

FX Range of Self-Regulating Flameproof Enclosure Heaters

EXHEAT Industrial's extended range of FX enclosure heaters provides an array of enclosure/cabinet 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/UKEX Ⓢ II 2 G D Ex db IIC T4 to T2 Gb Ex tb IIIC T135°C to T300°C Db CCC Ex d IIC T4 to T2 Gb Ex tD A21 IP66 T135°C to T300°C CU TR (EAC) CU-TR.012/2011 CERTIFIED 1 Ex db IIC T4...T2 Gb X Ex tb IIIC T135°C...T300°C Db X CSA: Class I Div 2, Groups A, B, C, D T4...T2 Class II Div 2, Groups E, F, G T4...T2 Class I Zone 1, AEx db IIC T4...T2 Gb Zone 21, AEx tb IIIC T135°C...T300°C Db
Ambient	-60°C to +180°C: T3 heaters -60°C to +130°C: T4 heaters Minimum of -50°C with the FXT thermostat
Cabling	3m standard (up to 10m available on request)
IP Rating	IP66
Mounting	FXB-SR: Wall or rail mounted vertically using supplied mounting kit FXH-SR: Directly bolted to enclosure or bracket (not supplied)
Output	50 to 550W
Protection	Heater: Flameproof Thermostat: Flameproof or encapsulated
T Class	T4 (135°C) or T3 (200°C)
Voltage	110 to 265VAC



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 for a thermostat. EXHEAT Industrial's FX self-regulating enclosure/cabinet 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.

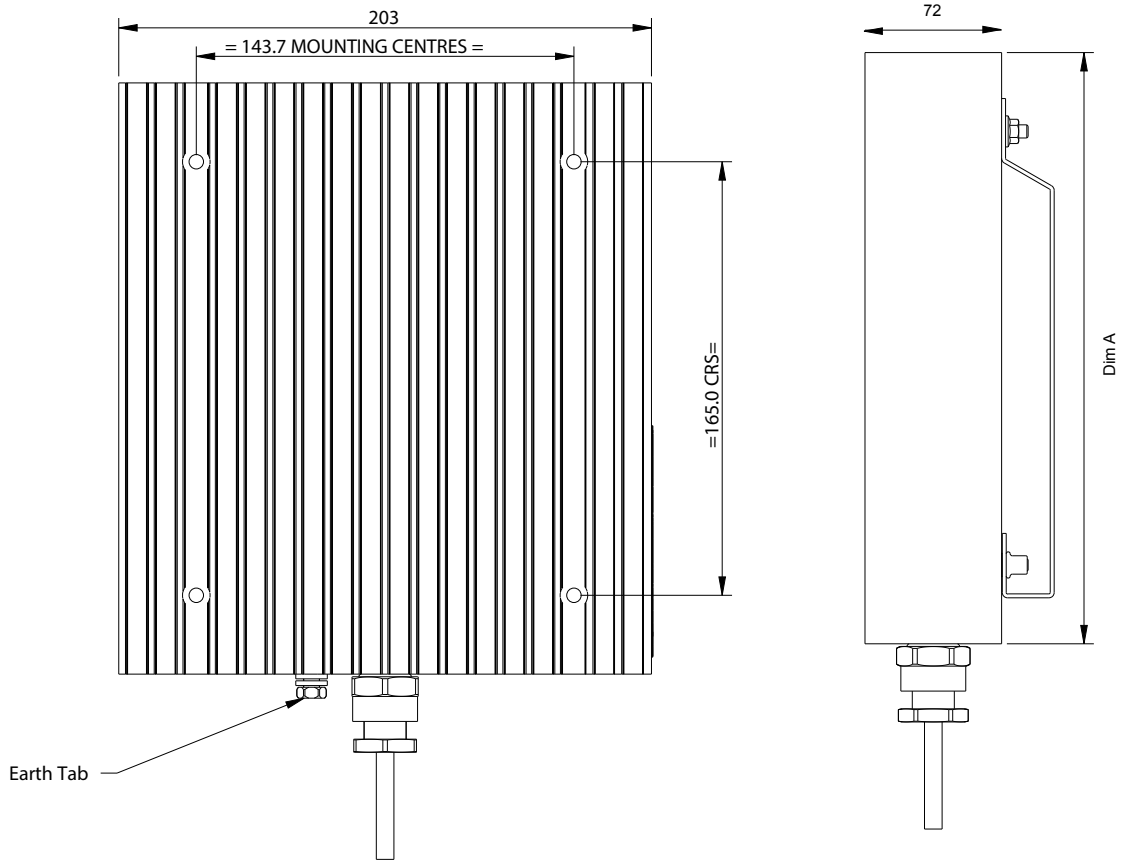
The FXB-SR heaters are designed with a double-sided finned profile, but unlike the fixed duty heaters, may be installed in any orientation (although vertically will provide the greatest power output). These heaters are supplied with a single mounting solution that can be used to affix the heater either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

