

FGD01 USER MANUEL

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1. Foreword

This guide is prepared for the GLD cases. The details below are examined in general.

- Operation of Case
- Technical Details
- Installation and Assembling
- Information and suggestions for the users
- Care operations

Producer company does not have any responsibilities about the situations below.

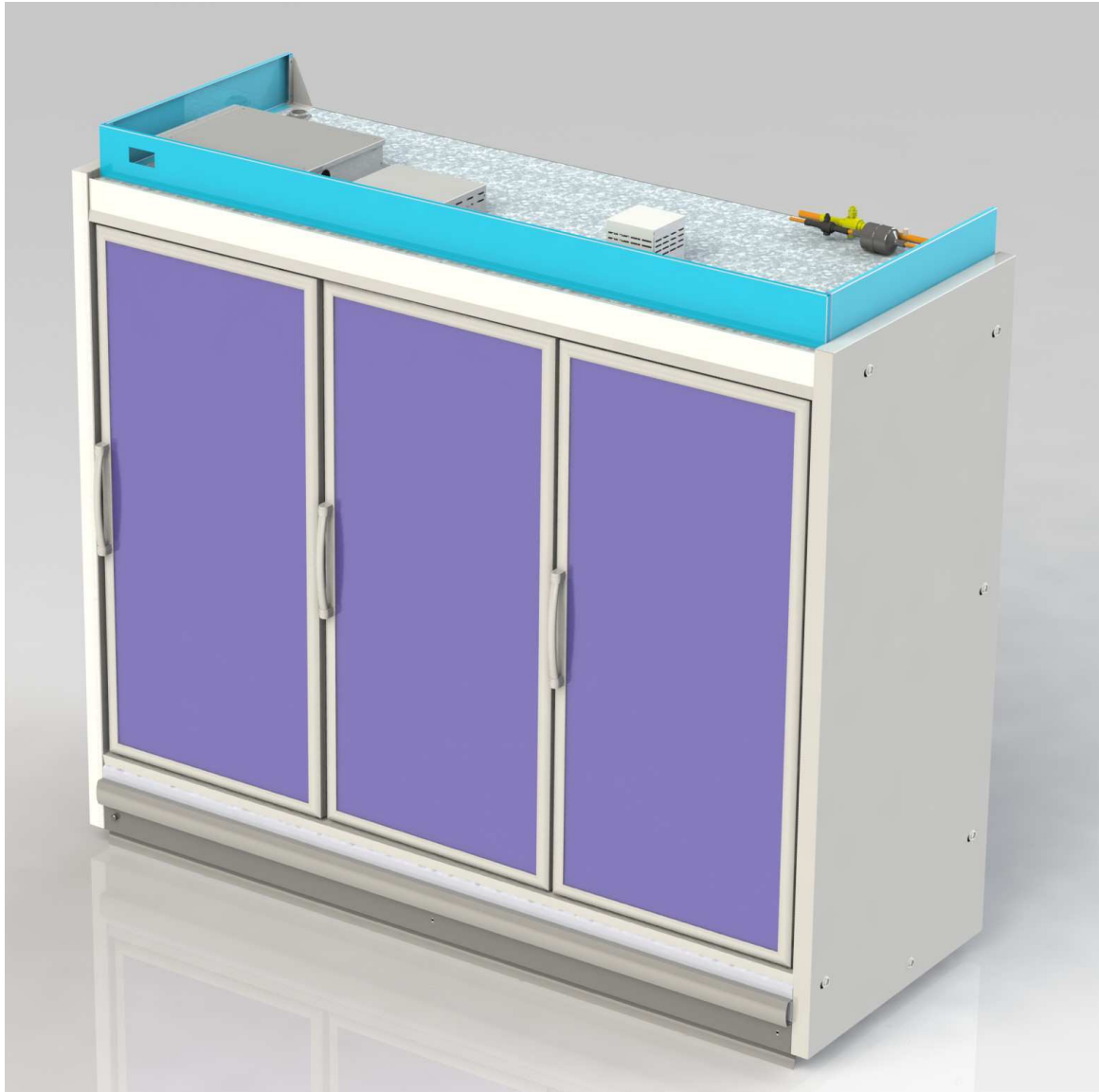
- Harsh usage of Case
- Wrong assembling
- Electrical Effects
- Not doing the periodical cares
- Changes of Operation
- Wrong application of spare parts
- Ignoring the given information

P.S. : Applications about electricity are dangerous for your life. Anyone who uses the refrigerator must read this guide.

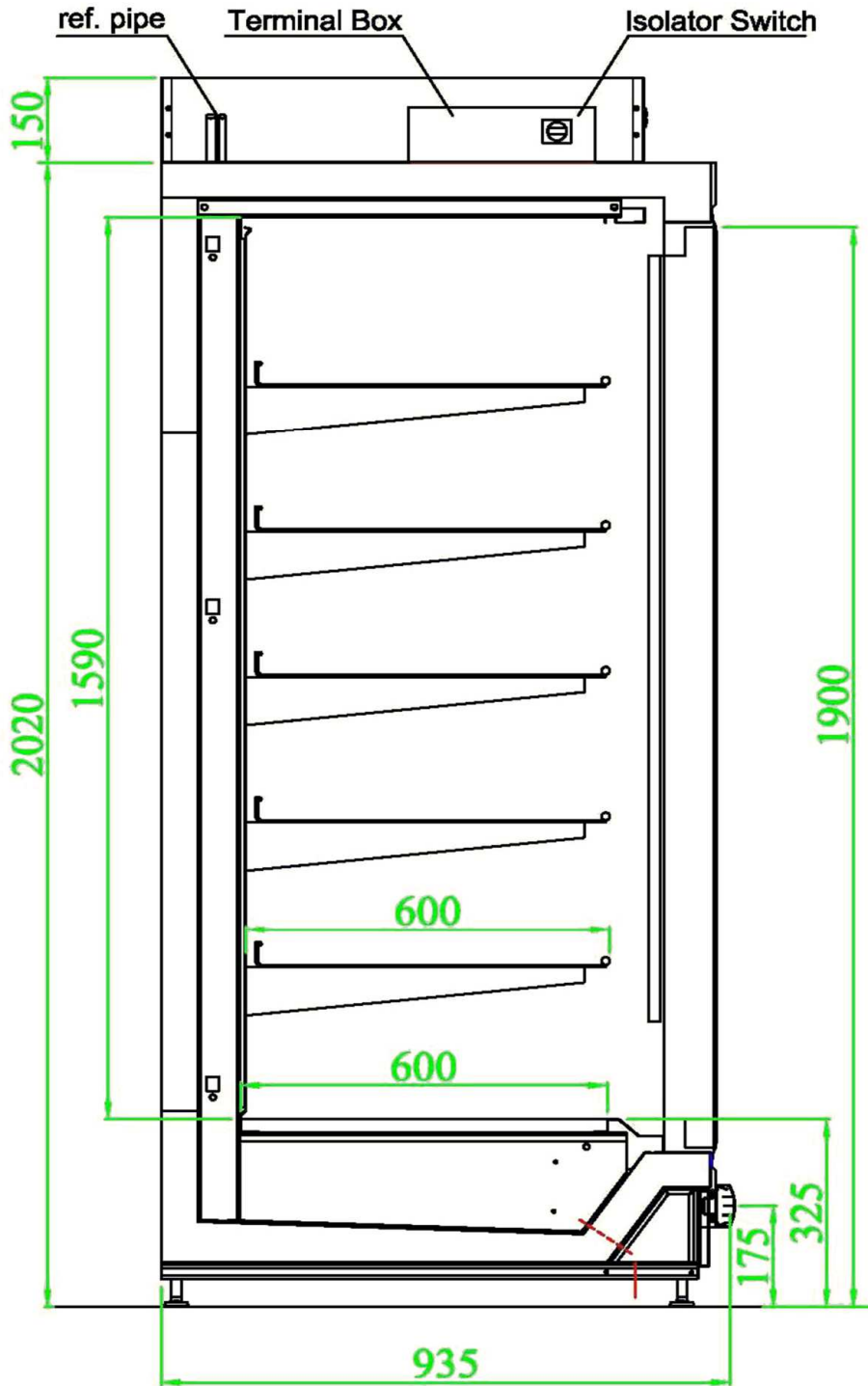
2. Introduction

FGD is a vertical, front-doored, multi-shelved cooler refrigerator. It's condensing unit is designed as a remote. With its wide display area and loading capacity, it is suitable for normal to and larger stores.

Food such as frozen meat, fish and ice-cream can be displayed in the cabinet. The cabinet has a defrost-type resistance.



3. Technical Details Cross-Section View;



	TECHNICAL DATA SHEET - FGD-01
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TECHNICAL DETAILS	2 Door (1562 mm)	3 Door (2343 mm)	4 Door (3124 mm)	5 Door (3898 mm)
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Refrigeration Load				
Case Temp (°C)	-21/-24			
Evap Temp (°C)	-31			
Duty (kW)	1,18	1,77	2,36	2,95
Expansion Valve (R404)	TES2 Or.01 AKV 10-3	TES2 Or.02 AKV 10-4	TES2 Or.03 AKV 10-4	TES2 Or.03 AKV 10-5
Pipe Size - Suction	15 mm	15 mm	19 mm	19 mm
Pipe Size - Liquid	10 mm	10 mm	10 mm	10 mm
Pipe Size - Drain	40 mm			
Cubic Capacity (dm ³)	1483	2224	2966	3700
TDA (prEN ISO 23953-2)	1,33	2,00	2,67	3,34

Defrost Details	
Defrost Type	Electric
Duration (minutes)	2 x 55 min.
Termination	Temp (+6 C)

Heaters				
Evaporator (Coil)	1 x 600W 2 x 400W	1 x 1000W 2 x 600W	1 x 1200W 2 x 800W	1 x 1400W 2 x 1000W
Frame (Schott Termofrost)	275W	404W	534W	666W
Doors (Schott Termofrost)	2 x 27W	3 x 27W	4 x 27W	5 x 27W
Front Glass	-	-	-	-
Side Glass	75W/pc.			
End Walls	-	-	-	-
Body	-	-	-	-
Water Drain	16W	16W	16W	2 x 16W
Air Return	-	-	-	-
Air Intake	-	-	-	-

Electrical / Fans				
Supply	230 V / 50 Hz			
Lighting (T5)	3x35W	4x35W	5x35W	6x35W
Evaporator Fans "energy saving"	2x31W/1600rpm AO 230 mm/28°	3x31W/1600rpm AO 230 mm/28°	4x31W/1600rpm AO 230 mm/28°	5x31W/1600rpm AO 230 mm/28°

Design Conditions					
Temp (°C)	25	Humidity (%)	60	Cross Draft Air Speed (m/s)	0,2

	TECHNICAL DOCUMENTATION	CHAPTER REVISION STATUS					
		ORD.	DATE	CHANGE ORDER	ORD.	DATE	CHANGE ORDER
PRODUCT	FGD-01	A			D		
DATE of 1st ISSUE	13.10.2010	B			E		
ORDER	ULAS GÜDÜCÜ	C			F		

4. Norms and Certificates

The approved certificates of norms and refrigerators that are using as reference;
EN 60204-1; EN 60439-1; EN 60439-2

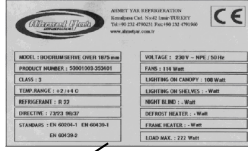
ENVIRONMENTAL CLIMATIC ATMOSPHERE (EN 441-4)

This case is tested as class 3.

Class	Dry Air temperature	Relative Humidity	Dew Point
1	16°C	%80	12°C
2	22°C	%65	15°C
3	25°C	%60	17°C
4	30°C	%55	20°C
5	40°C	%40	24°C
6	27°C	%70	21°C

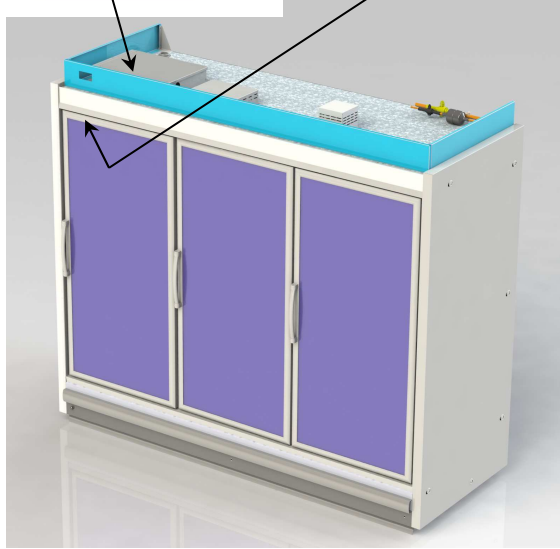
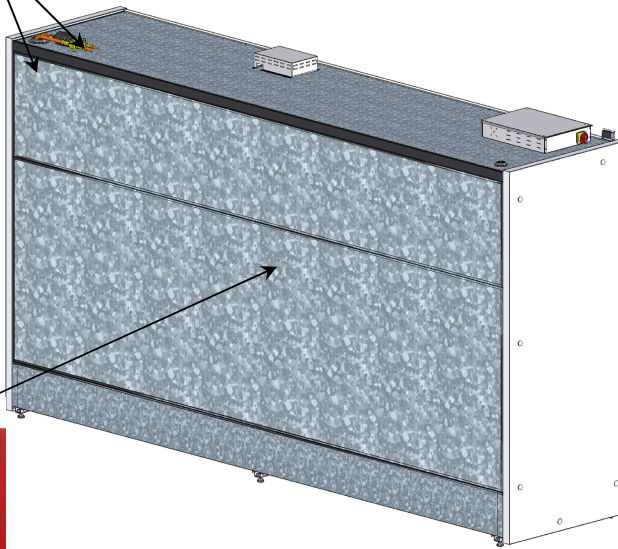
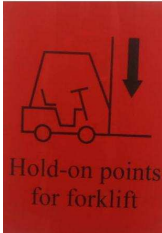
The directives that the refrigerator fits **EEC 73/23** , **EEC 98/37**

5. Warning and definition stickers on the refrigerator

YÜKSEK GERİLİM ETİKETİ**ÜRÜN TANIM ETİKETİ**

A white rectangular sticker with a grid of technical specifications. It includes the Ahmet Uyar logo, a CE mark, and various technical details in two columns.

MODEL : DİKKETMİNİRE ÇEŞİT 1873mm	YÜKSELİK : 210Y - 40Y - 1010mm
ÜRETİM NO : 1000100300000	FANLAR : 11A Watt
CLASS : 3	LIŞIYIMIN ON CEMPTİ : 100 Watt
ÇİMP MİNE : 1.7 x 1.6 C	LIŞIYIMIN ON CEMPTİ : 100 Watt
REFRİJERAN : R 22	İNEKİLE BİRE : 100 Watt
ÖLÇÜLERİ : 1873x 1010x 500	İNEKİLE HEKİLE : 100 Watt
STANDART : EN 60035 : 1994/06/26	LIŞIYIM HEKİLE : 100 Watt
EN 60035-2	LIŞIYIM HEKİLE : 100 Watt

**BASINÇ ETİKETİ****TAŞIMA ETİKETİ**



High Voltage Sticker

High voltage sticker is located on the electricity box.



Name Plate

The stickers of the product definition is inside the case, on the ceiling and includes all technical properties.

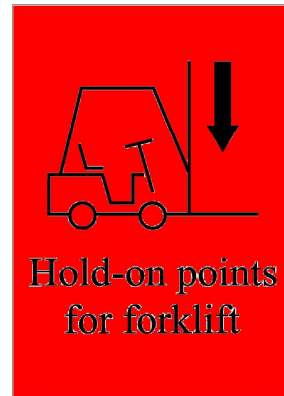
1		AHMET YAR REFRIGERATION Mah. 9. Sok. No:5 Kemalpaşa Organize San. Bölgesi İzmir-TURKEY 8771750 Fax: +90 232 8771751 www.ahmetyar.com.tr	Istiklal Tel: +90 232		2
3	MODEL	: FGD-01 4D	FANS	: 108 Watt	11
4	PRODUCT NUMBER	: 57902004-11710/04	LIGHTING LED	: 60 Watt	12
5	PRODUCTION DATE	: 04 / 2011	DEFROST HEATER	: 2800 Watt	13
6	CLASS	: 3	WATER DRAIN HEATER	: 16 Watt	14
7	TEMP.RABGE	: -24 / -34 °C	FRAME & DOOR HEATER	: 642 Watt	15
8	REFRUGERANT	: R 404	GLASS HEATER	: - Watt	
9	VOLTAGE	: 220 V~NPE / 50 Hz	LOAD MAX	: 3510 Watt	16
10	DIRECTIVE	: 2006 / 95 / EC - 2004 / 108 / EC - 98 / 37 / EC			
	STANDARDS	: EN 60335-1/EN 60335-2-24/EN 60204-1/TS EN ISO 12100-1/TS EN ISO 12100-2			

1. Logo and address info of the producer company
2. Product certificates and quality certificates of the producer
3. Model of the product
4. Serial number of the product
5. Air Conditioner class of the product
6. Heating limits of the product
7. Type of the cooler liquid that is used in the product
8. Approved certificates of the product and the standart directives
9. Working voltage infos
10. Fan power of evaporater
11. Electricity power of illumination
12. Electricity power of the under-shelf illumination
13. Electricity power of the night blind
14. Electricity power of the defrost resistances

- 15. Electricity power of total electricity power of the frame resistances
- 16. Total electricity power

Loading Sticker

There are palettes located on the refrigerator for transportation. Transportations with forklifts or transpalettes are materialized by the assistance of these palettes. There is a sticker behind the refrigerator about the transportation palettes. The sticker must be centered with the forklift handles during the transportation as shown in the diagram below.



Pressure Sticker

Pressure sticker is located at the exit points of the copper pipes. It is used for determining the quantity of nitrogen.

