



# 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](http://www.iecex.com)

Certificate No.: **IECEX ULD 24.0020X** Page 1 of 3 [Certificate history:](#)  
Status: **Current** Issue No: 0  
Date of Issue: 2024-09-20  
Applicant: **G.M. International S.r.l.**  
Via G. Mameli 53-55  
20852 Villasanta (MB)  
**Italy**  
Equipment: **Temperature Trip Amplifier with Zero/Span Trimmers - D5274S-xxx**  
Optional accessory:  
Type of Protection: **Increased Safety "ec", Sealed Device "nC", Intrinsic Safety "ia"**  
Marking: Ex ec nC [ia Ga] IIC T4 Gc  
[Ex ia Da] IIIC  
[Ex ia Ma] I  
-40°C to +70°C

Approved for issue on behalf of the IECEx  
Certification Body:

**Lucy Frieders**

Position:

**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](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**UL Solutions (Demko)**  
**Borupvang 5A**  
**Ballerup DK-2750**  
**Denmark**





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Manufacturer: **G.M. International S.r.l.**  
Via G. Mameli 53-55  
20852 Villasanta (MB)  
**Italy**

Manufacturing locations: **G.M. International S.r.l.**  
Via G. Mameli 53-55  
20852 Villasanta (MB)  
**Italy**

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 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

[IEC 60079-15:2017](#) Explosive atmospheres - Part 15: Equipment protection by type of protection "n"  
Edition:5.0

[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 Report:

[DK/ULD/ExTR24.0022/00](#)

Quality Assessment Report:

[NO/DNV/QAR07.0005/12](#)



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## **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

Temperature Trip Amplifier with Zero/Span Trimmers, model D5274S-xxx, is an associated apparatus and increased safety apparatus, designed to accept a low-level dc signal from millivolt/thermocouple or 2-3-4 wire resistance/RTD or potentiometer sensors, located in Hazardous Area.

Model D5274S-xxx offers two independent trip amplifiers via two SPDT output relays, whose thresholds are fully programmable. Extended power supply range guarantees functionality at 24 Vdc as well as 12 Vdc nominal voltage.

It is packaged in a plastic enclosure suitable for installation on EN/IEC60715 TH 35 DIN-Rail, with or without Power Bus connector. Electrical connections are accommodated by plug-in removable terminal block.

Model D5274S-xxx can be mounted with any orientation over the entire ambient temperature range.

**Please see Annex for additional information.**

## **SPECIFIC CONDITIONS OF USE: YES as shown below:**

- For installations in which both the Ci and Li of the Intrinsically Safe apparatus exceeds 1% of the Co and Lo parameters of the Associated Apparatus (excluding the cable), then 50% of Co and Lo parameters are applicable and shall not be exceeded. The reduced capacitance of the external circuit (including the cable) shall not exceed 1uF for Groups I, IIA and IIB and 600 nF for Group IIC.
- The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.
- For hazardous location, the unit shall be installed in an enclosure that provides a minimum ingress protection of IP54 in accordance with IEC 60079-0, that must have a door or cover accessible only by the use of a tool.

## **Annex:**

[Annex to IECEx ULD 24.0020X Issue 0.pdf](#)



# IECEX Certificate of Conformity

Annex to Certificate No.:

IECEX ULD 24.0020X

Issue No.: 0

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## TYPE DESIGNATION

D5274 S -xxx  
I II III

I- Model Designation:

D5274 – Temperature Trip Amplifier with Zero/Span Trimmers

II- Output type:

S – 1 channel

III- Configuration – Optional:

-xxx – Any alpha-numeric character denoting pre-delivery testing or configuration requested by end-user. No changes are made to construction of the device.

## PARAMETERS RELATING TO THE SAFETY

Electrical ratings:

Model	Supply voltage Terminals 9-10	Current consumption	Power consumption	Input Terminals 13-16	Output Terminals 11-12
D5274S- xxx	12-24V dc (SELV) (9-30V dc tolerances)	134 mA max.	1.2 W max.	-100 to +100 mV for TC/mV, 0-5 KΩ for resistance, up to 10KΩ (pot).	1 channel  0/4-20mA, max. 300Ω load

Relays output:

4A 250V ac 1000 VA, 4A 250V dc 120 W (resistive load).

