NordCap®
COOL-LINE

Bedienungsanweisung

COOL-LINE Backwarenkühlschrank **BKS 900**

2020-07

ORIGINAL INSTRUCTIONS FOR USE AND MAINTENANCE

1 PURPOSE AND USE

These refrigerators (BKS) and freezers (BLF) are used for keeping the bakery product.

2 DESCRIPTION

The cabinet consists of a casing, door and superstructure.

- The casing is made of an inner coat and outer coat which are both made from a stainless steel AISI 304. All the angels are rounded, which enable the easy cleaning. We were thinking on low energy consumption and we have constructed a superisolated housing of 70mm. Inside refrigerator there are movable bars placed at different levels.
- The door is also made of a stailess steel AISI 304. The door is locked by means of a lock which is built into the facade. When the door of the refrigerator is open, the refrigerator light switches on and fan switches off.
- The superstructure has a cooling unit built in. It is placed on the refrigerator and can therefore be taken off. There is a cooling equipment in the front and an evaporator with a ventilator in the back. The ventilator sucks the air for the refrigerator through an opening in the top and then blows the cooled air left into the refrigerator from special chenel. If the door is opened, the ventilator stops immediately. In front of the cooling unit there is a facade with electronic controler, which regulates operating of the cabinet. It also shows the temperature in the cabinet and other elements of functioning.
- The interior fittings are composed of support rails placed on the sides and the back of the inner coat. They are made in such a way that their installation is simple and the function is reliable. Shelves are located in special "L" profiles, which are stuck to the rails. Construction of L profiles are made to easy to adjust the height of the shelves with regard to the user's requirements.

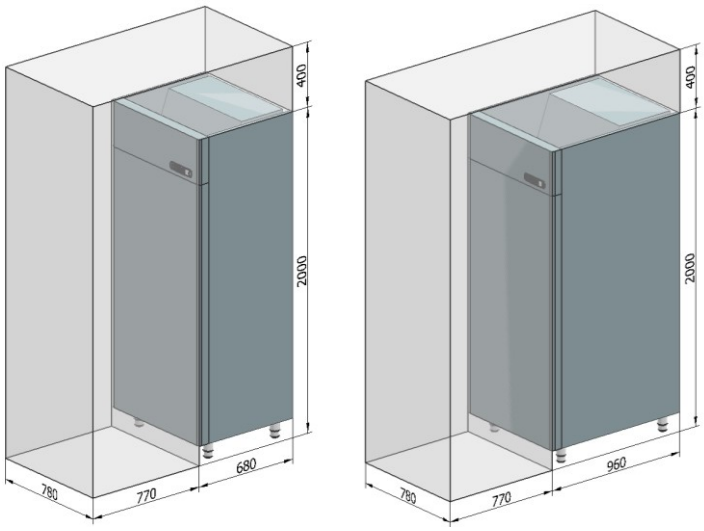
3 INSTALLATION AND CONNECTION

3.1 Transport and unpacking the cabinet

Be sure the cabinet stays in the upright position during transportation. Wooden support should be removed when remove some nail, which fix the suport on the cabinet. Stainless steel cabinets are PVC coated and this coat should be removed before installation. Don′t use sharp tools for removing the coat because of demaging the stainless steel.

3.2 Location of Cabinet

The place where the refrigerator is installed should not be humid nor near hot places such as stoves, radiators, heaters... The refrigerators must stand in a horizontal position which can be achieved by installing legs. The place where refrigerator cabinet is installed should be adequately ventilated or air-conditioned. Ceilling of the room should be at least 40 cm higher than the cabinet.
The minimum temperature should not be lower than 10 ºC. In a small unventilated room, the temperature can become excessive especially in hot weather. **Allowed ambient temperature is +10ºC to +43ºC**



3.3 Connection

Before connecting the cabinet, checkthe condition of the cable and plug. If the supply cable is damaged, it must be replaced by the manufacturer or similarly qualified persons in order to avoid a hazard.
Connect the cabinet to a line voltage of 230 V and 50 Hz using a wall socket earthed according to applicable standards. The allowed voltage variation is ±10%. Higher voltage variations will have a negative effect on the cabinet's electric equipment, preventing its proper fuctioning and reducing the service life of the refrigerator.

4 FUNCTIONING

4.1 Switch on

After connection of the cabinet to the electric system, the compressor started after 1 minutes. The lowest possible temperature on our BKS model is -3º C and on BLF model is –30º C.

