

REMKO EST

Electric infrared heaters

Operation · Technology · Spare parts



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Carefully read this operating manual prior to commissioning / using the units!

This operating manual is a translation of the German original.

These instructions are an integral part of the unit and must always be kept in the vicinity of the installation location or on the unit itself.

Subject to modifications; no liability accepted for errors or misprints!

Safety notes

The units have been built in accordance with state-of-the-art standards at the time of shipping.

The units have been subjected to extensive material, functional and quality inspections prior to delivery.

However, dangers can arise from the units if they are used improperly or not as intended by untrained personnel!

Please observe the following notes:

- Adhere to the respective applicable local regulations (including the regulations of the local power supply company) and the relevant legal safety regulations when using the units
- The personnel tasked with operating the units must check the units for visible defects on the operating and safety devices as well as the presence and function of the protective devices prior to commissioning
- In the event of defects that endanger the operational safety of the units, operation must be discontinued immediately
- The units may only be used in an assembled state and for their intended purpose
- Safety components (e.g. protection grids) must not be removed or rendered inoperative
- The units must not be operated in potentially explosive areas
- It is imperative that safety distances to combustible materials be maintained
- The protection grid and areas of the surface become very hot when the units are operational
- The direction of radiation may only be altered when the units are in a cool state
- Never insert foreign objects into the units
- The units may only be operated in enclosed spaces continuously and without supervision if a suitable room thermostat is installed
- Never operate the units without supervision unless it can be guaranteed that no unauthorised persons will be in the vicinity of the units
- The units must not be covered during operation
- The units must not be operated directly below a wall socket
- The units must not be operated in the vicinity of bathtubs, showers, swimming pools etc.
- The units must not be exposed to direct jets of water
- Never allow water to enter the inside of the units
- All electrical cables for the units must be protected against damage (e.g. by animals)

Unit description

The electric infrared heaters can either be portable or stationary. The units are operated with electric power and have been designed in such a way that they can be used universally and in a straightforward manner.

The units are equipped with an enclosed electric heating resistor, robust pedestal, mounting bracket and a power cable with protective contact plug. The units can not be regulated thermostatically.

The units conform to the fundamental health and safety requirements of the appropriate EU stipulations. The units are reliable and easy to operate.

The units may be used among other things for the following:

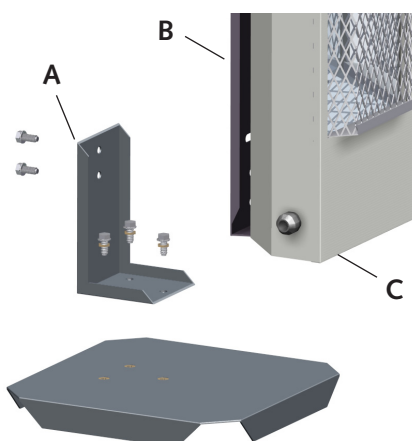
- Spot heating outdoor workspaces and fire-proof manufacturing facilities and halls
- Temporary room heating
- Maintaining the temperature of frost-sensitive parts
- De-icing machines, vehicles and non-combustible warehoused goods while adhering to the relevant safety distances

Unit installation

The units are delivered in a pre-assembled state and can be operated either as a standing or wall-mounted unit.

Installation as a standing unit

1. Fasten the mounting angle (A) onto the pedestal using 3 M8 screws and lock washers.



2. Fasten the unit's mounting bracket (B) onto the mounting angle using 2 M8 screws and lock washers.



3. Set the unit down in a stable position on a level and non-combustible base.

Installation on a wall

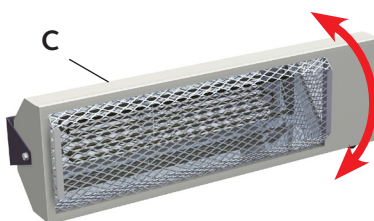
1. Remove the mounting bracket (B) from the unit housing (C).



2. With due consideration for the required safety distances, attach the mounting bracket (B) horizontally and securely to a load-bearing wall consisting of non-combustible material.

3. Mount the unit housing (C) back onto the mounting bracket (B).

The power cable should hang down.



