



Certificate of Compliance

FIRE PROTECTION EQUIPMENT

This certificate is issued for the following equipment:

Flame Detector model FlameGard 5 MSIR

Approval Guide Listing: Category: Electrical Signaling/Alarm Signal Initiating Devices/Fire Detection, Flame-Actuated

Model FlameGard 5 MSIR infrared flame detector, consisting of 4-20mA, Modbus, and HART communications. The relay contact outputs are rated 8A, 250Vac/24Vdc. Firmware P/N is 70879, Rev J. Approved for use at High, Medium and Low sensitivity settings. The FlameGard 5 MSIR operates from 20 to 36 Vdc via connection to a compatible Approved control panel, providing separate circuits for alarm signaling and for power. Latching initiating device circuits are needed unless detector is set for latching operation. Fuels tested for response include the following: Heptane. The detector enclosure is rated Type 6P/IP67 and is suitable for indoor and outdoor use. Suitable for use over ambient operating temperature range of -40°C to +80°C. Explosionproof for Class I, Division 1, Groups B, C and D; Dust-ignitionproof for Class II/III, Division 1, Groups E, F and G hazardous (classified) locations.

Approved for: Mine Safety Appliances Company
1000 Cranberry Woods Drive
Cranberry Township, PA. 16066, USA

This certifies that the equipment described has been found to comply with the applicable requirements, as stated in the Approval Report(s), of the following FM Approval Standards and other documents:

<i>Approval Standards</i>	<i>Date</i>	<i>Other Standards</i>	<i>Date</i>
<i>Class Number</i>		<i>Organization, Designation</i>	
3260	August 2000	ANSI/FM 3260	February 2004
3600	November 1998	ANSI/NEMA 250	1991
3615	August 2006	ANSI/NFPA 72	2002
		ANSI/IEC 60529	2004

Original Approval Job Identification: 3041816

Approval Granted: March 11, 2011

Subsequent Revisions:

A handwritten signature in dark ink, appearing to read 'D. Waite', written over a horizontal line.

David Waite
Technical Team Manager
FM Approvals
1151 Boston-Providence Turnpike,
Norwood MA, 02062 USA



Member of the FM Global Group



Certificate of Compliance

FIRE PROTECTION EQUIPMENT

This certificate is issued for the following equipment:

Flame Detector model FlameGard 5 UV/IR

Approval Guide Listing: Category: *Electrical Signaling/Alarm Signal Initiating Devices/Fire Detection, Flame-Actuated*

Flame detector model FlameGard 5 UV/IR. Flame detector model FlameGard 5 UV/IR use firmware 71424, Rev. A. The detector operates from 20 to 36 V dc (24 V dc nominal) via connection to a compatible FM Approved control panel providing separate power circuits and latching initiating device circuits. The detector enclosure is rated Type 4X for use in indoor and outdoor locations, in ambient temperatures from -40° to 185°F (-40° to 85°C). Explosionproof, suitable for use in Class I, Divisions 1, Groups B, C and D; and dust-ignitionproof, suitable for use in Class II/III, Divisions 1, Groups E, F, and G hazardous (classified) locations.

Approved for: Mine Safety Appliances Company
1000 Cranberry Woods Drive,
Cranberry Township,
Pennsylvania 16066, USA

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