



arktik[®]

1600N – 1600N/T – 2000N – 2500N - 2500N/K – 2000P – 2000P/K

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1 General

GOVI provides this manual for information purposes only. Information provided in this manual should at no time be regarded as all-inclusive or covering all contingencies. For further information, please contact your GOVI distributor.

Any change and alteration of this trailer refrigeration unit and deviation from the installation process without prior written consent will void GOVI's warranty.

Only use original spare parts or spare parts approved by GOVI. It is explicitly pointed out that original spare parts and accessories which are not supplied by GOVI are neither tested nor approved. GOVI cannot assume any liability or warranty for damage caused by the use of non-original spare parts.

The work on the trailer refrigeration unit described in this manual may only be carried out by persons who, on the basis of the relevant regulations and of their professional training, knowledge and experience, can assess the work to be carried out and identify possible dangers.

GOVI is not responsible for personal injury or material damage which may arise from non-approved modifications.

In order to ensure the durability of GOVI products please follow the instructions in this manual.

1.1 Disposal of the Unit

WARNING!



Danger of personal injuries and damage to the environment due to improper disassembly of the trailer refrigeration unit.

Only qualified, trained specialists are allowed to disassemble the trailer refrigeration unit.

The refrigerant must be handled with care as it poses serious health and environmental hazards.

The customer is responsible for the proper disposal of the trailer refrigeration unit.

Tab. 1-1 List of materials

Designation	Material
Structure	Sheet metal, ferrous material
Condenser, evaporator	Aluminium, copper
Electrical components	Copper, PVC, miscellaneous materials
Compressor	Ferrous materials, copper and other materials
Refrigerant	R452A / R134a
Refrigerant quantity	0,45 / 1,17 kg
Coating	Epoxy compound

Please follow local regulations regarding the disposal of the trailer refrigeration unit and especially its refrigerant. If appropriate, consult professionals or specialists.

2 Safety Instructions

2.1 Safety Messages and Safety Alert Symbols

DANGER!



Indicates a hazardous situation that, if not avoided, could result in irreversible personal injury and even death.

WARNING!



Indicates a hazardous situation that, if not avoided, could result in irreversible personal injury or even death under certain circumstances.

CAUTION!



Indicates a hazardous situation that, if not avoided, can result in personal injury or damage to objects and the environment.

2.2 Other Terms and Symbols

Notices do not indicate safety-related content.

Notice



Provides useful information and helpful tips.

2.3 Safety and Hazard Precautions

WARNING!



Electrical hazard!

Any work on the trailer refrigeration unit is allowed with unplugged main plug only.

Protect the trailer refrigeration unit against being started up while working on it by following suitable measures.

Never attempt to plug in or unplug the trailer refrigeration unit from the power supply when your hands are wet.

WARNING!



Electrical hazard!

The following safety rules must be strictly observed before working on the trailer refrigeration unit:

- Switch off.
- Prevent it from being switched back on again accidentally.
- Check that lines and equipment are without power.
- Ground and short circuit phases.
- Cover, partition or screen of adjacent line sections.

The electrical connection to the trailer refrigeration unit must be made by a licensed electrician.

WARNING!



Hazard from toxic gas!

This refrigeration unit contains a fluorocarbon refrigerant, which, in the presence of an open flame or electrical short, produces toxic gases that are severe respiratory irritants capable of causing death.

The refrigerant tends to displace air and can cause oxygen depletion, which may result in death by suffocation.

Be careful when working on the trailer refrigeration unit, especially in any enclosed or confined area with a limited air supply!

WARNING!



Fire and explosion hazard from flammable operating materials!

Avoid open fire, electrical sparks and ignition sources.

Do not smoke!

Observe measures for fire and explosion protection.

WARNING!



Hazard from improper modifications!

Do not drill any additional holes into the trailer refrigeration unit.

You may damage major parts. Holes accidentally drilled into electrical wiring or refrigerant pipes can cause fire or explosion.

WARNING!



Health hazard from refrigerant emissions!

During maintenance or repair work on the refrigerant circuit, refrigerant emissions may occur. These emissions can be both liquid and gaseous and pose a threat to humans and the environment.

In case of emissions or leaks in the refrigerant circuit, it is mandatory to wear proper protective clothing as goggles, respiratory masks and protective gloves.

CAUTION!



Burning hazard!

Components of the trailer refrigeration unit (such as condenser, evaporator and tubes) may still be hot from operation.

Allow a sufficient cooling time of the components when working on the trailer refrigeration unit.

CAUTION!



Long-term environmental hazard!

Operating materials (refrigerant and refrigerant oil) are not biodegradable. Observe the safety data sheet or operating instructions of the materials used.

Operating materials and polluted components must be disposed according to locally valid environmental regulations.

CAUTION!



Injury hazard from rotating fan blades!

Keep your hands away from rotating fan blades.

Accidental contact with fan blades' sharp edges can cause severe personal injury.

2.4 Safety Precautions Concerning the Refrigerant

Hydrofluorocarbon refrigerants are classified as safe refrigerants. However, certain precautions must be observed during the operation, installation and maintenance of the trailer refrigeration unit.

When released to the atmosphere in the liquid state, hydrofluorocarbon refrigerants evaporate causing rapid freezing.

In contact with parts of the human body, they can cause severe frostbites.

Hydrofluorocarbon refrigerants may generate hazardous gases, which, in the presence of an open flame or electrical short, are severe respiratory irritants and may have fatal consequences.

2.4.1 First Aid

In the event of frostbite, you should generally protect the affected area from further injury or contact with the refrigerant and if necessary seek medical advice.

Contact of refrigerant or refrigerant oil with the eyes:

In case of contact with the refrigerant or refrigerant oil, immediately flush eyes with large amounts of lukewarm water (for at least 15 minutes) and get prompt medical attention.

Frostbite of the skin:

Remove clothing and shoes contaminated with refrigerant.

Flush the affected area with large amounts of lukewarm water for a long time.

Do not apply heat (e.g. by rubbing or using a hot water bottle).

Get immediate medical attention. Loosely bandage frost-bite burns with dry, sterile, sizeable dressing to protect from infection or injury.

Inhalation of refrigerant:

Get immediate medical attention. Bring the person to fresh air and, if necessary, carry out resuscitation measures.

2.4.2 Environmental Considerations

GOVI trailer refrigeration units are shipped with a suitable charge of refrigerant R452A / R134a.

In case of errors in the refrigerant circuit or fluid leaking out of the trailer refrigeration unit, the unit must be checked by a specialist and be properly repaired. Under no circumstances the refrigerant shall be vented into the atmosphere.

Accurately read the Safety and Hazard Precautions in *section 2.3 Safety and Hazard Precautions*, as well as the data sheet for the refrigerant R452A / R134a provided by the manufacturer.

Defective and reclaimed refrigeration units/sucked fluids must be disposed according to the relevant environmental regulations.

2.5 Intended Use

This trailer refrigeration unit is designed for refrigerated trailers at locations without explosion or fire hazards. For that purpose, the trailer refrigeration unit is mounted stationary at the front wall of the refrigerated trailer by a mechanical fastening system (not within the scope of delivery).

At outside temperatures between -20°C and $+40^{\circ}\text{C}$ the trailer refrigeration unit enables inside temperatures from -20°C to 10°C .

- The trailer refrigeration unit is not determined for operation in AP.PE EEx (places with explosion hazard).
- The trailer refrigeration unit is not designed to be used in places with fire hazard.
- The trailer refrigeration unit is not equipped with reinforced electrical or mechanical protective elements to withstand aggressive atmospheric conditions.

Ensure good ventilation of the trailer refrigeration unit when placing the trailer. Ensure proper air circulation and good access for maintenance work when indicated.

Do not expose the trailer refrigeration unit to direct sunlight.

Ensure proper air circulation inside the refrigeration unit when loading the trailer. Do not block the evaporator. Avoid the insertion of heat sources in the refrigeration unit.

- The trailer is designed for no other purpose than the one described above. Any other use is considered improper, for which it is prohibited or requires the manufacturer's approval.

The Intended Use also includes compliance with the specified maintenance and repair work, [see section 10 10](#).

3 Technical Data

The trailer refrigeration unit consists of a self-supporting chassis made of galvanized plate and a main cover made of ABS, with paint in standard colour RAL9010.

