

ATEX



TEMPERATUR THERMOSTATS

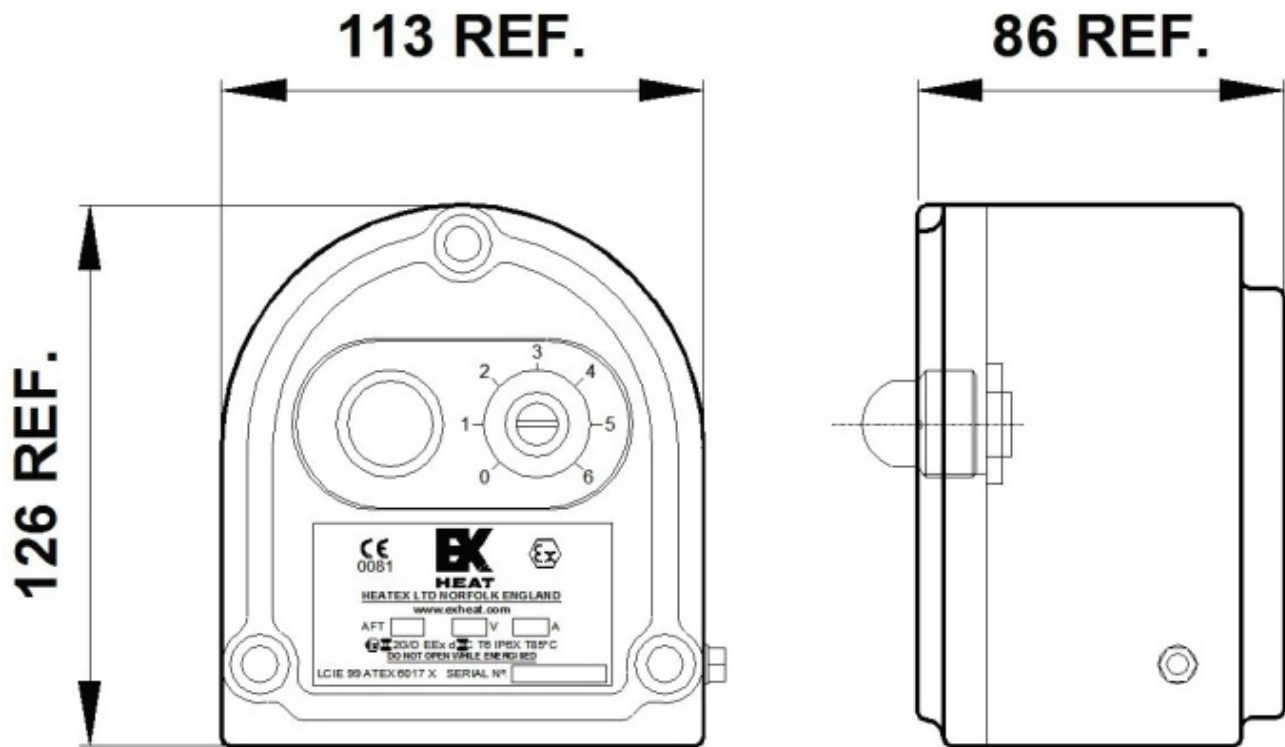
AFT FLAMEPROOF AIR/PROCESS SENSING THERMOSTATS

EXHEAT Industrial's AFT thermostats are supplied in weatherproof or flameproof enclosures to complement our heaters. All thermostats are certified for use in hazardous areas where the atmosphere is classified as a Zone 1 or 2 (IIA, IIB, IIC) gas group. The AFT has an externally adjustable option, enabling quick and accurate variable control for air applications.




FEATURES

- Wall mounted
- Suitable for ambient temperatures from -60°C to +60°C
- Lightweight cast aluminium enclosure certified weatherproof to IP6X



Certi cation

ATEX/IECEX  II 2 G/D
Ex d IIC T6 Gb (Gas)
Ex t IIIC T85°C Db (Dust) IP6X

CU TR (EAC) 1Ex
db IIC T6 Gb Ex tb
IIIC T85°C Db

Enclosure

Cast aluminium alloy with a maximum of two cable entries and external and internal earths

