Operation- and service manual

KPS cabinets

GRAM

Gram Commercial Technical information				765041466		
Description :						
Operation- and servicemanual Gram Process KPS						
Compiled.		Latest revision.			Deleted.	
Date	Name	Date	Name	Rev.no	Date	Name
30.09.11	JP	15.03.19	JP	000		

Contents

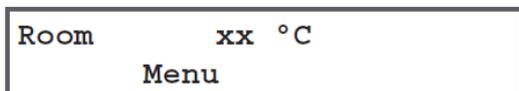| Gram Commercial *Technical information*		765041466				
Description : **Operation- and servicemanual** **Gram Process KPS**						
Compiled.		Latest revision.			Deleted.	
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Starting up
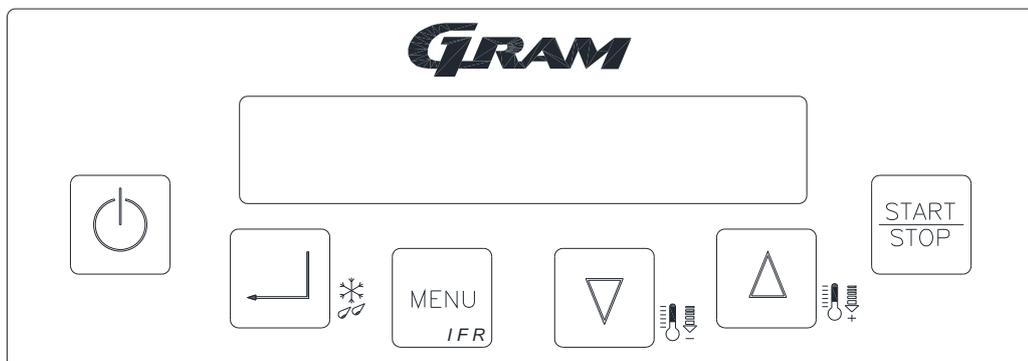
Connect the cabinet to the main power.

If the display does not turn on when power is connected, press ⏻ to turn on the cabinet.

Then press MENU twice to display:
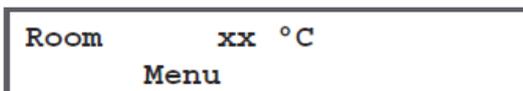
```
Room       xx  °C
      Menu
```

Use the keys ▽ △ to select the desired menu.

Language, date and time

It is recommended to set language, date and time initially. See next section.

Main menu

The main menu can be reached at any time pressing MENU twice. The display shows:

```
Room       xx  °C
      Menu
```

Note: xx **°C** = Current temperature

Language, date and time

The default language is English. Therefore, the display language is English unless this is changed. Date and time are set afterwards.

Press [MENU] and then [Δ] until the display shows:

```
         Language
  ↵    Esc        ↓         ↑
```
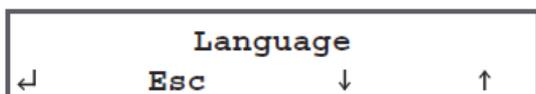
Press [⏎] to access the menu. The display shows:

```
         English
  ↵    Esc        ↓         ↑
```
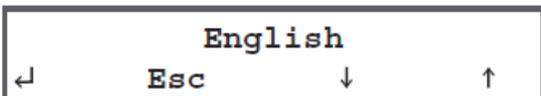
Press [∇] [Δ] to select language and then press [⏎] to confirm choice of language.

The display now shows:

```
         Language
  ↵    Esc        ↓         ↑
```
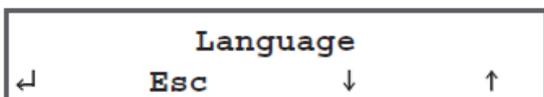
Press [∇] once and the display shows:

```
      Clock Setting
  ↵    Esc        ↓         ↑
```

Press [⏎] to enter the menu.

The display shows:

```
                  Example
    Date: ---- 10/02/09
    Time: ---- 14:22:46
```
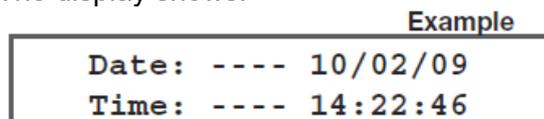
Press [∇] [Δ] to change the flashing digits.

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Press ⌐ to save the settings and to move on to the next digits.

Press [MENU] twice to return to the **main menu**.

The main menu display now shows:

```
Room        xx  °C
        Menu
```

Pre-cooling

To enable an effective chill/freeze cycle it is advisable to run a pre-cooling cycle of the cabinet prior to selecting any cycle.

Press [START STOP] for more than 5 seconds to start a pre-cooling cycle.

After end of the pre-cooling cycle the display shows:

```
Room       -25 °C
       Insert product
```

When the food item is placed inside the cabinet and the door is closed, the display shows:

```
Room        xx  °C
        Menu
```

Now the desired programme is to be started.

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Short-cut keys

5 keys also serve as short cuts. To activate a short cut, press the key for 5 seconds.

⏎   Activates a defrosting cycle. If defrosting is not necessary, the cycle will not be activated.

MENU   Activates an IFR cycle. IFR automatically adapts the cycle to the characteristics of the food item. Using the IFR facility, surface frosting will be minimised. See page 9 under "IFR" for further information.

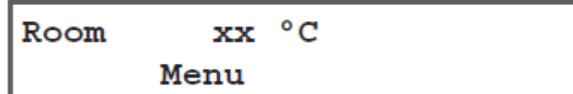▽   Activates a blast freezing cycle (Quick negative chill key).