Linear derating from 4A (60 °C) down to 2A (70 °C).

Intrinsically safe specifications:

Um: 250V rms

Terminals		Group	Co [μF]	Lo [mH]	Lo/Ro [μh/Ω]
13-14-15-16 (Ch1)	Uo: 7V Io: 22 mA Po: 38 mW	IIC	15.6	77.6	954
		IIB or IIIC	299	310.6	3818
	Ui: 20V Ii: - Ci: 4.5 nF Li: 0 nH	IIA	999	621.1	7636
		I	999	1000	12528

Annex to Certificate No.:

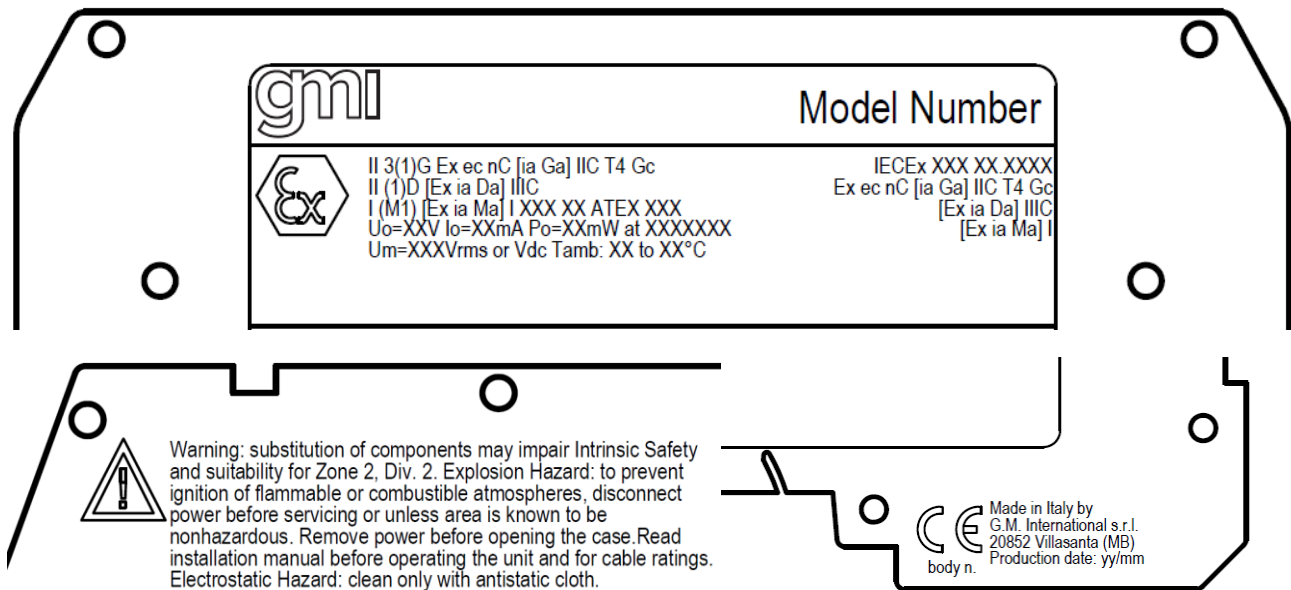
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## MARKING

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



Where:

Model Number:	D5274S, D574S-xxx
IEC Certification	marking indicated in the certificate, certificate number (IECEX ULD 24.0020X)
ATEX Certification:	 symbol and marking indicated in the certificate, certificate number (UL 24 ATEX 3257X).
Electrical Parameters:	Um ≤ value indicated in the certificate Uo, Io, Po ≥ value indicated in the certificate at terminals 13-14-15-16 Ui ≤ value indicated in the certificate, Ci, Li ≥ value indicated in the certificate at terminals 13-14-15-16
Ambient Temperature:	Tamb: ≥ lower value to ≤ higher value indicated in the certificate

## ROUTINE EXAMINATIONS AND TESTS

Each piece of equipment shall be subjected to the routine tests for transformers in accordance with Clause 11.2 of IEC 60079-11. A test voltage of 1500V rms shall be applied between T201 pins 5,6-7,8 and pins 1,2-3,4 for a minimum of 60s without breakdown resulting in more than 5mA rms flowing. Alternatively, a test voltage of 1800V rms for a minimum of 1s may be used.