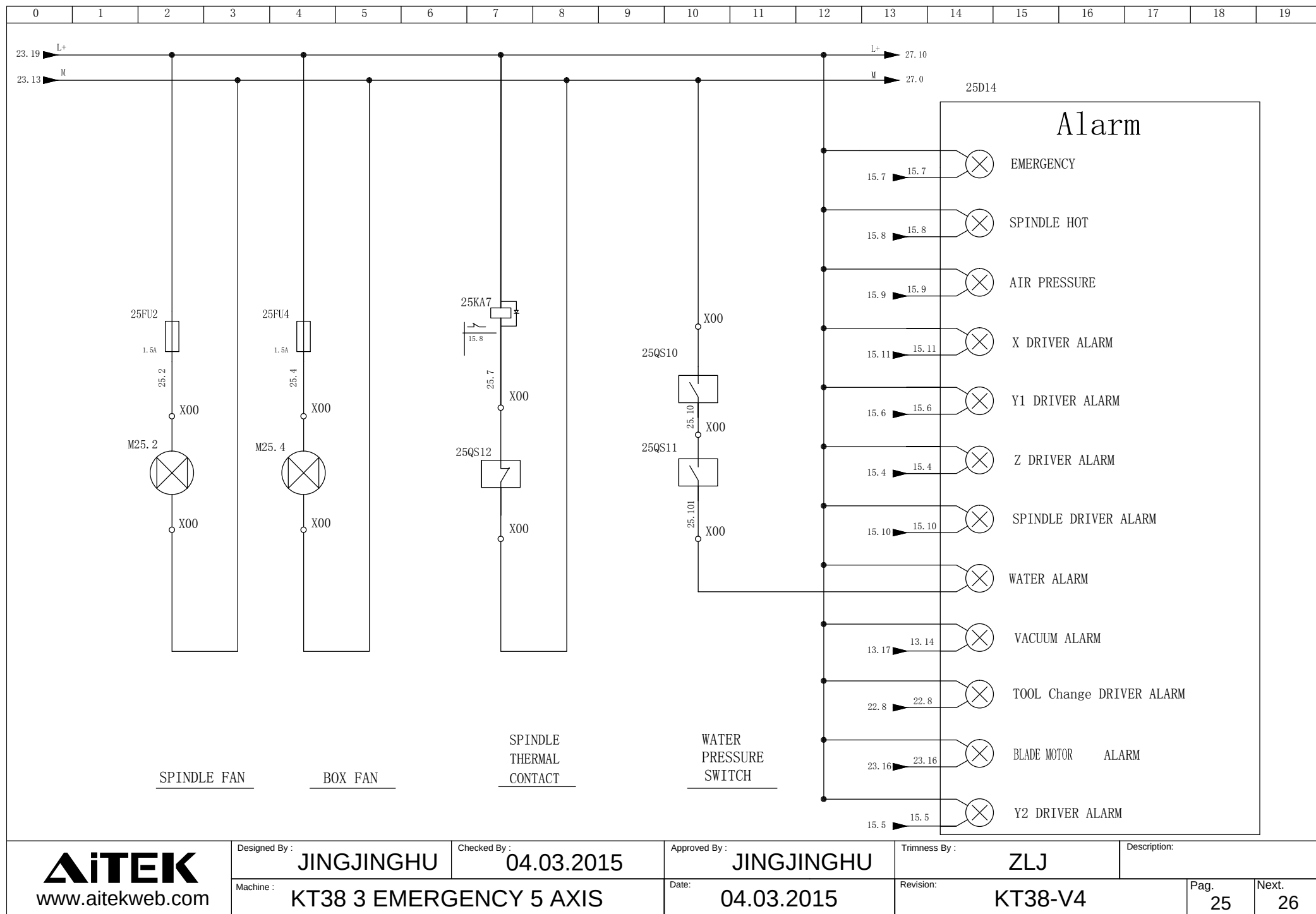


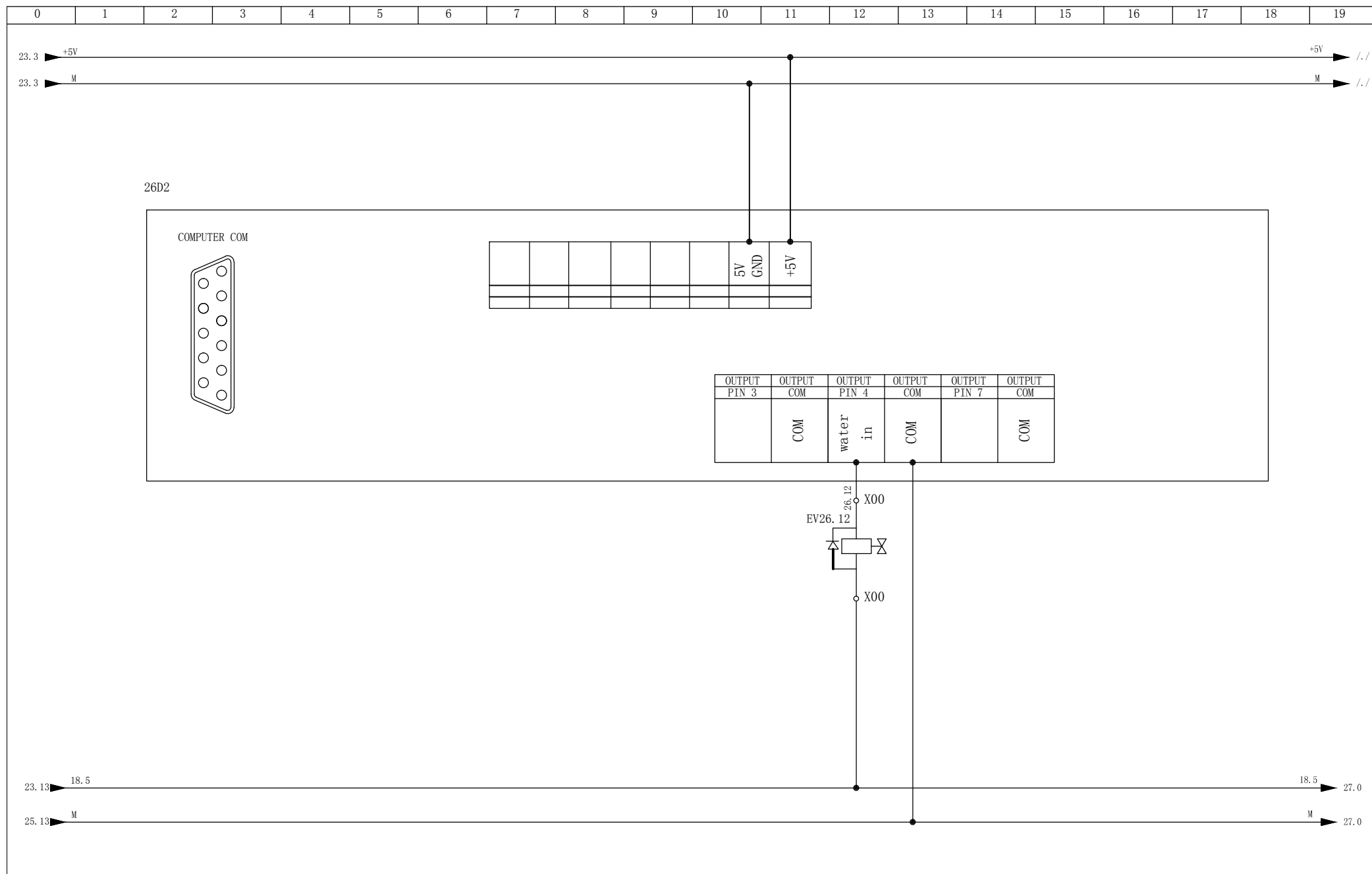
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			Machine : KT38 3 EMERGENCY 5 AXIS			Date: 04.03.2015			Revision: KT38-V4						Pag. 20		Next. 21		