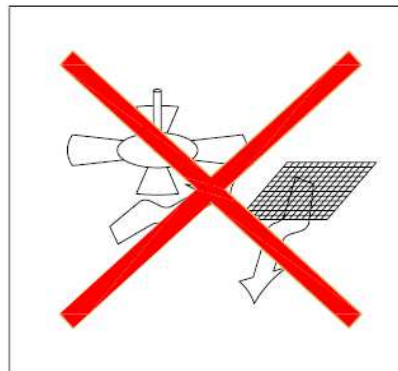
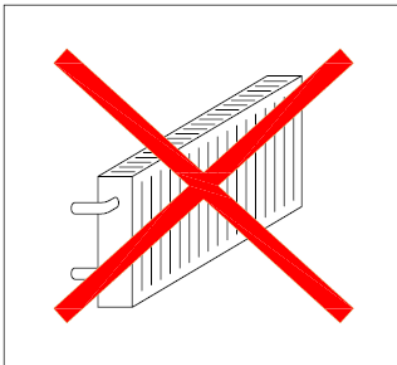
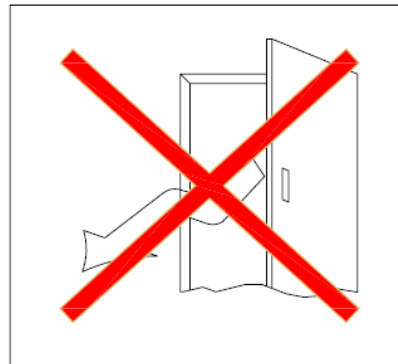
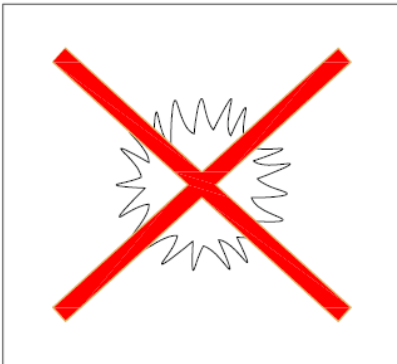


6. Assembling and Environmental Situations

Follow the instructions below for assembling.

The situations that must be paid attention to placing the refrigerators

- Do not leave or assemble the refrigerator at the positions below ;
 - Closer to any explosive gasses
 - Closer to heaters
 - Through the draught



7. Multiplexing of Two Cases

Follow the sequences below for connecting two or more refrigerators.

- Disassemble the endwalls (if exist)
- Place the refrigerators closer to each other
- Disassemble the palette. Level the refrigerators by arranging the heights of cabinet legs. (Diagram 1) Check on the balance by using water ballance*** (Diagram 2). Check the balance of the refrigerator by moving it.

➤ Side Pillar Connection

- Attach the connection equipments to the connection hole which is located near the refrigerator on the base tray pillars. Connection equipments and their locations are shown on the (Diagram 4).

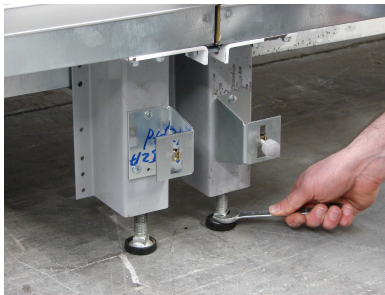


Diagram 1

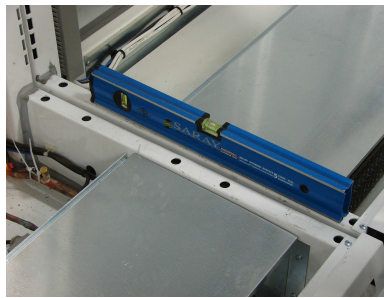
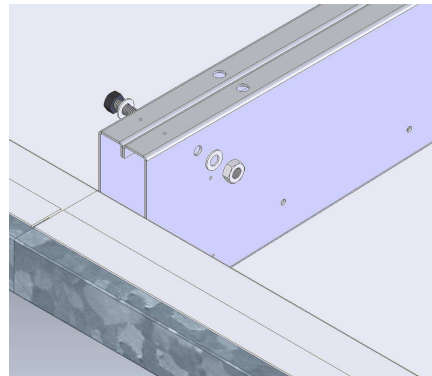
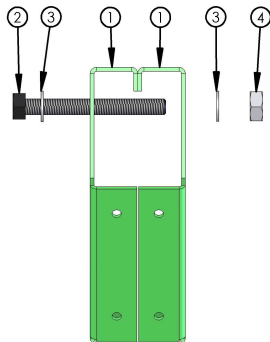


Diagram 2



Diagram 3



POS NO	MATERIAL NAME	UNIT
1	Side Pillar	On it
2	M8x80 Hexagonal screw	1
3	M8 Washer	2
4	M8 Nut	1

➤ UPPER PANEL CONNECTIONS

- There are two units of refrigerator connection sheets on the roof of the refrigerators and one connection sheet is located on the front lower body of the refrigerator.
(Diagram 5-6)

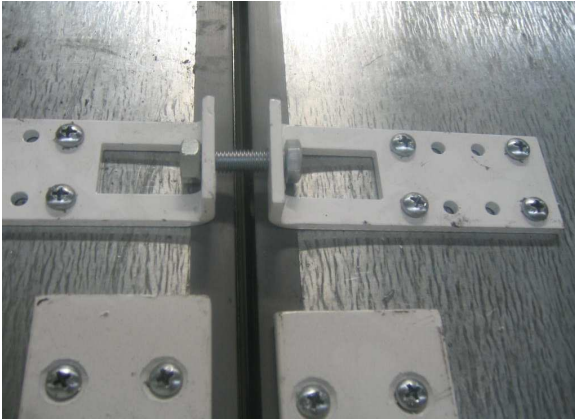


Diagram 5

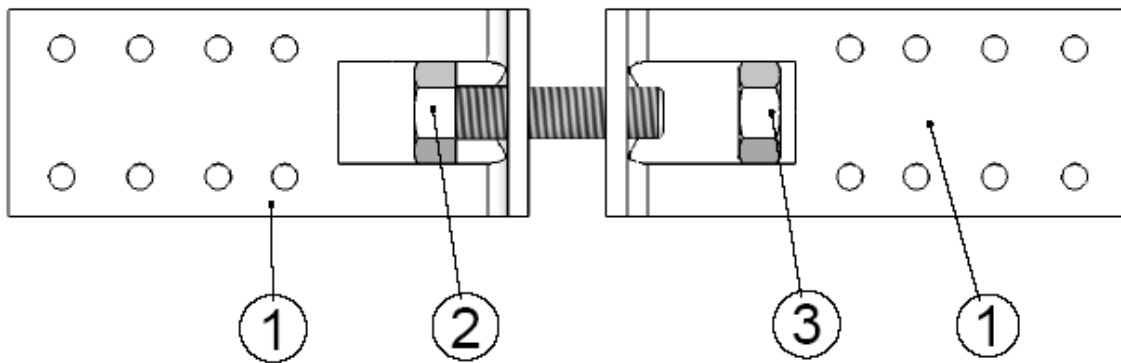
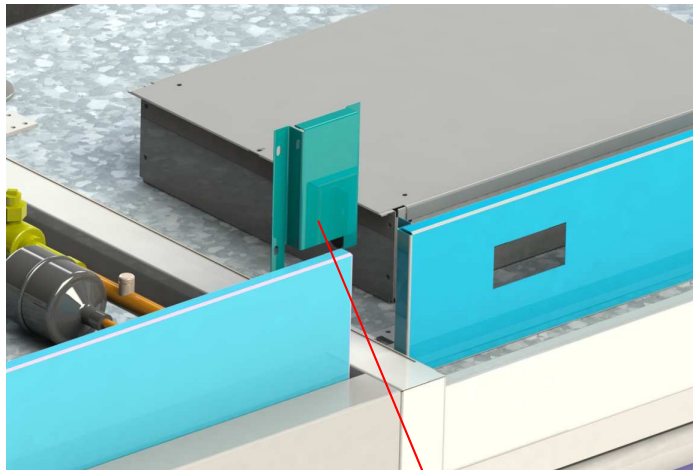


Diagram 6

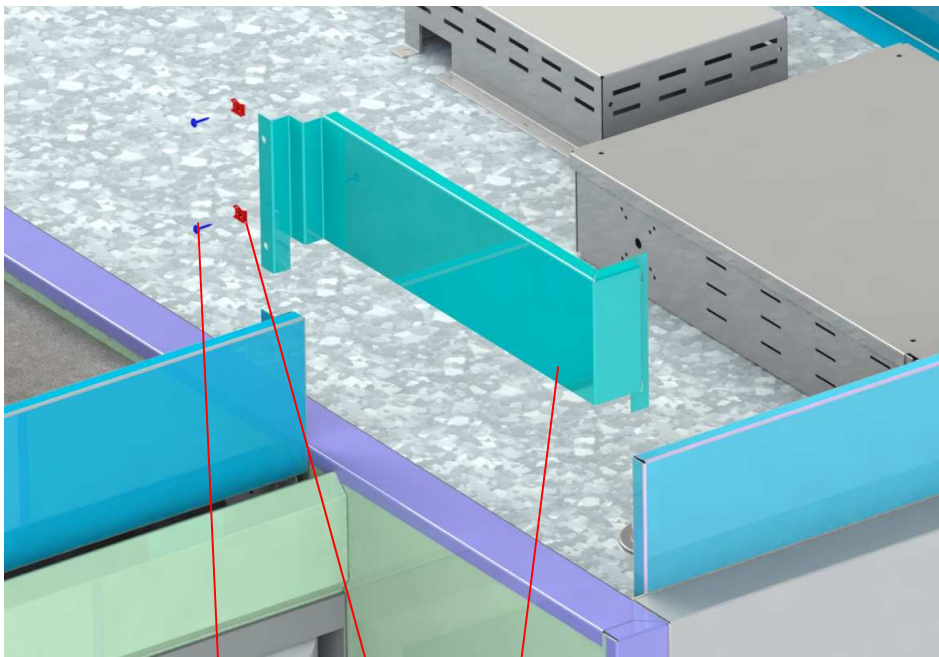
POS NO	MATERIAL NAME	UNIT
1	Multiplexing Kit	4
2	M8x40 Bolt	2
3	M8 Nut	2

FGD & FGD cabinet connection;



FGD & FGD addition to upstand

FGD & HGD cabinet connection;



3 2 1

pos NO	description	Qty
1	FGD & HGD addition upstand	1
2	Washer Ø 3,9 Würth	4
3	Screw 3,9x16	4

➤ **Side Pillar connection**

Side pillars must be connected from the two holes with bolts just as shown on the diagram 7.

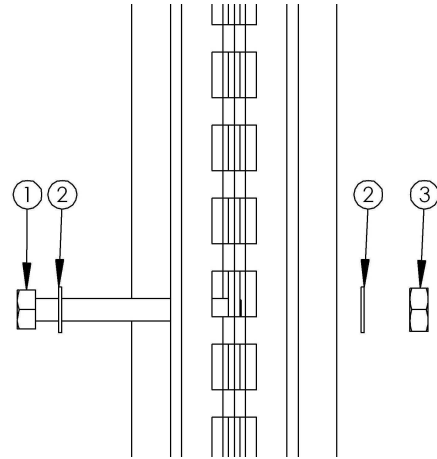
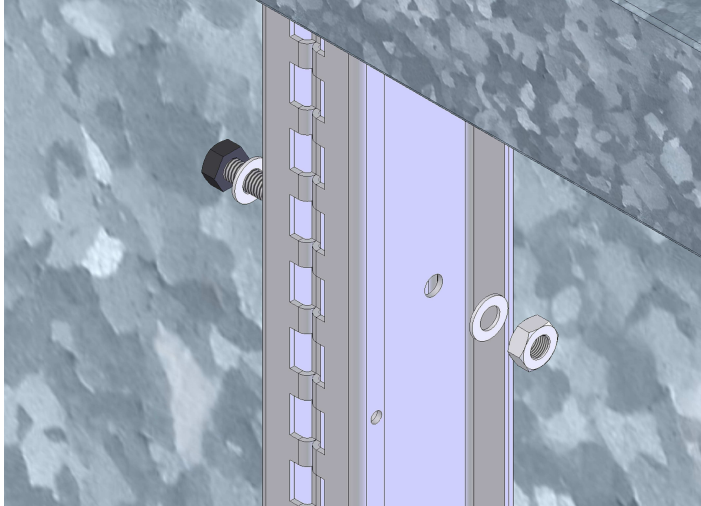


Diagram 7

POS NO	MATERIAL NAME	UNIT
1	M8x80 Bolt	3
2	M8 Washer	6
3	M8 Nut	3

8. Installation of Endwalls

For being able to connecting endwalls, first of all stick the isolation tape to the panel plastic and to the body polyurethane supporter. (The surfaces that isolation tape must be sticked are shown in Diagram 8)

Place the sheet nuts to the sockets as it is shown in Diagram 9 . Bring the connection holes on the endwall and the connection components on the refrigerator same level. Tighten the nuts with screw. (Diagram 10) Attach the plastic cover to the holes.

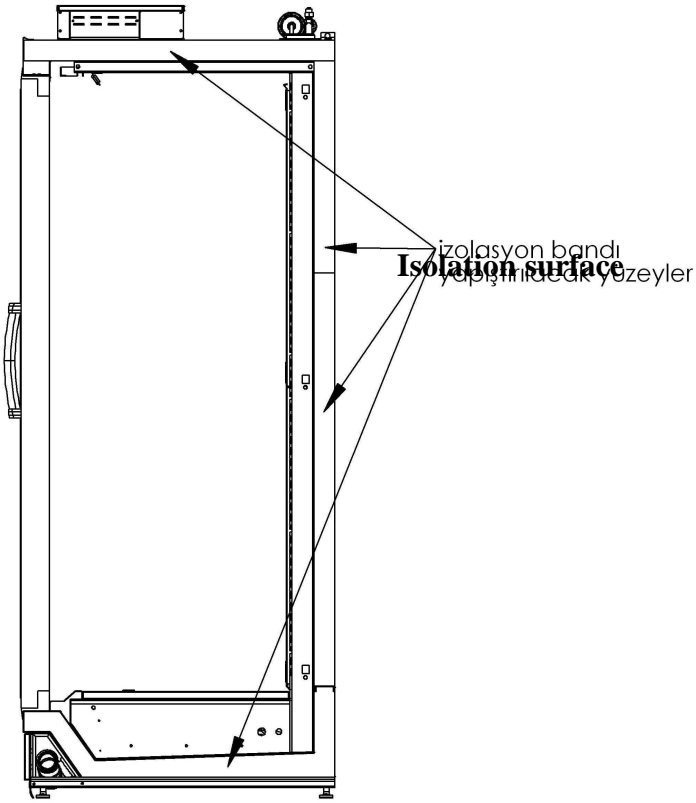


Diagram 8

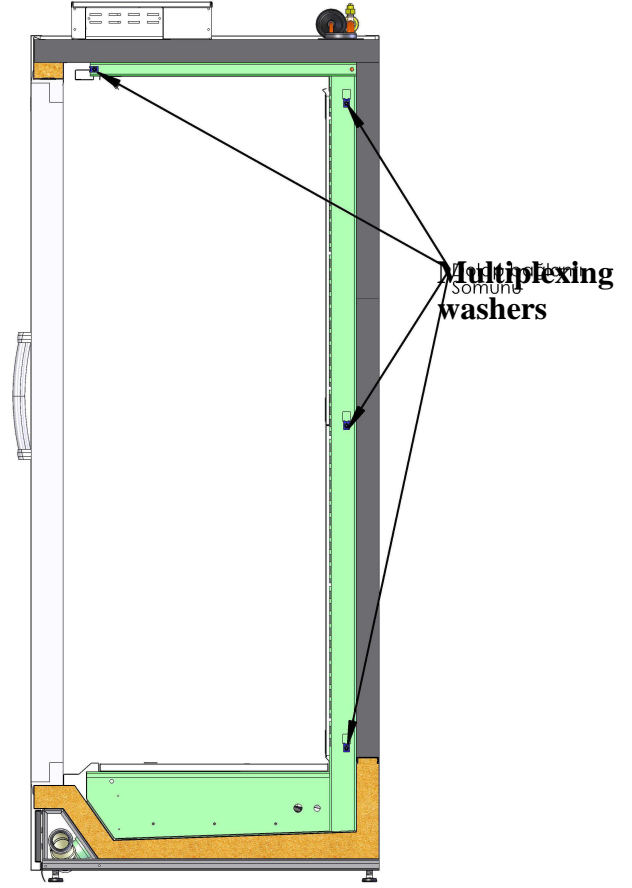
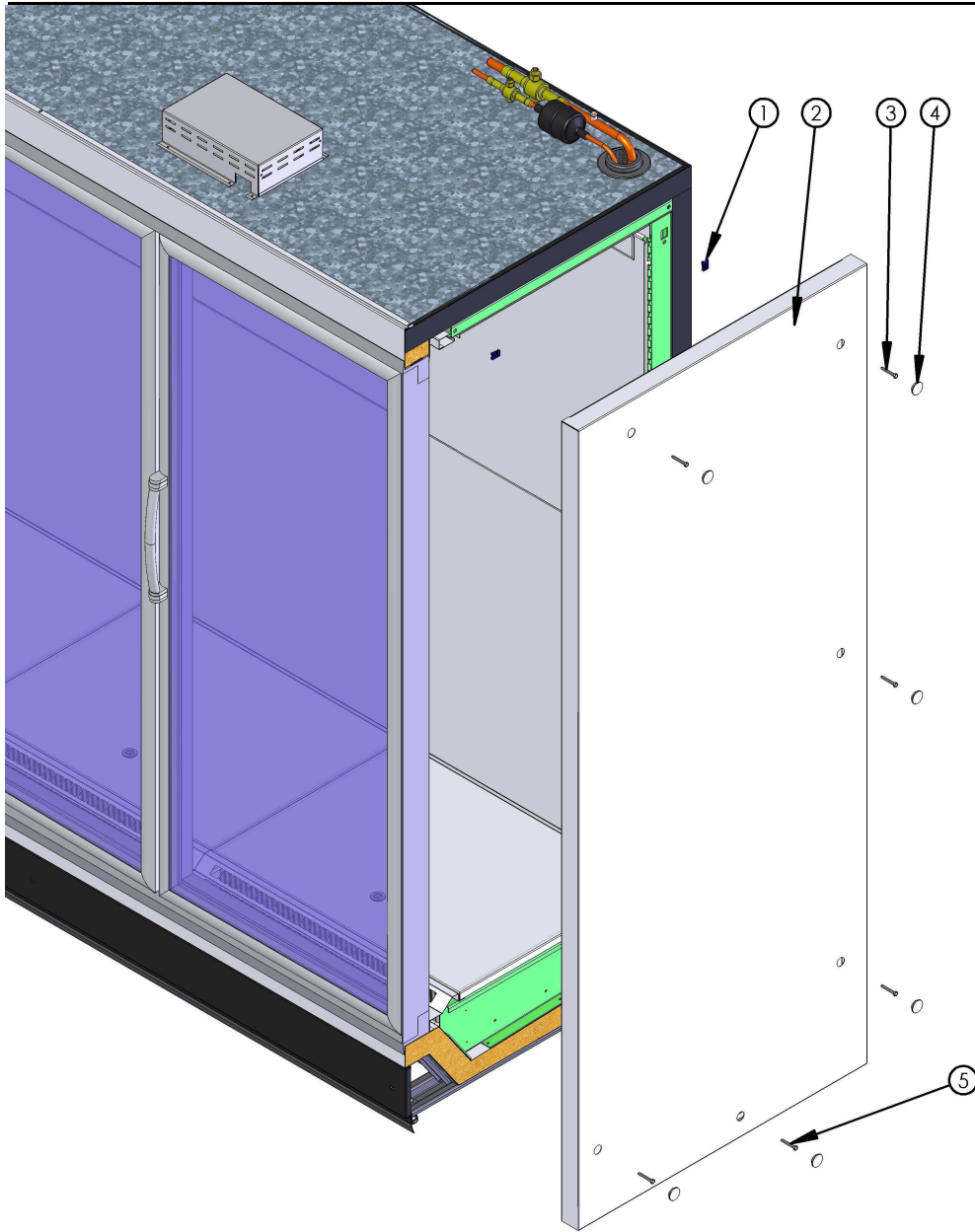


