

EXPERT IN SAFETY AND  
SECURITY TECHNOLOGY



# 火焰探测器产品手册

Flame Detectors Product Manual

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# 开关量紫外火焰探测器

## 紫外火焰探测器

型号：JT-GB-ZW-CF6002



- 工作电压：DC12V~ DC28V
- 监视电流：≤10mA
- 报警电流：≤40mA
- 报警输出信号：
  - 继电器无源常开常闭可选
  - 触点容量1A/DC24V
- 可设置报警锁定或自动复位

使用环境：-20℃ ~ +55℃, 相对湿度：≤95%

外形尺寸：直径：103mm, 高：45mm (带底座)

防护等级：IP21

光谱范围：180~290nm

探测角度：≤120°

保护面积：S = (h × tan α) × 2πh

探测器距地面高度，α = 60°

执行标准：GB 12791-2006

安装孔距：60mm

紫外火焰探测器通过探测物质燃烧所产生的紫外线来探测火灾，适用于火灾发生时易产生明火的场所，对发生火灾时有强烈的火焰辐射或无阴燃阶段的火灾以及需要对火焰作出快速反应的场所均可采用本探测器。该探测器与其他探测器配合使用，更能及时发现火灾，尽量减少损失。探测器报警后，指示灯常亮，并输出一路继电器无源触点信号(可通过串接的方式输出DC12或者DC24V)，可供外部驱动警告设备或检测信号用。

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# UV Flame Detector with Relay Output

## UV Flame Detector

Model:CF6002



- Operating Voltage Range: DC12 to 28 V
- Standby Current: ≤10 mA
- Alarm Current :≤40 mA
- Spectrum: 180~290nm
- Detection Angle: ≤ 120 °
- Relay Contact Load: 1A@DC24V

Normal Status: LED blinking in 5 seconds interval

Alarm Status: LED lit steady

Protection rating: IP 21

Operating Humidity Range: 10% to 93%

Relative Humidity, Non-condensing

Operating Temperature Range: -20°C to 55°C

Height: 45 mm installed in Base

Diameter: 103 mm

Detection Sensitivity: Grade I, 25m@flame

(Container 33cmX33cm, Height 5cm with 2Kg ethanol )

The device is an Ultraviolet-only flame detector designed to detect fires and provide alarm outputs directly from the detector while maintaining false alarm immunity. It detects in the ultraviolet (UV) spectral range for optimized speed of response. It is fast and capable of detecting the ultraviolet (UV) rays emitted by a burning substance and is used in high hazard applications such as petrochemical plants, munitions factories and other areas where flammable or explosive liquids or solids are handled or stored.

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## 防爆型紫外火焰探测器

紫外火焰探测器  
型号:A705/UV



- 工作电压:18-30VDC
- 监视状态 $\leq 25\text{mA}$
- 报警状态 $\leq 35\text{mA}$
- 工作温度 $-10^{\circ}\text{C} \sim +55^{\circ}\text{C}$
- 工作湿度 $\leq 95\% \text{HR}$ , 无结露
- 防爆级别: EXd II CT6 Gb
- 防护等级: IP66

执行标准: GB 12791-2006

探测视角:  $\leq 120^{\circ}$  探测距离:  $\geq 25\text{m}$

产品尺寸: 91X100mm 安装尺寸: 35mmX47mm

一路火警继电器常开输出, 报火警后触点闭合

输出触点容量: 3A@30VDC, 3A@250VAC

一路故障继电器常闭输出, 发生故障时触点断开

输出触点容量: 3A@30VDC, 3A@250VAC

CCCF消防产品认证, 防爆认证;

A705UV紫外火焰探测器能对绝大多数火焰中的紫外光波做出快速的报警响应, 在有易快速发生火焰的危险地方, 例如常见的油田、石化和电站, 都得到很好的应用。A705UV探测器配置了高灵敏度的紫外传感器, 能监测早期火焰的紫外放射线, 反应速度快, 同时其中紫外火焰传感器(185-260纳米)能够在火警和爆炸点燃的瞬间对紫外线放射作出快速响应(但紫外线放射源如闪电、电弧焊和正面阳光辐射都会使紫外探测器发生错误报警)。A705UV探测器的防爆壳在户内和户外都能牢固而准确的安装, 高亮LED可显示探测器的状态, 其自动测试功能可保证探测器在任何时候都能充分发挥其功能。

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## Explosion Proof UV Flame Detector

UV Flame Detector with Relay output

Model: A705/UV



- Operating Voltage Range: DC18 ~ 30V
- Standby Current:  $\leq 25\text{mA}$
- Alarm Current:  $\leq 35\text{mA}$
- Detection Angle:  $\leq 120^{\circ}$
- Detection Distance:  $\geq 25\text{m}$
- Ingress Protection: IP66
- Explosion Proof: EXd II CT6 Gb
- Relay Contact Load: 3A@30VDC

