

Operation manual XSDC 601-01



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1. Safety Information

1.1 Adherence to information provided in the Operation Manual

Being familiar with the basic safety information and regulations is essential for safe handling and failure-free operation of this device.

- ✓ This Operation Manual contains the most important information required in order to safely operate the device.
- ✓ Please ensure, all personnel operating the device adheres to this Operation Manual and in particular to the safety information provided herein.
- ✓ Additionally, any rules and regulations with respect to accident prevention, applicable at the your respective location, are to be complied with.

1.2 Operator Obligations

The operator undertakes to exclusively authorize individuals to work at the cooling cabinet, who:

- ✓ are familiar with relevant regulations on occupational safety and accident prevention, and have been trained in the device's handling;
- ✓ are in possession of and/or have proven to possess the required expertise and know-how;
- ✓ have read and understood the safety information and precautions provided in this Operation Manual.
- ✓ Furthermore, the operator undertakes to regularly check its personnel's for a safety-conscious mode of practice.

1.3 Personnel Obligations

All personnel assigned to operate the device, undertake to:

- ✓ comply with the relevant occupational safety and accident prevention regulations and follow the safety information and precautions provided herein, before operating the device.

1.4 Organizational Measures

- ✓ Required personal protective equipment (PPE) is to be provided by the operator.
- ✓ All existent safety installations are to be inspected regularly.

1.5 Information related safety precautions

- ✓ Ensure the Operation Manual's general availability at the device's application site.
- ✓ In addition to the Operation Manual, also provide for and ensure to comply with general as well as local regulations on accident prevention and environmental protection.
- ✓ Ensure to keep all safety information and precautions applied to the device in legible condition.

1.6 Intended use

The device is exclusively intended to cool atmospheric air. Any deviating or exceeding deployment is considered unintended use. Totech EU will not assume any liabilities for damage resulting therefrom.

The device must not be mounted in and/or exposed to the intake of liquids (e.g. filled tanks or sumps, flooded areas etc.).

Operation in and/or with potentially explosive ambiance is not permissible.

Intended use also includes compliance with all information provided in the Operation Manual as well as adherence to the remarks made on.

1.7 Hazards related to cabinet handling

The device was built in accordance with state-of-the-art technology and generally accepted technical safety requirements. Ensure to exclusively use it:

- ✓ for its intended use;
- ✓ in good order and condition with respect to safety.
- ✓ Ensure to immediately remedy any malfunction, which might impede the device's safety.

1.8 Protective devices

- ✓ Generally ensure all protective devices to be properly installed and functional before operating the device.
- ✓ Protective devices may only be removed:
 - a) After shutdown
 - b) As safeguarding against unintended restart.
- ✓ For delivery of subcomponents, the operator shall ensure the standard installation of protective devices.

1.9 Electrical hazards

- ✓ Works performed at the electrical power supply are to be executed by qualified electricians only.
- ✓ Ensure to always keep the control area locked. Access is to be granted to authorized and adequately equipped personnel only.
- ✓ In the event works are to be performed at live parts, ensure to provide for a second person who can switch off electricity, if necessary.

1.10 Hazards arising from hot surfaces

- ✓ Defrosting cycles process may cause the cooling module surface to heat up to approx. 40°C.
- ✓ Ensure not to touch the operating cooling module without wearing adequate protective equipment.
- ✓ Ensure to keep a minimum distance of 5 cm at the unit's back side.

1.11 Maintenance, Service and troubleshooting

- ✓ The device is maintenance-free.
- ✓ Ensure to inform operators prior to the commencement of maintenance activities.
- ✓ For repair works, switch device to neutral and secure main switch against unexpected restart.
- ✓ Apply restart warning sign.
- ✓ Check unscrewed fastenings for secure tightness.
- ✓ After completion of the repair works, check safety devices for functionality.

1.12 Dehumidifier modification

- ✓ Any modification, extension, and/or conversions to the device are subject to Totech EU's written consent.
- ✓ Exclusively use original spare parts to ensure the device's proper and safe function and operation.