Controls

Choice of control range: 0 to 25°C, 0 to 40°C or 0 to 60°C options

Mounting

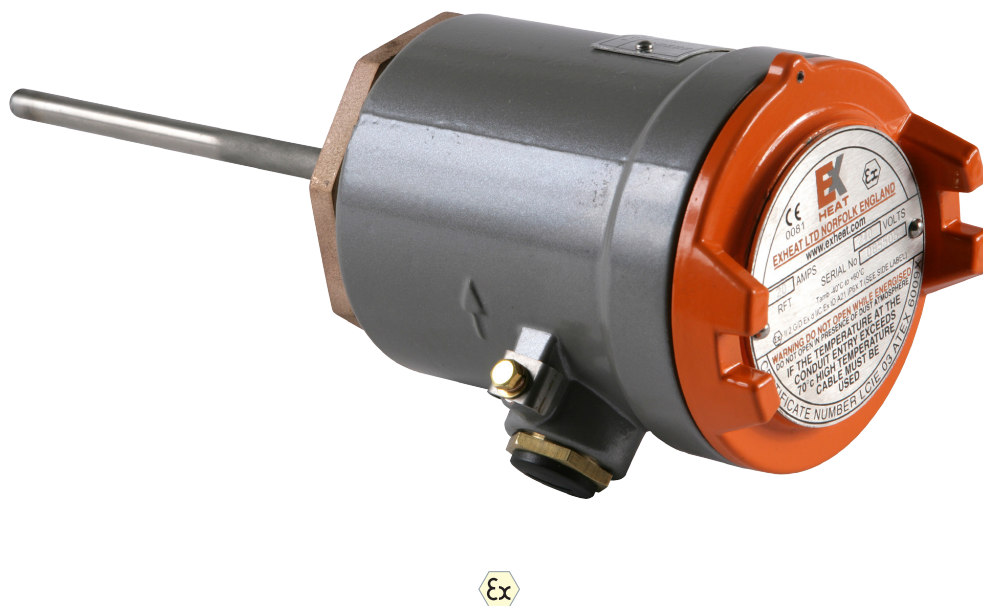
Any threaded boss or flange in any material can be specified within the limits of the design parameters

Voltage

20A on 250VAC in a choice of switching configurations

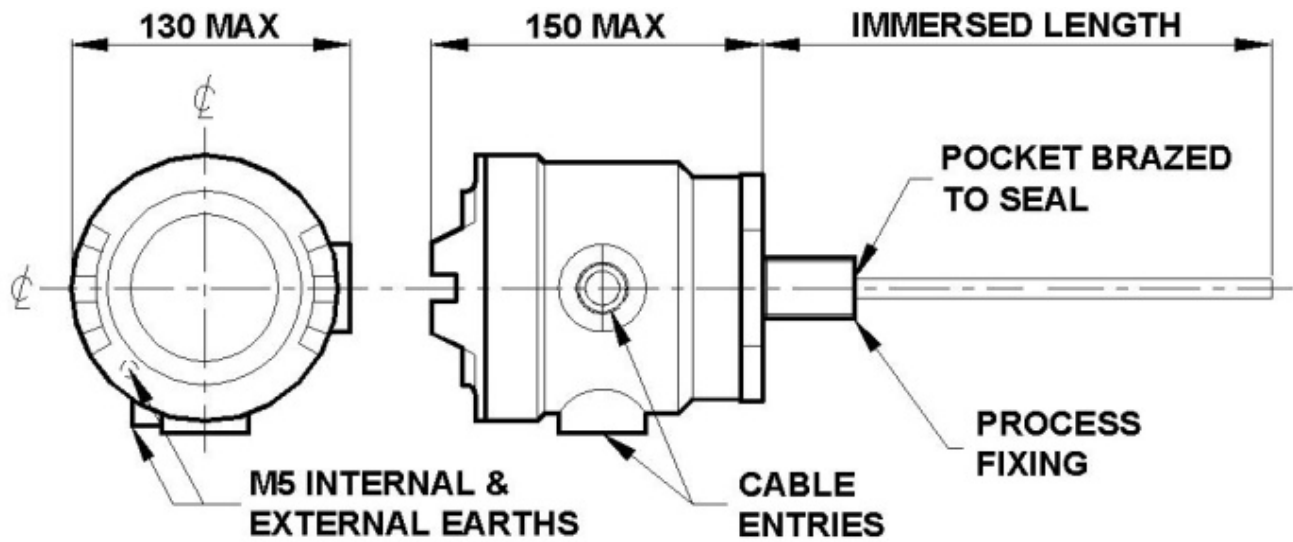
RFT FLAMEPROOF PROCESS SENSING THERMOSTATS

EXHEAT Industrial's RFT thermostats are supplied in weatherproof or flameproof enclosures to complement our heaters. All thermostats are certified for use in hazardous areas where the atmosphere is classified as a Zone 1 or 2 (IIA, IIB, IIC) gas group. The RFT is suitable for use in process tanks and vessels containing liquids.




