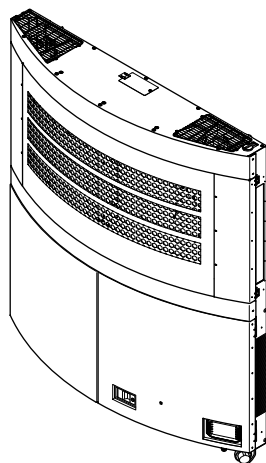




# Installation manual



## Exigo E1500 Trailer Refrigeration Unit



**EZESHP20AUAW1B**  
**EZLSHP20AUAW1B**

Installation manual  
Exigo E1500 Trailer Refrigeration Unit

**English**

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## 1 About this document

- Always keep this document together with the unit. After use, always store it in the storage compartment.
- This manual has to be read in conjunction with the operation manual.



### INFORMATION

Make sure that the user has the printed documentation and ask him/her to keep it for future reference.

### Target audience

Authorised installers



### INFORMATION

This appliance is intended to be used by expert or trained users.

### Documentation set

This document is part of a documentation set. The complete set consists of:

- Installation manual:**
  - Installation instructions
  - Format: Paper (in the box of the unit) + Digital files on <https://www.daikin.eu>. Use the search function 🔍 to find your model.
- Operation manual:**
  - User instructions
  - Format: Paper (in the box of the unit) + Digital files on <https://www.daikin.eu>. Use the search function 🔍 to find your model.

The latest revision of the supplied documentation is published on the regional Daikin website and is available via your dealer.

The original instructions are written in English. All other languages are translations of the original instructions.

### Technical engineering data

- A **subset** of the latest technical data is available on the regional Daikin website (publicly accessible).
- The **full set** of the latest technical data is available on the Daikin Business Portal (authentication required).
- A printed version of the declaration of conformity, the wiring- and piping diagrams is included with the unit.



**24/7**  
**+32 59 55 24 77**

For questions, information or support contact the 24/7 number +32 59 552477.

A QR code with a direct link to the online manuals can be found:

- On a decal, located on the right door, below the HMI.
- On the user interface, Menu → USAGE DATA










## 2 General safety precautions

### 2.1 About the documentation




- The original instructions are written in English. All other languages are translations of the original instructions.
- The precautions described in this document cover very important topics, follow them carefully.
- The installation of the system, and all activities described in the installation manual must be performed by an authorised installer.

#### 2.1.1 Meaning of warnings and symbols



The action-related warnings are there to warn you against residual risks and precede a dangerous action step.

	<b>DANGER</b> Indicates a situation that results in death or serious injury.
	<b>DANGER: RISK OF ELECTROCUTION</b> Indicates a situation that could result in electrocution.
	<b>DANGER: RISK OF BURNING/SCALDING</b> Indicates a situation that could result in burning/scalding because of extreme hot or cold temperatures.
	<b>WARNING</b> Indicates a situation that could result in death or serious injury.
	<b>CAUTION</b> Indicates a situation that could result in minor or moderate injury.
	<b>NOTICE</b> Indicates a situation that could result in equipment or property damage.
	<b>INFORMATION</b> Indicates useful tips or additional information.

Symbols used on the unit:

Symbol	Explanation
	Before installation, read the installation and operation manual, and the wiring instruction sheet.
	Before performing maintenance and service tasks, read the service manual.
	For more information, see the installer and user reference guide.

Symbols used in the documentation:

Symbol	Explanation
	Indicates a figure title or a reference to it. <b>Example:</b> "▲ 1–3 Figure title" means "Figure 3 in chapter 1".
	Indicates a table title or a reference to it. <b>Example:</b> "■ 1–3 Table title" means "Table 3 in chapter 1".

### 2.2 Hazard identification

#### Risk of poisoning

The unit contains poisonous substances:

- Diesel fuel
- Engine oil

- Refrigerant (R452A)
- Compressor oil
- Glycol
- Lead-Acid Battery

In case of ingestion/inhalation/contact, contact the anti-poisoning center.

#### Compressor oil

Hazard statements:	
H316	Causes mild skin irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements:	
Prevention:	
P261	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves.

Response:	
P302	IF ON SKIN: Wash with plenty of soap and water.
P352	
P333	If skin irritation or rash occurs: Get medical advice/ attention.
P313	
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.

Disposal:	
P501	Dispose of contents/container to an approved waste disposal plant.

#### Refrigerant R452A

Hazard statements:	
H280	Contains gas under pressure; may explode if heated.

Precautionary statements:	
Prevention:	
P410	Protect from sunlight.
P403	Store in a well-ventilated place.

Further data:	
	Greenhouse fluorinated gas falling within Kyoto Protocol

#### Engine oil

Hazard statements:	
H304	May be fatal if swallowed and enters airways.

#### Diesel

Hazard statements:	
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H332	Harmful if inhaled.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure (thyme, liver, bone marrow).
H411	Toxic to aquatic life with long lasting effects.

## 2 General safety precautions

Precautionary statements:	
Prevention:	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapor/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response:	
P301	IF SWALLOWED: Immediately call a POISON CENTER or a doctor.
P310	
P331	Do NOT induce vomiting.

Disposal:	
P501	Dispose of contents/container in accordance with local/regional/national/international regulation.

### Glycol

Hazard statements:	
H302	Harmful if swallowed.
H373	May cause damage to kidneys through prolonged or repeated exposure.

Precautionary statements:	
Prevention:	
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P260	Do not breathe vapours.
P270	Do not eat, drink or smoke when using this product.

Response:	
P314	Get medical advice/attention if you feel unwell.

Disposal:	
P501	Dispose of contents/container to an official chemical waste depot.

Additional labelling (for all packaging sizes):	
	Contains: Ethanediol.

### Battery

Hazard statements:	
H412	Hazardous to the aquatic environment: Chronic 3; Harmful to aquatic life with long lasting effects.
H302	Acute toxicity (oral): Category 4; Harmful if swallowed.
H318	Serious eye damage/eye irritation: Category 1; Causes serious eye damage.
H314	Skin corrosion/irritation: Category 1A; Causes severe skin burns and eye damage.
H360Df	Reproductive toxicity: Category 1A; May damage the unborn child. Suspected of damaging fertility.
H362	Reproductive toxicity; May cause harm to breast-fed children.
H372	STOT-repeated exposure: Category 1; Causes damage to organs through prolonged or repeated exposure.

### Environmental hazard due to operating materials


- Operating materials can endanger the environment. Leaking fluid should never seep into the ground, because of the risk of contaminating groundwater.
- Always use a suitable collecting recipient when checking for leaks.



- Do not let fluid(s) escape when performing maintenance on the diesel engine.
- Always use a suitable recipient to collect fluids. Keep the recipient ready before opening housings or components containing fluid.
- Dispose of the operating materials according to the country-specific legislations.

### Damage caused by wrong operating materials

- Using the wrong operating material can cause loss in performance and damage to the unit. Use only the approved operating materials.

## 2.3 In case of emergency

 **WARNING**

**Stop operation and shut OFF the power in case of an incident.**

Leaving the unit running may cause electrical shock, fire or breakage.

 **INFORMATION**

**112** is the single European **emergency number**. The European Electronic Communications Code ensures that Europeans can call the European emergency number 112 wherever they are in Europe, free of charge. 112 is also used in some countries outside the EU - such as Switzerland and South Africa - and is available worldwide on GSM mobile networks.

### European emergency number 112

- You can **call 112** from fixed and mobile phones to contact any emergency service: an ambulance, the fire brigade or the police.
- Give a brief and objective report of the events and situation.
- A specially trained operator will either deal with the request directly or transfer the call to the most appropriate emergency service depending on the national organization of emergency services.
- Operators in many countries can answer the calls not only in their national language, but also in English or French. If the caller does not know where he is, the operator will identify where the person making the call is physically located and will pass it to the emergency authorities so that these can help immediately.

### Actions to take in the event of an emergency

- Call 112 if the severity of the incident dictates it.
- Safeguard the incident location.
- If necessary, provide first aid.
- In event of eye injury, use an eyewash bottle.
- Extinguish smaller fires using a fire extinguisher.

Use an extinguisher with an ABC rating. This is suitable for use with fires involving ordinary combustibles, flammable liquids and energized electrical equipment. An extinguisher that is rated for use with multiple hazards should include a symbol for each hazard type.

## 2.4 Storage of the unit

If the unit is stored/taken out of service for an extended period, for example to be relocated, take into account the warnings below:



### WARNING

For storage:

- Isolate the unit from energy sources in order to prevent fire and explosion hazards.
- Position the unit so that there is sufficient space to move it safely.
- Use the proper handling and lifting equipment.
- Store the unit avoiding exposure to atmospheric agents, temperature and humidity conditions that can damage the packaging and the unit itself.
- Place the unit on a stable, solid supporting surface with characteristics so as to withstand the weight of the unit and the equipment involved.

## 2.5 For the installer

### 2.5.1 General

If you are NOT sure how to install or operate the unit, contact your dealer.



### WARNING

Make sure installation, testing and applied materials comply with applicable legislation (on top of the instructions described in the Daikin documentation).



### WARNING



Before any intervention, make sure that the unit cannot start unexpectedly by disconnecting the battery.



### DANGER: RISK OF BURNING/SCALDING

Allow the PM generator, the engine, the engine exhaust, the engine-cooling system, the evaporator defrost heaters and the water discharge heater to cool down before touching any of these parts.



### DANGER: RISK OF BURNING/SCALDING

Allow the engine, the engine exhaust and the engine-cooling system to cool down before performing any fluid change.



### WARNING



Improper installation or attachment of equipment or accessories could result in electrical shock, short-circuit, leaks, fire or other damage to the equipment. ONLY use accessories, optional equipment and spare parts made or approved by Daikin.



### DANGER: RISK OF POISONING

The unit contains poisonous substances:

- Diesel fuel
  - Engine oil
  - Engine coolant (Glycol)
  - Refrigerant (R452A)
  - Compressor oil
  - Sulfuric acid (inside the battery)
- ⇒ In case of ingestion/inhalation/contact, contact the anti-poisoning center.



### WARNING



Avoid contact of skin with corrosive substances. After skin contact, wash immediately with soap and water.



### WARNING



Acid fumes and explosive hydrogen may be released during battery charging. No open flame or smoking near the battery.



### WARNING



Condenser, radiator and evaporator have fins that can result in injury by cutting/severing or scalding/frostbite. Do not touch these components without adequate protective equipment.



### WARNING



Rotating components, electrical hazards and hot surfaces can cause severe injury or death.

- Do not operate with service doors open.
- Keep the service doors locked.
- Only qualified, authorized and trained persons have access to the service compartment.



### WARNING



The unit has several cutting parts and sharp edges. Use adequate personal protective equipment when working on or near these parts.



### CAUTION



Working on or around the unit raises multiple risks. Use adequate personal protective equipment as indicated when installing, maintaining or servicing the system.



### INFORMATION



The sound power level (according to 2000/14/CE) is less than 96 dBA. It is recommended to wear ear protection when in the vicinity of the working unit.



### WARNING

The screws for fixing the upper grids and the engine belt guard are captive. Do not replace the existing captive screws with not-captive types.

## 2 General safety precautions

### WARNING



Tear apart and throw away plastic packaging bags so that nobody, especially NOT children, can play with them.  
**Possible consequence:** suffocation.

### WARNING



Make sure that the forklift, or any other lifting device used, can bear the weight of the unit.

### WARNING



The unit must be fully and correctly fastened to the cold room wall before removing the safety lifting device. Do not stand below the unit while fixing the unit to the cold room.

### WARNING



If diesel leaks from the fuel system, it evaporates. These vapors are irritating to eyes, respiratory system and skin and can ignite if an open flame is in the area.

### CAUTION



Diesel is a polluting substance. Any diesel leaking from the fuel system may not be released in the environment.

### WARNING



When the unit is operating, a magnetic field is generated. This can disturb the functioning of cardiac devices like pacemakers and defibrillators. People who have such devices implanted must stay clear of the working unit when the service doors are opened.

### DANGER: RISK OF ELECTROCUTION

The unit must be switched off when cleaning the unit.  
Do not clean the unit while the electric plug is connected.

### NOTICE



To clean the exterior:

- Do not use any cleaning agents or chemicals.
- Do not use pressurised water.

### NOTICE



To clean the interior:

- Even if the main components of the device have a sufficiently high IP rating, do not wash the device and its electrical components and electrical boxes with pressurized water.

### WARNING



Daikin is not responsible for cold room safety.

Make sure that no people are left in the cold room before you close the doors:

- Risk of suffocation. 12 m<sup>3</sup> must be left empty inside the cold room.
- Risk of frostbite.
- Risk of freezing to death.

### DANGER



Always use a safety harness when working at height.

### CAUTION



The top panel of the unit is fragile.

- Do not lean, sit or stand on it.
- Do not place any objects or equipment on it.

### CAUTION

Use a door lock system to block the service doors when working inside the service compartment.

### CAUTION

Turn on the light before entering the cold room, and take a portable torch with you.

### DANGER



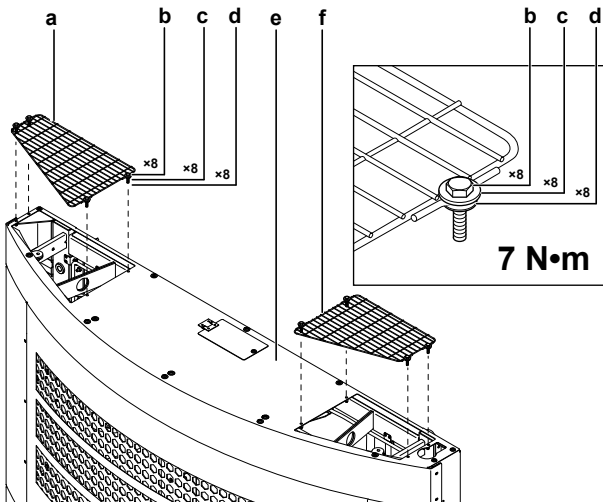
Always use a safety harness with adjustable sling length and fall damper.

#### To install a safety harness

### INFORMATION

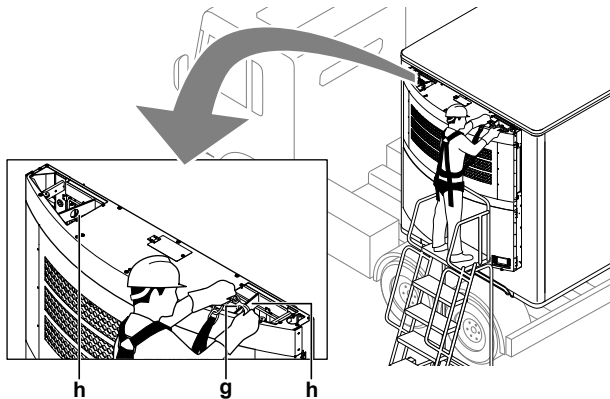
**Always** install a safety harness when you need to gain access to the lifting points.