TYPICAL APPLICATIONS

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



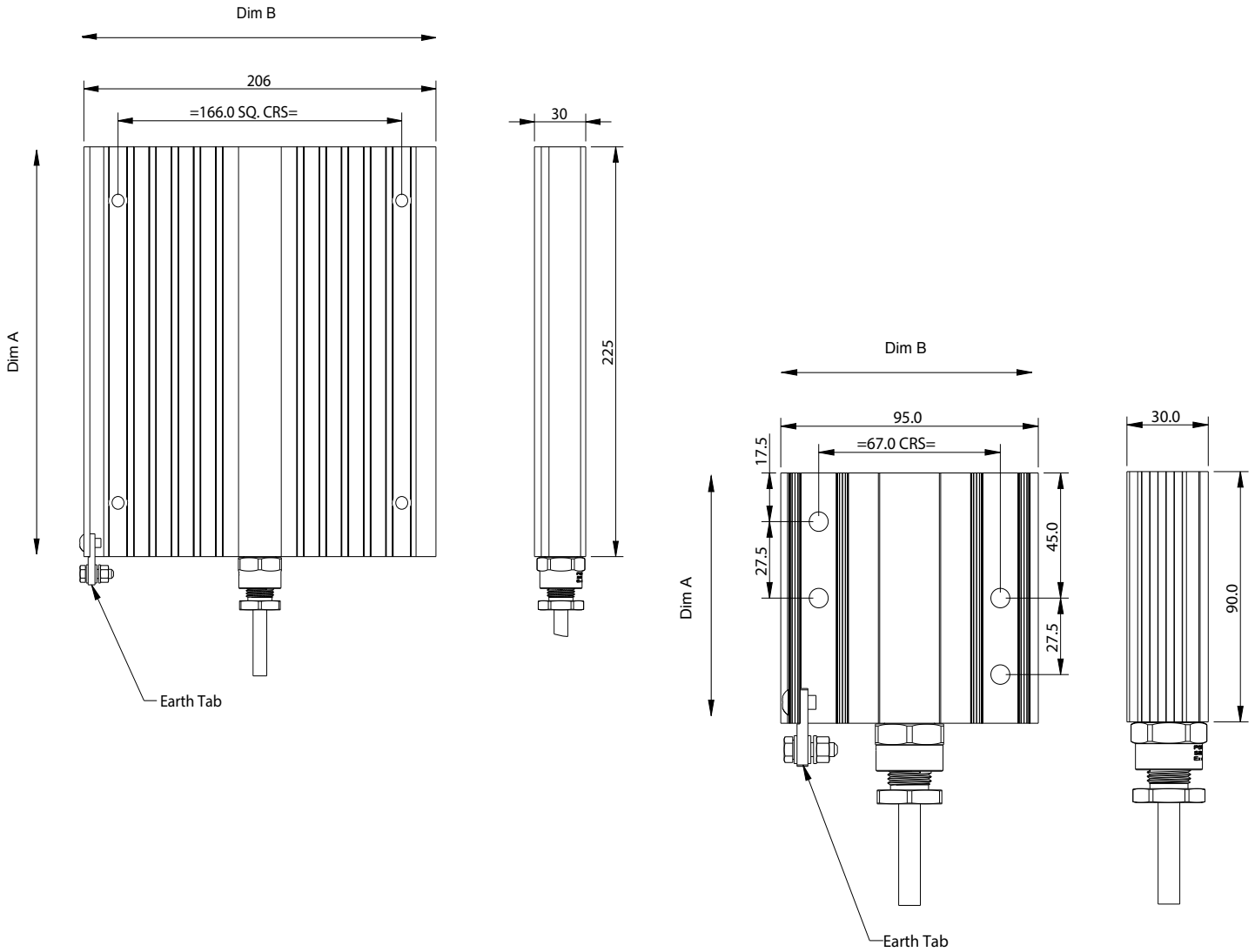
FXB-SR Self-Regulating Double-Finned Enclosure/Cabinet Heaters						
Nominal Power *	Voltage †	T Class	Ambient	Dim A	Weight §	Stock
130W	110-265V	T4	130°C	225mm	3.2kg	Yes
220W	110-265V	T3	180°C	225mm	3.2kg	Yes
220W	110-265V	T4	130°C	225mm	3.2kg	Yes
350W	110-265V	T3	180°C	325mm	4.5kg	Yes
400W	110-265V	T3	180°C	325mm	4.5kg	Yes
400W	110-265V	T4	130°C	325mm	4.5kg	Yes
550W	110-265V	T3	180°C	325mm	4.5kg	Yes

