

# PYRONICS



## ■ **PYR-FA-CHA-BD** REFLECTIVE SMOKE BEAM DETECTOR

The PYR-FA-CHA-BD is a conventional reflective beam type smoke detector with an internal microprocessor supporting automatic calibration through smoke-time analysis and ambient conditions compensation and adjustment to produce the best in market detection and false alarm identification results, the beam detector has a built-in LASER beam for easy alignment and installation.

## **KEY FEATURES**

- Modern Design and Feel
- Self-Diagnostics to Identify Internal Faults
- 3 Selectable Sensitivity Levels
- Supports 1 or 4 Reflectors According to Required Coverage Distance
- Up to 100 Meter by 14 Meter Coverage
- Commissioning Mode for Easy Installation
- Multiple LEDs for Commissioning Mode, Alarm and Fault
- Pathway Obscuration Alarm
- 3 Year Warranty



# SPECIFICATIONS

## GENERAL

Technology	Microprocessor Based
Sensing Method	Photoelectric using Optical Pathway Reflection
Diagnostics	Self-diagnostics Function
Ambient Compensation	Automatic Analysis and Adjustment
Angle of Adjustment	-6° to +6°
Maximum Angular Misalignment	± 0.5°
LEDs	Triple LED for Commissioning, Fire, and Fault
Contacts	Fire and Fault

## PERFORMANCE

Coverage Shape	Cone Beam
Coverage Length	From 8 to 100 Meters
Coverage Width	Up to 14 Meters
Sensitivity	Level 1: 1.25dB Level 2: 1.87dB Level 3: 3.01dB
Reflectors	Up to 70 Meters: 1 Reflector More than 70 Meters: 4 Reflectors
Mounting	0.5 Meter from Ceiling
Ceiling Height	1.5 to 40 Meters
EMI Protection	Yes

## ELECTRICAL

Operating Voltage	18 to 30 VDC
Standby Current	20 mA
Alarm Current	30 mA

## MECHANICAL

Material	High Impact Durable Engineered Polymer
Dimensions	100 mm x 46 mm x 46 mm (Length x Width x Depth)
Weight	130 gm (Without Reflectors)

## ENVIRONMENTAL

Application	Indoor Installation Only
Ingress Protection	IP30
Operating Temperature	-10 °C to +50 °C
Storage Temperature	-15 °C to +55 °C
Humidity	0 to 95% (Relative Humidity)

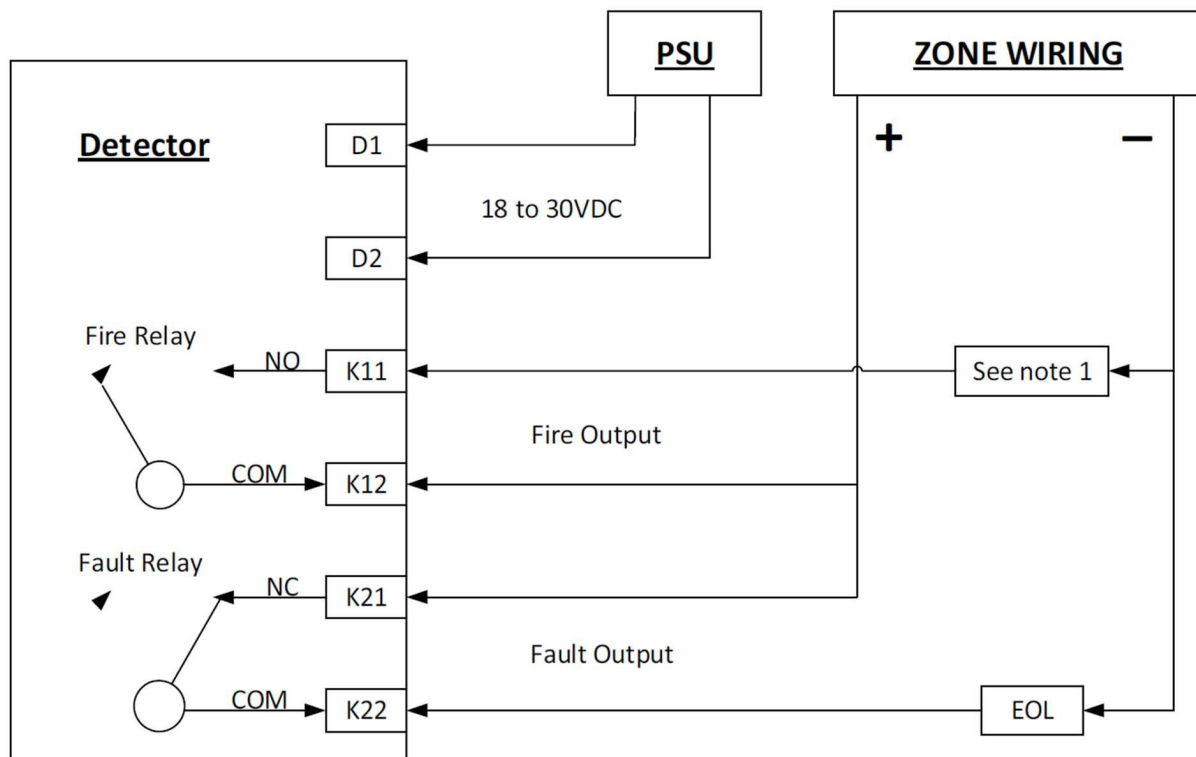
## REGULATORY

Certification	LPCB according to EN54-12
Declaration	CE





# WIRING



\* Fire resistor and its value is specified by the fire alarm control panel.

\*\* EOL – End of line resistor, and its value is specified by the fire alarm control panel.

# ORDERING INFORMATION

Model	Description
PYR-FA-CHA-BD	CONVNETIONAL REFLECTIVE SMOKE BEAM DETECTOR
PYR-FA-CHA-ERP	EXPANSION REFLECTIVE PANELS FOR EXTENDED RANGE

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Pyronics warrants all its products against any and all manufacturing defects from the date of product delivery from the factory and/or distribution center. Pyronics's Challenger series has a warranty of 3 years

PYR-FA-CHA-BD – Datasheet V.001

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