SPLİT TİP KONDENSER ÜNİTELERİ KULLANMA KILAVUZU

SPLIT TYPE CONDENSER UNITS USER MANUAL

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TABLE OF CONTENTS;

1-General Warning

1.1	PLEASE READ BEFORE USING THE MANUAL …. .!

-This manual is a part of the product and should be kept as close to the device as possible.

-This device cannot be used outside the features specified below. Before starting to use the device, make sure that it meets the operating conditions.

2.	 SECURITY PRECAUTIONS

- Before making connections, check whether the supply voltage is correct.

-The device should not be exposed to water or moisture . Protect the device from sudden temperature changes under high atmospheric humidity.

- Warning; Do not forget to disconnect all electrical connections before any maintenance.

3.General Description;

This user manual includes information such as the installation, commissioning and maintenance of the Condenser Units includes instructions that will ensure the correct and efficient use of your device. It should be read carefully before installation, by the service or by the technical team that will intervene in the event of a possible malfunction.

Before starting to install and use the condenser units, please read the user manual carefully. The terms specified in the user manual are expressed in an understandable and clear manner. However, if there is

any point that is not understood, do not hesitate to ask the technical team. As a result of any point that is skipped, your device may not work efficiently and effectively.
GGM accepts no liability for any damages or losses that may arise from usage and applications not specified in the booklet.

4.Evco Digital Front Panel Commands;

Important warning: If no action is taken regarding the digital thermometer within 30 seconds, the digital thermometer will lock itself. When first pressed, you will see the word « Loc » on the screen. To open it, press and hold any button for 2 seconds. The word « UnL » will be seen and it will be possible to perform operations on the digital after that.

It enables the energy in the refrigerator to be turned on and off.

manually defrost the product (press and hold for 4 seconds).

In programming mode, it switches between parameter codes or increases the displayed value.

In programming mode , cycles through parameter codes or decreases the displayed value.

SET To view or change the set value or to change it in programming mode

LEDS AND DESCRIPTION

Compressor LED. When it is on steadily, it means the contact is engaged. When it is flashing, it means the set value is being changed or the contact is preparing to be engaged.

Defrost LED. When it is on steady, it means defrost is active.

Evaporator LED. When it is on steady, it means the evaporator fan is on.

°C Celsius degree LED. When fixed, the measurement is in degrees Celsius.

°F Fahrenheit degree LED. When fixed, the measurement is in Fahrenheit degrees.

Energy saving LED. If it is on steadily, it means that the energy saving mode is active. In this case, the display will disappear. Press any button to see the degree.

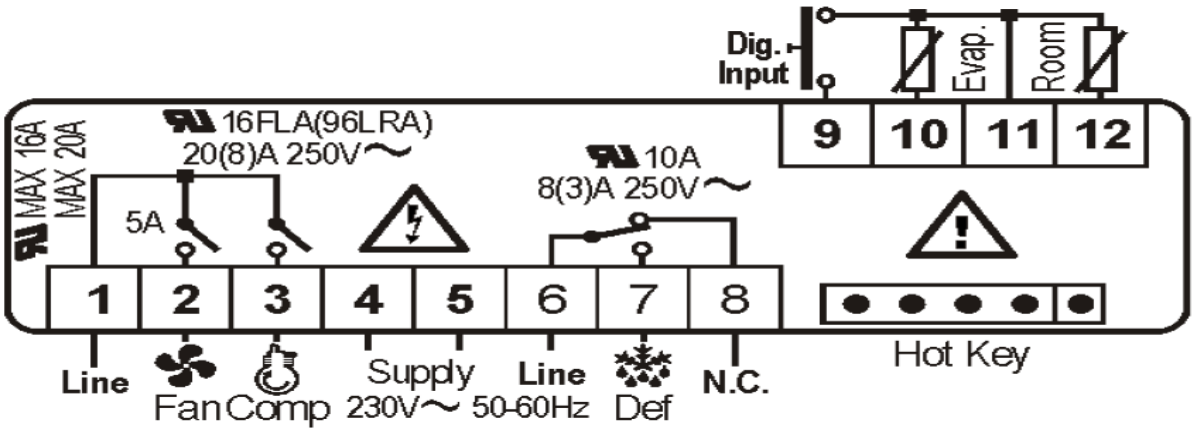
Loc . It means that the keypad or parameters are locked. Follow the relevant procedure to unlock.

