mychef.

EVOLINE

Product Manual

Installation, use and maintenance




INDEX

1. INTRODUCTION

This document has been meticulously prepared for the purpose of providing reliable and helpful information for proper installation, use, and maintenance to ensure correct operation and prolonged life of the regenerator. This manual is divided in two sections. The first section is dedicated to appliance installation in the workplace, and the second section focuses on the operation and maintenance of the regenerator.

Before operating or using the appliance, read this manual carefully and thoroughly.

The manufacturer declines all implicit or explicit responsibility for any errors or omissions it may contain.

- The regenerator may not be used by personnel who have not received any kind of training, and who do not have the necessary skills or experience for the proper functioning of the equipment. Do not let children use or play with the equipment.
- The owner of the equipment is obliged to have this manual read by personnel responsible for its use and maintenance and to keep this manual in a safe place for use by all users of the equipment and for future reference. If the equipment is sold to others, they must be given this manual.
- This regenerator must only be used for its intended purpose, i.e., cooking, heating, regenerating or dehydrating food. Any other use can be dangerous and can result in personal injury and property damage.
- The equipment is shipped from the factory once it has been calibrated and has passed rigorous quality and safety tests that ensure its correct operation.

The manufacturer will disclaim any responsibility for problems caused by improper installation, modification, use or maintenance.

2. TECHNICAL CHARACTERISTICS

2.1. Main characteristics

The main characteristics of the appliance are:

- Intuitive and easy-to-use panel with a touch keypad.
- Regeneration with or without humidity 140°C - 160°C.
- Temperature maintenance with or without humidity at 65°C.
- End of cycle control by time or by core probe.
- Digital indicators for humidity, steam, and time.
- Automatic pre-heating system.
- Automatic fan shutdown when opening the door.
- End of cycle audible and visual signal.
- Safety thermostat
- Open moisture drain.
- Humidity control from 0% to 99% (models with humidity).
- Hygienic cooking chamber with rounded corners.
- Built for a temperature range from 65°C to 160°C.
- Easy-removal guides
- Water connection (models with humidity).
- Direct water injection (models with humidity).
- Made of stainless-steel.
- Adjustable legs to facilitate alignment and appliance stability.

Model	Without packaging		With packaging		Capacity GN 1/1	Voltage	Power (kW)
	External dimensions (Width x Depth x Height) (mm)	Weight (kg)	Volume (m^3)	Weight (kg)			
F0460523	573x660x825	65	0.57	75	5*	230V, L+N; 50-60Hz	3.1
F0470523							
FS470523							
F0460511	743x661x825	75	0.7	85	5**		3.6
F0460512	743x723x825	80	0.7	90	5**	400V, 3L+N; 50-60 Hz	5.1
F0470512							
FS470512							
F0460611	773x729x890	118	1.23	125	6**		7.8
F0470611							
FS470611							
F0461011	773x729x1250	120	1.39	130	10**		10.5
F0471011							
FS471011							

Table 1. Dimensions and characteristics

*GN 2/3 TRAYS 65mm HEIGHT
**GN 1/1 TRAYS 65mm HEIGHT

The maximum recommended food load for 65 mm depth GN 1/1 trays is 5 kg, and for GN 5 2/3 trays it is 3.5 kg.

Model	Capacity	Humidity
F0460523	5 2/3 GN trays	No
F0470523		Yes
FS470523		
F0460511	5 1/1 GN trays	No
F0460512	5 1/1 GN trays	No
F0470512		Yes
FS470512		
F0460611	6 1/1 GN trays	No
F0470611		Yes
FS470611		
F0461011	10 1/1 GN trays	No
F0471011		Yes
FS471011		

Table 2. Evoline models

3. GENERAL SAFETY AND ACCIDENT PREVENTION REGULATIONS

3.1. Personnel responsible for using the equipment

The use of the equipment is reserved for trained personnel.

Personnel who perform any action on the regenerator, such as operation, cleaning, installation, handling, etc., must be familiar with the safety regulations and the operating instructions.

Do not allow unauthorized personnel to use, handle or clean the equipment.

3.2. Electrical hazard

Work on the electrical supply side and access to electrical-live parts may only be carried out by qualified personnel under their own responsibility. In any case, such access must be made with the equipment disconnected from the power supply.

If the appliance is placed on a cart or on tables that have some mobility, do not allow it to move while connected to the power supply to avoid possible damage to wiring, drainage pipes or water inlets. If the equipment is to be moved or repositioned, the cables and the drainage and water intake pipes must be disconnected.

3.3. Thermal hazard

When the equipment is in operation, the door should be opened slowly and carefully to avoid possible burns from steam or hot air that may escape from inside the cooking chamber.

