



# 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](http://www.iecex.com)

Certificate No.: **IECEX ITS 15.0068X** Page 1 of 4 Certificate history:  
Status: **Current** Issue No: 4 Issue 3 (2019-12-05)  
Date of Issue: 2020-05-20 Issue 2 (2017-12-11)  
Issue 1 (2016-11-23)  
Issue 0 (2016-06-07)  
Applicant: **Eaton MEDC Ltd (Oxalis)**  
Unit B, Sutton Parkway  
Oddicroft Lane, Sutton-in-Ashfield, NG17 5FB.  
**United Kingdom**  
Equipment: **14XX and 24XX Pan and Tilt Cameras (XF, XP, XC, XT)**  
Optional accessory:  
Type of Protection: **Ex db, Ex tb, Ex op pr, Ex op is, [Ex ia].**  
Marking: Ex db IIC T6...T4 Gb\*  
Ex tb III C T135°C Db IP6X\*  
-\*\*\*C ≤ Ta ≤ +\*\*C  
\* Coding reflects the standard camera variant, refer to certificate appendix for further details.  
\*\* Ambient temperature varies depending upon equipment configuration, refer to certificate appendix for further details.  
IECEX ITS 15.0068X

Approved for issue on behalf of the IECEx  
Certification Body:

**Mark Newman**

Position:

**Certificate Officer**

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 [www.iecex.com](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**Intertek Testing & Certification Limited**  
ITS House, Cleeve Road  
Leatherhead  
Surrey, KT22 7SA  
United Kingdom



# IECEX Certificate of Conformity

Certificate No.: **IECEX ITS 15.0068X** Page 2 of 4

Date of issue: 2020-05-20 Issue No: 4

Manufacturer: **Eaton MEDC Ltd (Oxalis)**  
Unit B, Sutton Parkway, Oddicroft Lane, Sutton-in-Ashfield, NG17 5FB.  
**United Kingdom**

Additional manufacturing locations: **Cooper Yuhua (Changzhou) Electronic Equipment Manufacture Co., Ltd.**  
No. 60 Hehuan Road, Zhonglou Development Zone; Changzhou, Jiangsu Province, CN-213023  
P.R. CHINA  
**China**

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 60079-0:2011** Explosive atmospheres - Part 0: General requirements  
Edition:6.0

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

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

**IEC 60079-28:2015** Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation  
Edition:2

**IEC 60079-31:2013** Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:2

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 Reports:

[GB/ITS/ExTR15.0063/00](#)  
[GB/ITS/ExTR15.0063/03](#)

[GB/ITS/ExTR15.0063/01](#)  
[GB/ITS/ExTR15.0063/04](#)

[GB/ITS/ExTR15.0063/02](#)

### Quality Assessment Reports:

[GB/BAS/QAR06.0023/09](#)

[NO/NEM/QAR13.0008/04](#)



# IECEx Certificate of Conformity

Certificate No.: **IECEx ITS 15.0068X**

Page 3 of 4

Date of issue: 2020-05-20

Issue No: 4

## **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The Camera Housing is constructed from stainless steel AISI316L with glass windows and designed to accommodate a range of CCTV cameras, infra-red cameras, lenses and associated ancillary equipment to allow their deployment in harsh environmental conditions. The housing has facilities for optional items such as window demister/heater, internal window wiper mechanism, integral window washer pump and external sunshield.

For full equipment description refer to Annex.

## **SPECIFIC CONDITIONS OF USE: YES as shown below:**

The following conditions of use apply to the end user of the equipment. Refer to the certificate appendix for the conditions of manufacture, which apply to the manufacturer Oxalis.

- No modifications must be made to the flamepaths of the unit without consultation of the drawings listed on the schedule.
- Temperatures could exceed 70°C at the cable gland or 80°C at the branching point, suitably rated cable must be selected.
- Use only hex socket head fasteners with property class of A4-70 for securing end covers & shafts to housings.
- No electromagnetic or ultrasonic energy radiating equipment shall be fitted within the enclosures other than armoured/protected fibre optic cables (op pr) or the IR illuminator as specified in the documents.
- When fitted, the optical fibre output from the camera housing must always be terminated within a suitably certified enclosure or safe area.
- Only armoured cable or conduit is to be utilized when fitted with a fibre optic output in order to protect the fibre optic cable.
- Precautions must be taken to avoid dust from forming layers on the equipment.
- Dual Imager Housing 2410-DI-04 and 2410-DI-05 variants only: Housings must only be installed in areas where there is a low risk of mechanical impact.



