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, IIB, IIIC).

| 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 |
|-----------------------------|
| Control / monitoring panels |
| Control valve housings |
| Generators |
| Manifolds |

Frost protection Fire hose cabinets Instrumentation cabinets Motor enclosures Valve blocks



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.





| Power | Voltage | T Class | Ambient | Dim A | Stock |
|-------|----------------------|---------|---------|-------|-------|
| 30W | 110-120V | Τ4 | 40°C | 250mm | Yes |
| 3000 | 220-254V | Т3 | 80°C | 175mm | res |
| E0\4/ | 110-120V | Τ4 | 40°C | 325mm | Yes |
| 50W | 220-254V | Т3 | 80°C | 250mm | res |
| 75W | 110-120V 220-254V | Т3 | 60°C | 250mm | Yes |
| 100W | 110-120V 220-254V | Т3 | 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.

| 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 FX | T-DR Flameproof Thermostat | | | | · · | |
| Model | Open / Close Temperature (+/-3°C) | Voltage | Max Current | T Class | Max Ambient | Max Set Point |
| FXT-DI-5 | 16°C / 5°C | | | | | |
| FXT-DR-5 | 10 07 5 0 | | | Т6 | 80°C | 25°C |
| FXT-DI-20 | 26°C / 15°C | 110-277V | 9A | Т5 | 95°C | 40°C |
| FXT-DR-20 | 28 07 15 0 | 110-2777 | 94 | Τ4 | 130°C | 75°C |
| FXT-DI-40 | 27%0 / 20%0 | | | Т3 | 195°C | 140°C |
| FXT-DR-40 | 37°C / 26°C | | | | | |
| FXT-M Encaps | sulated Inline Thermostat | | · · · | | - · | |
| Model | Open / Close Temperature (+/-3°C) | Voltage | Max Current | T Class | Am | bient |
| FXT-M-5 | 16°C / 5°C | 110-120V | 6.0A | | | |
| FXT-M-20 | 26°C / 15°C | 220-240V 3.3A | | Т6 | |)°C |
| FXT-M-40 | 37°C / 26°C | 254-277V | 277V 4.8A T5 | | 80°C | |



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, IIB, IIIC).

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



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.







| 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 | Т3 | 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 | Т3 | 40°C | 325mm | 4.5kg | Yes |
| 250W | 254V 277V | T4 T3 | 40°C 80°C | 325mm | 4.5kg | No |
| 350W | 110-120V 220-240V | Т3 | 40°C | 225mm | 3.2kg | Yes |
| 350W | 254V 277V | Т3 | 40°C | 225mm | 3.2kg | No |
| 400W | 110-120V 220-254V | Т3 | 40°C | 325mm | 4.5kg | Yes |
| 400W | 277V | Т3 | 40°C | 325mm | 4.5kg | No |
| 500W | 110-120V 220-240V | Т3 | 40°C | 325mm | 4.5kg | Yes |
| 500W | 254V 277V | Т3 | 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



| 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 | Т3 | 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 | Т3 | 40°C | 90mm | 95mm | 0.7kg | Yes |
| 85W | 254V 277V | Т3 | 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 | Т3 | 40°C | 225mm | 206mm | 2.1kg | Yes |
| 200W | 254V 277V | Т3 | 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 | 16°0 / 5°0 | 110-277V | 9A | | | |
| FXT-DR-5 | 16°C / 5°C | | | Т6 | 80°C | 25°C |
| FXT-DI-20 | 20%0 / 45%0 | | | Т5 | 95°C | 40°C |
| FXT-DR-20 | 26°C / 15°C | | | Τ4 | 130°C | 75°C |
| FXT-DI-40 | 07%0 / 00%0 | | | Т3 | 195°C | 140°C |
| FXT-DR-40 | 37°C / 26°C | | | | | |

| FXT-M Encaps | sulated 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 | To | 2000 |
| FXT-M-20 | 26°C / 15°C | 220-240V | 3.3A | T6 T5 | 60°C 80°C |
| FXT-M-40 | 37°C / 26°C | 254-277V | 4.8A | 15 | 00 0 |

PRODUCT SELECTOR

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

* 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, IIB, IIIC).

| Certification | ATEX / IECEx log 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-Regula | ating Double | e-Finned En | closure 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 | Т3 | 180°C | 225mm | 3.2kg | Yes |
| 240W | 100-140V 200-265V | T4 | 130°C | 325mm | 4.5kg | Yes |
| 350W | 100-140V 200-265V | Т3 | 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 t

