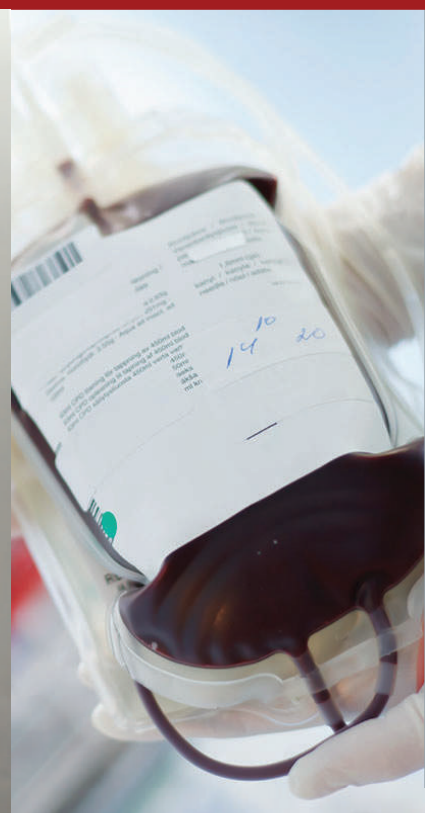


Blood Bank Refrigerators Blood Plasma Freezers

according to DIN 58371

according to DIN 58375



Blood
Plasma



Thalheimer Kühlung GmbH & Co. KG. Was established in Germany in 1948. Initially the company specialized in Medical Cold / Refrigerated equipment and utilities. Having thrived in this field it moved on to produce well - designed custom made various products that were well received in German and European markets. The company progressively grew in diversified outputs and ascending revenues. The company's acclaimed reputation reached the Middle East, Africa and Central Asia.

In appreciation of its reputation and craftsmanship, Thalheimer was elicited in 2009 to join the **ThalSa Group** stationed in Dubai, U.A.E.

Having joined the group, Thalheimer propelled to broader international fame and reputation. In its present status, the company is expanding its facilities to meet an expected increased demand for its products and to enjoy sustained improvement in quality, productivity and export.



Member of ThalSa Group

Forword



Thalheimer Kühlung GmbH & Co KG was established in 1948 to manufacture various cooling equipments, cold rooms, refrigerators and ice makers for brewery and catering business. Having succeeded in that field, our company got engaged in producing new products ever since.

In the 1960s Thalheimer introduced the first medical cooling equipment (Blood Bank Refrigerator) which was made of wood material. The product was designed and added to the product's portfolio, and considered, at that stage, as a start up of an innovation in the Research and Development activities in the field of Medical refrigeration systems within our company.

Since then Thalheimer decided to direct the company towards the healthcare environment rather than the popular air conditioning that relates more to comfort and less to the health of people. The continuous development of cold hygienic blood bank refrigerators was being given top priority since donated blood had to be looked after in two crucial ways: safe way of storing and the best method of dispensing.

In the 1970s Thalheimer developed refrigerators for the use in laboratory, pharmaceutical and pathology fields subsequently the company was in a capable position to fulfill all refrigeration requirements for Medical use in hospitals, universities and research institutions. The growing experience in manufacturing cooling systems allowed Thalheimer to develop ultra-deep temperature freezers (down to -90°C) in addition to all requirements of industrial, commercial cold rooms and refrigerated warehouses.

We are also proud of our renown excellence in the design, manufacture and supply of state-of-the-art forensic requirements including mortuaries of various types and sizes. We have designed in our R&D department and offered complete solution for forensic establishment that fulfilled the particular requirement and specifications of different clients in Germany and Europe.

Our newly launched Blood Bank Refrigerators are being produced in a serial production line that incorporates the latest technology, German precise workmanship and cost effectiveness. All built-in materials and components are of the highest quality. In this stage we have developed the new serial production of 3 sizes stainless steel Blood Bank refrigerators and blood plasma freezers with the capacities of 500L, 700L and 850L. Those cabinets have the lowest noise level, easy to clean and offer hygienic satisfaction.

Our R&D department has the ability to satisfy all demands of our customers regarding color, size, and surface materials.

The modes of wide range of servicing, indicates our particular strength.

Our R&D staff never neglect special requirements; we find answers.

Thalheimer company can provide you, not only with a complete Medical refrigeration solution systems, but also with the constant supply of spare parts, installation and maintenance services and training courses.

The motto of our company is (conviction precedes persuasion); thus we are convinced of the excellent quality of our work, and aspire to see this conviction shared with our customers.

We hope that this brochure will convince you of our genuine workmanship and look forward to be of service to you.

Jan-Kai Heller

Head of R&D Department

Our Missions

- Behind every achievement there is a human touch and talent.
- Searching for the missing link then proceed.
- Continued improvement.
- Diversification & innovation.
- Encouraging multi-disciplinary team work.

Commitments stems from:

- Self confidence
- Adopting best technology
- Adherence to standards and strict quality control
- Shoulder responsibility, flexibility and efficiency



The Thalheimer system

Do not do everything possible. Make everything possible

Thalheimer's development into a system provider follows the principle of always achieving more together.

In the company itself, as the supplier and particularly with end users, solutions that benefit all parties are sought together. For innovative products and services that, together, make an optimised system possible: The Thalheimer system.

The key is that by using the Thalheimer system, the most important-and ideally all- requirements and needs of the customer are completely fulfilled. As a system provider, Thalheimer does not want to offer everything, but everything that a user need for their hospital standard.

It is important to have an answer to all questions relating to performance, efficiency and sustainability. A system that consists of Medical refrigeration system, accessories, services and software, that can be easily integrated into operating procedure and that bring added value.

A system that satisfy the customer requirement is the Thalheimer system

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Thalheimer has developed its new HAEMO Med Line products including Blood Bank Refrigerators. This Blood Fridge is designed to conform with German standards and manufactured to comply with DIN58371 utilizing Thalheimer’s Technology developed over a period of six decades of specialization in medical refrigerated systems.

Blood
Bank
Refrigerators

Thalheimer Blood Bank Refrigerator

In the blood transfusion and donation process and over the years, safety has emerged as a key concern in blood products sourced from blood bank refrigerators. Thalheimer has developed its new HAEMO Med Line products including Blood Bank Refrigerator. This Blood Fridge is designed to conform with German standards and manufactured to comply with DIN58371 utilizing Thalheimer’s Technology developed over a period of six decades of specialization in medical refrigerated systems. The company is accredited with the ISO9001.

Our new innovative products have been designed with fully-automated pre-installed software system which enables our blood bank refrigerators and Freezers to fully control and record the operation.

All components are of German/EU origin. The fridge provides rapid cooling, quick performance and well controlled sustainable stable temperature compatible with human blood storage.