Keep the ventilation openings free of obstacles. Do not install the equipment in the vicinity of flammable products. Avoid positioning the regenerator near heat sources such as stoves, grills, fryers, etc. Check the safety distances in chapter Positioning.

DANGER OF ACCIDENT! Be careful when using food containers in the regenerator when the top tray is 1.60 m or more high. There is a risk of injury caused by the hot contents of the GN trays.

While the oven is in operation, avoid touching metal parts that may exceed 60°C. Touch only the handle and the control panel.

4. RECEPTION, TRANSPORT AND POSITIONING

Before carrying out the installation, the dimensions of the site where the equipment is to be placed and the electrical and water connections must be verified and seen to be within the parameters detailed in section 4.3 below.

4.1. Reception

Once the regenerator has been received, check that the model purchased corresponds to the order.

Check that the packaging has not been damaged during transport and that no parts of the equipment are missing. If you detect any anomaly or problem, contact your dealer immediately.

4.2. Transport

The equipment should be transported in its original packaging to the closest location to the point of installation to avoid damage as much as possible. It is recommended to keep the original packaging until the equipment is properly installed and in operation.

To move the equipment and place it in your workspace, the following observations should be taken into account:

- Consider the following dimensions of the different models when passing through narrow spaces (hallways, doors, narrow spaces:

Model	Dimensions (Width x Depth x Height) (mm)
5GN 2/3	573x660x825
5GN 1/1 Single-phase	743x661x825
5GN 1/1 Three-phase	743x723x825
6GN 1/1	773x729x890
10GN 1/1	773x729x1250

Table 3. External dimensions of the different models

- The handling must be done with the necessary personnel to move the load of the furniture taking into account the current occupational safety regulations at the place of installation.
- The regenerator must always be in an upright position during transport. It must be lifted perpendicularly to the ground and transported parallel to it.
- Make sure that during transport it does not tip over and is not hit by any object.

4.3. Positioning

- Place the oven at a comfortable distance from the wall so that the electrical and water connections can be made. There must be a minimum clearance from the oven parts to allow for proper ventilation and cooling. This minimum distance is:
    - 50mm on the left and right sides
    - 100mm from the rear
    - 500mm from the top
- The equipment should be placed on a Mychef support table or wall mount.
- If there are sources of heat or steam near the equipment (stove, grill, iron, deep fryer, etc.), these must be at a distance of more than 1 metre.
- Once it is placed in the workspace, check that it is level.

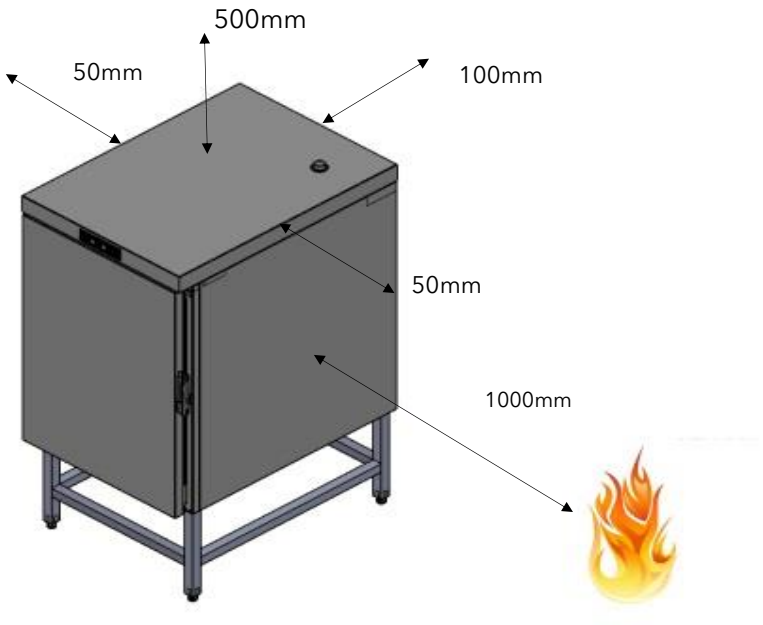


Figure 1. Example of a suitable location for installation

5. INSTALLATION

5.1. Electrical connection

Check that the voltage reaching the point where the oven is to be switched on corresponds to the operating voltage of the equipment.

The following table indicates the electrical characteristics of each regenerator:

	Voltage	Power (kW)	Rated current (A)	Cross-section cable (mm^2)
5GN 2/3	230/L+N/50-60	3.1	14	1.5
5GN 1/1	230/L+N/50-60	3.6	16	1.5
	400/3L+N/50-60	5.1	8	1.5
6GN 1/1	400/3L+N/50-60	7.8	12	1.5
10GN 1/1	400/3L+N/50-60	10.5	16	1.5

Table 4. Electrical connection characteristics

Before carrying out any electrical work, make sure that no electrical current is supplied at the point of connection of the equipment.