△   Activates a blast chill cycle (Quick soft positive chill key).

START STOP   Activates a pre-cooling cycle. Also when pressed once it will repeat the latest cycle.

The short cut keys can only be activated from the main menu:

```
Room       xx  °C
           Menu
```

Working cycles

If you want to do your own user cycle, select one of the following three types of cycles:

Soft positive cycle: Minimum room temperature of -5°C and a miminum core temperature of +3°C.

Negative cycle: Minimum room temperature of -25°C and a minimum core temperature of -18°C.

Hard positive cycle: 60% of the time at a minimum room temperature of -25°C. The remaining time at a minimum room temperature of -5°C. The core temperature is set to be +3°C. Suitable for thick cuts of meat.

The settings are displayed in the diagram on the next page.

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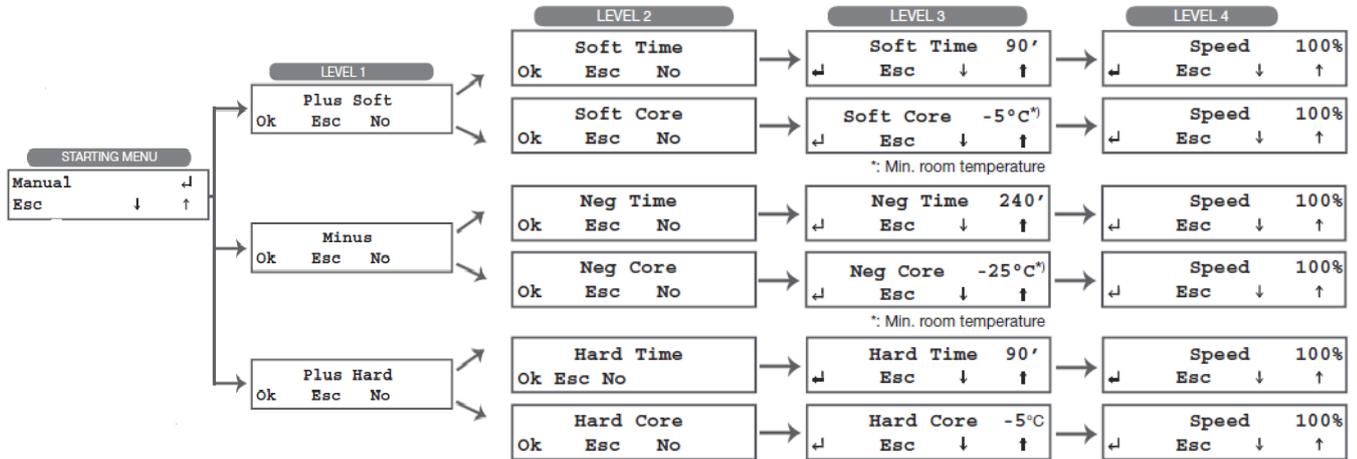
To repeat the latest cycle, press [START STOP].

Return to previous menu:

It is possible to return to the previous menu. Use the [MENU] key until you reach the start menu, see diagram.

Regarding "core" at level 2:
This cycle is with the core probe and continues until the core temperature has reached +3°C when running a soft or hard positive cycle, and -18°C when running a negative cycle.

Regarding time at level 2 and 3:
This cycle is time controlled and continues until the set time expires.

1. Press [MENU] and the display shows:
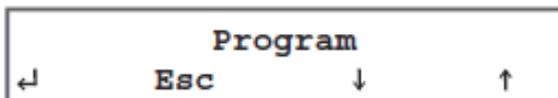
2. Press [Δ] until the display shows:

3. Press [↵] to access settings on LEVEL 1 and adapt the cycle to your needs.

4. Press [Δ] to scroll the cycle types at LEVEL 1.

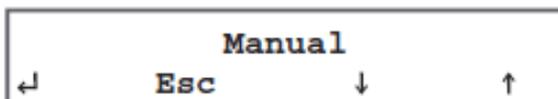|	Gram Commercial Technical information		765041466		
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5. Press [⌐⌐] to confirm your choice.

6. Press [Δ] to scroll between core and time controlled cycle.

7. Press [⌐⌐] to confirm your choice.

8. Use [Δ] or [∇] to set time or minimum room temperature.

Confirm your choice with [⌐⌐].

9. Press [Δ] or [∇] to set the desired fan speed. Press [⌐⌐] to confirm your choice.

If you want to save the programme, do this before running the programme, see next section.

Press [START STOP] to start the cycle.

Saving of user programmes

User programmes can be saved.

After programming a user cycle it can be saved. Do as follows:

Keep [MENU] pressed for 5 seconds and the display will show the first available position.

Available positions are shown with **------** in the display. Example:

```
    Program 02
    - - - - - -
```

Press [Δ] and [∇] to select a desired position.

If the position is not available, programme data is shown in the bottom line of the display.

Press [⌐⌐] to confirm the chosen position. Leave the menu and the display shows:

```
      A - - - - -
 ↵    Esc        ↓        ↑
```

Type in the name of the programme, which is to be saved using [∇] [Δ] to scroll through the letters and numbers.

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Press ⎍ to confirm and move on to the next character.

Press [MENU] to save the name. The display shows (example):

```
          Name          →|
 ↵       Esc       ↓       ↑
```
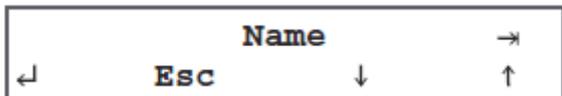
Press [START STOP] to immediately start the selected cycle.

! Please, note that saved programmes can be overwritten.

