# SM87 BG & PB Range - MANUAL CALL POINTS

Crouse-Hinds

## Ex d, Intrinsically Safe (Ex ia), Weatherproof



### Introduction

These manual fire alarm, emergency shutdown break-glass and pushbutton units have been designed for the most arduous environmental conditions. The units are both easy to install and maintain. Intrinsically safe Ex ia and flameproof Ex d versions of each model are available.

A choice of either stainless steel or alloy makes the range suitable for either the offshore or onshore industries. Stainless steel, one of the most durable materials available on the market, is both hard wearing and corrosion resistant, increasing the life of products in harsh environments and therefore reducing maintenance costs.

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#### **Features**

- Zone 0, Zone 1 and Zone 2 use\*.
- Ex d IIC T5/T6 or Ex ia IIC T4.
- ATEX approved, Ex II 1G (Ex ia) Ex II 2GD (Ex d).
- BASEEFA certified.
- UL listed for USA and Canada (PB only),Class I, Div 1, Groups C & D.
- ULC certified for Class I, Zone 1 Groups C & D.
- CSA certified.
- IECEx certified Gb, Db.
- CUTR certified.
- Chinese (CQST) certified.
- Brazilian (Inmetro) certified.
- SIL 2 certified. (SM87 PB only).
- IP66 and IP67.
- Certified temperature: -55°C to +70°C\*.
- Stainless steel or marine grade alloy.
- Robust yet lightweight.
- Easy to maintain.

\*Model dependent.



Web: www.medc.com

### Certification and Specification

Cert. no. Baseefa03ATEX0075. ATEX Approved Ex II 2GD. ATEX Ex d:

Certified to: EN60079-0. EN60079-1. EN60079-31.

Ex d IIC T5/T6 Gb, Ex tb IIIC T85°C/T100°C Db. IP66/IP67. Cert no. Baseefa 02ATEX0152X. ATEX Approved Ex II 1G.

ATEX Ex ia: Certified to: EN60079-0, EN60079-11, EN60079-26.

Ex ia IIC T4 Ga.

IECEx Ex d: Cert. no. IECEx BAS 09.0060.

Certified to: EN60079-0, EN60079-1, EN60079-31

Ex d IIC T5/T6 Gb. Ex tb IIIC T85°/T100°C Db. IP66/IP67.

IECEx Ex ia: Cert. no. IECEx BAS 10.0033X

Certified to: IEC60079-0, IEC60079-11, IEC60079-26.

Ex ia IIC T4 Ga. Listing no. E186629.

UL listed to Class 1, Div 1. Groups C & D. (SM87PBL).

ULC: Cert. no. 20091023-E320282.

ULC certified for Class I, Zone 1 Groups C & D.

CSA Ex d: Class 1, Div 1 & 2. Group D. CSA Ex ia: Class 1, Div 1 & 2. Groups A-D.

1Ex d IIC T5/T6 Gb, Ex tb IIIC T85°/T100 $^{\rm o}$ C Db. IP66/IP67. CUTR Ex d: ‡

Russian Fire Approved

CUTR Ex ia: ‡ 0Ex ia IIC T4 Ga. Russian Fire Approved.

Inmetro Ex d: Ex d IIC T5/T6 Gb. Ex ia IIC T4 Ga. Inmetro Ex ia: Exd IICT85°C/T100°C. COST Exd. **CQST Exia:** Exia IIC T4.

PB only - SIL2 Certification to IEC61508. Cert. No. FSP1404 SII ·

Material: Grade 316 ANC4B Stainless Steel or

LM 25 TF Marine Grade Alloy.

Finish: Paint finish as standard or to customer specification Voltage: Exd 24V a.c./d.c. Exia 28V.

Rating: 2 amp

UL:

**Switches** 2 pole c/o, wired to terminals. Optional up to 4 pole (UL version 2 pole only).

**Optional Indicator:** A red high intensity LED can be fitted for alarm indication.

 $Exd^*-55^{\circ}C$  to  $+70^{\circ}C$ .  $Exi^*-55^{\circ}C$  to  $+60^{\circ}C$ Certified Temp:

 $-20^{\circ}$ C to  $+55^{\circ}$ C (LED version only).

 $-40^{\circ}$ C to  $+70^{\circ}$ C,  $-20^{\circ}$ C to  $+55^{\circ}$ C (LED version only).  $CSA - 50^{\circ}C \text{ to } + 55^{\circ}C \text{ (Exd)}, -50^{\circ}C \text{ to } + 40^{\circ}C \text{ (Exi)}.$ 

\*Note: includes ATEX, IECEx, CUTR, Brazilian & Chinese versions.

Weight: 3.8 kg. steel (approx.) or 2.5 kg. alloy (approx)

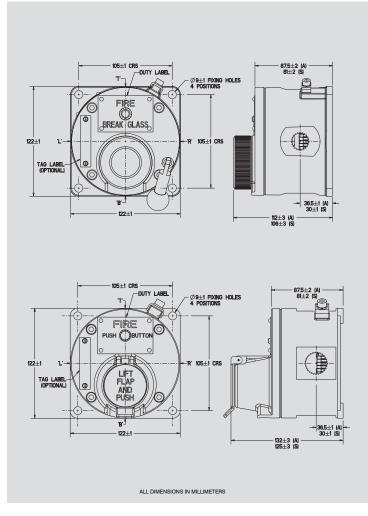
**Ingress Protection:** IP66 and IP67. SM87 PB IP68 (35m for 40 hours)

**Entries:** Up to 4 x M20 or M25 ISO Ex d/Ex ia.

Up to 4 x 1/2" or 3/4" NPT UL.

Terminals: Will accept up to 1.5mm<sup>2</sup> cable

**Resistor Values:** 470R minimum (d.c. & I.S. units only)



Both the Exia units and the Exd units have the same external appearance. Also the internal components are identical throughout the range. Each unit can be wired for either NO, NC or CO contacts to customer specification.

### Ordering Requirements

The following code is designed to help in selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

