

Service Manual

Wine chiller



© Electrolux Distriparts Muggenhofer Straße 135 D-90429 Nürnberg Germany	PublNo.: 168 650 685 EN	Fitted wine chiller WEK 7	
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1. Installing the Appliance

1. Observe the correct width

550 mm, CH version- fittings 167603 600 mm, EU version – fittings 167678

2. Observe the climate classes

SN +10 - +32°C N +16 - +32°C ST +18 - +38°C

3. Electrical connection

220 ... 240V 50 Hz alternating current



It is imperative that the chiller be disconnected from the mains prior to work being carried out on the electrical system! The electrical safety (accidental contact protection) is to be ensured by the installation.

2. Operating Functions

- 1. Switch appliance on/off
- 2. Temperature selection, top area -> (Can only be set if the
- 3. Temperature selection, bottom area -> display flashes).
- 4. Supercool mode
- 5. Interior lighting on permanently or only when the door is open.



- 6. Temperature display for the top compartment
- 7. Temperature display for the bottom compartment
- 8. Mode display
- 9. Supercool on (flashes when the presentation activation)
- 10. Presentation mode

(pressing buttons 2 $\,$, 4 and 3 $\,$ simultaneously activates and deactivates the presentation mode).

11. Diagnosis

(pressing of all 4 temperature selection buttons activates the diagnosis mode).



Child-proof lock: the buttons are only active after they have been pressed for 3 sec.

3. Refrigeration Cycle Diagram



German	English
Bedienungseinheit	Operating unit
Beleuchtung	Lighting
Türkontakt	Door contact
Elektronik	Electronic system
Temperaturfühler - oben	Temperature sensor - top
Temperaturfühler - unten	Temperature sensor - bottom
Ventilator	Ventilator
Lamellenverdampfer	Lamellar evaporator
Servomotor	Servomotor
Heizung	Heating
Kondensator	Capacitor
Trockenpatrone	Dry cartridge
Kompressor	Compressor

4. Troubleshooting

Fault	Possible cause	Remedy
Appliance not working	Appliance is not switched on Compressor 5 Min. forced interruption for pressure compensation Plug is not inserted or is loose. Fuse is defect Power outlet is defect Presentation mode is active	Switch appliance on. Insert plug. Check or replace fuse. Have power supply defect repaired by an electrical specialist. Deactivate
The chilling temperature is insufficient	Temperature is not correctly set Door was opened too long. Ventilator defect Inspect door seal Appliance is next to a heat source Glass door is cracked or broken Glass door is mounted canted Compressor defect, irregular operating sound.	Please refer to the operating functions. Do not leave the door open for longer than 2-3 minutes (alarm sounds after 5 minutes and can be deactivated by briefly pressing any button). Replace ventilator (see 6.3.6) Replace door seal (see 6.1.4). Please refer to "place of installation" in the instruction manual. Replace glass door (see 6.1.2). Adjust glass door (see 6.1.1). The repair is only to be carried out by a workshop designed for this purpose. Risk of explosion
Interior lighting not working Light does not go out	LED is defect LED plug is not correctly inserted Magnet missing of incorrectly fitted Sensor bent (magnetic field not effective) Permanent mode activated	Replace LED (see 6.2.2). Inspect plug-in connection (see 6.2.2). Check light switch (see 6.1.3). Align sensor (see 6.1.3). Deactivate permanent mode

Fault	Possible cause	Remedy
Insufficient temperature	Temperature setting	Set correctly
difference top/bottom	Sealing lip missing from false floor	Fit sealing lip
	False floor missing	Mount false floor
	Heating defect	Inspect heating (see Diagnosis.
	Air flap control defective	Inspect servomotor (see diagnosis)
	Air flap jams	Remedy air flap malfunction
Cooling temperature too cold	Sensors exchanged	Connect sensor correctly
Formation of condensation on the door	Increased atmospheric moisture	Wipe off with a dry cloth, set a little warmer.
Error message F1 on the operation panel	Top sensor defect (Appliance does not function in the emergency programme)	Replace sensor (see 6.3.11).
Error message F2 on the operation panel	Bottom sensor defect (Appliance does not function in the emergency programme)	Replace sensor (see 6.3.11).

