



AKF80

Compressor Refrigerator Instruction Manual



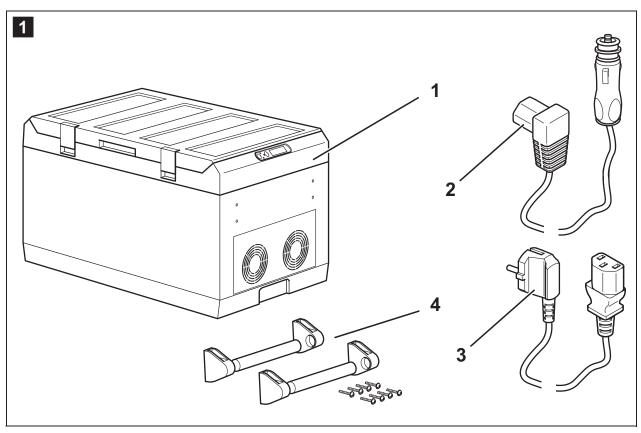
Please read this operating manual carefully before starting the device. Keep it in a safe place for future reference. If the device is passed on to another person, this operating manual must be handed over to the user along with it.

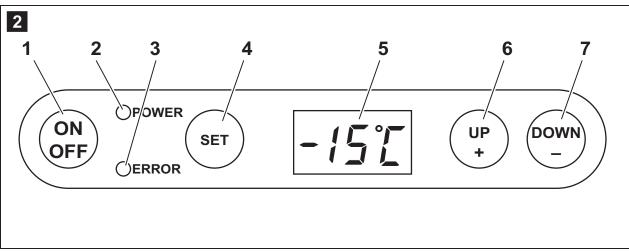
The manufacturer cannot be held liable for damage resulting from **improper usage** or **incorrect operation**.

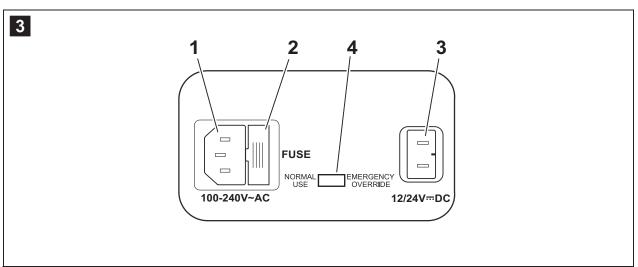
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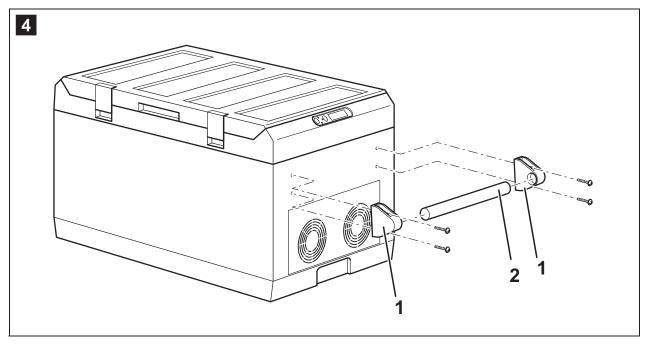


