



MAHLKÖNIG GmbH & Co. KG

Operating Instructions

K30 ES, K30 Vario, K30 Competition



Manual

Dear customer / service personnel

The "Single Espresso Grinder K30ES ", is a fully automatic espresso coffee grinder of the proven MAHLKÖNIG quality.

We have developed this product with over 80 years of experience in the manufacture of coffee grinders assuring you of high quality grinding of espresso and other types of coffee beans.

Read through and observe the operating instructions, so you and your customers will thoroughly enjoy the "K30ES". Please store the instructions in a safe place. If anything is unclear or additional information is required, please contact your authorized dealer or us as the manufacturer. We will be pleased to advise you further. We wish you unlimited pleasure and success with our product.

MAHLKÖNIG GmbH & Co. KG

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1. Safety



Please read carefully and observe the following safety instructions. Failure to do so can result in damage to the grinder and endangerment of the user.

1.1 Symbols

The following two symbols are used in these operating instructions:



Safety Instruction:

Imminent accident danger if you fail to observe.



General Instruction:

Failure to observe can result in damage to the grinder and optimum operation cannot be guaranteed.

1.2 Safety Instructions

Only whole roasted coffee beans may be ground in the K30 ES.

When unpacking please inspect whether the power supply (voltage) complies with the grinder voltage on the manufacturer's name plate. Never operate the grinder in damp or wet surroundings.

Always remove the electrical plug from the outlet prior to conducting maintenance or cleaning work on the grinder. Also, prior to removing the bean container, the plug must be removed from the electrical outlet.

Never operate a grinder with a damaged electrical cord. Inspect the grinder regularly for damages of the electrical cord, plug, etc.

Any required repairs may only be conducted by authorized service personnel. For this reason, please contact a customer service repair facility, your dealer or us directly as the manufacturer.

Do not exceed the maximum allowable continuous grinding time of 20 min. Afterwards, allow the grinder to cool off before the next operation.

Make no modifications or alterations to the grinder. The manufacturer assumes **absolutely no liability** for damages occurring from failure to observe these instructions.

Children cannot appreciate the dangers that can exist in the operation of electrical grinders. For this reason, never leave children unsupervised with electronic appliances such as this grinder.



Never submerge the grinder in water and never operate with wet hands.



1.3 Usage Purpose

Only whole roasted coffee beans may be ground in the K30 ES grinder. Never use the grinder to grind other products or objects.

1.4 Personnel Requirements

No special requirements are specified for the users of this grinder. It is nevertheless a prerequisite that the operating instructions have been carefully read and understood and that all instructions provided are observed. In addition, safety-conscious operation is expected.

2. Technical Data

Type	K30 ES, K30 Vario K30 Competition
Voltage/Frequency	230-240V / 50/60Hz 100-115V / 50/60Hz
Rotation	
230-240V	1350 rpm
110-115V	1640 rpm
Sound Emission	
Idle Operation	65 dB
Operation	85 dB
Pre-Fuse	16 A-slow
Overload Circuit Breaker	
230-240V	4A T
110-115V	7A T
Max. Permissible Running Time of the Grinder	S3 20% _{e.g.(4sec on / 16 sec off)} (6.sec on ; 60sec. off)*
Dimensions in mm	W 234, D 325, H554
Weight	14 kg (31 lbs)
Coffee Bean Capacity	1,5 kg (3.3 lbs.)
(Please request technical data for other voltages and frequencies from the manufacturer or dealer.)	

