DESCRIPTION TO THE PRODUCTS

This series includes CA6140, CA6150, CA6161, CA6140A, CA6150A CA6161A, CA6140B, CA6150B, CA6161B, CA6150C and CA6161C Horizontal lathes and CA6240A, CA6250A, CA6261A, CA6240B, CA6250B, CA6261B, CA6250C, CA6261C and CA6266 Gap-bed type lathes, CF series Copying lathes and CM series Precision lathes.

CONTENTS

1 GENERAL DESCRIPTION

1.1 Voltage and Frequency of Power Supply of the Machine

The voltage and the frequency used for power supply of the machine are determined according to order contract, practical values are given below.

Frequency	Rated Voltage					
50Hz	AC220V	AC380V	AC415V	AC420V	AC440V	AC600V
60Hz						

1.1.1 Allowed Fluctuation Range of Voltage and Frequency

Voltage: Value of stabilizing voltage is rated voltage multiplied by 0.9 – 1.1.

Frequency: Value of stabilizing frequency is rated frequency multiplied by 0.99-1.01 (continuous working)

Value of stabilizing frequency is rated frequency multiplied by 0.98-1.02(short time working).

1.1.2 Harmonic

The sum of distortion harmonic of 2-5 times shall be not more than 10% of root mean square value and for the sum of distortion harmonic of 6-30 times not more than 2% of the root mean square value of wire voltage.

1.1.3 Unbalance Voltage

The component of negative sequence and zero sequence of 3-phase power supply shall be not more than 2% of that of positive sequence.

1.1.4 Interruption of Voltage

The time of interruption and zero voltage shall not be more than 3 ms and interval of phase order shall be more than ls at any time during the period of cycle of power supply.

1.1.5 Voltage Drop

The voltage drop shall not be 20% of the peak voltages of power supply of one cycle and the interval of falling time of phase distance should be more than ls.

1.2 Voltage of Control Circuit

Control voltage of the machine in this series is AC110V and illuminating voltage AC24V and Illuminating voltage for scale dial AC6V. If the machine is provided with digital display unit, the voltage of power supply for digital display is AC220V.

1.3 Transmitting Mechanism

The machine is provided with following motors for transmitting various mechanisms.

M1---Main motor for controlling spindle running

M2---Coolant motor for the coolant pump

M3---Rapid motor for longitudinal/reverse moving of apron

M4---Motor for lubricating pump

2 INSTALLATION

(Refer to Electric installing drawing)

2.1 Leading – in Wire of Power Supply

2.1.1 Cable for Power Supply

The cable for power supply should be supplied by users, and the recommended cable is YC3 + 1 with cross section of 4 mm^2 . It is necessary compressively connect the cold-compressing terminal with the terminal L1, L2 and L3 of the switchboard XT1 in the niche.

2.1.2 Protection Grounding Wire

The cross section of protecting grounding wire should be more than or equal to that of the phase wires.

2.1.3 Leading-in Power Supply

User should supply suitable fuse on its power supply. Power from the power supply is led into the machine through the general power supply switch QF0. The rated current values are given in the table below.

Current Values When Main Motor of 7.5kW

Rated Current/Rated Freq.	AC220V	AC380V	AC415V, AC420V, AC440V	AC600V
Fuse	80A	50A	40A	30A
QF0	40A	30A	30A	20A

Current Values When Main Motor of 11kW

Rated Current/Rated Freq.		AC380V	AC415V, AC420V, AC440V	AC600V
Fuse		50A	50A	40A
QF0		40A	40A	30A

2.2 Inspection of the Phase Sequence of Power Supply of the Machine

After the machine is installed, the control handle for forward/reverse for spindle should be at neutral position. Turn the handle of the general switch QF0 of power supply right to the Position ON to switch on the power supply.

2.2.1 For the Machine with Hand-braking,

The green button on the apron is used to start the main motor. Shift up the control handle for forward/ reverse of spindle, if the spindle forward, it shows the phase sequence is right, otherwise, it is necessary to exchange positions of any two wires of

the line of power supply.

2. 2. 2 For the Machine with Foot-pedal Braking

After switch on the machine, shift up the control handle for forward/reverse of spindle, if the spindle forward, it shows that the phase sequence is right. Otherwise, it is necessary to exchange positions of any two wires of the line of power supply.

2. 3 Space Required for Maintenenace of Electric Equipment

600 mm away from the outside of the machine should be kept for maintenance of electric equipment; too small space may cause difficulty in maintenance of the electric equipment.

3 ELECTRIC SYSTEM AND OPERATION OF THE MACHINE

Refer to the Electric Circuit, please.

3.1 Preparation before Starting the Machine

- Open the door of electric cabinet by special tools to check whether the starter QF1, QF2 of the motor and the air-switches QF3, QF5, QF6, QF7 and QF8 are switched or not, whether every connecting terminal and the earthling terminal is reliable connection or not, then close the door of the electric cabinet after completion of inspection.
- Close the protecting cover of chuck; the front protecting cover and the pulley cover well.
- Shift the control handle for forward/reverse of spindle to the neutral position.

3.2 Start of the Machine

Shift the key-switch SA4  (refer to Fig. 3) on the switch board set on the front side of the protection cover of change gears to the position "1", and turn the rotary handle of the general switch QF0 of power supply to the position ON to switch the power supply with illuminating light HL for the scale dial on carriage lights on.

3.3 Start and Stop of Main Motor

3.3.1 For the Machine with Hand-braking

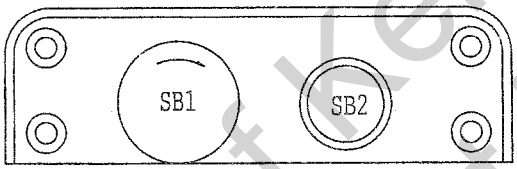


Fig1

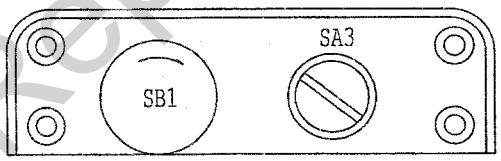


Fig2

Press the green start button SB2 (see Fog. 1) on the button panel of carriage, having contactor KM1 suck-closing, the main motor M1 will be running; Press the red E-stop knob SB1, having KM1 un-electrifying and being released, the main motor M1 will stop running.

3.3.2 For the Machine with Foot-pedal Braking

3.3.2.1 Start

Shift up the control handle for forward/reverse for spindle to press on the travel switch SQ3 for forward of the main motor, having KM1 electrifying and sucking-on, the main motor M1 will be forwards running. Shift down the control handle to press on the travel switch SQ4 reverse of the main motor, having contactor KM2 electrifying and sucking-on, the main motor will be reverse running.

3. 3. 2. 2 Stop

- Step the foot-pedal plate when the main motor is running to make the normally opened contact of inner foot-pedal switch SQ6 (SQ7) closing, normally closed contact opening, KM1, KM2 un-magnetizing and being released, the time-delay relay KT2 magnetizing and sucking-on, to make the magnetic clutch YC with normally opened contact sucking-on to realize the spindle braking. Stepping the foot-pedal braking has nothing to do with the status of the black knob SA3 on the carriage (see Fig. 2).
- Turn the black knob SA3 on the button panel of carriage (see Fig. 2) right to "VALID" status, the normally opened contact of SA3 will be closing, then shift the control handle to the neutral position, pressing on the travel switch SQ5 to switch off the travel switches SQ3, SQ4 for forward/reverse directions, KM1, KM2 un-electrifying and being released, the time-delay relay KT2 electrifying and sucking-on, the magnetic clutch YC with normally opened contact sucking-on to realize the spindle braking, If braking time is selected for 4 seconds, the normally opened contact of KT2 delays to open for 4 seconds later, the magnetic clutch YC will be un-magnetized and being released.
- Turn the black knob SA3 on the button panel of carriage (see Fig. 2) left to "INVALID" status, the normally opened contact of SA3 will be opening, the electromagnetic clutch YC cannot suck on. Shift the control handle to the neutral position pressing on the travel switch SQ5 to switch off the travel switches SQ3, SQ4 for forward/reverse directions, KM1, KM2 un-electrifying and being released, the main motor will freely stop.

  In order to prevent the main motor M1 from overload running, the electric circuit is provided with the starter QF1, its regulated valued had been regulated according to the current given by the data plate of the main motor before delivery. In general case, this value should not be regulated. In special case, it may be micro -regulated by professional person authorized.