- 1 Remove one of the grids (a or f). **Note:** Use an industrial ladder or another safe platform.



- a Upper right grid
- b Bolt (M6×25, DIN 931 INOX A2)
- c Contact washer (Ø6.1×18×1.4 INOX)
- d Retainer washer (Ø6)
- e Top panel
- f Upper left grid

- 2 Hook the safety harness sling (g) onto one of the two fixing points (h).



- g Safety harness sling
- h Fixing point A1

- 3 Set the adjustable fall damper to 6 kg/Nm.
- 4 Adjust the length of the sling to prevent the user from colliding with the ground, structure, or any other obstacle in case of a fall.

### 2.5.2 Refrigerant

The unit is factory charged with refrigerant, no additional charging of refrigerant is required.



#### WARNING



Refrigerant under pressure can escape due to breaks in the cooling system, or during maintenance on the cooling system.



#### WARNING



Take sufficient precautions in case of refrigerant leakage. If refrigerant gas leaks, ventilate the area immediately. Possible risks:

- Excessive refrigerant concentrations in a closed room can lead to oxygen deficiency.
- Toxic gas might be produced if refrigerant gas comes into contact with fire.



#### WARNING



- NEVER directly touch any accidental leaking refrigerant. This could result in severe wounds caused by frostbite.
- Do NOT touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.

### 2.5.3 Electrical



#### WARNING



Do not remove earth connections while installing the unit. Missing earth continuity can lead to electric shocks.

Be sure that at the end of the installation, all the earth connections are properly fixed.



#### DANGER: RISK OF BURNING/SCALDING

Allow the evaporator defrost heaters and the water discharge heater to cool down before touching them.



#### DANGER: RISK OF ELECTROCUTION

- Turn OFF all power supply before removing the switch box cover, connecting electrical wiring or touching electrical parts.
- Disconnect the power supply for more than 60 seconds, and measure the voltage at the terminals of main circuit capacitors or electrical components before servicing. The voltage MUST be less than 50 V DC before you can touch electrical components. For the location of the terminals, see the wiring diagram.
- Do NOT touch electrical components with wet hands.
- Do NOT leave the unit unattended when the service cover is removed.

## 3 About the box



### WARNING



NEVER touch the person receiving an electrical shock, or you could suffer one too. Do NOT touch the person until you are sure power is turned off.

Electrical shocks always need emergency medical attention, even if the person seems to be fine.



### DANGER: RISK OF ELECTROCUTION

The bottom plate, must be grounded via the unit's frame. Connect the earth cable correctly to the frame.



### CAUTION



The battery is set up in a small space, be careful not to cause a short circuit during installation.



### CAUTION

The battery is heavy and therefore difficult to handle.



### WARNING



- After finishing the electrical work, confirm that each electrical component and terminal inside the electrical components box is connected securely.
- Make sure all covers are closed before starting up the unit.

- At delivery, the unit and the installation kit MUST be checked for damage and completeness. Any damage or missing part MUST be reported immediately to the claims agent of the carrier.
- Bring the packed unit as close as possible to its final installation position to prevent damage during transport.
- Prepare in advance the path along which you want to bring the unit to its final installation position.
- When handling the unit, take into account the following:



Fragile, handle the unit with care.



Keep the unit upright in order to avoid damage.

### 2.5.4 Engine



### WARNING



Do not operate the unit in road mode (with diesel engine running) in confined spaces and areas where fumes from the engine could become trapped and cause serious injury or death.



### WARNING



Keep your hands, clothing and tools clear of moving parts such as fans and engine belt when the unit is working.



### DANGER: RISK OF BURNING/SCALDING

Allow the PM generator, the engine, the engine exhaust and the engine- cooling system to cool down before touching any of these parts.

## 3 About the box

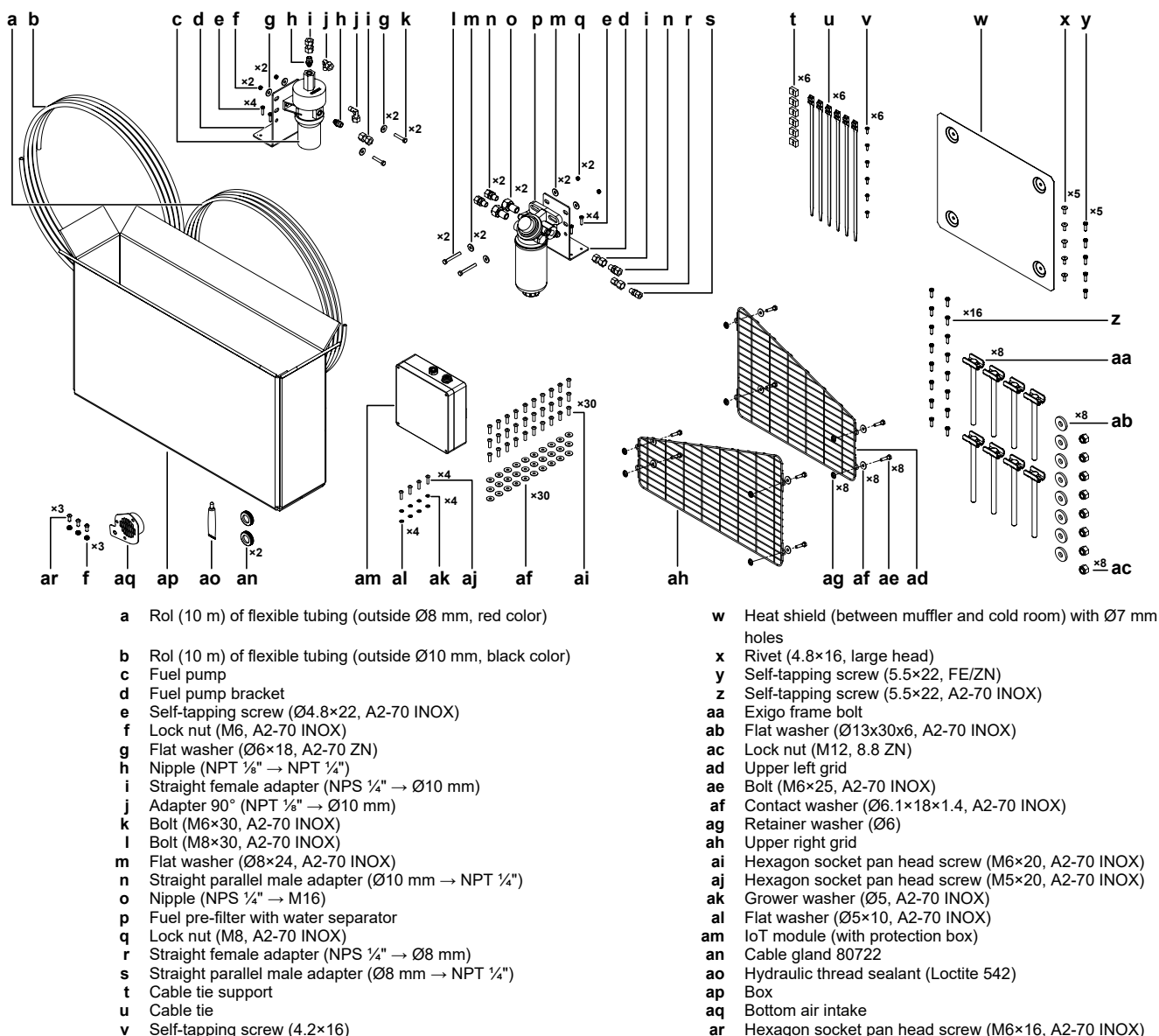
### 3.1 Overview: About the box

This chapter describes what you have to do after the unit is delivered on-site.

Keep the following in mind:

### 3.2 To unpack the installation kit

The installation kit should contain the following items:



#### INFORMATION

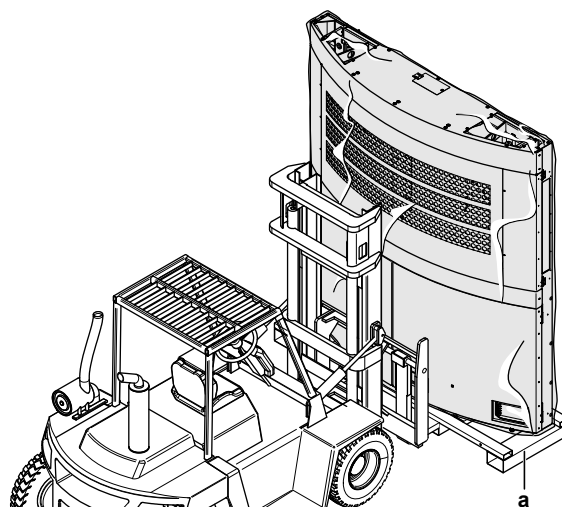
The installation kit contains only fasteners for installing the unit on the cold room. All fasteners and brackets needed to install the fuel supply system on the trailer must be provided by the bodybuilder.

### 3.3 To unpack the unit

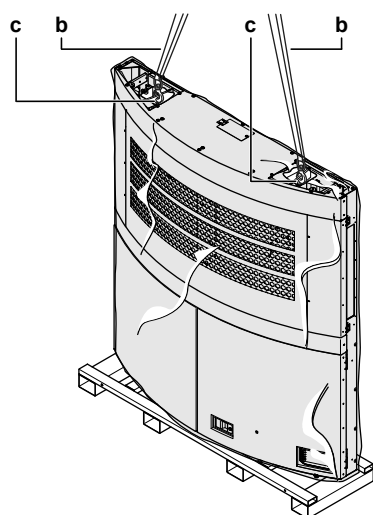
The packaging consists of a metal pallet on which the unit is fixed in upright position, wrapped in plastic film.

The Bottom plate of the unit is not installed, it is deliverable separately together with the necessary screws to attach it to the unit (see "6.2.3 To install the unit on the cold room" ▶ 14).

- 1 Bring out the unit that is mounted on the special transport pallet. Use a forklift or a lifting device.



## 4 About the unit and options



- a Special transport pallet
- b Sling
- c Fixing points A1



### DANGER



Always use a safety harness when working at height.



### WARNING



Make sure that the forklift, or any other lifting device used, can bear the weight of the unit.



### INFORMATION

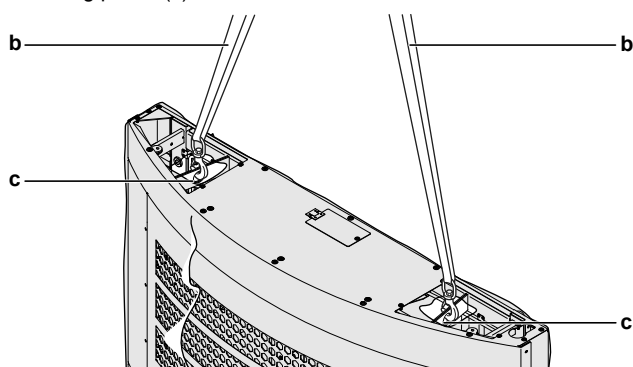
See "10 Technical data" [p 25] for the weight of the unit.



### INFORMATION

Cut a hole in the plastic wrapping to gain access to the lifting eyes when using a lifting device and lifting slings.

- 2 Standing on a ladder or work-stand, hook the slings (b) onto the fixing points (c).



- b Sling
- c Fixing points A1

- 3 Lift the unit with a lifting device (e.g. overhead crane).
- 4 Remove the plastic film from around the unit.



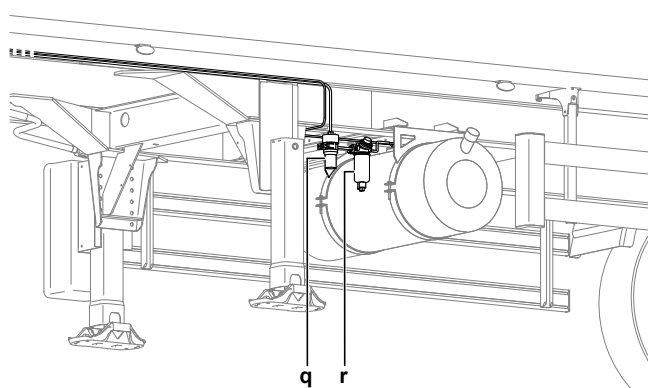
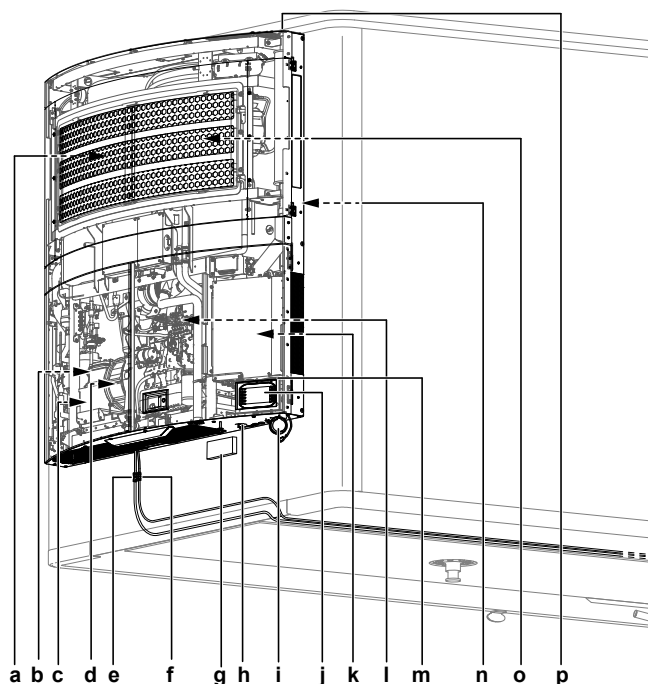
### WARNING



Tear apart and throw away plastic packaging bags so that nobody, especially NOT children, can play with them.  
**Possible consequence:** suffocation.

## 4 About the unit and options

### 4.1 System layout



- a Evaporator fans
- b Compressor
- c Battery
- d Generator
- e Fuel lines
- f Fuel line connectors
- g IoT module
- h USB Serial Port
- i Electrical plug
- j User interface
- k Electrical box
- l Engine
- m ON/OFF switch
- n Evaporator
- o Radiator
- p Exhaust
- q Fuel pump
- r Fuel pre-filter

## 4.2 About the system

### NOTICE

The unit is designed to be installed by a bodybuilder on a cold room trailer for transporting material or goods (e.g. fresh or frozen food) that must be transported at a controlled temperature, within the unit's operating area.

Transporting livestock is not part of the unit's purpose.

The system consists of a self-contained, diesel/electric powered thermoregulation (cooling/heating) unit and a complete fuel system.