# IECEX Certificate of Conformity

Certificate No.: **IECEX ITS 15.0068X**

Page 4 of 4

Date of issue: 2020-05-20

Issue No: 4

## **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

Issue 1:

Change of company name and address to:

Oxalis Group Ltd

Oxalis House, Masons Road, Stratford upon Avon, Warwickshire, CV37 9NB.

to

Eaton MEDC Ltd (Oxalis)

Unit B, Sutton Parkway, Oddiccroft Lane, Sutton-in-Ashfield, NG17 5FB.

Issue 2:

1. Option of alternative design of Dual Imager Window Assembly (with circlip and raised guard).
2. Option of alternative design of 260 housing base plate.

Issue 3:

Addition of alternative lens guard design.

Issue 4:

Additional manufacturing name and address.

## **Annex:**

[Annex to IECEx ITS 15.0068X Issue 4.pdf](#)



## Annex to IECEx Certificate of Conformity

<b>Certificate No:</b>	<b>IECEx ITS 15.0068X</b>	<b>Issue No. 4</b>
<b>Annex No. 1</b>		

<b>Technical Documents</b>			
Title:	Drawing No.:	Rev. Level:	Date:
EXD HOUSING, REAR CABLE ENTRY END COVER.	1420-20-001	006	7/12/15
EXD HOUSING, REAR MULTI CABLE ENTRY END COVER.	1420-20-501	001	7/12/15
1400-2400 HOUSING INTERNAL & EXTERNAL MOUNTING REQUIRMENTS	2400-1400-IEMR	002	7/12/15
FOR HOUSING AND P&T FLANGES OPTIONAL FLAMEPATH TOLERANCE	2410-MOD02	001	13/11/2014
2420 EXD INTERGRATED DC MOTOR PAN TILT, TWIN HEAD OPTION DRAWING	2420-TH	002	7/12/15
CERTIFICATION DRAWINGS FOR ALL OXALIS HOUSINGS AND PAN AND TILT COMBINATIONS 12 Sheets	OXCT-0001	004	13/11/19
*ATEX/IECEX CERTIFICATION LABEL DRAWINGS FOR UNITS WITH NO FIBRE OPTICS FITTED	OXCT-0002	6	19/03/2020
*ATEX/IECEX CERTIFICATION LABEL DRAWINGS FOR UNITS WITH FIBRE OPTICS FITTED	OXCT-0003	6	19/03/2020
*ATEX/IECEX CERTIFICATION LABEL DRAWINGS FOR ILLUMINATOR UNITS	OXCT-0004	6	19/03/2020
ATEX/IECEX CERTIFICATION DETAILS FOR RADIO TRANSMISSION UNITS	OXCT-0005	002	06/04/16
*ATEX/IECEX CERTIFICATION LABEL DRAWINGS FOR UNITS CONTAINING WIRELESS TRANSMISSION WITH IS BARRIER	OXCT-0006	5	19/03/2020
1400 – 2400 Surface Finish	1400/2400Finishdoc	001	17/11/2014
FOR GEARBOX HOLE/SHAFT OPTIONAL FLAMEPATH TOLERANCE	2420-MOD01	001	04/11/2014
EX DUAL HOUSING TI WIPER GRILL	OX30-00366	001	15/08/2017
2410 HOUSING WINDOW PROTECTIVE GUARD	2410-30-020	003	09/12/2012
*2400 & 1400 Series (XP, XT, XC & XF) Flame Proof Camera Housings & Pan Tilt Units Installation &	IMI+70-XF-XC-XP-XT	9	Stamped

Certificate issued by:

**intertek**

Total Quality. Assured.

**Intertek Testing & Certification Limited**  
 Intertek House, Cleeve Road,  
 Leatherhead, Surrey, KT22 7SA  
 Tel: +44 (0)1372 370900 Fax: +44  
 (0)1372 370977

<http://www.intertek.com>

Registered No 3272281. Registered  
 Office: Academy Place, 1-9 Brook  
 Street, Brentwood, Essex, CM14 5NQ

Page 1 of 4

SFT-IECEx-OP-HAZ-19f (10/23/2017)



# Annex to IECEx Certificate of Conformity

<b>Certificate No:</b>	<b>IECEx ITS 15.0068X</b>	<b>Issue No. 4</b>
<b>Annex No. 1</b>		

<b>Technical Documents</b>			
Title:	Drawing No.:	Rev. Level:	Date:
Maintenance Instructions (20 pages)			15/05/2020
*2400 & 1400 Series (XF) Flame Proof Camera Housings & Pan Tilt Units Installation & Maintenance Instructions	TM360	A	Stamped 16/04/2020

Note: An \* is included before the title of documents that are new or revised.