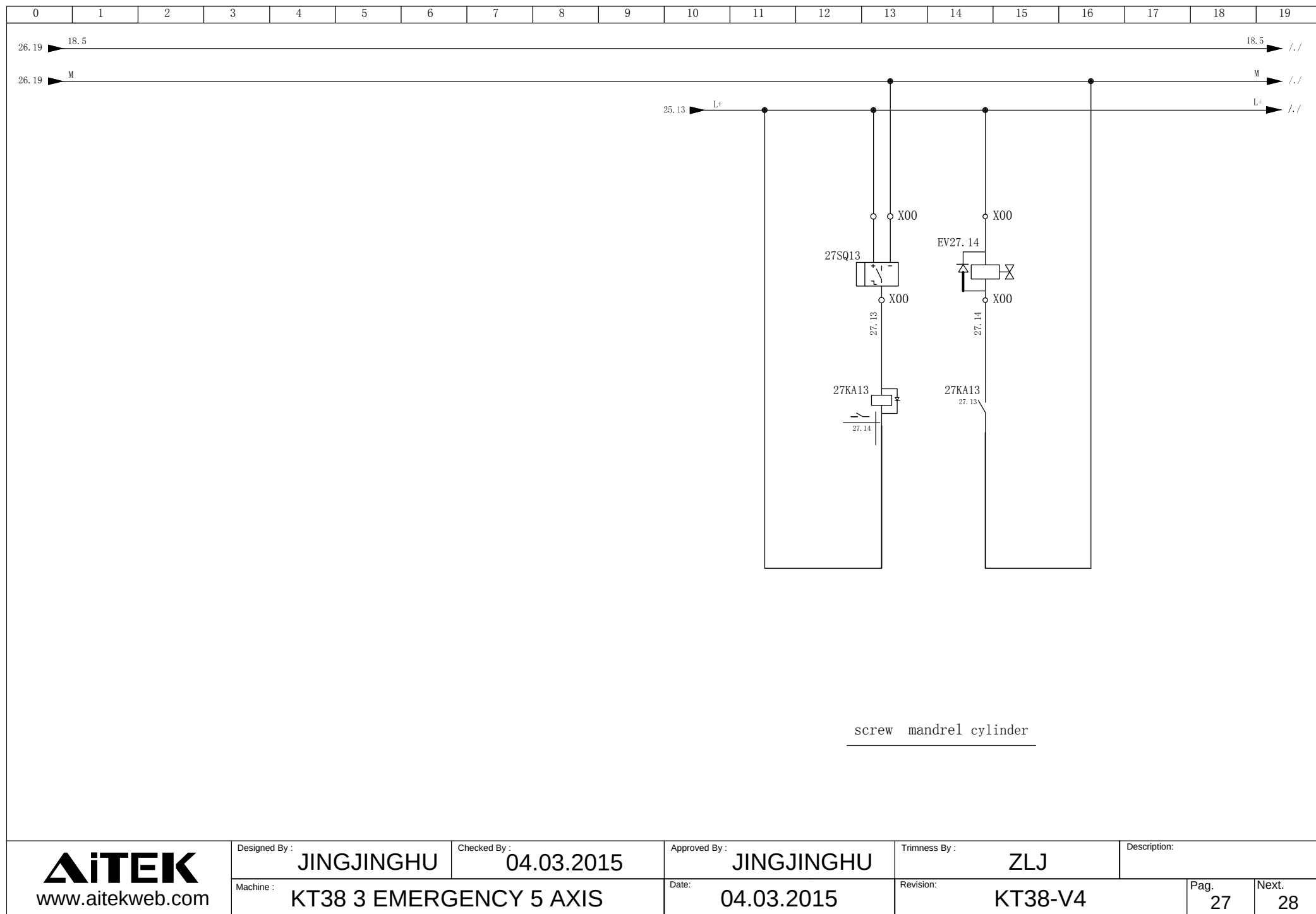
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			Machine : KT38 3 EMERGENCY 5 AXIS						Date: 04.03.2015			Revision: KT38-V4				Pag. 21	Next. 22		











