GARANTI BELGESI

IMALATÇI FİRMA : YILMAZ MAKİNE SANAYİ VE TİCARET A.Ş

ADRES : TAŞDELEN MH. ATABEY CD. No 9 34788 ÇEKMEKÖY

ISTANBUL-TÜRKİYE

TELEFON : 0216.312.28.28 PBX

TELEFAX : 0216.484.42.88

İMZA-KAŞE

ÜRÜNÜN CİNSİ : ALÜMİNYUM ve PVC ORTAKAYIT ALIŞTIRMA FREZE MAKİNESİ

MARKASI : YILMAZ

MODEL KODU : KM 210 – KM 211

BANDROL/SERÍ NO

TESLİM TARİHİ

GARANTÍ SÜRESÍ : 1 YIL

AZAMİ TAMİR SÜRESİ : 30 İŞ GÜNÜ

YETKİLİ SATICI FİRMA : ADRES :

TELEFON : TELEFAX : İMZA-KAŞE :

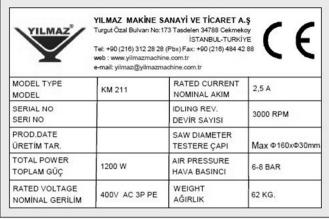
TEKNÍK ÖZELLÍKLER - TECHNICAL FEATURES - TEXHUYECKUE OCOБЕННОСТИ

				D d		2	H ↑ W cm	kg	kg
KM 210	800 W 50 Hz	1200 W 50 Hz	3000 D/dak.	D = max.160			W = 58 L = 46	61	63
KM 211	230 V AC P N PE	400 V AC 3P PE	RPM	d = 30 mm	6/8 Bar	5 Lt. / dak. Lt/min	H = 110	62	64

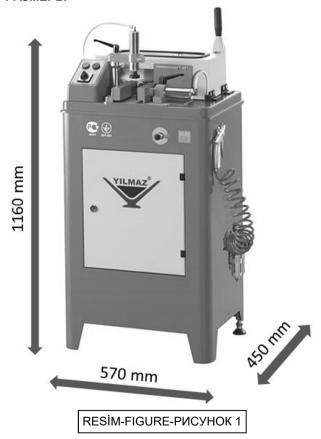
YILMAZ	Turgut Özal Bulvarı No:1		oy C C
MODEL TYPE MODEL	KM 210	RATED CURRENT NOMINAL AKIM	4,6 A
SERIAL NO SERI NO		IDLING REV. DEVİR SAYISI	3000 RPM
PROD.DATE ÜRETİM TAR.		SAW DIAMETER TESTERE ÇAPI	Мах Ф160xФ30mm
TOTAL POWER TOPLAM GÜÇ	800 W	AIR PRESSURE HAVA BASINCI	
RATED VOLTAGE NOMÍNAL GERILÍM	230V AC P N PE	WEIGHT AĞIRLIK	61 KG.

YILMAZ®	Turgut Özal Bulvarı No:1		oy C C
MODEL TYPE MODEL	KM 210	RATED CURRENT NOMINAL AKIM	2,5 A
SERIAL NO SERI NO		IDLING REV. DEVİR SAYISI	3000 RPM
PROD.DATE ÜRETİM TAR.		SAW DIAMETER TESTERE ÇAPI	Мах Ф160хФ30mm
TOTAL POWER TOPLAM GÜÇ	1200 W	AIR PRESSURE HAVA BASINCI	_
RATED VOLTAGE NOMÍNAL GERÍLÍM	400V AC 3P PE	WEIGHT AĞIRLIK	61 KG.