It is mounted on the front wall of the cold room, and consists of the following main components:

- A variable speed engine-generator module powering the unit in road operation.
- Variable speed brushless condenser and evaporator fans.
- Two microchannel condenser coils made of long life alloy for corrosion resistance.
- An inverter driven variable speed compressor with vapor injection and economizer.

### NOTICE

Phase advancing capacitors are not installed, and power lines with phase advancing capacitors **MUST NOT** be used.

- A programmable microcontroller developed by Daikin.
- Electronic Expansion Valves (EEV).
- Electrical heaters for heating and defrost operations.
- A high resolution color HMI, accessible from the outside to control and command the unit.
- A telematics module with IP67 protected box mounted on the front of the cold room to remotely control and monitor the unit's parameters and alarms (Daikin by WeMob option).

Furthermore, there is also a complete fuel system that consists of the following components:

- A fuel pre-filter to filter the fuel and remove water from the fuel before it enters the fuel pump.
- An optional integrated heater to warm up the fuel in cold circumstances can be installed.
- A fuel pump and fuel lines to transport the fuel towards the front of the cold room and to the unit.

### INFORMATION

The unit power supply **MUST** be 400V, 3P+N, 50Hz, 25A.

### INFORMATION

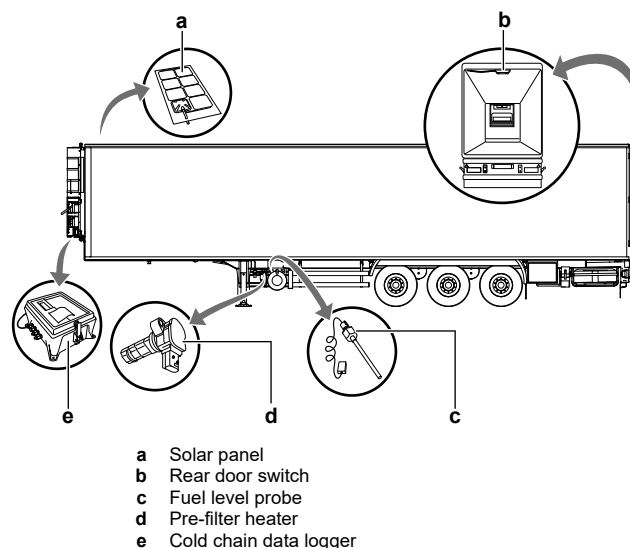


The sound power level (according to 2000/14/CE) is less than 96 dBA. It is recommended to wear ear protection when in the vicinity of the working unit.

## 4.3 Possible options for the unit

### INFORMATION

Certain options may **NOT** be available in your country.



### Solar panel

Solar panel and charge controller to ensure the efficiency of the 12V battery and to save energy.

### Rear door switch

Metallic IP grade switch to be connected with Exigo unit and telematics to detect the opening of trailer doors.

The micro switch signal interrupts the thermoregulation mode as soon as the cold room door opens.

### Fuel level probe

Compact and robust advanced capacitance sensor for continuously monitoring the fuel level in the tank.

### Fuel pre-filter heater

Heater based on a PTC heating element controlled by bi-metallic switch. The heating element is designed to create a small channel in the filter head where diesel remains liquid instead of becoming gel at low ambient temperatures.

### Cold chain data logger

Temperature recorder that allows continuous temperature monitoring and proof of compliance from origin to destination.

## 5 Preparation

### 5.1 Preparing the cold room

#### INFORMATION

The procedure described below for preparing the cold room is only an example. The bodybuilder may opt for a different fixing system, but it must guarantee at least the same level of safety.

#### INFORMATION

This manual only describes installation instructions specific to this unit. For carrying out mechanical work on the cold room and trailer, the instructions of the cold room/trailer manufacturer must always be followed.

#### INFORMATION

It is recommended to install doors that can be opened both from the inside and the outside. This reduces the chance of someone getting trapped in the cold room.

## 5 Preparation

### **i** INFORMATION

The use of a protection- or airflow regulating bulkhead is not recommended. This would obstruct optimal airflow. Should it be nevertheless necessary to use a bulkhead, it should be at least 105 mm away from the unit, and covering only the suction part.

To protect the unit from damage by cargo, it is recommended to install uprights.

### **i** INFORMATION

The trailer and cold room structure must be evaluated by the trailer/cold room manufacturer to determine its ability to withstand the loads imposed by the unit over its service life. See "10 Technical data" [► 25] for dimensions and weight.

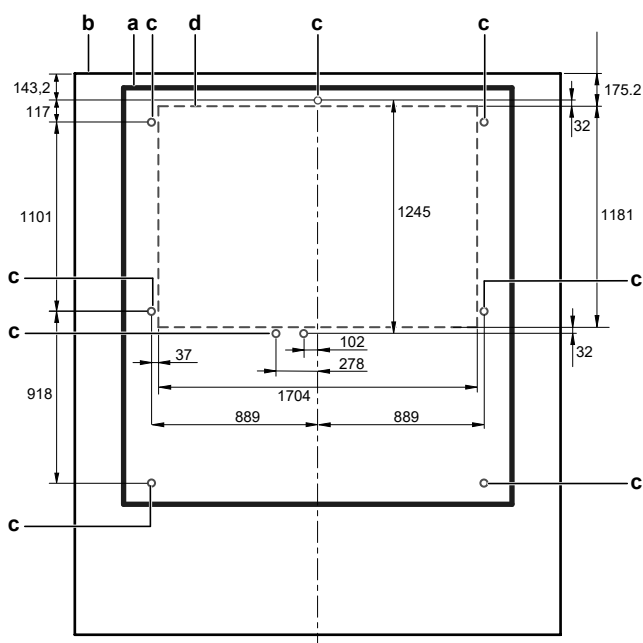
The structural integrity of the trailer/cold room is a responsibility of the user. Daikin accepts no liability for the trailer's or cold room's structural integrity.

The surfaces of the cold room that contact the unit's mounting pads must be uni-planar to within 3 mm to prevent distortion of the unit and/or cold room.

To ensure proper air seal, the visible thickness of the compressed gasket, between the unit and the trailer, should be no more than 5 mm.

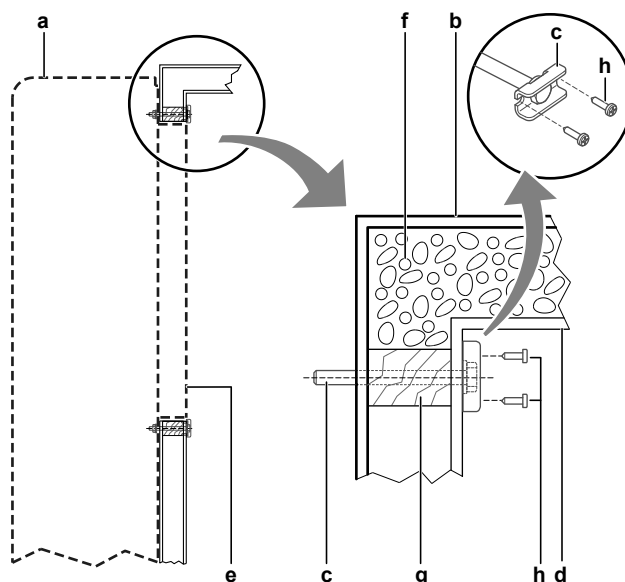
The evaporator fan grills must stay in place, even when air duct collectors are mounted in the cold room.

- 1 Make a cutout (d) and 8 holes (c) in the front of the cold room. (It is sufficient to make only one of the two central holes).



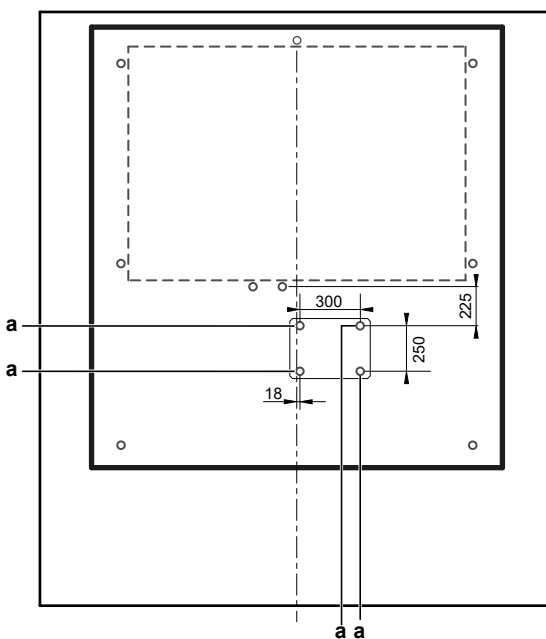
- a Unit (2076×2226 mm)
- b Roof of the cold room
- c Cold room holes (Ø14 mm) for mounting the M12 bolts
- d Cutout (1704×1181 mm)

- 2 Install the 8 Exigo frame bolts (c) through the 8 holes you have made in the cold room.
- 3 Fix the bolts (c) in place with the self-tapping screws (h).



- a Unit
- b Roof of the cold room
- c Exigo frame bolt
- d Cold room
- e Protrusion of the unit
- f Insulation
- g Vertical and horizontal framing (not provided in installation kit)
- h Self-tapping screw (5.5×22, A2-70 INOX)

- 4 Make 4 holes (a) in the front of the cold room.

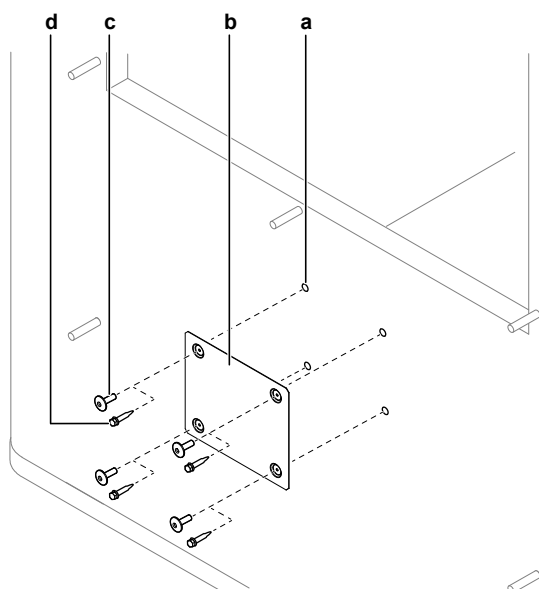


- a Holes for mounting the heat shield

Mounting the heat shield is left to the expertise of the bodybuilder; self tapping screws (d) or a large head rivets (c) are both possibilities included in the installation kit that is supplied with the unit, see "3.2 To unpack the installation kit" [► 9]. The size of the holes must fit the chosen option.

A typical installation is shown below.

- 5 Install the heat shield (b) on the cold room using the self tapping screws (d) or using large head rivets (c).

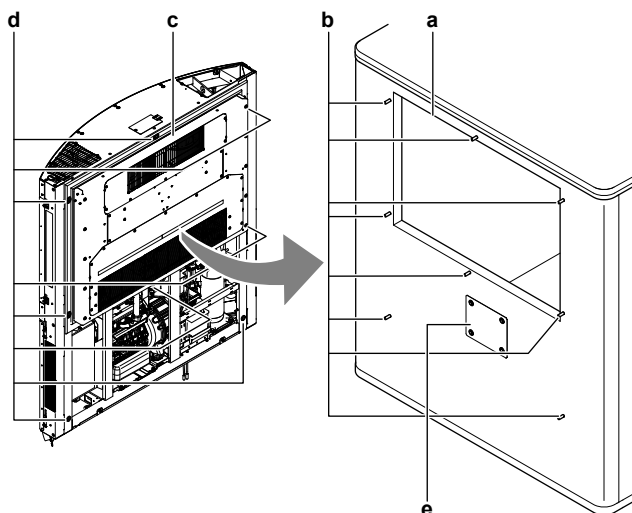


- a Hole for mounting the heat shield
- b Heat shield
- c Rivet (4.8×16, large head)
- d Self tapping screw (5.5×22, FE/ZN)

The cutout (a) will accommodate the evaporator protrusion (c) of the unit.

The bolts (b) will engage in the mounting holes (d) of the unit's frame.

The heat shield (e) will protect the cold room from the heat of the muffler.



- a Cutout
- b Bolts
- c Protrusion of the unit
- d Holes in the unit's frame
- e Heat shield

## 5.2 To prepare the unit



### INFORMATION

The pallet is larger than the unit base and must be removed before bringing the unit in installation position.



### DANGER



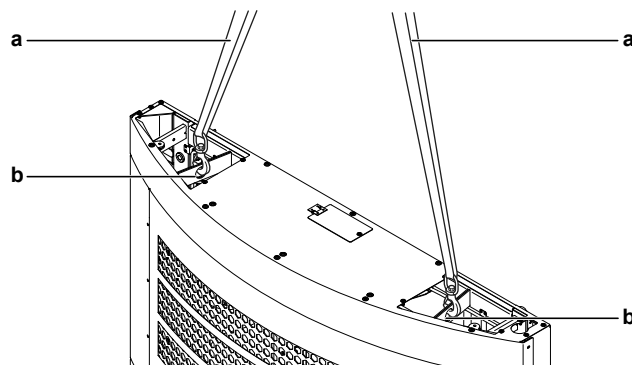
Always use a safety harness when working at height.



### INFORMATION

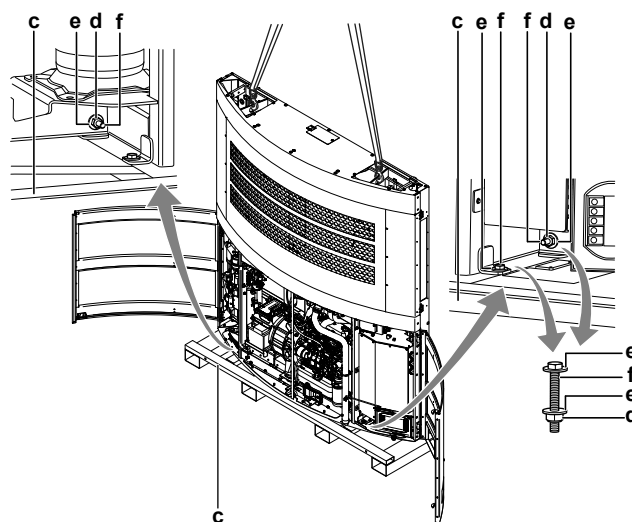
Always lift the unit from above. Use an overhead crane or a forklift with proper fork hook, see "10 Technical data" [p 25] for the weight of the unit.

- 1 Standing on a ladder or work-stand, hook the slings (a) onto the fixing points (b).



- a Sling
- b Fixing point A1

- 2 Remove the nuts (d), washers (e) and bolts (f).
- 3 Remove the special transport pallet (c) from the unit.