UnL . It means that the keypad or parameters are open.

IMPORTANT WARNINGS

The control panels, with their different features, offer users different functions to prevent the products you keep in the refrigerator from spoiling and to easily understand the problems.

Digital Thermostat Electrical Connection Diagram



IMPORTANT WARNING: Turning off your product from the control panel only puts it into standby mode. To cut off the power to the control panel, turn off the power button on the electrical box of your product or unplug it from the socket.

TURNING ON THE PRODUCT : Press and hold the power button for 4 seconds.

SETTING THE DEGREE: Press SET to enter the desired temperature value . You can change the displayed value using the and buttons. After making the changes, press the “set” button again. The product will operate with a + 3 °C differential from the set SET degree.

HACCP FEATURE: If there is currently an alarm on the device, the warning indicating the alarm will flash on the screen.

ALARMS

EXPLANATION

HIGH TEMPERATURE ALARM 'AH' :
Reasons: The air ducts inside the device are blocked when loading inside the device.
Solution: When installing your device, be sure to install it as shown in the user manual.
Reasons: Evaporator fan not starting
Solution: If there is a malfunction in the digital parameters, contact the technical service.
Reasons: Door left open
Solution: After making sure the door is closed, your device should reach the desired temperature in 60 minutes while empty.
Reasons: Filling the device with products that give heat before it cools down first.
Solution: In case of a problem with our product, the fans are deactivated when the cabin temperature reaches a certain degree in order to prevent the food inside from spoiling. If the appliance is filled with hot ingredients before it becomes cold, the fans will not be activated and the cabin temperature will not drop. Therefore, before filling the appliance for the first time, make sure that it reaches the desired degree and then fill it.

LOW TEMPERATURE ALARM ' AL':
Causes: Fault in temperature reading probes.
Solution: An icon will appear on the control panel indicating which probe is faulty, such as PR1, PR2 or PR3, contact the technical service.
Causes: Digital thermostat failure.
Solution: Contact technical service.

PR1 : Cabin sensor error. Please contact authorized service.

PR2 : Evaporator sensor error. Please contact authorized service.

Id : Door switch alarm. If the door remains open for more than 1 minute, the alarm will start. The alarm will go off when you close the door. If the alarm continues, check the door switch connections. If the alarm continues, contact the authorized service.

IA : Power outage alarm. If the electrical power to the system is cut off, the alarm starts.
Contact the authorized service.

COH : Indicates that the temperature value detected by the condenser sensor has reached the first critical point. Please unplug the device and clean the condenser . You can restart your device after waiting for 30 minutes. If the alarm persists, please contact the authorized service.

CSd : Indicates that the temperature value detected by the condenser sensor has reached the upper limit. In this case, the compressor will be disabled and the electrical supply of the device will be cut off. Please check and clean the condenser . You can restart the device after waiting for 60 minutes. If the “COH” or “ CSd ” alarm occurs again, contact the authorized service.

IMPORTANT WARNING:
COH and CSd alarms may also occur when the ambient temperature in which the device is operating is higher than necessary. In these cases, please ensure that the working environment is ventilated.
If the intervention specified as a result of these alarms is not made, any compressor failures that may occur will be excluded from the warranty.

dFd : Indicates that the device has been defrosting for the maximum time , but the desired defrost temperature has not been reached, and therefore icing continues. Please manually defrost the device again; To do this, press and hold the defrost button on the display for 4 seconds. If the alarm continues, contact the authorized service.

