

FXE Range of Fixed Duty Compact Flameproof Enclosure Heaters

EXHEAT Industrial's original range of FXE enclosure heaters provides an array of fixed duty heating solutions for smaller enclosures. EXHEAT Industrial also offers a range of FX fixed duty and self-regulating heaters, as well as the FXS bespoke self-regulating models that can be custom engineered to suit the customer's space restraints or duty requirements.

The FX range also includes the FXT control thermostats, available in both inline or remote designs. These thermostats provide frost protection, condensation prevention and temperature maintenance, and both heaters and thermostats are 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).



FXE FIXED DUTY COMPACT FLAMEPROOF ENCLOSURE HEATERS


The FXE range of enclosure heaters utilise a hard anodised, extruded aluminium profile, making it suitable for offshore applications, and includes a fixed duty cartridge type heating element in order to provide a compact heating solution for small enclosures.

Fixed duty heating elements produce a constant power output regardless of the ambient temperature, giving a specific temperature rise above the ambient. EXHEAT Industrial's FXE enclosure heaters have been certified to operate in an ambient temperature range -50°C to +40°C for T4 class heaters, and -50°C to +60°C and +80°C for T3 class heaters.

The FXE heaters are designed with a small, circular finned profile which may only be installed in a vertical orientation. These heaters are also supplied with a single mounting solution that can be used to affix the heater either directly to an enclosure, a bracket or terminal rail.

Due to the nature of fixed duty heating solutions, these heaters must not be allowed to exceed their ambient temperature limits; however EXHEAT Industrial can supply all heaters within the range with an integral inline thermostat which safely de-energises the heater when a certain ambient temperature is reached.

Please speak to our EXHEAT Industrial representatives in order to review your requirements and calculate the correct duty necessary for your installation. Alternatively, see our website for an enclosure heater calculation.

Certification	ATEX / IECEx  II 2 G D Ex d IIC T4 to T3 Gb Ex tb IIIC T135°C to T200°C Db
Ambient	-50°C with options up to +80°C
Cabling	1.5m standard
IP Rating	IP66 / IP68
Mounting	Wall or rail mounted vertically using the supplied mounting kit
Output	30 to 100W
Protection	Heater: Flameproof Thermostat: Flameproof or encapsulated
T Class	T4 (T135°C) and T3 (T200°C)
Voltage	110 to 254VAC

TYPICAL APPLICATIONS

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



Power	Voltage	T Class	Ambient	Dim A	Stock
30W	110-120V	T4	40°C	250mm	Yes
	220-254V	T3	80°C	175mm	
50W	110-120V	T4	40°C	325mm	Yes
	220-254V	T3	80°C	250mm	
75W	110-120V 220-254V	T3	60°C	250mm	Yes
100W	110-120V 220-254V	T3	60°C	325mm	Yes

ADDITIONAL ACCESSORY - THERMOSTAT

EXHEAT Industrial offers FXT thermostats that can be supplied fitted to the heaters' supply cable. Please speak to our sales representatives for more information on the range of available thermostats.

FXT Flameproof Air Sensing Thermostat						
Model	On / Off Temperature (+/-1.5°C)	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		
FXT-DI and FXT-DR Flameproof Thermostat						
Model	Open / Close Temperature (+/-3°C)	Voltage	Max Current	T Class	Max Ambient	Max Set Point
FXT-DI-5 FXT-DR-5	16°C / 5°C	110-277V	9A	T6	80°C	25°C
FXT-DI-20 FXT-DR-20	26°C / 15°C			T5	95°C	40°C
FXT-DI-40 FXT-DR-40	37°C / 26°C			T4	130°C	75°C
				T3	195°C	140°C
FXT-M Encapsulated Inline Thermostat						
Model	Open / Close Temperature (+/-3°C)	Voltage	Max Current	T Class	Ambient	
FXT-M-5	16°C / 5°C	110-120V	6.0A	T6	60°C	
FXT-M-20	26°C / 15°C	220-240V	3.3A		80°C	
FXT-M-40	37°C / 26°C	254-277V	4.8A	T5		

FX Range of Fixed Duty Flameproof Enclosure Heaters

EXHEAT Industrial's extended range of FX enclosure heaters provides an array of enclosure heating solutions, and are available in both fixed duty and self-regulating variants. EXHEAT Industrial can also manufacture bespoke self-regulating designs to suit any space restraint or duty requirement. Please enquire about the FXS range for more information.

The FX range also includes the FXT control thermostats, available in both inline or remote designs. These thermostats provide frost protection, condensation prevention and temperature maintenance, and both heaters and thermostats are 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).



FXB-FD AND FXH-FD FIXED DUTY FLAMEPROOF ENCLOSURE HEATERS

The fixed duty range of FX enclosure heaters utilise a hard anodised, extruded aluminium profile, making them suitable for offshore applications, and include a fixed duty, cartridge type heating element in order to provide a powerful heating solution for small and medium sized enclosures.

