

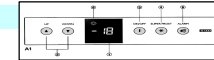
Self-test overview - fault codes - techn. data up to swing design

6er-Elektronik ab Index 24 und Kombinationen MagicEye



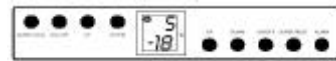
	Action	Display	Affected components	Info / Test
1 Start	AL + EA	I	Compressor + freezer fan (if fitted)	
2 Pull-down test	AL + ▲	IO	Pull-down test for factory quality control only	
3 Door switch	top door open	18 / 88	Acoustic alarm, light, LED	Reed switch o.k.
4	Door closed	2		Reed switch o.k.
5 Buttons	All buttons	5 / -18		all buttons, Reed switch
	+ bottom door			
6 Demo mode	-	5 / -18	All except compressor	no refrigeration
7 Finish	AL + ▲	Self-test completed		
Defrost phase GSN / initiate test sequence, then alarm & temp. colder buttons (only on already cold unit)				
To adjust BioFresh temperature / press alarm button for 7 seconds, then adjust using up/down buttons finally confirm using the alarm button				
Child proof / press alarm and SuperFrost buttons simultaneously for 3 seconds				

GSS / GSP / GSN 6er-Elektronik (MagicEye)



	Action	Display	Affected components	Info / Test
<i>On GSS- and GSP- models, omit steps 1 and 2</i>				
1 Start	AL + EA	P1	freezer compartment defrost heater on	
2	AL + ▲	P2	Freezer compartment compressor on	
3	AL + ▲	P3	Freezer compartment compressor on, fan on	
4	AL + ▲	IO	-	
5	Door open	88	Acoustic alarm, light, LED	Reed switch o.k.
6	Door closed	P5		Reed switch o.k.
7	All buttons	-18		Taster
8 Demo mode	-	-18	All except compressor	no refrigeration
9 Finish	AL + ▲	Self-test completed		
Defrost / child proof function can be activated as on 6 series SwingDesign controller.				
Test sequence for freezers only. Fridge/freezer combinations use same sequence as SwingDesign				

6-series controller KGN with solenoid valve, KGBN



	Action	Display	Affected components	Info / Test
1 Start	AL + ON/OFF	P1	Steps 1 to 3 are for factory test only	
2 Pull down test	AL + ▲	P2	Compressor on	
3 Pull down test	AL + ▲	P3	Compressor on	
4 Pull down test	AL + ▲	IO	Comp. on (GT: door closed, fan on / door open / fan off)	
5	top door open	18/-88	Acoustic alarm on, light on, LED's on	Reed switch OK
6	top door closed	P5		Reed switch OK
7 Buttons	All buttons	P5	Compressor off	
8	GT door open	P6	Heater Defrost heater can be switched on/off with the SF button (the SF-LED lights up as confirmation)	
9 Solenoid/Kp.	AL + ▲	P7	Comp.on (KGBN GT) / fan on / solenoid position B (KT off)	
10 Solenoid/Kp.	AL + ▲	P8	Comp.on (KGBN KT) / fan off / solenoid position A (KT on)	
			Bio-fresh fan (use SC to select high and low fan speeds)	
			On KGNv(es) 5066 no function	
11 Probes	AL + ▲		All probe values are shown consecutively	
12 Demo mode	AL + ▲	5/-18	All except compressor	no refrigeration duty
13 End	AL + ▲	Self-test completed		
Defrost phase GSN / start self-test, then press alarm and set temp. colder buttons simultaneously (only on cold appliance)				
Child proof function: press alarm + SuperFrost buttons simultaneously for 3 seconds				
After self-test completion, the controller resets to factory default values				

6er-Elektronik BioFresh (BSS 2986)



	Action	Display	Affected components	Info / Test
1 Start	AL + EA	P1	Freezer defrost heater on	
2	AL + ▲	P2	Freezer compressor on	
3	AL + ▲	P3	Freezer comp. on, fan on	
4	AL + ▲	IO	-	
5	door open	88	Acoustic alarm, light, LED	Reed switch o.k.
6	door closed	P5		Reed switch o.k.
7	all buttons	-18		all buttons
8 Demo mode		1	All except compressor	no refrigeration
9 Finish	AL + ▲	Self-test completed		
Child proof function: press alarm- and Biocool buttons simultaneously for 3 seconds				

Legend

AL = alarm button	SC = SuperCool
EA = On / Off switch	+ = press buttons simultaneously
▲ = Warmer button (UP)	GT = freezer compartment
▼ = Colder button (DOWN)	KT = fridge compartment
SF = SuperFrost	

