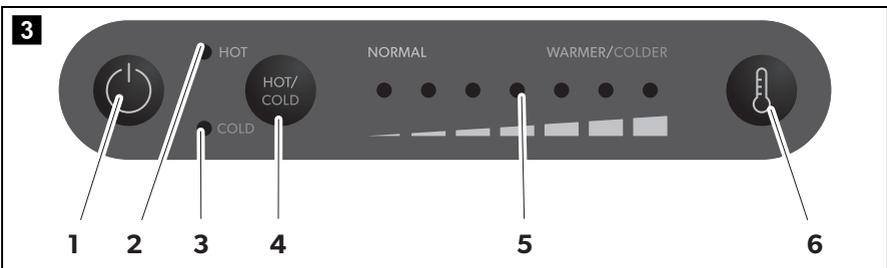
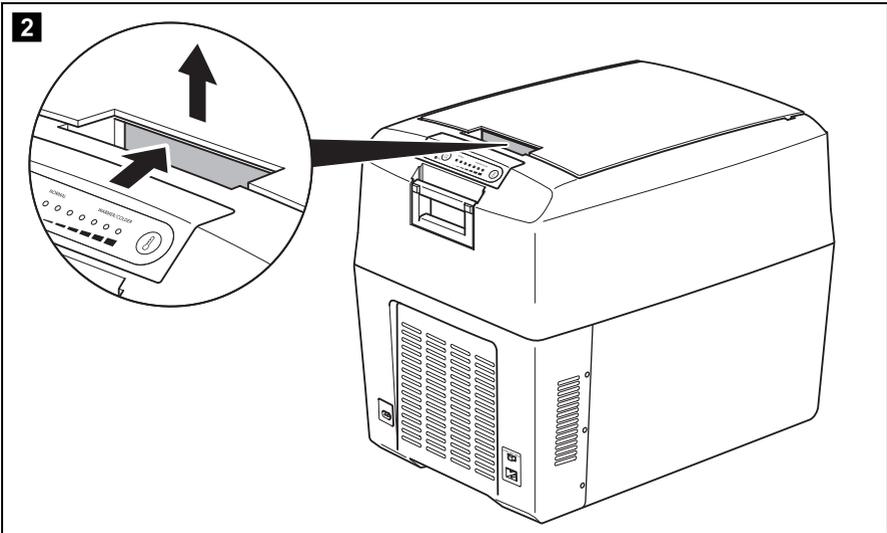
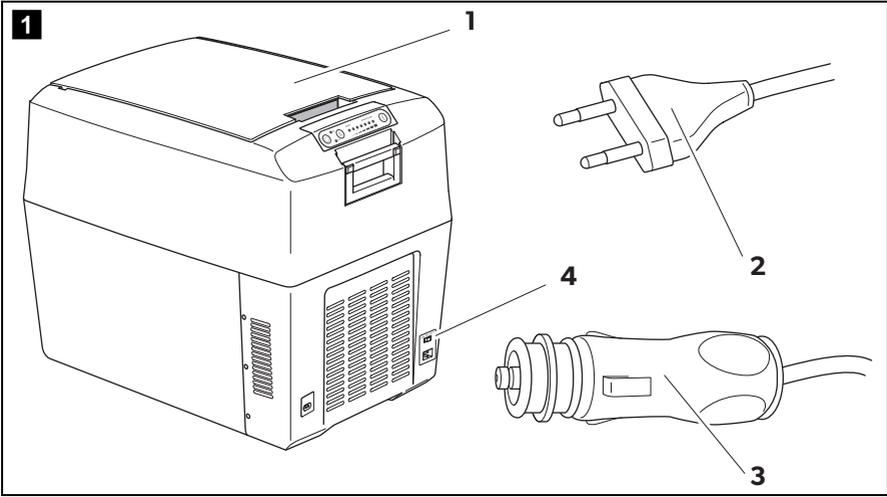


