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1 UVOD

Techfrost would like to thank you for having chosen its products and we are sure that you will be more than satisfied with their performance.

To help maintain efficiency and performance in time, TECHFROST have prepared this manual that describes the correct use and maintenance of the shock chamber for chilling and freezing.

1.1 Vrsta upotrebe i ograničenja

This Blast Chiller Freezer has been designed for chilling and preserving food (it rapidly lowers the temperature of cooked food in this way preserving quality and guaranteeing freshness for several days). Any other use is considered improper and incorrect. This Chiller cannot be installed outside or in environments exposed to weather conditions.

The manufacturer declines all responsibility for uses other than those given in this manual.



OPREZ: ŠOK KOMORA NIJE UREĐAJ ZA ČUVANJE NAMIRNICA.

After the work cycles, the blast chiller goes in conservation, but must be considered as temperature transaction.

1.2 Karakteristike mašine

Mašina na koju se odnosi ovaj priručnik je šok komora za hlađenje/zamrzavanje, u potpunosti izrađena od nerđajućeg čelika AISI 304, koja radi do temperature od -40°C. To je oprema sa odgovarajućim tehničko-konstruktivnim karakteristikama sposobna da u kratkom vremenu spusti temperaturu u jezgru kuvanih proizvoda sa +70°C na +3°C pri šok hlađenju i sa +70°C na -18°C pri šok zamrzavanju, blokirajući TERMIČKIM ŠOKOM proliferaciju bakterija bez da pri tome:

- Menja organoleptička svojstva
- Menja kvalitet proizvoda

Istovremeno osigurava:

- Higijenu, sigurnost, kvalitet proizvoda.

The blast chiller has well-defined features such as:

- Indirect system of air circulation
- Istu temperaturu na svim policama
- Cooling system conceived for a quick cold penetration to the product's core.

Štaviše, poseduje posebne karakteristike kao što su:

- Non-stop temperature measurement in the product's core through a piercing probe, when carrying out programs by means of core probe
- Maintenance of a high humidity rate in the chilled product (80/85%) thus avoiding drying or dehydration processes and almost totally canceling the risk of weight losses
- Excellent thermic conditions during transfer to the conservation cell.

Any product, as soon as you take it out from the oven, is at its quality peak. You can keep this high quality level unchanged only starting the chilling process soon after the cooking. This is why, using the blast chiller, which lowers temperature rapidly, you prevent your products from:

- External drying
- Early deterioration

We may therefore have a quality line including the following:

- OVEN for the reaching of high temperatures destroying microorganisms without altering product's quality
- BLAST CHILLER for the reaching of lower temperatures blocking bacterial proliferation and keeping product's quality unchanged.

The blast chiller is therefore a professional instrument which guarantees, according to the regulations in force, any thermal treatments of fore- and aftercooking for GASTRONOMY, PASTRY and ICE-CREAM SHOP food products and facilitates as well application of the HACCP System (Hazard Analysis Critical Control Point) and compliance with ISO9000 norms.
The passage to CONSERVATION at the pre-defined temperature follows automatski CHILLING or DEEP-FREEZING cycle thanks to the probe located in the product's core.

1.3 Testiranje

The Chiller is dispatched only after it has been tested (visual inspection – electric test – functional test). Final testing is certified, for the relevant documentation please refer to the enclosed appendixes.

1.4 Opšti bezbednosni standardi

Predmetni rashladni uređaj je proizveden u skladu sa evropskim direktivama relevantnim za nizak tension 2014/35/UE, and electromagnetic compatibility 2014/30/UE; EN60335- 1, EN60335-2-24, EN55014-2, EN61000-3-2, EN61000-3-3, EN62233.

1.5 Šta kupac mora da obezbedi na lokaciji

It is necessary that there is an earthed power socket suitable for the electrical input indicated on the metal plate, a thermomagnetic switch with at least a 3 mm break contact.

This appliance can be used by children aged from 8 years and above and person with reduced physical sensory or mental capabilities or lack experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. children shall not play with the appliance. Cleaning and user maintenance shall not be made by deca bez nadzora.

Installation and any other operation, including a possible extension of the power cable have to be carried out by authorized personnel only. If executed by people who do not possess the necessary technical knowledge, the operation might cause a worsening in the unit performance and cause daštete po lica i stvari.

Maintenance and service have to be carried out by qualified technicians belonging to our selling net. The same is to be said for spare parts, which should be original.

Do not attempt to modify the chiller yourself: the operation might be dangerous.

It is crucial to allow sufficient air circulation around the machine, so that the compressor does not risk overheating and consequently stopping.

The chiller should be placed so that there remains sufficient space for air circulation in the back (at least 10 cm).

While installing or transporting the unit make sure the cable is not squashed. Before any cleaning or installing operation remember to switch the machine off and disconnect the plug - make sure you do not pull the cable.

The deep-freezing system, placed on the back and inside the machine, contains a refrigerant solution. Do not use sharpened objects either in the vicinity of the evaporator or cooling plate, as well as near the pipe coils located on the back and inside the chiller. The accidental perforation of the system može prouzrokovati štetu na jedinici i proizvodima koje sadrži.

After the first installation you should wait about 30 minutes before connecting the plug to the power point; if the chiller has been transported in horizontal position, you should keep it in vertical position najmanje osam sati – to je zato što ulje sadržano u kompresoru mora imati vremena to go back to its original location.

The chiller is very heavy. When a transfer is needed, the use of gloves is highly recommended, since you may find protruding parts on its back, sides and bottom.

When the "DEEP-FREEZING" process is over, you should pull food containers out by using dry gloves ili krpe.

Do not open the machine door while executing its working cycle because you may prevent the proper accomplishment of the cycle itself.

The constructor is not liable for damages arising from improper use or installation, connection to non-authorized equipments, use of non-original fittings as well as tampering by non-authorized personnel.

