



FOLDING MACHINE

EZB 2520 ES

MANUAL OPERATION

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1. Main Technical Specification

MODEL	EZB 2520 ES
Max. bending thickness(mm)	1.0 mm
Max. bending length (mm)	2520 mm
Bending angle	0~135°
Packing size (mm)	3330X760X1410mm
Weight (kgs)	1310/1620 kgs

2. Safety Warnings and Precautions

WARNING: when using tool, basic safety precautions should always be followed to reduce the risk of person injury and damage to equipment.

1. **Keep work area clean.** Cluttered areas invite injuries.
2. **Observe work area conditions.** Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lighted.
3. **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cords.
4. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **Do not force tool.** It will do the job better and more safety at the rate for which it was intended. Do not use inappropriate attachments in an attempt to exceed the tool capacity.
6. **Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a large industrial tool. Do not use a tool for a purpose for which it was not intended.
7. **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
8. **Use eye and ear protection.** Always wear ISO approved impact safety goggles. Wear a full-face shield if you are producing metal filings or wood chips. Wear an ISO approved dust mask or respirator when working around metal, and chemical dusts and mists.
9. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machine.
10. **Maintain tools with care.** Keep tools sharp and clean for better and safer performance.

Follow instructions for lubricating and changing accessories. The handles must be kept clean, dry, and free from oil and grease at all times.

11. **Stay alert.** Watch what you are doing; use common sense. Do not operate any tool when you are tired.
12. **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician.
13. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from the distributor.
14. **Do not operate tool if under the influence of alcohol or drugs.** Read warning labels on prescriptions to determine if your judgment of reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.

2.1 Use and Attentions

1. Before using this kind of machine tool, you must read this direction carefully, in order to have an intimate knowledge of structure of the machine tool, operation methods and lubrication systems.
2. According to the different using conditions, this kind of machine tool must be fixed on the ground or special machine seat, in order to avoid slide of the machine tool.
3. Please firmly execute the following operating rules:
 - 3.1 Before packing this machine tool, antirusting agents are put on it, so when you are getting rid of the king of rust inhibitor, you can unset the yellow coat with varnish diluent and paint flux for machine oil.
 - 3.2 Place near the machine should be kept clean.
 - 3.3 When you move, install, clean and adjust the machine tool, you must keep away from the die.
 - 3.4 Keep your hands from the die when you are working on it .
 - 3.5 Operators must be familiar with the structure and function of this machine tool. Protecting mask and the other safety devices should be used when work on it.
 - 3.6 Focus your attention on the machine when operate.
 - 3.7 Any metal plate that thickness and quality goes beyond the scope of the machine demands should be refused to process.
 - 3.8 Before processing, protect installation and electric structure must be suit to requirement.

4. Adjust of bending

Adjust the gap between bending knife and support knife according to the thickness of material. The way is: when the bend plate is free of working, loosen the #26 bolt and adjust #27 bolt, then move the bend plate down, the gap between bending knife and support knife should be coincide with the workpiece thinckness, then fixed the #26bolt. In order to keep the end and the middle of the dies in the same level,please adjust #29 bolt.

