# COFFEE ROASTER W15A

**GIESEN COFFEE ROASTERS** 

INSTALLATION & OPERATION MANUAL

Please read this manual carefully before using. Retain the manual for further future reference.



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#### 1.0 MANUFACTURER

The manufacturer of the Giesen W15A is Giesen Coffee Roasters B.V. located in The Netherlands.

#### Address:

Giesen Coffee Roasters Industrieweg 13-15 7071 CK Ulft The Netherlands

#### **Contact:**

Telephone support: +31 (0)315 74 50 55 E-mail support: support@giesen.eu

Telephone service / sales: +31 (0)315 68 13 77 E-mail service / sales: info@giesen.eu

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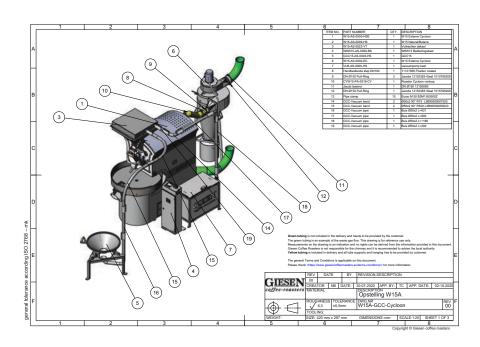
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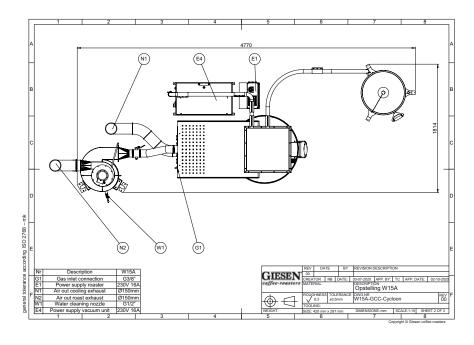
Giesen Coffee Roasters is constantly improving its products and reserves the right to change these without prior notice. This manual contains general information and is not part of the contract. Although this manual has been compiled with the utmost care, it may contain incomplete information or inaccuracies. Giesen Coffee Roasters, therefore, disclaims all liability. Giesen Coffee Roasters advises its users at all times to consult on the use of its coffee roaster and accessories. This manual applies to the type or types of machines indicated on the front cover. These instructions meet the requirements as laid down in the applicable European directive as stated on the declaration of conformity. If there are any questions or comments, please contact Giesen Coffee Roasters. The machine can only be started when the complete manual has been read and understood. Any responsibility for damage or injury resulting from non-compliance with the instructions as described in this manual, or non-observance of normal and generally accepted caution and care during installation, operation, maintenance or repairs, even if not expressly stated, will be rejected by the manufacturer.



# 2.0 MACHINE DETAILS

Below you can find an example of a standard setup featuring a Giesen W15A coffee roaster.







## 3.0 DECLARATION OF CONFORMITY



Industrial Route 13-15 +31 (0) 315 68 13 77 CHAMBER OF COMMERCE NO: 09165753 VAT: NL817325621B01



February 2020

## **Declaration of Conformity.**

Giesen Coffee Roasters B.V.

Industrieweg 13-15

7071 CK ulft

Declares under our sole responsibility the coffee roasters

#### W6A and W15A

EN 60335-2-102:2010

Ulft

Are in conformity with the provisions of the following EC directives, including all amendments, and with national legislation implementing these directives:

Low Voltage Directive (LVD) 2014/35/EU EMC Directive (EMCDDA) 2014/30/EU Machinery Directive (MD) 2006/42/EC Regulation on the combustion of gas-fired fuels (GAR) 2016/426/EU

NEN-EN-ISO 12100:2010 EN 61000-6-1:2007 NEN-EN 349:1994+A1:2008 EN 55011:2016/A1:2017 NEN-EN 60204+1:2018 EN 676 Appendix K EN 60335-1:2010 EN 676:2008

Location: Date: Signature: Mr. Wilfred Giesen





## 4.0 READ CAREFULLY BEFORE INSTALLING

#### 4.1 FOLLOW THE MANUAL



If the technical application limits and/or the safety rules stated in this manual are not followed, damage to the environment or machine can occur. Always follow the instructions as described in the manual. When you have any questions or are in doubt, contact Giesen support.

#### 4.2 TRANSPORTING THE MACHINE



- It must be ensured at all times that the hoisting or lifting device is suitable for the
  load that you want to carry. When transporting with transport equipment (hoisting with hoisting equipment and lifting with lifting equipment), objects and other
  loads can fall and cause serious injury and even death. There is also a risk that
  people will be overlooked by the driver or crane operator.
- Make sure at all times that the used transport tools, hoisting and lifting equipment, bobbins and all other means comply with the local safety requirements and are sufficiently strong to be able to carry the loads.

#### 4.3 INSTALLING THE MACHINE



- The specialist installation work described in this manual may only be carried out by certified specialists who are familiar with the functions of industrial machines and their parts and who are familiar with the safety instructions.
- Only suitable qualified personnel should work on this equipment, and only after becoming familiar with all safety notices, installation and operation procedures contained in the manual. The successful and safe operation of this equipment depends upon its proper handling, installation, operation and maintenance.
- The coffee roaster needs to be placed in a safe, prominent location. This needs to be advised by a local gas supplier.
- The coffee roaster needs to be connected to a qualified electric, gas and ventilation connection. Check carefully for gas leaks after installation.

