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**IECEX certificate:**

EN

**IECEX DEK 15.0029**

**for CA 28x, CE 28x  
and CE 31x**

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**Meggitt SA**  
Route de Moncor 4  
PO Box 1616  
CH - 1701 Fribourg  
Switzerland

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## IECEX Certificate of Conformity

Certificate No: IECEX DEK 15.0029

Date of Issue: 2016-06-24

Manufacturer: Meggitt SA  
Rte de Moncor 4, 1752 Villars-sur-Glâne  
Switzerland

Additional Manufacturing location(s):

Issue No: 0

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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 electrical apparatus 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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "T"

*This Certificate does not indicate compliance with electrical 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: NL/DEK/EX-TR15.0037/00	
Quality Assessment Report: FR/LIC/JAR/08.0006/09	




## IECEX Certificate of Conformity

**INTERNATIONAL ELECTROTECHNICAL COMMISSION**  
**IEC Certification Scheme for Explosive Atmospheres**  
for rules and details of the IECEX Scheme visit [www.ieceex.com](http://www.ieceex.com)

Certificate No.: IECEX DEK 15.0029

Status: Current

Date of Issue: 2016-06-24

Applicant: Meggitt SA  
Rte de Moncor 4, 1752 Villars-sur-Glâne  
Switzerland

Equipment: Piezoelectric Accelerometer Type 144-28-000-...; Type 444-28-000-... and Type 444-31-000-...

Optional accessory:

Type of Protection: Ex ia

Marking: Ex ia IIC T6 ... T2 Ga

Approved for issue on behalf of the IECEX Certification Body:

Position: Certification manager

Signature: (for printed version)

Date: 2016-06-24

Issue No: 0

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Certificate history:  
Issue No. 0 (2016-06-24)

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 the Official IECEX Website.

Certificate issued by:

**DEKRA** Certification B.V.  
 Meander 1051,  
 6825 MJ Arnhem  
 The Netherlands





Annex 1 to Certificate of Conformity IECEx DEK 15.0029, Issue 0  
Annex 1 to NL/DEK/ExTR.15.0037/00

**Description**

Piezoelectric Accelerometers sensor only Type 144-28-000-... sensor with remote Conversion Module (sensor with remote conversion module) and Type 444-28-000-... and sensor with Integral Conversion Module Type 444-31-000-... are used for vibration monitoring.  
The sensor converts mechanical forces (e.g. vibrations) of the equipment to which it is mounted into an electrical signal, that is processed externally. When a conversion module is integrated, the sensor signals are converted into a modulated current output signal.

Ambient temperature range, depending on type and application:

Type 144-28-000-...  
Sensor only: -60 °C to +260 °C

Type 444-28-000-...2 to 444-28-000-...9  
Conditioner: -55 °C to +125 °C  
Sensor and Cable: -55 °C to +260 °C

Type 444-31-000-...2 to 444-31-000-...9  
Sensor and Integral  
Conditioner: -55 °C to +125 °C

The relation between maximum ambient temperature and temperature class is as follows for all devices, taking into account the above mentioned temperature ranges:

Type	T6	T5	T4	T3	T2
444-28-000-...2 to 444-28-000-...9 Conditioner	+65 °C	+80 °C	+115 °C	+125 °C	-
444-31-000-...2 to 444-31-000-...9	+65 °C	+80 °C	+115 °C	+125 °C	-
144-28-000-...9	+80 °C	+95 °C	+130 °C	+195 °C	+260 °C

**IECEx Certificate of Conformity**



Certificate No: IECEx DEK 15.0029 Issue No: 0  
Date of Issue: 2016-06-24 Page 3 of 3

**Schedule**

**EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

Piezoelectric Accelerometers Type 144-28-000-... (sensor only), Type 444-28-000-... (sensor with remote conversion module) and Type 444-31-000-... (sensor with Integral conversion module) are used for vibration monitoring.

The sensor converts mechanical forces (e.g. vibrations) of the equipment to which it is mounted into an electrical signal, that is processed externally. When a conversion module is integrated, the sensor signal is converted into a modulated current output signal.

Refer to Annex 1 for details

**CONDITIONS OF CERTIFICATION: NO**

**Annex:**

Annex 1 to IECEx DEK15.0029 Iss0 & IECExTR15.0037\_00.pdf



Annex 1 to Certificate of Conformity IECEX DEK 15.0029, Issue 0  
 Annex 1 to NL/DEK/ExTR 15.0037/00

Electrical data

Supply and output signal:  
 in type of protection intrinsic safety Ex ia II, only for connection to a certified intrinsically safe circuit, with  
 following maximum values:

Type	U <sub>i</sub>	I <sub>i</sub>	P <sub>i</sub>	L <sub>i</sub>	C <sub>i</sub> sensor	C <sub>i</sub> cable
444-28-000--2 b	28 V	100 mA	0.7 W	0 mH	0 nF	-
444-28-000--9						
444-31-000--2 b	28 V	100 mA	0.7 W	0 mH	0 nF	0.25 nF/m
444-31-000--9						
144-28-000-...	28 V	100 mA	0.7 W	0 mH	8 nF	0.25 nF/m

Installation instructions

The instructions provided with the product shall be followed in detail to assure safe operation.

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