

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.: IECEx SEV 21.0019X

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Certificate history:

Status:

Current

Issue No: 0

Date of Issue:

2021-09-27

Applicant:

Baumer Electric AG Hummelstrasse 17 8501 Frauenfeld Switzerland

Equipment:

Inductive proximity switch, Type: IFRM**X***

Optional accessory:

Type of Protection: i

Marking: Ex ia IIC T6...T5 Ga

SAS Admin.ch

Approved for issue on behalf of the IECEx

Certification Body:

Position:

Signature: (for printed version)

Date:

Martin Plüss

Manager Product Certification

2021-09-27

1. This certificate and schedule may only be reproduced in full.

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:

Eurofins Electric & Electronic Product Testing AG Luppmenstrasse 3 CH-8320 FEHRALTORF Switzerland



E&E



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Date of issue: 2021-09-27 Issue No: 0

Manufacturer: Baumer Electric AG

Hummelstrasse 17 8501 Frauenfeld **Switzerland**

Additional manufacturing locations:

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:

CH/SEV/ExTR21.0020/00

Quality Assessment Report:

CH/SEV/QAR21.0005/00



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Date of issue: 2021-09-27 Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Inductive proximity switch, Type: IFRM**X***

BAUMER proximity switches of the IFRM**X** series serve for the detection of parts made of metal with regard to the characteristics of distance, counting, speed, etc. They are used under normal atmospheric conditions.

Additional information see Annexe.

SPECIFIC CONDITIONS OF USE: YES as shown below:

See Annexe





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Additional information:

Annex:

IECEx 21.0019X app i0.pdf





Annexe to:

IECEx SEV 21.0019X

Issue No.: 0 page 1 of 1

Applicant Name:

Baumer Electric AG

Equipment:

Inductive proximity switch

Description of product

BAUMER proximity switches of the IFRM**X** series serve for the detection of parts made of metal with regard to the characteristics of distance, counting, speed, etc. They are used under normal atmospheric conditions

Classification of installation and use:

stationary

Ingress protection:

IP67

Rated ambient temperature range (°C):

-20 °C to 40 °C / 60 °C

Rated ambient temperature range (°C) for Ex Components:

s· ---

Electrical data:

Supply circuit:

Type of protection Intrinsic Safety Ex ia IIC

Only for connection to a certified intrinsically safe circuit.

Maximum values:

 $\begin{array}{lll} U_i &=& 13.5 \ V \\ I_i &=& 37 \ mA \\ P_i &=& 125 \ mW \\ linear \ characteristic \end{array}$

 $C_i = 50 \text{ nF}$ $L_i = 0.2 \text{ mH}$

Instructions for operation:

When installing the inductive proximity sensor, the sensor must be included in the equipotential of the installation site by assembly.

If the sensor or their connecting cables are installed in the wall to the hazardous area with Ga requirements, the installation must be tight and at least the degree of protection by enclosure IP67 according to IEC 60529.

If the sensors are installed into the hazardous area with EPL Ga requirements, the installation of the sensor and the installation of the connecting cables must be secure.

Specific conditions of use

The dependence of the temperature class allocation to the ambient temperature corresponds to the following table.

Temperature class	T6	T5
Permissible ambient temperature range	-20 °C ≤ Tamb ≤ +40 °C	-20 °C ≤ Tamb ≤ +60 °C