Model T302IS Intrinsically Safe Fixed Temperature Rate-of-Rise Heat Detector

- ■ *Thermal Sensor with 140°F (60°C) fixed set point and rate-of-rise feature*
- ■ *Two LED alarm indicators provide 360⁰ visibility*
- ■ *Optional Remote Alarm Indicator*
- ■ *Certified by BASEEFA to II 1G EEx ia IIC T5 (-20°C to +55°C)*
- ■ *Ingress protection IP42*
- ■ *Suitable for installation in hazardous locations at ATEX gas classification category 1, 2 or 3*
- ■ *LPCB approved*
- ■ *Germanischer Lloyd type approval*
- ■ *Certifications are approximately equivalent to US Class I Division 1 Groups A,B,C,D hazardous (classified) locations*

Intrinsically safe detectors are used in hazardous locations where explosive levels of gas or vapors are normally or potentially present. The Model T302IS circuit power levels are limited so the potential to ignite an explosive atmosphere is eliminated.

Intrinsically safe detectors must be compatible with the system control panel for proper use. An intrinsically safe barrier must be installed at the point where the intrinsically safe circuit connects to the control panel. The barrier limits the available voltage and current available on the circuit to safe levels.

The SST Model T302IS Intrinsically Safe rate-of-rise Heat Detector with fixed temperature alarm set point uses a state-of-the-art dual thermister sensing circuit. These detectors are designed to provide open area protection when used with the NOVA-5000 Detection and Control System.

The heat detector is installed into its accessory base with a simple twist-lock action. Operating power is provided over the 2-wire detection circuit from the Control System. Proper operation of the detector is indicated by two red Light Emitting Diodes (LED), which provides a local, 360⁰ visual indication of detector status. For installations where the detector is not visible (such as above a false ceiling), a remote LED may be connected to the unit. When the detector senses a fire, it latches into alarm and remains in this condition until reset from the NOVA-5000 System control panel.

APPLICATION INFORMATION

The Model T302IS Heat Detectors are designed for use in hazardous locations. When connecting to the associated Model 5010 Fire Module, a barrier must be used at the control in accordance with the National Electric Code and/or the local authority having jurisdiction.

LIFE SAFETY: Heat detectors protect property only. In most fires, hazardous levels of smoke, heat and toxic gasses can build up before a heat detector would initiate an alarm. In cases where life safety is a factor, smoke detectors are recommended.

SAFETY SYSTEMS TECHNOLOGY

TECHNICAL SPECIFICATIONS

Detection Method:	Thermister rate-of-rise with fixed temperature alarm Permanently calibrated at factory.
Operating Voltage:	15 to 30 VDC Provided by the SST NOVA-5000 Control System.
Quiescent Current:	50 microamps
Current in Alarm:	50 milliamps
Alarm Set Point:	+140°F, +60°C
Operating Temperature:	+14 to +131°F, -10 to +55°C
Maximum Humidity:	95% relative humidity Humidity should be below the dew point (non-condensing).
Intrinsic Safety Rating:	ATEX classification II 1G EEx ia IIC T5 Tamb=55°C (Equivalent to Class I, Div. 1, Groups A,B,C,D)
Ingress Protection:	IP63
Case Material:	ABS plastic, White or Ivory
Size/Weight:	100 mm (4.0 inches) diameter x 40 mm (1.6 inches) high, 3.5 ounces (97 g)
Base Mounting Centers:	48 to 74 mm (1.88 to 2.90 inches)

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
302-02	**Model T302IS Intrinsically Safe Fixed Temperature Rate-of-rise Heat Detector** Requires mounting base for installation.
280-14	**Intrinsically Safe Mounting Base** Installs on US standard 3 to 4 inch round, square or octagonal wiring box. Provides twistlock plug-in for detector.
288-98	**Remote Alarm Indicator** Mounts on US standard single gang outlet box.

REQUIRED ACCESSORY

PART NUMBER	DESCRIPTION
289-02	**Intrinsically Safe DC Isolator** Use quantity one to connect each intrinsically safe field circuits to the SST Model 5010 Smoke/Fire Detection Module.