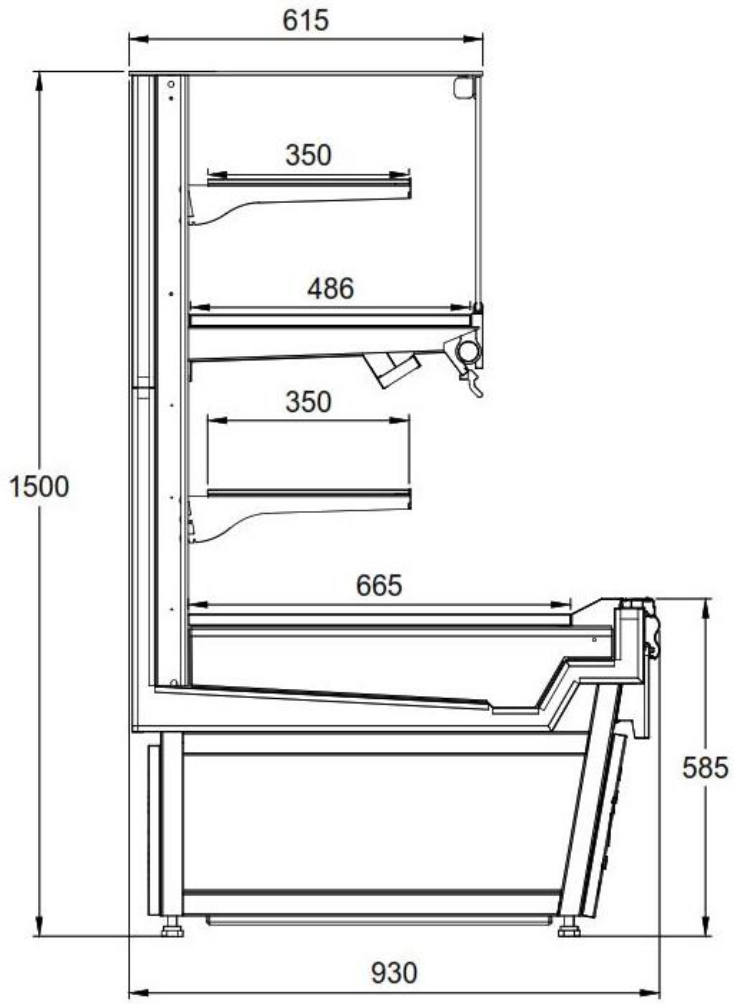
IRIS DC

1.CONTENTS

2.CROSS-SECTIONS



LENGTH
1320

3.INSTALLATION

3.1.Adjustment of feet

To ensure the İRİS cabinet stands on balance, these followings should be done after removing the packaging. The base plate at the bottom of the cabinet is removed. By screwing the adjustable feet right and left, the height of the cabinets are equalized.

3.2.General View of Water Drain and Electrical Connections

Water drainage channel ensures the removing of the water which comes from the evaporator during the defrost period. Before cleaning the cabinet with water please check opening of the drainage channels.

Refrigerant pipes ensure the refrigerating cycle inside of the cabinet. Therefore the products which are in the cabinet stay cold.

IMPORTANT : Please use the appropriate electrical voltage and ampere. Otherwise low or high voltage effects your cabinet operational conditions in bad way. Before first-run of the cabinet please check all of the electrical cables.

Electrical connections have to be applied by certified technician only, according to safety norms; make sure that the power supply voltage is the same as that indicated on the nameplate (230V/50Hz)

In order to guarantee regular operation, voltage variation let to fluctuate in between +/-6% of the nominal value. Make sure the power supply line and auxiliary line are wired with PVC fire redundant insulated copper flexible cord conductors with adequate thickness and equipped with snap-in insulated cable terminals and identification label.

4.ELECTRICAL INPUT

The assembly, installation and connection of these cabinets must be carried out by a certified technician.

Consult the circuit diagrams that are supplied with each cabinet when carrying out the electrical connections and observe all of your country's safety regulations in full.

Before plugging into the mains, check that the supply voltage is the same as the voltage indicated on the nameplate. The electricity supply should be adequate for maximum consumption.

The power cords must be properly spread out, safe from shocks and far from liquids, water and heat sources, and in perfect condition. The use of adaptor plugs is forbidden.

Electrical diagrams are in the electrical panel inside a plastic package. Technical cabinet data are showed in the nameplate.

Earthing is mandatory according to current legislation, as is providing protection against power surges, short circuits and indirect contacts.

4.1.INITIAL START-UP

Before starting up the unit, allow at least one hour to pass in order to let the oil levels to stabilize, as they would have been displaced during transportation.

Connect the cabinet to the mains and the display will light up showing two horizontal strips. These indicate that the control is conducting a self-test.

