

Service Manual No. 24/2008

Appliance Documentation

GGU 15.. from Index 20

Commercial freezer, suitable for under-worktop installation





Contents

1.0	Operating and control elements 3			
2.0	Functions at a glance			
3.0	Description of the appliance	4		
3.1	Sensor positions, schematic diagrams	4		
4.0	Main components and their functions	5		
4.1	Electrical components and functions	5		
4.2	Refrigeration components and functions	6		
5.0	Assembly instructions / replacement of parts	7		
5.1	Electronic control system	7		
5.2	Air sensor	8		
6.0	Technical data	9		
7.0	Hidden functions	10		
7.1	Customer menu	10		
7.2	Service menu	11		
7	7.2.1 Demo mode	11		
7	7.2.2 Service mode	11		
7	7.2.3 Sensor menu	12		
8.0	Table of error codes	12		

1.0 Operating and control elements



- 1: Temperature setting buttons
- 2: ON/OFF button
- 3: SuperFrost button, button lit = function activated
- 4: Alarm OFF button
- 5 : Temperature display
- 6: Display for activated SuperFrost function
- 7: Display for activated child lock

2.0 Functions at a glance

Control:	Electronic
Temperature display:	Actual value
Temperature range:	-9°C to -26°C
Temperature alarm:	Visual and audible
Door alarm:	Audible
Fan:	Not present
Defrosting:	Manual
Interior light:	Not present
Service menu:	Present
Compressor:	Standard
Solenoid valve refrigeration circuit:	Not present

3.0 Description of the appliance

The GGU 15.. models are statically cooled freezers with wire tube evaporators. As the appliances are only 83 cm high, the models are also suitable for under-worktop installation!

The temperature is controlled by an air sensor.

3.1 Sensor positions, schematic diagrams



Fig. 3.1/ 1: GGU 15..

Fig. 3.1 / 2: GGU 15..

4.0 Main components and their functions

4.1 Electrical components and functions

Electronic control system			
Туре:	Series 6 electronic control system		
Components:	Integral PCB		
Setting range:	-9°C to -26°C		
Display range:	-50° C to -1	° C	
Functions			
SuperFrost:	<u>SuperFros</u>	t activated (quantity-contro	olled):
	The appliar practically hours) dep	nce sets itself to a fictitious se continuously) and switches o ending on the quantity put int	et value (-30°, i.e. the compressor operates ff earlier (min. 30 hours) or later (max. 65 to storage.
	SuperFros	t deactivated:	
	The appliar	nce sets itself to the set value	9.
Temperature alarm:	When:	Set value: Alarm value:	-9°C to -22°C 4K warmer than set value.
		Set value: Alarm value:	-25° C and -26° C -20°C
		SuperFrost alarm value:	-20°C
	Audible:	4 beeps (suppressed durin	g initial operation).
	Visual:	Flashing temperature displ	ау
	Alarm is se value (e.g.	t off with a delay of 60 minut set value: -18° C, actual valu	es when the air sensor has reached the alar ie at -14° C for 60 minutes \rightarrow alarm).
	During star the audible	t-up the temperature display alarm is suppressed.	flashes until the switch-off value is reached,
Door alarm:	When:	Door is open long	ger than 1 minute.
	Audible:	3 beeps	
Child lock:	Activation v	via the customer menu (see 8	3.1).
	When the o The remain	child lock is activated, the ON/OFF button is inactive.	
Defrosting:	Manual		
Sensor			
Air sensor:	Position:	Clipped in behind	the 2nd evaporator level.
	Function:	Switches compre	ssor ON and OFF.

Switch					
Door switch:	Position:	In front	t panel.		
	Туре:	Reed PCB			
	Contact type:	Make o	contact		
	Function:	Activat	ion via magnet o	on the door, mag	gnet replaceable.
		<u>Switch</u>	ning signal whe	<u>en:</u>	
		door c	losed:	door alarm	OFF
		door o	pen:	door alarm	ON
Loads					
Compressor:	Function:	ON:	Air sensor sw	itch-on value.	
		OFF:	Air sensor sw	itch-off value.	
		Specia	al features:	On-delay time (8 minutes) m	e Just have elapsed.

4.2 Refrigeration components and functions

Compressor:	1 standard compressor		
Evaporator:	Design:	Wire tube evaporator.	
	Type of installation:	Between the baskets/drawers	
	Injection point:	Тор	
	Flow sequence:	From top to bottom.	
Frame heater:	Position:	Foamed-in in the region of the frame.	
	Туре:	Liquid heater	
Condenser:	Design:	Lamellar condenser	
	Type of installation:	Suspended at the back	

5.0 Assembly instructions / replacement of parts

5.1 Electronic control system

Front panel:

- Press the locating lugs at the left and right upwards and then forwards! - Control panel disengages!





