# Chill**TOUCH**

APPARECCHIO MULTIFUNZIONE MULTI-FUNCTION EQUIPMENT EQUIPEMENT MULTIFONCTION MULTIFUNKTIONSGERÄTE



# Tecnomac



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#### 1.1 - General information



*Up to 40 programmes of various type can be saved.* 

During all cycles, the humidificationdehumidification will be used, it will be active only if the cell temperature is higher than 3°C.



The Touch interface accepts only pressing with the fingers, *avoid using tools or other mechanical devices which might damage the interface* 



During the cooking cycles, the retarder proving cycles and in general in all cases in which high humidification values are used, it is recommended **removing the steel cap placed on the internal back discharge**.

#### Identification of operation in progress

Icons positioned in the top right





If the DFC logo appears, then the Dynamic Frost Control algorithm is active.

# 1.2 - Entry and exit from Stand-by



Upon the machine start-up, after a few seconds, the screen represented above will appear.

In order to access the main screen, press the key [1]. By pressing key [2], you can access the machine information.



In order to return to the initial stand-by screen, just press the key [3]

# 2 - INITIAL SETTINGS

# 2.1 - Language



In order to access the language setting from the main menu, press the key **[4]** 



Once the Utility window is accessed, press the key [5]



Select the preselected language by pressing the key representing it with the flag **[6]** 

#### 2.2 - Unlocking the display

| 5                   |  | BloccoSchermo     |    |
|---------------------|--|-------------------|----|
|                     |  | Inserire Password | ок |
|                     |  | 1365              |    |
| 0 1 2 3 4 5 6 7 8 9 |  |                   |    |

If the keyboard is blocked, type the password 1365 in order to unlock it

# 2.3 - Date and time setting



In order to set or change the date/time, access the Utility page and press the key **[7]** 

| 5                   |  | Service Password  |    |
|---------------------|--|-------------------|----|
|                     |  | Inserire Password | ок |
|                     |  | 3621              |    |
| 0 1 2 3 4 5 6 7 8 9 |  |                   |    |

Access the service area with the password 3621

| 5                         | Menù Service         |           |              |
|---------------------------|----------------------|-----------|--------------|
| DATE<br>8<br>NOME SERVICE | SINOTTICO<br>MACHINE | PARAMETRI | MANUTENZIONE |

In order to access the date and time setting, press the key **[8]** 



In order to change the date, press above the date field **[10]** 



Once the window opened, use the keys +/- to change the day, month and year and confirm using the OK key to save the changes

In order to change the time, press above the time field [9]



Once the window is opened, use the keys +/- to change the hour and minutes and confirm using the OK key to save the changes

#### 2.4 - Setting the 24-48-72 H cycle duration

All cycles that provide the programming of the cycle end date, adopt the following duration setting method, based on the time ranges that fall within the 24, 48 or 72 hour ranges following the cycle start. We present hereinafter a few examples that represent the setting logic.

1st example: 24H cycle ending at 10:00.



# 2nd example: 72H cycle ending at 10:00.



#### 3 - CHILLING/FREEZING CYCLES .

#### 3.1 - Summary of Positive chilling cycles

The Positive chilling cycle is set to bring the temperature of a food item under 10°C, normally to +3°C. Hereinafter, we list the available chilling programmes.





In order to start the Manual positive chilling cycle, press the icon **[10]** from the main screen. In order to stop at any time the chilling, just press the key STOP **[11]** 



Upon the first start-up, the blast chiller will execute a SOFT temperature cycle and check, during the first two minutes, if the needle is inserted. If inserted, it will continue to execute a temperature cycle or it will execute a time cycle. During the insertion control, the needle will flash. Afterwards, at any time, by pressing the symbols [11a] and [11b], you can change the operation type (time or temperature).



