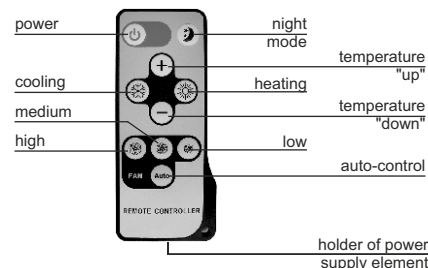


ROOM THERMOSTAT MLC E2 MLCD E2 (with remote controller)



If no button is pressed during 20 seconds, room thermostat will switch off.
 Menu item 1: Accuracy of maintaining temperature. On the display, the text "Temp adjust" will appear. The default value is 0; it is blinking in configuration menu. Any value from "-3" to "+3" may be selected. You may set on the display the temperature of the premise of up to 3 degrees higher or lower than the set value.
 Menu item 2: Entering upper limit of temperature setting. On the display, 37 0C is represented, that is default value of upper limit, set by the manufacturer. Using "+" and "-" button, the upper limit may be set in the range from 26 0Ñ to 37 0C.
 Menu item 3: Entering lower limit of temperature setting. On the display, 5 0C is represented, that is default value of lower limit, set by the manufacturer. Using "+" and "-" button, the lower limit may be set in the range from 5 0Ñ to 26 0C.
 Menu item 4: Control of fan. On the display, "ON" is represented, that is default value, set by the manufacturer. Using "+" and "-" button, "ON" or "OFF" may be selected. If "ON" is selected, room thermostat will switch the fan to the set speed and will not stop it until mode selection button or fan speed selection button is pressed. When "OFF" is selected, if, during heating, set temperature is lower than room temperature, or, during cooling, set temperature is higher than room temperature, room thermostat will stop the fan and will stay in this mode until mode selection button is pressed.

REMOTE CONTROL



REMOTE CONTROLLER

For control of operation of room thermostat with the help of remoter controller, point the remote controller to the front panel of room thermostat from the distance of not more than 4 m.
 In the course of long-term operation, discharge of power supply element is possible. In this case, replacement of power supply element is required. To do this, pull out holder of the element from the bottom part of remote controller and replace power supply element, observing polarity.

STORAGE RULES

It is necessary to store room thermostat in manufacturer's package in the ventilated premise at temperature from +5°C to +40°C and relative air humidity of not more than 80 % (at T = 25°C).

MANUFACTURER'S WARRANTY

The manufacturer guarantees normal operation of room thermostat during 12 months from the date of sale through retail trade network, in case of observance of transportation, storage, assembling and operation rules. The warranty does not cover the goods with signs of mechanical damages. If note about date of sale is absent, warranty period is started from the date of production. If any failures in operation of room thermostat through manufacturer's fault are detected during the warranty period, the consumer has a right to replace room thermostat at the manufacturer. Replacements are offered by the Seller.

We hereby declare that the following product complies with the essential protection requirements of Electromagnetic Council Directive 2004/108/EC, 89/336/EEC and Low Voltage Directive 2006/95/EC, 73/23/EEC and CE-marking Directive 93/68/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

This certificate is issued following test carried out on samples of the product referred to above. Assessment of compliance of the product with the requirements relating to electromagnetic compatibility was based on the following standards.

ACCEPTANCE CERTIFICATE

Room thermostat of speed is accepted as ready for operation

| | | |
|--|--------------------|---|
| Model MLC E2 | Date of production | Sold (name of trade enterprise, stamp of the shop) |
| MLCD E2 (with the remote controller) | Acceptance stamp | Date of sale |

B21EN-03

DESTINATION

Room thermostat is intended for air heating or cooling with the help of control SPST or SPDT mixers with electrical servo drive, control of 3-speed fan.

BASIC TECHNICAL SPECIFICATIONS

- Power supply: 230 V AC, 50/60 Hz
- Output capacity for contacts 2, 3, 4: not more than 2.0 A
- Output capacity for contacts 5, 6: not more than 0.1 A
- Temperature setting range: +5°C - +37°C
- Overall dimensions: 86x86x15 mm
- Illuminated LC display
- Temperature setting is carried out simply by pressing buttons with "up" and "down" arrows
- On the display, setting temperature and temperature in the premise are displayed simultaneously
- Maintaining temperature to within 1 set degree
- Automatic switching of 3-speed fan
- Saving of user settings after switching off power supply
- Availability of remote controller (model RTSD-1-400)

