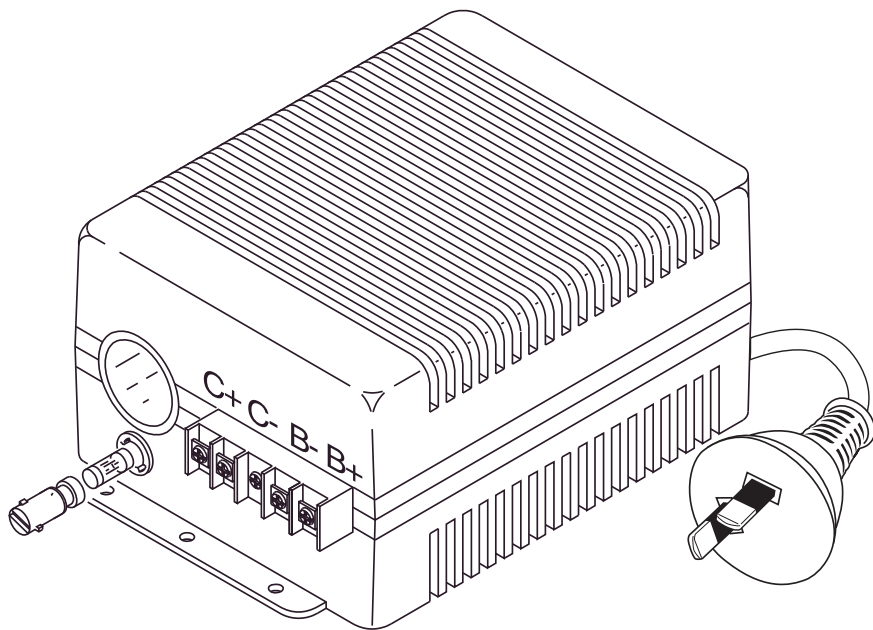


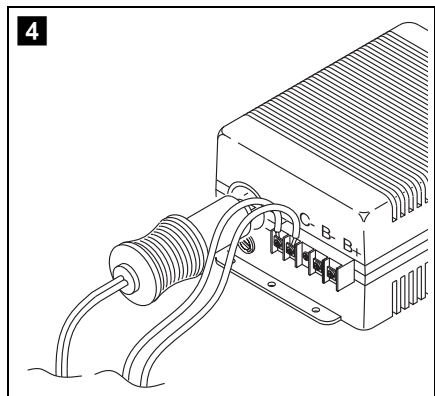
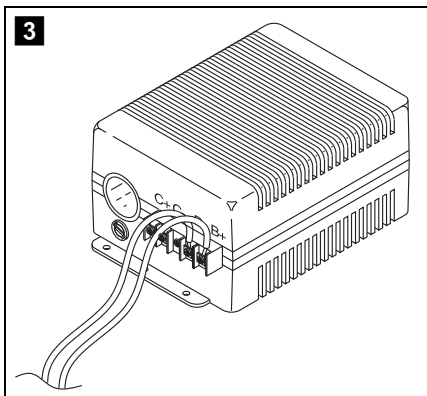
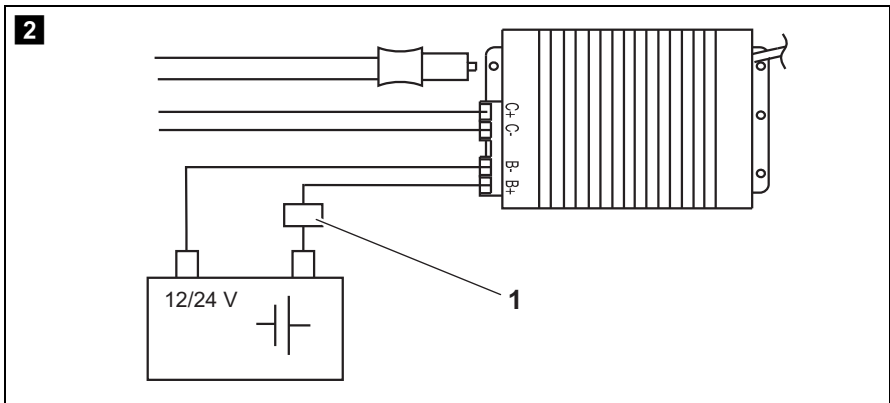
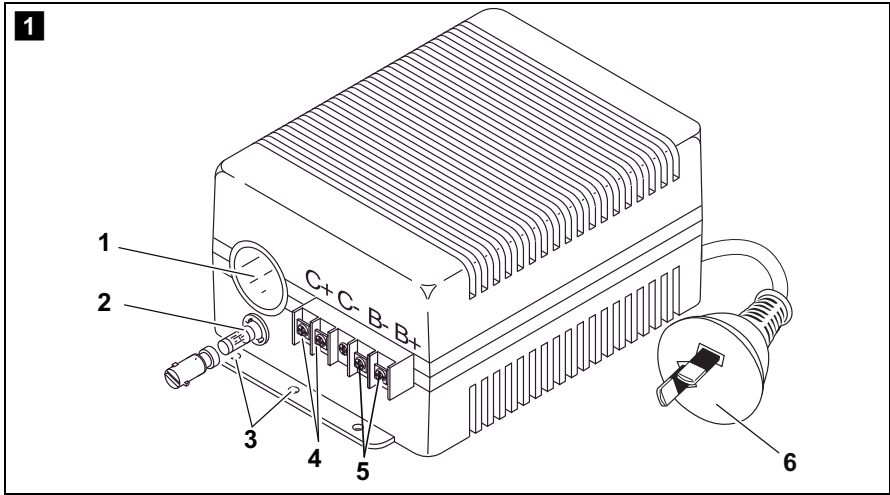
WAECO

