

CERTIFICATE OF CONFORMITY



1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**

2. **Certificate No:** FM16US0277

3. **Equipment:** Model AutoVu® Universal Display AV20
(Type Reference and Name)

4. **Name of Listing Company:** Autronica Fire and Security AS

5. **Address of Listing Company:** Bromstadveien 59
7483 Trondheim
Norway

6. The examination and test results are recorded in confidential report number:

3050447 dated 27th January 2014

7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM Class 3600:2011, FM Class 3610:2010, FM Class 3611:2004, FM Class 3615:2006,
FM Class 3810:2005, FM Class 6320:2014, ANSI/ISA-92.00.01:2010, UL 60079-0:2013,
ANSI/ISA 60079-1:2009, ANSI/ISA-60079-11 (12.02.01), ANSI/ISA 60079-29-1 (12.13.01):2013,
ANSI/NEMA 250:1991, ANSI/IEC 60529:2004

8. If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.

9. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.

Certificate issued by:

J. E. Marquedant
Manager, Electrical Systems

15 January 2017

Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
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SCHEDULE

US Certificate Of Conformity No: FM16US0277

10. Equipment Ratings:

AV20 - Suitable for installation in Class I, Division 1 and 2, Groups A, B, C, and D; Class I, Zone 1 and 2 Group IIC Hazardous (Classified) Locations, indoor and outdoor (Type 4X / IP66) and may provide intrinsically safe connections to Class I, Division 1, Groups A, B, C, and D; Class I, Zone 1, Group IIC Hazardous (Classified) Locations in accordance with Entity requirements and Control Drawing 009803-001.

11. The marking of the equipment shall include:

AV20 (Explosionproof):

CL I, DIV 1/2, GRPS B,C,D; CL II/III, DIV 1/2, GRPS E,F,G

CLASS I, ZONE 1, AEx d IIC T6

(Tamb = -20°C to +70°C) NEMA TYPE 4X, IP66

12. **Description of Equipment:**

General - Stationary Single Channel 4-20 mA Combustible or Toxic Gas Detector Display. The Universal Display AV20 is suitable for installation in Class I, Division 1 and 2, Groups A, B, C, and D; Class I, Zone 1 and 2 Group IIC Hazardous (Classified) Locations, indoor and outdoor (Type 4X / IP66). The AV20 monitors FM Approved Combustible Gas Detector Heads. The AV20 is designed to be used with the GT3000 Toxic Gas Detector or PIRECL Combustible Gas Detector. The AV20 functions as a pass through device, reading the linear 4-20 mA dc output signal from the gas detector. The detected gas concentration is indicated on an alpha-numeric display. The AV20 automatically detects the gas type and operating range of the sensor to which it is connected via the HART signal. The operating temperature range of the apparatus is -20°C to +70°C In addition, the apparatus complies with ANSI/ISA-60079-29-1-2013 Performance requirements of detectors for flammable gases, ANSI/ISA-92.00.01-2011 Performance Requirements for Toxic Gas Detectors.

AV20abc26d2, AutroVu® Universal Display Unit

a = Enclosure Type: A or S

b = Number of ports: 2, 3, 4 or 5

c = Thread Type: E, F, N or M

d = Approval: A, F, T or W

Specifications - The manufacturer's specifications are as follow;

Operating Temperature: -20°C to +70°C

Storage Temperature: -40°C to +70°C

Relative Humidity: 5 to 99% RH

Supply Parameters: 12.5-30 VDC 1 Watt maximum for Source and detector

Measurement Signal: 4-20mA

Calibration: magnetic or Hart

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13. **Specific Conditions of Use:**

None

14. **Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

15. **Schedule Drawings**

A copy of the technical documentation has been kept by FM Approvals.

16. **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
27 th January 2014	Original Issue.
15 th January 2017	<u>Supplement 1:</u> Report Reference: – 3057413 dated 15 th January 2017 Revised to new certificate format.

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