INSTALLATION AND OPERATING INSTRUCTIONS

Installation and operating instructions for electric quartz-halogen radiant heaters

Models with protection class IP65 and IP67

TERM2000®COLOR

types RCAC, RCACC, RCJC, RCJCC

TERM2000®PRESTIGE

types RCA ... PR, RCJ...PR, RCA...PRC

TERM2000®RAINDROP

types RCA ...VREsh

TERM2000®ALU

types RCA ...Vsh, RCB...sh, RCC...sh, RCJ...sh

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
www.teoterm.com.pl

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INSTALLATION AND OPERATING INSTRUCTIONS:

The TERM2000® IP65/IP67 radiant heater is designed for indoor and outdoor use. Do not touch the filament with bare hands. If the filament surface is accidentally touched, follow the maintenance instructions. Grease residues left by fingers may cause premature damage to the emitter and result in loss of warranty. All electrical connections must be carried out in accordance with applicable safety regulations for electrical installations. In case of doubt, consult qualified electrical service personnel.

⚠ WARNING: Radiant heaters must be grounded (earthed).

Installation of TERM2000® IP65/IP67 Radiant Heaters*

Selection of the mounting location:

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

⚠ WARNING: Do not install radiant heaters near curtains or other flammable materials.

Do not place the appliance directly below a wall socket outlet. This heater is not equipped with a room temperature control device. Do not use the heater in small rooms when occupied by persons who are unable to leave the room independently, unless constant supervision is provided.

Electrical connection

TERM2000® radiant heaters are designed for single-phase, two-phase, or three-phase power supply: 230 V, 2N 400 V, and 3N 400 V. All components are designed to operate at 230 V. The fixed installation must be equipped with a disconnecting device ensuring disconnection from the power supply on all poles (except for grounding). The minimum contact separation must be 3 mm.

Connection of conductors to the terminal block depends on the device type and the power supply used:

a) For single-phase supply (single-lamp or double-lamp radiant heaters up to 3000 W), a three-core cable terminated with a 230 V plug is used. The socket outlet must be located in an accessible place, allowing immediate disconnection of the device.

b) For two-phase and three-phase lamps, connections must be made according to the wiring diagrams provided in the product datasheets available on the manufacturer's website.

Conductor cross-sections must be selected by a licensed electrician according to the heater power and the distance from the control panel.

At the end of the device's service life, disposal must be carried out in accordance with applicable regulations.

Mounting and adjustment of the radiant heater

The heater is mounted to a wall using a metal bracket (two brackets for RCJ and RCA...PRC heaters) 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 lengths of 60–80 mm, depending on the type (weight) of the heater. The tilt angle of the heater relative to the floor is set by locking the mounting/connection bracket in a specific position—typically 45° (except for TERM2000 PRESTIGE; see the mounting diagram). The housing should be positioned parallel to the wall or ceiling surface, ensuring the filament is horizontally aligned inside the heater. The power supply cable must be routed so that it does not touch the 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.

⚠ 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.

In the radiant heater code (e.g. RCA), the first two letters are an abbreviation of Reflektor Ciepła (Radiant Heater). The third letter indicates the heater type depending on the configuration and number of emitters. The following digits specify the rated power of the radiant heater according to the rule: 150 – 1.5 kW; 200 – 2 kW; 300 – 3 kW, etc.

* IP65 or IP67 – 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; (7) – protection against the effects of temporary immersion in water (not permitted while the heater is in operation).

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/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 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.

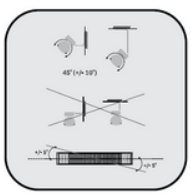
Storage

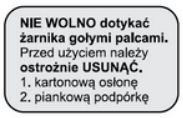
Radiant heaters should be stored in the manufacturer's original boxes in a horizontal position. Stacking is allowed up to 15 layers. Store in dry, well-ventilated rooms at approximately 15°C.

