![Flamonitec logo] **Flamonitec**®
BFI AUTOMATION

Product Information
FLAME SCANNER 2.0L

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$C\epsilon$
008522

Typ: **2.0 L**
S/N: **1042579**

II3G Ex ec IIC T4 Gc
-40 °C ...+85°C
24 VDC / 200 mA
Year: 2022
IECEx TUR 15.0029X
TÜV15 ATEX 7682 X
Made in Germany

Do not open while energized
42579 Heiligenhaus   www.flamonitec-bfi.com

- **failsafe design**
- **suitable for continuous operation**
- **use at ambient temperatures from -40 °C to +85 °C**
  (optional fiber optic insert up to 300 °C)
- **approved according to international standards**
- **protection class IP 65/IP 66**
- **IECEx-certified**

1 | Design

The Flame Scanner 2.0L is designed for the use with a fibre optic cable or lance and forms a complete flame monitoring system in combination with a flame amplifier of the 3000 series. The flame monitoring and evaluation system 3000 was developed under the aspects of safety and optimal availability of customer plants.
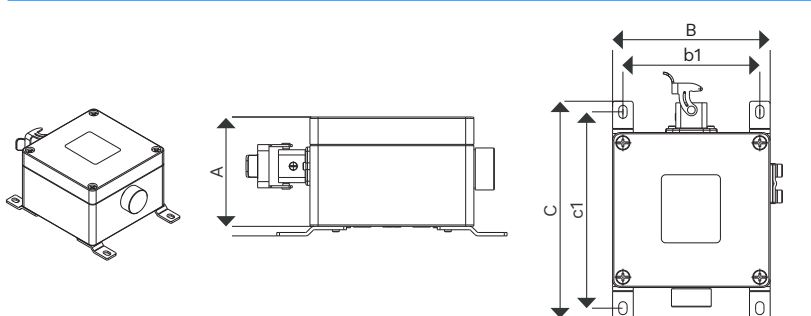
Our goals are to monitor incinerators safely and reliably, to provide criteria for optimizing the incineration process and to reduce pollutant emissions. The system is able to distinguish the flames of different burners and to selectively monitor them.
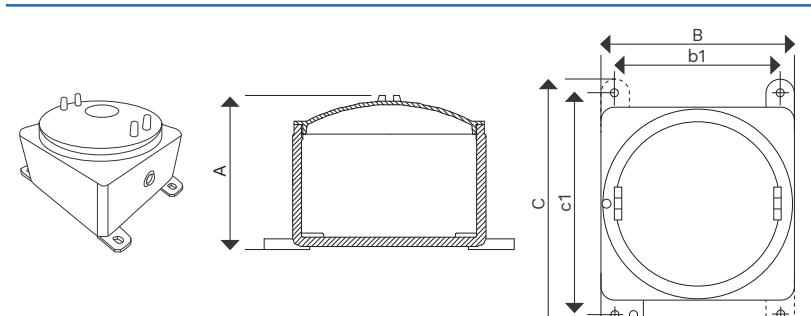
2 | Customer benefits and usage

- self monitoring to control fault free function
- selective monitoring of gas and oil firing systems
- high temperature and vibration resistance due to fibre optic technology
- dual sensor Si and PbS
- separately adjustable sensitivity of Si and PbS sensor
- fully electronic design
- automatic gain control
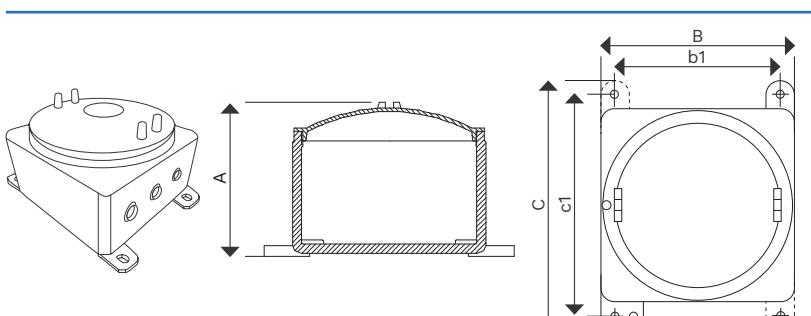- automatic frequency control

3 | Housing versions

The Flame Scanner 2.0L is available in three housing versions for the application with a fibre optic cable.