- c Special transport pallet
- d Nut
- e Washer
- f Bolt



### NOTICE

Do not lift the unit before all the screws are removed. Check that no small parts (e.g. nuts, washers, screws, ...) are left inside the unit.

## 6 Installation



### INFORMATION

This manual only describes installation instructions specific to this unit. For carrying out mechanical work on the cold room and trailer, the instructions of the cold room/trailer manufacturer must always be followed.

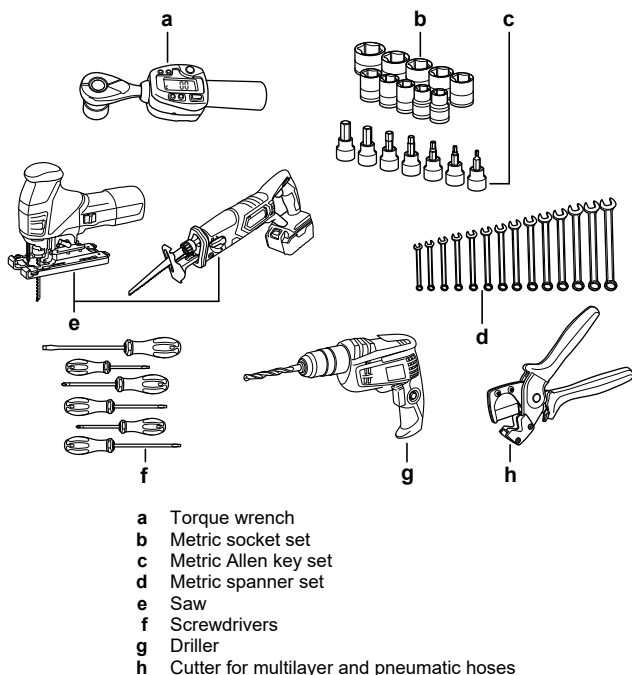


### INFORMATION

In some cases the installation of a splitter/duct on the coldroom side can increase efficiency. For carrying out mechanical work on the cold room and trailer, the instructions of the cold room/trailer manufacturer must always be followed.

## 6 Installation

### 6.1 Tools needed for installation



#### INFORMATION

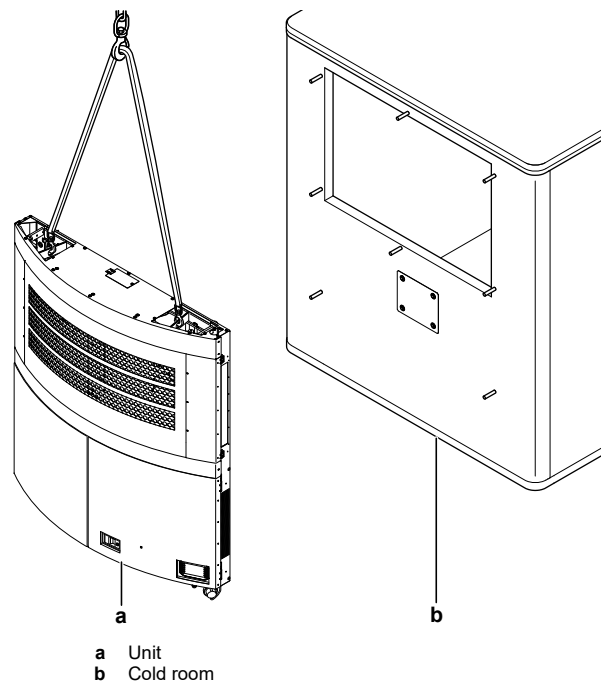
Choose the correct saw in function of the wall thickness of the cold room. Make sure the blade is long enough to cut through the entire wall panel.



#### CAUTION



Always wear adequate personal protective equipment (protective gloves, safety glasses,...).



### 6.2.3 To install the unit on the cold room



#### DANGER



Always use a safety harness when working at height.

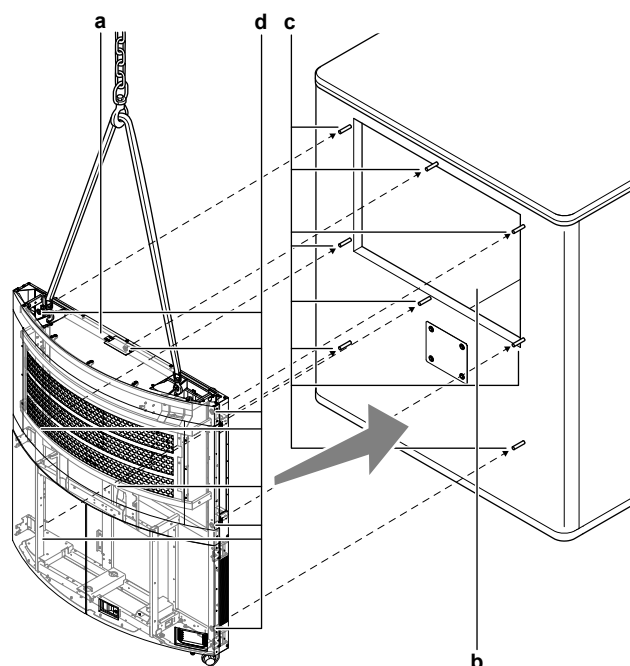


#### WARNING



The unit must be fully and correctly fastened to the cold room wall before removing the safety lifting device. Do not stand below the unit while fixing the unit to the cold room.

- 1 Install the protusion (a) through the cold room opening (b).
- 2 Ensure that all 8 bolts (c) are fully engaged in the unit frame's mounting holes (d).



### 6.2 Mounting the unit

#### 6.2.1 Precautions when mounting the unit



#### WARNING



Do not remove earth connections while installing the unit. Missing earth continuity can lead to electric shocks.

Be sure that at the end of the installation, all the earth connections are properly fixed.



#### INFORMATION

Also read the precautions and requirements in the following chapters:

- General safety precautions
- Preparation

#### 6.2.2 To position the unit



#### INFORMATION

Always lift the unit from above. Use an overhead crane or a forklift with proper fork hook, see "10 Technical data" [p. 25] for the weight of the unit.

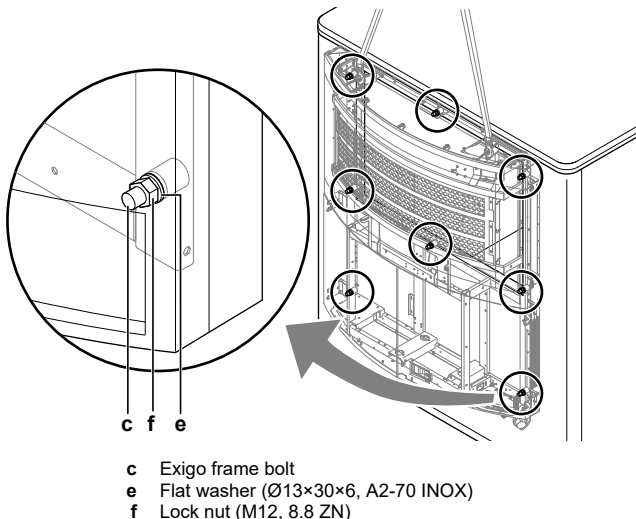
- 1 Position the unit (a) in front of the cold room (b) by hanging it from a lifting device (e.g. fork lift or overhead crane).

- a Protrusion
- b Cold room opening
- c Exigo Frame bolt (×8)
- d Mounting holes

## **i** INFORMATION

To ensure some freedom of movement, the unit must remain suspended. The lifting slings should not be removed until the installation of the 8 bolts, washers and nuts is completed, and the unit is in its correct and final position.

- 3 Place a washer (e) and lock-nut (f) on each of the 8 bolts (c), and hand tighten the lock nuts (f).

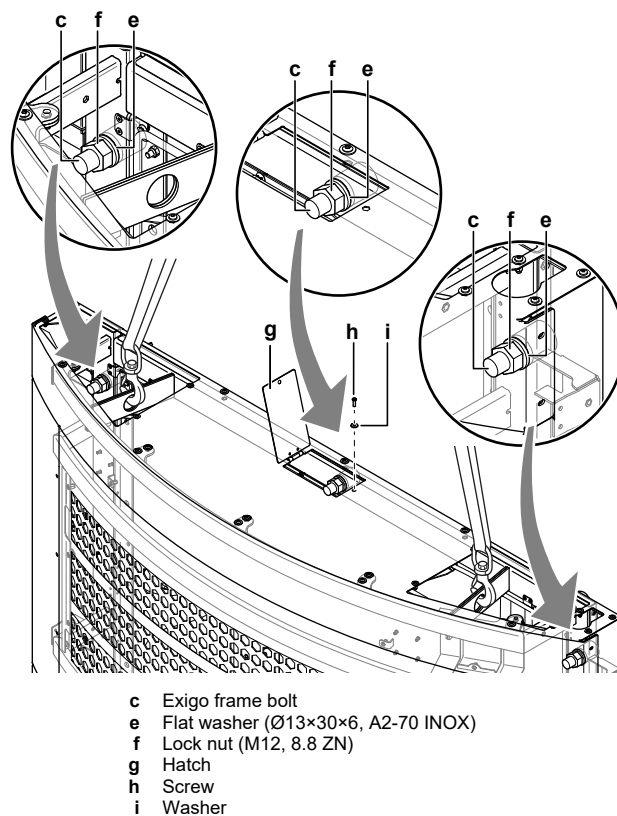


See below for details on how to install each bolt.

## **i** INFORMATION

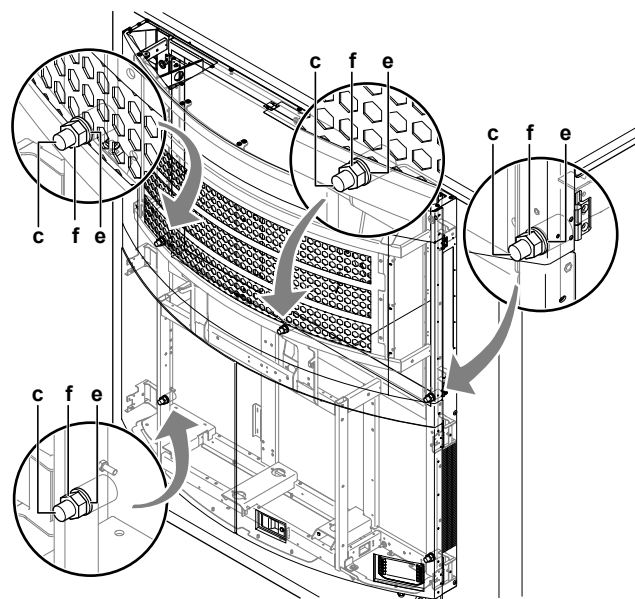
The 3 upper bolts can be accessed through the openings in the top panel. The 4 lower bolts must be accessed through the open service doors of the unit, and the bolt in the bottom right-hand corner can only be accessed by rotating the control panel.

- 4 Place a washer (e) and lock-nut (f) on each of the 2 bolts (c) accessible through the grid openings, and hand tighten the lock nuts (f).
- 5 Remove the screw (h) and washer (i) and open the hatch (g).
- 6 Place a washer (e) and lock-nut (f) on the bolt (c) accessible through the hatch opening, and hand tighten the lock nuts (f).



- 7 Open the unit's service doors.

- 8 Place a washer (e) and lock-nut (f) on each of the 4 bolts (c) accessible through the door openings, and hand tighten the lock nuts (f).



The control panel (j) must be rotated to give access to the bolt location in the bottom right-hand corner inside the unit.

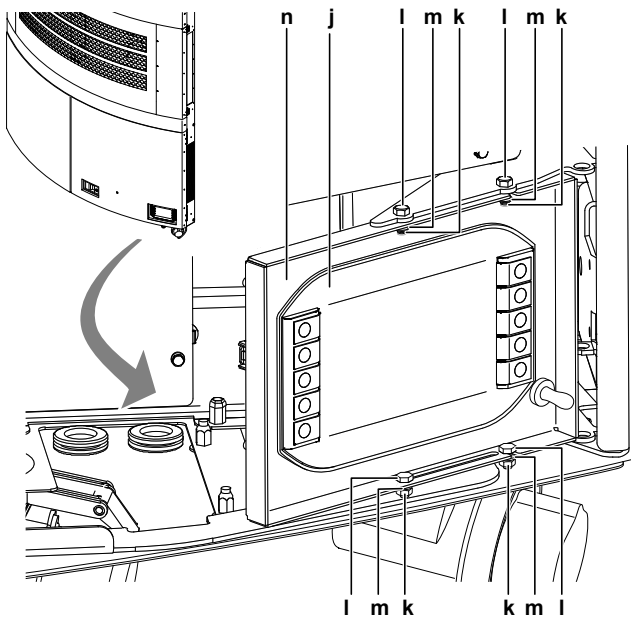


## **NOTICE**

The wiring of the control panel is connected to the unit. Be careful not to break the wiring while rotating or removing the control panel.

- 9 Open unit's service doors.
- 10 Loosen the lock nuts (k). The screws (l) and nuts (k) do not have to be removed.

## 6 Installation

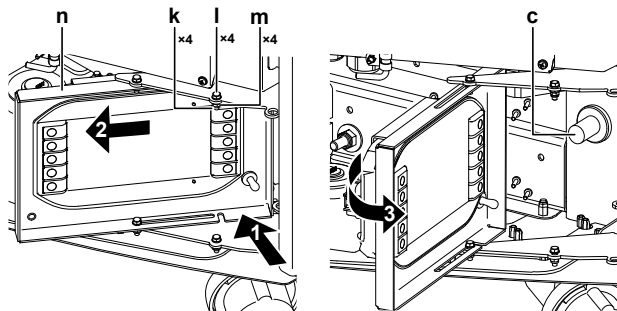


- j Control panel
- k Lock nut
- l Screw
- m Washer
- n Mounting plate

11 Rotate the control panel mounting plate (n), liberating it from the open slot.

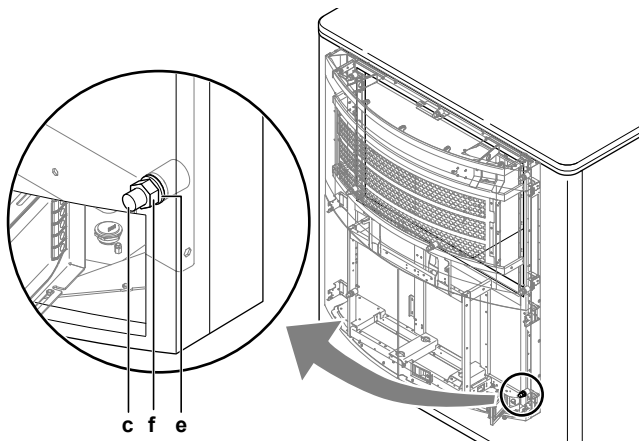
12 Slide the control panel mounting plate (n) to the left and rotate the mounting plate (n) completely.

