# Protec A Bosch Company

# **Cirrus CCD Detector**



The Cirrus CCD is an advanced, multi-pipe aspirating detector that uses Cloud Chamber Detection (CCD) technology to provide early warning of fire. This technology ensures the highest level of sensitivity, enabling the device to detect even the slightest traces of combustion particles, even before visible smoke particles are present.

### Standards / Approvals

- UL
- ULC
- FM

# **Technical Specification**

Supply Voltage	20 - 28VDC
Current Consumption @ 24VDC, 100% Fan 4 pipe	522mA quiescent   622mA alarm (1 pipe) 840mA quiescent   940mA alarm (Scanner 4 pipe)
Operating Temperature Range	0°C to 37.8°C (32°F to 100°F)
Application Sampled Air Temperature	-20°C to 60°C (-4°F to 140°F)
Humidity	10 - 93%RH (no icing / non-condensing)
IP Rating	IP30
Cable access	10 x 20mm knock outs
Cable Termination	Screw terminal blocks (0.2 - 2.5mm <sup>2</sup> , 30 - 12AWG)
Pipe Outer Diameter	25mm, push to fit tapered inlet
Alarm Indications	Pre-alarm, Fire 1, Fire 2, Fire 3
Other Indications	Supply Healthy, General Fault, 7inch LCD colour touch Screen Display
Fault Contact	Rated at 30VDC 1A maximum [Normally closed]
Programmable Output Contacts	5 contacts rated 30VDC 1A [Volt-free change over contacts with 28 programming options]
Programmable Inputs	3 monitored inputs that may be configured for Isolate, Reset, Silence, Day/Night, Battery Fault and Mains Fault
Camera	6 Protec specified IP cameras
Event Log / Data Retention	24,000 events stored on FIFO basis (alarms, actions, faults and data points) (Approx 30-day historical graph data)
Variable Sensitivity Settings	7-day programmable settings with 2 time zones per day. Daytime/Night-time setting
Sensitivity Range	Incipient Detection Range: 0.002micron to 1.0micron in diameter. Concentrations of 10,000 particles per cc to 10 million particles per cc.  Carbon Monoxide Detection Range:
	1 to 150 ppm

### **Cirrus CCD Detector**

## **Technical Specifications Continued**

Summation of 60 holes per detector

Threshold Settings Recommended Maximum @ 15 holes per pipe

\*Application dependent. Consult product manual for more information

Number of inlet ports: Up to four
Pipe Network Design Tool: ProFlow

Maximum pine length. Specific to ince

Maximum pipe length: Specific to individual design. To be compliant to

local design codes and verified by ProFlow.

Airflow Monitoring 'High Airflow' and 'Low Airflow' fault monitoring

Weight 3.5kg (7.7lbs)

Dimensions (mm) 380(H) x 250(W) x 137(D)

### **Product Codes**

1 Pipe (with display)	61-986-C4-FMUL1	
2 Pipe (with display)	61-986-C4S-FMUL2	
3 Pipe (with display)	61-986-C4S-FMUL3	
4 Pipe (with display)	61-986-C4S-FMUL4	

1 Pipe (no display)	61-986-C4ND-FMUL1
2 Pipe (no display)	61-986-C4ND-FMUL2
3 Pipe (no display)	61-986-C4ND-FMUL3
1 Pine (no display)	61-986-CAND-EMIII A