Operating Temperature Range:  $-10^{\circ}\text{C} \sim 55^{\circ}\text{C}$

Operating Humidity Range: 0 ~ 95%RH

Product Size:  $\varnothing 91 \times 100\text{mm}$

Installation Dimension: 35mmX47mm

Alarm relay output contact: 3A@30VDC 3A@125VAC

Fault relay output contact :3A@30VDC 3A@125VAC

A705/UV is applied to those places which need to monitor flame. It can detect the flame that may cause fire rapidly and alarm timely.

A705/UV convert flame combustion parameters to electrical signals by two pyroelectric sensors which working in different bands, then compare, calculate and process signal input industrial computing chip, coordinate with special intelligent control software, thus can send the fire alarm timely.

A705/UV is with good protective and explosion-proof properties by using the aluminum die-casting flame proof shell. It is corrosion resistance and anti aging, can work at a variety of special industrial sites(indoor /outdoor) for a long time.

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## 防爆型双红外火焰探测器

红外火焰探测器  
型号:A705/IR2



- 工作电压:18-30VDC
- 监视状态 $\leq 25\text{mA}$
- 报警状态 $\leq 35\text{mA}$
- 工作温度 $-10^{\circ}\text{C} \sim +55^{\circ}\text{C}$
- 工作湿度 $\leq 95\% \text{HR}$ , 无结露
- 防爆级别: EXd II CT6 Gb
- 防护等级: IP66

执行标准: GB 12791-2006

探测视角:  $\leq 120^{\circ}$  探测距离:  $\geq 25\text{m}$

产品尺寸: 91X100mm 安装尺寸: 35mmX47mm

一路火警继电器常开输出, 报火警后触点闭合

输出触点容量: 3A@30VDC, 3A@250VAC

一路故障继电器常闭输出, 发生故障时触点断开

输出触点容量: 3A@30VDC, 3A@250VAC

CCCF消防产品认证, 防爆认证

A705/IR2 可应用于需要对火焰实施监控的场所, 快速发现可能引起火灾的燃烧火焰, 及时发出火灾警报。

A705/IR2 通过两个工作于不同波段的红外热释电传感器将火焰燃烧参数转换为电信号, 之后将信号输入工业计算芯片进行比较、运算和处理, 配合专用智能控制软件, 可以及时发出火灾警报。

A705/IR2 采用铝压铸隔爆壳体, 具有良好的防爆和防护特性, 耐腐蚀、抗老化, 可以长期工作于室内、室外和各种特殊的工业场所。

## Explosion Proof Dual IR Flame Detector

IR Flame Detector with Relay output

Model: A705/IR2



- Operating Voltage Range: DC18 ~ 30V
- Standby Current:  $\leq 25\text{mA}$
- Alarm Current:  $\leq 35\text{mA}$
- Detection Angle:  $\leq 120^{\circ}$
- Detection Distance:  $\geq 25\text{m}$
- Ingress Protection: IP66
- Explosion Proof: EXd II CT6 Gb
- Relay Contact Load: 3A@30VDC

Operating Temperature Range:  $-10^{\circ}\text{C} \sim 55^{\circ}\text{C}$

Operating Humidity Range: 0 ~ 95%RH

Product Size:  $\varnothing 91 \times 100\text{mm}$

Installation Dimension: 35mmX47mm

A705/IR2 is applied to those places which need to monitor flame. It can detect the flame that may cause fire rapidly and alarm timely.

A705/IR2 convert flame combustion parameters to electrical signals by two pyroelectric sensors which working in different bands, then compare, calculate and process signal input industrial computing chip, coordinate with special intelligent control software, thus can send the fire alarm timely.

A705/IR2 is with good protective and explosion-proof properties by using the aluminum die-casting flame proof shell. It is corrosion resistance and anti aging, can work at a variety of special industrial sites(indoor /outdoor) for a long time.

