



# **IR3 Flame Detector**

### **DESCRIPTION**

The CS-TIE-C30P has three IR sensors and these detect three specific wavelength bands within the IR spectral range of a fire. Due to its variety of detection ranges, their immunity to false alarms to minimize malfunctions and increase reliability have been greatly improved.



- ◆ Alarm and warning function in case of abnormal temperature and voltage (optional)
- ◆ Highly immune to false alarms
- ◆ Various fire output signals (optional)
- ◆ Lead wire-integrated type -Easy installation
- ◆ Compact in size therefore can be installed in small space — Mainly used for cultural heritage made of wood, indoor gyms, multi-story car parks, High Speed Response to fire
- ◆ FM 3260 / EN 54-10 (2809-CPR-E0012)
- **◆** CCCF
- ◆ IECEx / ATEX / Dust Explosive /Nepsi



## CS-TIE-C30P (Explosion-proof)

#### **ELECTRICAL SPECIFICATIONS**

Operating Voltage	19.2Vdc ~ 28.8Vdc
Power Consumption	On stand-by : 30mA Alarm : 75mA
Wiring	15 to 24AWG
Electrical Interface	Relay dry contact: NO Fault dry contact: NC

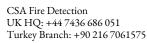
# OUTPUT SIGNALS

Relays

Alarm relay (SPST)
Fault relay (SPST)
4-20mA
RS-485

### **GENERAL SPECIFICATIONS**

Detection Range	Fuel	ft/m	Fuel	ft/m
_	Heptane	197 / 60	Kerosene	138 / 42
-Sensitivity Setting	Gasoline	197 / 60	Alcohol	118 / 36
1ft x 1ft Fan Fire	Jet A	138 / 42	*Methane	89 / 27
*20"(0.5M) Plume Fire	JP 4	138 / 42	*Propane	89 / 27
	Diesel	138 / 42	Paper	69 / 21
Field of View	Horizontal 90° Vertical 90°			
Response Time	Normally 10 Seconds (Maximum 30 Seconds)			
Temperature Range	Operating: $-40^{\circ}F \sim 167^{\circ}F$ ( $-40^{\circ}C \sim 75^{\circ}C$ ) Storage: $-40^{\circ}F \sim 176^{\circ}F$ ( $-40^{\circ}C \sim 80^{\circ}C$ )			
Humidity	Relative humidity of up to 93% $\pm$ 2% for the operational temperature range			





CSA



# MECHANICAL SPECIFICATIONS

Enclosure	Stainless Steel (316L) Aluminum (AL6061)
Dimensions	Cylinder 61.5(H)mm x 75(Ø) mm
Weight (Approx.)	Stainless 316L: 3.0kg (6.61lbs) Aluminum: 0.49kg (1.08lbs)
Water and Dust Tight	IP67, NEMA 4X

### HAZARDOUS AREA ZONES

- ♦ IECEX Ex db IIC T6 Gb (-40°C ≤ Ta ≤ +75 °C)
- ◆ ATEX Ex db IIC T6 Gb, (IP66/67)
- ◆ Ex tb IIIC T6 Db (ZONE 21) IP66/67 T85°

### **APPLICATIONS**

- ◆ Industrial Fires
- ◆ Oil & Gas Industries
- ◆ Airport
- ◆ Military Base
- Cultural Heritage Made of Wood
- ♦ Indoor Gyms
- ♦ Multi-Story Car Parks

## **CERTIFICATION & APPROVAL**

- ◆ Dust Explosive
- **♦** IECEx
- **♦** ATEX
- ◆ Nepsi

- ◆ FM 3260
- ♦ EN54-10
- **♦**CCCF

## ORDERING GUIDE

Accessories

# **Cable Length**

☐ 2M (standard)

## **Cable Gland**

☐ For Stainless Steel Enclosure☐ For Aluminum Enclosure

#### **Bracket**

1. ☐ Aluminum (160mm)



- 2. 
  Stainless Steel
  - long leg (134mm)

    ☐ Stainless Steel
    short leg (83mm)



### **Cable Gland**

#### For Stainless Steel Enclosure

### **For Aluminum Enclosure**

A2FRC-20b (1/2" NPT) IP67 (Stainless Steel)



16C (1/2") (Brass)

