Please read this operating manual carefully before starting the device. Keep it in a safe place for future reference. If the device is passed on to another person, this operating manual must be handed over to the user along with it.

The manufacturer cannot be held liable for damage resulting from improper usage or incorrect operation.

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1 Explanation of symbols



WARNING!

Safety instruction: Failure to observe this instruction can cause fatal or serious injury.



CAUTION!

Safety instruction: Failure to observe this instruction can lead to injury.



NOTICE!

Failure to observe this instruction can cause material damage and impair the function of the product.





NOTE

Supplementary information for operating the product.

- ➤ **Action:** This symbol indicates that action is required on your part. The required action is described step-by-step.
- This symbol describes the result of an action.

Fig. 1 5, page 3: This refers to an element in an illustration. In this case, item 5 in figure 1 on page 3.

2 Safety notes

2.1 General safety



WARNING!

- Do not operate the device if it is visibly damaged.
- If this device's power cable is damaged, it must be replaced by the manufacturer, customer service or a similarly qualified person in order to prevent safety hazards.
- This device may only be repaired by qualified personnel.
 Improper repairs can lead to considerable hazards.
- This device can be used by children aged 8 years or over, as well as by persons with diminished physical, sensory or mental capacities or a lack of experience and/or knowledge, providing they are supervised or have been taught how to use the device safely and are aware of the resulting risks.
- Cleaning and user maintenance must not be carried out by children without supervision.
- Children must not play with the device.
- Children must be supervised to ensure that they do not play with the device.
- Always keep and use the device out of the reach of children under the age of 8 years.
- Do not store any explosive substances such as spray cans with a flammable propellant in the device.

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CAUTION!

- Disconnect the device from the power supply
 - before each cleaning and maintenance
 - after every use
- Food may only be stored in its original packaging or in suitable containers.



NOTICE!

- Check that the voltage specification on the type plate corresponds to that of the energy supply.
- Only connect the device as follows:
 - With the DC cable to a DC plug socket in the vehicle (e. g. cigarette lighter)
 - Or with the 230 V connection cable to the 230 V AC mains supply
- Never pull the plug out of the socket by the cable.
- If the cooler is connected to the DC socket: Disconnect the cooler and other power consuming devices from the battery before connecting the quick charging device.
- If the cooler is connected to the DC socket: Disconnect the cooler or switch it off when you turn off the engine. Otherwise you may discharge the battery.
- The cooling device is not suitable for transporting caustic materials or materials containing solvents.
- The cooling device contains inflammable cyclopentane in the insulation. The gases in the insulation material require special disposal procedures. Deliver the device at the end of its lifecycle to an appropriate recycling.

2.2 Operating the device safely



CAUTION!

 Before starting the device, ensure that the power supply line and the plug are dry.



NOTICE!

- Do not use electrical devices inside the cooler unless they are recommended by the manufacturer for the purpose.
- Do not place the device near naked flames or other heat sources (heaters, direct sunlight, gas ovens etc.).



Danger of overheating!

Ensure at all times that there is sufficient ventilation so that the heat that arises during operation does not build up. Make sure that the device is sufficiently far away from walls and other objects so that the air can circulate.

- Ensure that the ventilation openings are not covered.
- Do not fill the inner container with ice or fluid.
- Never immerse the device in water.
- Protect the device and the cable against heat and moisture.

3 Scope of delivery

No. in fig. 1, page 3	Quantity	Description
1	1	Thermoelectric cooler
2	1	Connection cable for AC connection
3	1	Connection cable for DC connection
_	1	Instruction manual

Check before starting up the device that all parts are available belonging to the scope of delivery.

4 Use as intended

The cooler can be used to cool and keep foodstuffs warm. The device can be also used for camping purposes.

All materials processed in the refrigerator are safe for foodstuffs.



CAUTION! Health hazard!

Please check if the cooling capacity of the device is suitable for storing the food or medicine you wish to cool.

5 Technical description

The cooling device is suitable for mobile use. It can cool goods up to max. 30 $^{\circ}$ C under ambient temperature (thermostatic switch-off at approx. 0 $^{\circ}$ C) or keep them cool or warm them up to max. 65 $^{\circ}$ C or keep them warm.

If the device has reached the set temperature range, it will automatically switch over to the energy save mode. In this mode only the energy which is required to reach the temperature inside the box is consumed.

The cooling is a wear-free thermo-electric cooler with heat removal through a ventilator.

The cooling box is equipped with an automatic priority circuit. Thus it is ensured that with simultaneous connection to the AC mains supply and to a 12/24 V battery, the AC mains supply will be used.

6 Operation



NOTE

Before you put the new cooling device into operation, you should clean it inside and outside with a damp cloth for hygienic reasons (see also chapter "Cleaning and servicing" on page 24).

6.1 Tips to save energy



NOTE

A ventilator in the interior space of the cooling device provides for the circulation of the cold air within the box. Thus a better cooling capacity will be achieved. In order that the cold air cannot reach the outside when opening the cooling device, it is equipped with a switch which turns off the ventilator as soon as the lid is opened.

- Choose a well ventilated installation location which is protected against direct sunlight.
- If you want to set an increased energy efficiency and a limited cooling capacity for the cooler device, use the device's ECO mode.
- Allow warm food to cool down first before placing it in the cooling device to keep cool.
- Do not open the cooling device more often than necessary.
- Do not leave the cooling device open for longer than necessary.