5. Diagnosis Mode

Activation and deactivation by simultaneously activating the four buttons for the adjustment of the target values (min. 3 sec.). When the diagnosis mode is active, "tE" alternates with the ACTUAL temperature of the top sensor in the left-hand display and in the right-hand display, the ACTUAL temperature of the top sensor alternates with the consumer status. The temperature displays in Diagnosis Mode are not the average compartment temperatures but the ACTUAL temperature at the sensor position.

The following functions are possible.

Compressor	on / off	"+" cold compartment	Display CI / CO
Heating	on / off	" - " cold compartment	Display HI / HO

The heating function is reset to "off" after 10 minutes for safety reasons.

Flap	open / closed	"+" cold compartmentDisplay SI /	SO
Ventilator	on / off	" - " cold compartment	Display LI / LO

The Diagnosis Mode is automatically deactivated after 30 minutes for safety reasons. The Diagnosis Mode can be deactivated at all times by switching the main switch off.

Presentation Mode

An operation mode is possible for presentations, by which the compressor, ventilator, heating and air flap are not switched.

The Presentation Mode is **activated** and **deactivated** by simultaneously pressing the button combination **Target Value Adjustment"+" top**, **"Supercool" and target Value Adjustment "+" bottom** (min. 3 sec.)

"**dE**" is briefly displayed in the left-hand display after activation, "**dA**" being briefly displayed in the left-hand display after deactivation.

The target value adjustment, lighting, door switch and the door alarm remain active. The "Supercool" function button only switches the LED but does not switch the compressor **on** and **off.**

The target values are shown in the right-hand and left-hand display as ACTUAL values.

In order to control the "Presentation Mode" operating mode, the "Supercool" LED briefly illuminates every 5 seconds or it is briefly extinguished if the "Supercool" is activated.

A switching off and on by means of the main switch or a power failure does not result in a deactivation of the Presentation Mode.

6. Replacing Spare Parts

- 6.1 Door elements
- 6.1.1 Levelling out the door
- An elongated hole is situated in the KS frame (top and bottom) which can be used to adjust the door height
- 2. An elongated hole is situated in the door (top and bottom) which can be used to adjust the door in a longitudinal direction



Ensure that the gap between the niche and the door is the same all around.

- 6.1.2 Replacing the door
- 1. Remove the bottom and top covers

2. Remove the internal screw from the top and the bottom

- 3. Loosen the external screw (do not remove)
- 4. Push the hinge out and then remove the door.
- 5. Mount the new door in the reverse order





- 6.1.3 Inspecting the light switch
- 1. Switch the inside lighting of the door opening on (see No. 5 in the Operating Functions)
- 2. The operating display shows "OFF"
- 3. Close the door- the inside lighting should go off. Refer to 4 and 5 if the light does not go off.

4. Remove the operation (see 6.2.1) and then check the sensor.

The sensor should be clearly bent as shown in the photo. If necessary, bend it carefully of replace the board.



5. Check the position of the door magnet if the inside lighting still does not go off, i.e. turn the magnet in the magnet housing.





1. Removal

Left the seal at the corner and pull it off

2. Fitting

Carefully press the seal in at the corners and travel along the seal with the fingers





- 6.1.5 Replacing the handle
- 1. Lift the seal
- 2. Remove the cover cap
- 3. Loosen the screws with a Torx spanner
- 4. Remove the handle

5. Do not forget the plastic washers when mounting the handle.





Only tighten the screws with a maximum torque of 1.5 Nm - risk of glass breakage !!!

6.2 Replacing electrical elements



It is imperative that the chiller be disconnected from the mains prior to work being carried out on the electrical system! The electrical safety (accidental contact protection) is to be ensured by the installation.

- 6.2.1 Replace operation
- 1. Remove the cover cap
- 2. Loosen the screws
- 3. Protect the buttons with adhesive tape



4. Loosen the printed circuit board screws

5. **Carefully** remove the printed circuit board from the clamp

6. Carefully remove the printed circuit board connector

7. When installing the operation, ensure that the cable protects the cable before the soldering tip and that the sensor is not bent.