If the test is NOT exceeded, it will perform the execution of a time cycle represented in the figure. If you want to change the chilling time, just press above the countdown value **[12]** 



While, in the case of a temperature cycle, in order to change the chilling end temperature set point, just press above the value **[13]** 



If you want to select another type of chilling cycle, just press above the name of the execution cycle **[14]** and a selection wheel will appear with the selectable cycles, once the preselected cycle **[15]** is selected and ESC **[16] is pressed**, the programme will acquire a new cycle.



Once the chilling time has elapsed or the chilling end temperature is reached, the programme will pass automatically to the preservation phase. In the centre, the value read by the cell probe and in the lower part, the summary of the performed chilling type and its duration, used to set the dedicated chilling programmes, will be displayed. In order to stop the cycle, press the key **[11]** 

#### 3.3 - Summary of Negative chilling cycles

The negative chilling cycle is set to bring the temperature of a food item under -18°C, in the shortest time possible. Hereinafter, we list the available freezing programmes.



#### 3.4 - Starting the MANUAL Negative Chilling



In order to start the Manual negative chilling cycle, press the icon **[17]** from the main screen. In order to stop at any time the freezing, just press the key STOP **[18]** 



Upon the first start-up, the blast chiller will execute a HARD temperature cycle and check, during the first two minutes, if the needle is inserted. If inserted, it will continue to execute a temperature cycle or it will execute a time cycle. During the insertion control, the needle will flash. Afterwards, at any time, by pressing the symbols [18a] and [18b], you can change the operation type (time or temperature).



If the test is NOT exceeded, it will perform the execution of a time cycle represented in the figure. If you want to change the chilling time, just press above the countdown value **[19]** 



While, in the case of a temperature cycle, in order to change the freezing end temperature set point, just press above the value **[21]** 



If you want to select another type of chilling cycle, just press above the name of the execution cycle **[20]** and a selection wheel will appear with the selectable cycles, once the preselected cycle **[22]** is selected and ESC **[23]** is pressed, the programme will acquire a new cycle.



Once the chilling time has elapsed or the chilling end temperature is reached, the programme will pass automatically to the preservation phase. In the centre, the value read by the cell probe and in the lower part, the summary of the performed chilling type and its duration, used to set the dedicated chilling programmes, will be displayed. In order to stop the cycle, press the key **[24]** 

#### 3.5 - Saving the Positive / Negative chilling cycle

If you want to save the just executed cycle, press the key **[A]**, then type the Name of the programme on the keyboard **[B]** and finally confirm using the OK key **[C]**. Once the programme is saved, it will be found in the programmes window.

| -22°C                               |
|-------------------------------------|
| Medium<br>★★ ② 255' ● ③             |
| Num 12 Actual name Lasagne          |
| New name Lasagne                    |
| QWERTYUIOC<br>ASDFGHJKLC<br>ZZBVBNM |
|                                     |
| A 1/1 Programmi                     |
| Lasagne                             |
|                                     |

#### 3.6 - Change the preservation cell set point

Both in the case of a chilling or a freezing, and possibly during the preservation phase, change the cell set point, it will be enough to press above the represented cell temperature value **[D]**, and a change window will appear. At the end of the change, just confirm using the OK key **[E]**, if you do not want to change, just press the **ESC** key.





#### 4.1 - Manual THAWING

The defrost cycle has as its purpose to defrost a frozen food item, guaranteeing health and therefore being below the temperatures at which bacterial growth occurs (above 10°C).

The cycle is composed of a first pre-set time phase, during which the cell temperature, the humidity and the speed of the fans can be adjusted; and of a second preservation phase with undetermined time.



In order to start the defrost cycle, press the key **[25]** The following window will appear:



In order to execute a manual cycle, press the bottom key of the manual cycle **[26]**, once pressed, the following window will appear:



In order to change the set points, the window for changing the value appears, it will be enough to press above the displayed values. In order to change the cell set point, just press above the value **[27]**, in order to change the defrosting time, press above the value [28] .

