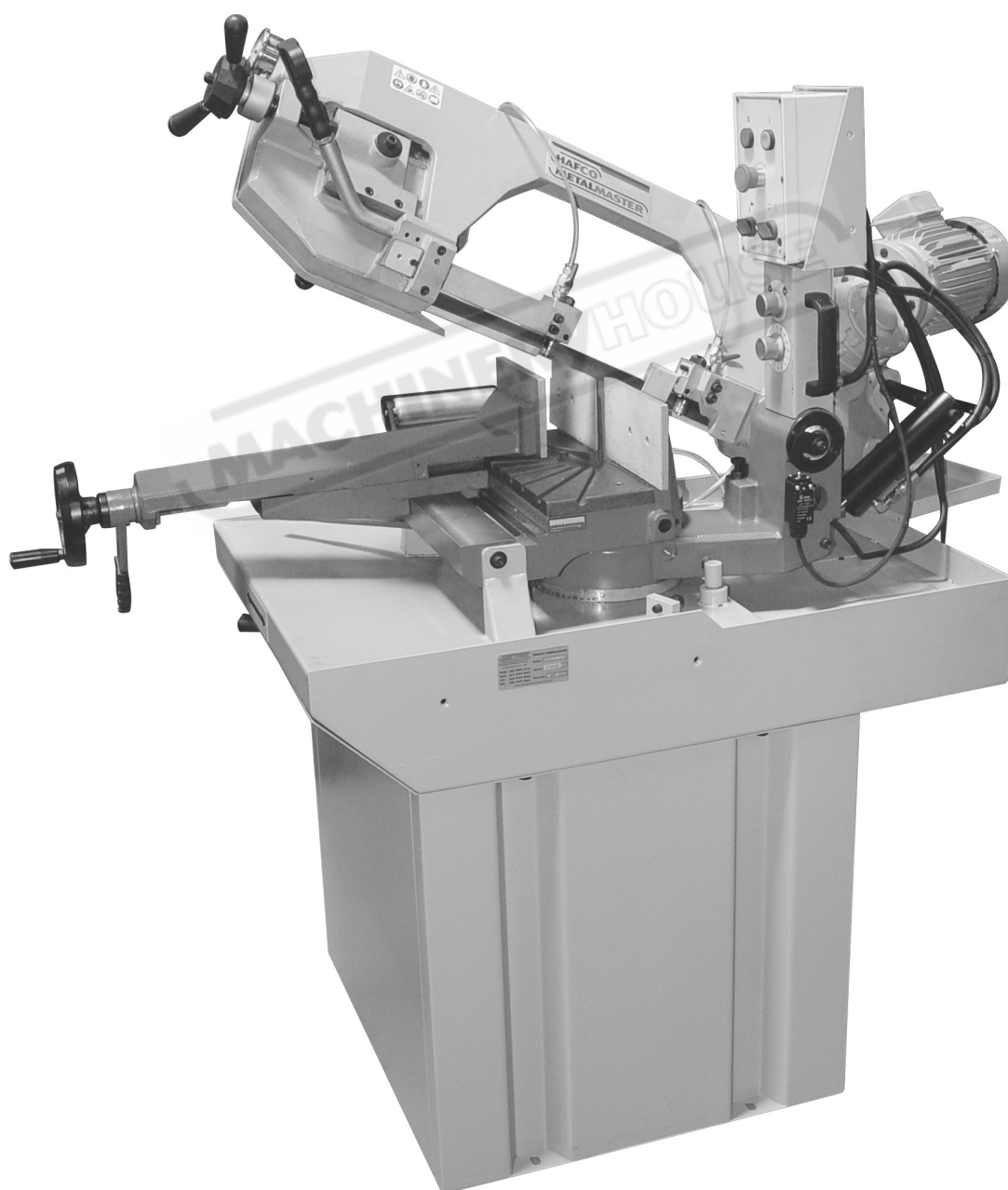


# INSTRUCTION MANUAL

## EB-280DS

Swivel Head Metal Cutting Band Saw (415V)  
245 x 180mm (W x H) Rectangle



**B063**

## SAFETY RULES


**WARNING: When using electric tools basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury!**

As with all machinery there are certain hazards involved with operation and use of the machine. Using the machine with respect and caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result. This machine was designed for certain applications only. We strongly recommends that this machine NOT be modified and/or used for any application other than for which it was designed. If you have any questions relative to its application DO NOT use the machine until you contact with us and we have advised you.