**Result:** The frame bolt is now accessible.



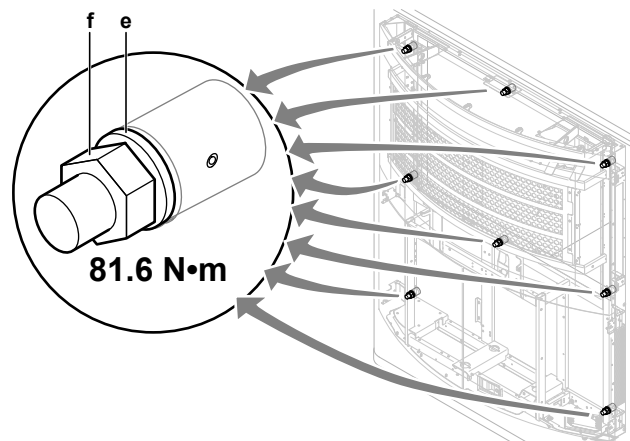
- k Lock nut
- l Screw
- m Washer
- n Mounting plate

13 Place a washer (e) and lock-nut (f) on the bolt (c), and hand tighten the lock nut (f).



- c Exigo frame bolt
- e Flat washer (Ø13×30×6, A2-70 INOX)
- f Lock nut (M12, 8.8 ZN)

14 Evenly tighten all 8 lock nuts (f) to 81.6 N•m using a torque wrench.

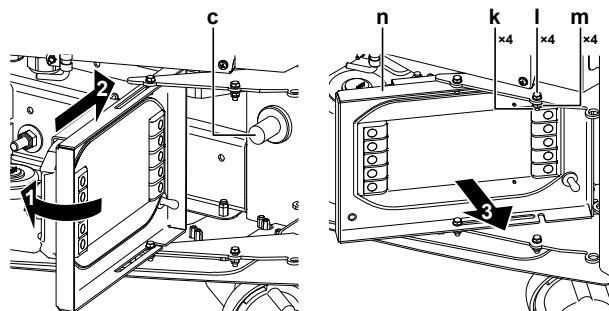


### **i** INFORMATION

When using electric or pneumatic tightening devices, minimal speed setting is recommended.

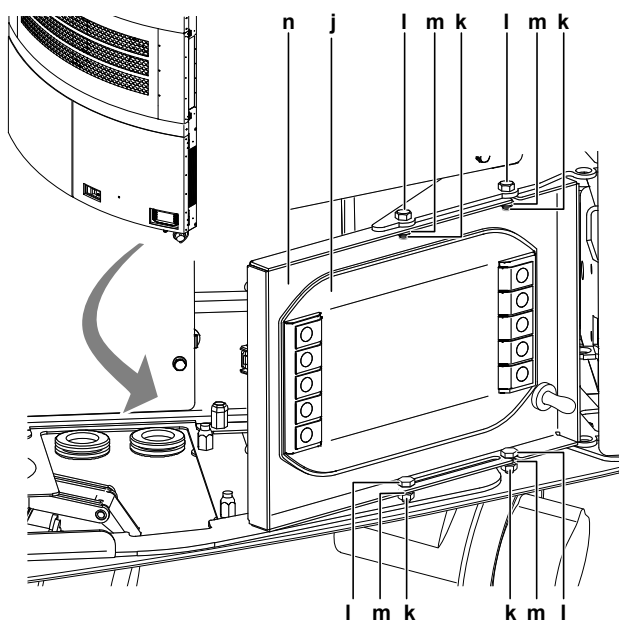
15 Rotate the control panel mounting plate (n) and slide it to the right.

16 Rotate the control panel mounting plate (n) further, engaging the screws in the open slot.



- k Lock nut
- l Screw
- m Washer
- n Mounting plate

17 Fasten the lock nuts (k).



- j Control panel
- k Lock nut
- l Screw

- m Washer
- n Mounting plate

18 Remove the lifting slings.

## 6.2.4 To install the top plate grids

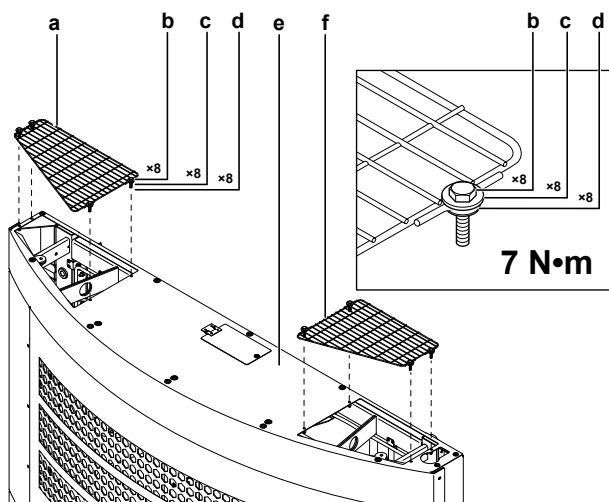


### DANGER



Always use a safety harness when working at height.

- 1 Standing on an industrial ladder (or other safe platform), position the grids (a and f) on the top panel (e).
- 2 Install the bolts (b), the contact washers (c) and retainer washers (d) and tighten them to 7 N•m.



- a Upper left grid
- b Bolt (M6×25, A2-70 INOX)
- c Contact washer (Ø6.1×18×1.4, A2-70 INOX)
- d Retainer washer (Ø6)
- e Top panel
- f Upper right grid

## 6.3 To install the bottom plate

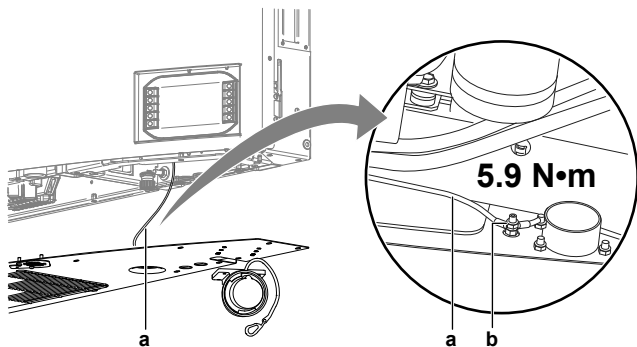
The Bottom plate of the unit is not installed upon delivery, it is delivered separately together with the necessary screws to attach it to the unit.



### DANGER: RISK OF ELECTROCUTION

The bottom plate, must be grounded via the unit's frame. Connect the earth cable correctly to the frame.

- 1 Connect the bottom panel earth wire (a) to the connection stud (b) on the bottom panel. Tighten the nut on the stud to 5.9 N•m.



- a Earth wire
- b Connection stud

- 2 Position the bottom panel (c) on the unit.

- 3 Install the screws (e) and washers (d).

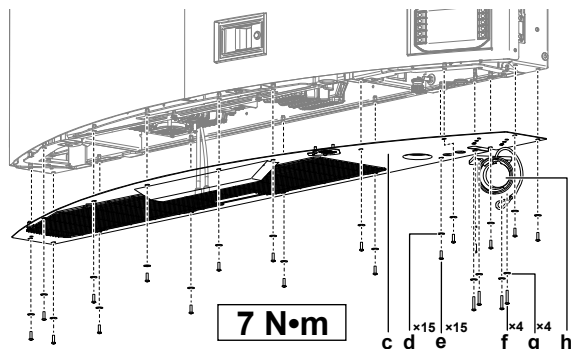
- 4 Tighten the screws (e) with a hexagonal key to 7 N•m.



### INFORMATION

The wiring of the electrical plug is already connected.

- 5 Using the screws (f) and washers (g), install the electrical plug (h) on the bottom panel.



- c Bottom panel
- d Contact washer (Ø6.1×18×1.4, A2-70 INOX)
- e Hexagon socket pan head screw (M6×20, A2-70 INOX)
- f Hexagonal socket head screw
- g Washer
- h Electrical plug

## 6.4 About the drain hoses

Frost gradually builds-up on evaporator coils as a result of normal operation. The unit uses 3 evaporator defrost heaters to melt the frost on the evaporator coils.

Make sure condensation water can be evacuated properly through collection drain hoses onto the ground.

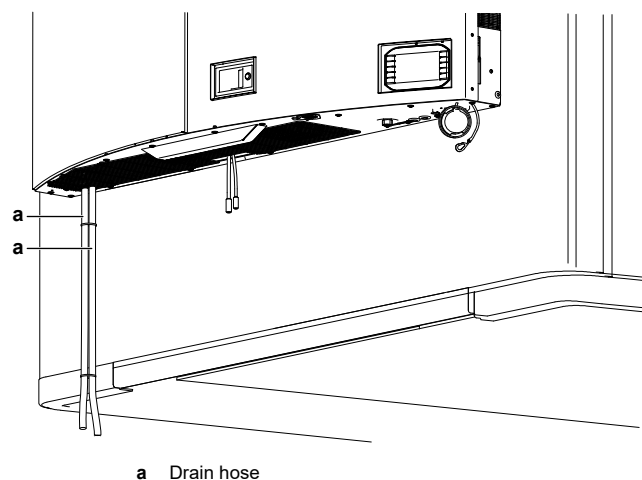
If necessary the drain hoses may be extended, taking into account that:

- Drain Hoses should run as straight as possible down the cold room wall, with no kinks or bends.
- Keep drain hoses as short as possible.
- Secure with screws, tie wraps and clamps as required.



### NOTICE

Incorrect connection of the drain hose might cause leaks, and damage the installation space and surroundings.

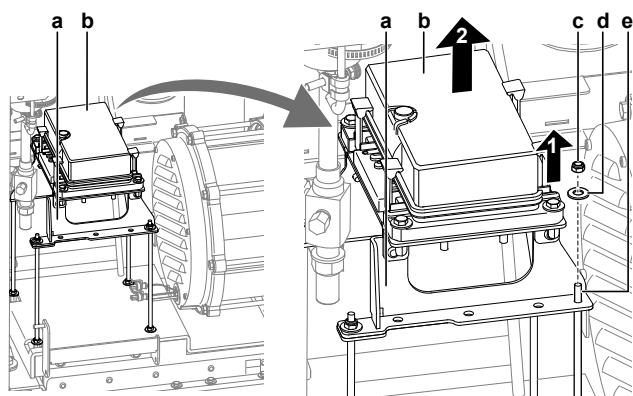


- a Drain hose

## 6.5 Battery

- 1 Remove the nuts (c) and washers (d) from the threaded rods (e).
- 2 Remove the brackets (a) together with the relay box (b).

## 6 Installation



- a Bracket
- b Relay box
- c Nut
- d Washer
- e Threaded rod



### CAUTION



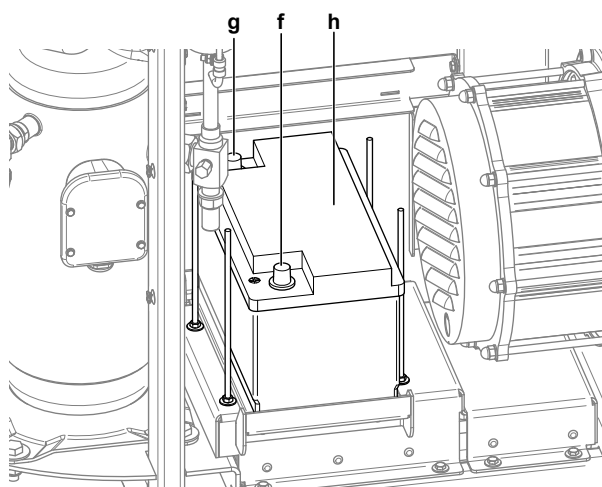
The battery is set up in a small space, be careful not to cause a short circuit during installation.



### CAUTION

The battery is heavy and therefore difficult to handle.

- 3 Install the battery (h) in place.
- 4 Connect the wires to the battery poles (f and g).
- 5 Install the pole protection caps.



- f Positive pole (+)
- g Negative pole (-)
- h Battery



### CAUTION



To prevent an accidental short circuit, attach the positive cable to the positive pole before the negative cable is attached to the negative pole.

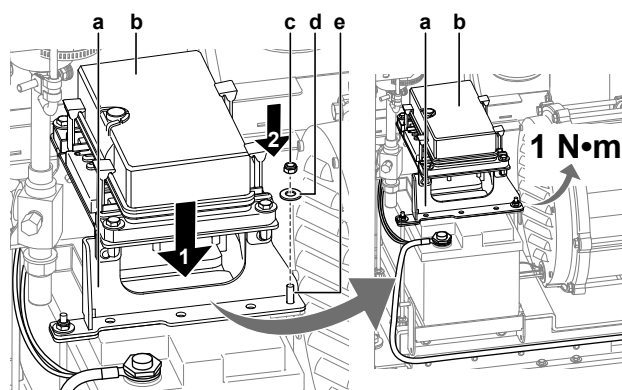
Keep open sparks and flames away from the battery at all times.

- 6 Install the brackets (a) together with the relay box (b).
- 7 Install the nuts (c) and washers (d) on the threaded rods (e), and tighten the nuts to 1 N•m.



### NOTICE

Be careful NOT to damage the battery by overtightening the mounting screws.



- a Bracket
- b Relay box
- c Nut
- d Washer
- e Threaded rod

## 6.6 Fuel supply

The unit uses fuel from a separate fuel tank, from where a fuel pump transports the fuel towards the front of the trailer and to the unit.

Installing the fuel supply system is left to the expertise of the bodybuilder.

An installation kit is supplied with the unit, see "3.2 To unpack the installation kit" [p. 9].

The installation kit contains the fuel pre-filter, fuel pump, fuel lines and connectors. Any required fixing materials, brackets and extra protection of the lines must be provided by the bodybuilder.



### WARNING



Only the fittings supplied with the installation kit and as indicated in the manual can be used. Do not use fittings from other suppliers.



### WARNING



If diesel leaks from the fuel system, it evaporates. These vapors are irritating to eyes, respiratory system and skin and can ignite if an open flame is in the area.



### CAUTION



Diesel is a polluting substance. Any diesel leaking from the fuel system may not be released in the environment.

### 6.6.1 To install the fuel tank



### INFORMATION

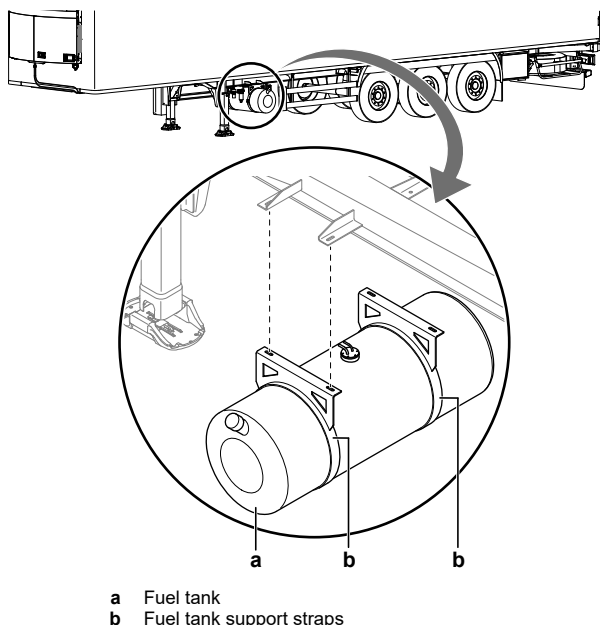
The fuel tank is not supplied by Daikin.