PARAMETERS TO FACTORY SETTINGS
First of all, the device is in the stand Make sure that it is not in standby mode and the key lock is on .
SET button for 4 seconds. “PA” will appear on the screen.
SET button quickly and release your hand.
Enter the parameter RESET password “149” using the up and down keys within 15 seconds.
the SET button quickly and release your hand or wait for 15 seconds without performing any action. “ dEF ” will appear on the screen.
Press **the SET button.**
Within 15 seconds, use the up and down keys to set the value to “4”.
the SET button quickly and release your hand. “----- ” will flash on the screen for 4 seconds . Then the process will be completed.

Disconnect the device from the power supply and reconnect it.

IMPORTANT WARNING:

DIGITAL CONTROL PANELS ARE SPECIFICALLY ADJUSTED IN OUR FACTORY FOR THE PRODUCT TO OPERATE IN THE MOST CORRECT WAY. NEVER CHANGE ANY PARAMETERS OF THE CONTROL PANEL OTHER THAN THE INTERNAL TEMPERATURE ADJUSTMENT. OTHERWISE, SERIOUS DECREASES OR PROBLEMS MAY OCCUR IN THE PERFORMANCE OF THE DEVICE.

5.-Condenser Unit Installation or Service;

Installation, system commissioning and service applications must be carried out by the technical service.

- The power supply must be cut off during the installation of the condenser unit or any intervention for service purposes.

5.1-Condenser unit Installation Location Features;

- The unit should be installed in a dust-free environment.
- When installing the unit, an environment that will ensure proper air circulation of the device must be selected.
- Precautions should be taken against extreme heat, cold and rain.

or forced ventilation must be provided to prevent additional heat generation in the environment .

- Even if the unit is to be installed in an open environment, it should never be exposed to sunlight. If necessary, a shade should be made to prevent sunlight.

6. Points to be taken into consideration and security precautions;

Please remember that the safety instructions provided are provided to prevent any danger that may arise to you.

- Before performing any intervention on the units, make sure that the electrical connection is disconnected.
- Do not intervene in the system immediately after the unit is stopped. Since the discharge line and the part where the pistons of the compressor are (head) are at high temperature, you must wait 15-20 minutes.
- All tests and checks have been made before the units reach you. No connection changes should be made during product installation.
- Since the units operate under high pressure, do not operate the product in case of damage to any equipment. Do not accept products that arrive in this manner.
- The units are set to operate in the most efficient way. Do not change the settings during installation or service.
- The units are harmless in terms of environmental interaction and human health.

Do not disable or change the settings of contactors, switches , sensors, etc. used for specific tasks or safety precautions in the units . If there is anything broken , replace it with the same product. Using a different product may change the reliability and optimal values of the unit.

- Warning labels are attached to the units against situations (whether specified or not specified in this manual). Do not touch or stay away from the areas where you see the warning label. Follow the instructions on the labels.

7. Definition of Unit;

The product specified in the User Manual is a condenser unit. The types of the specified products are detailed in the table below. The unit must be commissioned by a technical service that is familiar with the product and general safety procedures.
After the product assembly is completed, it can be connected to the unit we call the evaporator and operated after the refrigerant is given to the system. These units cannot be used alone.
The function of the system formed by the unit together with the internal unit, which we call the evaporator, is to keep the temperature of the cold room constant.
The manufacturer is not responsible for any situation that may arise in case of any revision made on the device without the permission of
GGM or use other than the purpose specified above.

8. Split
Cooling System;

MODEL	Oda Hacmi Room Volume m³	İç Sıcaklık Temperature °C	Gerilim Tension V	Güç Power Hp	Gaz Gas
SKAF75	3 - 7,5	0 / -8	230/50 Hz	1/2 HP	R452
SKAF15	7,6 - 15	0 / -8	230/50 Hz	3/4 HP	R452
SKAF20	15,1 - 20	0 / -8	230/50 Hz	1 HP	R452

MODEL	Oda Hacmi Room Volume m³	İç Sıcaklık Temperature °C	Gerilim Tension V	Güç Power Hp	Gaz Gas
STKAF75	3 - 7,5	0 / -20	230/50 Hz	1-1/2 HP	R452
STKAF15	7,6 - 15	0 / -20	380/50 Hz	2 HP	R452
STKAF20	15,1 - 20	0 / -20	380/50 Hz	2-1/2 HP	R452