* only for 115V 60Hz

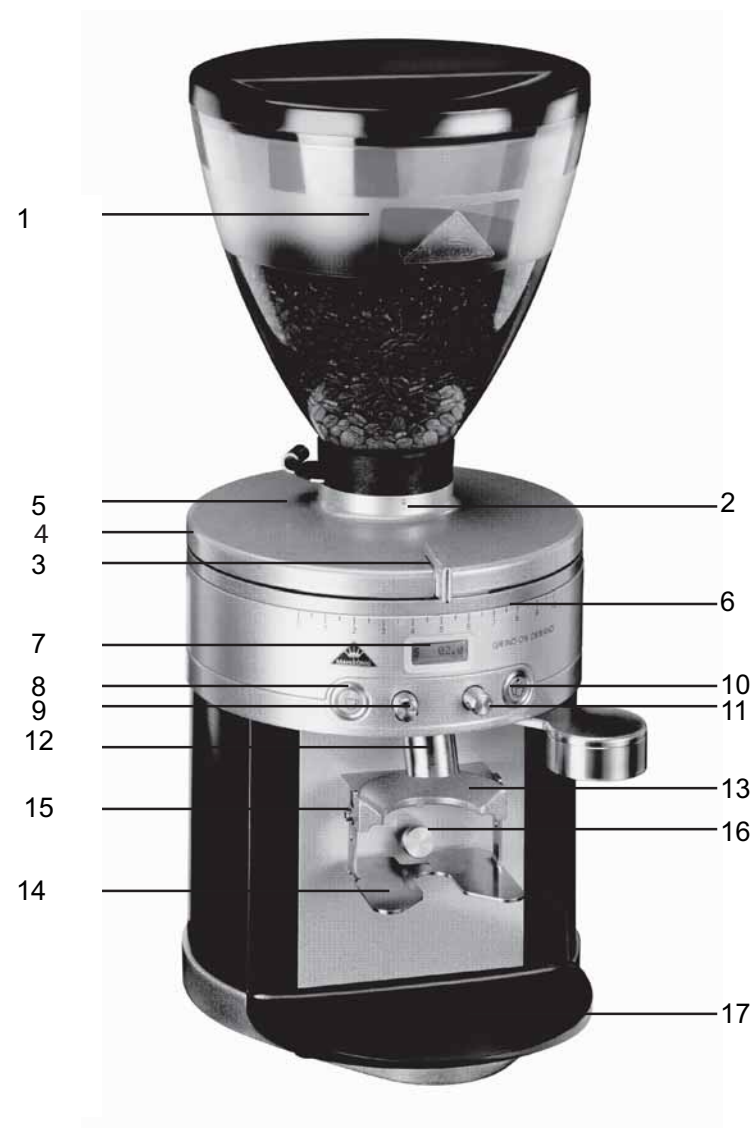


3. Description

3.1 Main Components and Operating Elements

The main components and operating elements are pictured in the illustration.

Pos. 1	Bean container with lid
Pos. 2	Lock screw for bean container
Pos. 3	Grinding fineness adjustment
Pos. 4	Lock screw for grind adjustment lid
Pos. 5	Grind adjustment lid
Pos. 6	Grinding fineness scale
Pos. 7	Display
Pos. 8	Single shot pre-selection button
Pos. 9	Single shot timer
Pos. 10	Double shot pre-selection button
Pos. 11	Double shot timer
Pos. 12	Spout
Pos. 13	Filter support
Pos. 14	Filter support rest
Pos. 15	Fastening screw for filter support rest
Pos. 16	Grinding mechanism
Pos. 17	Drip tray





- Pos. 18 Hopper slide
- Pos. 19 Main switch
- Pos. 20 Trip switch
- Pos. 21 Power cable



4. Safety Devices of the Grinder

Thermal overload circuit breaker

The motor of the grinder is protected by a thermal overload circuit breaker, which interrupts the motor's electric circuit in the event of electric overload. The trip switch, item 19, must be pressed to enable the grinder to be re-started.



The user has no influence whatsoever on this circuit breaker. If the circuit breaker trips repeatedly, an authorised service partner must be consulted, as the motor's winding may be damaged.



5. Set-up and Basic Adjustment

A grinding test run is carried out on each grinder in the manufacturer's factory. This is why you may find ground material residue in the grinding mechanism!

5.1 Usage Location

Place the grinder on a level, vibration-free surface.



Never operate the grinder in moist, or even worse, in wet surroundings!

5.2 Installation

You have received your grinder in operating condition. Now you only need to connect it to the mains. Proceed as follows:



Protect your device with separate pre-fuses (not included in the scope of delivery) according to the information provided under Point 2 "Technical data".



Make sure that the pre-fuse is not overloaded by other devices (e.g. fan heaters, deep freezers).



