

1 EU - Type Examination Certificate

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: ExVeritas 20ATEX0651X Issue: 2

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

5 Manufacturer: Axis Ex AB

6 Address: Gränden 1, Lund 223 69, Sweden

7 This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

8 ExVeritas, Notified Body number 2804 in accordance with Article 17 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to design and construction of equipment and protective systems for use in potentially explosive atmospheres given in Annex II to the Directive.

9 Compliance with the applicable Essential Health and Safety Requirements has been assured by compliance with the following Standards and section 16 of this certificate:

EN IEC 60079-0: 2018

EN 60079-1: 2014

EN 60079-31: 2014

10 If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design, construction, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment shall include the following:



I M2 Ex db I Mb

T_{amb} -40°C to +60°C (model F31111 only)

II 2 G Ex db IIC T6 - T4 Gb

T_{amb} -60°C to +60°C (all other models)

II 2 D Ex tb IIIC T85°C – T135°C Db

On behalf of ExVeritas



Peter Lauritzen
Managing Director

Schedule

13 Description of Equipment or Protective System

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 56W
F33	Fixed - Thermal						

Note: * Original certified Type F31 supports both 100 - 240 VAC and POE 802.3bt Type 3 => Max 56 W

13.1 Details of change

The following changes are introduced in issue 1 of the certificate:

- Add ratings for Group I, mining applications.
- Add electromagnetic interference filter.

The following changes are introduced in issue 2 of the certificate:

1. Inclusion of changes to Fixed Type F31111 only:
 - a. Addition of new camera block, Q1656 corresponding EMI filter.
 - b. Addition of a coin cell battery and minor electrical changes for a clock circuit.
 - c. Ambient rating changed: Tamb -40°C to +60°C.
2. Wiper position change for Fixed Type F31.
3. Enclosure wall thickness reduced.
4. Enclosure fastener torque reduced.
5. Update drawings.

Schedule

14 Descriptive Documents

14.1 Associated Report and Certificate History:

Report Number	Cert Issue Date	Issue	Comment
R3468/A/1	22 Jul 2021	0	Initial issue of the Prime Certificate
R3587/A/1	08 Feb 2022	1	Issue of the first variation, see section 13.1.
R3960/A/1	11 Jul 2023	2	Issue of the second variation, see section 13.1.

14.2 Compliance Drawings:

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

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



Schedule

15 Conditions of Certification

15.1 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.

15.2 Conditions for Use (Routine tests)

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

16 Essential Health and Safety Requirements

Essential Health and Safety Requirements are addressed by the standards listed in section 9 and where required the report listed in section 14.1

The manufacturer shall inform the Notified Body of any modifications to the design of the product described by this schedule.

Certificate: ExVeritas 20ATEX0651X

Issue 2

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