

COMBINATION – BEACON SOUNDER

EExde, Weatherproof CU1 Range



Introduction

This range of beacon/sounder units, intended for use in potentially explosive gas and dust atmospheres, has a power rating of up to 10 watts (sounder) and 10 joules (beacon) and is suitable for use in the harsh environmental conditions found offshore and onshore in the oil, gas and petrochemical industries.

The flamepaths, flare and body are manufactured from a UV stable glass reinforced polyester. Stainless steel screws and mounting stirrup are incorporated to ensure a corrosion-free product. A tapered flamepath is used to overcome the problems of assembly of parallel spigot flamepaths.

- ★ Zone 1, Zone 2 & non-Ex use.
- ★ EExde IIB T3.
- ★ ATEX approved, Ex II 2 G.
- ★ CENELEC approved.
- ★ BASEEFA certified.
- ★ IP66 and 67.
- ★ Certified temperature -50°C to $+70^{\circ}\text{C}^*$.
- ★ Up to 116dBA*.
- ★ 27 Tones, user selectable (dual tone option)
- ★ Tones comply with UK00A/PFEER guidelines
- ★ Integral volume control
- ★ GRP corrosion-free flamepath.
- ★ Ratcheted swivel mounting stirrup.
- ★ Stainless steel fixtures.
- ★ Tapered flamepath.

*Model dependent.

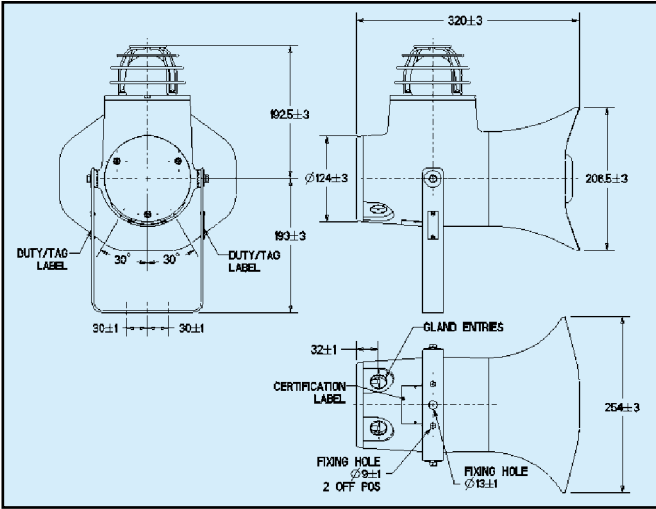
MEDC Ltd, Colliery Road,
Pinxton, Nottingham NG16 6JF, UK.
Tel: +44 (0)1773 864100
Fax: +44 (0)1773 582800

MEDC International, 5829 West Sam Houston Parkway,
North, Suite 1005, Houston, Texas 77041, USA.
Tel: +1 (713) 937 9772
Fax: +1 (713) 937 9773

MEDC Norway, Auglaendsmyråa 6,
4016, Stavanger, Norge.
Tel: +47 913 92 289
Fax: +47 914 46 030

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

MEDC



Specification

Certification:	CENELEC EN50014, 18 & 19. Baseefa Cert. No. Baseefa04ATEX0273X EExde IIB Zones 1 & 2. Under review for UL listing.
Material:	Body, flares & covers: Glass Reinforced Polyester (GRP). Lens: Glass Guard fitted as standard Cover screws & mounting strap: Stainless steel.
Finish:	Natural black or epoxy painted to customer's requirements.
Weight:	6.5kg approx.
Certified Temperature:	Standard unit: -50°C to +50°C (CU1-S & CU1-SP). High temperature unit: -50°C to +70°C (CU1-H & CU1-HP).
IP Rating:	IP66 & 67.
Earth Cont:	Available as an option.
Terminals:	8 x 4.0mm ² .
Initiation:	Remote relay or telephone initiate options available.
Labels:	Duty/tag label option to customer's requirements.
Entries:	Up to 2 x M25, 2 x M25 ISO, 2 x M20 with 1/2" NPT adaptor or 2 x M25 with 3/4" NPT adaptors into termination (EExe) chamber.
Mounting:	Stainless steel bracket with ratchet facility.
Maximum Output:	Standard unit: sounder 10 watts, beacon 5 or 10 joules. High temp. unit: sounder 5 watts, beacon 5 or 10 joules.
Sound Output:	Standard unit: 116dB(A) ± 3 dB(A) (tone dependent). High temp. unit: 110 dB(A) ± 3 dB(A) (tone dependent).
Tone Selection:	27 user selectable tones.
Two Stage Unit:	Switchable between any two tones by either: (i) reversing the polarity* of the supply, or (ii) by a 3 wire common +ve system, switching between the two -ve lines. Note: Two stage unit available in d.c. versions only. *will not effect beacon operation †Limited to 110dB(A)