9. Application Area and Purpose of Use;
Condenser units are devices designed and manufactured for the preservation of chilled or frozen foods (showcase type refrigerators, cold rooms, ice machines, ice cream machines, etc.) depending on the specified subject headings and technical specifications of the units. The units should not be used for purposes other than their intended use. GGM does not accept any liability for any malfunctions or damages that may occur if the unit is used for other purposes without the approval of the manufacturer.

10. Packaging, Transportation and Storage;

The condenser units are shipped in cardboard packaging to prevent the device from deforming due to external effects. It is shipped as an export product or in export packaging (wooden cage) if specifically specified.
Condenser units must be shipped and stored upright. Since all tests and controls are completed before the device is shipped, it can be put into operation after the mechanical and electrical connections are made to the evaporator in the assembly area and the refrigerant is supplied to the system. Since the unit is sent to you in this form, necessary care must be taken during shipping and assembly.
The units should be stored in a non-corrosive environment where they will not be exposed to any vibration, extreme heat or cold. Since there are electrical materials inside the unit, the storage area should

be protected against high humidity or flooding. Products should never be laid on their sides and should not be stacked more than allowed.
GGM does not accept any liability for malfunctions and damages arising from the shipment and storage of products.

11. Installation of the Unit;

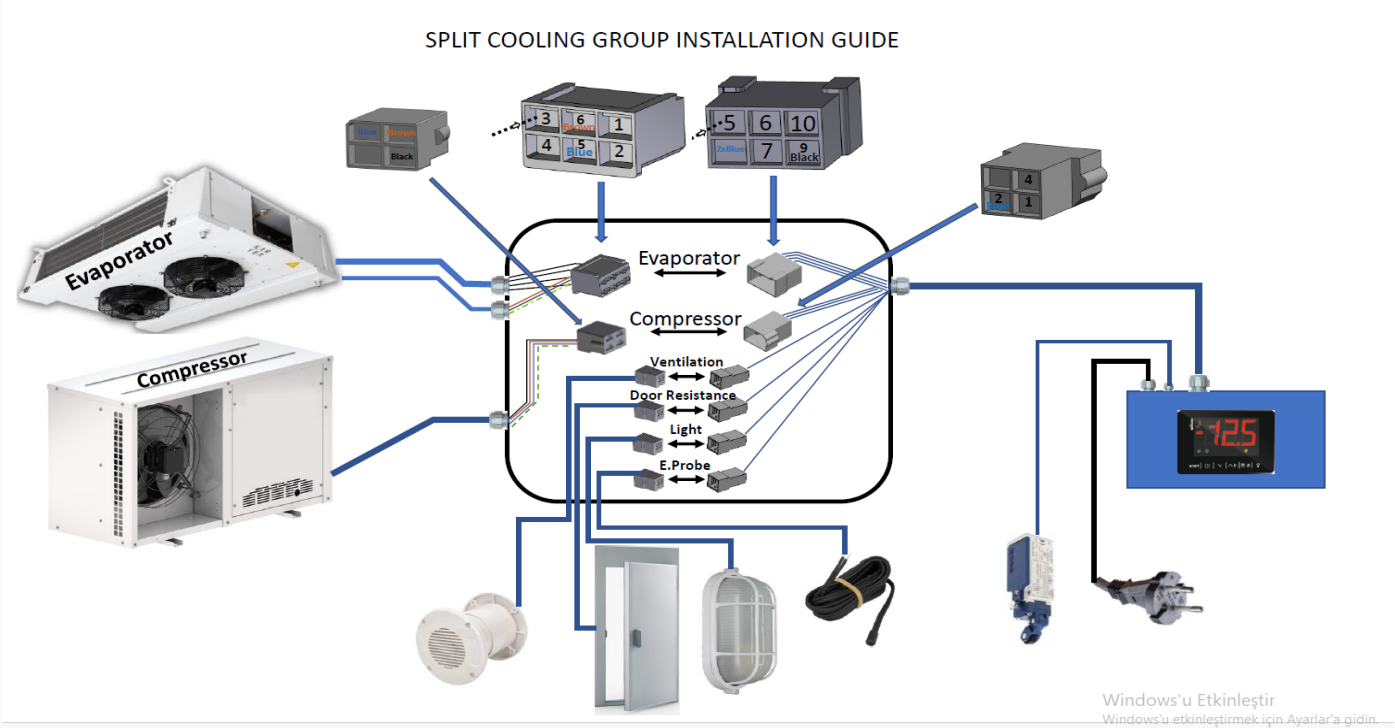
Installation, service and controls of condenser units must be carried out by experienced technical personnel who are familiar with the device characteristics . During installation, the matters specified in the user manual must be followed and no set value of the device must be changed.