After approximately 5 seconds the temperature that has been read by the control will appear on the display and the unit will actuate itself.

4.1.1. Display Function

During normal operation, the controller displays the temperature read by probe 1. In addition, the display has LEDs that indicate the activation of the control functions (see Table 1), while the 3 buttons can be used to activate/deactivate some of the functions (see Table 2).

İcon	Function	Normal Operation			Start up
		ON	OFF	Blink	
	Compressor	On	Off	Request	On
	Fan	On	Off	Request	On
	Defrost	On	Off	Request	On
	Alarm	All	No alarm	-	On

4.1.2. Table of functions activated

		Normal Operation		Start up
		Pressing the button alone	Pressed together	
	Up	More Than 3 s:toggle	Pressed together star/stop contionus cycle	
	ON /OFF	ON/OFF		
	Down	More Than 3 s:toggle		For 1 s display firmware vers.code
	defrost	ON/OFF		
mute set	Set mute	1 s:display/set the setpoint more than 3 s:acess parameter setting menu(enter posword '22') Mute audible alarm(buzzer)		For 1 s RESET current EZY set

4.1.3. Setting the setpoint(desired temperature)

Step	Action	Effect	Meaning
1	Keep SET button pressed for 2 s	After 1 sec cuurently setpoint value will flash on display	It's regulation setpoint currently active
2	Press UP or DOWN	Setpoint value will change	Set desired value
3	Press SET button	Controller will visualize tempereture read by probes again	Setpoint is modified and save

4.1.4. Acessing and setting the parameters

Step	Action	Effect	Meaning
1	Keep SET button pressed for 3 s	After 3 sec display will visualize “PS”	Password is requested
2	Press SET button again	Display will visualize “0” blinking	
3	Press UP or DOWN button	Visualized value on display will change	Insert password “22”
4	Press SET button	After 5 sec the first parameter, “/5”, will be visualized on display	It’s the name of the first parameter
5	Press UP or DOWN button	Parameter list will be scrolled on display (refer to Table of parameters)	Select desired parameter
6	Press SET button	Display will visualize value of the selected parameter	It’s the currently parameter value
7	Press UP or DOWN button	Parameter value visualized on display will change	Set desired value
8	Press SET button	Display will visualize parameter name again	Attention: parameters updating is not yet active
9	Repeat steps 5, 6, 7 and 8 for all desired parameters		
10	Keep SET button pressed for 5 s	Controller will visualize temperature read by probes again	Attention: now parame- ters updating will be active

4.1.5. Acessing and setting the parameters

	Parameter	Min.	Max.	Def.	UOM
PS	PASSWORD	0	200	22	-
/	PROBE PARAMETERS				
/5	Select °C / °F (0 = °C; 1 = °F)	0	1	0	-
/6	Disable decimal point (1 disabled)	0	1	0	-
/C1	Probe calibration	-50.0	50.0	0.0	°C/°F
/C2	Probe 2 calibration	-50.0	50.0	0.0	°C/°F
r	CONTROL PARAMETERS				
St	Control temperature	-50.0	90.0	-18.0	°C/°F
rd	Control differential (hysteresis)	0.0	19.0	2.0	°C/°F
c	COMPRESSOR PARAMETERS				
c0	Comp. and fan start delay after start-up	0	100	0	min
c1	Min. time between successive comp. starts	0	100	1	min
c4	Compressor safety (duty setting)	0	100	15	min
d	DEFROST PARAMETERS				
d0	Type of defrost (0= heater; 1= hot gas; 2= heater by time; 3= hot gas by time; 4= heater by time with temp. cont.)	0	4	0	-
dI	Interval between two defrosts	0	199	6	h/min
dt	End defrost temperature	50.0	130.0	8	°C/°F
dP	Max. or effective defrost duration	1	199	25	min/s