3. 4 Start and stop of coolant pump

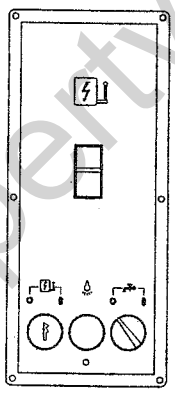


Fig. 3

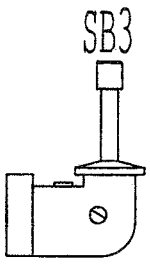


Fig. 4

Turn the black button SA1  on the switch board (see Fig. 3) in front side of the

protecting cover of change gears, to the position "1", having KM7 magnetizing and sucking-on, the coolant pump M2 will be rotating. When turn it to the position "0", having un-electrifying and releasding, and the coolant pump M2 will stop running.

For the machine with hand-braking, in order to prevent the coolant pump from overload running, the electric circuit is provided with motor starter QF2, its regulated valued had been regulated according to the current given by the data plate of the motor for coolant pump before delivery. In general case, this value should not be regulated. If in special case, it may be micro -regulated by professional person authorized.

For the machine with foot-pedal braking, in order to prevent the coolant pump overload running the electric circuit is provided motor starter QF2, its regulated valued had been regulated according to sum of the current values given by the label of the motor for the coolant pump and that given by the data plate of the lubricating motor. In general case, this value should not be regulated. If in special case, it may be micro -regulated by professional person authorized.

3.5 Start/Stop of Rapid Motor

Shift the joystick lever for rapid feed to required direction, then pressing on the rapid button SB3 on the top of the rapid feed joystick lever, having KM3 electrifying and sucking -on, the rapid motor will be running, thus, the rapid moving of required direction can be obtained. Release the button SB3, having KM3 un-electrifying and being released, the rapid motor will stop running.

In order to prevent the rapid motor from short-circuit, the electric circuit is provided with motor starter QF1 for preventing the rapid motor from short circuit.

3.6 Start of Lubricating Motor

Switch on the general switch QF0 of power supply, having KM6 electrifying and self-locking, the lubricating pump will be rotating.

For the machine with foot-pedal braking, in order to prevent the lubricating motor form overload running, the electric circuit is provided with motor starter QF2, its regulated value had been regulated according to sum of the current value given by the data plate of the motor for the coolant pump and that given by the data plate of the lubricating motor. In general case, this value should not be regulated. If in special case, it may be micro -regulated by professional person authorized.

3.7 Emergency Stop and Releasing

Press on the self-locking emergency stop button SB1 shown in Fig. 1 and 2, all the motors stop running, and the machine will be under emergency stop status. Turning the stop button SB1 according to the arrow can make the emergency stop status be released.

Note:

After the emergency stop button is pushed, some electric elements in the machine are still electriferous. Only after switch off the general switch of power supply QF0, all the other elements are powered off except the connecting terminals L1, L2 and L3 on the input terminal of the general switch of power supply.

3.8 Illuminating of the Machine

Ptess the button SB5 for illuminating light shown by Fig. 3  set on the button board on the front side of protection cover of change gears once, the illuminating light will be lighting. When press it again, the light will be off, Protection of short circuit of the illuminating light is realized through an air -switch QF6.

3.9 Control Circuit and Protection of Transformer TC

The short circuit protection on the primary side of control transformer TC is obtained with the general switch QF0 of power supply and the short circuit protection on the secondary side of control circuit with the air-switch QF5.

3.10 Switch-off of the Machine

In order to guarantee the safety of personnel and equipments, it is necessary to switch off the general switch QF0 of power supply. Turn the key switch SA4  of the power supply on the switch panel (see Fig. 3) set on the front side of protection cover of change gears to the position "0", then, pull out the key and keeping it well.

4 MAINTENANCE AND ADJUSTMENT OF ELE. EQUIPMENT

4. 1 Adjustment

Time of the time relay KT2 should be adjusted to 4 seconds.

4. 2 Inspection of Precaution

In order to ensure person and equipment safety, the electric part of the equipments should be checked once a year and checking record written. If finding any problem, you should take measures to solve it immediately.

4. 3 Measuring of Insulating Resistance

The main electric circuit and the control circuit should be measured with earthmeter of 500V and their insulating resistance should do more than one megohm.

4. 4 Inspection of Earthing Protection

All the motors, the switchboard in front side of protecting cover of the change gears, the button board of the carriage, the connecting wires boards of XT3 and XT4 are provided with earthing line is continuous or not and the earthing screws must be firmly tightened.

4. 5 Maintenance of Common Trouble in Electric System

Electric troubles should be enquired according to the electric drawing, the electric installation drawing and the electric connecting wires drawing of the machine, the electric installation drawing and the connecting wires drawing of distribution board of the machine.

4. 5. 1 No Running of Spindle

Yon may refer to following steps to inquire troubles:

- Check if the power supply is in lack of phase or not.
- Check if the motor starter QF1 trips or not.
- Check if the protecting cover is well closed or not and the normally opened contact switch SQ10 of the protecting cover of chuck is normal or not.
- Check if the protecting cover of change gears is well closed or not and the normally opened contact switch SQ1 of the protecting cover of change gears is normal or not.
- Check if the front protecting cover is well closed or not and the normally opened contact switch SQ9 of the front protecting cover is normal or not.
- Check if the control handle for forward/ reverse of spindle is at the neutral position or not. For the machine with hand braking, check if the normally closed contact of the interlocking travel switch SQ11 is normal or not. For the machine with foot-pedal braking, check if the normally opened contacts of the combined switches

SQ3, SQ4 and SQ5 for forward/reverse/stop are normal or not.

- Check if the normally opened contact of the start button SB2 is normal or not, the connecting wires are correct or not, also check if the normally closed contact of the stop button SB4 is normal or not and the connecting wires are correctly connected or not.
- Check if the contact of the contactor is correct or not.
- Check if the connecting terminals I the electrics circuit are firmly connected or not.

4. 5. 2 Coolant Pump Does Not Rotate

You may refer to following steps to inquire troubles:

- Check if the power supply is in lack of phase or not.
- Check if the motor starter QF2 trips or not.
- Check if the contact of the rotary knob SA1 is normal or not and the connecting wires are correct or not.
- Check if the contact of the contactor is normal or not.
- Check if the connecting terminals in the electric circuit are firmly connected or not.

4. 5. 3 Rapid Motor Does Not Run

You may refer to following steps to inquire troubles:

- Check if the power supply is in lack of phase or not.
- Check if the motor starter QF1 trips or not.
- Check if the normally opened contact of the button SB3 is normal or not and the connecting wires are correct or not.
- Check if the contact of tne contactor is normal or not.
- Check if the connecting terminals in the electric circuit are firmly connected or not.