Pictograms and warning labels

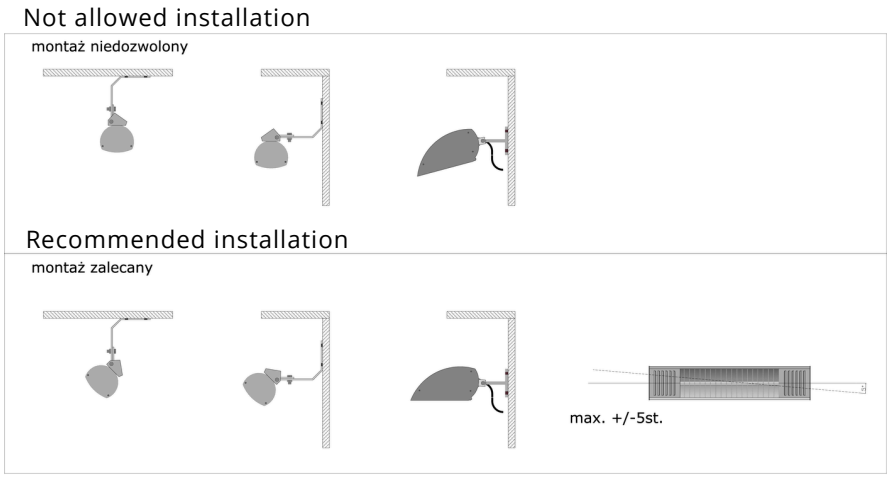
1. Recommended installation and warning against incorrect installation – label located on the cardboard protecting the emitter at the front during transport.
2. Warning: Do not touch the emitter; remove only the cardboard and foam supports – label located on the cardboard protecting the emitter at the front during transport.
3. Orientation arrows showing "top" of the heater – label located on the back of the heater on the hanging bracket.

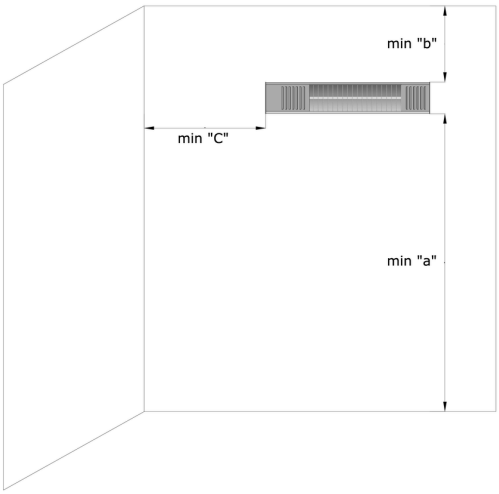
Note: Pictograms and labels should be kept clean and legible. If they become unreadable, they must be replaced with new ones.





Recommended mounting parameters for the heaters			
Heater power	"a" min.	"b" min.	"c" min.
1500W	2,1m	0,3m	1,5m
2000W	2,5m	0,5m	1,5m
3000W	3,0m	0,5m	1,5m
4000W	3,2m	1m	1,5m
6000W	4,2m	1m	1,5m





Heaters with control module RCACC, RCJCC, RCA...PRC

Heater Operation

The power module installed in the heater is designed to switch the TERM2000 COLOR or PRESTIGE heaters on/off and adjust their heating power. It is operated via an infrared remote control.

The control module is equipped with a status LED indicating the operating state of the controller:

- Green or blue LED – blinking: indicates the module is connected to power.
- Green or blue LED – steady: indicates the device is turned on and the control system is ready for operation.
- Red LED: service mode – programming.

Switching on and adjusting power

Power on and adjustment are performed using the buttons on the remote control. Depending on the number of TERM2000 devices being controlled, the heaters can be divided into two zones.

By default, all heaters are programmed as "Zone 1" devices only. To change this setting, the module must be reprogrammed. See "Programming the control module" or watch the instructional video available at www.teoterm.com.pl under FAQ/Support.

Turning on the heater

Point the remote at the corresponding TERM2000 COLOR/PRESTIGE device and press the red button on the remote – this is a universal button for all heaters (both Zone 1 and Zone 2). The LED will light up steady green or blue.

Adjusting power

- Use the "/\" or "\/" buttons for Zone 1.
- Use the "+" or "–" buttons for Zone 2.
- Each press of the button increases or decreases the heater power by 25%.

Turning off the heater

Point the remote at the corresponding device and press the "OFF" button – this is a universal button for all heaters (both Zone 1 and Zone 2). The LED will start blinking green.

