

International Center for Quality Certification - ICQC Ltd.
63-19, Skolas street, Jurmala, LV-2016, Latvia
Phone: +371 27168371 E-mail: office@icqc.lv Web: www.icqc.lv
SIA „International Center for Quality Certification - ICQC”
Reģ. Nr. LV40103539825
Skolas iela 63-19, Jūrmala, LV-2016, Latvija



(1) **EU-TYPE EXAMINATION CERTIFICATE**

(2) **Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **ICQC 20 ATEX 0440 X** **Issue: 0**

(4) Equipment: **Optical Flame Detectors types: FG1-UV-IR-F-HD-ASXX, FG1-UV-IR-HD-ASXX, FG1-IR3-HD-ASXX, FG1-IR3-H2-HD-ASXX.**

(5) Manufacturer: **Gastech Pty Ltd.**

(6) Address: **24 Baretta Road, Wangara, Perth, W.A. 6065, Australia**

(7) This equipment and any acceptable variation, also documents which are specified in the schedule to this certificate.

(8) The certification body ICQC, Notified body No. 2549 in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.


The examination and test results are recorded in confidential report no **440/2019/04/ATEX**


(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with: **EN 60079-0:2012/A11:2013, EN 60079-1:2014, EN 60079-7:2015, 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 and the construction of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture and supply of this equipment. These are not covered by the certificate

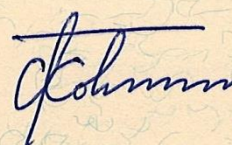
(12) The marking of the equipment or protective system shall include the following:

 **II 2 G Ex db IIC T5 Gb or II 2 G Ex db eb IIC T5 Gb and II 2D Ex tb IIIC T95 °C Db**
-55°C<Ta<75°C

 **II 2 G Ex db IIC T4 Gb or II 2 G Ex db eb IIC T4 Gb and II 2D Ex tb IIIC T105 °C Db**
-55°C<Ta<85°C

Director of Certification:



 **Sergey Kovalev**

Date of issue: 11 February, 2020
Jurmala, Latvia

(13) **SCHEDULE**

(14) **to EU-TYPE EXAMINATION CERTIFICATE: ICQC 20 ATEX 0440 X**

Issue: 0

(15) **Description of Equipment:**

Optical Flame Detectors types: FG1-UV-IR-F-HD-ASXX (85-6000-F-xx-HD), FG1-UV-IR-HD-ASXX (85-6000-xx-HD), FG1-IR3-HD-ASXX (85-6010-xx-HD), FG1-IR3-H2-HD-ASXX (85-6010-xx-H2-HD) are infrared and UV/IR flame detectors, which provide fast response, high performance and reliable detection of all types of hydrocarbon and hydrogen fires (visible and non-visible).

The last four symbols in the type designation:

A – ATEX certified

S – stainless steel enclosure

X – openings for M25 (1) or 3/4" NPT (2) cable glands

X – symbol for options, not affecting explosion protection.

The flame detector consists of electronic compartment in type of protection flameproof enclosure "d" and terminal compartment in type of protection "d" or increased safety "e" with a two openings 3/4" NPT or M25 for cable glands.

The cable entry devices (cable glands) shall be certified with an appropriated type of protection. Unused entries shall be closed with certified blanking elements. Installing and use of cable gland and blanking elements shall be in compliance with EN 60079-14 current edition.

The detector is intended for use as part of a complex system and can be installed indoor or outdoor. The detector has a window heater, which automatically turns on by the ambient temperature below 5°C.

There are following features available in the flame detectors:

- Alarm Relay
- Fault Relay
- 4-20 mA and HART Output
- RS-485
- Ethernet
- Composite Video
- Data/Event logger
- Built-in-Test (BIT)

Technical characteristics:	
Parameters	Value
Supply voltage	18 ... 32 V DC
Current Consumption	Standby: 210 mA Maximum: 300 mA all systems in operation (including window heater)
Alarm Relay, SPST, Normally open and normally closed	2A at 30 VDC
Fault Relay, SPST, Normally open	
Degree of protection	IP66 / IP67
Ambient temperature range	-55°C to +75°C or -55°C to +85°C

Routine tests:

Routine tests according to cl. 7.1 of EN 60079-7 shall be conducted for Exe terminal compartment with a test voltage of 500 V

Routine tests according to cl. 16 of EN 60079-1 shall be conducted for Exd electronic compartment with a test pressure of 1,46 MPa

(16) Descriptive Documents:

User Manual Release Number	76-M-6010-01 – FG1-IR3-HD-ASXX 76-M-6010-03 – FG1-IR3-H2-HD-ASXX 76-M-6000-01 – FG1-UV-IR-HD-ASXX & FG1-UV-IR-F-HD-ASXX
The drawings are listed in Evaluation report No:	440/2019/04/ATEX

Certificate History

Issue/Date	Evaluation report	Comment
Issue 0 from 11.02.2020	440/2019/04/ATEX	The release of the prime certificate.

(17) Specific conditions of use:

17.1 The Exd electronic compartment of flame detector has flamepaths which differ from those in IEC 60079-1. Repairs shall be conducted only by FG Detection Technologies LTD.

(18) Essential Health and Safety Requirements:

Met by compliance with the standards mentioned in clause (9).