FEATURES

- Lightweight cast aluminium enclosure certified weatherproof to IP6X
- Suitable for ambient temperatures from -20°C to +40°C
- Mounting can be by a threaded boss or an industry standard flange
- 1 × M20 and 1 × M25 (plugged) cable entries provided as standard



Certification

ATEX  II 2 G
Ex d IIC T1 to T6 Gb Zone 1 and 2
Ex d t IIIC T450 to T85°C Db Zone 21 and 22

Enclosure

Cast aluminium alloy with a maximum of two cable entries and external and internal earths

Controls

Choice of control range to suit process application

Mounting

Any threaded boss or flange in any material can be specified within the limits of the design parameters

Voltage

20A on 250VAC maximum in a choice of switching configurations

HIH FLAMEPROOF TRANSMITTER ENCLOSURES

The HIH range of instrument enclosures are designed to accommodate most makes of head mounted process transmitter or termination block. EXHEAT Industrial promotes the use of its preferred range of WIKA® temperature transmitters, however empty enclosures can be supplied or, on special request, other makes of transmitter such as Siemens®, Rosemount® or Yokogawa® can be installed.

The range of HIH instrument enclosures are certified for use in hazardous areas where the atmosphere is classified as a Zone 1 or 2 (IIA, IIB, IIC) gas group, or a Zone 21 or 22 (IIIA, IIIB, IIIC) dust group.



FEATURES

- Certified to meet the ATEX Equipment Directive and IECEx II 2 G/D Ex d IIC T6 (Gas) Ex tD A21 T85°C (Dust)
- CU TR (EAC) certified
- Ingress protection IP66
- 316 stainless steel enclosure
- Optional viewing window for transmitter LCD displays
- M20 cable entries (2 standard, 4 maximum)
- Suitable for ambient temperatures from -50°C to +60°C

TYPICAL APPLICATIONS

- Temperature measurement and display for all applications
- Accommodates all major brands of head mounted process transmitter
- Hazardous area process temperature measurement
- Thermowell assemblies available
- Machinery and plant construction, power engineering, heating, ventilation, and refrigeration

MODELS

- HIH-SPD140 Instrument Housing
- HIH-SPD141 Instrument Housing with Viewing Window
- HIH-SPD142 Temperature Transmitter Assembly with analogue temperature transmitter
- HIH-SPD143 Temperature Transmitter Assembly with Digital Ex ia temperature transmitter
- HIH-SPD144 Temperature Transmitter Assembly with Digital Ex ia temperature transmitter/LCD
- HIH-SPD145 Temperature Transmitter Smart/Hart protocol Ex ia
- HIH-SPD146 Temperature Transmitter Smart/Hart with LCD Ex ia

ANALOGUE TRANSMITTER – SPD142

This cost effective analogue temperature transmitter is geared towards the requirements of industrial applications. Depending on their output signal they are ideally suited for direct connection to processors such as PLC's or PC-A/D convertors with voltage or current inputs. The transmitters convert the temperature dependant change in resistance or voltage into a 0 to 10V or 4 to 20mA output signal. These standard signals allow an easy and reliable transmission of temperature measurement values. These temperature transmitters are characterised by fixed measuring ranges configured according to customer specifications, combined with zero and span potentiometers, which enable the fine adjustment of small corrections on site. Industry compliant accuracy, interference resistance and sensor mounting are further features of these compact signal converters.

FEATURES

- Designs for Pt100/Pt1000 or thermocouples
- Output 0 to 10V, 3 wire design or 4 to 20mA, 2 wire design
- Fault signal for sensor burnout
- High accuracy
- Compact and cost effective

DIGITAL TRANSMITTER – HIH-SPD143/HIH-SPD144

The digital temperature transmitter T12 range is designed for universal industrial use. Comprehensive configuration possibilities, for example type of sensor, measuring range and error signalling, reliable accuracy, galvanic isolation and EMI protection, characterise these transmitters. The compact head mounting case fits in almost any DIN connecting head with form B.

During configuration any one of 17 types of sensors can be selected. Measured temperatures are from -200°C up to +2300 °C.

The following sensors can be connected:

- RTDs per DIN IEC 751, JIS C 1606, DIN 43 760 in 2-, 3- and 4-lead connection, the connection system used is configurable and ensures an optimal lead wire compensation
- Thermocouples per DIN IEC 584, DIN 43 710 and ASTM E988 Cold Junction Compensation (CJC) is built-in, the use of an external CJC is selectable via configuration
- Resistance sensors up to 5000 Ω in 2-, 3- and 4-lead connection, configurable compensation of the connection cable of mV-sensors up to 800mV

FEATURES

- Signal configurable for sensor burnout and sensor short circuiting
- 100% Rh protection, moisture condensation permissible
- Universal configuration via Windows® PC, simulation of the sensor not necessary
- Isolation voltage 1500VAC between sensor and current loop

DIGITAL TRANSMITTER SMART/HART® – HIH-SPD145/HIH-SPD146

This high specification universal transmitter is designed for use in the process industry. Comprehensive configuration possibilities such as type of sensor, measuring range and error signalling, high accuracy, galvanic isolation, and excellent EMI protection.