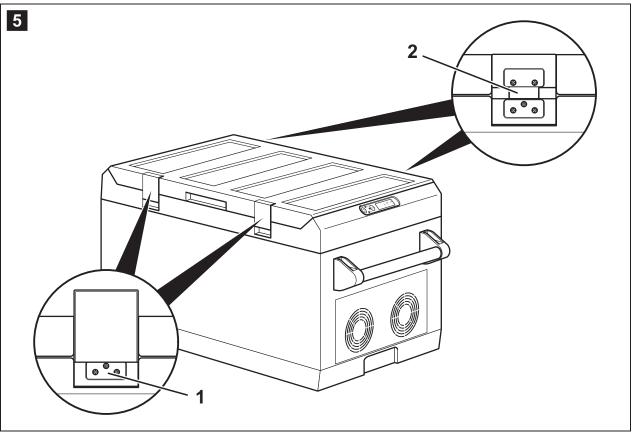




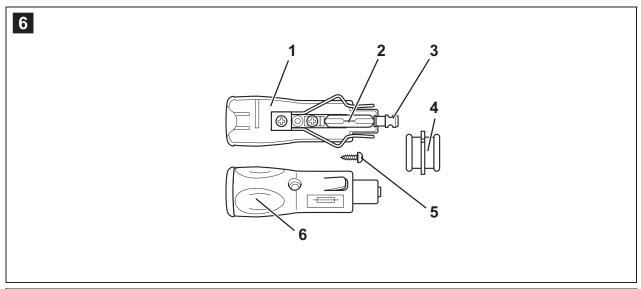


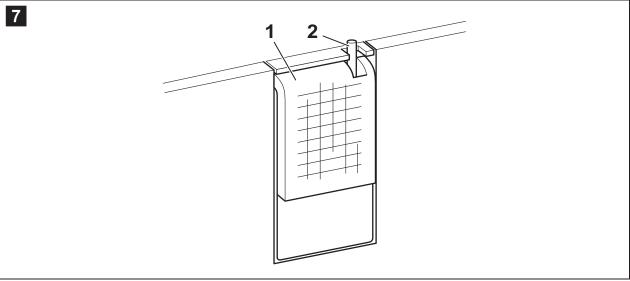














1 Notes on using the manual



DANGER!

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



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 instructions



CAUTION!

Neither Dometic Australia Pty Ltd nor Outdoor Supacentre Pty Ltd will be held liable for claims for damage resulting from the following:

- Damage to the device resulting from mechanical influences and overvoltage
- Alterations to the device made without the explicit permission of Outdoor Supacentre Pty Ltd
- Use for purposes other than those described in the operating manual.



2.1 General safety



DANGER!

 On boats: If the appliance is powered by the mains, ensure that the power supply has a residual current circuit breaker.



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.



CAUTION!

- Disconnect the device from the mains
 - 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.

2.2 Operating the device safely



DANGER!

Do not touch exposed cables with your bare hands. This
especially applies when operating the device with an AC mains
power supply.



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

fig. 1, page 1, shows the scope of delivery.

Item	Quantity	Description
1	1	Cooler
2	1	Connection cable for 12/24 V=== connection
3	1	Connection cable for 100-240 V~ connection
4	2	Carrying handle, consisting of: - 2 holders - 1 handle - 4 fastening screws
_	1	Operating manual
_	1	Internal basket with dividers(2 off)

4 Intended use



The cooler is suitable for cooling and freezing foods. The device is also suitable for use on boats.



The appliance is designed for use with a 12 V— or 24 V— battery in a car, boat or caravan, or on a 100–240-V~ mains supply.



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 Function description

The cooler can chill products, keep them cool as well as freeze them. A low maintenance CFC-free refrigerant circuit with compressor provides the cooling.

The cooler is designed for mobile use and can be carried by two detachable handles.

The cooler can withstand a short-term inclination of 30°, for example on boats.



Scope of functions:

- Power pack with priority circuit for connecting to the AC mains
- 3-level battery monitor for protecting the vehicle battery
- Programmed turbo mode for rapid cooling
- Display with temperature gauge
- Temperature adjustment (with two buttons in steps of 1 °C (2 °F)
- Detachable carrying handles
- Emergency override switch

5.1 Operating and display elements

Operating panel (fig. 2, page 1)

	• · · · • —	, ,	
Item	Description	Explanation	
1	ON OFF		n or off when the button n one and two seconds
2	POWER	Status indication	
		LED lights up green:	Compressor is on
		LED lights up orange:	Compressor is off
		LED flashes orange:	display switched off automatically due to low battery voltage
3	ERROR	LED flashes red:	Device is switched on but not ready for operation
4	SET	Selects the input mode - Temperature setting - Celsius or Fahrenheit display - Set battery monitor	
5	_	Display, shows the information	
6	UP +	Press once to increase the value	
7	DOWN –	Press once to decrease the value	



5.2 Connections

Connection sockets (fig. 3, page 1):

Item	Description
1	Connection socket AC voltage supply
2	Fuse holder
3	Connection socket DC voltage supply

6 Operation

6.1 Before initial use



NOTE

Before starting your new cooler for the first time, you should clean it inside and outside with a damp cloth for hygienic reasons (please also refer to the chapter "Cleaning and maintenance" on page 37).