Fixed duty heating elements produce a constant power output regardless of the ambient temperature, giving a specific temperature rise above the ambient. EXHEAT Industrial's FX fixed duty enclosure heaters have been certified to operate in an ambient temperature range of -60°C to +40°C for T4 and T3 heaters, and -60°C to +80°C for some T3 heaters (see the tables on page 2).

The FXB-FD heaters are designed with a double-sided finned profile which may only be installed vertically to provide the greatest power output within the range. These heaters are supplied with a single mounting solution that can be used to affix the heater either directly to an enclosure or to a rail within one. The FXH-FD heaters have one flat side which can allow flexibility, they can be mounted horizontally or vertically to suit possible space constraints.

Due to the nature of fixed duty heating solutions, these heaters must not be allowed to exceed their ambient temperature limits; however EXHEAT Industrial can supply all heaters within the range with an integral inline thermostat which safely de-energises the heater when a certain ambient temperature is reached.

Please speak to our EXHEAT Industrial representatives in order to review your requirements and calculate the correct duty necessary for your installation. Alternatively, see our website for an enclosure heater calculation.

Certification	ATEX / IECEx Ⓜ II 2 G D Ex db IIC T4 to T3 Gb Ex tb IIIC T135°C to T200°C Db CSA and CU TR (EAC) approval upcoming
Ambient	-60°C with options up to +80°C
Cabling	3m standard (up to 10m available on request)
IP Rating	IP66 / IP68
Mounting	FXB-FD: Wall or rail mounted vertically using the supplied mounting kit FXH-FD: Directly bolted to the enclosure or a bracket (not supplied)
Output	45 to 500W
Protection	Heater: Flameproof Thermostat: Flameproof or encapsulated
T Class	T4 (135°C) and T3 (200°C)
Voltage	110 to 277VAC

TYPICAL APPLICATIONS

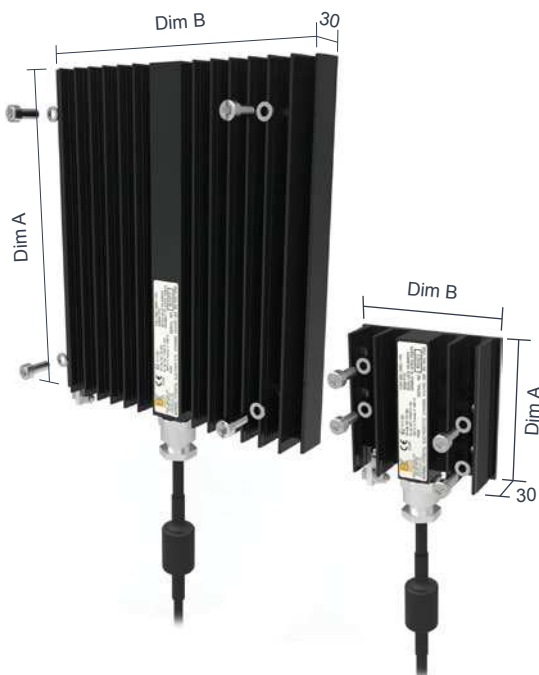
Condensation prevention	Control valve housings
Control / monitoring panels	Frost protection
Fire hose cabinets	Instrumentation cabinets
Generators	Motor enclosures
Manifolds	Valve blocks



FXB-FD Fixed Duty Double-Finned Enclosure Heaters

Power	Voltage *	T Class	Ambient	Dim A	Weight †	Stock
100W	110-120V 220-277V	T4 T3	40°C 80°C	225mm	3.2kg	Yes
200W	110-120V 220-240V	T4 T3	40°C 80°C	225mm	3.2kg	Yes
200W	254V	T3	40°C	225mm	3.2kg	Yes
200W	254V 277V	T4 T3	40°C 80°C	225mm	3.2kg	No
250W	110-120V 220-240V	T4 T3	40°C 80°C	325mm	4.5kg	Yes
250W	254V	T3	40°C	325mm	4.5kg	Yes
250W	254V 277V	T4 T3	40°C 80°C	325mm	4.5kg	No
350W	110-120V 220-240V	T3	40°C	225mm	3.2kg	Yes
350W	254V 277V	T3	40°C	225mm	3.2kg	No
400W	110-120V 220-254V	T3	40°C	325mm	4.5kg	Yes
400W	277V	T3	40°C	325mm	4.5kg	No
500W	110-120V 220-240V	T3	40°C	325mm	4.5kg	Yes
500W	254V 277V	T3	40°C	325mm	4.5kg	No

* Heaters are based on a nominal 120V and 240V with +5/-10% voltage tolerance on select models
 † Weight including 3m cable