## **i** INFORMATION

The size of the fuel tank should be related to the intended use of the unit. The duration and climatic conditions under which the unit must be able to operate autonomously are decisive here.

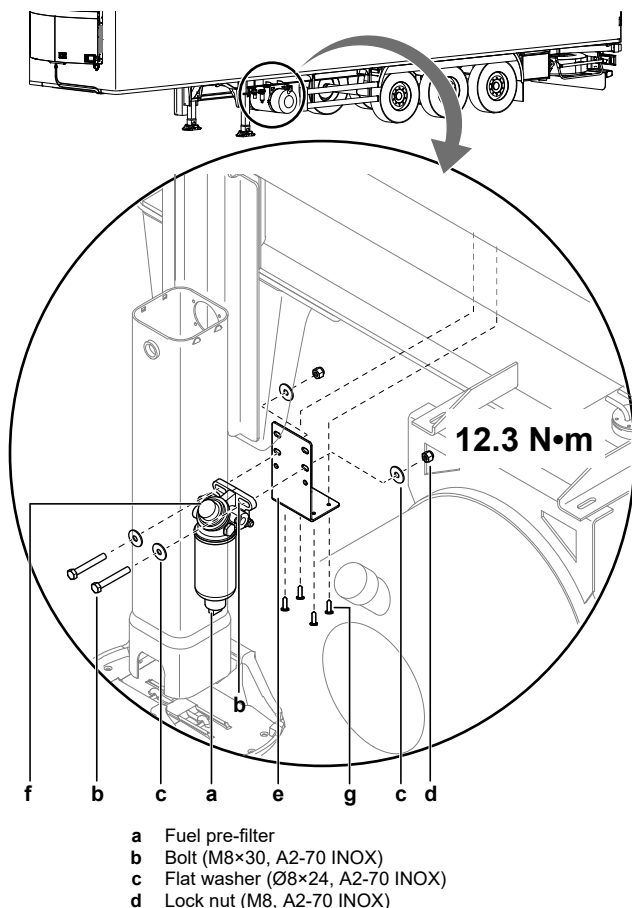
Installing the tank is left to the expertise of the bodybuilder.

A typical installation is shown below.



### 6.6.2 To install the fuel pre-filter

Installing the fuel pre-filter is left to the expertise of the bodybuilder. A typical installation, using a mounting bracket, is shown below. The bracket can be used in various directions and positions.



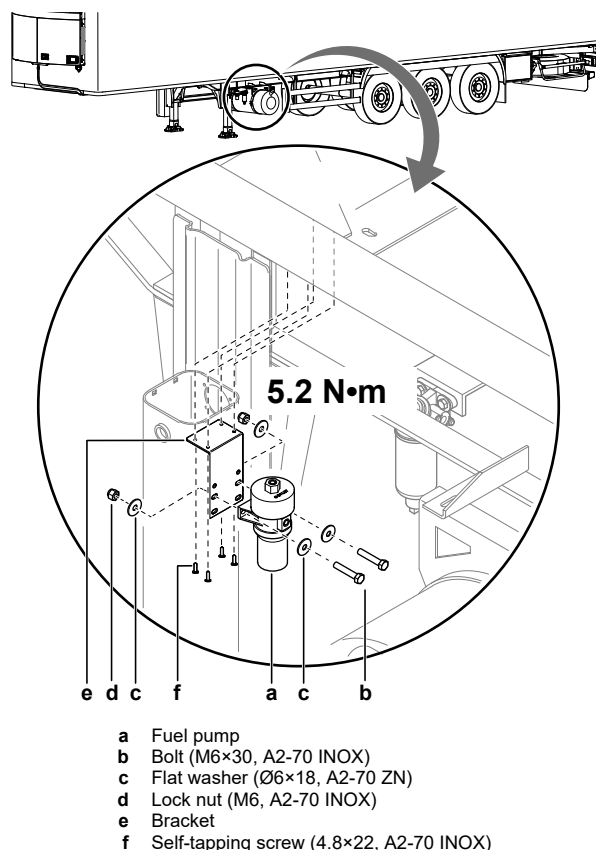
- e Bracket
- f Hand pump
- g Self-tapping screw (4.8×22, A2-70 INOX)

### 6.6.3 To install the fuel pump

## **i** INFORMATION

Check the instruction on the pump body (oulet/inlet, wire colours) to assure correct connection of wirings and fuel line.

Installing the fuel pump is left to the expertise of the bodybuilder. A typical installation, using a mounting bracket, is shown below. The bracket can be used in various directions and positions.



### 6.6.4 To install the fuel lines

Installing the fuel lines is left to the expertise of the bodybuilder.

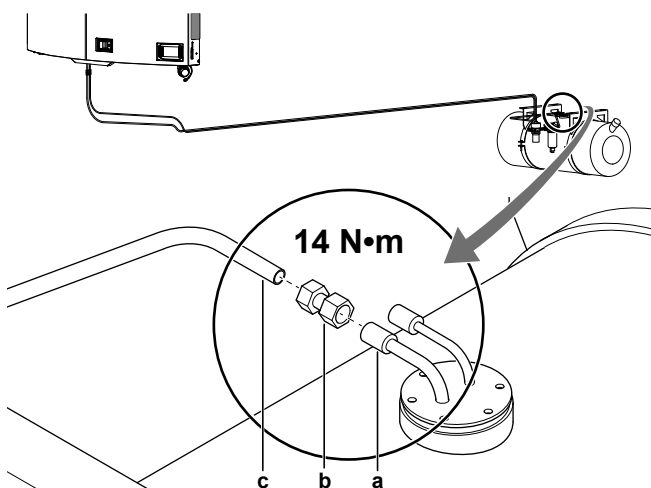
An installation kit is supplied with the unit, see "3.2 To unpack the installation kit" [p. 9].

The installation kit contains fuel lines and connectors. Any required fixing materials and (if necessary) extra protection of the lines must be provided by the bodybuilder.

## **i** INFORMATION

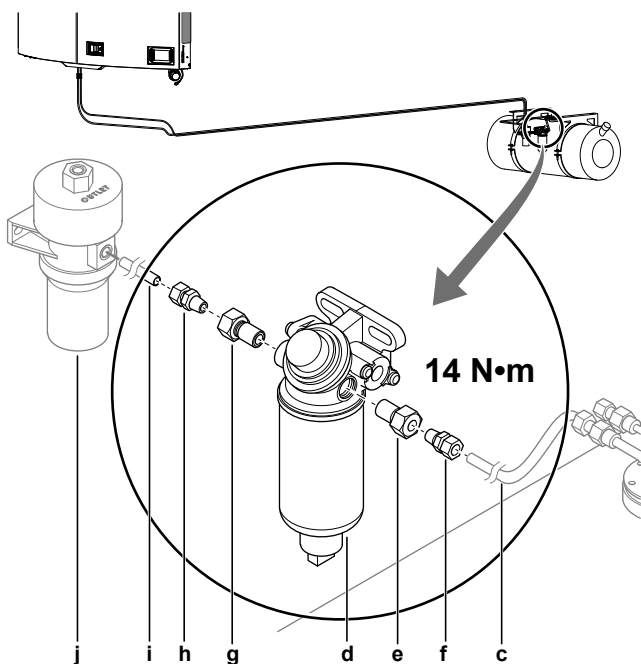
ALWAYS use hydraulic thread sealant as delivered with the installation kit to seal the fuel connections.

## 6 Installation



- a Fuel tank suction and return pipe (L=720 mm)
- b Straight female adapter (NPS 1/4" → Ø10 mm)
- c Fuel supply line (flexible tubing - outside Ø10 mm, black color)

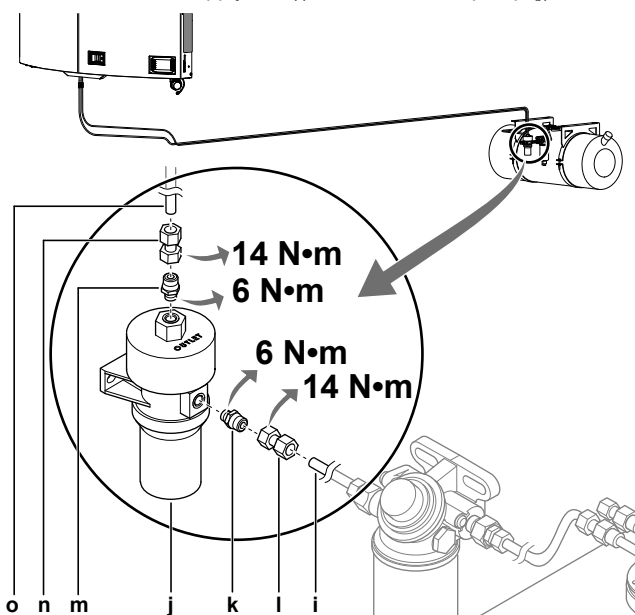
- 1 Connect the adapter (b) to the suction pipe of the fuel tank suction and return pipe (a).
- 2 Connect the fuel supply line (c) to the adapter (b).
- 3 Guide the fuel supply line (c) towards the fuel pre-filter (d).



- d Diesel pre-filter with water separator
- e Nipple (NPS 1/4" → M16)
- f Straight parallel male adapter (Ø10 mm → NPT 1/4")
- g Nipple (NPS 1/4" → M16)
- h Straight parallel male adapter (Ø10 mm → NPT 1/4")
- i Fuel supply line (flexible tubing - outside Ø10 mm, black color)
- j Fuel pump

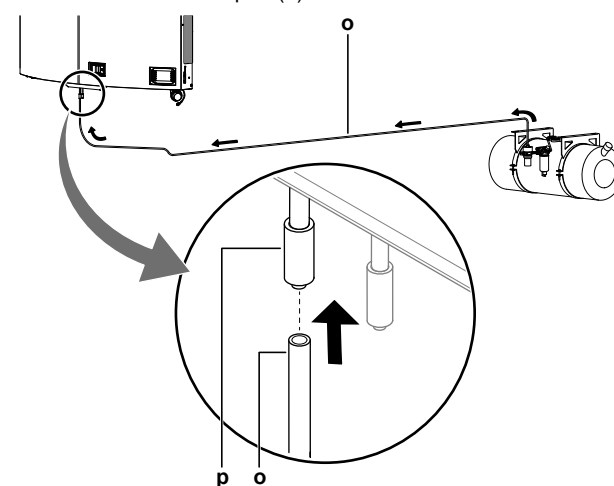
- 4 Screw the nipple (e) into the fuel pre-filter (d) on the inlet side.
- 5 Screw the adapter (f) into the nipple (e).
- 6 Cut the fuel supply line (c) to length.
- 7 Connect the fuel supply line (c) coming from the fuel tank to the adapter (f).
- 8 Screw the nipple (g) into the fuel pre-filter (d) on the outlet side.
- 9 Screw the adapter (h) into the nipple (g).
- 10 Connect the fuel supply line (i) going to the fuel pump (j) to the adapter (h).

- 11 Guide the fuel supply line (i) towards the fuel pump (j).



- j Fuel pump
- k Nipple (NPT 1/8" → NPT 1/4")
- l Straight female adapter (NPS 1/4" → Ø10 mm)
- m Nipple (NPT 1/8" → NPT 1/4")
- n Straight female adapter (NPS 1/4" → Ø10 mm)
- o Fuel supply line (flexible tubing - outside Ø10 mm, black color)

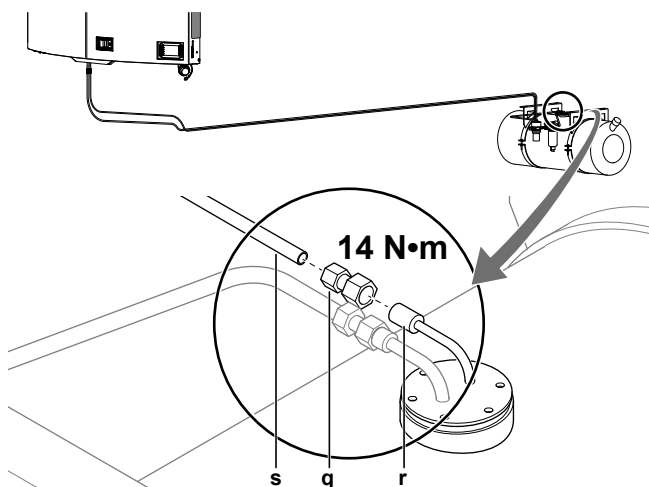
- 12 Screw the adapter (l) onto the nipple (k), tighten to 14 N·m.
- 13 Screw the nipple (k) into the fuel pump (j) on the inlet side, tighten to 6 N·m.
- 14 Cut the fuel supply line (i) to length.
- 15 Connect the fuel supply line (i) coming from the diesel pre-filter (d) to the adapter (l).
- 16 Screw the adapter (n) onto the nipple (m), tighten to 14 N·m.
- 17 Screw the nipple (m) into the fuel pump (j) on the outlet side, tighten to 6 N·m.
- 18 Connect the fuel supply line (o) going to the unit on the front of the trailer to the adapter (n).



- o Fuel supply line (flexible tubing - outside Ø10 mm, black color)
- p Equal straight connector

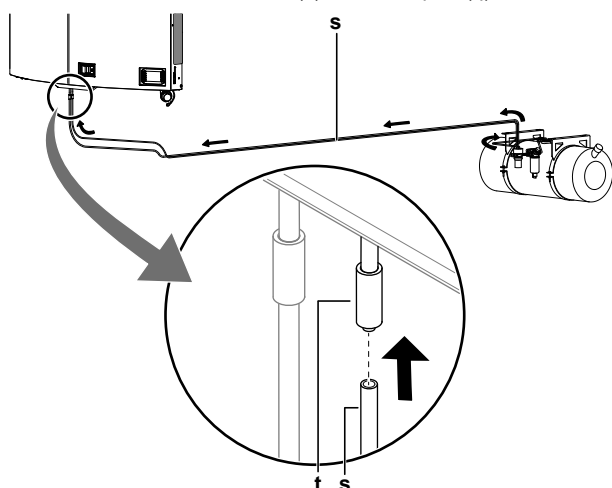
- 19 Guide the fuel supply line (o) towards the unit on the front of the trailer.
- 20 Attach the fuel line along the trajectory along the undercarriage of the trailer.