IFR cycle

IFR automatically adapts the cycle to the food item's characteristics. IFR minimises frost on the food surface.

Insert the probe correctly into the food item and activate an IFR cycle. The temperatures are then monitored in 3 places; the core, the product surface and the air temperature around the surface of the food.

In this way surface frost, that can be damaging to the food item, can be minimised.

The function is usable only when blast chilling (not blast freezing) and where the probe can be used correctly.

Press [MENU] and the display will show:

```
        Program
 ↵      Esc       ↓         ↑
```
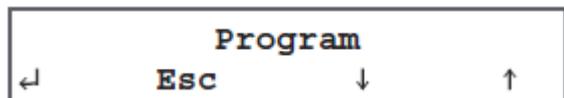
Press ⎍ and the display now shows:

```
         IFR           →|
 ↵      Esc       ↓         ↑
```

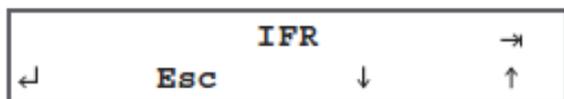Press [START STOP] to start the IFR cycle.

From the main menu it is also possible immediately to start an IFR cycle.

Simply [MENU] press for 5 secs. and the cycle will start immediately.

Use of recommended programmes

It is possible to choose between recommended programmes, which are pre-set programmes, that can not be changed.

Press [MENU] to select the desired preset programme. The display shows:

```
        IFR           →|
 ↵    Esc        ↓      ↑
```

Press [∇] [∆] until the display shows:

```
    Recommended
 ↵    Esc        ↓      ↑
```

Press [↵] and the display shows:

```
       MEAT
 ↵    Esc        ↓      ↑
```

Press [∇] [∆] to select the desired programme, 21 - 29.

Press [START STOP] to start the selected cycle.

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Program	Name	Time/core	Hard	Storage temperature	Time
21	MEAT	Core (probe)	Yes	+2°C	120 min.
22	DAIRY	Time	No	+2°C	90 min.
23	PIE	Time	No	+2°C	90 min.
24	STEW	Time	No	+2°C	90 min.
25	FISH	Time	Yes	+2°C	90 min.
26	POULTRY	Time	Yes	+2°C	90 min.
27	VEGETABLES	Time	No	+2°C	90 min.
28	FREEZING TEMP	Core (probe)	Yes	-22°C	240 min.
29	FREEZING TIME	Time	Yes	-22°C	240 min.

Use of own programmes

Press [MENU] to use your own programmes. The display shows:

```
          Program
↵      Esc        ↓        ↑
```

Press [↵] and the display shows:

```
          IFR →
↵      Esc        ↓        ↑
```

Press [∇] [Δ] until the display shows:

```
          User
↵      Esc        ↓        ↑
```
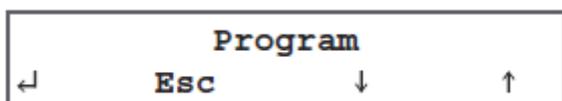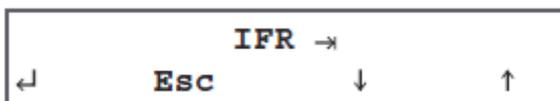
Press [↵] to confirm the choice.

Use [∇] [Δ] to scroll between the user programmes.

Press [START STOP] to activate the selected programme.

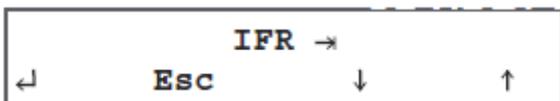| Gram Commercial Technical information					765041466	
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Pre-cooling

It is recommended to pre-cool the cabinet, prior to any cooling or freezing prozess.

Press [MENU] to select the desired menu.

Use [∇] [∆] until the display shows:
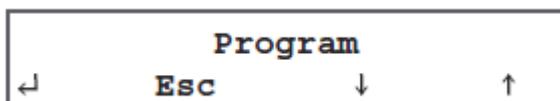
```
          Program
  ↵     Esc        ↓         ↑
```

Press [↵] to confirm your choice. The display shows:

```
          IFR →
  ↵     Esc        ↓         ↑
```

Use [∇] [∆] until the display shows:

```
          Cooling      →
  ↵     Esc        ↓         ↑
```

Press [START STOP] to activate pre-cooling.

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Storing cycles

The cabinet can run a storing cycle for a short period.

Press [MENU] to select the desired menu.
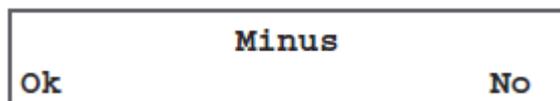
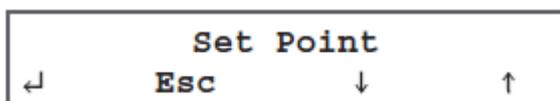Use [Δ] and [∇] until the display shows:

```
              Store
  ↵       Esc        ↓        ↑
```

Press [⌐] to confirm your choice.

To set a **positive** storing temperature press [Δ] , until the display shows:

```
              Plus
Ok                       No
```
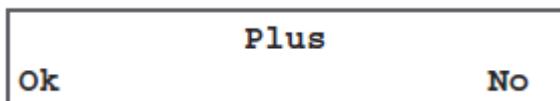
To set a **negative** storing temperature, press [∇] , until display shows:

```
              Minus
Ok                       No
```

Press [⌐] to confirm your choice. The display now shows:

```
           Set Point
  ↵       Esc        ↓        ↑
```

Press [Δ] and [∇] to change setpoint for the room temperature.