1.13 Cabinet cleaning and disposal

Ensure proper handling and disposal of deployed substance and materials. This particularly applies to cleaning activities including the use of solvents.

2. Technical Specifications

2.1 Description

- ✓ This equipment is designed and deployed for cooling functions in process engineering, air-conditioning technology, and cooling in production and storage spaces, inside which products and installations require low temperatures. Any other use is improper.
- ✓ The equipment is not suitable for installation outdoors and/or in areas subject to weather. The manufacturer denies any responsibility for unintended uses of the equipment.

2.2 Operating conditions

In general, cooling cabinets made by Totech are designed for initial conditions of 20-40°C at 0-60%RH. Higher ambient temperature conditions will adversely affect cooling performance.

- ✓ Ensure to exclusively operate the device in ambient temperatures (control-side) ranging between 10°C and 40°C!
- ✓ Ensure the intake air does not contain any free water (water drops)
- ✓ Ensure devices are not mounted in and/or exposed to the intake of liquids (e.g. filled tanks or sumps, flooded areas etc.).
- ✓ Any operation in and/or with potentially explosive ambience is not permissible.

2.3 Function

The device has been equipped with an easy to control logic display, mounted in the front panel of the cabinet. The respective module serves to control the device's temperature and functions monitoring.

In order to ensure ideal cooling, the cooling unit requires adequate defrosting. Therefore the device has an automatic defrosting cycle. This means that the device will start defrosting every 6 hours. Each individual defrosting cycle will take about 30 minutes. During defrosting processes, active cooling is not feasible.

It provides an external display, indicating several reports such as malfunction, alarms, actual and pre-set values. The air temperature can be controlled by means of the logic module, integrated in the display. The function is operated via the central display.