Some of our newly developed features represent the latest innovation in blood refrigeration system.

Microprocessor control system

Product Temp controller

Driven by 12 V. rechargeable battery with automatic charging. The control gives alarm during low and high temp and during power fault.

Refrigeration controller

Controlled by microprocessor. The temperature is adjustable from +2C to +6C. Factory setting is at +4 C.

Manual defrosting

In case the evaporator allows manual defrosting and the overcooling function is not activated, then manual defrosting can be achieved by pressing the button for few seconds.

Set point

This provides access to th set point edit function=

On/stand by

BY pressing this button for a few seconds the cabinet will be switched on or will be on stand by

Chamber light

In case of glass door, you can switch the chamber light on and off manually.

Down/up

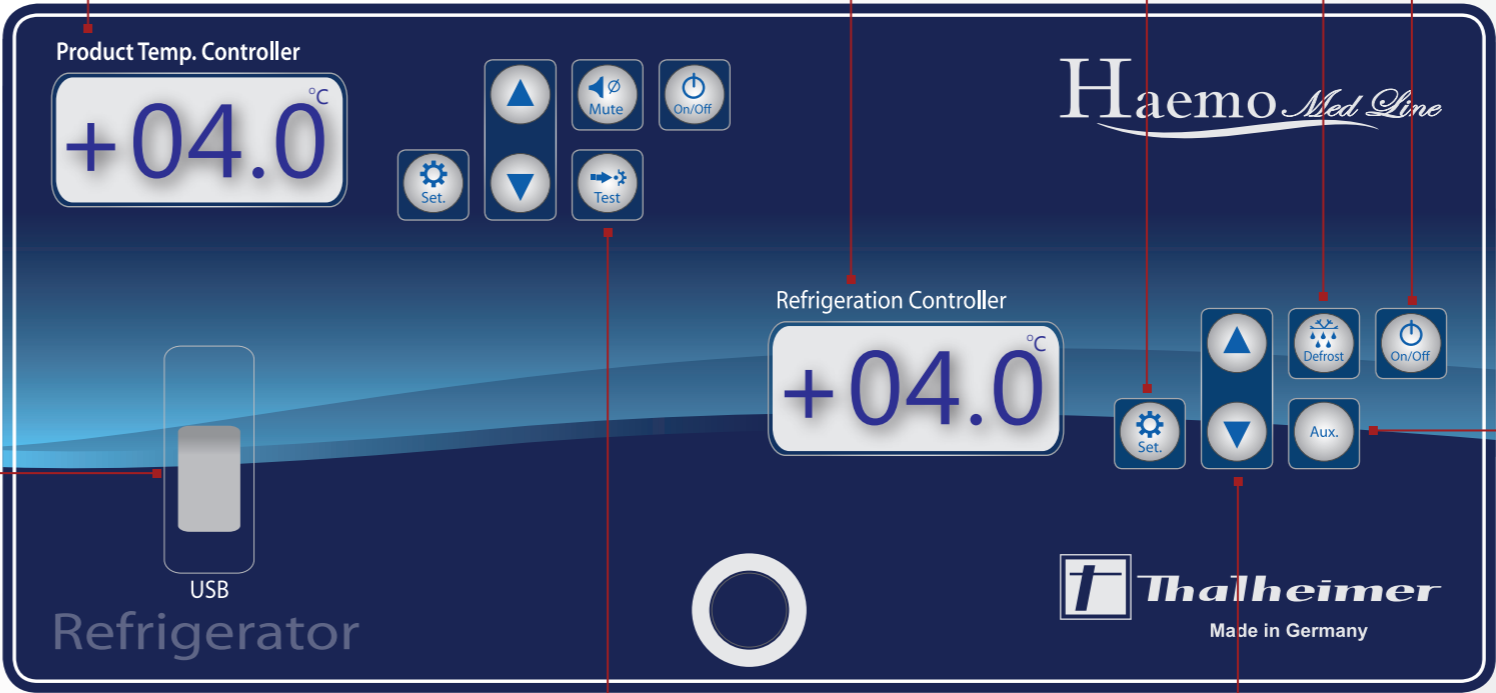
These are used to scroll the menu items and change the values.

Test

by pressing the button for at least two seconds you can check the battery level

USB for recording system

Temperature recording is done by a USB-recording devices. The record is being stored all the time in the system and can be down loaded at any time for any period.



Innovation...Quality...Simplicity

Blood Bank Refrigerators
Blood Plasma Freezers

SPECIFICATION

Capacity: ranging between 500L - 700L – 850L
Exterior housing: made from stainless steel (1.4301 AISI 304) brushed longitudinally.
Interior: made from stainless steel.
Door: The self-closing door is made from stainless steel with easily replaceable magnetic seal. The door stop-open on the right hand side and is lockable.
Insulation: The 75mm thick insulation is made from high-quality compression -molded, environmentally friendly injected polyurethane that ensures maximum energy saving. **This is unique to the Thalheimer model.**
Drawers: The fridge is supplied with Five or six drawers made from aluminum of medical specification. Their heights are adjustable and each has dividers similar to those adopted internationally. The drawers are equipped with telescopic runners that stop at full withdrawal. Maximum load of each drawer is 50 kg.
Castors: The fridge is equipped with four swivel castors. The front two have brake mechanism.
Ambient Temperature: +10 to +34 °C