You can also choose if the ventilation should be continuous or discontinuous, just press the symbol **[31b]** which will change the graphics with the following meaning:





Non-continuous

Continuous

The cycle is executed only according to the set time, however if, by any chance, the product has the needle probe inserted, by pressing the key **[31]**, you can go from the display of the cell probe to the display of the needle probe or vice versa.



Once the time has elapsed, you will go to the preservation phase (next window), where you can change the cell temperature set point, ,by pressing above the corresponding values



At any moment, in order to stop the cycle, press the key [33]

#### 4.2 - Programmed THAWING

The programmed defrost cycle consists of three phases: a first preservation phase, a second phase of defrosting with a defined time, and a final post-defrosting indefinite time preservation phase. The purpose of the cycle is to obtain defrosting within a particular date and time set by the user, keeping the food in the blast chiller before the defrosting process. To obtain this, the user must in any case know the time necessary to defrost the product



In order to start the Programmed defrost cycle, press the key **[34]**, the following window will appear:



In order to execute a cycle on a date, press the top key [35], once pressed, the following window will appear:



Now you have to set the final time by pressing above the values of the hours and minutes **[36]**, and select the duration in days of the programme **[37]**.

Should the duration of the programmed defrost cycle be higher than the defrosting phase, if the set time and duration in days which determines a period of time is lower than the duration provided for defrosting, the programme cannot be executed and the top left START key [38] will have a **grey background**, and it will not execute any programme. In order to enable it and making it green, just change either the cycle end time or the duration days.

In this page, the cycle can be started by pressing the key [38], or you can continue changing the default parameters of the 3 phases which compose the programme starting from phase F1 (pre-defrosting preservation) which is accessed by pressing the top right arrow **[40]**. In order to change the values, it is enough to press above and access again the change window.



Naturally, the first phase does not have a time to set for the duration, such value being obtained for the difference between the total time which is missing at the end and the provided defrosting duration.

Phase F2 (Defrost) allows the setting or modifying of this duration, together with the other variables that can be set. It can be accessed by pressing on F2 [39] or on the right arrow [40].



The phase F3 (preservation) allows setting the parameters of this phase of indefinite duration. It can be accessed, by pressing the keys **[41]** or **[42]**.





START key [38], and the following screen will appear:

On the left, the read elements are represented: cell temperature, needle temperature.

The screen represents a scheduled defrosting cycle, the coloured phase (e.g. F2) will be the one in progress. You can access the temperature settings, by pressing above the area of the phase you want to change.



If instead, the lower arrow **[45]** is pressed, you can access the setting, for every single phase, of the continuous ventilation (<u>this can be performed even</u> <u>during the setting phase of the cycle programme</u>).

In order to set the continuous ventilation, just press in the white boxes provided for each phase **[46]** until the green flag appears. In order to stop at any time the cycle, just press the key **[44]**.



If you want to save the set programme, press the key **[47]**, and the following window will open to name the programme. If you confirm the name with the key **[48]**, the programme will be found in the programmes window. If you want to exit without saving, just press the key **[49]**.



#### 6.1 - Ice Cream MANUAL cycle

The Ice Cream cycle is a single phase cycle and of *indefinite* duration, during which the following elements can be set: Cell temperature and the timer.

This cycle is aimed to quickly harden the surface of an ice cream just made and as soon as it leaves the whisker, or with a reverse process, softening it as it is already frozen.

In order to access the ice cream cycle, press the key [108] from the main menu:

The following window will appear, where the cell



temperature reading **[109]** and the flashing Timer value are displayed **[110]**. The appliance will start to cool down right away.



During this phase, but also subsequently, you can change the initially set value of the timer by pressing above the value [110] and the following value changing window will appear:



Using the keys +/- [111], you can change the value, afterwards, you can save the change by pressing the OK key [112], or you can exit without saving using the ESC key [113]. Similarly, by pressing above the cell temperature [109], you can change the cell temperature set point.