1.6 Tehnička podrška

Post-sale technical assistance can be carried out by any licensed refrigeration technician. The company is available to provide indications on how to intervene technically through the AFTER SALES service by writing to the e-mail address info@techfrost.com.

2 REDOVNO ODRŽAVANJE

2.1 Upozorenja

Regular maintenance work can be carried out by non-specialised personnel who, however, must always adhere to the instructions given in this manual. Before cleaning or servicing the chiller lockoff the power supply. When carrying out regular maintenance work do not remove any of the safety shields.

2.2 Čišćenje rashladnog uređaja i dodatne opreme

Pre upotrebe ovog rashladnog uređaja očistite unutrašnjost i svu dodatnu opremu. Koristite toplu vodu i neutralni sapun. Rinse and dry well. Do not use solvent or powder based detergents and use a silicon wax to protect steel.

2.3 Periodično čišćenje kondenzatora

The condenser should be cleaned periodically. Cleaning intervals will depend on how frequently it is used.



CAUTION: To access the condenser it is necessary to remove the safety guards. Always use qualified and specialized personnel.

To guarantee efficiency and performance in time, it is necessary to clean the condenser periodically. Veoma se preporučuje da se, ako se nalazi u prašnjavom okruženju, otvori na rashladnoj jedinici čiste jednom mesečno, a jednom u tri meseca ako se nalazi u zatvorenim i čistim okruženjima. Za uklanjanje prašine i prljavštine sa otvora koristite četku ili usisivač. Ne koristite oštre predmete ili alate koji bi mogli oštetiti kondenzator. Ne čistite mlazovima vode.

2.4 Mere koje treba preduzeti kada uređaj nije u upotrebi tokom određenog perioda

When the Chiller is out of service for a long period of time take the following measures:

- Remove the plug from the power socket
- Uklonite svu hranu i očistite unutrašnjost rashladnog uređaja i sav pribor
- Buff all the stainless steel surfaces with a cloth moistened with vaseline oil to give a protective coating;
- Ostavite vrata odškrinuta radi cirkulacije vazduha kako biste sprečili neprijatne mirise
- Periodically air the room or kitchen where the Chiller is installed.

3 VANREDNO ODRŽAVANJE



CAUTION: Extraordinary maintenance and servicing work must be carried out by qualified personnel!

3.1 Razumevanje jednostavnih kvarova

At times malfunctions are due to simple and trivial causes and nearly always there is no need to call in a specialised technician, therefore before informing the company check for the following:

Rashladni uređaj nije pod naponom:

- a. Check that it is plugged in
- b. Check that there is power.

Rashladni uređaj ne dostiže odgovarajuću unutrašnju temperaturu:

- a. Check the temperature settings
- b. Check the probe.
- c. Check the functioning of the fans.

The Chiller is excessively noisy:

- a. Check that the Chiller is level. If unbalanced this could cause vibrations creating excessive noise.
- b. Check that the Chiller is not positioned up against other machines or predmeti koji izazivaju vibracije.

After having proceeded with the foregoing checks and if the problem persists, contact the company dajući:

- A description of the type of malfunction
- Kod i serijski broj rashladnog uređaja koji su naznačeni na metalnoj pločici.

4 ODLAGANJE OTPADA I RASHODOVANJE

Skladištenje otpada:

It is possible to temporarily store special waste products that are to be scrapped. However, the user mora poštovati i pridržavati se lokalnih zakona koji se odnose na upravljanje otpadom.

Makro – demontaža rashladnog uređaja:

Each country has its own waste management laws, therefore the user must observe and adhere to lokalnih zakona koji važe tamo gde se rashladni uređaj rashoduje.

Kao opšta smernica, rashladni uređaj treba predati postrojenju za tretman posebnog otpada. Demont-

Pročitajte i podelite različite komponente u grupe prema njihovim hemijskim svojstvima. Zapamtite da se u kondenzatoru nalaze ulje i rashladni rastvori koji se mogu rekuperisati i ponovo koristiti, a različite komponente se smatraju posebnim otpadnim proizvodima i kao takve se ne tretiraju kao komunalni otpad.



CAUTION: All dismantling operations must be carried out by specialised personnel!

4.1 Informacije za ispravno odlaganje otpada

Directive on the electrical appliances waste (WEEE) (RoHS)

U cilju poštovanja životne sredine i zdravlja, a na osnovu odredbi sankcionisanih Direktivom 2002/95/CE Evropske unije po pitanju ograničenja upotrebe opasnih supstanci (RoHS), regarding:

- Olovo (Pb)
- Mercury (Hg)
- Hexavalent chromium (Cr VI)
- Kadmijum (Cd)
- Polybrominated biphenyl (PBB)
- Polybrominated diphenyl ether (PBDE)

and according to of art. the 13, D.Lgs. 25 July 2005, n. 151 "Performance of the Directives 2002/95/CE, 2002/96/CE and 2003/108/CE, relative to the reduction of the use of dangerous substances in the equipment electronic electrical workers and, to the waste disposition, TECHFROST declares that its proizvodi poštuju takve norme.



The following symbol on the side of the equipment indicates that the product ne sme se odlagati kao komunalni otpad. Disposing of a household appliance separately avoids possible negative consequences po životnu sredinu i zdravlje koje proizilaze iz nepravilnog odlaganja i enables the constituent materials to be recovered to obtain significant savings in energy and resources. As a reminder of the need to dispose of household appliances separately, the products is marked with a crossed-out wheeled dustbin.

5 UPUTSTVO ZA INSTALACIJU

This manual aims at providing the user with all the necessary information to correctly use and maintain održavajte čiler.

Before use carefully read all the instructions given in this manual.

The manufacturer shall decline all responsibility for operations and use which disregard the instructions uputstva ovde navedena.

5.1 Materijali i rashladni rastvori

Le zone a contatto con il prodotto sono realizzate in acciaio inox.