5.1.1. Evoline three-phase models

For proper connection after positioning, the device has a five-wire, approximately 2 m long, H05RN-F type cable. The phases (L1, L2, and L3) are color brown, grey, and black. The phases order can be inverted. The neutral is blue, and the grounding is yellow-green.

Color		Cable
■	Green-yellow	Grounding
■	Blue	Neutral
■	Brown	L1
■	Grey	L2
■	Black	L3

Table 5. Cable color code

Never connect a phase to a neutral or grounding cable. Verify that the installation voltages are correct for the appliance.

The appliance must be connected to the electric grid through a universal cut off switch (three-phases and neutral) and with a contact openings distance of greater than 3 mm. Also install a differential circuit breaker and an overcurrent protection.

Always ensure effective grounding.

Connect the equipment to an equipotential bonding system using the contact specially provided for this purpose (see equipotential symbol at the bottom right of the appliance).

Connection to an equipotential system ensures additional safety in the event of simultaneous failure of grounding leakage and differential failure.

Wiring and other safety devices used in the electrical installation should have the appropriate cross-section for the appliance.

In any case, respect the regulations in force for the connection of the equipment to the low voltage network.

5.1.2. Evoline single-phase models

For proper connection after positioning, the device has a plug that connects to the grid. Take the following precautions:

a) Verify that the voltage / current source required by the appliance corresponds to its electrical system (230V/16A).

b) Grounding is mandatory. Verify that the outlet is grounded.

c) Connect the appliance to an equipotential system using the contact specially provided for this purpose (see equipotential symbol at the bottom right of the appliance).

Connection to an equipotential system ensures additional safety in the event of simultaneous failure of grounding leakage and differential failure.

5.2. Water connection (appliances with humidity)

5.2.1. Water input

Cold water (max. 40°C) ¾ inch 100 to 400 kPa dynamic flow pressure.

Drinking quality water with the following characteristics:

- Hardness between 3° and 6° FH
- PH between 6.5 and 8.5
- Chlorides lower than 30 ppm

The use of a water softener is recommended (BRITA Purity Steam 450 recommended).

5.2.2. Drain (appliances with humidity)

The equipment must be connected to a drainage system with a nominal diameter of 40mm (DN40) through a heat-resistant pipe and siphon type.

Note that the tube must have a constant slope of at least 5°.

The drain must be a maximum of 1 meter long, have a diameter greater than the drain connection and be free of bottlenecks.

6. USE

6.1. Control panel

The figures below show the control board button panel. It comprises seven-segment displays and flat control panel .

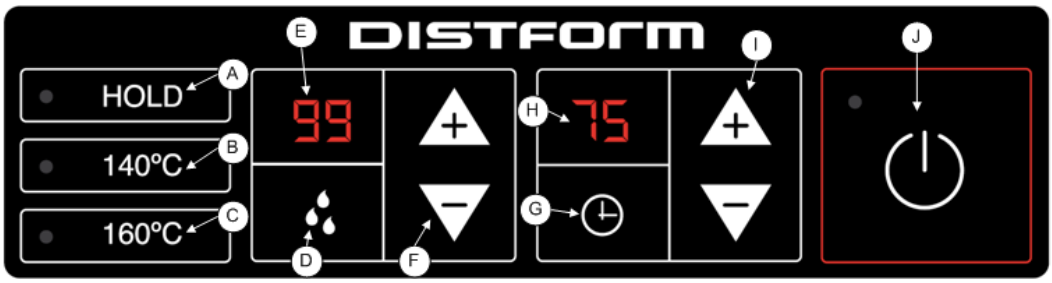


Figure 2. Model with humidity control panel

Figure 3. Model without humidity control panel

Function		Description
A	HOLD button	HOLD mode selection button
B	140° button	140° temperature selection button
C	160° button	160° temperature selection button
D	Humidity button*	Sets the humidity selection to change the percentage of humidity.
E	Humidity display*	Shows the percentage of humidity in the chamber.
F	Modify humidity button *	Allows changing the humidity within the chamber.
G	Time button	Sets the time selection.
H	Time display	Indicates the remaining time to complete the program.
I	Modify time button	Time selection button. Allows for programming the operating time from the moment the chamber has reached the set temperature.