Fig. 5.1/ 1

Fig. 5.1/ 2

PCB:

- Carefully disengage the PCB and raise it!
- Carefully disengage the PCB!



Fig. 5.1/ 3



Fig. 5.1/ 4

5.2 Air sensor

Air sensor:

- Remove the sensor from the holder (note position) and extricate it through the real wall.
- During assembly pay attention that the sensor is clipped into place in the right position.
- As the sensor cable is foamed-in in the tabletop, the new sensor has to be pieced together at the back

(instructions accompany the new sensor!).







Fig. 5.2 / 2

6.0 Technical data

Sensor values:

Air sensor

Temperature °C	Resistance value kOhm
+35	3.1
+30	3.8
+25	4.7
+20	5.9
+15	7.3
+10	9.3
+5	11.9
0	15.3
-5	19.8
-10	25.9
-15	34.1
-20	45.3
-25	60.8
-30	82.3
-35	112.8

7.0 Hidden functions

7.1 Customer menu



Step	Display	Operation	Display following operation	INFO
1	Actual value	Hold down "SuperFrost" for 3 seconds	С	Activation customer menu
2a	с	Press "SuperFrost"	c0	Child lock deactivated
2a	c0	Press "Up"	c1	Child lock activation
2a	c1	Press "SuperFrost" once and "ON/OFF" once	Actual value	Child lock ON
2b	С	Press "SuperFrost"	c1	Child lock activated
2b	c1	Press "Down"	c0	Child lock deactivation
2b	c0	Press "SuperFrost" once and "ON/OFF" once	Actual value	Child lock OFF
3	с	Press "Up"	h	Display brightness selection
3	h	Press "SuperFrost"	h1 to h5	Display brightness adjustment
3	h1 to h5	Select the brightness stage wanted using "Up" and confirm with "SuperFrost"	h	Display brightness changed
3	h	Press "SuperFrost" once and "ON/OFF" once	Actual value	Display brightness set

7.2 Service menu

The service menu may be used by service technicians only.



7.2.1 Demo mode

Step	Display	Operation	Display following operation	Testing option / Info
Service	menu start			
1	Actual value	Press "SuperFrost" and "ON/OFF" simultaneously for 3 seconds	"d1" flashes	Service menu activation
Demo m	ode (Demo mode ca	n be deactivated only via service men	u, not by OFF/ON.)	
2a	"d1" flashes	Press "SuperFrost"	Set value	Demo mode ON
2b	"d0" flashes	Press "SuperFrost"	Current actual value	Demo mode OFF
Operation is switched to the mode wanted, demo mode or normal mode, as soon as "SuperFrost" has been pressed.				

7.2.2 Service mode

Step	Display	Operation	Display following operation	Testing option / Info
Service	e menu start			
1	Actual value	Press "SuperFrost" and "ON/OFF" simultaneously for 3 seconds	"d1" flashes	Service menu activation
Service	e mode ng display LEDs, l	buttons, door contact		
1	"d1" flashes	Press "Up"	"L" flashes	Service mode selected
2	"L" flashes	Press "SuperFrost"	"rd" flashes	Service mode activated
3	"rd" flashes	Door open and closed	All LEDs and the display (88) shine	Door contact, LEDs
4	All LEDs and the display (88) shine .	Press all the buttons	2 seconds audible alarm "L0" shines	Buttons

Service mode testing electric loads				
5	"L0" shines			All OFF
6	"L1" shines	Press "Up"	"L1" shines	Compressor ON
Return to step 6 by pressing the "Up" button again.				
End		Press "ON/OFF"		

7.2.3 Sensor menu

Step	Display	Operation	Display following operation	Testing option / Info
Service n	nenu start			
1	OFF	Hold down "SuperFrost" and simultaneously press "ON/OFF"	d1 flashes	Service menu activation
2	d1	Press "Up" until E flashes	E	Sensor selection
3a	E	Press "SuperFrost"	E3 in alternation with the respective temperature	Sensor
3b	E3	Press "Up"	E8	Reed contact
4	E8	Open/close door	Displays door status 1 open, 0 closed	
The higher-level menu (d1, L, F) is reached as soon as "ON/OFF" is pressed.				

8.0 Table of error codes

Error code	Defective component	Emergency mode
"F3" flashes	Air sensor	Continuous operation