Integral Volume Control:

Nominal Output (dB(A))	Input Current (mA)
90	460
95	520
100	670
102	720
105	1000
107	1220
116	1387

*Output measured with 24V input voltage. Tone set to 970Hz continuous, with 10 joule beacon set to 60 fpm.

Current Consumption at full power:

Input Voltage	10 Joule Beacon Sounder @ 60 fpm	5 Joule Beacon Sounder @ 60 fpm
24Vd.c.	1387mA	700mA†
48Vd.c.	864mA	
110Va.c.	365mA	
120Va.c.	417mA	
230Va.c.	172mA	
240Va.c.	182mA	
250Va.c.	241mA	

In addition to the 10 Joule CU1 MEDC offer a 5 Joule, (low output sounder) 24Vd.c. version. Details are available on request.

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. **For standard products, available ex-stock, contact sales office for details.**

Unit Type	Certification	Voltage	Power	FPM	Lens	Labels	Options	Entries	Finish																																																															
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																																																															
<table border="1"> <thead> <tr><th>Type</th><th>Code</th></tr> </thead> <tbody> <tr><td>Standard unit</td><td>CU1S</td></tr> <tr><td>Two stage</td><td>CU1SP*</td></tr> <tr><td>High temp. Standard unit</td><td>CU1H</td></tr> <tr><td>Two stage</td><td>CU1HP*</td></tr> </tbody> </table> <p>*dc versions only</p>	Type	Code	Standard unit	CU1S	Two stage	CU1SP*	High temp. Standard unit	CU1H	Two stage	CU1HP*	<table border="1"> <thead> <tr><th>Certification</th><th>Code</th></tr> </thead> <tbody> <tr><td>ATEX</td><td>B</td></tr> <tr><td>Weatherproof</td><td>W</td></tr> </tbody> </table>	Certification	Code	ATEX	B	Weatherproof	W	<table border="1"> <thead> <tr><th>Power</th><th>Code</th></tr> </thead> <tbody> <tr><td>5 Joule</td><td>F*</td></tr> <tr><td>10 Joule</td><td>T</td></tr> </tbody> </table> <p>*available 24Vd.c only</p>	Power	Code	5 Joule	F*	10 Joule	T	<table border="1"> <thead> <tr><th>FPM</th><th>Code</th></tr> </thead> <tbody> <tr><td>60</td><td>06</td></tr> <tr><td>80</td><td>08</td></tr> <tr><td>120</td><td>12</td></tr> </tbody> </table> <p>*Current consumption available for 80 & 120 fpm on request.</p>	FPM	Code	60	06	80	08	120	12	<table border="1"> <thead> <tr><th>Lens</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>Green</td><td>G</td></tr> <tr><td>Amber</td><td>A</td></tr> <tr><td>Yellow</td><td>Y</td></tr> <tr><td>Clear</td><td>C</td></tr> </tbody> </table>	Lens	Code	Red	R	Blue	B	Green	G	Amber	A	Yellow	Y	Clear	C	<table border="1"> <thead> <tr><th>Option</th><th>Code</th></tr> </thead> <tbody> <tr><td>Tel. Initiate</td><td>T†</td></tr> <tr><td>Relay Initiate</td><td>R</td></tr> <tr><td>Earth cont.</td><td>C</td></tr> <tr><td>Special Tone</td><td>S*</td></tr> <tr><td>EOL Res.</td><td>E*</td></tr> <tr><td>None</td><td>N</td></tr> </tbody> </table> <p>*Please specify †Not available in UL option</p>	Option	Code	Tel. Initiate	T†	Relay Initiate	R	Earth cont.	C	Special Tone	S*	EOL Res.	E*	None	N	<table border="1"> <thead> <tr><th>Option</th><th>Code</th></tr> </thead> <tbody> <tr><td>Natural</td><td>N</td></tr> <tr><td>Red</td><td>R</td></tr> <tr><td>Special</td><td>S*</td></tr> </tbody> </table> <p>*Please specify</p>	Option	Code	Natural	N	Red	R	Special	S*
Type	Code																																																																							
Standard unit	CU1S																																																																							
Two stage	CU1SP*																																																																							
High temp. Standard unit	CU1H																																																																							
Two stage	CU1HP*																																																																							
Certification	Code																																																																							
ATEX	B																																																																							
Weatherproof	W																																																																							
Power	Code																																																																							
5 Joule	F*																																																																							
10 Joule	T																																																																							
FPM	Code																																																																							
60	06																																																																							
80	08																																																																							
120	12																																																																							
Lens	Code																																																																							
Red	R																																																																							