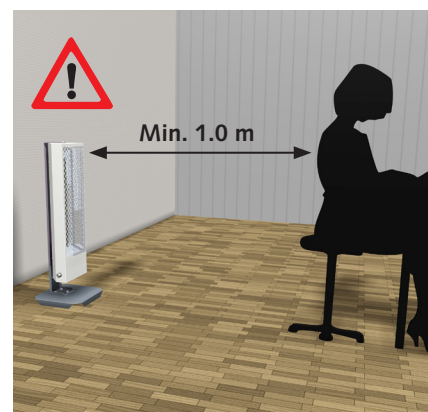
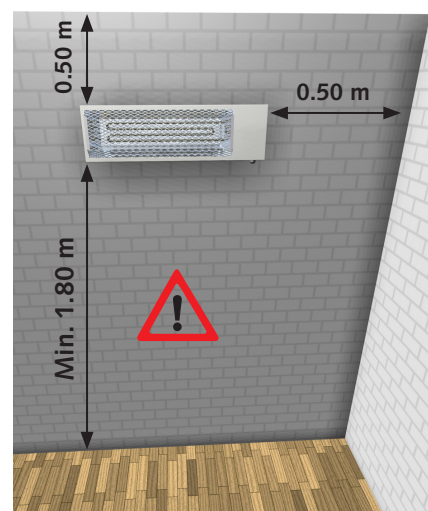
4. Adjust the direction of radiation as required and tighten the lateral fastening screws.

CAUTION

Observe adequate safety distances at all times!

Safety distances

The minimum safety distances stated below must be adhered to at all times.



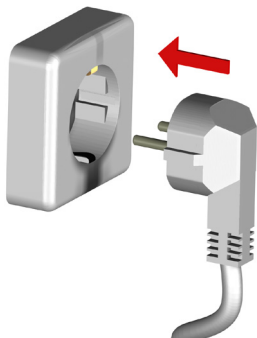
Commissioning

Individuals who have been adequately trained in the handling of the units, should be tasked with the operation and monitoring of the units.

The personnel tasked with operating the units must check the units for visible defects on the operating and safety devices as well as the presence and function of the protective devices prior to starting work.

If defects are discovered these must be reported to the supervisor.

1. Set the unit up in a stable standing position or ensure that the unit is securely fixed to the wall.
2. Check the mains voltage.
230V/1~/50 Hz.
3. Connect the unit's power plug to a properly installed and safeguarded mains socket.
Electrical protection 16 A (slow).

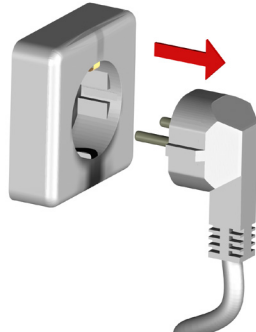


⚠ CAUTION

Extensions to the connection cable must only be conducted by authorised specialist electricians, taking into consideration the unit capacity, cable length and local use.

Shutdown

1. Remove the mains plug from the mains socket.



Caution! The units are hot!

It is imperative that the units cool down sufficiently before they are touched.

💡 NOTE

The electrical connection for the units must be made at a separate feed point with a residual current device in accordance with VDE 0100, Section 55.

⚠ CAUTION

All cable extensions must only be used in fully un-reeled or reeled off condition.

Troubleshooting

⚠ CAUTION

Before undertaking any work on the units, the power plug must be removed from the mains socket.

If the unit does not heat up, follow these steps to locate the fault.

1. Check the mains fuses on site.
2. Check the mains plug.
3. Check the mains cable for damage.
4. Check that the heating resistor is functioning correctly.
It is only possible to replace the heating resistor at a specialist workshop.

If all of the functional checks have been carried out without any findings, please contact an authorised service station.

💡 NOTE

Repair work may only be carried out by authorised qualified electricians.

⚠ CAUTION

An electrical safety check must be carried out in accordance with VDE 0701 after any work on the units.

Care and maintenance

Regular care and observation of some basic requirements will ensure trouble-free operation and a long service life of the units.

In accordance with the operating conditions, the units must, if necessary, be checked at least yearly by a specialist to ensure that they are in a condition that is safe to use.

The relevant care and maintenance work must be carried out regularly.

- Keep the units free of dust and other deposits
- Only clean the units with a dry or moistened cloth
- Never use direct jets of water, such as high-pressure cleaners etc.
- Never use abrasive or solvent-based cleaners
- Use only suitable cleaners, even for heavy contamination
- Inspect the safety equipment on a regular basis
- Inspect the protective devices on a regular basis
- Observe the regular care intervals

Intended use

The units are designed exclusively for heating purposes. in industrial or commercial use (not for domestic heating) on the basis of their structural design and equipment.

The units may only be used by appropriately instructed personnel.