By simply opening and closing the cell, the countdown will start, the following window will appear, in which the value **[114]** indicates the remaining time.



Once the countdown ends, the following window appears with the flashing message:



This message will notify you that you must remove the hardened ice cream and you must insert a new bucket of ice cream.

However, you can at any time restart the timer by opening and closing the door.

To leave the cycle, just press the STOP button [115] at any time.

#### 7.1 - MANUAL preservation cycle

The preservation cycle is a single phase cycle and of *indefinite* duration, during which the following elements can be set: Cell temperature, relative humidity and fan speed.

This cycle aims to perform the preservation of food items under optimum air temperature, humidity and flow conditions.

In order to access the preservation cycle, press the key **[116]** from the main menu:



The following window will appear, in which, upon startup, only the reading of the set temperature is represented **[117].** The appliance will start to cool down right away, if the conditions exist.



In order to change the set temperature, just press above the temperature value **[117]** and the following window for changing the temperature will appear, in which, using the keys +/- **[118]** you can change the value and using the OK key OK **[119]** you can confirm it.



If you want to save the new configuration as a programme with a name, press the key **[123]**. You will access the window which allows typing the name of the programme and save it.



You can end at any time the preservation cycle, by pressing the STOP key **[124]**.

#### 8.1 - Access to programme set-up

In addition to saving programmes from the selected cycles, you can register a programme without starting a cycle. In order to select a programme to store, press the icon **[125]** from the main menu.



Image: Window Structure

Which will allow accessing the following Utility window:

Now, by pressing the icon **[126]** you can access the following library of created or to create programmes

LINGU



To modify a programme already created, simply press on the icon of the programme concerned. The icons of the programmes created with the yellow circle at the top right, are also visible in the User programme collection. If instead you want to create a new programme, press above the grey icon **[132]**, afterwards, the following circular menu will appear which allows selecting the type of programme to create:



Upon pressing one of the represented symbols, a specific programme setting will follow. To exit, press ESC.

To scroll through the pages quickly, instead of using the arrows in the top right, it is possible to recall the pages by pressing the key [P].

The following screen will appear, in which the green pages will be those that have at least one programme set, the white ones will be the ones with no programme set (wait a few seconds for the green pages to be updated).

Pressing on a page will send to the screen containing the programs of the selected page.



#### 8.2 - Creation of a Chilling Programme

If you select the icon of chilling cycles **[127]** from the wheel, you will access the following window:



As a first action, press in the programme name area **[128]** and the following keyboard will appear for typing the name of the programme to confirm using the OK key **[129]**:



After saving the name and returning to the setting window, define the type of blast chilling by pressing above one of the Chilling/Freezing symbols [130], afterwards select one of the 4 modes [131], finally select the mode, TIME or TEMPERATURE [132], and afterwards change the value [133].

Up until this moment, the programme remains visible during the collection of USER programmes. In order to make it visible, ONLY in the CREATED programmes window, you must disable the view by pressing the flag [134].

Hereinafter, there is an example of selection with TEMPERATURE chilling.



Now, if you want to save the set programme, press the key **[135]**, while if you want to delete or if you do not want to save the new programme, press the key **[136]**, a message to confirm appears **[137]** or otherwise **[138]** to delete.



#### 8.3 - Creation of a thawing programme

If you select the icon of defrosting cycles **[139]** from the wheel, you will access the following window:



By pressing on the area of the programme name **[140]**, the usual keyboard will appear which will allow typing the name of the desired programme. During this phase, you can decide if you want that this programme be displayed in the User programmes collection by pressing the flag **[141].** By pressing the OK key or the arrow **[142]**, you will go to the next setting window.



Now you have to set the final time by pressing above the values of the hours and minutes **[143]**, and select the duration in days (24-48 and 72h, see paragraph 2.4) of the programme **[144]**. To continue in the settings, press the arrow **[145]**.