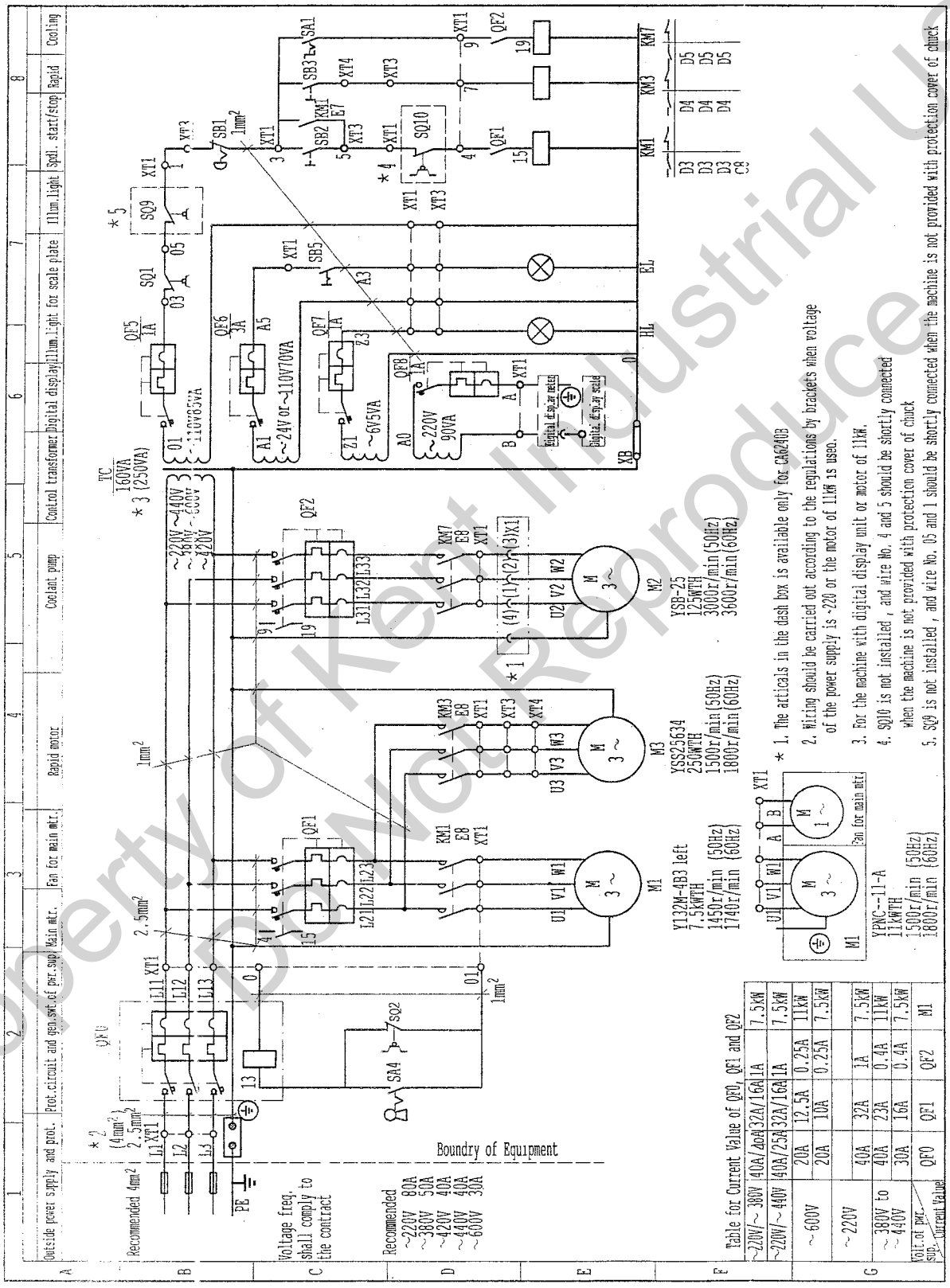
4. 5. 4 Lubricating Motor Does Not Run

You may refer to following steps to inquire troubles:

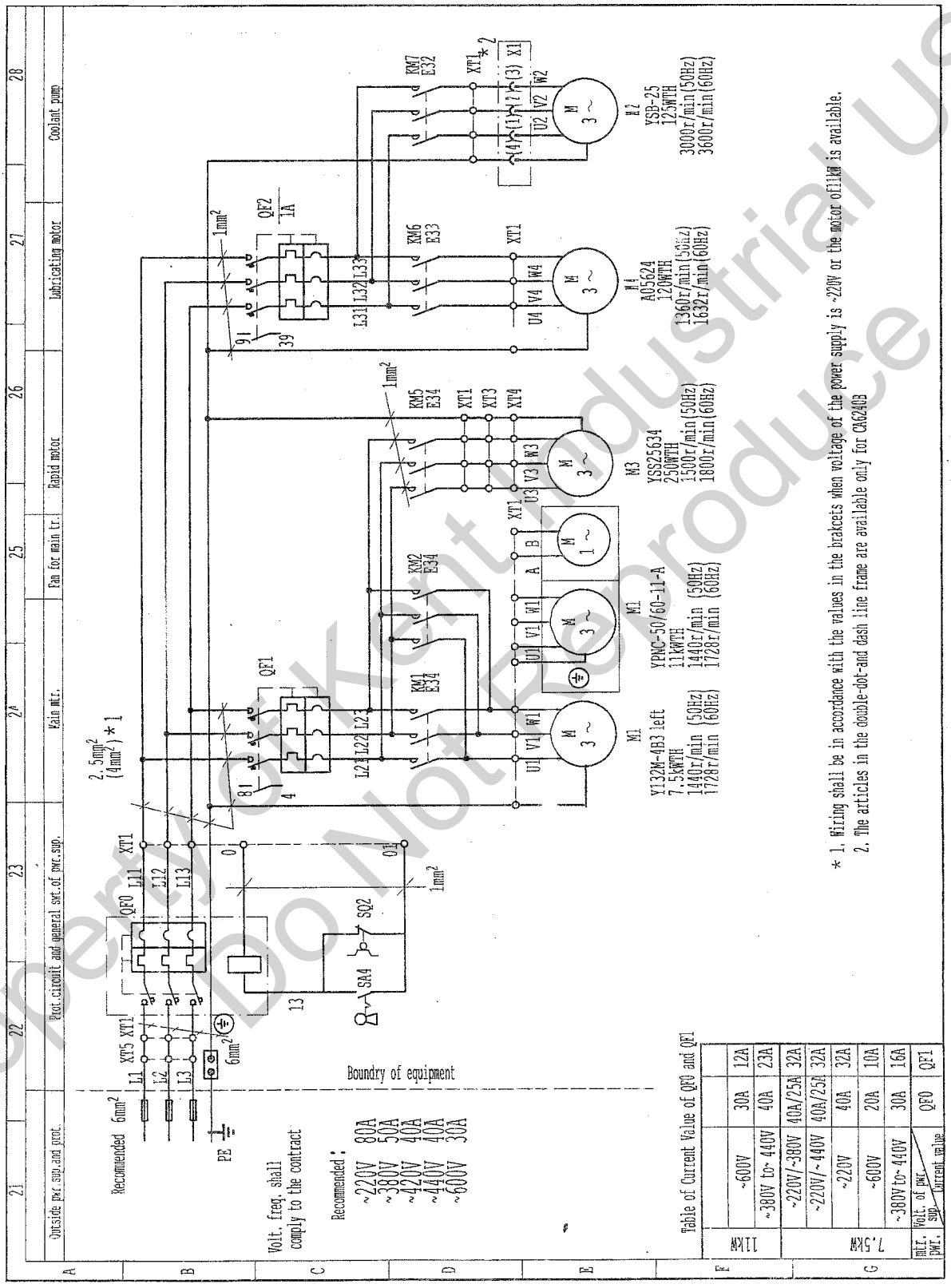
- Check if the power supply is in lack of phase or not.
- Check if the motor starter QF2 trips or not.
- Check if the contact of the contactor is normal or not.
- Check if the connecting terminals in the electric circuit are firmly connected or not.

5 CIRCUIT DIAGRAMS OF THE MACHINE

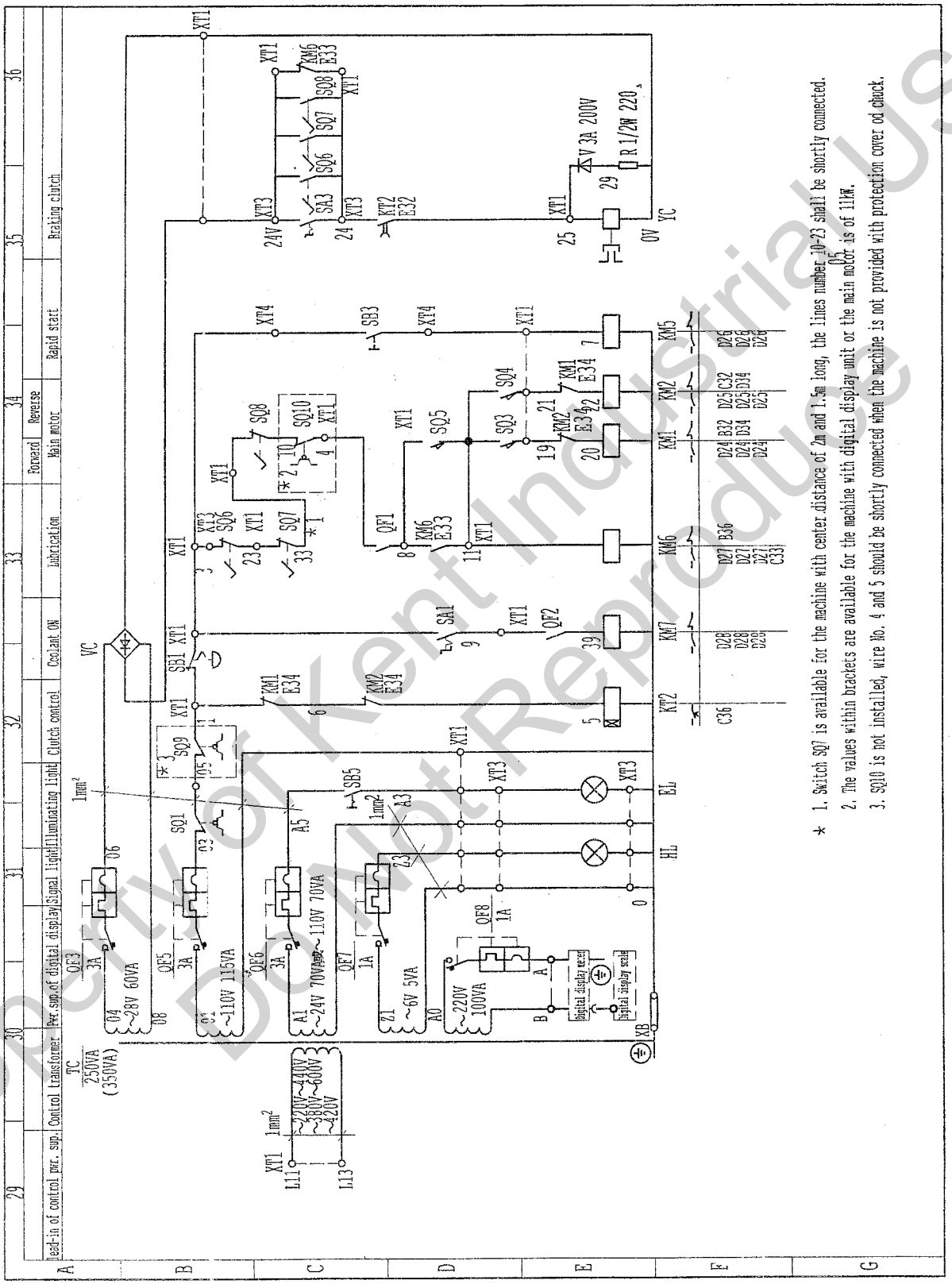
5.1 Circuit Diagrams for the Machine of Basic Type