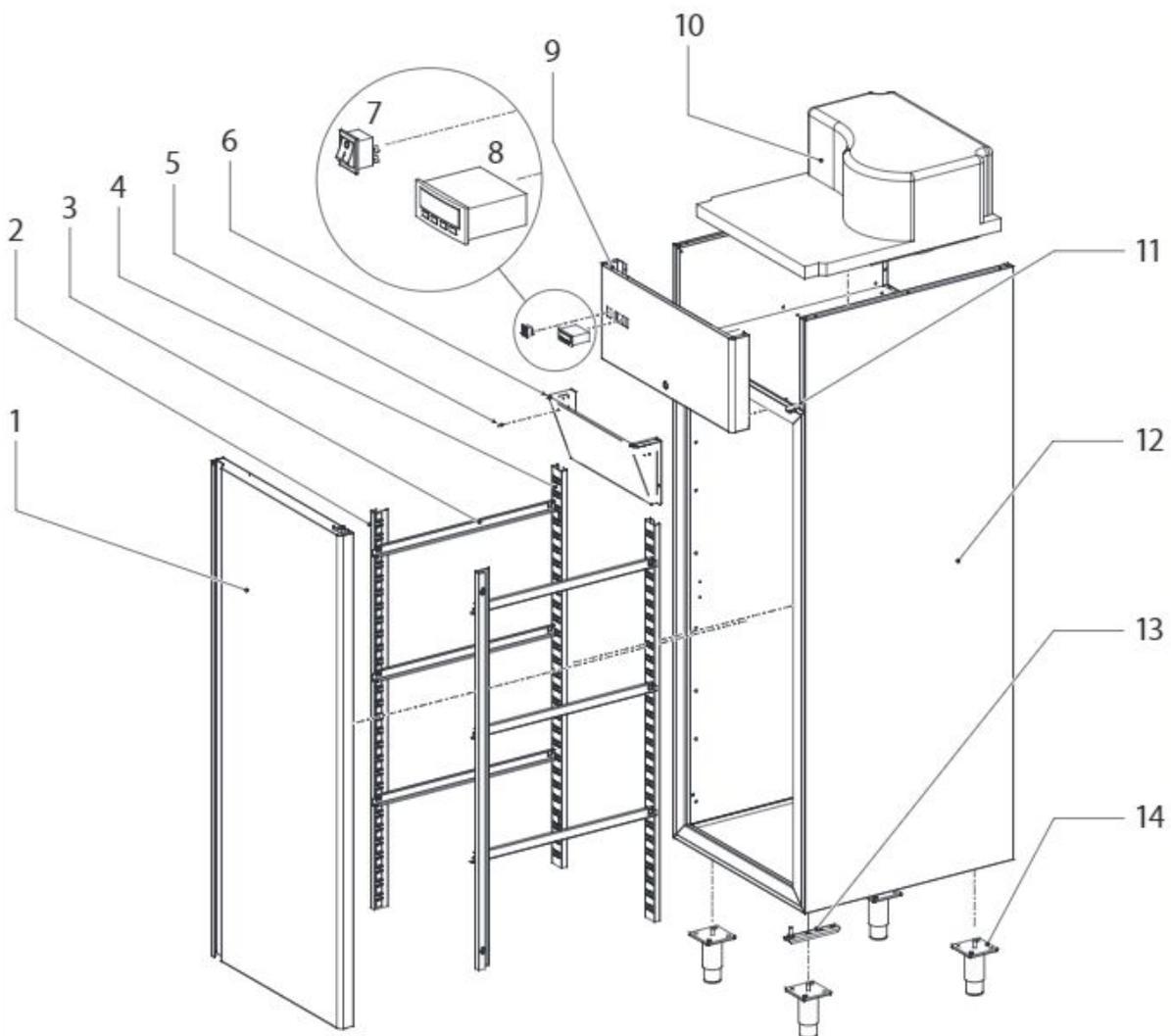
2.4 Main Components

The equipment is made up of the following (see table and figure)

Pos.	Part	Pos.	Part
1	DOOR	8	THERMOSTAT
2	FRONT RACK	9	INSTRUMENT PANEL
3	DOOR TRAY GUIDE	10	REFRIGERATOR UNIT
4	REAR RACK	11	UPPER HINGE
5	DIAGNOSTIC LED (<i>ONLY DEBATTER</i>)	12	CASING
6	CONVEYOR	13	LOWER HINGE
7	SWITCH	14	FOOT

The shelves found inside the refrigerator cabinet have the following dimensions: 530 x 500 mm.

The areas that come in contact with the product are made out of AISI 304 Stainless Steel or coated in non-toxic plastic material. The refrigerator units use refrigerant fluids permitted by current legislation.



3. Ordinary Maintenance

3.1 Preliminary inspection operations



Before any maintenance, replacement, repair, cleaning, lubricating or other operation, the equipment must be isolated from electrical power!

- ✓ Wear the appropriate safety gloves when performing maintenance operations.

3.2 Internal and external cleaning of the refrigerator cabinet

- ✓ Do not use jets of water to wash the internal parts of the refrigerator cabinet: there are electrical and electronic parts that could be damaged.
- ✓ Do not use hard metal tools to remove ice.
- ✓ To clean the internal parts of the refrigerator cabinet use a non-aggressive detergent diluted in warm water. Dry damp parts with a soft cloth.
- ✓ Weekly cleaning is recommended.
- ✓ Avoid using products with chlorine, caustic soda, abrasive detergents, muriatic acid, vinegar, bleach or other products that should scratch or abrade.

Also clean the exterior of the equipment with non aggressive detergent to prevent it from getting dirty

3.3 Cleaning the condenser unit



All cleaning operations of the refrigerator monoblox or the incorporated condenser unit must be performed by qualified and authorized technicians.

- ✓ In order to be able to count on the proper operation of the condenser unit, it must be cleaned periodically with a jet of air from inside towards the outside of the unit or with a long-bristle brush along the outside of the condenser.

Do not damage the refrigerant circuit.

4. Extraordinary Maintenance

- ✓ Extraordinary maintenance requires a qualified and authorized technician.



Before any maintenance, replacement, repair, cleaning, lubricating or other operation, the equipment must be isolated from electrical power.

