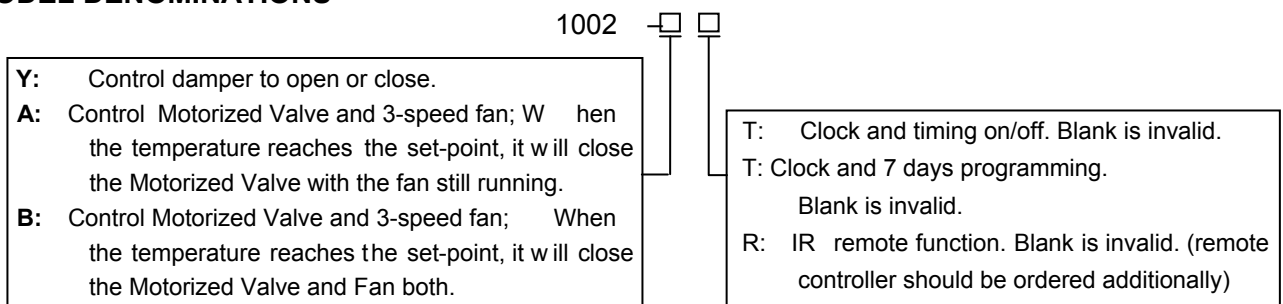# DELPHI

MR1002 Series Thermostat User Manual

MR1002 Series thermostats are available for individual room temperature control in residential, industrial and bus iness premises. Models are available for heating, cooling, ventilating control.

MR1002 adopts digital control technology with large LCD display , It shows the following items: working states (cool, heat or ventilation), the speed of fan coil, room temperat ure, set-point temperature. There are following keys on the panel: On/Off "⏻", Exchange mode (cool, heat or ventilation) "M", Timer "☺", Select fan speed (high, medium, low or auto) " ☇ ", set-point temperature "▲" and "▼".

MODEL DENOMINATIONS

1002 – □ □

Y: Control damper to open or close.
A: Control Motorized Valve and 3-speed fan; W hen the temperature reaches the set-point, it w ill close the Motorized Valve with the fan still running.
B: Control Motorized Valve and 3-speed fan; When the temperature reaches t he set-point, it w ill close the Motorized Valve and Fan both.

T: Clock and timing on/off. Blank is invalid.
T: Clock and 7 days programming.
　　Blank is invalid.
R: IR remote function. Blank is invalid. (remote controller should be ordered additionally)

BASIC FEATURES

★ Room temperature setting

★ Manual or Auto 3-speed changeover

★ Defrost (low temperature protection)

★ Clock (-T,-T74)

★ 7 days programmable (-T74)

★ IR control (-R)

★ Blue backlight (-L)

STATUS DISPLAY

★ Working Status: Cool ❄, Heat ✳, Ventilation ⟳

★ Fan Speeds: Low ☇, Medium ☇, High ☇ and Auto ⟳

★ Room temperature display

★ Temperature setting

★ Clock

★ Week

SPECIFICATIONS

Sensing element:　　NT C

Accuracy :　　　　　±0.5

Set-point range:　5　to 35

Operating Temperature: 0~45

Operating Humidity: 5~ 90%RH (non-condensing)

Power supply:　　AC85　260V　50/60Hz

Switch current rating: 2(1)A

Power Consumption: < 2W

Wirings: Screw-in terminals, each terminal capable of accepting 2 x 1.5 mm^2 or 1 x2.5 mm^2 wires

Housing: ABS Flame Retardant

Dimensions: 86 × 86 × 13 mm

Hole pitch: 60mm

Protection Class: IP30

Display:　　　　LCD

OPERATION

☞ On/Off: Press "⏻" to turn on, press "⏻" again to turn off thermostat and its output.

☞ Setting temperature: Press "▼" to reduce set-point, press "▲" to raise set-point.

☞ Mode Selection: Press "M" to change sy stem working in cooling " ❄ ", heating "✳" or ventilation "⟳" mode, the related icon will flash, and it will be confirmed automatically after 5 seconds. The ventilation function is invalid for 1002Y.

☞ Fan Speed Selection (1002DA/DB): Press "☇" to change fan speed among " ☇ (Hi)", " ☇ (Med)", "☇ (Low)" or "⟳ (Auto)".

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Under auto fan speed " ⟳ ", the fan-speed will be changed automatically. Auto LOW-speed When the difference between room temperature and set-point exceed 1 , Auto MED-speed When exceed 2 , Auto HI-speed When exceed 3 .

Under manual fan speed: Press " ⚘ " button can select the fan speed as your required. And ⚘ (Hi), ⚘ (Med) or ⚘ (Low) symbols will be displayed.

☞ Control Damper (1002Y): The damper will be open when (1) room temperature is higher than 1 set-point in cooling; (2) room temperature is lower than 1 set-point in heating, Otherwise the damper will be closed.

☞ Control Motorized Valve (1002DA/DB): If the difference between room temperature and set-point exceed 1 , FCU Valve will be open; If room temperature and set-point are equal, 1002DA will close the FCU valve with the fan still running, 1002DB will close the FCU valve and Fan both.

