



# INSTALLATION AND OPERATING INSTRUCTIONS



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

*Models with protection class IP20*

TERM2000® ECONOS

TERM2000® ALU

*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.*

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Installation of heating radiators must be carried out only by specialized companies or individuals with the required qualifications and authorizations, in accordance with the manufacturer's installation and user manual and applicable national and European Union laws, in particular regulations resulting from ErP/Ecodesign directives. Any deviation from these requirements, including improper installation, lack of required control systems, or use inconsistent with the intended purpose, will result in: Loss of the device's compliance with Ecodesign requirements. Possible voiding of the warranty. Exclusion of manufacturer and distributor liability for consequences of using the device in the territory of the Republic of Poland and the European Union.

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

Customer Support 801 00 96 95

[www.teoterm.com.pl](http://www.teoterm.com.pl)

## INSTALLATION AND USER MANUAL

The TERM2000® ECONOS and ALU heaters are intended for use only in indoor spaces and covered outdoor areas. Do not touch the heating element (emitter) with bare hands. If the surface of the emitter is accidentally touched, follow the maintenance instructions. Finger grease left on the emitter can cause premature failure and void the warranty. All electrical connections must comply with applicable safety regulations for electrical installations. In case of doubt, consult a qualified electrical professional.

⚠ WARNING: Heaters must be earthed/grounded.

### Installing TERM2000® ECONOS and ALU Heaters

Choosing the mounting location:

- Minimum distances from the floor, ceiling, and side walls depend on the type and power of the heater.
- Parameters are shown in the diagrams and tables on pages 4 and 5.
- Do not use the heater in rooms prone to splashing, fogging, or dampness.

⚠ WARNING: Do not install the heater near curtains or other flammable materials. Do not place the device directly under a wall socket. This heater is not equipped with a room temperature control device. Do not use the heater in small rooms if occupied by people unable to leave the room independently, unless constant supervision is provided.

### Electrical Connection

TERM2000® heaters are designed for single-, two-, or three-phase power: 230V, 2N 400V, and 3N 400V.

- All components are rated for 230V operation.
- Fixed installations must include a disconnecting device that disconnects all poles (except for grounding).
- The power cable enters the connection junction via a cable gland.

Connecting wires to the terminal block depends on the heater type and power supply:

1. Single-phase power (single- or double-lamp heaters up to 3000W): Three-wire cable is applied:
  - Yellow-green (Earth) → connect to PE terminal
  - Blue (Neutral) → connect to N terminal
  - Brown (Phase) → connect to L1 terminal
  - If the heater has a 230V plug, the socket must be easily accessible for immediate disconnection.
2. Two-lamp or multi-lamp heaters powered by two phases of a three-phase supply (four-wire cable):
  - Connect the additional wire to the L2 terminal.
3. Multi-lamp heaters powered by a three-phase supply (five-wire cable):
  - Earth → connect to PE terminal
  - Neutral → connect to N terminal
  - Phase wires → connect to L1, L2, L3 terminals

Cable sizes must be chosen by a qualified electrician according to heater power and distance from the control panel.

NOTE: Connected wires must not touch the heater casing. Heaters of type "F" come with a connection box allowing power supply from a convenient side.

To avoid hazards, if the power cable is damaged, it must be replaced immediately by the manufacturer, in a specialist repair shop, or by a qualified person. At the end of the heater's life, disposal must comply with applicable regulations.

### Mounting and Positioning the Heaters

Heaters are mounted on the wall using a metal bracket (two brackets for D, J, K, L, F types) provided by the manufacturer. Long bracket arm (two holes) is attached using dowels and screws (8–12 mm diameter, 60–80 mm length depending on heater type/weight). Short bracket arm (one hole) is attached with a screw and nut to the mounting-connection bracket. Tilt angle relative to the floor is set by locking the mounting bracket in position (usually 45°). The heater casing should be parallel to the wall or ceiling, and the emitter positioned horizontally. The power cable must be routed so that it does not touch the heater casing during operation. The correct operating position is shown in the diagram on page 4.

### 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.

⚠ 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.

## 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/IP67 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 infrared heater is located on the rear of the device near the mounting bracket for single-unit heaters, or in the lower right corner for multi-emitter units.