6.2.2 Replacing the lighting

1. Pull out the LED retainer with your fingers

2. Pull the clip back with your fingers and push the board upwards





- 3. Push the LED-board out
- 4. Replace the LED-board
- 5. Carefully reinsert the LED-board







The LEDs are connected in series on the right-hand side, i.e. if a LED is defect, the other LED on the same side is also not illuminated.

6.3 Refrigerating cycle

The refrigerating cycle is only to be repaired in a workshop designed for this purpose!

The workplace must be well ventilated!

Soldering regulations and risk instructions R 600a

All of the valid safety regulation in connection with the handling of combustible and explosive substances must be adhered to when installing the compressors in new and existing refrigerating systems.

The refrigerating agent must be avoided when evacuating a defective system.

6.3.1 Evacuating the refrigerating agent



After suction is carried out on a R 600a cycle, it is imperative that the system is flooded with dry nitrogen and not by air in order to avoid the formation of an explosive mixture!

The min. suction and evacuation time should be 30 minutes.

You require an evacuation pump for the suction.





- 6.3.2 Replacing the evaporator
- 1. Remove rear panel cover (se 2.3.7)

2. 2. Open the rivet head by drilling it out with a ø6 bit (only the rivet head)

3. Remove the board with the rest of the rivet

- 4. Loosen the evaporator screws
- 5. Warm up the connections with a soldering frame and loosen it



- 6. Pull the evaporator out of the inside retainer
- 7. Bend and screw on the new evaporator
- 8. Lace in the lines, replace the leading-in tube (Art. No. 126221).
- 9. Solder the lines in place.





- 6.3.3 Replace the capacitor
- 1. Warm up the capacitor connections with a soldering flame and loosen them
- 2. Loosen the screwed connections of the capacitor
- 3. Screw on a new capacitor
- 4. Reconnect the connections to the compressor and the dry cartridge





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6.3.4 Always replacing dry cartridges

1. Cut-off the dry cartridge connections directly above the dry cartridge with a special cutting tool.

- 2. Remove the dry cartridge
- 3. Position the new dry cartridge
- 4. Solder the dry cartridge on



6.3.5 Replacing the compressor



- 4. Loosen the screwed connection and remove the compressor
- 5. Screw a new compressor on
- 6. Push on the connections and replace the protective cover
- 7. Solder the tubes on again



6.3.6 Replacing the ventilator

- 1. Lift the cover with a screwdriver (use the bottom slits), lever the handle upward
- 2.
- 2. Break cable out

3. Pull the ventilator off. Ensure that the rubber knob remains on the rear panel

- 4. Insert the new ventilator cable.
- 5. Pull the rubber knob upwards with a pair of pliers until it latches into the ventilator.





- 6.3.7 Removing the rear panel cover
- 1. Screw the electronics cover off
- 2. Remove all of the connectors



3. Electronics diagram



- 4. Remove the sealing compound
- 5. Remove the protective covers
- 6. Loosen all 5 screws





7. Take hold of the rear panel through the slide opening and pull it towards you. Thereby ensure that the cables do not get caught.

8. When replacing, insert the cable through the cable opening. Initially insert the centre screw in the rear panel. Finally seal the cable opening with sealing compound.



- 6.3.8 Replacing the heating
- 1. Remove the rear panel
- 2. Remove the heating from the retainer
- 3. Remove the cable



- 6.3.9 Replacing the servomotor
- 1. Remove the rear panel
- 2. Loosen the servomotor retainer with the screwdriver and then pull it upwards
- 3. Remove the air flap (arrow)
- 4. Pull the servomotor upwards





6.3.10 Replacing the slide

- 1. Remove the rear panel
- 2. Remove the springs

3. Remove the slide and in doing so, lightly press the panel outwards



- 6.3.11 Replacing the sensor
- 1. Remove the rear panel
- 2. Remove the sensor upwards from the retainer
- 3. Remove the cable
- 4. Do the same with the bottom sensor