OPTIONS

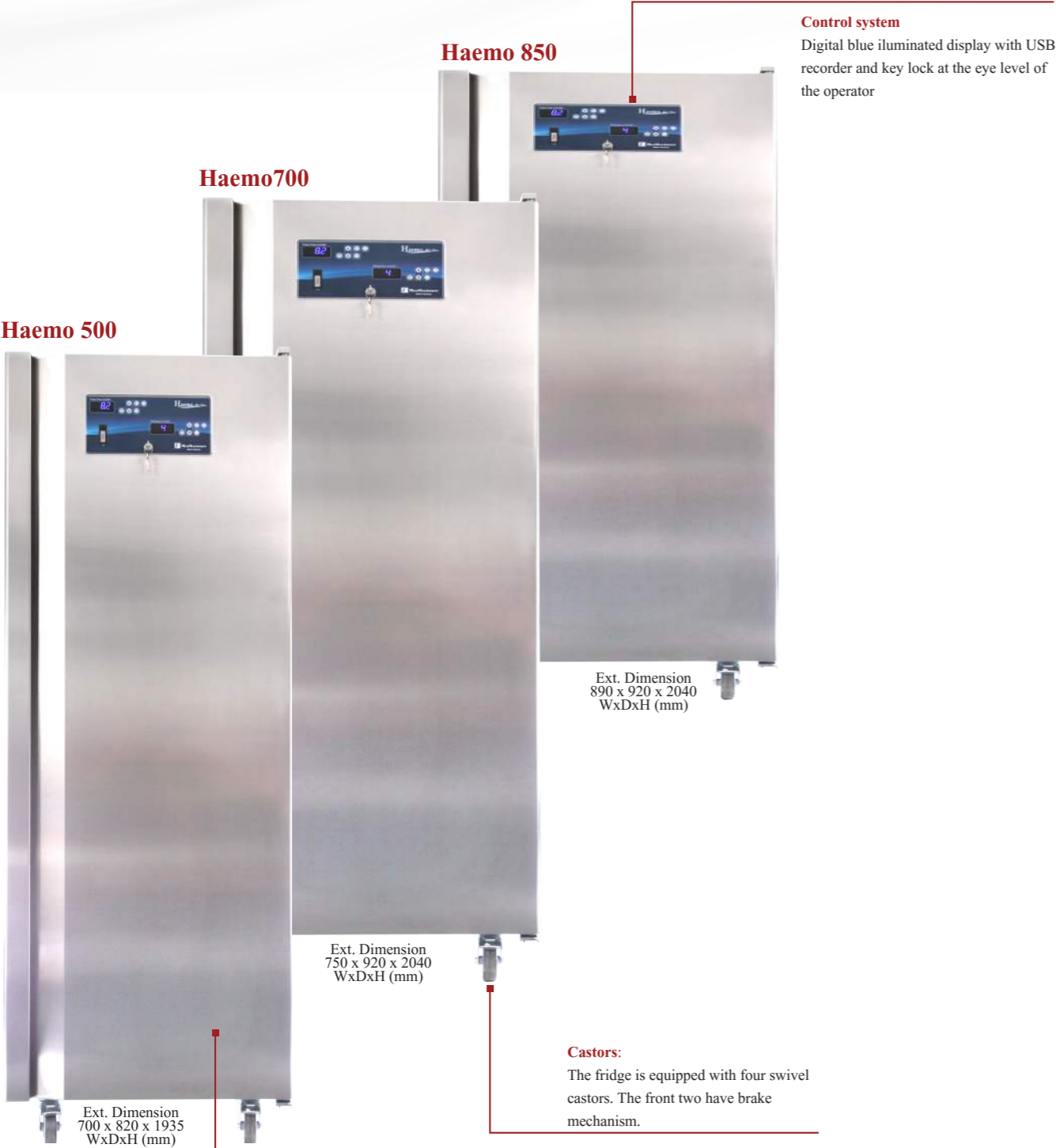
- Drawers made from various other materials.
- Drawer's dividers of various arrangements.
- Glass door
- Left or right hinged door
- GSM module
- Temperature documentation via PC

Technical Overview

Haemo Med Line
Frezo Med Line

		Refrigerators according to DIN 58371			Freezers according to DIN 58375		
Model Name		Haema 500	Haema 700	Haema 850	FREZO 500	FREZO 700	FREZO 850
	Capacity (Liter) 3 different capacity are available in our product range	500 L	700 L	850 L	500 L	700 L	850 L
	Temperature setting (°C) According to the above DIN standard.	+4	+4	+4	-25 °C	-25 °C	-25 °C
	Number of drawers The drawers made from aluminum of medical specification.	5	6	6	5	6	6
	Total capacity of blood bags 375ml - 400ml Blood bag are considered in the calculation. bigger bags can also fit in the drawers	375	540	648	375	540	648
	Max. load Per drawer (50 Kg)	●	●	●	●	●	●
	Insulation (75 mm) thick made from high-quality compression -molded, environmentally friendly injected polyurethane	●	●	●	●	●	●
	Power supply (220-240 V)	●	●	●	●	●	●
	Frequency (50-60 Hz)	●	●	●	●	●	●
	Admissible ambient temperature (+10 to +38 °C) Maximum performance can be achieved within the above ambient Temp.	●	●	●	●	●	●
	Noise level (45 dB(A)); distance 1m	●	●	●	●	●	●
	Weight (Kg)	132	145	155	132	145	155
	One compressor	●	●	●	●	●	●

Products Range



Haemo 850

Control system
Digital blue illuminated display with USB recorder and key lock at the eye level of the operator

Haemo700

Haemo 500

Ext. Dimension
890 x 920 x 2040
WxDxH (mm)

Ext. Dimension
750 x 920 x 2040
WxDxH (mm)

Ext. Dimension
700 x 820 x 1935
WxDxH (mm)

Castors:
The fridge is equipped with four swivel castors. The front two have brake mechanism.

Door:
The self-closing door is made from stainless steel with easily replaceable magnetic seal. The door stop-open on the right hand side and is lockable.



Internal Light:
The fridge has an interior LED lighting that is not only energy saving but has reduced heat output

Haemo 850
Dimensions inner drawer
700 x 750 x 100 mm

Drawers:
The fridge is supplied with drawers made from aluminum of medical specification. Their heights are adjustable and each has dividers similar to those adopted internationally. The drawers are equipped with telescopic runners that stop at full withdrawal. Maximum load of each drawer is 50kg.

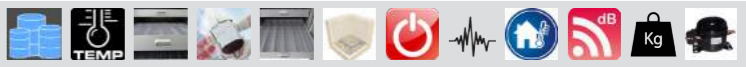
Haemo 500
Dimensions inner drawer
510 x 650 x 100 mm

eco friendly



A COMMITMENT DEMONSTRATED BY DISTINCTIVE VALUE

A global search for quality and environmental care: Thalheimer has achieved the **ISO 9001 certification**. The company's strategy is to minimize its environmental impact in every aspect of production, from the supply of raw materials to manufacturing, from packaging materials to logistics. Further evidence of the ability to understand the market and interpret current trends and the changes taking place, asserting itself as a modern and dynamic organization that can stand out from the competition.



Haemo 500

Designed & manufactured according to DIN 58371



Exterior dimensions	700 x 820 x 1935
Temperature setting	+4 °C
Capacity	500 Liter
Number of drawers	5

SPECIFICATIONS

Exterior housing: made from stainless steel (1.4301 AISI 304) brushed longitudinally.

Interior: made from stainless steel.

Door: The self-closing door is made from stainless steel with easily replaceable magnetic seal. The door stop-open on the right hand side and is lockable.

Insulation: The 75mm thick insulation is made from high-quality compression -molded, environmentally friendly injected polyurethane that ensures maximum energy saving. This is unique to the Thalheimer model.

Drawers: The fridge is supplied with Five drawers made from aluminum of medical specification. Their heights are adjustable and each has dividers similar to those adopted internationally. The drawers are equipped with telescopic runners that stop at full withdrawal. Maximum load of each drawer is 50kg.