6.2 Opening the cooler

- ➤ TCX35 only: Unlock the cooling device (fig. 2, page 3).
- ➤ Open the cooling device.

6.3 Switch on the cooling box



NOTICE!

Take care that there are only objects or goods in the cooling device which may be cooled or heated to the selected temperature.

- ➤ Place the cooling device on a stable base.
- ➤ Connect the cooling device
 - using the AC connection cable supplied (fig. 1 2, page 3) to an AC mains power socket or ...
 - using the DC connection cable supplied (fig. 1 3, page 3) to the DC socket in the vehicle (fig. 4 , page 4).
- ➤ Press the button "o" at the control panel to switch on the cooling device.
- ✓ The cooling device starts to cool or heat the interior space.

Operating display	Operating mode	
red (fig. 3 2, page 3)	heating	
blue (fig. 3 3, page 3)	cooling	

6.4 Switch over between cooling and heating

➤ If you want to switch over between **cooling** and **heating**, press the button "HOT/COLD".



NOTE

The control unit of the cooling device has a memory function. It memorises the selected temperature range for each mode (cooling and heating). Thus the temperature range which is previously selected in the mode is set again with each switching on or switching over.

- ✓ The red or blue operating display lights up and the device starts to cool/ heat
- > When you want to finish the cooling or heating process, press the button "₺".
- ➤ When you stop using the cooling device, disconnect it from the mains.

6.5 Select temperature

The status display of the temperature (fig. **3** 5, page 3) indicates the selected temperature range. With an increasing number of illuminating LEDs, the intensity of the temperature range also increases.



NOTE

The following temperature indications are subject to tolerances and are dependent on the measuring position.

Interior space temperature at approx. 25 °C ambient temperature:

	Status display	Temperature range
	seven illuminating LEDs	approx 0 °C in the interior space
Cooling	an illuminating LED	approx 16 °C in the interior space (ECO mode)
Heating	seven illuminating LEDs	approx 65 °C in the interior space
rieating	an illuminating LED	approx 48 °C in the interior space

➤ If you want to select the temperature to **cool/heat**, press the button "ὧ", until the requested temperature range is reached.



6.6 Connecting to vehicle power



NOTE

If you connect the cooling device to the vehicle power, remember that you may have to turn on the ignition to supply it with power.

6.7 Removing the lid

You can remove the lid of the cooling device (fig. 5, page 4):

- ➤ Open the lid until it is at a ca. 30° angle to the cooler.
- ➤ Pull the lid forwards and lift it off diagonally.

7 Cleaning and servicing



WARNING!

Always disconnect the device from the power supply before you clean and service it.



NOTICE! Risk of damage

- Never clean the cooler under running water or in dish water.
- Do not use abrasive cleaning agents or hard objects during cleaning as these can damage the cooler.
- ➤ Occasionally clean the device interior and exterior with a damp cloth.
- Make sure that the air inlet and outlet vents on the device are free of any dust and dirt, so that heat can be released and the device is not damaged.

8 Disposal

➤ Place the packaging material in the appropriate recycling waste bins wherever possible.



If you wish to finally dispose of the product, ask your local recycling centre or specialist dealer for details about how to do this in accordance with the applicable disposal regulations.

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9 Troubleshooting

Fault	Possible cause	Suggestion	
The cooling device does not function and the fan impeller which is visible from outside does not rotate.	There is no voltage present in the DC power socket in your vehicle.	The ignition must be switched on in most vehicles to apply current to the DC power socket.	
The ignition is switched on and the cooling device does not work.	The DC power socket is dirty. This results in a poor electrical contact.	Clean the socket of the DC power socket with a non-metallic brush and a solvent, so that the middle contact pin is clean. If the plug of your cooling device becomes very warm in the DC power socket, either the DC power socket must be cleaned or the plug has not been assembled correctly.	
	The fuse of the connecting cable is burnt through.	Replace the fuse (fig. 6 1, page 4) of the DC plug with one of the same rating.	
	The vehicle fuse is burnt through.	Replace the vehicle fuse of the DC power socket (usually 15 A). (Observe the operating instructions in your motorcar for this).	
Your cooling device does not cool satisfactorily and the fan impeller at the outside does not rotate.	The ventilator motor is defective.	The repair can be executed only by an authorized customer service.	
Your cooling device does not cool satisfacto- rily and the fan impeller	The ventilator motor for the inner ventilator is defective.		
at the outside rotates.	The thermo-electric element is defective.		
	The integrated power unit is defective.		



10 Technical data

	TCX14	TCX21	TCX35	
Item no.:	9105330180	9105330181	9105330182	
Input voltage:	12/24 V 220 − 240 V~			
Power input:	46 W (12 V) 50 W (24 V) 64 W (230 V∼)			
	8.5 W 8.8 W (AC, ECO mode)			
Temperature range:	Cooling: 0 °C to 16 °C (up to 30 °C below ambient temperature) Heating: 48 °C to 65 °C			
Category:	Pantry			
Energy efficiency class:	A++			
Energy consumption:	74 kWh/annum 77 kWh/annum			
Gross capacity:	14	21	35 I	
Usable capacity:	13.5 20		33 I	
Climate class:	Т			
Ambient temperature:	+16 °C to +43 °C			
Noise emission:	41 dB(A)			
Weight:	5.8 kg	7.3 kg	10.6 kg	
Inspection/Certificate:	CE	E4	Control	

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