Diagram 9



diagram10

Connection elements of endwalls
as shows on diagram 11



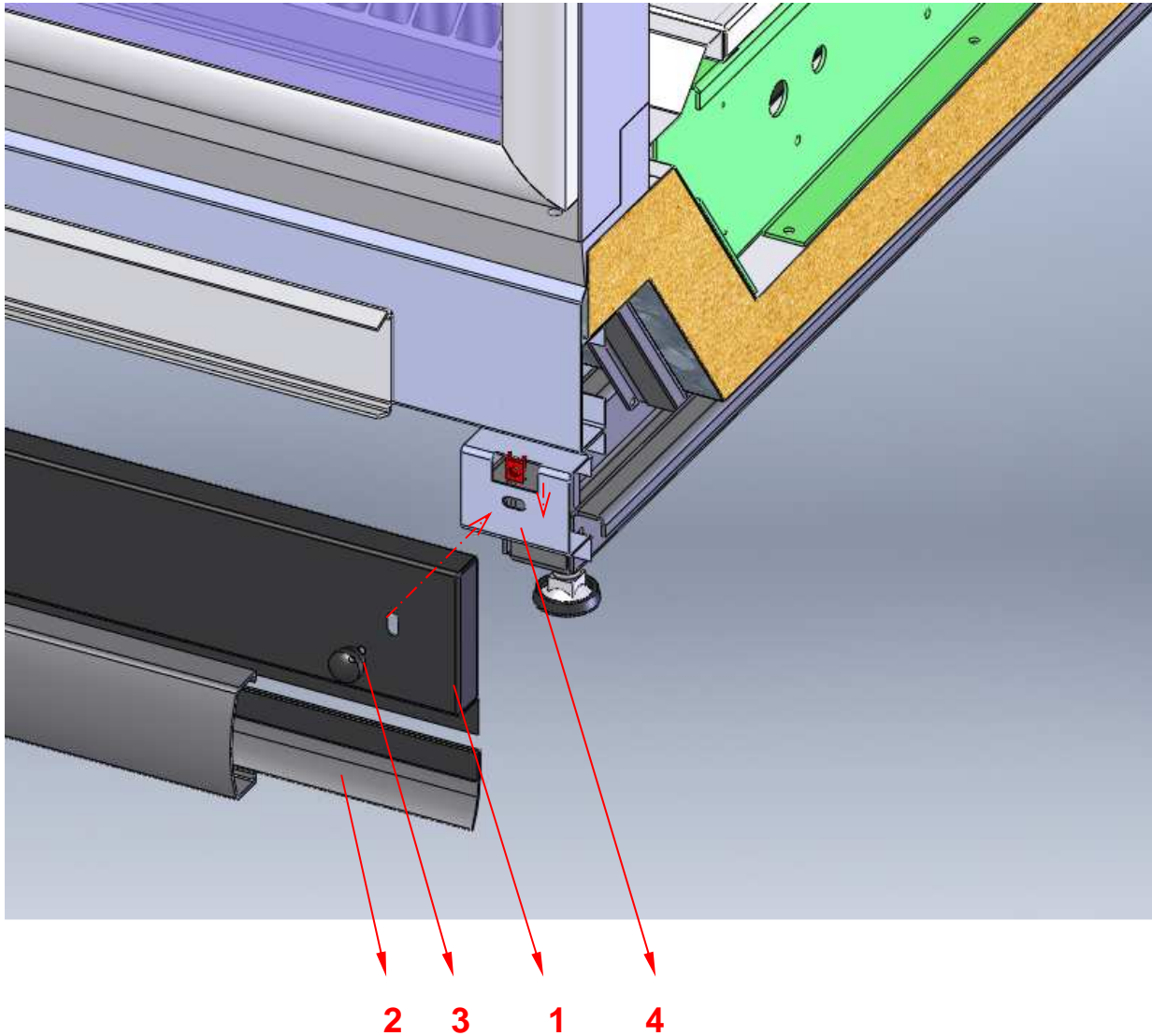
Şekil 11

Pos No	MATERIAL NAME	UNIT
1	Multiplexing Washer Ø6.3	4
2	Endwall (R&L)	1
3	M6.3x60 AKB Sheet Screw	4
4	Plastic caps	6
5	M6x60 Wood Screw	2

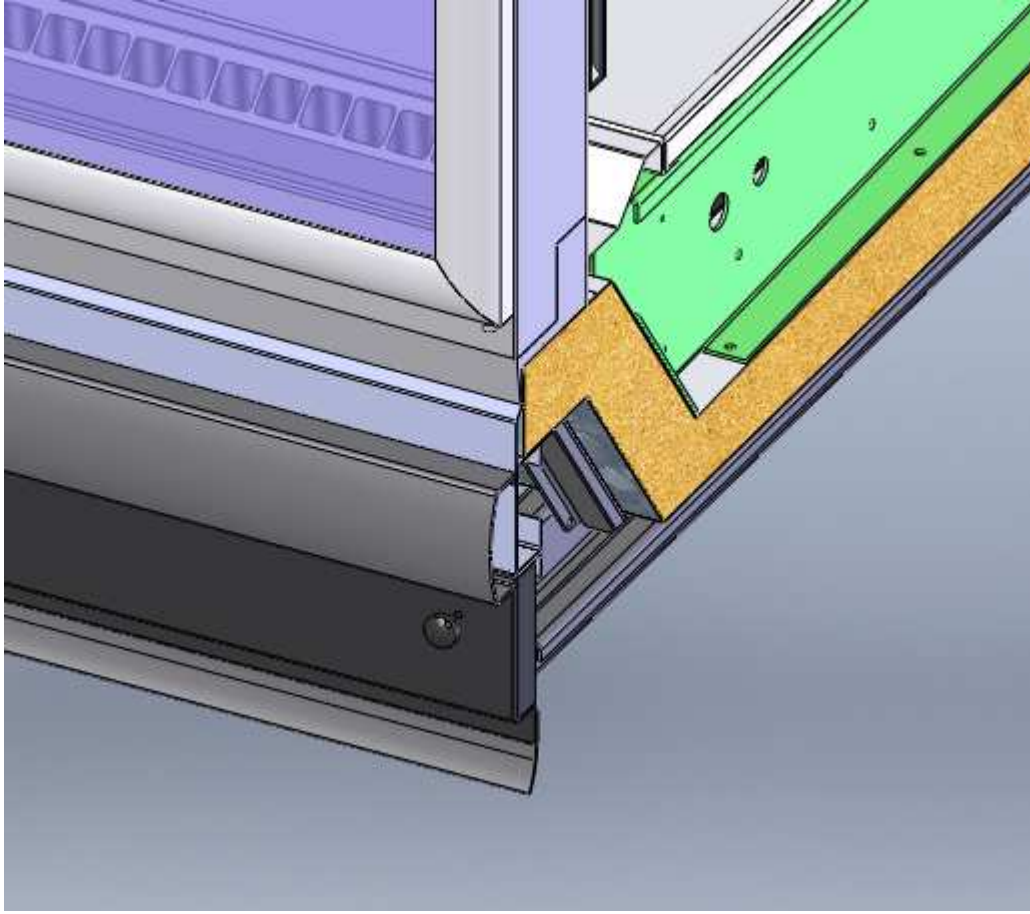
9. Assembling the Lower Decor and The Kickplate

Kickplate is such an equipment that is located under the lower decor which covers the legs of refrigerator. After attaching the kickplate rubber on to the kickplate, lean the kickplate to the legs of refrigerator but be sure the kickplate rubber stays closer to the ground Tighten the kickplate mace from left to right but be sure you placed the kickplate mace correctly to its sockets Connection elements of endwalls as shows on diagram 13

“



POS NO	DESCRIPTION	QUANTITY			
		2D	3D	4D	5D
1	KICKPLATE 2D / 3D / 4D /5D	1	1	1	1
2	RUBBER	1	1	1	1
3	4,2x13 RYSB SCREW	2	3	3	3
4	KICKPLATE CONNECTION SHEET	ON THE PRODUCT			



Şekil 13

10. Assembling the Shelf Brackets and Shelves

Shelf bracket is tied to back grill which is tied on the refrigerator pillar. Shelf bracket carries the refrigerator shelf. Attach the shelf bracket's upper nails on to the holes on the pillar. After you assembled the upper nails, attach the middle and lower nails. After you attached the nails on to the pillar, press on the brackets and make the nails fit well with the pillar.

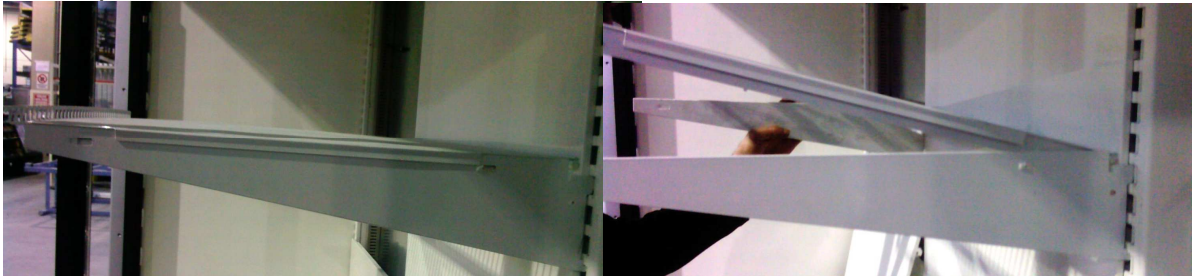
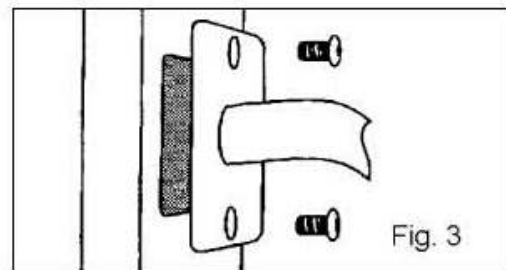
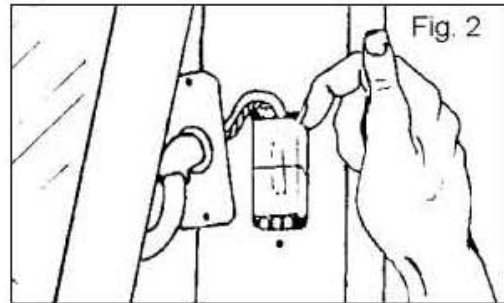
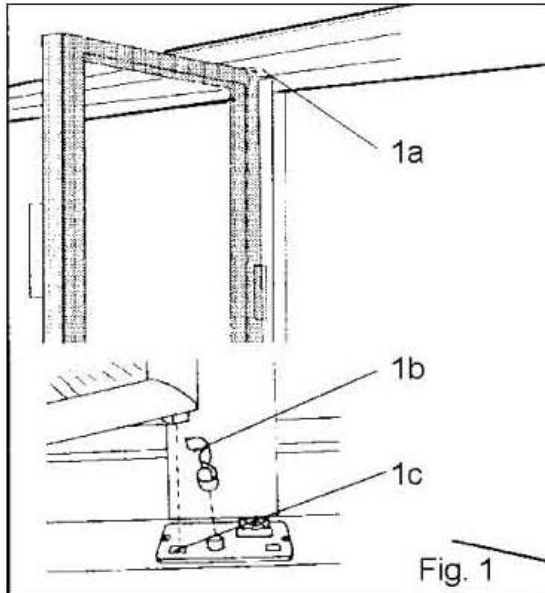


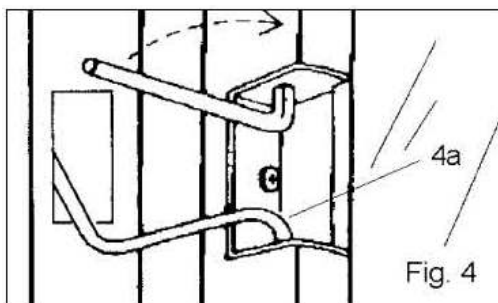
Diagram 14

Diagram 15

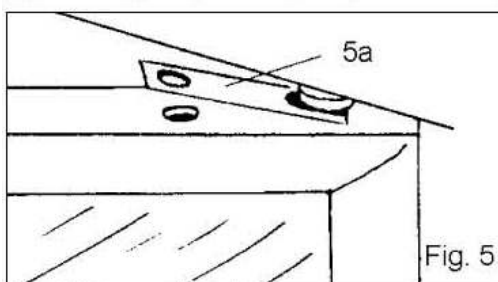
11. DOOR INSTALLATION REVERSIBLE DOOR



1. Lift door into frame to engage top door hinge pin into frame (1a).
2. Rest door on bottom of frame. Plug in door plug into frame and press it into the frame (2). Fasten cover plate where door cord exits (3).
3. Place door hold-open spring (1b) on mounting plate pin. Put door on hinge plate so that door pin fits into hole (1c). Swing door open or closed to drop door into proper position. Attention! Check that cable runs smoothly in door profile (4a).



4. Adjust door closing tension by inserting an allen key (art No. 711301) into frame hole and rotate tool approx. three “clicks”. Proper tension is achieved when door is opened approx. 20mm. and then closes by itself when released.



5. Screw on lock plate (5a) on top of door. It is important that this is done, in order to lock door safely in frame.

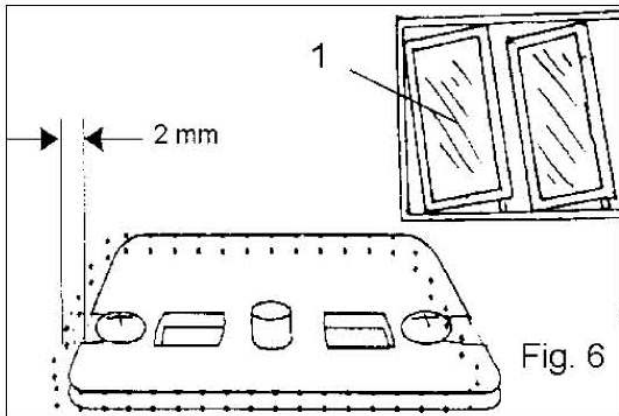


Fig. 6

6. After installation, if door appears to sag (1), unscrew screws on bottom mounting plate and adjust it to desired position. Bottom plate can be moved 2mm. in each direction.

Attention! Screws must be tightened even if bottom plate has not been adjust.

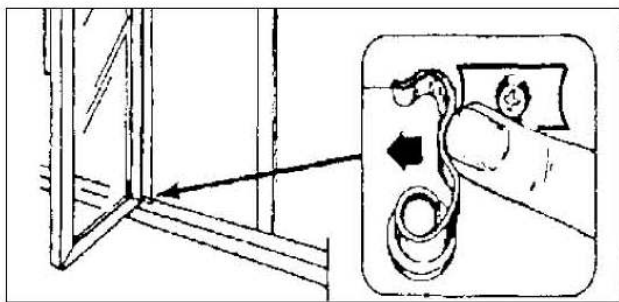


Fig. 7

DOOR HOLD-OPEN RETAINER

Attention! To keep door in open position, open door fully and push hold-open retainer, according to fig. To release, close door.