Check whether the mains voltage and frequency correspond to the information on the rating plate.

Insert the plug into the corresponding grounded outlet.

5.3 Basic Adjustment

Once the device is ready to operate, a grinding test should be carried out.

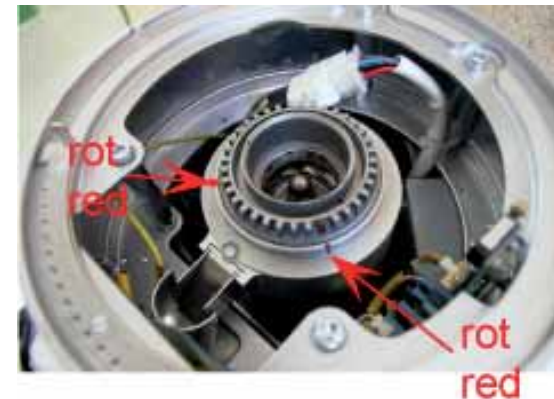
Basic adjustment to a moderately fine setting has been carried out in the factory using espresso beans. The following markings have been made on the grinding mechanism (interior):

Red line: Basic adjustment 0, finest setting and minimum grinding disc spacing

Red line: Basic factory setting and also the position for installing and removing the lid, in order to achieve the factory setting after positioning the lid.



Never rotate the grinding discs clockwise up to the red mark, as the grinding discs may otherwise be damaged.





6. Operation

Only use the K 30 ES espresso grinder according to the purpose specified in 1.3.

Observe the safety instructions under 1.2!

Never exceed the maximum permissible continuous operating period of running time (S3 20% e.g. 4 sec **on** and 16 sec **off**); 6 sec **on** and 60 sec **off** only for 115V/60Hz. Do not exceed the maximum allowable continuous grinding time of 20 min. Afterwards, allow the grinder to cool off before the next operation.

6.1 Handling the Grinder

Proper operation necessitates the steps described in the following:

6.1.1 Actuate the main switch on the rear of the device. Set the grinding fineness e.g. to 2 ½.* To do this, pull the sliding detent, item 3, out to the front and turn the lid / grinding fineness adjustment to the left to the 2 ½ mark.

Rotation to the left = fine
Rotation to the right = coarse



6.1.2 Open the bean container. Pour whole, roasted espresso beans into the bean container from above. Never pour in coffee powder.

6.1.3 Check whether the hopper slide (item 18) is open.

6.1.4 Adjust the filter support rest (item 14) to your espresso machine's filter support. Proceed as follows: Switch the K 30 ES espresso grinder off using the main switch (item 19). Use the enclosed Allen key to loosen the fastening screws (item 15) slightly and adjust the height of the filter support rest.



If the enclosed filter support rest does not fit, please contact the manufacturer or your local dealer. We will be happy to send you a different rest.

Slide the filter support between the filter support mounting and the filter support rest until it comes to a stop. Push the filter support rest up and tighten the fastening screws. The setting is correct when the filter support independently remains in the mounting.

6.1.5 Check whether the factory grinding time settings for single S 2.0 and double D 4.0 appear in the display. If the display corresponds to the factory settings, continue as described in point 6.1.9; if this is not the case, the time must be set (see point 6.1.6).

* not for K30 Vario & K30 Competition



6.1.6** Setting the grinding time (portion quantity). Simultaneously press both buttons for approx. 3 sec. MENU appears in the display. Scroll to menu option STI using the single button.

6.1.7** Use the Single shot timer, item 9, to set 2.0 sec. Scroll to menu option DTI using the single button. Use the Double shot timer, item 11, to set 4.0 sec.

6.1.8** To store these values, press both buttons simultaneously until SAVE appears in the display.

6.1.9 Adjust the grinding fineness by pulling the sliding detent out to the front / turn the adjustment screw*** and turning the lid / grinding fineness adjustment to the 2 ½ mark. Note that "0" is the finest setting and "10" is the most coarse setting.

6.1.10 Push your espresso machine's filter support into the filter support mounting, item 13, until the grinding process is switched on.