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 www.aitekweb.com		Designed By : JINGJINGHU		Checked By : 04.03.2015		Approved By : JINGJINGHU		Trimness By : ZLJ		Description: INVERTER SETTING									
		Machine : KT38 3 EMERGENCY 5 AXIS		Date: 04.03.2015		Revision: KT38-V4						Pag. 28		Next. 29					

Page	Cod	Manufacturers by	Manufacturers COD.
3	3QS5	Kber	G2D11-63/08 +4P
3	3S16	DU0JI	NF312C36/16
4	4Q3	Schneider	IC65N 1P D10A
4	4Q4	Schneider	IC65N 1P D10A
4	4Q6	Schneider	IC65N 1P D10A
4	4Q11	Schneider	C65H-DC 1P C4A
4	4Q12	Schneider	IC65N 1P D10A
4	4P12	WH	D-120B-5V/6A, 24V/4A
4	4FU13	Phoenix	5A-250V
4	4T3	CHNT	NDK (BK) -200VA
4	4S6	FILTEMC	SGAA1-6A2
6	6Q3	Schneider	IC65N 3P D10A
6	6Q6	Schneider	IC65N 3P D20A
6	6Q17	Schneider	IC65N 3P D10A
6	6S6	DU0JI	NF312C36/16
6	6S9	MK	SD-S4T011-S0
6	6M3	---	2BV2070
6	6M11	MK	DHG10-3-48-7.5/11-4=1500
6	6M17	---	
6	6R13	---	1500W 26QJ
6	6QM17	Schneider	LRD08C 2.5~4A

7	7KA7	Omron	G2R-25ND (S) 24V DC
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9	9Q1	Schneider	IC65N 2P D10A
9	9Q3	Schneider	IC65N 2P D10A
9	9Q4	Schneider	IC65N 2P D10A
9	9Q6	Schneider	IC65N 2P D10A
9	9Q7	Schneider	IC65N 2P D10A

10	10S1	Moons'	3SRAC8
10	10M3	---	---
10	10S5	Moons'	3SRAC8
10	10S8	Moons'	3SRAC8
10	10S12	Moons'	3SRAC8
10	10M14	---	---
10	10S15	Moons'	3SRAC8
10	10M18	---	---

Page	Cod	Manufacturers by	Manufacturers COD.
10	10M7	---	---
10	10M10	---	---
13	13KM3	Schneider	LC1D 50AB7C
13	13KM7	Schneider	LC1D 18B7C
13	13KM9	Schneider	LC1D 18B7C
13	13SB3	RENY	RAPNR4-220
13	13SB3.1	RENY	RAPNR4-220
13	13SB3.2	RENY	RAPNR4-220
13	13SB3.3	RENY	R2PIF-220
13	13SB9	RENY	R2SIS-220
13	13QS14	YXC	ZXC-100, -0.1-0MPA
13	13KA16	Omron	G2R-2-SND(S) 24V DC
13	13KA17	Omron	G2R-2-SND(S) 24V DC

15	15QS9	SNS	QPM11-NC
15	15D0	Aitek	LPT OUTPUT CARD
15	15SQ13	SANWEVI	M12-NPN NO
15	15SQ14	SANWEVI	M12-NPN NO
15	15SQ15	SANWEVI	M12-NPN NO
15	15SQ16	SANWEVI	M12-NPN NO

18	18D0	Aitek	LPT INPUT CARD
18	18SB12	RENY	R2PNF-220
18	18SQ14	SANWEVI	M12-NPN NO
18	18FU3	Phoenix	5A-250V
18	18KA8	---	---
18	18SB10	RENY	R2PNF-220
18	EV18.7	CNSY	4V210-08
18	EV18.9	CNSY	4V210-08
18	EV18.11	CNSY	4V210-08

