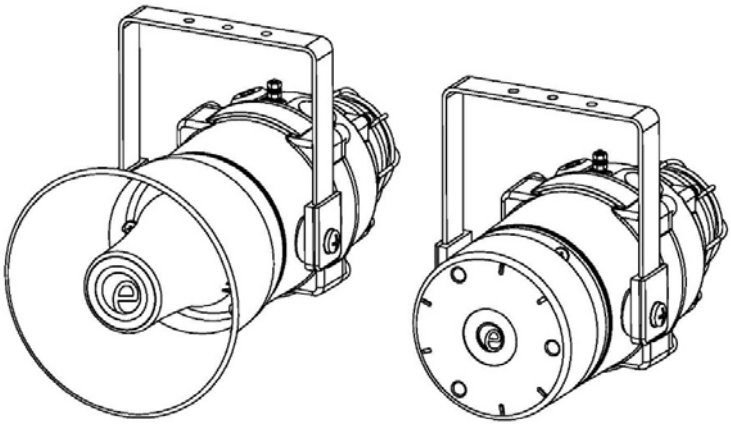
INSTRUCTION MANUAL
BExCTS110-05D-P& BExCTS110-05D-R-P
Combined Sounder & Beacon with Call Relay
ATEx/IECEx & UKEx Gas & Dust



BExCTS110-05D-P BExCTS110-05D-R-P

1. Product Table

Unit Type Code	Nominal Input Voltage	Sounder Nominal Input Current	Beacon Nominal Input Current	Max I/P Voltage	Sound Pressure Level dB(A)	
					Max*	Nom.†
BExCTS110-05DPDC012 / BExCTS110-05DPDC012-R	12Vdc	195mA	750mA	14V	Flare: 117dB(A) Radial: 115dB(A)	Flare: 110dB(A) Radial: 110dB(A)
BExCTS110-05DPDC024 / BExCTS110-05DPDC024-R	24Vdc	265mA	300mA	28V		
BExCTS110-05DPDC048 / BExCTS110-05DPDC048-R	48Vdc	130mA	180mA	54V		
BExCTS110-05DPAC115 / BExCTS110-05DPAC115-R	115Vac	110mA	140mA	126V		
BExCTS110-05DPAC230 / BExCTS110-05DPAC230-R	230Vac	56mA	55mA	253V		
	*Max = Tone 4 †Nom. = Tone 44 The table shows the input current taken by the various units. The current levels shown above are for the 440Hz Continuous tone @ nominal input voltage. Nominal current at nominal voltage.					
	Table 1: Electrical Ratings.					

It is important that a suitable power supply is used to run the equipment. The power supply selected must have the necessary capacity to provide the input current to all of the units.

The above table shows the input current taken by the various sounders and shows the maximum voltage at which the sounders can be operated:

The input current will vary according to the voltage input level and the frequency of the tone selected.

2. Warnings



- DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT
- DO NOT OPEN WHEN ENERGIZED
- POTENTIAL ELECTROSTATIC CHARGING HAZARD – CLEAN ONLY WITH A DAMP CLOTH
- COVER BOLTS CLASS A4-80
- USE HEAT RESISTING CABLES AND CABLE GLANDS (RATED 110°C) AT AMB. TEMPERATURES OVER 40°C

3. Marking & Rating Information

The BExCTS110-05D-P & BExCTS110-05D-R-P Alarm Horns comply with the following standards for hazardous locations:

3.1 ATEX / IECEx & UKEx Ratings

Standards	
EN60079-0:2018/IEC60079-0:2017 (ed.7): Explosive Atmospheres - Equipment General Requirements. EN60079-1:2014/IEC60079-1:2014 (ed.7): Explosive Atmospheres - Equipment Protection by Flameproof Enclosures “d”. EN60079-31:2014/IEC60079-31:2013 (ed.2): Explosive Atmospheres - Equipment Dust Ignition Protection by enclosure “t”.	
Model No:	**Rating**
BExCTS110-05D-P / BExCTS110-05D-R-P	Ex db IIB T5 Gb Ta. -50°C to +40°C Ex db IIB T4 Gb Ta. -50°C to +70°C Ex tb IIIC T110°C Db Ta. -50°C to +55°C Ex tb IIIC T125°C Db Ta. -50°C to +70°C
See Product table for electrical ratings of each unit model	