Castors: The fridge is equipped with four swivel castors. The front two have brake mechanism.

Interior light: The fridge has an interior LED lighting that is not only energy saving but has reduced heat output

Refrigeration System

- Danfos Compressor of high – quality system of EU origin, hermetically sealed, vibration free, low noise, energy saving, ventilation – enforced system.
- Inlet and exhaust air flow through slits at the top.
- Forced – air cooling and distribution through a blower that ensures uniform temperature throughout the volume and minimizes temperature deviations.
- Automatic fast defrosting when required
- Re-evaporation of defrost water in the evaporation panel under the compressor.
- Special air distribution system to stabilize temperature within the cabinet.
- Installed condenser filter.
- Energy efficient defrost management.

Specification Haema 500

Item code	FR3T11192719M
Capacity (Liter)	500 L
Exterior dimensions including door (mm)	700 x 820 x 1935
Interior dimensions (mm)	550 x 690 x 1350
Dimensions inner drawer	510 x 650 x 100
Number of bags per drawer	5 X 15 = 75
Number of drawers	5
Total capacity of blood bags	375
Max. load drawer (Kg)	50
Insulation (mm)	75
Power supply (V)	220-240
Frequency (Hz)	50-60
Admissible ambient temperature (°C)	+10 °C to +38 °C
Temperature setting (°C)	+4 °C
Power consumption (W)	295
Normal consumption (Kwh/24h)	2.4
Heat emission (max.) (W)	410
AMP (A)	1.8
Noise level (dB(A)); distance 1m	45
Weight (Kg)	132
No. of compressors	1
Refrigerant	R 134 a

Control and Measurement

- The fridge has a front display that shows:
Refrigeration controller on the lower RHS.
Product temperature controller on the upper LHS.
- USB data recorder downloaded via USB Pindrive
- Temperature is measured and ultimately controlled by sensors located in liquid loaded monitor vessel designed to mimic the shape of the blood bag within the fridge. The sensors constantly measure the temperatures that are recorded on the Product Temperature controller and are easily downloaded via the USB pindrive.
- The required temperature is set on the refrigeration controller to be +4°C ± 1.5°C.
- Continuous temperature control is secured for at least 48 hours through an installed battery.

Alarm and Safety Functions

Mechanical safety thermostat is activated if the simulated core temperature is lower than the minimum tolerance limit of + 2 °C.

If the door is unduly kept open an optical and acoustic alarm is activated and the interior LED lightning is activated; the compressor and fan switched off. Two stage management is utilized, the first gives a visual and audio alarm at the refrigeration controller and can be attended to by the operator, the second is managed at the product temp. controller where it can be manipulated through the central monitoring station. **This unique system is available only on Thalheimer fridge.**

In the event of electrical power failure, the alarm and control mechanism and data recording remains operative for 48 hours with the help of an installed battery. **This feature is unique to the Thalheimer fridge.**

Intelligent energy –efficient defrost management is available.

The condensing temperature can be monitored even if the filter is blocked or rendered inoperative.

OPTIONS

- Drawers made from various other materials.
- Drawer's dividers of various arrangements.
- Glass door
- Left or right hinged door
- GSM module
- Temperature documentation via PC



5X15=75 Bags per drawer



Drawers made from aluminum of medical specification.



Drawer's dividers of various arrangements.

Haemo 700

Designed & manufactured according to DIN 58371



Exterior dimensions	750 x 920 x 2040
Temperature setting	+4 °C
Capacity	700 Liter
Number of drawers	6

SPECIFICATIONS

- Exterior housing:** made from stainless steel (1.4301 AISI 304) brushed longitudinally.
- Interior:** made from stainless steel.
- Door:** The self-closing door is made from stainless steel with easily replaceable magnetic seal. The door stop-open on the right hand side and is lockable.
- Insulation:** The 75mm thick insulation is made from high-quality compression -molded, environmentally friendly injected polyurethane that ensures maximum energy saving. This is unique to the Thalheimer model.
- Drawers:** The fridge is supplied with six drawers made from aluminum of medical specification. Their heights are adjustable and each has dividers similar to those adopted internationally. The drawers are equipped with telescopic runners that stop at full withdrawal. Maximum load of each drawer is 50kg.
- Castors:** The fridge is equipped with four swivel castors. The front two have brake mechanism.
- Interior light:** The fridge has an interior LED lighting that is not only energy saving but has reduced heat output

Refrigeration System

- Danfos Compressor of high – quality system of EU origin, hermetically sealed, vibration free, low noise, energy saving, ventilation – enforced system.
- Inlet and exhaust air flow through slits at the top.
- Forced – air cooling and distribution through a blower that ensures uniform temperature throughout the volume and minimizes temperature deviations.
- Automatic fast defrosting when required
- Re-evaporation of defrost water in the evaporation panel under the compressor.
- Special air distribution system to stabilize temperature within the cabinet.
- Installed condenser filter.
- Energy efficient defrost management.

Specification Haema 700

Item code	FR3T11192710N
Capacity (Liter)	700 L
Exterior dimensions including door (mm)	750 x 920 x 2040
Interior dimensions (mm)	600 x 790 x 1450
Dimensions inner drawer	560 x 750 x 100
Number of bags per drawer	5 x 18 = 90
Number of drawers	6
Total capacity of blood bags	540
Max. load drawer (Kg)	50
Insulation (mm)	75
Power supply (V)	220-240
Frequency (Hz)	50-60
Admissible ambient temperature (°C)	+10 °C to +38 °C
Temperature setting (°C)	+4 °C
Power consumption (W)	295
Normal consumption (Kwh/24h)	2.7
Heat emission (max.) (W)	410
AMP (A)	1.8
Noise level (dB(A)); distance 1m	45
Weight (Kg)	145
No. of compressors	1
Refrigerant	R 134 a

Control and Measurement

- The fridge has a front display that shows:
 - Refrigeration controller on the lower RHS.
 - Product temperature controller on the upper LHS.
- USB data recorder downloaded via USB Pindrive
- Temperature is measured and ultimately controlled by sensors located in liquid loaded monitor vessel designed to mimic the shape of the blood bag within the fridge. The sensors constantly measure the temperatures that are recorded on the Product Temperature controller and are easily downloaded via the USB pindrive.
- The required temperature is set on the refrigeration controller to be +4°C ± 1.5°C.
- Continuous temperature control is secured for at least 48 hours through an installed battery.

Alarm and Safety Functions

Mechanical safety thermostat is activated if the simulated core temperature is lower than the minimum tolerance limit of + 2 °C.