Weight including 3m cable §

Hazardous Area Electric Heaters & Controls



| Nominal | Voltage † | T Class | Ambient | Dim A | Dim B | Weight§ | Stock |
|---------|----------------------|---------|---------|-------|-------|---------|-------|
| Power * | | | | | | | |
| 50W | 100-140V 200-265V | Τ4 | 130°C | 90mm | 95mm | 0.7kg | Yes |
| 80W | 100-140V 200-265V | Т3 | 180°C | 90mm | 95mm | 0.7kg | Yes |
| 100W | 100-140V 200-265V | Τ4 | 130°C | 225mm | 206mm | 2.1kg | Yes |
| 200W | 100-140V 200-265V | Т3 | 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 | 16°C / 5°C | | | | | |
| FXT-DR-5 | 16 07 5 0 | | | Т6 | 80°C | 25°C |
| FXT-DI-20 | 26°C / 15°C | 110-277V | 9A | Т5 | 95°C | 40°C |
| FXT-DR-20 | 26 07 15 0 | 110-277V | 9A | Τ4 | 130°C | 75°C |
| FXT-DI-40 | 2702 / 200 | | | Т3 | 195°C | 140°C |
| 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 | 6.0A | To | 00%0 | | |
| FXT-M-20 | 26°C / 15°C | 220-240V | 3.3A | T6 T5 | 60°C 80°C | | |
| FXT-M-40 | 37°C / 26°C | 254-277V | 4.8A | 10 | 00 0 | | |

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)





| 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 |

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.

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 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.

| 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 |
| 100 to 140VAC or 200 to 265VAC |
| Up to 1000W (subject to design, mounting and ambient conditions) |
| -60 to +130°C: T4 heaters |
| -60 to +180°C: T3 heaters |
| T4 (135°C) or T3 (200°C) |
| Directly bolted |
| 3m standard (up to 10m available on request) |
| IP66 / IP68 |
| |



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.

FEATURES

Hard anodised aluminium housing suitable for onshore and offshore applications $% \left({{{\left({{{{\bf{n}}}} \right)}_{i}}}_{i}} \right)$

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



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.

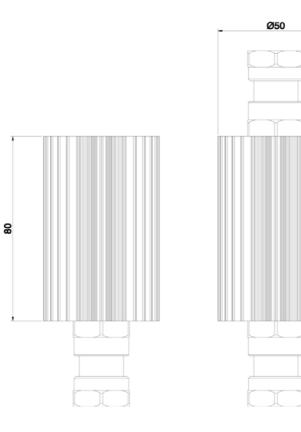


| | AT | UR | |
|----|----------|-----------------|-----|
| FF | ΔΙ | пк | ES. |
| | _ | \mathbf{v} iv | |

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 |





TYPICAL APPLICATIONS

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

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).

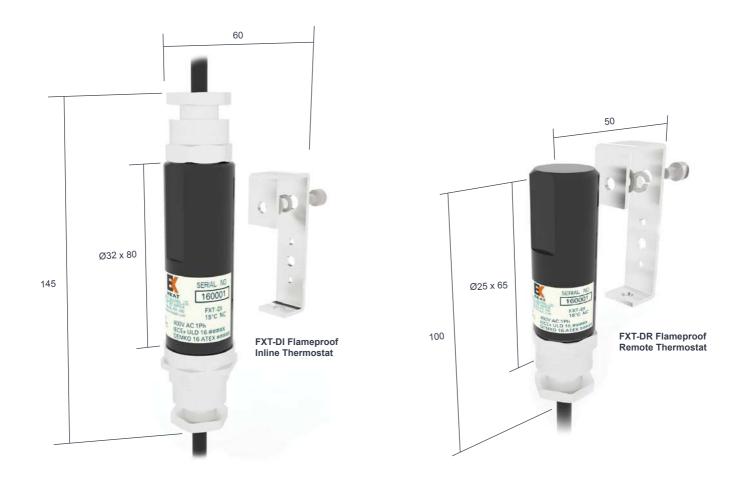
FXT-DR AND FXT-DI FLAMEPROOF THERMOSTAT

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.





| Model | Weight | Open / Close Temperature (+/-3°C) | Voltage | Max Current | Temp Class | Max Ambient | Max Set Point |
|-----------|--------|--------------------------------------|-----------|----------------|---------------|----------------|------------------|
| FXT-DI-5 | 0.5kg | 16°0 / 5°0 | | | | | |
| FXT-DR-5 | 0.2kg | 16°C / 5°C 26°C / 15°C | | | Т6 | 80°C | 25°C |
| FXT-DI-20 | 0.5kg | | 110 077\/ | 0.4 | T5 | | 40°C |
| FXT-DR-20 | 0.2kg | | 110-277V | 9A | T4 | 130°C | 75°C |
| FXT-DI-40 | 0.5kg | | | | Т3 | 195°C | 140°C |
| FXT-DR-40 | 0.2kg | 37°C / 26°C | | | | | |

| 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, IIB, 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 / monitoring panels Fire hose cabinets Generators Manifolds

Control valve housings Frost protection Instrumentation cabinets Motor enclosures 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 | | | |
| FXT-M-20 | 26°C / 15°C | 220-240V 254-277V | 3.3A | Т6 Т5 | 60°C 80°C | 0.1kg |
| FXT-M-40 | 37°C / 26°C | | 4.8A | 15 | 80 C | |

| 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 |