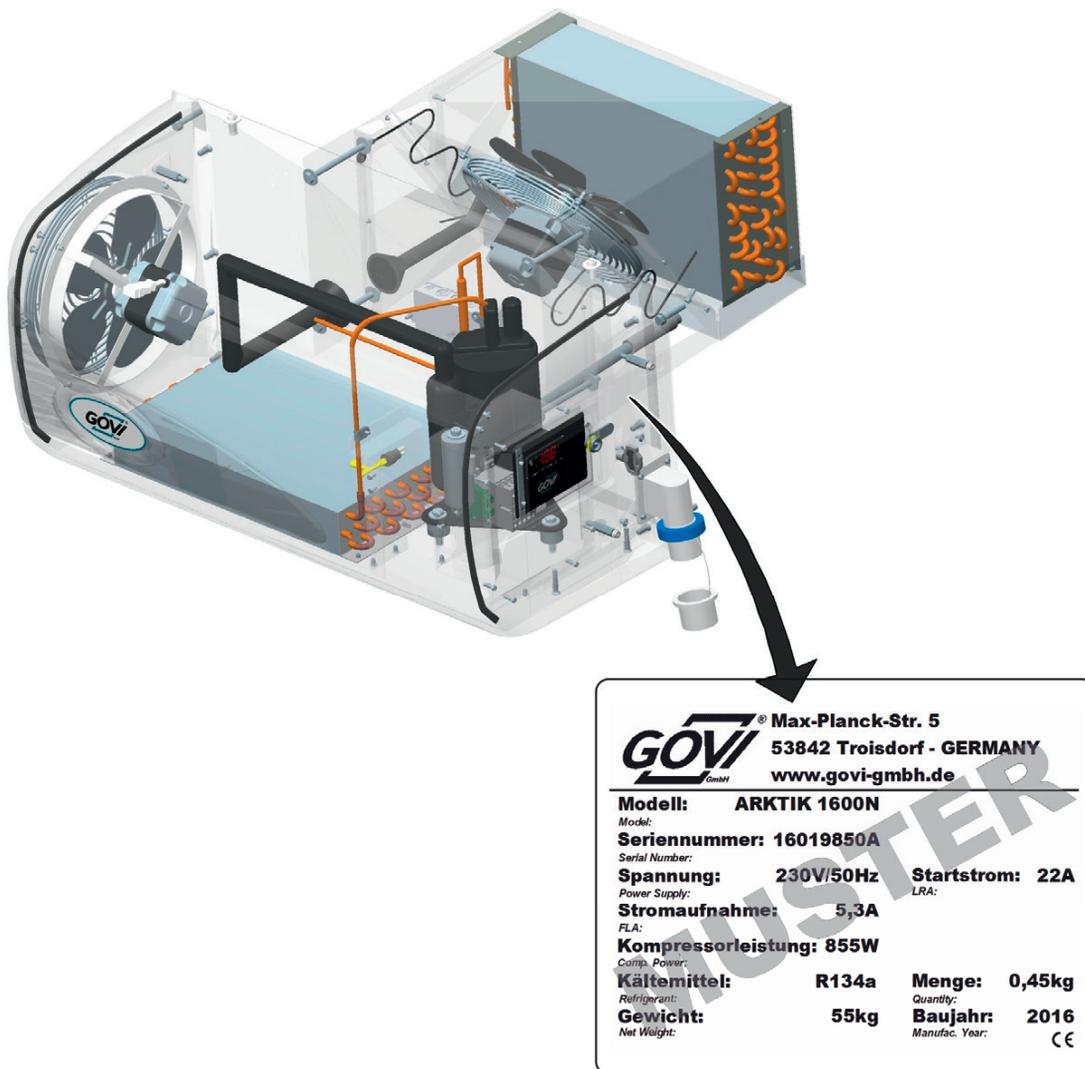


Fig. 3-1 Nameplate

The serial numbers of the trailer refrigeration unit are on the nameplate, together with other important technical data. The nameplate is on the right-hand side of the main cover in the proximity of the electrical connection.

To ensure a fast and smooth processing of your requests, please mention the serial number of the trailer refrigeration unit when asking technical queries.

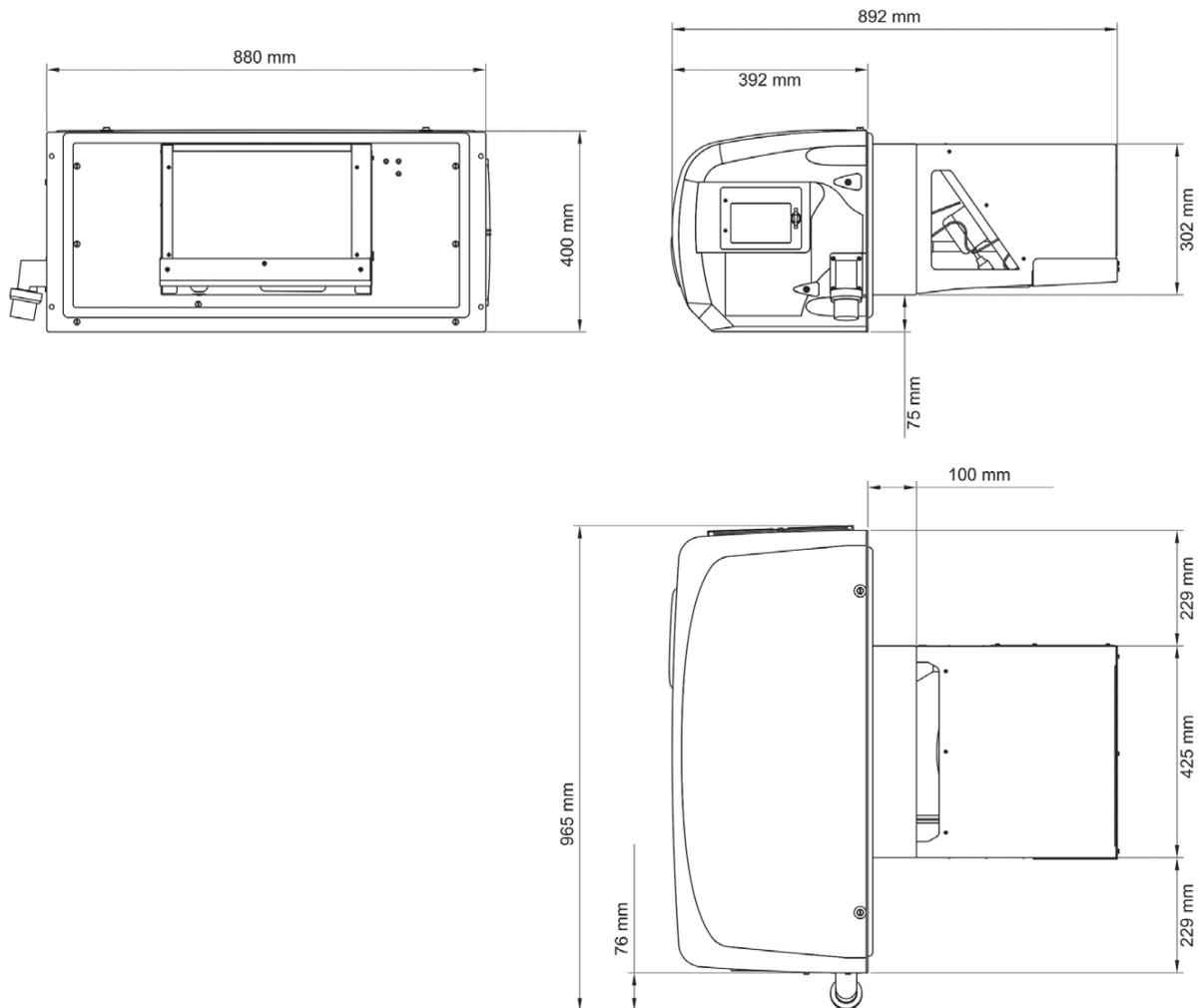


Fig. 3-2 Dimensions

Tab. 3-1 Technical data

Description	Unit	<i>arktik</i> [®] 1600N	<i>arktik</i> [®] 1600N/T	<i>arktik</i> [®] 2000N	<i>arktik</i> [®] 2500N	<i>arktik</i> [®] 2500N/K	<i>arktik</i> [®] 2000P	<i>arktik</i> [®] 2000P/K
refrigerated trailer internal temperature		T=2 °C	T=2 °C	T=2 °C	T=2 °C	T=2 °C	T=2 °C/ -20 °C	T=2 °C/ -20 °C
power supply	V	230	230	230	230	230	230	230
frequency	Hz	50	50	50	50	50	50	50
cooling capacity	W	1600	1470*	2050	2500	2500	1500/2050	1500/2050
heating capacity	W				-/-	1600	-/-	1600
power consumption	W	855	855	1260	1200	1200	1000/1200	1000/1200
current consumption LRA	A	19,8	19,8	29	32	32	32	32
current consumption FLA	A	4,8	4,8	5,7	7	7	6,5/7,0	6,5/7,0
defrosting	W	340	340	340	340	340	1090	1090
air flow evaporator	m³/h	750	750	750	1100	1100	1100	1100
air flow condenser	m³/h	750	1100	1100	1100	1100	1100	1100
protection class, mounting side	IP	54	54	54	54	54	54	54
refrigerant	Typ	R134a	R134a	R134a	R452A	R452A	R452A	R452A
refrigerant quantity	g	450	450	550	800	800	1170	1170
max. operating temperature	°C	40	45	40	40	40	40	40
weight	kg	55	55	63	63	63	63	63
colour	RAL	9010	9010	9010	9010	9010	9010	9010

CFC-free refrigerant R134a • CFC-free refrigerant R452A •

N = Normal refrigeration • N/T = Normal refrigeration at high outside temperature

P = Polytemperature • K = Climate heater (ensuring the desired temperature in winter)

The refrigeration capacity is based on the following operating conditions:

Outside temperature 30 °C, RH 50% • * Outside temperature 40 °C, RH 50%

We recommend an insulation with a k value of 0.2 W/m²K

4 Package, Transportation and Storage

4.1 Package

For safe transportation, the trailer refrigeration unit is securely packed in a box mounted on pallets.

CAUTION!



Damaged appliances can cause skin injuries and property damage due to leakage of the refrigerant.

In case of severe external damage to the package and/or on the trailer refrigeration unit, contact immediately your local GOVI dealer for assistance.

Do not start with the installation of the trailer refrigeration unit and do not put it into operation.

1. Upon delivery place the pallet and box on a level ground. Immediately inspect the box and the trailer refrigeration unit for any damage.
2. Inform the carrier about any damage you have discovered.
3. Take pictures of the damage and document them immediately on the bill of delivery.



- | | | |
|--------------------|------------|--------|
| 1 Operation manual | 3 Spanner | 5 Bulb |
| 2 Fixing bolts | 4 Coupling | 6 Lamp |

Fig. 4-1 Box

4. Check the contents of the box for completeness.
5. Look for loose parts that may be integral part of the delivery, before disposing of the package.

4.2 Transport

CAUTION!



Risk of equipment damage!

The trailer refrigeration unit must be transported horizontally.

The trailer refrigeration unit must have been in a horizontal position at least six hours prior to its commissioning.

