

# Installation and operating instructions for electric quartz-halogen radiant heaters

*Models with IP65 protection class*

## TERM2000® IRGLASS

type RCAG2200

*WARNING: Please read these instructions before installing the heater and follow all recommendations. This manual is an integral part of the device and should be kept in an accessible place; in the event of a change of ownership, it should be handed over to the new owner.*



*Manufacturer: TEO TERM, ul. Wiejska 2d, 05-805 Otrębusy  
tel.+48 22 822-37-82, 668-95-08, 824-23-27  
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## INSTALLATION AND OPERATING INSTRUCTIONS:

The TERM2000® IP65 infrared heater is designed for use both indoors and outdoors. Do not touch the heating element with bare hands. If the surface of the element is accidentally touched, proceed in accordance with the maintenance instructions. Grease marks left by fingers may cause premature failure of the emitter and void the warranty. All electrical connections must be carried out in accordance with applicable safety regulations for electrical installations. In case of doubt, consult qualified electrical personnel.

⚠ WARNING: Infrared heaters must be properly grounded.

### Installation of TERM2000® IP65 Infrared Heaters\*

Selecting the installation location:

The minimum installation distances of the TERM2000® heater from the floor, ceiling, and side walls depend on the type (power rating) of the device. These parameters are illustrated in the diagrams and specified in the table attached on page 4.

⚠ WARNING: Do not install infrared heaters near curtains or other flammable materials. Do not place the device directly below a wall socket. This heater is not equipped with a room temperature control device. Do not use the heater in small rooms when they are occupied by persons who are unable to leave the room on their own, unless constant supervision is provided.

### Electrical connection

TERM2000® infrared heaters are designed for a single-phase power supply: 230 V. All components are rated for operation at 230 V. The fixed installation must be equipped with a disconnecting device that ensures disconnection from the power supply on all poles (except for grounding). The minimum contact separation must be 3 mm. The method of connecting the wires to the terminal block depends on the device type and power supply used:

a) For a single-phase power supply, a three-core cable terminated with a 230 V plug is used. The socket must be located in an accessible place to allow immediate disconnection of the device.

The cable cross-sections must be selected by a qualified electrician according to the heater power and the distance from the distribution board. At the end of the product's service life, disposal of the device must be carried out in accordance with applicable regulations.

### Mounting and positioning of the infrared heater

The heating device is mounted to the wall using two brackets supplied by the manufacturer. The bracket (with two holes) should be fixed using wall plugs and screws with diameters of 6 or 8 mm and a length of 60 mm. The angle of inclination of the heater relative to the floor is set by locking the mounting-connection bracket in the desired position—typically 45°. The device housing should be positioned parallel to the wall or ceiling surface, and ensure a horizontal position of the heating element inside the heater. The power supply cable must be routed in such a way that it does not come into contact with the device housing during operation.

### Maintenance

NOTES: Before cleaning the heater:

- ensure the device is disconnected from the power supply,
- allow the heater to cool down,
- do not touch the filament with bare fingers; fingerprints cause premature filament failure,
- clean the filament with a soft cloth moistened with ethyl alcohol (pure ethanol—do not use denatured alcohol or salicylic alcohol). Other components should be cleaned by blowing off accumulated dust. Do not use abrasive or corrosive cleaning agents.

- Clean the glass panel using standard glass-cleaning products.

WARNING: Never immerse the device in water. Life hazard!

WARNING: If the power cord is damaged, immediately disconnect the device from the power supply. The damaged cord must not be replaced with a different type of cable. Contact the manufacturer for repair. If the non-detachable power supply cord is damaged, it must be replaced by the manufacturer, a service technician, or a qualified person to avoid hazards. Replacement of the heating element must also be carried out only by the manufacturer, a service technician, or a qualified person to avoid danger.

\* IP65 – degree of protection according to PN-EN 60529:2003.

The first digit (6) – complete protection against dust ingress.

The second digit (5) – protection against water jets from any direction.

Note: During the first start-up or after a long period of non-use, a smell and a slight noise may occur as a result of the device heating up.

## Residual Risk

### 1. Description of residual risk

Although the manufacturer assumes responsibility for the design and labeling of radiant heaters to eliminate hazards during operation, as well as during handling and maintenance, there are certain unavoidable risks. Residual risk arises from incorrect or improper behavior of the person operating the radiant heater. The greatest danger occurs when performing the following prohibited actions:

- Using the radiant heaters for purposes other than those described in the operating instructions.
- Operating radiant heaters with a damaged power cable.
- Checking the technical condition, or performing maintenance or repairs while the heaters are switched on.
- Allowing children or persons with disabilities who are unaware of the risks of electrical devices to handle the heater.