Nei gruppi refrigerati viene impiegato fluido refrigerante consentito dalle attuali legislazioni, del tipo HFC. Tip i kvalitet korišćenog gasa su naznačeni na pločici.

5.2 Osnovni bezbednosni standardi – rizici

The Chiller has no dangerous corners, sharp and cutting surfaces or protruding parts. All safety

guards on moving parts or electricians are screwed to the cabinet. These guards avoid any form of accidental contact with parts that present a risk to the user. Always respect safety standards:

- Ne dodirujte čiler mokrim rukama ili stopalima
- Ne koristite čiler bosi
- Do not poke screwdrivers, cutlery or other objects between the safety guards mounted on moving parts
- Before cleaning or servicing the Chiller lock-off the power supply.

Carefully follow and adhere to the instructions given in this chapter to guarantee working efficiency and safety when the Chiller is in use.



CAUTION: When transporting or moving the Chiller to the installation site do not push or drag it, lift it and position it on a trolley to avoid overturning.

5.3 Lokacija

Locate the Chiller in a ventilated area distant from heat sources such as radiators, air conditioning units, deep-fryers and ovens. Make sure the Chiller is located at a distance not less than 10 cm from the back wall to permit a good cooling effect for the various components.

To maintain the correct internal temperature, the ambient temperature must not exceed +32°C. Adjust height and levelling using the support feet and also check the door closes.

If the Chiller is not perfectly level working efficiency and condensation flow may be affected. Remove the PVC protective film on both sides of the Chiller.

Mašina treba da bude postavljena tako da ima dovoljno prostora oko nje kako bi se osigurala pravilna cirkulacija vazduha.

5.4 Povezivanje na napajanje

Connect the unit only to energy sources properly earthed.

Do not damage the power cord (danger of electric accident). If it is damaged, it has to be replaced immediately by a qualified electrician from the assistance centre. Install a safety switch in case of fault currents with a specific protection for persons (30mA) on the power supply control panel.



CAUTION: the manufacturer shall not be held responsible for damage or accidents caused by negligence due to non-compliance with the instructions and local laws governing standards and laws regarding electrical safety.

6 SAVETI ZA PRAVILNU UPOTREBU OPREME

6.1 Optimizacija ciklusa

PREHLAĐIVANJE

Pre-cooling is highly recommended before carrying out a chilling or rapid deep-freezing cycle to pre-cool the cell in order to reduce working times.

JEZGRANA SONTA (opciono)

The core probe, if it is present (optional), shall be properly positioned in the core of the thicker portion of the product. Its tip must not protrude or touch the container. The probe must be cleaned before starting any cycle, in order to prevent contaminations.

POKLOPCI I POSUDE

Do not cover pans and/or other containers with lids or insulating films. The more the product's surface gets in contact with the air circulating in the cell, the less it will take to chill and deep-freeze it. Ne koristite posude ili plehove dublje od 40 mm.

POZICIONIRANJE PROIZVODA

Do not superimpose layers of product one upon another and make sure that they are never thicker than 50 mm.

Do not overload the unit beyond the quantity recommended by the manufacturer.

Allow a sufficient space between the pans in order to permit the proper air circulation. Do not ne stavljajte previše plehova na jednu stranu uređaja, već ih ravnomerno rasporedite.

KONZERVACIJA

The chilled and/or frozen product shall be covered and protected (film, airtight, hermetic sealing). The probe must be cleaned before each cycle to avoid contamination.

6.2 Priprema mašine

It is necessary to clean the chilling chamber optimally before starting to work.

Brzina šok hlađenja/šok zamrzavanja zavisi od sledećih faktora:

- shape, type and material of the containers used
- upotreba poklopaca na posudama
- food characteristics (density, water content, fat content)
- početna temperatura
- termalna provodljivost hrane

Blast chilling time and rapid blast freezer are based on the type of product being treated.

It is recommended to use the full speed cycle for all dense or large dough foods and in any case never exceed 3.6 kg (for GN1 / 1, EN1 / 1 or 60x40) or 7.2 [kg] for loads (for GN2 / 1, EN2 / 1 or 60x80) and the thickness of 50 [mm] during negative killing and 80 [mm] during positive killing.

The low speed cycle is suitable for delicate products such as vegetables, creams, spoon desserts, or reduced-thickness products.

In any case, check that the positive cutoff cycle up to +3 [°C] to the product core does not use a time of more than 90 minutes and that the negative cutoff cycle, up to -18 [°C], do not exceed 4 hours.

It is necessary to pre-cool the working chamber before starting the positive cut and / or negative knockout cycle and it is advisable not to cover the food during the cycle in order not to increase the potrebno vreme.

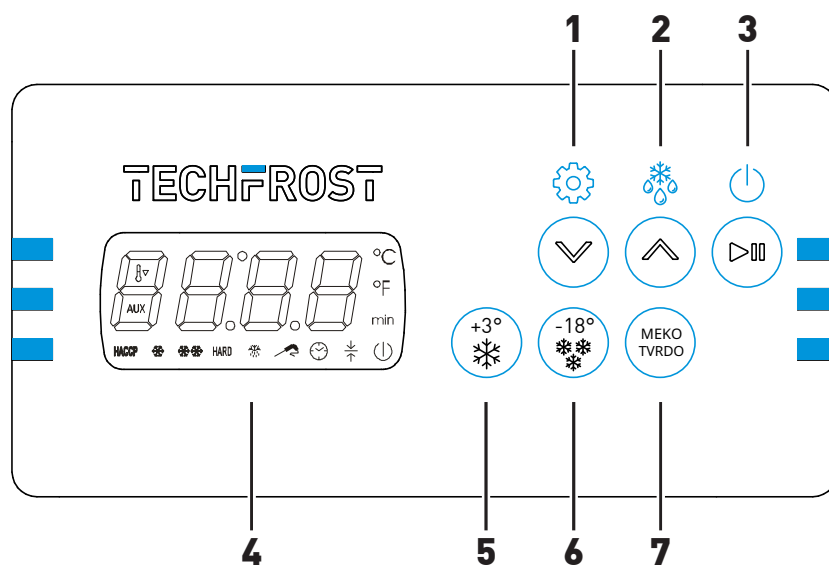
When the thickness of the product allows, always use the heart probe to know the exact temperature reached at the heart of the product and not to interrupt the cycle before the positive +3 [deg.] C temperature is reached and -18 [°C] in case of negative chilling.