This is a phase the duration of which is obtained by difference and therefore, the time will not be set. You can change the set temperatures **[146]**. Simply press above the value you want to change, and the set point changing window will open.

In order to perform the F2 phase setting, press one of the icons **[149]** and the following window will appear:

In this case, besides the already mentioned elements



for the previous phase, it is possible to change and set the duration of the F2 defrosting phase by pressing the area **[150a-b]**, the time changing and setting window will appear (hours-minutes). Also in this case, to go to phase F3, press one of the icons **[151]**.

Also in phase F3, you can change the set points in the



same way as for phase F1. In any of the 3 phases, you can access the **EXPERT** configuration which will allow deciding if the ventilation in the phase should be continuous or discontinuous. Just press the arrow symbol [152] and the following pop-up window will appear, you must enable or disable the continuous ventilation using the flag for every single phase **[155]**.



At any moment or at the end of the programme configuration, you can decide if you want to save the programme by pressing the icon **[153]**, or if you want to delete it by pressing the icon **[154]**. In case of deletion, a confirmation message is displayed, otherwise a deletion one.



#### 8.7 - Creation of a preservation programme

If you select the icon of preservation cycles **[198]** from the wheel, you will access the following window:



There, you can access the keyboard by pressing above the programme name area **[198]**, set different cell temperature set points by pressing the arrows **[199]**, set the humidity set point by pressing the arrows **[200]**, set the fan speed by pressing the arrows **[201]**, and show the user programme by checking the flag **[202]**.

Afterwards, you can save the programme by pressing the key **[203]** or delete it by pressing the key **[204]** (in this case, a deletion confirmation request message appears).



#### 9 - STARTING UP STORED PROGRAMMES

#### 9.1 - Access to stored programmes

In order to access the archive of stored programmes and visible to the user, press the icon **[205]** from the main menu.



You will access the following window where you can start the preselected cycle by pressing the relative icon and browsing all available pages by pressing the icons [206]



Or to move between pages quickly, press [P]. The following page summary will appear. Having pressed on the relevant page, the screen will show the programmes of that page.

The number of pages represented depends on the number of programmes set and made visible. A maximum of 20 pages may appear.



Please bear in mind that the modification, deletion, creation of programmes can be made only by accessing the set programmes icon [126].

#### 9.2 - Starting up from stored programmes

If, upon the machine start-up, after pressing the stand-by key **[1]**, you want to directly access the programmes pages, you must enable the padlock function, pressing above the icon [207].



Afterwards the icon will turn red, representing a closed padlock as in the following screen.



In order to return to the previous condition, just press again above the icon [208].

#### 10.1 - Access to UTILITY window

In order to access the Utility window, press the icon **[209]** from the main menu.



#### 10.2 - Display LOCK function

If you want to lock the typing on the display, even after starting a cycle, in order to avoid unauthorised access during operation, press the icon **[210]** 



Type on the keyboard [211], the password **1365**, and confirm using the OK key [212]. From now on, the display can no longer be used, unless you type again the Password **1365**, which will unlock the display.



In order to exit the password window, press the icon [213].

If you enter an incorrect password, you will be prompted by a message, and you will be prompted again to enter it.

# 10.3 - List/Export of alarms

If you want to view the list of stored alarms and current alarms, press the icon **[213]** 



The triggered alarms will have a grey background, the current alarms will have a red background (the date and time of the alarm end will not be present). In order to reset the triggered alarm situations, press the Reset key **[214]**.



in order to exit the alarms window, press the icon [216].

From every alarm, you can export a txt file which will be stored on flash drive, entered in the USB port. The stored files will have the following name:

#### 20170331-14.11-AL13.txt

The first part of the txt file name contains the year+month+day separated by a "-" and followed by the hour and minute of registering of the alarm, then followed by the type of alarm. In order to export the alarm OR HACCP files, press the key [215], which will allow opening the following window:



Once the window is opened, insert the USB flash drive in the provided connecter (on the blast chiller air output), select the period you want to download [217], finally press the type Export key [219-220] and afterwards, after the export completed message appears, you can exit by pressing the ESC key [218].