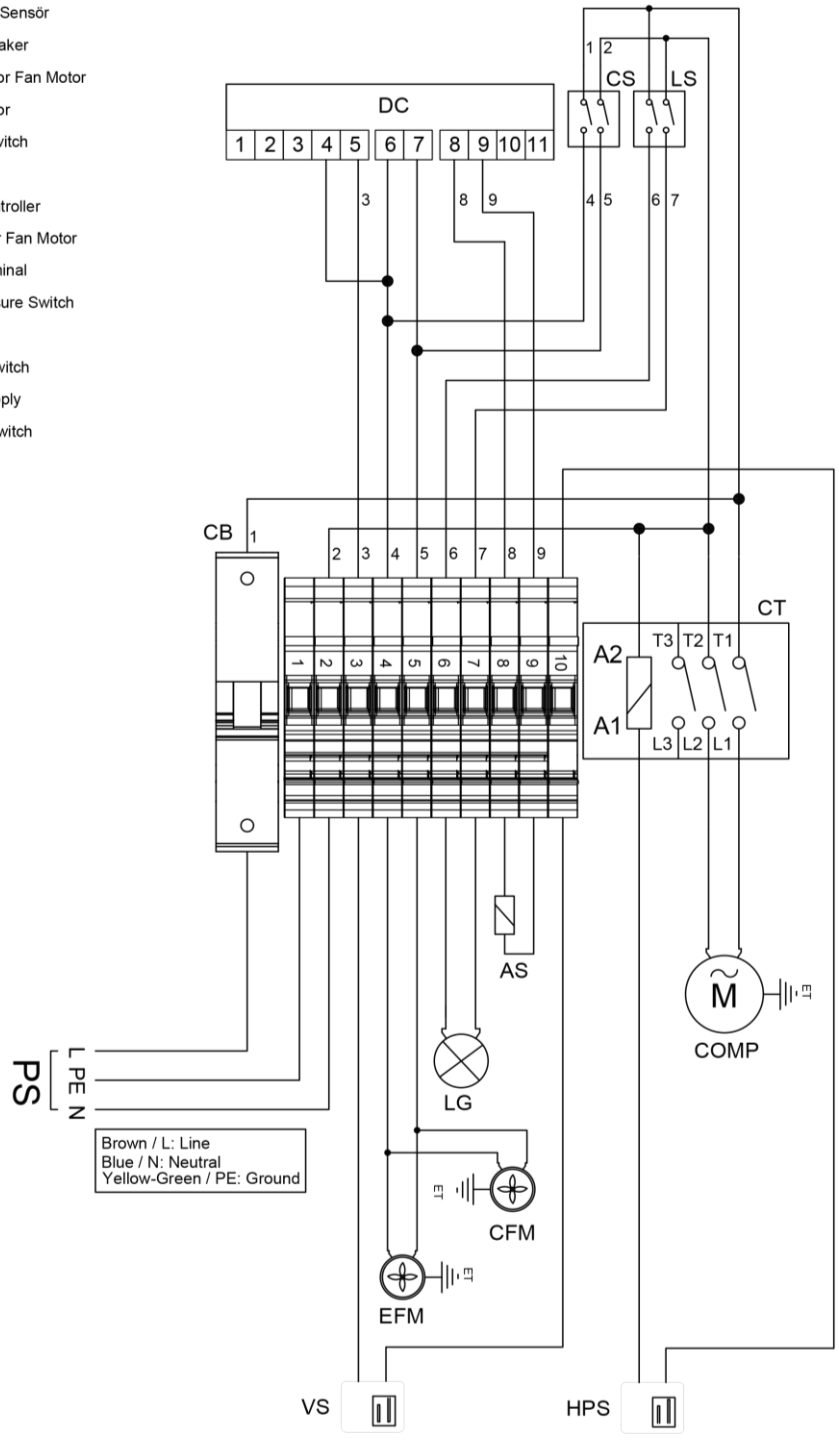
d4	Defrost when the instrument is switched on (1= activated)	0	1	0	-
d6	Disable temperature display during defrost (1= display disabled)	0	1	1	-
dd	Dripping time after defrost	0	15	1	min
d/	Defrost probe reading	-	-	-	°C/°F
A	ALARM PARAMETERS				
A0	Alarm and fan differential	-20.0	20.0	-2.0	°C/°F
AL	Low temperature alarm threshold/deviation (AL= 0; alarm disabled)	-50.0	250.0	-50	°C/°F
AH	High temperature alarm threshold/deviation (AH= 0; alarm disabled)	-50.0	250.0	50	°C/°F
Ad	Low and high temperature alarm delay	0	199	0	min
F	FAN PARAMETERS				
F0	Fan management: 0= fans on excluding specific phases; 1= fans on according to parameter F1 excluding specific phases	0	1	1	-
F1	Fans shutdown temperature	50.0	130.0	2	°C/°F
F2	Fans OFF when compressor OFF	0	1	1	-
F3	Fans status during defrost: 0= fan ON; 1= fan OFF	0	1	1	-
H	OTHER SETTINGS				
H2	Enable keypad 0= keypad disabled 1= keypad enabled 2= keypad enabled except for ON/OFF function	0	2	1	-
EZY	restore the Default settings	0	1	0	-

4.1.6. Table of alarm

Alarm Code	Buzzer and Alarm Relay	LED	Description	Parameters İnvolved
E0	active	ON	probe 1 error= control	-
E1	inactive	ON	probe 2 error= defrost	[d0 = 0 / 1]
LO	active	ON	low temperature alarm	[AL] [Ad]
HI	active	ON	high temperature alarm	[AH] [Ad]
EE	inactive	ON	unit parameter error	-
EF	inactive	ON	operating parameter error	-
Ed	inactive	ON	defrost ended by timeout	[dP] [dt] [d4] [A8]
dF	inactive	OFF	defrost running	[d6=0]