FXH-FD Fixed Duty 'Low Profile' Enclosure Heaters

Power	Voltage *	T Class	Ambient	Dim A	Dim B	Weight †	Stock
45W	110-120V 220-240V	T4 T3	40°C 80°C	90mm	95mm	0.7kg	Yes
45W	254V 277V	T3	40°C	90mm	95mm	0.7kg	Yes
45W	254V 277V	T4 T3	40°C 80°C	90mm	95mm	0.7kg	No
85W	110-120V 220-240V	T3	40°C	90mm	95mm	0.7kg	Yes
85W	254V 277V	T3	40°C	90mm	95mm	0.7kg	No
100W	110-120V 220-277V	T4 T3	80°C 40°C	225mm	206mm	2.1kg	Yes
200W	110-120V 220-240V	T3	40°C	225mm	206mm	2.1kg	Yes
200W	254V 277V	T3	40°C	225mm	206mm	2.1kg	No

* Heaters are based on a nominal 120V and 240V with +5/-10% voltage tolerance on select models
 † Weight including 3m cable

ADDITIONAL ACCESSORIES

Extended Cable

FX heaters are supplied with 3m of cable as standard. Lengths up to 10m are available upon request.

Thermostat

EXHEAT Industrial can supply integral FXT thermostats installed in the heater's supply cable. Please speak to our sales representatives for more information on the range of available thermostats.

FXT-DI and FXT-DR Flameproof Thermostat						
Model	Open / Close Temperature (+/-3°C)	Voltage	Max Current	T Class	Max Ambient	Max Set Point
FXT-DI-5 FXT-DR-5	16°C / 5°C	110-277V	9A	T6	80°C	25°C
FXT-DI-20 FXT-DR-20	26°C / 15°C			T5	95°C	40°C
FXT-DI-40 FXT-DR-40	37°C / 26°C			T4	130°C	75°C
				T3	195°C	140°C

FXT-M Encapsulated Inline Thermostat						
Model	Open / Close Temperature (+/-3°C)	Voltage	Max Current	T Class	Ambient	
FXT-M-5	16°C / 5°C	110-120V	6.0A	T6	60°C	
FXT-M-20	26°C / 15°C	220-240V	3.3A		80°C	
FXT-M-40	37°C / 26°C	254-277V	4.8A	T5		

PRODUCT SELECTOR

Heater Model	Heater Output (W)	Heater Voltage (VAC)	Thermostat Type	Thermostat Set Point (°C)
• FXB-FD	• 100	• 110 • 120 • 220 • 230 • 240 • 254 • 277	• DI • DR • M • N *	• 5 • 20 • 40
	• 200			
	• 250			
	• 350			
	• 400			
	• 500			
• FXH-FD	• 45			
	• 85			
	• 100			
	• 200			

* Client to ensure that the maximum permissible ambient temperature is not exceeded.

Example (FXB-FD-100-110-DR-5)

FXB-FD fixed duty double-finned enclosure heater, 100W output, 110 voltage AC, with FXT-DR flameproof remote thermostat at 5°C pre-set temperature trigger point

FX Range of Self-Regulating Flameproof Enclosure Heaters

EXHEAT Industrial's extended range of FX enclosure heaters provides an array of enclosure heating solutions, and are available in both fixed duty and self-regulating variants. EXHEAT Industrial can also manufacture bespoke self-regulating designs to suit any space restraint or duty requirement. Please enquire about the FXS range for more information.

The FX range also includes the FXT control thermostats, available in both inline or remote designs. These thermostats provide frost protection, condensation prevention and temperature maintenance, and both heaters and thermostats are 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).



FXB-SR AND FXH-SR SELF-REGULATING FLAMEPROOF ENCLOSURE HEATERS

The self-regulating range of FX enclosure heaters utilise a hard anodised, extruded aluminium profile, making them suitable for offshore applications, and include a self-regulating, cartridge type heating element in order to provide a controlled heating solution for small and medium sized enclosures.

Self-regulating heating elements produce a variable power output based on the ambient temperature, which removes the necessity of an additional thermostat. EXHEAT Industrial's FX self-regulating enclosure heaters have been certified to operate in an ambient temperature range of -60°C to +180°C for T3 applications and -60°C to +130°C for T4 applications.

The FXB-SR heaters are designed with a double-sided finned profile, but unlike the fixed duty heaters, may be installed in any orientation (although vertically will provide the greatest power output). These heaters are supplied with a single mounting solution that can be used to affix the heater either directly to an enclosure or to a rail within one. The FXH-SR heaters have one flat side which can allow flexibility, they can be mounted in any orientation and directly to components that require heating.

