Infra Red Intrisically Safe Flame Detector

IFD-E-IS

Features

- Unaffected by convection currents, draughtsor wind and solar-blind
- Tolerant of fumes, vapours, dust and mist
- ATEX certification to: EEx ia IIC T4 (135 C) zones 0, 1 and 2)
- Responsive to a flame more than 25 m away
- Selectable response speed
- Class 1 performance as defined in BS EN5410:2002 (on the high sensitivity setting)
- Optical self-test
- SIL capable

Description

Infra Red Intrinsically Safe Flame Detector Alloy Housingis an Intrinsically Safe IR^3 flame detector designed for use where open flaming fires may be expected and responds to the light emitted from flames during combustion. The detector discriminates between flames and other light sources by responding only to particular optical wavelengths and flame flicker frequencies. This enables the detector to avoid false alarms due to such factors as flickering sunlight. Ideal for the detection of flames from the burning of Aviation Fuels (kerosene), Butane, Grain & Feeds, Hydrogen, Paper, Natural Gas, Petrol (gasoline) etc.

Specification

Ordering codes		IFD-E(IS)
		IFD-MB (Stainless Steel Mounting Bracket)
Operating voltage		14 - 30Vd.c.
Alarm Current (selected via by DIL switches)		3 ~ 28mA
Test Signal Voltage		14 to 30Vd.c.
Relay Contact Ratings	Current	0.25A (max)
	Voltage	30Vd.c. (max)
	Power	3.0W (max) (resistive loads only)
Power Up Time		2 seconds (max)
Field of View		90° min. Cone
Range		Class 1 – 0.1m^2 n-heptane at 25m Class 3 – 0.1m^2 n-heptane at 12m
Operating Wavelength Band		IR (0.75 ~ 2.7μm)
Operating temperature range		-10°C to + 55°C (sensor limit -10°C to +40°C (T4))
Storage temperature range		-20°C to + 65°C
Maximum humidity		95% RH - Non condensing (at 40°C)
Ingress Protection Rating		IP65
Colour / Case Material		Blue / Die-Cast Zinc Alloy (ZA12)
Weight (Kg)/Height/Width/Depth (mm)		2 / 142 / 108 / 82
Approved Barriers	Pepperl & Fuchs Ltd	Z728, Z779, Z828, KFD0-CS-Ex1.51, KFD0-CS-Ex2.51
	MTL	MTL7028+, MTL7728+, MTL7779+, MTL7706+