The units should be mounted on a rigid base that will not cause any vibration. The installation environment should be a non-corrosive environment that will not be exposed to extreme heat or cold. Since there are electrical materials inside the unit, the area should be protected against high humidity or flooding.

Follow the instructions regarding installation, operation and maintenance. Please review the information provided in the manual. For more information, please contact the manufacturer.
In order to use the condenser units with the desired efficiency and safety, the following criteria must be followed when determining the placement areas of the devices. Make sure that the unit is not damaged during shipment.

Make sure that the quality workmanship of the assembly equipment is done by qualified personnel .

The assembly image is as follows.



12. Installation location ;

The ground where the unit will be mounted must be of a quality that will not cause vibration. In this sense, rubber wedges that absorb vibration should be used between the ground where the unit will be mounted and the device.

The installation location should be such that it does not obstruct the air circulation of the unit. In this sense, the distance between the unit and the wall should be at least 50 cm and the air intake direction of the device should be towards the wall.
The level difference between the unit and the evaporator should be as low as possible (max . 10 m) The distance between the unit and the evaporator to be connected should not be long. The total horizontal and vertical distance should not exceed 25 m, if possible it should be shorter.
The units should be kept away from any heat source and if the installation location is to be a closed environment, effective air circulation should be provided.
Considering that the unit will be adversely affected by sunlight and possible rain, it should be installed under a canopy if necessary.
In case of a possible need for service or maintenance, the unit must be easily accessible and installed in a position that will not interfere with the current facility operation.

13. Electrical connections;

Electrical connections of the devices must be made in accordance with EN 60204-1 standards.
The grounding connection of the compressor must be made.
It must be ensured that the connection between the electrical panel of the unit and the supply cable is made very well and tightened with terminals.

14. Nitrogen Test;

After all connections of the unit have been made, it must be subjected to a leak test before commissioning the system.
Before nitrogen is injected into the entire system, solenoid valves and valves should be brought to the open position. All fittings and welds should be checked for leaks.
After 15 bar nitrogen is pressurized into the system, a minimum of 12 hours must be waited. If there is no drop in pressure at the end of the specified time, there is no leak. In this case, nitrogen must be removed from the system.
At the end of the test, the system is put into vacuum by connecting the vacuum pump to the system suction and discharge lines.
After the vacuum process of the system is completed, gas can be given from the liquid line.

15. Commissioning the System;

Check the system supply and voltage.
Check the voltage of the condenser unit fans and make sure that the fan blades are turning freely. Check that the condenser fins are clean and that there is nothing around them that could block the air flow.
Check whether the service valves are fully open.
Open the main fuse on the electrical network supply from the main distribution panel.
On/ Off button on the evaporator control panel to the "On" position.
The system will be activated automatically.
Check the system settings.
To check the correct operation of the system, check the low and high pressure values using a manometer.
In cases where it is necessary to add cooling compressor oil to the cooling system, the standards determined by the compressor manufacturer should be taken into account .

16. Shutting Down the System;

In cases where you want to take the system out of use, you can turn off the system by taking the On/ Off button on the control panel to the '' Off '' position.

