

High Temperature Transit Flame Sensor

IECEX and ATEX Approved 5710



The 5710 High Temperature Transit Flame Sensor monitors high temperature materials (up to 240° on highest sensitivity), being transported on conveyor systems at speeds of between 0.5 and 6m/s, and triggers as the material reaches the ember or flame condition.

The sensor employs enhanced infra-red monitoring technology that analysis the levels of IR emission in the narrow band of 4.2-4.7µm. As the sensor is tuned to this band it is "solar blind" meaning the "background" and "transient" IR spectra are discriminated. This provides enhanced false alarm immunity.

The 5710 is specifically designed for hazardous areas and is IECEx / ATEX approved for Zones 1, 2 & 21, 22.

Air purging from a compressed air feed is used to maintain a lens cleaning system that ensures the prevention of dust settling on the sensor window.

The 5710 incorporates within the unit a user programmable SIL switch. Option selection includes detector sensitivity settings, auto/manual reset sequence selection and single/ coincidence voting from the two individual internal detectors for the alarm trip shutdown outputs.

The sensor air pressure and signal cable connections are fault monitored and fail safe. The controller incorporates an auxiliary fault input and common fault output contact.

Features

Detection of ember and flame of high Temperature product.

Air purged system for dusty environments with air pressure monitoring.

Isolated Detectors for Maximum reliability.

Single / Coincidence voting output

Timed auto reset / coincidence analyzer circuit

Tuned response — solar blind

Voting Logic & Latching options

Alarm & Trip Functions

Fault Monitored, with Test & Reset push Buttons

Field Programmable

Volt free relay contact output operation selectable as standard

Two wire operation - Can be powered by direct connection to standard fire trigger circuits or

Applications

Food Processing

Tobacco Processing

Conveyors

Waste Recycling Conveyors

Baggage Handling

Radio Frequency Drying Systems

Microwave Drying Systems

Waste Drying Systems

Drying Conveyors



Infra-red Transit Heat Sensor

Model :5450



The 5000 Series is an early warning infra-red heat sensor, which can trigger at temperatures as low as 100°C, when monitoring materials being transported on conveyor systems, before they have reached the ember or flame condition.

Its unique dual detector enhanced Infra-red monitoring has been created to detect black heat. Black body emissions occur for all material, the sensor is designed to detect a change in these emissions even at relatively low temperatures, when the material moves through its field of view.

Air purging from an integral Air Purged Blower (APB) feed is used to maintain a positive air pressure in the sensor enclosure, and ensures the prevention of dust settling on the sensor window. The air supply is monitored, which on air failure is signal led as a fault status.

The 5450 incorporates within the unit a series of user programmable SIL switches. Option selection including detector sensitivity settings, auto/manual reset sequence selection and single / coincidence voting from the two individual internal detectors for the alarm trip and shutdown outputs.

The sensor air pressure and supply cable connections are fault monitored and fail safe. The controller incorporates an auxiliary. fault input and common fault output contact.



AKSHARATEK
SYSTEMS PVT. LTD.

No. 232, 10th main, 100 Feet Road,
HRBR Layout, 1st Block, Kalyan Nagar.
Bangalore – 560 043. India
Email: info@aksharatek.in, Web:
www.aksharatek.in
Tel: +91 80 4174 6003, Mob: +91 82966 69007

Features

Detection of hazards at temperatures below flame point including both embers and buried hot spots.

Air purged system for dusty environments with air pressure monitoring.

Twin high integrity detection circuit channels for maximum reliability

Two wire operation - Powered by direct connection to standard fire trigger circuits or addressable loop interface

Single / Coincidence voting output

Timed auto reset / coincidence analyser circuit

Tuned response — solar blind

Volt free relay contact output operation selectable as standard

Fault Monitored, with Test & Reset push Buttons

Field Programmable

Applications

Conveyors

Escalators

Drying Lines

Sorting Machines

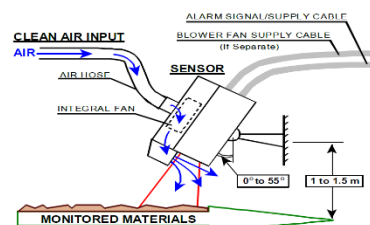
Food Processing

Baggage Handling

Production Lines

Warehouse Robots

Waste Recycling Conveyors



Infra-red Transit Heat Sensor

5000 Series: Model :5410



The 5000 Series is an early warning infra-red transit heat sensor, which can trigger at temperatures as low as 100°C, when monitoring materials being transported on conveyor systems, before they have reached the ember or flame condition.