**Read all the following instructions before attempting to operate this product and save these instructions!**

1. Keep work area clear
  - Cluttered areas and benches invite injuries.
2. Consider work area environment
  - Do not expose tools to rain.
  - Do not use tools in damp or wet locations.
  - Keep work area well lit.
  - Do not use tools in the presence of flammable liquids or gases.
3. Guard against electric shock
  - Avoid body contact with earthed or grounded surfaces.
4. Keep other persons away
  - Do not let persons, especially children, not involved in the work touch the tool or the extension cord and keep them away from the work area.
5. Store idle tools
  - When not in use, tools should be store in a dry locked-up place.out of reach of children.
6. Do not force the tool
  - It will do the job better and safer at the rate for which it was intended.
7. Use the right tool
  - Do not force small tools to do the job of a heavy duty tool.
  - Do not use tools for purposes not intended; for example do not use circular saws to cut tree limbs or logs.
8. Dress properly
  - Do not wear loose clothing or jewellery, they can be caught in moving parts.
  - Non-skid footwear is recommended when working outdoors.
  - Wear protective hair covering to contain long hair.
9. Use protective equipment
  - Use safety glasses.
  - Use face or dust mask if cutting operations create dust.
10. Connect dust extraction equipment
  - If device are provided for the connection of dust extraction and collecting equipment,ensure these are connected and properly used.
11. Donot abuse the cord
  - Never yank the cord to disconnect it from the socket. Keep the cord away from heat,oil and sharp edges.
12. Secure work
  - Where possible use clamps or a vice to hold the work. It is safer than using your hand.
13. Do not overreach
  - Keep proper footing and balance at all times.
14. Maintain tools with care
  - Keep cutting tools sharp and dean for better and safer performance.
  - Follow instructions for lubricating and changing accessories.
  - Inspect tool cords periodically and if damaged have them repaired by an authorized service facility.
  - Inspect extension cords periodically and replace if damaged.
  - Keep handles dry dean and free from oil and grease.
15. Disconnct tools
  - When not in use, before servicing and when changing accessories such as blades,bits and cutters disconnect tools from the power supply.
16. Remove adjusting keys and wrenches
  - From the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.
17. Avoid unintentional starting
  - Ensure switch is in "off" position when plugging in.
18. Use outdoor extension leads
  - When the tool is used outdoors, use only extension cords intended for outdoor use and so marked.
19. Stay alert
  - Watch what you are doing , use common sense and do not operate the tool when you are tired.
20. Check damaged parts
  - Before further use of tool, it should be carefully checked to determine that it will operate properly and perform its intended function.
  - Check for alignment of moving parts, binding of moving parts, breakage of parts , mounting and any other conditions that may affect its operation.
  - A guard or other part that is damaged should be properly repaired or replaced by an authorized service centre unless otherwise indicated in this instruction Manual.
  - Have defective switches replaced by an authorized service centre.
  - Do not use the tool if the switch does no turn it on-and off.
21. Warning
  - The use of any accessory or attachment other than one recommended in this instruction manual may present a risk of personal injury.
22. Have your tool repaired by a qualified person
  - This electric tool complies with the relevant safety rules.Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

## SPECIFICATIONS

			<b>EB-280DS</b>
<b>Capacity</b>	(mm)	0°	● 225 ■ 245 x 180
		45°	● 160 ■ 160 x 160
		60°	● 100 ■ 100 x 100
<b>Speeds</b>	(MPM)		
<b>Motors</b>	<b>Saw</b>		<i>Customed</i>
			400V,50Hz, 3 Phase/230v,50Hz
	<b>Coolant</b>		50W
			400V,50Hz, 1 Phase, 0.16A
<b>Blade</b>	(mm)		27 x 0.9 x 2480
<b>Blade Wheels</b>	(mm)		292 ( <i>High strength flanged cast iron</i> )
<b>Dimensions</b>	(mm)	<b>Length</b>	1500
		<b>Width</b>	510
		<b>Height</b>	935( <i>Cutting area</i> )
		<b>Height</b>	1570( <i>Total</i> )
<b>Packing</b>			1480 x 760 x 960 mm
<b>Weight</b>	(Kg)	(N.W./G.W.)	295/315
<b>Miter Scale</b>			
<b>Noise</b>	(dB)		70 ( <i>Weighted sound pressure level</i> )
<b>Fuse</b>			Max. 16A

### ATTENTION!

Because there is no built in fuse in this saw, the saw has to be fused by the fuse of the building installation. The maximum value of the building installation fuse has to be 16A.

