THERMAC

ABN 69 007 449 256
Manufactured to ISO 9002 Q.A. Standard.

DATA SHEET

HEAT DETECTOR MODEL 1000

APPROVALS

- AS1603.1-1995 TESTED - Type E HEAT DETECTOR
- ACTIVEFIRE LISTED (CSIRO Aust. Govt.)
- PATENT No. 699529

FEATURES

- RESETTING TYPE HEAT DETECTOR
- RATE COMPENSATION & FAST RESPONSE
- WIDE TEMPERATURE RANGE.
- GOLD PLATED ELECTRICAL CONTACTS.
- CORROSION & SHOCK RESISTANT.
- SINGLE MOUNTING THREAD - Model 1000 - 1 Metric M20
- DUAL MOUNTING THREAD - Model 1000 - 2 Metric M20 & ½"NPT
- INTRINSICALLY SAFE:
  Classed as a simple apparatus and installed with a suitable I.S. barrier.

DESCRIPTION

The Thermac Detector is a heat sensitive electrical switch. It is a fixed temperature device with a factory pre-set temperature in the range 60 °C to 240 °C.
The detector comprises a pair of normally open electrical contacts mounted within a stainless steel probe. A rise in temperature will cause the contacts to close at the set point temperature. With a drop in temperature the procedure reverses and the contacts re-open below the set point temperature.
The detector body is a seamless one-piece unit, precision machined from AISI 316 stainless steel with high corrosion resistance. Electrical contacts are gold/silver plated and lead cables are nickel plated copper with PTFE/glass insulation. Cables are to aircraft engine specification.
The operating parts are factory calibrated and permanently sealed against severe environmental conditions.

SPECIFICATION

Contacts:	Normally open, close on temperature rise.
Applied Voltage AC @ 0.25A	32 V max.
Applied Voltage DC @ 0.25A	32 V max.
Operating Current:	0.25A max.
Operating or Set Temperature Range:	+60 °C to +240 °C
Ambient Temperature Range: (continuous exposure)	–40 °C to +180 °C
Relative Humidity:	100%
Weight:	150 g.
Degree of Protection:	IP 67
Sensitivity & Accuracy:	+/– 5% or 5 degrees
Mounting Screw Threads:	10 Nm torque max.

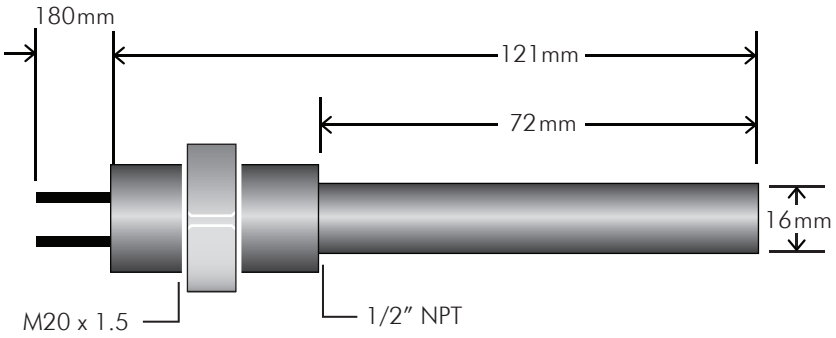
NOTES:

1. All electrical ratings apply to noninductive loads. Ensure circuit inrush currents do not exceed ratings.
2. Where a detector has been subjected to a fire or overheat, the unit should be returned to Thermac for condition check and calibration.

TEMPERATURE SETTINGS DEGREES CELSIUS

Detectors may be set to: 60, 70, 80, 100, 110, 120, 130, 140, 150, 180, 200, 220, 240 degree Celsius.
Suggested temperature setting 20°C above maximum ambient.

INSTALLATION



INSTALLATION OF MODEL 1000 :

• NORMAL LOCATIONS

The unit is mounted using the 20mm electrical conduit screw thread to a junction box or to a weatherproof enclosure if there is a risk of water or chemical exposure. Avoid pulling electrical cables or causing cables to be in tension.

• THROUGH WALL OR BULKHEAD LOCATIONS

The Model 1000-2 is screwed into a 1/2"–14 NPT hole in the plant or vessel wall to a maximum torque 10 Nm. Ensure the entire length of the sensing shell (72 mm) is exposed to the heat source.

- Normally open contacts close on temperature rise.
- Cables are 20 swg with 2mm O.D. insulation.
- Installation and connection to be in accordance with AS1603.1, AS1603.4 and AS1670.

IDENTIFICATION STAMPING ON HEX:

- Serial numbers are 4 or 5 digits, e.g. '10000'
- Set temperature in degrees Celsius, e.g. '120°C'
- Year made: 2020

IDENTIFICATION MARKING ON BARREL:

' Thermac Model 1000 Detector '
' Thermal Type E '
' 0 – 32 Vac 0.25A 0 – 32 Vdc 0.25A '
' Contacts close on temperature rise '

TO ORDER:

Please specify Set Temperature (degrees Celsius)
e.g. TYPE E HEAT DETECTOR, MODEL 1000 –1 @120 °C

MANUFACTURED BY

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ACTIVFIRE LISTED