#### 4.4 CAUTION - GENERAL



- Clean the roaster according to the maintenance schedule. Insufficient maintenance or cleaning can cause fires.
- During maintenance on the machine, close the gas supply to the roaster.
- This equipment may only be used for the purpose specified by the manufacturer.
- This appliance is intended for professional, industrial use. Persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved children shall not use the appliance.
- The coffee roaster and appliance area needs to be free and clear of any combustibles.
- Note that those parts which have been protected by the manufacturer or his agent shall not be adjusted by the user.



- Do not open the drum (oven) discharge door while roasting.
- Children and the general public must be prevented from accessing or approaching the equipment in order to prevent dangerous situations.
- The surroundings of the coffee roaster need to be free of liquids, dust and dangerous gases in order to prevent dangerous situations.n

#### 4.5 CAUTION - ELECTRONICS



- This equipment contains dangerous voltages. Non-compliance with warnings
  from this manual or failure to follow the instructions contained in this manual
  can result in loss of life, severe personal injury or serious damage to property.
- There is a risk of serious injury when the safety equipment (emergency stop) is not functioning or inoperative. There is a danger to life due to unauthorized or uncontrolled switching on! Unauthorized or uncontrolled switching the roaster back on can result in serious injury.
- There is a direct danger to life from electric shock when touching live parts. Damage to insulation or individual components can be life-threatening.
- Care must be taken to ensure that all the pipework connected to the coffee roaster is installed voltage-free, in order to prevent leakage on the machine which will affect the connections.
- The main input can carry dangerous voltages even if the roaster is inoperative.
- Ensure that appropriate circuit-breakers/fuses with the specified current rating and type are connected between the power supply and roaster.
- During maintenance on any of the electrical parts, be sure the coffee roaster is disconnected from the main net: pull the plug.
- Take particular note of the general and regional installation and safety regulations regarding work on dangerous voltage installations (e.g. EN 50178), as well as the relevant regulations regarding the correct use of tools and personal protective gear.

#### 4.6 CAUTION - GAS CONNECTION



• Improper connection of gas supply can cause fire and/or explosions. The gas supply should be installed, adjusted, and tested by a qualified gas installer.

#### 4.7 CAUTION - HEAT



- The piping from and to the coffee roaster can reach high temperatures just like the coffee roaster. It is up to the user to make the provision so that the pipes can not be touched and/or to apply the clearly visible warning.
- Surfaces of the coffee roaster can become very hot during operation. Contact with hot surfaces causes severe burns.

## 4.8 CAUTION - FIRE



• The risk of fire arises if the coffee beans are not released in time. Giesen Coffee Roasters advises not to exceed the bean temperature by 220 °C / 428 °F, and not to exceed the air temperature by 250 °C / 482 °F.



#### READ CAREFULLY BEFORE INSTALLING

## 4.9 CAUTION - VENTILATION



- The surrounding ambient temperature must be between 10 °C (50 °F) and 40 °C (104 °F). The room should have sufficient ventilation during operation in order to prevent dangerous situations. Burning gas requires oxygen.
- Never obstruct the roasting and air ventilation vents.
- The coffee roaster shall be installed in conformity with the current regulations and used only in a well-ventilated location.



## 5.0 IMPORTANT INFORMATION

#### 5.1 SHUTDOWN PROCEDURE



In case of cleaning or maintenance always follow these six steps as the shutdown procedure. As an alternative to this, you have the option of using the cleaning mode when your roaster has version 7.54 or higher.

- **1.** Turn the roaster off. You can do this by pushing the on/off button in the F2 section.
- **2.** Finish the cooling down.
- 3. The temperature needs to be below 50 degrees 50  $^{\circ}$ C / 122  $^{\circ}$ F.
- **4.** Push the emergency button on the console.
- **5.** Unplug the roaster electrics supply.
- **6.** The gas valve should be connected by a certified gas mechanic.

#### 5.2 LOCATION OF THE ELECTRIC DRAWINGS



The electric drawings are supplied with this Installation & Operations manual. The manual and electric drawings are located in the control panel of the machine. When the required documents are not available do not install the machine. Immediately contact us via support@giesen.eu or call us on +31(0)315 681377.

#### 5.3 SERVICE FOR THE ROASTER



We want our coffee roasters to work perfectly and you to roast carefree. That's why we offer the best service and support. If you buy a Giesen coffee roaster you can be assured that we will accompany you from the beginning to the end. If you encounter any mechanical or technical problems with your coffee roaster, it is a priority for us to help you to get your Giesen coffee roaster up and running again as soon as possible. That is why our support team is available for you. The support desk can be reached by phone, email, and our website.

Every 400 hours your coffee roasters need a check-up and cleaning by Giesencertified mechanics. For service, you can contact us at service@giesen.eu or call us on +31 (0)315 68 13 77.