With non-observance of the manufacturer's specifications, the respective local legal requirements or after arbitrary alterations to the units, the manufacturer shall not be liable for resulting damages.

Customer service and guarantee

As a prerequisite for any guarantee claims to be considered, it is essential that the ordering party or its representative complete and return the **"certificate of guarantee"**

to REMKO GmbH & Co. KG at the time when the units are purchased and commissioned.

The units have been tested several times to verify that they are functioning correctly. However, if malfunctions should arise that cannot be remedied by the operator with the assistance of the troubleshooting section, please contact your specialist dealer or contractual partner.



Environmental protection and recycling

Disposing of packaging

When disposing of packaging material, please consider our environment.

Our units are carefully packed and delivered in sturdy transport packaging made from cardboard and polystyrene.

The packaging materials are environmentally-friendly and can be recycled.

By recycling packaging materials, you make a valuable contribution to the reduction of waste and conservation of raw materials.

Therefore, only dispose of packaging material at appropriate collection points.

Disposal of the old unit

The manufacturing process for the units is subject to continuous quality control.

Only high-grade materials are processed, the majority of which are recyclable.

You also contribute to environmental protection by ensuring that your old equipment is only disposed of in an environment friendly manner.

Therefore, only bring the old unit to an authorised recycling business or to an appropriate collection point.