4.2.Electrical Wiring

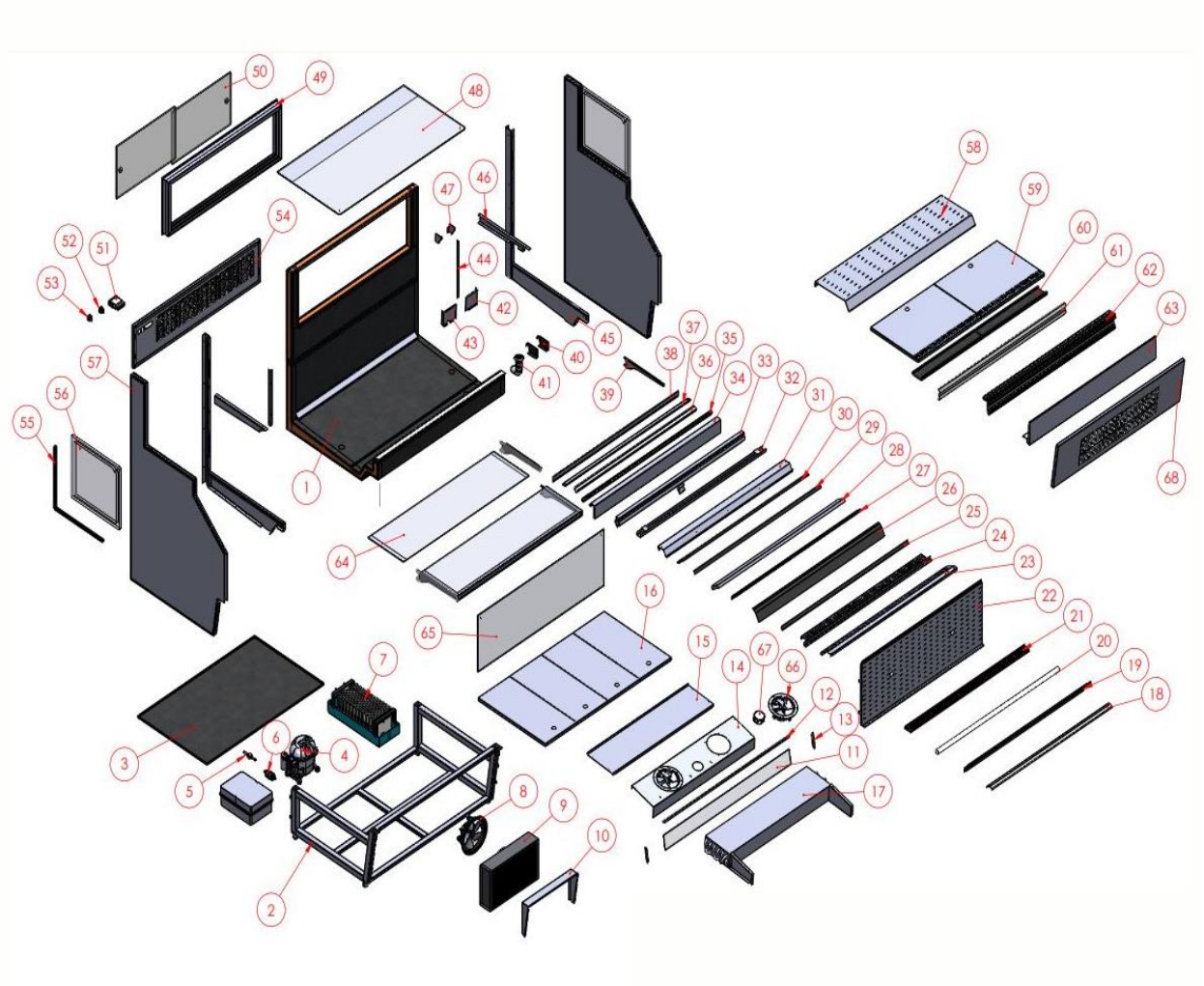
AS	Ambience Sensör
CB	Circuit Breaker
CFM	Compressor Fan Motor
COMP	Compressor
CS	Cooling Switch
CT	Contactor
DC	Digital Controller
EFM	Evaporator Fan Motor
ET	Earth Terminal
HPS	High Pressure Switch
LG	LED's
LS	Lighting Switch
PS	Power Supply
VS	Vaccum Switch



5.ELECTRICAL PANEL

Electrical panels are placed in the bottom of the cabinet as shown on the picture. They are located in a waterproof electrical junction box enclosure in order to provide maximum safety. The maintenance should be made only by qualified technicians.