NOTE: The controller has a temperature protection feature to prevent overheating. When the radiator reaches approximately 110°C, the transmitted power is automatically reduced to 25%. After the radiator cools by 10°C, the controller automatically restores the previously set power level (50%, 75%, or 100%).

WARNING! Any work involving the following actions – programming the electronic control module, changing auto-off settings, or connecting to a power thermostat – <u>may only be performed by a qualified electrician.</u>

Programming the Control Module – ZONE 2

The heater is equipped with a dedicated remote control, with "Zone 1" and "Zone 2" commands stored in its memory. The power module in the heater can be programmed for the "Zone 2" command using a special P1 button located on the printed circuit board inside the heater's side casing. In older models, P1 is located under a gray silicone cover on the front of the side module. In the newest models, P1 is located under the front cover of the side casing (COLOR) or inside a hermetic box (PRESTIGE).

<u>Accessing P1</u>

- TERM2000 COLOR: Unscrew the four Torx screws and remove the side panel. Then slide out the front cover and remove the silicone service cap (see photo).
- TERM2000 PRESTIGE: Unscrew the four Torx screws and remove the side panel. Then lower the front cover and remove the hermetic box cover.

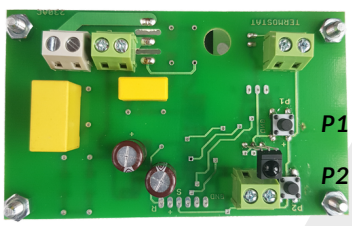
<u>Programming procedure</u>

1. Ensure the device is connected to the power supply (the LED will blink green or blue).
2. Insert the plastic service rod (provided in the kit) into the service hole.
3. Press and hold the P1 programming button for approximately 3 seconds. The LED will light red (appears orange) and the controller enters programming mode, ready to receive commands from the remote.
4. Point the remote at the IR receiver window and press the four buttons that will be used for control:
   - **Sequence:** Turn On → Turn Off → Increase Power → Decrease Power
   - The controller confirms each command by changing the brightness of the red LED.
5. After the fourth command is entered, the controller automatically switches to normal operation mode. The LED will blink green/blue.

<u>After programming</u>

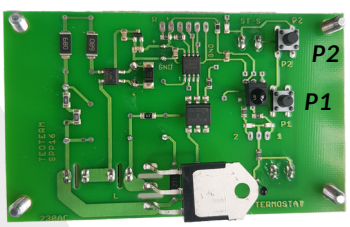
Carefully reinstall the service cap, slide the front cover back, and reattach the side panel.

WARNING: <u>When tightening screws, use a screwdriver setting of 5–6. If using a manual wrench, exercise caution to avoid stripping the threads. The gasket should be slightly compressed but not damaged.</u>



VIEW FOR PRESTIGE

MICRO SWITCH P1



VIEW FOR COLOR

Programming the Control Module – Automatic Shutdown

<u>To access the programming mode</u>: Unscrew the four Torx screws and remove the side panel. Then slide out the front cover and remove the silicone service cap (see photo below).

<u>To enter programming mode</u>: Press P1 – the red LED will light up. Press and hold P2 – the red LED will go out and then light up again. After the first blink, release P2. Press P1 to select the AUTO-OFF time. The red LED will blink. Each subsequent press of P1 changes the number of red LED blinks, allowing you to set the desired automatic shutdown time.

Number of red LED blinks corresponds to the shutdown time:

- 1 blink – no automatic shutdown
- 2 blinks – shutdown after 2 hours
- 3 blinks – shutdown after 3 hours
- 4 blinks – shutdown after 4 hours

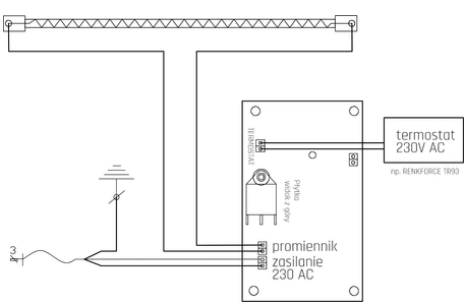
<u>Exiting the programming mode</u> occurs automatically approximately 10 seconds after the last button press.