If the door is unduly kept open an optical and acoustic alarm is activated and the interior LED lightning is activated; the compressor and fan switched off. Two stage management is utilized, the first gives a visual and audio alarm at the refrigeration controller and can be attended to by the operator, the second is managed at the product temp. controller where it can be manipulated through the central monitoring station. **This unique system is available only on Thalheimer fridge.**

In the event of electrical power failure, the alarm and control mechanism and data recording remains operative for 48 hours with the help of an installed battery. **This feature is unique to the Thalheimer fridge.**

Intelligent energy –efficient defrost management is available.

The condensing temperature can be monitored even if the filter is blocked or rendered inoperative.

OPTIONS

- Drawers made from various other materials.
- Drawer’s dividers of various arrangements.
- Glass door
- Left or right hinged door
- GSM module
- Temperature documentation via PC



USB data recorder downloaded via USB Pindrive



Telescopic runners that stop at full withdrawal



Temp. controlled by sensors located in liquid loaded monitor vessel

Haemo 850

Designed & manufactured according to DIN 58371



Exterior dimensions	890 x 920 x 2040
Temperature setting	+4 °C
Capacity	850 Liter
Number of drawers	6

SPECIFICATIONS

- Exterior housing:** made from stainless steel (1.4301 AISI 304) brushed longitudinally.
- Interior:** made from stainless steel.
- Door:** The self-closing door is made from stainless steel with easily replaceable magnetic seal. The door stop-open on the right hand side and is lockable.
- Insulation:** The 75mm thick insulation is made from high-quality compression -molded, environmentally friendly injected polyurethane that ensures maximum energy saving. This is unique to the Thalheimer model.
- Drawers:** The fridge is supplied with six drawers made from aluminum of medical specification. Their heights are adjustable and each has dividers similar to those adopted internationally. The drawers are equipped with telescopic runners that stop at full withdrawal. Maximum load of each drawer is 50kg.
- Castors:** The fridge is equipped with four swivel castors. The front two have brake mechanism.
- Interior light:** The fridge has an interior LED lighting that is not only energy saving but has reduced heat output

Refrigeration System

- Danfos Compressor of high – quality system of EU origin, hermetically sealed, vibration free, low noise, energy saving, ventilation – enforced system.
- Inlet and exhaust air flow through slits at the top.
- Forced – air cooling and distribution through a blower that ensures uniform temperature throughout the volume and minimizes temperature deviations.
- Automatic fast defrosting when required
- Re-evaporation of defrost water in the evaporation panel under the compressor.
- Special air distribution system to stabilize temperature within the cabinet.
- Installed condenser filter.
- Energy efficient defrost management.

Specification Haema 850

Item code	FR3T11192711N
Capacity (Liter)	850 L
Exterior dimensions including door (mm)	890 x 920 x 2040
Interior dimensions (mm)	740 x 790 x 1450
Dimensions inner drawer	700 x 750 x 100
Number of bags per drawer	6 x 18 = 108
Number of drawers	6
Total capacity of blood bags	648
Max. load drawer (Kg)	50
Insulation (mm)	75
Power supply (V)	220-240
Frequency (Hz)	50-60
Admissible ambient temperature (°C)	+10 °C to +38 °C
Temperature setting (°C)	+4 °C
Power consumption (W)	295
Normal consumption (Kwh/24h)	3.0
Heat emission (max.) (W)	410
AMP (A)	1.8
Noise level (dB(A)); distance 1m	45
Weight (Kg)	155
No. of compressors	1
Refrigerant	R 134 a

Control and Measurement

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 - Product temperature controller on the upper LHS.
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If the door is unduly kept open an optical and acoustic alarm is activated and the interior LED lightning is activated; the compressor and fan switched off. Two stage management is utilized, the first gives a visual and audio alarm at the refrigeration controller and can be attended to by the operator, the second is managed at the product temp. controller where it can be manipulated through the central monitoring station. **This unique system is available only on Thalheimer fridge.**

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OPTIONS

- Drawers made from various other materials.
- Drawer’s dividers of various arrangements.
- Glass door
- Left or right hinged door
- GSM module
- Temperature documentation via PC

Innovation



Forced – air cooling and distribution that ensures uniform temperature



Inlet and exhaust air flow through slits at the top.



The drawers are equipped with telescopic runners that stop at full withdrawal

Sophisticated Training for Sophisticated Products

With an innovative and well designed products like our newly launched Blood Bank Refrigerators and Freezers, the operator training becomes more simple — not only because the product is easily handled, but also because we understand the need of our client.

The training programs have been planned and categorized by our training center into the following levels: Product's awareness, feature's knowledge, unit's operation and finally the service & programming training.

We don't want to make our training all about product but usually we train the operators about the basic features of a product in each hospital and at the client's premises to ensure the setting of the control system as per our client's requirement and expectation

Thalheimer's training center

Efficient performance



Thalheimer has developed its new Frezo Med Line products including Blood Plasma Freezers. This Blood Fridge is designed to conform with German standards and manufactured to comply with DIN58375 utilizing Thalheimer's Technology developed over a period of six decades of specialization in medical refrigerated systems.

Blood
Plasma
Freezers

Thalheimer Blood Plasma Freezers

Thalheimer has developed its new Frezo Med Line products including Blood Plasma Freezers. This Blood Fridge is designed to conform with German standards and manufactured to comply with DIN58375 utilizing Thalheimer’s Technology developed over a period of six decades of specialization in medical refrigerated systems. The company is accredited with the ISO9001.

Our new innovative products have been designed with fully-automated pre-installed software system which enables our blood Plasma Freezers to fully control and record the operation.

All components are of German/EU origin. The fridge provides rapid cooling, quick performance and well controlled sustainable stable temperature compatible with human blood storage.

Some of our newly developed features represent the latest innovation in blood refrigeration system.

Microprocessor control system

Product Temp controller

Driven by 12 V. rechargeable battery with automatic charging. The control gives alarm during low and high temp and during power fault.

Refrigeration controller

Controlled by microprocessor. The temperature is adjustable from +2C to +6C. Factory setting is at +4 C.

Manual defrosting

In case the evaporator allows manual defrosting and the overcooling function is not activated, then manual defrosting can be achieved by pressing the button for few seconds.

Set point

This provides access to the set point edit function=

On/stand by

BY pressing this button for a few seconds the cabinet will be switched on or will be on stand by

Chamber light

In case of glass door, you can switch the chamber light on and off manually.