4.2 Front panel commands

BLF/BKS

LED	
⏻	Main switch
⌃	Increasing the temperature
⌄	Decreasing the temperature
❄	Manual Defrosting
SET	Set
⊐ / ✣	Humidity regulation Energy saving

Key combination::

⌃ + ⌄	Tolock and unlock the keyboard
SET + ⌄	To enter in programming mode
SET + ⌃	To return to the room temperature display

LED	MODE	FUNCTION
❄	ON	Compressor enabled
❄	FLASHING	Anti-short cycle delay enabled
❄	ON	Defrost enabled
❄	FLASHING	Drip time in progress
🔔	ON	An alarm is occuring
✣	ON	Fans enabled
✣	FLASHING	Fans delay after defrost in progress
❄	ON	Continius cycle is running
☀	ON	/
°C/°F	ON	Measurment unit
°C/°F	FLASHING	Programming phase

4.3 Controlling and Changing of the Actual Setpoint Temperature

By pressing the button SET actual setpoint temperature appears on a display. After the button SETis released display shows temperature in the cabinet.
A new setpoint temperature could be changed - within factory set limits - by pressing button SET (for at least 2 seconds so that the refrigerating light °C/°F) appear. You setup a temperature with a button ⌃+⌄. The new value is confirmed by pressing button SET.

4.4 Defrosting

The defrosting of ice on the evaporator surface is automatic. It is switched on by electronic controller every 6 hours. During defrosting display shows sign ❄. If the doors are opened very frequently in the ambient with high humidity, the defrosting could be uncompleted. In this case we can switch on the defrosting manualy with pressing button ❄ for at least 2 second, so that the the defrosting light switch on.

4.5 Lighting

The light in the cabinets is switched on automatically when the door is opened.
Some cabinets contain LED strip or classic bulb. The power of the illumination is 9W/m for LED strip and 25W for classic bulb. Power supply for Led is DC 24V and for bulb is AC 240V. The replacing operations should be done by the manufacturer or similarly qualified persons in order to avoid hazard.

4.6 Alarm

The controller allows a check on the correct operation of the controler.

- Exceeding of the allowed temperature in the cabinet (indication HAor LA).

HA- The temperature in the cabinet is to high - alarm is switched on after 15 minutes,
LA –The temperature in the cabinet is to low - alarm is switched on after 15 minutes

- Fault of the air temperature probe- indications:
  P1, P2, P3, P4 fault of the probe of the temperature in the cabinet, the termostat is stopped immediately, alarm is signalled immediately. The termostat is working normaly. Before changing the probes check the contacts, and see the chapter 6.

4.7 Humidity regulation and energy saving

After start LED dioda ✣ is lighting. With pressing on the buton ⮒ / ✣ we will change the regim of the fan. In this case LED ✣ permanently lighted. In this regime will be higher humidity in the cabinet and energy consumption will be lower.

4.8 Fast cooling (only for CN Models)

By holding on the button ⌃ for 3 seconds cycled cooling will be switched ON. After this time the cooling is switched to SET working. With holding on the button ⌃ again for 3 seconds, cycled cooling is interrupted.

5 CLEANING

5.1 Cleaning of the Inner and Outer Cout

The inner and outer cout should be cleaned at least four times a year. The surface of the stainless steel cout could be standing damaged due to irregular cleaning.
Wipe the outer cout with a soft, damp cloth, and clean the inner cout with warm water. Cleaning agents may be used. When cleaning the inner cout be sure to use agents that are odour-free and have no harmful effects on food quality. The cabinet should then be rinsed with warm water and wiped with a soft cloth. Leave the door open until the interior has dried.
WHEN CLEANING THE CABINET, THE USE OF PROTECTING GLOVES ARE NECESSARY.

5.2 Cleaning of the condenser

The condenser lamellas should be cleaned two to three times yearly with a soft brush or vacuum cleaner. More frequent cleaning is required if the cabinet is in a dust-filled environment, since a dusty condenser, will prevent normal operation of the refrigerator.

MAKE SURE TO DISCONNECT THE POWER CORD FROM THE WALL SOCKET WHEN CLEANING THE CONDENSER AND OTHER EQUIPMENT IN THE UPPER SECTION OF THE CABINET.