The handles are enclosed unassembled. If you wish to attach the handles, proceed as follows:

- ➤ Make a handle by putting two holders (fig. 4 1, page 2) and a handle (fig. 4 2, page 2) together.
- ➤ Fasten the holders with the enclosed screws in the holes provided.

Selecting the temperature units - °C or °F

You can switch the temperature display between Celsius and Fahrenheit. This is how to do it:

- Switch on the cooler.
- ➤ Press the "SET" button (fig. 2 4, page 2) twice.
- ➤ Use the "UP +" (fig. 2 6, page 2) and "DOWN -" (fig. 2 7, page 2) buttons to select Celsius or Fahrenheit.
- ✓ The selected temperature units then appear in the display for a few seconds. The display flashes several times before it returns to the current temperature.



Turning the lid around

You can turn the lid around if you want to open the lid from the other side.

To do this, proceed as follows:

- ➤ Undo the screws on the lock lugs (fig. 5 1, page 2) and remove them.
- ➤ Undo the screws on the hinges (fig. 5 2, page 2) and remove them.
- ➤ Lay the lid down.
- ➤ Fit the hinges on the side you want.
- ➤ Fit the lock lugs on the side you want.

6.2 Energy saving tips

- Choose a well ventilated installation location which is protected from direct sunlight.
- Allow hot food to cool down first before you place it into the device.
- Do not open the cooler more often than necessary.
- Do not leave the lid open for longer than necessary.
- Defrost the cooler once a layer of ice forms.
- Avoid unnecessary low temperatures.

6.3 Connecting the cooler

Connecting to a battery (Vehicle or boat)

The cooler can be operated with 12 V or 24 V==.



NOTICE! Danger of damaging the device!

Disconnect the cooler and other consumer units from the battery before you connect the battery to a quick charging device.

Overvoltage can damage the electronics of the device.

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



Using the fused DC plug



NOTICE! Danger of damage!

For protection of the device the DC cable supplied includes a fuse inside the plug.Do **not** remove the fused DC plug. Only use the DC cable supplied.

- ➤ Plug the DC connection cable (fig. 1 2, page1) into the DC voltage socket of the cooler (fig. 3 3, page1).
- ➤ Connect the connection cable to the DC power outlet.

Connecting to a 100–240 V AC mains (E.g. in the home or office)



DANGER! Danger of electrocution!

- Never handle plugs and switches with wet hands or if you are standing on a wet surface.
- If you are operating your cooler on board a boat from a mains connection of 100–240 V~, you must install a residual current circuit breaker between the 100–240 V AC mains and the cooler.

Seek advice from a trained technician.

The cooler has a built-in multi-voltage mains adapter with a priority circuit for connecting to a 100-240 V~ supply. The priority circuit automatically switched to mains operation if the appliance is connected to a 100–240 V~ supply, even if the 12/24 V cable is still connected.

When switching between the AC mains and the battery supply, the red LED may light up briefly.

➤ Plug the 100–240 V connection cable (fig. 1 3, page 1) into the AC voltage socket and connect it to the 100–240 V AC mains.



6.4 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 12/24 V 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.



NOTICE! During low voltage

When switched off by the battery monitor, the digital display (fig. **2** 5,page 1)goes blank and the power LED (fig. **2** 2, page 1) flashes orange.

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

Battery monitor mode	LOW	MED	HIGH
Switch-off voltage at 12 V	10.1 V	11.4 V	11.8 V
Restart voltage at 12 V	11.1 V	12.2 V	12.6 V
Switch-off voltage at 24 V	21.5 V	24.1 V	24.6 V
Restart voltage at 24 V	23.0 V	25.3 V	26.2 V

This is how to select the battery monitor mode:

- Switch on the cooler.
- ➤ Press the "SET" button (fig. 2 4, page 1) three times.
- ➤ Use the "UP +" (fig. 2 6, page 1) and "DOWN -" (fig. 2 7, page 1) buttons to select the battery monitor mode.