<u>Operation with a Room Thermostat</u> (Available from serial number 138421)

When using this feature, a heater equipped with the power module operates under thermostat control.

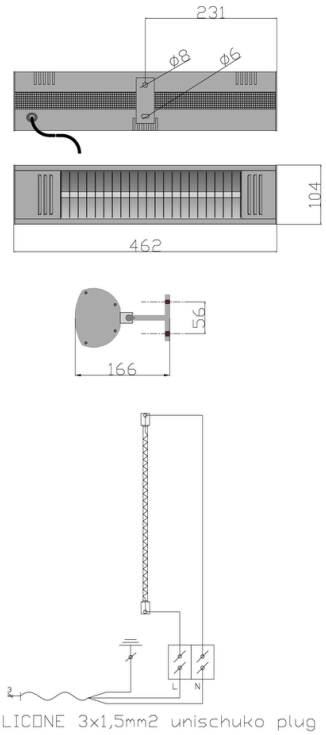
- The power module allows connection of an external thermostat operating at 230 V only.
- When the heater is connected to a thermostat and the desired room temperature is reached, the heater reduces power to 25% (or 0% for devices produced after 2021).
- When the room temperature drops again, the heater returns to the previously set power level.

To connect a thermostat to the power module, use the THERMOSTAT terminal and connect it according to the diagram below.