## FEATURES

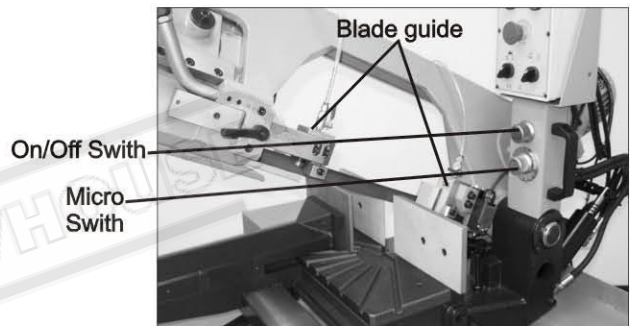
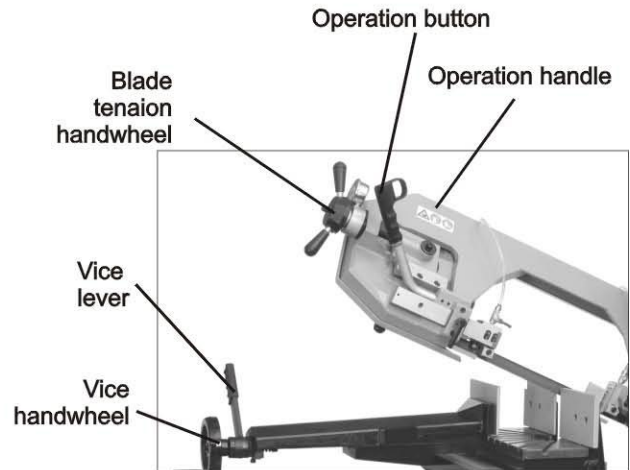
1. Special designed horizontal band saw.
2. Offers two speeds for cutting metal.
3. With cooling pump for prolongation of the saw blade life.
4. With triggering knob at the handle for easy and safe use.
5. With scale for the mitering vise and graduation.
6. Stand for safe use.

## DELIVERY

1. Transportation to desired location before unpacking, please use lifting jack.
2. Unpack all the parts.
3. Transportation after unpacking, please use heavy duty fiber belt to lift up the machine.  
Always keep proper footing and balance while moving this machine.  
As this machine weights 295kgs it is recommended that the machine be transported with help of lifting jack.

## INSTALLATION

1. Position the base of the machine on a solid cement floor and then fix it to the ground.
2. Put the bandsaw at the base and fasten it with the delivered screws.
3. Secure the cutting head by the safety lever.
4. Assemble the roller holding arm.
5. Tighten all locks before operation.
6. Check carefully if the sawblade is running in counter-clockwise direction. If not, exchange two wires at the plug. Then repeat the running test.
7. Make sure that the blade is not impeded in any way.
8. Position the adjustable blade guide to its most left position. Turn the blade tension handwheel to tighten the blade. Correct tension will be reached, if the sawblade can be pushed for 3 mm in the middle of the cutting area with a force of 50 N.  
**Please note!** Incline the handle of the blade tension handwheel in such manner, that hitting of the handwheel of the vice is impossible.
9. Fill the tank with coolant liquid by using a mixture of water and oil in 7-10% percentage.
10. Check that the mains voltage corresponds to that reported on the motor.