6.PART LIST



1	Polyurethane Body	22	Perforated Back Panel	43	Left By-pass Metal Sheet
2	Chassis	23	Bottom Air Return Grill	44	Perforated Back Panel Support Metal Sheet
3	Compressor Tray Sheet	24	Top Air Return Grill	45	Rear Shelf Pilasters Metal Sheet
4	Compressor	25	Honey Comb Metal Sheet 1	46	Top Rear Shelf Pilasters Metal Sheet
5	Sight Glass	26	Top Air Grill Metal Sheet	47	Top Air Return Grill Support Metal Sheet
6	Dryer	27	Top Air Grill Metal Sheet	48	Top Glass
7	Condensate Tray	28	Honey Comb	49	Sliding Door Plastik Frame
8	Condenser Fan	29	Honey Comb Metal Sheet 2	50	Sliding Glass
9	Condenser	30	Top Air By-pass Metal Sheet	51	Digital
10	Condenser Bypass Metal Sheet	31	Lighting Metal Sheet	52	Cooling Switch

11	Bottom Front Glass	32	Front Panel Support Metal Sheet	53	Lighting Switch
12	Bottom Front Glass Top Aluminium	33	Night Curtain	54	Back Grill Metal Sheet
14	Evaporator Fan Metal Sheet	35	Front Glass Support Aluminium	56	Side Glass
16	Bottom Tray	37	Shelf Support Metal Sheet Top	58	Roof Metal Sheet
17	Evaporator	38	Shelf Support Metal Sheet Front	59	Top Tray
18	Top Lighting Metal Sheet	39	Shelf Bracket	60	Top Tray Support Metal Sheet
19	Top Air	40	Front Base Metal Sheet	61	Front Aluminium Plastic
21	Air Grill Metal Sheet	42	Right By-pass Metal Sheet	63	Front Decor Sheet
64	Shelf Glass	66	15 cm Evaporator Fan	68	Front Metal Sheet
65	Front Glass Support Aluminium	67	Junction Box		

7.RISK ANALYSIS

Use of electrical Isolator

WHO	WHAT	REDUCTION
Store personnel	Electrical Shock	Live parts mech. covered
Store personnel	Falling whilst using isolator	Correct use approved steps

Electrical Maintenance

WHO	WHAT	REDUCTION
Maintenance Personnel	Electrical Shock	Isolate before working
Maintenance Personnel	Falling whilst using isolator	Correct use approved steps

Cleaning shelves and base

WHO	WHAT	REDUCTION
Cleaning personnel	Strain	Single shelves light weight
Cleaning personnel	Scratch and impact	Training in correct method
Others in area	Scratch and impact	Clean when store closed

Cleaning Fans and Drain Area

WHO	WHAT	REDUCTION
Cleaning personnel	Revolving fan blades	Training in correct method
		Fans protected by guards
Cleaning personnel	Bending down low	Training in correct method
Others in area	Scratch and impact	Clean when store closed

8.SERVICE & MAINTENANCE

Note: All servicing of the display cabinet refrigeration and electrical systems should be undertaken by certified technicians having suitable knowledge of electrical and refrigeration systems.

8.1.Operational Overview

8.1.1.Cabinet Operation

The cabinet operates on a double (up and down) evaporator coil and flue .
Refrigeration flow is controlled via a capillary tube.
In addition, the cabinet has one common electrical isolator switch attached to the electrical controller tray.

8.1.2.Cabinet Control

Thermostatic control is determined from air on and air off control probes.
Always electrically isolate cabinet before carrying out any work that may effect or expose electrical components or moving parts (eg: fan blades).

8.1.3.Access to fans

For access to fans, lift out decks and remove any shelves or trolleys and fan cowls.
If removing fan baffle assembly, remove screws at top of fan baffle and then lift it out using the lifting rings on the baffle. Place near the cabinet ensuring there is no strain placed on connecting cables.

8.1.4.Access to drainage outlets

Drainage outlets are located behind the fan baffles.
Cabinet interconnecting drainage lines are located under the drain tray. They can be accessed by removing deck, dolly or trolley section.

8.1.5.Access to cabinet electrics and controls

For safety sake, when working inside the condensing unit the power supply must be switched off .