6.3 Switch off the machine

It is always advisable to perform a defrost cycle at the end of the use of the blast chiller, both to dry the chamber and to prevent any condensation water from stopping on the fan/s and damaging it.

7 KONTROLNA PLOČA

7.1 Opis dugmadi



ENGLJSKI

Br.	Opis
1	Decrease key, then also named "DOWN key"
2	Increase key, then also named "UP key"
3	On/off/start/stop key, then also named "START/STOP key"
4	Display
5	Blast chilling key
6	Blast freezing key
7	Hard blast chilling or soft blast freezing key, then also named "HARD/SOFT key"

7.2 Preliminarna uputstva

There are the following state of working:

- the state "off" (the device is not fed)
- the state "stand-by" (the device is fed and it is out)
- the state "on" (the device is fed, you/he/she has turned on and it is waiting for the start of a cycle of operation)
- the state "run" (the device is fed, you/he/she has turned on and a cycle of operation is in progress).

Then, with "lighting of the device" he intends the transition from the state "stand-by" to the state "on" and with "turning off of the device" it is named the transition from the state "on" to the state "stand-by."

If an interruption of the feeding occurs during the state "stand-by" or during the state "on", at the obnavljanja napajanja uređaj će predložiti isto stanje.

If an interruption of the feeding occurs during the state "run", at the restoration of the feeding the device will work in the following way:

- if a temperature blast chilling cycle or a temperature blast freezing cycle was in progress, then with a heart probe, it will be restarted from the beginning
- if a time blast chilling cycle or a time blast freezing cycle was in progress:
- it will be restarted by the instant in which the interruption of the feeding will be manifested with a maximum error of 10 min
- if a conservation cycle was in progress, the conservation cycle will be proposed again.

7.3 Blast chiller switching on/off

Please operate in the following way:

- Please make sure that the keyboard is not jammed and that some procedure is not in progress.
- Please keep pressed the key START / Stop for 1 s: the LED  will ignite / extinguish.

7.4 Pokretanje ručnog odmrzavanja

Please operate in the following way:

- Please make sure that a maintenance is in progress.
- Please make sure the keyboard is not jammed and that some procedure is not in progress.
- Please keep the UP key pressed for 4 s: the LED  will switch on.
- Odmrzavanje će trajati 20 minuta. Ostavite vrata otvorena tokom faze odmrzavanja.

7.5 Zaključavanje/otključavanje tastature

To stop the keyboard please operate in the following way:

- Please make sure some procedure is not in progress.
- Please keep the DOWN and the START / STOP key pressed for 1 s: the display will visualize "Loc" na 1 s.

To unlock the keyboard please operate in the following way:

- Please make sure that some procedure is not in progress.
- Please keep the DOWN key and the START / STOP key pressed for 1 s: the display will visualize "UnL" na 1 s.

7.6 Real day and hour setting (RTC)

Ako se pri uključivanju uređaja pojavi natpis writing RTC, potrebno je podesiti dan i vreme.

Please operate in the following way:

- Please make sure that the keyboard is not jammed and that some procedure is not in progress.
- Please keep the DOWN key pressed for 1 s: the display will visualize the first available label.

Please press and release the UP key or the DOWN key to select "rtc"

Za podešavanje godine please operate in the following way:

Please press and release the BLAST CHILLING key: the display will visualize "yy" followed by the last two numbers of the year and the LED  will flash. Please press and release the UP key or the DOWN key within 15 s to modify the value.

Za podešavanje meseca please operate in the following way:

Please press and release the BLAST CHILLING key during the formulation of the year: the display will prikaži "nn" followed by the two numbers of the month. Please press and release the UP key or the DOWN key within 15 s to modify the value.

Za podešavanje dana of the month please operate in the following way:

Please press and release the BLAST CHILLING key during the formulation of the month: the display will visualize "dd" followed by the two numbers of the month. Please press and release the UP key or the DOWN key within 15 s to modify the value.

Za podešavanje vremena please operate in the following way:

Please press and release the BLAST CHILLING key during the formulation of the day of the month: the display will visualize "hh" followed by the two numbers of the time.

Please press and release the UP key or the DOWN key within 15 s to modify the value. The time is prikazano u formatu 24 h.

Za planiranje minuta please operate in the following way:

Please press and release the BLAST CHILLING key during the formulation of the time: the display will prikaži "nn" followed by the two numbers of the minutes. Please press and release the UP key or the DOWN key within 15 s to modify the value.

Please press and release the BLAST CHILLING key or do not to operate for 15 s: the display will again prikaži "rtc" and the LED  will turn off.

To go out of the procedure please operate in the following way:

Please press and release the UP key or the DOWN key until when the display visualizes the suitable size "the display" or do not operate for 60 s.

8 FUNKCIONISANJE ŠOK HLADILICE/ZAMRZIVAČA

8.1 Preliminarna uputstva

You can select the following types of functioning:

- Šok hlađenje i čuvanje (podrazumevano)
- Intenzivno šok hlađenje i čuvanje
- Šok zamrzavanje i čuvanje
- Blago šok zamrzavanje i čuvanje (podrazumevano).

For more information, see the following paragraphs.

Every cycle of functioning can be preceded by a pre-cooling.

The cycles by temperature are preceded by a test for the verification of the correct insertion of the sonda jezgra.

