

MANUAL CALL POINTS

Intrinsically Safe (EExia), EExd, Weatherproof
SM87 BG & PB Range



Now VNIPO Approved



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 EExia and flameproof EExd 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.

- ★ Zone 0, Zone 1 and Zone 2 use*.
- ★ EExia IIC T4 or EExd IIC T5/T6.
- ★ ATEX approved, Ex II 1G (EExia) Ex II 2GD (EExd).
- ★ BASEEFA certified.
- ★ UL Listed (PB only), Class I, Div 1, Groups C & D.
- ★ GOST 'R' & 'K'* certified.
- ★ Chinese (CQST) certified.
- ★ Brazilian (Inmetro) certified.
- ★ CSA certified.
- ★ IP66 and IP67.
- ★ Certified temperature -55°C to $+70^{\circ}\text{C}$ *.
- ★ Stainless steel or marine grade alloy.
- ★ Robust yet lightweight.
- ★ Easy to maintain.

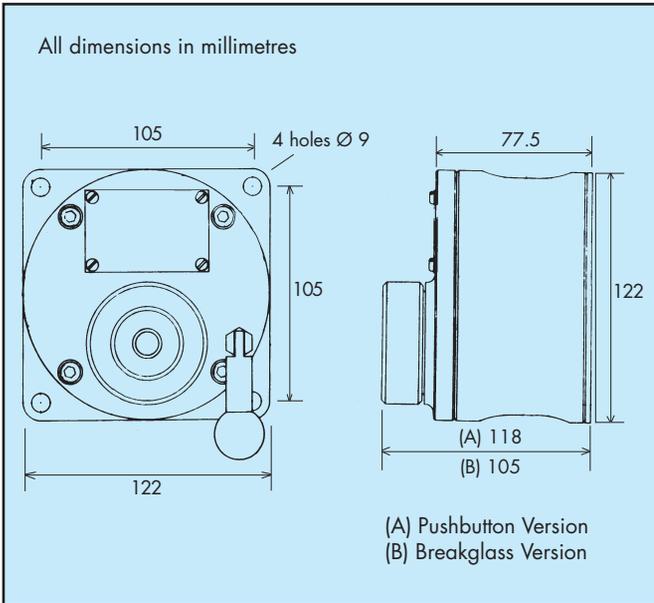
*Depending on version.

Cooper MEDC Ltd, Colliery Road,
Pinxton, Nottingham NG16 6JF, UK.
Tel: +44 (0)1773 864100
Fax: +44 (0)1773 582800

Cooper MEDC (USA) 3413 North Sam Houston Parkway,
West, Houston, Texas 77086, USA.
Tel: +1 (713) 937 9772
Fax: +1 (713) 937 9773

Sales Enq. Fax: +44 (0)1773 582830 Sales Orders Fax: +44 (0)1773 582832
E-Mail: medc.sales@cooperindustries.com Web: www.medc.com





SPECIFICATION

Breakglass unit, latching	Type SM87BGL
Lift flap, Breakglass, latching	Type SM87LBGL
Push button, latching, key reset	Type SM87PBL
Push button, self reset	Type SM87PBM
Voltage:	EExd 24V a.c./d.c. EExia 28V.
Rating:	2 amp.
Switches:	2 pole c/o, wired to terminals. Optional up to 4 pole (UL version 2 pole only).
Terminals:	Will accept up to 2.5mm ² cable.
Entries:	Up to 4 x 20mm or 25mm ISO EExd/EExia. Up to 4 x 1/2" or 3/4" NPT UL
Optional Indicator:	A red high intensity LED can be fitted for alarm indication.
Material:	Grade 316 ANC4B Stainless Steel or LM 25 TF Marine Grade Alloy.
Weight:	3.8 kg. steel (approx.) or 2.5 kg. alloy (approx.).
Finish:	Epoxy paint finish as standard or to customer's specification.
Certification:	CENELEC EN 50014, EN50018 (for Exd) and EN50020 (for Exi). EExiaIIC T4 Cert No. Baseefa 02 ATEX 0152X. EExdIIC T5/T6 Cert No. Baseefa 03 ATEX 0075. UL Listed: Class I, Div1 Groups C & D (PBL only). Listing No: 186629. CSA Certification: Class I Groups A-D I.S. version (SM87 PBL only). Class I, Div 1 & 2, Group D (Exd - SM87 PB & SM87 BG). GOST 'R' Certification: 1ExibIIC T4, 1ExdIIC T4 Russian Fire Approved (VNIIP0). GOST 'K' Certification: Exib IIC T4. Chinese Certification: CQST - Exia IIC T4, Exd IIC T5/T6. Brazilian (Inmetro) Certification: BR-Ex d IIC T5/T6 BR-Ex ia IIC T4
Certified Temperature:	EExd* -55°C to +70°C. Exi* -55°C to +55°C. -20°C to +55°C (LED version only). UL -55°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, GOST, Brazilian & Chinese versions.
Ingress Protection:	IP66 and IP67. SM87 PB IP68 (40m for 8 hours).
Resistor Values:	470R minimum (D.C. & I.S. units only).

