

GARANTİ BELGESİ

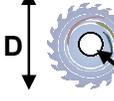
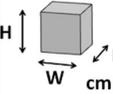
İMALATÇI FİRMA : YILMAZ MAKİNE SANAYİ VE TİCARET A.Ş.
ADRES : TAŞDELEN MH. ATABEY CD. No 9 34788 ÇEKMEKÖY
İSTANBUL-TÜRKİYE
TELEFON : 0216.312.28.28 PBX
TELEFAX : 0216.484.42.88
İMZA-KAŞE :

ÜRÜNÜN CİNSİ : ÇİFT KAFA PVC VE ALÜMİNYUM KESME MAKİNESİ
MARKASI : YILMAZ
MODEL KODU : KD 402
BANDROL/SERİ NO :
TESLİM TARİHİ :
GARANTİ SÜRESİ : 1 YIL
AZAMI TAMİR SÜRESİ : 30 İŞ GÜNÜ

YETKİLİ SATICI FİRMA :
ADRES :

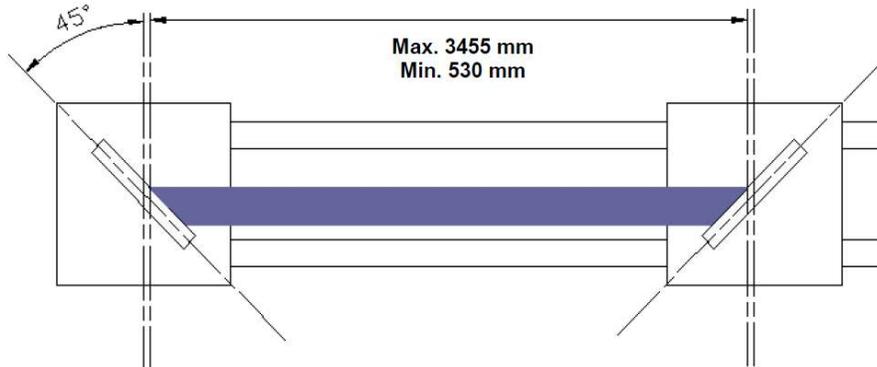
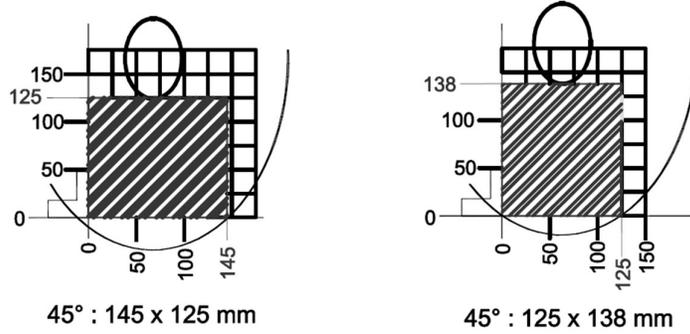
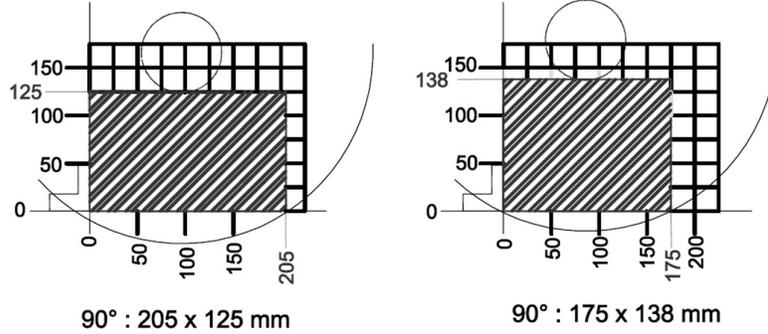
TELEFON :
TELEFAX :
İMZA-KAŞE :

TEKNİK ÖZELLİKLER - TECHNICAL FEATURES - ТЕХНИЧЕСКИЕ ОСОБЕННОСТИ

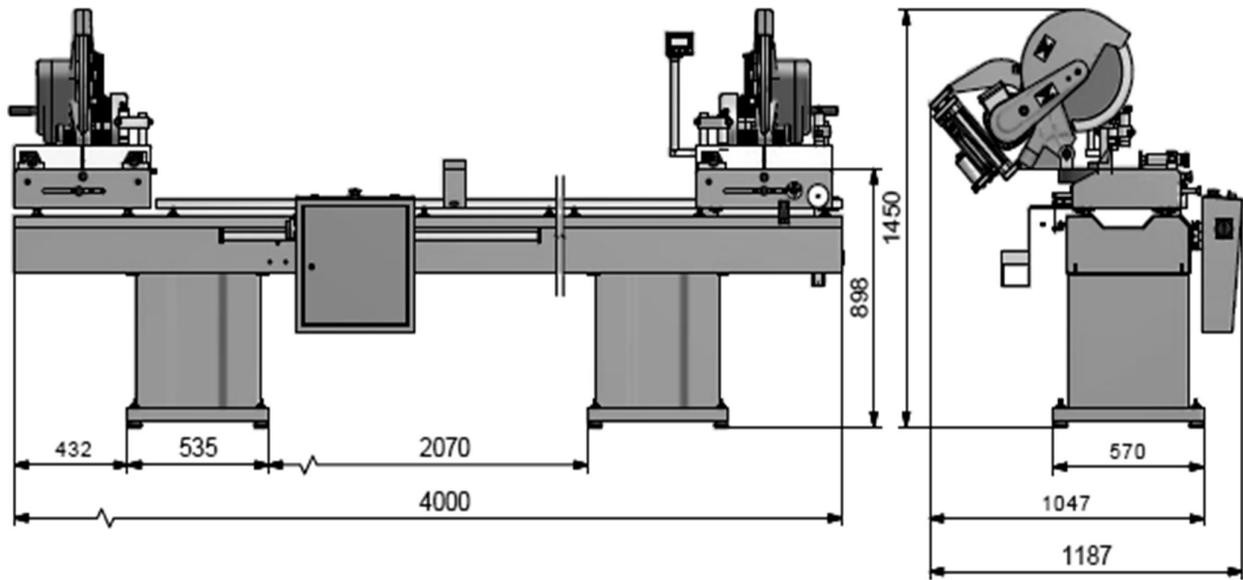
							
KD 402	2.2 kW 50 Hz X 2 400V AC 3P PE	3000 dev/dak. RPM	D = 400 mm d = 30 / 32 mm	6-8 BAR	46 Lt/dak. Lt/min.	W = 75 L = 410 H = 170	487 kg 622 kg

 YILMAZ MAKİNE SANAYİ VE TİCARET A.Ş Turgut Ozal Bulvarı No:173 Tasdelen 34788 Cekmekoy İSTANBUL-TURKIYE Tel: +90 (216) 312 28 28 (Pbx) Fax: +90 (216) 484 42 88 web : www.yilmazmachine.com.tr e-mail: yilmaz@yilmazmachine.com.tr					
MODEL TYPE MODEL	KD 402	RATED CURRENT NOMINAL AKIM	9,3 A		
SERIAL NO SERI NO		SAW DIAMETER TESTERE ÇAPI	Ø400xØ30/32mm		
PROD.DATE ÜRETİM TAR.		AIR CONSUMP. HAVA TÜKETİMİ	46 Lt/min		
TOTAL POWER TOPLAM GÜÇ	4440 W	AIR PRESSURE HAVA BASINCI	6-8 BAR		
RATED VOLTAGE NOMİNAL GERİLİM	400V AC 3P PE	WEIGHT AĞIRLIK	487 KG.		