6.1.11 Now make a test portion of espresso using your machine. If the result is unsatisfactory, repeat adjustment steps 6.1.6 to 8.1.8 again by varying the grinding time and grinding fineness. Carry out this process until the best coffee results have been reached.

6.2 Display / Menue**

6.2.1 Calling up the menu

To call the menu up, simultaneously press both buttons for approx. 3 sec. MENU appears in the display. Scroll forwards using the single button. Scroll backwards using the double shot button.

6.2.2 Grinding time setting

The grinding time range for single cups and double cups should be set between 0.1 and 10 sec.* Scroll to menu option STI (time for single cups) using the single button. Use the Single shot timer, item 9, to set the time. Scroll to menu option DTI (time for double cups) using the single button. Use the Double shot timer, item 11, to set the time.

6.2.3 Store the grindig time or go to 6.2.4

To store these values, press both buttons simultaneously until SAVE appears in the display. You now have a setting range of 0.5 sec.

6.2.4 Quantity indicator

Scroll to menu option S using the single button. The display shows e.g. S 000020 – You have ground 20 single cup portions. Scroll to menu option D using the single button. The display shows e.g. D 000018 – You have ground 18 double cup portions.

** not for K30ES Competition

***for K30 Vario & K30 Competition

* not for 115V / 60Hz

** not for K30ES Competition



6.2.5 Continuous quantity indicator

Scroll to menu option SC using the single button. The display shows e.g. SC 000127 – You have ground 127 single cup portions.

Scroll to menu option DC using the single button. The display shows e.g. DC 004037 – You have ground 4037 double cup portions.

If you wish to set the grinding time, proceed from point 6.2.2. If you would like to exit the menu, press both buttons simultaneously until SAVE appears in the display.

6.2.6 Reset function

If you wish to reset the quantity indicator 6.2.4, switch the grinder off at the main switch. Press both buttons simultaneously and switch the main switch on again. The quantity indicator is now set to 0.

6.3 Interruption of grinding*

If the grinding process is interrupted before the set grinding time has expired, the light-emitting diode in the active pre-selection button flashes. The grinding process can be re-started by pushing the filter support back into the mounting. The missing quantity is ground into the filter support. If this is not desired, the pre-selection button can be activated and the entire set grinding quantity or grinding time is available once again.

* not for K30ES Competition

7. Operating faults

Defect	Cause	Remedy
The grinder hums but does not grind.	The spout is clogged.	Set grinding fineness to "coarse" and trigger the grinding process. The grinder will then grind itself free. Afterwards, return the setting to the desired grinding fineness.
	Grinding is set too fine.	Turn the grinding fineness setting to the right, to "coarse", and trigger the grinding process. The grinder will then grind itself free. Afterwards, return the setting to the desired grinding fineness.
	A foreign object is in the grinding mechanism.	Clean the grinding mechanism as described and remove the foreign object. Observe the safety instructions!
The grinder does not grind, the display is lit, single cup is pre-selected*	The grinding time is set to 0.	Reset the grinding time.

* not for K30 Competition



7. Operating faults

Defect	Cause	Remedy
The grinder does not start, the operating mode display is not lit.	The mains plug is not inserted.	Insert the mains plug into the socket.
	The overload circuit breaker has been tripped.	Check to determine whether the trip button of the circuit breaker has jumped out. Press the trip button in again if appropriate. If the circuit breaker trips repeatedly, contact your authorised customer service centre or dealer.
	The pre-fuse has tripped.	Check the pre-fuse. Restore the pre-fuse to its initial state or replace it. Determine whether other devices are connected to this fuse.

In the case of other malfunctions or continued faults, please contact your dealer or your authorised customer service centre.

8. Cleaning

8.1 Cleaning with GRINDZ™ Grinder Cleaner

We recommend cleaning your espresso grinder once a week and your shop grinder once a month with our GRINDZ™ Grinder Cleaner.

Simply take the recommended dose (35 - 40g for espresso grinders and 70-80g for shop grinders) and drop it into an empty grinder hopper. You can also use the cup of the jar for dosing. A full cup will yield between 35 - 40 grams.