Press [⌐] to confirm your choice.

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The display shows:

```
          Speed
 ↵     Esc        ↓        ↑
```
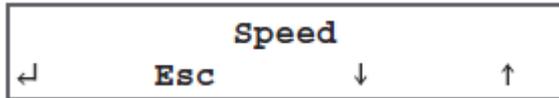
Use △ and ▽ to change fan speed.

Press ↵ to confirm your choice.

The display shows:

```
          Store
 ↵     Esc        ↓        ↑
```

Press START/STOP to start the storing cycle.

We recommend that you do not use the product range for storing cycles, as the cabinets are not equipped with an automatic defrosting function.

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Error codes

If the cabinet has a defect or operating troubles occur, the display will typically show an error code.

In the table below you can get information about the error and how to correct it.

| Error code	Cause	How to correct the error
ALL High Press	High pressure switch activated.	• The blast chiller is located too close to the wall behind. • Ask Gram Service department for skilled assistance.
ALL Room Sensor	Room sensor defect.	• Qualified technician required. Replacement of room sensor.
ALL Evap Sensor	Evaporator sensor defect.	• The problem may be a frosted evaporator. • Ask Gram Service department for skilled assistance.
ALL Cond Sensor	Condenser sensor defect. (this only concerns cabinets with built-in compressors)	• Qualified technician required • Replacement of the condenser sensor.
ALL Probe	Probe sensor defect.	• Qualified technician required. • Replacement of the probe sensor.
ALL Insert Probe	Probe sensor not correctly inserted in the food item, although a probe sensor cycle is running. The cycle will automatically change to a timecontrolled cycle.	• Insert probe or ignore the error code. • **IMPORTANT**: If the probe is not used at Quickguide programmes, it must be heated before restart of the programme to avoid that the process starts in storing cycle (cons.)
High T Room	The room temperature is / has been higher than the set point, plus 10°C (in storing programme) Example: The set point is set to +2°C. The upper alarm threshold will in this case be +12°C.	• Qualified technician required.
Low T Room	The room temperature is / has been below the set point, less 10°C (storing cycle). Example: The set point has been set to +2°C. The lower alarm threshold will then be -8°C.	• Qualified technician required.
ALL BlackOut	The power supply has been disconnected.	• When power is restored, you can see under **ALARM** how long this blackout has lasted, and what the maximum temperature has been.
ALL Door Open	Door is open. Door microswitch defect.	• Close the door. • If the error code is still shown in the display after the door has been closed, a qualified technician is required.

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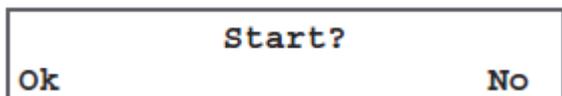## Sterilization programme

This function is only possible if the cabinet is equipped with sterilisation equipment - UV lamp (optional equipment).

Press [MENU] to select the sterilisation programme and use [△] and [▽] until the display shows:

```
         Sterilization
↵       Esc        ↓          ↑
```

Press [↵] and the display shows:

```
            Start?
Ok                          No
```
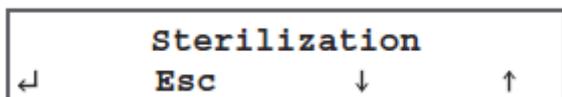
Press [↵] to start. The display shows:

```
Room        xx °C
         Sterilization
```
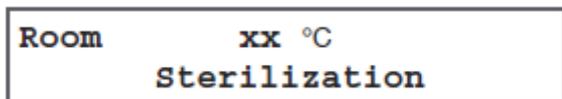
Press [START STOP] to stop the process.

If the door is opened, the process is interrupted

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Printing of data

This function is only possible if the cabinet is equipped with a thermo printer (optional equipment).

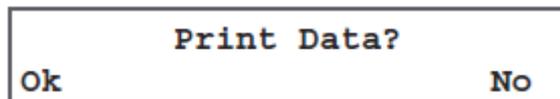Press [MENU] to use the thermo printer and use [Δ] and [∇] , until the display shows:

```
          Print
  ↵     Esc        ↓        ↑
```

Press [↵] and the display shows:

```
       Print Data?
  Ok                    No
```

Press [↵] to print the memorised data. Subsequently, the data will be printed during the following cycles.

Press [↵] and select **"Ok"**, and all memorised cycles will be printed..

How to turn the printer on/off:

Press (on/off)

How to feed the paper by hand:

Press (feed)

How to change the roll of paper:

Turn the printer off.

Press (👆) for opening the panel at the front of the printer.

Slip the roll of paper into the lower side of the roller.

Press (feed) as long as the roller drags the roll of paper.