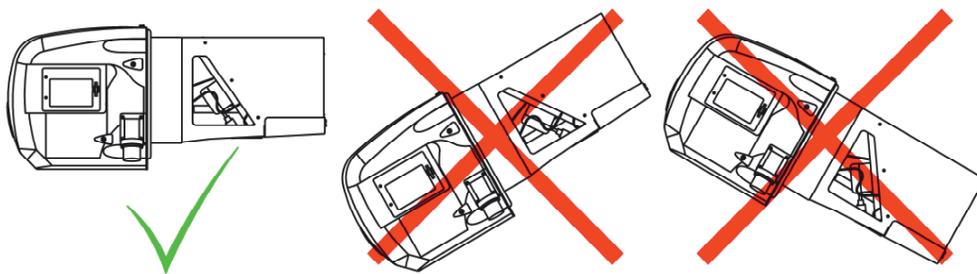


Fig. 4-2 Transport and storage

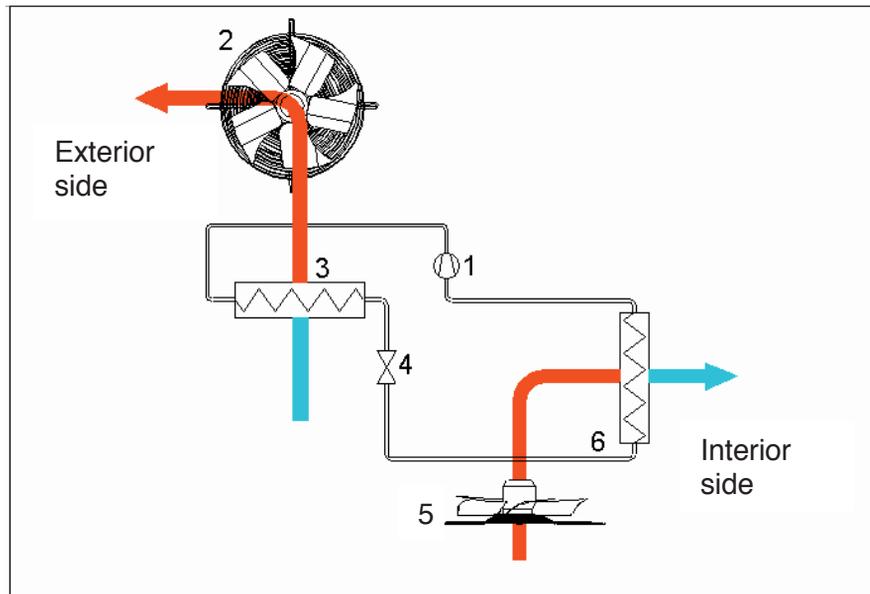
- Only use suitable lifting equipment for lifting and transport of the trailer refrigeration unit. Look at *section 3 Technical Data* for information about the weight.
- Lift the refrigeration unit for trailers according to *section 6.4 Installation of the Trailer Refrigeration Unit*.

4.3 Storage

Observe the following when storing the trailer refrigeration unit:

- The trailer refrigeration unit must be stored horizontally, *see Fig. 4-2*.
- The storage temperature must not exceed 60 °C.
- The trailer refrigeration unit must not be stored in an aggressive environment.
- Direct sunlight at the storage location must be avoided.

5 System Description

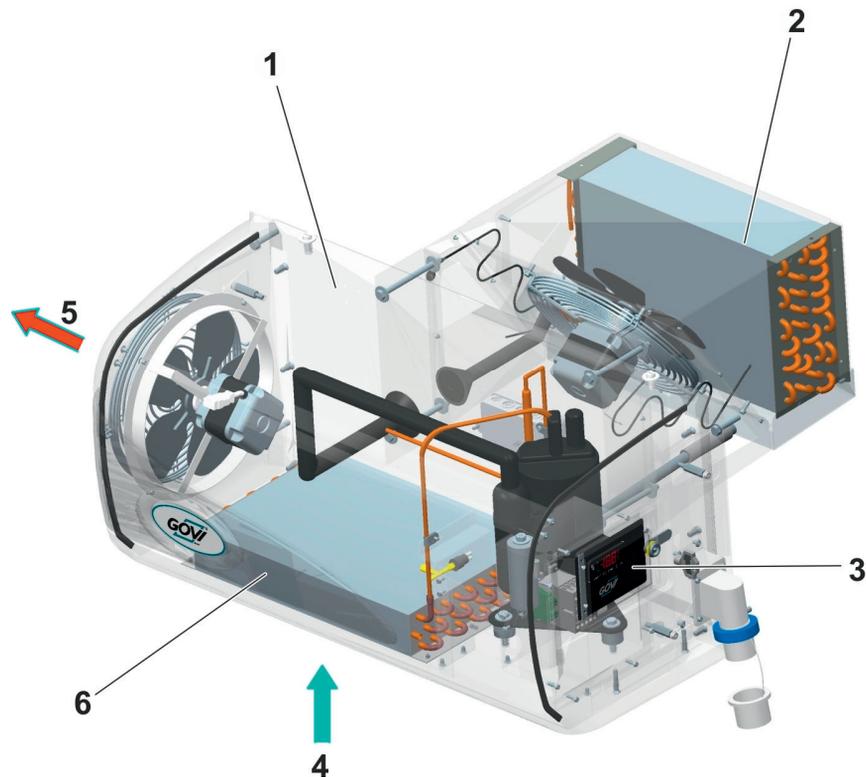


- | | |
|-----------------|------------------|
| 1 Compressor | 4 Throttle valve |
| 2 Condenser fan | 5 Evaporator fan |
| 3 Condenser | 6 Evaporator |

Fig. 5-1 Functional diagram

The unit functioning is based on the cooling cycle principle: heat transfer occurs by means of a refrigerant, which absorbs heat in the evaporator and then releases it in the condenser. All this takes place within a closed loop. The refrigerant is pressurised by an electrically driven compressor, fluidised in the condenser, atomised by means of a throttle valve and evaporated in the evaporator.

The evaporator is located inside the refrigerated trailer, while the condenser on the outside. The trailer refrigeration unit is equipped with a forced-ventilated condenser and evaporator, axial fans and electronic temperature control.



- | | |
|--|---|
| 1 Main cover | 4 Air intake
(do not obstruct!) |
| 2 Evaporator
(with refrigerant in the system) | 5 Air outlet
(do not obstruct!) |
| 3 Protection cover | 6 Condenser
(with refrigerant in the system) |

Fig. 5-2 Overview of the trailer refrigeration unit

- | | |
|---|---|
| Main cover (1) | The main cover (1) covers the outer parts of the trailer refrigeration unit. |
| Evaporator (2) and condenser (6) | In the evaporator (2) heat is absorbed by the refrigerant, which is released again in the condenser (6). |
| Protection cover (3) and setting of nominal temperature | The protection cover (3) shields the control unit from harsh weather and impedes unintended changes of the settings.
The nominal temperature is set according to section 9.2 9.2 . |
| Air intake (4) and air outlet (5) | The air intake (4) and air outlet (5) must always be kept free. They must not be covered or obstructed. |

6 Installation

6.1 Conditions for Installation

1. Read this manual carefully in order to understand how to properly perform the installation.
2. Verify that the trailer refrigeration unit is delivered according to your order, is in good condition and has no visible damages.
3. Check that all necessary tools and all additionally required parts are not missing and that are in good operating condition.
4. Verify that the installation site of the trailer refrigeration unit provides a flat surface without unevenness, which may cause vibrations.
5. Check that the front wall of the trailer refrigeration unit is able to adequately support its weight.
6. Make sure that the loading crane or lifting device, and the complete lifting cables are of sufficient size to support the weight of the trailer refrigeration units. Look at [section 3 Technical Data](#) for information about the weight.
7. Note that the power supply of the trailer refrigeration unit cannot be connected before the installation of the unit and its accessories has been completed.
8. Provide protection to the trailer's walls and/or internal parts to prevent damage by swarf and alike during the installation process.

6.2 Additional Parts and Equipment

Because of the wide variety of installation options available, the trailer refrigeration unit is not shipped with all parts needed for every possible installation situation. The installer needs to make sure that the following parts are available.

We recommend keeping the following additional parts ready in a box before starting the installation process:



2 assembly eyelets M8



1 condensed water drain hose
with an internal 15-mm diameter and suitable length.

6.3 Preparatory Activities

6.3.1 General Preparation

1. Place the refrigerated trailer and trailer refrigeration unit side by side on a dry and clean level ground.
2. Verify that the trailer is in horizontal position.
3. Make sure that the contact area between its front wall and the trailer refrigeration unit is free from impurities.
4. Remove all obstacles from the installation area.
5. Prepare all required tools and equipment and place them in a safe place easily accessible from the installation area.