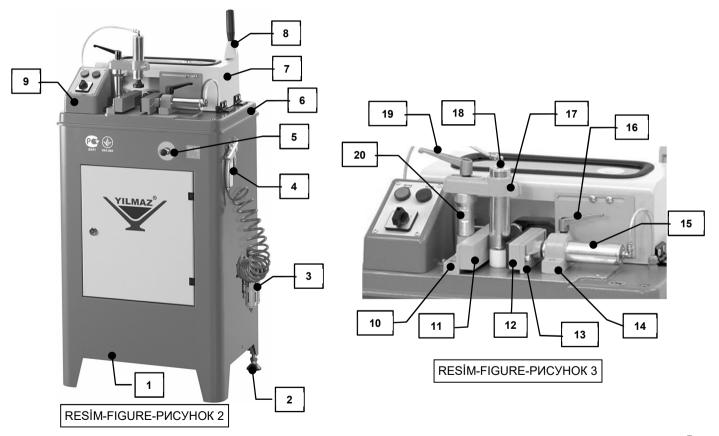


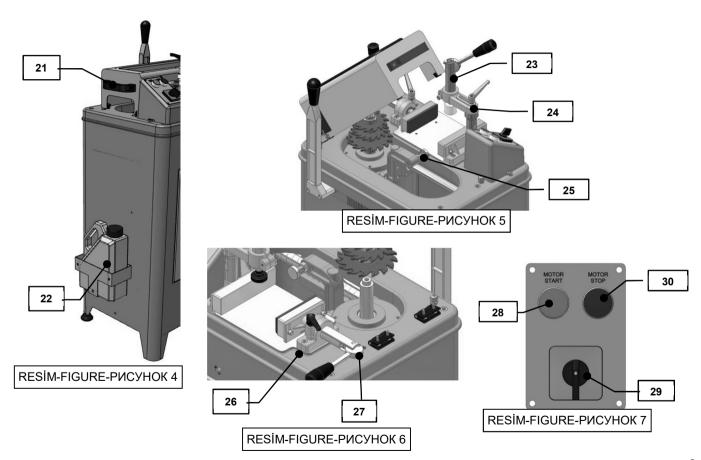


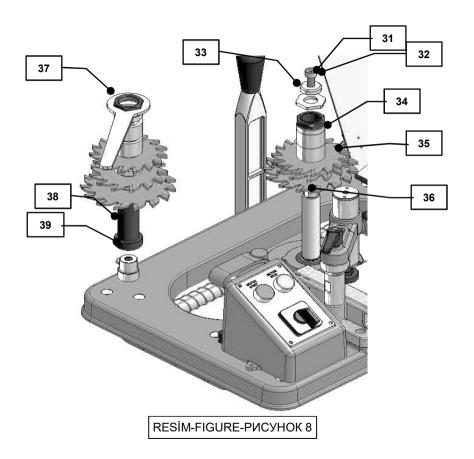
BOYUTLAR - DIMENSIONS - PA3MEPЫ



PARÇA LİSTESİ - PART LIST - ПЕРЕЧЕНЬ ДЕТАЛЕЙ







NO номер	STOK KODU STOCK CODE ПОРЯДОК КОД	ADET QTY КОЛИЧЕСТВО	NO номер	STOK KODU STOCK CODE ПОРЯДОК КОД	ADET QTY КОЛИЧЕСТВО
1	1SA010000-0007	1	15	3UA060030-0005	1
2	1SC170000-0001	2	16	3UA040030-0005	1
3	3UA110030-0020 *	1	17	2TU012610-0054 *	1
4	1PN080000-0009 *	1	18	3UA060030-0004 *	1
	1PN010000-0087*	1	19	3UA040030-0002	1
6	2TU012510-0096	1	20	2TU011110-0091	1
7	1SA030000-0003	1	21	1PL010000-0016	1
8	2TU012510-0191	1	22	1PL010000-0020 **	1
9	2TU012510-0100	1	23	3UA370030-0003	1
10	2TU012610-0031	1	24	2TU012610-0009	1
11	2TU012610-0033	1	25	2TU011110-0150	1
12	2TU012610-0034	1	26	2TU012610-0050	1
13	2TU012610-0032	1	27	3UA370030-0001	1
14	2TU012610-0051	1			

* KM 211

Modellerinde kullanılmaktadır. It is used for the KM 211 Models. Водораспылительная система охлаждения. (На моделях KM 211)

^{**} KM 211 Modellerinde, opsiyonel soğutma sisteminde kullanılmaktadır. It is used on the optional front cooling system (On KM 211 Models). Он используется на дополнительные системы охлаждения фронта. (На моделях КМ 211)

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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

AUTHOR	AUTHORIZED TECHNICAL SERVICE CENTER ADDRESS					
TAŞDEL	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 documantation, 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				
• D	escription of the machine fault	Name of dealer where machine was purchased				
• A	verage 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	A	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	IMPORTANT	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 Use correct illumination for the safety of the operator. (ISO 8995-89 Standard The lighting of indoor work system)
- **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

End milling machines are designed for precise end milling operations in PVC and Aluminium profiles. Portable endmilling machine.