- 21 Using the cutter for multilayer and pneumatic hoses, cut the fuel supply line (o) coming from the fuel pump to length.
- 22 Connect the fuel supply line to the equal straight connector (p) coming out of the unit by pushing it firmly in the connector. Check the correct connection by pulling the line.
- 23 Connect the adapter (q) to the return pipe of the fuel tank suction and return pipe (r).



- q Straight female adapter (NPS 1/4" → Ø8 mm)
- r Fuel tank suction and return pipe (L=720 mm)
- s Fuel return line (flexible tubing - outside Ø8 mm, red color)

- 24 Connect the fuel return line (s) to the adapter (q).



- s Fuel return line (flexible tubing - outside Ø8 mm, red color)
- t Equal straight connector

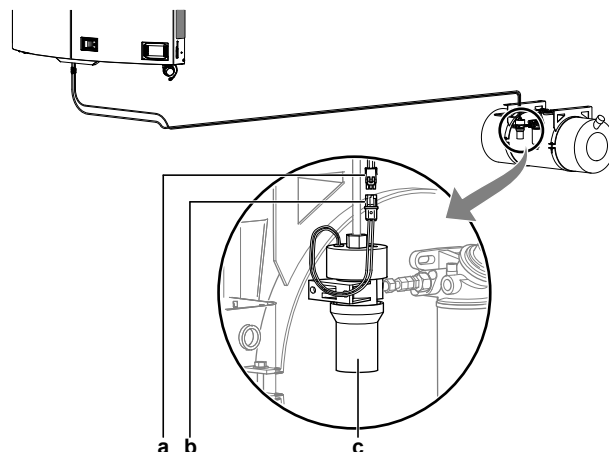
- 25 Guide the fuel return line (s) towards the unit on the front of the trailer.
- 26 Attach the fuel return line (s) along the trajectory along the undercarriage of the trailer.
- 27 Using the Cutter for multilayer and pneumatic hoses, cut the fuel return line (s) going to the fuel tank to length.
- 28 Connect the fuel return line (s) to the equal straight connector (t) coming out of the unit by pushing it firmly in the connector. Check the correct connection by pulling the line.

## 6.6.5 To make the electrical connections

Installing the electrical cable is left to the expertise of the bodybuilder.

A typical installation is shown below.

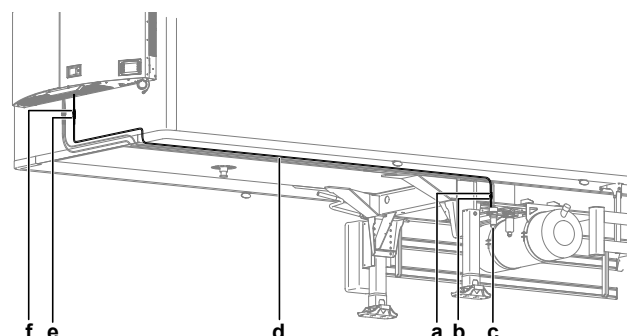
- 1 Plug the 2 pin connector (a) of the connection cable in the socket (b) of the fuel pump cable.



- a 2 pin connector of the connection cable
- b Socket of the fuel pump cable
- c Fuel pump

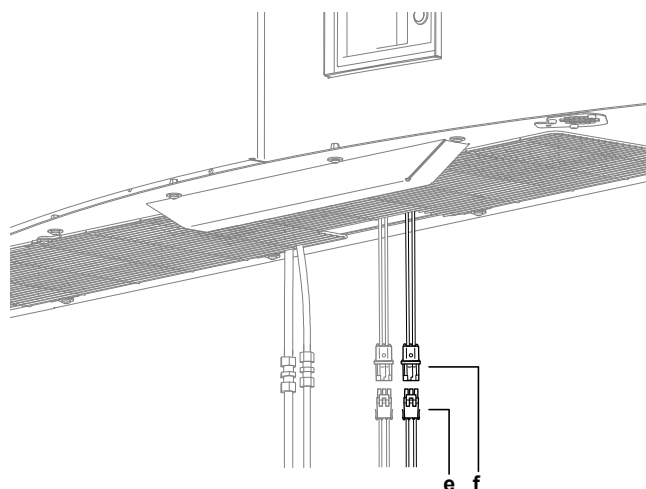
- 2 Guide electrical connection cable (d) towards the front of the trailer.

- 3 Attach the cable to the trailer undercarriage.



- a 2 pin connector of the connection cable
- b Socket of the fuel pump cable
- c Fuel pump
- d Connection cable
- e Two pin connector of the connection cable
- f Socket of the unit cable

- 4 Plug the 2 pin connector (e) of the connection cable in the socket (f) of the unit cable.

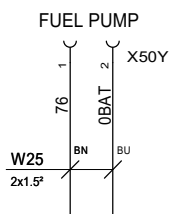


- e 2 pin connector of the connection cable
- f Socket of the unit cable

The fuel pump cable coming out of the unit is labelled "Fuel pump".

The fuel pump is connected to the X50Y connector.

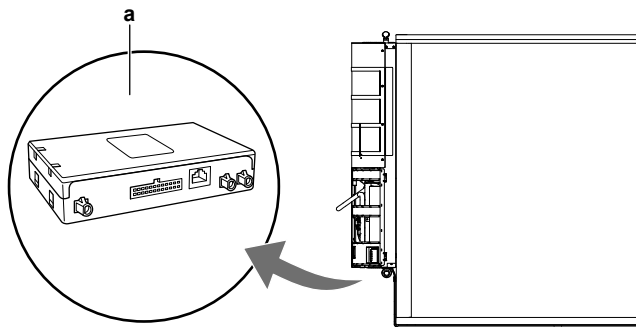
## 6 Installation



## 6.7 To install the IoT module

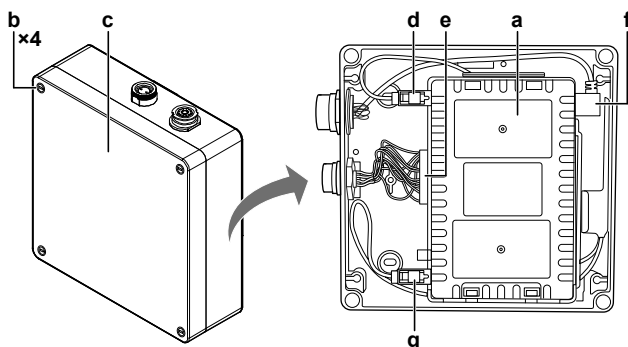
The IoT module, including the protection box and fasteners, is part of the installation kit.

Install the IoT module (a) in its protection box outside the unit, near the HMI.



**a** IoT module

- 1 Loosen the screws (b) and open the protection box cover (c).
- 2 Make sure that the GNSS connector (d), GSM connector (g), USB connection port (f) and 24-pin connector (e) are all connected to the module (a).



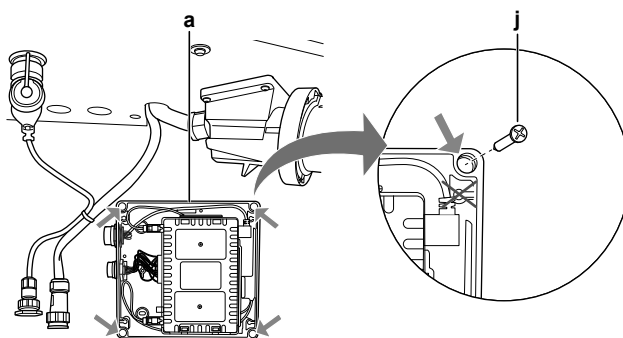
- a** IoT module
- b** Screw
- c** Protection box cover
- d** GNSS connector (GPS + GLONASS + Galileo)
- e** 24-pin connector
- f** USB connector
- g** GSM connector

- 3 Install the protection box with the IoT module complete on the cold room wall, using the 4 screws (j), grower washers (i) and flat washer (h) that are part of the installation kit.



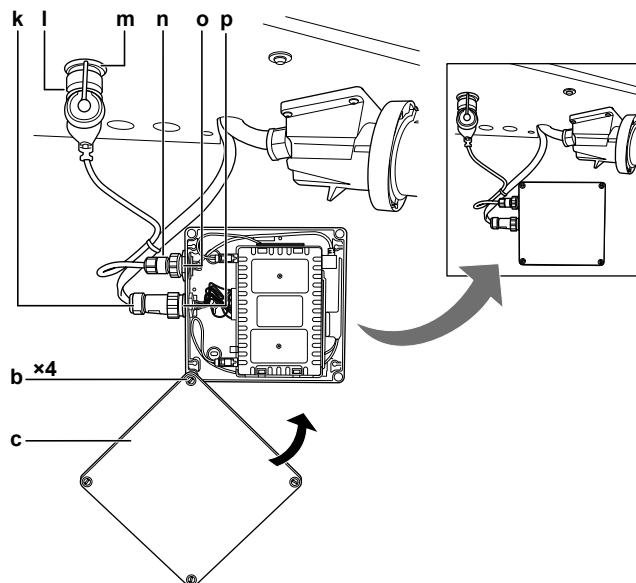
## NOTICE

To maintain the IP properties, fix the protection box through the outer holes. This way the sealing characteristics are not compromised.



**a** Protection box with IoT module  
**j** Self-tapping screw (5.5×22, FE/ZN)

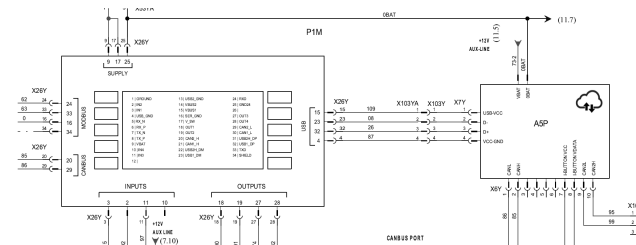
- 4** Close the protection box cover (c), and fasten the screws (b).



- b** Screw
- c** Protection box cover
- k** 12-pin connector
- l** USB connector
- m** USB serial port
- n** USB connector
- o** USB serial port
- p** 12-pin socket

- 5 Connect USB connectors (n and l) of the USB cable to the serial ports (m and o).
- 6 Connect the 12-pin connector (k) to the 12-pin socket (p) of the IoT module.

**Result:** The IoT module is now connected to the unit.



## 6.8 Possible options for the unit

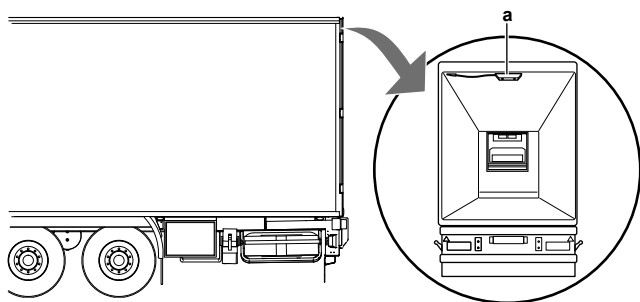
### 6.8.1 To install the door micro switch



## INFORMATION

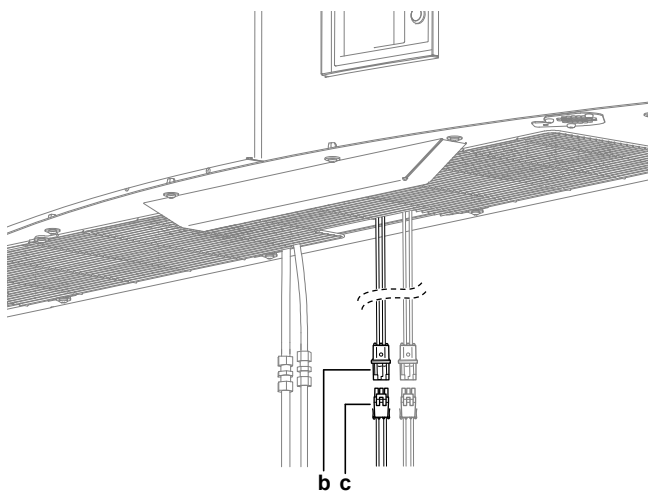
When the cold room door is closed, the optional micro switch (NO contact) sends a signal to the unit.

The micro switch signal interrupts the thermoregulation as soon as the cold room door opens, and it switches on the internal lighting in the cold room.



a Rear door switch

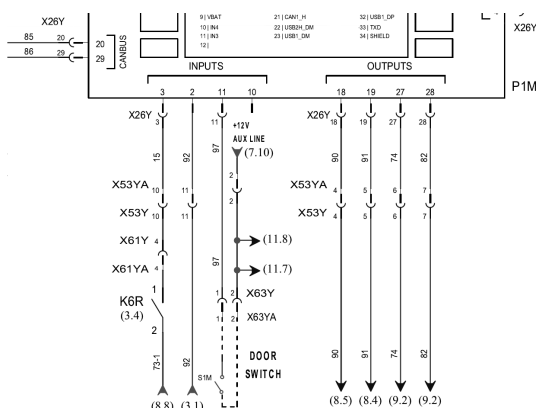
- 1 Install the door micro switch (a) so that it gives a signal when the door is closed.
- 2 Guide the electrical cable from the switch to the unit.
- 3 Plug the 2 pin connector (c) of the connection cable in the socket (b) of the unit cable.



b Socket of the unit cable  
c 2 pin connector of the connection cable

The door micro switch cable coming out of the unit is labelled "Door micro switch".

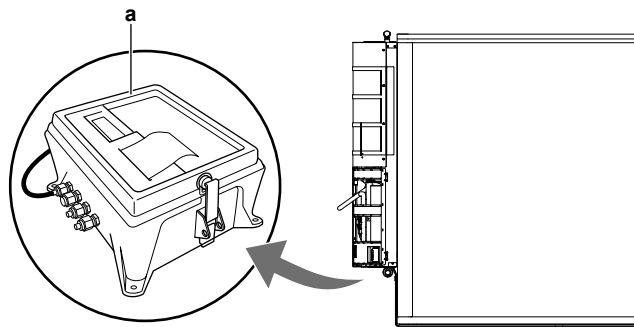
The door micro switch is connected to the X63Y connector.



### INFORMATION

Full installation instructions are delivered with the option kit.

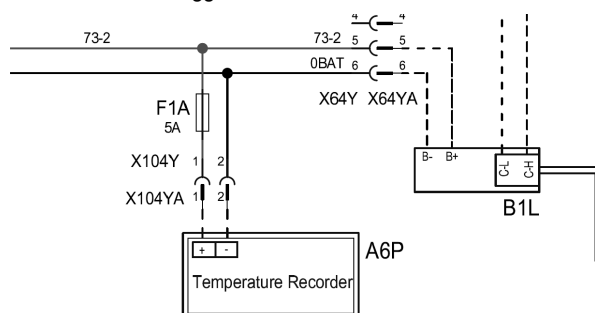
### 6.8.2 To install the cold chain data logger



a Cold chain data logger

- 1 Install the cold chain data logger (a).
- 2 Plug the 2 pin connector of the connection cable in the socket of the unit cable.