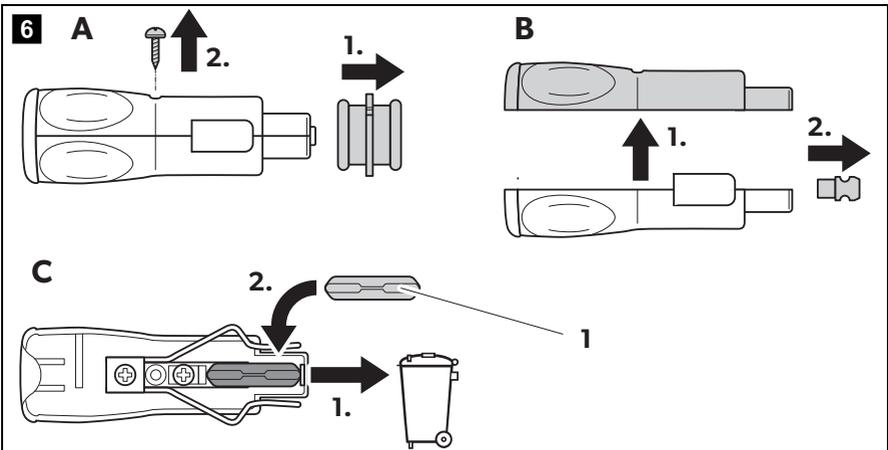
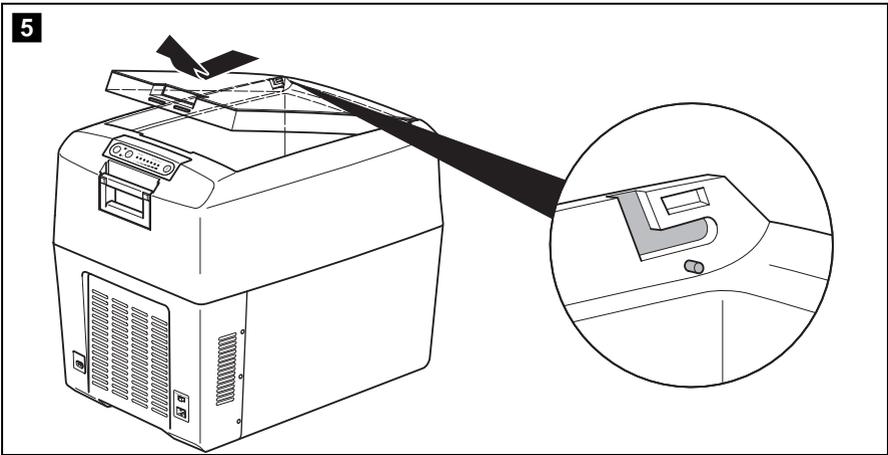
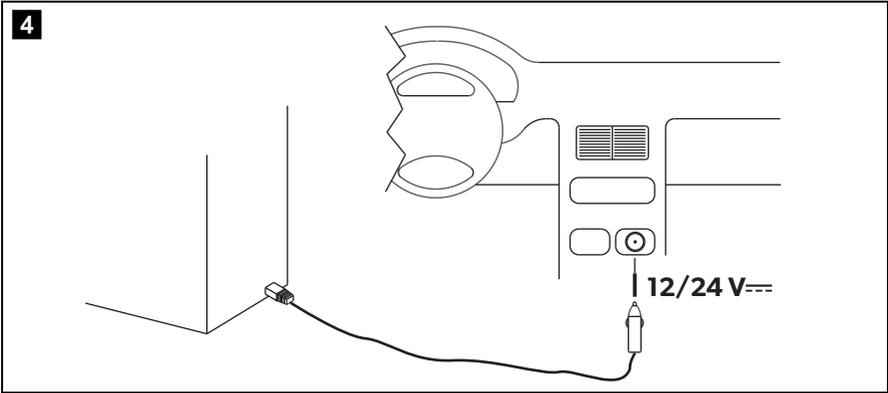
# ↔ DOMETIC MOBILE COOLING TCX SERIES



TCX14, TCX21, TCX35

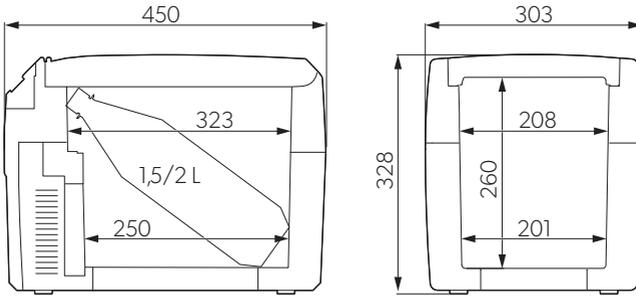
<b>EN</b>	<b>Thermoelectric cooler</b>
	Operating manual ..... 5



