

Fitting and user instructions

Thermolux Split units TL6 - TL10 - TL16



– Norwegian produced quality –

Contents

Before fitting	3
Contents in screw bag	3
Position/fitting	4
Use and maintenance	5
Connection diagram	8
Technical specifications.....	8
Information about the unit.....	9
Warranty.....	11

General

THERMOLUX split units is a Norwegian produced high-quality product with selected components, with 30 years' experience. The units are supplied in 3 sizes: from 1-8 M3 from 2-12M3 and from 4-17M3. Quick to fit, easy to use and extremely quiet.

The refrigeration units are suitable for private households and small refrigeration compartments in large kitchens and institutions and similar. Hot and cold is separated, and the cold part (evaporator) is fitted in the refrigeration compartment, while the hot part is placed in a separate area. This could be a technical room, laundry room or storage area where a hot feed can be used for the majority of the year.

The room where the hot is placed must have good ventilation during the summer, so that the average temperature does not exceed 27 degrees.

Fitting of the split units must be conducted by an approved cold fitter and conducted according to Norwegian refrigeration standards. The distance between hot and cold should not exceed 10 metres.

The hot and cold parts are connected with 8 mm and 6 mm copper pipes, which are insulated, and a cable of a min. of 0.75 square, 3 wires + earth.

Before fitting

Unwrap the unit and check that all the parts in the list are present. Contact the supplier if there are any deficiencies or parts missing.

You need to use 6 mm and 8mm (5/16" & 3/8") approved copper pipes on the TL6 and TL10 models. TL16 uses 1/4" & 3/8". The electrical cable between the evaporator and compressor part must be 3-wires + earth. (4x0.75).

It must be connected to the drain under the evaporator, which is fed to a drain/container. When connecting to the drain you must create a water trap.

The cooling pipes must be put in place or with a slight drop from the highest point above the evaporator back to the compressor part, and the oil lock on the suction tube at a height difference of + 1.5 m up to the compressor part again.

Associated parts

1 x User and fitting instructions

2 x 5 pin male connector with cover for electrical connection between hot and cold section.

4 x Rubber mufflers for metal box heat part.

1 x thermostat for walls/ceiling evaporators.

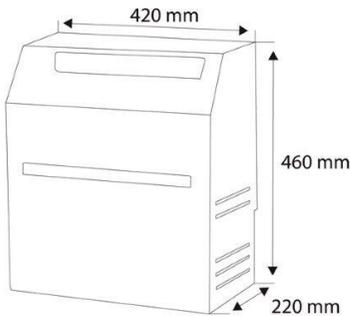
2 x discs used together with 2 x 4x40 for heat part attachment.

4 x 3.5x13 screws used together with 5-pin male connector.

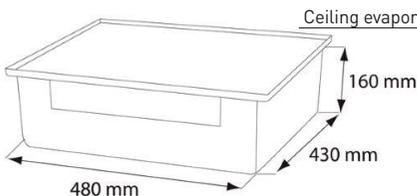
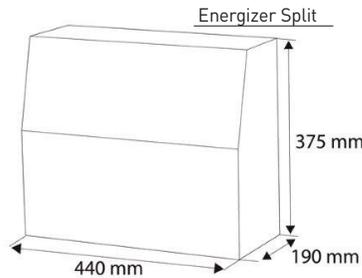
5 x 4x40 screw for attaching hot and cold part.

4 x 4.2x15 screws for fixing plastic cover ceiling evaporator and heat part.

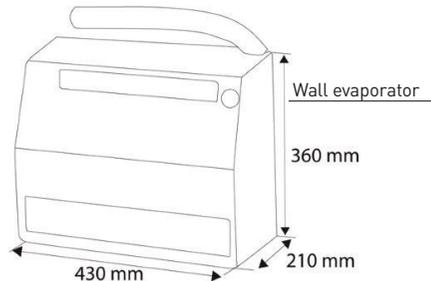
1 x rubber rinse tube for walls/ceiling evaporator.



Compressor unit TL6-10-16



Ceiling evaporator



Wall evaporator

Position/fitting

The evaporator must be positioned so that it does not blow on the door, as this can cause condensation in the frame. It is also important that it is positioned so that there is good air circulation in the room. The stretch of pipe between the compressor and evaporator must not exceed 10 metres. When fitting in completed element rooms and corner fridge/pantry, the pipes from the evaporator are pulled up through the ceiling and connected together at the top of the ceiling. The stretch between the pipes must be well insulated. It is important to avoid long oil pockets in the pipework (straight pipes).