## WORKING WITH THIS MACHINE

1. Position the vice about 4 mm from the workpiece by operating the vice handwheel!
2. Clamp the workpiece in vice completely by turning the vice lever.
3. Position the adjustable guide head as near as
4. Operate the speed switch by selecting the appropriate speed:
  - in the 1st pos. the cutting speed is 45m/min (EB-280DS)
  - in the 2nd pos. the cutting speed is 90m/min (EB-280DS)
5. Connect the cable to the mains according to the mains according to accident-prevention standards.  
**ATTENTION: GROUND WIRE.**
6. Choose, if you would like to use coolant or not. For pumping coolant, please turn the switch with the inscription coolant to the "I"-position, if you do not wish to use coolant, turn this switch to the "O"-position.  
**ATTENTION:**  
Before start the machine, make sure, that blade is suitable to workpiece specifications. Make also sure that all protective covers are installed and tighten correctly by screws.
7. Unsecure the cutting head.
8. After that, lead down the cutting head to about 5 mm to the workpiece, press the operating button of the handle to start the rotation of the blade and to start the cooling system.
9. There are two different control systems of this saw:  
EB-280DS: The push button at the handle is a trigger button. That means, the saw is working, as long as the button is pushed. If the push button is released, the saw and the coolant will stop.
10. If the sawblade has reached its full speed, you can push down the saw bow.  
**Please be careful! Feed the bow slowly and with normal force. High force will damage the sawblade and the saw.**
11. In case of any emergency, press the red palm-EMG-button at the control box. The saw will stop immediately. To release the EMG-switch, please turn the palm-button and release it.

## INCLINED CUTS

If you wish to make inclined cuts , release the lever and turn the bow according to the desired angle and clamp the lever again .

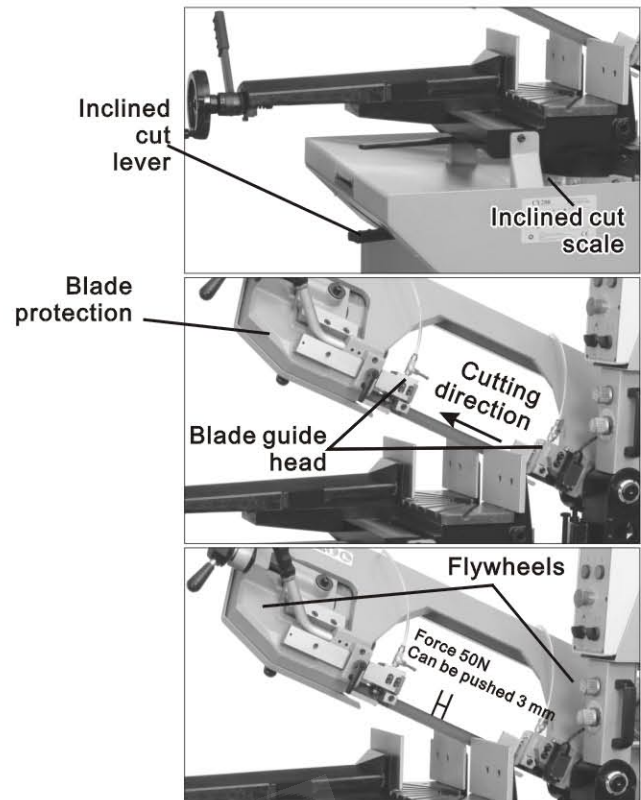
## REPLACEMENT OF THE BLADE

### ATTENTION !

Before doing any maintenance or servicing switch off and unplug the machine .

1. Lift the bow completely .
  2. Secure the cutting head (by safety lever)!
  3. Loosen the blade tension handwheel and remove the blade protection .
  4. Replace the blade by inserting it first between the bearings of the blade guide heads and then by positioning it on the housings of the flywheels .
- ATTENTION :** Check the cutting direction of the blade teeth. It has to be according to the arrow at the bow. Tighten the blade again.

**Blade tension :** The correct blade tension is reached , if the sawblade can be pushed for 3 min the middle of the cutting area with a force of **50 N**. For this adjustment , the adjustable blade guide has to be at its most left position .



**Please note !** Incline the handle of the blade tension handwheel in such manner, that hitting of the handwheel of the vice is impossible .

**Be careful !** After any dismantling of the blade protection , be sure , that this cover is replaced and Secured by the screws again . Do never manipulate the safety switch . Accidents may happen if this is disregarded .

## MAINTENANCE

**Attention !** In each case before you will do any Maintenance switch off the machine and unplug it . Secure the cutting head by the safety lever!