## 5.4 ACCEPTABLE PRODUCTS



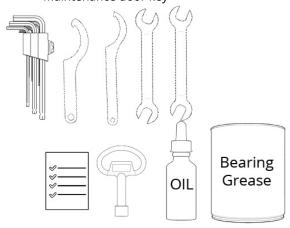
The sole purpose of a Giesen Coffee Roaster is to roast coffee beans. No other products may be processed since it may lead to fire, explosions or other dangerous situations.



## 6.0 PLACING YOUR ROASTER; PREPARATIONS

## 6.1 WHAT'S IN THE BOX?

- Giesen Coffee Roaster
- A tool bag that contains the following items:
  - Standard set of hex keys (1x)
  - Wrenches (2x)
  - Hook wrenches (2x)
  - Oil
  - Bearing grease
- Test report
- Maintenance door key

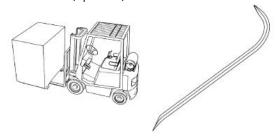


## 6.2 WHAT DO YOU NEED?

- Forklift truck to unload your roaster

  Make sure the forklift you use is capable of lifting the weight you Giesen Coffee

  Roaster has. Please refer to the roaster and forklift's technical specifications.
- Philips screwdriver (electric)
- Crowbar
- Pallet truck (optional)

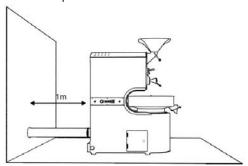




#### 6,3 CHOOSE A LOCATION

When picking the location of where you want to place your roaster, keep the following points in mind:

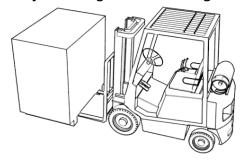
- Make sure that the floor is capable of holding the weight of your roaster.
- Make sure that the surface is horizontal and concrete. Wooden floors must be fireproof insulated by means of sheet metal.
- Make sure that the roaster is accessible from all sides. The roaster needs at least 1 meter of free space surrounding it to ensure adequate airflow and safe access.
- Make sure that the roaster is protected from moisture and wind, because the roaster is not water resistant.
- Make sure that the roaster is vented to the outside. Ensure that the area is well ventilated for safely operating and maintenance.
- If you are at an altitude of 1500 m or above; please let us know. Some adjustments may be needed to allow the roaster to operate properly.
- Make sure the outlet of the cooling sieve can be turned into the requested direction.
- We strongly advise to install a carbon monoxide detector in the same room the roaster is placed in.



## 6.4 UNLOADING THE ROASTER

We advise a forklift truck to unload your roaster. Make sure the forklift truck is controlled by individuals who have been trained properly and contain a license to operate the equipment.

Do not lift the roaster by the hopper or by the cooling sieve. For tips to unload safely read our guidance on taking delivery of goods.





## 6.5 UNPACKING THE ROASTER

**1.** After removing the top cover by removing the nails, take out the screws that hold the side panels in place with an (electric) screwdriver.



**2.** After taking out all the screws, the side panels can be removed.



**3.** Take out the screws on the final two side panels and take them off.



**4.** Remove the wooden wedges on top of the roaster.



**5.** Remove the hopper, control panel and accessories from the pallet.



**6.** Remove the plastic protection foil from the machine. Remove the side protection panels on the bottom of the roaster by taking out the screws with an (electric) screwdriver.



7. The roaster now stands on two battens and can be lifted from the pallet using a forklift



**8.** Now that the roaster is on the forklift you can place the roaster on your desired location.





## 7.0 PLACING AND INSTALLING YOUR ROASTER



Warning: Only authorized skilled persons are allowed to effect technical electrical connections, connect the ventilation and connect the gas lines.

Don't want to do it yourself? Our skilled mechanics are happy to help. They'll take care of the installation and make sure everything is up and running. Please contact our service department at service@giesen.eu or call +31 (0)315 68 13 77, to schedule an appointment.

#### 7.1 ELECTRIC INSTALLATION

Only authorized skilled persons are allowed to effect electrical connection!



The installation must conform the HD-IEC 60364 standardization.

The roaster must be electrically grounded in accordance with local codes. In absence of local codes apply the codes of the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.2.

#### 7.2 ELECTRICAL CONNECTION



- For personal protection, we strongly recommend you to connect the roaster to an Residual Current Circuit Breaker (RCCB) before using it.
- We strongly advise you to relate to your local rules and regulations concerning the electrical connection. When in doubt, get in touch with a skilled electrical technician or contact Giesen support.

#### 7.3 VENTILATION



Only authorized skilled persons are allowed to connect the ventilation!

- Metal (single smooth pipe) or stone pipe pressure-resistant. Don't use a flexible pipe because this interrupts the airflow of the roaster.
- Make sure the exhaust is pressure-resistant.
- Take note of the ventilation requirements as the minimal width and number of corners, as stated in the technical data.
- The maximum total length: this depends on the situation, always discuss this with a Giesen service engineer.
- Maximum horizontal length: depends on the situation, always discuss this with a Giesen service engineer.
- If your exhaust needs angles, we advise to use a max of 2 corners with a 90° angle or 4 corners with a 45° angle.
- Do not use external ventilation in the exhaust.
- The maximum temperature of the exhaust ventilation is 80 °C / 176 °F.