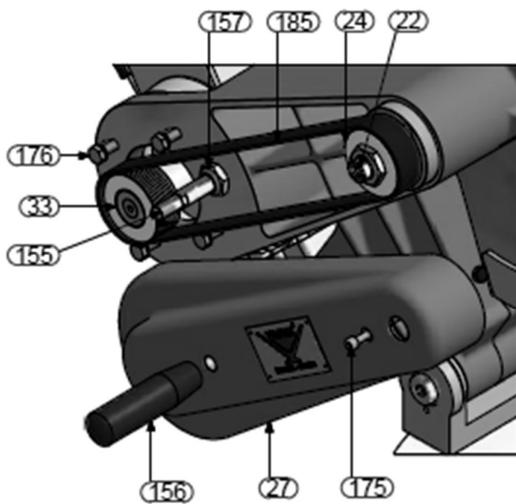
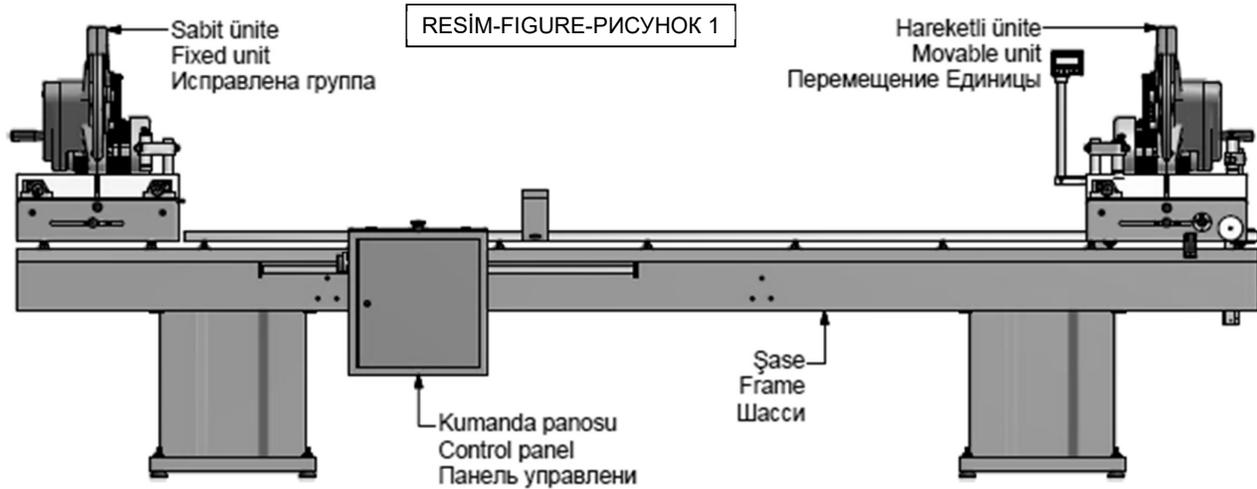
KESME DİYAGRAMI – CUTTING DIAGRAM – ДИАГРАММА ВЫПИЛИВАНИЯ