Table 6. Control panel buttons functions

* Not available in the model without humidity

6.2. Operation

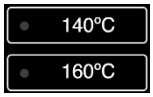
6.2.1. Turning on the appliance

The device turns on or off when the "ON/OFF" button  is pressed. When the device is started, an audible signal can be heard. Then it will switch to maintenance phase (temperature of 65° within the chamber).

Immediately after, the regeneration parameters (temperature, time, and humidity) can be set.

6.2.2. Regeneration

Once the regeneration is turned on, you can start programming the regeneration process, to do so, follow these steps. First, choose the temperature at which you want the regeneration to take place (140° or 160°).



The LED indicator for temperature will blink while the regenerator preheats. Once the selected temperature is reached, the LED will remain lit.

Once the temperature is set, if desired, you can choose the level of humidity (only for models with humidity) to introduce into the chamber. To do so, activate the humidity command  and modify it with the  symbol until the desired humidity is set. This value can vary between "1" and "99".

Once you have selected the temperature and the humidity, choose the regeneration time. For this step, you must activate the time command  and modify it from "1" to "- -", using  , the symbol "- -" means that the time is undefined, and the process will have to be stopped manually.

The time indicator starts counting immediately after the previous step has been set. The counter will not stop if the door is open.

6.2.3. End of cycle

When any regeneration process is finished, in which the time value was set to "undefined," an audible signal will be heard, and the device will automatically switch to maintenance mode until the user intervenes.

6.2.4. Door open

When the appliance is on with any temperature, humidity, and time settings, if the user opens the door the control panel will emit an audible and visual signal indicating that the door is open. This warning will be repeated every 10 seconds until the door is closed.

Figure 4. Door open control panel - model with humidity

Figure 5. Door open control panel - model without humidity

6.2.5. Errors and faults

6.2.5.1. Errores graves

The device relies on algorithms that detect abnormal situations which could lead to malfunctioning. In the case of malfunction, an audible signal will be emitted, and the LEDs will blink to indicate the error. The user is notified of these situations with an error screen such as the one shown below, depending on whether the model is with or without humidity:

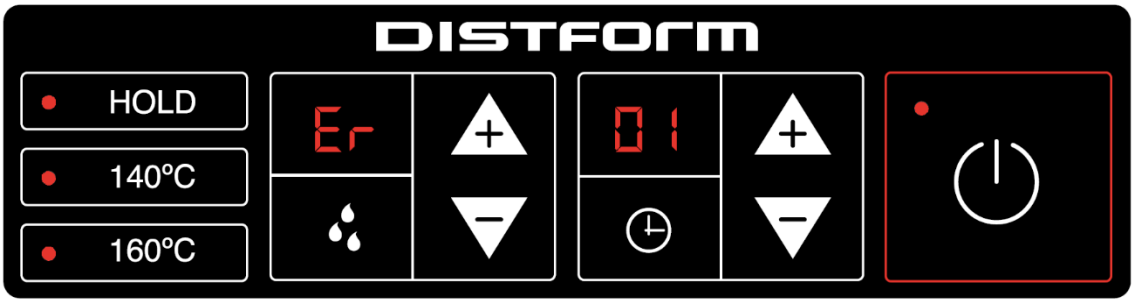


Figure 6. Error screen for models with humidity

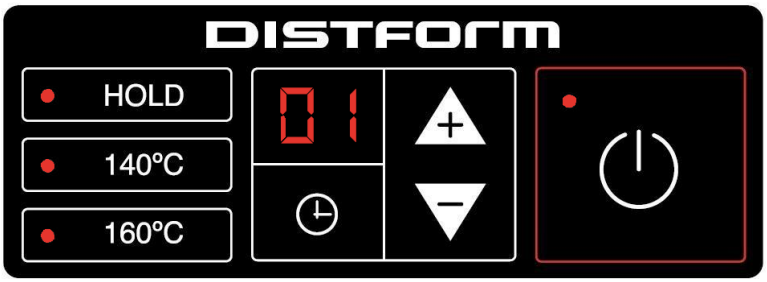


Figure 7. Error screen for models without humidity

The following table shows the errors:

Error	Reason	Solution
Er 01	Chamber probe short circuit	The system has detected that the chamber probe cable has a short circuit. Call an after-sales service provider for repair.
Er 02	Chamber probe open circuit	The system has detected that the chamber probe cable has been cut or disconnected. Call an after-sales service provider for repair.
Er 16	Internal error	The system has detected an internal error. Disconnect the device from the power source, wait one minute, and connect it again. If this does not work, call an aftersales service provider for repair.
Er 17	E01+E16	Both errors E01 and E16 have occurred at the same time.
Er 18	E02+E16	Both errors E02 and E16 have occurred at the same time.