by Dometic GROUP



CoolPower MPS50

EN 4 Mains rectifier
Installation and operating manual



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

Contents

1	Notes on using the manual	4
2	General safety instructions	5
3	Scope of delivery	7
4	Proper use	7
5	Technical description	7
6	Mounting the mains rectifier	8
7	Using the mains rectifier	9
8	Maintaining and cleaning the mains rectifier	10
9	Guarantee	10
10	Disposal	10
11	Technical data	11

1 Notes on using the manual



Caution!

Safety instruction: Failure to observe this instruction can cause material damage and impair the function of the device.



Warning!

Safety instruction relating to a danger from an electrical current or voltage. Failure to observe this instruction can cause material damage or personal injury and impair the function of the device.



Note

Supplementary information for operating the device.

- **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.

Please observe the following safety instructions.

2 General safety instructions

The manufacturer will not be held liable for claims for damage resulting from the following:

- Faulty assembly or connection
- Damage to the appliance resulting from mechanical influences and excess voltage
- Alterations to the device without express permission from the manufacturer
- Use for purposes other than those described in the operating manual

Note the following basic safety information when using electrical devices to protect against:

- Electric shock
- Fire hazards
- Injury

2.1 General safety



- **Electronic devices are not toys!**
Keep electrical appliances out of reach from children or infirm persons.
- Children should be supervised to ensure that they do not play with the appliance.
- This appliance 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 appliance by a person responsible for their safety.
- Only use the device only as intended.

- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified person in order to avoid a hazard.
- Do **not** operate the device in wet or damp environments.
- Maintenance and repair work may only be carried out by qualified personnel who are familiar with the risks involved and the relevant regulations.

2.2 Safety when installing the device



- Ensure that the device is standing firmly!
The device must be set up and fastened in such a way that it cannot tip over or fall down.
- Take the precautions necessary to ensure that children cannot interfere with operation.
Dangerous situations may occur which cannot be recognised by children!
- Do not expose the device to a heat source (such as direct sunlight or heating). Avoid additional heating of the device in this way.

For installation on boats



- If electrical devices are incorrectly installed on boats, corrosion damage might occur. Have the inverter installed by a specialist (marine) electrician.

Electrical cables



- If cables have to be fed through metal walls or other walls with sharp edges, use ducts or tubes to prevent damage.
- Do not lay cables which are loose or bent next to electrically conductive material (metal).
- Do not pull on the cables.
- Do **not** lay the 110 – 240 V~ mains cable and the 12/24 V=== cable together in the same duct (ductwork).
- Fasten the cables securely.
- Lay the cables so that they cannot be tripped over or damaged.