#### 7.4 GAS CONNECTION



Only authorized skilled persons are allowed to connect the gas line! The installation must confirm with local codes. When local codes are in absence use the National Fuel Gas Code, ANSI Z223.1/NFPA54 or the Natural Gas and Propane Installation Code, CSA B149.1.

- A manual gas shut-off valve must be installed at the roaster (for maintenance and safe storage).
- Connection: 3/8" right thread standard fitting.

Gas type: see identification plate on the back side of the roaster.

# USA / Canada gas connection statement - Only for USA / Canada installing locations!

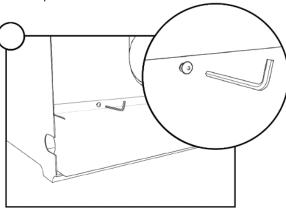
A statement that the installation must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1, Natural Gas Installation Code, CAN/CGA-B149.1, or the Propane Installation Code, CAN/CGA-B149.2, as applicable, including:

- **1.** The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi (3.45 kPa).
- 2. The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi (3.45 kPa).



## 7.5 CONNECTING THE ROASTER

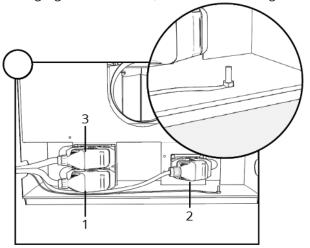
**1.** Remove the two screws from the backplate with Allen key nr. 3 and remove the backplate.



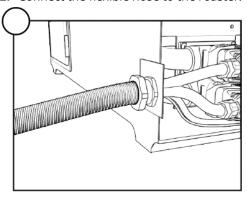
First connect the smallest connector on the right. Connect the two other connectors. Please make sure the connectors are tightly plugged in and locked.

**ST3:** Upper left **ST2:** Upper right **ST1:** Bottom left

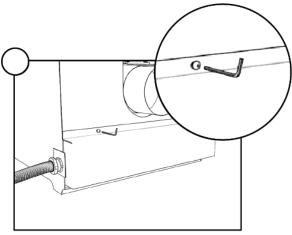
As highlighted in the circle, connect the earthing to the location as shown.



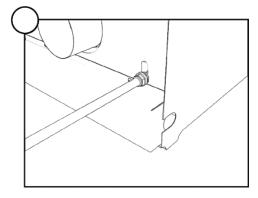
**2.** Connect the flexible hose to the roaster.



**3.** Reattach the backplate using the screws and Allen key nr. 3.



**4.** Attach the gas hose.



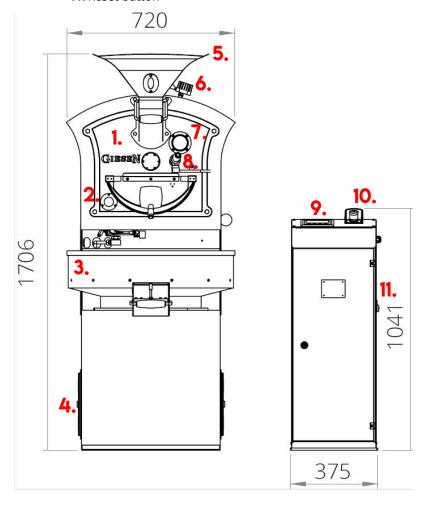


Warning: Connecting the gas lines may only be done by a certified, recognized installer!



# 8.0 YOUR GIESEN COFFEE ROASTER

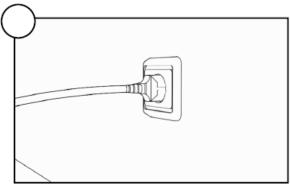
- 1. Front plate
- 2. Sight glass
- 3. Cooling sieve
- 4. Maintenance door
- 5. Hopper
- 6. LED light
- 7. Sight glass
- 8. Sampler
- 9. Control panel
- 10. Emergency stop
- 11. Reset button



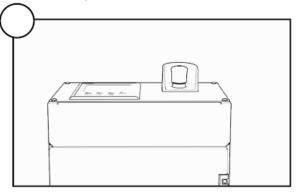


## 9.0 GENERAL OPTIONS

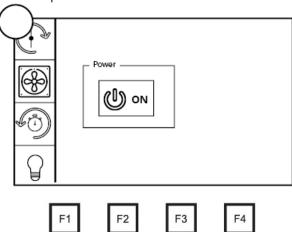
**1.** Connect the roaster and insert the socket into the power outlet.



**2.** Make sure the emergency stop button is pulled up and press the reset button on the control panel.

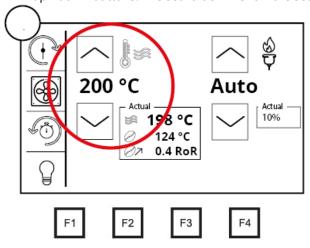


**3.** Press the F2 button once, then push the roasting button to start up the roaster. Press F1 to reach the 'home-screen'. Set your air temperature and wait until the air temperature has reached the required roasting temperature. This might take a couple of minutes.