8.1.6.Access to probes

The ambient probe and defrost probes are now accessible

9.USE OF CABINET

9.1.Transportation

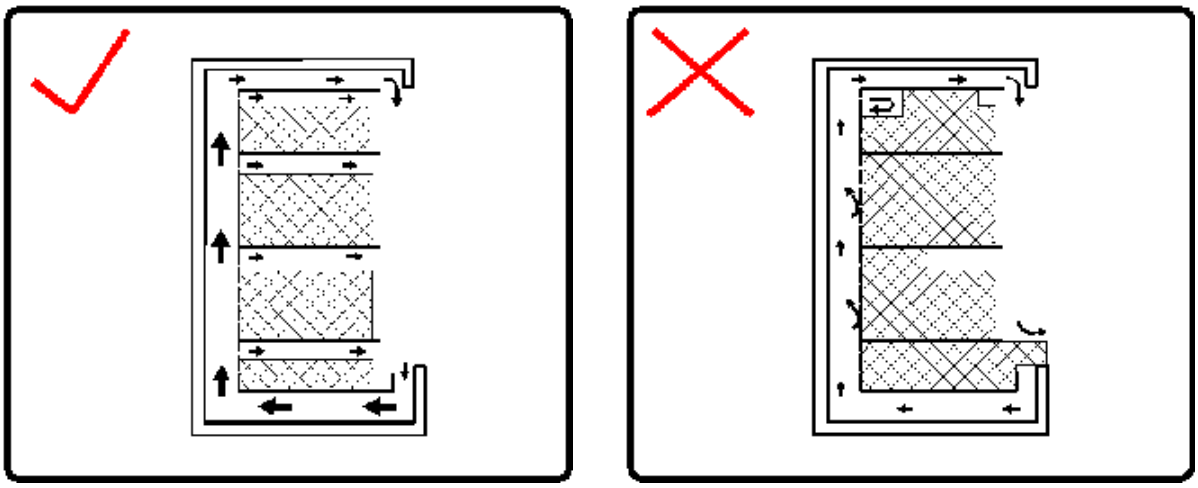
GGM gastro international its refrigerated cabinets suitable to be carried with forklift fork. It should be considered to replace the forklift forks into appropriate spaces underneath the cabinet.In addition to protect cabinets from dust and humidity, they are wrapped with plastic stretch films.

9.2.Shelf mounting

- Locate shelves into the slotted stub to the required height.
- Note when the shelf is in the sloping format the shelf should be located in the rear cutouts to minimise the gap between the shelf and the perforated back.
- Only use recommended shelf configurations to ensure correct cabinet operation and loading characteristics.

9.3.Loading of products

Always allow air space between the product and the shelf above in order to maintain cold air circulation and do not block air grills.



Failure to enable cold air to circulate as designed can lead to product temperature not being maintained and affects the functionality of the cabinets refrigeration system. When loading frozen products wear insulated gloves.

In order to prevent obstruction the correct circulation of air that may cause the temperature rise and ice on evaporator, the items should not exceed the loading limit line. Concerning to foodstuff turnover, the goods which have been in the cabinet for a longer time should be sold first with respect to the fresher incoming goods.

9.4.Filling with products

Wait for the oil in the compressor to sink to the bottom before starting the Display Refrigerators. In normal conditions this takes 2 hours. Connect the electric to the refrigerator and turn it on. The Display Refrigerator will start cooling and after two hour it will reach the storage cooling level, after this level is reached the food products can be placed in the Display Refrigerator.

9.5.Exterior factors for placing the cabinet

- Do not place the cabinets in places contains explosive gaseous substances.
- Do not place the cabinet near air-conditioning system, windows and doors. Air currents speed has to be limited with 0,2m/s.
- Do not place the cabinet in the open air.
- Do not place the cabinet close by the heating appliances and incandescent light.
- Assemble the adjustable feet after removing the wood pallets. Utilize a level and position horizontally.
- Make sure that the ventilation openings of the condensing unit are not blocked.

9.6.Cabinet cleaning

ALWAYS ELECTRICALLY ISOLATE CABINET BEFORE CARRYING OUT ANY WORK

The internal panels and all areas that are in contact with food should be wiped down with a damp cloth using a mild soap solution, this task should be carried out weekly. Some cabinets will require more frequent or daily cleaning such as non-prepacked food cabinets.

Regular deep cleans should be carried out involving dismantling, cleaning and inspecting the cabinet. Specialists should only carry this out.

Only non-abrasive odorless detergent cleaner suitable for food hygiene environments diluted to the manufacturers recommended concentration should be used when cleaning cabinets.

When cleaning debris from the cabinet base, in order to avoid blockages or damage, the following points must be observed:

- When working inside the cabinet takes care not to damage any components such as fan blades or probes and ensure no strain is put on any cables.
- Where electrical components are fitted with plug and sockets, these should be removed prior to cleaning.
- Do not directly apply water to fan motors or any other electrical components in the cabinet.
- Plug the drainage outlet.
- Rinse and remove water and debris using a wetvac.
- It is recommended that the cabinet drainage system be flushed with clean water on an annual basis, provided the above cautions are noted.

Care should be taken when cleaning in the area of the evaporator - it is recommended that protective gloves should be worn as the evaporator fins can have sharp edges.