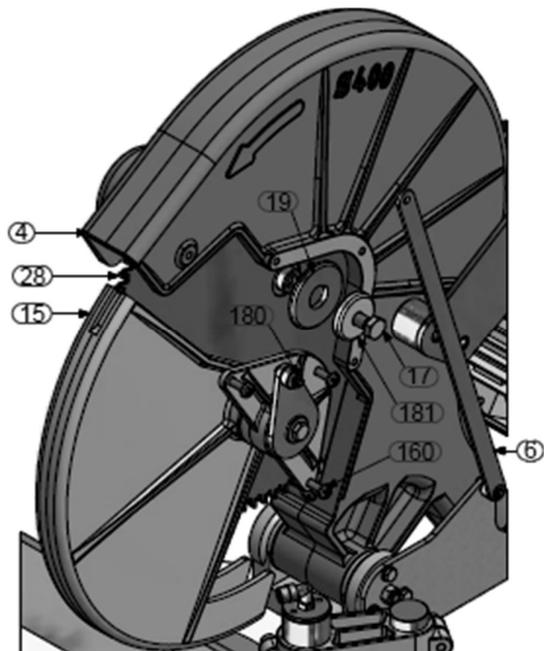
BOYUTLAR – DIMENSIONS – РАЗМЕРЫ



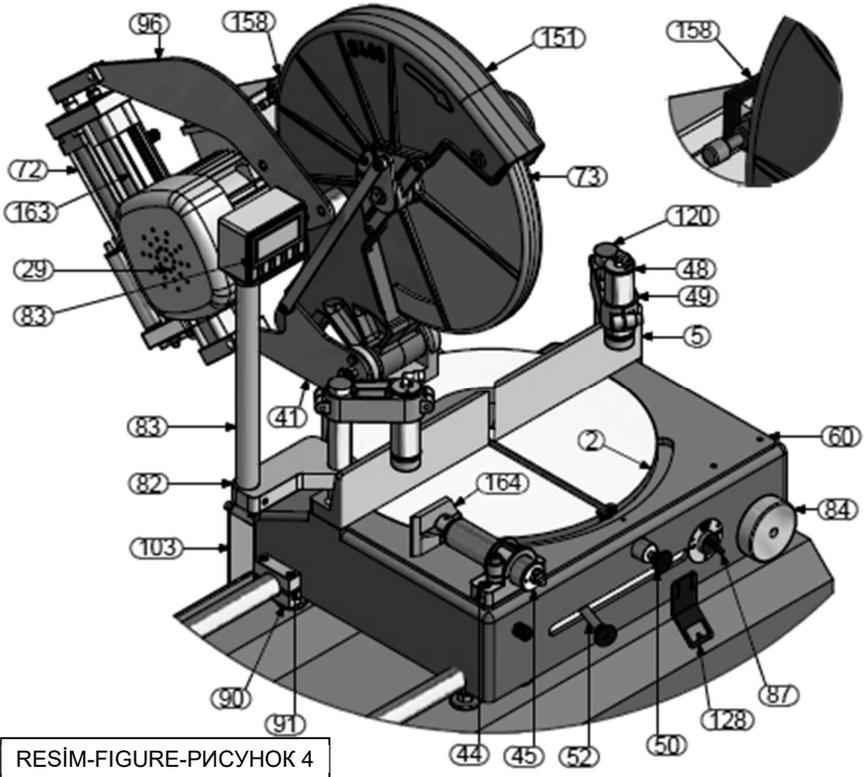
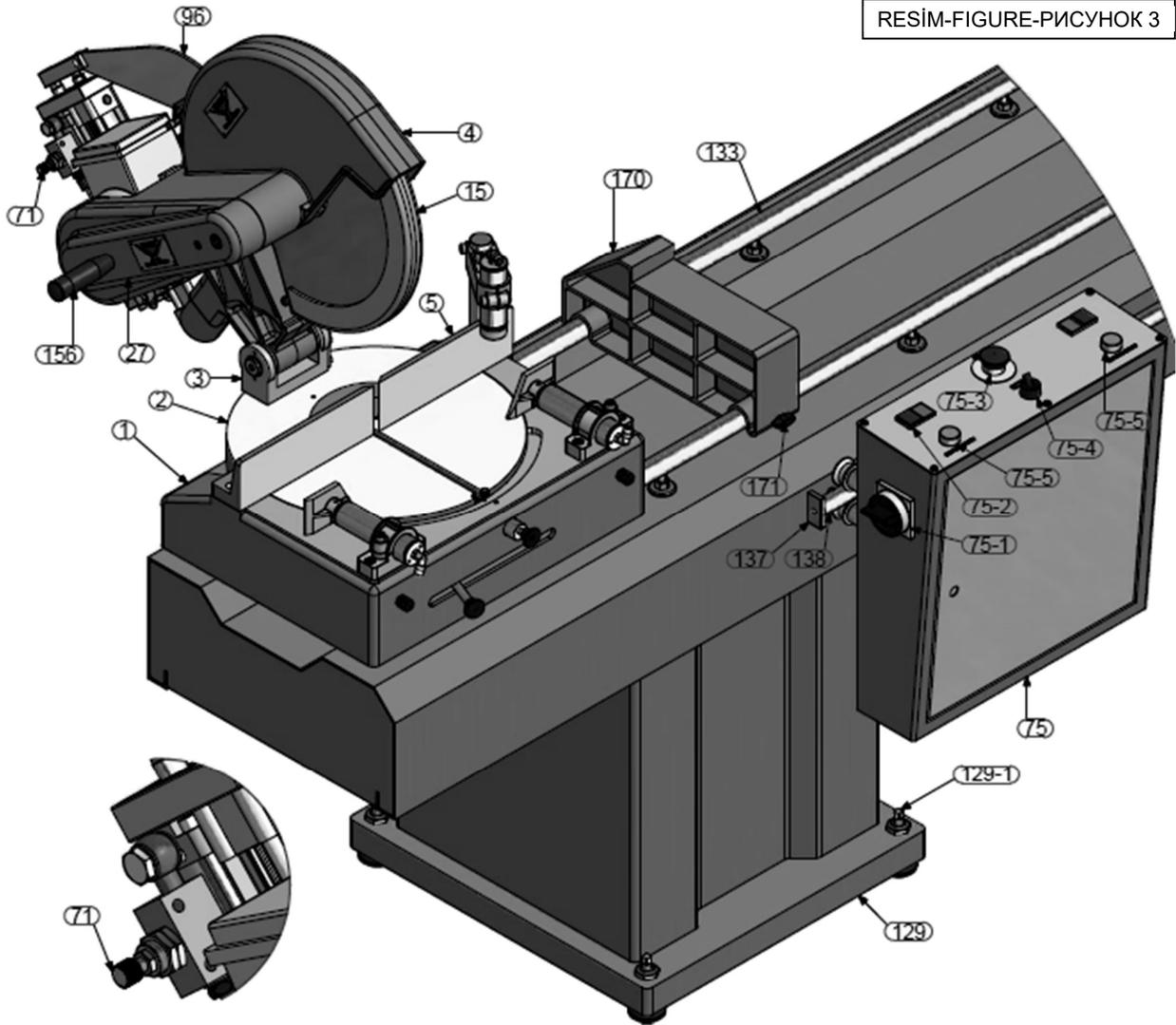
PARÇA LİSTESİ - PART LIST - ПЕРЕЧЕНЬ ДЕТАЛЕЙ



RESİM-FIGURE-РИСУНОК 2



RESIM-FIGURE-РИСУНОК 3



RESIM-FIGURE-РИСУНОК 4

NO номер	СТОК KODU / CODE ПОРЯДОК КОД	ADET / QTY КОЛИЧЕСТВО	NO номер	СТОК KODU / CODE ПОРЯДОК КОД	ADET / QTY КОЛИЧЕСТВО
1	2TU012510-0248	1	137	2TU011210-0087	2
2	2TU011610-0009	2	138	2TU014010-0029	1
3	2TU012510-0128	2	151	2TU012510-0373	1
4	2TU012510-0368	1	155	2TU011110-1018	2
5	2TU012510-0202	2	156	1PL010000-0012	2
6	2TU011210-0100	2	157	1SC071000-0017	2
15	2TU012550-0370	1	158	1PN010000-0012	2
17	1SC011000-0002	2	160	1SC041000-0072	6
19	2TU011441-0651	2	163	1PN020000-0017	2
22	2TU011110-0135	2	164	2TU012510-0227	2
24	2TU012110-0030	2	170	2TU012510-0236	1
27	2TU012510-0371	2	171	2TU011110-0145	1
28	1SK010000-0004	2	175	1SC021000-0050	2
29	1EL070001-0001	2	176	1SC011000-0036	8
33	2TU012110-0029	2	180	1SC131000-0006	4
41	2TU011441-0045	2	181	2TU011110-0857	2
44	2TU012610-0051	3	185	1SR070000-0006	2
45	3UA060030-0006	3			
48	3UA060030-0007	3			
49	2TU012610-0012	3			
50	3UA030030-0003	2			
52	2TU011110-0140	2			
60	2TU012510-0247	1			
71	3UA050030-0005	1			
72	3UA050030-0006	1			
73	2TU012510-0369	1			
75	3UA020030-0195	1			
75-01	1EL010000-0043	1			
75-02	1EL090000-0016	2			
75-03	1EL090000-0001	1			
75-04	1PN010000-0050	1			
75-05	1EL090000-0009	2			
82	2TU012210-0074	1			
83	1EL200000-0257	1			
84	2TU012110-0013	1			
87	1PN010000-0050	1			
90	2TU012210-0040	2			
91	2TU012210-0041	2			
96	2TU011441-0280	2			
103	2TU011441-0089	1			
120	2TU011110-0246	1			
128	2TU011441-0521	1			
129	1SA010000-0013	1			
129-1	1SC170000-0001	8			
133	2TU014010-0039	2			

CONTENTS

- 1. General information**
 - 1.1. Introduction
 - 1.2. Service Information
- 2. Safety**
 - 2.1. Safety Symbols and Their Meanings
 - 2.2. Accidents Prevention
 - 2.3. General Safety Information
- 3. Machine's Description**
- 4. Transport of the Machine**
- 5. Installation of the Machine**
 - 5.1. Preparation
 - 5.2. Connecting to Power Source
- 6. Machine's Safety Information**
- 7. Operation**
 - 7.1. Preparation
 - 7.2. Operation
 - 7.3. Angular cutting
 - 7.4. Single head cutting
 - 7.5. Display counter reset
 - 7.6. Changing display parameters
 - 7.7. Calibration of display
 - 7.8. Changing the initial values
 - 7.9. Replacing the battery on the display
- 8. Maintenance, Service and Repair**
 - 8.1. Maintenance
 - 8.2. Changing the cutting tool
 - 8.3. Changing the belt
 - 8.4. Angular and run out adjustment control of saw blade and set square
 - 8.5. Adjust the air pressure
- 9. Noise Emission Values**
- 10. Troubleshooting Guide**
- 11. Warranty conditions**

1. GENERAL INFORMATION

1.1. Introduction

The user's manual given by the manufacturer contains necessary information about the machine parts. Each machine operator should read these instructions carefully, and the machine should be operated after fully understanding them.