Adjust machine setting to medium and operate as if grinding coffee beans. Once complete, we recommend passing twice as much coffee through to purge any residue.

8.2 Cleaning the Grinder Placement Surface

8.2.1 Pull out the mains plug!

8.2.2 Tilt the grinder to one side and clean the area on which it stands and the bottom of its base.

8.2.3 Both surfaces must be dry and free of oil and grease.

8.2.4 Replace the grinder



8.3 Cleaning the Grinder Casing

8.3.1 Clean the outside of the casing from time to time using a damp cloth.

8.3.2 Observe the safety instructions under 1.2!



Be careful of sharp edges when cleaning. There is a risk of injury!

8.4 Cleaning of the Grinding Mechanism



Always pull the main plug from the socket before carrying out maintenance or cleaning work on the device!



Do not let any foreign objects fall into the grinding mechanism!

8.4.1 Close the slide on the bean container. Remove the lock screw Item 2. Turn the base of the bean container to the right so that the bayonet releases the bean container. Pull the bean container off upwards.

8.4.2 Remove beans out of the filler neck. Remove the lock screw Item 4 and turn the grind adjustment lid to the right. The sliding detent automatically engages in the coarsest setting.

8.4.3 Remove the grind adjustment lid Item 5.

8.4.4 Now you can carefully vacuum out the grinder housing.



Please do not change any grinder settings!

8.4.5 During the reassembly please make sure that the grind adjustment lid is placed in a way that the 3 engaging cones fit into the toothing of the grinding disc support. The screw of the grind adjustment has to be placed over the cut-out in the intermediate ring.

8.4.6 Lower the grind adjustment lid onto the intermediate ring and turn to the left. Fasten the lock screw Item 4.

8.4.7 Carry out a grinding and coffee making test. Readjust the grinding setting if necessary.

9. Removal of the Integrated Grinder



Always pull the main plug from the socket before carrying out maintenance or cleaning work on the device!



Observe the safety instructions under 1.2!



Do not let any foreign objects fall into the



9.1 Disconnect the main plug. Close and remove the bean container. Place the grinder on its side and unscrew the fastening screws. Store the screws and washers in a safe place. Re-position the grinder on its rubber feet. Proceed as described in 8.4.2 and 8.4.3.

9.2 Release the motor's plug-in connector. Carefully pull the integrated grinder out of the casing.

9.3 Carefully vacuum out the grinder casing. Vacuum out the grinder casing and the integrated grinder's spout, and clean with a brush. **Do not damage any cables!**

9.4 Component assembly is carried out in reverse order. To do this, please note 8.4.5 to 8.4.7



10. Maintenance and Repair



Always pull the mains plug from the socket before carrying out maintenance or cleaning work on the device!



Inspect the grinder regularly for damage, particularly to the electrical cable, plug, etc.



Any required repairs may only be conducted by authorized specialist personnel. For this reason, please contact a customer service repair facility, your dealer or us directly as the manufacturer.

10.1 Grinding Disc Replacement

10.1.1 Grinding disc replacement should only be carried out by authorised specialists or a customer service centre. "Repair manual EK9-EK10-EK11 grinding disc replacement and basic adjustment", article No. 6592, is required for replacing grinding discs.

10.1.2 Grinding disc replacement may also be carried out using a replacement (AT) integrated grinder. To do this, order an AT integrated grinder. On receipt of the AT integrated grinder, remove your integrated grinder from the K 30 ES according to section 9 and install the AT integrated grinder into the K 30 ES. Return your old integrated grinder in the packaging.



10.2 Grinding fineness adjustment with the grinder switched ON

10.2.1 Set the grinding fineness adjustment to the 0 detent.

10.2.2 Close and remove the bean container.

10.2.3 Remove the remaining beans from the filler shaft and vacuum out the grinder casing.

10.2.4 Remove the sealing ring from the filler shaft.

10.2.5 Loosen – do not unscrew – the adjusting screws with the size 2.5 Allen key (article No. 6568).

10.2.6 Insert the adjusting handle into the filler shaft. The adjusting handle must engage in the slot in the filler shaft's transverse bar.