9.6.1.The external parts of cleaning :(daily/weekly)

- Neutral detergents, soap and water will be used weekly for cleaning the external parts.
- Wash it with clean water and dry it with a soft cloth.
- Do not use abrasive products and solvent that may cause any scrap on the surface of the cabinet.
- Do not use alcohol to clean parts,

9.6.2.The internal parts of cleaning :(daily)

In order to eliminate the micro-organisms, cleaning of the inner parts of the cabinet is essential.
For inner cleaning of a cabinet follow these steps:

- Clear the foodstuffs from the cabinet,
- Switch off power supply of the cabinet from the main switch,
- Remove all the parts such as display trays, (various grids etc) wash and dry carefully.
- Clean the bottom tray carefully,
- If you notice any abnormal ice than contact with a Qualified Refrigeration Technician.
- Inside of the cabinet must be washed with running water and water drain outlet fastened to the floor during installation of the cabinet,

9.7.Recommendation :

First of all, read the installation and use manual and if any operation problem occurs, call our operator to take further assistance. (Unplug the cabinet before carrying out any maintenance operation.)

Before calling the technical service, check those points below:

- Ambient temperature and humidity values should not be exceed the indicated values.
- Therefore the air conditioning, ventilation and heating devices in the shop should be working efficiently.
- Ambient air speed values near the cabinet opening should be limited with 0,2m/s.
- Air stream and air intakes should not be directed towards the cabinet openings and the goods displayed should not be exposed to direct sunlight.

- Prevent the temperature increment of radiating surfaces in the shop e.g. installation ceiling
- Spotlights with incandescent lamps should not be directed towards the cabinet.
- The air inlets and vents on the cabinet should not be closed with products, labels, accessories so on.
- Only the items which already refrigerated can be used in the cabinet as the temperature that normally characterizes the chain of cold.
- The cabinet temperature should remain the same.
- Do not overload the cabinet; take the loading limit into consideration.
- Considering the foodstuff turnover, the first loaded goods should be sold first. (Apply first in first out procedure.)
- Control the displays foodstuff and the operation temperature of the cabinet regularly at least twice a day.
- Replace the goods right away, if any failure occurs on the cabinet.
- If you find any fault parts, move it right away(burnt out lamps, loosened parts etc)
- Control the automatic defrosting of the cabinet regularly.
- The draining of the defrost water and the water evaporation has to be checked regularly.
- If any unexpected condensation occurs than call a qualified refrigerator technician.

9.8.In case of breakdowns:

If a failure occurs on display refrigerators make sure that the reason of the failure is not improper maintenance. If a failure is occurred for any other reason than the possible reasons below please contact with our after sales technical services.

Some reasons for a breakdown and fixing instructions are given below.

a) If the cabinet is not working and stopping continuously;
- Check if the electric is disconnected.
- Check if the starting switch is on and the working lamp is illuminated.
- Check if the electric cable is connected properly.
- If there is no electricity for any other reason, call the nearest technical service.

If any breakdown occurs or if the electric power is cut and the work of the cabinet is interrupted for a certain period of time, all the food products should be taken out and transferred to a cooling room to keep the temperature of the food products fixed.

b) If the fridge is not cooling appropriately;
- Check if the display area of the cabinet is filled properly so that the air holes are not blocked and there is no excessive load.
- If the cabinet is not defrosted for more than 6 hours, the ice should be melt (defrost) and it should be cleaned before starting operation again.
- Check if the cabinet is away from air circulation (ventilators, windows or open doors) and heaters.
- Check with a spirit-level if the cabinet is appropriately leveled.

Under normal conditions if the above are fulfilled the cabinet should start working appropriately. After the digital thermostat is set, 24 hours should be given for the desired temperature.

9.9.Safety instructions:

Follow the instructions below in a case of gas escape or fire:

- If there is gas escape from the refrigerator, ventilate the room. If it cannot be ventilated leave the room. The cooling gas is not poisonous but contains oxygen and may result in suffocate symptoms.
- In case of fire turn the cabinet off from its starting switch. Only use dry fire extinguishers to take out the fire. Never use water.

9.10.Controls :

Connect electricity to start the refrigerator and turn the starting switch on. The working lamp will turn on when it starts to work. To illuminate the display area, turn on the illumination switch (inside the lamp area). Check if the set value is appropriate for food products. For appropriate cooling the set value can be changed. When ice in the refrigerator is melting the defrost lamp turns on.

9.11.Maintenance :

See if the electricity is disconnected from the display refrigerator and it is turned off before any maintenance or cleaning process. Appropriate gloves have to be used during maintenance or cleaning.

a) All internal or external parts should be cleaned with a warm water and neutral soap weekly. Dry the area carefully with a soft cloth; never use flammable, poisonous or corrosive cleaning products. Never use water jets to clean the cabinet. Drainages are installed in the cabinet to drain the water from melting and cleaning and a cup for liquid is used to collect the excess water and keep the area clean. The drainage should be periodically checked and cleaned and the cup should be emptied continuously to prevent leakages.

b) For rising the performance, the ice inside the cabined should be melted in every 6 hours (defrost). Follow the instructions below.

