



IECEX certificate:

EN



IECEX LCI 11.0061X

**for EA 4xx, IQS 4xx
and TQ 4xx**



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

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IECEx Certificate of Conformity

Certificate No.: IECEx LCI 11.0061X Issue No.: 2

Date of Issue: 2015-11-09 Page 2 of 4

Manufacturer: **MEGGITT SA**
Route de Moncor 4
1752 VILLARS SUR GLANE
Switzerland

Additional Manufacturing Location (s):

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 Explosive atmospheres - Part 0: General requirements
Edition: 6.0



IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "I"
Edition: 6.0

This Certificate does not indicate compliance with 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: FR/LCI/EXTR11.0070/00 FR/LCI/EXTR11.0070/01

Quality Assessment Report:
FR/LCI/QAR06.0006/08

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INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx LCI 11.0061X issue No.: 2

Status: **Current**

Date of Issue: 2015-11-09 Page 1 of 4

Applicant: **MEGGITT SA**
Route de Moncor 4
1752 VILLARS SUR GLANE
Switzerland

Electrical Apparatus: **Proximity system, type : TQ 4xx / EA 4xx / IQS 4xx**
Optional accessory: PNR 111-4xx-000-yyy, PNR 204-4xx-000-yyy, PNR 913-4xx-000-yyy


Type of Protection: **ia**

Marking: MEGGITT SA or VIBRO-METER or MFR S3960
Address: **TC 4xx / EA 4xx / IQS 4xx**
Type: **TC 4xx / EA 4xx / IQS 4xx**
PNR 111-4xx-000-yyy
PNR 204-4xx-000-yyy
PNR 913-4xx-000-yyy

Serial number: ...
Year of construction: ...
Ex Ia IIC T6...T3 Ga
IECEx LCI 11.0061X
UI = ... II = ... PI = ... CI = ... LI = ... (1)
(1) completed with the electrical parameters


Approved for issue on behalf of the IECEx Julien Gauthier Certification Officer

Certification Body: Position: Certification Officer

Signature:  Date: 2015-11-09

(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 the Official IECEx Website.

Certificate issued by:  **LCIE**
Laboratoire Central des Industries Electriques (LCIE)
33 Avenue du General Leclerc
FR-92280 Fontenay-aux-Roses
France
Documents relative to LCIE certification activities (Certificates, QARs, EXTRs) can be registered under the references "LCI" or "LCIE".

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 1:

- Normative update according to IEC 60079-0:2001 Ed 6.0 and IEC 60079-11:2011 Ed 6.0
- Modification of the operating ambient temperature for the conditioner: -30°C to +85°C
- Modification of the temperature classification: T6 or T5 for the conditioner
- Update of the technical file.

Issue 2:

- Correction of the operating ambient temperature for the conditioner in the Conditions of certificate.

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Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

The system is based on a TQ 4xx non-contacting transducer, a cable EA 4xx and an IQS 4xx signal conditioner. Together, they form a calibrated proximity system in which each component is interchangeable. The TQ 4xx transducer has an integral coaxial cable, with various lengths, terminated with a connector. The EA 4xx cable is an extension cable with various lengths. The IQS 4xx conditioner is a signal conditioner.

Type designation: TQ 4xx / EA 4 xx / IQS 4 xx

TQ 4xx : PNR 111-4 xx -000-yyy

IQS 4xx : PNR 204-4 xx -000-yyy

EA 4xx : PNR 913-4 xx -000-yyy

x : defines the design of the product (x = 0 to 9)

yyy : product versions (y = 0 to 9)

Electrical parameters:

IQS 4xx : $U_{IF} = 28 \text{ V}$, $I_{IF} = 100 \text{ mA}$, $P_i = 0.7 \text{ W}$, $C_i = 0$, $L_i = 0$

TQ 4xx : $C_i \leq 120 \text{ pF/m}$ (cable), $L_i \leq 50 \text{ }\mu\text{H}$ (transducer)

EA 4xx : $C_i \leq 120 \text{ pF/m}$, $L_i = 0$

CONDITIONS OF CERTIFICATION: YES as shown below:

- The equipment can be only connected to intrinsically safe certified equipment. This combination must be compatible as regard the intrinsic safety rules.
- The inductance and capacitance of connection cable between the conditioner IQS 4xx and the transducer TQ 4xx (cable include) do not exceed any of these following values: $L \leq 3.5 \text{ mH}$, $C \leq 0.083 \text{ }\mu\text{F}$.
- The conditioner (IQS 4xx) shall not be submit to frictions or mechanical impacts.

Ambient temperature of use:

Transducer (TQ 4xx) : -100°C to +195°C

Cable (EA 4xx) : -100°C to +195°C

Conditioner (IQS 4xx) : -35°C to +85°C

Temperature classification:

Transducer (TQ 4xx) : T6 at +95°C, T4 at +130°C, T3 at +195°C

Cable (EA 4xx) : T6 at +80°C, T5 at +95°C, T4 at +13 0°C, T3 at +195°C

Conditioner (IQS 4xx) : T6 at +70°C, T5 at +85°C