10.2.7 Insert the mains plug back into the socket and switch the grinder on.

10.2.8 Set the double portion grinding time to 10 sec. (see section 6.2 paragraph 3).

10.2.9 Hold the adjusting handle firmly and push the filter support into the filter support mounting until the grinder switches on.

10.2.10 Whilst the grinder is running, turn the adjusting handle to the left until a slight ringing sound becomes audible. Now turn the adjusting handle slightly to the right until no further ringing sound can be heard. Switch the mains switch off.



It is important to ensure that no grinding disk "rattling" can be heard at the finest setting! Their service life will otherwise be significantly reduced!

10.2.11 Disconnect the mains plug from the socket.

10.2.12 Tighten the adjusting screws and remove the adjusting handle from the filler shaft.

10.2.13 Insert the sealing ring again. If the sealing ring is damaged, it must be replaced.

10.2.14 Replace the bean container and allow it to engage in the bayonet and replace the lock screw (item 2). Open the hopper slide.

10.2.15 Insert the mains plug into the socket and switch the grinder on using the mains switch.

10.2.16 Reset the desired double portion grinding fineness and grinding time.

10.2.17 Push your espresso machine's filter support into the filter support mounting, item 14, until the grinding process is switched on.

10.2.18 Only remove the filter support once the grinding process has been completed.



10.2.19 Now make a test portion of espresso using your machine. If the result is unsatisfactory, repeat the adjustment steps as described in section 6.1.6 to 6.1.8, by varying the grinding time and grinding fineness.