If the core probe is not enable the temperature cycles will be started by time automatically.

8.2 Šok hlađenje i konzervacija

Please make sure the device is in "ON."

Press the key BLAST CHILLING: the LED  will flash.

I can modify the temperature set at 0°C by default, pressing the key UP to increase the temperature, the key DOWN to decrease the temperature. This option is active only before starting the program. Press the key START / STOP to start the BLAST CHILLING.

Faza ŠOK HLAĐENJA trajeće 90 minuta.

During the blast chilling cycle displej prikazuje preostalo vreme trajanja ciklusa šok

hlađenja i LED  se uključio.

I can modify the time of the phase of BLAST CHILLING pressing the key UP to increase the time, the key DOWN to decrease the time.

This option is active only after having started the program. Once completed the cycle of 90 minutes, uređaj će preći u režim konzervacije (zadana vrednost 2°C).

Tokom procesa displej prikazuje temperaturu koju očitava sonda jezgra i LED  se uključio.

To visualize the temperature of the cell to press and to release the BLAST CHILLING key, the BLAST FREEZING key or the HARD / SOFT key; to restore the normal visualization please press again and release the same key or do not operate for 15 s. If the temperature noticed by the core probe reaches the temperature of end blast chilling cycle within the maximum duration of the blast chilling cycle, the cycle will be completed with success, the device will automatically pass to conservation and the zujalica će se aktivirati.

During the conservation the display visualizes the temperature noticed by the cell probe and the LED  se uključio.

If the temperature noticed by the core probe doesn't reach the temperature of end blast chilling within the maximum duration of the blast chilling, it won't be completed with success but it will continue, the LED  will flash and the buzzer will be activated. To restore the normal visualization and stop the buzzer please press and release a key. To visualize the cell temperature please press and to release the BLAST CHILLING key; to restore the normal visualization please press again and release the key BLAST CHILLING or do not to operate for 15 s.

When the temperature noticed by the core probe reaches the temperature of end blast chilling cycle, the device automatically passes to the conservation phase with the same formalities mentioned before.

8.3 Intenzivno šok hlađenje i konzervacija

Please make sure the device is in "ON".

Press the key BLAST CHILLING: the LED  will flash.

Press the key HARD/SOFT: the LED  will flash.

Press the key START / STOP to start the BLAST CHILLING hard.

Faza ŠOK HLAĐENJA trajeće 90 minuta.

I can modify the time of the phase of BLAST CHILLING pressing the key UP to increase the time, the key DOWN to decrease the time. This option is active only after having started the program. Once completed the cycle of 90 minutes, the device will pass in conservation (setpoint 2°C).

Tokom procesa displej prikazuje temperaturu koju očitava sonda jezgra i LED  se uključio.

To visualize the temperature of the cell to press and to release the BLAST CHILLING key, the BLAST FREEZING key or the HARD / SOFT key; to restore the normal visualization please press again and release the same key or do not operate for 15 s. If the temperature noticed by the core probe reaches the temperature of end blast chilling cycle within the maximum duration of the blast chilling cycle, the cycle will be completed with success, the device will automatically pass to conservation and the zujalica će se aktivirati.

During the conservation the display visualizes the temperature noticed by the cell probe and the LED  je uključen.

If the temperature noticed by the core probe doesn't reach the temperature of end blast chilling within the maximum duration of the blast chilling, it won't be completed with success but it will continue, the LED  will flash and the buzzer will be activated. To restore the normal visualization and stop the buzzer please press and release a key. To visualize the cell temperature please press and to release the BLAST CHILLING key; to restore the normal visualization please press again and release the key BLAST CHILLING or do not to operate for 15 s.

When the temperature noticed by the core probe reaches the temperature of end blast chilling cycle, the device automatically passes to the conservation phase with the same formalities mentioned before.

8.4 Šok zamrzavanje i konzervacija

Please make sure the device is in "ON."

Please press and release the BLAST FREEZING key : the LED , the LED  and the LED HARD will flash.

I can modify the temperature set at -40°C by default, pressing the key UP to increase the temperature, the key DOWN to decrease the temperature. This option is active only before starting the program.

Press the key START / STOP to start the BLAST FREEZING.

Faza ŠOK ZAMRZAVANJA traje 240 minuta.

I can modify the time of the phase of BLAST CHILLING pressing the key UP to increase the time, the key DOWN to decrease the time. This option is active only after having started the program. Once the cycle of 240 minutes is over, the device will pass in conservation (setpoint -20°C)

Tokom procesa displej prikazuje temperaturu koju očitava sonda jezgra i LED  je uključen.

To visualize the temperature of the cell to press and to release the BLAST CHILLING key, the BLAST FREEZING key or the HARD / SOFT key; to restore the normal visualization please press again and release the same key or do not operate for 15 s. If the temperature noticed by the core probe reaches the temperature of end blast chilling cycle within the maximum duration of the blast chilling cycle, the cycle will be completed with success, the device will automatically pass to conservation and the zvučni signal će biti aktiviran.

During the conservation the display visualizes the temperature noticed by the cell probe and the LED  je uključen.

If the temperature noticed by the core probe doesn't reach the temperature of end blast chilling within the maximum duration of the blast chilling, it won't be completed with success but it will continue, the LED  will flash and the buzzer will be activated. To restore the normal visualization and stop the buzzer please press and release a key. To visualize the cell temperature please press and to release the BLAST CHILLING key; to restore the normal visualization please press again and release the key BLAST CHILLING or do not to operate for 15 s.

When the temperature noticed by the core probe reaches the temperature of end blast chilling cycle, the device automatically passes to the conservation phase with the same formalities mentioned before.

8.5 Blago šok zamrzavanje i konzervacija

Please make sure the device is in "ON."

Please press and release the BLAST FREEZING key : the LED , the LED  and the LED HARD will flash. Please press and release the HARD / SOFT key: the LED HARD will turn off.