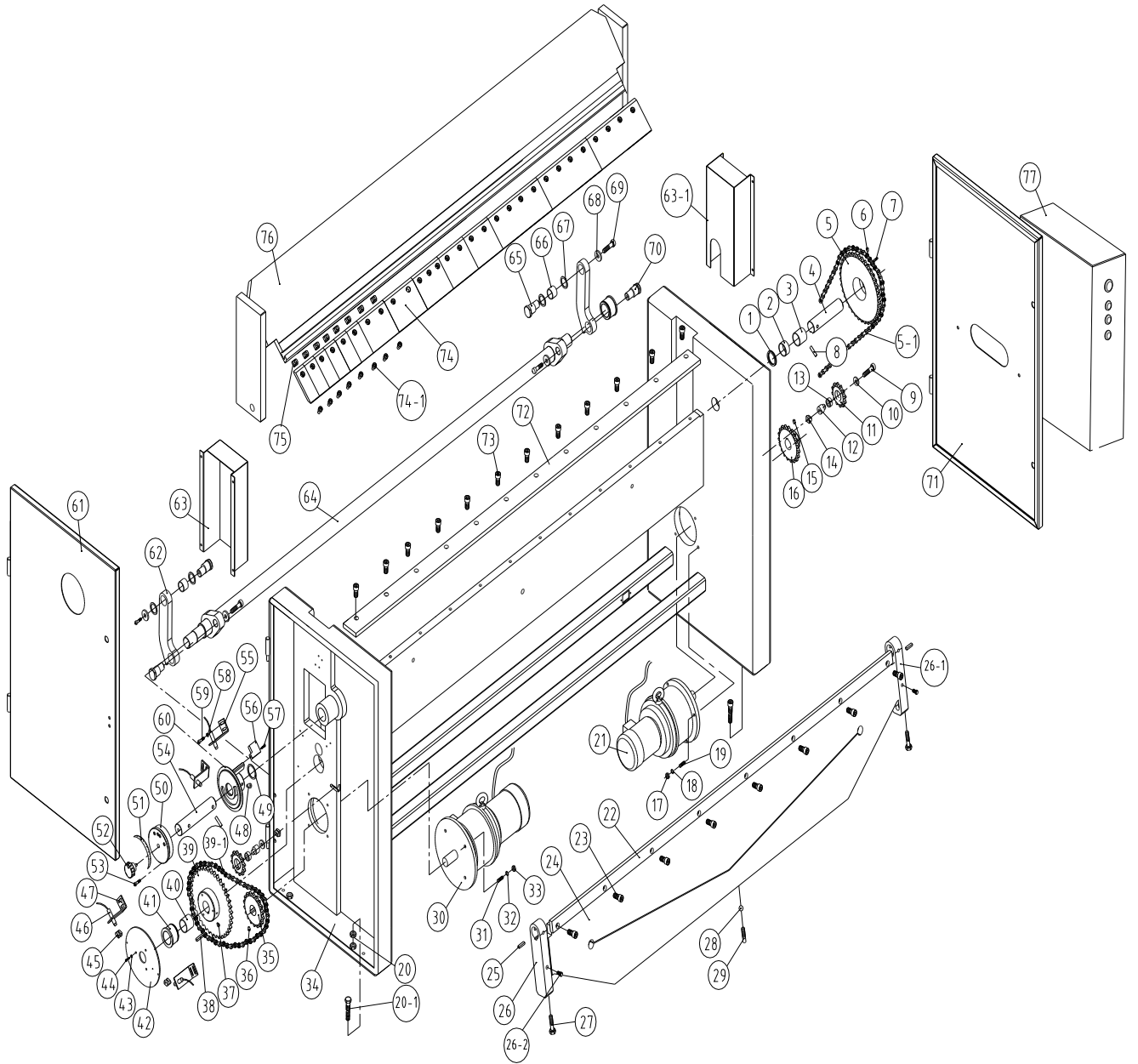
5. Fixing and usage

In order to operate steady and safety, please make sure that the machines are grounded firmly and adjust by the bolt.In the process of bending, the upper plate will be rised by the electric contolling switch, the bending plate is in the situation of free working. Then put the workpiece onto the support blade, adjust the angle and width according to the working requirement. Press the control button of upper plate and compress the workpiece then the bender plate will rise and bend. When finished, the upper plate rise, the bender plate let down. Take out of the workpiece.

6. LUBRICATION AND MAINTAINANCE

There should be enough lubricant for chain wheel, chain. You should injection oil service for parts of machiney everyday.

