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).

Certification	ATEX / IECEx Ⓔx 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 / monitoring panels
- Fire hose cabinets
- Generators
- Manifolds
- Control valve housings
- Frost protection
- Instrumentation cabinets
- Motor enclosures
- Valve blocks

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.

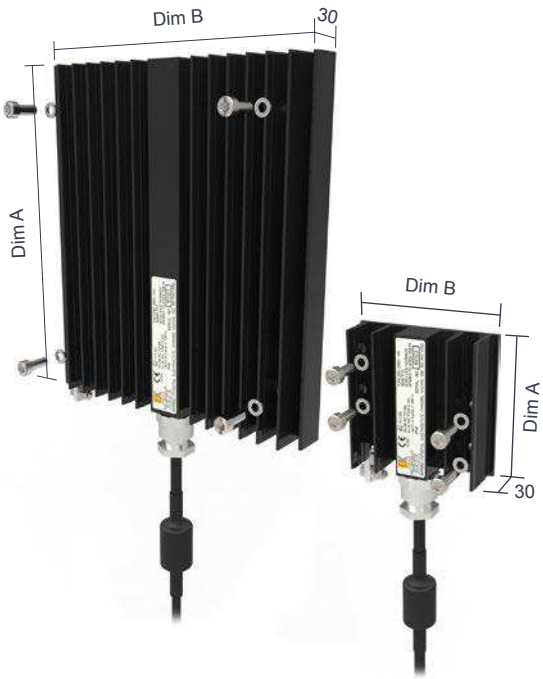
The FXB-SR heaters are designed with a double-sided finned profile, but unlike the fixed duty heaters, may be installed in any orientation (although vertically will provide the greatest power output). These heaters are supplied with a single mounting solution that can be used to affix the heater either 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.

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 T5 T4 T3	80°C 95°C 130°C 195°C	25°C 40°C 75°C 140°C
FXT-DI-20 FXT-DR-20	26°C / 15°C					
FXT-DI-40 FXT-DR-40	37°C / 26°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 220-240V 254-277V	6.0A 3.3A 4.8A	T6 T5	60°C 80°C
FXT-M-20	26°C / 15°C				
FXT-M-40	37°C / 26°C				

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)