1. Fit the evaporator part in the ceiling/wall with 4 screws 4 x 35 mm. Prepare for appropriate connection across the ceiling. Remember to have a sufficiently long cable to the 5 pin plug for quick connection.
2. Wait screwing onto the plastic cover until after vacuuming and filling.
3. Attach the drainage hose. Pull the rubber through the drainage hole.

The compressor part is fitted to the wall or put on the floor in a suitable place. Consideration must be made for air coming in and out of the unit. Do not place the unit under stairs/enclosed areas etc. where there is minimal air ventilation.

1. The compressor bracket has 4 x rubber mufflers on the bottom.
2. The compressor bracket is placed on a pre-fitted shelf or fixed to the wall with screws.
3. Secure the unit with the disc and screws through the 2 outer rubber dampers. [shelf/floor].
4. Suction (8mm) and fluid pipes (6mm) are soldered to the compressor pipe and filter respectively.
5. The unit is vacuumed and leak tested with a drop test. The ambient temperature upon vacuuming must be above 15°C. If there is a leak, the unit must be pressure-tested and re-vacuumed.
6. Fill the unit with 134 according to recommended capacity levels + approx. 15-20 g per metre of pipe length.
7. Connect the wires to the right colours according to the drawing for 5-pin fast connection, and position in respective connections. Normal suction pressure during operation is between 10-15°C.

The evaporator part without fitted cover must run over upon correct filling. Check the thermostat stops the compressor by switching the thermostat to the far right and into OFF mode. Re-fit cover, and drainage hose. Put a box or towel over the entire evaporator box for faster check of correct filling, and in/out connection on thermostat. For correct suction pressure it is also important that the cover on the compressor unit is fitted.

Set the thermostat to 1o'clock. After 1-2 days, adjust to the right temperature.

Use and maintenance

Setting the temperature:

The thermostat has a working area of 3-12 degrees Celsius. When the thermostat knob is turned clockwise, the temperature is reduced and the fridge gets colder.

Counter clockwise warmer. The correct temperature for food is set with a thermometer placed in a glass of water. 5°C in the water glass is the ideal temperature for most food. With a temperature of 5°C the air temperature will be between 3 and 7°C in the fridge. By turning the knob-to the left and up to breaking point (OFF), the compressor is switched off and the cold part is forced to defrost.

DEFROSTING TIMER: TL10 and TL16 have a defrosting timer and must be supplied from the factory with defrosting of 4x15 min. per 24 hours. The defrosting timer is adjusted according to requirements in each case. 1 turn outwards is 15 mins. defrosting.

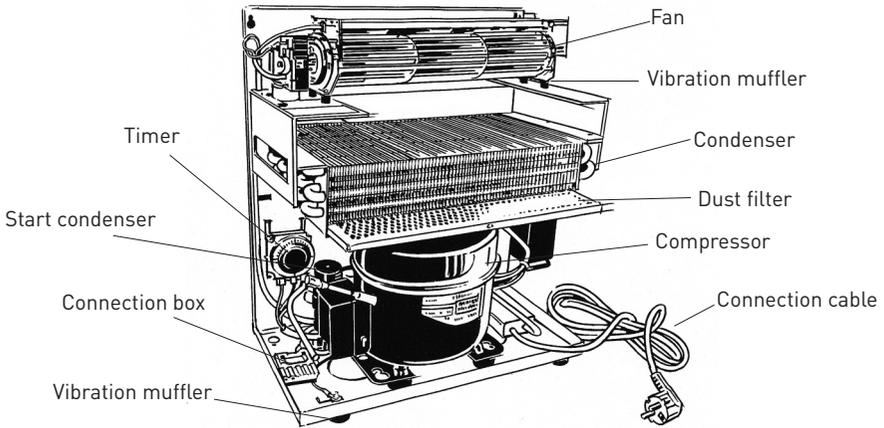
CLEANING: The compressor unit has a dust filter at the front, which can be pulled out and should be vacuumed 4 times a year as required. Remember to unplug before cleaning. When cleaning the evaporator cover and inside the fridge, use mild soapy water with a small amount of chlorine to prevent mould forming. Draining of condensation water should be checked regularly including that the water runs free to the container or the drain.