ATEX Zone 2	
O/E-Converter housing	
Length A:	80 mm
Width B/b1:	120/106 mm
Hight C/c1:	168.5/152 mm
Weight:	1.5 kg
IECEx TUR 15.0029X	

ATEX Zone 1	
Ex-O/E-Converter housing	
Length A:	165 mm
Width B/b1:	230/106 mm
Hight C/c1:	302/267 mm
Weight:	8.3 kg
IECEx DEK 13.0075	

ATEX Zone 1	
Ex-O/E-Converter housing XL	
Length A:	218 mm
Width B/b1:	276/236 mm
Hight C/c1:	356/316 mm
Weight:	11.4 kg
IECEx DEK 13.0075	

4 | Technical data

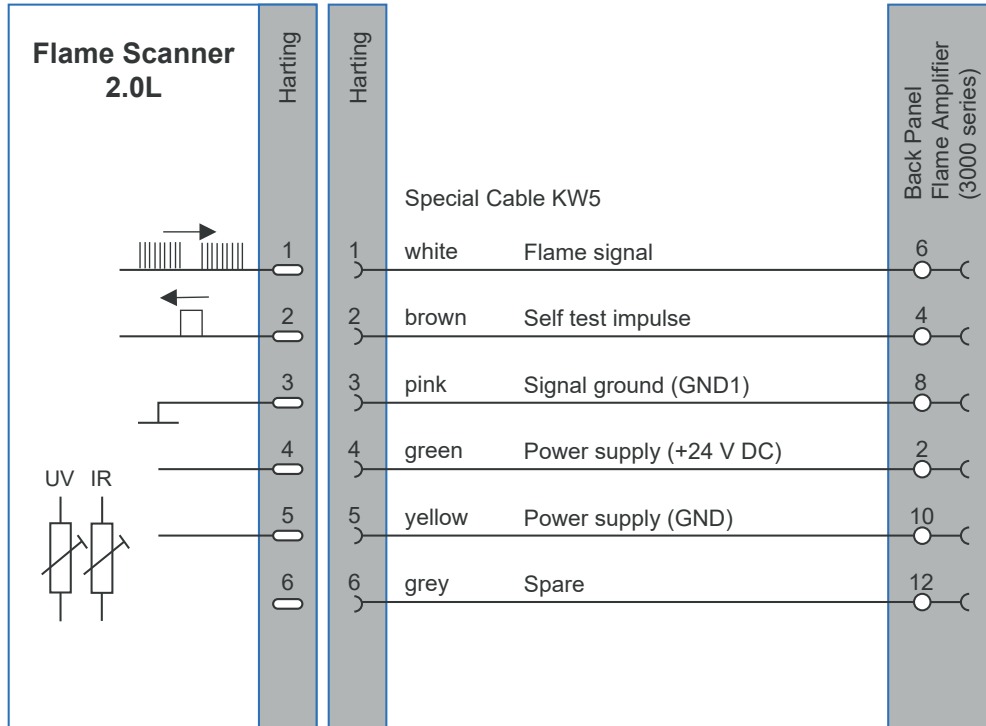|	
Spectral sensitivities	combination of UV + IR (300 nm to 2700 nm)
Power supply	24 V DC
Current consumption	max. 200 mA each Flame Scanner
Angle of view	2.7° with standard SKL
Self checking	fully electronic, once per second

ATEX Zone 1

ATEX Marking	II 2G Ex db eb IIC T6 Gb II 2D Ex tb IIIC T80°C Db
Ambient temperature	-20 °C to +70 °C
Type of protection	IP66

ATEX Zone 2

ATEX Marking	II 3G Ex ec IIC T4 Gc II 3D Ex tc IIIC T100°C Dc
Ambient temperature	-40 °C to +85 °C
Type of protection	IP65

5 | Connection diagram

Flame Scanner 2.0L	Harting	Harting	Special Cable KW5		Back Panel Flame Amplifier (3000 series)
	1	1	white	Flame signal	6
	2	2	brown	Self test impulse	4
	3	3	pink	Signal ground (GND1)	8
	4	4	green	Power supply (+24 V DC)	2
UV IR	5	5	yellow	Power supply (GND)	10
	6	6	grey	Spare	12

6 | Part number

Type	Part number
Flame Scanner 2.0L	6010-2033-00
Flame Scanner 2.0LEX	7010-2034-00
Flame Scanner 2.0LEX2	7010-2034-04
Flame Scanner 2.0LEX3	7010-2034-12

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