Setting Clock (-T, -T74) :

☞ Clock Adjustment: Press " ⊕ " till "mm" in "hh:mm" flashes and then press " ▲ " or " ▼ " to adjust Minutes; press " ⊕ " till "hh" in "hh:mm" flashes, then press " ▲ " or " ▼ " to adjust Hours;

☞ Week Adjustment: Press " ⊕ " till "Week" flashes and then press " ▲ " or " ▼ " to adjust week;

Setting the Timer On and Timer Off (-T) :

☞ Set sleep Function: Press " ⊕ " till to " ☾ " flash To confirm, press " ▲ " button To cancel, press " ▼ "

☞ Timing ON Setting: Press " ⊕ " till " ⊕ " and "TIMER ON" flash together with "mm" in "hh:mm" flashing, then press " ▲ " or " ▼ " to adjust Minutes; press " ⊕ " till "hh" in "hh:mm" flashes, press " ▲ " or " ▼ " to adjust Hours;

☞ Timing OFF Setting: Press " ⊕ " till " ⊕ " and "TIMER OFF" flash together with "mm" in "hh:mm" flashing, press " ▲ " or " ▼ " to adjust Minutes; press " ⊕ " till "hh" in "hh:mm" flashes, then press " ▲ " or " ▼ " to adjust Hours;

☞ Timing ON Cancellation: Press " ⊕ " till " ⊕ " and "TIMER ON" flash together with "mm" in "hh:mm" flashing, then press " ▲ " or " ▼ " to adjust Minutes to "00"; press " ⊕ " till "hh" in "hh:mm" flashes, then press " ▲ " or " ▼ " to adjust Hours to "00";

☞ Timing OFF Cancellation: Press " ⊕ " till " ⊕ " and "TIMER OFF" flash together with "mm" in "hh:mm" flashing, then press " ▲ " or " ▼ " to adjust Minutes to "00"; press " ⊕ " till "hh" in "hh:mm" flashes, then press " ▲ " or " ▼ " to adjust Hours to "00".

Setting the program(-T74):

☞ Press " ⊕ " for 3 seconds, the number 1 and "Mo Tu We Th Fr" are displayed. This indicates that you are able to program switching time 1 for the week-day.

☞ Use Up/Down buttons to set the required start time. Press " ⊕ " to accept this setting.

☞ Use Up/Down button to set the required temp. Press " ⊕ " to accept this setting.

☞ Repeat for switching times 2-4 week-day.

☞ After you have programmed times 1-4 for the weekday, you are now able to set the switching times for weekend "Sa Su" will be displayed.

☞ Use Up/Down buttons to set the required start time. Press " ⊕ " to accept this setting.

☞ Use the Up/Down button to set the required temp. Press " ⊕ " to accept this setting.

☞ Repeat for switching times 2-4 for the week-end.

Low temperature protection mode:

☞ Low temperature protection: When you enable this function, and the thermostat is off, and the RT is lower than 5 , thermostat will be on automatically and in heat mode, when the temperature is back to 7 , thermostat will be off automatically.
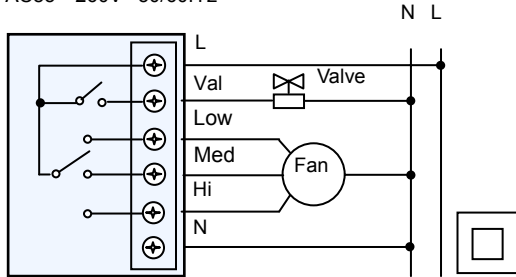
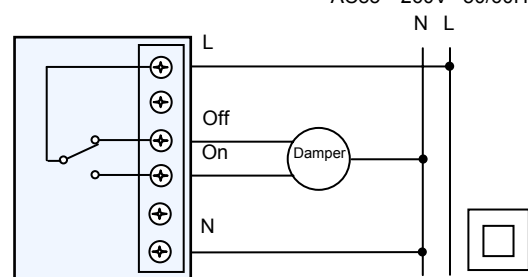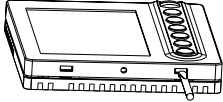☞ Set low temperature protection: Turn off the thermostat press " Ⓜ " and hold for 3 seconds, it will display parameter "00" or "01" adjust the parameter by using " ▲ " or " ▼ ". "00" means disable low temperature protection, "01" means enable low temperature protection, Factory default is "00".
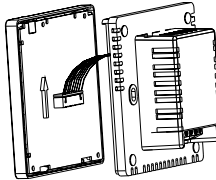
Press " ⊕ " to quit this function.

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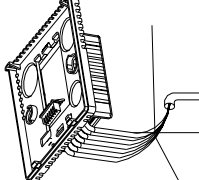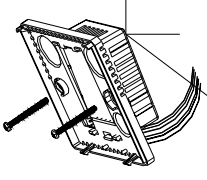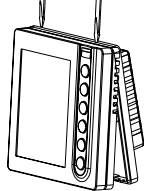
WIRING DIAGRAMS

AC85 260V 50/60Hz

AC85 260V 50/60Hz

INSTALLATION

1. Open the main control panel: put the screwdriver (3.5mm) into the block 4mm along the bevel. Prize up, open the clips.	2. Take off the wires.	3. As per wiring diagram, connect it with terminals, fixed by the screwdriver.	4. Put the connected thermostat onto the back panel in the wall, then fix it with the two screws in the packing box.	5. Put the cover with 30 degree angle, then fix the up two clips; 6. Push the places of the two down clips, fix the cover, and finish the installation.

Attention: wiring work should be done according to wiring diagram. Water,mud et c. impurity should be kept outside of thermostat, or electric element will be damaged!