5. Installation



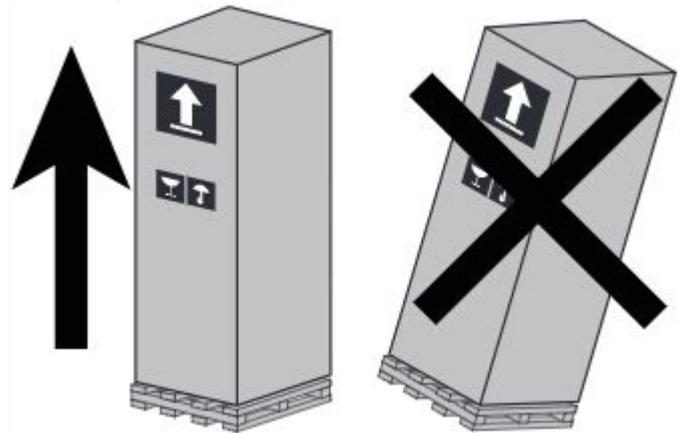
Personal safety devices must be used during this operation.



5.1 Transport

The refrigerator cabinet is shipped on a pallet and protected by its packaging.

The refrigerator cabinet should always and only be transported in a **vertical** position (indicated Up-Down on the packaging) (see figure).



Installation and start-up must be performed by qualified and authorized personnel only.

5.2 Environmental specifications.

When positioning the equipment, keep in mind that its operation is guaranteed only in environmental conditions with a temperature of +18°C to +43°C.

5.3 Positioning



Check the suitability of the electrical plug installed (SHUKO) according to current national laws. Replace the plug if not in compliance; the replacement must be done by qualified personnel. Check that the mains voltage corresponds with that of the REFRIGERATOR CABINET as reported on the label. Before positioning the equipment, put on safety clothing and gloves for moving it since the metal parts could be sharp. Position the product in a clean, dry and well-ventilated area. The refrigerator is set for operation in environments where the temperature is between +18°C and +43°C (Tropicalized Compressor) -Climate Class T -. The equipment should be located far from heat sources and in places with sufficient ventilation. Do not install the equipment in places where there are explosive and/or corrosive gases/powders. Make sure the equipment is level and on flooring that is capable of supporting its weight and in a suitable area based on its dimensions and use. Make sure the product is not near any heat sources.



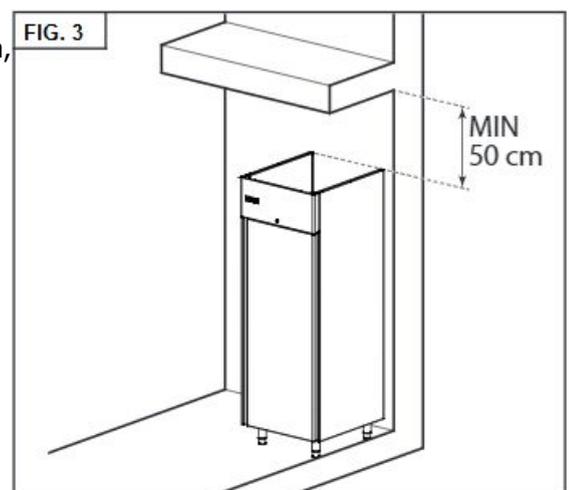
Once the refrigerator cabinet is positioned in the intended area, make sure it is level using the adjustable feet.



Do not locate the REFRIGERATOR CABINET near heat sources or in areas with elevated temperatures since this could lower performance and increase equipment wear. Leave at least 50cm between the equipment and any upper surface (FIG. 3)

