



Certificate of Compliance

Certificate: 70117806

Master Contract: 187735 (110351_0_000)

Project: 70117806

Date Issued: 2017-06-23

Issued to: Exheat Ltd.
Threxton Road Industrial Estate
Watton
Norfolk, IP25 6NG
UNITED KINGDOM
Attention: Mr. Paul Bumstead

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Issued by: Thomas Munteanu
T. Munteanu, P.Eng.

PRODUCTS

CLASS - C2848 01 - HEATERS- Industrial and Laboratory - For Hazardous Locations

Class I, Division 2, Groups A, B, C and D, T3 or T4

Ex e IIC T3 or T4 Gb

CLASS - 2848 81 HEATERS-Industrial and Laboratory - For Hazardous Locations-Certified to U.S. Standards

Class I, Division 2, Groups B, C and D, T3 or T4

Class I, Zone 1, AEx e IIC T3 or T4 Gb

Type HEF30, HEF50, HEF100, HEF200 and HEF500 anti-condensation enclosure/cabinet heaters rated 30W to 500W, 120V ac or 240Vac, 1 phase, 50/60 Hz. $-55^{\circ}\text{C} \leq T_{\text{amb.}} \leq +80^{\circ}\text{C}$

Note: The heaters are certified as Components for use in other equipment where the suitability of the combination is to be determined by the Local Inspection Authority.



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APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 0-M91	- General Requirements – Canadian Electrical Code, Part II
CAN/CSA-C22.2 No. 60079-0:07	- Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
CAN/CSA-C22.2 No. 60079-7:03	- Electrical apparatus for explosive gas atmospheres - Part 7: Increased safety “e”
ANSI/UL 60079-0:09	- Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements
ANSI/UL 60079-7:08	- Electrical Apparatus for Explosive Gas Atmospheres - Part 7: Increased safety “e”
CSA C22.2 No. 213-16	Nonincendive electrical equipment for use in Class I and II, Division 2 and Class III, Divisions 1 and 2 hazardous (classified) locations.
CSA C22.2 No. 130-16 (used as a guide)	Requirements for electrical resistance trace heating and heating device sets
UL 823 (9 th edition)	Electric heaters for use in hazardous (classified) Locations
UL 499 (14 th edition) (used as a guide)	Electric Heating Appliances
CSA C22.2 No. 72-10 (used as a guide)	Heater elements

MARKINGS

The following marking details appear:

- CSA Monogram, with C/US Indicator;
- Company name;
- Model number;
- Serial number or Date Code
- Certificate number CSA17. 70117806U for Zone label and 70117806 for Division label.
- Hazardous Location designation:
For Canada: Class I, Div. 2, Groups A, B, C, D, T3 or T4; Ex e IIC T3 or T4 Gb;
For USA : Class I, Div. 2, Groups B, C, D, T3 or T4; Class I, Zone 1 AEx e IIC T3 or T4 Gb;
- Ambient Temperature $-55^{\circ}\text{C} \leq T_{\text{amb.}} \leq +80^{\circ}\text{C}$
- The statement: “WARNING – Explosion hazard. Do not disconnect while circuit is live unless area is known to be non-hazardous.” appears on the product.
- The statement: “WARNING – Check nameplate for correct voltage and classification” appears in the Installation Drawing.

Note - Jurisdictions in Canada may require these markings to also be provided in French language. It is the responsibility of the manufacturer to provide bilingual marking, where applicable, in accordance with the requirements of the Provincial Regulatory Authorities. It is the responsibility of the manufacturer to determine this requirement and have bilingual wording added to the "Markings".



Supplement to Certificate of Compliance

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*The products listed, including the latest revision described below,
are eligible to be marked in accordance with the referenced Certificate.*

Product Certification History

Project	Date	Description
70117806	2017-06-23	Completion of certification of model HEF space heaters; splice kit testing. Addition of Classes 2848 01 / 81



**THORNE &
DERRICK
INTERNATIONAL**

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