BGN 2986



	Action	Display	Affected components	Info / Test
1 Start	AL + EA	P1	Steps 1 to 3 are for factory test only	
2 Pull down test	AL + ▲	P2		
3 Pull down test	AL + ▲	P3		
4 Pull down test	AL + ▲	IO		
5	top door open	18/88	Acoustic alarm, light, LED	Reed switch o.k.
6	top door closed	P5		Reed switch o.k.
7	All buttons	P5	Child proof symbol illuminated	
8	Freezer door open	P6	Defrost heater Defrost heater can be switched on or off using the SuperFrost button	
9 Compressor	AL + ▲	P7	Freezer compartment compressor on, fan on	
10 Compressor Fan		P8	BioFresh compressor on, fan on slow (BioCool LED = off) with BioCool, increased fan speed (BioCool LED = on)	
11 Probe	AL + ▲		Probe values are shown in sequence	
12 Demo mode	AL + ▲	5/-18	All except compressor	no refrigeration
13 Finish	AL + ▲	Self-test completed		
BioFresh temperature adjustment: press alarm button for 7 seconds, then use up / down buttons to adjust, confirm with alarm button (value is stored when display no longer blinks).				
No child-proof function				

6er-Elektronik KSB



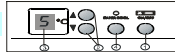
	Action	Display	Affected components	Info / Test
1 Start	AL + EA	I	Compressor + fan on	
2 Pull-down	AL + ▲	IO	Pull-down test for factory quality control only	
3 Door switch	Door open	2	Light, LED	Reed switch o.k.
4	Door closed	2		Reed switch o.k.
5 Buttons	All buttons	2		all buttons, Reed switch
7 Finish	AL + ▲	Self-test completed		
BioFresh temperature adjustment: press alarm button for 7 seconds, then use up / down buttons to adjust, confirm with alarm button (value is stored when display no longer blinks).				
Child-proof function: press alarm and SuperFrost buttons simultaneously for 3 seconds				

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Self Test Overview - Fault codes- Techn. Data up to swing design

Built-in models KIB/KEB (from index 21) onwards



	Action	Display	Affected components	Info / Test
1 Start	SC + EA	P1	Compressor on, interior light off	Door should be open
2 Light test	SC + ▲	8	Interior light on	On cold unit, display shows P2 or when door is shut P2
3	Keep light switch pressed			Check light switch
4 Buttons	All buttons	P3	Comp. off.	On KIB/KEB2544, heaters can be activated using SC
5 Fan test	SC + ▲	P4	Compressor on / fan on	Display FU indicates defective ambient temperature probe
6	SC + ▲	P5	Compressor and fan off	Using SC, higher or lower fan speeds can be selected
7 Probes	SC + ▲			A = fan off, L = low fan speed, H = high fan speed
8 Finish	SC + ▲			The current probe temperature values are shown in series
To adjust BioFresh temperature / press both up/down buttons simultaneously and switch unit on, then adjust set temperature with up/down buttons, confirm with On button				

Grand Cru wine storage cabinets



Temperature alarm on +/-4K deviation from set temperature

	Action	Display	Affected components	Info / Prüfung
1 Start	AL + EA	1	Compressor on, fan on	
2 Pull down test	AL + ▲	2	Internal low ambient heater on	
3	AL	3		
4 Door switch	Door open	88	all LED's flash, acoustic alarm on, interior light on	
5	Door closed	4		
6	all buttons	4	Child-proof symbol lights up briefly as confirmation	
	Auto step 5		Probe values	
	AL + ▲	12	current probe values are shown in sequence	
			normal operation	

The fan runs continuously. To reduce the humidity (aprox. -15%) the fan can be set to run in parallel with the compressor.

To change the setting, press and hold the alarm cancel and child-proof buttons simultaneously for 3 seconds.

Setting change is confirmed acoustically with a double beep. **Child-proof:** to activate/deactivate press button for 3 secs.

Low ambient internal heater is controlled by the ambient temperature probe on the controller board

Ambient temperature below +14°C = heater on, above +17°C = heater off Heater rating 24W 2284 Ohm

Display brightness: Press and hold the alarm button, increase brightness using ▲ button
Press and hold the alarm button, decrease brightness using ▼ button

After self-test procedure, the controller resets to default values: child-proof off, display brightness low, fan in continuous mode, set temperature +12°C.