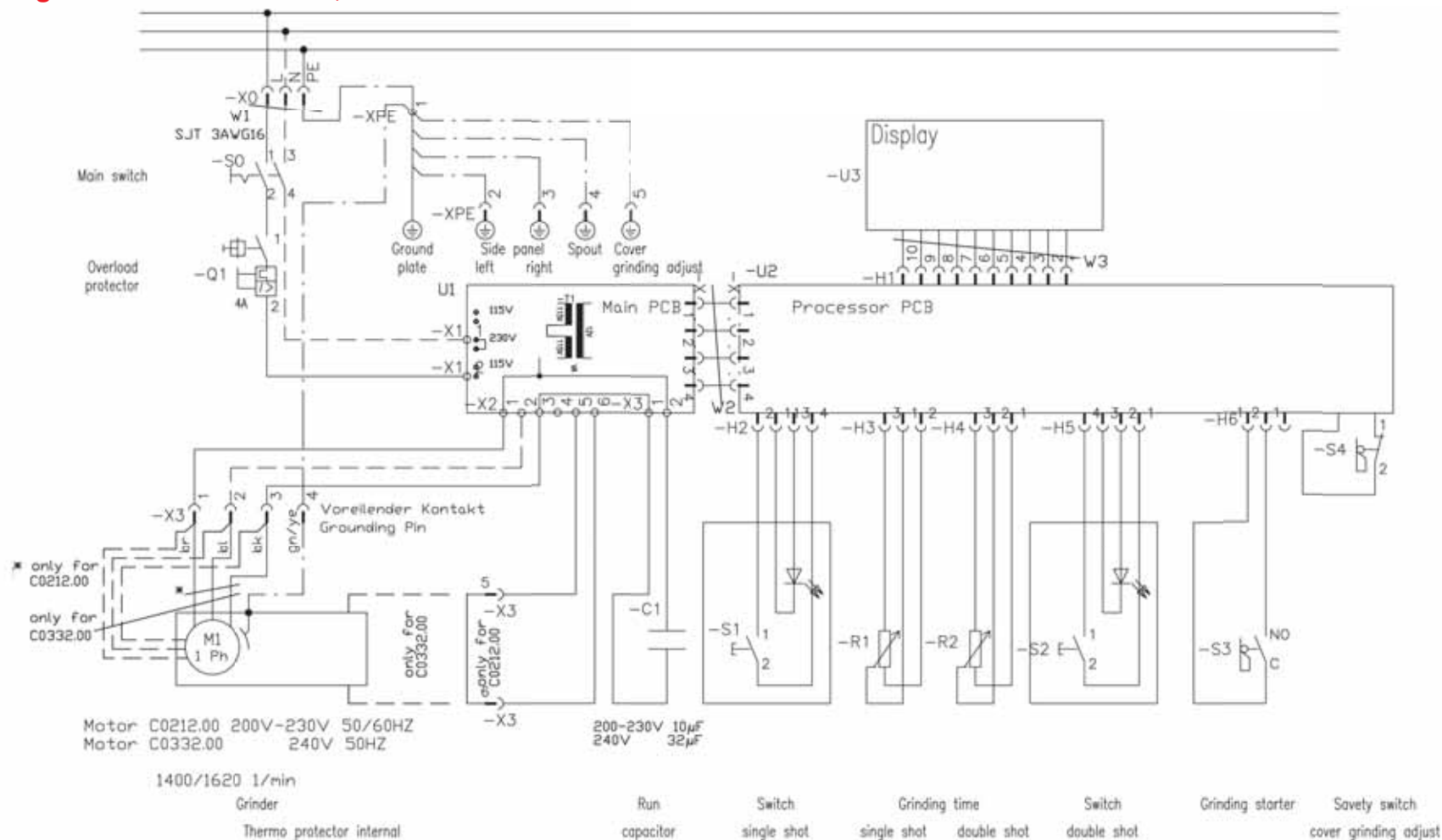
11. Spare Parts

Spare parts are usually ordered from your customer service centre or your local dealer. To ensure quick, correct processing of your order, the following information is absolutely essential:

1. Type designation, serial number and voltage of the grinder (on the rating plate on the rear of the grinder).
2. An exact description of the part to be replaced or the article number.

