# 850 and 830 Series

Generation 6

# ZETTLER

The 850 and 830 series fire detectors are designed to be both adaptable and flexible which means they can be used in most premises to protect against a wide range of potential fire risks.

They use sophisticated digital signalling to communicate with the MZX Technology fire control panel. Using the 850EMT Engineering Management Tool, which communicates with the detector via a two way infrared link together with a range of bases and accessories, they are quick and easy to install. Colour options allow the detectors to either blend into the decor or be easily spotted against a contrasting background. System designers can choose between a built-in line isolator with the 850 series, or may use an isolator base with the 830 series.



#### **Features**

- Choice of heat, optical, optical and heat multi-sensor or 3oTec triple multi-sensor
- Any Pantone colour available with CPD approval
- Advanced multi-sensor designs
- Built-in line isolator 850 Series
- Quick and easy to install
- Extended drift compensation
- Two way infra-red communication to the 850EMT Engineering Management Tool
- Fire, isolate and fault LED indications
- Comprehensive range of bases and base accessories

#### 850PH and 830PH Photo Heat Detector

With the ability to detect a wide range of fires from flaming to smouldering types, the combined optical and heat multi-sensor detector is the preferred choice for a range of applications including light industrial, retail and office environments. It operates in a number of approved modes and sensitivities that can be dynamically selected to suit different environmental conditions.



#### 850P and 830P Photo Detector

More benign environment where any potential fire will be slow burning can be protected using the optical detector. A choice of sensitivities and modes gives this detector a broad range of applications.



#### 850H and 830H Heat Detector

To compliment the range the heat sensor can operate in fixed temperature and rate-ofrise modes with a number of approved sensitivities. Most often used in areas where high levels of dust are present or where the environment precludes the use of smoke detectors.



#### 850PC and 830PC 3oTec Triple Sensor Detector

For life protection and when the environmental conditions are challenging, the  $3\sigma$ Tec detector provides the ultimate in detector performance and false alarm rejection. It is a multi sensor that monitors smoke, heat and CO levels in concert to accurately determine the presence of fire. Applications include industrial, retail, transport hubs, and healthcare. Its false alarm rejection properties make it the ideal choice for hotel bedrooms where steam from bathrooms is a common source of false alarms.



#### **Colour Options**

Detectors are supplied white as standard. A range of colours are available, these are supplied as packs of ten detector covers and continuity bases. A sample pack is also available that contains one cover and one base in each of the standard 10 colours. In addition to the 10 stocked shades, any Pantone colour can be supplied as a special order for quantities of 100 or over.



# 850 and 830 Series Fire Detectors

Generation 6

#### **Detector Bases**

The detector bases are designed to snap-fit to the ceiling tile adaptor or can be screw fixed to a ceiling or electrical box in the traditional manner. A park position allows the detector to be mechanically attached to the base without making electrical connection to facilitate the testing of electronic free bases.

## 4B-C 4" Continuity Base

Use with 850 Series detectors that have built in line isolator. The 4B-C base provides continuity when the detector is removed.



#### 4B 4" Detector Base

Use this base with 830 Series detectors when short circuit isolation is not required.



#### 4B-I 4" Isolator Base

Use the 4B-I base with 830 Series detectors to provide local short circuit isolation.



#### **850 EMT Engineering Management Tool**

The 850EMT is a commissioning tool that communicates with 850 and 830 series fire devices via a two way infrared link. It is designed to speed up and simplify installation and commissioning, reduce the possibility of engineering error and improve health and safety by removing the need for working at height.



# 850 and 830 Series Fire Detectors

Generation 6

#### **Detector Base Accessories**

A number of ingeniously designed detector base accessories combine to cut installation time, enhance the installed appearance and mechanically protect the installation.

#### **Ceiling Tile Adaptor CTA**

The CTA is used to fix detectors to suspended ceilings and allows the detector to be commissioned and tested before the ceiling is fitted. It can cut the total installation time by 30%.





#### **CTA Adapter Plate**

When beacon bases or sounder bases are fixed to the CTA, the adaptor plate is required to provide standard electrical box fixings.



#### **Euro Mount**

For surface cable and mini trunking installations, the Euro Adaptor provides a shallow back-box onto which the detector base is fitted.



#### **Deckhead Mount**

The deckhead mount provides an IP55 seal between the mount and the detector base to provide superior environmental protection.