22	22SB6	RENY	R2PNF-220
22	22SQ11	SANWEVI	M12-NPN NO
22	22KA14	Omron	G2R-2-SND(S) 24V DC
22	22D0	Aitek	LPT INPUT CARD

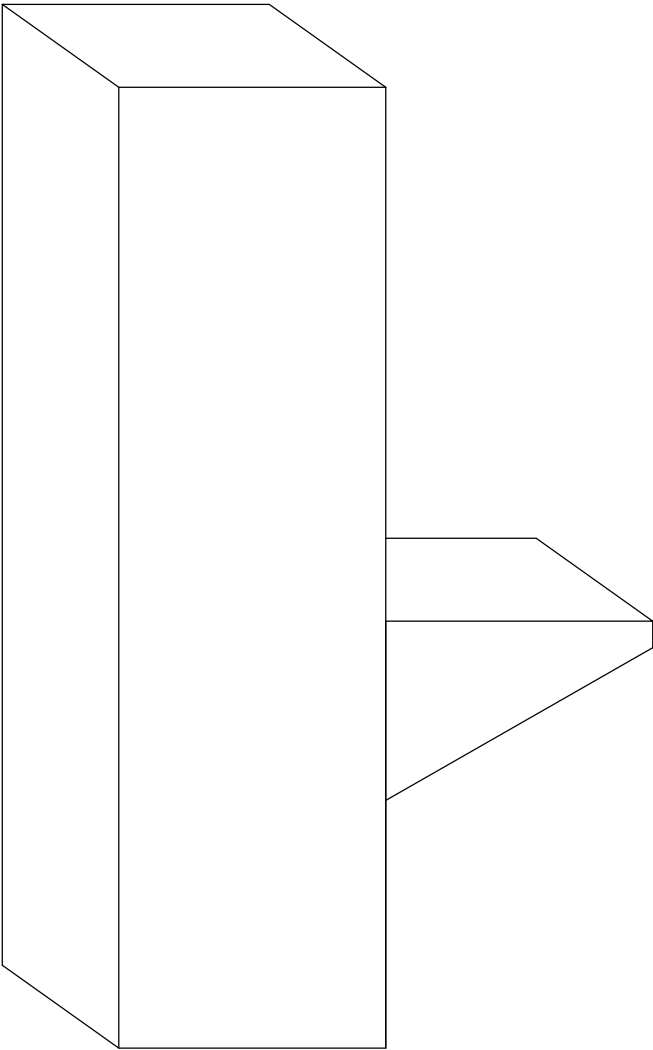
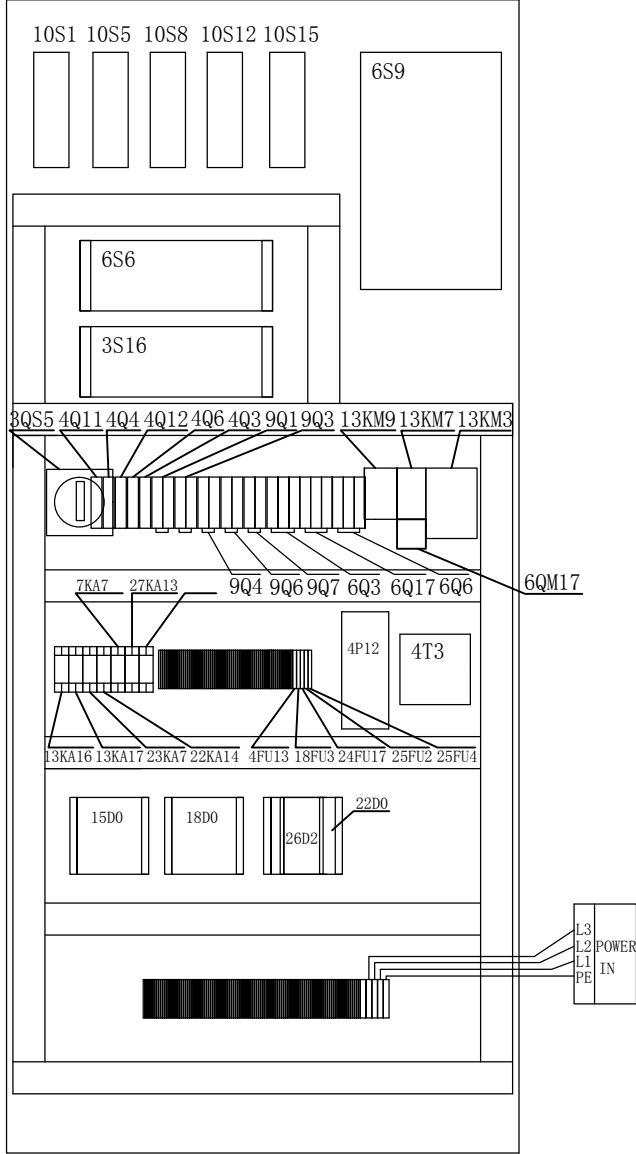
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23	23KA7	Omron	G2R-2-SND(S) 24V DC
23	23SB14	RENY	R2PNF-220