7. EXPLODED DRAWING AND PART LIST



PARTS LIST

Item	Description	Qty	Item	Description	Qty
1	Sleeve	2	39	Big chain wheel 1	1
2	Cover	2	39--1	Chain	1
3	Cover	2	40	Cover	4
4	Right turning axle	1	41	Spindle sleeve	2
5	Big chain wheel 2	1	42	Disk	1
5--1	Chain	1	43	Flat washer	3
6	Screw	1	44	Screw	3
7	Key	1	45	Block	2
8	Spring pin	2	46	Approach switch	3
9	Screw	1	47	Switch support	3
10	Bearing cover	2	48	Screw	1
11	Tensioner sprocket	2	49	Washer	1
12	Shaft	1	50	Adjustment disc	1
13	Bearing	2	51	Graduated scale	1
14	T block	2	52	Pentacle handle	1
15	Screw	1	53	Screw	4
16	Small chain wheel2	1	54	Left turning axle	1
17	Nut	4	55	Switch support	1
18	Washer	4	56	Mass	1
19	Screw	4	57	Screw	1
20	Nut	4	58	Flat washer	8
20--1	Bolt	4	59	Screw	8
21	Motor reducer	1	60	Limit disc	1
22	Bending knife	1	61	Left fender of wallboard	1
23	Screw	8	62	Connect plate	2
24	Bending plate	1	63	Left guard plate	1
25	Key	2	63--1	Right guard plate	1
26	Left connector	1	64	Main spindle	1
26--1	Right connector	1	65	Eccentric shaft	2
26--2	Bolt	2	66	Cover	4
27	Bolt	2	67	Washer	8
28	Ball	1	68	Press wahser	1
29	Cock screw	1	69	Screw	4
30	Motor reducer	1	70	Pin	2
31	Screw	4	71	Right fender of wallboard	1
32	Flat washer	4	72	Support knife	1
33	Nut	4	73	Screw	12
34	Wallboard	1	74	Upper knife	1 set
35	Small chain wheel 1	1	74--1	Screw	33
36	Screw	1	75	T block	33
37	Screw	1	76	Upper shelf	1
38	Key	1	77	Electric box	1

OPERATION MANUAL

(Electrical System)

I BRIEF INTRODUCTION

This operation manual shows you the connection, use and maintenance for interface of electrical system and mechanism, and maintenance of Electric bending machine. Before operation, please read the manual carefully, to avoid the damage of equipment and body.

The bending machine connect easily, wiring and maintenance is convenient. There are two ways for running. One is point, another is single-pass . There is pressing and bending in the point way. In single-pass way, when we tramp the right foot switch, the motor will stop by itself when it run to the 25mm. At this time If you are sure the position is correctness and reliability, you can tramp right foot switch again, thers is the function of single stroke.

The internal Command PLC have adjusted before left factory. User don't change random in case affect the machine's capability. If you want to change it, you should find the professionals technical and special software to change it.

II PREPARATION BEFORE RUNNING

Before using this machine, please prepare a 25A Air Switch or 25A knife switch, Connect 3*4mm² black + 1*2.5mm² yellow / green wire namely 3 phase 4 wires to the foreside of switch. The nether wire connects with the wire outside the electrical box. Make sure the power doesn't fluctuate a lot, if the power fluctuate a lot (>2), please stable it.

Check if the securities cover and protect switch is installed firmly or not, and there is no sundries on the blade and move part.

III RUNNING

Pleas make sure that the power and earth-wire are connected firmly, then you can connect the machine to power. Turn the armature switch to the "ON" position, then turn the start button of control box and meanwhile the PLC indicator light bright, it means the machine begin to work.

IV OPERATION

After the machine is power on, please operate the machine according to following steps:

1. POINT OPERATION

<1>.Turn the mode switch to the point position, then tramp left foot switch. Motor for pressing will run to the loosening position until the operation finished, the operation will stop.If for the opposite direction, you need to adjust phase sequence of power. When it is adjusted, the machine will continue operating to top limit and make sure the

position is correct.

<2> Tramp the right foot switch, motor for pressing will run to the pressing position. Untie the foot switch, the motor will stop working. If the pressing doesn't finish working, the motor can reverse in order to adjust the position of pressing. When it reaches the top limit, the motor will stop reversing. Tramp the right foot switch, the motor will stop by itself when it will run to 25mm away from swaging. Meanwhile please make sure the position's correctness and reliability then tramp the foot switch and continue working. When the rotational numerical of motor beyond current relay's set-point (2A), the current reply start to working, the motor will stop. Pressing is finished, indicator bright.