Down/up

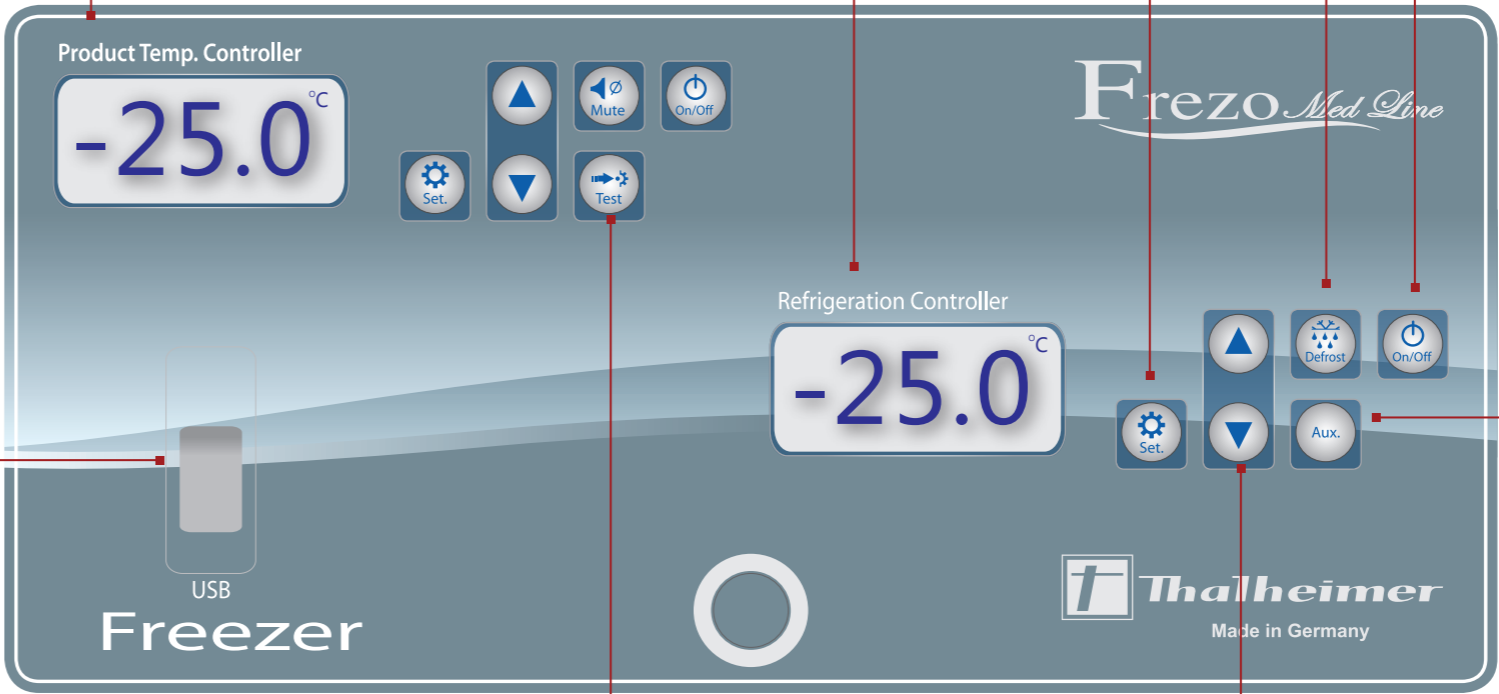
These are used to scroll the menu items and change the values.

Test

by pressing the button for at least two seconds you can check the battery level

USB for recording system

Temperature recording is done by a USB-recording devices. The record is being stored all the time in the system and can be down loaded at any time for any period.



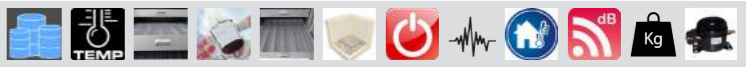
Go app!



SMARTER EVERY DAY WITH THE NEW APP

With the **new app designed to read the QR-codes** of Thalheimer's website, we have introduced the latest technology into the world of professional Medical Refrigeration system. The app is a first in the industry and allows **product information to be obtained at all times, from wherever you are**. An important tool for both the end user, who can view the instruction manual, and specialized personnel, who can access technical material, interact with the support center and submit orders.





FREZO 500

Designed & manufactured according to DIN 58375



Exterior dimensions	700 x 820 x 1935
Temperature setting	-25 °C
Capacity	500 Liter
Number of drawers	5

SPECIFICATIONS

Exterior housing: made from stainless steel (1.4301 AISI 304) brushed longitudinally.

Interior: made from stainless steel.

Door: The self-closing door is made from stainless steel with easily replaceable magnetic seal. The door stop-open on the right hand side and is lockable.

Insulation: The 75mm thick insulation is made from high-quality compression -molded, environmentally friendly injected polyurethane that ensures maximum energy saving. This is unique to the Thalheimer model.

Drawers: The fridge is supplied with Five drawers made from aluminum of medical specification. Their heights are adjustable and each has dividers similar to those adopted internationally. The drawers are equipped with telescopic runners that stop at full withdrawal. Maximum load of each drawer is 50kg.

Castors: The fridge is equipped with four swivel castors. The front two have brake mechanism.

Interior light: The fridge has an interior LED lighting that is not only energy saving but has reduced heat output

Refrigeration System

- Danfos Compressor of high – quality system of EU origin, hermetically sealed, vibration free, low noise, energy saving, ventilation – enforced system.
- Inlet and exhaust air flow through slits at the top.
- Forced – air cooling and distribution through a blower that ensures uniform temperature throughout the volume and minimizes temperature deviations.
- Automatic fast defrosting when required
- Re-evaporation of defrost water in the evaporation panel under the compressor.
- Special air distribution system to stabilize temperature within the cabinet.
- Installed condenser filter.
- Energy efficient defrost management.

Specification FREZO 500

Item code	FF3T11192719M
Capacity (Liter)	500 L
Dimensions exterior incl. door WxDxH (mm)	700 x 820 x 1935
Dimensions interior WxDxH (mm)	550 x 690 x 1350
Dimensions inner drawer	510 x 650 x 100
Number of drawers	5
Max. load drawer (Kg)	50
Insulation (mm)	75
Power supply (V)	220-240
Frequency (Hz)	50-60
Admissible ambient temperature (°C)	+10 °C to +38 °C
Temperature setting (°C)	-25 °C
Power consumption (W)	295
Normal consumption (Kwh/24h)	2.4
Heat emission (max.) (W)	410
AMP (A)	1.8
Noise level (dB(A)); distance 1m	45
Weight (Kg)	132
No. of compressors	1
Refrigerant	R 404 a

Control and Measurement

- The fridge has a front display that shows:
Refrigeration controller on the lower RHS.
Product temperature controller on the upper LHS.
- USB data recorder downloaded via USB Pindrive
- Temperature is measured and ultimately controlled by sensors which constantly measure the temperatures that are recorded on the Product Temperature controller and are easily downloaded via the USB pindrive.
- The required temperature is set on the refrigeration controller to be -25°C ± 1.5°C.
- Continuous temperature control is secured for at least 48 hours through an installed battery.