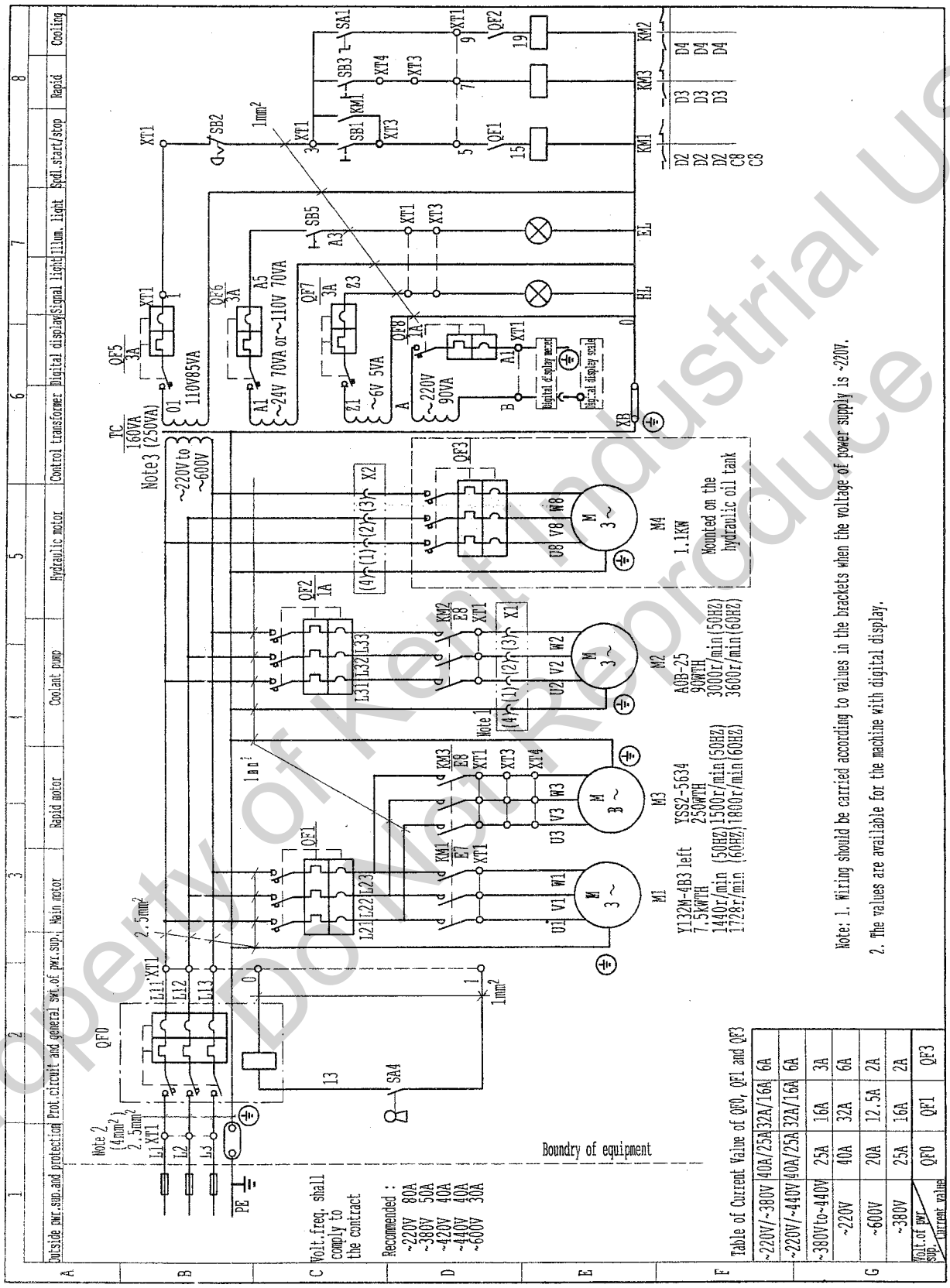
5.2 Circuit Diagram of the Machine with Foot-brake