1. Lubricate the slide , the vice , and the blade guide Periodically . Clean the coolant tank from the chips .
2. The reduction gear has already been lubricated with synthetic grease and , therefore , it does not require any maintenance .

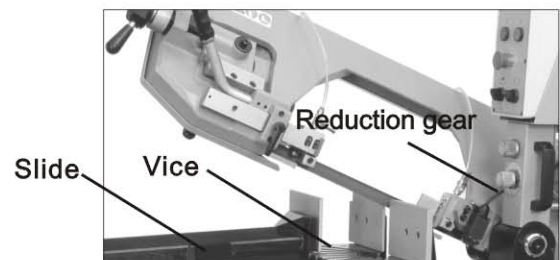
**IMPORTANT :** At the end of each working day , it is necessary to loosen blade tension , unplug the machine and secure the cutting head (by safety lever) ! Remember to put the blade under tension again when You resume your work .

## ADJUSTMENT OF BLADE GUIDE BEARINGS

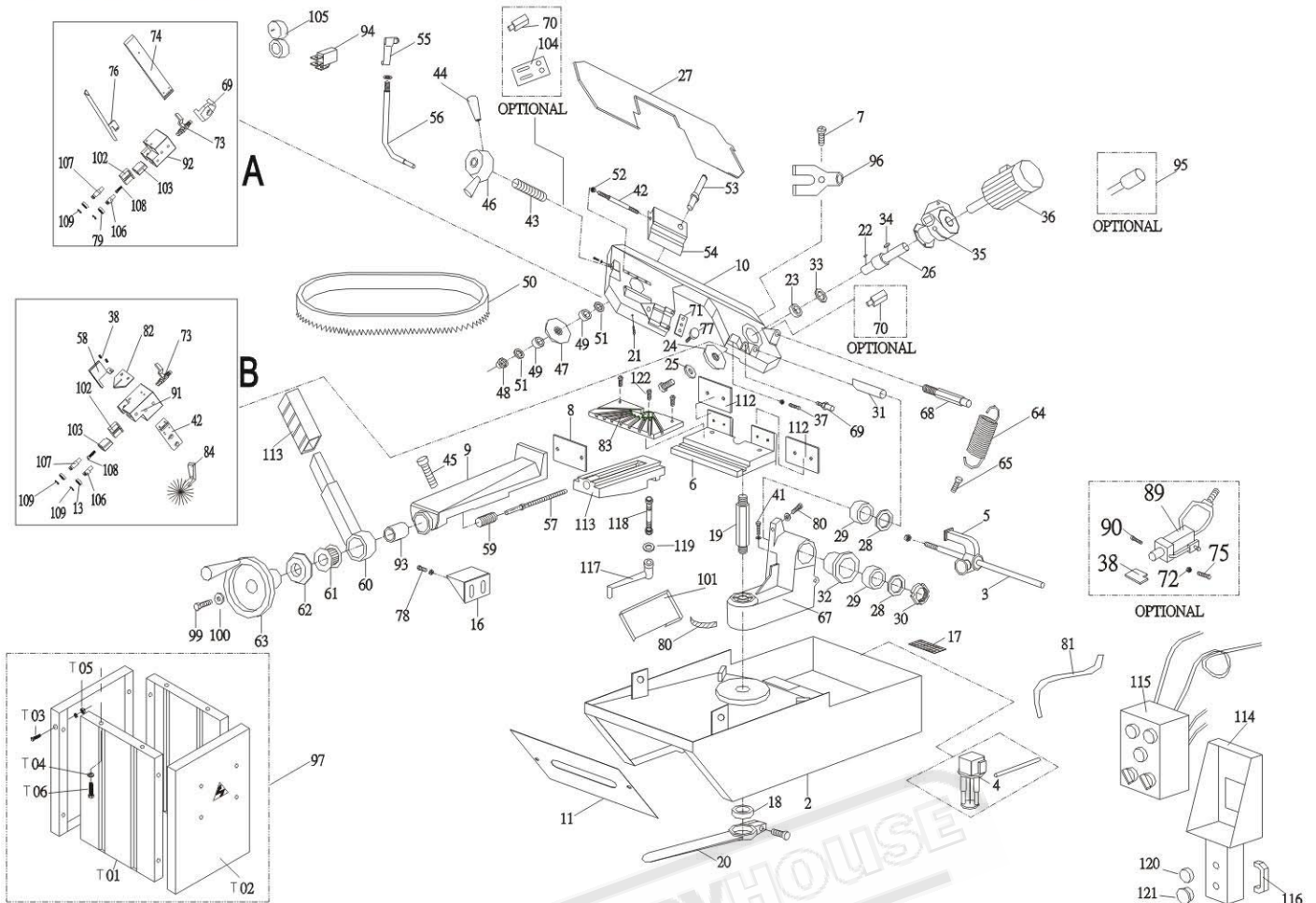
1. Unloose the nut and unscrew the dowel (ref.No.80) , by increasing the gap between the blade and the bearings .
2. Then adjust the upper bearing : If necessary , unloose the screws on the arm (ref.No.74) .
3. In order to adjust the pair of side bearings (ref.No.78) , act on the dowel (ref.No.80) so that the bearings rest on the blade and , then , loose it as much as it is necessary to let the blade slide , by leaving a backlash of 0.04 mm .
4. When the adjustment has been completed , tighten its nut .