For the purpose of assessing residual risk, radiant heaters are considered devices that were designed and manufactured according to the best available technical knowledge at the time of production.

### 2. Assessment of residual risk

Residual risk can be eliminated when the following recommendations are followed:

- Carefully read the operating instructions.
- Do not perform any unauthorized modifications or repairs to the electrical installation.
- Only qualified personnel should carry out repairs and maintenance.
- Disconnect the device from the power supply before performing repairs or maintenance.
- Check the technical condition before using the radiant heaters and after any repairs.
- Operate the heaters only if familiar with the instructions.
- Prevent children and disabled persons from accessing the heaters.
- Do not disassemble the device unless authorized.

⚠ Note: Residual risk exists if the above recommendations and instructions are not followed.

### Operating environment

TERM2000 IP65 radiant heaters are intended for use in a temperate climate and are suitable for installation under the following environmental conditions:

- Indoors in rooms free of dust, reactive chemical gases, or explosive materials, and free of electrically conductive dust.
- Ambient temperature and humidity corresponding to a temperate climate.

The nameplate of the radiant heaters is located on the back of the device near the mounting bracket or on one of the sides of the unit.



NAMEPLATE EXAMPLE

## Transport, handling, and storage instructions

After production, TERM2000 radiant heaters are packed individually in boxes dedicated to each model. The boxes are marked with "Fragile – Glass" tape and pictograms appropriate for glass content. Each emitter inside the device is individually protected during transport with 2 or 3 polyurethane foam inserts. The front surface, with the visible filament, is protected with cardboard to prevent accidental impact.

Devices are transported using courier companies operating in the local market under standard company procedures. Radiant heaters should always be transported in their original boxes with the manufacturer's protective packaging.

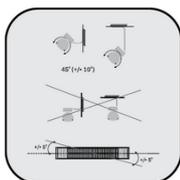
### Storage

Radiant heaters should be stored in the manufacturer's original boxes in a horizontal position. Stacking is allowed up to 8 layers. Store in dry, well-ventilated rooms at approximately 15°C.

### Pictograms and warning labels

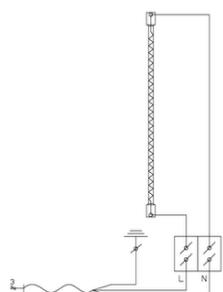
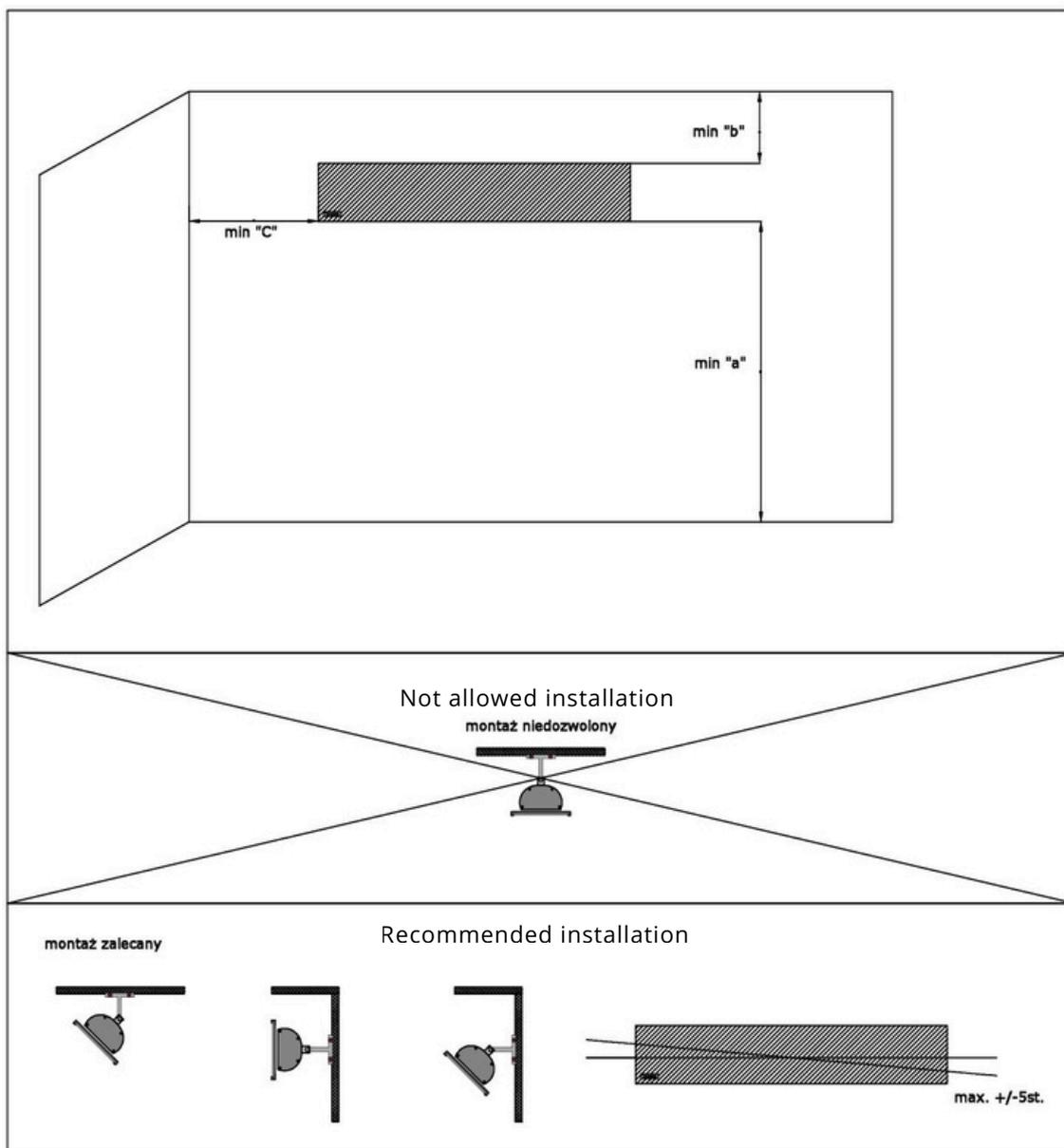
- Recommended installation and warning against incorrect installation – label located on the cardboard protecting the emitter at the front during transport.
- Orientation arrows showing "top" of the heater – label located on the back of the heater on the hanging bracket.

