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VP, Manager - Electrical Systems

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.: IECEx FMG 14.0029X Page 1 of 4 Certificate history:

Status: Current Issue No: 18

Date of Issue: 2023-03-17

Applicant: Banner Engineering Corporation

9714 Tenth Ave N Minneapolis MN 55441, USA

United States of America

Equipment: Q45AD9ab, Q459Eb, SMI30a, T30AD9FF150,

T30AD9FF150Q Photoelectric Sensors.

Optional accessory:

Type of Protection: Intrinsic Safety

Marking: MIAD9ab, MI9Eb - Ex ia IIC T5

Q45AD9ab, Q459Eb - Ex ia IIC T5

SMI30a - Ex ib IIC T5

T30AD9FF150, T30AD9FF150Q - Ex ia IIC T6

Approved for issue on behalf of the IECEx

Certification Body:

or another body.

Position: Signature:

(for printed version)

Date:

(for printed version)

- 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 or use of this QR Code.



Issue 17 (2022-09-27)

Issue 16 (2022-01-27) Issue 15 (2021-04-20)

Issue 14 (2020-12-07) Issue 13 (2019-10-17)

Issue 12 (2019-07-08)

Issue 11 (2019-01-07)

Issue 10 (2018-08-01) Issue 9 (2018-06-13)

Issue 8 (2018-03-09)

Certificate issued by:

FM Approvals LLC 1151 Boston-Providence Turnpike Norwood, MA 02062 United States of America





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Manufacturer: Banner Engineering Corporation

15755 32nd Avenue

Plymouth, Minneapolis, MN 55447

United States of America

Manufacturing

locations:

Banner Engineering Corporation 99 15th Street Northwest

Huron, SD 57350

United States of America

Banner Engineering Corporation

9714 Tenth Ave N Minneapolis MN 55441, USA

United States of America

Banner Engineering Corporation

715 North Country Road Aberdeen, SD 57401. **United States of America**

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 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition:6.0

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:

US/FMG/ExTR14.0029/00	US/FMG/ExTR14.0029/01	US/FMG/ExTR14.0029/02
US/FMG/ExTR14.0029/03	US/FMG/ExTR14.0029/04	US/FMG/ExTR14.0029/05
US/FMG/ExTR14.0029/06	US/FMG/ExTR14.0029/07	US/FMG/ExTR14.0029/08
US/FMG/ExTR14.0029/09	US/FMG/ExTR14.0029/10	US/FMG/ExTR14,0029/11
US/FMG/ExTR14.0029/12	US/FMG/ExTR14.0029/13	US/FMG/ExTR14.0029/14
US/FMG/ExTR14.0029/15	US/FMG/ExTR14.0029/16	US/FMG/ExTR14.0029/17
US/FMG/ExTR14 0029/18		

Quality Assessment Report:

GB/FME/QAR13.0015/09



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

SMI30a. Photoelectric Sensor.

a = 6EQ, 6EBQ, 6ECQ, 6EYCQ, AN6RQ, AN6RBQ, AN6RCQ, RN6RQ, RN6RBQ, RN6RCQ, 6EYQ, N6RYQ, AN6RYCQ, RN6RYQ, or RN6RYCQ

MIAD9ab, MI9Eb. Photoelectric Sensors.

- a = Sensing mode D, W, F, LV, LVAG, CV, CV2 or R.
- b = Connection method Q or blank.

Q45AD9ab, Q459Eb. Photoelectric Sensors.

- a = Sensing mode D, DL, F, FP, FV, LV, LP, CV, CV4 or R.
- b = Connection method Q or blank

T30AD9FF150, T30AD9FF150Q. Photoelectric Sensor.

The optical radiation output of the apparatus with respect to explosion protection is covered in this certificate based on Exception 1 to the scope of IEC 60079-28:2015.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Parts of the enclosure are non-conducting and may generate an ignition-capable level of ESD. Cleaning of the equipment shall be done only with a damp cloth.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Minor documentation changes.