Multi-temperature Vinidor Grand Cru cabinets



	Action	Display	Affected components	Info / Prüfung
1 Start	AL + EA	1	Compressor on, heater on	
2 Pull down test	AL + ▲	10	Compressor off, heater off	
3 Door switch	Door open	88	all LED's flash, acoustic alarm on, interior light on	
4	Door closed	2		
5	All buttons	2	Child-proof symbol lights up briefly as confirmation	
	Demo mode	17/10	All functions, however no components are activated	
	AL + ▲	6 / 18	normal operation	

Display brightness: Heater: 24 Watt or 2284 Ohm at +20°C

Press and hold the alarm button, increase brightness using ▲ button

Press and hold the alarm button, decrease brightness using ▼ button

Child-proof function: press the child-proof button for 3 seconds to deactivate and reactivate the other buttons.

Chest freezer probe values

Models	Resistance	Models	Temp.	Resistance
GT ..83 -3, -3A, -4, -10	20	1 GTS ..62-11A, 21A, 21B	20	2.25
GTS ..62-21	-15	5 GTS ..63-11A, 21A, 21B, 22	-14	10
GTS ..63-3 to -21	-19	6 GTS ..64-21, 21A	-18	14
(not on -11A)	-27	8 GTS ..23-24	-23	17
GTS ..64-3 to -10A, -20	-31	10 GTS ..26-24	-27	21
			-31	27

Values in °C

Values in (kOhm)

Values in °C

Values in (kOhm)

3er-Elektronik



	Action	Display	Component	Display	Component
1 Start	Insert test-plug in socket X3	- 32°C LED		green LED	GT comp. On
2	Using SuperFrost button	- 25°C LED	GT comp. On	green LED	KT comp. On
3	move to the next test step	- 21°C LED	KT comp. On	no display	
4		- 18°C LED	(GSN - heater)	no display	
5		- 15°C LED	(GSN - fan)	no display	
6		Alarm LED	Audible alarm on	no display	
Part number test plug: 9988 046					to step 1

Heaters on NoFrost models

New SwingDesign from Index 24, values at +20°C

Evaporator	185W	0,8A	286 Ohm
Drip tray	43W	0,2A	1,2 kOhm
Total	228W	1.0A	230 Ohm

Heat limit switch activates at +93°C

Resistance values at -18°C: total 217 Ohm

Heaters on KGN, 2001 design

Heater data on KGN 3346, KGN 3846 and KGBN 3846			
125W	0,55A	404Ohm	

Heaters on KDN 4632

Winter heaters	10W
Defrost heaters	170W 311 Ohm
Drain line heater (foamed-in)	3W 17,6kOhm

The defrost cycle is activated after 12 hours cumulated compressor run-time. Defrost duration 30 minutes

Error codes 6-series controller

- F0 BioFresh probe
- F1 Refrigerator air probe
- F2 Refrigerator evap. probe
- F3 Freezer air probe
- F4 Freezer evap. probe
- F5 EEPROM-error



Error codes AKO refrigerator controller

Old controller from index 21

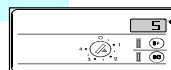
Probe failure interior light and unit off,

no error code displayed

On following models: KTe ..-21; KLe ..-20,-21; KIUe ..-21

New controller from index 22

- Display Error
- F1 Refrigerator air probe
- F2 Refrigerator evap. probe
- F8 Evaporator probe pull-down error



Grand Cru wine storage cabinets

- F1 Air probe
- F5 EEPROM-error
- FU Ambient probe (on controller board)



Multi-temperature Vinidor/Grand Cru cabinets

- F1 Air probe bottom zone
- F2 Air probe top zone
- F3 EEPROM-error
- F4 Pull down error (bottom zone)
- F5 Warm up error (top zone)



Error codes: Steca refrigerator controller

- Display Error
- F0 Thermostat
- F1 Air probe



Chest freezers from index 24

- F4 Evaporator probe error
- F5 EEPROM-error



Error codes UKS-, WKS-, UGK- & TGS models

- empty battery - no temperature display
- temperature below -40°C, display LL
- temperature above +109°C, display HH
- probe error or defect display Er = Error



Error codes 3-series controller

LED Ei	LED Alarm	LED -15°C	LED -18°C	
	X	X		Freezer air probe error
	X		X	Freezer evaporator probe error
X	X	X		Refrigerator air probe error
X	X		X	Refrigerator evaporator probe error

Probe v. SwingDesign all values in kOhm

Temperature	Refrigerator	Freezer
20°C	12.5	2.4
5°C	25.3	4.6
0°C	32.5	5.7
-10°C	54.9	9.1
-18°C	85.5	13.5
-25°C	128.5	19.4
-30°C	173.9	25.4

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