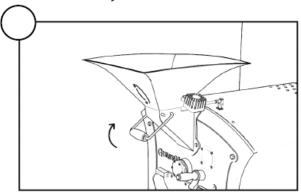




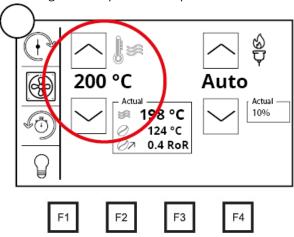
**4.** Check the actual air temperature and adjust if needed. The temperature is set on 200 °C (factory default). Set required roasting temperature by pushing the cursor up / down buttons. The set value will show the setpoint.



**5.** Release the beans into the drum by opening the handle. Note: this might be the moment when you would start the timer. .

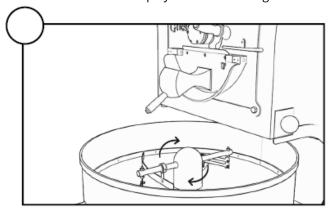


**6.** Continue roasting until the beans have reached the required color. You can change the temperature set point while the roasting is in progress.

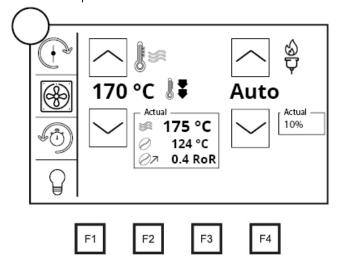


**7.** When the beans are ready and roasted, start up the stirrer and cooling fan by pushing the stirrer button on the control panel. Afterwards, slowly open up the release door to release the beans into the cooling sieve.

To start roasting a new batch, return to step 5 and redo the process. When all batches have been completed, push the roasting button on the control panel to turn off the burner. The display will show 'cooling down'.



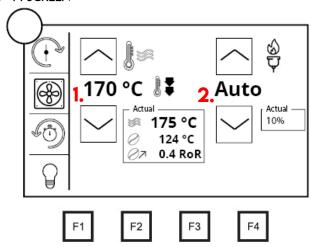
**8.** The roaster will stay in cooling down mode until the air temperature inside has dropped to below 50 °C / 122 °F. While the machine is cooling down, the drum and fan will continue to run, but the burner is turned off. After the cooling down is completed the machine will shut down automatically.





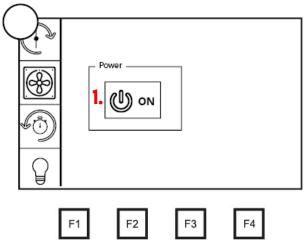
## 10.0 OPERATING CONSOLE

#### 10.1 F1 SCREEN



- Adjust the air temperature up or down with the arrows on the left. One click means one degree up or down. Click and hold to change the air temperature faster.
- 2. Adjust the burner power up or down with the arrows. One click means one degree up or down. Click and hold to change the burner power faster. NOTE: The burner percentage is an upper limit, the machine will continue to regulate by itself. To switch off the auto burner adjustment, push the arrow up (OFF) and push the arrow again to change the burner percentage.

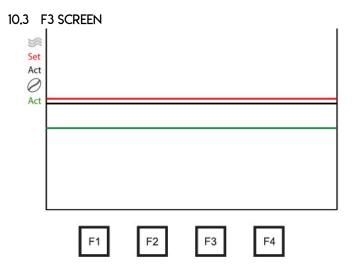
## 10.2 F2 SCREEN



1. With this button you can turn your roaster on and off.

NOTE: In versions 7.54 and above there will be an additional button called the 'Cleaning mode'. With this button you can clean our the chaff in-between roasts. For more information on this subject, refer to the paragraph 'Cleaning mode'.





This is the graph of your current roasting.

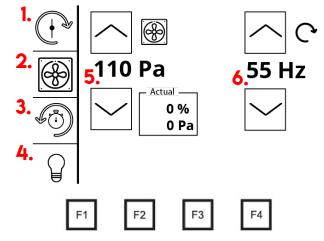
- Red line: Set temperature
- Black Line: Air temperature
- Green Line: Bean temperature
- White line: Infrared temperature (option)



## 10.4 F4 SCREENS

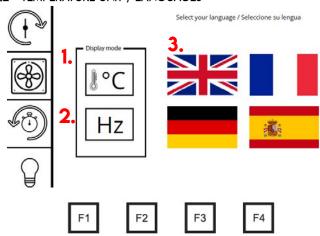
You can use the F4 button to reach several menu's; the underpressure / drumspeed menu, temperature unit / languages menu, running time / software version menu and the PLC info. Scroll through the F4 menu's by pressing the F4 button multiple times until you have reached your wanted menu.

## 10.4.1 UNDERPRESSURE / DRUM SPEED



- 1. Stirrer on / off
- 2. Cooling fan on / off
- 3. Timer / stopwatch
- **4.** Light on / off
- 5. With the arrows you can adjust the underpressure up / down
- **6.** With the arrows you can adjust the drum speed up / down

## 10.4.2 TEMPERATURE UNIT / LANGUAGES



- 1. Set the temperature display to Celsius or Fahrenheit
- 2. Select the drum speed to be displayed in Hertz (Hz) or RPM
- 3. Select your preferred language

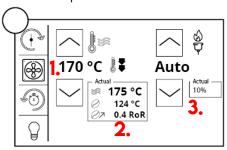


## 10.5 IN-DEPTH OPERATING BUTTONS

The operation console has a lot of advanced features. With these features, you can view and set advanced values for your roaster. Below we will explain each screen of this console.