<3> When the motor for pressing finish working, the motor will stop by it self. Then tramp the right foot switch, the motor for bending start to working, untie the foot switch, the motor stop bending. If it doesn't finish the bending, the motor can reverse in order to adjust the correct angle. When finish the bending, the motor for pressing will go back to the loosening position.

2. SINGLE-PASS OPERATION

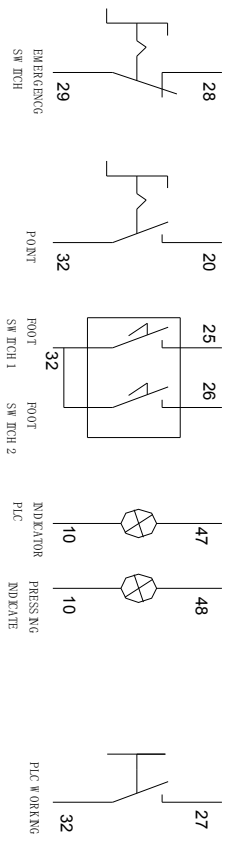
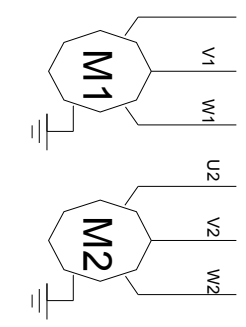
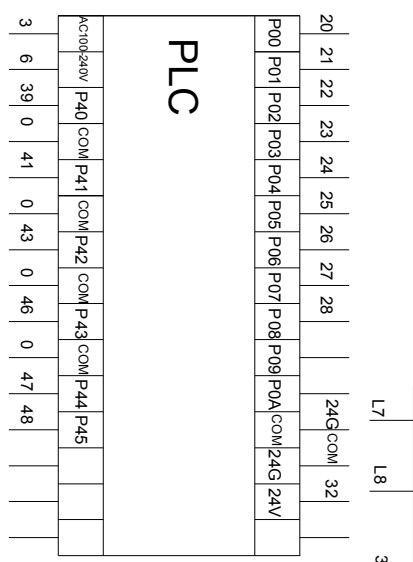
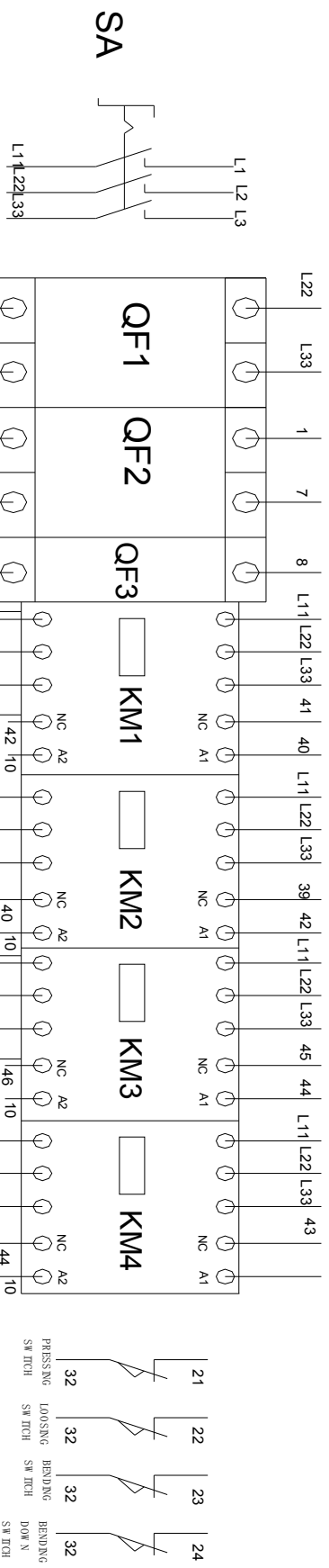
Turn the mode switch to the single-pass position. According to the following steps to operate:

Tramp the right foot switch, the motor for pressing will stop by itself when it will run to 25mm away from swaging. Meanwhile please make sure the position's correctness and reliability then stemp the foot switch and continue working. When finish working, meanwhile the indicator bright, the motor will stop working. The motor for bending start working, when the bending finished, the motor begin to reverse, when it finished, the motor for pressing begin to reverse, when it finished, the motor will stop working, the whole single-pass will be finished.