1- Turn off the cabinet by switching the operating switch.
2- Take out all the food products inside the fridge and place them in another refrigerator or in another cold storage room to keep the temperature fixed.
3- Clean the interior of the cabinet with lukewarm water and neutral soap and drain it with a soft cloth.
4- Turn the cabinet on after the interior and the surface of the cooler is completely dry.
5- Approximately two hour later put the products back to the cabinet.

10.SPECIFICATION OF R290 PROPANE

10.1.Service, Maintenance and Handling of Hydrocarbon Refrigerants

All service and maintenance should be carried out by a competent person in accordance with the manufacturer's recommendations and requirements. All competent persons should be fully versant with the hazards and safety requirements associated with hydrocarbon refrigerants.

10.2.General Approach to Handling of Hydrocarbon Refrigerants

All flammable refrigerant gases when mixed with air can form a flammable mixture. The effect of ignition of such a flammable m ixture can be severe. It is therefore important that the appropriate safety requirements

are observed at all times when working with flammable refrigerants. All tools and equipment (including measuring equipment) must b e checked for suitability for working with hydrocarbon equipment.

10.3.Safety Checks for Hydrocarbon Refrigerant Use

Check the area
Prior to commencing any service or maintenance work on systems containing hydrocarbon refrigerants it is necessary to conduct the appropriate safety checks to ensure that the risk of ignition is minimised. The following precautions should be considered the minimum required prior to commencing any work:

Work procedure
Work procedures should be planned to minimise risk of flammable gas or vapour being present while the work is being performed.

General work area
Work in confined spaces must be avoided. The area around the work space should be sectioned off. The condition within the working space should be made safe by the control of flammable materials. Instructions should be issued regarding the nature of the work being carried out.

Checking for presence of hydrocarbon refrigerant
The working space should be checked with an appropriate refrigerant detector prior to and during work to ensure that technici ans are aware of a potentially flammable atmosphere. Ensure that the detection equipment being used is suitable for use with flammable refrigerants (e.g. non-sparking, adequately sealed or intrinsically safe etc.)

Presence of fire extinguisher
If any hot work is to be conducted on refrigeration equipment or any associated parts, appropriate fire extinguishing equipment (e.g. dry powder or CO2 fire extinguisher) should be located near the work space.

No ignition sources
Work being carried out in relation to a refrigeration system involving exposing any piping or equipment that contains or has contained flammable refrigerant must use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including ciga rette smoking, must be sufficiently far away from the work space and/or site of installation, repairing, removing and disposal during which flammable refrigerant could possibly be released to the surrounding space. S hould there be a need for brazing or welding, it should be undertaken in accordance with the recommendations noted elsewhere in this document. The area around the equipment should be surveyed prior to any work being undertaken to ensure that that it is safe from all flammable hazards or ignition risks.

Ventilated area
Ensure that the working space is well ventilated before any work is undertaken on any refrigerant piping or refrigerant equipment. Ventilation should safely disperse any released refrigerant and preferably expel it externally to atmosphere.

Check the electrical components
Repair and maintenance to all electrical components should be included in the initial safety checks of the equipment. Ensure that power supplies are isolated prior to undertaking such an inspection and immediately repair or replace faulty electrical components. Under no circumstances should equipment operation be re-instated with faulty electrical components. If it is essential to maintain an active power supply to the equipment during the repair activities, it is recommended that an appropriate detection system and alarm is provided in the most appropriate and critical point in the system.
Initial safety checks prior to undertaking refrigeration circuit repairs should include but not be limited to the following:

- Ensure that all capacitors are discharged to prevent possible sparking.
- Ensure that electrical power to the equipment is isolated while undertaking charging, recovering and purging of refrigeration systems.
- Check and ensure adequate and efficient earth bonding of the equipment.
- Do not alter any electrical components such that their operation or safety can compromise the safety of the system/installation.
- Check seals and sealing materials for degradation. Note that equivalent manufacturer approved seals and sealing materials sho uld be used to replace faulty seals.
- Check and ensure that all electrical cabling and wiring is safe and not showing any wear that could contribute to potential short circuiting and sparking. Repla ce all faulty components

with manufacturer approved components.

Check the refrigeration equipments

The following list provides an overview of checks that apply to installations employing flammable refrigerants.

- Check compliance of refrigerant charge with the latest legislated requirements.
- Check ventilation provisions for adequacy and effectiveness.
- Check and verify operation of leak detection equipment.
- Check and verify refrigerant and lubricant labelling fitted to equipment.
- Check operation of any refrigerant detection systems and alarms.
- Check refrigeration systems components and piping for potential corrosion.
- Chek for excessive vibration from compressors and other moving parts such as fans.