CERTIFICATE OF CONFORMITY

1. **HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS**
2. **Certificate No:** **FM20CA0026X**
3. **Equipment:** **Models FIK-IR3-ASX1, FIK-UV-IR-ASX1, FIK-UV-IR-F-ASX1**
   (Type Reference and Name) **and FIK-IR3-H2-ASX1 Flame Detectors**
4. **Name of Listing Company:** **Fike Corporation**
5. **Address of Listing Company:** **704 SW 10th Street**
   Blue Springs, Missouri 64015
6. The examination and test results are recorded in confidential report number:

   PR456768 dated 26th October 2020

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

   CSA-C22.2 No. 0.4:R2017, CSA-C22.2 No. 0.5:R2016,
   CSA-C22.2 No. 30:R2016, CSA-C22.2 No. 94:R2011
   CAN/CSA-C22.2 No. 60079-0:2015, CAN/CSA-C22.2 No. 60079-1:2016

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.
10. Equipment Ratings:

    Explosionproof for Class I, Division 1, Groups B, C and D; Flameproof for Class I, Zone 1, Ex db IIC Gb hazardous locations.

11. The marking of the equipment shall include:

Certificate issued by:

J.E. Marquedant
VP, Manager - Electrical Systems

26 October 2020
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

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SCHEDULE

Canadian Certificate Of Conformity No: FM20CA0026X

Class I Division 1, Groups B, C, D; T4 Ta = -50°C ≤ Ta ≤ 85°C or T5 Ta = 50°C ≤ Ta ≤ +75°C; Type 4X/6P

Class I, Zone 1, Ex db IIC Gb T4 Ta = -50°C ≤ Ta ≤ 85°C or T5 Ta = 50°C ≤ Ta ≤ +75°C; Type 4X/6P

12. **Description of Equipment:**

General – The flame detectors have four sensitivity ranges, Alarm and Fault, rated 2A at 30VDC relays, uses 0-20mA analog output and has RS-485 Modbus outputs. The detector operates from 18 to 32 V dc via connection to a compatible FM Approved fire alarm control providing separate circuits for alarm signaling and for power. Operating temperature is from -50° to 85°C or -50° to 75°C .

Construction – Models FIK-IR3-ASX1, FIK-UV-IR-ASX1, FIK-UV-IR-F-ASX1 and FIK-IR3-H2-ASX1 Flame Detectors have the same enclosure construction (with the exception of the sensor openings) and consist of a two compartment housing made of STS316 stainless steel. The forward most compartment (housing) consist of a sapphire window with a polyimide film window heater. The UV models have two openings and the IR3 model has three openings. Both use the same window and have the same flame path configuration. The three opening IR3 model was consider to be the worst case for the explosionproof enclosure and was used for the majority of the testing. The window is mechanically secured using a retaining bracket with 3 screws. This compartment contains the electronics. The housing is connected to a connection box using 4 hex head screws to secure a spigot joint. The connection box consists of two conduit entries that can be configured with M25 metric or ¾ inch NPT threads and one of which, when unused, will be fitted with a certified blanking plug. A printed circuit board for making the electrical connection passes through a channel between the two compartments and is sealed with epoxy compound. The rear most portion of the connection box is closed by a cover with a spigot joint which is secured using 4 hex head screws.

Ratings - Models FIK-IR3-ASX1, FIK-UV-IR-ASX1, FIK-UV-IR-F-ASX1 and FIK-IR3-H2-ASX1 Flame Detectors operate at 18-32 Vdc. The detectors are rated for use in an ambient temperature range of -50°C to +85°C or -50° to 75°C .

FIK-a-ASb1 Non HD Flame Detector
a = IR3 or IR3- H2 or UV-IR or UV-IR-F
b = 1 (M25) or 2 (¾" NPT) .

13. **Specific Conditions of Use:**

1. The flamepaths of the equipment are not intended to be repaired. Consult the manufacturer if repair of the flamepath joints is necessary.
2. Consult the manufacturer for genuine replacement cover and housing to connection box fasteners. M6x1x18 Hexagonal Socket head fasteners with a minimum of ISO 4762 Grade A4 Class 80 are acceptable alternatives.

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

This Certificate has been issued in accordance with FM Approvals Canadian Certification Scheme.

15. **Schedule Drawings**

SCHEDULE

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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
26th October 2020	Original Issue.

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