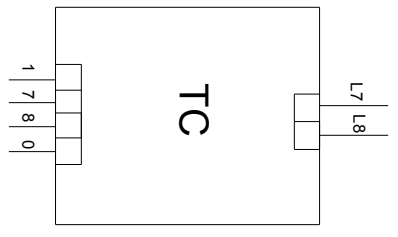
V. MAINTENANCE

When the damage is happened, the machine must be repaired by an experienced technician, in case happen other problem.

VI. ELECTRICAL DRAWINGS

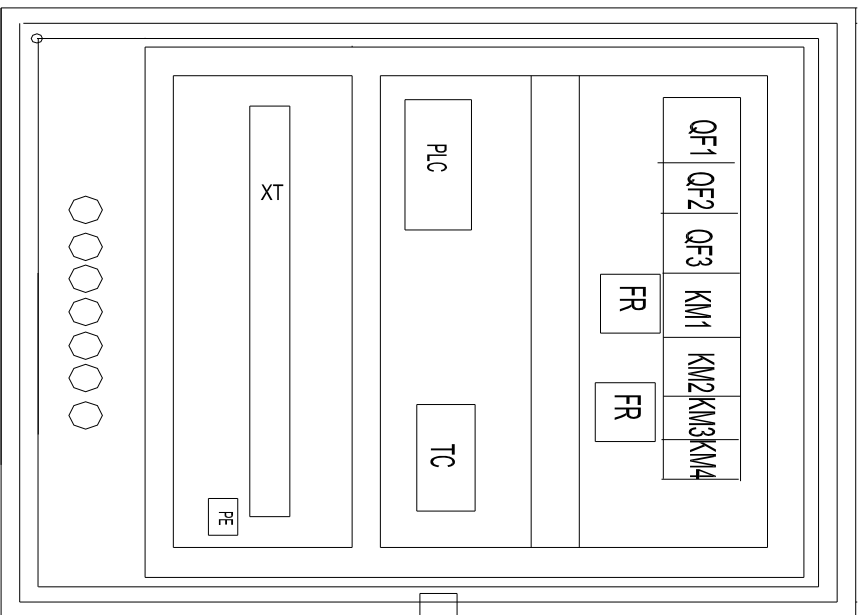
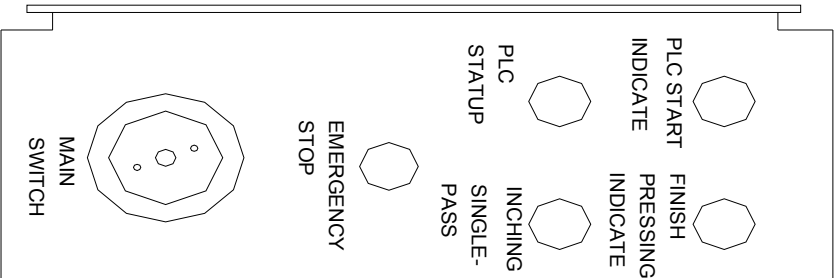