5.3 Circuit Diagram of the Mahcine with Foot-brake

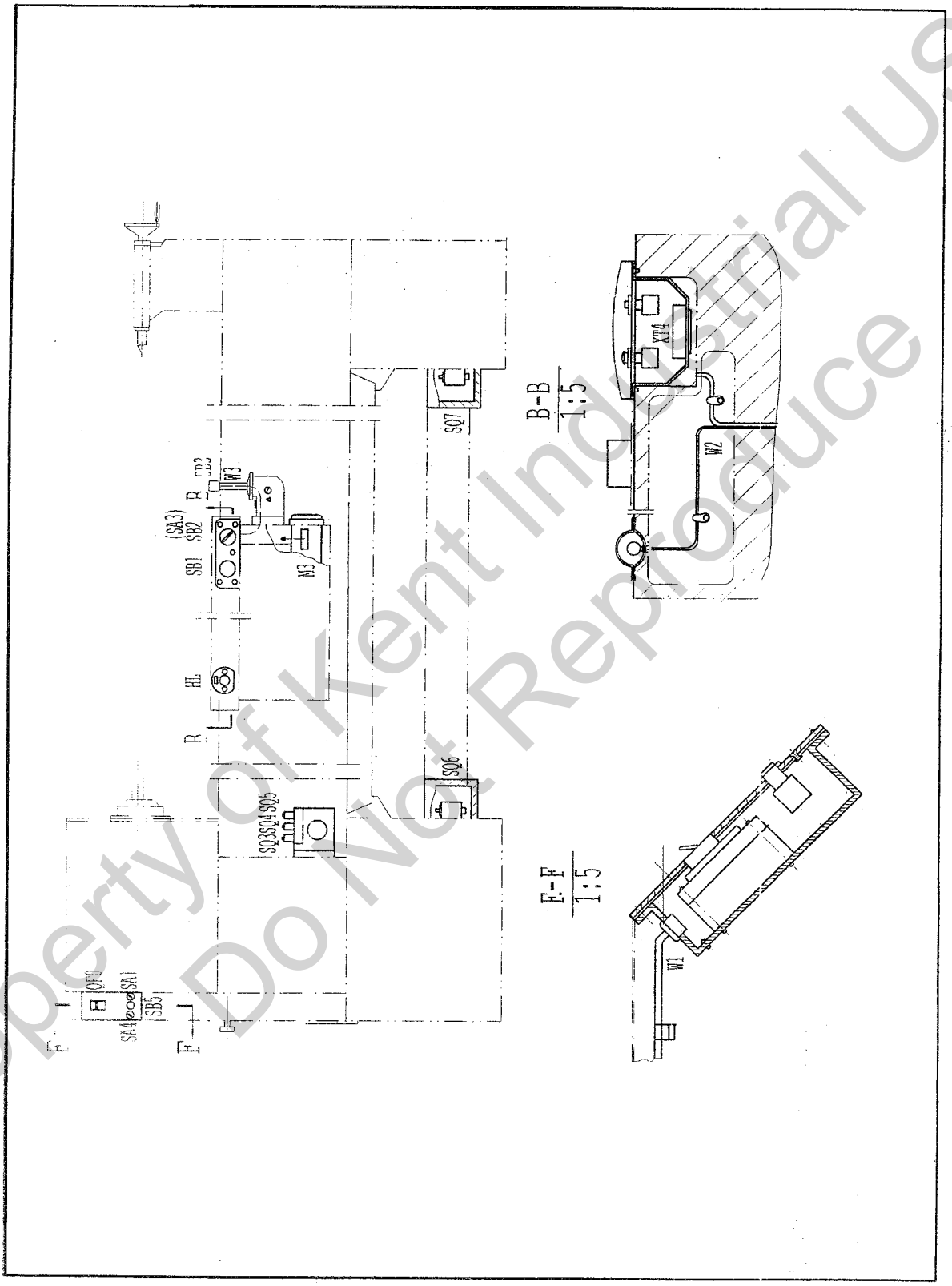


5.4 Circuit Diagram of Copying Machine

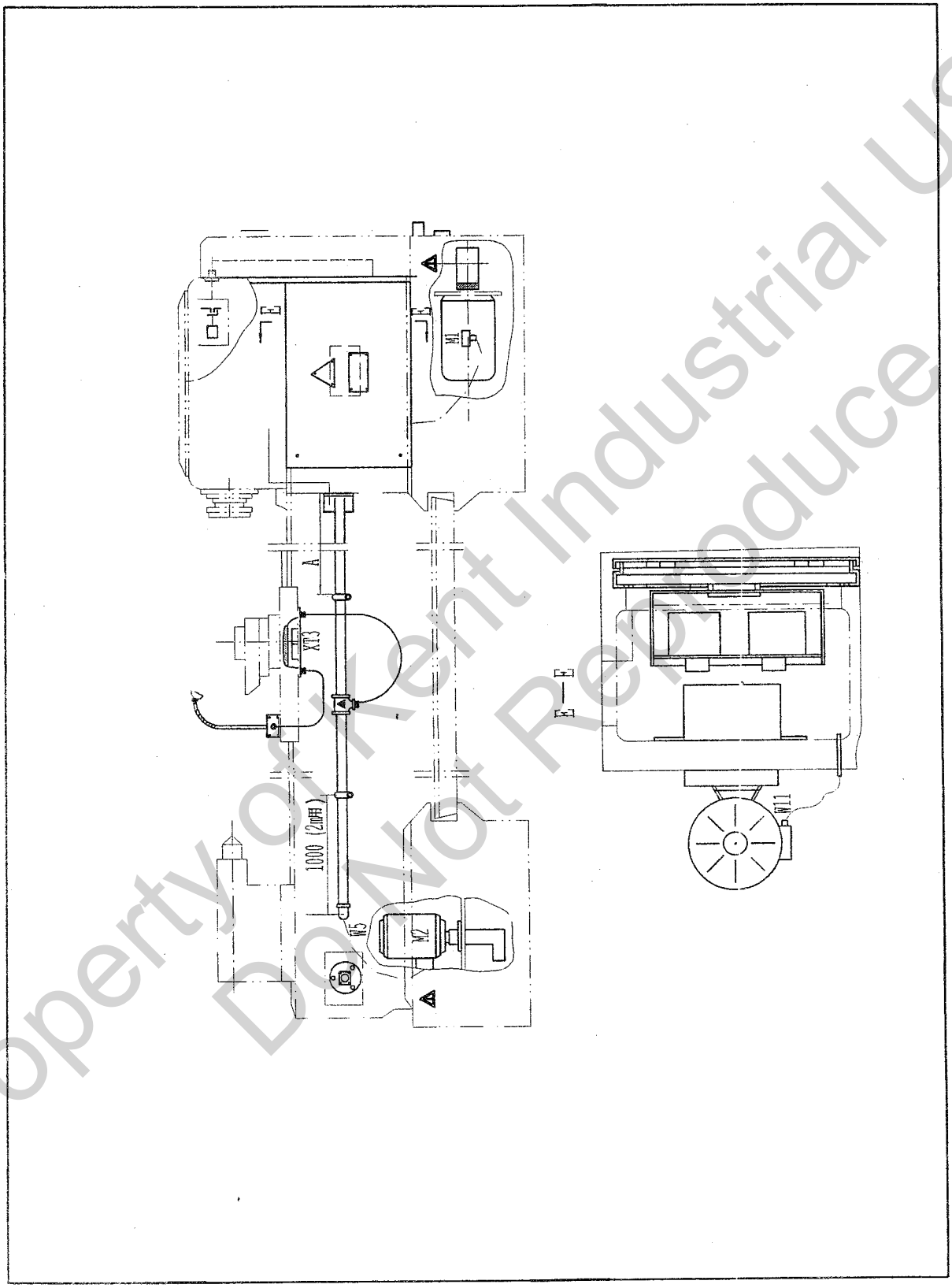


6 DIAGRAM OF WIRING FOR ELECTRIC INSTALLATION

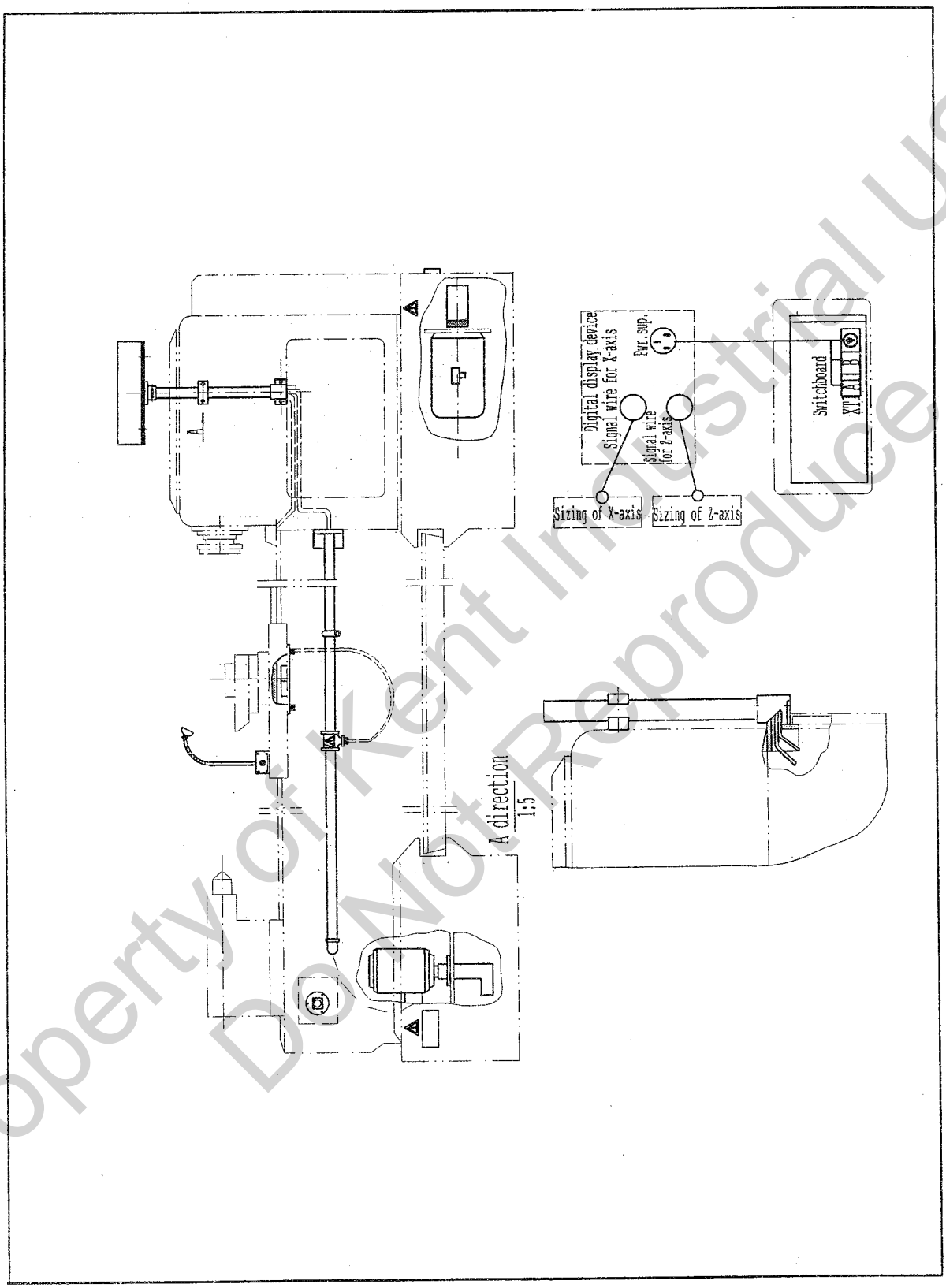
6. 1 Electric Installation Wiring of the Machine