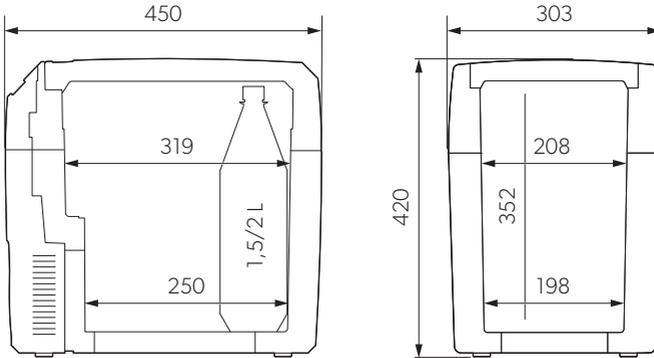


7

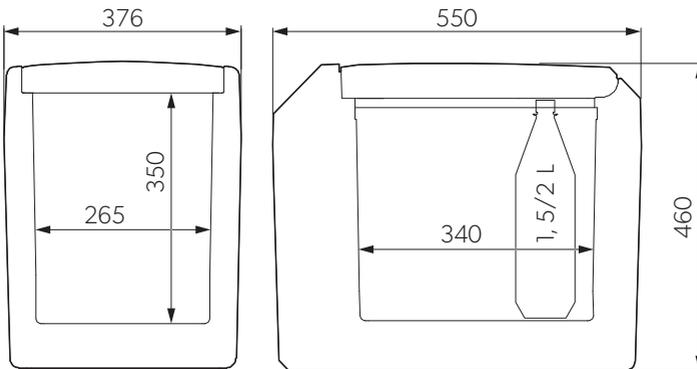
**TCX14**



**TCX21**



**TCX35**



**Please read this 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 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:** Indicates a hazardous situation that, if not avoided, could result in death or serious injury.



### **CAUTION!**

**Safety instruction:** Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.



### **NOTICE!**

Indicates a situation that, if not avoided, can result in property damage.

**NOTE**

Supplementary information for operating the product.

## 2 Safety notes

### 2.1 General safety



**WARNING! Failure to obey these warnings could result in death or serious injury.**

**Electrocution hazard**

- Do not operate the cooling device if it is visibly damaged.
- If this cooling 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 cooling device may only be repaired by qualified personnel. Improper repairs can lead to considerable hazards.

**Health hazard**

- This device is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the device by a person responsible for their safety.
- Cleaning and user maintenance must not be carried out by children without supervision.
- Children must not play with the cooling device.
- Children must be supervised to ensure that they do not play with the cooling device.
- Always keep and use the cooling device out of the reach of children under the age of 8 years.

**Explosion hazard**

- Do not store any explosive substances such as spray cans with a flammable propellant in the cooling device.



**CAUTION! Failure to obey these cautions could result in minor or moderate injury.**

**Electrocution hazard**

- Disconnect the cooling device from the power supply
  - before each cleaning and maintenance
  - after every use

**Health hazard**

- Food may only be stored in its original packaging or in suitable containers.



**NOTICE! Damage hazard**

- Check that the voltage specification on the type plate corresponds to that of the energy supply.
- Only connect the cooling device as follows:
  - With the DC connection cable to a DC power supply in the vehicle
  - Or with the AC connection cable to an AC power supply
- Never pull the plug out of the socket by the cable.
- If the cooling device is connected to a DC outlet: Disconnect the cooling device and other power consuming devices from the battery before connecting a quick charging device.
- If the cooling device is connected to a DC outlet: Disconnect the cooling device 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 insulation of the cooling device contains flammable cyclopentane and requires special disposal procedures. Deliver the cooling device at the end of its life-cycle to an appropriate recycling center.

## 2.2 Operating the cooling device safely



**CAUTION! Failure to obey these cautions could result in minor or moderate injury.**

**Electrocution hazard**

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

**Health hazard**

- Opening the door for long periods can cause significant increase of the temperature in the compartments of the device.
- Clean regularly surfaces that can come in contact with food and accessible drainage systems.
- Store raw meat and fish in suitable containers in the device, so that it is not in contact with or drip onto other food.
- If the device is left empty for long periods:
  - Switch off the device.
  - Defrost the device.
  - Clean and dry the device.
  - Leave the door open to prevent mould developing within the device.

**NOTICE! Damage hazard**

- Do not use electrical devices inside the cooling device unless they are recommended by the manufacturer for the purpose.
- Do not place the cooling device near naked flames or other heat sources (heaters, direct sunlight, gas ovens etc.).
- **Danger of overheating!**  
Ensure at all times that there is a minimum of 50 mm ventilation on all four sides of the cooling device. Keep the ventilation area free of any objects that could restrict the air flow to the cooling components. Do not place the cooling device in closed compartments or areas with none or minimal air flow.
- Ensure that the ventilation openings are not covered.
- Do not fill the inner container with ice or fluids.
- Never immerse the cooling device in water.
- Protect the cooling device and cables against heat and moisture.