DOOR DISASSEMBLY

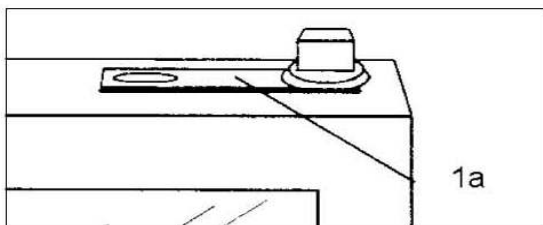


Fig. 1

1. Disconnect from power source. Open door and remove lock plate (1a, fig1).

2. Lift door up and out to disengage bottom door pin from mounting plate and rest door on bottom of frame. (fig 2)

3. Remove cover plate for door cable and disconnect electrical cord. (fig 3)

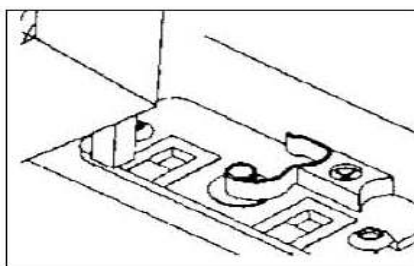


Fig. 2

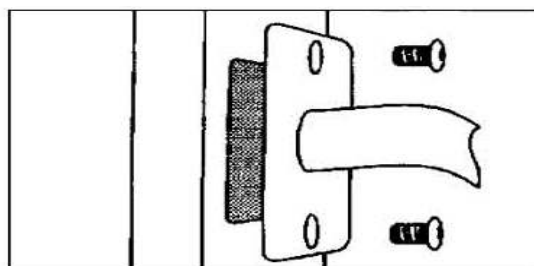
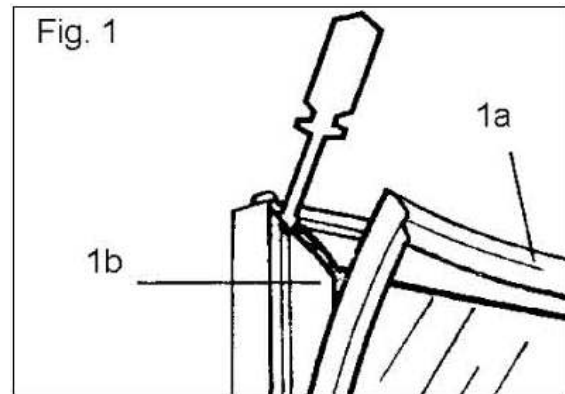


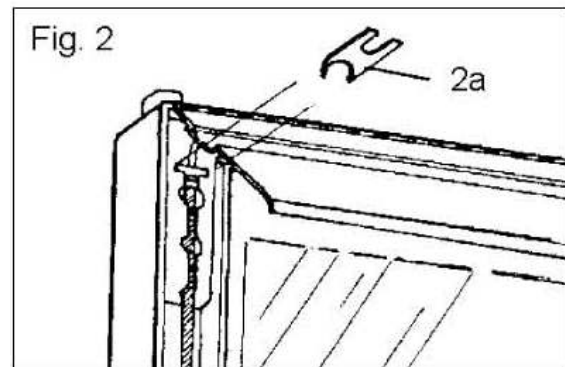
Fig. 3

DOOR SPRING REPLACEMENT

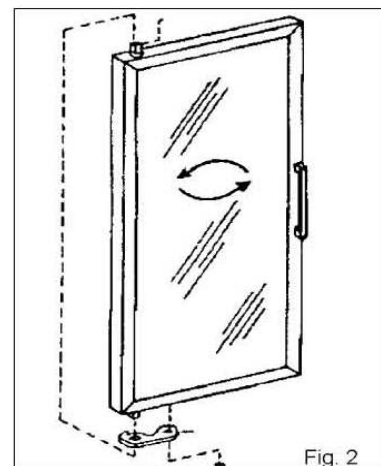
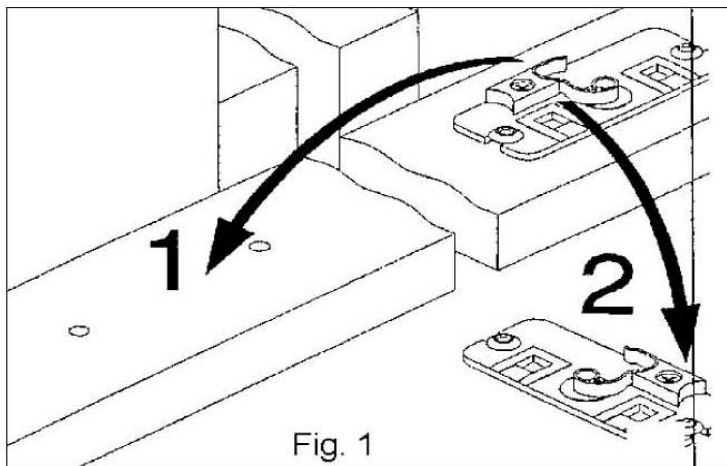
1. Disconnect frame from power source. Remove door as shown in “Door disassembly”. Remove magnetic gasket (1a) by starting on the upper corner and work your way down. Remove plastic cover (1b) with a screw driver, starting in the upper corner. If plastic cover is damaged it has to be replaced.



2. Remove locking pin (2a).
3. Replace spring mechanism (see page 10) Refit plastic cover by using a rubber hammer to get it into position properly. Use your finger to press magnetic gasket back into position. Reinstall door according to “Door installation”.



DOOR HINGE CONVERSION

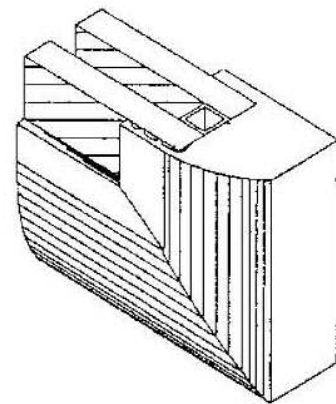
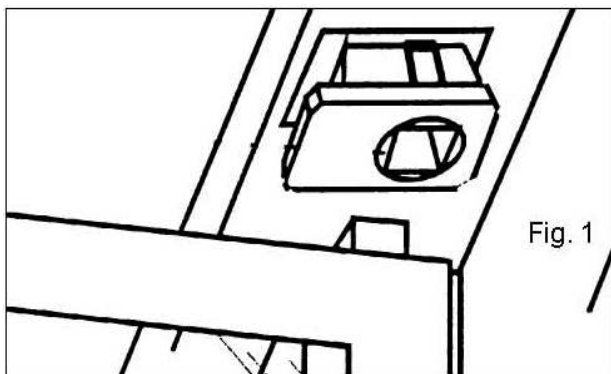


1. Disconnect frame from power source. Remove door according to “Door disassembly”.
2. Remove door stop plate from bottom of door to opposite side, so that straight side of door stop plate faces front of door, fig 2.
3. Remove mounting plate and protection plate and attach them on opposite side (1:1). Place hold open assembly on opposite side of mounting plate (1:2) Reinstall door according to “Door installation”.

12. LIGHTING

REPLACING PLASTIC BUSHING

1. Remove door from frame.
2. How to replace plastic bushing is depending on type of door profile. If door profile is curved, hole of bushing should be placed outwards (fig 1a).
3. Remove hinge bushing with a screw driver. Install new bushing.
4. Reinstall door.



Standard door profile

13. ELECTRICAL CONNECTION

Details below must be examined while making the electrical connections.

Attention!! Examine the definition stickers, informations and electricity diagrams on the product guide before making the electric connections.

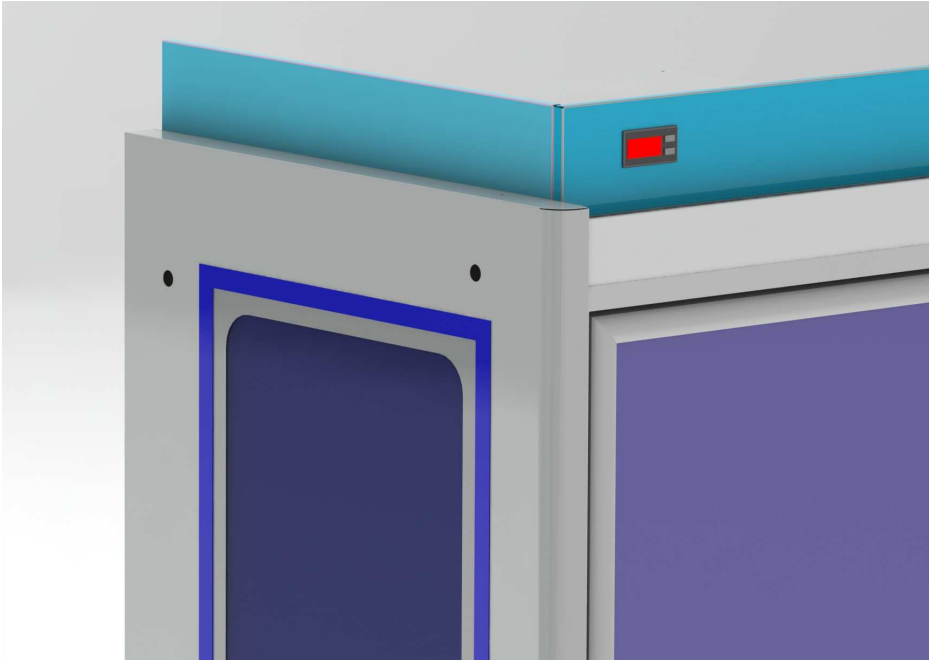
- Protective automatic key and main power switch must be used against electric current on the refrigerator.
- Users must know where the key is kept in case of an emergency
- **Electric systems must be grounded.**
- Maximum voltage difference must be guaranteed at $\pm 6\%$.
- The thickness of the cable on the energy line must be at least 2,5 mm² and must put up with high current
- The cable of energy line must not be longer than 4-5m, depends on the conditions if cable length increases the cable cross-section must be increased too.

- For making the refrigerator works regularly, be sure you obtained the heat and the damp values which are regarded at EN441 and be sure the climate class is 3.

The personnel who will interfere to the refrigerator must have electricity certificate.

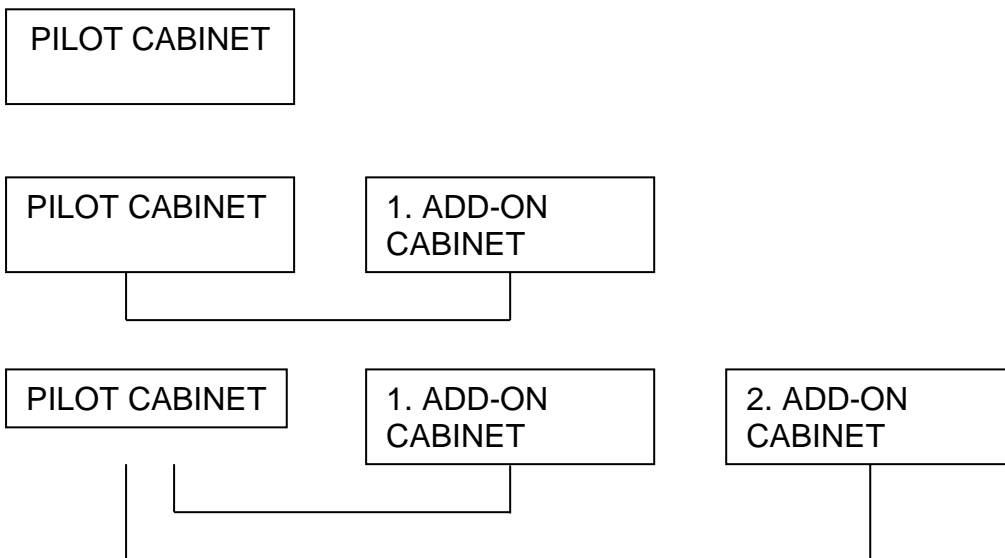
14. TEMPERATURE CONTROL

Heat control is operated by a digital thermostat at the left upper side (Diagram 16)



Şekil 16

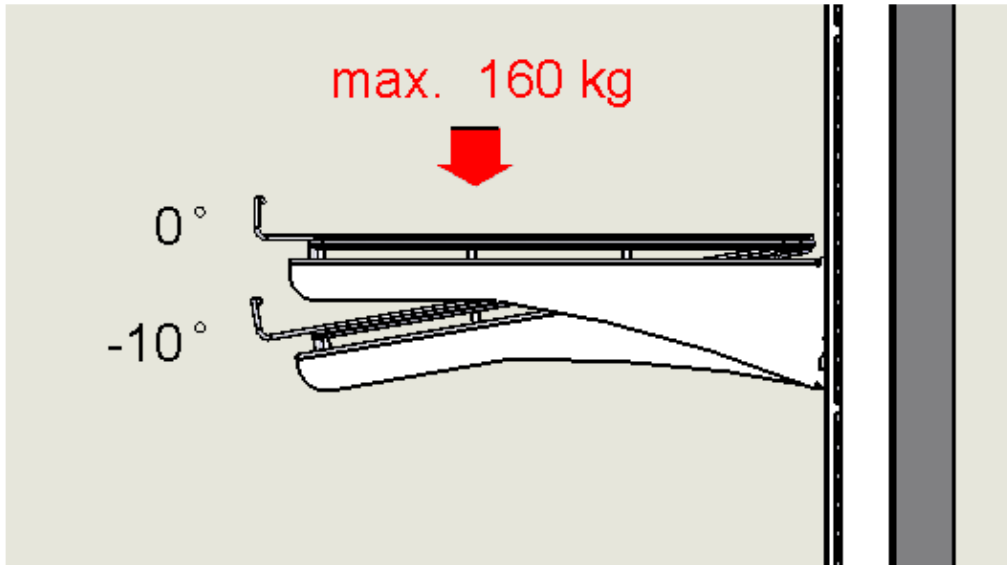
Important: Maximum 3 units of cabinet's control must be obtained with a pilot module.



15.Loading Goods

These important rules must be followed while the refrigerator is loading.

- Locate the goods to the shelves tidy. Maximum loading limit is approximately 160 kg. on a shelf. Do not load over 160 kg.
 - Shelves can be adjusted in different angles. (0°,10°) (Diagram17)

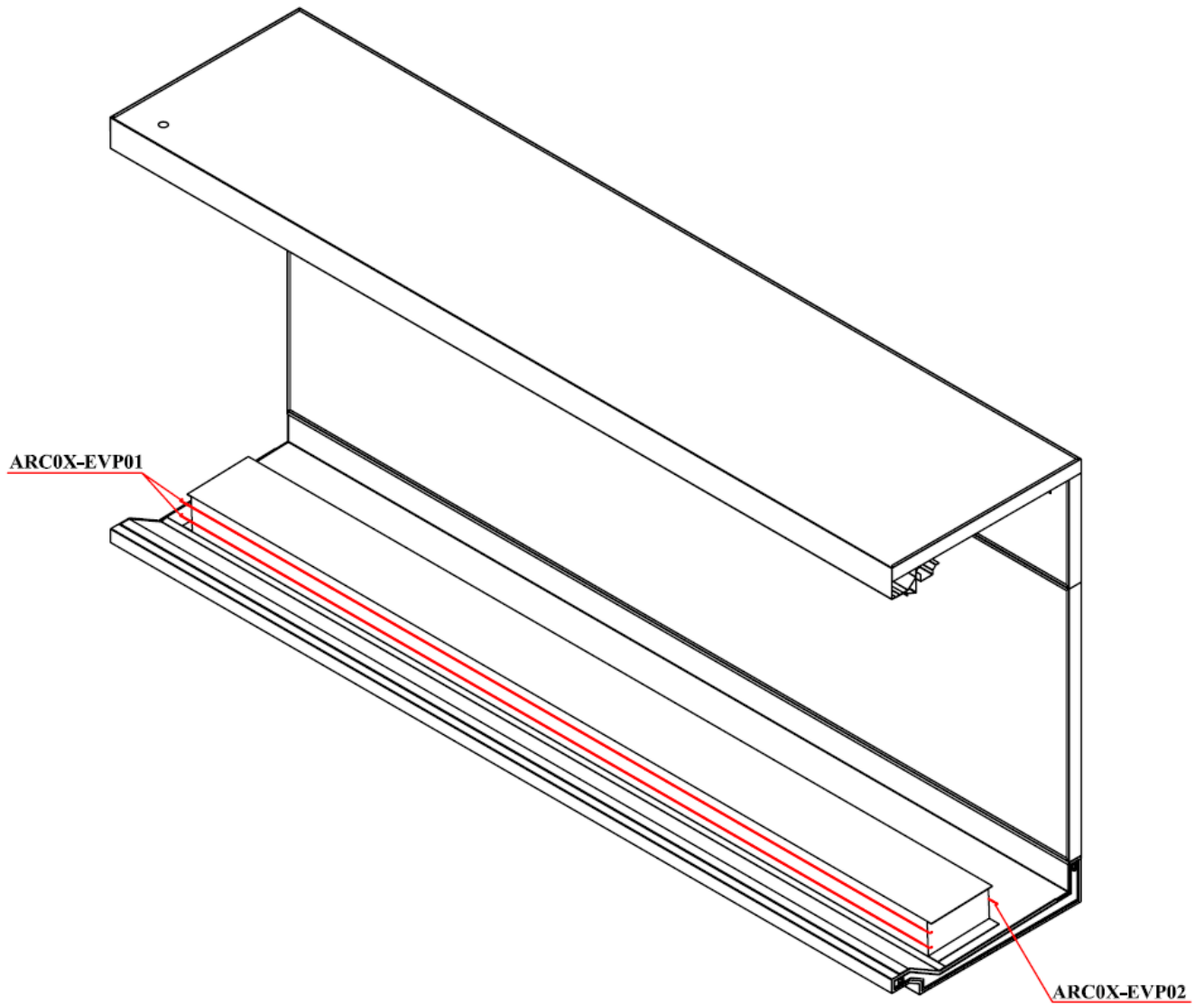


Şekil 17

- For being able to load the refrigerator fully adjust the goods and do not leave empty spaces
- Leave at least 30mm space between the loaded goods and the shelves.
- Make the loading as the same product which is loaded firstly would always be loaded.
- Do not load any goods to the refrigerator except the refrigerator's shelves and base displates.