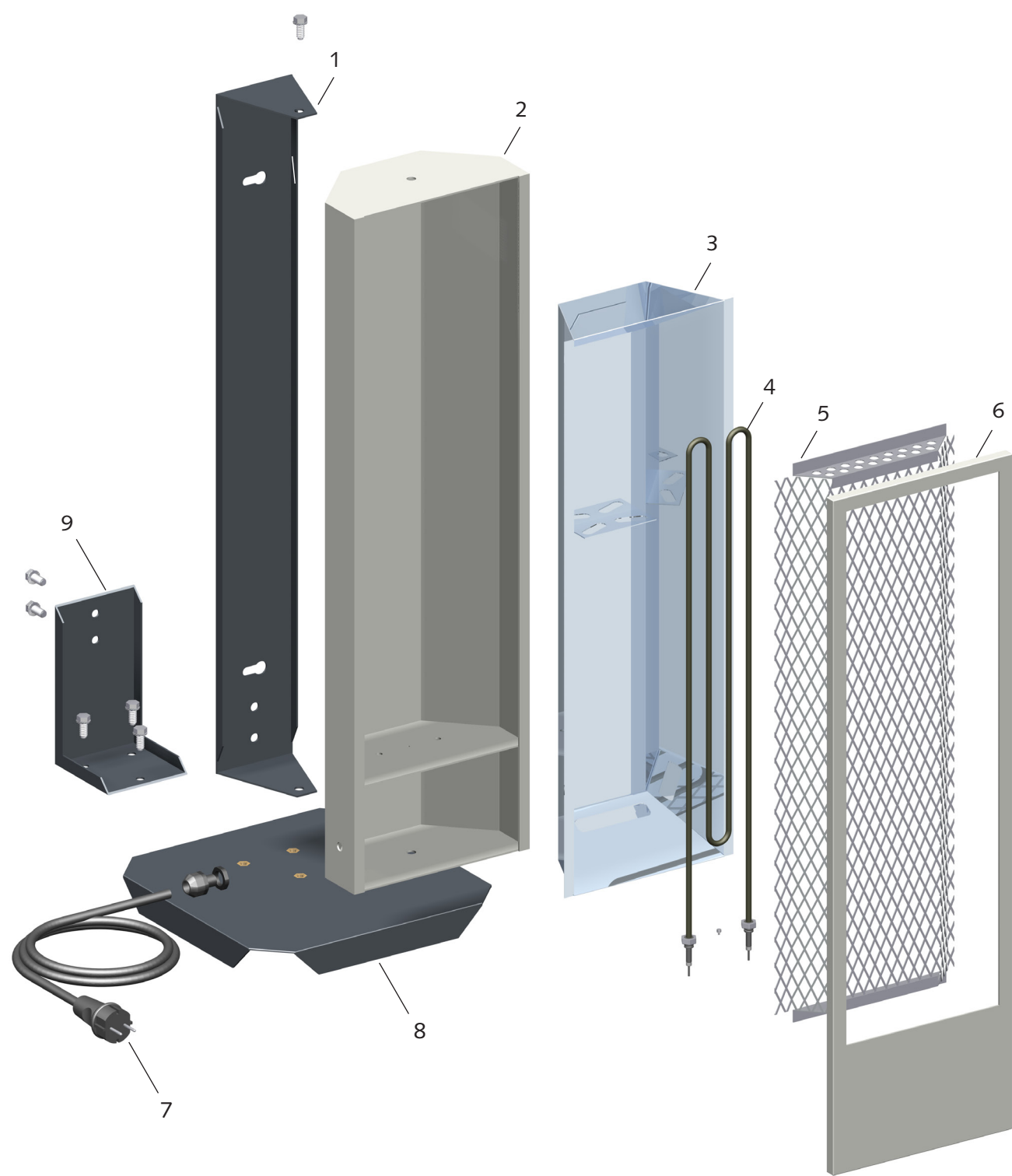


NOTE

Operation other than the types listed in this operating manual is prohibited.

With non-observance, any manufacturer liability or guarantee claims are voided.

Exploded view of the unit



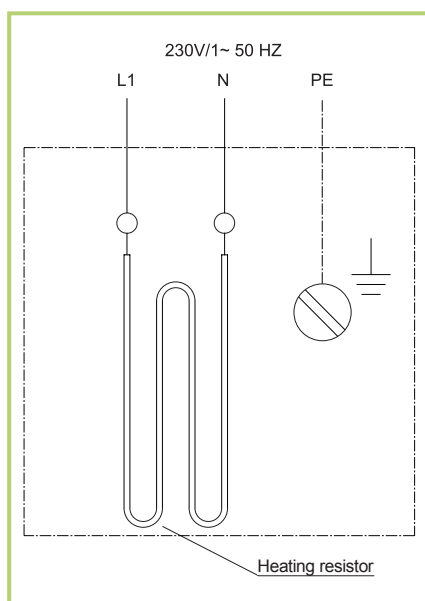
We reserve the right to modify the dimensions and design as part of the ongoing technical development process.

Spare parts list

No.	Name	EDP no.
1	Mounting bracket	1101206
2	Unit housing	1101205
3	Reflector	1101204
4	Heating resistor	1101201
5	Protection grid	1101202
6	Housing frame	1101203
7	Mains cable with plug	1103035
8	Pedestal	1101207
9	Mounting angle	1101208

When ordering spare parts, please state the EDP no., unit number and type (see name plate)!

Electrical wiring diagram



NOTE

Repair work may only be carried out by authorised qualified electricians.

Maintenance protocol



Unit type: Unit number:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Unit cleaned - outside -																				
Unit cleaned - inside -																				
Protection grid cleaned																				
All electrical cables checked																				
Safety equipment checked																				
Safety devices checked																				
Unit checked for damage																				
Electrical safety check																				
All fastening screws checked																				
Test run																				

Comments:

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1. Date: Signature	2. Date: Signature	3. Date: Signature	4. Date: Signature	5. Date: Signature
6. Date: Signature	7. Date: Signature	8. Date: Signature	9. Date: Signature	10. Date: Signature
11. Date: Signature	12. Date: Signature	13. Date: Signature	14. Date: Signature	15. Date: Signature
16. Date: Signature	17. Date: Signature	18. Date: Signature	19. Date: Signature	20. Date: Signature

Unit to be maintained only by authorised specialists in accordance with the statutory regulations.

Technical data

Series		EST
Power supply	V	230/1~
Frequency	Hz	50
Rated current	A	9.1
Protection class		I
Power consumption	kW	2.0
Electrical protection (provided by the customer)	A	16 (slow)
Dimensions	<div>Wall-mounted unit</div> <div>Standing unit</div>	
Depth	mm	195
Width	mm	770
Height	mm	225
Weight	kg	7.7
		10.0

REMKO INTERNATIONAL

*... and also right in your neighbourhood!
Take advantage of our experience and advice*



REMKO GmbH & Co. KG Klima- und Wärmetechnik

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Consulting

Thanks to intensive training, our consultants are always completely up-to-date when it comes to technical expertise. This has given us the reputation of being more than just an excellent, reliable supplier: REMKO, a partner who helps to solve problems.

Sales

REMKO offers not just a well-established sales network both nationally and internationally, but also has exceptionally highly-qualified sales specialists. REMKO employees in the field are more than just sales people: above all, they must be advisers to our customers in air conditioning and heating technology.

Customer service

Our units operate precisely and reliably. However, in the event of a malfunction REMKO customer service is quickly on the scene. Our comprehensive network of experienced dealers guarantees quick and reliable service.