Simple problem solving

Fault	Reason	Need
Poor refrigeration	Dust filter	Clean filter
	Fan motor on warm side defect	Order new fan
	Ambient temperature too high	Improve ventilation
Fan motor on cold side defect	Order new fan	
	Evaporator full of ice	Manual defrosting
No refrigeration	Compression not running	Check fuse/plug
	Compressor not working	Call + 47 69102402
Water running over	Drain	Open drain

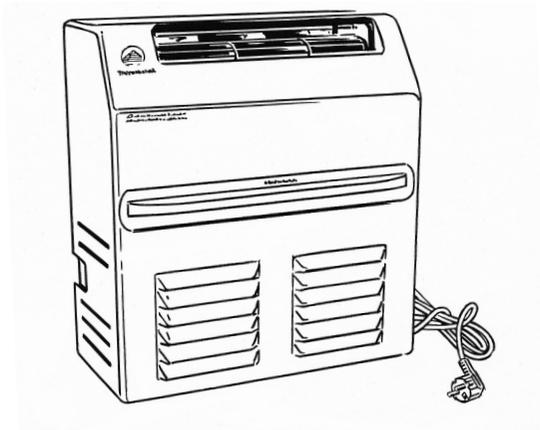
Compressor unit TL6-10-16

Very quiet compressor unit with dust filter, vibration mufflers on the unit box, compressor and fan.



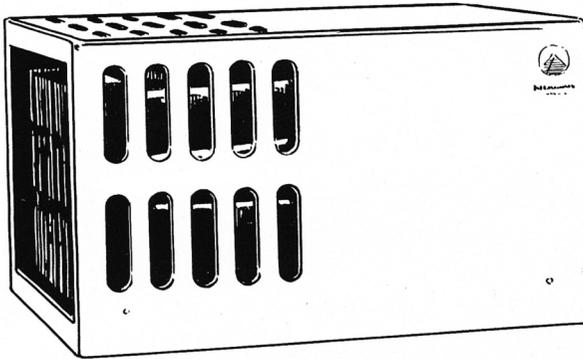
Compressor unit with cover

Dust filter cleaned every 3 months. or as required.



Compressor unit Luve 6-10-16

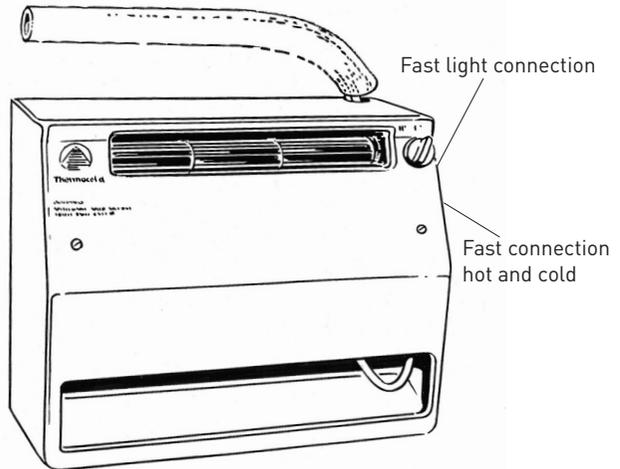
This model is well-suited for placing in e.g. a small loft, room etc.



Wall evaporator

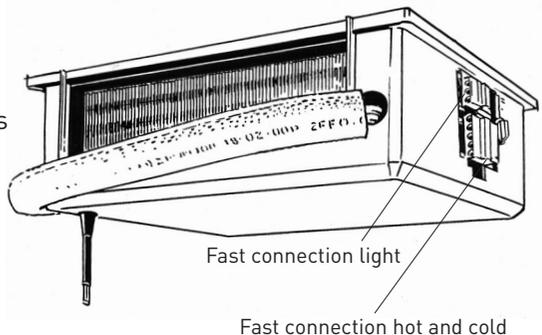
Wall evaporators have 20% more cooling capacity than ceiling evaporators and are used in both DIY and finished rooms of varying sizes:

TL 6 from 1-8M3 – TL10 from 2-12M3 – TL16 from 3-17M3

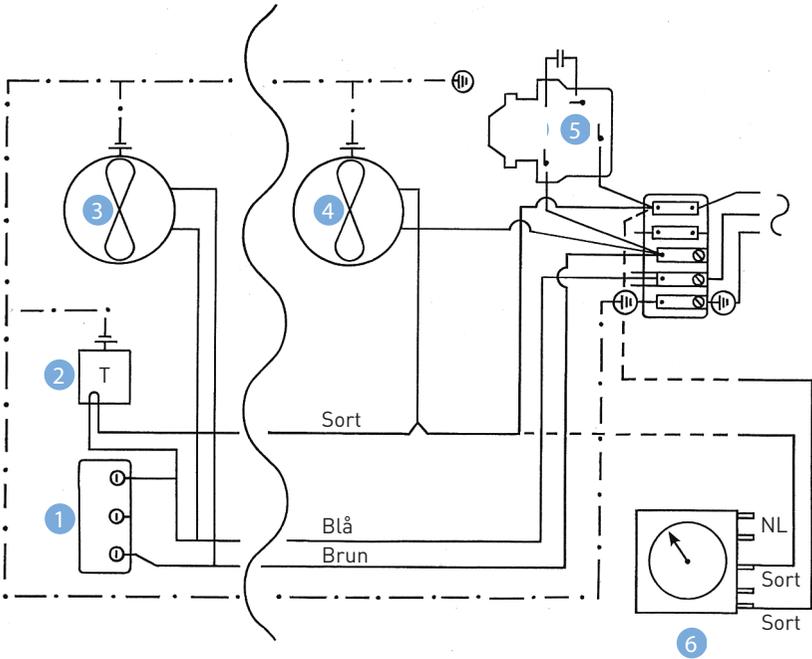


Ceiling evaporator

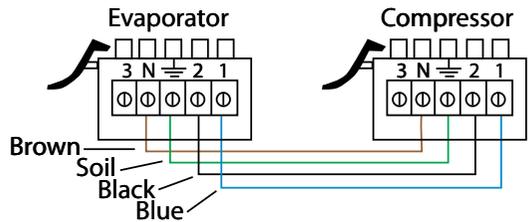
Ceiling evaporator is used only for small unit rooms or smaller DIY rooms with a guaranteed diffusion blocker fitted on the hot side of the insulation.



Connection diagram for split unit



1. Fast connection
2. Thermostat
3. Evaporator fan
4. Condenser fan
5. Compressor relay
6. Defrosting timer



Technical specifications

Model	TL6	TL10	TL16
Cooling fluid	R134A CFC free 0.29kg	R134A CFC free 0.30kg	R134A CFC free 0.39kg
Voltage	220-240V AC 50Hz	220-240V AC 50Hz	220-240V AC 50Hz
Compressor	Danfoss FR8,5G	Danfoss FR10G	Danfoss SC15G
Cooling effect	8000 litres/390W	12000 litres/450W	17000 litres/780W
Thermostat setting	3-12°C	3-12°C	3-12°C
Ambient temperature	10-27°C	10-27°C	10-27°C
Net weight	23 kg	24 kg	26 kg
Dust filter	Yes	Yes	Yes
Timer for defrosting	No	Yes	Yes

Information about the equipment

Please note down the details from the equipment's model sign below for reference and to help THERMOCOLD's customer service in case a fault occurs with the equipment and to register the equipment for warranty purposes.

Equipment model: _____

Serial number: _____

EC declaration of conformity:

This equipment is designed, constructed and sold in accordance with the safety requirements in the EØF-directive 2006/95/EØF (low voltage) and the requirements in the EMC directive 2004/108/EØF.

This unit has been produced in accordance with the strictest standards and meets all applicable legislation, including electrical safety (LVD) and electromagnetic interference compatibility. (EMC). Parts that may come into contact with food meet the requirements in EØF/89/109.4

IMPORTANT INFORMATION FOR PROPER DISPOSAL OF THE PRODUCT IN ACCORDANCE WITH THE EF DIRECTIVE 2002/96/EF.

At the end of its lifetime, the product must not be disposed of in household waste. It must be taken to a local recycling plant or to an agent who provides this service.