16.DEFROST AND DRAINAGE

FGD-01 Defrosting is obtained by resistance.



Sending the defrost water out;

- Make the base connection with the refrigerator's drainage piece.
- Prepare the water siphon and connect it to the water way

Way to prepare the water emptying system



Diagram 18

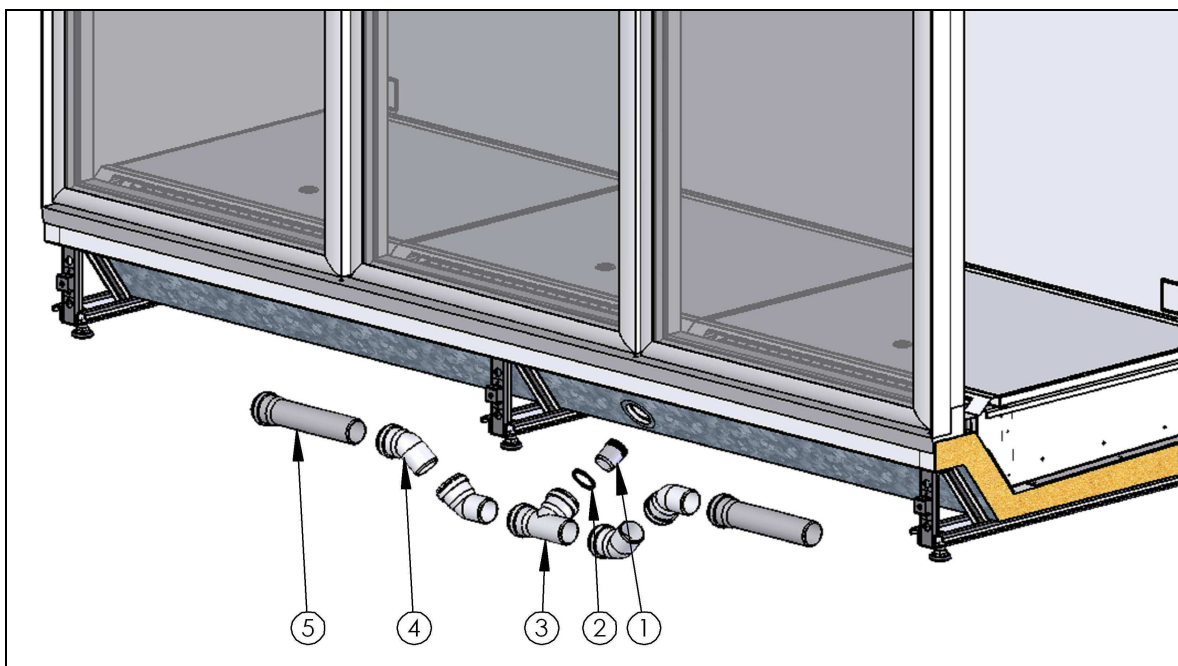


Diagram 19

POZ NO	MATERIAL NAME	QUANTITY			
		2D	3D	4D	5D
1	DRAIN TRAPS	1	1	1	2
2	DRAIN SEAL 50mm-40mm	1	1	1	2
3	WATER PIPE T 50 mm	1	1	1	2
4	WATER PIPE ELBOW 45	4	4	4	8
5	WATER PIPE D:50 mm	2	2	2	3

- There must be some water placed as much as it fills the water emptying siphon before the refrigerator's first working attempt is made. These procedures prevent the bad smell of refrigerator, avoiding of cold weather and also prevent refrigerator perspiration.

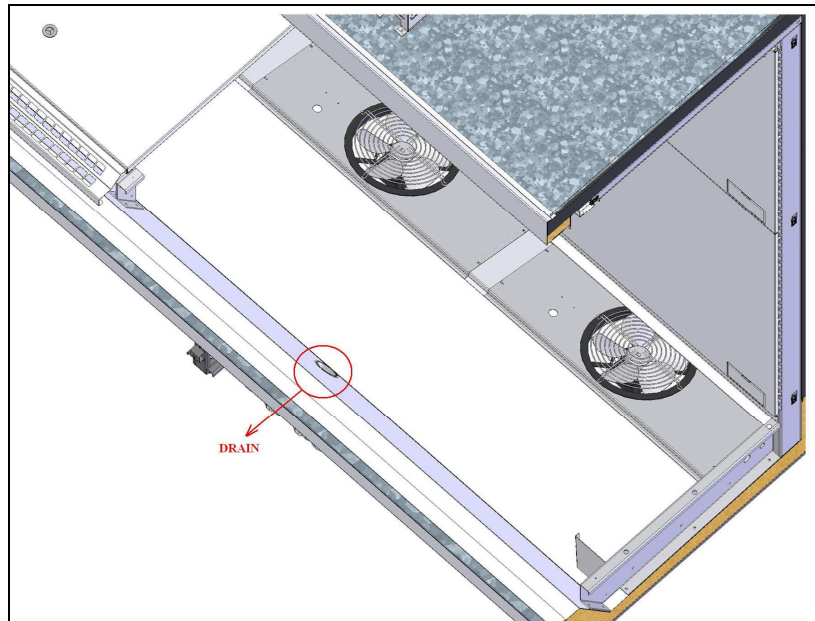
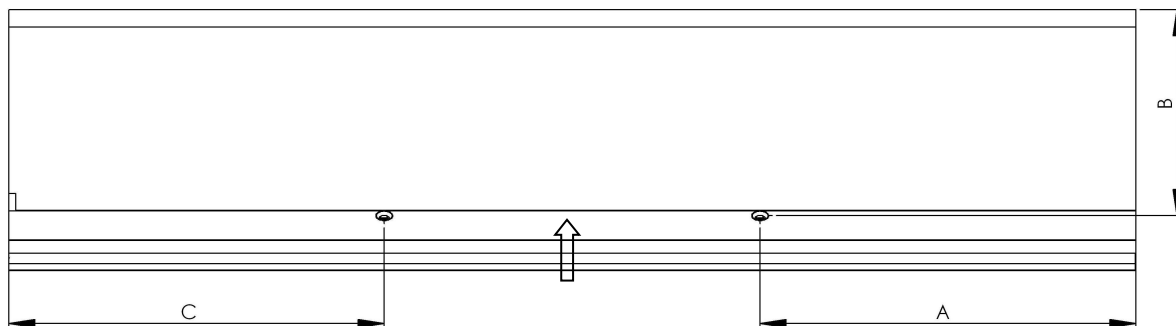


Diagram 20

The drainage places of the refrigerator as to module is shown below

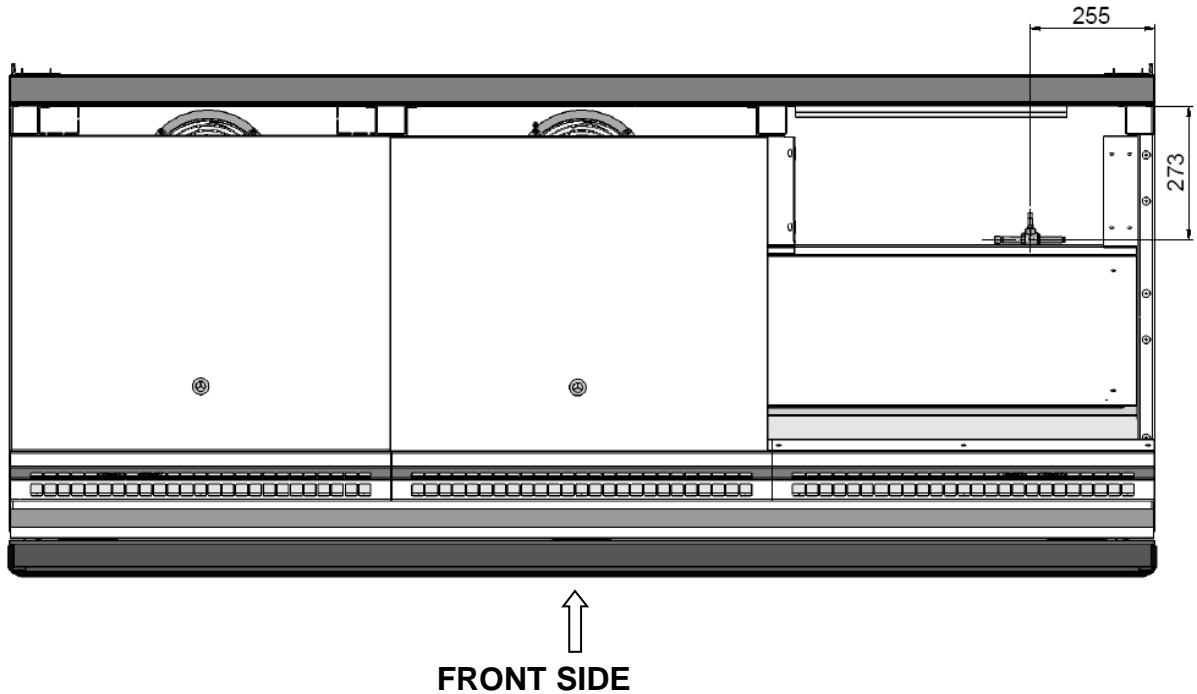


FRONT SIDE

MODÜL	2D	3D	4D	5D
A (mm)	531	922	1312	1299
B (mm)	715	715	715	715
C (mm)	-	-	-	1299

17. VALVE LOCATION

The valve on the FGD refrigerator is located on right part of the refrigerator behind the evaporator near the fan sheet



18. CARE CLEANING AND TECHNICAL SERVICE

ATTENTION MAKE SURE THAT THE CABINET IS SWITCHED OFF FROM THE MAIN FUSE AND NO LIVE ELECTRICAL CONNECTION BEFORE CLEANING AND MAINTANENCE.

Long life and satisfactory performance of any equipment is dependent upon the care it receives. To ensure long life, proper sanitation and minimum maintenance costs, these display Cases should be thoroughly cleaned, all debris removed and the interiors washed down, weekly.



Before starting the cleaning process switch off the cooling and lighting buttons. Replace the goods to another freezer during the cleaning process. Do not take of the bases of the cabinet.

Cleaning must be done as described below.

Never use alcohol during cleaning

Use handcovers to protect your hands

- **FIRST TIME CLEANING BEFORE OPERATING**

After unloading the cabinet from the container

- Make sure that the package of the cabinet hasn't been harmed
- Open the coverage of the cabinet carefully.
- Make sure that all of the components are on the cabinet
- Clean the product Daily and weekly according to the description
- In case of any problem call the service or the supplier
- **Cleaning of outer surface components weekly and daily**
 - Clean the outer components weekly with detergent or soap
 - Clean the cabinet with a smooth clothing and clean water
 - **NEVER USE ABRASIVE CLEANSERS OR SCOURING PADS.**
 - No water on the electrical components and fans.
 - Plexiglass kısımları temizlemek için alkol kullanmayın
- **Internal component cleaning(monthly)**

Aim is preventing your products from the possible bacterias

- Empty the cabinet
 - disconnect the electricity and switch of the fuse
- remove all movable parts (shelves bases) and clean them with a warm water with detergent. And maket hem dry carefully
- clean the base carefully and make sure that no parts fall down to the fan part.
- In case you recognize any problem with the cabinet call the service

Long life and satisfactory performance of any equipment is dependent upon the care it receives. To ensure long life, proper sanitation and minimum maintenance costs, these display Cases should be thoroughly cleaned, all debris removed and the interiors washed down, weekly.



Fan Plenum

To facilitate cleaning, the fan plenum is hinged and also fastened with screws at each end. After cleaning be sure the plenum is properly lowered into position and that screws are reinstalled OR PRODUCT LOSS WILL RESULT due to improper refrigeration.

Exterior Surfaces

The exterior surfaces should be cleaned with a mild detergent and warm water to protect and maintain their attractive finish. **NEVER USE ABRASIVE CLEANSERS OR SCOURING PADS.**

Interior Surfaces

The interior surfaces may be cleaned with most domestic detergents, ammonia based cleaners and sanitizing solutions with no harm to the surface.

DO NOT USE:

- Abrasive cleansers and scouring pads, as these will mar the finish.
- Solvent, oil or acidic based cleaners on any interior surfaces.

! WARNING

Do NOT use HOT water on COLD glass surfaces. This can cause the glass to shatter and could result in personal injury. Allow glass fronts, ends and service doors to warm before applying hot water.

Do:

- Remove the product and all loose debris to avoid clogging the waste outlet.

- Store product in a refrigerated area such as a freezer. Remove only as much product as can be taken to the freezer in a timely manner.
- **First turn off refrigeration, then disconnect electrical power.**
- Thoroughly clean all surfaces with soap and hot water. **DO NOT USE STEAM OR HIGH WATER PRESSURE HOSES TO WASH THE INTERIOR.**
THESE WILL DESTROY THE DISPLAY CASES
SEALING CAUSING LEAKS AND POOR PERFORMANCE.
- Remove screws and lift fan plenum for cleaning. BE SURE TO REPOSITION THE FAN PLENUM AFTER CLEANING DISPLAY CASE.
- Take care to minimize direct contact between fan motors and cleaning or rinse water.
- Rinse with hot water, but do NOT flood. **NEVER INTRODUCE WATER FASTER THAN THE WASTE OUTLET CAN REMOVE IT.**
- Allow Display Cases to dry before resuming operation.
- After cleaning is completed, turn on power and refrigerant to the Display Case.

Verify that Display Case is working properly

REPLACING FAN MOTORS AND BLADES

See cross section for location of evaporator fans. Should it ever be necessary to service or replace the fan motors or blades be certain that the fan blades are re-installed correctly. **THE BLADES**

MUST BE INSTALLED WITH RAISED EMBOSSING (PART NUMBER ON PLASTIC BLADES) POSITIONED AS INDICATED ON THE PARTS LIST. (Refer to the case data sheet for each model.)

For access to these fans:

1. Turn off power.
2. Remove bottom display pans.
3. **Disconnect fan from wiring harness.**
4. Remove fan blade.
5. Lift fan plenum and remove screws holding bottom of motor to fan basket.
6. Replace fan motor and blade.
7. Lower fan plenum.
8. Reconnect fan to wiring harness.
9. Turn on power.
10. Verify that motor is working and blade is turning in the correct direction.
11. Close air gaps under fan plenum. Warmer air moving into refrigerated air reduces effective cooling. If the plenum does not rest against the case bottom without gaps, apply foam tape to the bottom of the fan plenum to reduce improper air movement. Use silicone sealant to close other gaps.

12. Replace display pans. Bring Display Case to operating temperature before restocking.

Cleaning Instructions

After cleaning process assembly all the removable parts to the cabinet and switch on the cabinet, and load the cabinet with your goods

Attention : Make sure all of the fans, switches electrical cables and other possible electrical equipment are dry.

▪ **Technical service:**

Please read the manual carefully so that the operator will be able to help you properly.

➤ Make sure the ambient and humidity is between the indicated range. Check the air conditioning system of the store is operating properly

➤ No direct sunlight on the cabinets and foods. In order to prevent it apply films to the Windows of store

➤ No direct spot lights on the cabinets.

➤ Do not place any goods that can avoid the air suction on the grid.

➤ Only use the cabinet for the cold packs

➤ Make sure that the cabinet operates regularly

➤ Do not over load the cabinet. Obey the loading limits

➤ In case of any break down take the goods to a different freezer.

➤ Any screw falls or lamp breaks change them with the new ones.

➤ Check the automatic defrost periodically

➤ Make sure that there is no abnormal condensation. If so please call the service

➤ Obey the periodical maintenance times

IN CASE OF ANY BREAK DOWN:

Please check

- Cooling switch is on?
- Everything is ok with the fuse box?
- Check if the electricity is live or not?

If everything is ok then there can be a problem with the multicompressor set or piping line CALL THE TECHNICAL SERVICE. Take the frozen food packs to a different freezer till the service comes.