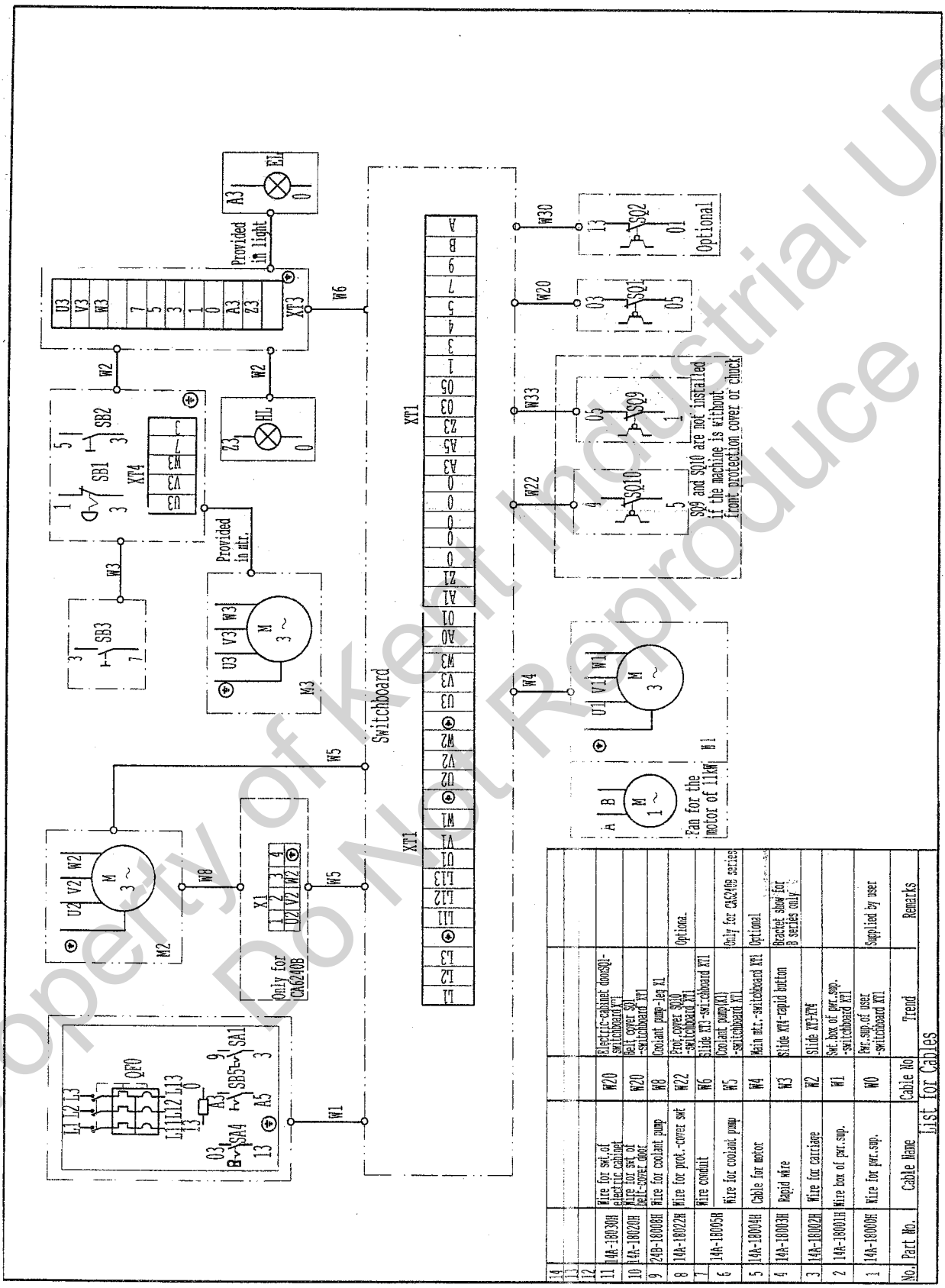
6.2 Electic Installation Wiring of the Machine



6.3 Additional Electric Installation Wiring for the Machine with Digital Display

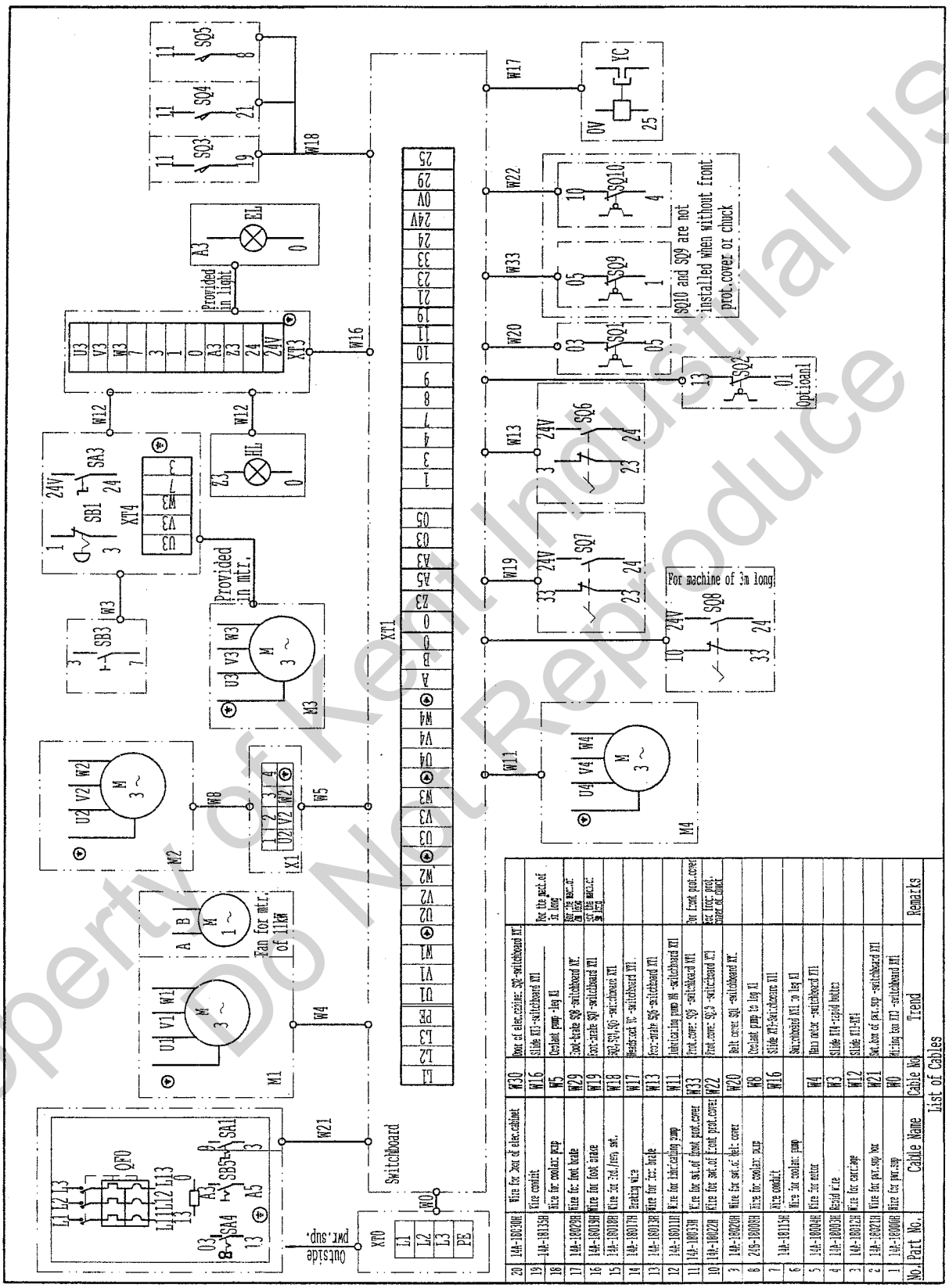


6. 4 Wiring Diagram of Basic-type Machine



No.	Part No.	Cable Name	Cable No	Trend	Remarks
			List for Cables		
14					
13					
12					
11	14A-18030H	Wire for swt.of electric cabinet	W20	Electric-cabinet door&SQ1-switchboard XT1	
10	14A-18020H	Wire for swt of belt-cover door	W20	Belt cover SQ1 -switchboard XT1	
9	24B-18008H	Wire for coolant pump	W8	Coolant pump-1se X1	
8	14A-18022H	Wire for prot.-cover swt	W22	Prot.cover SQ10 -switchboard XT1	Optiona.
7	14A-18005H	Wire conduit	W6	Slide XT3-swi.cbboard XT1	
6		Wire for coolant pump	W5	Coolant pump(X1) -switchboard XT1	Only for CA6240 series
5	14A-18004H	Cable for motor	W4	Main mtr.-switchboard XT1	Optional
4	14A-18003H	Rapid wire	W3	Slide XT4-rapid button	Bracket show for B series only
3	14A-18002H	Wire for carriage	W2	Slide XT3-XT4	
2	14A-18001H	Wire box of pwr.sup.	W1	Swi.box of pwr.sup. -switchboard XT1	
1	14A-18000H	Wire for pwr.sup.	W0	Pwr.sup.of user -switchboard XT1	Supplied by user