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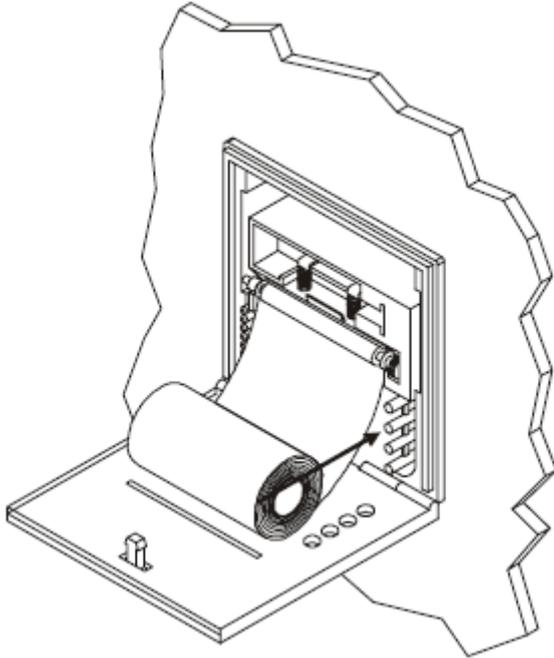
Put the roll of paper into its box.
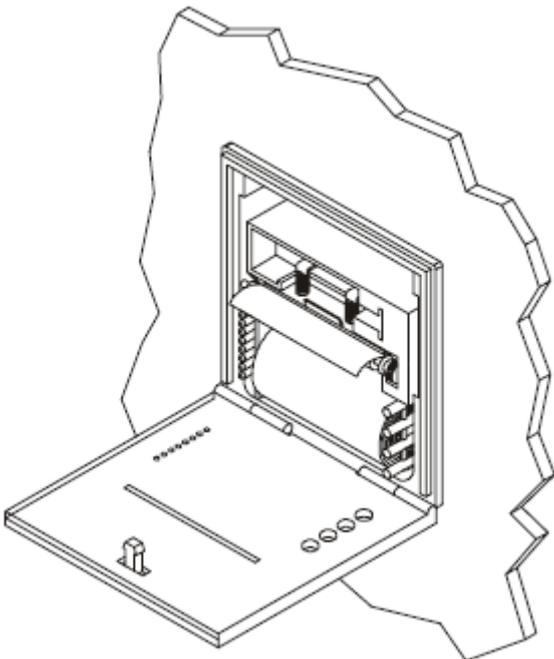
Close the panel at the front of the printer.

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Alarms

The controller memorises all alarms.

To gain access to the mode for displaying alarms press [MENU] and use [△] and [▽] to display:

```
          Alarm
 ↵      Esc        ↓        ↑
```

Then press [⏎] to see the latest alarms. If **no** alarms are memorized the display shows:

```
          No Data
      Esc
```

If alarms are memorised, the display shows (example):

```
A05       Room Sensor
S       14:21        10/02/09
```

Press [⏎] to get further information about the alarm. Alarm stop **"E"** is shown with this example:

```
A05       Room Sensor
E       16:30        10/02/09
```

If the alarm is still in progress the display shows: **"Present"**. Example:

```
A05       Room Sensor
I Gang       16:30   10/02/09
```

Press [⏎] again for further information of how to solve an error.

Example:

```
A05       Room Sensor
        Call Service
```

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Use the keys △ and ▽ to display all the memorised alarms.

Press MENU several times to return to the main menu.

Alarm information:
A_ _ = Alarm number, i.e. A05 is the 5th and the latest alarm and in the example it concerns a room sensor error.
Room Sensor = Error type, in this example a room sensor error.
S = Alarm start.
E = Alarm stop.
Present = Alarm is still in progress.

See page 15 for an overview of error codes, cause and how to remedy.

Key lock

The keys can be locked and in this way secured against unauthorized use of the blast chiller/freezer.

Go to the main menu.

Press △ and ▽ at the same time, and a signal is given.

Then press △ and ▽ at the same time for 5 seconds, until an "S" is shown in the upper right corner of the display. The keys are now locked.

To unlock the keys press △ and ▽ for 5 seconds. The "S" will disappear from the display.

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Inputs/outputs

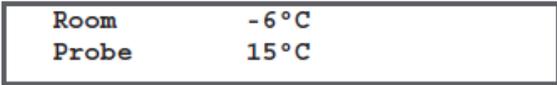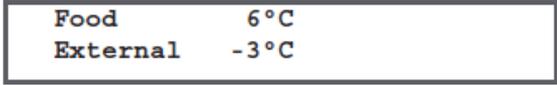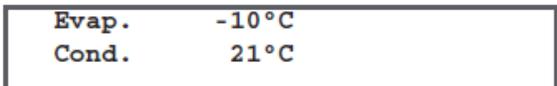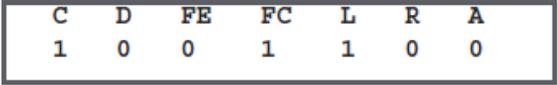In this menu the input and output values can be read, i.e. the present sensor temperature and the relay state.

Press [MENU] and use [△] and [▽] to display:

```
      Inputs/Outputs
↵     Esc        ↓        ↑
```
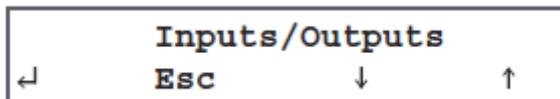
Press [↵] to check the values shown in the table below.

Use the keys [△] and [▽] to scroll the data.

Press [MENU] several times to exit.

Display	Description
``` Room -6°C Probe 15°C ```	Room and probe temperature values.
``` Food 6°C External -3°C ```	"**Internal**" surface temperature of food item. "**External**" temperature around the food item.
``` Evap. -10°C Cond. 21°C ```	Evaporator and condenser temperature values. If the cabinet is with remote compressor, "**Cond.**" setting will be "**Disab**"
``` C D FE FC L R A 1 0 0 1 1 0 0 ```	1 = Relay activated 0 = Relay de-activated C = Compressor D = Defrost FE = Evaporator fan FC = Condenser fan L = Sterilisation equipment R = Frame/floor heating A = Alarm
``` DI1 DI2 FAN 0 1 80 ```	Digital inputs state and evaporator fan speed. DI1 = Inputs door switch DI2 = Inputs for high pressure safety Fan = Evaporator fan speed in %
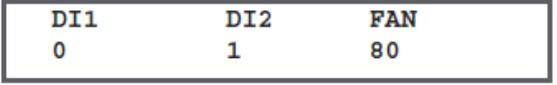
This menu is suitable for error analysis.

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Service parameters

The service parameter area of the controller is reserved for the service technician. Therefore the area is protected with a password. Changes in the parameters will directly influence the operation and functions of the cabinet.
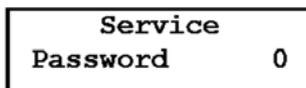
Press [MENU] to select the desired menu.

Use the keys [△] and [▽] to display:

```
     Service
 ↵   Esc    ↓      ↑
```
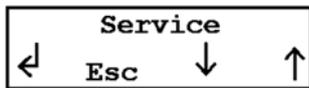
Press [↵] to confirm your choice.

The display shows:

```
     Service
 Password      0
```
(Only the first time)

Use the keys [△] and [▽] to select the password "**-19**"

Press [↵] to confirm your choice.

The display shows:

```
    Parameters
 ↵  Esc    ↓     ↑
```

Press [↵] to gain access to the parameter programming mode.

The first parameter is displayed:
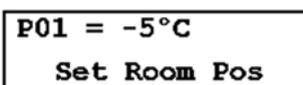
```
 P01 = -5°C
    Set Room Pos
```

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Use the keys ▲ and ▼ to scroll all the controller parameters.

Press ↵ to confirm your choice.

Use the keys ▲ and ▼ to select the new value of the parameter.

Press ↵ to confirm your choice.

Press MENU several times to exit.

Parameters.

Parameter	Description	Default	Min.	Max.
Positive quick cooling				
P01	Room temperature setpoint, soft	-5°C	-30°C	30°C
P02	Room temperature setpoint, hard	-25°C	-40°C	30°C
P03	Probe temperature setpoint, soft	3°C	-30°C	30°C
P04	Probe temperature setpoint, hard	20°C	-30°C	30°C
P05	Process duration	90 min	0 min	900 min
P06	Hard phase duration expressed in % relative to P05	60%	0%	100%
P07	Room temperature setpoint, storing	2°C	-30°C	30°C
Negative quick cooling				
N01	Room temperature setpoint	-25°C	-40°C	30°C
N02	Probe temperature setpoint	-18°C	-30°C	30°C
N03	Process duration	240 min	0 min	900 min
N04	Room temperature setpoint, storing	-22°C	-40°C	30°C
Alarms				
A01	Temperature alarm hysteresis	2°C	0°C	10°C
A02	High temperature alarm, relative to P07	10°C	0°C	50°C
A03	Low temperature alarm, relative to P07	-10°C	-50°C	0°C
A04	High temperature alarm, relative to N04	10°C	0°	50°C
A05	Low temperature alarm, relative to N04	-10°C	-50°C	0°C
A06	Temperature alarm delay from storing or defrost start	60 min	0 min	30 min
A07	Temperature alarm delay	30 min	0 min	300 min
A08	Duration of the buzzer in alarm mode	1 min	0 min	240 min

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Parameter	Description	Default	Min.	Max.
	Display			
D01	Temperature unit of measurement (0=Celsius, 1=Fahrenheit)	0	0	1
D02	Room sensor offset	0°C	-10°C	10°C
D03	Display backlight (0 when pressing a key; 1 always on)	1	0	1
D04	Core probe offset	-7°C	-10°C	10°C
D05	Surface probe offset	-7°C	-10°C	10°C
D06	External probe offset	-7°C	-10°C	10°C
	Defrost			
S01	Performs defrost on quick cooling start (0=no; 1=yes)	0	0	1
S02	End of defrost temperature	8°C	-10°C	30°C
S03	Defrost max. duration	15 min	1 min	90 min
S04	Interval between defrosts in storing (0=excluded)	0 hrs	0 hrs	18 hrs
S05	Type of defrost: 0=electrical or due to compressor stop 1=hot gas 2=air	2	0	2
S06	Dripping time	1 min	0 min	90 min
S07	Compressor activation delay with hot gas defrost	0 sec	0 sec	600 sec
S08	First defrost activation time from storing start (0=excluded)	0	0	90 min
S09	Ignores compressor protection delays in defrost	0	0	1
S10	Defrost type started through keyboard: 0=electrical or due to compressor stop 1=hot gas 2=air	2	0	2
	Configuration			
C01	Door input (0=de-activated; 1=activated)	1	0	1
C02	Door open polarity	0	0	1
C03	Door open alarm delay	2 min	0 min	60 min
C04	Activates buzzer (0=de-activated; 1=activated)	1	0	1
C05	Buzzer duration at the end of process	10 sec	0	600 sec
C06	Temperature difference in the first phase of probe insertion test (0=test excluded)	7°C	0	60°C
C07	Duration of the second phase of probe insertion test (0=test excluded)	56 sec	0	600 sec
C08	Activates condenser sensor 0=no sensor 1=sensor	1	0	1
C09	Compressor stop delay due to door opening	30 sec	0 sec	60 sec
C10	Pressostat alarm detection time	5 sec	0 sec	60 sec
C11	High pressure digital input polarity	0	0	1
C12	Heaters starting setpoint	-5°C	-10°C	-20°C

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Parameter	Description	Default	Min.	Max.
	Adjustment			
R01	Compressor start/stop hysteresis	2°C	0°C	20°C