IN CASE OF GAS LEAKAGE OR FIRE; If there is no air circulation do not stay at the closed areas. Unplug the cabinet. In case of fire do not use water. You can use only fire extinguisher

19. Recycle Parts

All countries are disposing of waste according to EU laws and norms

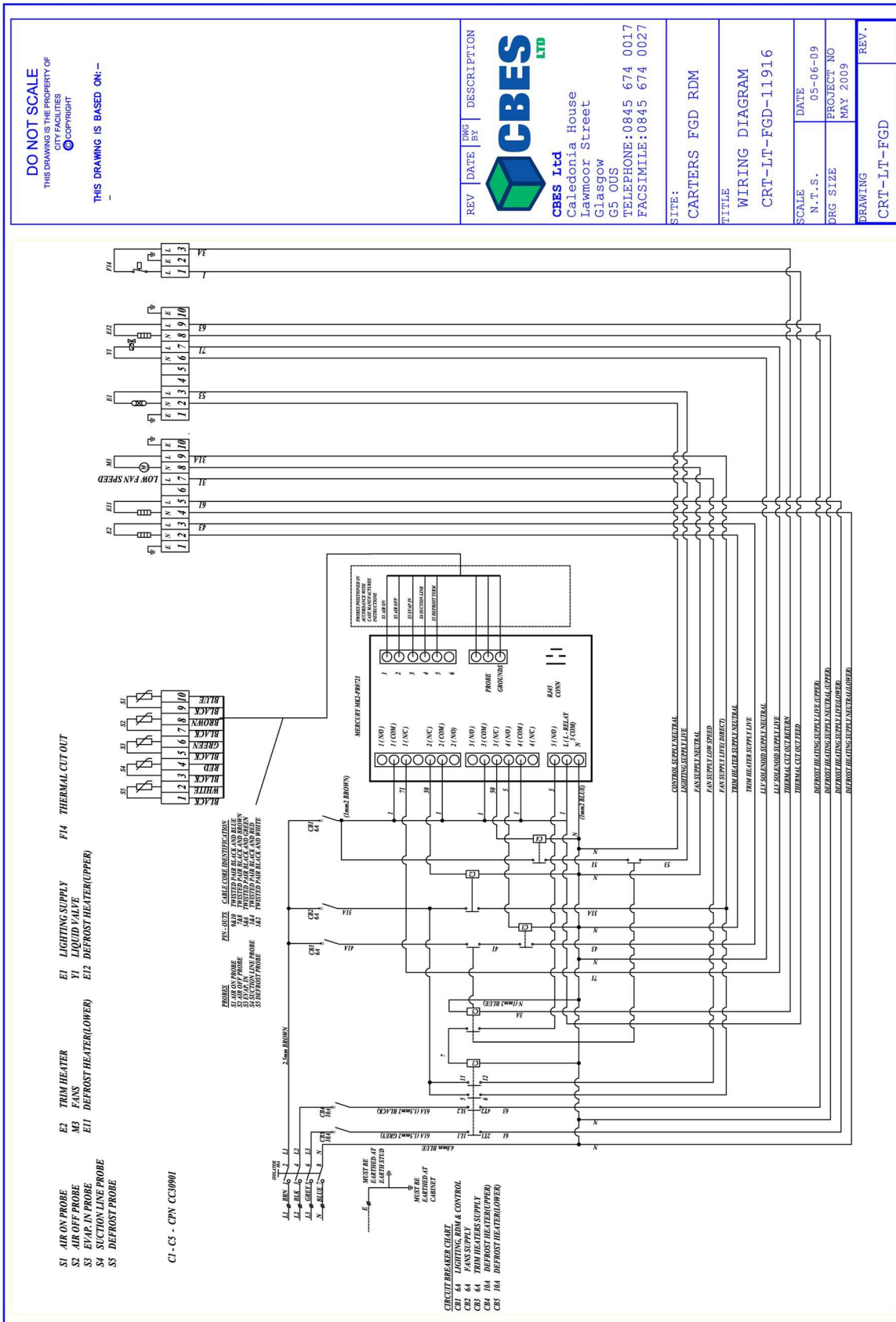
Current Recycle Parts on the case

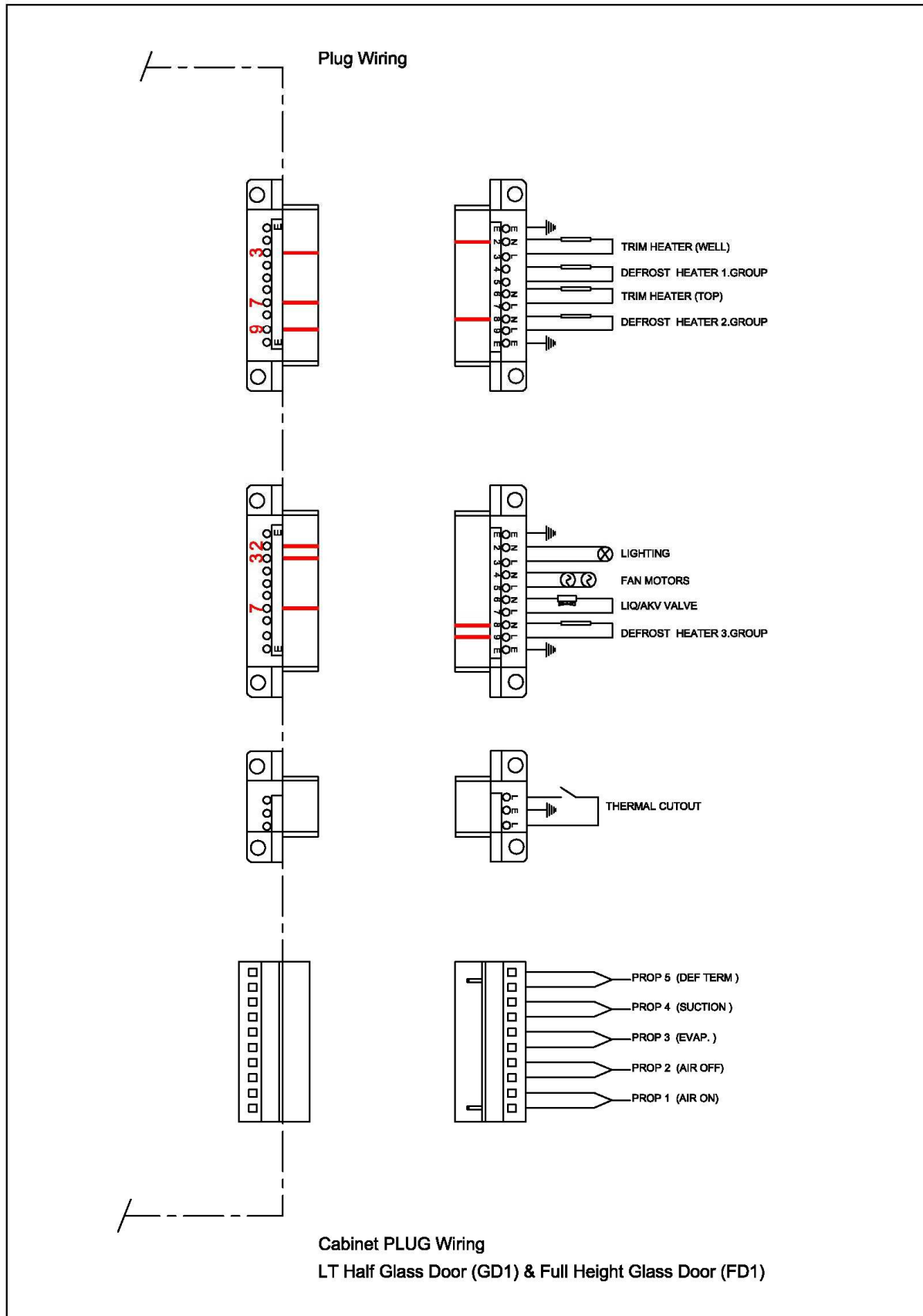
- **Painted Metals** :Pillars ,shelves ,legs, back panel, base tray, ceiling
- **Copper, Aluminium** :Evaporator and electrical parts
- **Stainless Steels** :Bottom panels ,painted panels ,basic parts , base tray
- **Polyurethane** :Thermal injection
- **Thermopane** :Glass parts
- **PVC** :Handrails
- **Polystyrene** :Side endwalls
- **Polycarbon** :Led Lighting cover

FGD01 PARCA LISTESİ					
NO	PARCA ADI	ADET			
		2D	3D	4D	5D
1	CERCEVE 1639 x 1562 mm M2 NEGATIF (T5) - SCHOTT	1 ad.			
	CERCEVE 1639 x 2343 mm M3 NEGATIF (T5) - SCHOTT		1 ad.		
	CERCEVE 1639 x 3124 mm M4 NEGATIF (T5) - SCHOTT			1 ad.	
	CERCEVE 1639 x 3898 mm M5 NEGATIF (T5) - SCHOTT				1 ad.
2	KAPAK 760 x 1601mm NEGATIF - SCHOTT	2 ad.	3 ad.	4 ad.	5 ad.
3	LED AYDINLATMA	3 ad.	4 ad.	5 ad.	6 ad.
4	FLORASAN TÜPÜ	3 ad.	4 ad.	5 ad.	6 ad.
5	DEEP FREZE TAMPON PLASTIK PROFILI 2D	1 ad.			
	DEEP FREZE TAMPON PLASTIK PROFILI 3D		1 ad.		
	DEEP FREZE TAMPON PLASTIK PROFILI 4D			1 ad.	
	DEEP FREZE TAMPON PLASTIK PROFILI 5D				1 ad.
6	FGD01 BAZA 2D BOYALI	1 ad.			
	FGD01 BAZA 3D BOYALI		1 ad.		
	FGD01 BAZA 4D BOYALI			1 ad.	
	FGD01 BAZA 5D BOYALI				1 ad.
7	GLD (AHOLD) BAZA LASTIGI (RAL 9005 MAT) 60026 - 4050 mm	0,4 ad.	0,6 ad.	1 ad.	1 ad.
8	DEEP FREZE TAMPON PLASTIK PROFILI 2D	1 ad.			
	DEEP FREZE TAMPON PLASTIK PROFILI 3D		1 ad.		
	DEEP FREZE TAMPON PLASTIK PROFILI 4D			1 ad.	
	DEEP FREZE TAMPON PLASTIK PROFILI 5D				1 ad.
9	FGD01 ALT DEKOR 2D BOYALI	1 ad.			
	FGD01 ALT DEKOR 3D BOYALI		1 ad.		
	FGD01 ALT DEKOR 4D BOYALI			1 ad.	
	FGD01 ALT DEKOR 5D BOYALI				1 ad.
10	TAHLIYE PVC DIRSEK Q:40mm 45 DERECE (100011)	2 ad.	2 ad.	2 ad.	4 ad.
	TAHLIYE PVC DIRSEK Q:40mm 90 DERECE (100011)	1 ad.	1 ad.	1 ad.	2 ad.
11	FGD01 ALT DEKOR TRAVERSI 2D	1 ad.			
	FGD01 ALT DEKOR TRAVERSI 3D		1 ad.		
	FGD01 ALT DEKOR TRAVERSI 4D			1 ad.	
	FGD01 ALT DEKOR TRAVERSI 5D				1 ad.
12	FGD01 ON BAZA BAGLANTI SACI				
13	CIVATA AYAK M16*90 (LASTIKLI)	4 ad.	6 ad.	6 ad.	6 ad.
14	GLD ON EMIS AYAGI SAG BOYALI	1 ad.	2 ad.	3 ad.	4 ad.
	GLD ON EMIS AYAGI SOL BOYALI	1 ad.	2 ad.	3 ad.	4 ad.
15	ARCTIC EVAPORATOR SACI 2D	1 ad.			
	ARCTIC EVAPORATOR SACI 3D		1 ad.		
	ARCTIC EVAPORATOR SACI 4D			1 ad.	
	ARCTIC EVAPORATOR SACI 5D				1 ad.
16	GLD ON EMIS BOYALI	2 ad.	3 ad.	4 ad.	4 ad.
	GLD ON EMIS 5D BOYALI				1 ad.
17	GLD FAN SACI ALT TRAVERSI	2 ad.	3 ad.	4 ad.	5 ad.
18	GLD FAN SACI YAN	2 ad.	2 ad.	2 ad.	2 ad.
	GLD FAN SACI ORTA		1 ad.	2 ad.	3 ad.
19	GLD ARA ORTME SACI	1 ad.	2 ad.	3 ad.	4 ad.
20	EBM M1G055-BD91-12 1600 rpm / D:AO 230 mm a:28	2 ad.	3 ad.	4 ad.	5 ad.
21	GLD ARKA TAVA OTURTMA	1 ad.	2 ad.	3 ad.	4 ad.
22	FAN MUHAFAZA D:230 mm CR-NI	2 ad.	3 ad.	4 ad.	5 ad.

FGD01 PARCA LISTESI					
NO	PARCA ADI	ADET			
		2D	3D	4D	5D
23	GLD TAVAN SACI 2D	1 ad.			
	GLD TAVAN SACI 3D		1 ad.		
	GLD TAVAN SACI 4D			1 ad.	
	GLD TAVAN SACI 5D				1 ad.
24	GLD ARA KAT SACI BOYALI	2 ad.	3 ad.	4 ad.	5 ad.
25	TAVA PLASTIGI				
26	GLD TAVA	2 ad.	3 ad.	4 ad.	4 ad.
	GLD TAVA 5D				1 ad.
27	GLD (AHOLD) RAF KOLU	20 ad.	30 ad.	40 ad.	50 ad.
28	GLD (AHOLD) RAF TELI	10 ad.	15 ad.	20 ad.	25 ad.
29	GLD ARKA TEL ALT-SAG BOYALI	1 ad.	1 ad.	1 ad.	1 ad.
	GLD ARKA TEL ALT-ORTA BOYALI		1 ad.	2 ad.	3 ad.
	GLD ARKA TEL ALT-SOL BOYALI	1 ad.	1 ad.	1 ad.	1 ad.
30	DEEP FREEZE PROB YUVASI KAPAGI (100006) RAL 9003	6 ad.	6 ad.	6 ad.	6 ad.
31	FGD01 ARKA TEL UST-SAG BOYALI	1 ad.	1 ad.	1 ad.	1 ad.
	FGD01 ARKA TEL UST-ORTA BOYALI		1 ad.	2 ad.	3 ad.
	FGD01 ARKA TEL UST-SOL BOYALI	1 ad.	1 ad.	1 ad.	1 ad.
32	SOLAR TERMOMETRE	1 ad.	1 ad.	1 ad.	1 ad.
33	GLD SOLAR TERMOMETRE SACI BOYALI	1 ad.	1 ad.	1 ad.	1 ad.
34	FGD01 UST DEKOR 2D	1 ad.			
	FGD01 UST DEKOR 3D		1 ad.		
	FGD01 UST DEKOR 4D			1 ad.	
	FGD01 UST DEKOR 5D				1 ad.
35	FGD TAC SACI 2D BOYALI	1 ad.			
	FGD TAC SACI 3D BOYALI		1 ad.		
	FGD TAC SACI 4D BOYALI			1 ad.	
	FGD TAC SACI 5D BOYALI				1 ad.
36	ARCTIC ELEKTRIK KUTUSU KAPAGI	1 ad.	1 ad.	1 ad.	1 ad.
37	ARCTIC ELEKTRIK KUTUSU	1 ad.	1 ad.	1 ad.	1 ad.
38	GLD DRIVER KUTUSU KAPAGI	1 ad.	1 ad.	1 ad.	1 ad.
39	GLD DRIVER KUTUSU	1 ad.	1 ad.	1 ad.	1 ad.
40	FGD 01 TRAFO KAPAK SACI	1 ad.	1 ad.	1 ad.	1 ad.
41	DOLAP BIRLESTIRME SACI	4 ad.	4 ad.	4 ad.	4 ad.
42	MDM 03 TAC SACI YAN DESTEGI_SAG	1 ad.	1 ad.	1 ad.	1 ad.
	MDM 03 TAC SACI YAN DESTEGI_SOL	1 ad.	1 ad.	1 ad.	1 ad.
43	FGD 01 TAC YAN SACI_SAG	1 ad.	1 ad.	1 ad.	1 ad.
	FGD 01 TAC YAN SACI_SOL	1 ad.	1 ad.	1 ad.	1 ad.
44	FGD 01 YAN MONTAJLI_SAG	1 ad.	1 ad.	1 ad.	1 ad.
	FGD 01 YAN MONTAJLI_SOL	1 ad.	1 ad.	1 ad.	1 ad.
45	FGD 01 CAMLI YAN MONTAJLI_SAG	1 ad.	1 ad.	1 ad.	1 ad.
	FGD 01 CAMLI YAN MONTAJLI_SOL	1 ad.	1 ad.	1 ad.	1 ad.
46	FGD 01 YAN BAZA SACI	1 ad.	1 ad.	1 ad.	1 ad.
47	EPHESUS BAZA LASTIGI_954 MM	1 ad.	1 ad.	1 ad.	1 ad.

21. ELECTRICAL DIAGRAM







Cool Solutions Ltd

4 Brook View
Grange Park
Northampton
NN4 5DR

01604 767 338
07840 354 268

16th November 2010

Mr Brian Churchyard
Refrigeration Manager
ASDA Stores Ltd

Leeds

Brian,

I attended Ahmet Yar's Izmir premises on 15th September and carried out a temperature validation check on an Ahmet Yar 3door, FGD Ice Cream cabinet. The cabinet was internally fitted with 5 shelves and a base.

The test was conducted in test room No.1 which was maintained at ISO Climate Class3 conditions of 25°C and 60%RH for the 24 hour test period. The cabinet was loaded on all shelves with Tylose packs, two packs high, as per EN23953.

During defrost the warmest pack (shelf5, right hand, front, bottom) reached -12.2°C, it returned to -20.8°C during refrigeration and averaged -18.8°C over the 24 hour test. The coldest pack (base, left hand, rear, bottom) was -24.4°C and so I can confirm that the cabinet meets ASDA's requirements of -12°C/-18°C product temperature in a 25°C/60%RH environment.

The average of all packs over the 24 hours was -19.9°C.

There was no visible condensation on the endwalls or on the doors. The doors did mist up during the opening tests but this condensation cleared away in 60 seconds.