Due to the nature of self-regulating heating solutions, these heaters cannot exceed their ambient temperature limits under their own power; if there are other sources of heat within the enclosure, it may be necessary to include an integral inline thermostat to safely de-energise the heater when the ambient temperature limit is reached.

Please speak to our EXHEAT Industrial representatives in order to review your requirements and calculate the correct duty necessary for your installation. Alternatively, see our website for an enclosure heater calculation.

Certification	ATEX / IECEx Ⓜ II 2 G D Ex db IIC T4 to T3 Gb Ex tb IIIC T135°C to T200°C Db CSA and CU TR (EAC) approval upcoming
Ambient	-60 to +180°C: T3 heaters -60 to +130°C: T4 heaters
Cabling	3m standard (up to 10m available on request)
IP Rating	IP66 / IP68
Mounting	FXB-SR: Wall or rail mounted vertically using the supplied mounting kit FXH-SR: Directly bolted to the enclosure or a bracket (not supplied)
Output	50 to 350W
Protection	Heater: Flameproof Thermostat: Flameproof or encapsulated
T Class	T4 (135°C) or T3 (200°C)
Voltage	110 to 277VAC

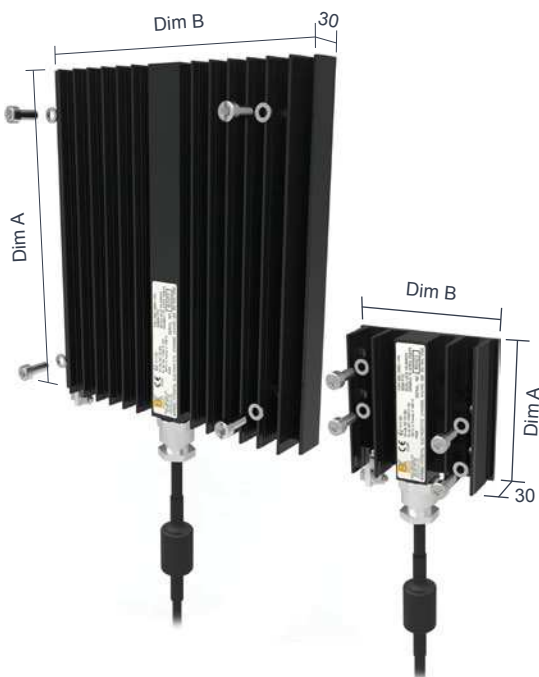
TYPICAL APPLICATIONS

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



FXB-SR Self-Regulating Double-Finned Enclosure Heaters						
Nominal Power *	Voltage †	T Class	Ambient	Dim A	Weight §	Stock
130W	100-140V 200-265V	T4	130°C	225mm	3.2kg	Yes
220W	100-140V 200-265V	T3	180°C	225mm	3.2kg	Yes
240W	100-140V 200-265V	T4	130°C	325mm	4.5kg	Yes
350W	100-140V 200-265V	T3	180°C	325mm	4.5kg	Yes

- * Power output will vary based on ambient conditions, placement, orientation, mounting and enclosure environment
- † Heaters are based on a nominal 120V and 240V with +/-10% voltage tolerance
- § Weight including 3m cable



FXH-SR Self-Regulating 'Low Profile' Enclosure Heaters							
Nominal Power *	Voltage †	T Class	Ambient	Dim A	Dim B	Weight §	Stock
50W	100-140V 200-265V	T4	130°C	90mm	95mm	0.7kg	Yes
80W	100-140V 200-265V	T3	180°C	90mm	95mm	0.7kg	Yes
100W	100-140V 200-265V	T4	130°C	225mm	206mm	2.1kg	Yes
200W	100-140V 200-265V	T3	180°C	225mm	206mm	2.1kg	Yes

- * Power output will vary based on ambient conditions, placement, orientation, mounting and enclosure environment
- † Heaters are based on a nominal 120V and 240V with +/-10% voltage tolerance
- § Weight including 3m cable

ADDITIONAL ACCESSORIES

Extended Cable

FX heaters are supplied with 3m of cable as standard. Lengths up to 10m are available upon request.

Thermostat

EXHEAT Industrial offers optional FXT thermostats that can be supplied fitted to the heaters' supply cable. Please speak to our sales representatives for more information on the range of available thermostats.