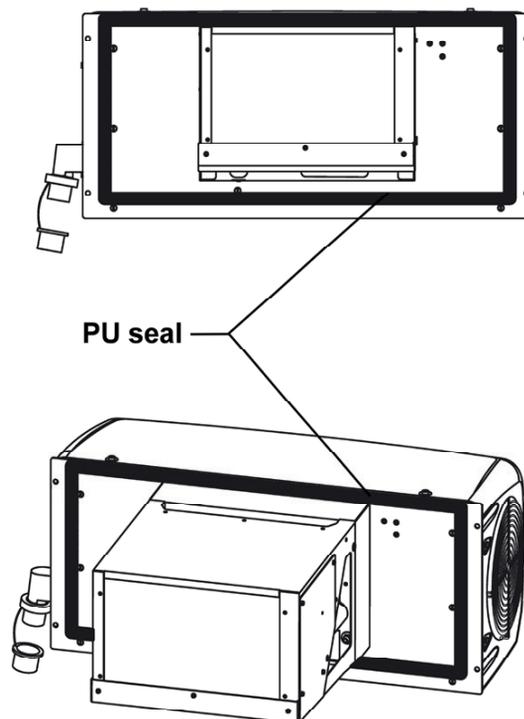


Fig. 6-1 PU seal of the trailer refrigeration unit

6. Verify that the PU seal (1) at the backside of the trailer refrigeration unit is available and intact.

6.3.2 Installation Opening of Trailer Wall

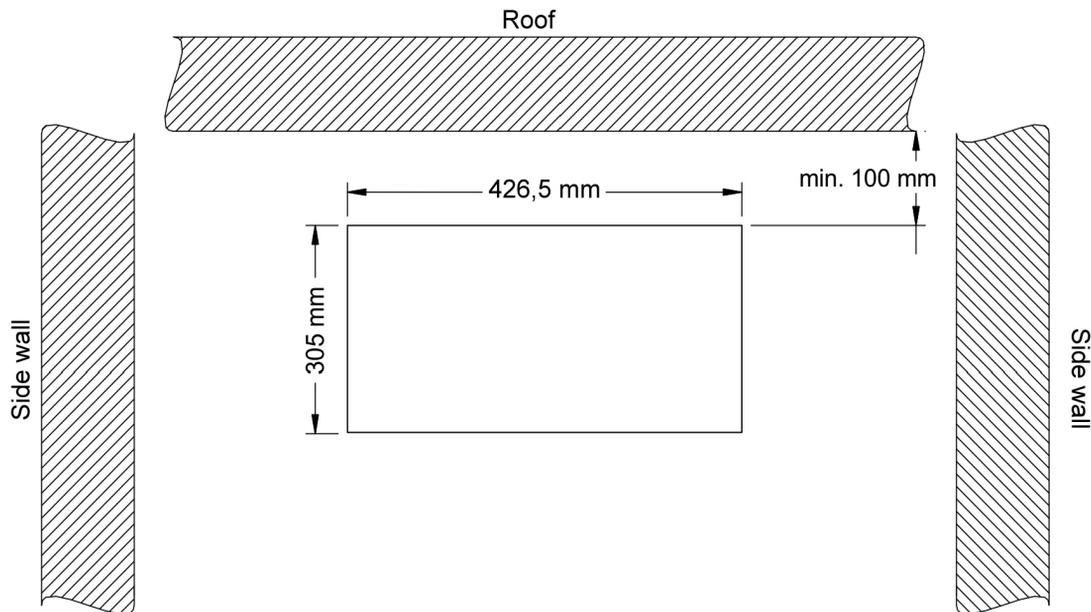
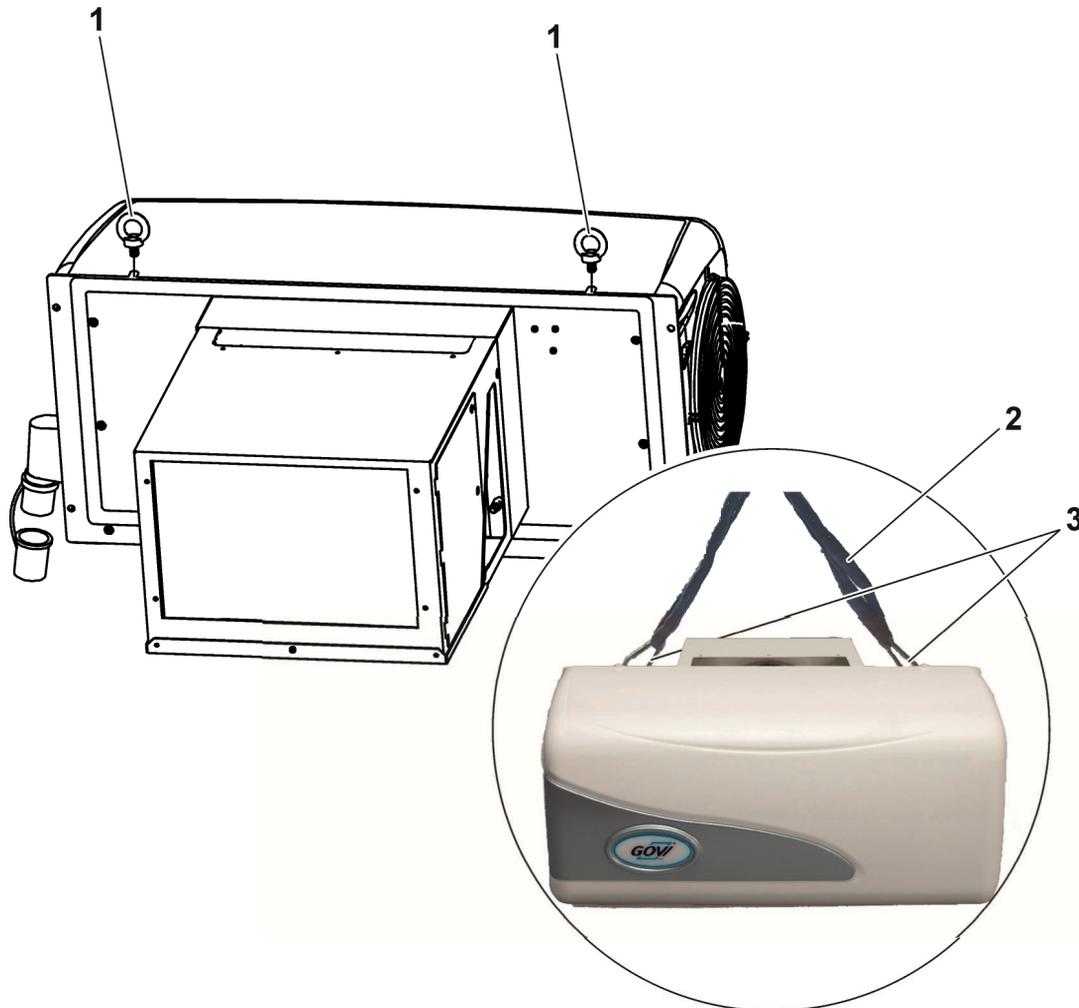


Fig. 6-2 Dimensions of the trailer wall opening

7. Prepare the wall opening together with 6 drill holes for the fastening elements in the middle of the front wall of the trailer. Make sure that the minimum size for proper operation of the trailer refrigeration unit is observed, *see Fig. 6 2*.

6.4 Installation of the Trailer Refrigeration Unit



1 Eye bolts 2 Carrying rope 3 Spring hook

Fig. 6-3 Attachment points of the trailer refrigeration unit

CAUTION!**Risk of equipment damage!**

Without the main cover, the individual components of the trailer refrigeration unit are vulnerable to damage during the installation.

Leave the main cover during the installation.

1. Remove the hexagon head screws from the mounting holes of the main cover on the top of the trailer refrigeration unit one by one and insert in each free hole one eye bolt (1) from the provided box, *see Fig. 4-1*.

WARNING!**Injury hazard!**

The weight of the trailer refrigeration unit is approximately 63 kg.

Always wear a helmet when lifting and positioning it.

Use only suitable and approved tools.

You must use both lifting points (eye bolts).

2. Attach 2 sufficient dimensioned carrying ropes (2) at both eye bolts (1).

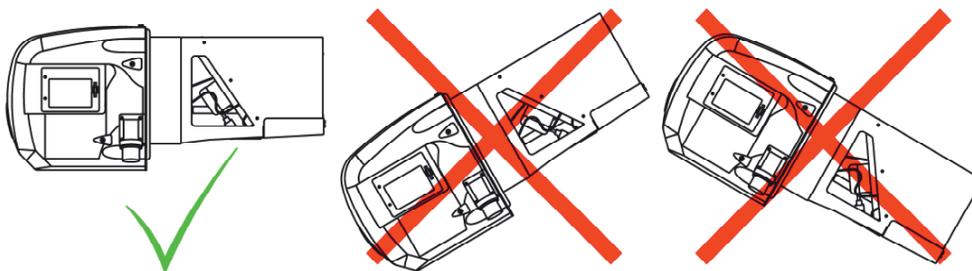


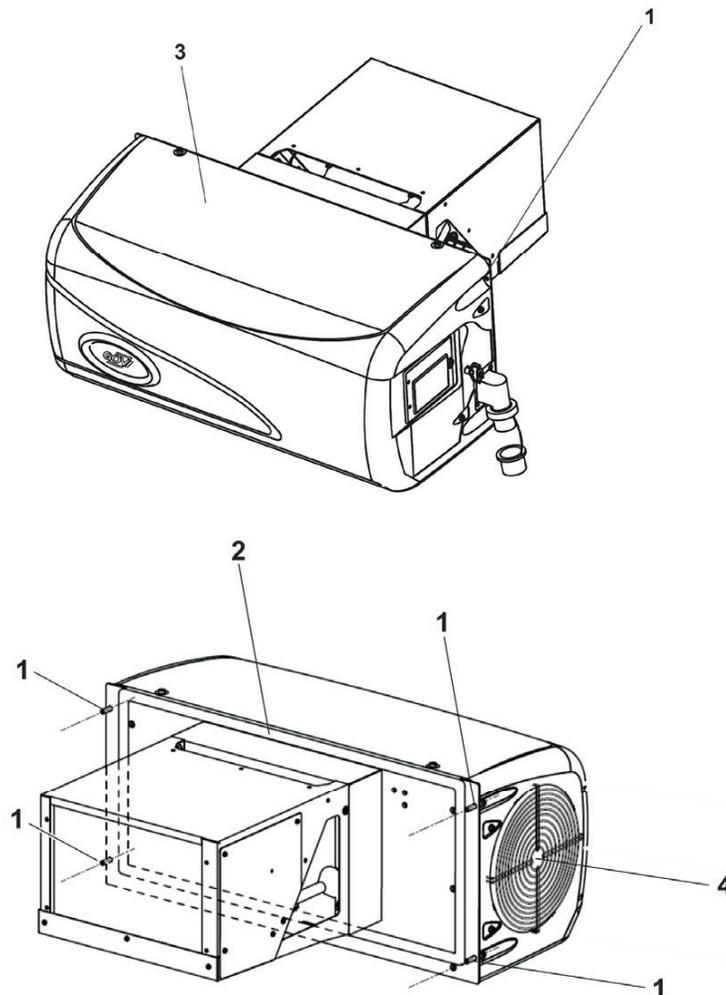
Fig. 6-4 Mounting alignment

CAUTION!**Risk of equipment damage!**

The trailer refrigeration unit must be transported horizontally.

The trailer refrigeration unit must have been in a horizontal position at least six hours prior to its commissioning.

3. Make sure that the trailer refrigeration unit stays in a horizontal position while lifting it carefully out of the box.
4. Position the trailer refrigeration unit in front of the installation opening at its front wall using an adequate lifting device or loading crane.



