



ROOM CONTROLLERS WITH AUTOMATIC SPEED AND SEASON CHANGEOVER, ON-OFF

DB-TA-387-10A

FUNCTION

2- 4-pipe and 3-speed fan coil control with room temperature regulation by:

- min/comfort/max regulation knob;
- automatic season changeover, based on water supply temperature for 2-pipe systems or based on room temperature for 4-pipe systems;

- automatic variation of 3-speed fan based on room temperature and the setpoint;
- "manual" operating which drives the fan at low or medium speed;
- air mixing cycle (activation of fan every 10 minutes);
- internal or remote sensor (optional).

TYPE	SYSTEM (PIPE)	ON/OFF	I/II/AUTO	W/S	3 SPEED
DB-TA-387-10A	2/4	•	•	auto	auto

auto working season selection (W/S) by water sensor for 2-pipe systems
working season selection (W/S) by air sensor for 4-pipe systems

Note: The controllers are supplied with water sensor model: NTA020-027P.

On request:
optional remote 2 m cable sensor, selectable by jumper; ordering code: NT0220-NTC10-02.

TECHNICAL DATA

Power supply: 230 Vac \pm 10%, 50/60 Hz
Max load: 6 A for motor output and valves or electric heater relay
Output: 5 relays 8 A 230 Vac
Power cons.: 1 W
Sensors: NTC 10K, air sensor and water sensor
Setpoint: +12...+28 °C
mechanical limitation of the setpoint adjustment

Differential between 1st and 3rd speed: 0.4 K
Working: 0...+40 °C
10...90% r.h. (without condensing)
-20...+70 °C
< 95 % r.h.

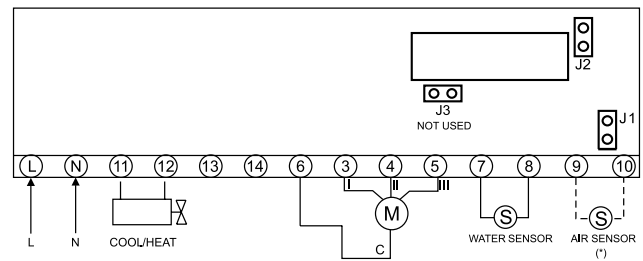
Storage:

Housing: ABS fireproof according to UL94 V-0 color (RAL 9010)
Protection: IP30, class II
Size: 144 x 82 x 34 mm
Weight: 210 g

WIRING DIAGRAM

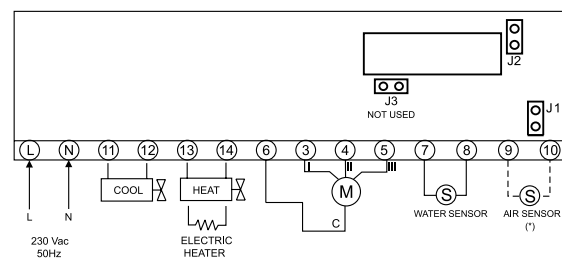
Connections for heating and cooling plants:

2-pipe systems



(*) remote sensor (optional)

4-pipe systems



(*) remote sensor (optional)

Jumper setting:

- J1 closed = internal sensor
- J1 open = remote sensor
- J2 closed = 4-pipe systems
- J2 open = 2-pipe systems
- J3 = not used

Units are supplied with internal sensor and 4-pipe system setting.

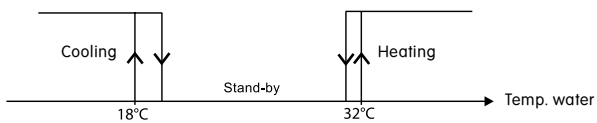


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The water sensor can be used as automatic season changeover in 2-pipe systems or as minimum thermostat for 4-pipe systems. For 2-pipe systems the working season can be selected by sensing the temperature of water delivered to the fan at the

2-pipe system: changeover selection

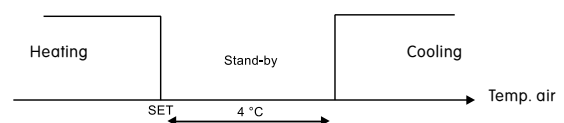


inlet of the valve.

When the unit is powered on if the water temperature is on the range 18...32°C, the thermostat is on stand-by mode the valve is closed and the fan is off.

In heating, the ventilation is delayed 45 seconds from the valve opening instant to avoid to send cold air on the room.

4-pipe systems: operating mode



In heating mode the fan can be on only if the water sensor temperature inside the battery is upper than 32°C. Otherwise if the temperature is lower than 30°C the ventilation is off.

On cooling mode the fan is off after a delay has elapsed from the moment the valve is closed.