Both the EExiaIIC T4 units and the EExdIIC T6 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 the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

Unit Type	Model	Material	Certification	Entries	Duty Label	Tag Label	Features	Finish																																																																																																																							
SM87																																																																																																																															
<table border="1"> <thead> <tr> <th>*Model</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>Breakglass Latching</td><td>BGL</td></tr> <tr><td>Lift Flap Breakglass Latching</td><td>LBGL</td></tr> <tr><td>Push Button Latching key reset</td><td>PBL</td></tr> <tr><td>Push Button Only Momentary Action</td><td>PBM</td></tr> </tbody> </table> <p>*UL version only available in PBL model.</p>	*Model	Code	Breakglass Latching	BGL	Lift Flap Breakglass Latching	LBGL	Push Button Latching key reset	PBL	Push Button Only Momentary Action	PBM	<table border="1"> <thead> <tr> <th>Certification</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>EExiaIIC T4</td><td>I</td></tr> <tr><td>EExdIIC T6</td><td>D</td></tr> <tr><td>UL</td><td>UL</td></tr> <tr><td>CSA - Exd</td><td>DC</td></tr> <tr><td>CSA - Exi</td><td>IC</td></tr> <tr><td>GOST 'K' - Exi</td><td>IK</td></tr> <tr><td>GOST 'R' Exi</td><td>IG</td></tr> <tr><td>GOST 'R' Exd</td><td>DG</td></tr> <tr><td>Chinese Exi</td><td>IQ</td></tr> <tr><td>Chinese Exd</td><td>DQ</td></tr> <tr><td>Inmetro Exi</td><td>IM</td></tr> <tr><td>Inmetro Exd</td><td>DM</td></tr> </tbody> </table>	Certification	Code	EExiaIIC T4	I	EExdIIC T6	D	UL	UL	CSA - Exd	DC	CSA - Exi	IC	GOST 'K' - Exi	IK	GOST 'R' Exi	IG	GOST 'R' Exd	DG	Chinese Exi	IQ	Chinese Exd	DQ	Inmetro Exi	IM	Inmetro Exd	DM	<table border="1"> <thead> <tr> <th>*Material</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>Stainless Steel</td><td>S</td></tr> <tr><td>Alloy</td><td>A</td></tr> </tbody> </table> <p>*UL version only available in Alloy.</p>	*Material	Code	Stainless Steel	S	Alloy	A	<table border="1"> <thead> <tr> <th>Entries</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>20mm</td><td>1</td></tr> <tr><td>25mm</td><td>2</td></tr> <tr><td>1/2" NPT</td><td>3</td></tr> <tr><td>3/4" NPT</td><td>4</td></tr> <tr><td>Other</td><td>5</td></tr> <tr><td colspan="2"><i>Please specify</i></td></tr> <tr><td>Top</td><td>*T</td></tr> <tr><td>Bottom</td><td>*B</td></tr> <tr><td>RHS</td><td>*R</td></tr> <tr><td>LHS</td><td>*L</td></tr> <tr><td colspan="2">*prefix position with size code i.e. 1T 1B = 20mm Top and Bottom</td></tr> </tbody> </table>	Entries	Code	20mm	1	25mm	2	1/2" NPT	3	3/4" NPT	4	Other	5	<i>Please specify</i>		Top	*T	Bottom	*B	RHS	*R	LHS	*L	*prefix position with size code i.e. 1T 1B = 20mm Top and Bottom		<table border="1"> <thead> <tr> <th>Label</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>Fire-Breakglass</td><td>1</td></tr> <tr><td>Push Button</td><td>2</td></tr> <tr><td>Fire-Push Button</td><td>3</td></tr> <tr><td>ESDO-Abandon</td><td>4</td></tr> <tr><td>Other</td><td>O</td></tr> <tr><td>None</td><td>N</td></tr> <tr><td colspan="2"><i>Please specify</i></td></tr> </tbody> </table>	Label	Code	Fire-Breakglass	1	Push Button	2	Fire-Push Button	3	ESDO-Abandon	4	Other	O	None	N	<i>Please specify</i>		<table border="1"> <thead> <tr> <th>Tag Label</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>Required</td><td>Y</td></tr> <tr><td>Not Required</td><td>N</td></tr> </tbody> </table>	Tag Label	Code	Required	Y	Not Required	N	<table border="1"> <thead> <tr> <th>Features</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>Not required</td><td>N</td></tr> <tr><td>LED</td><td>A</td></tr> <tr><td>Resistor Series</td><td>G</td></tr> <tr><td>Resistor EOL</td><td>H</td></tr> <tr><td>Diode</td><td>*D</td></tr> <tr><td>3 Pole c/o Switch</td><td>T</td></tr> <tr><td>4 Pole c/o Switch</td><td>F</td></tr> <tr><td>Other</td><td>*O</td></tr> <tr><td colspan="2"><i>*Specify values.</i></td></tr> </tbody> </table>	Features	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	Other	*O	<i>*Specify values.</i>		<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>Red</td><td>R</td></tr> <tr><td>Blue</td><td>B</td></tr> <tr><td>Yellow</td><td>Y</td></tr> <tr><td>Yellow/Black Stripes</td><td>X</td></tr> <tr><td>Special Finish</td><td>S</td></tr> </tbody> </table>	Finish	Code	Red	R	Blue	B	Yellow	Y	Yellow/Black Stripes	X	Special Finish	S
*Model	Code																																																																																																																														
Breakglass Latching	BGL																																																																																																																														
Lift Flap Breakglass Latching	LBGL																																																																																																																														
Push Button Latching key reset	PBL																																																																																																																														
Push Button Only Momentary Action	PBM																																																																																																																														
Certification	Code																																																																																																																														
EExiaIIC T4	I																																																																																																																														
EExdIIC T6	D																																																																																																																														
UL	UL																																																																																																																														
CSA - Exd	DC																																																																																																																														
CSA - Exi	IC																																																																																																																														
GOST 'K' - Exi	IK																																																																																																																														