17. Instructions for Use and Maintenance;

Check the cleanliness of the

The condenser unit periodically (once a week). Clean the unit once a month, especially during seasonal changes. If the unit is operating in a dusty or dirty environment, you should perform the periodic cleaning once a week. You should perform the cleaning process without damaging the condenser fins (with an air compressor or a

soft brush). If the fins are damaged during the process, contact your service immediately. Never use chemicals to clean the condenser fins. These chemicals may damage your condenser battery.

The units specified as frozen storage are designed for the storage of frozen products. Do not store unfrozen products in the room. Otherwise, it may cause the evaporator to freeze, the unit to operate for a long time and its capacity to be insufficient. This will make the device inefficient and increase energy consumption.

Units with a Cold Storage area are designed to store products between -5/+5^{o}C. Do not store hot and humid products in the room. Otherwise, it may cause the evaporator to freeze, the unit to work for a long time and the capacity to be insufficient. This will make the device inefficient and increase energy consumption.
Check periodically that the condenser and evaporator fans are working properly and that there is no frost on the evaporator.
If you detect that the unit is operating louder or noisier than normal, it is recommended that you turn off the system. The existing sound may be an indication of existing damage or a possible malfunction. In this case, you should contact your service.
If the system stops and restarts at shorter intervals than normal and sufficient cooling is not provided, the amount of refrigerant in the system is insufficient. In such a case, ask for help from your technical service. Adding gas to the system will not be a sufficient solution, the source of the decrease will need to be found and intervened.
your safety and the continuous efficient operation of your system, periodically perform leakage tests and checks of your unit once a year.

18. Causes and Solutions of Malfunction Problems;

Below is a table of problems-causes-solutions. It should be noted that many problems require solutions beyond what the user can do. Such problems can be fixed by authorized and well-equipped service personnel. Try to fix the problems by following the instructions given below. Please note that continuing to operate the unit without fixing the problems may cause permanent damage in the future. If you cannot fix the problems yourself, please contact the nearest service provider.

PROBLEM	FROM WHERE	SOLUTION
Unit Does Not Work	If There is No Mains Electricity	If you have a backup power source, activate it.
	Power supply voltage is out of range	Do not operate the unit if there are voltage fluctuations.
	If the main circuit breaker has cut off the circuit	Check the amperage value of your circuit breaker and change it if necessary.
	If the thermostat settings are high	Check the thermostat settings
	If Thermal is Throwing	1- Check the temperature of the compressor. If it is too hot, let it cool down. 2- Check the electrical connections. 3- Check the operation of the fans on the unit.
If the compressor runs continuously without any breaks	Thermostat is on low	Adjust the thermostat temperature setting to the appropriate value.
	Refrigerant is insufficient	Report to the nearest service
	The evaporator has been overloaded	Check the installation

If the compressor stops and starts intermittently	**The pressure switch setting may be lower than it should be.**	**The pressure setting needs to be adjusted to what it should be.**
	If icing has occurred	**Check the defrosting periods and times of the control panel. Clean the accumulated ice.**

19. Matters not covered by the warranty:

Malfunctions caused by usage errors.
Malfunctions caused by lack of service and maintenance
Failure to commission the devices by an authorized service (not approved by GGM) Having the service and maintenance done by unauthorized persons. Malfunctions that may occur as a result of improper electrical supply (voltage, frequency changes), damages that may occur in the electric motor winding.
Malfunctions caused by installation errors
Operation of faulty devices
Changing or incorrectly setting the settings and safety values of the devices without consulting an authorized service.
Operating the devices in very hot and/or very dirty, dusty, extremely humid and closed areas without taking precautions.
Operating devices outside of project conditions
Failure to comply with the connection diagram and grounding, and to charge the system and cooling unit with appropriate gas.
Application on damaged systems
Malfunctions caused by transportation and natural disasters

GGM Gastro International GmbH
Weinerpark 16
D-48607 Ochtrup

www.ggmgastro.com info@ggmgastro.com
+49 2553 7220 0