

IECEx Certificate of Conformity

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INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

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

Certificate No.: **IECEx EXV 20.0017X** Page 1 of 4 Certificate history:

Issue 1 (2022-02-08) Issue No: 2 Status: Current Issue 0 (2021-07-23)

2023-07-11 Date of Issue:

Applicant: Axis Ex AB

Gränden 1 Lund 223 69 Sweden

Equipment: Fixed Types F31, F33, PTZ Types P21, P23 series

Optional accessory:

Type of Protection: Flameproof 'db' Enclosure 'tb'

Marking: Ex db I Mb

Ex db IIC T6 - T4 Gb

Ex tb IIIC T85°C -T135°C Db

Tamb -40°C to +60°C (Model F31111 only)

Tamb -60°C to +60°C (All other models)

Approved for issue on behalf of the IECEx

Certification Body:

Position: **Certification Manager**

Signature:

(for printed version)

(for printed version)

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Certificate issued by:

ExVeritas Limited Units 16-18 Abenbury Way Wrexham Ind. Est. Wrexham LL 139UZ **United Kingdom**





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Date of issue: 2023-07-11 Issue No: 2

Manufacturer: Axis Ex AB

Gränden 1 Lund 223 69 **Sweden**

Manufacturing Axis Ex AB locations: Gränden 1

Gränden 1 Lund 223 69 Sweden Axis Ex AB Maskinvägen 1 Lund 227 30 Sweden

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

Edition:7.0

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/EXV/ExTR20.0036/00 GB/EXV/ExTR22.0010/00 GB/EXV/ExTR22.0046/00

Quality Assessment Report:

GB/EXV/QAR21.0005/00



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Axis Ex Series Fixed Types F31, F33, PTZ Types P21, P23 series Camera Station systems comprise fixed (static) camera stations and motorised pan-tilt-zoom (PTZ) camera stations allowing up to 360° viewing depending on mounting arrangement and location.

The camera stations are designed to allow either high definition colour image generation or the use of infrared commonly used in night vision or thermal measurement applications.

Image transmission from the camera stations is achieved via various media including ethernet, coaxial or fibre optics which is also the media that contains operator input to camera functionality, for example positioning or zoom functions.

Each camera station is designed specifically for use in harsh and hazardous environments and uses 316L stainless steel and toughened glass as core materials. The IR variants utilise Germanium with a guard for impact protection.

The static camera variants consist of one flame-proof enclosure whilst the PTZ versions consist of three interlinking flame-proof enclosures allowing full positioning mobility.

IP rated for levels of protection IP66/IP67/IP68 per manufacturer's declaration.

Type Structure for Axis Ex flameproof products

TYPE: AAABCD

Letter:

AAA (Enclosure)	Comment	B (Battery)	Comment	C (Amb. Temp)	Comment	D (Power)	Comment	
P21	PTZ	0 or blank	No battery	0 or blank	-60°C to +60°C	0 or blank	• 100-240 VAC => Max. 150 W	
P23	PTZ - Thermal	1	With battery	1	-40°C to +60°C	1	 100-240 VAC => Max. 56 W POE 802.3bt Type 3 => Max 56 W 	
F31	Fixed			2	-20°C to +60°C	2	• POE 802.3bt Type 3 => Max 56 W	
F33	PTZ - Thermal							

Note: * Original certified Type 31 supports both 100 - 240 VAC and POE 802.3bt Type 3 => Max 56 W.

SPECIFIC CONDITIONS OF USE: YES as shown below: Special Conditions for Safe Use

- · Flameproof joints are not to be modified
- Cable temperature can exceed 60°C select suitable cable for the end application
- Yield Strength of the end cap fasteners is A4-80
- Equipment must be placed in an area where there is low risk of mechanical damage



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- 1. Inclusion of changes to Fixed Type F3111 only:
 - · Addition of new camera block, Q1656 corresponding EMI filter.
 - Addition of a coin cell battery and minor electrical changes for a clock circuit.
 Ambient rating changed: Tamb -40°C to +60°C.
- 2. Wiper position changed for Fixed Type F31.
- 3. Enclosure wall thickness reduced.4. Enclosure fastener torque reduced.
- 5. Update drawings.

Annex:

IECEx Certificate Annex Issue 2.pdf





Description Continued:	
N/A	

Routine Tests:

1. The enclosures must be subjected to a routine overpressure test in accordance with clause 16.1 of IEC 60079-1 at 23.67 Bar min for a period of at least 10s.

Manufacturer's documents:									
Title:	Drawing No.:	Rev	Sheets	Date:					
Certification Drawing	EX-001	005	1 to 5	25/09/2020					
*Certification Drawing (F31)	2660373	M1	1 to 2	03/11/2022					
*Certification Drawing critical cross section and volume (F31111)	DOCID-1032280532- 221	2.0	10 & 13	02/06/2023					
*General marking drawing – Axis Ex Types P21, P23, F31, F31111 and F33x	DOCID-1032280532- 219	2.0	2 to 4	27/06/2023					
*Installation Manual IM001	2820140	3.0	4, 5, 6, 8, 11 to 15, 19	12/05/2023					

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