Separate disposal of the household unit prevents the possible negative consequences for the health and environment as a result of incorrect disposal and makes it possible for the used materials to be recycled and thus achieve significant savings for energy and resources. As a reminder for the need to dispose of household equipment separately the product is labelled with a waste disposal bin with a cross over it.

NB:

This unit is only designed to refrigerate a fridge compartment. Other types of use are not permitted and may be dangerous. THERMOCOLD KFD A/S shall not be held liable for any damage caused by incorrect use of the unit.

- Carefully read all the instructions before use.
- To protect against fire, electrical shock and injury, the wire or plug socket must not be submerged in water or other liquid.
- Use of accessories/spare parts not recommended by THERMOCOLD KFD A/S may lead to fire, electric shock or personal injury.
- If the unit is switched off, let it stand for five minutes before moving

Transport/Repair/Replacement

Thermocold A/S or the distributor can determine whether faults and deficiencies need repair, either at the customer site or at a designated workshop.

The customer can claim financial compensation according to the Purchasing Act.

The supplier is under no circumstance responsible for indirect losses §67 (2)

If components that have a direct or close connection with the product's use or function become damaged, the supplier is only liable to the extent that this is required by mandatory law. This also applies to personal injury. Injuries of this kind should be dealt with between the customer and supplier.

Thermocold A/S's responsibility does not include:

1. Repair/intervention carried out by unauthorised staff or dealers, and fitting of the unit in other installations or products that Thermocold A/S does not have control over.
2. Installation that does not follow the local EL authority's regulations and fitting instructions.
3. Treatment that contradicts the user instructions (poor maintenance).
4. Transport damage that has not been reported to the courier, or accidents following delivery that lies outside the supplier/dealer's control, such as lightning strikes, electrical disturbances such as high/low voltage variation in addition to 10% of rated voltage.

The supplier's responsibility is not covered if faults, damage or deficiencies are caused by: Incorrect structure of the refrigeration compartment - poor ventilation.

Lack of maintenance - corrosion and scale due to the surroundings.

Consumer purchase

These provisions regulate the customer's rights to Thermocold A/S as the supplier of new products suitable for use in private households. The supplier is obliged to repair faults or deficiencies upon proof of a receipt from the customer.

Buyer's rights

Complaint deadline is 2 years. When the product or parts of the product are meant to last significantly longer, this deadline is 5 years. The pre-requisite for complaints is that the deficiency was there at the point of delivery. The customer loses their right to claim if they do not complain within a reasonable time after discovering the deficiency, or by a time it should normally have been discovered. For legal defects Thermocold A/S is entitled to repair the product within the deadline in accordance with the consumer Purchasing Act.

Commercial purchase

Commercial purchase is understood to mean anything that is not a consumer purchase. Where products are going to be placed in cafes, restaurants, street kitchens, hotels, motels, companies or other business-related activities, as well as use in schools, childcare premises, dormitories, nurseries, sports centres, shared households and where the customer either wholly or in part pays for the use of the unit as part of a tenancy agreement, and where the unit is used to maintain a product the customer sells. The complaint and warranty period is 1 year. This applies to every loss and deficiency caused by e.g. loss of operation, lost service and other financial consequential losses. This limit in the supplier's responsibility does not apply in situations of gross negligence. The same terms apply as for consumer purchases.

Thermocold A/S is not liable for any print errors and reserves the right to make changes to the product specifications.

Disposal



Products labelled with this symbol must be disposed of at your local recycling plant. Thermocold A/S is a member of the Renas recycling system. Disposed of products can therefore be deposited at most depots in Norway. The manufacturer must be contacted for any complaints and warranty work.

Thermocold KFD A/S shall not be held liable for any printing errors in the fitting instructions.

Warranty

Thermocold A/S warrants that the product delivered has the features and quality described in the brochures and other sales material. Small discrepancies may occur as a result of product change. The warranty period runs for 2 years from the time the product is delivered to the customer. It is important that the customer adheres to the fitting/user instructions carefully. Even for normal use, the products will be subjected to general wear and tear, which requires preventative maintenance and thereby the replacement of worn components such as fans, start equipment, thermostat and light. These are components with a variable life time dependent on fitting, use and maintenance. These are not covered in the 5 year complaints period, but by the warranty in accordance with the Purchasing Act.



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