IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx FME 18.0002X

Issue No: 0

Certificate history:
Issue No. 0 (2018-07-20)

Status: **Current**

Date of Issue: **2018-07-20**

Applicant: **LumaSense Technologies GmbH**
Kleyerstrasse 90, Frankfurt D-60326
Germany

Equipment: **E²T Infrared Flame Monitor Quasar 2 M8100-EXP and Quasar 2 M8100-EXP Advanced**

Optional accessory:

Type of Protection: **Flameproof 'db'**

Marking:
Ex db IIB T4 Gb Ta = -40°C to +60°C IP66

Approved for issue on behalf of the IECEx Certification Body: Nicholas Ludlam

Position: Deputy Certification Manager

Signature:
(for printed version)

Date:

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:

FM Approvals Ltd
1 Windsor Dials
SL4 1RS Windsor
United Kingdom

FM Approvals
Member of the FM Global Group

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Manufacturer:	**LumaSense Technologies GmbH** Kleyerstrasse 90, Frankfurt D-60326 **Germany**	

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 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 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

*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:

GB/FME/ExTR18.0001/00

Quality Assessment Report:

GB/FME/QAR14.0004/02

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The LumaSense E²T Quasar 2 series are designed for detecting & monitoring of pilot flame and flared gases from flares. The assembly consist of main housing cylinder, front housing cover assembly, back housing cover assembly and the non-contact infrared electro-optical package.

It can be configured in two models; Quasar 2 M8100-EXP and Quasar 2 M8100-EXP Advanced. The advanced system includes an intensity mA output, which allows the programming of multiple Setpoints to indicate pilot flame detection and flaring status signals from the same unit.

Both models' output are able to be inverted and the output ratios are as follows: 37.5:1, 60:1, 75:1, 150:1 and 300:1.

These Quasar 2 models can be configured as 24V dc, 115V ac or 250V ac.

39150a0, E²T Quasar 2 M8100-EXP Advanced
39151a0, E²T Quasar 2 M8100-EXP Advanced (with inverted output)
39152a0, E²T Quasar 2 M8100-EXP
39153a0, E²T Quasar 2 M8100-EXP (with inverted output)
a = Output ratio (1 = 37.5:1; 2 = 60:1; 3 = 75:1; 4 = 150:1; 5 = 300:1)

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Contact manufacturer for flamepath joint design information.

2. The cable glands, cable sealing device or blanking plugs for the unused entries (as applicable) shall be suitably certified with a minimum Ex rating of Ex db IIB Ta = -40 °C to 60 °C Gb.

3. In order to maintain an IP66 rating for the equipment, the cable glands shall be suitably certified with a minimum rating of IP66.

4. To reduce the risk due to electrostatic discharge, the user shall regularly clean the enclosures with a damp cloth to limit dust layers on the enclosure sides.