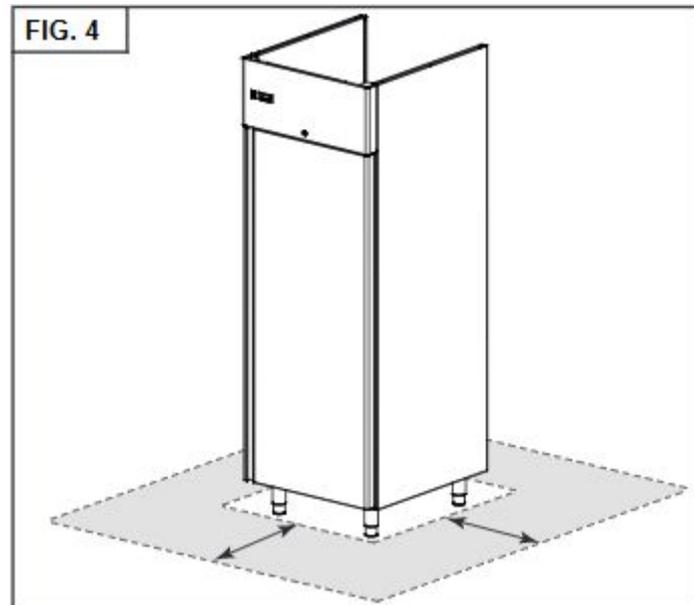


Make sure the power cable is not under the equipment.



5.4 Space needed for maintenance

When installing the refrigerator cabinet, enough space must be left around it for maintenance operations (FIG. 4).



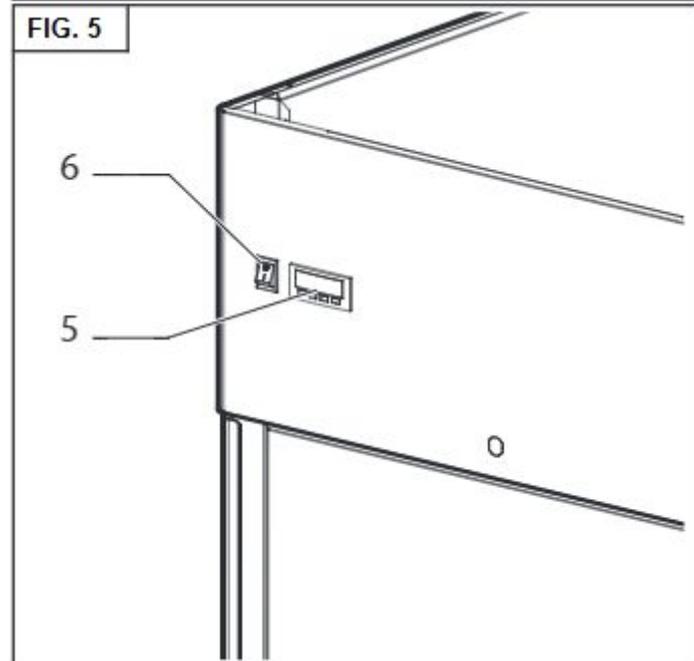
6. Operation

6.1 Preliminary inspection operations

Wait the necessary time for the equipment to reach the set temperature before storing food inside of it. Do not put hot foods or beverages inside the refrigerator.

Store the products inside the perimeter defined by the grills in order to prevent blocking the flow of air. Do not obstruct the fan intake area.

Do not obstruct the upper part of the refrigerator or the air intakes when the refrigerator cabinet is in operation or under electrical power.



6.2 Start up

At the first startup, make sure the refrigerator cabinet was transported only in a vertical position: otherwise wait **8 hours from the time it was positioned** before proceeding with start-up. Turn on the equipment by pressing the general switch to "I" (FIG. 5, POS. 6).

6.3 Shut-down

To shut down the refrigerated cabinet, just press the main switch to the "0" position (FIG. 5, POS. 6); the light on the switch will shut off.



To isolate the refrigerator from electrical power, remove the plug from the outlet.

6.4 Defrosting

In order to ensure ideal cooling, the cooling unit requires adequate defrosting. Therefore the device has an automatic defrosting cycle. This means that the device will automatically start defrosting every 6 hours. Each individual defrosting cycle will take about 30 minutes.

6.5 Front panel description

1 - Key P: Used for setting the setpoint and for programming the function parameters.

2 - Key DOWN: Used for decreasing the values to be set and for selecting the parameters.

3 - Key UP: Used for increasing the value to be set, for selecting parameters and for activating manual defrosting.

4 - Key U: Used for visualising the temperatures taken by the cell and evaporator probes (Pr1 and Pr2).

