## TA2001\* - ENVIRONMENTAL DISPLAY - TRANSMITTERS

Indicators instruments for environmental parameters, for measurement of temperature, relative humidity, barometric pressure and air velocity by hot wire. The whole series has RS232C or RS485 serial outputs for the management of multiple instruments in a network and an alarm output configurable open collector active low.

TA20011 - TA20013 are analog outputs selectable as 4 ... 20mA or 0 ... 20mA current or 0 ... 10Vdc or 2 ... 10Vdc voltage, by jumper pin onto the board.

Air velocity measurement is detected with a hot-wire probe placed on top of the instrument.

A large display with dual indication on all models allows you to view, in the first line, a process variable, in the second line, the temperature.

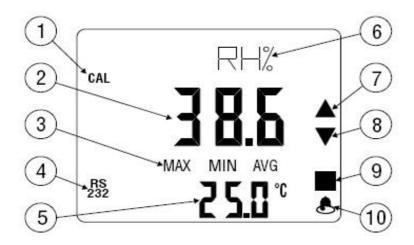


|                                    |                      |  | _ SPECIFICATIO                                    |                   |  |
|------------------------------------|----------------------|--|---|-------------------|--|
|                                    |                      | TA20010  | TA20011   | TA20012           | TA20013  |
| Temperature                        | Sensor               | NTC 10 kOhm                                      |   |                   |  |
|                                    | Range                | -20+80°C   |   |                   |  |
|                                    | Accuracy             | +/-0.3°C into range 0+70°C; +/-0.4°C over        |   |                   |  |
| Humidity                           | Sensor capacity      | 300 pF   |   |                   |  |
|                                    | Range %RH            | 0100%RH  |   |                   |  |
|                                    | Range TD             | -20+80°C   |   |                   |  |
|                                    | Accuracy             | +/-2.0% (1090%RH); +/-2.5%RH remaining range     |   |                   |  |
| Pressure                           | Range                | 6001100mbar - 6001100hPa - 60.0110.0kPa          |   |                   |  |
|                                    | Accuracy             | +/- 0.5mbar @25°C                                |   |                   |  |
|                                    | Fluid contact        | Air, non-corrosive gases (no liquids)            |   |                   |  |
| Velocity                           | Sensor               |  |   | Hot wire          |  |
|                                    | Range                |  |   | 05 m/s            |  |
|                                    | Range °C             |  |   | -2080°C           |  |
|                                    | Accuracy             |  |   | +/-0,15 m/s @25°C |  |
| Output                             | Serial communication | RS232C and RS485 Multidrop, max 9600 baud rate   |   |                   |  |
| Variables<br>displayed -<br>models | Temperature          | *  | *   | *                 | *  |
|                                    | %RH                  | *  | *   | *                 | *  |
|                                    | TD dewpoint          | *  | *   | *                 | *  |
|                                    | Pressure             | *  | *   | *                 |  |
|                                    | Air velocity         |  |   | *                 |  |
| Alarm                              | Туре                 | Active low open collector, 30VDC max, 200 mW max |   |                   |  |
| Analog<br>Output                   | Output type          |  | 0/4…20 mA,<br>0/2…10Vdc                           |                   | 0/420 mA,<br>0/210Vdc                              |
|                                    | Load resistance      |  | max 500Ohm<br>(current); 100kOhm<br>min (voltage) |                   | max 500Ohm<br>(current); 100kOhm<br>min (voltagee) |
|                                    | Resolution           |  | 16 bit  |                   | 16 bit   |
| Power supply                       |                      | 24Vac ±10% 5060Hz (on request 230Vac ±10%)       |   |                   |  |
| Protection degree                  |                      | IP67 Electronic                                  |   |                   |  |



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## TA2001\* - DISPLAY FEATURES



The display constantly shows the measure of two quantities. In line 2 the size can be selected by pressing MEAS, in line 5 at the bottom is always displayed temperature. During measurement, the top line 6 displays the unit of measurement of the main variable; the menu provides information on the active voice.

On the right side of the display there are four symbols:

- the two arrows (7) and (8) light when the pressure detected by the barometric sensor differs by at least 1 mbar from that measured 6 hours before;

- The arrow with the edge (9) is the alarm indication of the pressure drop and turns on when, in the last 6 hours there was a pressure drop greater than or equal to the BAR DROP value set in the menu in the range 1 ... 9 mbar;

- The bell symbol (10) lights up when any of the alarms is exceeded.

Symbols

- CAL (1) turns on during calibration of the RH sensor

- MAX MIN AVG (3) indicate that the principal measure (2) is the maximum (MAX), the minimum (MIN) or average (AVG) since the last reset.

- RS232 (4) lights up when the unit is connected to a PC.



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