Yours sincerely

John D S Lilburn

CAREL PARAMETERS		ISLAND FREEZER	WALL FREEZER	COMBI FREEZER	UPRIGHT FREEZER	COUNTER	MULTIDECK CABINET
/Pro (Prob parameters)							
/2	Measurement stability		4	4	4	4	4
/4	Virtual Prob: Blowing and suction probes rates for regulation		100	100	100	50	50
	0= Blow probe						
	100= Suction probe						
/5	°C or °F selection		0	0	0	0	0
	0=°C, 1=°F						
/6	Decimal		1	1	1	1	1
	0=active,						
	1= inactive						
rHS	Virtual probe regulation rate to calculate glass temperature		20	20	20	20	20
	0= Blow probe						
	100= Suction probe						
/t	Are signals and alarms viewed in non-button terminal?		0	0	0	0	0
	0= inactive						
	1= active						
/t1	probe to be viewed in button terminal		12	12	12	12	12
	0 = Terminal inactive	8 =Serial probe 8					
	1 = Probe 1	9 =Serial probe 9					
	2 = Probe 2	10 =Serial probe 10					
	3 = Probe 3	11 =Serial probe 11					
	4 = Probe 4	12 = Control probe					
	5 = Probe 5	13 = Virtual probe					
	6 = Probe 6	14 = Set point					
	7 = Probe 7						
/t2	probe to be viewed in non-button terminal		12	12	12	12	12
	0 = Terminal inactive	8 =Serial probe 8					
	1 = Probe 1	9 =Serial probe 9					
	2 = Probe 2	10 =Serial probe 10					
	3 = Probe 3	11 =Serial probe 11					
	4 = Probe 4	12 = Control probe					
	5 = Probe 5	13 = Virtual probe					
	6 = Probe 6	14 = Set point					
	7 = Probe 7						

CAREL PARAMETERS			ISLAND FREEZER	WALL FREEZER	COMBI FREEZER	UPRIGHT FREEZER	COUNTER	MULTIDECK CABINET
/to	button/non-button terminal configuration		3	3	3	3	3	3
	Button terminal	Non-button terminal						
	0 Yes	yes						
	1 optional	yes						
	2 Yes	optional						
3 optional	optional							
/P1	S1 ,S2 , S3 (Group 1) probe type		0	0	0	0	0	0
	0 = NTC Standard Range -50T90°C							
	1 = PTC Standard Range -50T150°C							
	2 = PT1000 Standard Range -50T150°C							
	3 = NTCL243 Standard Range -50T90°C							
/P2	S4 ,S5 (Group2) probe type		0	0	0	0	0	0
	0 = NTC Standard Range -50T90°C							
	1 = PTC Standard Range -50T150°C							
	2 = PT1000 Standard Range -50T150°C							
	3 = NTCL243 Standard Range -50T90°C							
/P3	S6 (Group3) probe type		4	4	4	4	4	4
	0 = NTC Standard Range -50T90°C							
	1 = PTC Standard Range -50T150°C							
	2 = PT1000 Standard Range -50T150°C							
	3 = NTCL243 Standard Range -50T90°C							
4 = 0 to 5V ratiometric pressure transmitter								
/P4	S7, (Group4) probe type		0	0	0	0	0	0
	0 = NTC Standard Range -50T90°C							
	1 = PTC Standard Range -50T150°C							
	2 = PT1000 Standard Range -50T150°C							
	3 = NTCL243 Standard Range -50T90°C							
	4 = 0 to 5V ratiometric pressure transmitter							
	5 = 0 to 10 V input							
6 = 4 to 20 mA input								
/P5	S8 den S11 e (Group5) serial problar probe type		0	0	0	0	0	0

CAREL PARAMETERS		ISLAND FREEZER	WALL FREEZER	COMBI FREEZER	UPRIGHT FREEZER	COUNTER	MULTIDECK CABINET
CtL (Control)							
OFF	ON/OFF control unit on-off 0 = ON; 1 = OFF;	0	0	0	0	0	0
St	Set point	-20	-20	-20	-20	0	2
St2	Double thermostate control suction set value	50	50	50	50	50	50
rd	St set value difference	2	2	2	2	2	2
rd2	Double thermostate control suction set value difference 0.0 = Function inactive	0	0	0	0	0	0
r1	Allowed minimum set value	-24	-24	-24	-24	-4	-4
r2	Allowed maximum set value	-18	-18	-18	-18	4	4
r3	Defrost warning activation ending in time 0 = inactive, 1 = active	0	0	0	0	0	0
r4	Automatic night set point	0	0	0	0	0	0
r5	Will minimum and maximum temperatures be kept to which probe in the memory?		1	1	1	1	1
	0 = Monitoring inactive	6 = superheat temperature probe (tGS)					
	1 = Control probe (Sreg)	7 = saturated evaporation temperature probe (tEu)					
	2 = virtual probe (Sv)	8 = auxiliary defrost probe (Sd2)					
	3 = Blow probe (Sm)	9 = auxiliary probe (Saux)					
	4 = defrost probe (Sd)	10 = auxiliary probe 2 (Saux2)					
rt	Recorded min and max temperature monitoring time range	-	-	-	-	-	-
rH	Recorded max temperature	-	-	-	-	-	-
rL	Recorded min temperature	-	-	-	-	-	-
r6	Night Control probe 0 = virtual probe Sv; 1 = Suction probe Sr	0	0	0	0	0	0
ro	For Virtual Probe, probe error offset	0.0	0.0	0.0	0.0	0.0	0.0
r7	Master solenoid valve configuration 0 = local valve ;1 = network valve (connected to the Master)	0	0	0	0	0	0
rSu		0	0	0	0	0	0

CAREL PARAMETERS			ISLAND FREEZER	WALL FREEZER	COMBI FREEZER	UPRIGHT FREEZER	COUNTER	MULTIDECK CABINET
CMP (compressor)								
c0	Compressor and fan starting time delay		0	0	0	0	0	0
c1	Minimum time between successive start		0	0	0	0	0	0
c2	Compressor minimum OFF Time		0	0	0	0	0	0
c3	Compressor minimum ON Time		0	0	0	0	0	0
c4	Control probe error duty time. Compressor and solenoid outlet works for the time stated there		0	0	0	0	0	0
	holds for 15 minutes and works again.							
	0 = Compressor/valve always OFF; 100 = compressor/valve always ON							
cc	Continuous cycle time		1	1	1	1	1	1
c6	Post-continuous cycle alarm by-pass		60	60	60	60	60	60
c7	Maximum pump down time		0	0	0	0	0	0
Def (defrost)								
d0	Defrost type		4	0	0	0	0	0
	0 =temperature-based heater	4 =time and temperature-based heater defrost						
	1 = temperature-based hot gas	5 =temperature-based heater multiplied hotgas bypass						
	2 = temperature-based heater	6 =time-based heater multiplied hotgas bypass						
	3 = time-based hot gas							
d2	Defrost-end synchronization by Master		1	1	1	1	1	1
	0 = unsynchronous; 1 = synchronous							
d1	Time between defrosts		8	8	6	6	6	6
dt1	Defrost-end temperature, Evaporator Sd1		10	10	12	12	10	10
dt2	Defrost-end temperature,AUX Evaporator Sd2		10	10	12	12	10	10
dP1	Maximum Defrost time		35	35	40	45	45	45
dP2	Maximum Defrost time, AUX 2. Evaporator		35	35	40	45	45	45
d4	Initially defrost		0	0	0	0	0	0
	0 = No initial defrost ; 1 = inital defrost							
	(Master = network defrost; Slave = local defrost)							
d5	Defrost time delay at the beginning if d4=1		0	0	0	0	0	0
	0 = delay inactive							
d6	Terminal indicator status during defrost		2	2	2	2	2	2
	0 = Real temperature value and "dEF" flashes							
	1 = pre-defrost last temperature remains on the screen							
	2 = 'dEF' is viewed							
dd	Post-Defrost drip time		2	2	2	2	2	2
	0= No drip							

CAREL PARAMETERS		ISLAND FREEZER	WALL FREEZER	COMBI FREEZER	UPRIGHT FREEZER	COUNTER	MULTIDECK CABINET	
d7	defrost by-pass	0	0	0	0	0	0	
	0 = inactive ; 1 = active;							
d8	Alarm delay following defrost and door opening	30	30	30	30	30	30	
d9	Status of compressor protection times in hotgas bypass	1	1	1	1	1	1	
	0 = protection times are followed ; 1 = protection times are ignored							
Sd1	Defrost Probe value	-	-	-	-	-	-	
Sd2	Second Evaporator defrost probe value	-	-	-	-	-	-	
dC	Defrost time basis	0	0	0	0	0	0	
	0 = dl hour,dP1,dP2 and ddP minute; 1 = dl minute,Dp2 and ddP second							
d10	Time for defrost based on lamel temperature	0	0	0	0	0	0	
	0 = Function inactive							
d11	Temperature-based defrost activation temperature threshold	-30	-30	-30	-30	-30	-30	
d12	During Defrost, pressure transmitter alarm status	0	0	0	0	0	0	
	probe failure							failure in supervisor
	0 inactive							active
	1 active							active
	2 inactive							inactive
3 active	inactive							
dS1	Compressor stop time for successive defrost (when stops for this time, defrost ends,	0	0	0	0	0	0	
	0 = Function inactive							
dS2	Compressor operation time for successive defrost (defrost starts when the	120	120	120	120	120	120	
ddt	Defrost end temperature offset for Power defrost	0.0	0.0	0.0	0.0	0.0	0.0	
ddp	Defrost time offset for Power defrost	0	0	0	0	0	0	
dn	Nominal Defrost bypass time rate	75	75	75	75	75	75	
d1S	daily defrost based on td1 time zone	0	0	0	0	0	0	
	0 = inactive							8 = 3 hours 0 minute
	1 = 24 hours 0 minute							9 = 2 hours 40 minutes
	2 = 12 hours 0 minute							10 = 2 hours 24 minutes
	3 = 8 hours 0 minute							11 = 2 hours 11 minutes
	4 = 6 hours 0 minute							12 = 2 hours 0 minute
	5 = 4 hours 48 minutes							13 = 1 hour 0 minute
	6 = 4 hours 0 minute							14 = 30 minutes
7 = 3 hours 26 minutes								

CAREL PARAMETERS		ISLAND FREEZER	WALL FREEZER	COMBI FREEZER	UPRIGHT FREEZER	COUNTER	MULTIDECK CABINET
d2S	see d1S parameter for td1 time zone daily defrosts	0	0	0	0	0	0
dH1	Pumpdown time	0	0	0	0	0	0
	0= pump down inactive						
dHG	Multiplied hot gas bypass type	0	0	0	0	0	0
	0 = Compensator valve is OFF usually						
	1 = Compensator valve is ON usually						
ALM (Alarm)							
AA	Determination of temperature probe for AH and AL alarms		1	1	1	1	1
	1 = control (sreg)	8 = auxiliary defrost probe (Sd2)					
	2 = virtual (Sv)	9 = auxiliary probe (Saux)					
	3 = blow (Sm)	10 = auxiliary probe 2 (Saux2)					
	4 = defrost (Sd)	11 = ortam sıcaklığı (SA)					
	5 = suction (Sr)	12 = ortam nemi (SU)					
	6 = superheat temperature probe(tGS)	13 = cam sıcaklığı (Syt)					
	7 =SH pressure transmitter temperature equivalence (tEu)	14 = çığırma noktası (SdP)					
AA2	Determination of temperature probe for AH2 and AL2 alarms control AA parameter		5	5	5	5	5
A0	Low and high temperature alarm difference		2.0	2.0	2.0	2.0	2.0
A1	Threshold type for AL and AH 1. Alarm delays		0	0	0	0	0
	0 = relative AL and AH set value 1 = absolute AL and AH absolute values						
A2	Threshold type for AL2 and AH2 2. Alarm delays		0	0	0	0	0
	0 = relative AL and AH set value 1 = absolute AL and AH finite values						
AL	Low temperature 1. alarm threshold		4	4	4	4	4
AH	High temperature 1. alarm threshold		5	5	5	5	5
AL2	Low temperature 2. alarm threshold		0	0	0	0	0
AH2	High Temperature 2. alarm threshold		0	0	0	0	0
Ad	Low and high temperature alarm alarm delay		15	15	15	15	15
A4	ID1 digital input configuration in S4 input		0	0	0	0	0
	0 = input is not active	5 = kapı switchi konfigürasyonu kompresör ve fanlar OFF					
	1 = momentary external alarm	6 = uzaktan ON/OFF					
	2 = delayed external alarm	7 = perde switchi					
	3 = defrost activation	8 = sürekli çevrim başlama / durma					
	4 = defrost starting	9 = ışık sensörü					

CAREL PARAMETERS		ISLAND FREEZER	WALL FREEZER	COMBI FREEZER	UPRIGHT FREEZER	COUNTER	MULTIDECK CABINET
A5	ID2 digital input configuration in S5 input, see the list in A4 parameter	0	0	0	0	0	0
A6	In the event of external alarm, solenoid/compressor working times. Compressor and solenoid work for this time, stop for 15 minutes and work againn.	0	0	0	0	0	0
	0 = Compressor/valve always OFF; 100 = compressor/valve always ON						
A7	Time delay for delayed external alarm	0	0	0	0	0	0
A8	Virtual digital input configuration see the list in A4 parameter	0	0	0	0	0	0
A09	Digital input selection transferred from master to slave		0	0	0	0	0
	0 = supervisor	3 = D13					
	1 = D11	4 = D14					
	2 = D12	5 = D15					
A10	ID3 digital input configuration in S6 input see the list in A4 parameter	0	0	0	0	0	0
A11	Id4 digital input configuration in S7 input, see the list in A4 parameter	0	0	0	0	0	0
A12	Digital input configuration in D15 input, see the list in A4 parameter	0	0	0	0	0	0
Ar	Is alarm signal in slaves shown in master?	1	1	1	1	1	1
	0 = no ; 1 = yes						
A13	When slaves are offline, hotgas bypass procedure	0	0	0	0	0	0
	0 = inactive 1 = active						
Fan (Evaporator fans)							
F0	Evaporator fan management	0	0	0	0	0	0
	0 = always ON						
	1 = Fan activation Sd defrost - Sv virtual (or Sd defrost - Sm blow double thermostat control) 2 =Activation Sd defrost probe						
F1	Fan activation threshold (only F0=1 and 2)	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
F2	Will fans stop when the compressor stops?	0	0	0	0	0	0
	0 =Fans work 1 = Fans stop						
F3	Status of fans during defrost	0	0	1	1	0	0
	0 = Fans work in Defrost 1 = fans stop						
Fd	Post-defrost drip fan waiting time	2	2	2	2	2	2
Frd	Fan activation difference (including variable speed fans)	2.0	2.0	2.0	2.0	2.0	2.0
F5	Evaporator fan stop threshold (difference 1C)	50.0	50.0	50.0	50.0	50.0	50.0
F6	Maximum Evaporator fan speed	100	100	100	100	100	100

CAREL PARAMETERS		ISLAND FREEZER	WALL FREEZER	COMBI FREEZER	UPRIGHT FREEZER	COUNTER	MULTIDECK CABINET
F7	Minimum Evaporator fan speed	0	0	0	0	0	0
F8	Evaporator fan peak time	0	0	0	0	0	0
	0 = Function inactive						
F9	PWM1/' fan control output selection (by phase-break)	1	1	1	1	1	1
	0 = pulse 1 = time-dependant						
F10	Time of working of evaporator fans at maximum speed	0	0	0	0	0	0
	0 = Function inactive						
Eud (Electronic valve)							
P1	Electronic valve	2	2	2	2	2	2
	0 = not used 1 = PWM valve 2 = CAREL E2V valve						
P3	Superheat Set point	10.0	10.0	10.0	10.0	10.0	10.0
P4	Proportional rate	15.0	15.0	15.0	15.0	15.0	15.0
P5	Integration rate (Integral factor)	150	150	150	150	150	150
	0 = Function inactive						
P6	Derivative rate	5.0	5.0	5.0	5.0	5.0	5.0
	0 = Function inactive						
P7	LowSH: low superheat threshold	7.0	7.0	7.0	7.0	7.0	7.0
P8	LowSH: low superheat integral time	15.0	15.0	15.0	15.0	15.0	15.0
	0 = Function inactive						
P9	LowSH: düşük superheat alarm gecikmesi	600	600	600	600	600	600
	0 = alarm inactive						
P10	Will solenoid valve be OFF in the event of low superheat or low suction temperature?	0	0	0	0	0	0
	1 = OFF is active						
P11	LSA: low evaporation temperature alarm	-45.0	-45.0	-45.0	-45.0	-45.0	-45.0
P12	LSA: alarm delay	600	600	600	600	600	600
	0 = alarm inactive						
P13	LSA: alarm difference (C)	10.0	10.0	10.0	10.0	10.0	10.0
	0 = reset the alarm all the time automatically						
P14	('blo') alarm signal activation	1	1	1	1	1	1
	1= blo alarm is active						
P15	Complementary temperature acceptance value in the event of Superheat pressure	-30	-30	-30	-12	-12	-12

CAREL PARAMETERS			ISLAND FREEZER	WALL FREEZER	COMBI FREEZER	UPRIGHT FREEZER	COUNTER	MULTIDECK CABINET
PH	Gas type		3	3	3	3	3	3
	1 = R22	8 = R600						
	2 = R134a	9 = R600a						
	3 = R404A	10 = R717						
	4 = R407C	11 = R744						
	5 = R410A	12 = R728						
	6 = R507A	13 = R1270						
	7 = R290	14 = R417A						
OSH	Superheat offset for modulation thermostate		0.0	0.0	0.0	0.0	0.0	0.0
	0 = Function inactive							
Phr	Fast updating of valve parameters by the supervisor		0	0	0	0	0	0
	0 = fast update is inactive							
PM1	MOP: Maximum evaporation pressure temperature value		50.0	50.0	50.0	50.0	50.0	50.0
PM2	MOP: Integral time		10.0	10.0	10.0	10.0	10.0	10.0
PM3	MOP: alarm delay		0	0	0	0	0	0
	0 = Function is inactive							
PM4	MOP: MOP function delay at the beginning		2	2	2	2	2	2
PM5	MOP: activating solenoid valve shutting		0	0	0	0	0	0
	0 = OFF is inactive							
	1 = OFF is active							
PL1	LOP: Minimum evaporation pressure temperature value		-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
PL2	LOP: Integral time		0.0	0.0	0.0	0.0	0.0	0.0
PL3	LOP: alarm delay		0	0	0	0	0	0
	0 = Function is inactive							
SH	Superheat value		-	-	-	-	-	-
PPU	valve ON rate		-	-	-	-	-	-
tGS	Superheat temperature sensor reading value		-	-	-	-	-	-
tEu	Superheat pressure sensor temperature value (value of the pressure equivalent to the temperature)		-	-	-	-	-	-
/cE	Saturated evaporation temperature calibration		0.0	0.0	0.0	0.0	0.0	0.0
Po6	PWM expansion valve T on/OFF period		6	6	6	6	6	6
cP1	Valve position when the control is ON		30	30	30	30	30	30
Pdd	Post-Defrost valve position		10	10	10	10	10	10
PSb	valve standby position		0	0	0	0	0	0
PF	valve opening stages		-	-	-	-	-	-