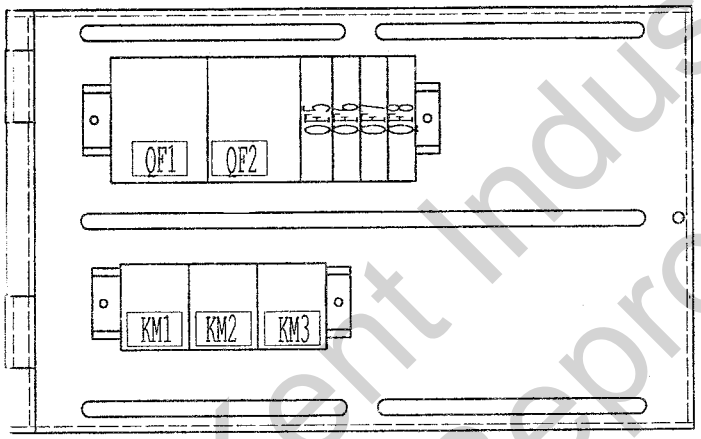
6. 5 Wiring Diagram for the Machine With Foot-brake



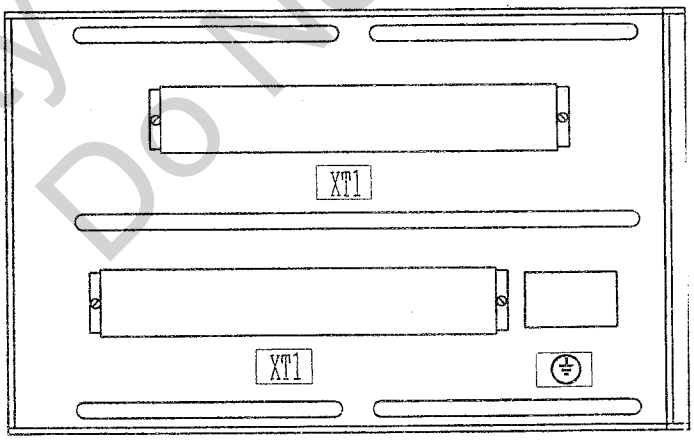
7 ASSEMBLY DRAWING OF SWITCHBOARD OF THE MACHINE

7. 1 Assembly Drawing of Turn-over Switchboard of Basic-type Machine

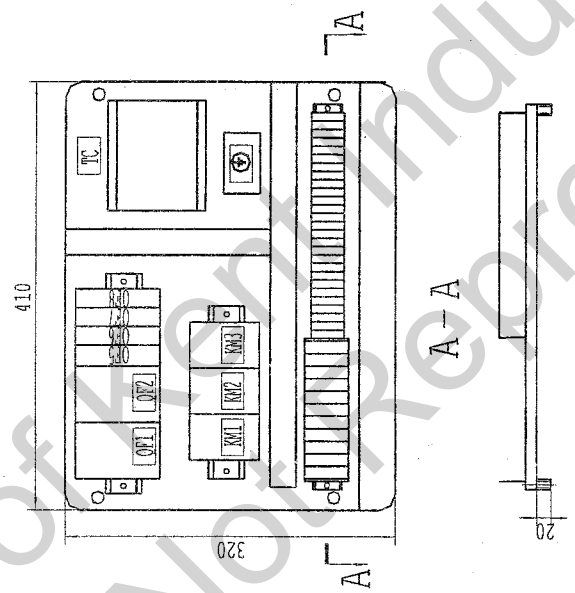
Front view



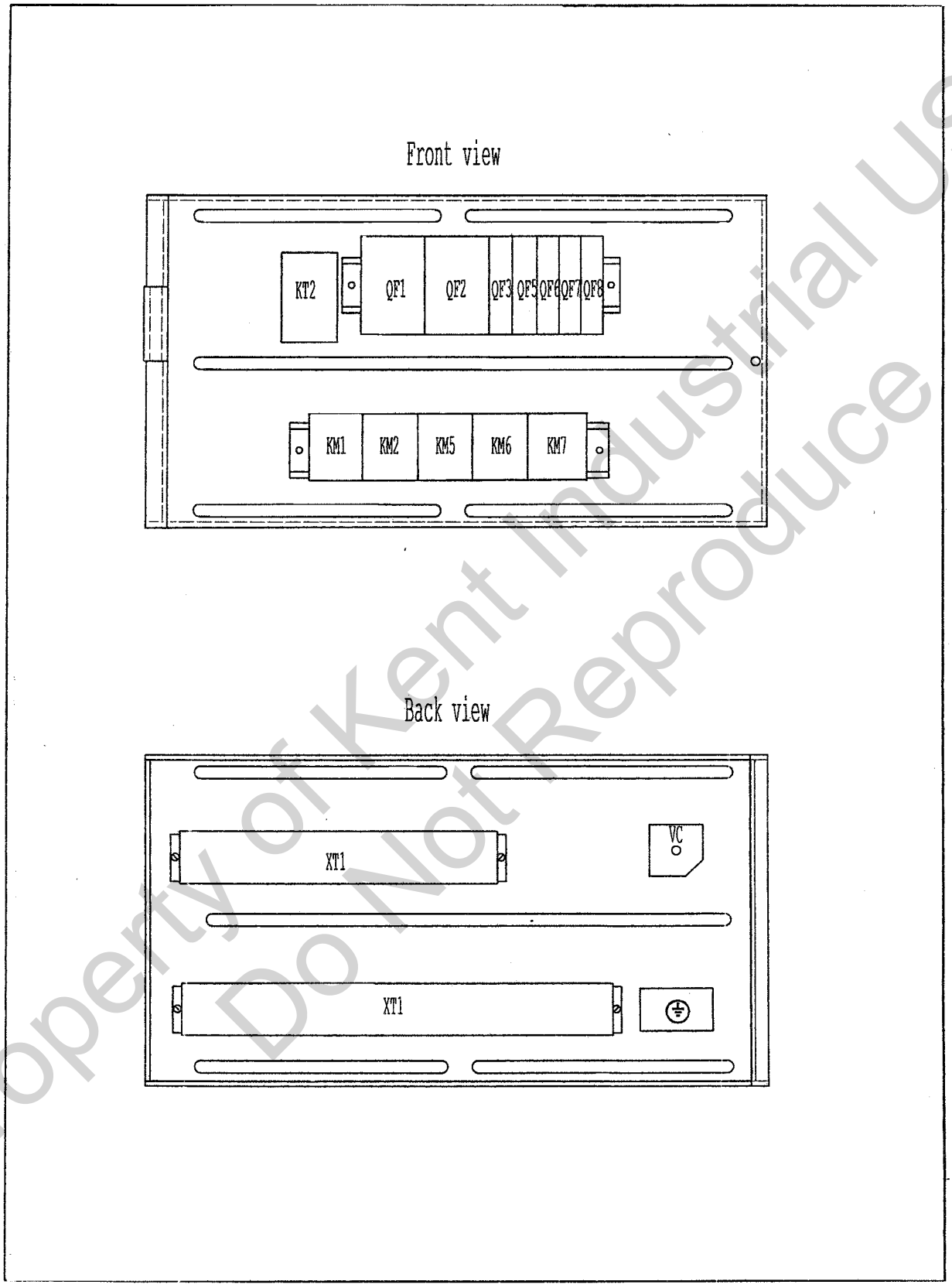
Back view



7. 2 Electric Assembly Drawing of Fixing Switchboard of Basic-type Machine



7. 3 Electric Assembly Drawing of the Switchboard of the Machine with Foot-brake



8 LIST OF ELECTRICAL ELEMENTS

List for Electric Elements

No.	Elec. Code	Name	Type	Qty.	Technical Specifications	Remarks
1	M1	Three – phase asynchronous motor	Y132M – 4 – B3 TH	1	7. 5kW 1450r/min	Wiring box is on the left
2	M2	Coolant pump	AYB – 25 TH	1	125W 3000r/min	
3	M3	Three – phase asynchronous motor	YSS2 – 5634 TH	1	250W 1360r/min	
4	M4	Three – phase asynchronous motor	AO5624 TH	1	120W 1360r/min	For the machine with foot – brake
5	M1	Three – phase asynchronous motor	YPNC – 11 – B3 TH	1	11kW 1450r/min	Wiring box is on the left
6	SB2	Start button	LA39 – 10/G	1		
7	SB2	Start button	800EP – F3 + 800E – 3LX10	1		For UL standard
8	SB1	E – stop button	XB2 – BS542C	1		
9	SB1	E – stop button	800EP – MT4 + 800E – 3LX01	1		For UL standard
10	SB3	Rapid button	XB2 – EA121	1		
11	SA1	Knob	XB2 – BD217C	1		
12	SA1	Knob	800EP – SM22 + 800E – 3LX10	1		For UL standard
13	SA3	Knob	XB2 – BD217C	1		For the machine with foot – brake
14	SA3	Knob	800EP – SM22 + 800E – 3LX10	1		For the machine with foot – brake and for UL standard
15	SA4	Key switch	XB2 – BG217C	1		
16	SA4	Key switch	800EP – KM2R1 + 800E – 3LX10	1		For UL standard
17	HL	Signal light	ZSD – 0 TH	1	6V	