Table 7. Errors and possible solutions

Once the appliance has detected a serious error, it will not function normally until it is repaired.

The appliance runs automatic checks which may result in it turning off to prevent a serious error. Turn it on as usual.

7. MAINTENANCE

Before the appliance is handled for cleaning, maintenance, or repair, it should be disconnected from the power supply.

If the power cable is damaged, it should be replaced by the manufacturer, its aftersales service or by personnel with similar qualifications in order to avoid danger.

7.1. Cleaning

Clean the regenerator regularly and carefully.

Cleaning the regenerator with pressure cleaning equipment is HARMFUL to the appliance and may cause the appliance to break, and it will void the WARRANTY.

To clean the stainless-steel outer casing, use a damp cloth with water and detergent.

When the inside of the cooking chamber is at temperatures above 70° C, do not wash with cold water. Thermal contrast is DAMAGING to the appliance and will void the WARRANTY.

During cleaning, never exceed 70° C when using cleaning products. At higher temperatures, cleaning products can cause the cooking chamber to rust. This DAMAGE is not covered by the WARRANTY.

After cleaning, rinse the inside of the chamber thoroughly with water to remove all cleaning product residues. Leaving the door open for at least 1 hour for ventilation is also recommended.

Models without humidity do not have a drain; be careful when rinsing the inside because liquids can overflow through the door.

7.1.1. Door gasket

Clean the rubber gasket with a moist cloth with dish soap and water. Then rinse entire area and dry well.

Do not remove the gasket from its frame for cleaning, it should only be removed to be replaced.

Periodically check door gasket condition. If steam leaks occur, contact your after-sales service provider for replacement.

7.1.2. Door opening

Verify that the door opens normally, without making strange noises and without having to exert force. The door's maximum opening angle is 270°.

7.1.3. Owner liability

THE OWNER IS RESPONSIBLE FOR REGULAR MAINTENANCE. TO KEEP THE WARRANTY VALID, THE OWNER MUST PROVE THAT MAINTENANCE HAS BEEN CARRIED OUT.

7.2. Preventive maintenance

Regenerators are designed for intensive and long-lasting operation. For this to happen, in addition to regular cleaning tasks, preventive maintenance must be carried out.

These periodic checks must be carried out by specialized technicians or dealer or technical service.

8. CE MARKING

The EVOLINE regenerator bears a name plate with the following specifications and references:

Manufacturer: Distform, S.L.
Item:
Series number:
Electrical features
Year manufactured.

Figure 8. CE marking label

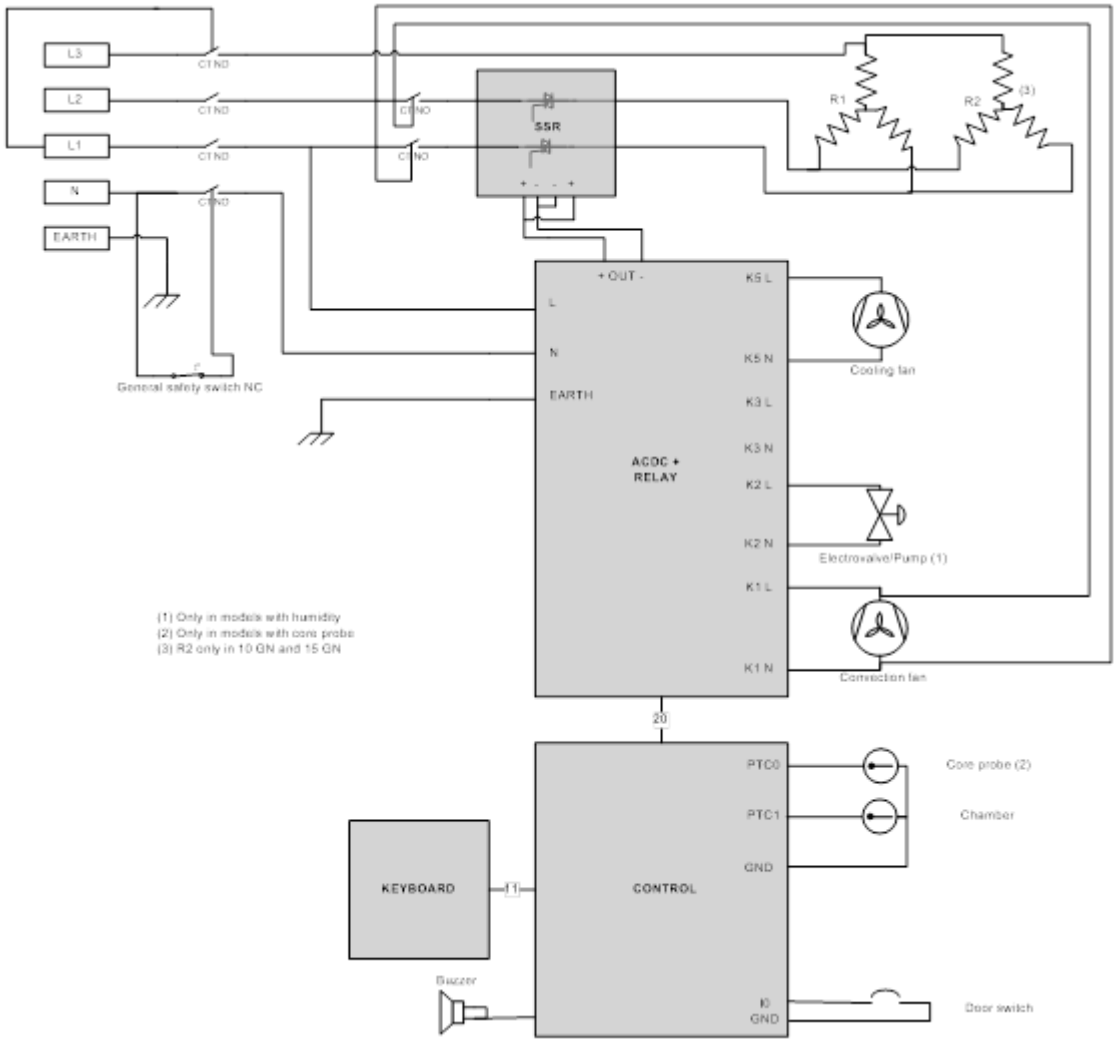
This regenerator has been manufactured according to the following standards:

- UNE-EN 60335-1
- UNE-EN 60335-2-42
- UNE-EN 55014-1
- UNE-EN 55014-2
- EN 61000-3-2
- EN 61000-3-3

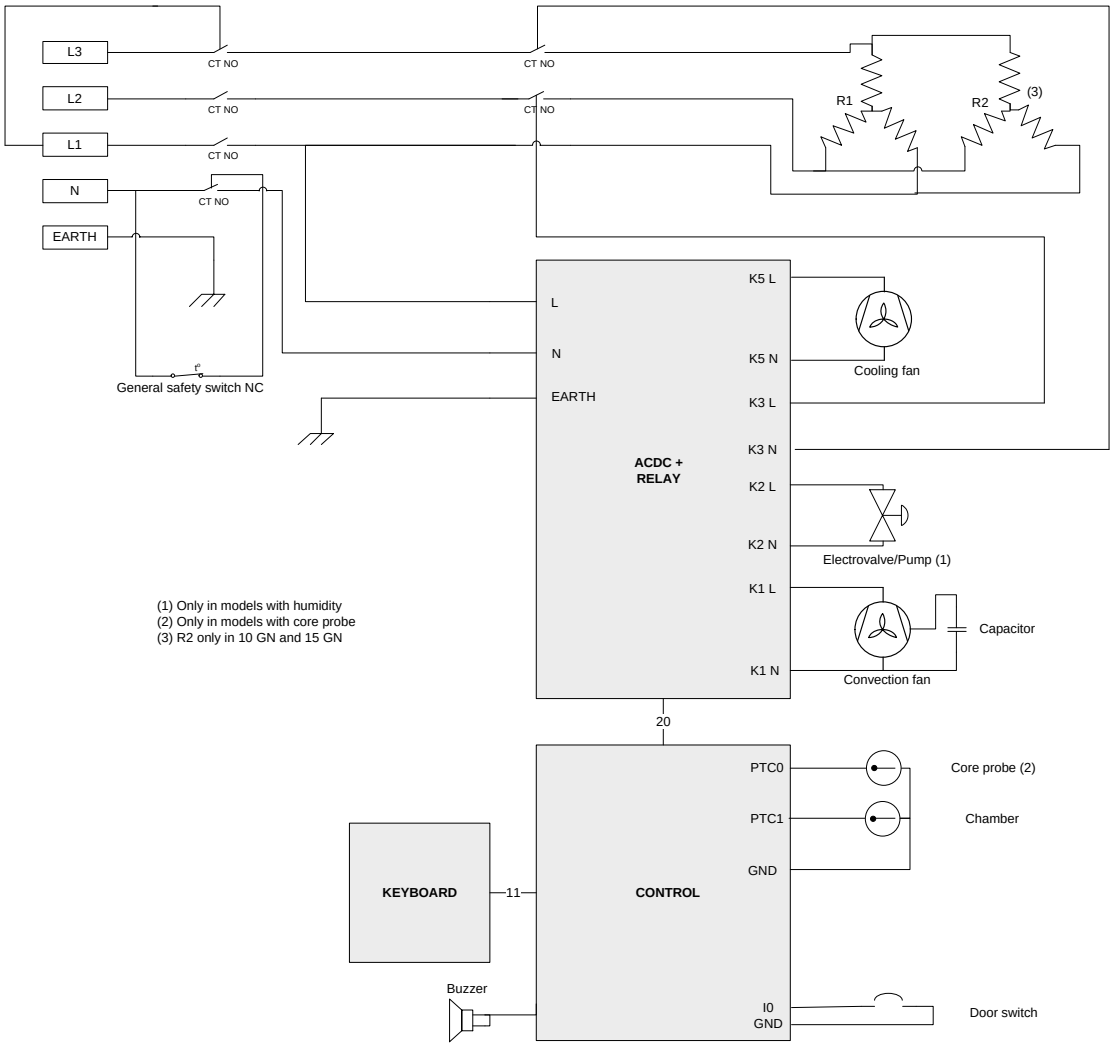
And is in conformity with the low voltage (2006/95/EC), electromagnetic compatibility (2004/108/EC), and machinery (2006/42/EC) directives.