I can modify the temperature set at -40°C by default, pressing the key UP to increase the temperature, the key DOWN to decrease the temperature. This option is active only before starting the

program.

Press the key START / STOP to start the BLAST FREEZEING.

Faza ŠOK ZAMRZAVANJA traje 240 minuta.

I can modify the time of the phase of BLAST CHILLING pressing the key UP to increase the time, the key DOWN to decrease the time. This option is active only after having started the program. Once the cycle of 240 minutes is over, the device will pass in conservation (setpoint -20°C)

Tokom procesa displej prikazuje temperaturu koju detektuje sonda jezgra i LED  je uključen.

To visualize the temperature of the cell to press and to release the BLAST CHILLING key, the BLAST FREEZING key or the HARD / SOFT key; to restore the normal visualization please press again and release the same key or do not operate for 15 s. If the temperature noticed by the core probe reaches the temperature of end blast chilling cycle within the maximum duration of the blast chilling cycle, the cycle will be completed with success, the device will automatically pass to consevation and the zvučni signal će se aktivirati.

During the conservation the display visualizes the temperature noticed by the cell probe and the LED  je uključen.

If the temperature noticed by the core probe doesn't reach the temperature of end blast chilling within the maximum duration of the blast chilling, it won't be completed with success but it will continue, the LED  will flash and the buzzer will be activated. To restore the normal visualization and stop the buzzer please press and release a key. To visualize the cell temperature please press and to release the BLAST CHILLING key; to restore the normal visualization please press again and release the key BLAST CHILLING or do not to operate for 15 s.

When the temperature noticed by the core probe reaches the temperature of end blast chilling cycle, the device automatically passes to the conservation phase with the same formalities mentioned before.

8.6 Početak predhlađivanja

Every cycle of operation can be preceded by a pre-cooling phase.

To start the pre-cooling phase please operate in the suitable way:

- Please make sure that the device is in the state "on."
- Please make sure that some procedure is not in progress.

Please keep the BLAST CHILLING key pressed for 1 s: the LED  will flash.

To stop the pre-cooling phase please operate in the suitable way:

- Please keep the BLAST CHILLING key pressed for 1 s or to start a cycle of operation.

When the cell temperature reaches the one established the pre-cooling phase continues, the LED  remains permanently turned on and the buzzer is activated for 1 s.

8.7 Test provere ispravnog umetanja sonde jezgra

If the core probe is trained the temperature cycles are preceded by a test on two phases for the verification of the correct insertion of the core probe.

The second phase is performed only if the first one is not completed with success.

The first phase is completed with success if the difference "temperature noticed by the core probe

- temperatura komore " je viša od one utvrđene u najmanje 3 od 5 kontrola (kontrole se vršemed to intervals of 10 s; to consider the difference without sign).

The second phase is completed with success if the difference "temperature noticed by the core probe - cell temperature " is higher than 1 °C / 1 °F, in comparison to the control performed before, at least in 6 controls on 8 (controls are performed to intervals of 1 / 8 of the time; to consider the difference bez znaka).

If the test is completed with success, the cycle will be started; if the test is not completed with success, the LED  will flash and the buzzer will be activated for 5 s every 15 s.

To start the temperature cycle to press the BLAST CHILLING key or the BLAST FREEZING key howe-

very; departed 1 min from the signaling that the test has not been completed with success without having operated the cycle you/he/she is started to time.
If the probe is not inserted, the test won't be performed (neither the first neither the second phase).

9 "HACCP" FUNKCIJA

9.1 Preliminarne instrukcije

Kroz "HACCP" funkciju moguće je memorisati do 9 događaja za svaki od 3 alarma HACCP, then the most recent event is written on the older one.

Sledeća tabela ilustruje informacije u vezi sa HACCP alarmima koje uređaj može da memoriše.

Alarm	Kod	Kritična vrednost	Datum i sat događaja	Trajanje
temperatura alarma šok hlađenja ili temperatura šok zamrzavanja nije završena unutar maximum duration	vreme	the maximum temperature noticed by the core probe after temperatura šok hlađenja ili temperatura šok zamrzavanja nije završena unutar the maximum duration	yes	od 1 min do 99 h and 59 min, delimično ako je alarm u toku
maximum temperature alarm tokom održavanja	AH	cell maximum temperature tokom alarma	yes	od 1 min do 99 h and 59 min, delimično ako je alarm u toku
alarm prekida napajanja tokom faze konzervacije	PF	temperatura komore tokom obnavljanja napajanja	yes	od 1 min do 99 h i 59 min od 1 min do 99h i 59 min

Da bi se izbeglo ponovljeno memorisanje alarma prekida napajanja (kod "PF") osigurarsi che il dispositivo sia nello stato "stand-by"

ili u stanju "on" pre isključivanja napajanja.

Ako je trajanje alarma prekida napajanja (kod "PF") takvo da izazove grešku sat (kod "rtc"), il dispositivo non memorizzerà né la data e l'ora in cui l'allarme si è manifestato niti njegovo trajanje. HACCP može da memoriše informacije u vezi sa stanjem memorije HACCP alarma uređaja.

uređaja.

9.2 Prikaz HACCP informacija o alarmima

Please operate in the following way:

- Please make sure that keyboard is not jammed and that some procedure is not in progress.
- Please keep the DOWN key pressed for 1 s: the display will visualize the first available label.
- Please press and release the UP key or the DOWN key to select "LS."
- Please press and release the BLAST CHILLING key: the display will visualize the code of the najnoviji alarm.