### Equipment:

The Camera Housing is constructed from stainless steel AISI316L with glass windows and designed to accommodate a range of CCTV cameras, infra-red cameras, lenses and associated ancillary equipment to allow their deployment in harsh environmental conditions. The housing has facilities for optional items such as window demister/heater, internal window wiper mechanism, integral window washer pump and external sunshield.

The unit is 260mm to 600mm in length (dependent on model) and is constructed from 139.7mm diameter cylindrical tube and 154mm diameter end covers. The unit has a cemented window assembly in one end cover, with the opposite end cover being either a blank end plate, end plate with up to three cable entries available in M20, M25, 1/2" or 3/4" NPT thread forms. The cable entry to the camera housing is either via a cable entry adaptor in the side of the housing tube or via the tilt motor shaft attachment flange when mounted to a Pan/Tilt unit. When fitted with Germanium windows, for use with infra-red cameras, a protective guard plate is factory fitted on the window end cover and secured in place.

The Camera Housing has welded joints and is therefore to be subjected to routine overpressure tests. The IR model is fitted with an infrared LED Illuminator which is fitted in place of a camera.

The integrated Pan & Tilt Unit would be used in conjunction with the Camera Housing where installations require a moveable camera.

This Pan & Tilt Unit is also constructed from AISI316L stainless steel and can be fitted with either AC fixed speed or DC variable speed motors. The Pan & Tilt Unit with integral base mount is 300mm wide and 485mm high. There is one cable entry in the base mount which has one M25 threaded flamepath. There are four spigot flamepaths, two where the end covers fit into the housing and two where the motor/gearbox assemblies connect to the housing. In addition there are 2 cylindrical flamepaths for the motor shafts allowing for the pan and tilt movement.

The Pan & Tilt Unit has welded joints and is therefore to be subjected to routine overpressure tests. An alternate base unit can also be provided with a M110x1.5 threaded cover for readily accessing wiring terminals. This is secured with a hexagonal grub screw.

Internal and external earthing points are provided.

Options are also available fitted with an optical output for data transmission purposes and antennas with associated barriers.

Only suitably certified cable glands, thread adaptors or blanking elements to be utilized as detailed on the certificate. The coding the equipment is marked with is dependent upon the assembly configuration, internal power dissipation and optical accessories installed. A breakdown of the coding is given below.

Standard variants;  
Ex db IIC T6...T4\* Gb  
Ex tb IIIC T135°C Db IP6X\*\*  
-##°C ≤ Ta ≤ +##°C

Certificate issued by:



Total Quality. Assured.

**Intertek Testing & Certification Limited**  
Intertek House, Cleeve Road,  
Leatherhead, Surrey, KT22 7SA  
Tel: +44 (0)1372 370900 Fax: +44  
(0)1372 370977

<http://www.intertek.com>  
Registered No 3272281. Registered  
Office: Academy Place, 1-9 Brook  
Street, Brentwood, Essex, CM14 5NQ

Page 2 of 4

SFT-IECEx-OP-HAZ-19f (10/23/2017)



## Annex to IECEx Certificate of Conformity

<b>Certificate No:</b>	IECEx ITS 15.0068X	<b>Issue No. 4</b>
<b>Annex No. 1</b>		

Options fitted with fibre optic outputs are marked;  
 Ex db op pr IIC T6...T4\* Gb  
 Ex tb op pr IIIC T135°C Db IP6X\*\*  
 -##°C ≤ Ta ≤ +##°C

LED illuminator module variants are marked;  
 Ex db op is IIC T4\* Gb  
 Ex tb op is IIIC T135°C Db IP6X\*\*  
 -##°C ≤ Ta ≤ +##°C

All of the variants above may additionally be marked [Ex ia Ga], which refers to an intrinsically safe antenna connection. The antenna accessory has only been considered for use in the 20W versions of the camera. Refer to the Table below for the suitable ambient temperature ranges of equipment incorporating an antenna.