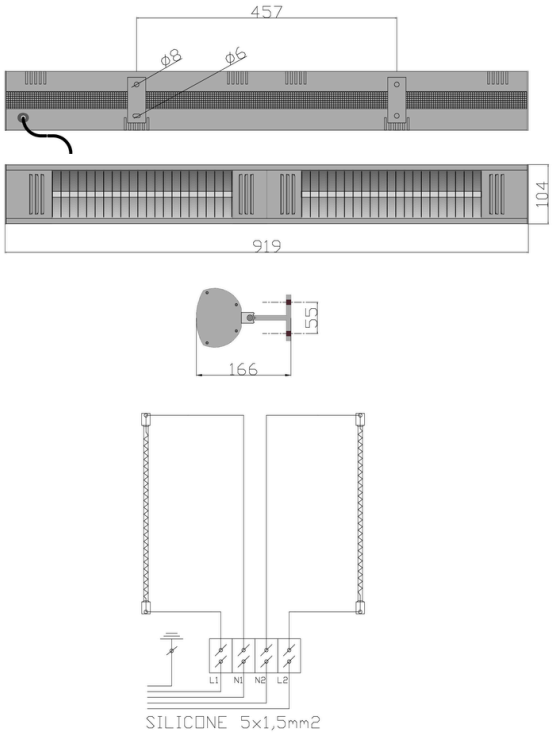


TERM2000®
WATERPROOF MODELS IP 65 / IP67

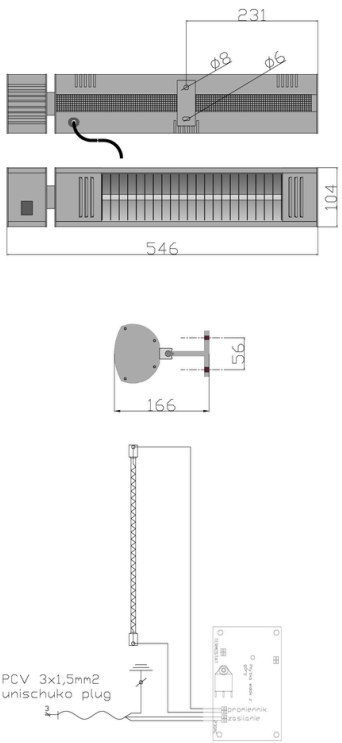
TERM2000 COLOR RCAC - IP65



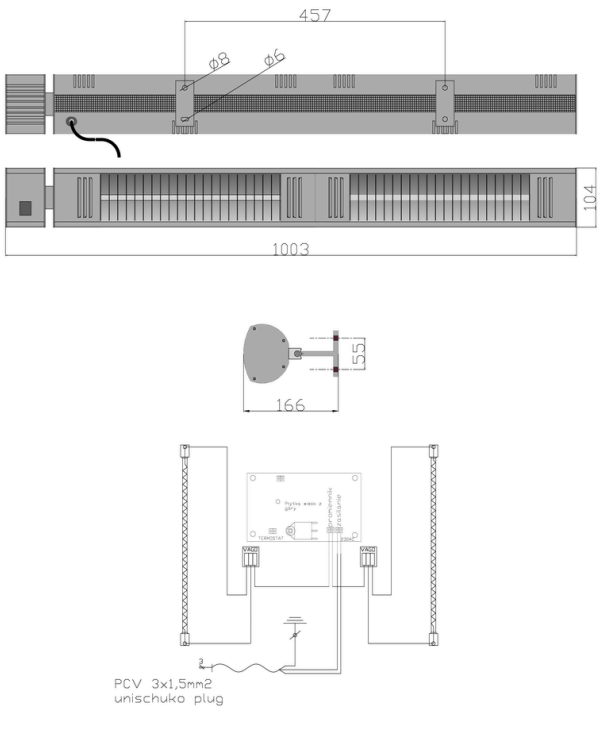
TERM2000 COLOR RCJC - IP65



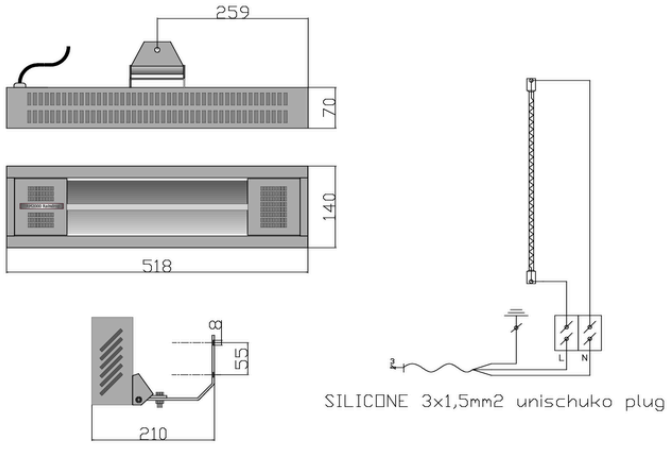
TERM2000 COLOR RCACC - IP65



TERM2000 COLOR RCJCC300V (3kW) - IP65



TERM2000 Raindrop RCA...VREsh

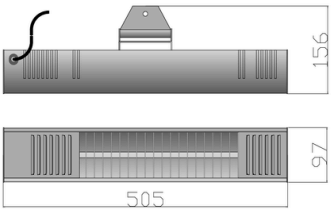


Gwarancja wysokiej jakości
Produkt polski

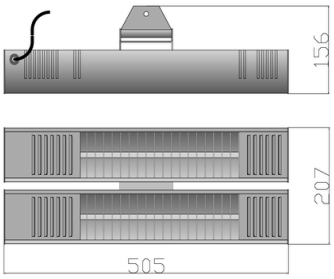
TERM2000®

WATERPROOF MODELS IP 65 / IP67

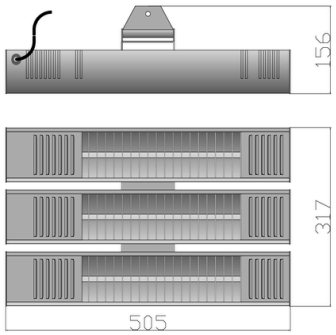
TERM2000 ALU RCA..sh. - IP67

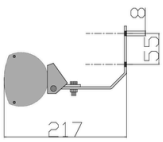


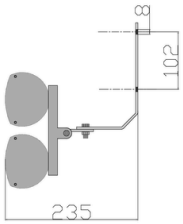
TERM2000 ALU RCB..sh - IP67

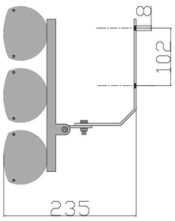


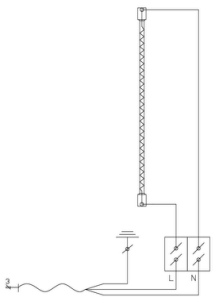
TERM2000 ALU RCC..sh - IP67



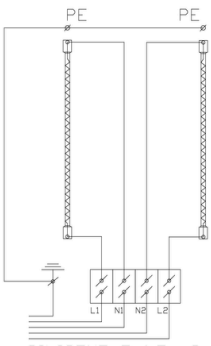




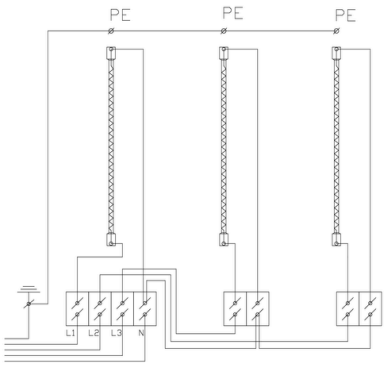




SILICONE 3x1,5mm2 unischuko plug