- ✓ Display will be as follows: Lo(LOW), Πd(MED), Hi(HIGH)
- ✓ The selected mode then appears in the display for a few seconds. The display flashes several times before it returns to the current temperature.



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. If you wish to operate the cooler from the AC mains, set the battery monitor to the "LOW" position.

6.5 Using the cooler



NOTICE! Danger of overheating!

Ensure at all times that there is sufficient ventilation so that the heat that generated during operation can dissipate. Ensure that the ventilation slots are not covered. Make sure that the device is sufficiently far away from walls and other objects so that the air can circulate.

- Place the cooler on a firm foundation.
 Make sure that the ventilation slots are not covered and that the heated air can dissipate.
- ➤ Close the cooler, see chapter "Connecting the cooler" on page 31.



NOTE

If you wish to operate the cooler from the AC mains, set the battery monitor to the "LOW" position.





NOTICE! Danger from excessively low temperature!

Ensure that the only those objects are placed in the cooler that are intended to be cooled at the selected temperature.

- ➤ Press the "ON/OFF" button (fig. 2 1, page 1) for between one and two seconds.
- ✓ The "POWER" LED lights up.
- ✓ The display (fig. 2 5, page 1) switches on and shows the current temperature.



NOTE

The temperature displayed is that of the middle of the interior. The temperatures elsewhere can deviate from this temperature.

✓ The cooler starts cooling the interior.



NOTE

When operating with the battery, the display switches off automatically if the battery voltage is low. The LED "POWER" flashes orange.

6.6 Setting the temperature

- ➤ Press the "SET" button (fig. 2 4, page 1) once.
- ➤ Use the "UP +" (fig. 2 6, page 1) and "DOWN -" (fig. 2 7, page 1) buttons to select the cooling temperature.
- ✓ The cooling temperature appears in the display for a few seconds. The display flashes several times and then the current temperature is displayed again.

6.7 Using the emergency swith

- ➤ The emergency override switch (Fig. 3 4, page 1) is located in the connection panel.
- ➤ For normal operation the switch should be in the 'NORMAL USE' position.
- ➤ In the unlikely event of an electronic control failure slide the Switch to 'EMERGENCY OVERRIDE'.

NOTE: in this position the appliance will run all the time and will therefore perform as a freezer only.



6.8 Switching off the cooler

- ➤ Empty the cooler.
- > Switch the cooler off.
- ➤ Pull out the connection cable.

If you do not want to use the cooler for a longer period of time:

➤ Leave the cover slightly open. This prevents odour build-up.

6.9 Defrosting the cooler

Humidity can form frost in the interior of the cooling device or on the vaporiser. This reduces the cooling capacity. Defrost the device in good time to avoid this.



NOTICE! Danger of damage!

Never use hard or pointed tools to remove ice or to loosen objects which have frozen in place.

To defrost the cooler, proceed as follows:

- ➤ Take out the contents of the cooling device.
- ➤ If necessary, place them in another cooling device to keep them cool.
- > Switch off the device.
- ➤ Leave the cover open.
- ➤ Wipe off the defrosted water.

6.10 Replacing the device fuse(AC)



WARNING! Danger of electrocution!

Disconnect the connection cable before you replace the device fuse.

- ➤ Pull off the connection cable.
- ➤ Pry out the fuse insert (fig. 3 2, page 1) with a screwdriver.
- ➤ Replace the defective fuse with a new one that has the same rating (T2.5AL 250V).
- ➤ Press the fuse insert back into the housing.