\*Note: T class and ambient temp, is dependent on the assembly configuration and maximum internal power dissipation.

\*\* Note: When fitted with an internal dissipation of 60W and upper ambient temperature of 70°C the maximum marked temperature should be marked T140°C.

The following table denotes the temperature classification for products which do not contain an antenna.

T-Class	Maximum Ambient Range <sup>^</sup>	Integrated Pan and Tilt		Standalone
		Pan & Tilts Max Watts Dis	Housing Max Watts Dis	Housing Max Watts Dis
T6	-60°C ≤ Ta ≤ +40°C	20 W	20 W	20 W
T5	-60°C ≤ Ta ≤ +40°C	40 W	40 W	40 W
T5	-60°C ≤ Ta ≤ +65°C	20 W	20 W	20 W
T4	-60°C ≤ Ta ≤ +65°C	60 W	60 W	60 W
T4	-60°C ≤ Ta ≤ +70°C	60 W	40 W	40 W
T4	-60°C ≤ Ta ≤ +70°C	50 W	50 W	50 W
T3	-60°C ≤ Ta ≤ +70°C	60 W	60 W	60 W
T3	-60°C ≤ Ta ≤ +70°C	60 W	60 W	60 W
Dust T135°C	-60°C ≤ Ta ≤ +65°C	60 W	60 W	60 W
Dust T140°C	-60°C ≤ Ta ≤ +70°C	60 W	60 W	60 W

The following table contains lists the permitted upper ambient temperatures when using a certified RF barrier.

Barrier fitted	T-Class	Maximum Ambient Range <sup>^</sup>	Integrated Pan and Tilt		Standalone
			Pan & Tilts Max Watts Dis	Housing Max Watts Dis	Housing Max Watts Dis
Extronics & Solexy	T6	-40°C ≤ Ta ≤ +40°C	20 W	20 W	20 W
Extronics	T5	-40°C ≤ Ta ≤ +50°C	20 W	20 W	20 W
Solexy	T5	-40°C ≤ Ta ≤ +55°C	20 W	20 W	20 W
Extronics	Dust T135°C	-40°C ≤ Ta ≤ +50°C	20 W	20 W	20 W
Solexy	Dust T135°C	-40°C ≤ Ta ≤ +55°C	20 W	20 W	20 W

Certificate issued by:



Total Quality. Assured.

**Intertek Testing & Certification Limited**  
 Intertek House, Cleeve Road,  
 Leatherhead, Surrey, KT22 7SA  
 Tel: +44 (0)1372 370900 Fax: +44  
 (0)1372 370977

<http://www.intertek.com>

Registered No 3272281. Registered  
 Office: Academy Place, 1-9 Brook  
 Street, Brentwood, Essex, CM14 5NQ



## Annex to IECEx Certificate of Conformity

<b>Certificate No:</b>	<b>IECEx ITS 15.0068X</b>	<b>Issue No. 4</b>
<b>Annex No. 1</b>		

^ The manufacturer has requested that this limit may be marked from the evaluated lower ambient to 0°C to ensure correct functionality of the equipment. This does not affect the protection offered by the enclosure.

### **Conditions of Manufacture – Routine Tests:**

- A routine overpressure test in accordance with IEC 60079-1:2014 Clause 16.1 shall be carried out on all enclosures, including all cemented window assemblies, at a pressure of 30.12bar for a period of between 10 and 60 seconds.
- There shall be no deformation or damage to the enclosures and no leakage through the cement of any of the window assemblies integrity of the welded construction shall also be verified during routine overpressure testing.
- Empty enclosures may be tested.
- The individual parts of a flameproof enclosure (for example, cover and base) can be tested separately. The test conditions shall be such that the stresses are comparable to those to which these parts are exposed in the complete enclosure.
- If required during the construction, thread inserts needs to withstand the routine overpressure test also.

Details must be recorded and records maintained.

Certificate issued by:

**intertek**

Total Quality. Assured.

**Intertek Testing & Certification Limited**  
Intertek House, Cleeve Road,  
Leatherhead, Surrey, KT22 7SA  
Tel: +44 (0)1372 370900 Fax: +44  
(0)1372 370977

<http://www.intertek.com>

Registered No 3272281. Registered  
Office: Academy Place, 1-9 Brook  
Street, Brentwood, Essex, CM14 5NQ

Page 4 of 4

SFT-IECEx-OP-HAZ-19f (10/23/2017)