R02	Min. interval between 2 compressor starts	2 min	0 min	30 min
R03	Compressor start delay from card activation	0 sec	0 sec	300 sec
R04	Compressor duty-cycle time w/ faulty room sensor in storing	10 min	0 min	90 min
R05	Compr. ON time w/faulty room sensor – pos. storing	3 min	0 min	90 min
R06	Compr. ON time w/faulty room sensor – neg. storing	8 min	0 min	90 min
R07	Probe sensor min. temperature for process start	70°C	0°C	90°C
R08	Compressor inhibition temperature	90°C	0°C	100°C
R09	Compressor protection function activation time	24 hrs	0 hrs	240 hrs
R10	Pulse duration	2 sec	1 sec	10 sec
R11	Pause between pulses	4 sec	1 sec	10 sec
R12	Number of pulses	3	1	20
R13	Temperature at the end of the cooling cycle	-25°C	-50°C	10°C
	Sterilization			
U01	Sterilization duration	20 min	1 min	99 min
	Fans			
F01	Evaporator fans activation hysteresis	2°C	0°C	20°C
F02	Condenser fans activation hysteresis	2°C	0°C	20°C
F03	Evaporator fans activation setpoint	5°C	-50°C	50°C
F04	Condenser fans activation setpoint	15°C	-50°C	50°C
F05	Evaporator fans during defrost (0=fans off; 1=fans on)	0	0	1
F06	Condenser fans during defrost (0=fans off; 1=fans on)	0	0	1
F07	Fans stop time after defrost	1 min	0 min	30 min
F08	Condenser fans stop delay	30 sec	0 sec	300 sec
F09	Evaporator fans control during quick cooling: 0=fans always on 1=fans controlled by evaporator temperature	0	0	1
F10	Evaporator fans control during storing: 0=fans in parallel with the compressor 1=fans controlled by evaporator temperature	0	0	1
F11	Evaporator fans inhibition temperature	70°C	0°C	90°C
	Print			
PR1	Sampling time	10 min	1 min	60 min
	Ventilation speed (P.W.M.)			
CF1	Evaporator fan min. speed	30	0	100
CF2	Evaporator fan min. speed selectable in a quick cooling cycle	50	0	100
	I.F.R.			
B01	Room temperature in phase 1	-45°C	-50°C	50°C
B02	Surface temperature control start temperature	5°C	-50°C	99°C
B03	First coefficient of the control relation	0	-50	50
B04	Second coefficient of the control relation	0	-50	50
B05	Third coefficient of the control relation	-8	-50	50
B06	Surface temperature initial value determining the end of phase 1	-1°C	-50°C	99°C
B07	Phase 2 formula coefficient	99	0	99

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Parameter	Description	Default	Min.	Max.
B09	Surface temperature min. value allowed during phase 3	0	-50°C	99°C
B10	End of IFR cycle core temperature	4°C	-50°C	99°C
B11	Delay from the positive result of the probe test, for starting the procedure to determine the end of phase 1	60 sec	0 sec	99 sec
B12	Phase 1 temperature detection time	30 sec	0 sec	99 sec
B13	Phase 1 min. duration	6 min	0 min	99 min
B16	Defrost on starting IFR cycle (0=no; 1=yes)	0	0	1
B17	Inhibition temperature	90°C	-50°C	99°C
B18	Room setpoint in the event of automatic switch to time or temperature mode	-7°C	-50°C	99°C
B19	Max. duration possible for IFR process	999 min	1 min	999 min
B20	Surface temperature safety value determining the end of phase 1	-1°C	-50°C	99°C
B21	First coefficient of the room sensor curve (phase 3)	10	-90	99
B22	Second coefficient of the room sensor curve (phase 3)	-50	-90	99
B23	Storing activation at the end of IFR cycle (0=no; 1=yes)	1	0	1
B24	Room sensor setpoint in storing	2°C	-90°C	90°C
B26	Core temperature limit for the timer start	999	0	999
B27	Adjuster of fan speed in the phase 3	99	0	99
B28	Cold pulse adjuster	10	0	99
Communication				
ADD	Device address	1	1	147
SC	Serial control 0=not activated 1=print 2=ModBus (RS485)	1	0	2
MB1	Baud rate: 0=2400; 1=4800; 2=9600; 3=18200	2	0	3
MB2	Parity: 0=no parity; 1=odd; 2=even	2	0	2
Type of cycle				
G01	Positive QC cycles only: 0=positive and negative 1=positive only	0	0	1

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Reset memory

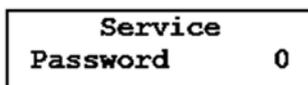*This function cancels the memorised data, but not the memorised user's programmes.*

Press [MENU] to select the desired menu.

Use the keys [∇] [Δ] to display:

```
       Service
 ↵   Esc     ↓        ↑
```

Press [⏎] to confirm your choice.

The display shows:

```
       Service
 Password        0
```
(only the 1st time)

Use the keys [∇] [Δ] to select the password "**-19**"

Press [⏎] to confirm your choice.

The display shows:

```
     Parameters
 ↵   Esc     ↓        ↑
```

Use the keys [∇] [Δ] to display:

```
    Reset Memory
 ↵    Esc    ↓        ↑
```

GRAM

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Press [⌐] to gain access to cancelling the stored data.

The display shows:

```
 Reset Memory?
Ok          No
```
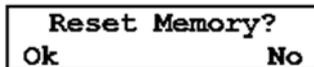
Press [⌐] to cancel the whole memory.

Press [MENU] several times to exit.

Restore

This function restores the original parameters.

ATTENTION: should you use the device with the "RESTORE" option, available on the card, please apply to the manufacturer for proper setting of the electronic controller configuration parameters.

Press [MENU] to select the desired menu.

Use the keys [∇] [∆] to display:

```
    Service
↵  Esc   ↓    ↑
```

Press [⌐] to confirm your choice.

The display shows:

```
    Service
Password     0
```
(only the 1st time)
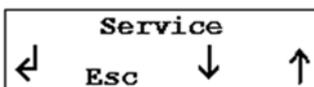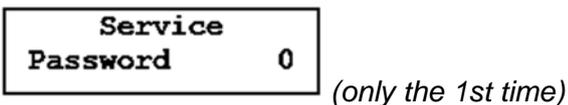
Use the keys [∇] [∆] to select the password "**-19**"

Press [⌐] to confirm your choice.

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The display shows:

```
┌─────────────────────────┐
│      Parameters         │
│  ↲  Esc    ↓      ↑      │
└─────────────────────────┘
```

Use the keys ▽ △ to display:

```
┌─────────────────────────┐
│       Restore           │
│  ↲  Esc    ↓      ↑      │
└─────────────────────────┘
```

Press ⊔ to gain access to cancelling the stored data.

The display shows:

```
┌─────────────────────────┐
│      Restore?           │
│ Ok              No      │
└─────────────────────────┘
```

Press ⊔ to cancel the whole memory.

Press MENU several times to exit.

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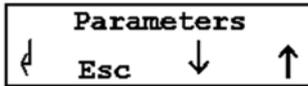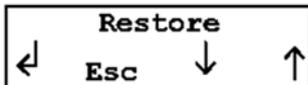
Changing door hinge side KPS 21
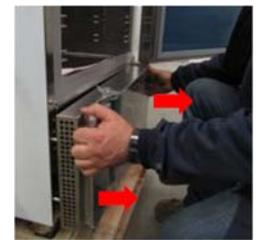
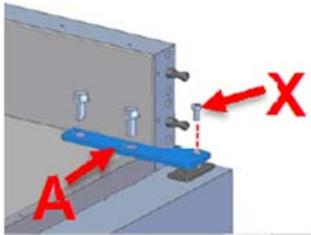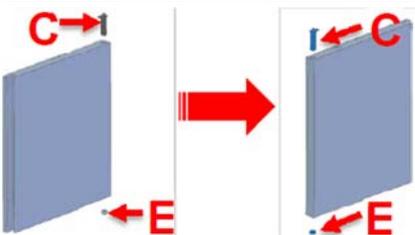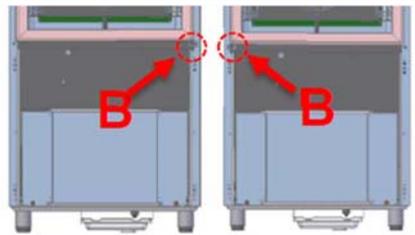|	
- To unhook the front guard, pull it towards you.	
- Remove the screw securing the plan and the screws fastening the top bracket "A" to the door.	
- Remove the door and the top bracket "A".	
- Remove the brackets "B" and "C" and install them in the holes on the opposite side.	
- Turn the door 180° and place it by means of the pin of the bracket "B" with the bracket "A" pre-assembled at the top.	
- Fix the bracket "A" to the structure by tightening the fixing screws. - Fix the screw securing the plane.	
- Apply the front guard again.	
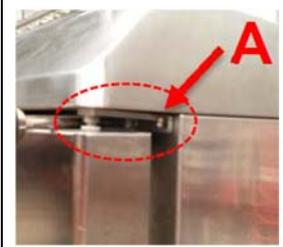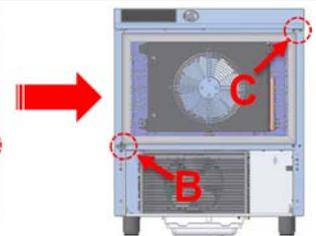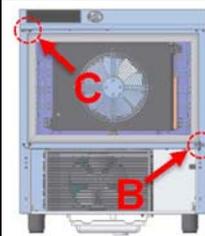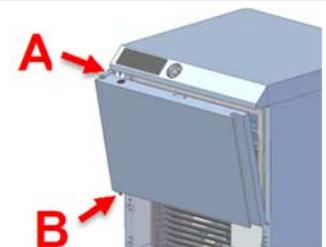
GRAM

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Changing door hinge side KPS 42
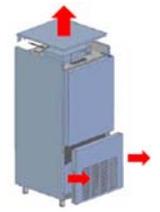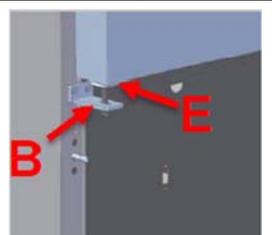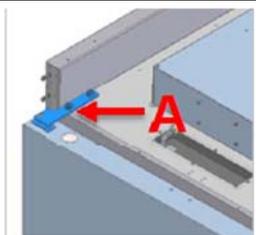
- Remove the protection panel at the upper part of the appliance. - To unhook the front guard, pull it towards you.	
- Remove the screw under the dashboard. - Unhook the dashboard, pulling it forward.	
- Remove the two fixing screws of the bracket "A" and the holding screw of the hinge "X".	
- Remove the door. Remove the door closer "C" and the bush "E" and invert their position.	
- Remove the lower bracket "B" and install it in ist housing on the opposite side.	
- Place the door by fitting the lower bush "E" into the pin of the bracket "B". - Fix the bracket "A" to the structure on the opposite side by tightening the fixing screws.	
- Before tightening the bracket screws, check the hinge height (12mm approx.) and the door perpendicular position in respect to the structure. - Apply the dashboard, the front guard and the protection panel again. - NOTE: Keep the door closed when removing and installing the brackets	