## **Display explanation**

- 1. Set point (T-set)
- **2.** Actual bean temperature
- 3. Actual power



## **Icons** explanation

1. Turns on / off the stirrer



2. Turns on cooling fan on / off



3. Roaster is turned on



4. Enters the timer menu



5. Roaster is cooling down, the drum and fan keep running during cooling





#### **Burner settings explanation**

- 1. Up / down to select the burner power. Select 'Auto' for the automatic power option (use T-set from the first screen)
- 2. Options: Auto, Off, 1%...100%'



#### Auto



## Drum (under)pressure

1. Use the up / down buttons to increase / decrease the drum pressure. Please refer to the technical specifications when you need more information on the default Pa settings.





## **Drum rotation speed**

Drum rotation settings explanation

1. Use the up / down buttons to increase / decrease the drum rotation speed. Please refer to the technical specifications when you need more information on the default Hz settings.







#### **Temperature units**

Temperature unit settings explanation

1. Use the buttons to select Celsius or Fahrenheit.





#### Drum speed display unit

Drum speed display unit selection explanation

1. Select your preferred unit wherein the drum speed is displayed; Hertz (Hz) or Rotations Per Minute (RPM)



#### Language

Language selection settings explanation

1. Select your preferred language; English, French, German or Spanish,



#### Version

Version view explanation

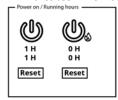
1. This function displays the current version of the PLC in your roaster. When you encounter software related problems, make sure you communicate your current software version to our support team.



## **Operation hours**

Operation hours explanation

1. This function displays the total power-on hours and roasting hours your roaster has had. This function is useful for maintenance purposes. The amount of use indicates when certain parts of the machine need service.





## 11.0 CLEANING AND MAINTENANCE

#### 11.1 CLEANING PLAN

#### TABLE 1.

#### CLEANING PLAN OVERVIEW

Interval	Position	Service
Daily	See 11.1 - Daily cleaning steps	Cleaning
Every 12 roasts	Cyclone space and below the cooling sieve	Cleaning
Weekly	Clean behind the drum. You can access this by opening the panel on the side of the roaster.	Cleaning

Clean the roaster according to the cleaning interval. Insufficient cleaning can cause fires and damages to the roaster.

Make sure to disconnect the coffee roaster from its power source before cleaning or servicing!

## 11.2 DAILY CLEANING STEPS

- **1.** First, turn off the roaster following the shutdown procedure.
- Finish the cooling down. The drum's temperature is below 50° Celsius / 122° Fahrenheit.
- **3.** Remove the collector and empty it. You can do this on the right side of the roaster. CAUTION: the collector can still be very hot!



**4.** Open the chaff collector with the door key supplied with the toolbag. See the picture for an example of the key to use.







**5.** Clean out the chaff with a vacuum cleaner.



**6.** Remove the cooling sieve. Warning: the cooling sieve is very heavy. Make sure you lift the cooling sieve with two people.



**7.** Remove the two split door covers.



**8.** Remove the internal cyclone.



**9.** Clean out the machine with a vacuum cleaner.



**10.** Reposition the cyclone, split door covers and the cooling tray in their original locations.



**11.** Remove the door on the right hand side of the machine using the Allen key nr. 3 supplied in the toolbag.



**12.** Clean inside the door with a vacuum cleaner, when done cleaning, close the door with the previously used Allen key nr. 3.



Make a final check on all of the doors; make sure they're all closed. When so, the roaster is ready for it's next day of roasting.



#### 11.3 CLEANING MODE

Only featured in version 7.54!

The cleaning mode is a function that has been added to allow the user that controls the machine to clean the machine in-between the different roasting sessions. When the cleaning mode is activated the burner will shut off and the machine will cool down to 180 °C. Up until then, the cooling fan and stirrer motor can be turned on and off. When the machine has reached 180 °C all parts of the machine, except the drum motor, will be shut off.



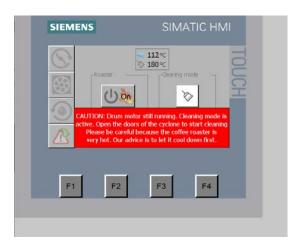
In the screenshot above you can see the maintenance button which is referred to as 'Cleaning mode'. Clicking this button activates this mode as described above.

The cyclone and cooling motor will be shut off which makes sure no under-pressure will be created and the chaff won't be sucked up. The stirrer will be shut off which ensures there won't be any moving parts working, except for the drum motor.



In this screenshot you see that Cleaning mode has been activated, but the machine indicates that it is still too hot for you to start cleaning. Wait until the temperature has dropped to 180  $^{\circ}$ C / 356  $^{\circ}$ F.





In the above screenshot you can see that the machine has cooled down to 180 °C but is still very hot. You can clean, but have to be very careful since the machine is still hot and the drum motor is running.

These steps give you as a user the opportunity to safely open up the machine doors and clean out the chaff, without having to completely turn off the machine. After cleaning the machine and closing the doors, the cleaning mode has to be de-activated in order to resume roasting.



