Intrinsically Safe (Exia), Exd, Weatherproof

Features

- Zone 0, Zone 1 and Zone 2 use*.
- Exia IIC T4 or Exd IIC T5/T6.
- ATEX aproved, Ex II 1G (Exia) Ex II 2GD (Exd).
- BASEEFA certified.
- UL Listed (PB only), Class I, Div 1, Groups C & D.
- CSA certified.
- IECEx certified Gb, Db.
- GOST 'R' & 'K'* certified.
- Chinese (CQST) certified.
- Brazilian (Inmetro) certified.
- IP66 and IP67.
- Certified temperature: −55°C to +70°C*.
- Stainless steel or marine grade alloy.
- Robust yet lightweight.
- Easy to maintain.

Depending on version.

Introduction

These manual fire alarm, emergency shutdown breakglass and pushbutton units have been designed for the most arduous environmental conditions. The units are both easy to install and maintain. Intrinsically safe Exia and flameproof Exd 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.

⟨Ex⟩ ATEX IECEx (UL) GOST INMETRO CQST NAN YANG CSA

Specification

Type:

Breakglass unit, latching	Type SM87BGL.
Lift flap, Breakglass, latching	Type SM87LBGL.
Push button, latching, key reset	Type SM87PBL.
Push button, self reset	Type SM87PBM.

Certification:
Ex d certified to IEC60079-0, IEC60079-1, IEC60079-31.
Ex d certified to EN60079-0, EN60079-1, EN60079-31.
Exia certified to IEC60079-0, IEC60079-11, IEC60079-26.
Exia certified to EN60079-0, EN60079-11, EN60079-26.
Ex d ATEX Cert. No. Baseefa03ATEX0075.
Ex II 2 GD Ex d IIC T5/T6 Gb, Ex tb IIIC T85°C/T100°C Db.
Exia ATEX Cert. No. Baseefa02ATEX0152X.
Ex II 1 G Ex ia IIC T4 Ga.
Ex d IECEx Cert. No. IECEx BAS 09.0060.
Ex d IIC T5/6 Gb, Ex tb T85°C/T100°C Db.
Exia IECEx Cert. No. IECEx BAS 10.0033X.
Exia IIC T4 Ga.
UL Listed: Class I, Div1 Groups C & D (PBL only).
Listing No: 186629.
CSA Certification: Class I Groups A-D I.S. version (SM87 PBI only).
Class I, Div 1 & 2, Group D (Exd – SM87 PB & SM87 BG).
GOST 'R' Certification: 1Exib IIC T4, 1Exd IIC T4.
Russian Fire Approval.
GOST 'K' Certification: Exib IIC T4.
Chinese Certification: CQST – Exia IIC T4, Exd IIC T5/T6. †
Brazilian (Inmetro) Certification: Ex d IIC T5/T6 Gb, Ex ia IIC T4 Ga.

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.

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.

Certified Temp:
Exd*−55°C to +70°C. Exi*−55°C to +55°C.
     −20°C to +55°C (LED version only).
UL −40°C to +70°C, −20°C to +55°C (LED version only).
CSA −50°C to +55°C (Exd), −50°C to +40°C (Exi).
*Note: includes ATEX, IECEx, GOST, Brazilian & Chinese versions.

Weight: 3·8 kg. steel (approx.) or 2.5 kg. alloy (approx).

Ingress Protection: IP66 and IP67. SM87 PB IP68 (40m for 8 hours).

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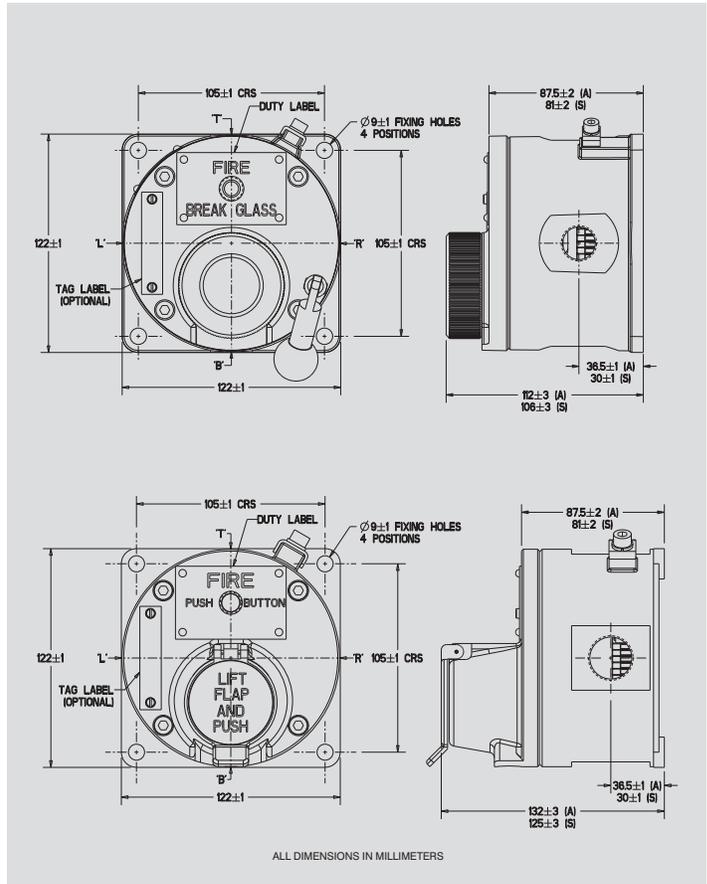
Both the Exia units and the Exd units have the same external appearance. Also the internal components are identical throughout the range. Each unit can be wired for either NO, NC or CO contacts to customer specification.

Entries:
Up to 4 x M20 or M25 ISO Exd/Exia.
Up to 4 x 1/2" or 3/4" NPT UL.

Terminals: Will accept up to 2·5mm² cable.

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

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.

Unit	Model	Material	Certification	Entries	Duty Label	Tag Label	Options	Finish
SM87								

*Model	Code
Breakglass Latching	BGL
Lift Flap Breakglass Latching	LBGL
Push Button Latching key reset	PBL
Push Button Only	PBM
Momentary Action	

* UL version only available in PBL model.

*Material	Code
Stainless Steel	S
Alloy	A

* UL version only available in Alloy.

Certification	Code
Exia	I
Exd	D
IECEx Exi	IJ
IECEx Exd	DJ
UL	UL
CSA – Exi	IC
CSA – Exd	DC
GOST 'K' – Exi	IK
GOST 'R' Exi	IG*
GOST 'R' Exd	DG*
Chinese Exi	IQ†
Chinese Exd	DQ†
Inmetro Exi	IM
Inmetro Exd	DM

* Russian Fire Approval as standard.
† Not suitable for use in China on fire alarm systems.

Entries	Code
M20	1
M25	2
1/2" NPT	3
3/4" NPT	4
Other	5

Position	
Top	*T
Bottom	*B
RHS	*R
LHS	*L

* Prefix position with size code i.e. 1T 1B = 20mm Top and Bottom.

Duty Label	Code
Fire-Breakglass	1
Push Button	2
Fire-Push Button	3
ESDO-Abandon	4
Other	0*
None	N

* Please specify.

Label	Code
Required	Y*
Not Required	N

* Please specify.

Options	Code
Not required	N
LED	A
Resistor Series	G*
Resistor EOL	H*
Diode	D*
3 Pole c/o Switch	T
4 Pole c/o Switch	F

* Please specify.

Finish	Code
Red	R
Blue	B
Yellow	Y
Yellow/ Black Stripes	X
Special	S*

* Please specify.

MEDC