CAREL PARAMETERS		ISLAND FREEZER	WALL FREEZER	COMBI FREEZER	UPRIGHT FREEZER	COUNTER	MULTIDECK CABINET	
PMP	Electronic expansion valve manual operation activation	0	0	0	0	0	0	
	0 = inactive 1 = active							
PMu	Manual valve position	-	-	-	-	-	-	
Phc	Large capacity valve activation	0	0	0	0	0	0	
Cnf (Configuration)								
In	MPXPRO Unit type	1	1	1	1	1	1	
	0 = Slave 1 = Master							
Sn	Number of slave in local network	0	0	0	0	0	0	
	0 = No Slave							
H0	Supervisor and Master-Slave network address	199	199	199	199	199	199	
H1	AUX1 output configuration	8	8	8	8	8	8	
	0 = no function							7 = second Evaporator defrost output
	1 = alarm without energy normally							8 = Evaporator Fan output
	2 = energy alarm normally							9 = Glass heater output
	3 = auxiliary output							10 = Suction valve
	4 = auxiliary output shared by Master with slaves							11 = Compensation valve
	5 = Light output							12 = Solenoid valve
6 = auxiliary output shared by Master with slaves								
H2	Button set and remote control deactivation	1	1	1	1	1	1	
	1 = Button set and remote control is active							
H3	Remote control activation code	0	0	0	0	0	0	
	0 =no remote control activation code							
H4	Buzzer activation	0	0	0	0	0	0	
	0 = active; 1 = inactive							
H5	Please see AUX2 output configuration H1 parameter	7	2	2	2	2	2	
H6	Terminal button set locking configuration	0	0	0	0	0	0	
H7	Please see AUX3 output configuration H1 parameter	5	5	5	5	5	5	
H8	Output association with time bands	0	0	0	0	0	0	
	0 = Light 1 = AUX							

CAREL PARAMETERS		ISLAND FREEZER	WALL FREEZER	COMBI FREEZER	UPRIGHT FREEZER	COUNTER	MULTIDECK CABINET
H9	Output association with AUX button	0	0	0	0	0	0
	0 = Light 1 = AUX						
H10	Compressor output configuration	0	0	0	0	0	0
	0 = Cooling 1 = heating						
H11	Fan output configuration	0	0	0	0	0	0
	0 = Cooling 1 = Heating						
H12	Light sensor threshold	25	25	25	25	25	25
H13	Please see AUX4 output configuration H1 parameter	12	12	12	12	12	12
Hdn	default set parameters number	0	0	0	0	0	0
Htc	External time card insertion	0	0	0	0	0	0
	0 = not inserted						
rHu	Manual glass heater activation rate (rHt period)	70	70	70	70	70	70
	0 = Function is inactive						
rHt	Manual glass heater activation period	5	5	5	5	5	5
	0 = Function is inactive						
rHo	Glass heater modulation offset	2.0	2.0	2.0	2.0	2.0	2.0
rHd	Glass heater modulation difference	0.0	0.0	0.0	0.0	0.0	0.0
rHL	PWM output load type for glass heater modulation	0	0	0	0	0	0
	0 = resistant 1 = inductive						
rHA	Factor A for calculated glass temperature	2	2	2	2	2	2
rHb	Factor B for calculated glass temperature	22	22	22	22	22	22
HSt (Alarm log)							
HSo to 9	0 dan 9'a alarmlar (sete basın)	-	-	-	-	-	-
---	0 dan 9'a alarm kodu	-	-	-	-	-	-
h_	0 dan 9'a alarm houri	0	0	0	0	0	0
n_	0 dan 9'a alarm minutesi	0	0	0	0	0	0
---	0 dan 9'a alarm süresi	0	0	0	0	0	0
HcP (HACCP alarms)							
Ht0	HACCP alarm	0	0	0	0	0	0
HAn	HA alarm type number	0	0	0	0	0	0

CAREL PARAMETERS		ISLAND FREEZER	WALL FREEZER	COMBI FREEZER	UPRIGHT FREEZER	COUNTER	MULTIDECK CABINET
HA to HA2	HA type active HACCP alarm number	-	-	-	-	-	-
y_	From 1 to 3 alarm-Year	0	0	0	0	0	0
M_	From 1 to 3 alarm - month	0	0	0	0	0	0
d_	From 1 to 3 alarm - which day of the month	0	0	0	0	0	0
h_	From 1 to 3 alarm - hour	0	0	0	0	0	0
n_	From 1 to 3 alarm - minute	0	0	0	0	0	0
...	From 1 to 3 alarm - Alarm time	0	0	0	0	0	0
HFn	HF alarm type number	0	0	0	0	0	0
HF to HF2	HF type active HACCP alarm number	-	-	-	-	-	-
y_	From 1 to 3 alarm - Year	0	0	0	0	0	0
M_	From 1 to 3 alarm -month	0	0	0	0	0	0
d_	From 1 to 3 alarm - which day of the month	0	0	0	0	0	0
h_	From 1 to 3 alarm - hour	0	0	0	0	0	0
n_	From 1 to 3 alarm - minute	0	0	0	0	0	0
_	From 1 to 3 alarm - Alarm time	0	0	0	0	0	0
Htd	HACCP alarm delay	0	0	0	0	0	0
	0 = alarm viewing deactivated						
rtc (Real Time Clock)							
td1 to 8	Defrost time from 1 to 8 (press Set)	-	-	-	-	-	-
d_	From 1 to 8 defrost day selection	0	0	0	0	0	0
	0 = no defrost						
	1 to 7 = days one by one from Monday to Sunday						
	8 = every day from Monday to Friday						
	9 = everyday from Monday to Saturday						
	10 = only Saturday Sunday						
11 = everyday							
h_	Defrost hour	0	0	0	0	0	0
n_	Defrost minute	0	0	0	0	0	0
P_	Power defrost selection	0	0	0	0	0	0
	0 = Normal defrost; 1 =Power defrost						
tS1 to 8	Time band starting from 1 to 8 (press Set)	-	-	-	-	-	-
d	Time band starting: day	0	0	0	0	0	0
h	Time band starting: hour	0	0	0	0	0	0
n	Time band starting: minute	0	0	0	0	0	0
tE1 to 8	Time band end from 1 to 8 (press Set)	-	-	-	-	-	-

DANFOSS PARAMETERS		ISLAND FREEZER	WALL FREEZER	COMBI FREEZER	UPRIGHT FREEZER	COUNTER	MULTIDECK CABINET
Normal operation							
---	Temperature (setpoint)	-26	-20	-20	-20	0	2
Thermostat							
r01	Differential	2	2	2	2	2	2
r02	Max. limitation of setpoint setting	-22	-18	-18	-18	-4	-4
r03	Min. limitation of setpoint setting	-29	-23	-23	-23	4	4
r04	Adjustment of temperature indication	0	0	0	0	0	0
r05	Temperature unit (°C/°F)	0	0	0	0	0	0
r09	Correction of the signal from S4	0	0	0	0	0	0
r10	Correction of the signal from S3	0	0	0	0	0	0
r12	Manual service, stop regulation, start regulation (-1, 0, 1)	1	1	1	1	1	1
r13	Displacement of reference during night operation	0	0	0	0	0	0
r14	Define thermostat function	1	1	1	1	1	1
	1=ON/OFF						
	2=Modulating						
r15	Definition and weighting, if applicable, of thermostat sensors - S4% (100%=S4, 0%=S3)	100	0	0	0	50	50
r16	Time between melt periods	0	0	0	0	0	0
r17	Duration of melt periods	0	0	0	0	0	0
r21	Temperature setting for thermostat band 2 . As differential use r01	-26	-20	-20	-22	0	0
r59	Correction of the signal from S6	0	0	0	0	0	0
r61	Definition and weighting, if applicable, of thermostat sensors when night cover is on. (100%=S4, 0%=S3)	100	0	0	0	50	50
r62	Heat function	2	2	2	2	2	2
	Neutral zone between refrigeration and heat function						
r63	Time delay at switch between refrigeration and heat function	0	0	0	0	0	0
Alarms							
A03	Delay for temperature alarm	15	15	15	15	20	20
A04	Delay for door alarm	0	0	0	0	0	0
A12	Delay for temperature alarm after defrost	60	60	60	60	60	60
A13	High alarm limit for thermostat 1	-18	-15	-15	-15	4	6
A14	Low alarm limit for thermostat 1	-30	-26	-26	-26	-6	-6
A20	High alarm limit for thermostat 2	-18	-15	-15	-15	4	6
A21	Low alarm limit for thermostat 2	-30	-26	-26	-26	-6	-6
A22	High alarm limit for sensor S6 at thermostat 1	8	8	8	8	8	8
A23	Low alarm limit for sensor S6 at thermostat 1	-30	-30	-30	-30	-30	-30
A24	High alarm limit for sensor S6 at thermostat 2	8	8	8	8	8	8
A25	Low alarm limit for sensor S6 at thermostat 2	-30	-30	-30	-30	-30	-30

DANFOSS PARAMETERS		ISLAND FREEZER	WALL FREEZER	COMBI FREEZER	UPRIGHT FREEZER	COUNTER	MULTIDECK CABINET
A26	S6 alarm time delay	240	240	240	240	240	240
	With setting = 240 the S6 alarm will be omitted						
A27	Alarm time delay or signal on the DI1 input	30	30	30	30	30	30
A28	Alarm time delay or signal on the DI2 input	30	30	30	30	30	30
A36	Signal for alarm thermostat. S4% (100%=S4, 0%=S3)	100	0	0	0	50	50
A52	Delay for S6 (product sensor alarm) after defrost	90	90	90	90	90	90
Compressor							
c01	Min. ON-time	0	0	0	0	0	0
c02	Min. OFF-time	0	0	0	0	0	0
c05	Time delay for cutin of comp.2	5	5	5	5	5	5
Defrost							
d01	Defrost method	1	1	1	1	1	1
	0=off						
	1= EL						
	2= gAs						
d02	Defrost stop temperature	10	10	12	12	10	10
d03	Interval between defrost starts	8	8	6	6	6	6
d04	Max. defrost duration	35	35	35	35	45	45
d05	Displacement of time on cutin of defrost at start-up	0	0	0	0	0	0
d06	Drip off time	2	2	2	2	3	3
d07	Delay for fan start after defrost	2	2	2	2	0	0
d08	Fan start temperature	-5	-5	-5	-5	-5	-5
d09	Fan cutin during defrost	1	1	0	0	1	1
	0: Stopped						
	1: Running						
	2: Running during pump down and defrost						
d10	Defrost sensor	3	1	1	1	1	1
	0 =Stop on time						
	1=S5						
	2=S4						
	3=Sx						
(Application 1-8 and 10: both S5 and S6. Application 9: S5 and S5B)							
d16	Pump down delay	0	0	0	0	0	0
d17	Drain delay (used at hot gas defrost only)	0	0	0	0	0	0
d18	Max. aggregate refrigeration time between two defrosts	0	0	0	0	0	0
d20	Heat in drip tray. Time from defrosting stops to heating in the drip tray is switched off	30	30	30	30	30	30

DANFOSS PARAMETERS		ISLAND FREEZER	WALL FREEZER	COMBI FREEZER	UPRIGHT FREEZER	COUNTER	MULTIDECK CABINET	
t45	Clock - Setting of date	REAL TIME	REAL TIME	REAL TIME	REAL TIME	REAL TIME	REAL TIME	
t46	Clock - Setting of month	REAL TIME	REAL TIME	REAL TIME	REAL TIME	REAL TIME	REAL TIME	
t47	Clock - Setting of year	REAL TIME	REAL TIME	REAL TIME	REAL TIME	REAL TIME	REAL TIME	
Miscellaneous								
o01	Delay of output signals after start-up	5	5	5	5	5	5	
o02	Input signal on DI1. Function:	0	0	0	0	0	0	
	0=not used							7=thermostat band changeover (activate r21)
	1=status on DI1							8=alarm function when closed
	2=door function with alarm when open							9=alarm function when open
	3=door alarm when open							10=Appliance cleaning (pulse signal)
	4=defrost start (pulse-signal)							11=forced cooling at hot gas defrost
	5=ext.main switch							12=night cover
6=night operation	15=case shut down							
o03	Network address	0	0	0	0	0	0	
o04	On/Off switch (Service Pin message) IMPORTANT! o61 must be set prior to o04 (used at LON 485 and DANBUSS only)	Off	Off	Off	Off	Off	Off	
o05	Access code 1 (all settings)	0	0	0	0	0	0	
o06	Used sensor type	0	0	0	0	0	0	
	0=Pt1000							
	1=Ptc1000,							
o08	Readout of software version	**	**	**	**	**	**	
o16	Max hold time after coordinated defrost	20	20	20	20	20	20	
o17	Select signal for display view. S4% (100%=S4, 0%=S3)	100	0	0	0	50	50	
o20	Pressure transmitter working range – min. value	-1	-1	-1	-1	-1	-1	
o21	Pressure transmitter working range – max. value	12	12	12	12	12	12	

DANFOSS PARAMETERS			ISLAND FREEZER	WALL FREEZER	COMBI FREEZER	UPRIGHT FREEZER	COUNTER	MULTIDECK CABINET	
o30	Refrigerant setting:		19	19	19	19	19	19	
	1=R12	15=R227							29=R1270
	2=R22	16=R401A							30=R417A
	3=R134a	17=R507							31=R422A
	4=R502	18=R402A							32=R413A
	5=R717	19=R404A							33=R422D
	6=R13	20=R407C							34=R427A
	7=R13b1	21=R407A							35=R438A
	8=R23	22=R407							36=R513A
	9=R500	23=R410A							37=R407F
	10=R503	24=R170							38=R1234ze
	11=R11	25=R290							39=R1234yf
	12=R142b	26=R600							40=R448A
	13=User defined	27=R600a							41=R449A
14=R32	28=R744	42=R452A							
o30	Refrigerant setting:		19	19	19	19	19	19	
o37	Input signal on DI2. Function:		0	0	0	0	0	0	
	(0=not used.	5=ext. main switch							10=Appliance cleaning (pulse signal).
	1=status on DI2.	6=night operation							11=forced cooling at hot gas defrost.).
	2=door function with alarm when open.	7=thermostat band changeover (activate r21).							12=night cover,
	3=door alarm when open.	8=alarm function when closed.							13=coordinated defrost).
4=defrost start (pulse-signal).	9=alarm function when open.	15=case shut down							
o38	Configuration of light function:		1	1	1	1	1	1	
	1=Light follows day /night operation,								
	2=Light control via data communication via 'o39',								
	3=Light control with a DI-input,								
4=As "2", but light switch on and night cover will open if the network cut out for more than 15 minutes.									
o39	Activation of light relay (only if o38=2) On=light		Off	Off	Off	Off	Off	Off	
o41	Rail heat On time during day operations		100	100	100	100	100	100	
o42	Rail heat On time during night operations		100	100	100	100	100	100	
o43	Rail heat period time (On time + Off time)		10	10	10	10	10	10	
o46	Appliance cleaning.		0	0	0	0	0	0	
	0=no Appliance cleaning.								
	1=Fans only.								
	2=All output Off.								
o61	Selection of EL diagram. See overview page 12 and 13		9	1	4	4	1	1	
o62	Download a set of predetermined settings. See overview page 27.		0	0	0	0	0	0	

DANFOSS PARAMETERS			ISLAND FREEZER	WALL FREEZER	COMBI FREEZER	UPRIGHT FREEZER	COUNTER	MULTIDECK CABINET	
o64	Access code 2 (partial access)		0	0	0	0	0	0	
o67	Replace the controllers factory settings with the present settings		Off	Off	Off	Off	Off	Off	
o84	Input signal on DI3. Function: (high voltage input)		0	0	0	0	0	0	
	(0=not used.	6=night operation,							12=night cover.
	1=status on DI2.	7=thermostat band changeover (activate r21)							13=Not used.
	2=door function with alarm when open.	8=Not used.							14=Refrigeration stopped (forced closing)).
	3=door alarm when open	9=Not used.							15=case shut down
	4=defrost start (pulse-signal).	10=Appliance cleaning (pulse signal).							
	5=ext. main switch	11=forced cooling at hot gas defrost,							
o85	Rail heat control		0	0	0	0	0	0	
	0=not used,								
	1=pulse control with timer function (o41 and o42),								
	2=pulse control with dew point function								
o86	Dew point value where the rail heat is minimum		8	8	8	8	8	8	
o87	Dew point value where the rail heat is 100% on		17	17	17	17	17	17	
o88	Lowest permitted rail heat effect in %		30	30	30	30	30	30	
o89	Time delay from "open door" refrigeration is started		30	30	30	30	30	30	
o90	Fan operation at stopped cooling (forced closing): 0= Stopped (defrost allowed)		1	1	1	1	1	1	
	1= Running (defrost allowed)								
	2= Stopped (defrost not allowed)								
	3= Running (defrost not allowed)								
o92	1=defrost stop temperature,		1	1	1	1	1	1	
	2=S6 temperature,								
	3=S5_B temperature (application 9), 4=S3B (application 10)								
o97	Display of temperature		1	1	1	1	1	1	
	1= u56 Air temperature								
	2= u36 product temperature								
o98	Light and night blinds defined		0	0	0	0	0	0	
	0: Light is switch off and night blind is open when the main switch is off								
	1: Light and night blind is independent of main switch								

DANFOSS PARAMETERS		ISLAND FREEZER	WALL FREEZER	COMBI FREEZER	UPRIGHT FREEZER	COUNTER	MULTIDECK CABINET
P41	Configuration of alarm relay	1	1	1	1	1	1
	The alarm relay will be activated upon an alarm signal from the following groups:						
	1 - High temperature alarms						
	2 - Low temperature alarms						
	4 - Sensor error						
	8 - Digital input enabled for alarm 16 - Defrosting alarms						
	32 - Miscellaneous 64 - Injection alarms						
The groups that are to activate the alarm relay must be set by using a numerical value which is the sum of the groups that must be activated. (E.g.: a value of 5 will activate all high temperature alarms and all sensor error and 0 will cancel the relay function).							