## FUNCTION

3-point valve control on 4-pipe fan coil for room temperature applications with:

- knob adjustment min/comfort/max;
- 2 outputs for each valve (opening and closing);
- proportional band adjustable by jumper;
- fixed dead zone (ZN);
- 3 motor speeds and thermostatic fan/ continuous fan/off manual selection;
- internal or remote temperature sensor (optional);
- setting of the system response time;
- setting of valve stroke time (selectable by jumper): 60, 90, 120 or 180 s .

| TYPE | VT/VC/OFF | 3-SPEED | LOCAL S/W |
| :---: | :---: | :---: | :---: |
| DB-TA-347-439 | $\bullet$ | $\bullet$ | zn |

zn dead zone
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 FEATURES

| Power supply: Ouputs: | $24 \mathrm{Vac} \pm 10 \%, 50 / 60 \mathrm{~Hz}$ |
| :---: | :---: |
|  | 5 triac 24 Vac |
|  | valves: max $0.5 \mathrm{~A}, \min 0.025 \mathrm{~A}$ |
|  | speed: max 1 A, min 0.040 A |
| Power cons.: | 1 W |
| Sensor: | NTC 10K |
| Setpoint: | summer: $+24 \pm 5^{\circ} \mathrm{C}$ |
|  | winter: $+20 \pm 5^{\circ} \mathrm{C}$ |
|  | mechanical limitation of the setpoint adjustment |
| Prop. band: | 1... 10 K |
| Dead zone: | 4 K |
| Working: | $0 \ldots+40^{\circ} \mathrm{C}$ |
|  | 10...90\% r.h. (without condensing) |
| Storage: | $-20 \ldots+70^{\circ} \mathrm{C}$ |
|  | < 95 \% r.h. |
| Housing: | ABS fireproof according to UL94 V-0 |
|  | color (RAL 9010) |
| Protection: | IP30, class II |
| Size: | $144 \times 82 \times 34 \mathrm{~mm}$ |
| Weight: | 210 g |

## WIRING DIAGRAM

Terminal connections for air conditioning and heating 4-pipe systems.
N.B. to connect loads with 230 Vac use auxiliary relays

(*) water sensor as minimum temperature thermostat with minimal threshold at $30^{\circ} \mathrm{C}$ (optional)
${ }^{* * *}$ remote sensor (optional)
LOGIC OF OUTPUTS


## Jumper setting:

- TV = opening valve time
- $\quad T R=$ response time of the unit
- $\quad \mathrm{PB}=$ proportional band
- NT = do not modify
- Jl open = remote sensor
- Jl closed = internal sensor

The products are factory supplied with $T V=60 \mathrm{~s}, \mathrm{TR}=1 \mathrm{mine} 30 \mathrm{~s}$, $\mathrm{BP}=4^{\circ} \mathrm{C}$ and internal sensor.

| J9 | J8 | TV <br> $\mathbf{s}$ |
| :---: | :---: | :---: |
| 0 | 0 | 60 |
| 0 | 1 | 90 |
| 1 | 0 | 120 |
| 1 | 1 | 180 |


| J4 | J5 | J2 | $\mathbf{B P}$ <br> ${ }^{\circ} \mathbf{C}$ |
| :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 1 |
| 0 | 0 | 1 | 2 |
| 0 | 1 | 0 | 3 |
| 0 | 1 | 1 | 4 |
| 1 | 0 | 0 | 5 |
| 1 | 0 | 1 | 6 |
| 1 | 1 | 0 | 7 |
| 1 | 1 | 1 | 8 |