2.3 Operating the device safely



- Operate the device only if you are certain that the housing and the cables are undamaged.
- Make sure the air vents of the device are not covered.
- Ensure good ventilation.
- Even after the safety device (fuse) triggers, parts of the device remain live.
- Always disconnect the power supply when working on the device.

3 Scope of delivery

- Mains rectifier
- Operating manual

4 Proper use

The MPS50 mains rectifier is for operating coolers and refrigerators with BDF-50 compressors at 110 – 240 V~.

5 Technical description

The mains rectifier can operate all coolers and refrigerators with BDF-50 compressors at 110 – 240 V~. With a 110 – 240 V~ mains connection, the rectifier automatically switches from battery to mains operation.

When disconnected from the 110 – 240 V~ mains supply, the rectifier automatically switches back to battery operation. Mains operation via the rectifier always takes priority over battery operation.

5.1 Control elements

Item in fig. 1 , page 3	Explanation
1	12/24 V socket
2	Glass fuse (250 V, 12 A, slow-blow)
3	Fastening holes
4	Compressor output terminals
5	Battery input terminals
6	Mains cable

6 Mounting the mains rectifier

If you wish to mount the mains rectifier in a fixed position, please observe the following **mounting instructions**:

- Do **not** mount the device
 - In wet or damp environments
 - In the vicinity of combustible materials
 - In areas where there is a danger of explosions
- The place of installation must be well-ventilated. A ventilation system which is at least equivalent to the air openings in the device must be present for installations in closed housings.
- The air intake on the underside or the air outlet on the back of the device must remain clear.
- The installation surface must be level and sufficiently sturdy.
- Secure the mains rectifier with screws through the fastening holes at the front and the back of the device (fig. **1** 3, page 3).

7 Using the mains rectifier

**Warning!**

Do not reverse the polarity. If the poles are reversed device may overheat and be damaged.

**Caution!**

Replace defective fuses with new ones of the same rating (12 A slow-blow).

**Warning!**

Ensure that the battery's positive supply line is secured with a fuse (fig. **2** 1, page 3) of the following value:

- at 12 V_{DC}: 15 A
- at 24 V_{DC}: 7.5 A

The fuse must be installed as close to the battery as possible.

To avoid drops in voltage and therefore performance, keep the cable route as short as possible and only disconnect it when necessary.

The cables between mains rectifier and compressor must not exceed 1.5 m and must have a cross section of at least 2.5 mm²!

- ▶ Fit wire sleeves to the ends of wires which you wish to connect to the mains rectifier.
- ▶ Connect the battery using the B+ and B– terminals on the front plate (fig. **3**, page 3).
- ▶ Connect the BDF-50 compressor
 - using the C+ and C– terminals (fig. **4** 1, page 3) or
 - using the socket on the front plate (fig. **4** 2, page 3).

8 Maintaining and cleaning the mains rectifier



Caution!

Do not use any sharp or hard objects for cleaning since they may damage the device.

- Occasionally clean the device with a damp cloth.

9 Guarantee

The statutory warranty period applies. If the product is defective, please contact the manufacturer's branch in your country (see the back of the instruction manual for the addresses) or your retailer.

For repair and guarantee processing, please include the following documents when you send in the device:

- A copy of the receipt with purchasing date
- A reason for the claim or description of the fault


10 Disposal

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



If you wish to finally dispose of the device, 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

	CoolPower MPS50
Item number:	MPS-50A
Rated input voltage:	110 – 240 V~, 50/60 Hz
Input voltage range:	100 – 250 V~
Input current:	3 A
Rated output voltage:	27,0 V===
Rated output current:	6 A
Peak output current:	18 A
Constant output power	160 W
Operating temperature range:	0 °C to +40 °C
Fuse:	12 A slow-blow
Dimensions (W x H x D):	120 x 70 x 200 mm
Weight:	1.0 kg
Testing/certification:	 5375

Battery operation

Input voltage:	12/24 V===
Output voltage:	12/24 V===
Input/output current:	12/6 A

Versions, technical improvements and delivery options reserved.

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