6.11 Replacing the plug fuse (DC)

- ➤ Pull the adapter sleeve (fig. 6 4, page 3) off of the plug.
- Unscrew the screw (fig. 6 5, page 3) out of the upper half of the housing (fig. 6 1, page 3).
- ➤ Carefully raise the upper half of the housing from the lower (fig. 6 6, page 3) half.
- ➤ Take out the contact pin (fig. 6 3, page 3).
- ➤ Replace the defective fuse (fig. 6 2,page 3) with a new one that has the same rating (8A 32V).
- Re-assemble the plug in the reverse order.

6.12 Replacing the light bulb

- ➤ Press the switch pin (fig. 7 2, page 3) downwards so that the transparent part (fig. 7 1, page 3) of the lamp can be removed at the front.
- ➤ Replace the light bulb.



NOTE

The LEDs in the light bulb must be aligned with the transparent part of the lamp.

➤ Press the transparent part of the lamp back into the housing.

7 Cleaning and maintenance



WARNING!

Always disconnect the device from the mains 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 Warranty

Dometic Australia Pty Ltd · ABN 62086366305·Po Box 2495, Burleigh DC, QLD 4220, Australia

Warranty period:

Full 12 month warranty from date of purchase against all manufacturing defects.

What does the warranty cover:

Under normal consumer usage conditions, this warranty covers:

- a. Any defect in design or manufacture which results in the product failing to perform substantially as described in authorised advertising or literature.
- b. We will either repair or replace the product at our discretion providing that the fault is found to have been caused by a design or manufacturing defect and not misuse or tampering.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. The benefits provided to you as the consumer by this warranty are in addition to other rights and remedies available to you under the law.

The warranty does not cover:

- a. Any damage resulting from improper use, such as extreme misuse or serious water damage.
- b. Damage caused by connecting your product to the wrong power source.
- c. Faulty installation or modification made during installation.
- d.The cost of removing and reinstalling a built in product.
- e. Travel and/or other expenses due to customer remote location.



- f. TRANSPORT CHARGES and damage in transit. It is your responsibility to deliver and pick up your product via one of our service points, including any costs associated with the postage of your repair or replacement product should you not be able to arrange in person. If you do freight your product, we recommend that you insure against loss or damage.
- g. Any loss directly or indirectly associated with the product failing to operate.

If the product is defective, please take it to the nearest authorised repair agent See contact details at end of manual. For warranty repair processing, please present copy of the receipt with purchase date.

9 Troubleshooting

Fault	Possible cause	Suggested remedy
Device does not function, LED does	Battery voltage is too low.	Test the battery and charge it as needed.
not glow.	No voltage present in the AC voltage socket.	Try using another plug socket.
	The device fuse is defective.	Replace the device fuse, see chapter "Replacing the device fuse" on page 36.
	The integrated mains adapter is defective.	This can only be repaired by an authorised repair centre.
The device does not cool (plug is inserted, "POWER" LED is lit).	Defective compressor.	This can only be repaired by an authorised customer services unit.
The device does not cool (plug is inserted, "POWER" LED flashes orange, display is switched off).	Battery voltage is too low.	Test the battery and charge it as needed.
The display shows an error message (e.g. "Err1") and the appliance does not cool.	The appliance has switched off due to an internal fault.	This can only be repaired by an authorised repair centre.



10 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.

11 Technical data

	AKF80
Connection voltage:	12/24 V=== and 100–240 V~
Rated current:	
– 12 V :	7.5 A
− 24 V === :	3.5 A
− 100–240 V~:	1.3 to 0.7 A
Cooling range:	+10 °C to –18 °C (+50 °F to 0 °F)
Gross capacity:	80 I
Storage capacity:	79 I
Climate class:	N, ST, T
Noise emission:	45 dB(A)
Dimensions (W x H x D) in mm:	790* x 455 x 500 (*W940 incl.handles)
Weight:	29 kg



NOTE

If the ambient temperature is above +32 °C (+90 °F), the minimum temperature cannot be attained.

The coolant circuit contains R-134a. This device is CFC-free.



For warranty service & technical enquiries please call
1800 21 21 21 (AUS) or 09 622 1490 (NZ) or visit website dometic.com
to locate your nearest Service Agent and place your claim through the Service Agent.