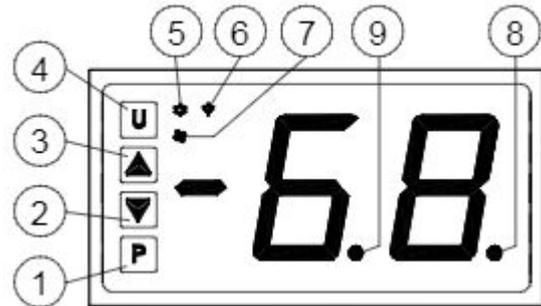
5 - Led OUT: Indicates the compressor output status on (on), off (off) or inhibited (flashing).

6 - Led DEF: Indicates defrosting in progress (on) or dripping (flashing).

7 - Led FAN: Indicates that the fan is on (on), off (off) or delayed (flashing) after the defrost cycle.

8 - Led SET: Indicates the input in programming mode and the programming level of the parameters.

9 - Stand-By: indicate the Stand-By status.



7. Programming

7.1 Programming of the setpoint

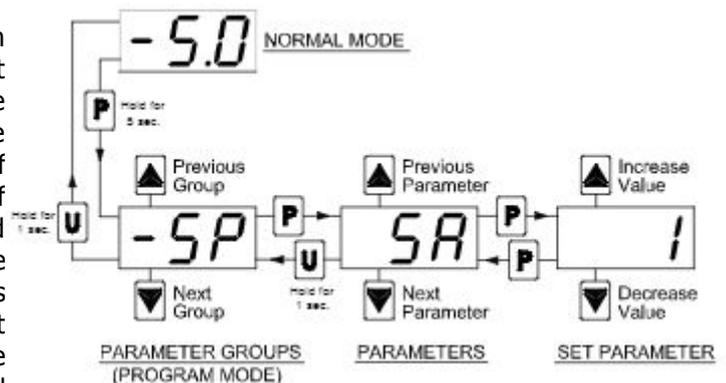
Pressing the key **P** will show **SP** alternating with the set value on the display. To change the setpoint, press the UP key to increase the value or DOWN to decrease it.

These keys increase or decrease the value one digit at the time, but if the button is pressed for more than one second the value increase or decreases rapidly, and after two seconds pressed, the speed increases even more to all the desired values to be reached rapidly.

Exiting the setpoint mode is achieved by pressing the **P** key. The display also returns to the normal function mode when no button is pressed for 15 seconds.

7.2 Programming the parameters

To access the instrument's function parameters, press the key **P** and keep it pressed for about 5 seconds, after which the SET led will light up, the display will visualise the code that identifies the first group of parameters ("**SP**") and the group of parameters that are to be edited are selected by pressing the UP and DOWN keys. Once the group of parameters has been selected, press the **P** and the code that identifies the first parameter in the selected group will be visualised. Again using the UP and DOWN



keys, the desired parameter can be selected and pressing the **P** key, the display will alternately show the parameter code and its setting that can be changed with the UP and DOWN keys. Once the desired value has been set, press the key **P** again: the new value will be memorised and the display will show only the abbreviation of the selected parameter. Pressing the UP and DOWN keys, it is possible to select another parameter (if present) and change it as described. To return to select another group of parameters, keep the UP or the DOWN key pressed for about 1 second, after which the display will return to showing the code of the parameter group. Release the pressed key and using the UP and DOWN keys it will be possible to select another group (if present). To exit the programming mode, do not press any key for about 20 seconds, or keep the **U** key pressed until it exits the programming mode.

7.2.1 Keyboard lock function

It is also possible to lock the keyboard completely on the display. This function is particularly useful when the regulator is reachable by the users and it is desired to avoid any modification. To activate the keyboard lock it's enough program the par. "**Lo**" to a different value than 0F. The value program to this parameter is the time (0 to 30 minutes) of inactivity of the keys after which the keyboard will be locked. Insofar not pressing any key for the time "**Lo**" the instrument automatically disable the normal functions of the keys. When the keyboard is locked, if any of the key is pushed, on the display will appear "**Ln**" to indicate the active lock. To unlock the keyboard it's enough to contemporarily push key **P** and **UP** and keep them pushed for 5 sec., after which the label "**LF**" will appear on the display and all the keys functions will be available again.