Alarm and Safety Functions

Mechanical safety thermostat is activated if the simulated core temperature is lower than the minimum tolerance limit.

If the door is unduly kept open an optical and acoustic alarm is activated and the interior LED lightning is activated; the compressor and fan switched off.

Two stage management is utilized, the first gives a visual and audio alarm at the refrigeration controller and can be attended to by the operator, the second is managed at the product temp. controller where it can be manipulated through the central monitoring station. **This unique system is available only on Thalheimer fridge.**

In the event of electrical power failure, the alarm and control mechanism and data recording remains operative for 48 hours with the help of an installed battery. **This feature is unique to the Thalheimer fridge.**

Intelligent energy – efficient defrost management is available.

The condensing temperature can be monitored even if the filter is blocked or rendered inoperative.

OPTIONS

- Drawers made from various other materials.
- Drawer’s dividers of various arrangements.
- Left or right hinged door
- GSM module
- Temperature documentation via PC

FREZO 700

Designed & manufactured according to DIN 58375



Exterior dimensions	750 x 920 x 2040
Temperature setting	-25 °C
Capacity	700 Liter
Number of drawers	6

SPECIFICATIONS

Exterior housing: made from stainless steel (1.4301 AISI 304) brushed longitudinally.

Interior: made from stainless steel.

Door: The self-closing door is made from stainless steel with easily replaceable magnetic seal. The door stop-open on the right hand side and is lockable.

Insulation: The 75mm thick insulation is made from high-quality compression -molded, environmentally friendly injected polyurethane that ensures maximum energy saving. This is unique to the Thalheimer model.

Drawers: The fridge is supplied with six drawers made from aluminum of medical specification. Their heights are adjustable and each has dividers similar to those adopted internationally. The drawers are equipped with telescopic runners that stop at full withdrawal. Maximum load of each drawer is 50kg.

Castors: The fridge is equipped with four swivel castors. The front two have brake mechanism.

Interior light: The fridge has an interior LED lighting that is not only energy saving but has reduced heat output

Refrigeration System

- Danfos Compressor of high – quality system of EU origin, hermetically sealed, vibration free, low noise, energy saving, ventilation – enforced system.
- Inlet and exhaust air flow through slits at the top.
- Forced – air cooling and distribution through a blower that ensures uniform temperature throughout the volume and minimizes temperature deviations.
- Automatic fast defrosting when required
- Re-evaporation of defrost water in the evaporation panel under the compressor.
- Special air distribution system to stabilize temperature within the cabinet.
- Installed condenser filter.
- Energy efficient defrost management.

Specification FREZO 700

Item code	FF3T11192710N
Capacity (Liter)	700 L
Dimensions exterior incl. door WxDxH (mm)	750 x 920 x 2040
Dimensions interior WxDxH (mm)	600 x 790 x 1450
Dimensions inner drawer	560 x 750 x 100
Number of drawers	6
Max. load drawer (Kg)	50
Insulation (mm)	75
Power supply (V)	220-240
Frequency (Hz)	50-60
Admissible ambient temperature (°C)	+10 °C to +38 °C
Temperature setting (°C)	-25 °C
Power consumption (W)	295
Normal consumption (Kwh/24h)	2.7
Heat emission (max.) (W)	410
AMP (A)	1.8
Noise level (dB(A)); distance 1m	45
Weight (Kg)	145
No. of compressors	1
Refrigerant	R 404 a

Control and Measurement

- The fridge has a front display that shows:
Refrigeration controller on the lower RHS.
Product temperature controller on the upper LHS.
- USB data recorder downloaded via USB Pindrive
- Temperature is measured and ultimately controlled by sensors which constantly measure the temperatures that are recorded on the Product Temperature controller and are easily downloaded via the USB pindrive.
- The required temperature is set on the refrigeration controller to be -25°C ± 1.5°C.
- Continuous temperature control is secured for at least 48 hours through an installed battery.

Alarm and Safety Functions

Mechanical safety thermostat is activated if the simulated core temperature is lower than the minimum tolerance limit.

If the door is unduly kept open an optical and acoustic alarm is activated and the interior LED lightning is activated; the compressor and fan switched off.

Two stage management is utilized, the first gives a visual and audio alarm at the refrigeration controller and can be attended to by the operator, the second is managed at the product temp. controller where it can be manipulated through the central monitoring station. **This unique system is available only on Thalheimer fridge.**

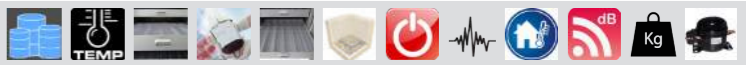
In the event of electrical power failure, the alarm and control mechanism and data recording remains operative for 48 hours with the help of an installed battery. **This feature is unique to the Thalheimer fridge.**

Intelligent energy – efficient defrost management is available.

The condensing temperature can be monitored even if the filter is blocked or rendered inoperative.

OPTIONS

- Drawers made from various other materials.
- Drawer’s dividers of various arrangements.
- Left or right hinged door
- GSM module
- Temperature documentation via PC



FREZO 850

Designed & manufactured according to DIN 58375



Exterior dimensions	890 x 920 x 2040
Temperature setting	-25 °C
Capacity	850 Liter
Number of drawers	6

SPECIFICATIONS

- Exterior housing:** made from stainless steel (1.4301 AISI 304) brushed longitudinally.
- Interior:** made from stainless steel.
- Door:** The self-closing door is made from stainless steel with easily replaceable magnetic seal. The door stop-open on the right hand side and is lockable.
- Insulation:** The 75mm thick insulation is made from high-quality compression -molded, environmentally friendly injected polyurethane that ensures maximum energy saving. This is unique to the Thalheimer model.
- Drawers:** The fridge is supplied with six drawers made from aluminum of medical specification. Their heights are adjustable and each has dividers similar to those adopted internationally. The drawers are equipped with telescopic runners that stop at full withdrawal. Maximum load of each drawer is 50kg.
- Castors:** The fridge is equipped with four swivel castors. The front two have brake mechanism.
- Interior light:** The fridge has an interior LED lighting that is not only energy saving but has reduced heat output

Refrigeration System

- Danfos Compressor of high – quality system of EU origin, hermetically sealed, vibration free, low noise, energy saving, ventilation – enforced system.
- Inlet and exhaust air flow through slits at the top.
- Forced – air cooling and distribution through a blower that ensures uniform temperature throughout the volume and minimizes temperature deviations.
- Automatic fast defrosting when required
- Re-evaporation of defrost water in the evaporation panel under the compressor.
- Special air distribution system to stabilize temperature within the cabinet.
- Installed condenser filter.
- Energy efficient defrost management.