**ATTENTION :**

Please make sure to always assemble 0.9 mm thick blades for which the bearings of the blade guide have been adjusted In case of thicker blade , if is necessary to adjust the blade guide once again above mentioned .



# EXPLODED VIEW



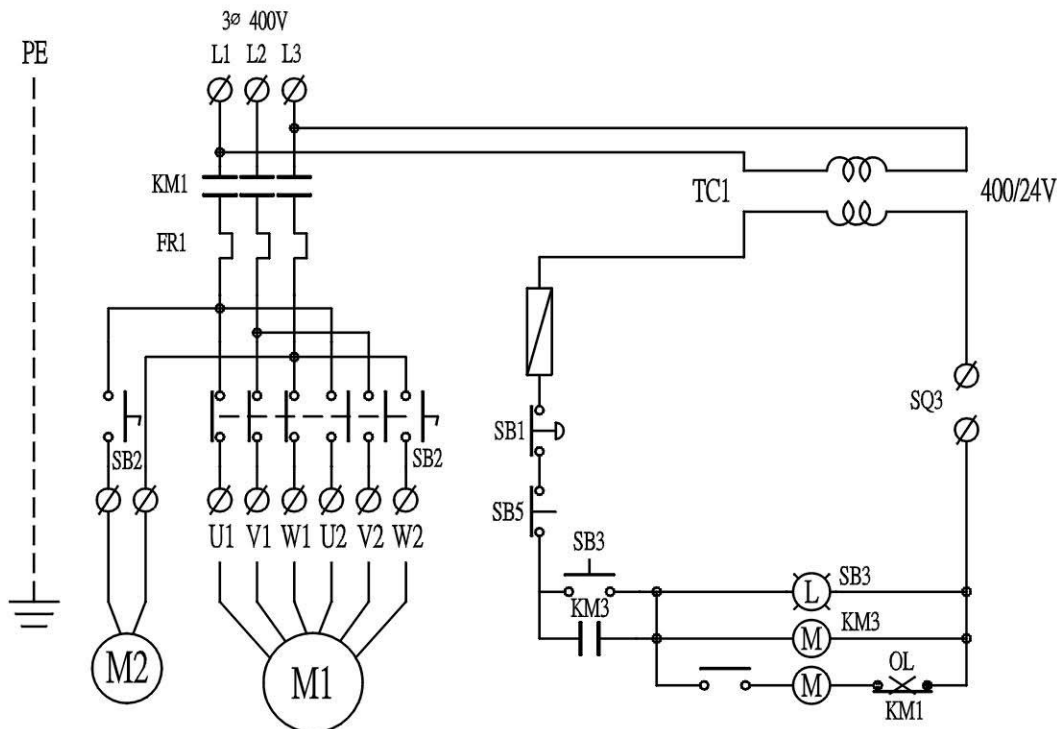
## DELIVERING OF SPARE PARTS

Please note: When ordering spare parts please always mention: Model of the machine, Serial number and Reference number of the part.  
**SHOULD REF. NUMBERS MISSING, NO SPARE PART WILL BE DELIVERED.**