7.2.2 Manual defrosting

To start up a manual defrosting cycle, press the key UP/DEFROST when it is not in programming mode and keep it pressed for about 5 seconds after which, if the conditions are correct, the led DEF will light up and the instrument will carry out a defrosting cycle. The defrosting cycle takes 30 minutes.

8. Troubleshooting

Problem	Causes	Solutions
The refrigerator does not turn on.	The plug is not connected to the outlet.	Connect the plug to a suitable outlet.
	Malfunction of the general switch.	Turn off and back on using the general switch.
	The outlet does not supply power or the voltage is insufficient.	Adapt the outlet to the refrigerator's needs.
The blue indicator light on the switch is on but the display is still off.	Malfunction of the display or transformer.	Contact us at our service portal: http://service.superdry-totech.com/
Both the blue indicator light on the switch and the display show an error rather than the temperature.	Malfunction of the room or evaporator sensor.	Contact us at our service portal: http://service.superdry-totech.com/
The display is on but the compressor does not start.	The refrigerator is already at the set temperature.	Set a lower temperature.
	Motor unit failure.	Contact us at our service portal: http://service.superdry-totech.com/
The compressor starts but the refrigerator doesn't cool and doesn't reach the set temperature.	Possible lack of refrigerant gas.	Contact us at our service portal: http://service.superdry-totech.com/
	The set temperature is too low.*	Set the thermostat to a higher temperature.
	The evaporator is clogged with ice.	Turn the refrigerator off and wait for the ice to melt.
	The condenser is clogged with dust or foreign objects.	Thoroughly clean the condenser or remove the objects.
	The room temperature is too high. **	Move the refrigerator or lower the room temperature.

* Remember that the maximum/minimum temperatures that can be set by the refrigerator is -2 to +8°C

** The maximum temperature in the area where the refrigerator is installed must not exceed +43°C. Above this temperature, proper operation is not guaranteed (not possible to reach the set temperature).

9. Waste disposal and dismantling

**ATTENTION!**

Demolition and disposal should be performed by personnel qualified in performing these operations since they have the proper information and tools for this purpose.

At the end of the product's life cycle, do not dispose of in the environment. The doors must be removed before disposing of the equipment. Temporary storage of special waste is permitted with the intention of disposal through final storage and/or treatment. The current laws regarding environmental protection in the country where used must be followed.

SAFETY FOR THE DISPOSAL OF WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE DIRECTIVE 2002/96).

Do not dispose of pollutants in the environment. dispose them according to current laws.

10. Warranty and RMA Procedure

10.1 Warranty and liability

Principally, we apply our "General Terms & Conditions", which the operator has been provided with upon contract conclusion at the latest. Warranty and liability claims in relation to personal injury and property damage shall be excluded if the same arise from one or more of the causes below:

- ✓ the cabinet's unintended use;
- ✓ the cabinet's improper and inappropriate installation, commissioning, operation, and/or maintenance;
- ✓ operation with defect safety devices or non-functional safety and protective devices;
- ✓ unauthorized modification or unauthorized alteration of the technical design;
- ✓ repair works performed in an inappropriate manner;
- ✓ disaster situations, impact by foreign objects, and events of force majeure.

After purchase we provide warranty on all our new products, unless agreed differently.

10.2 Full Warranty

Valid during the first year after purchase of the new product

All drying cabinets, cooling cabinets, vacuum machines & spare parts (including dry-units).

Full warranty:

The end user will receive the defective part replaced at no costs. The transport costs are to be paid by the receiving party. The defective part has to be returned after it is replaced with the new one.

Actual replacement is done by the end user with support from Totech technical support if needed.

10.3 Exchange warranty

Valid during the second year after purchase of the new product

Only U-5000 series & U-7000 series.

Exchange warranty:

The end user will receive the defective part at a lower price. The old part will be returned by the end user to Totech EU as soon as the defective part is replaced with the new one.