GOST 'R' Exi	IG																																																																																																																														
GOST 'R' Exd	DG																																																																																																																														
Chinese Exi	IQ																																																																																																																														
Chinese Exd	DQ																																																																																																																														
Inmetro Exi	IM																																																																																																																														
Inmetro Exd	DM																																																																																																																														
*Material	Code																																																																																																																														
Stainless Steel	S																																																																																																																														
Alloy	A																																																																																																																														
Entries	Code																																																																																																																														
20mm	1																																																																																																																														
25mm	2																																																																																																																														
1/2" NPT	3																																																																																																																														
3/4" NPT	4																																																																																																																														
Other	5																																																																																																																														
<i>Please specify</i>																																																																																																																															
Top	*T																																																																																																																														
Bottom	*B																																																																																																																														
RHS	*R																																																																																																																														
LHS	*L																																																																																																																														
*prefix position with size code i.e. 1T 1B = 20mm Top and Bottom																																																																																																																															
Label	Code																																																																																																																														
Fire-Breakglass	1																																																																																																																														
Push Button	2																																																																																																																														
Fire-Push Button	3																																																																																																																														
ESDO-Abandon	4																																																																																																																														
Other	O																																																																																																																														
None	N																																																																																																																														
<i>Please specify</i>																																																																																																																															
Tag Label	Code																																																																																																																														
Required	Y																																																																																																																														
Not Required	N																																																																																																																														
Features	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																																																																																																																														
Other	*O																																																																																																																														
<i>*Specify values.</i>																																																																																																																															
Finish	Code																																																																																																																														
Red	R																																																																																																																														
Blue	B																																																																																																																														
Yellow	Y																																																																																																																														
Yellow/Black Stripes	X																																																																																																																														
Special Finish	S																																																																																																																														

NOTE: The units can be internally wired to suit customers' specifications. Please discuss your requirements with us.



All the above specifications, dimensions, weights and tolerances are nominal (typical) and MEDC reserve the right to vary all data without prior notice. No liability is accepted for any consequence of use.