24	24SB12	---	Las2 Φ12mm
24	24FU17	Phoenix	2A
24	24SB17	RENY	R2SIS-220
24	24SB18	RENY	R2SIS-220
24	24D13	Aitek	REMOTE

25	25FU2	Phoenix	1.5A
25	25FU4	Phoenix	1.5A
25	25KA7	Omron	G2R-2-SND(S) 24V DC
25	25QS10	---	PC-3A
25	25QS11	---	PC-3A
25	M25.2		150x150 24V
25	M25.4		120x120 24V
25	25D14	Aitek	ALARM TAB
25	25QS12	---	PC-3A

26	26D2	Aitek	COMPUTER CARD
26	EV26.12	CNSY	4V210-08

27	27SQ13	SANWEVI	M12-NPN NO
27	27KA13	Omron	G2R-2-SND(S) 24V DC
27	EV27.14	CNSY	4V210-08



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Name	Description	Range	Default	Units	Name	Description	Range	Default	Units	Name	Description	Range	Default	Units					
E00	Motor base frequency	0.00~500.00	50	Hz	E41	Speed mode direction	0:Default 1:Reverse	0		F19	Position mode input divider	0~60000	1000	-					
E01	Motor Ampare	0.0~500.0	17.5	A	E42	Disable reversed motion	0:Enabled 1:Disabled	0		F20	Homing search Z pulse Acceleration	0~10000	1000	0.1Hz/					
E02	Motor poles	2~12	4	-	E43	Speed mode control type	0:Norma 1:High-speed	0		F21	Homing speed from Z pulse to Home	0~10000	200	-					
E03	Motor slip parameter (Auto-set by OP 2)	1~900	30	rpm	E44	Position mode control type	0:Realtime,1:Delayed	0		F22	Homing distance from Z pulse to Home	0~60000	2000	pps					
E04	Encoder PPS	1~60000	2500	pps	E45	Driver jog direction	0:CW,1:CCW	0		F23	Homing speed to search Z pulse	0~1000	120	rpm					
E05	Motor excitation (field) current	1~100	80	%	E46	Low voltage protection	0:Enabled,1:Disabled	0		F24	Pulse time delay of pulse-home-pulse homing	0~10000	100	2.5ms					
E06	Encoder pulse filter	1~200	20	0.1ms	E60	Motor feedback type	0:Encoder,1:Resolver	0		F25	Homing call type	0:high-home-low 1:pulse-home-pulse	0	-					
E07	Motor zero speed slip compensation	1~100	60	%	E61	Control pulse type	0:ABpulse 1: Direction + Pulse 2: CW pulse 3: AB(no multiplier)	1			F26	Homing mode type	0: CW homing 1: CCW homing 2: Nearest without check Z pulse	0	-				
E08	Motor slip compensation above base frequency	0~150	30	%	E62	Encoder phase selection	0:A Leads B,1:B Leads A	1		F27		Second homing adjustment	0~60000	1500	pps				
E10	Speed mode motor slip reference	1~900	45	rpm	E63	Motor overheat protection	0:Disabled 1:N.O. protection 2:N.C. protection	0		F30	Emergency stop deceleration	0~10000	1500	0.05Hz/					
E11	Speed mode motor slip gain	1~100	80	-					F31	Emergency stop delay	0~10000	0	2.5ms						
E12	Position mode motor slip reference	1~900	30	rpm	E64	Feedback pulse direction	0:Default ,1:Reverse	1		F32	Rigid tapping high speed	1~300	1500	rpm					
E20	Acceleration torque limiter	0~200	200	-	E65	Z pulse feedback	0:Disabled,1:Enabled	0		F33	Rigid tapping acceleration	0~10000	2000	0.05Hz/					