FXT-DI and FXT-DR Flameproof Thermostat						
Model	Open / Close Temperature (+/-3°C)	Voltage	Max Current	T Class	Max Ambient	Max Set Point
FXT-DI-5 FXT-DR-5	16°C / 5°C	110-277V	9A	T6	80°C	25°C
FXT-DI-20 FXT-DR-20	26°C / 15°C			T5	95°C	40°C
FXT-DI-40 FXT-DR-40	37°C / 26°C			T4	130°C	75°C
				T3	195°C	140°C

FXT-M Encapsulated Inline Thermostat						
Model	Open / Close Temperature (+/-3°C)	Voltage	Max Current	T Class	Ambient	
FXT-M-5	16°C / 5°C	110-120V	6.0A	T6	60°C	
FXT-M-20	26°C / 15°C	220-240V	3.3A		80°C	
FXT-M-40	37°C / 26°C	254-277V	4.8A	T5		

PRODUCT SELECTOR

Heater Model	Heater Output (W)	Heater Voltage (VAC) *	Thermostat Type (Optional)	Thermostat Set Point (°C)
• FXB-SR	• 130 • 220 • 240 • 350	• 120 • 240	• DI • DR • M • N †	• 5 • 20
• FXH-SR	• 50 • 80 • 100 • 200			

* Heaters are based on a nominal 120V and 240V with +/-10% voltage tolerance

† Client to ensure that the maximum permissible ambient temperature is not exceeded.

Example (FXH-SR-200-240-N)

FXH-SR 'low profile' enclosure heater, 200W output, 200VAC nominal voltage, with NO additional thermostat (no need to include value from Thermostat Set Point)

FXS Range of Flameproof Enclosure Heaters

The FXS self-regulating enclosure heater provides a bespoke solution tailored to suit your requirements. Unlike fixed duty heaters, the FXS does not require a thermostat to operate safely due to their inbuilt ability to reduce the output as the temperature increases. They can operate in ambient temperatures as high as 130°C (T4) or 180°C (T3) and down to -60°C.

The FXS is 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).

The FXS concept can be applied to practically any enclosure or component heating requirement. Designs will utilise an anodised aluminium body fitted with a self-regulating PTC cartridge type heating element in order to provide effective heating of enclosures via convection and radiation.



PTC heating elements produce more power when it is needed at lower temperatures. As ambient temperature increases, the resistance of the PTC element increases with the effect of a steady reduction in power output so that no power is produced above a particular temperature set point.

FXS self-regulating heaters are not restricted to being vertically mounted, but instead can be mounted flat on the base of an enclosure, horizontal / diagonally on an enclosure wall or directly to whatever component needs the heat.

Please speak to an EXHEAT Industrial representative in order to calculate the right amount of power for your particular installation.

Certification	ATEX Ⓢ II 2 G D Ex db IIC T4 to T3 Gb Ex tb IIIC T135°C to T200°C Db IECEX Ex db IIC T4 to T3 Gb Ex tb IIIC T135°C to T200°C Db
Voltage	100 to 140VAC or 200 to 265VAC
Output	Up to 1000W (subject to design, mounting and ambient conditions)
Ambient	-60 to +130°C: T4 heaters -60 to +180°C: T3 heaters
T Class	T4 (135°C) or T3 (200°C)
Mounting	Directly bolted
Cabling	3m standard (up to 10m available on request)
IP Rating	IP66 / IP68

FEATURES

- Hard anodised aluminium housing suitable for onshore and offshore applications
- Can be directly mounted to the component that requires heating
- Compact and efficient
- Suitable for ambient temperatures as low as -60°C and up to +180°C
- Available in T3 and T4 temperature classes



FXS Block Heaters

The FXS self-regulating block heaters provide a bespoke solution tailored to suit your requirements. Unlike fixed duty heaters, the FXS does not require a thermostat to operate safely due to their inbuilt ability to reduce the output as the temperature increases. They can operate in ambient temperatures as high as 130°C (T4) or 180°C (T3) and down to -60°C.

The FXS range is 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).

Block heaters offer a superior alternative to trace heating when either the size of the part being heated or installation time needs to be considered.

When bolted directly to a metal-based product (an aluminium housing for instance) the self-regulating properties of the FXS Block heater are enhanced, as the part being directly mounted on to acts as a heatsink, and draws the energy from the element far quicker than if left in air.

Trace heating may require several meters of cable to achieve the required duty, which will also need careful installation, securing, and splicing to ensure the protection offered by the cable's approval is maintained. With the FXS Block heater, you simply bolt the unit to your intended surface, and connect the supply cable in an appropriate way.

Certification	<p>ATEX</p> <p>⊕ II 2 G D Ex db IIC T4 to T3 Db Ex tb IIIC T135°C to T200°C Db</p> <p>IECEX</p> <p>Ex db IIC T4 to T3 Gb Ex tb IIIC T135°C to T200°C Db</p>
Voltage	100 to 140VAC or 200 to 265VAC
Output	Up to 1000W (subject to design, mounting and ambient conditions)
Ambient	-60 to +130°C: T4 heaters -60 to +180°C: T3 heaters
T Class	T4 (135°C) or T3 (200°C)
Mounting	Directly bolted
Cabling	3m standard (up to 10m available on request)
IP Rating	IP66 / IP68

FEATURES

- Hard anodised aluminium housing suitable for onshore and offshore applications
- Can be directly mounted to the component that requires heating
- Compact and efficient
- Suitable for ambient temperatures as low as -60°C and up to +180°C
- Available in T3 and T4 temperature classes

HEF Hazardous Area Enclosure Heaters

The HEF is self-regulating, automatically adjusting its output to match ambient temperatures. Coupled with its compact design, this makes the HEF ideal for anti-condensation, frost protection and temperature regulation. The HEF range is certified for use in hazardous areas where the atmosphere is classified as a Zone 1 or 2 (IIC) gas group.