6 TROUBLE SHOOTING

TROUBLE	6.1.1 DISPLAY	COMMON CAUSE	REMEDY
Unit will not run	No sign	Blown fuse	Replace fuse
		No voltage in the socket	Check and repair the socket
		Electric lead is damaged	Replace electric lead- Call the ingeneer
		The controller is spoilt	Call the ingeneer
Refrigeration section is to warm	Alarm - Indication HA	The door is opened too often	Reduce number and lenght of the door openings
		Overloading of shelves, blocking normal air circulation in cabinet	Load on the shelves just to the height mark
		Warm or hot foods placed in cabinet	The food placed in cabinet must be cold
		Poor door seal	Change the door gasket
		The controller is set on too high temperature	Set the controller on lower temperature
		Dirty conderser	Clean the condenser
		Too much ice on the evaporator - uncompletly defrosting	Switch manual defrosting on; if there is no improvement after 4 hours, call the engineer
Refrigeration section is to cold	Alarm - indikation LA	The controller improperly set	Set higher temperature
Compressor runs for 15 min and is stopped for 30 min without regard to the temperature in the cabinet	Alarm - indication P1, P2, P3, P4	The controller probe of the temperature is broken	Call the engineer
»dA« alarm on the screen	Alarm – Indikation »dA«	Magnetic switch doesn't recognize closed door.	Check position of switch above door.

7 TECHNICAL DATA

Type:	BKS 600	BLF 600	BKS 900	BLF 900
Cooling temperature (°C)	-3 / +10	-5/-30	-3 / +10	-5/-30
External dimensions (mm)				
Width	780	780	780	780
Depth	680	680	960	960
Depth-open door	1415	1415	1695	1695
Height	2000	2000	2000	2000
Internal dimensions (mm)				
Width	640	640	640	640
Depth	540	540	820	820
Height	1460	1460	1460	1460
Net volume (l)	505	505	766	766
Net weight (kg)	120	130	145	155
Refrigerant	R404a R290	R404a R290	R 404a R290	R404a R290
Energy consumption (kWh/24h)	2,5	8	4,1	10
Rated voltage (V/Hz)	230 / 50	230/50	230 / 50	230/50
Rated power (W)	335	821	501	977
Starting current (A)	10.6	18	12.8	24
Rated current (A)	2,1	3,1	2,7	3,5
Maximal load no. of L profil – pair (kg)	10x 12kg	10x 12kg	10x 12kg	10x 12kg
A-weighted emission sound pressure	below 70 dB(A)	below 70 dB(A)	below 70 dB(A)	below 70 dB(A)

8 SIGN EXPLANATION:

Outer coat	SS-AISI 304
Inner coat	AISI 304
Working zone	BKS -3 / +10 °C
	BLF -5 / -30 °C

9 REMOVAL AFTER USE

The removal of products after their use should be environmentally friendly. Products should be delivered to a company which specialises in complete removal.
The table below lists all details of removal and repeated use of individual component parts of the product:

Product	**Material**	**Removal**
Steel construction frames, engines, propellers pipelines, drawers	Metals	Separation of material melting procedure for repeated use (recycling)
Insulated casings insulated doors	Metals, PU foam	Separation of materials special incineration procedure
Cables casings, plugs	Rubber, PVC, silicone, similar artificial materials	Separation of materials recycling
Electronic assemblies	Artificial materials, metals electrolytes	To special waste dumps in compliance with all local regulations
Gasoline, flammable liquids	R290	Do not store or use gasoline, or other flammable liquids in the vicinity of this or any other appliance. Read product labels for warnings regarding flammability and other hazards.

Products with coatings should be delivered for processing to enable their repeated use, depending on the type of coating, or be taken to special waste dumps in compliance with all local regulations.

WARNING!
If you will not be using the refrigerator/freezer cabinet for a longer period of time or are replacing it with a new one, make sure that the lock is not functioning. This will prevent children from locking themselves into the cabinet.
If is used flammable refrigerants, you should read and understood Annex FLAMMABLE REFRIGERANTS.

THIS APPLIANCE COMPLIES WITH THE MACHINERY DIRECTIVE 2006/42/EC, THE LOW VOLTAGE DIRECTIVE 2014/35/EU AND WITH THE ELECTROMAGNETIC COMPATIBILITY DIRECTIVE 2014/30/EU.

NordCap GmbH & Co. KG

Thalenhorststraße 15
D-28307 Bremen

Telefon: +49 421 48557-0
Telefax: +49 421 488650

E-Mail: info(at)nordcap.de