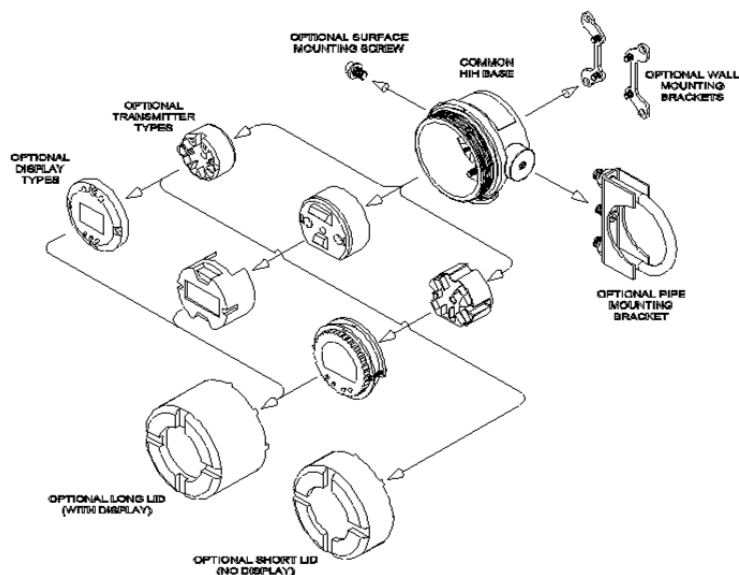
The transmitter can be configured for any one of 15 types of sensors and can accommodate temperatures from -270°C to 1820°C. Configuration is achieved using HART® communicator or with the HART® functionality of a DCS system. These transmitters are delivered with basic configuration. Alternatively can be delivered with a customised configuration within given limits on request.

FEATURES

- Functional safety (SIL 2)
- HART® Protocol
- Monitoring of Sensor lead integrity
- Configurable signalling for error messages
- Configuration and write protection via password
- High accuracy
- User friendly configuration software

MOUNTING OPTIONS

The enclosure is supplied with a single fixing bolt for universal mounting. Wall mounting brackets or pipe mounting clips are available upon request.