# Base 6" Adaptor

For use with U.S. style 6" electrical back boxes or can be fixed directly to a ceiling and used to conceal marks left when older, large diameter detectors are replaced.



#### **Approvals**

850PH / 830PH: EN54-5 and EN54-7, CPD, VdS Type Approval, CEA4021

850P / 830P: EN54-7, CPD, VdS Type Approval 850H / 830H: EN54-5, CPD, VdS Type Approval

850PC / 830PC: EN54-5 and EN54-7, CPD, VdS Type Approval, VdS2806, CEA4021

# 850 and 830 Series Fire Detectors Generation 6

# **Technical Specifications**

	Dimensions mm	Weight g	Operating Temp.	Relative Humidity	
850PH Photo heat detector	Dia. 109 x 43H	76	-25 °C to +70 °C		
850P Photo detector		76	-25 °C to +70 °C		
850H Heat detector		81	-25 °C to +70 °C short-term: to +90 °C		
850PC 30Tec detector		94	-10 °C to +55 °C		
830PH Photo heat detector		76	-25 °C to +70 °C		
830P Photo detector		76	-25 °C to +70 °C	95% (non	
830H Heat detector		81	-25 °C to +70 °C, short-term: to +90 °C	Condensing)	
830PC 3oTec detector		94	-10 °C to +55 °C		
4B-C 4" Continuity Base	Dia. 109 x 23.3H	53			
4B 4" Detector Base		48			
4B-I 4" Isolator Base		60			
Ceiling Tile Adaptor CTA	Dia. 165 x 51.5 H	232	-25 °C to +70 °C (+90 °C for short periods)		
CTA Adapter Plate	Dia. 114.5 x 7.5 H	40	C for short periods/		
Euro Mount	Dia. 110.4 x 20 H	70			
Deckhead Mount	Dia. 147.5 x 41.5 H	288			
Base 6" Adaptor	Dia. 150.7 x 16.5 H	50			

#### **Ordering Information**

516.850.051 516.850.052	850PH Photo Heat Detector 850P Photo Detector	517.050.501	Colour Sample set, pack of 10, one of each cover and base
516.850.053	850H Heat Detector	517.050.502	Orange Pantone 1645C (semi-gloss)
516.850.054	850PC 3oTec Triple Sensor Detector		pack of 10 cover and base
516.830.051	830PH Photo Heat Detector	517.050.503	Yellow Pantone 102C (gloss) pack of
516.830.052	830P Photo Detector		10 cover and base
516.830.053	830H Heat Detector	517.050.504	Green Pantone 355C (matt) pack of
516.830.054	830PC 3oTec Triple Sensor Detector		10 cover and base
516.850.900	850EMT Engineering Management Tool	517.050.505	Red Pantone 186C (matt) pack of 10
517.050.041	4B 4" Detector Base		cover and base
517.050.042	4B-C 4" Continuity Base	517.050.506	Brown Pantone 1615C (matt) pack
517.050.043	4B-I 4" Isolator Base		of 10 cover and base
517.050.060	Ceiling Tile Adaptor	517.050.507	Blue Pantone 639C (gloss) pack of
517.050.058	CTA -AP CTA Adaptor Plate		10 cover and base
517.050.052	4B-EM 4" Euro Mount	517.050.508	Pink Pantone 238C (gloss) pack of
517.050.054	4B-6A 4" to 6" Base Adaptor		10 cover and base
517.050.051	4B-DHM Deckhead Mount	517.050.509	Sliver Pantone 877C (metallic) pack
517.050.055	4B-DAF 4" Base DIN Address Flag		of 10 cover and base
516.800.915	Standard Address Flag	517.050.510	Gold Pantone 873C (metallic) pack
			of 10 cover and base
		517.050.511	Black Pantone Hexachrome Black C
			(matt) pack of 10 cover and base

ZETTLER, is a leading brand of fire detection products in the European market. The ZETTLER fire detection product line includes a wide range of EN54 CPD approved fire detection products carrying approvals and cross-listings, including VdS and NF. The ZETTLER product lines are available through ZETTLER Authorised Distributors as well as many Johnson Controls offices around the world.

Tyco Fire & Security GmbH, Victor von Bruns Strasse 21, CH-8212 Neuhausen am Rheinfall, Switzerland

© 2017 Johnson Controls. All rights reserved. All specifications and other information shown were current as of document revision date and are subject to change without notice.

PSF255ZT Issue – 1. October 2012

www.zettlerfire.com