Safe and efficient use of the machine for long term depends on understanding and following the instructions contained in this manual. The technical drawings and details contained in this manual constitute a guide for the operator.

1.2. Service Information

In case of any technical problem please contact your nearest YILMAZ dealer, or YILMAZ head office through the above mentioned phone, fax or e-mail address.

Technical labels with the model description of the machine are fixed onto the front side of each machine.

The machine's serial number and manufacturing year are stipulated on the technical label.

Average life usage of production is 10 years. If you have any further failure and complaint, please inform to our below mentioned technical service by verbal or written

<u>AUTHORIZED TECHNICAL SERVICE CENTER ADDRESS</u>	
TAŞDELEN MH. ATABEY CD. No 9 34788 ÇEKMEKÖY – İSTANBUL / TÜRKİYE	
Tel	0216 312 28 28 Pbx.
Fax	0216 484 42 88
E-mail	service@yilmazmachine.com.tr
Web	www.yilmazmachine.com.tr
For minimize the documentantation, It is wery necessary to mention below details at the agreements signed with suppliers and dealers of the purchased machines	
• Machine model	• Voltage and frequency
• Machine's serial number	• Date of purchase
• Description of the machine fault	• Name of dealer where machine was purchased
• Average daily operation period	

2. SAFETY

2.1. Safety Symbols and Their Meanings

	Read the user guide		Ensure safe working position, always keep your balance.
	Wear ear protectors		Elektrical excitation
	Wear safety goggles		Don't place your hands between parts in motion..
	If the power cable should be damaged during operation, don't touch and unplug it. Never use damaged power cables.		High temperature warning
	During saw blade change operations, use protective gloves		Keep your fingers clear of the movable parts of the glide arm.
	The above symbol DANGER WARNING , warns you against specific dangers, and you have definitely to read them..		The IMPORTANT symbol above is one telling to apply special care and to be careful at carrying out the specified operation



2.2. Accidents Prevention

- 2.2.1 Our machines are manufactured in accordance with CE safety directives, which cover national and international safety directives.
- 2.2.2 It is the task of the employer to warn his staff against accident risks, to train them on prevention of accidents, to provide for necessary safety equipment and devices for the operator's safety.
- 2.2.3 It is the task of the employer to warn his staff against accident risks, to train them on prevention of accidents, to provide for necessary safety equipment and devices for the operator's safety.
- 2.2.4 Machine should be operated only by staff members, who have read and understood the contents of this manual.
- 2.2.5 All directives, recommendations and general safety rules contained in this manual have to be observed fully. The machine cannot be operated in any way for purposes other than those described herein. Otherwise, the manufacturer shall not be deemed responsible for any damages or injuries. And such circumstances would lead to the termination of the warranty

2.3. General Safety Information

- 2.3.1 The power cable should be led in such a way that nobody can step on it or nothing can be placed on it. Special care has to be taken regarding the inlet and outlet sockets
- 2.3.2 Don't overload machines for drilling and cutting. Your machine will operate more safely with power supply in accordance with the stipulated values.
- 2.3.3 Use correct illumination for the safety of the operator. (ISO 8995-89 Standard The lighting of indoor work system)
- 2.3.4 Do not leave any things on the machine.
- 2.3.5 Don't use any materials other than those recommended by the manufacturer for cutting operations on the machine.
- 2.3.6 Ensure that the work piece is clamped appropriately by the machine's clamp or vice
- 2.3.7 Ensure safe working position, always keep your balance.

- 2.3.8 Keep your machine always clean for safe operation. Follow the instructions at maintenance and replacement of accessories. Check the plug and cable regularly. If damaged, let it replace by a qualified electrician. Keep handles and grips free of any oil and grease.
- 2.3.9 Unplug first, before conducting and maintenance works.
- 2.3.10 Ensure that any keys or adjustment tools have been removed before operating the machine..
- 2.3.11 If you are required to operate the machine outside, use only appropriate extension cables.
- 2.3.12 Repairs should be carried out by qualified technicians only. Otherwise, accidents may occur.
- 2.3.13 Before starting a new operation, check the appropriate function of protective devices and tools, ensure that they work properly. All conditions have to be fulfilled in order to ensure proper operation of your machine. Damaged protective parts and equipment have to be replaced or repaired properly (by the manufacturer or dealer).
- 2.3.14 Don't use machines with improper functioning buttons and switches
- 2.3.15 Don't keep flammable, combustive liquids and materials next to the machine and electric connections.

3. MACHINE'S DESCRIPTION

Circular saw cutting machine designed for double-sided cutting of PVC and aluminum profiles to the desired measure in straight or angled cutting operations.

- The saw blade movement is hydro-pneumatically, and it is possible to adjust the movement speed of the saw blade precisely according to the material to be cut.
- The clamps operate pneumatically, operating at low pressure and with both hands occupied for safety reasons.
- The left cutting head is fixed, while the right head is movable manually.
- The right head is equipped with a pneumatic braking system. For the operator's safety, the machine does not work with the brake key OPEN.
- Measurements can be taken precisely with the digital read-out system.
- Cutting at fixed angles of 15°-22.5°-30°-45°-90°, and at any intermediate angle through a fixing handle.
- Machine has been designed in accordance with the CE Safety Directives.

<u>STANDARD ACCESSORIES</u>	<u>OPTIONAL ACCESSORIES</u>
User manual	Cooling system
Service wrench (6 mm)	
Service wrench (8 mm)	
Service wrench (17 mm)	
400 mm Saw blade	
Profile support apparatus	

4. TRANSPORT OF THE MACHINE

IMPORTANT

4.1. The transport should be done by qualified personnel only.

- 4.2. The machine should be transported by lifting with proper equipment (not touching the ground during the transport).
- 4.3. Unless customer requests the contrary, the machine will be delivered with wooden packaging.
- 4.4. Movable parts on the machine should be fixed before carrying out the transport.
- 4.5. The machine size and weight measurements, given the technical specification sheet.
- 4.6. On the machine, there are places to carry the machine with suitable lifting eye bolts. During transportation of the machine, Yilmaz supplied eye bolts can be used to lift the machine with an appropriate lifting device. Please pay attention not to give any damage to the machine during lifting.
- 4.7. In order to get more stability when hanging the machine in case of move it, hang it from bottom insofar. Move the machine without shaking it in slow movements. Be sure to take care of persons in dangerous places.

5. INSTALLATION OF THE MACHINE

5.1 Preparation

- 5.1.1 The machine size and weight measurements, given the technical specification sheet. The ground, where the machine will be placed, should be even, solid enough to bear the weight of the machine.
- 5.1.2 The machine should be located approx. 100 cm away from the rear wall. On the backside of the machine you will find connection tube for the collection of burr and swarf, hydro-pneumatic system, cable channels, power supply connection plug.
- 5.1.3 You can provide the balance of the machine with adjustable counterforts (FIGURE 3 NO 129-1) in the bottom part.
- 5.1.4 Circular saw cutting machine designed for double-sided cutting of PVC and aluminum profiles to the desired measure in straight or angled cutting operations.
- 5.1.5 Remove the carriage safety parts (FIGURE 4 NO.90/91).