FEATURES

Certified and declared in accordance with ATEX directive 2014/34/EU

Certified to CSA (Divisions and Zones) standards for North American markets

Compact, low profile, 316 stainless steel case, requires minimal space

Self-regulating - can be used without a thermostat

Suitable for ambient temperatures from -60°C (-55°C for CSA certified models only) to +80°C

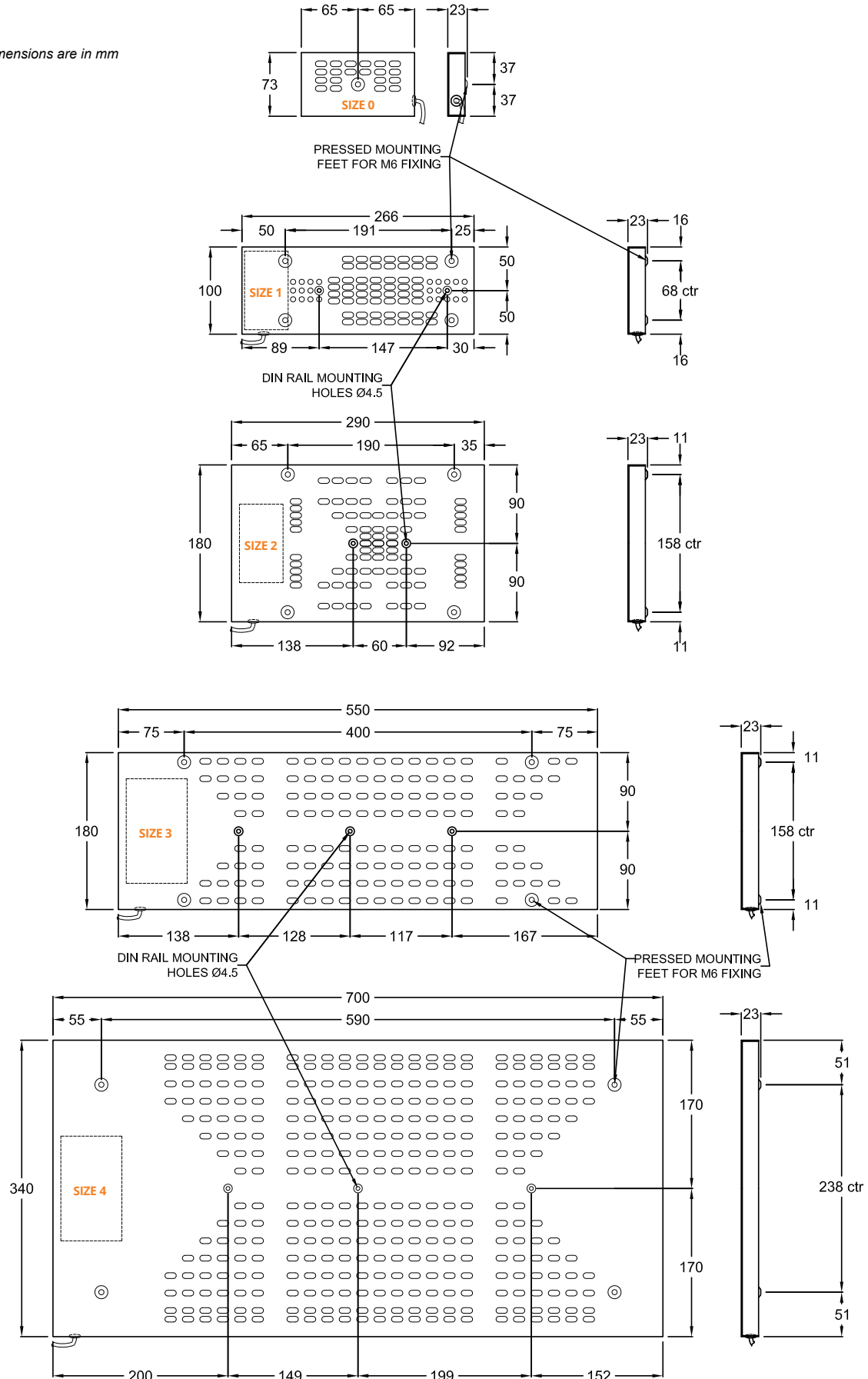
Mounting of the heater can be in any orientation