DESCRIPTION OF DESIGN

- Front panel (Fig.1)
- Display 1
- "power" button 2
- mode selection button (HEATING, COOLING) 3
- fan speed selection button (HIGH, MEDIUM, LOW, AUTO) 4
- "night" mode selection button 5
- increase of set value of temperature 6
- decrease of set value of temperature 7
- IR receiver 8 (for model RTSD-1-400)

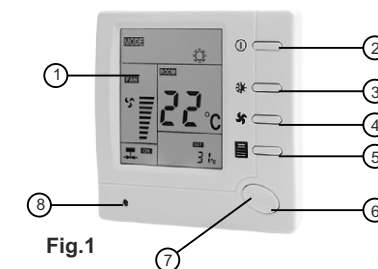


Fig.1

Display (Fig.2)

- shows that room thermostat is switched to "night" mode 9
- shows that room thermostat is switched to cooling mode 10
- shows temperature in the premise or set temperature 11
- shows set temperature or temperature in the premise 12
- shows whether valve with drive is switched or not 13
- shows selection of fan speed 14
- shows that room thermostat is working in heating mode 15

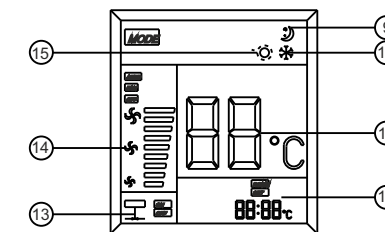


Fig.2

COMPLETE SET

- The delivery set includes:
- room thermostat 1
- remote controller 1 (only for model RTSD-1-400)
- certificate

INSTALLATION OF ROOM THERMOSTAT

ATTENTION! THERE IS A HAZARD OF ELECTRIC INJURY!

Prior to dismantling or installation of existing room thermostat, de-energize wiring being connected

IMPORTANT:

Installation of terminal box in the premise must comply with local and national building norms and regulations. Connection to supply network must be carried out via switch with gap between open contacts of not less than 3 mm for all poles, built in fixed wiring.

Activities on installation of room thermostat must be carried out by qualified specialist that have appropriate admission.

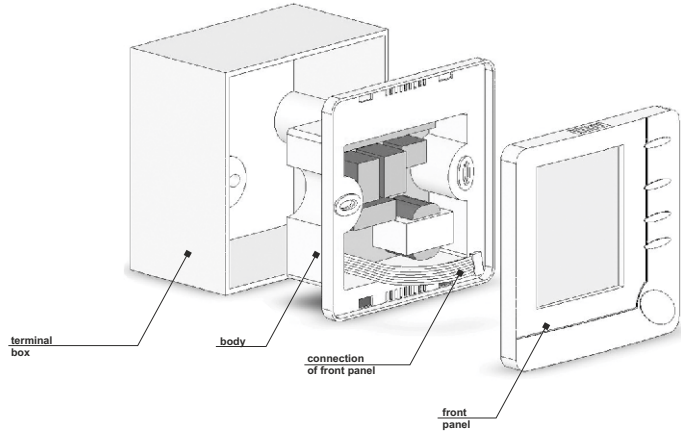
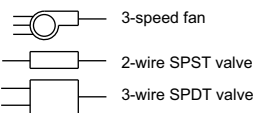
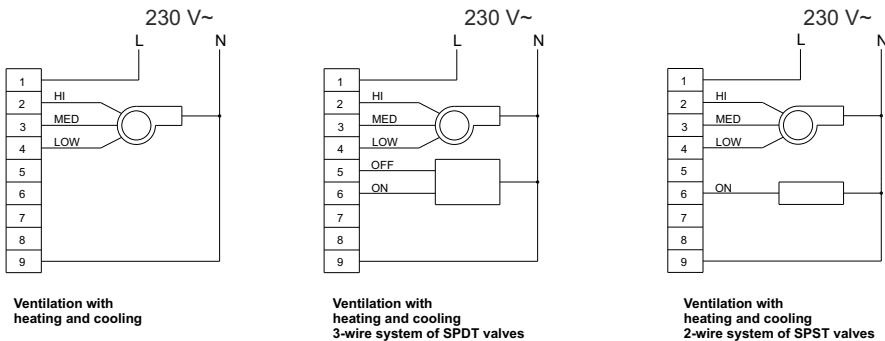


Fig.3

1. Fix terminal box to the wall
2. Remove packaging material from room thermostat. Carefully disengage front control panel from the body. Excessive effort may lead to damage of room thermostat.
3. Connect wires to the terminals of room thermostat according to the connection layout.
4. Put the body into 86x86 mm terminal box.
5. With the help of two assembling screws, attach the body of room thermostat to the terminal box.
6. With the help of level, adjust position of body of room thermostat, then tighten fixing screws (leveling effects only the appearance and has no influence on operation of room thermostat).
7. Mount front panel on the body of room thermostat, pressing it until the click.