The TXT file stores the statuses of the board inputs and outputs at the beginning and the ending of the alarm.

# 10.4 - Starting the manual defrosting

If you want to start a manual defrosting, press the icon **[221]** 



If there are no minimum temperature conditions, in order to perform a defrosting, the following message will appear:



In order to exit, just press the key ESC [222]. While if the defrosting can be performed, the following message will appear and the defrosting can be interrupted in advance by pressing the key STOP [223].



# 10.5 - Starting the Drying cycle

The drying cycle is used either to remove the humidity from the cell after cleaning or to perform a defrosting using only the ambient air ventilation.

If you want to start a drying cycle, open the door of the chiller and then press the icon **[224]** 

A window will open with a timer that will start from 20 minutes and proceed with the countdown. At the



end of the time the cycle will end. If you want to end earlier, just press the key STOP [225]. Please bear in mind that during this cycle, the door switch will not have any impact on the ventilation.



## 10.6 - Starting the OZONO cycle (optional)

The Ozone cycle (if installed) involves a definite time cycle during which ozone is inserted into the cell, to achieve sanitisation, killing bacteria, mould, etc.

Such cycle must be started after performing a machine cleaning using the recommended detergents.



ATTENTION! : Ozone being an aggressive gas, you must try not to come into contact with it, however, immediately after opening the door with a running cycle, the cycle will end, and even if the door is closed back, it will not start again. If you want to start an Ozone cycle, close the door of the chiller and then press the icon **[226]** 



The cycle will start and the following screen will appear, with the countdown being displayed in the centre (starting from 120 minutes).



If you want to join the action of the ozone with the one of cooling down or of the humidity, check the flags [227] and respectively [228].

At the end of the countdown you will exit the cycle that will end. To end earlier press the STOP [229] key.

If you are using Temperature and humidity, it is recommended to perform a drying cycle afterwards.

#### 10.7 - Configuration of the main menu

Upon start-up, the main menu has 8 icons represented in the following window, if you want to change the number of icons present, press the key [230]:



You will access the Utility window, at this point press the key [231].



The following window will appear and by checking the green flags, the main menu icon will be shown or hidden.

The disabled icons will disappear from the main menu, but you will be able to find them in the second page of the UTILITY menu.





If all icons are disabled by mistake, when accessing the main menu, a warning will be displayed which will send you back to the icon setting page.

#### 11.1 - Alarm warnings

If the machine is under alarm, a pop-up window appears at the bottom, with the description of the type of alarms in progress.

Normally, the alarms appear with an ascending seriousness warning according to the background colour.

#### 11.2 - Warnings for SERIOUS alarms

The alarm warnings, such as the one represented hereinafter, which cause the immediate interruption of the running cycle, are represented by a RED background warning and are to be deemed serious. The **assistance service** is called and the machine will be disconnected from the power and hydraulic supply and secured.



## 11.3 - Warnings for AVERAGE alarms

The AVERAGE alarm warnings, as the ones represented below, which do **not** cause the immediate interruption of a running cycle, and represented by a ORANGE background warning, are to be deemed important, even if they enable an automatic maintenance operation. If the alarm persists, the assistance service will be contacted and the machine will however be disconnected from the power and hydraulic supply.



#### 11.4 - Pre-alarm warnings

The pre-alarm warnings, as the ones represented below, which do **not** cause the immediate interruption of a running cycle, and represented by a YELLOW background warning, normally predict either an AVERAGE alarm or they indicate operation conditions which are not compliant with the set values. Only if the event is repeated several times without justification, the service is called.