Design allows for closer installation proximity to internal components and cables (minimum distance 100mm away)

TYPICAL APPLICATIONS

Condensation prevention	Container skid housing
Control / monitoring panels	Control valve housings
Fire hose cabinets	Frost protection
Generators	Instrumentation cabinets
Manifolds	Motor enclosures
Temperature fluctuations	Valve blocks

All dimensions are in mm



ATEX / IECEx, CU TR, KGS Certified Models

Model	Output	Temperature Class	Weight	Size of Casing
HEF30	30W	T4	0.4kg	SIZE 0
HEF50	50W	T4	1.0kg	SIZE 1
HEF100	100W	T4	1.5kg	SIZE 2
HEF200	200W	T4	3.0kg	SIZE 3
HEF500	500W	T4	6.5kg	SIZE 4

CSA Certified Models

Model	Output	Temperature Class	Weight	Size of Casing
HEF30	30W	T3	0.4kg	SIZE 0
HEF50	50W	T3	1.0kg	SIZE 1
HEF100	100W	T3	1.5kg	SIZE 2
HEF200	200W	T3	3.0kg	SIZE 3
HEF500	500W	T3	6.5kg	SIZE 4

Note: CSA T4 certified models available upon special request.

Certification	<p>ATEX / IECEx Ⓜ II 2 G Ex e IIC T4 Gb</p> <p>CSA ® (CAN & USA) CAN: Class I, Division 2, Groups A, B, C and D, T3 or T4 CAN: Ex e IIC T3 or T4 Gb USA: Class I, Division 2, Groups B, C and D, T3 or T4 USA: Class I, Zone 1, AEx e IIC T3 or T4 Gb</p>	<p>CU TR / EAC (formerly GOST) 2 Ex e II T4</p> <p>KGS Ex e IIC T4</p>
Casing	316 perforated stainless steel	
Controls	The HEF is self-regulating, automatically reducing its output as the ambient temperature rises. If overall enclosure temperature control is required, it is recommended that the HEF heater be used in conjunction with the AFT, HFT or FXT flameproof air sensing thermostats	
Elements	Self-regulating	
Mounting	The heater may be mounted in any orientation, using appropriate securing bolts through the mounting feet or DIN rail holes	
Rating	The HEF range is available in a nominal 30W, 50W, 100W, 200W and 500W outputs	
Voltage	Models available for 110V to 120V and 230V to 240V 1 phase supplies (max 254V subject to design parameters)	

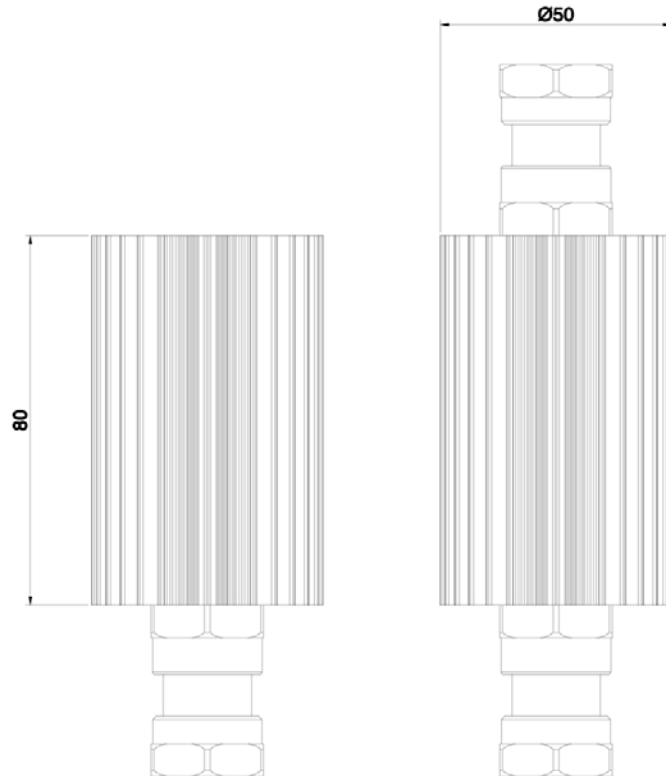
FXT Flameproof Air Sensing Thermostats

The FXT range of thermostats reflects the design of other FX range of air warmers; the extruded aluminium finned tube can be mounted vertically by bracket or rail. The thermostat can be paired with the FXE heater or used as a standalone product supplied with cables fitted through certified cable glands for termination.




FEATURES

- Certified to ATEX and IECEx standards
- 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 CU TR approval upcoming
Extrusion	Finned aluminium, anodised matt black
Mounting	Vertically mounted by bracket or rail
Voltage	Up to 250V, 1.3A
Hysteresis	+/- 1.5°C

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.