Actual replacement is done by the end user with support from Totech technical support if needed.

10.4 Third year warranty

Valid during the third year after purchase of a new product
Only U-5000 series & U-7000 series.

Third year warranty:

Each case will be evaluated by the technical support department, and the Part(s) will be provided under leniency circumstances. The end user will receive the defective part at an especially quoted price by Totech EU sales department. The old part will be returned by the end user to Totech EU as soon as the defective part is replaced with the new one.

Actual replacement is done by the end user with support from Totech technical support if needed.

Please note: all the parts needs to be shipped back to Totech Europe B.V. within 30 days of receiving the warranty parts. If not, you will be invoiced for the normal price.

10.5 Guidelines for the RMA procedure of Totech Europe B.V.

The RMA form:

Requirement: Microsoft Excel, Email.

You can download the RMA from: <http://www.superdry-totech.com/>

The purpose of this new RMA form is to make one standard form for all Totech dealers & customers. Please provide us as much as possible details by filling in the yellow lines to speed up the process.

- ✓ Do not change, rename and/or delete any of the worksheets.
- ✓ Please fill in the, Company name, Address, Zip code, City, Country, Tel. nr., Fax. nr., Contact person, and Email.
- ✓ Fill in ALL the yellow lines of the Complaint form starting with the first one.
- ✓ When the complaint form is filled in correctly the overview sheet will be filled in automatically.
- ✓ Use the "Save as" function in Excel to rename the form. Send the completely filled in complaint form to our service portal at <http://service.superdry-totech.com/>
- ✓ Totech Europe B.V. will only accept the Complaint form send in electronically at this stage.
- ✓ We will provide you the warranty and/or repair parts as soon as possible.

Shipping the parts to Totech Europe B.V.

- ✓ Each part must have its own complaint form attached.
- ✓ All parts must be shipped back in original packaging as much as possible, and ESD safe.
- ✓ Those parts that are returned to Totech EU without any proper packaging will not be accepted for warranty or repair.
- ✓ Broken or damaged parts due to shipping, or bad packaging, will not be accepted for warranty.

Send all parts to:

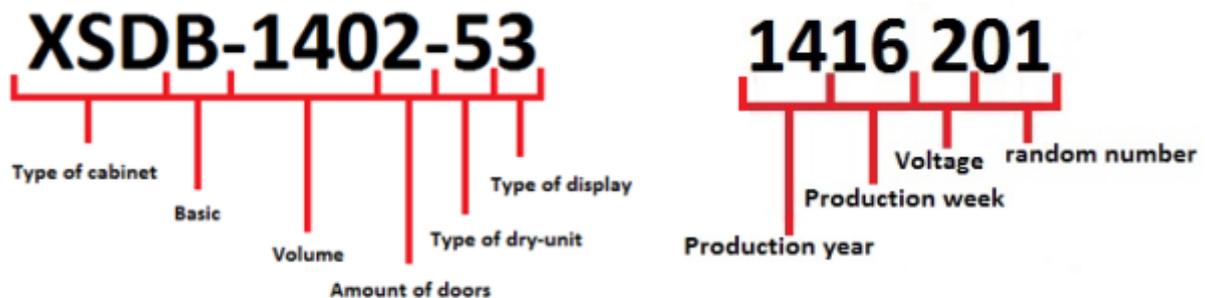
Totech Europe B.V.
To: Technical support department
De linge 28
8253 PJ Dronten
The Netherlands Europe

Totech Europe B.V. will not provide warranty on returned parts when the Complaint form is not filled in correctly.

11. Serial numbers

11.1 Cabinet serial numbers

Explanation how the serial number of the cabinet is identified:



12. CE Declaration

With this writing, we:

Totech Europe BV
De Linge 28
8253 PJ Dronten

confirm that the cooling cabinet described corresponds with the fundamental safety and health demands of the following EC instructions:

EN55011: 1998+A1:1999+A2:2002
EN61000-6-2:2001
2006/95/EG
2004/108/EG

Totech Europe B.V.



Gerhard Kurpiela