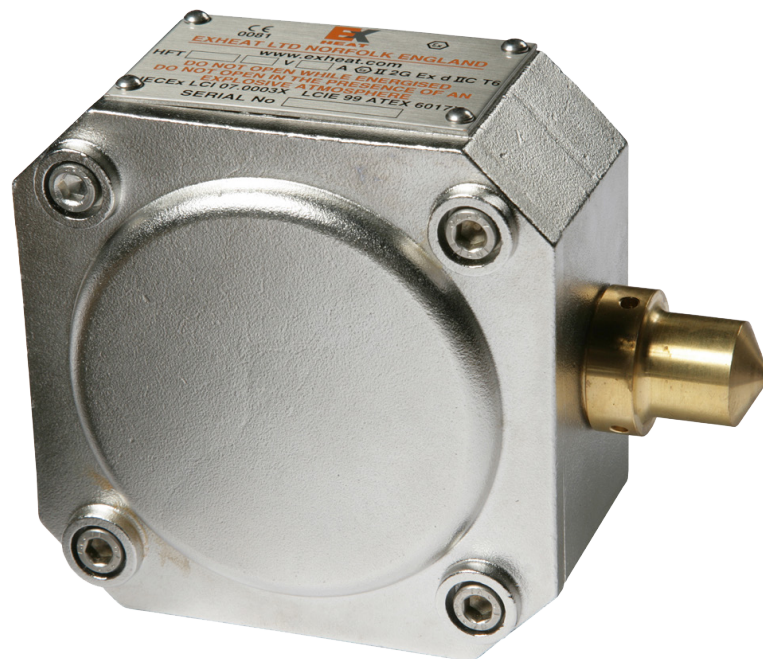


Device Type	Code	Display Option	Product Certification				Sensor				Range °C		
			ATEX	IECEX	Safe Area	T/C	RTD			Simplex	Duplex	Lower	Upper
							2 Wire	3 Wire	4 Wire				
HIH – Instrument Housing	HIH-SPD140	-	B	C	D	-	-	-	-	-	-	-	-
HIH – Instrument Housing with Viewing Window	HIH-SPD141	A	B	C	D	-	-	-	-	-	-	-	-
HIH – Temperature Transmitter Assembly with Analogue Ex ia Temperature Transmitter	HIH-SPD142	-	B	C	D	1	2	3	4	5	6	*	*
HIH – Temperature Transmitter Assembly with Digital Ex ia Temperature Transmitter	HIH-SPD143	-	B	C	D	1	2	3	4	5	6	*	*
HIH – Temperature Transmitter Assembly with Digital Ex ia Temperature Transmitter/LCD	HIH-SPD144	A	B	C	D	1	2	3	4	5	6	*	*
HIH – Temperature Transmitter Smart/Hart protocol Ex ia	HIH-SPD145	-	B	C	D	1	2	3	4	5	6	*	*
HIH – Temperature Transmitter Smart/Hart protocol with Ex ia Temperature Transmitter/LCD	HIH-SPD146	A	B	C	D	1	2	3	4	5	6	*	*

HIH-SPD146-A-C-3-5-0-400	HIH-SPD146	HIH - Temperature Transmitter Smart/Hart protocol with Ex ia Temperature Transmitter/LCD											
	A	Display Option Included											
	C	IECEX certification											
	3	3 Wire RTD input											
	5	Simplex Sensor Device											
	0	Lower Temperature Range											
	400	Upper Temperature Range											

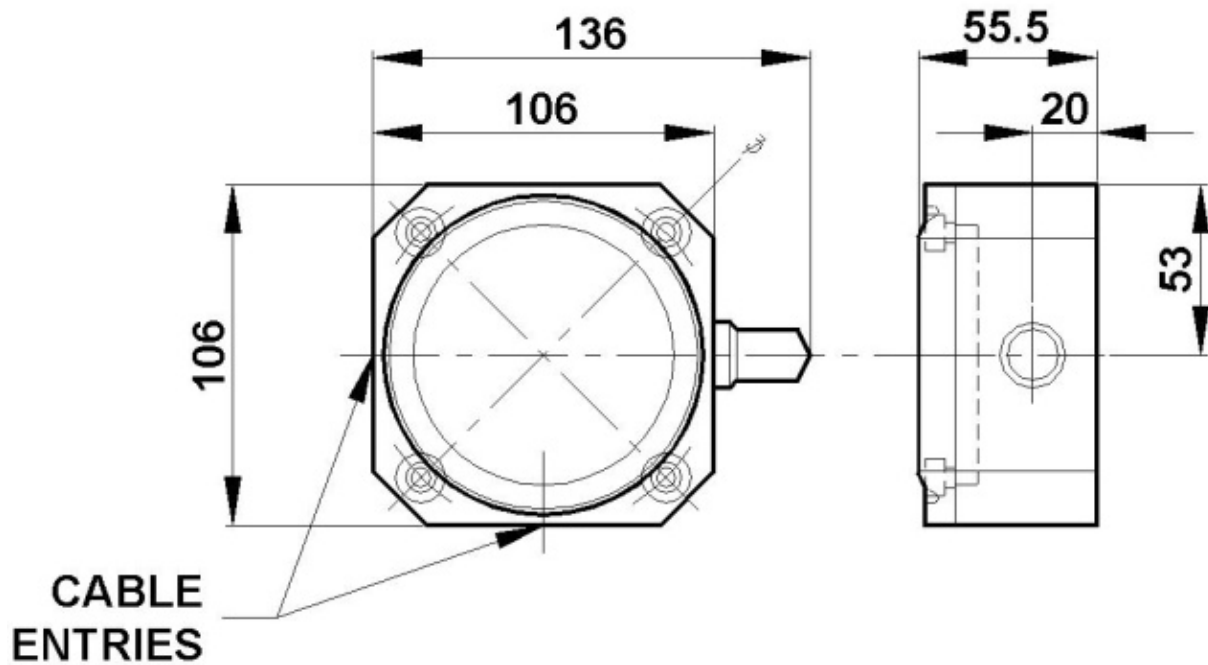
HFT FLAMEPROOF AIR SENSING THERMOSTATS

EXHEAT Industrial's HFT thermostats are supplied in weatherproof or flameproof enclosures to complement our heaters. All thermostats are certified for use in hazardous areas where the atmosphere is classified as a Zone 1 or 2 (IIA, IIB, IIC) gas group. The HFT is designed for the temperature control of work or storage areas, in conjunction with a hazardous area air heater.