## 11.4 ADJUSTING THE DRUM

Adjusting the front bearing might be necessary when;

- A scraping sound is being heard the distance needs to be bigger.
- When beans are falling through the distance needs to be smaller.

Only authorized skilled persons are allowed to adjust the drum. Always do this on the instruction of a Giesen Coffee Roasters trained person.

**1.** Unscrew the three countersunk screws with the supplied tools.



2. Turn 90° clockwise with the key hook to adjust the drum back.



**3.** Use the key hook to turn the drum anticlockwise until you hear the drum lightly scraping the front plate. When you hear this sound, you need to stop. Then, turn the key 45° clockwise. Your drum is now adjusted.



**4.** To lock the drum adjustment, tightly screw in the three countersunk screws you removed earlier.





## 11.5 MAINTENANCE PLAN OVERVIEW

## TABLE 2.

## MAINTENANCE PLAN OVERVIEW

Interval	Recommendation			
Every 100 hours	Grease the front and back bearing, see the Lubrication chapter.			
	Clean the overall roaster parts that are subject to dust and dirt.			
	Take off the cooling sieve and clean and grease it.			
Even 400 hours	Clean the cyclone and the space below the cooling tray.			
Every 400 hours	Overall check on turning parts and electricity			
	Service the fans by taking them apart and clean them.			
	Clean the burner. It is recommended that this is done by a Giesen Certified Technician.			
Every 1000 hours or once a year	Replace the ignition and ionization pen.			
	Major service			
Every 15000 hours	Replace the burner, ignition, ionization pen, motors, bearings and ventilation fans. It is recommended that this is done by a Giesen Certified Technician.			

Maintain the roaster according to the maintenance interval. Insufficient maintenance can cause fires and damages to the roaster.

Make sure to disconnect the machine from it's power source before cleaning or servicing!



# 12.0 LUBRICATION

Lubricating the roaster release valve is very important, since this will keep the hinges in good shape and prevents early wear and squeaks. You will need to lubricate the roaster release valve with a few drops every week.

## 12.1 FRONT VALVE LUBRICATION

1. Oil the front valve on the left side.



2. Oil the front valve on the right side.





## 12.2 FRONT BEARING LUBRICATION

1. Remove the three visible screws.



2. Remove and clean the cover.



**3.** Put new heat resistant grease on the axis.



**4.** Put new heat resistant grease inside the cover.



## 12.3 BACK BEARING LUBRICATION

- 1. Attach the grease pump to the back bearing
- 2. Pump three times to fill the bearing with new grease
- **3.** Disconnect the grease pump





## 12.4 TYPES OF GREASE

When lubricating / greasing your machine there are two types of grease to choose from. Both types of grease are available through the Giesen webshop.

• Heat resistant grease (non-food grade)

Use this type of grease in areas that will not be in touch with the coffee beans.

• Non-heat resistant grease (food grade)

Use this type of grease in areas that will not be in touch with the coffee beans.



# 13.0 ALARM LIST AND TROUBLESHOOTING

## TABLE 3.ALARM LIST / TROUBLESHOOTING

Display text	Meaning	Solution	
Emergency stop	Emergency stop pressed	Pull the emergency stop button and push the blue reset button.	
Thermal overload Drum	Thermal overload on drum: 102F1.1 reports an alarm.	Press the blue reset button.	
Thermal overload Stirrer	Thermal overload on stirrer: 102F3 reports an alarm.	Press the blue reset button.	
Burner failure	Burner failure.	Press the on-screen triangle for 5 seconds to reset the machine.	
PT100 Air temperature	The air temperature reading is lower than -10 °C/ 14 °F or higher than 400 °C/752 °F, indicating a wiring problem or PT100 problem.	Contact Giesen support.	
PT100 Bean temperature	The bean temperature reading is lower than -10 °C/ 14 °F or higher than 400 °C/752 °F, indicating a wiring problem or PT100 problem.	Contact Giesen support.	
Drum pressure low	Drum pressure low indicates that the value (0,6mBar) for the Dungs is not reached.	Check if all doors and valves are closed and if the chimney is clean.	
Roasting fan Invertor	The controller received too much power / the motor asked for too much power.	Check if fuse 101F1 is in the right position.	
Drum invertor	The controller received too much power / the motor asked for too much power.	Check if fuse 101F1 is in the right position.	
Fan speed too high	The exhaust fan is running >80%.	Check if all doors and valves are closed.	
PT100 Environment	The environment temperature reading is lower than -100C or higher than 400C, indicating a wiring problem or PT100 problem.	Check if the Siemens underpressure reader is still connected.	
Cooling fan invertor 104U1	Controller got too much power / motor asked for too much power.	Check if fuse 101F1 is in the right position.	

When in doubt other have a different problem with your roaster contact us on support@giesen.eu or call the support telephone number: +31 (0)315 74 50 55.



## 14.0 EMERGENCY SITUATIONS

#### 14.1 FIRE IN THE DRUM

- 1. Press the emergency stop button.
- 2. Close the manual gas valve.
- **3.** Disconnect the machine from the electrical outlet. (Pull the plug)
- 4. Do NOT OPEN the front opening. Leave the burning beans inside.
- **5.** You can extinguish the beans by pulling out the sampler and adding water through the sampler hole.
- **6.** Let the machine cool off.