#### 11.5 - Machine information/data

Before contacting the assistance service, retrieve the machine data by pressing the info key [232] from the input screen



#### 11.6 Alarm list

|      | Cause   | Effect   | Solution  |
|------|---|--|---|
| AL04 | Defective cell probe, for more than 30 "(U1 card input).  | Displaying of the wording "Cell temperature probe alarm" in<br>the alarm window. The alarm symbol will appear, the buzzer<br>will sound and any program that is running will be exited,<br>returning to the main menu.   | Check the cell probe connections, check<br>the configuration parameters (Service) and<br>replace if necessary.  |
| AL06 | Defective product 1 probe, for more than 30" (U4 card input).   | Displaying of the wording " <b>Product 1 temperature probe</b><br><b>alarm</b> " in the alarm window. The alarm symbol will appear, the<br>buzzer will sound and in the case of a temperature-controlled<br>program, it will switch to timed mode  | Check the product probe connections, check<br>the configuration parameters (Service) and<br>replace it if necessary.  |
| AL07 | Defective product 2 probe, for more than 30" (U5 card input).   | Displaying of the wording " <b>Product 2 temperature probe</b><br><b>alarm</b> " in the alarm window. The alarm symbol will appear, the<br>buzzer will sound and in the case of a temperature-controlled<br>program, it will switch to timed mode  | Check the product probe connections, check<br>the configuration parameters (Service) and<br>replace it if necessary.  |
| AL08 | Micro-door entry (ID4) active.  | When the door opening is detected by the micro-switch, the<br>evaporator fans stop, after 120" the compressor stops. In<br>the case of a blast chilling cycle, after 5 minutes, to verify<br>that the door is really open and the micro-door is not simply<br>broken, a 15-minute cooling cycle is started in which both the<br>compressor and the evaporator fans start. At the end of the<br>test if the temperature drops, the cycle continues, otherwise<br>the machine stops and the door opening alarm is triggered. | Check the micro-door functionality and replace it if necessary.   |
| AL09 | Circuit breaker input (ID5)<br>active.  | Displaying of the wording " <b>Circuit breaker alarm</b> " in the alarm<br>window. The alarm symbol will appear, the buzzer will sound<br>and any program that is running will be ended.   | Check the condenser state of cleanliness,<br>that the condenser fan is working, that the<br>room is sufficiently ventilated. Check to see<br>if the circuit breaker setting is correct, and if<br>the compressor is blocked (Service) |
| AL10 | <i>Oil pressure switch input, if any, (ID6) active.</i>   | Displaying of the wording <b>"Oil pressure alarm</b> " in the alarm<br>window. The alarm symbol will appear, the buzzer will sound<br>and any program that is running will be ended.   | Check whether the oil level if sufficient.<br>Check if the setting of the ID6 input is<br>correct, and if the pressure switch is faulty<br>(Service)  |
| AL11 | Hydrostat Input, if present,<br>(ID7) active.   | Displaying of the wording "Hydrostat Alarm" in the alarm<br>window. The alarm symbol will appear, the buzzer will sound<br>and any program that is running will be ended <b>upon the third</b><br><b>appearance of this alarm in a cycle</b> .   | Check if the water supply is guaranteed.<br>Check if the setting of the ID6 input is<br>correct, and if the Hydrostat is faulty<br>(Service)  |
| AL12 | Humidifier Alarm Input, if<br>present, (ID8) active.  | Displaying of the wording " <b>Humidifier alarm</b> " in the alarm<br>window. The alarm symbol will appear, the buzzer will sound<br>and the Humidifier output will be deactivated.  | Check the power supplies of the external<br>humidifier (if it exists). Check if the setting of<br>the ID8 input is correct, and if the humidifier<br>is faulty (Service)  |
| AL13 | <i>If the cell temperature exceeds the temperature defined by the parameter A7.</i>   | Displaying of the wording <b>"Cell maximum temperature</b><br><b>alarm</b> " in the alarm window. The alarm symbol will appear, the<br>buzzer will sound and heating-humidification-dehumidification<br>and compressor will be deactivated   | If the alarm repeats several times, stop the machine and contact the Support Service.   |
| AL14 | If the cell temperature exceeds<br>the set temperature determined,<br>by the value in degrees defined<br>by parameter A2, in the positive<br>preservation case and A4 in the<br>negative preservation case. | Displaying of the wording <b>"Cell high temperature alarm</b> " in<br>the alarm window. The alarm symbol will appear, the buzzer<br>will sound and heating-humidification will be deactivated until<br>return to below the necessary limit.  | If the alarm repeats several times, stop the<br>machine and contact the Support Service<br>to update the parameters.  |