No.	Elec. Code	Name	Type	Qty.	Technical Specifications	Remarks
18		Signal bulb	ZSD – 0 TH	1	6VE10	
19	EL	Illuminating light of the machine	JC11	1	24V/40W	
20	EL	Illuminating light of the machine	JC11	1	110V/40W	Optional
21	VC	Rectifying block	KBPC601	1	6A100V	For the machine with foot – btake
22	KT	Time relay	JSCF – 1/G	1	(0. 1 – 240)S	For the machine with foot – brake
23	KT	Time relay	700 – FED1RU2 3	1	(0. 05 – 10)S	For the machine with foot – brake and for UL standard
24						
25						
26	QF0	General switch of power supply	ABS53a/40	1	40A	Motor of 7. 5kW for 220V
27	QF0	General switch of power supply	ABS53a/30	1	30A	Motor of 7. 5kW for 380 – 440V
28	QF0	General switch of power supply	ABS53a/20	1	20A	Motor of 7. 5kW for 600V
29						
30	QF0	General switch of power supply	ABS53a/30	1	40A	Motor of 11kW for 380 – 440V
31	QF0	General switch of power supply	ABS53a/20	1	30A	Motor of 11Kw for 600V
32	QF1	Air switch	GV2 – RS21 – C	1	(13 – 18)A	Motor of 7. 5kW for 380 – 440V
33	QF1	Air switch	140 – MN – 1600	1	(10 – 16)A	Motor of

No.	Elec. Code	Name	Type	Qty.	Technical Specifications	Remarks
			+ 140 – A10			7. 5kW for 380 – 440V For UL standard
34	QF1	Air switch	140 – MN – 2500 + 140 – A10	1	(20 – 25) A	Motor of 11kW for 380 – 440V For UL standard
35	QF1	Air switch	GV2 – RS32 – C	1	(24 – 32) A	Motor of 11kW for 380 – 440V
36	QF1	Air switch	GV2 – RS32 – C	1	(24 – 32) A	For 220V
37	QF1	Air switch	140 – MN – 2500 + 140 – A10	1	(20 – 25) A	Motor of 7. 5kW for 220V For UL standard
38	QF1	Air switch	140 – MN – 1000 + 140 – A10	1	(6. 3 – 10) A	Motor of 7. 5kW for 600V for UL standard
39	QF1	Air switch	140 – MN – 1600 + 140 – A10	1	(10 – 16) A	Motor of 11kW for 600V For UL standard
40	QF2	Air switch	140 – MN – 0040 + 140 – A10	1	(0. 25 – 4) A	For 600V For UL standard
41	QF2	Air switch	140 – MN – 0100 + 140 – A10	1	(0. 63 – 1) A	For 220V For UL standard
42	QF2	Air switch	GV2 – RS04 – C	1	(0. 4 – 0. 63) A	For 380 – 440V
43	QF2	Air switch	GV2 – RS06 – C	1	(0. 63 – 1) A	For 220V
44	QF2	Air switch	GV2 – RS05 – C	1	(0. 63 – 1) A	For the machine with foot – brake
45	QF2	Air switch	GV2 – RS06 – C	1	(1 – 1. 6) A	For 220V For the machine with foot – brake

No.	Elec. Code	Name	Type	Qty.	Technical Specifications	Remarks
46						
47	QF3, 5	Air switch	1492 – SP1C030	3	1P3A	For the machine with foot – brake and for UL standard
48	QF3, 5	Air switch	DZ47 – 63 1P	2	3A	For the machine with foot – brake
49	QF5, 7	Air switch	DZ47 – 63 1P	2	1A	
50	QF6	Air switch	DZ47 – 63 1P	1	3A	
51	QF6	Air switch	1492 – SP1C030	1	1P3A	For UL standard
52	QF8	Air switch	DZ47 – 63 1P	1	1A	For the digital display unit
53	QF5, 7	Air switch	1492 – SP1C010	2	1P1A	For UL standard
54	QF8	Air switch	1492 – SP1C010	1	1P1A	For the machine with digital display and for UL standard
55	KM1	Three – phase AC contactor	100 – C16KD10	1	Motor of 7. 5kW for 380 – 440V	For UL standard
56	KM1	Three – phase AC contactor	LC1 – D1810	1	Motor of 7. 5kW for 380 – 440V	
57	KM1	Three – phase AC contactor	100 – C23KD10		Motor of 7. 5kW for 220V	For UL standard
58	KM1	Three – phase AC contactor	100 – C23KD10		Motor of 11kW for 380 – 440V	For UL standard
59	KM1	Three – phase AC contactor	LC1 – D2510	1	Motor of 11kW for 380 – 440V	
60	KM1	Three – phase AC contactor	LC1 – D3210	1	Motor of 7. 5kW for 220V	

No.	Elec. Code	Name	Type	Qty.	Technical Specifications	Remarks
61	KM1	Three – phase AC contactor	100 – C16KD10	1	Motor of 7. 5kW for 600V	For UL standard
62	KM1	Three – phase AC contactor	100 – C23KD10	1	Motor of 11kW for 600V	For UL standard
63	KM1, 2	Three – phase AC contactor	LC1 – D1810	2	Motor of 7. 5kW for 380 – 440V	For the machine with foot-brake
64	KM1, 2	Three – phase AC contactor	LC1 – D2510	2	Motor of 11kW for 380 – 440V	For the machine with foot-brake
65	KM1, 2	Three – phase AC contactor	LC1 – D3210	2	Motor of 7. 5kW for 220V	For the machine with foot-brake
66	KM1, 2	Three – phase AC contactor	100 – C16KD10	2	Motor of 7. 5kW for 600V	For the machine with foot-brake for UL standard
67	KM1, 2	Three – phase AC contactor	100 – C23KD10	2	Motor of 11kW for 600V	For the machine with foot-brake For UL standard
68						
69	KM3, 7	Three – phase AC contactor	100 – C09KD10	2		For UL standard
70	KM3, 7	Three – phase AC contactor	LC1 – D0910	2		
71	KM5, 6	Three – phase AC contactor	LC1 – D0910	2		For the machine with foot – brake
72	KM5, 6	Three – phase AC contactor	100 – C09KD10	2		For the machine with foot – brake and for UL standard
73	TC	Control transformer	JBK5 – 160		160VA 220 – 600/110 V85VA /24V70VA/6 V5VA	For the illuminating of 24V

No.	Elec. Code	Name	Type	Qty.	Technical Specifications	Remarks
74	TC	Control transformer	JYC1 – 250	1	250VA 220 – 600/110 V85VA /24V70VA/6 V5VA/ 220V90VA	For the illuminating of 24V For the machine with digital display
75	TC	Control transformer	JYC1 – 250	1	250VA 220 – 600/110 V115VA /24V70VA/6 V5VA/ 28V60VA	For the illuminating of 24V For the machine with foot – brake
76	TC	Control transformer	JYC1 – 350	1	350VA 220 – 600/110 V115VA /24V70VA/6 V5VA/ 28V60VA/22 0V100A	For the illuminating of 24V For the machine with foot – brake For the machine with digital display
77	TC	Control transformer	JBK5 – 160		160VA 220 – 600/110 V85VA /110V70VA/ 6V5VA	For the illuminating of 110V
78	TC	Control transformer	JYC1 – 250	1	250VA 220 – 600/110 V85VA /110V70VA/ 6V5VA/ 220V90VA	For the illuminating of 110V For the machine with digital display
79	TC	Control transformer	JYC1 – 250	1	250VA 220 – 600/110 V115VA /110V70VA/ 6V5VA/ 28V60VA	For the illuminating of 110V For the machine with foot – brake
80	TC	Control transformer	JYC1 – 350	1	350VA 220 – 600/110 V115VA /110V70VA/ 6V5VA/ 28V60VA/22 0V100A	For the illuminating of 110V For the machine with foot – brake For the machine with digital display