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PROFACTOR[®]
DER DEUTSCHE QUALITÄTSSTANDARD

TECHNICAL DATA SHEET AND USER MANUAL



**PRODUCT
CODE**

PF TR 644

**ELECTRONIC ROOM THERMOSTAT
WITH LCD DISPLAY**

1. PURPOSE AND SCOPE

The PROFACOR® PF TR 644 electronic room thermostat with LCD display uses a state-of-the-art microcomputer integrated CMOS chip that meets international standards.

The PF TR 644 thermostat with LCD display allows control of the ambient temperature using a built-in NTC sensor. By comparing the room temperature with the set value, the thermostat can operate a valve to maintain the desired comfortable and stable temperature.

The PROFACOR® PF TR 644 thermostat is not intended for installation in damp rooms with high humidity or in aggressive environments.

2. TECHNICAL SPECIFICATIONS

Operating voltage: 230 V AC, 50/60 Hz

Power consumption: < 1.5 W

Load current: < 5 A

Temperature setting range: +10°C to +30°C

Temperature control accuracy: ±1°C

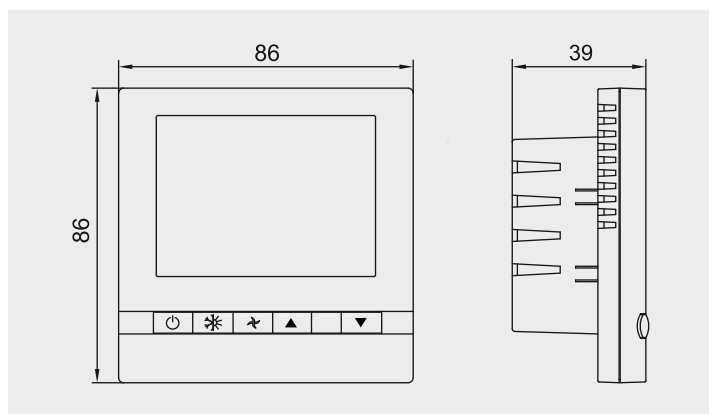
Ambient temperature: -5°C to +50°C

Time deviation: < 1%

Protection rating: IP20 (IEC 60529)

Housing material: heat-resistant, non-flammable plastic (ABS)

Digital LCD display with EL backlight



3. BUTTONS AND USER OPERATIONS



— Power On/Off



— Mode selection (MODE): Cooling (COOL), Heating (HOT)



— Fan speed (FAN): High (HI), Medium (MED), Low (LOW), Automatic (AUTO)

Manual adjustment of the fan speed (3 speeds: high, medium, low) or automatic mode. When the room temperature reaches the set value, the controlled valve closes, but the fan coil continues to operate.



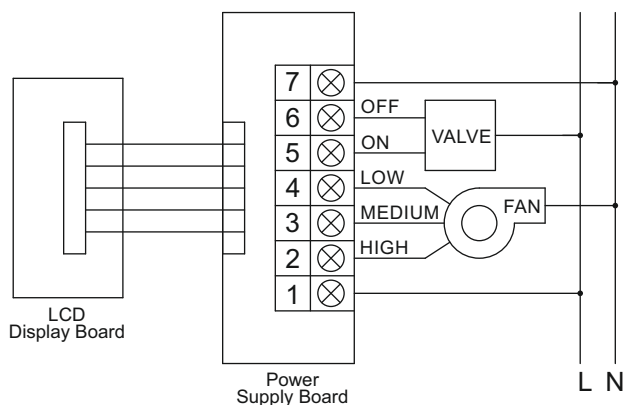
— Increase temperature or select options



— Decrease temperature or select options

Press and hold the MODE button  and the FAN button simultaneously to enter the temperature compensation mode. Set the desired temperature using the  and  buttons, then confirm automatically after 5 minutes. The maximum compensation range is -9°C to $+9^{\circ}\text{C}$.

4. ELECTRICAL CONNECTION DIAGRAM



5. INSTALLATION INSTRUCTIONS

Use a flat-head screwdriver (approximately 3.5 mm) and insert it into the slots (about 4 mm) located on the underside of the LCD display unit. Then press gently to release the LCD display unit.

Carefully disconnect the cable connecting the LCD display unit and the power supply unit. The power supply unit must be connected to the fan coil unit in accordance with the wiring diagram. Using the two screws provided, attach the thermostat power supply unit to the wall or mounting box.

Then carefully reconnect the LCD display unit to the power supply unit, avoiding damage to the cable, and assemble the thermostat housing by reinstalling the front cover.

WARNING! Installation must be carried out only by qualified personnel who have received appropriate training, in accordance with the instructions and with the power supply disconnected.

RISK OF ELECTRIC SHOCK! Disconnect the power supply before starting installation. Contact with live components may cause electric shock, resulting in serious injury or death.

6. TYPICAL MALFUNCTIONS AND TROUBLESHOOTING

Make sure that the electrical connection of the "N" and "L" lines is correct, and that the heating and cooling modes correspond to the required settings.

Typical Problems	Causes and Solutions
The thermostat does not respond when the power is on	— Check the presence of power and the correct connection of the L and N lines — Check whether the Power On/Off button is functioning properly — Check the connection lines between the LCD display unit and the power supply unit
Display Error	The back cover is deformed during installation — loosen one or both mounting screws.
Display is normal, but there is no output	The cable connecting the LCD display unit and the power supply unit is faulty.
Temperature is displayed incorrectly	Set the temperature using the buttons on the thermostat panel.

7. WARRANTY OBLIGATIONS

The warranty period is 24 months from the date of sale to the end consumer. Throughout the entire warranty period, the manufacturer guarantees the proper functioning of the product and its compliance with safety requirements, provided that the consumer follows the rules for storage, transportation, installation, operation, and maintenance of the product. The warranty covers all defects arising through the manufacturer's fault.

The warranty does not cover defects resulting from:

- Violation of storage, transportation, installation, operation, or maintenance conditions;
- Exposure to substances aggressive to the materials of the product;
- Signs of mechanical damage;
- Damage caused by fire, natural disasters, or other force majeure circumstances;
- Damage caused by improper actions of the user;
- Evidence of unauthorized interference with the product design.

The product described in this technical manual is a technically complex device that must be installed by a qualified specialist with appropriate experience working with this type of equipment.

Installation and commissioning must be carried out by an authorized and certified company.

Profactor Armaturen GmbH reserves the right to make changes to the product design that do not affect its technical characteristics or functional features.



INTERNATIONAL WARRANTY CARD

NAME OF THE PRODUCT

PRODUCT CODE, SIZE

QUANTITY

SELLER NAME AND ADDRESS

DATE OF PURCHASE

SELLER STAMP

SELLER SIGNATURE

For the warranty term refer to the Warranty obligation clause in the technical manual

FOLD LINE

FOLD LINE

In case of any claims to the product quality the following documents should be submitted:

1. Application with customer and product details:

- Name of the customer, actual address and phone number
- Article of the product
- Reason for the claim and photo
- Plumbing system where installed (name, address, phone number)

2. Invoice copy and receipt

3. Warranty card

RETURN/EXCHANGE COMMENTS

DATE

SIGNATURE



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