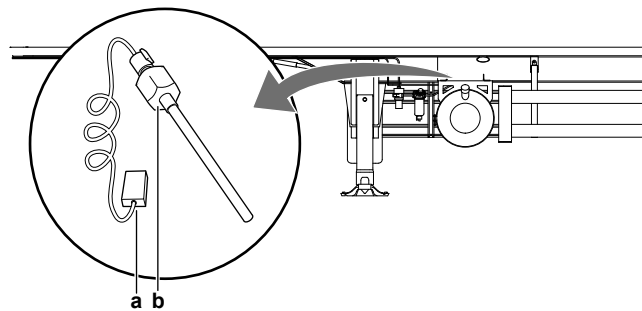
The cold chain data logger is connected to the X104Y connector.



### INFORMATION

Full installation instructions are delivered with the option kit.

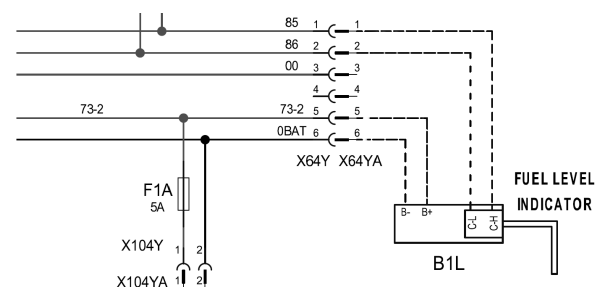
### 6.8.3 To install the fuel level probe



a Connector  
b Fuel level probe

- 1 Install the fuel level probe (b).
- 2 Guide the electrical cable from the tank to the unit.

The fuel level probe cable is connected to the X64Y connector.

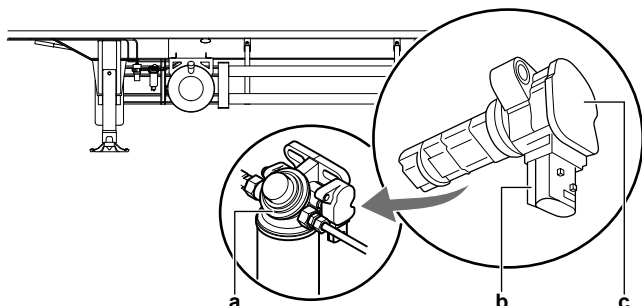


## 7 Functional test

### **i** INFORMATION

Full installation instructions are delivered with the option kit.

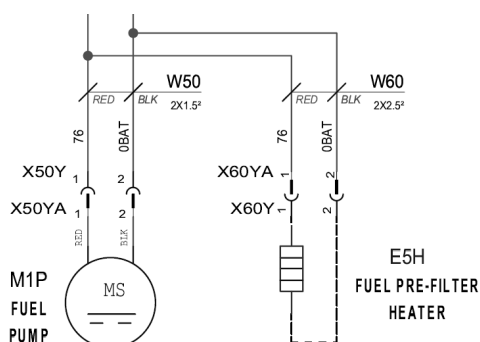
### 6.8.4 To install the pre-filter heater



- a Fuel pre-filter
- b Connector
- c Pre-filter heater

- 1 Install the pre-filter heater (c).
- 2 Guide the electrical cable from the pre-filter to the unit.
- 3 Plug the 2 pin connector of the connection cable in the socket of the unit cable.

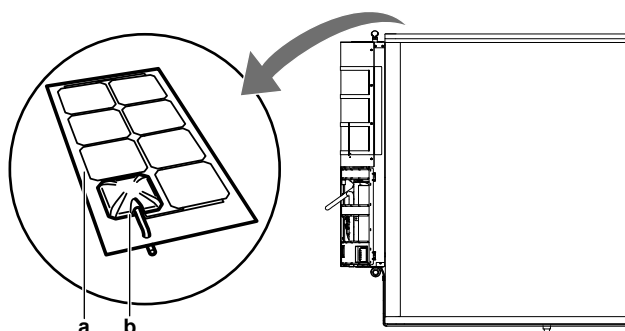
The pre-filter heater cable is connected to the X60Y connector.



### **i** INFORMATION

Full installation instructions are delivered with the option kit.

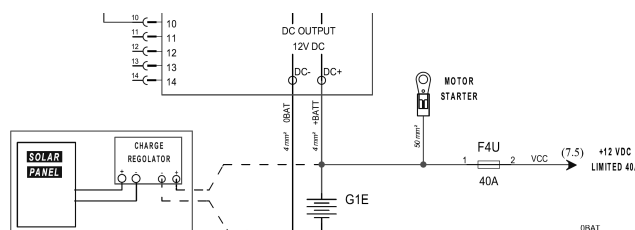
### 6.8.5 To install the solar panel



- a Solar panel
- b Charge controller

- 1 Install the solar panel (a).

The door solar panel cable is connected to the battery poles.



### **i** INFORMATION

Full installation instructions are delivered with the option kit.

## 7 Functional test

### **!** CAUTION



Preliminary electrical system checks such as earth continuity, polarity, neutral connection, resistance to earth and short circuit must be carried out by using a suitable test meter by a competent person.

### **!** NOTICE



To preserve the electronics of the unit, always connect the electrical plug with the power switched OFF. Only switch ON the power after the electrical plug is connected.

### 7.1 Final Checks

The following checks must be performed before handing the cold room with the installed unit over to the user:

- 1 Check all fluid components and connections inside the unit. Make sure they are not damaged during installation and that there are no visible leakages.
- 2 Check that all auxiliary components are installed correctly and that there are no visible leakages:
  - Fuel tank
  - Fuel pre-filter
  - Fuel pump
  - Fuel lines and connections



### WARNING




If diesel leaks from the fuel system, it evaporates. These vapors are irritating to eyes, respiratory system and skin and can ignite if an open flame is in the area.

- 3 Check that there is no air gap between unit and cold room wall.
- 4 Check that the exhaust pipe can discharge optimally.
- 5 Check that all covers can be closed correctly.

### 7.2 Test run


After installation the installer is obliged to verify the correct operation of the unit. Therefore a test run **MUST** be performed according to the procedures described below.

**WARNING**




- NEVER directly touch any accidental leaking refrigerant. This could result in severe wounds caused by frostbite.
- Do NOT touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.

**WARNING**




Do not operate the unit in road mode (with diesel engine running) in confined spaces and areas where fumes from the engine could become trapped and cause serious injury or death.

**WARNING**



Keep your hands, clothing and tools clear of moving parts such as fans and engine belt when the unit is working.

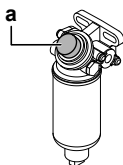
**WARNING**



When the unit is operating, a magnetic field is generated. This can disturb the functioning of cardiac devices like pacemakers and defibrillators. People who have such devices implanted must stay clear of the working unit when the service doors are opened.

### 7.2.1 To fill up the fuel line with engine bleeding function

- Switch on the unit. The fuel tank suction pipe is still empty at this moment.
- Operate the hand pump (a) on the fuel pre-filter to get the fuel (faster) to the fuel pump and the unit.



- Operate the engine bleeding function to fill up the fuel line as fully described in the operation manual (User interface/Basic functions chapter). This will turn on the fuel pump for 60 seconds.

### 7.2.2 PTI (Pre-Trip Inspection)

- Launch a Pre-Trip Inspection (see the procedure in the operation manual).

**Result:** This PTI procedure should take approximately 30 minutes.

### 7.2.3 Cooling, heating and defrost tests

- First perform the PTI.
- Perform a cooling test, a heating test and a defrost test.

**Result:** The duration of these tests will depend on the set point temperature, the ambient temperature and the cold room characteristics.

## 8 Hand-over to the user

Once the test run is finished and the unit operates properly, make sure the following is clear for the user:

- Make sure that the user has the printed documentation and ask him/her to keep it for future reference. Inform the user that he can find the complete documentation at the URL mentioned earlier in this manual.
- Explain the user how to properly operate the system and what to do in case of problems.
- Show the user what to do for the maintenance of the unit.

## 9 Disposal

The metal pallet on which the unit is fixed at delivery may be returned to sender or recycled, whichever is the most cost- and environment-friendly solution.

Wooden, plastic and polystyrene packing must be disposed of according to the regulations in force in the country where the unit is used.



#### NOTICE

Do NOT try to dismantle the system yourself: dismantling of the system, treatment of the refrigerant, oil and other parts MUST comply with applicable legislation.

Final disposal of the unit must be done by an authorised area technical assistance service, that has proper training, equipment and instructions for the dismantling. They are also responsible for reuse, recycling and recovery.

## 10 Technical data







- A **subset** of the latest technical data is available on the regional Daikin website (publicly accessible).
- The **full set** of the latest technical data is available on the Daikin Business Portal (authentication required).

### 10.1 Wiring diagram

- A printed version of the declaration of conformity, the wiring- and piping diagrams is included with the unit.

#### Wiring diagram legend

For applied parts and numbering, refer to the wiring diagram on the unit. Part numbering is by Arabic numbers in ascending order for each part and is represented in the overview below by "\*" in the part code.

Symbol	Meaning	Symbol	Meaning
	Circuit breaker contact		Noise filter
	Compressor		Power supply plug
	Connection		Pressure switch

## 10 Technical data

Symbol	Meaning	Symbol	Meaning
	Connector		Protective earth
	Contactor contact		Relay
	Expansion valve		Relay contact
	Fan		Resistor
	Fuse		Solenoid valve
	Fuel pump		Speed sensor
	Generator		Temperature sensor
	Heater		Terminal
	Inverter reactor		Terminal strip
	Main switch		Transformer

Symbol	Colour	Symbol	Colour
BLKBK	Black	ORG	Orange
BLUBU	Blue	PK	Pink
BRNBN	Brown	VI	Violet
GNYE	Green/yellow	REDRD	Red
GRNGR	Green	WHTWH	White
GRYGY	Grey	YLWYE	Yellow

Symbol	Meaning
A*P	Printed circuit board
E*H	Heater
F*F	Fan fuse
F*T	Thermal fuse
F*U, (for characteristics, refer to PCB inside your unit)	Fuse
G1	Battery
J*	Power connector
K1	Main line
K2	Auxiliary line
K*M	Contactor
K*R	Relay
L*R	Reactor
M*C	Compressor motor
M*F	Fan motor
M*G	Generator
M1P	Fuel pump
P*M	User interface (HMI)
Q*C	Circuit breaker (compressor)
R*	Precision resistor
R*T	Temperature sensor
S1	ON/OFF switch
S*T	Heat safety thermostat
S*NPH	Pressure sensor (high)
S*NPL	Pressure sensor (low)
S*P	Pressure switch (air diff.)

Symbol	Meaning
S*PH	Pressure switch (high)
V*R	Transformer
X*	Clamp
X*P	Power supply plug
X*Y	Connector
X*A	Solenoid valve
Y*E	Electronic expansion valve coil
Z1F	Grid noise filter

### 10.2 Piping diagram

- A printed version of the declaration of conformity, the wiring- and piping diagrams is included with the unit.

#### Piping diagram legend

For applied parts and numbering, refer to the piping diagram on the unit.

Symbol	Meaning	Symbol	Meaning
	Air differential pressure switch		High pressure switch
	Charge/service port		Insulation material
	Check valve		Outside diameter
	Compressor		Pressure sensor
	Electric heater		Propeller fan
	Electronic expansion valve		Receiver
	Economiser		Solenoid valve
	Filter		Stop valve
	Heat exchanger		Thermistor (temperature sensor)
	Heater stop thermostat		


Symbol	Meaning
<b>Analog inputs</b>	
CND1	Condenser heat exchanger 1
CND2	Condenser heat exchanger 2
PDIS	High pressure sensor
PSUC	Low pressure sensor
TAMB	Outside air temperature sensor (in condenser)
TCOND OUT	Condenser outlet temperature sensor
TDIS1	Discharge temperature sensor
TDIS2	Discharge temperature sensor backup
TDTS	Defrost temperature sensor
TE_A_IN1	Inside air temperature sensor (in evaporator)
TE_A_IN2	Inside air temperature sensor backup (in evaporator)
TE_A_OUT1	Inside air temperature sensor (out evaporator)
TE_A_OUT2	Inside air temperature sensor backup (out evaporator)

Symbol	Meaning
TECO OUT	Economiser outlet temperature sensor
TSUC	Suction gas temperature
<b>Digital inputs</b>	
DPS	Air differential pressure switch
HPS	High pressure switch
HTT	Heater stop thermostat
<b>Solenoid valves</b>	
COMP BSV	Compressor bypass solenoid valve [NC]
COND CPS	Condenser partialisation solenoid valve [NO]
<b>Expansion valves</b>	
MAIN EV	Electronic expansion valve main
INJ EV	Expansion valve (injection)


## 10.3 Weight

Weight of the Exigo 1500 unit: 730 kg.

Weight of the Exigo 1500 unit with the special transport pallet: 791 kg.



**WARNING**



Make sure that the forklift, or any other lifting device used, can bear the weight of the unit.

# 11 Glossary

## Accessories

Labels, manuals, information sheets and equipment that are delivered with the product and that need to be installed according to the instructions in the accompanying documentation.

## Applicable legislation

All international, European, national and local directives, laws, regulations and/or codes that are relevant and applicable for a certain product or domain.

## Authorised installer

Technical skilled person who is qualified to install the product.

## Bodybuilder

Technical skilled person who is qualified to install the product on a cold room trailer.

## Dealer

Sales distributor for the product.

## Field supply

Equipment NOT made by Daikin that can be combined with the product according to the instructions in the accompanying documentation.

## HMI

Human Machine Interface. Screen that communicates information, data and metrics using graphics or visual representations.

## Installation manual

Instruction manual specified for a certain product or application, explaining how to install, configure and maintain it.

## Maintenance instructions

Instruction manual specified for a certain product or application, which explains (if relevant) how to install, configure, operate and/or maintain the product or application.

## Operation manual

Instruction manual specified for a certain product or application, explaining how to operate it.

## Optional equipment

Equipment made or approved by Daikin that can be combined with the product according to the instructions in the accompanying documentation.

## PM generator

Permanent Magnet generator, engine driven.

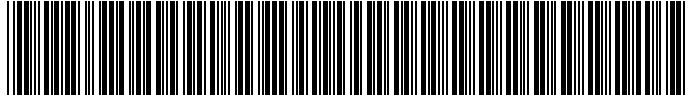
## Service company

Qualified company which can perform or coordinate the required service to the product.

## User

Person who is owner of the product and/or operates the product.

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4P726857-1B 2025.04