## **Outdoor Air Temperature Sensor**

(E Model TE-706-B RoHS



- Rugged, corrosion free 30% glass fill polycarbonate enclosure rated NEMA-4 (IP65)
- Liquid tight connector to ensure moisture proof operation
- External mounting bracket and single screw cover attachment provide a low cost, quick and easy installation
- More than 16 types of interchangeable NTC thermistors, precision platinum, nickel or balco RTDs are available for universal compatibility
- Conforms to EMC and RoHS standards

The TE-706-B outdoor air temperature sensor meets the rigorous requirements of building owners and control professionals who need reliable outdoor air temperature data. This rugged, reliable outdoor air sensor incorporates more than thirty plus years of product development and experience drawn from millions of installations world wide in all types of climatological situations. The corrosion free 30% glass filled polycarbonate enclosure is designed to withstand temperature extremes, mechanical shock and vibration. The external mounting bracket crimp on to the enclosure for a low profile mating surface and the single screw cover attachment, are some of the features which improve reliability and lower installation cost. The TE-706-B features the well-known MAMAC Systems temperature sensor, carefully sealed in the polycarbonate enclosure via a cable gland to prevent building air from escaping across the sensor. This product and process design combined with automated manufacturing processes yields a rugged, reliable, repeatable and stable temperature sensor at a low cost.

# *MAMAC SYSTEMS*

8189 Century Boulevard • Minneapolis, MN 55317-8002 • USA 800-843-5116 • 952-556-4900 • Fax 952-556-4997 sales@mamacsys.com • www.mamacsys.com

4200 Waterside Centre 1 Fullerton Road #02-01 Solihull Parkway One Fullerton
Birmingham • West Midlands Singapore • 049213
B37 7YN • United Kingdom 65-31581826 • Fax 65-31581826
01384-271113 • Fax 01384-271114

4 Armiger Court, Unit 2 Adelaide • S.A. 5088 • Australia 08-8395-4333 • Fax 08-8395-4433 675 Cochrane Drive
East Tower • 6th Floor
Toronto • Ontario
L3R 0B8 • Canada
905-474-9215 • Fax 905-474-0876

#### **TE-706-B**

#### **SPECIFICATIONS:**

**Platinum RTD sensors:** +/- 0.1% @ 0 C, Alpha : 385 per DIN 43760

**Nickel RTD sensors: (#2)** +/- 0.5 C @ 0 C, 5000 PPM/K T.C.R.

Nickel RTD sensors: (#4) +/- 0.5 F @ 70 F / 21.1 C, 6000 PPM/K T.C.R. Balco RTD sensors: +/- 0.5 F @ 70 F /21.1 C, 4300 PPM/K T.C.R.

**Thermistor sensors:** +/- 0.2 C interchangeability @ 77 F/ 25 C

**Plastic Enclosure:** Polycarbonate 30% glass filled, rated UL 94V-5-0

**Operating Temp:** -40F/-40C to 210F/100C **Ambient Temp:** -40F/-40C to 160F/70C

**Weight:** 2.4 oz (4.6 g)

#### **CONFORMANCE & TESTING:**

**RoHS Compliant** 

**EMC Testing:** 

BS EN 55022:1998, BS EN 55024:1998,

EN 61000-3-3, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4,

EN 61000-4-5, EN 61000-4-6,

EN 61000-4-11

#### **ORDERING INFORMATION: TE-706-B-**

#### **Example: TE-706-B-3:**

Outdoor Air Sensor with 1,000 ohm platinum RTD

#### **Temperature Sensor**

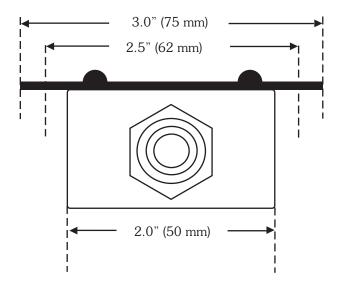
- 1 100 ohm Platinum RTD
- 2 1,000 ohm Nickel RTD (5000 PPM)
- **3** 1,000 ohm Platinum RTD
- **4** 1,000 ohm Nickel RTD (6000 PPM)
- 5 1,000 ohm Balco RTD
- 7 10,000 ohm NTC thermistor (Type III)
- **8** 10,000 ohm NTC thermistor (Carel)
- **10** 3,000 ohm NTC thermistor
- **12** 10,000 ohm NTC thermistor (Type II)
- **13** 5,000 ohm NTC thermistor
- **14** 1,035 ohm Silicon PTC
- **15** 100,000 ohm NTC thermistor
- **16** 10,000 ohm NTC thermistor (Eliwell)
- 17 20,000 ohm NTC thermistor
- **18** 2,252 ohm NTC thermistor
- **21** 1,800 ohm NTC thermistor

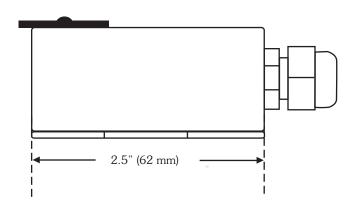
CAUTION: Do not use in explosive/hazardous environment or with flammable/combustible media.

<sup>\*</sup> For sensor compatibility, please refer to TI.700-10.

<sup>\*\*</sup> For complete **Resistance vs. Temperature** tables, please refer to Tl. 700-11.

### TE-706-B





#### **TE-706-B**



MAMAC Systems is the leading global manufacturer of sensors, transducers, control peripherals and web browser based IP appliances. MAMAC products are used for HVAC and environmental controls, remote monitoring, alarming, energy metering and industrial automation.

All MAMAC products are manufactured in the USA.

**WARRANTY:** MAMAC Systems, Inc. and its subsidiaries (hereinafter referred to as MAMAC Systems) warrants its products to be free of defects in material and workmanship for a period of five (5) years from date of shipment. If a unit is malfunctioning, it must be returned to the factory for evaluation. A return authorization number (RMA) will be issued by the customer service department and this number must be written or prominently displayed on the shipping boxes and all related documents. The defective part should be shipped freight pre-paid to the factory. Upon examination by MAMAC Systems, if the unit is found to be defective, it will be repaired or replaced at no charge to the customer. However, this warranty is void if the unit shows evidence of being tampered with, damaged during installation, misapplied, misused, or used in any other operating condition outside of the unit's published specifications.

MAMAC Systems makes no other warranties or representations of any kind whatsoever, expressed or implied, except that of title. All implied warranties including any warranty of merchantability and fitness for a particular purpose are hereby disclaimed. User is responsible to determine suitability for intended use.

**LIMITATIONS OF LIABILITY:** The remedies of buyer set forth herein are exclusive and the total liability of MAMAC Systems with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the product upon which liability is based. **In no event shall MAMAC Systems be liable for consequential, incidental or special damages.** MAMAC Systems reserves the right to change any specifications without notice to improve performance, reliability, or function of our products.

Every precaution for accuracy has been taken in the preparation of this manual, however, MAMAC Systems neither assumes responsibility for any omissions or errors that may appear nor assumes liability for any damages that result from the use of the product in accordance with the information contained in the manual.



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