CONNECTION LAYOUT



OPERATION OF ROOM THERMOSTAT

Switch on the room thermostat, pressing "power" button (2).

Press fan speed selection button. On the display, one of the characters (14 in Fig.2) will appear or AUTO. This means that fan will rotate at HI (high), MED (medium), or LOW (low) speed or in AUTO (automatic mode). If AUTO mode is selected, fan rotation speed will change, depending on difference between actual temperature in premise and set temperature. If temperature in the premise is by more than 3 degrees higher than set temperature during cooling and by more than 3 degrees lower than set temperature during heating, fan will operate at the highest speed. If temperature in the premise is by 2-3 degrees higher than set temperature during cooling and by 2-3 degrees lower than set temperature during heating, fan will operate at medium speed. If temperature in the premise is by 0-1 degrees higher than set temperature during cooling and by 0-2 degrees lower than set temperature during heating, fan will operate at low speed.

Operation of heating system

Using mode selection button, select heating mode (15 in Fig.2).

Press "+" to increase the value of set temperature. If temperature in the premise is lower than set temperature, the heating system will start operation.

Press "-" to decrease the value of set temperature. If temperature in the premise is higher than set temperature, the heating system will stop operation.

Operation of cooling system

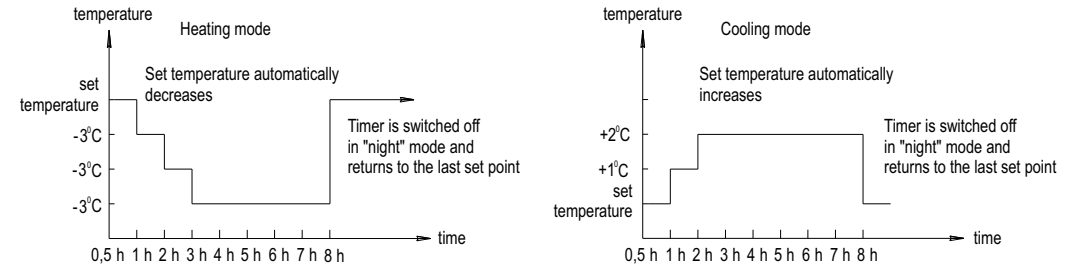
Using mode selection button, select cooling mode (10 in Fig.2).

Press "-" to decrease the value of set temperature. If temperature in the premise is higher than set temperature, the heating system will start operation.

Press "+" to increase the value of set temperature. If temperature in the premise is lower than set temperature, the heating system will stop operation.

Operation of "night" mode

Press "night" mode selection button (5 in Fig.1). Symbol of "night" mode (9 in Fig.2) will appear. This mode will active during 8 hours, at that, room thermostat will control heating or cooling according to the chart (see below). Press "night" mode selection button once more, appropriate symbol will disappear; this means cancellation of "night" mode operation.



PECULIARITIES OF FUNCTIONING OF NIGHT MODE

Room thermostat is set to cooling mode: For smooth change of temperature, an hour after setting "night" mode, set temperature automatically increases by 1 degree, in two hours by two degrees; then, the temperature will be maintained at this level during 8 hours until timer is switched off. After switching off timer, set point will be automatically returned to initial value.

Room thermostat is set to heating mode: For more smooth change of temperature, half an hour after setting "night" mode, set temperature automatically decreases by 1 degree, in two hours by two degrees; then, the temperature will be maintained at this level during 8 hours until timer is switched off. After switching off timer, set point will be automatically returned to initial value.

ADJUSTMENT OF CONTROL MODES

Adjustment of control modes allows setting certain performance characteristics of room thermostat according to your requirements.

Switch off room thermostat, pressing "power" button, then press and hold "night" mode selection button (5, Fig.1) at least 4 seconds until the display switches on. This means that you have entered the first menu option of setting mode. There are 4 menu options, that is represented on the display. Selection of appropriate menu option is made by pressing (5) button. In each menu option, press "+" or "-" button to change settings. To quit the menu and return to normal operation mode, switch off room thermostat, pressing "power" button and, then, switch it on again.