Its unique dual detector enhanced Infra-red monitoring has been created to detect black heat. Black body emissions occur for all material, the sensor is designed to detect a change in these emissions even at relatively low temperatures, when the material moves through its field of view.

Air purging from a mains operated Air Purged Blower (APB) feed is used to maintain a positive air pressure in the sensor enclosure, and ensures the prevention of dust settling on the sensor window. The air supply is monitored by a pressure switch, which on air failure is signalled as a fault status.

The 5410 incorporates within the unit a series of user programmable SIL switches. Option selection including detector sensitivity settings, auto/manual reset sequence selection and single/coincidence voting from the two individual internal detectors for the alarm trip and shutdown outputs.

The sensor air pressure and signal cable connections are fault monitored and fail safe. The controller incorporates an auxiliary fault input and common fault output contact.

Features

Detection of hazards at temperatures below flame point including both embers and buried hot spots.

Air purged system for dusty environments with air pressure monitoring.

Twin high integrity detection circuit channels for maximum reliability

Two wire operation - Powered by direct connection to standard fire trigger circuits or addressable loop interface

Single / Coincidence voting output

Timed auto reset / coincidence analyser circuit

Tuned response — solar blind

Volt free relay contact output operation selectable as standard

Fault Monitored, with Test & Reset push buttons

Field Programmable

Applications

Conveyors

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Drying Lines

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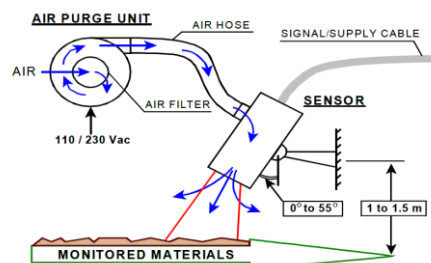
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Infra-red Transit Heat Sensor

5000 Series: Model :5010



The 5000 Series is an early warning infra-red heat sensor, which can trigger at temperatures as low as 100°C, when monitoring materials being transported on conveyor systems, before they have reached the ember or flame condition.

Its unique eight detector enhanced Infra-red monitoring has been created to detect black heat. Black body emissions occur for all material, the detector is designed to detect a change in these emissions even at relatively low temperatures, when the material moves through its field of view.

Air purging from a mains operated Air Purged Blower (APB) feed is used to maintain a positive air pressure in the sensor enclosure, and ensures the prevention of dust settling on the sensor window. The air supply is monitored by a pressure switch, which on air failure is signalled as a fault status.

The 5020 controller is directly connected to the sensor. A series of user programmable DIL switches allows option selection including detector sensitivity settings, auto/manual reset sequence selection and single / coincidence voting from the four individual internal detection channels for the alarm trip and shutdown outputs.

The sensor air pressure and signal cable connections are fault monitored and fail safe. The controller also incorporates an aux. fault input & common fault output contact.

Features

Detection of hazards at temperatures below flame point including both embers and buried hot spots.

Air purged system for dusty environments with air pressure monitoring.

Four Channels of Detectors (two detectors per channel) for Maximum reliability.

Multi-Facet lensing provides wide uniform coverage

Single / Coincidence voting output

Timed auto reset / coincidence analyser circuit

Tuned response — solar blind

Voting Logic & Latching options

Alarm & Trip Functions

Fault Monitored, with Test & Reset push Buttons

Field Programmable

Local Indicators

Applications

Conveyors

Escalators

Drying Lines

Sorting Machines

Food Processing

Baggage Handling

Production Lines

Warehouse Robots

Waste Recycling Conveyors