## SPARE PARTS LIST FOR EB-280DS

Ref. No.	Description	Ref. No.	Description	Ref. No.	Description	Ref. No.	Description
1.	Washer	33.	Washer	64.	Spring	97.	Stand
2.	Base	34.	Key 4x25	65.	Spring connection	98.	Nut M10
3.	Bar stop rod	35.	Reducer	67.	Revolving arm	99.	Screw M8*15
4.	Cool pump	36.	Motor	68.	Rod	100.	Washer
5.	Bar stop	37.	Screw	69.	Stop bolt	101.	Plate
6.	Countervice	38.	Plate	70.	Micro switch(optional)	102.	Bladeguide unit square
7.	Screw M5	39.	Plug	71.	Block	103.	Bladeguide unit
8.	Vice jaw	40.	Micro switch(optional)	72.	Hex. nuts	104.	Blade tension guide
9.	Vice	41.	Screw M8	73.	Rubber connection	105.	Blade tension gauge (optional)
10.	Body frame	42.	Threaded shaft	74.	Arm	106.	Guide pivot
11.	Casing	43.	Spring washer	75.	Bolt	107.	Guide pivot
12.	Motor Fan	44.	Grip	76.	Blade guard	108.	33MM*MS screw
13.	Motor Cover	45.	Pin	77.	Handle	109.	C-ring
14.	Connection Plate	46.	Handwheel	78.	Screw M10	110.	Vice piece
16.	Arm	47.	Return flywheel	79.	Bearing 6082Z	111.	Screw
17.	Filter	48.	Hex. nut	80.	Screw M8	112.	Vice jaw
18.	Bush	49.	Bearings 2Z	81.	Water pipe	113.	Vice sliding seat
19.	Pin	50.	Saw blade	82.	Rust plate	114.	Switch shelf
20.	Lever	51.	C-ring	83.	Vice pad	115.	Electrical box
21.	Knob	52.	Hex. nuts	84.	Bush	116.	Handle
22.	Key 7x7	53.	Blade sheel shaft	85.	Switch set	117.	Handle
23.	Bearing	54.	Block blade tension	86.	24V switch set	118.	Bolt
24.	Motor flywheel	55.	Handle	87.	Scale	119.	Washer
25.	Washer	56.	Lever	89.	Hydraulic cylinder	120.	Revolving Hook
26.	Shaft	57.	Vice screw	90.	Pin	121.	Adjusting hook
27.	Blade cover	58.R.	Bladeguard	91.	Fixed bladeguide plate	122.	Screw
28.	Ring nilons	59.	Vice spring	92.	Mobile bladeguide plate		
29.	Bearing 32006	60.	Vice lever	93.	Bush		
30.	Ring nut M30	61.	Bearing	94.	Toger switch		
31.	Pivot	62.	Bearing cover	95.	Condenser(motor)(optional)		
32.	Bearing cover	63.	Vice handwheel	96.	Coolant distributor		

# ELECTRICAL CIRCUIT DIAGRAM EB-280D



Electrical parts list Including 24V electric power unit (optional)

CERTIFICATE OF CONFORMITY

SLG Nr/NO : 99-1-396-0

Part No	Name	Description	Producer	Mark
S01	KM1	Contacteur Lcl0910b724V 25A	Telemicquie	CE
S02	FR1	Overload Box LR7k	Telemicquie	CE
S03	BOX	Control Box 140*230	CYM	CE
S04	M1	Saw Motor 400V 50HZ 3Phases	CYM	CE
S05	M2	Coolant Pump Motor 400V 50HZ 3Phases	CYM	CE
S06	FU1	Fuse 10*38 1A 500V	Ciro	CE
S07	SB4	Speeds Switch 10A 500V	TEND	CE
S08	TC1	Transformer 400V/24V	TAICHUNC	CE
S09	SB1	Emergency Stop 6A 500V	Ciro	CE
S10	SB2	Pump Switch 10A 500V	Telemicquie	CE
S11	SB3	I Switch 10A 500V	Telemicquie	CE
S12	SB5	O Switch 10A 500V	Telemicquie	CE
S13	SQ2	Safety Door Switch TZ-93B	TEND	CE
S14	SQ3	On-Switch	SHINOZAK	CE
S15	KM3	Relay 6A	RY	CE

# PROFILE