5.2 Connecting to Power Source

- 5.2.1 Electrical connection must be made by a licensed electrician
- 5.2.2 The power outlet socket on the machine should be available.
- 5.2.3 Plug the machine to a grounded socket.
- 5.2.4 Mains voltage of the machine is optional as 230 V 50 Hz or 400 V 50 Hz.



- 5.2.5 Check the supply voltage. **The source voltage must be in accordance with the data on the machine's label.**

5.2.6 After electrical connection is made, machine must be operated in idle running and it must be controlled whether rotation directions of cutting tools are correct or not and if the rotation direction is wrong, appropriate connection must be made.

6. MACHINE'S SAFETY INFORMATION

- 6.1 Lifting, installation, electric maintenance of the machine should be carried out by qualified personnel only.
- 6.2 Routine maintenance and scheduled maintenance should be carried out by qualified personnel after unplugging the machine first.
- 6.3 Ensure that the machine has been cleaned, tested and maintained before starting to operate it.
- 6.4 Check the safety devices, power cable and moving parts regularly. Don't operate the machine before having replaced defective safety devices or faulty parts.
- 6.5 Never replace the cutting tools before unplugging first.
- 6.6 Keep foreign materials away from the working area of the machine, keep away from the machine's moving parts.
- 6.7 Do not work on the machine by removing the protective parts



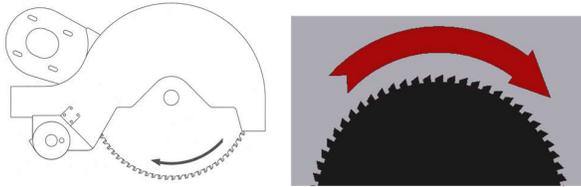
The safety data have been defined above. In order to prevent physical damage or damage to the equipment, please read the safety information carefully and keep the manual always in an easy accessible place.

7. OPERATION

7.1 Preparation

- 7.1.1 Degrease and dry the machine table. Especially ensure that the holding grips and handles are clean and dry
- 7.1.2 Clean all surfaces of the machine from chip and foreign particles. Use eye glasses for protection.
- 7.1.3 This machine can process on products manufactured from rigid plastic and aluminum materials that don't include iron alloy.

- 7.1.4 Control whether cutting tools (FIGURE 2 NO.28) are inserted safely to their places.
- 7.1.5 Control cutting tools against corrosion, distortion and fractions. If cutting tools are damaged, change them.
- 7.1.6 Cutting tool must process on the part after machine is operated and cycled.
- 7.1.7 Absolutely control the direction of rotation of the saw.



- 7.1.8 **Do not process the profile before clamping the work piece properly.**

7.2 Operation

- 7.2.1 Move the mobile unit (FIGURE 1) roughly to the desired measure by using the meters measuring system incorporated on the frame. Move it to the desired precise measure (+ / - 0.1) by rotating the hand wheel (FIGURE 4, NO. 84) located on the mobile unit in rightward or leftward direction by using the read-out piece (FIGURE 4, NO. 128) and the digital measure read-out (FIGURE 4, NO. 83) found on the measure. **Immobilize the mobile saw head by activating the pneumatic brake system.**
- 7.2.2 **The clamps shall not clamp on and the saw head cannot be moved for safety reasons unless the brake system on the mobile unit is activated.**
- 7.2.3 Cutting speed setting can be adjusted independently from each other by means of the reducing valves (FIGURE 3, NO. 71) located on the mobile and fixed units.
- 7.2.4 Fix the profile by pressing the clamp open-close button (FIGURE 3, NO. 75/4) on the control panel (FIGURE 3, NO. 75) after cutting length is adjusted.
- 7.2.5 Start the motor by pressing the motor start buttons (FIGURE 3, NO. 75/2) located on the control panel following the fixing procedure.
- 7.2.6 Start the cutting procedure by simultaneously pressing the cutting buttons (FIGURE 3, NO. 75/5) and hold them pressed until cutting operation is completed.
- 7.2.7 Release the pressure on the button at the end of the cutting operation. Both cutting units shall return to starting position.
- 7.2.8 Stop the motor by pressing the motor stop buttons (FIGURE 3, NO. 75/2).
- 7.2.9 **In case of a potential danger release the pressure on the cutting buttons or press the emergency stop button (FIGURE 3, NO. 75/3).**
- 7.2.10 Remove the part by opening the clamps.



Don't operate the saw while it touches the work piece. The saw must be operated only when the head is in the top position.

7.3 Angular cutting

- 7.3.1 Release the lock by moving the table lock shaft (FIGURE 4, NO. 52) leftwards.
- 7.3.2 Pull the spring shaft (FIGURE 4, NO. 50) out from the spring seat. Simultaneously, move the saw head (FIGURE 3, NO. 4) to the desired angle by using the plastic lever (FIGURE 3, NO. 156) with your other hand. You can read the angle values by means of the angle measure found on the table (FIGURE 3, NO. 2).
- 7.3.3 Angles of 15 – 22.5 – 30 and 45 can be set by means of the spring (FIGURE 4, NO. 50) while other intermediate angles can be set by means of the table lock shaft (FIGURE 4, NO. 52). The spring shall not fit into the seat in intermediate degrees. Tighten the table lock shaft by pushing it rightwards after rotating the saw head to the desired angle.

7.3.4 Carry out the cutting operation after.

7.4 Single head cutting

7.4.1 Select the unit to make cutting with single saw head. (Fixed or mobile cutting unit)

7.4.2 Make the saw rotate by pressing the motor start button (FIGURE 3, NO. 75/2) located on the cutting unit which starts the motor. In this mode, the machine is adapted to perform cutting operation only on the desired unit.

7.4.3 Press the cutting buttons (FIGURE 3, NO. 75/5) simultaneously and keep them pressed until the work piece is cut. From the worker safety viewpoint, the cutting operation is adapted to incorporate double hand control. The saw head under use moves during cutting operation with single saw head. The other cutting unit remains stationary.

7.4.4 Carry out the cutting operation after.

7.5 Display counter reset



7.5.3 Move the movable head so that it touches the fixed head (Ensure that the movable head touches the adjustment bolt on the fixed head.)

7.5.4 Reset the measurement by simultaneously pressing the **F** and **SET** buttons on the display. You should read the measurement 530. If the cutting measurement is wrong, adjust it by turning the adjustment bolt to the right or left.