E21	Deceleration Torque limiter	0~200	120	-	F00	Maximum speed (speed mode)	1~15000	10000	rpm	F34	Rigid tapping analog resolution	1~1000	2	-					
E22	Torque saturation gain	0~550	500	-	F01	Minimum speed (speed mode)	0~100	0	rpm	F35	Swing angle	0~3600°	180	°					
E23	S-curve parameter	1~20000	1530	-	F02	Low-speed Acceleration (speed mode)	0~10000	1500	0.05Hz/	F36	Swing speed	1~300	120	rpm					
E24	Steady speed PID integral constant	1~500.00	50.00	Hz	F03	Low-speed Deceleration (speed mode)	0~10000	1500	0.05Hz/	F37	Swing torque	0~1000	500	%					
E25	Acceleration and deceleration PID integral constant	1~500.00	40.00	Hz	F04	Low to High speed threshold	0~15000	6000	rpm	F38	Driver Jog speed	1~1500	120	rpm					
					F05	High-speed Acceleration (speed mode)	0~10000	1000	0.05Hz/	F39	Driver Jog acceleration	0~10000	500	0.05Hz/					
E30	PID Proportional gain	0~100	80	%	F06	High-speed Deceleration (speed mode)	0~10000	1000	0.05Hz/	F40	Speed mode resolution	1~10000	10	rpm					
E31	PID Integral gain	0~150	100	%	F07	Speed mode speed approximation	0~300	90	rpm	F41	Analog filter time constant	5~10000	200	0.1ms					
E32	PID Zero-speed current gain	1~100	40	%	F08	Speed mode input multiplier	0~60000	2	-	F42	Zero Volt deadband	0~4000	2000	-					
E33	PID Current gain	1~150	80	1/10	F09	Speed mode input divider	0~60000	1	-	F43	Analog forward points	0~15000	6000	rpm					
E34	PID Current gain thresholds	1~300.00	50.00	Hz	F10	Maximum RPM (position mode)	1~15000	600	rpm	F44	First paragraph of positive bias	0~4000	2000	-					
E35	PID Speed close-ring time constant	1~1000	1000	0.1ms	F11	The minimum speed (position mode)	0~60	1	rpm	F45	Second paragraph of positive bias	0~4000	2000	-					
E36	PID Steady speed time constant	1~20000	100	0.1ms	F12	Accelerating rigid (position mode)	0~10000	800	0.05Hz/	F46	± 10V negative points	0~15000	6000	rpm					
E37	PID Acceleration time constant	1~20000	100	0.1ms	F13	Speed reducer rigid (position mode)	0~10000	600	0.1Hz/	F47	± 10V negative first paragraph offset	0~4000	2000	-					
E38	PID Deceleration time constant	1~20000	2000	0.1ms	F14	Input filter time	1~10000	0	0.1ms	F48	± 10V negative paragraph offset	0~4000	2000	-					
E39	PID Positioning close-ring in tegral time constant	1~1000	1000	0.1ms	F15	Inertia correction	0~60000	200	pps										
					F16	Crawling before the end position pulse	0~60000	20	pps										
E40	Speed mode input type	0: 0 ~ 10V 1: ± 10V 2: PPS	2		F17	Position mode accuracy	1~250	1	pps										
					F18	Position mode input multiplier	0~60000	1000	0.05Hz/										