



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX UL 22.0015X** Page 1 of 4 [Certificate history:](#)
Issue 0 (2022-08-11)

Status: **Current** Issue No: 1

Date of Issue: 2023-01-17

Applicant: **nVent Thermal LLC**
899 Broadway St.
Redwood City, CA 94063
United States of America

Equipment: **Heat Tracing Remote Monitoring Modules, Models RMM3, RMM3-24VDC.**

Optional accessory:

Type of Protection: **Increased Safety "ec"**

Marking: **Ex ec IIC T5 Gc**
-40 °C ≤ T_{amb} ≤ 60 °C

Approved for issue on behalf of the IECEx
Certification Body:

Katy A. Holdredge

Position:

Senior Staff Engineer

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

UL LLC
333 Pfingsten Road
Northbrook IL 60062-2096
United States of America





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Manufacturer: **nVent Thermal LLC**
899 Broadway St.
Redwood City, CA 94063
United States of America

Manufacturing locations: **nVent Thermal LLC**
899 Broadway St.
Redwood City, CA 94063
United States of America

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

[US/UL/ExTR22.0017/00](#)

[US/UL/ExTR22.0017/01](#)

Quality Assessment Report:

[GB/BAS/QAR06.0030/09](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Monitoring Modules RMM3 and RMM3-24DC are part of the control and monitoring system. The RMM3 and RMM3-24DC accept inputs from up to 8 RTDs (3 wire Pt 100 temperature sensors) measuring pipe or ambient temperature in a trace heating system.

Model and RMM3 is AC module and RMM3-24DC is DC module. The model RMM3-24DC is same as RMM3 in terms of DC circuit. Only two capacitors, C17 and C18, each 470 μ F, are left out in power supply of and RMM3-24DC, as they are not needed.

Please see Annex for additional information.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.
- The equipment shall be installed in an enclosure with tool removable door or cover that provides a degree of protection not less than IP 54 in accordance with IEC 60079-7.
- Transient protection shall be provided that is set at a level not exceeding 140% of the peak rated voltage value at the supply terminals to the equipment.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1: Marking labels and installation instructions were updated. In addition, fuse rating for RMM3 is updated to 50mA.

Annex:

[Annex to IECEx UL 22.0015X Issue 1.pdf](#)



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PARAMETERS RELATING TO THE SAFETY

RMM3 Supply voltage: 115/230 Vac, jumper selectable, 50/60 Hz, 2.5VA

RMM3-24VDC supply voltage: 24 Vdc, 85mA, 2W

MARKING

Marking has to be readable and indelible; it has to include the following indications:

L L N N 230V:		115V:				ADDR H ADDR L				<table border="1"> <tr> <td>S + -</td> <td>S + -</td> </tr> <tr> <td>OUT</td> <td>IN</td> </tr> <tr> <td colspan="2">RS 485</td> </tr> </table>		S + -	S + -	OUT	IN	RS 485	
S + -	S + -																
OUT	IN																
RS 485																	
~ 50/60 Hz 2,5VA Fuse: F 50mA, L 250V Refer to installation manual for the fuse type which is allowed. WARNING: DO NOT REMOVE OR REPLACE FUSE WHEN ENERGIZED		RMM3 Raychem -40°C ≤ T _{amb} ≤ +60°C		Class I, Division 2, Groups ABCD; T5 CAN: Ex ec IIC T5 Gc USA: Class I, Zone 2, AEx ec IIC T5 Gc UL 22 UKEX 2685X UL 22 ATEX 2706X II 3 G Ex ec IIC T5 Gc		XMT RCV RUN		IECEX UL 22.0015X Ex ec IIC T5 Gc 899 Broadway Redwood City, CA 94063 USA									
RTD Wiring		Install per Raychem RMM3 Instruction Manual Raychem RMM3 Montage- und Betriebsanleitung beachten Suivre attentivement les instructions d'installation de Raychem RMM3				RTD 1 RTD 2 RTD 3 RTD 4 RTD 5 RTD 6 RTD 7 RTD 8											

- + 24V DC 85mA, 2W Fuse: F 200mA, L 250V Refer to installation manual for the fuse type which is allowed. WARNING: DO NOT REMOVE OR REPLACE FUSE WHEN ENERGIZED		RMM3-24VDC Raychem -40°C ≤ T _{amb} ≤ +60°C		Class I, Division 2, Groups ABCD; T5 CAN: Ex ec IIC T5 Gc USA: Class I, Zone 2, AEx ec IIC T5 Gc UL 22 UKEX 2685X UL 22 ATEX 2706X II 3 G Ex ec IIC T5 Gc		XMT RCV RUN		IECEX UL 22.0015X Ex ec IIC T5 Gc 899 Broadway Redwood City, CA 94063 USA	
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Codierung der Bedruckung
coding of the label :

- DDD:** 3-stellige Angabe des Prüftages
3-digits day when electrical test was done
- YY:** 2-stellige Angabe des Prüfjahres
2-digits year when electrical test was done
- SSSS:** 4-stellige Angabe der Seriennummer
4-digits serial number
- CC:** 2-stellige Identnummer des Prüfcomputers
2-digits ID of the testcomputer