Features

- Ingress protection IP66/Type NEMA 4X
- Wall mounted
- 316 stainless steel enclosure
- Suitable for ambient temperatures from -60°C to +60°C



Certification

ATEX/IECEx  II 2 G

Ex d IIC T6 Zone 1 and 2

CSA (CEC/NEC) Class I, Division 2, Groups A, B, C, D; T6, Type 4X (USA/CAN)

CSA (CEC) Ex db IIC; T6 Gb; IP66 (CAN)

CSA (NEC) Class I, Zone 1, AEx db IIC; T6 Gb; IP66 (USA)

CU TR (EAC) 1Ex db IIC T6 Gb X

Enclosure

Cast 316 stainless steel with 2 × M20 cable entries, external and internal earths and internal neutral link

Controls

Choice of control range: 0 to 25°C, 0 to 40°C or 0 to 60°C options

Mounting

2 × 6mm dia shrouded mounting holes are provided

Voltage

SPDT, 20A on 250VAC in a choice of switching configuration

FXT THERMOSTATS



EXHEAT Industrial's range of FXT thermostats provide an array of control solutions for up to 2kW heaters, available in both flameproof (Ex d) and encapsulated (Ex m) designs. EXHEAT Industrial can also create thermostats with bespoke set points to suit any required enclosure or room temperature.

Please enquire with our sales team for more information. The FXT flameproof control thermostats are available in either

inline or remote designs, and are suited to provide temperature maintenance for frost protection and condensation prevention

of enclosures. The FXT thermostats can also be combined with the FX range of heaters, with both the heaters and thermostats being certified for use in hazardous areas where

the atmosphere is classified as Zone 1 or 2 (Gas groups IIA, IIB, IIC) and Zone 21 or 22 (Dust groups IIIA, IIIB, IIIC).

FXT-M ENCAPSULATED THERMOSTAT

The FXT-M inline encapsulated thermostat has been developed as a space-saving temperature control solution capable of switching small and medium sized heaters to maintain a pre-determined ambient temperature.

Comprising a specialised electronic potting compound, stainless steel shroud and polyolefin sheath, the FXT-M is a robust and lightweight thermostat requiring practically zero maintenance.

Suitable for operating in ambient temperatures up to +80°C,

the FXT-M can be combined with the FX range of enclosure heaters to provide a single heating and control product. Alternatively, when supplied with up to 10m of cable, the FXT-M can be installed to control any electrical item inside a cabinet or enclosure.

FEATURES

- Acoustic enclosures
- Condensation prevention
- Control/monitoring panels
- Control valve housings
- Fire hose cabinets
- Frost protection
- Generators
- Instrumentation cabinets
- Manifolds
- Motor enclosures



Model	Open/Close Temperature (+/-3°C)	Voltage	Max Current	Temp Class	Max Ambient	Weight
FXT-M-5	16°C/5°C	0-277V	6.0 A 3.3 A 4.8 A	T6 T5	60°C 80°C	0.1kg
FXT-M-20	26°C/15°C					
FXT-M-30	37°C/26°C					
FXT-M-40	53°C/42°C					
FXT-M-60	69°C/58°C					

Certification

ATEX/IECEX  II 2 G D

Ex mb IIC T6 to T5 Gb

Ex mb IIIC T85°C to T100°C Db

CU TR (EAC)

CU-TR.012/2011 CERTIFIED 1 Ex db IIC T6...T3 Gb

X Ex tb IIIC T85°C...T200°C Db X

CSA

Class I Div 2, Groups A, B C and D T6...T5

Class III, Div 2: Class II Div 2, Groups E, F & G.

Type 4 Ex mb IIC T6...T4 Gb Ex mb IIIC T85°C...

T135°C Db IP66

Protection Method

Encapsulated

Voltage

110 to 277VAC

Ambient Temperature

-50°C to +80°C

Temperature Class

T5 (T100°C) to T6 (T85°C). T5 and T6 thermostats are suitable for use in T1 to T4 (T450°C to T135°C) hazardous environments. Ensure ambient temperature limits are adhered to

Cable

3m standard (up to 10m available on request)

Ingress Protection

IP66

FXT THERMOSTATS



EXHEAT Industrial's range of FXT thermostats provide an array of control solutions for up to 2kW heaters, available in both flameproof (Ex d) and encapsulated (Ex m) designs. EXHEAT Industrial can also create thermostats with bespoke set points to suit any required enclosure or room temperature. Please enquire with our sales team for more information.

The FXT flameproof control thermostats are available in either inline or remote designs, and are suited to provide temperature maintenance for frost protection and condensation prevention of enclosures. The FXT thermostats can also be combined with the FX range of heaters, with both the heaters and thermostats being certified for use in hazardous areas where the atmosphere is classified as Zone 1 or 2 (Gas groups IIA, IIB, IIC) and Zone 21 or 22 (Dust groups IIIA, IIIB, IIIC).