Note: Pictograms and labels should be kept clean and legible. If they become unreadable, they must be replaced with new ones.





Recommended installation parameters for infrared heaters			
Heater power	"a" min.	"b" min.	"c" min.
2200W	2,5m	0,5m	1,5m



PVC 3x1,5mm<sup>2</sup> unischuko plug

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## WARRANTY CARD

Infrared Heater TERM2000® type: .....

Serial number: .....

### WARRANTY CONDITIONS

1. The warranty period depends on the intended use of the heater and is calculated from the purchase date indicated on the sales document.

Radiators for industrial use, public buildings, and outdoor heating:

- used for heating: 12 months + 12 months after product registration\* (1)
- used in technological processes: 12 months\* (2)
- used in technological processes in heavy industry: 6 months (periodic cleaning required) – non-extendable
- domestic use: 24 months + 12 months after product registration\* (3)

#### \*Notes:

(1) Production plants, warehouses, shops, restaurants.

(2) Curing and drying in rooms where heaters operate in a clean atmosphere, following recommended installation conditions.

(3) Purchased by private individuals not running a business, used solely for home heating or personal wellness purposes.

2. The manufacturer provides a warranty for the above-mentioned TERM2000® heater and guarantees free repair within the warranty period.

3. Warranty repairs will be carried out within 14 days from the date the product is delivered by the customer.

4. For repairs, the user must deliver the complete heater along with the warranty card (at their own expense) to the seller (distributor) or directly to the manufacturer at the production plant: ul. Wiejska 2d, 05-805 Otrębusy, tel.: (22) 822 37 82, 668 95 08.

5. If the same component is repaired three times during the warranty period, the customer has the right to replace the product with a new one.

6. The manufacturer is not responsible for damage resulting from failure to follow the installation and operating instructions, particularly:

- Mechanical damage to the housing, reflector, or lamp filament
- Filament burn-out caused by grease, dirt, or dust
- Incorrect power connection or damage due to power surges (e.g., lightning strikes)
- Repairs performed by unauthorized personnel or service not approved by the manufacturer

7. The warranty period is extended by the time during which the buyer could not use the heater. In the case of product replacement, the warranty period restarts from the beginning. If a component is replaced, the warranty for that component starts anew.

8. Repairs may only be performed by the manufacturer or an authorized service provider indicated by the distributor/seller; otherwise, the warranty is void.

9. The general provisions of applicable regulations apply to warranty rules and procedures.



**\* You can extend the warranty by an additional 12 months for free by registering the product on the company website: [www.term2000.com.pl](http://www.term2000.com.pl)  
Registration must be completed within 30 days from the date of purchase.**