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1 1/4 and 2 1/4 INCH TSO'd ELECTRICAL TEMPERATURE INDICATOR

[T12 X1XX XXXX XXX], Meets TSO C43c & RCTA/DO-160D requirements *

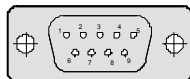
Installation Instructions:

- *All connections are to be made in accordance with AC 43.13.*
- *Additional wire and fuses may be necessary for installation of unit.*
- *Use shielded wires with appropriate temperature ratings for installation.*
- *Keep unshielded sections of wire as short as possible.*

1. Mount indicator in desired location in aircraft's instrument panel.
2. Install temperature sensor in the proper location.
3. Connect the 9-pin connector to the shielded wire that will go to the sender. Connect Power Input wires to 9-pin connector. These can be unshielded if kept short.
4. Shield will be unconnected at probe end and should be protected using insulation.
5. Connect power input wires to switched aircraft power through appropriate fusing.
6. If gauges have internal lighting, connect wires to lighting inverter.
7. Connect wire to sender. (Refer to Installation Instructions of Sender for details).

NOTE: Temperature senders for this gauge do not require power so there is no connection to Pin 3. Senders that use thermistors such as UMA Type 1Bx, connect between Pins 5 and Gnd, Pins 8 or 9. Thermocouple type senders such as UMA 2Bxx, connect between 4 and 5. The red (-) wire from thermocouples is negative and connects to Pin 4. The yellow(+) or white (+) connects to Pin 5. When extension wires are used, check for proper polarity from thermocouple.

Refer to drawing below for proper pin wiring



As viewed from solder side of connector

PIN DESIGNATION

- Pin 1 Voltage Input (14 or 28 volt systems)
- Pin 2 Voltage Input (Internally connected to pin 1)
- Pin 3 Regulated Voltage output to Sender (Only when sender requires voltage)
- Pin 4 Negative Input (Used for Thermocouple and Ammeter negative input)
- Pin 5 Positive / Primary Input (Used in all gauges)
- Pin 6 EL Lighting Input (Internal lighting only)
- Pin 7 EL Lighting Input (Internal lighting only)
- Pin 8 Signal GND (Internally connected to pin 9)
- Pin 9 GND (Connect to aircraft ground)



Specifications:

Description. Remote indicating electronic temperature instrument built to meet or exceed AS 8005 standards as per TSO C43c & RCTA/DO-160D.

Supply Voltage:	12-28 Volts DC (Nominal) 10-30 Volts DC (Max)
Current Draw:	100 mA (Maximum)
Accuracy:	± 3% (Class IIIb)
Weight:	4 oz

Limitations:

- Instrument can be installed in any single or multi-engine, reciprocating or turbine fixed wing aircraft or rotary wing aircraft.
- To be installed in an internal section of the aircraft.
- Instrument maximum operating temperature range is from (-55)°C to 70°C.
- Maximum altitude 25,000 feet.

Must be installed with fully shielded wiring that has an appropriate temperature rating for the installation.

*The conditions and test required for TSO approval of this article are minimum performance standards. It is the responsibility of those desiring to install the article on or within a specific type or class of aircraft to demonstrate that the aircraft installation conditions are within the TSO standards. The article may be installed only if installation of the article is approved by the Administrator.

Warranty

UMA, Inc. warrants all products to be free from defects in material and workmanship under normal use and operation. UMA does not warrant any product which has been damaged as the result of accident, abuse, negligence, improper operational voltage, lightning, fire, flood, or other acts of nature. Any indication that the unit has been opened can void warranty. Under no circumstances shall UMA be liable for any loss or damage, direct, consequential or incidental, arising from the use of or inability to use this product.

This warranty is limited to the repair or replacement, at the manufacturer's option, of any product or part thereof, which has been returned to UMA within the specified warranty period, and which after examination shall disclose to the customer service department's satisfaction that the product is defective. Transportation to the factory or authorized service center must be prepaid; the product after repair or replacement, will be returned at the expense of the dealer or end customer. This warranty does not apply to any product or integral part thereof, which has been altered or serviced by other than the manufacturer or authorized service center.

The warranty period is twelve (12) months to the user.

This warranty supersedes all other warranties either expressed or implied and shall be governed and executed under the laws of the Commonwealth of Virginia, USA