Specification FREZO 850

Item code	FF3T11192711N
Capacity (Liter)	850 L
Dimensions exterior incl. door WxDxH (mm)	890 x 920 x 2040
Dimensions interior WxDxH (mm)	740 x 790 x 1450
Dimensions inner drawer	700 x 750 x 100
Number of drawers	6
Max. load drawer (Kg)	50
Insulation (mm)	75
Power supply (V)	220-240
Frequency (Hz)	50-60
Admissible ambient temperature (°C)	+10 °C to +38 °C
Temperature setting (°C)	-25 °C
Power consumption (W)	295
Normal consumption (Kwh/24h)	3.0
Heat emission (max.) (W)	410
AMP (A)	1.8
Noise level (dB(A)); distance 1m	45
Weight (Kg)	155
No. of compressors	1
Refrigerant	R 404 a

Control and Measurement

- The fridge has a front display that shows:
Refrigeration controller on the lower RHS.
Product temperature controller on the upper LHS.
- USB data recorder downloaded via USB Pindrive
- Temperature is measured and ultimately controlled by sensors which constantly measure the temperatures that are recorded on the Product Temperature controller and are easily downloaded via the USB pindrive.
- The required temperature is set on the refrigeration controller to be -25°C ± 1.5°C.
- Continuous temperature control is secured for at least 48 hours through an installed battery.

Alarm and Safety Functions

- Mechanical safety thermostat is activated if the simulated core temperature is lower than the minimum tolerance limit.
- If the door is unduly kept open an optical and acoustic alarm is activated and the interior LED lightning is activated; the compressor and fan switched off.
- Two stage management is utilized, the first gives a visual and audio alarm at the refrigeration controller and can be attended to by the operator, the second is managed at the product temp. controller where it can be manipulated through the central monitoring station. **This unique system is available only on Thalheimer fridge.**
- In the event of electrical power failure, the alarm and control mechanism and data recording remains operative for 48 hours with the help of an installed battery. **This feature is unique to the Thalheimer fridge.**
- Intelligent energy – efficient defrost management is available.
- The condensing temperature can be monitored even if the filter is blocked or rendered inoperative.

OPTIONS

- Drawers made from various other materials.
- Drawer’s dividers of various arrangements.
- Left or right hinged door
- GSM module
- Temperature documentation via PC

Technological Dialogue Between Man And Machine

Operation & Services

Thalheimer's Blood Refrigerators and freezers are designed to make operation easier for the user and simplify servicing.

Service engineers are supported by a special card, which allows them to communicate remotely with the equipment and ensures data can be downloaded, anomalies identified and operating parameters reset via a PC within a very short period of time. The user interfaces and data control system are particularly intuitive, the most innovative technology, which allows the unit to be used instantly. The blue digital color display provides bright, crisp and clear readings in any lighting conditions.

Technical Services are in safe hands

Our qualified technicians at Thalheimer service network repair and service all our products quickly and reliably with the aim returning the repaired or serviced unit in perfect working order.

Contact your nearest authorized service center

Thalheimer has built a service network which makes your service requirement easier and more convenient. Your nearest authorized service center will be pleased to service or repair our products within a very short time and as per our German standard.

Contact our Service Centre directly

If you have any queries for our Repair Service, please contact us via e-mail or phone at any time and we will be happy to assist you.

Warranty

Thalheimer's products are manufactured to provide outstanding value, and your satisfaction is our goal on every product. Our Blood bank refrigerators and Freezers carry a one year warranty on both parts and labor. Extended warranty up to five years against manufacturing defects is possible based on the agreement with the local distributor within your territory.

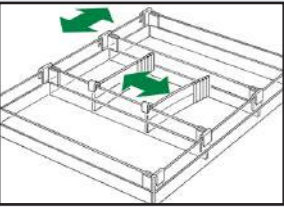
For details on specific warranty issues, please contact the distributor from which you purchased Thalheimer's Medical refrigerator unit.

In case of any complain about warranty issue, we ensure you that your warranty rights are protected by mailing back your purchase order and the invoice issued by our distributor.

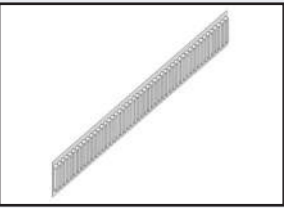
Our benefits . . . being at your service



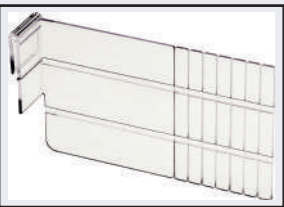
Accessories and parts



Verticle and horizontal dividers can be ordered seperately.
The verticle dividers create the row while the horizontal dividers split between each blood bag from the other. each part has its unique article number.



Slot to arrange hte verticle dividers. (article number SL-HF FB 578)



Horizontal dividers (article number HD-HF 578)



Handle made of Aluminum according to Medical specificaiton. (Article number HND-D 578)



Disc type thermometer recorder (Article number TH-Disc)



Complete control system with electrical board ordered in one delivery (Article nnumber CR-H 578. This article used for Refrigerators while for the Freezers, please use the Article number CR-F578)



Liquid loaded monitor vessel ordered with the sensors (Article number LV -HF578)



Verticle dividers should be ordered for each drawer models based on the size of your refrigeratos
(For drawers of cabinet size 500 . Article number VD-HF 500)
(For drawers of cabinet size 700 . Article number VD-HF 700)
(For drawers of cabinet size 850 . Article number VD-HF 850)



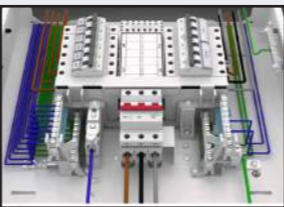
Pen recording thermometer (Article number PRT-HF 578)



Hermetically sealed compressor, vibration free (Article number FX001TL5CN)



12 V Battery for alarm controller (Article Number BAT-HF 578)



Electrical board supplied complet set with battery (Article number EB HF 578)



Telescopic runner, (Article number TR-HF 578)



Complete drawer with dividers and telescopic runners
Drawers of cabinet size 500 (Article number COMDR HF 500)
Drawers of cabinet size 700 (Article number COMDR HF 700)
Drawers of cabinet size 850 (Article number COMDR HF 850)



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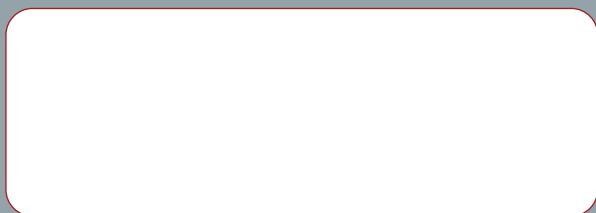
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Distributor



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