L1	L2	L3	U1	V1	W1	U2	V2	W2	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
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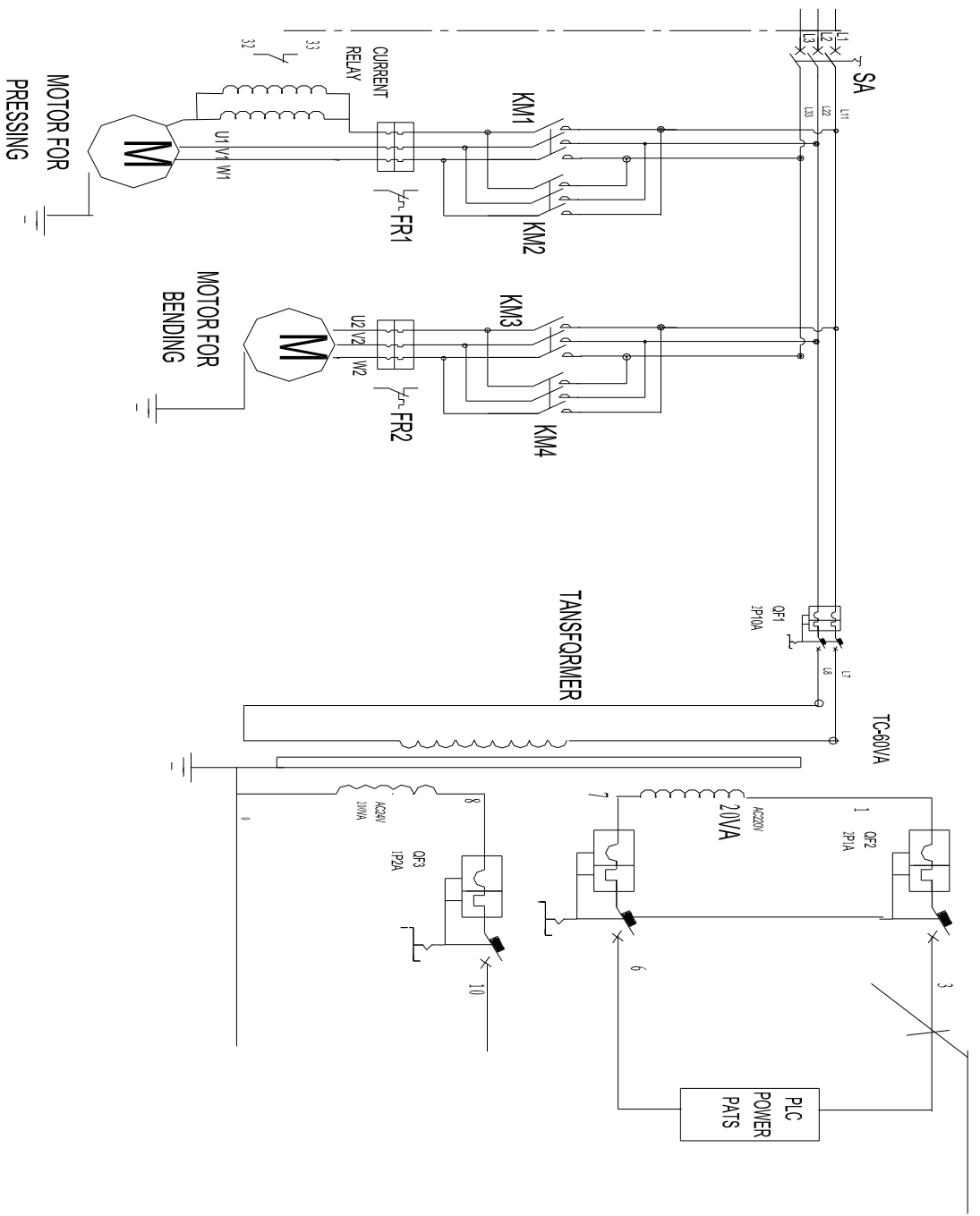