7.6 Changing display parameters

Parameter list :

Initial values

Yılmaz values

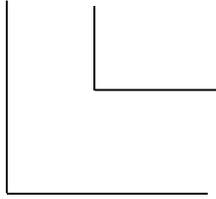
Program Number:

P01: A

X X

01

00



0 = Countung direction (+)

1 = Countung direction (-)

0 = mm Mode

1 = Inch (0.001) Accuary

P02: A Screen mode (symbols, only in screen)

0

0

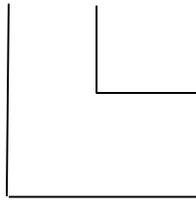
P03: A Point of decimals 0...3 (only in mm mode)

2

1

P 05: A Button functions

X X



0 = **Set** Button aktive

000

001

1 = **Set** Button inaktive

0 = **Incremental** Button aktive

1 = **Incremental** Button inaktive

P 07: A Decision : V1.50 start with firmware

0

1

P 08: A Coefficient (value of factor)

1,0000

1,0000

P 09: A Reference point

000000,0

000530,0

P10: Offset 1

0

0

P11: Offset 1

0

0

P12: Offset 1

0

0

P13: A Ofset 1 Configuration offset

3

3

P 90: No function

0

0

P 99: Software version

When **F & Set** buttons are pressed simultaneously the value of reference point appears (530 mm)

7.7 Calibration of display

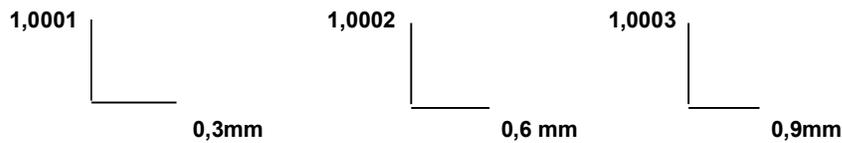
If there exist a problem about the length of cut, make get in touch with the referancing screw of movable head to the fixed head. Use the movable head break piston to fix the movable head. Cut a sample profile in that situation without changing the referance position and measure note that length. (Factory setting value is 530mm) Measure the cut profile with a calibrated measurement device (caliper, ruler, etc). If the value differs from the factory setting value, then write that value to the P 09 paremeter as shown. For example:

Mesaured Value: 531 mm

P 09 Paremeter value must be as fallows : 000531,0

If the cutting length is less than 530 mm then change the value by decreasing 000530,0.

After this process cut another profile with a length of 4000 mm, Measure and note the length of cut piece by means of a calibrated equipment. For example if the cut profile is measured to be 4001 mm instead of 4000, change the value of P 08 COEFFICIENT VALUE as 1,0003 instead of 1,0000 1,0003.

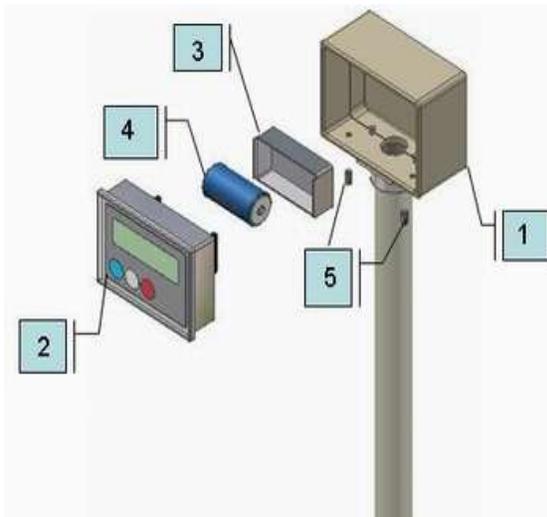


Note : Cut accuracy on display is 0.2 mm.

7.8 Changing the initial values

- 7.8.1 Press and hold **F** button for 3 seconds, Parameter P 01 will appear on the display.
- 7.8.2 Pressing **F** button for once parameter value of P 01 will appear, if it is pressed again one can pass to parameter P 03, and it can be changed. (Other parameters could also be passed through P 05, P 08, P 09... etc.)
- 7.8.3 For example: When P 01 parameter appears the first digit flashes, inc/abs button (blinking) changes the value. Passing to the second digit can be accomplished by pressing Set button. This time second digit flashes, inc/abs button changes the value. This procedure can be used to change all other parameter values.

7.9 Replacing the battery on the display



- 7.9.1 The life of the display battery is one year. Replace the display battery after one year. To replace the battery.
- 7.9.2 Loosen the hexagonal head screws numbered with 5 by turning them counter-clockwise.
- 7.9.3 Hold the display numbered with 2, and take it out from the protection box numbered 1.
- 7.9.4 Hold the battery cover numbered 3 and remove it.
- 7.9.5 Remove the old battery, place the new battery (pay attention to + and – poles).
- 7.9.6 Position the display numbered 2, tighten the screws applying little force.
- 7.9.7 As the power to the Display was temporarily interrupted during replacing the battery, you have to reset the device

8. MAINTENANCE, SERVICE AND REPAIR

8.1 Maintenance

- 8.1.1 Cut the electric and pneumatic (if any) power connections of the machine.
- 8.1.2 Clean all surfaces of the machine from burs, chips and foreign substances. If the machine will not be used for a long time, lubricate undyed parts with oil that prevents rusting.
- 8.1.3 When cleaning the machine, do not use materials that may damage the dye.
- 8.1.4 Control cutting tools against corrosion, distortion and fractions. If cutting tools are damaged, change them.
- 8.1.5 Before using cutting tool, operate the machine out of gear and control whether it is inserted correctly, it is without flexure and it is inserted appropriately. Do not use cutting tools that are damaged or lost its functionality.

8.2 Changing the cutting tool

- 8.2.1 Cut the electric connection of the machine.
- 8.2.2 Dismantle the blade guard group (FIGURE 2 NO.15) in the stipulated order.
- 8.2.3 Remove the segment (FIGURE 2 NO.180) on the protection sheet bar (FIGURE 2 NO.6). Set the end of the protection sheet bar to off-position by removing it from the pin.
- 8.2.4 Remove the saw protection connection screws (FIGURE 2 NO.160) with the aid of philips screwdriver. Remove the saw protection Group which is set to off-position.
- 8.2.5 Remove the M10 bolt (FIGURE 2 NO.17) from its place with the aid of 17 mm switch. While removing the bolt, hold from the other end of the saw shaft (FIGURE 2 NO.50) with 8 mm Allen switch.
- 8.2.6 Remove the string (FIGURE 2 NO.181) and saw coupling (FIGURE 2 NO.19) respectively.
- 8.2.7 Take out the saw blade (FIGURE 2 NO.28) carefully.
- 8.2.8 Install the new saw blade onto the shaft ensuring the correct rotation direction.
- 8.2.9 Install the guard group parts applying the reverse order as described above.
- 8.2.10 It is necessary to sharpen / replace the saw blade in certain intervals depending on the cutting material. If the cut material leaves burr after the cutting operation or if the saw blade is strained, it needs to be sharpened / replaced.
- 8.2.11 When replacing the saw blade, use the part of the blade washer which is appropriate for the blade shaft diameter. The outer diameter of the blade washer is 30 and 32 mm.