EXAMPLE OF THE NAMEPLATE

## 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.

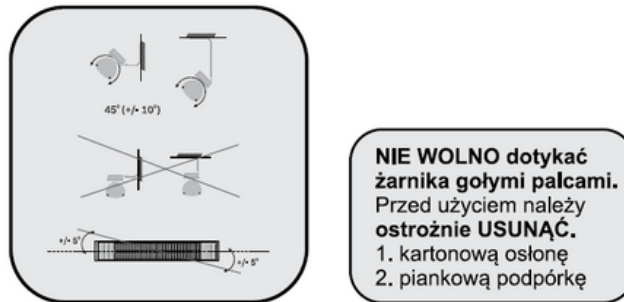
### Storage

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

### Pictograms and warning labels

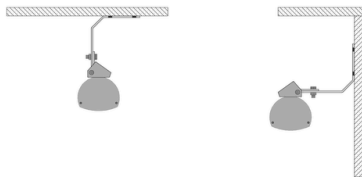
1. Recommended installation and warning against incorrect installation – label located on the cardboard protecting the emitter at the front during transport.
2. Warning: Do not touch the emitter; remove only the cardboard and foam supports – label located on the cardboard protecting the emitter at the front during transport.

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



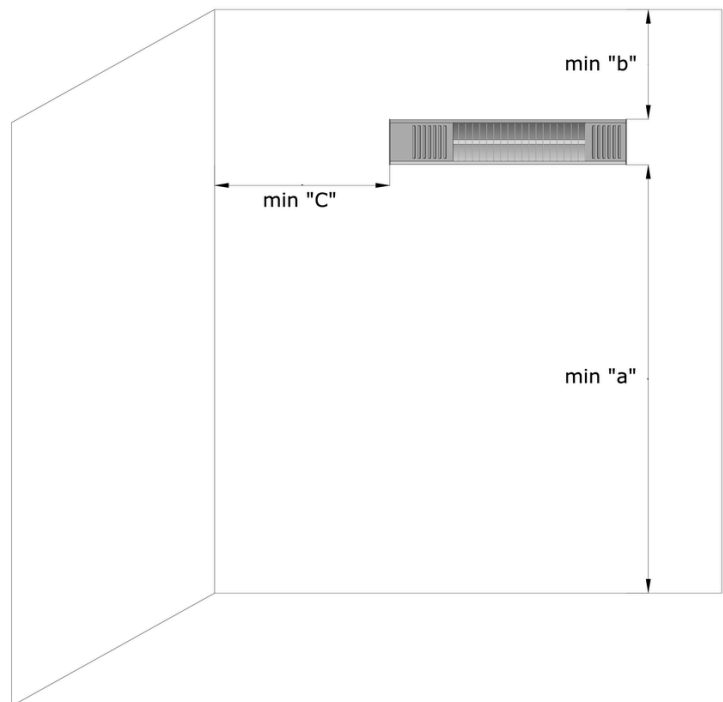
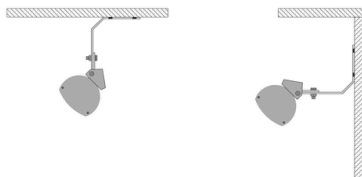
Not allowed installation