FXT-DR AND FXT-DI FLAMEPROOF THERMOSTAT

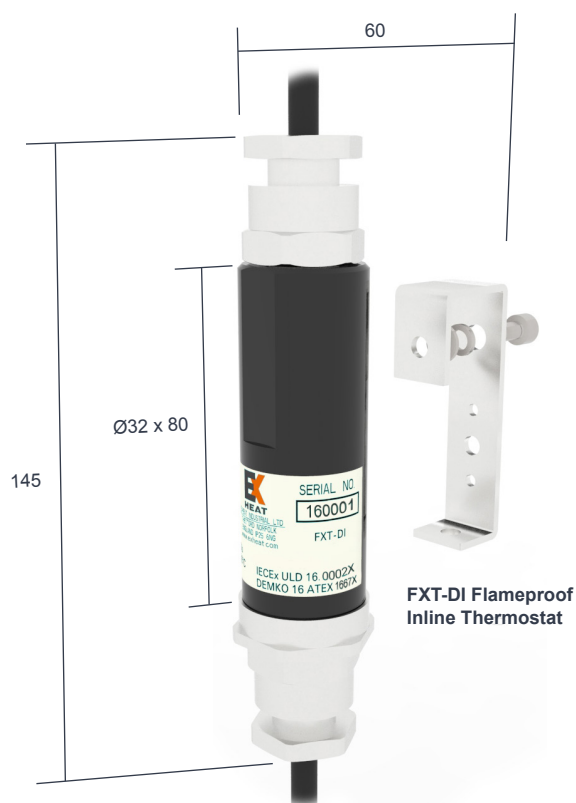
The FXT-DR and FXT-DI flameproof thermostats are designed to provide control for larger heaters (up to 2kW), and are capable of operating in ambient temperatures as high as 195°C.

Housed in a hard anodised aluminium enclosure, they are suited for marine environments, and are available as either a remote (FXT-DR) or inline (FXT-DI) thermostat.

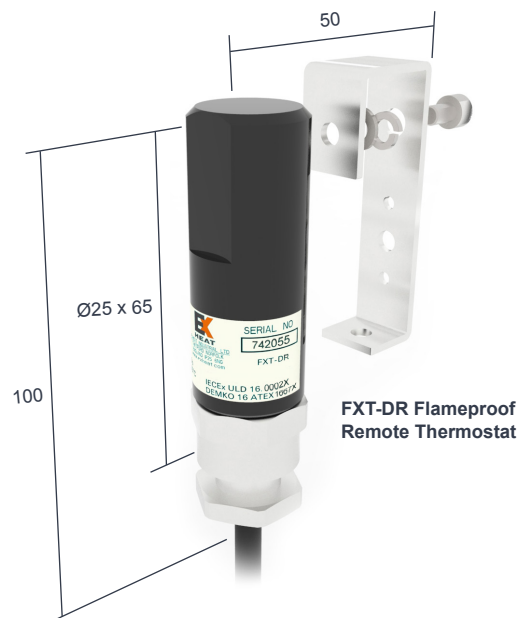
The FXT-DI and FXT-DR thermostats can be combined with the FX range of enclosure heaters to provide a single heating and control product. Please speak to our EXHEAT Industrial representatives in order to review your requirements and calculate the correct duty necessary for your installation.

TYPICAL APPLICATIONS

- Acoustic enclosures
- Condensation prevention
- Control/monitoring panels
- Control valve housings
- Fire hose cabinets
- Frost protection
- Generators
- Instrumentation cabinets
- Manifolds
- Motor enclosures



**FXT-DI Flameproof
Inline Thermostat**



**FXT-DR Flameproof
Remote Thermostat**

Model	Open/Close Temperature (+/-3°C)	Voltage	Max Current	Temp Class	Max Ambient	Weight
FXT-DI-5	16°C/5°C	0-277V	9.0 A	T6 T5 T4 T3	80°C 95°C 130°C 195°C	0.5kg
FXT-DI-20	26°C/15°C					
FXT-DI-30	37°C/26°C					
FXT-DI-40	53°C/42°C					
FXT-DI-60	69°C/58°C					
FXT-DI-80	92°C/81°C					
FXT-DR-5	16°C/5°C	0-277V	9.0 A	T6 T5 T4 T3	80°C 95°C 130°C 195°C	0.2kg
FXT-DR-20	26°C/15°C					
FXT-DR-30	37°C/26°C					
FXT-DR-40	53°C/42°C					
FXT-DR-60	69-130°C/58°C					
FXT-DR-80	92°C/81°C					

Certification

ATEX/IECEX  II 2 G D

Ex db IIC T6 to T3 Gb

Ex tb IIIC T85°C to T200°C Db

CU TR (EAC)