Blue	B																																																																							
Green	G																																																																							
Amber	A																																																																							
Yellow	Y																																																																							
Clear	C																																																																							
Option	Code																																																																							
Tel. Initiate	T†																																																																							
Relay Initiate	R																																																																							
Earth cont.	C																																																																							
Special Tone	S*																																																																							
EOL Res.	E*																																																																							
None	N																																																																							
Option	Code																																																																							
Natural	N																																																																							
Red	R																																																																							
Special	S*																																																																							
	<table border="1"> <thead> <tr><th>Option</th><th>Code</th></tr> </thead> <tbody> <tr><td>24Vd.c.</td><td>024</td></tr> <tr><td>48Vd.c.</td><td>048</td></tr> <tr><td>110V a.c.</td><td>110</td></tr> <tr><td>120V a.c.</td><td>120</td></tr> <tr><td>230V a.c.</td><td>230</td></tr> <tr><td>240V a.c.</td><td>240</td></tr> <tr><td>254V a.c.</td><td>254</td></tr> </tbody> </table>	Option	Code	24Vd.c.	024	48Vd.c.	048	110V a.c.	110	120V a.c.	120	230V a.c.	230	240V a.c.	240	254V a.c.	254	<table border="1"> <thead> <tr><th>Option</th><th>Code</th></tr> </thead> <tbody> <tr><td>None</td><td>N</td></tr> <tr><td>Duty Label</td><td>D</td></tr> <tr><td>Tag label</td><td>T</td></tr> </tbody> </table>	Option	Code	None	N	Duty Label	D	Tag label	T	<table border="1"> <thead> <tr><th>Entries</th><th>Code</th></tr> </thead> <tbody> <tr><td>1 x M20</td><td>1B</td></tr> <tr><td>2 x M20</td><td>2B</td></tr> <tr><td>1 x M25</td><td>1C</td></tr> <tr><td>2 x M25</td><td>2C</td></tr> <tr><td>1 x 1/2" NPT</td><td>1M</td></tr> <tr><td>2 x 1/2" NPT</td><td>2M</td></tr> <tr><td>1 x 3/4" NPT</td><td>1N</td></tr> <tr><td>2 x 3/4" NPT</td><td>2N</td></tr> </tbody> </table> <p>To specify certified plug, suffix appropriate code with 'P', e.g. 2BP is 2 x M20 entries with one certified plug.</p>	Entries	Code	1 x M20	1B	2 x M20	2B	1 x M25	1C	2 x M25	2C	1 x 1/2" NPT	1M	2 x 1/2" NPT	2M	1 x 3/4" NPT	1N	2 x 3/4" NPT	2N																											
Option	Code																																																																							
24Vd.c.	024																																																																							
48Vd.c.	048																																																																							
110V a.c.	110																																																																							
120V a.c.	120																																																																							
230V a.c.	230																																																																							
240V a.c.	240																																																																							
254V a.c.	254																																																																							
Option	Code																																																																							
None	N																																																																							
Duty Label	D																																																																							
Tag label	T																																																																							
Entries	Code																																																																							
1 x M20	1B																																																																							
2 x M20	2B																																																																							
1 x M25	1C																																																																							
2 x M25	2C																																																																							
1 x 1/2" NPT	1M																																																																							
2 x 1/2" NPT	2M																																																																							
1 x 3/4" NPT	1N																																																																							
2 x 3/4" NPT	2N																																																																							



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.