montaż niedozwolony



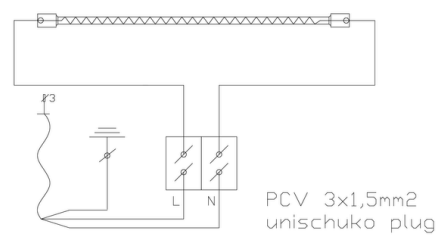
Recommended installation

montaż zalecany

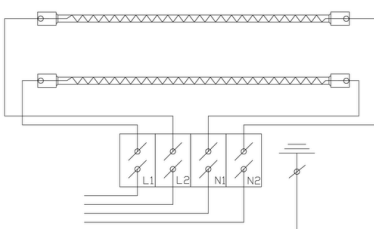


CONFIGURATION	POWER - kW	MODEL	"a" min.	"b" min.	"c" min.
	1,5	RCA015 / 015E	2,1 m	0,3 m	1,5 m
	2,0	RCA020 / 020E	2,5 m	0,3 m	1,5 m
	3,0	RCB030 / 030E	3,0 m	0,5 m	1,5 m
	4,0	RCB030 / 40E	3,2 m	0,5 m	1,5 m
	6,0	RCD060 / 60E	4,5 m	0,5 m	1,5 m
	8,0	RCD080 / 080E	5,0 m	1,0 m	1,5 m
	3,0	RCJ030 / 030E	3,0 m	0,5 m	1,5 m
	4,0	RCJ040 / 030E	3,2 m	0,5 m	1,5 m
	4,5	RCC045 / 40E	3,5 m	1,0 m	1,5 m
	6,0	RCC060 / 60E	4,5 m	1,0 m	1,5 m
	9	RCE090 / 090E	5,0 m	1,0 m	1,5 m
	12	RCE120 / 120E	6,0 m	1,0 m	2,0 m
	13,5	RCF135 / 135E	6,0 m	1,5 m	2,0 m
	18	RCF180 / 180E	7,0 m	1,5 m	2,0 m
	4,5	RCK045 / 045E	3,5 m	0,5 m	1,5 m
	6,0	RCK060 / 060E	4,5 m	0,5 m	1,5 m
	6,0	RCM060 / 060E	4,5 m	1,0 m	1,5 m
	8,0	RCM080 / 080E	5,0 m	1,0 m	1,5 m
	7,5	RCN075 / 075E	5,0 m	1,0 m	1,5 m
	10	RCN100 / 100E	5,5 m	1,5 m	1,5 m
	9,0	RCP090 / 090E	5,0 m	1,0 m	1,5 m
	12,0	RCP120 / 120E	6,0 m	1,5 m	2,0 m

RCA

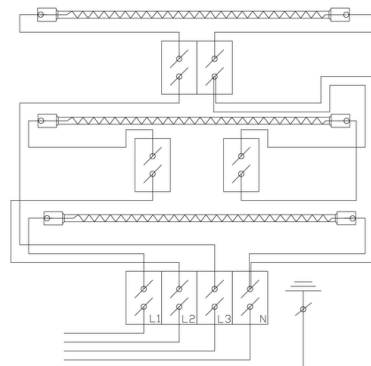


RCB

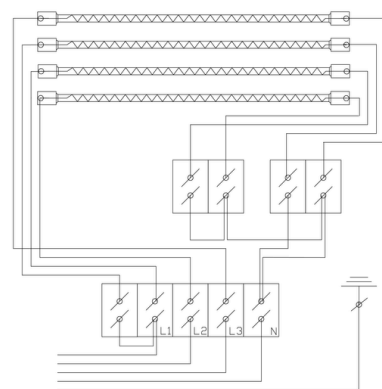


opis:  
 Emitter 1                      Emitter 2  
 L1-czarny (faza)              L2-brązowy (faza)  
 N1-niebieski (zero)          N2-szary (zero)  
 PE- żółto/zielony (przewód ochronny)

