

CUI combined beacon sounder range

Ex de, weatherproof



Overview

This range of beacon/sounder units, intended for use in potentially explosive gas atmospheres, has a sound output of up to 116dB(A) and tube energy of up to 10 joules (beacon).

It 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.

Features

- Zone 1, Zone 2 & non-Ex use
- Ex de IIB T4
- ATEX approved, Ex II 2 G
- IECEx approved, Gb
- INMETRO certified
- CCC Ex certified
- IP66 and 67
- Certified temperature: -50°C to +70°C*
- Up to 116 dB(A)*
- Version with independent beacon/sounder operation available
- 27 tones, user selectable (dual tone option - dc voltage)
- Tones comply with UKOOA/PFEER guidelines
- Integral volume control
- GRP corrosion-free flamepath
- Ratcheted swivel mounting stirrup
- Stainless steel fixtures
- Tapered flamepath

*Model dependent



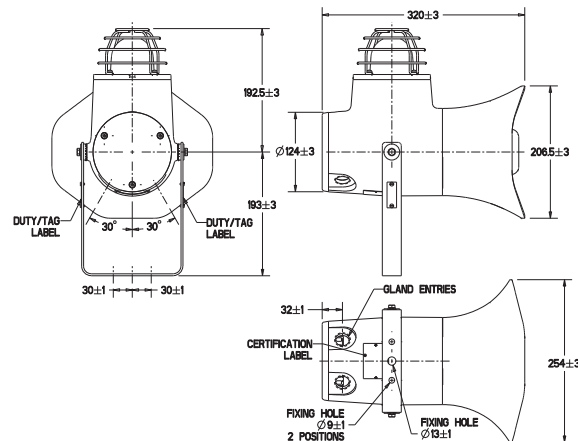
Certifications

ATEX Ex de	Cert. no. Baseefa04ATEX0273X Certified to: EN60079-0, EN60079-1, EN60079-7 Ex II 2G, Ex de IIB T4 Gb
IECEX Ex de	Cert. no. IECEX BAS 11.0149X Certified to: IEC60079-0, IEC60079-1, IEC60079-7 Ex de IIB T4 Gb
INMETRO Ex de	Ex de IIB T4 Gb
CCC Ex de	Ex de IIB T4 Gb

Specifications

Material	Body, flares & covers: glass reinforced polyester (GRP) Lens: glass Guard fitted as standard: stainless steel Cover screws & mounting strap: stainless steel
Finish	Natural black or painted to customer specification
Certified temp	Standard unit: -50°C to +50°C (CU1S & CU1SP) High temperature unit: -50°C to +70°C (CU1H & CU1HP)
Weight	6.5kg approx
Ingress protection	IP66 & IP67
Entries	Up to 2 x M25, 2 x M25, 2 x M20 with ½" NPT adaptor or 2 x M25 with ¾" NPT adaptors into termination (Ex e) chamber
Terminals	8 x 4.0mm ²
Relay initiate	Available on all versions – operates with 24Vdc initiate supplies only
Mounting	Stainless steel bracket with ratchet facility
Earth continuity	Available as an option
Labels	Duty and tag label option to customer's requirements
Tube energy	5 or 10 Joules
Sound output	Sound 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 (dc only)	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 - velines If a two stage unit is ordered with either Independent sounder/beacon operation or telephone or relay initiate, it will be wired for reverse polarity tone switching only, to allow loop in, loop out installation *Will not affect beacon operation
Independent beacon / sounder operation	DC: 3 wire common-ve as standard (4 wire available on request) AC: 4 wire
Reverse line monitoring	Available on request. Please contact MEDC Technical Sales for more details

General arrangement drawing (all dimensions in mm)



Current consumption at full power (60fpm)

Input voltage	CU1S 10J	CU1H 10J	CU1S 5J	CU1H 5J
24Vdc	1680mA	960mA	1390mA	750mA
48Vdc	864mA	-	-	-
110Vac	365mA	360mA	-	-
120Vac	417mA	370mA	-	-
230Vac	172mA	165mA	-	-
240Vac	182mA	165mA	-	-
254Vac	241mA	220mA	-	-

Integral volume control (beacon set to 60fpm) (Not applicable to CU1H)

Nominal output dB(A)*	CU1S 10J	CU1S 5J
105dB(A)	850mA	650mA
108dB(A)	1000mA	780mA
111dB(A)	1150mA	940mA
114dB(A)	1400mA	1190mA
116dB(A)	1680mA	1390mA

*Output measure with 24Vdc input voltage. Tone set to 970Hz continuous
High temperature CU1H is set to 107dB(A). For the 24Vdc version 960mA @ 10J & 750mA @ 5J

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 type	Certification	Voltage	Power	Flashrate	Lens	Labels	Options	Entries	Finish
Type Code Standard unit CU1S Two stage CU1SP* High temp CU1H standard unit CU1HP* Two stage CU1HP*	Certification Code ATEX B IECEX J INMETRO EM CCC Q Weatherproof W	Voltage Code 24Vdc 024 48Vdc 048 110Vac 110 120Vac 120 230Vac 230 240Vac 240 254Vac 254	Power Code 5 Joule F* 10 Joule T	Flashrate Code 60fpm 06 120fpm 12	Lens Colour Code Red R Blue B Green G Amber A Yellow Y Clear C	Label Code None N Duty label D* Tag label T*	Options Code None N Tel. Initiate T† Relay initiate R† Independent operation I† Earth continuity C Special tone S* EOL resistor E*	Entries Code 1 x M20 1B 2 x M20 2B 1 x M25 1C 2 x M25 2C 1 x ½" NPT 1M 2 x ½" NPT 2M 1 x ¾" NPT 1N 2 x ¾" NPT 2N	Finish Code Natural black N Red R Special S*

*DC versions only

*Current consumption available for 120fpm on request

*Please specify

To specify certified plug, suffix appropriate code with 'P', e.g. 2BP is 2 x M20 entries with one certified plug

* Available 24Vdc only

* Please specify

† T, R or I not available on same unit