- The machine has been designed in accordance with the CE Directives.
- Clamping and milling operation is manual.

STANDART AKSESUARLAR	OPSİYONEL AKSESUARLAR		
Service keys	Milling cutter set		
Air gun	Spray cooling system (KM 211)		
User's manual			

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.

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. The power connection plug of the machine is located on the rear side of the machine.
- 5.1.3 You can provide the balance of the machine with adjustable counterforts (FIGURE 2 NO 2) in the bottom part.

5.2 Connecting to Power Source

- **5.2.1** The 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** Main voltage of the machine is optional as 230 V 50 Hz or 400 V 50 Hz.



- **5.2.5** Check the power source voltage. It has to be in accordance with the values stipulated on the machine's type 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 and disconnecting the air supply first.
- **6.3** Ensure that the machine has been cleaned, tested and maintain before starting to operate.
- **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 milling cutters 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 Our portable end milling machine KM 210-211 is used for working of non-ferrous materials, aluminum and PVC mullion profiles to make <T > connections.
- 7.1.4 Control whether cutting tools (FIGURE 2 NO.78) 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 Do not process the profile before clamping the work piece properly.

7.2 Operation

- 7.2.1 Switch the system start switch to "1" (FIGURE 7 NO.29)
- 7.2.2 Place mullion profile on the machine table and push it forward until it contacts the stopper (FIGURE 5, NO.25).

NOTE: The milling length of the mullion profile can be adjusted precisely by loosening the stopper on the machine (FIGURE 5, NO.25), and fixing it at the desired length

7.2.3 Manually clamp the work piece, which you have placed onto the machine table and pushed forward until touching the stopper, using the two clamps on the machine

NOTE: The clamps operate manually at KM 210 (FIGURE 5-NO 23 / FIGURE 6 NO: 27), and pneumatically at KM 211 (FIGURE 3-NO 15/18)

7.2.4 By pressing on the engine start button (FIGURE 7-NO:28) on the control box (FIGURE 2-NO 9), enable rotation of the saw cutters.. For the milling operation, push the lever on the machine with low pressure alongside the profile. (FiGURE 2-NO.8) After returning the lever to its original position, press the Motor Stop button to complete the operation. (FIGURE 7-N0.30)

7.2.5 Release the clamps and take out the end milled profile.

IMPORTANT

The milling operation has always to be started from the starting position of the machine. Never start this operation from the opposite side.

NOTE: The milling cutters have to be started freely, without touching the profile. They have to start to rotate first before making the milling operation.

7.2.6 Release the Start button after the milling operation is finished. The milling cutters will come to a full stop within approx. 10 sec. after releasing the Stop button.

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.
- 8.1.6 If the cutting tool are blunted, change immediately with a new / sharpened cutting tool.
- 8.1.7 Sharpen with proper sharpening machines by taking the angular value of the cutting tool into consideration.

8.2 Changing the cutting tool



- 8.2.1 Use protective gloves when replacing cutting tool.
- 8.2.2 Cut the electric connection of the machine.
- 8.2.3 Open the upper protection cover. (FIGURE 2-NO: 7)
- 8.2.4 With the help of 6 Allen key (given with the machine), demount the bolt (FIGURE 8-NO: 31) from its location..

 Take the washer (FIGURE 8-NO: 32) and the exterior coupling (FIGURE 8-NO: 33) to the outside.. Take the saw cutter group (FIGURE 8-NO: 35) over the rotor shaft (FIGURE 8-NO: 36) by taking, replace it with a new group saws After replacing the saw cutters, do the opposite of the demounting procedure and tighten the bolt.

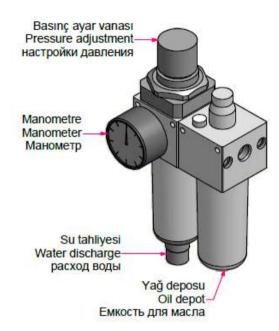


WHEN REPLACING THE MILLING CUTTER GROUP, ENSURE THE CUTTERS ROTATE IN THE CORRECT DIRECTION

. .