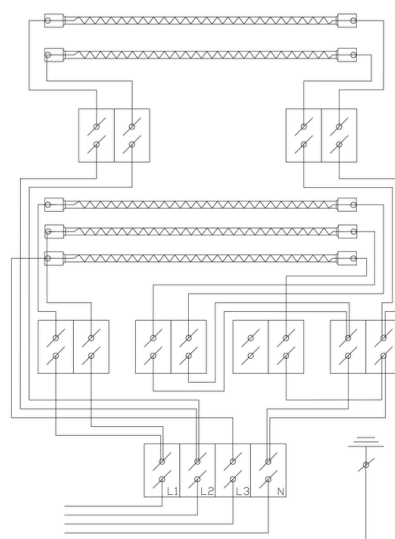
RCC



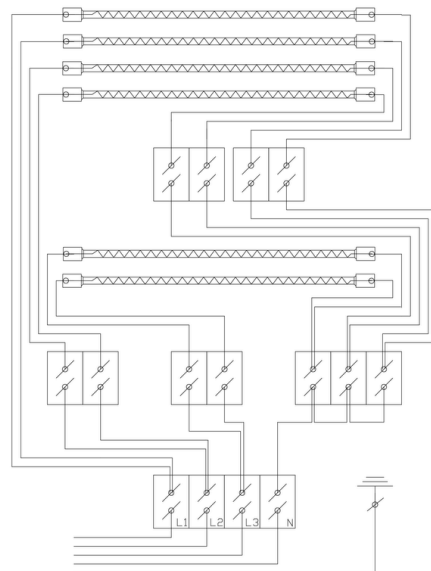
RCM



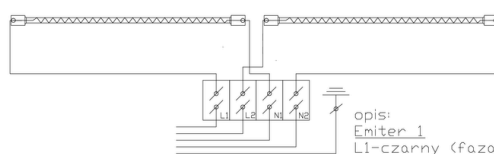
RCN



RCP

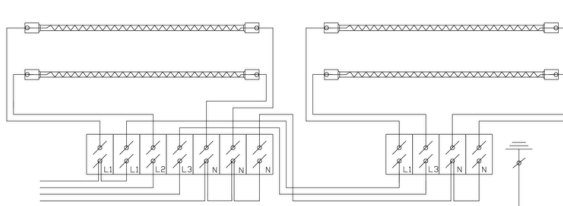


RCJ

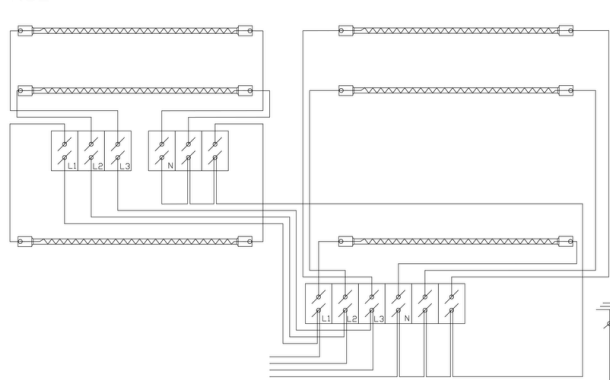


opis:  
 Emiter 1      Emiter 2  
 L1-czarny (faza)      L2-brązowy (faza)  
 N1-niebieski (zero)      N2-szary (zero)  
 PE- żółto/zielony (przewód ochronny)

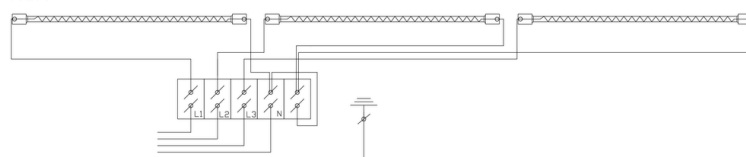
RCD



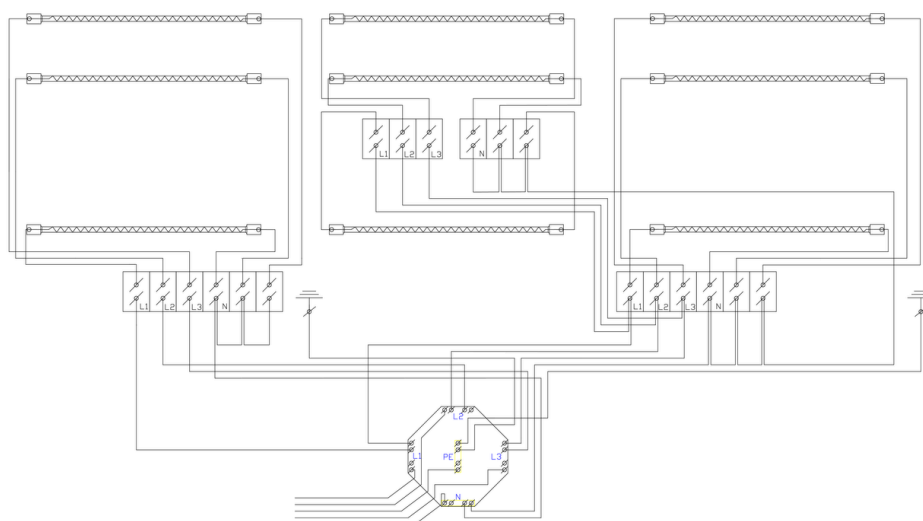
RCE



RCK



RCF



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Sales Office and Production Plant:  
ul. Wiejska 2d, 05-805 Otrębusy, tel. 822 37 82, 668 95 08  
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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.**