To visualize the information related to an alarm HACCP please operate in the following way:

- Please press and release the UP key or the DOWN key to select an alarm code, for example "AH3."
- Please press and release the BLAST CHILLING key: the LED HACCP will stop flashing to remain permanently turned on and the display will visualize, for example, the following informations redosledom:

Inf.	Significato
8.o	kritična vrednost je 8.0 °C / 8 °F
StA	il display sta per visualizzare la data e l'ora in cui l'allarme si è manifestato
y11	alarm se pojavio 2011. godine (nastavak...)
n03	alarm se pojavio u martu (nastavak...)
d26	alarm se pojavio 26. marta 2011.
h16	alarm se pojavio u 16 časova (nastavak...)
n30	alarm se pojavio u 16 i 30
tra	il display sta per visualizzare la durata dell'allarme
h01	alarm je trajao 1 h (nastavak...)
n15	alarm je trajao 1 h i 15 min
AH3	izabrani kod alarma

The display visualizes every information for 1 s. To abandon the succession of information please operate in the following way:

- Please press and release the START/STOP key: the display will again visualize the code of se-izabrani alarm.

To go out of the procedure please operate in the following way:

- Molimo napustite niz informacija.
- Please press and to release the UP key or the DOWN key until the display visualizes the suitable greatness "the display" or do not operate for 60 s.

9.3 Poništavanje informacija o HACCP alarmima

Please operate in the following way:

- Please make sure that the keyboard is not jammed and that some procedure is not in progress.
- Please keep the DOWN key pressed for 1 s: the display will visualize the first available label.
- Press and release the UP key or the DOWN key to select "rLS".
- Press and release the BLAST CHILLING key: the display will visualize "o".

- Press and release the UP key or the DOWN key within 15 s to plan "149".
- Press and release the BLAST CHILLING key or do not operate for 15 s: the display will visualize "- - - -" flashing for 4 s and the LED HACCP will turn off, then the device will automatically go out of the procedure and the display will visualize the suitable size in the paragraph "the display."

If the device has not memorized any information about the HACCP alarms, the label "rLS" neće biti vizuelizovano.

9.4 Parameters and configuration of the blast chiller

Mašina se prodaje sa podešavanjima proizvođača Techfrost. Ako je potrebno promeniti **the parameters or the factory settings, ask the dealer for the parameter configuration manual** i odgovarajuću pristupnu lozinku.

10 SAVETI I UPUTSTVA

10.1 Saveti

Sledeća tabela ilustruje značenje LED signala.

LED	Značenje
	LED za brzo hlađenje Ako je uključen: -a blast chilling cycle is running If it's flashing: -a blast chilling and conservation cycle is running
	LED za brzo zamrzavanje Ako je uključen: -a soft blast freezing cycle is running If it's flashing: -a soft blast freezing and conservation cycle is running
HARD	LED za hard brzo hlađenje/zamrzavanje Ako je uključen: -an hard blast chilling or freezing cycle is running If it's flashing: -a hard blast chilling and conservation cycle or a blast freezing and conservation cycle is running
	LED za brzo hlađenje/zamrzavanje po temperaturi Ako je uključen: -a temperature blast chilling and conservation cycle or a temperature blast freezing and conservation cycle is running -u toku je brzo hlađenje ili brzo zamrzavanje po temperaturi If it's flashing: -the correct core probe insertion test has not been completed correctly -u toku je zagrevanje sonde jezgra

	LED za brzo hlađenje/brzo zamrzavanje. Ako svetli: -a time blast chilling and conservation cycle or a time blast freezing cycle radi -a time blast chilling cycle or a time blast freezing cycle is running If it's flashing: -day and time setting is running
	LED za konzervaciju. Ako svetli: -a conservation cycle is running
	LED za odmrzavanje. Ako svetli: -a defrosting cycle is running
	LED za predhlađenje. Ako svetli: -a pre-cooling cycle is running and the cell temperature reaches the temperature set by the parameter r12. If it's flashing: -a pre-cooling cycle is running and the cell temperature doesn't reach the temperature set by the parameter r12
HACCP	HACCP LED. Ako svetli: -sve informacije o HACCP alarmu neće biti prikazane If it's flashing: -uređaj će memorisati najmanje jedan novi HACCP alarm
°C	LED za stepen Celzijusa. Ako svetli: -jedinica mere temperature biće stepen Celzijusa
°F	LED za stepen Farenhajta. Ako svetli: -jedinica mere temperature biće stepen Farenhajta
min	LED za minute. Ako svetli: -jedinica mere vremena biće minut.
	On/Stand by LED. Ako svetli: -the device will be in the state "stand-by"

10.2 Uputstva

Sledeća tabela ilustruje značenje koda uputstava

Kod	Značenje
Lok	The keyboard is blocked; please consult paragraph 7.5 "Keyboard Block/Unlocking".
Otk	The keyboard is unblocked; please consult paragraph 7.5 "Keyboard Block/Unlocking".

ENGLISKI

11 ALARMI

11.1 Alarmi

Sledeća tabela ilustruje značenje kodova alarma.

Kod	Značenje
vriME	Alarm temperature brzog hlađenja ili alarm temperature brzog zamrzavanja nije completed within the maximum duration (HACCP alarm). Remedy: -please check the parameter r5,r6 e AA values. Glavne posledice: -uređaj će memorisati alarm
AL	Alarm minimalne temperature. Remedy: -please check the cell temperature -please check the parameters A1 e A2 parameters Glavne posledice: -the device will run normally
AH	Maximum temperature alarm (HACCP alarm). Remedy: -please check the cell temperature -please check the parameters A4 and A5 parameters Glavne posledice: -uređaj će memorisati alarm.
id	Alarm otvorenih vrata. Remedy: -please check the door conditions -please check the parameters io e i1 values Glavne posledice: -the effect set by the parameter io