8.3 Adjust the air pressure (pneumatic systems)

- 8.3.1 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.
- 8.3.2 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.
- 8.3.3 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.
- 8.3.4 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 OFISI SPINDURA 10.



9. 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:

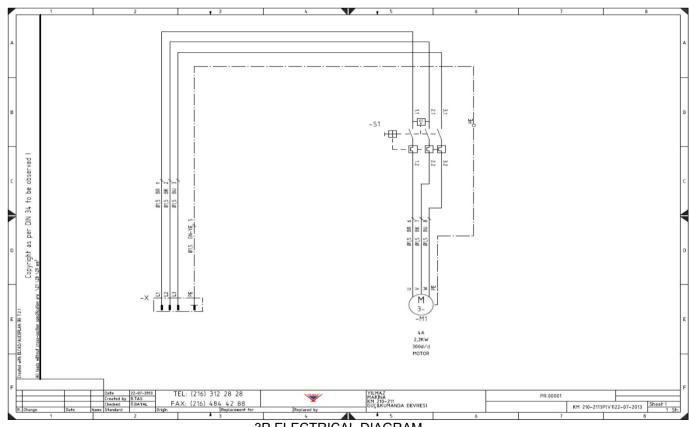
- Any repair and replacement effected at our workshop is completely free of charge (only transport costs are at customer's charge).
- For repair and replacement effected by our technician at the customer's site, we will invoice only the travel and lodging costs for our technician.

The guarantee does not cover damages caused by:

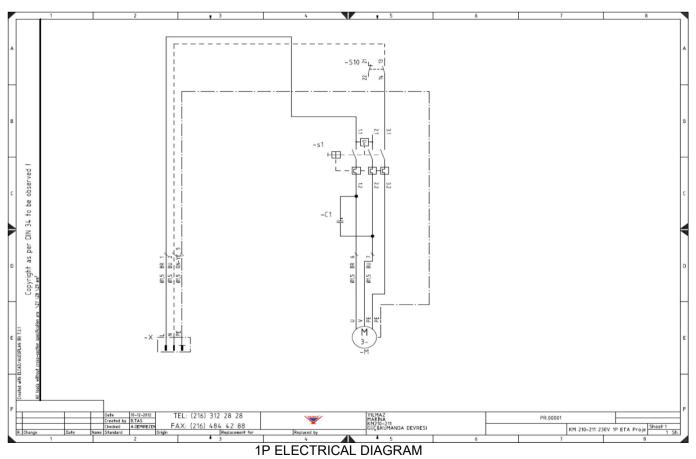
- not respect of the rules indicated in the manual instruction book
- not correct voltage
- improper use or use not in accordance with what the Machine has been designed for
- use of non original tooling
- programming errors
- lack of cleaning and of ordinary maintenance by the customer
- transport or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

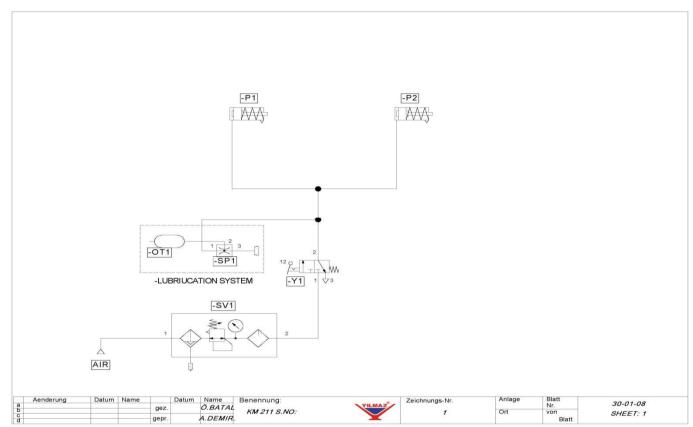
The warranty does not cover, in any case, damages caused by the malfunction of the Machine

ELECTRIC&PNEUMATIC DIAGRAM



3P ELECTRICAL DIAGRAM





PNEUMATIC DIAGRAM