1 Fixing bolts 2 PU seal 3 Main cover 4 Protective grating

Fig. 6-5 Attachment of the trailer refrigeration unit

5. Place the trailer refrigeration unit in the mounting area and make sure that the PU seal (2) does not get damaged.
6. Secure the trailer refrigeration unit with the aid of fixing bolts (1) on the trailer, *see section 6.2 Additional Parts and Equipment*.
7. Remove eye bolts with the carrying ropes and fasten again the main cover (3) using the screws.

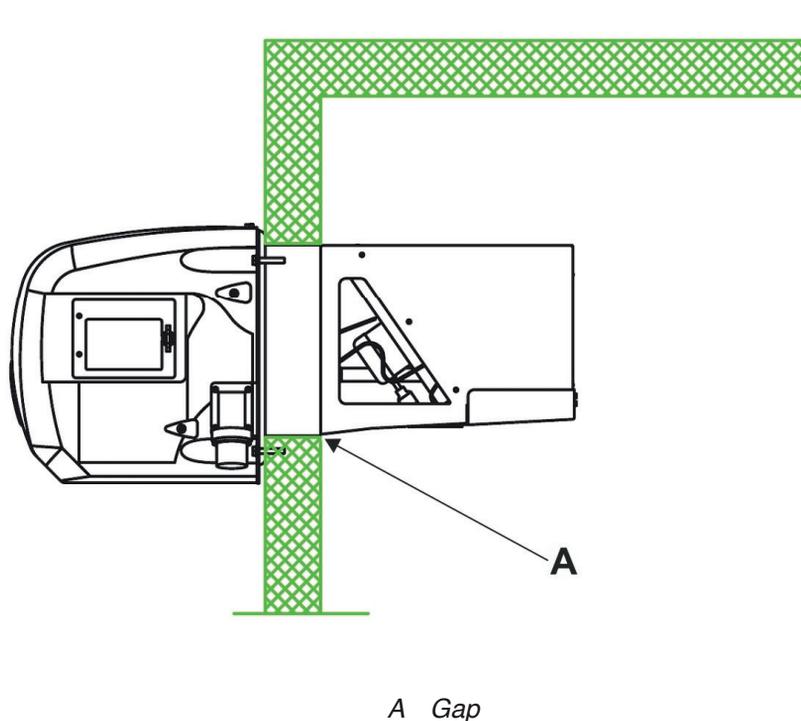


Fig. 6-6 Sealing inside of the trailer

8. Inside the refrigeration unit, seal the gap (A) between the front wall of the trailer refrigeration unit and the trailer edge using silicone.
9. If necessary, connect a condensed water drain hose at the bottom of the condenser and make sure that it is not kinked or is positioned in an inclined way, [see section 6.2 6.2.](#)

6.5 Installation of Accessories

It is not necessary to open the unit when installing the lighting system. The power supply connection has been prefitted at the factory. The connected cable for the interior lighting is located on the evaporator side panel.

7 Operating Elements

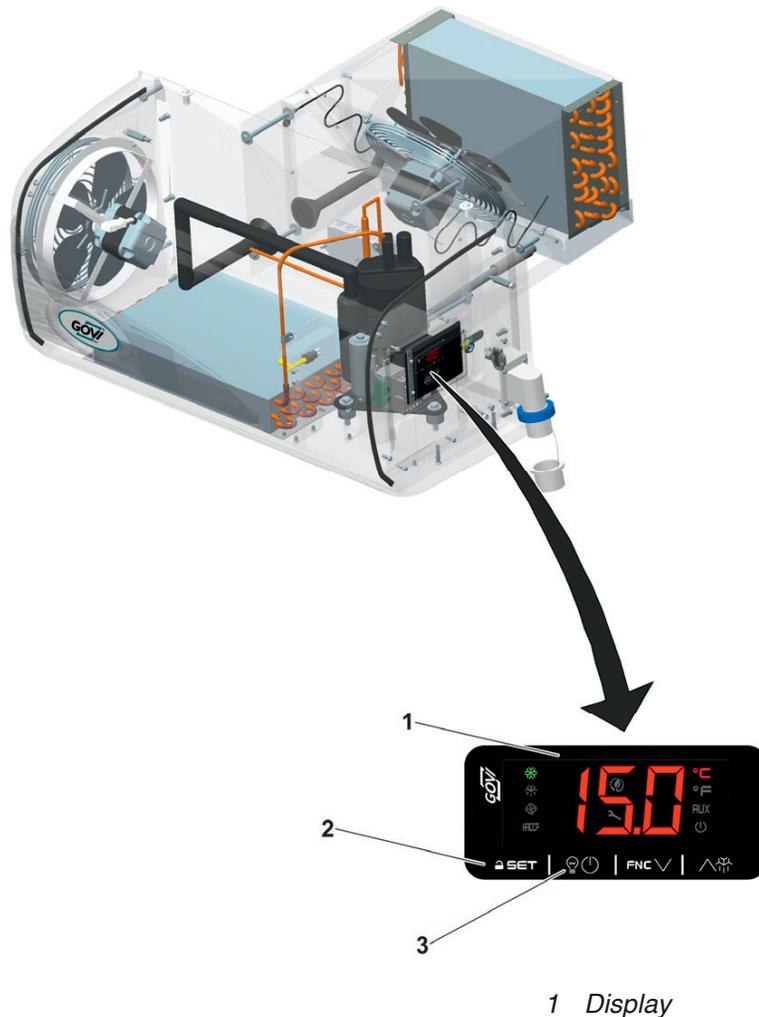
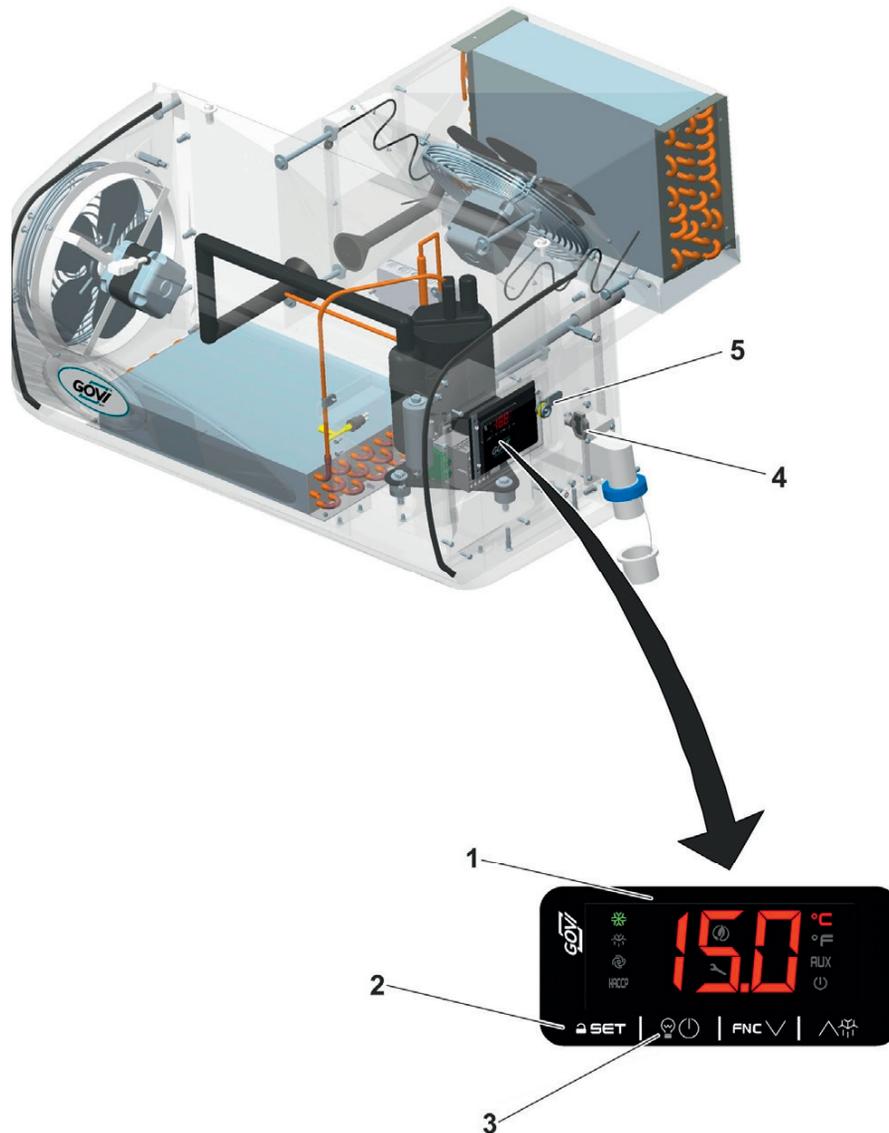


Fig. 7-1 Operating elements

Display (1)	The display serves to choose and to show the nominal temperature.
Control switch (2)	The control switch (2) enables to switch on and off the control voltage of the trailer refrigeration unit.
Lamp switch (3)	The lamp switch (3) enables to switch on and off the light inside the refrigeration unit.

8 Commissioning



- | | | |
|------------------|--------------------------------|-----------|
| 1 Display | 3 Light switch & ON/OFF switch | 4 Spanner |
| 2 Control switch | 5 Latch | |

Fig. 8-1 Commissioning

1. Remove protective cover from the power connector.
2. Connect the trailer refrigeration unit by means of a suitable cable (not supplied) to the electric power system.
3. Use the spanner (4) to unlock the latch (5) and open the protection cover.

CAUTION!



Immediately unplug the power supply of the trailer refrigeration unit if you detect smoke, unusual smells or strange noises coming from it.

Call for service before operating the trailer refrigeration unit again.

4. Press the button ON/OFF to activate the trailer refrigeration unit. The symbol ON/OFF blinks until the controller is on. The current temperature is displayed.
If “LoC” is displayed, it means the buttons are locked. In order to unlock them, keep any button pressed until “UnL” is displayed.



Press SET once shortly.
The display now shows the current setting of the nominal temperature.



Adjust the nominal temperature by pressing UP for a higher temperature or DOWN for a lower temperature.



To confirm the nominal value, press the button SET.