PE

PROJECT: MECHANICAL POWER SHEAR	PLANT: 3X400V+1N+PE 50HZ	CONNECTION DRAWING	DRAWING NUMBER: TFM2020-D-2	DATE: 09/05/07	DRAWING: 4 OF 4
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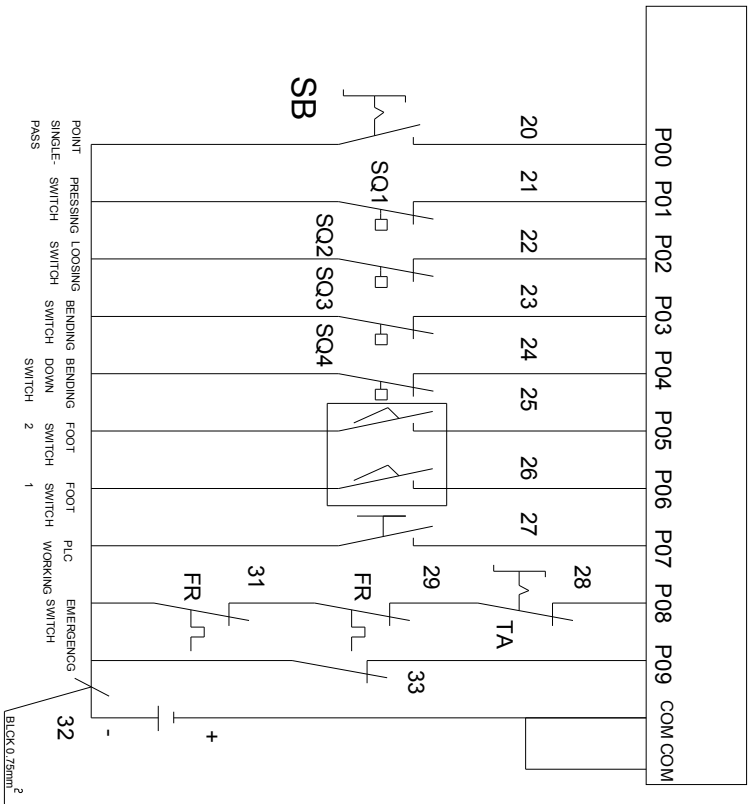


PROJECT: MECHANICAT POWER SHEAR	PLANT: 3X400V+N+PE 50HZ	STATION DRAWING	DRAWING NUMBER: TFM2020-D-2	DATE: 09/05/07	DRAWING: PAGE: 4 OF 4
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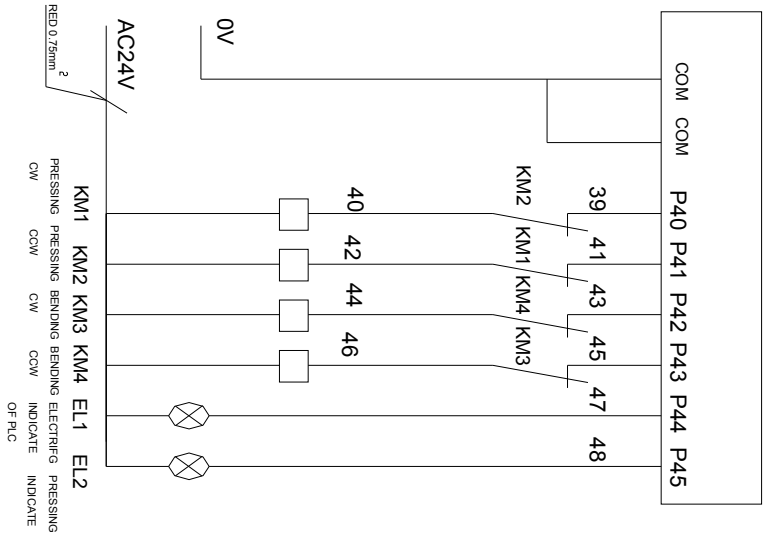


PROJECT: MECHANICAT POWER SHEAR	PLANT: 3X400V+N+PE 50HZ	ELEENTS PART 1	DRAWING NUMBER: TFM2020-D-2	DATE: 09/05/07	DRAWING:
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IN



OUT



PROJECT:

MECHANICAT POWER SHEAR

PLANT:

3X400V+AN+PE 50HZ

ELEENTS PART 2

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09/05/07

PAGE:

4 OF 4

DRAWING:

Note: This manual is only for your reference. Owing to continuous improvement of the machines, Changes may be made at any time without obligation on notice. And please note the local voltage while operating this electric machine.



Our products are frequently updated and improved. Minor changes may not yet be incorporated in this manual. Always state the year of build, type and serial number of the machine in correspondence.

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