



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 BVS 11.0002X**

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Certificate history:

Status: **Current**

Issue No: 4

Issue 3 (2023-09-12)

Issue 2 (2019-05-16)

Issue 1 (2014-12-09)

Issue 0 (2011-01-31)

Date of Issue: 2025-04-17

Applicant: **ifm electronic gmbh**
Friedrichstrasse 1
45128 Essen
Germany

Equipment: **Socket type ENC**A**

Optional accessory:

Type of Protection: **Intrinsic Safety "i"**

Marking: Ex ia IIB T6 Ga Ex ia IIB T5 Ga
Ex ia IIC T6 Gb Ex ia IIC T5 Gb
Ex ia IIIB T₂₀₀ 85°C Da Ex ia IIIB T₂₀₀ 95°C Da
Ex ia IIIC T₂₀₀ 70°C Da

Approved for issue on behalf of the IECEx
Certification Body:

Deniz Pezzutto

Position:

Certification Manager

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:

DEKRA Testing and Certification GmbH
Certification Body
Dinnendahlstrasse 9
44809 Bochum
Germany





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Manufacturer: **ifm electronic gmbh**
Friedrichstrasse 1
45128 Essen
Germany

Manufacturing
locations: **ifm ecolink Sp.z.o.o.**
ul.Polnocna 6
45-805 Opole
Poland

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

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:

[DE/BVS/ExTR11.0008/03](#)

Quality Assessment Report:

[DE/BVS/QAR06.0010/15](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

General product information:

The socket is used at intrinsically safe apparatus for the connection of the intrinsically safe circuits.

The socket is a simple apparatus.

The socket has a permanently connected cable and is due to construction able to carry two different intrinsically safe circuits up to a sum of voltages of 30 V; in this case the cable must be effectively protected against damage.

In the complete denomination instead of the ** numerals will be inserted which characterize modifications as: kind of cable, length of cable, construction straight or bent.

Parameters

See Annex

SPECIFIC CONDITIONS OF USE: YES as shown below:

- 1 The connectors and the connected cable must be installed in a way that an intensive electrostatic charge is excluded.
- 2 Due to space restriction the markings may not be applied completely to the unit. See operating instructions for the complete marking.
- 3 The cable and socket must be installed fixed and effectively protected against mechanical damage.
- 4 For Group IIIC:
 - The operation of the sockets without a suitable M12 counterpart is not permissible. The M12 counterpart has to meet the IP requirements according to IEC 60079-11.
 - When the socket is opened, the ingress of dust must be avoided.
 - The sockets have to be protected against UV emitting light.
 - The lock nut has to be fastened with a tightening torque of 1.2...1.5 Nm.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Clarification of manufacturer/manufacturer locations.

Annex:

[BVS_11_0002X_ifm_Annex_issue3.pdf](#)



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Annex
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Parameters

Voltage	U_i	DC	30	V
Current	I_i		1	A
Power	P_i			
For use in Group II			1	W
For use in Group III			1	W
Ambient temperature range (except IIIC)	T_a		-25 °C up to +75 / +85 °C	
For Group IIIC	T_a		-20 °C up to 60 °C	

For ambient temperatures up to 75 °C, the sensors are classified as T6 resp. T_{200} 85 °C (except Group IIIC).
For ambient temperatures up to 85 °C, the sensors are classified as T5 resp. T_{200} 95 °C (except Group IIIC).

The socket may carry two different intrinsically safe circuits up to a sum of voltages of 30 V.

The values of internal capacitance and inductance depend on the length of the permanently connected cable and be calculated as:

Internal capacitance	C_i	0.1	nF/m
Internal inductance	L_i	2	μH/m