Damaging, removing, modifying, altering, or covering the features/identification plate is forbidden; it must always remain visible. Altering or removing the plate could void the warranty.

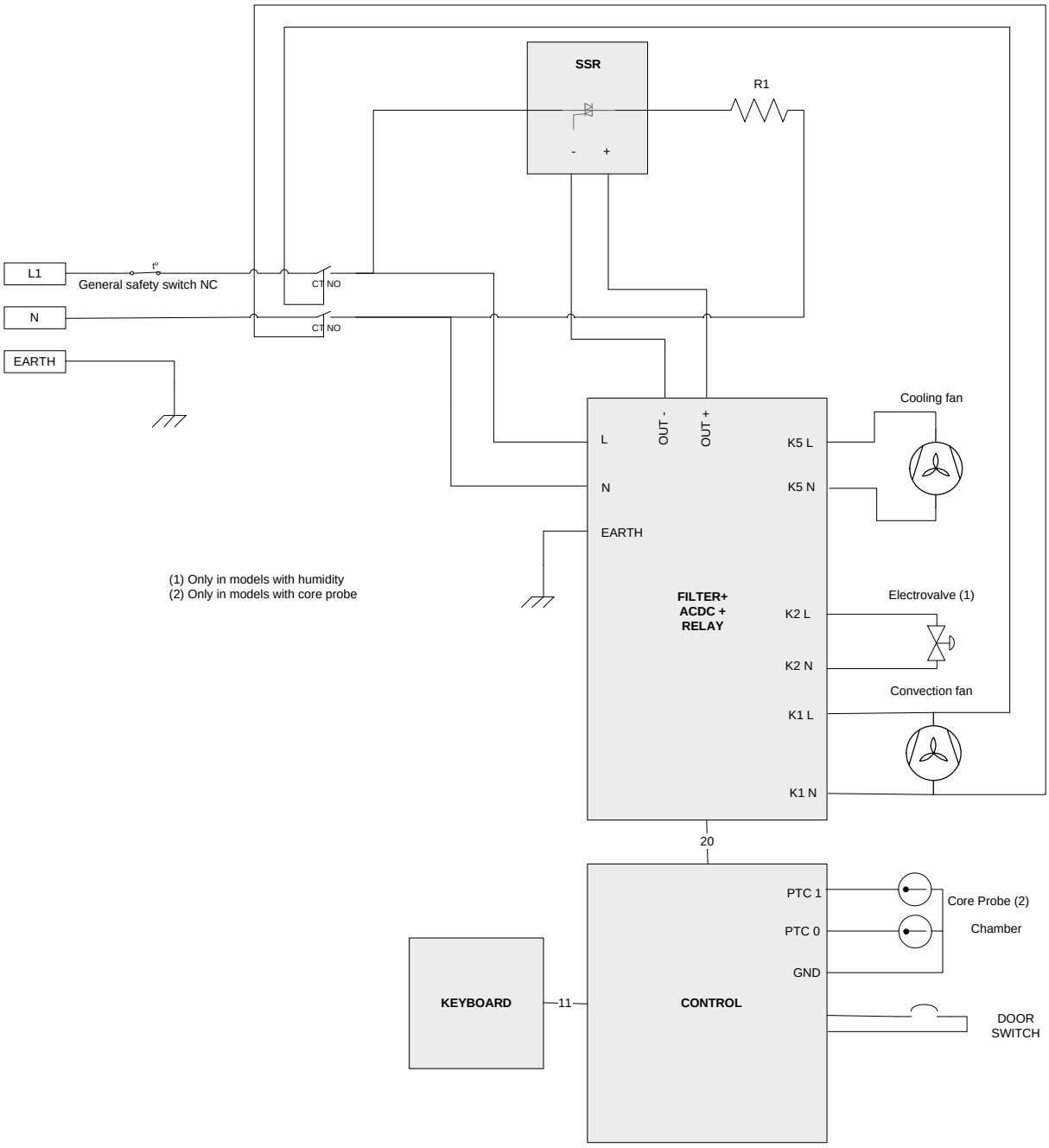
9. GENERAL ELECTRIC BLUEPRINT



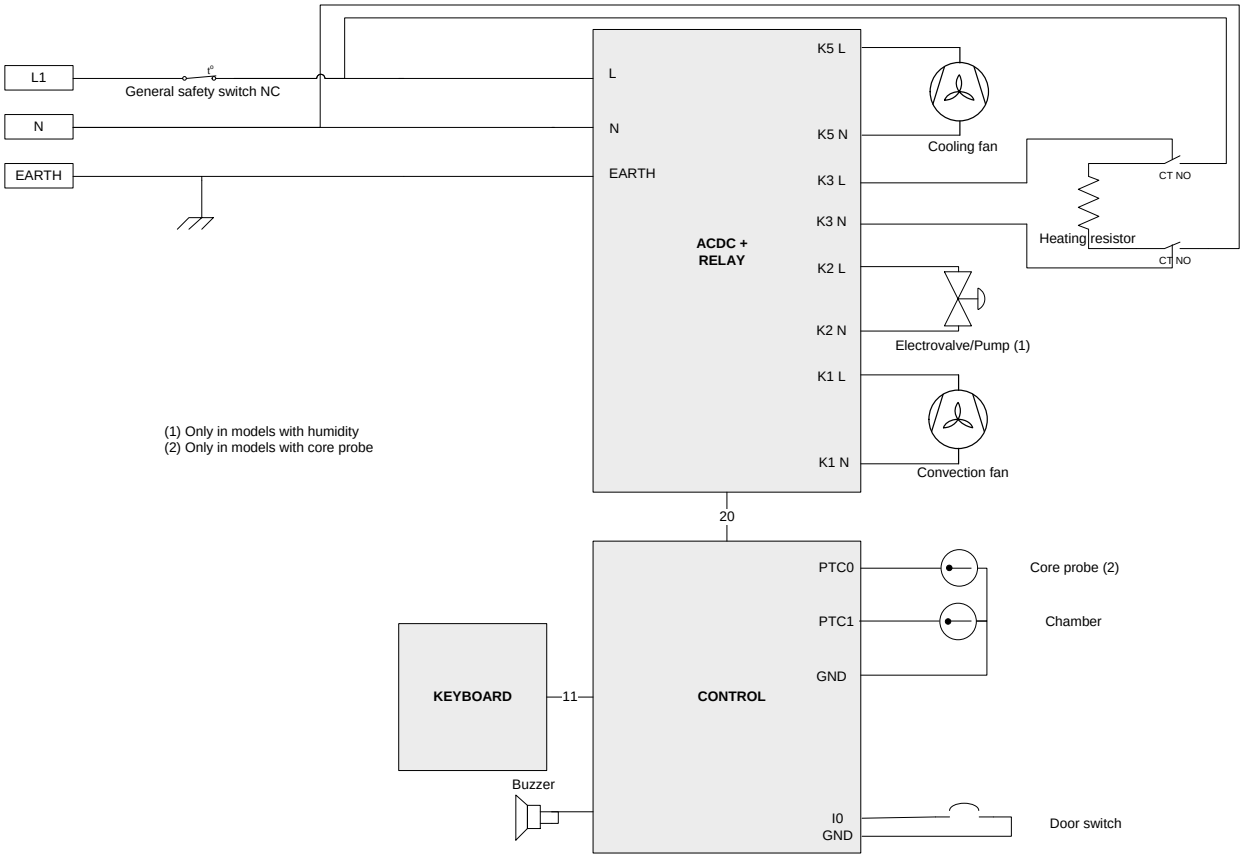
Blueprint 1. EVOLINE electric circuit 5, 6, and 10 three-phase with TSC



Blueprint 2. EVOLINE electric circuit 5, 6, and 10 three-phase without TSC



Blueprint 3. EVOLINE electric circuit 5 2/3 GN and 1/1 GN single-phase with TSC



Blueprint 4. EVOLINE electric circuit 5 2/3 GN and 1/1 GN single-phase without TSC