## 14.2 FIRE ON TOP OF THE COOLING SIEVE

- 1. Press the emergency stop button.
- 2. Close the manual gas valve.
- 3. Disconnect the machine from the electrical outlet. (Pull the plug)
- **4.** Extinguish the fire using water.
- **5.** Let the machine cool off.

## 14.3 FIRE BELOW / CHAFF CABINET / DUST BIN

- **1.** Press the emergency stop button.
- 2. Close the manual gas valve.
- **3.** Disconnect the machine from the electrical outlet. (Pull the plug)
- **4.** Do NOT OPEN any door! Keeping the doors and other openings shut will ultimately cause the fire to stop by itself.
- 5. Let the machine cool off.

#### 14.4 CAUTION WHEN ROASTING

• Do not roast batches that are too small and avoid too guick heat supply.



 Roasting has to be stopped immediately when the brown color of the coffee beans is getting darker. Above 220 °C there is the danger of fire due to the heat reactions within the bean's interior. The coffee has to cool down quickly on the cooling sieve.



## 15.0 TECHNICAL DATA W15A

#### TABLE 4. BASIC SPECIFICATIONS

Roaster weight720 kgRoaster length2100 mmRoaster width1000 mmRoaster height2000 mmSupply power consumption1.7 kWMaximum sound level70 dB

**Insulation type** Rockwool 8 cm

Minimum batch size500 gMaximum batch size15000 g

#### TABLE 5.ELECTRICAL SPECIFICATIONS

Supply voltage230 V + N + PESupply frequency50 - 60 HzRoastfan power consumption0.37 kWDrum power consumption0.55 kWStirrer power consumption0.18 kWCooling power consumption0.36 kWControl panel power0.20 kW

consumption

**External fusing** 16 A

## TABLE 6. VENTILATION SPECIFICATIONS

Roast air productivity	180 m³/h (min) - 320 m³/h (max)
Roast air productivity	3,0 m/s (min) - 5,0 m/s (max)
Cool air productivity	620 m³/h (min) - 1360 m³/h (max)
Cool air productivity	9,5 m/s (min) - 22,0 m/s (max)
Fans total static pressure	80 Pa - 200 Pa
Max. exhaust temperature	80 °C
Chimney size	150 mm - 200 mm (a reducer is supplied as standard)
Max. chimney length	Custom-made
Number of chimney bends	2 (Max!)



## TABLE 7.

## VARIOUS SPECIFICATIONS

Maximum control panel

temperature

80 °C

**Default underpressure** 110 Pa (80 - 180)

 $\begin{array}{lll} \textbf{Default RPM drum} & 44 \ \text{Hz} \\ \textbf{Default setpoint temperature} & 200 \ ^{\circ}\text{C} \\ \textbf{Maximum setpoint} & 250 \ ^{\circ}\text{C} \\ \end{array}$ 

temperature

\_\_\_\_

Gas inlet connection3/8" right threadGas inlet connection locationRear of the machineFrameSt 37-2 / S235JR 1.0037

## TABLE 8.

## GAS SPECIFICATIONS W15A

Category	12L, 12K	12E, I2H, I2E+	I3P	13B/P, 13+, 13B
	Natural gas	European gas	Propane	Butane or Butane/ Propane
Gas	G25, G25.3	G20	G31	G30
Injector	146	146	75	75
Burner pressure (mbar)	11.5	10.0	29.0	20.5
Gas (m3/h)	3.8	3.4	1.29	0.99
Heat input Nett (kW)	33 / 112600	33 / 112600	33 / 112600	33 / 112600
Heat input Gross (kW)	36 / 122837	36 / 122837	36 / 122837	36 / 122837
Inlet Pressure (mbar)	25	20	30 or 37 or 50	30 (29) or 50
Burner control unit Honeywell	S4965BD3 005	S4965BD3 005	S4965BD3 005	S4965BD3 005
Burner valve Honeywell	VK4105M5 215	VK4105M5 215	VK4105M5 215	VK4105M5 215
Rated capacity (min max.) (mbar)	2.5 - 50	2.5 - 50	2.5 - 50	2.5 - 50
Burner type	Atmo- spheric	Atmo- spheric	Atmo- spheric	Atmo- spheric



## TABLE 9.

## GAS SPECIFICATIONS W15A - USA / AUSTRALIA

Category	United States (USA)		Australia	
	Natural	Butane -	Natural	Butane -
	gas	Propane	gas	Propane
Gas	G25, G25.3	G20	G31	G30
Heat input	33 /	33 /	33 /	33 /
Nett (kW)	112600	112600	112600	112600
Heat input	36 /	36 /	36 /	36 /
Gross (kW)	122837	122837	122837	122837
Burner control unit Honeywell	S4567A10	S4567A10	S4565BF3	S4565BF3
	19	19	062	062
Burner valve	VK4105M5	VK4105M5	VK4100M2	VK4100M2
Honeywell	124	124	015	015
Rated capacity (min max.) (mbar)			1.0 - 37.0	1.0 - 37.0
Burner type	Atmo-	Atmo-	Atmo-	Atmo-
	spheric	spheric	spheric	spheric



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