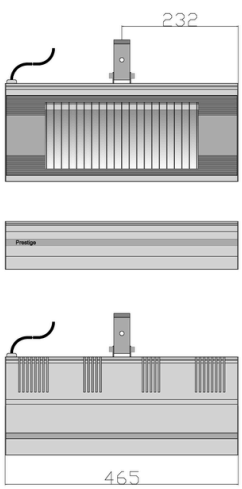


SILICONE 5x1,5mm2

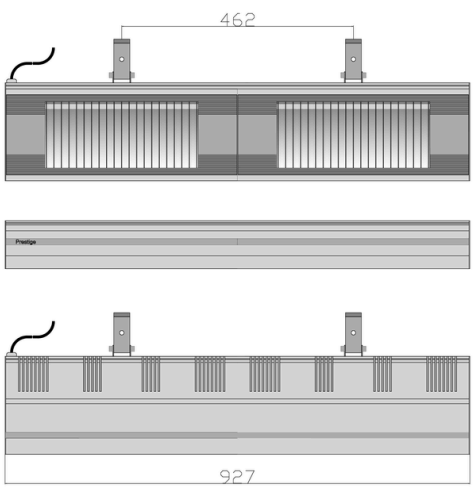


SILICONE 5x1,5mm2

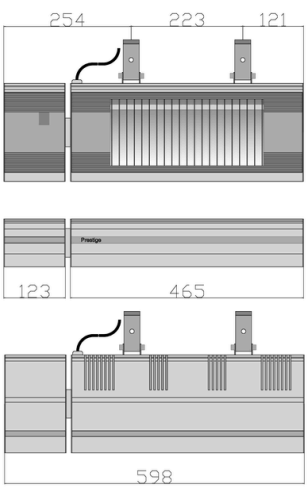
TERM2000 PRESTIGE RCA...PR

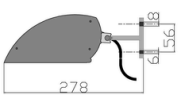


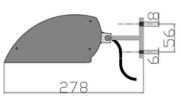
TERM2000 PRESTIGE RCJ...PR

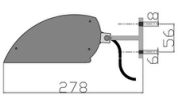


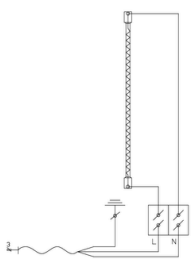
TERM2000 PRESTIGE RCA...PRC



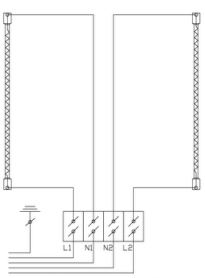




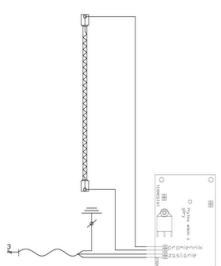




PVC 3x1,5mm2 unischuko plug



SILICONE 5x1,5mm2



PCV 3x1,5mm2 unischuko plug

Gwarancja wysokiej jakości

Produkt polski

"TEO TERM" Andrzej i Danuta Wrońscy Sp.j.
ul. Wróbla 13, 05-807 Podkowa Leśna
Sales Office and Production Plant:
ul. Wiejska 2d, 05-805 Otrębusy, tel. 822 37 82, 668 95 08
dzialhandlowy@teoterm.com.pl

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**
Registration must be completed within 30 days from the date of purchase.