* Power output will vary based on ambient conditions, placement, orientation, mounting and enclosure environment

† +/-0% voltage tolerance

§ Weight including 3m cable

Refer to IOM for recommended mounting distance between heater and enclosure wall.



FXH-SR Self-Regulating 'Low Profile' Enclosure/Cabinet Heaters							
Nominal Power *	Voltage †	T Class	Ambient	Dim A	Dim B	Weight §	Stock
50W	110-265V	T4	130°C	90mm	95mm	0.7kg	Yes
80W	110-265V	T3	180°C	90mm	95mm	0.7kg	Yes
100W	110-265V	T3	180°C	90mm	95mm	0.7kg	Yes
120W	110-265V	T4	130°C	225mm	206mm	2.1kg	Yes
200W	110-265V	T3	180°C	225mm	206mm	2.1kg	Yes
300W	110-265V	T3	180°C	225mm	206mm	2.1kg	Yes

* Power output will vary based on ambient conditions, placement, orientation, mounting and enclosure environment

† +/-0% voltage tolerance

§ Weight including 3m cable

Refer to IOM for recommended mounting distance between heater and enclosure wall.

ADDITIONAL ACCESSORIES

Extended Cable

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

Bracket Kit

Bracket mounting kits (*stock code: S0960201650001*) are available for the FXH series. (225mm only)

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-M Encapsulated Inline Thermostat						
Model	Open / Close Temperature (+/-3°C)	Stock Code	Voltage	Max Current	T Class	Max Ambient
FXT-M-5	16°C / 5°C	S760400500	0-277V	6.0 A 3.3 A 4.8 A	T6 T5	60°C 80°C
FXT-M-20	26°C / 15°C	S760402000				
FXT-M-30	37°C / 26°C	S760403000				
FXT-M-40	53°C / 42°C	S760404000				
FXT-M-60	69°C / 58°C	S760462000				
FXT-DI and FXT-DR Flameproof Thermostat						
Model	Open / Close Temperature (+/-3°C)	Stock Code	Voltage	Max Current	T Class	Max Ambient
FXT-DI-5 FXT-DR-5	16°C / 5°C	S760200500 S760300500	0-277V	9.0 A	T6 T5 T4 T3	80°C 95°C 130°C 195°C
FXT-DI-20 FXT-DR-20	26°C / 15°C	S760202000 S760302000				
FXT-DI-30 FXT-DR-30	37°C / 26°C	S760203000 S760303000				
FXT-DI-40 FXT-DR-40	53°C / 42°C	S760204000 S760304000				
FXT-DI-60 FXT-DR-60	69°C / 58°C	S760206000 S760308000				
FXT-DR-80	92°C / 81°C					

PRODUCT SELECTOR

Heater Model	Heater Output (W)	Heater Voltage (VAC)	Thermostat Type (Optional)	Thermostat Set Point (°C)
• FXB-SR	• 130 • 220 • 350 • 400 • 550	• 110-265	• DI • DR • M • N †	• 5 • 10 • 20 • 40 § • 60 • 80 (only for DR)
• FXH-SR	• 50 • 80 • 100 • 120 • 200 • 300			

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

§ 40°C set point not applicable for FXT-M models.

Example (FXH-SR-200)

FXH-SR 'low profile' enclosure heater, 200W output, 240VAC nominal voltage, optional thermostat