## 防爆型双红外单紫外火焰探测器

### 红紫外火焰探测器

型号：JTH-CH386EX



- 工作电压:16-32VDC
- 监视状态 $\leq 15\text{mA}$
- 报警状态 $\leq 30\text{mA}$
- 工作温度 $-10^{\circ}\text{C} \sim +55^{\circ}\text{C}$
- 工作湿度 $\leq 95\% \text{HR}$ , 无结露
- 防爆级别：EXd II CT6 Gb
- 防护等级：IP66

执行标准: GB 12791-2006

探测视角:  $\leq 120^{\circ}$  探测距离:  $\geq 25\text{m}$

产品尺寸: 186X191X96mm 安装尺寸: 60mmX90mm

光谱范围: 红外:  $3.8\mu\text{m}-11\mu\text{m}$ , 紫外:  $180 \sim 290\text{nm}$

一路火警继电器常开输出, 报火警后触点闭合

输出触点容量:  $1\text{A}@30\text{VDC}$ ,  $1\text{A}@220\text{VAC}$

一路故障继电器常闭输出, 发生故障时触点断开

输出触点容量:  $1\text{A}@30\text{VDC}$ ,  $1\text{A}@220\text{VAC}$

CCCF消防产品认证, 防爆认证

JTH-CH386Ex防爆型点型红/紫外火焰探测器含二个红外波长传感器和一个紫外传感器以及光学过滤器, 探测器对 $\text{CO}_2$ 发射光谱( $4.4\mu\text{m}$ )具有最高的灵敏性, 另一个红外传感器对环境光线、热体辐射的干扰进行探测, 探测器对发生火灾时产生的紫外线再进行探测并结合火焰闪烁频率的逻辑综合判断并进行多信号处理, 能够最大程度抑制错误报警以及需要的最佳火灾探测性能, 提高了探测器的灵敏度和响应时间, 使探测器具有抗日光干扰的性能。火焰探测器不仅对碳氢化合物等有机材料的火灾具有早期报警性能, 而且对无机物火灾也具有早期报警性能。

JTH-CH386Ex防爆型点型红/紫外火焰探测器能够在高温、低温、高湿、震动等苛刻的工业环境下工作。

## Explosion Proof Dual IR and UV Flame Detector

### 2 IR and UV Flame Detector with Relay output

Model: JTH-CH386EX



- Operating Voltage Range: DC16 ~ 32V
- Standby Current:  $\leq 15\text{mA}$
- Alarm Current:  $\leq 30\text{mA}$
- Detection Angle:  $\leq 120^{\circ}$
- Detection Distance:  $\geq 25\text{m}$
- Ingress Protection: IP66
- Explosion Proof: EXd II CT6 Gb
- Relay Contact Load:  $1\text{A}@30\text{VDC}$

Operating Temperature Range:  $-10^{\circ}\text{C}-55^{\circ}\text{C}$

Operating Humidity Range:  $0 \sim 95\% \text{RH}$

Product Size:  $\varnothing 186 \times 191 \times 96\text{mm}$

Installation Dimension:  $60\text{mm} \times 90\text{mm}$

Spectrum: IR:  $.8\mu\text{m}-11\mu\text{m}$ , UV:  $180 \sim 290\text{nm}$

JTH-CH386EX detects the Ultraviolet produced by fire, combines with the flame flicker frequency to process multiple signals, which can maximum restrain the false alarm and the optimal fire detection performance, improve the sensitivity and response time of the detector.

The flame detector not only has early warning performance for organic compounds and other organic materials, but also for inorganic fire. The JTH-CH386Ex explosion-proof point type infrared / UV flame detector can work in harsh industrial environments such as high temperature, low temperature, high humidity and vibration.

## 防爆型3红外火焰探测器

### 红外火焰探测器

型号：JTH-CH381EX



工作电压:16-32VDC  
监视状态 $\leq 15\text{mA}$   
报警状态 $\leq 30\text{mA}$   
工作温度 $-10^{\circ}\text{C} \sim +55^{\circ}\text{C}$   
工作湿度 $\leq 95\% \text{HR}$ , 无结露  
防爆级别：EXd II CT6 Gb  
防护等级：IP66

3 IR Flame Detector with Relay output

Model: JTH-CH381EX

Operating Voltage Range: DC16 ~ 32V

Standby Current:  $\leq 15\text{mA}$

Alarm Current:  $\leq 30\text{mA}$

Detection Angle:  $\leq 120^{\circ}$

Detection Distance:  $\geq 25\text{m}$

Ingress Protection: IP66

Explosion Proof: EXd II CT6 Gb

Relay Contact Load: 1A@30VDC

执行标准: GB 12791-2006

探测视角:  $\leq 120^{\circ}$  探测距离:  $\geq 25\text{m}$

产品尺寸: 186X191X96mm 安装尺寸: 60mmX90mm

光谱范围: 红外:  $3.8\mu\text{m}, 4.4\mu\text{m}, 5.0-11\mu\text{m}$ ,

一路火警继电器常开输出, 报火警后触点闭合

输出触点容量: 1A@30VDC, 1A@220VAC

一路故障继电器常闭输出, 发生故障时触点断开

输出触点容量: 1A@30VDC, 1A@220VAC

CCCF消防产品认证, 防爆认证



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