



THORNE &
DERRICK
INTERNATIONAL
+44 (0) 191 410 4292
www.heatingandprocess.com



**CSA
Group**

Certificate of Compliance

Certificate: 70124225

Master Contract: 269798

Project: 70124225

Date Issued: October 12, 2018

Issued to: ExHeat Industrial Limited
Thrextan Road
Industrial Estate,
Watton
Norfolk,
IP25 6NG
UNITED KINGDOM

Attention: James Brown

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and US Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only



Issued by:

Sean Kiely

PRODUCTS

CLASS 4868-01 – Temperature-Indicating and Regulating Equipment – For Hazardous Areas

Type FXT-DI and FXT-DR Flameproof/Explosion proof Air Sensing Thermostats (Regulating Type), Rated 9A max, 277Vac max, 50/60 Hz

Class I, Div 1, Groups A, B, C, and D T*

Class III, Div 1; Class II, Div 1, Groups E, F, and G

Type 4

Ex db IIC T* Gb

Ex tb IIIC T*°C Db

IP 66



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***Ambient Range:**

-50°C to + 195°C	Set point 140°C max	T3 / T200 °C	**
-50°C to + 180°C	Set point 125°C max	T3 / T200 °C	
-50°C to + 130°C	Set point 75°C max	T4 / T135 °C	
-50°C to + 95°C	Set point 40 °C max	T5 / T100 °C	
-50°C to + 80°C	Set point 25 °C max	T6 / T85 °C	

**** Omerin Silicable Cable only**

Type FXT-M Encapsulated Air Sensing Thermostats (Regulating Type), Rated: 6A max at 120Vac max, 3.3A max at 240Vac, 4.8A max at 277Vac, 50/60 Hz.

Class I, Div 2, Groups A, B, C, and D T*

Class III, Div 2; Class II, Div 2, Groups E, F, and G

Type 4

Ex mb IIC T* Gb

Ex mb IIIC T*°C Db

IP 66

***Ambient Range:**

-50°C to + 60°C	T6 / T85°C
-50°C to + 80°C	T5 / T100°C

CLASS 4868-81 – Temperature-Indicating and Regulating Equipment – For Use in Hazardous Location – Certified to US Standards

Type FXT-DI and FXT-DR Flameproof/Explosion proof Air Sensing Thermostats (Regulating Type), rated 9A max, 277Vac max, 50/60 Hz

Class I, Div 1, Groups A, B, C, and D T*

Class III, Div 1; Class II, Div 1, Groups E, F, and G

Type 4

Class I, Zone 1, AEx db IIC T*

Class III, Zone 21; Class II, Zone 21, AEx tb IIIC T*°C

IP 66

***Ambient Range:**

-50°C to + 195°C	Set point 140°C max	T3 / T200 °C	**
-50°C to + 180°C	Set point 125°C max	T3 / T200 °C	
-50°C to + 130°C	Set point 75°C max	T4 / T135 °C	
-50°C to + 95°C	Set point 40 °C max	T5 / T100 °C	
-50°C to + 80°C	Set point 25 °C max	T6 / T85 °C	

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Type FXT-M Encapsulated Air Sensing Thermostats (Regulating Type), Rated: 6A max at 120Vac max, 3.3A max at 240Vac, 4.8A max at 277Vac, 50/60 Hz.

Class I, Div 2, Groups A, B, C, and D T*

Class III, Div 2; Class II, Div 2, Groups E, F, and G

Type 4

AEx mb IIC T*

AEx mb IIIC T*°C

IP 66

*Ambient Range:

-50°C to + 60°C T6 / T85°C

-50°C to + 80°C T5 / T100°C

Conditions of Acceptability:

Type FXT-DI and FXT-DR Flameproof/Explosion proof Air Sensing Thermostats (Regulating Type)

1. The equipment is not field serviceable by the user and shall not be opened.
2. The equipment shall be installed so that pulling, flexing or mechanical damage of the cable is prevented.
3. The equipment shall be grounded by use of a 4mm² cross sectional area grounding cable as a minimum, installed in accordance with the descriptive documents.
4. The cable entry glands and thread adaptors on the FXT-DI/DR shall be appropriately certified equipment suitable for the ambient temperature range of the equipment to which they are fitted and which provide IP66/Type 4 sealing to the enclosure body. The FXT-DI/DR when fitted with suitably certified cable entry glands of the compression type shall be limited to installation in Div 2/Zone 1 locations.