5. Make sure that:
 - the wall opening and the drill holes of the trailer wall are sealed firmly to prevent moisture or air leakage,
 - neither the air outlets and air intakes nor the condenser and the evaporator are obstructed by any material or object,
 - the main cover is securely installed and sealed,
 - the condensed water drain hose is firmly attached to its discharge outlet,
 - all bolts and screws are securely fastened,
 - the system operates correctly.

9 Operating

CAUTION!



Immediately unplug the power supply of the trailer refrigeration unit if you detect smoke, unusual smells or strange noises coming from it.

Call for service before operating the trailer refrigeration unit again.



- 1 Display
- 2 Control (SET) switch
- 3 Lamp switch & ON/OFF switch

Fig. 9-1 Operating

9.1 Switching on/off the Trailer Refrigeration Unit

1. Use the spanner (4) to unlock the latch (5) and open the protection cover.
2. Press and hold the button ON/OFF for 2 seconds.

9.2 Setting Nominal Temperature

1. Use the spanner (4) to unlock the latch (5) and open the protection cover.
2. Briefly press the button SET. The display shows the preset nominal value already set.

3. To change the nominal value, press the button UP or DOWN.


4. Confirm your desired temperature by pressing SET again.


9.3 Switching on/off the Lamp in the Refrigerated Trailer

1. Use the spanner (4) to unlock the latch (5) and open the protection cover.
2. Briefly press the button ON/OFF. "AUX" lights up.
3. Briefly press again the button ON/OFF in order to switch off the lamp in the trailer. "AUX" goes out.

9.4 Manual Defrost

While the trailer refrigeration unit is in use, the evaporator fins will gradually get covered with frost. Defrosting must be carried out regularly in order to avoid losses in the cooling capacity and air flow. It can be done using electric heating elements, which heat the evaporator causing the frost (or ice) to melt. The melted frost runs off through the drain pipes of the unit. During the defrosting procedure, the evaporator fans are stopped.



1. Use the spanner (4) to unlock the latch (5) and open the protection cover.
2. Press "UP" for more than 5 seconds.
The manual defrost routine will start.

10 Maintenance

Notice



Maintain the trailer refrigeration unit

- every 6 months, or
- after a longer period out of operation or
- immediately after operation in a dusty or moist environment.

Negligent maintenance can lead to malfunction and damage the trailer refrigeration unit.

10.1 Manual Defrost During Maintenance

See section 9.4 9.4.

10.2 Cleaning

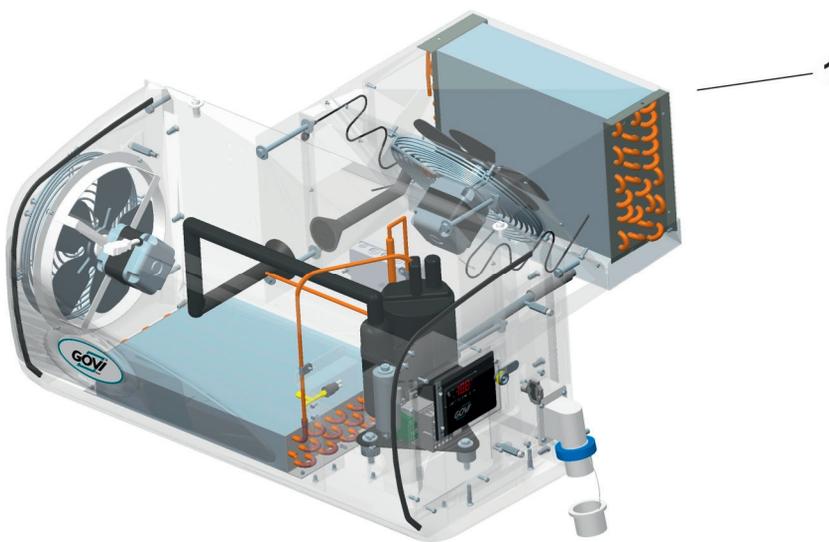
10.2.1 Cleaning Parts Inside the Refrigeration Unit

WARNING!



Fire and explosion hazard!

Never use flammable solvents such as alcohol, benzene or thinners for cleaning.

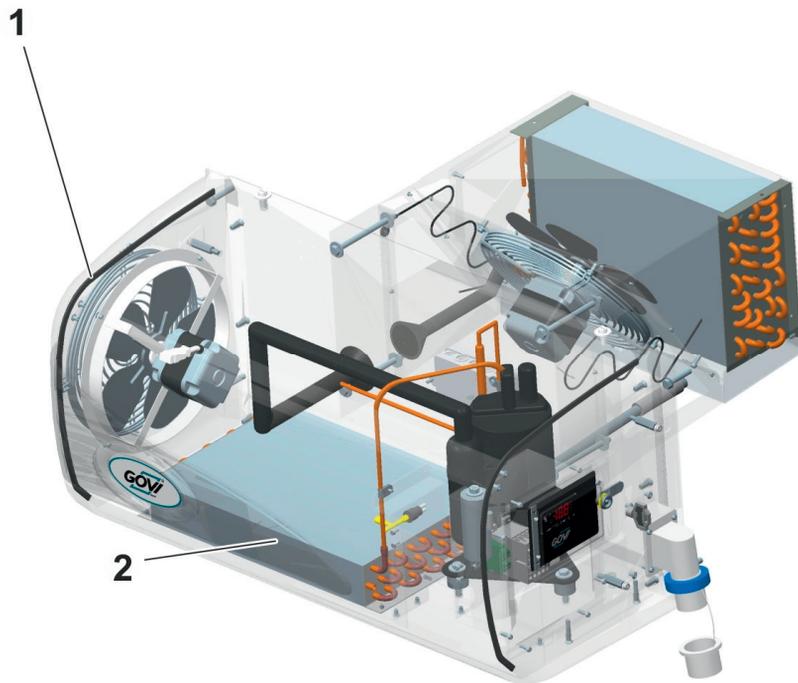


1 Evaporator

Fig. 10-1 Cleaning parts inside the refrigeration unit

1. Clear the refrigeration unit of all goods and merchandise.
2. Disconnect the trailer refrigeration unit from the power supply by pulling the main plug.
3. Clean the evaporator by applying compressed air from an appropriate distance.
4. Connect again the trailer refrigeration unit to the power supply by inserting the main plug.

10.2.2 Cleaning Parts Outside the Refrigeration Unit



1 Main cover 2 Condenser

Fig. 10-2 Cleaning parts outside the refrigeration unit

1. Disconnect the trailer refrigeration unit from the power supply by pulling the main plug.
2. Loosen and remove the five screws on the upper side of the trailer refrigeration unit and take off the main cover (1).
3. Clean the condenser (2) by blowing compressed air from top to bottom through the cooling fins from an appropriate distance.
If necessary, align fins after the cleaning procedure.
4. Fasten the main cover (1) using the screws.
5. Connect again the trailer refrigeration unit to the power supply by inserting the main plug.

11 Troubleshooting

Tab. 11-1 Troubleshooting

Errors / Failure	Problem	Solution
The trailer refrigeration unit does not start.	No power.	<ol style="list-style-type: none"> 1. Check that the display is on (button ON/OFF). 2. Check the connection to the power supply.
	The fuses of the power line are blown.	Call for GOVI service.
The trailer refrigeration unit does not cool; the fan inside the refrigerated trailer does not work.	No power.	<ol style="list-style-type: none"> 1. Check that the display is on (button ON/OFF). 2. Check the connection to the power supply.
The trailer refrigeration unit does not cool; the fan inside the refrigeration unit works.	The nominal temperature is set too high.	Set the nominal temperature to the desired temperature.
	Malfunction of thermostat.	Call for GOVI service.
	The high-pressure switch is tripped.	<ol style="list-style-type: none"> 1. Make sure that the condenser is clean and that the outer fan is turning. 2. Make sure that the main cover is mounted correctly. 3. Call for GOVI service.

Errors / Failure	Problem	Solution
The trailer refrigeration unit does not provide sufficient cooling.	The ambient temperature is too high.	<ol style="list-style-type: none"> 1. Check the refrigeration unit for leaks. 2. Choose a colder location for the refrigeration unit.
	The refrigerant is leaking.	Call for GOVI service.
	The condenser is obstructed.	Clean the condenser.
	Malfunction of fans.	Call for GOVI service.
	The air circulation in the condenser section is blocked.	<ol style="list-style-type: none"> 1. Make sure that there is sufficient space for proper air circulation in the trailer refrigeration unit. 2. Remove any obstructing objects from the air circulation area.
The trailer refrigeration unit switches itself on and off automatically.	The air circulation inside the refrigeration unit is impaired.	Check objects in the refrigeration unit. Position the objects so that the air circulation is not obstructed.
	No nominal temperature has been set.	Set the nominal temperature to the desired temperature.
Water leaks out of the trailer refrigeration unit.	Defective temperature sensor.	Call for GOVI service.
	The drain hose is obstructed.	Remove objects that obstruct the drain hose by using compressed air.
Icing of the evaporator.	The door of the refrigeration unit is open.	Close the door of the refrigeration unit.
	Defective fan inside the refrigeration unit.	Call for GOVI service.
	Malfunction of defrost heating.	Call for GOVI service.

Errors / Failure	Problem	Solution
The lighting in the trailer does not work.	No power.	<ol style="list-style-type: none">1. Briefly press the button ON/OFF. "AUX" lights up.2. Check that the bulb in the refrigeration trailer works.3. Check the power supply to the lights.4. Call for GOVI service.