8.2.12 During saw blade change operations, use protective gloves



8.2.13 **Saw must be selected according to standart DIN EN 847-1**

8.2.14 **A saw blade rotating in reverse direction, causes danger both for the operator and the equipment. The teeth of the saw blade would be damaged and even broken.**

8.3 Changing the belt

- 8.3.1 Cut the electric connection of the machine.
- 8.3.2 Also, remove M5 imbus screw (FIGURE 2 NO.175) with the aid of Allen switch by turning the plastic arm (FIGURE 2 NO.156) manually. After removing the connections, remove the balancing wheel protection (FIGURE 2 NO.27) from its place.
- 8.3.3 Loosen the motor connection bolts (FIGURE 2 NO.176) with the aid of 13 mm switch.
- 8.3.4 Hold the belt tension part (FIGURE 2 NO. 155) from its part, which has a nozzle, to the switch with the aid of 12 mm switch. Loosen the M16 nut (FIGURE 2 NO.157) which is located on the belt tension part with the aid of 24 mm switch.
- 8.3.5 Get the belt tension part (FIGURE 2 NO.155) to off-position by turning it with the aid of a switch, have the belt (FIGURE 2 NO.185) got loosen by pushing the motor (FIGURE 2 NO.29) forward.
- 8.3.6 Change the new belt with the previous one. Be careful when fixing the belt to the channels of balancing wheel (FIGURE 2 NO.24/33) of the channels of the belt.
- 8.3.7 After having fixed the new belt to its place, set the tightness of the belt by holding the belt tension part (FIGURE 2 NO.155) with the aid of 12 mm switch. After adjusting it to the proper tightness, tighten M16 nut (FIGURE 2 NO.157) with your free hand while still holding the part.
- 8.3.8 Tighten the motor connection bolts. (FIGURE 2 NO.176)
- 8.3.9 Fix the removed parts by following the reverse sequence that your removed them before.

8.4 Angular and run out adjustment control of saw blade and set square

- 8.4.1 Cut the electric connection of the machine.
- 8.4.2 Control the run out of the saw blade with eyes. If possible use a dial gage.
- 8.4.3 If there is any problem in the inclined cut, control the saw's 90 degrees orthogonal to the set square with the aid of the set-square. If it is not proper, loosen the stay bolt at the top which tightens the spring (FIGURE 4 NO.50) Have the pin located to its place by turning the spring in way that it can provide it to be proper by setting it to the 90 degrees. Tighten the screw at the top again which fastens the spring.

8.5 Adjust the air pressure (pneumatic systems)

- 8.5.1 Pull up pressure adjustment valve. Set adjustment valve to the desired value on manometer by turning it clockwise or counter clockwise. Then lock the valve by pressing it down.
- 8.5.2 Set the air pressure between 6 and 8 BAR. If air pressure drops below the stated values, accessories operating with pneumatic power do not work.
- 8.5.3 Conditioner unit accumulates the water in the air in the collection container so that it won't damage pneumatic components. At the end of the working day, empty the accumulated water by opening water discharge valve under the collection container.
- 8.5.4 In order to put oil to the oil tank, remove the reservoir by turning. Oils recommended by the manufacturer are; TELLUS C10 / BP ENERGOL HLP 10 / MOBIL DTE LIGHT / PETROL OFİSİ SPINDURA 10.



9. NOISE EMISSION VALUES

Educations including possible effects of noise to hearing sense, purposes advantages, disadvantages, usages and determination of protection types, maintenance and cleanliness of earflaps must be given to the operator who works at the noise level greater than 80 dB(A) before he/she begins to work. **It is recommended to be renewed these educations annually.**

Characteristic informations of machine :

Rotation speed of saw : 3000 rpm

Motor power : 2.2 Kw

Nominal voltage : 400 V

Specifications of filing evacuation manifold:

Diameter : 65 mm.

Characteristic values of saw :

Saw diameter : 400 mm

Saw thickness : 4.2 mm

Shaft thickness of saw : 3.2 mm

Saw forward movement speed (According to aluminium material) : 64 m/sn.

Noise values test materials specifications:

Material : Aluminium

Length : 1000 mm

Width : 70 mm

Height : 50 mm

L_{wA} : 98 dB (Measured value)

K : 4 dB (Indefiniteness in measurements – EN ISO 3746)

Values given above indicate emission level and do not indicate safe working level. There is no direct relation between emission and level of exposing, and this can not be used reliably to make a decision for further measures. Factors affecting real level of exposing to emission that affects work power are characteristics of working area, time of exposure in other words all noise sources and number of machines around. Also, permitted level of expose changes from country to country. Nevertheless this information is for healthy evaluation of the operator about dangers and risks

10. TROUBLESHOOTING GUIDE

Here are some recommendations for solving urgent problems. If the trouble cannot be solved, or if you have a problem other than those described hereunder, please contact our technical service or your nearest dealer.

TROUBLE	CAUSES	REMEDY
Low surface quality (at aluminum and similar materials) : Rough surface, Large chip, Not homogenous surface, Saw blade traces visible	Not cooling the saw blade surfaces	Lubricating the saw blade cutting surfaces, Using of cooling liquid
	Using of damaged or blunt saw blade	Check the saw blade teeth. Replace if necessary.
	Saw blade moves to quick	The cutting speed is too high for the material. Decrease the cutting speed.
Motor does not work (Start button is pressed, not working)	No power supply to the machine.	Check the electric cable connections. Check the electric power sockets.
Motor is working but the saw blades don't move down.	Air supply connections missing or faulty The brake system on the movable head has not been activated.	Check the air compressor connections Adjust the air pressure between 6-8 Bar on the conditioner. Activate the brake system button on the movable head .
The saw blade rotates in reverse direction.	The electric connection, the power cable or the connection at the panel is wrong.	Let the electric connections carry out by a qualified electrician.
Profile clamps don't work	Air supply connection missing or air pressure is too low The brake system on the movable head has not been activated .	Check the air supply connections. Activate the brake system button on the movable head

11 WARRANTY CONDITIONS

YILMAZ Machine Industry and Trade Limited Company, guarantees that all machines have been tested and conform to the international standards.

The guarantee is valid 24 months from despatch date and does not cover the electrical parts of the machine.

During this period:

- Any repair and replacement effected at our workshop is completely free of charge (only transport costs are at customer's charge).
- For repair and replacement effected by our technician at the customer's site, we will invoice only the travel and lodging costs for our technician.

The guarantee does not cover damages caused by:

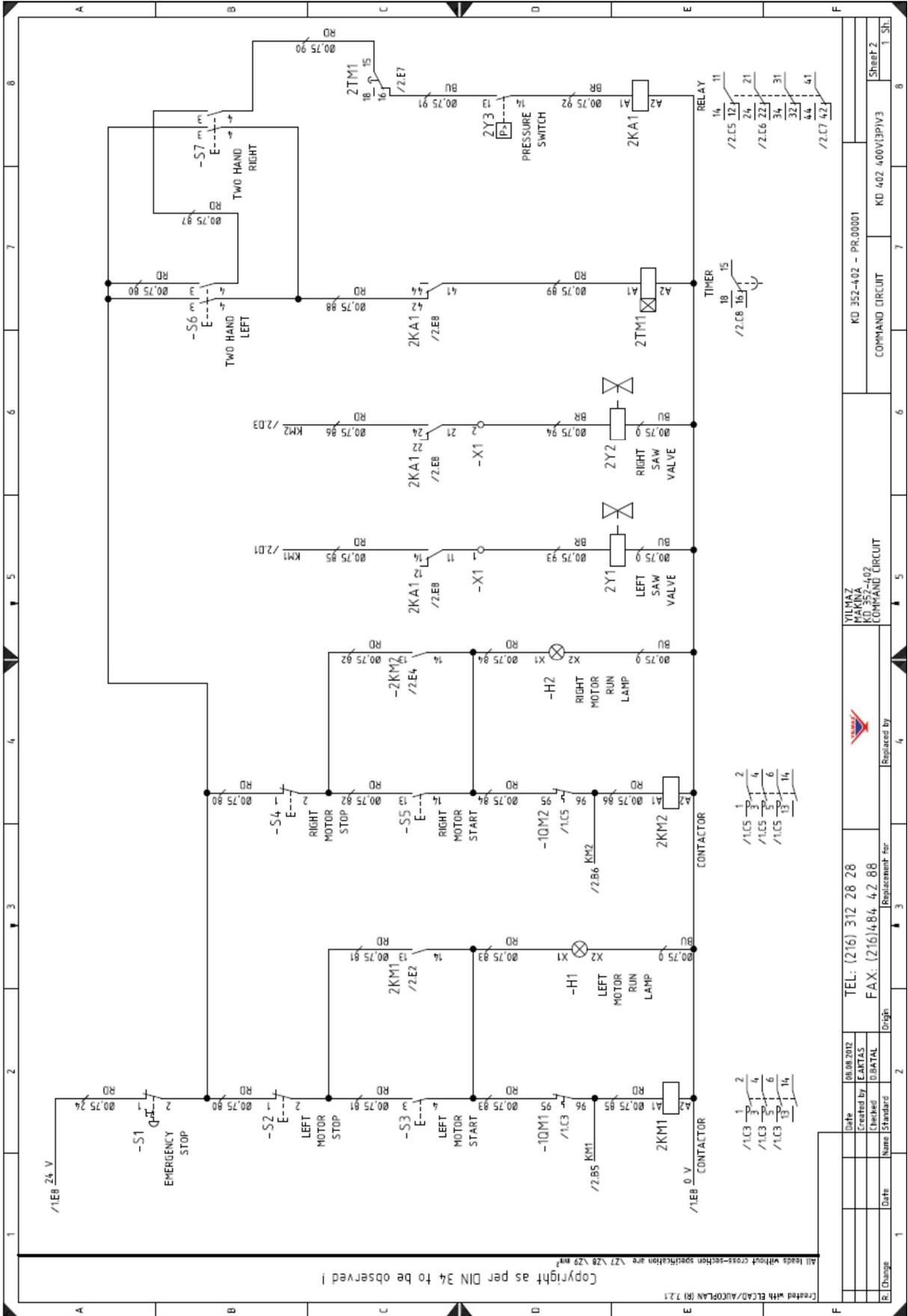
- not respect of the rules indicated in the manual instruction book
- not correct voltage
- improper use or use not in accordance with what the Machine has been designed for
- use of non original tooling
- programming errors
- lack of cleaning and of ordinary maintenance by the customer
- transport or displacement (even inside the workshop)
- natural events (lightings, fires, floods)

The warranty does not cover, in any case, damages caused by the malfunction of the Machine

СОДЕРЖАНИЕ

- 1. Общие сведения**
 - 1.1 Предисловие
 - 1.2 служебная информация
- 2. Безопасность**
 - 2.1 Обозначение символов безопасности и их значения
 - 2.2 Техника безопасности
 - 2.3 Информация об общей безопасности
- 3. Описание механизма**
- 4. Транспортировка механизма**
- 5. Установка механизма**
 - 5.1 Подготовка
 - 5.2 Подключение машины в источник питания
- 6. Данные по безопасности механизма**
- 7. Операция**
 - 7.1 Подготовка
 - 7.2 Операция
 - 7.3 Выпиливание под углом
 - 7.4 Одноголовочная пила
 - 7.5 Сброс показаний счетчика в режиме дисплея
 - 7.6 Настройка параметров дисплея
 - 7.7 Калибровка дисплея
 - 7.8 Изменение первоначальных настроек
 - 7.9 Замена батареи дисплея
- 8. Техническое обслуживание, сервис и ремонт**
 - 8.1 Обслуживание
 - 8.2 Менять режущий комплект
 - 8.3 Изменение пояса
 - 8.4 Настройка угла пилы и угольника и его контроль
 - 8.5 Регулировка давления воздуха
- 9. Эмиссия шума**
- 10. Возможные неполадки и их устранение**
- 11. Гарантийные условия**

ELECTRIC&PNEUMATIC DIAGRAM



Copyright as per DIN 34 to be observed!

Created with EPLAN/AUOPPLAN (R) 7.2.1

R. Change	Date	Name	Standard	Origin	Replacement for	Replaced by
	06.06.2012	EAKTAS			TEL: (216) 312 28 28	VILMAZ KD 352-402
		IBATAL			FAX: (216) 4.84. 4. 2. 88	KD 352-402
						COMMAND CIRCUIT
						COMMAND CIRCUIT
						KD 402 400V/3P/V3
						PR.00001
						KD 352-402 - PR.00001
						Sheet 2
						1 Sh.

KD402 3 PHASE ELECTRICAL DIAGRAM SHEET 2

Operation manual

SERIES IZ16E-000

Battery powered length Measuring System



Copyright as per DIN 34 to be observed!
 Created with ELO/AUCOPLAN (R) 7.21
 All leads without cross-section specification are V27 V28 V29 mm²

KD 402

Parameter:	Description:	Default:	FACTORY
F01: A	System configuration: A = 0: Counting positively A = 1: Counting negatively	0	1
F02: A	Display mode (effect only the display of symbols!) A = 0: mm-Mode / Display symbol "mm" A = 1: Inch-Mode / Display symbol "Inch" A = 2: mm-Mode / Display symbol "m" A = 3: mm-Mode / Display symbol "mm" A = 4: mm-Mode / Display non symbol	0	0
F03: A	Decimal point (0 ... 4) → only for mm-Mode	2	1
F05: ABC	Keypad: A: key „Set“ (0= activated / 1= deactivated) B: key „Incr/Abs“ (0= activated / 1= deactivated) C: key „...“ (0= activated / 1= deactivated)	000	001
F07: A	Resolution: (trimming with Firmware V1.50) A = 0: Resolution 0,01 mm A = 1: Resolution 0,1mm	0	1
F08:	Multiplication factor [0,0001 ... 9,9999]	1,0000	1,0000
F09:	Reference value [-9999999 ... +9999999]	0	000530,0
F10:	Offset 1 [-9999999 ... +9999999]	0	0
F11:	Offset 2 [-9999999 ... +9999999]	0	0
F12:	Offset 3 [-9999999 ... +9999999]	0	0
F13: A	Configuration Offset (0...3) A = 0: offset cannot be activated A = 1: offset 1 can be activated A = 2: offset 1 & 2 can be activated A = 3: offset 1 & 2 & 3 can be activated	3	3
F90:	(without function)	0	0
F99:	Indicator in the company version	x.xx	x.xx

Parameter input

- press button F for 3 second
In the display appears P for parameter 01
- Press button F, In the display appears the relevant parameter value
- With the buttons Set and Incr/Abs chose decade and prepare the wanted value
- With button F set new value, display is changing to the next parameter (P05)
Repeat steps (2, to 4,) for the next parameter
- Press button F for 3 second
(Display switches back to reference value)

F + Set = With pressing simultaneous reference value is put on

Date	06.06.2012	TEL: (216) 312 28 28	INDICATOR	PR.00001	Sheet 3
Created by	EARTAS	FAX: (216) 484 42 88	INDICATOR	KD 402 400V3P1V3	1 Sh.
Checked	BATAL	Repaired by			
Name	Standard	Origin			

KD402 3 PHASE ELECTRICAL DIAGRAM SHEET 3