Type FXT-M Encapsulated Air Sensing Thermostats (Regulating Type)

1. The equipment is not field serviceable by the user and shall not be opened.
2. The equipment shall be installed so that pulling, flexing or mechanical damage of the cable is prevented.
3. The equipment shall be installed so that it is protected from impact and exposure to direct sunlight.
4. The equipment shall be supplied via a fuse that is mounted externally in a safe area and rated at 277 V ac, 6 A maximum. The fuse shall have a breaking capacity which exceeds the prospective short circuit current of the supply.



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APPLICABLE REQUIREMENTS

CAN/CSA C22.2 No. 0-10 (R2015)	- General Requirements – Canadian Electrical Code, Part II
CAN/CSA C22.2 No. 24-15	- Temperature-indicating and regulating equipment
CAN/CSA C22.2 No. 25-17	- Enclosures for use in Class II, Division 1, Groups E, F, and G hazardous locations
CAN/CSA C22.2 No. 30-M1986 (R2016)	- Explosion-proof enclosures for use in class I hazardous locations
CAN/CSA C22.2 No. 94.2-15	- Enclosures for electrical equipment, environmental considerations
CAN/CSA C22.2 No. 60079-0:15	- Explosive atmospheres – Part 0: Equipment - General requirements
CAN/CSA C22.2 No. 60079-1:16	- Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures “d”
CAN/CSA C22.2 No. 60079-18:16	- Explosive atmospheres – Part 18: Equipment protection by encapsulation “m”
CAN/CSA C22.2 No. 60529:16	- Degrees of protection provided by enclosures (IP Code)
C22.2 No. LTR_E-004_051212:05	- Encapsulation of Electrical Apparatus, for Use in Class I, Division 1 Hazardous Location
UL 50E-2015	- UL Standard for Safety Enclosures for Electrical Equipment, Environmental Considerations
UL 873-2015	- UL Standard for Safety Temperature-Indicating and -Regulating Equipment
UL 1203-2015	- UL Standard for Safety Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations
ANSI/UL 60079-0:2013	- UL Standard for Safety Explosive atmospheres – Part 0: Equipment – General requirements
ANSI/UL 60079-1:2015	- UL Standard for Safety Explosive Atmospheres – Part 1: Equipment Protection by Flameproof Enclosures “d”
ANSI/UL 60079-18:2015	- UL Standard for Safety Explosive atmospheres – Part 18: Equipment protection by encapsulation “m”
ANSI/IEC 60529:2013	- Degrees of Protection Provided by Enclosures (IP Code)



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MARKINGS

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

Markings are printed on UL recognized polymeric self-adhesive labels with the UL file number MH17154.

The following marking details appear on the labels:

- CSA Monogram, with C/US indicator or US indicator or without indicators
- Company Name and Address,
- Model Number,
- Serial Number,
- Hazardous Location Designation:
 - o CEC
 - o NEC
 - o NEC/CEC
- Ambient Temperature
- Environmental ratings IP 66 and Type 4
- Size of metric conduit entry appears near the entry
- The statement "WARNING - A conduit seal is required within 50mm of the enclosure" in both English and French
- Dimensions of flameproof joints are detailed in the installation drawings

Note: For products shipped into the Canadian market and bearing only the CSA Monogram without indicators; it is permitted by C22.2 No. LTR_E-004_051212 that the product can be marked "Class I, Div 1, Groups A, B, C, and D T*" on the manufacturers labels. Where "*" is defined under the "PRODUCTS" section.



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