12 Summary

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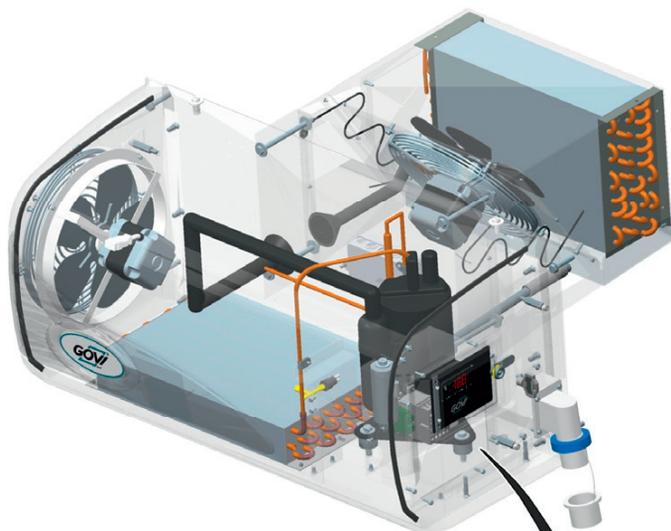
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13 Appendices

13.1 Operation Manual

The operation manual is placed below the control unit outside the trailer refrigeration unit.



Bedienungsanleitung (D)	User Manual (GB)
	<p> SET-Taste / button SET</p> <p> ON/OFF-Taste / button ON/OFF</p> <p> AUF-Taste / button UP</p> <p> AB-Taste / button DOWN</p>
<p>Entsperren der Bedienoberfläche: Halten Sie die SET-Taste für 2 Sekunden gedrückt.</p> <p>Ein/Ausschalten der Lampe: Drücken Sie kurz die ON/OFF-Taste</p> <p>Ein/Ausschalten des Geräts: Halten Sie die ON/OFF-Taste für 2 Sekunden gedrückt.</p> <p>Einleitung der manuellen Abtaugung: Halten Sie die AUF-Taste für 5 Sekunden gedrückt.</p> <p>Einstellung der Raumtemperatur: Drücken Sie kurz die SET-Taste. Im Display erscheint der bereits eingestellte Sollwert. Zum ändern des Sollwerts drücken Sie die AUF- oder AB-Taste. Bestätigen Sie den Sollwert mit der SET-Taste.</p>	<p>Unlocking the user interface: Press and hold the button SET for 2 seconds.</p> <p>Turning on/off the lamp: Briefly press the button ON/OFF.</p> <p>Turning on/off the device: Press and hold the button ON/OFF for 2 seconds.</p> <p>Initiating manual defrosting: Press and hold the button UP for 5 seconds.</p> <p>Setting the room temperature: Briefly press the button SET. The display shows the preset nominal value already set. To change the nominal value, press the button UP or DOWN. To confirm the nominal value, press the button SET.</p>

Fig. 13-1 Operation manual

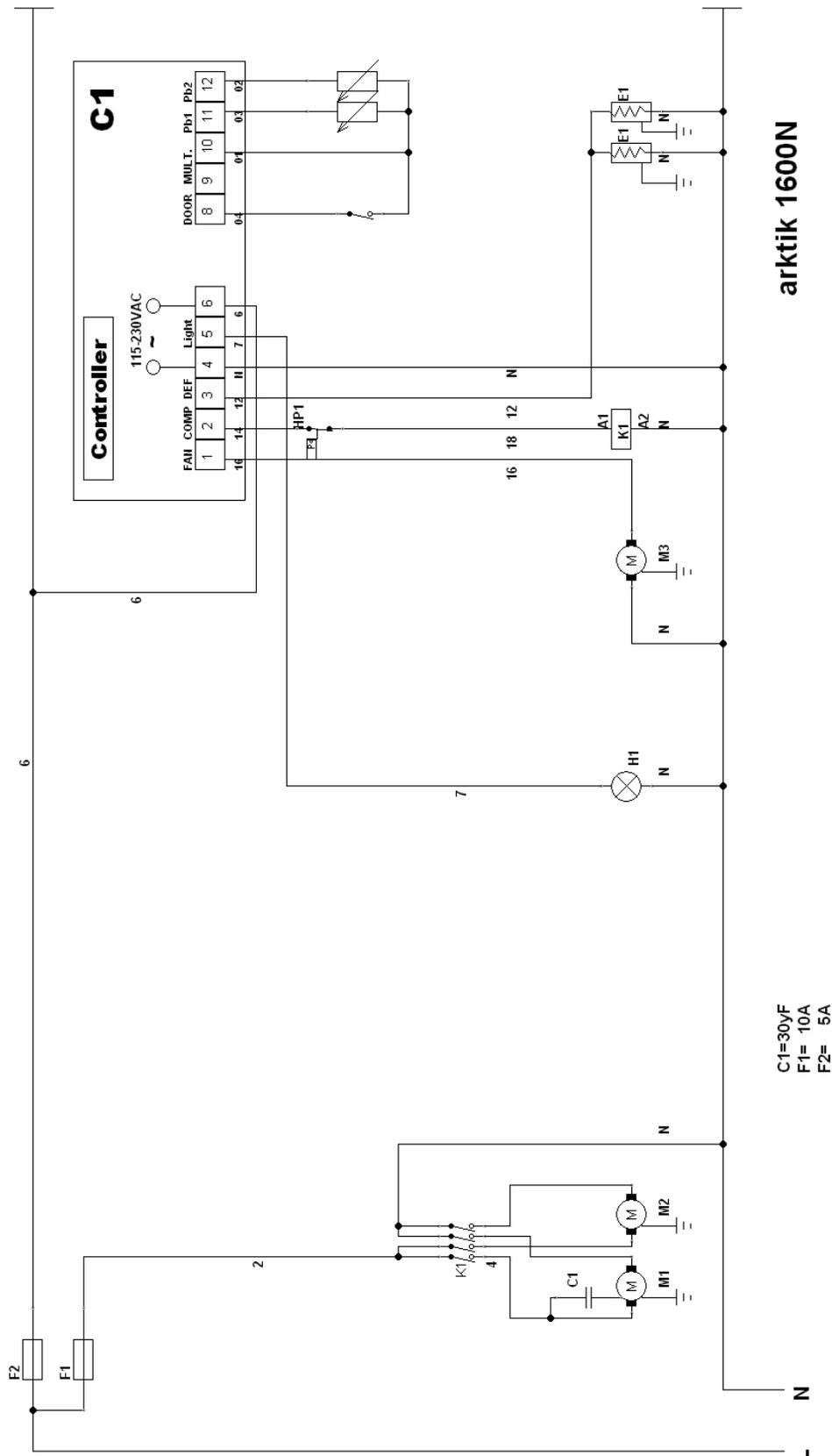
13.2 Wiring Diagrams

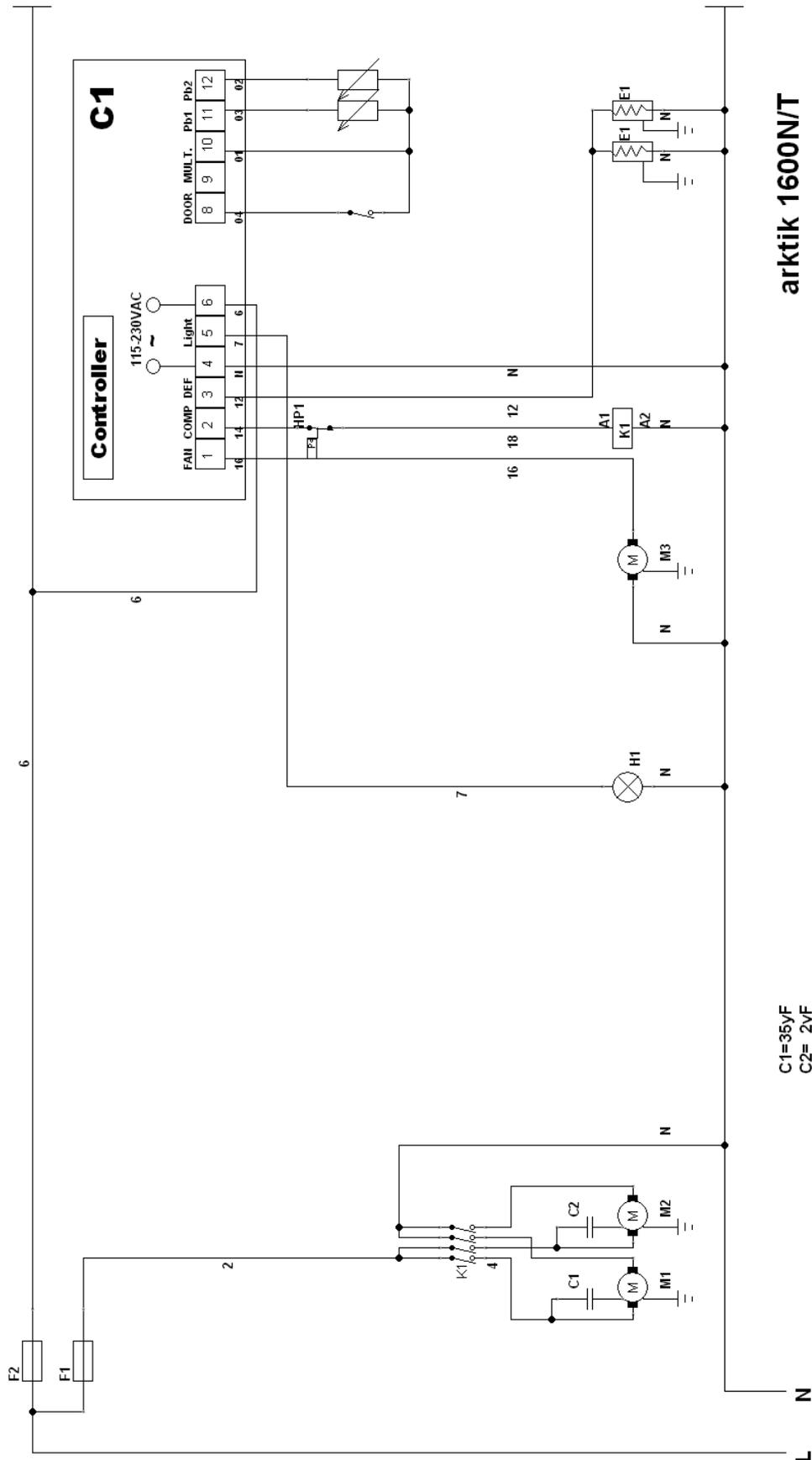
The wiring diagram is placed inside the main cover of the trailer refrigeration unit.