### 3 Scope of delivery

No. in fig. 1, page 2	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. 27 °C under ambient temperature (thermostatic switch-off at approx. 2 °C) or keep them warm up to max. 65 °C.

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 device is a low-wear thermo-electric cooler with fan-assisted heat removal.

The cooling device 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 13).

### 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 location which is protected from 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 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.

For safety reasons the cooler is equipped with an electronic system to prevent polarity reversal. This protects the cooler against short-circuiting when connecting to a battery.

## 6.3 Using the battery monitor

The device is equipped with a multi-level battery monitor that protects your vehicle battery against excessive discharging when the device is connected to the on-board DC supply.

If the cooler is operated when the vehicle ignition is switched off, the cooler switches off automatically as soon as the supply voltage falls below a set level. The cooler will switch back on once the battery has been recharged to the restart voltage level.



### **NOTICE! Danger of damage!**

When switched off by the battery monitor, the battery will no longer be fully charged. Avoid starting repeatedly or operating current consumers without longer charging phases. Ensure that the battery is recharged.

In "HIGH" mode, the battery monitor responds faster than at the level "LOW" (see the following table).

Battery monitor mode	LOW	HIGH
Switch-off voltage at 12 V	10.1 V	11.7 V
Restart-voltage at 12 V	11.5 V	13.1 V
Switch-off voltage at 24 V	21.5 V	24.6 V
Restart voltage at 24 V	23.0 V	26.2 V

- Slide the switch (fig. **1** 4, page 2) to the appropriate setting in order to select the battery monitor mode.
- Slide the switch (fig. **1** 4, page 2) to „OFF“ in order to deactivate the battery monitor mode.



### **NOTE**

When the cooler is supplied by the starter battery, select the battery monitor mode "HIGH". If the cooler is connected to a supply battery, the battery monitor mode "LOW" will suffice.

## 6.4 Opening the cooler

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

## 6.5 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 2) to an AC mains power socket or ...
  - using the DC connection cable supplied (fig. **1** 3, page 2) to the DC socket in the vehicle (fig. **4**, page 3).
- Press the button “

Operating display	Operating mode
red (fig. <b>3</b> 2, page 2)	heating
blue (fig. <b>3</b> 3, page 2)	cooling

## 6.6 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 “

## 6.7 Select temperature

The set temperature status display (fig. **3** 5, page 2) indicates the selected temperature. With an increasing number of illuminated LEDs, the cooling or heating intensity also increases.



**NOTE**

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

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

	Status display (fig. 3 5, page 2)	Interior temperature
<b>Cooling</b>	7 illuminated LEDs	approx 1 °C (TCX14) approx 3 °C (TCX21, TCX35)
	1 illuminated LED	approx 16 °C (ECO mode)
<b>Heating</b>	7 illuminated LEDs	approx 65 °C
	1 illuminated LED	approx 48 °C

- To select the **cool** or **heat** temperature, press the “🌡️” button repeatedly until the required number of LEDs are illuminated.

## 6.8 Removing the lid

You can remove the lid of the cooling device (fig. 5, page 3):

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

# 7 Cleaning and servicing



**WARNING! Electrocuttion hazard**

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.

## 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. <b>6</b> 1, page 3) 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).

Fault	Possible cause	Suggestion
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 satisfactorily and the fan impeller at the outside rotates.	The ventilator motor for the inner ventilator is defective.	
	The thermo-electric element is defective.	
	The integrated power unit is defective.	

## 10 Technical data

	TCX14	TCX21	TCX35
Ref. no.:	9600014289	9600014290	
Input voltage:	12/24 V $\overline{=}$ 220 – 240 V $\sim$		
Power input:	46 W (12 V $\overline{=}$ ) 50 W (24 V $\overline{=}$ ) 64 W (230 V $\sim$ )		
	8.5 W (AC, ECO mode)	8.8 W (AC, ECO mode)	
Interior temperature range (7 to 1 LEDs) – Cooling:	1 °C to 16 °C	3 °C to 16 °C	
	(max. 27 °C below ambient temperature)		
Interior temperature range (7 to 1 LEDs) – Heating:	48 °C to 65 °C		
Category:	Pantry		
Energy efficiency class:	A++		

Energy consumption:	74 kWh/annum	77 kWh/annum	
Gross capacity:	14 l	21 l	35 l
Usable capacity:	13.5 l	20 l	33 l
Climate class:	T		
Ambient temperature:	+16 °C to +43 °C		
Noise emission:	41 dB(A)		
Weight:	5.8 kg	7.3 kg	10.6 kg
Inspection/Certificate:			

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