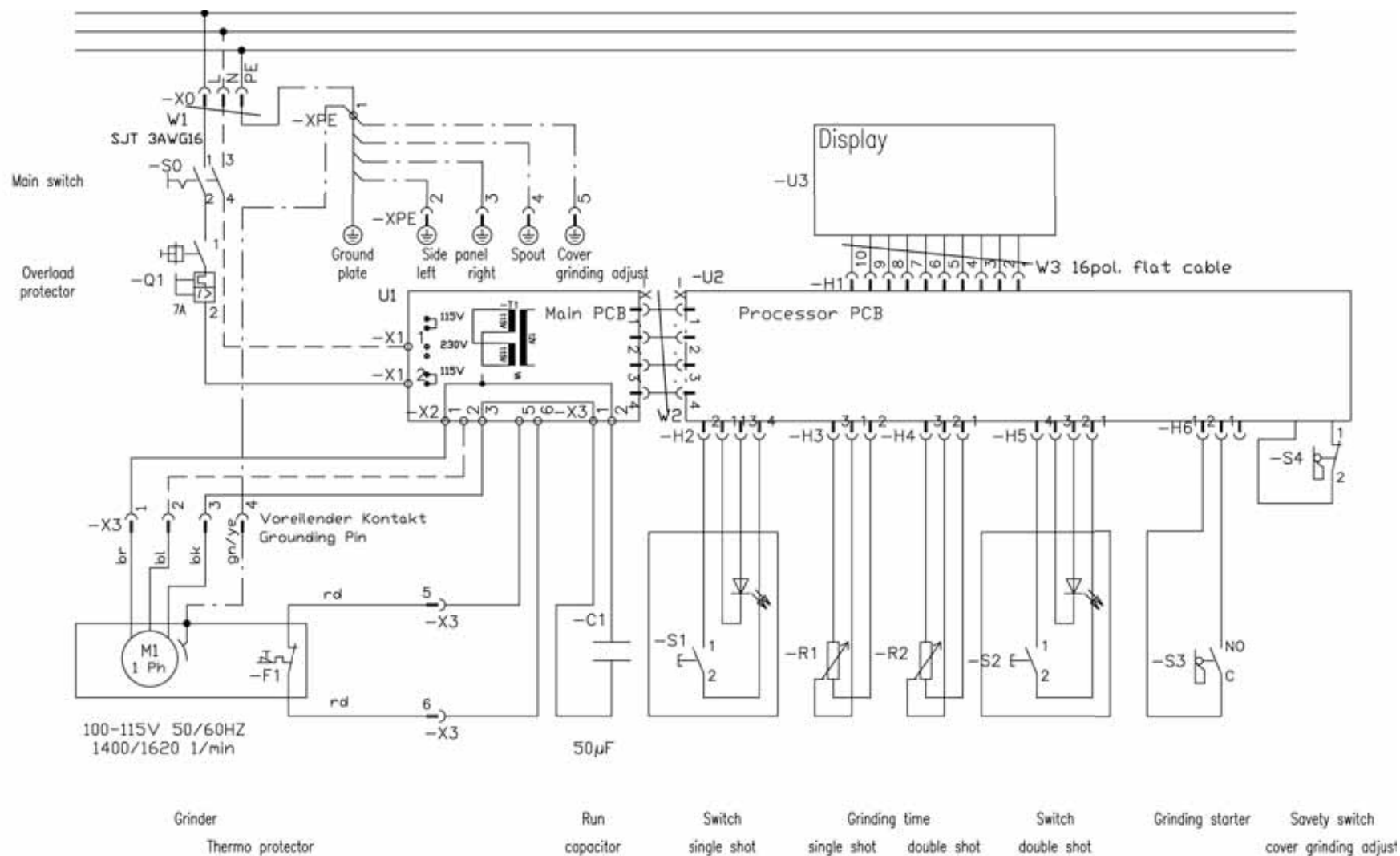


12. Wireing Diagram 200-230V 50/60Hz, 240V/50Hz





12. Wireing Diagram 100-115V 50/60Hz





13. Certificate

EC Declaration Conformity As defined by EMC-directive 89/392/EWG	 MAHLKÖNIG GmbH & Co. KG Tilsiter Straße 142, 22047 Hamburg Telefon : 040 - 69 69 40 - 0 Telefax : 040 - 69 39 721
Name of the manufacturer or in the EU residential authorized person: HEMRO AG	
Address of the manufacturer or the authorized person: Gagoz 73, FL-9496 Balzers	
announce, that the machine below	
product type	: commercial device for food processing
machine description	: Coffee grinder
machine typ	: K30 ES
is in compliance with the conditions of the Directive of Machines 98/37/EG and with the main standards stipulated in the Directive concerning low tension 73/23/EWG and applies to the national laws that transpose it.	
Issued in Hamburg	: 14.11.2005
Function of subscriber	: Managing Director
Name of subscriber	: Nils Erichsen
Signature	
<small>MAHLKÖNIG GmbH & Co. KG, Amtsgericht Hamburg HR A 85 074; Persönlich haftende Gesellschafterin: Beteiligungsgesellschaft MAHLKÖNIG mbH, Eingetragenes Amtsgericht Hamburg HR B 45 324, Geschäftsführer: Nils Erichsen Dresdner Bank AG (BLZ 200 800 00) Kto. 363 790 400 Postbank Hamburg (BLZ 200 100 20) Kto. 253 89-203 Commerzbank AG (BLZ 200 400 00) Kto. 21 10 294 Unt. Nr.: DE 118 37 22 65</small>	

14. Warranty Conditions

1. The warranty period is 1 year from the date of purchase.
2. The warranty covers all damages that can be attributed to inferior materials or defective workmanship. Corresponding grinders will be repaired or replaced free-of-charge, with the exception of transport or freight charges. Transport is the responsibility of the customer. Therefore, avoid damages with all returns by correct packing.
3. The grinder may only be opened for cleaning purposes in accordance with the Operating Instructions.
4. This warranty does not cover damages which have occurred through: Improper usage, improper maintenance, lack of servicing, usage for purposes other than those intended, incorrect installation, incorrect voltage, breakage, natural wear or for reasons beyond our sphere of influence.
5. In order to maintain the warranty, only original spare parts and accessory parts may be used.
6. Observe in addition our General Delivery Conditions in their respective current version.
7. The manufacturer is in no way liable for consecutive or secondary damages.
8. The warranty does not cover costs emerging from repairs conducted by non-authorized personnel.



Manufacturer Name Plate

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Subject to change without prior notice!!