HP	Alarm prekida napajanja (HACCP alarm). Remedy: -please check the device-feeding connection -please check the parameter A10 value. Glavne posledice: -uređaj će memorisati alarm
PF	Alarm prekida napajanja (HACCP alarm). Remedy: -please check the device-feeding connection -please check the parameter A10 value. Glavne posledice: -uređaj će memorisati alarm
COH	Alarm pregrevanja kondenzatora. Remedy: -please check the condenser temperature -please check the parameter C6 value Glavne posledice: -ventilator kondenzatora će se aktivirati
CSd	Compressor blocked alarm. Remedy: -please check the condenser temperature -please check the parameter C7 value -molimo isključite napajanje uređaja i očistite kondenzator Glavne posledice: -if the error occurs during the state "stand-by", it won't be possible to select or start any cycle -if the error occurs during the fonctionning cycle, the cycle will be stopped.
ESt	Download configuration parameters alarm not completed correctly. Remedy: -please press and release a key to restore the normal visualization -please make the configuration parameters download again Glavne posledice: -the device will work normally
CEr	Download configuration parameters alarm not completed correctly. Remedy: -please press and release a key to restore the normal visualization -please make the configuration parameters download again Glavne posledice: -the device will work normally
Erd	Configuration parameters upload alarm not completed Remedy: -please restore the factory setting -please make the configuration parameter upload again. Glavne posledice: -the digital exit will be switched off.

12 GREŠAKA

12.1 Greške

Sledeći grafikon ilustruje značenje koda greške.

Kod	Značenje
Pr1	Greška sonde komore. Remedy: -please check the parameter Po value -please check the cell probe intact state -please check the device-probe connection -please check the cell temperature Glavne posledice: -if the error occurs during the state "stand-by", it won't be possible to select or start any cycle -if the error occurs during the blast chilling or the blast freezing, the cycle biće zaustavljen -if the error occurs during the conservation, the compressor activity will depend on parameters C4 i C5 ili C9 - odleđivanje se nikada neće pokrenuti - grejači vrata se nikada neće uključiti - alarm minimalne temperature (kod "AL ") se nikada neće aktivirati -the maximum temperature alarm (code "AH ") se nikada neće aktivirati
Pr2	Greška sonde jezgra. Remedy: -iste greške kao kod sonde komore (kod " Pr1 ") ali se odnose na sondu jezgra. Glavne posledice: -if the error occurs during the state "stand-by", the temperature functioning cycle will be activated by time -if the error occurs during the temperature blast chilling, the cycle will stop within the time set by the parameter r1 -if the error occurs during the temperature blast freezing , the cycle will stop within the time set by the parameter r2 -if the error occurs during the core probe warm up, the cycle will be stop-zaustavljen.
Pr3	Greška sonde isparivača. Remedy: -iste greške kao kod sonde komore (kod " Pr1 ") ali se odnose na sondu isparivača. Glavne posledice: -if the parameter P4 is set to 1, the defrosting cycle will be completed within the time set by the parameter d3 -if the parameter Fo is set to 1, the parameter F16 won't have any effect -if the parameter F4 is set to 1, the device will work as the parameter would be set to 2

Pr4	Greška sonde kondenzatora. Remedy: -iste greške sonde ćelije (kod "Pr1") ali se odnose na sondu kondenzatora Glavne posledice: -the condenser fan will work parallel to the compressor. -alarm pregrevanja kondenzatora (kod "COH") se nikada neće aktivirati -the compressor blocked alarm (code "CSd") se nikada neće aktivirati
rtc	Clock error. Remedy: -set the day and the real time again Glavne posledice: -uređaj neće pamti ni datum ni vreme kada se HACCP alarm dogodio, niti njegovo trajanje

13 GARANCIJA

TECHFROST garantuje za ispravno funkcionisanje robe koja je predmet ove prodaje u periodu od dvanaest meseci počev od datuma kupovine za originalnog kupca. Ova garancija predviđa zamenu neispravnih delova vraćenih fabrički, isključujući rad.

The replacement of the parts within warranty period does not prolong the same warranty. The purchaser has no compensation rights as far as damages due to non-use of the machine su u pitanju.

The warranty is not applicable in the following cases:

- If the purchaser does not comply with the terms of payment;
- If damages are due to unskillfulness, unconventional use, overloading, poor care, tampering or modifications which were not authorized by the manufacturer, lacks of or unstable power supply;
- If damages are due to force majeure;
- If the defects are not made known to TECHFROST in writing within eight days from their discovery, upon pain of ineffectiveness;
- Ako izjava ne uključuje detaljan opis reklamiranog kvara kao i njegov possible causes;

This warranty is not applicable to ordinary wearing of the machine.

TECHFROST does not shoulder responsibility for the quality of the products obtained from the machine since the latter depends on different factors such as: skillfulness and technique of the operator, quality and quantities of the ingredients or materials employed.

In the event that the statement is accepted, TECHFROST will replace those parts of the unit that are found damaged or defected, on condition that the malfunctioning is due to production defects.

In the event that the statement is not accepted TECHFROST reserves the right to hold this warranty valid, thus making known this intention in writing (fax is admitted) or by phone, within five days from statement receipt, on pain of ineffectiveness.

To the benefit of the validity of the warranty here to, the existence of a production defect shall be stated by TECHFROST through its personnel and technical staff.

The warranty of good functioning does not cover defects due to improper use of the product by the kupac.

The warranty hereto does not include (and therefore the corresponding expenses are covered by the kupac):

- cleaning actions;
- repair works carried out to repair the unit when the unit could be repaired by the purchaser according to the instruction manual;

- any ordinary maintenance works needed for the normal use of the unit;
- any repair work carried out on the unit to remove damages due to power circuit failure or due to causes related to the professional, commercial and industrial activity performed by the purchaser;
- any action performed to repair functioning defects due to bad maintenance of the unit by the purchaser or third parties appointed by the purchaser or in case that the maintenance was not performed according to the provisions given by TECHFROST;
- any action performed to remove functioning defects due to abuses of the unit by the purchaser or third parties;
- radnje izvršene radi popravke oštećenja jedinice usled transporta robe od sedišta TECHFROST to its delivery place. The warranty hereto does not cover damages suffered by the kupca zbog nekorišćenja jedinice.