CU-TR.012/2011 CERTIFIED 1 Ex db IIC T6...T3 Gb

X Ex tb IIIC T85°C...T200°C Db X

Protection Method

Flameproof

Voltage

110 to 277VAC

Ambient Temperature

-50°C to +195°C

Temperature Class

T3 (T200°C) to T6 (T85°C)

Cable

3m standard (up to 10m available on request)

Ingress Protection

IP66

CSA

Class I Div 1, Groups A, B C & D T6...T1

Class III, Div 1: Class II Div 1, Groups E, F & G. Type 4

Class I, Zone 1, AEx db IIC T6...T4 Class III, Zone 21:

Class II, Zone 21, AEx tb IIIC T85°C...T135°C IP66

FXT FLAMEPROOF AIR SENSING THERMOSTATS

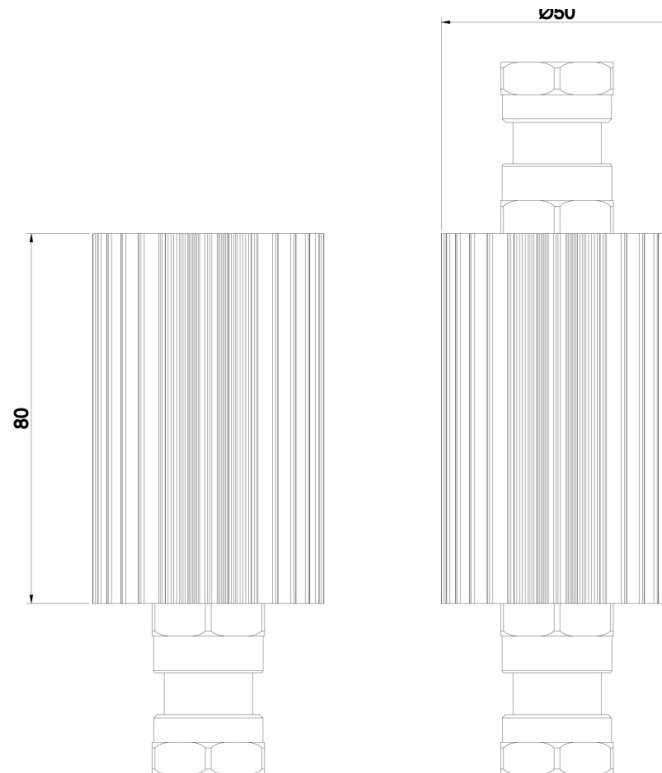
The FXT thermostats are a range of compact hazardous area thermostats that provide smart and energy-efficient temperature management for heaters up to 2kW, and can be engineered (upon request) with custom set-points to suit individual requirements.

FXT thermostats are designed to complement the FX range of enclosure/cabinet heaters, but can also be utilised for many other standalone applications. They are additionally certified for use in hazardous areas where the atmosphere is classified as a Zone 1 or 2 (IIA, IIB, IIC) Gas Group or a Zone 21 or 22 (IIIA, IIIB, IIIC) Dust Group.




FEATURES

- Certified weatherproof protected to IP6X
- Compact design, requires minimal space
- Black anodized convective surface
- Standard product available with short delivery times
- Suitable for ambient temperatures -60°C to +78°C



Model	ON/OFF Temperature	Fuse Trip Temperature	Rating
FXT1	-1.5°C/5°C	76°C (+/- 3°C)	Up to 1.30A
FXT2	11.5°C/17°C	76°C (+/- 3°C)	Up to 1.30A
FXT3	33.5°C/40°C	76°C (+/- 3°C)	Up to 1.30A

Certification

ATEX/IECEX  II 2 G D
Ex d IIC T6 Gb Zone 1 and 2
Ex tb IIIC T85°C Db Zone 21 and 22

CUTR (EAC)

CU-TR.012/2011 CERTIFIED 1 Ex db IIC T6...T3 Gb
X Ex tb IIIC T85°C...T200°C Db X

Extrusion

Finned aluminium, anodised matt black

Mounting

Vertically mounted by bracket or rail

Voltage

Up to 250V, 1.3A

Hysteresis

+/- 1.5°C



ELVARME

VORES PRODUKTSORTIMENT INKLUDERER:



AIR WARMERS



IMMERSION HEATERS



GENNEMSTRØM STANDARD



FLANGEVARMELEGEMER STANDARD



HIBC/B



ATEX

VI FØRER PRODUKTER INDENFOR KATEGORIERNE:



AUTOMATIK



**HVAC & BYGNINGS-
AUTOMATIK**



KØLEPROFILER

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