|              | Cause  | Effect  | Solution   |
|--------------|--|---|--|
| AL15         | If the cell temperature is less than<br>the set temperature determined,<br>by the value in degrees defined<br>by parameter A2, in the positive<br>preservation case and A4 in the<br>negative preservation case. | Displaying of the wording " <b>Cell low temperature alarm</b> " in the<br>alarm window. The alarm symbol will appear, the buzzer will<br>sound and compressor outlet will be deactivated until return<br>to below the necessary limit.  | If the alarm repeats several times, stop the<br>machine and contact the Support Service<br>to update the parameters.   |
| AL18         | Maximum pressure sensor<br>input (if present) (ID1) active.  | Displaying of the wording " <b>High pressure of pressure switch</b><br><b>alarm</b> " in the alarm window. The alarm symbol will appear, the<br>buzzer will sound and the compressor output will be switched<br>off <b>upon the third appearance of this alarm in a cycle it</b><br><b>will be ended</b> .                              | Check the condenser state of cleanliness,<br>that the condenser fan is working, that the<br>room is sufficiently ventilated. Check to see<br>if the input setting of alarm ID1 is correct<br>(Service) is correct. |
| AL 19        | <i>Minimum pressure switch input (if present) (ID2) active.</i>  | Displaying of the wording " <b>Pressure switch low pressure</b><br><b>alarm</b> " in the alarm window. The alarm symbol will appear, the<br>buzzer will sound, the compressor will stop, the cycle will be<br>terminated <b>upon the third appearance of this alarm in a cycle</b> .  | Check whether the ambient temperature is<br>too low. Check if the parameter setting of<br>input ID2 is correct, or if there are any leaks<br>in the circuit (Service)  |
| AL20<br>AL21 | Kriwan compressor input (ID3)<br>active.   | With the first two alarms the message "Compressor 1 Circuit<br>Breaker Warning" will appear on the alarm window, with the<br>third alarm the message "Compressor 1 Circuit Breaker<br>Alarm" will appear, the alarm symbol will appear, the buzzer<br>will sound and any program running will be exited, returning<br>to the main menu. | Check the condenser state of cleanliness,<br>that the condenser fan is working, that the<br>room is sufficiently ventilated. Check that<br>the compressor is not jammed (Service).                                 |
| AL24         | Defective evaporate probe, for more than 30" (U3 card input).  | Displaying of the wording <b>"Suction temperature probe</b><br><b>alarm</b> " in the alarm window, the alarm symbol will appear, the<br>buzzer will sound, the defrost cycles will not be performed and<br>the evaporator fan will depend on parameter F2.  | Check the evaporator probe connection,<br>and check the configuration parameter<br>setting and replace it if necessary (service).  |
| AL31         | If the power failure duration<br>exceeds the time defined by the<br>UL parameter, and there was a<br>cycle in progress   | Displaying of the wording " <b>Blackout alarm</b> " in the alarm<br>window. The alarm symbol will appear, the buzzer will sound<br>and the cycle in progress before the blackout will resume.   | Check electrical connection upstream of the equipment (service).   |



If periodic maintenance activities have been set up, maintenance warnings may appear that do not affect the operation of the equipment. In this case, however, contact technical assistance.

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