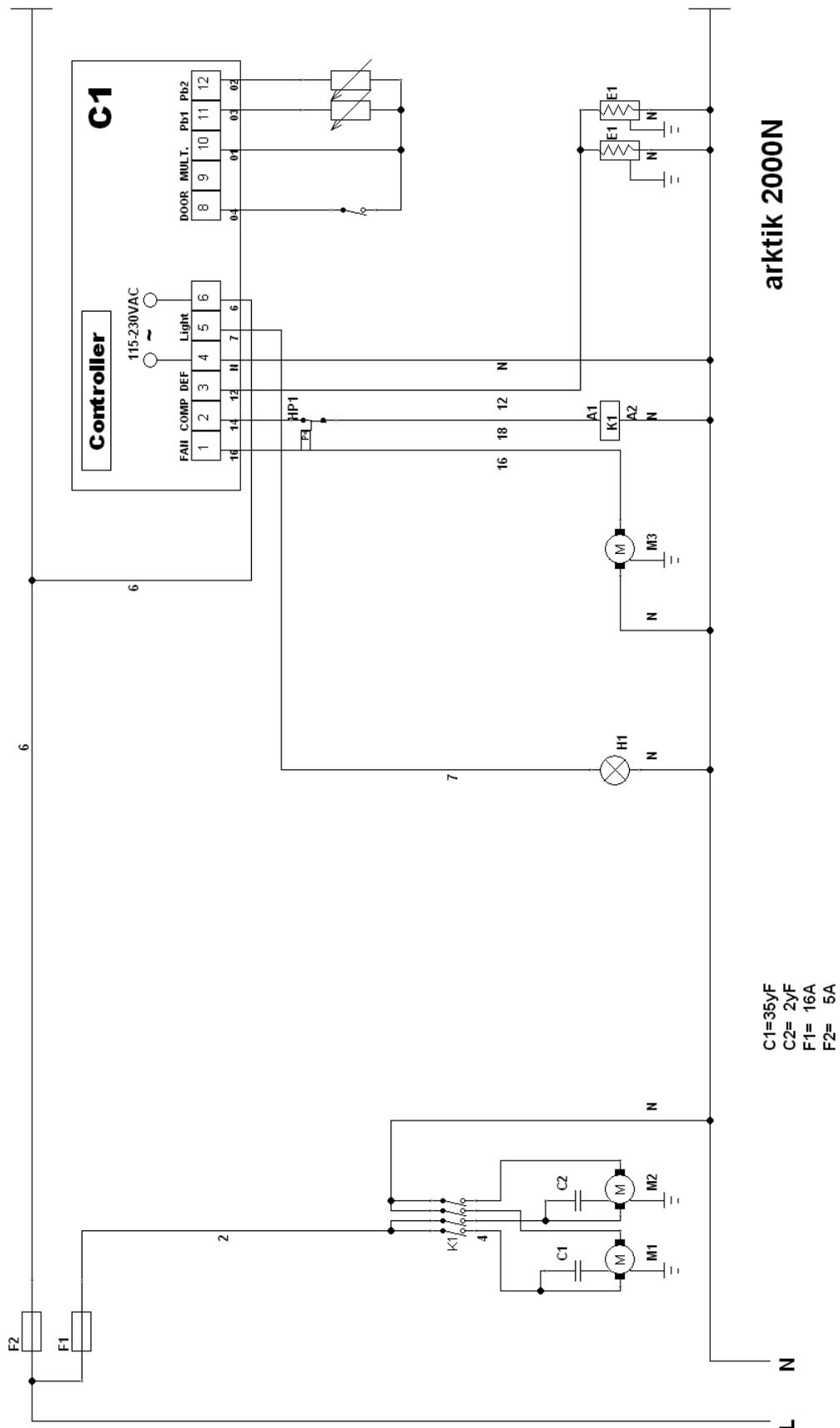
Legend of the wiring diagram

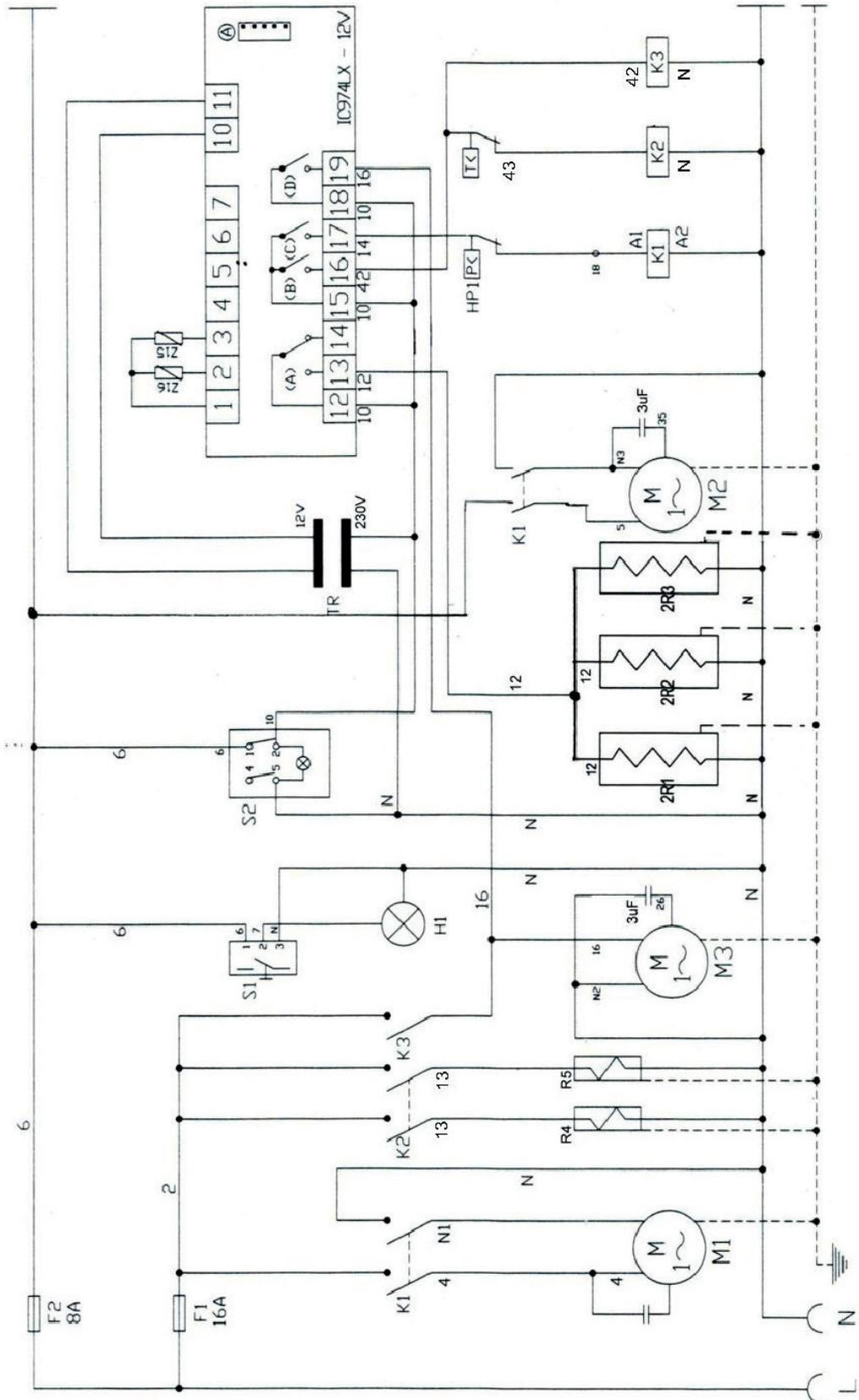
F1	Main fuse
F2	Control switch
M1	Compressor motor
M2	Condenser fan motor
M3	Evaporator fan motor
E1	Defrosting
E2	Sump heating
E3	Drain heater
K1	Relay compressor
HP1	Pressure control (HP)
HP2	Pressure switch condenser fan
C1	Temperature controller
Pb2	"Defrost" sensor
Pb1	"Room temperature" sensor
S1	"Interior lighting" switch
S2	"On/off" switch
H1	Interior lighting
Door	Door contact switch
K2	Contacteur heat
K3	Contacteur evaporator fan
TR	Transformer
R4	Roomheater
R5	Roomheater
2R1	Defrosting
2R2	Sump heating
2R3	Drain pipe heater
T	Overheatprotector
IC974LX	- Temperature controller

Fig. 13-2 Wiring diagrams









arktik 2000P/K



**KONFORMITÄTSERKLÄRUNG
CONFORMITY DECLARATION
DECLARATION DE CONFORMITE
DECLARACION DE CONFORMIDAD**

**KOMPAKTKÄLTESATZ
REFRIGERATION UNIT
GROUPE FRIGORIFIQUE
EQUIPO COMPACTO**

Model – Modell – Modèle – Modelo

**ARKTIK 1600N – ARKTIK 1600N/T – ARKTIK 2000N – ARKTIK 2500N – ARKTIK 2000P
ARKTIK 2500N/K – ARKTIK 2000P/K**

Die Unterzeichneten erklären in alleiniger Verantwortung, daß das betreffende Gerät den Bestimmungen aus den EG-Richtlinien und Normen:	We subscribers declare under our own responsibility that this unit is conforming with the EC Directives and norms:	Nous, les signataires de la présente, déclarons sous notre responsabilité que l'unité en question est conforme aux prescriptions des Directives et normes:	Nosotros, firmantes del presente, declaramos bajo nuestra responsabilidad que esta unidad esta conforme a las directivas y normas de EC
Niederspannung	Low voltage	Basse tension	Baja tension
73/23/EEC => 93/68/EEC / EN 60 335-1			
EMV	Electromagnetic Compatibility	Compatibilité électromagnétique	Compatibilidad electromagnetica
89/336/EEC => 92/31/EEC => 93/68/EEC / EN 55014, EN61000-3-2, EN61000-3-3			

HERSTELLER / MANUFACTURER / FABRICANT / PRODUCTOR



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