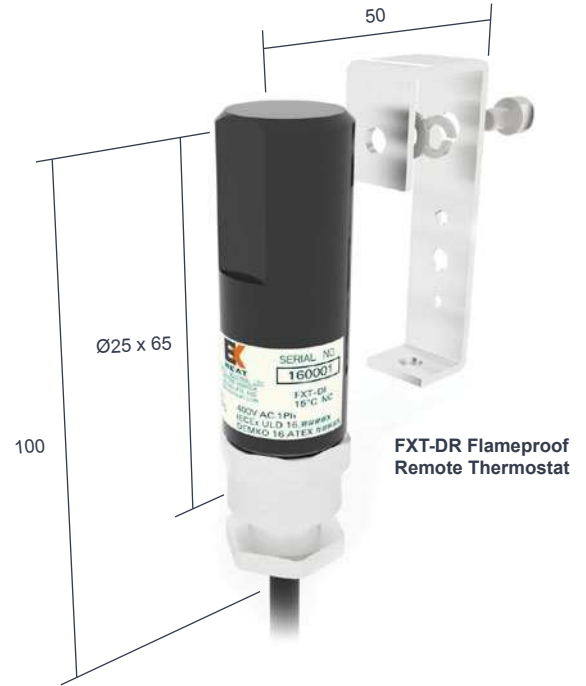
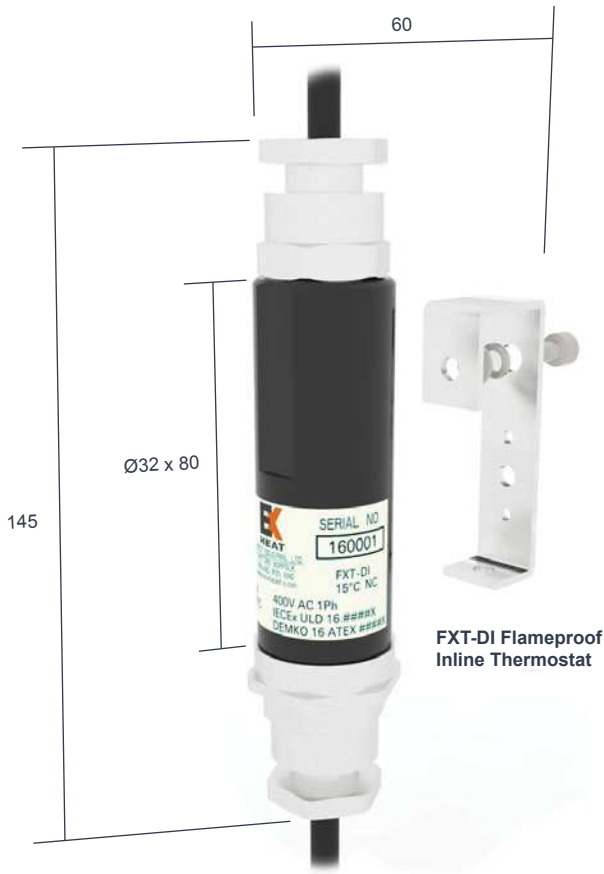
Housed in a hard anodised aluminium enclosure, they are suited for marine environments, and are available as either a remote (FXT-DR) or inline (FXT-DI) thermostat.

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. Alternatively, see our website for an enclosure heater calculation.



TYPICAL APPLICATIONS

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



Model	Weight	Open / Close Temperature (+/-3°C)	Voltage	Max Current	Temp Class	Max Ambient	Max Set Point
FXT-DI-5	0.5kg	16°C / 5°C	110-277V	9A	T6 T5 T4 T3	80°C 95°C 130°C 195°C	25°C 40°C 75°C 140°C
FXT-DR-5	0.2kg						
FXT-DI-20	0.5kg	26°C / 15°C					
FXT-DR-20	0.2kg						
FXT-DI-40	0.5kg	37°C / 26°C					
FXT-DR-40	0.2kg						

- Certification** ATEX / IECEx II 2 G D
Ex db IIC T6 to T3 Gb
Ex tb IIIC T85°C to T200°C Db
CSA and CU TR (EAC) approval upcoming
- 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 / IP68



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.

TYPICAL APPLICATIONS

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



Model	Open / Close Temperature (+/-3°C)	Voltage	Max Current	T Class	Ambient	Weight
FXT-M-5	16°C / 5°C	110-120V	6.0A	T6 T5	60°C 80°C	0.1kg
FXT-M-20	26°C / 15°C	220-240V	3.3A			
FXT-M-40	37°C / 26°C	254-277V	4.8A			

Certification

ATEX / IECEx II 2 G D
 Ex mb IIC T6 to T5 Gb
 Ex mb IIIC T85°C to T100°C Db
 CSA and CU TR (EAC) approval upcoming

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 / IP68