Certificate No.	KEMA 01ATEX2223X IECEx KEM 10.0025X UL22UKEX2639X
Epsilon x Equipment Group and Category:	**II 2G** **II 2D**
CE Marking and Notified Body No.	**2813**
UKCA Marking and Approval Body No.	**0518**

4. Zones, Gas Group, Category and Temperature Classification

The units can be installed in locations with the following conditions:

Area Classification Gas	
Zone 1	Explosive gas air mixture likely to occur in normal operation.
Zone 2	Explosive gas air mixture not likely to occur in normal operation, and if it does, it will only exist for a short time.
Gas Groupings	
Group IIA	Propane
Group IIB	Ethylene
Temperature Classification for Gas Applications	
T1	450º C
T2	300º C
T3	200º C
T4	135º C
T5	100º C (Up to 40°C Ambient)
Area Classification Dust	
Zone 21	Explosive dust air mixture likely to occur in normal operation.
Zone 22	Explosive dust air mixture not likely to occur in normal operation, and if it does, it will only exist for a short time.
Dust Groupings	
Group IIIA	Combustible Dusts
Group IIIB	Non-Conductive Dusts
Group IIIC	Conductive Dusts
Equipment Category	
2G, 2D	
Equipment Protection Level	
Gb, Db,	
Maximum Surface Temperature for Dust Applications	
110°C at +55°C 125°C at +70°C	
Ambient Temperature Range	
-50°C to +70°C Gas Groups IIA and IIB -50°C to +70°C Dust Groups IIIA, IIIB and IIIC	
IP Rating	
IP66/67 to EN/IEC60529 and IP6X to EN/IEC60079-0, EN/IEC60079-31	
The unit must only be installed by suitably qualified personnel in accordance with the latest issues of the relevant standards: EN60079-14 / IEC60079-14: Explosive atmospheres - Electrical installations design, selection and erection EN60079-10-1 / IEC60079-10-1: Explosive atmospheres - Classification of areas. Explosive gas atmospheres EN60079-10-2 / IEC60079-10-2: Explosive atmospheres - Classification of areas. Explosive dust atmospheres The installation of the unit must also be in accordance with any local codes that may apply and should only be carried out by a competent electrical engineer who has the necessary training.	

5. Special Conditions for Safe Use

Repair of the flamepath / flameproof joints is not permitted.

The enclosure is non-conducting and may generate an ignition-capable level of electrostatic charges under certain extreme conditions (such as high-pressure steam). The user should ensure that the equipment is not installed in a location where it may be subjected to external conditions that might cause a build-up of electrostatic charges on non-conducting surfaces.

Additionally, cleaning of the equipment should be done only with a damp cloth.

6. Product Mounting and Access

The location of the unit should be made with due regard to the area over which the warning signal must be visible. They should only be fixed to services that can carry the weight of the unit.

The BEx combined sounder beacon should be secured to any flat surface using at least two of the three 7mm fixing holes on the stainless steel U shaped mounting bracket. See Figure 1a/1b. The required angle can be achieved by loosening the two large bracket screws in the side of the unit, which allow adjustment of the sounder in steps of 18°. On completion of the installation then two large bracket adjustment screws on the side of the unit must be fully tightened to ensure that the unit cannot move in service.

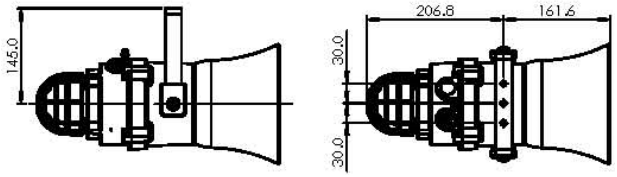


Fig. 1a Fixing Location for Combined Flare

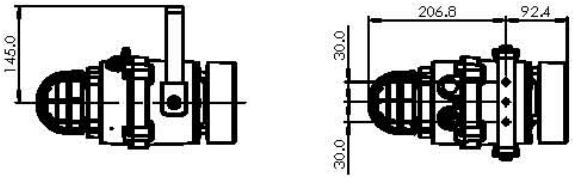


Fig. 1b Fixing Location for Combined Radial

7. Access to the Flameproof Enclosure



Warning – High voltage may be present, risk of electric shock. DO NOT open when energised, disconnect power before opening.



Warning – Hot surfaces. External surfaces and internal components may be hot after operation, take care when handling the equipment.

To access the Ex d chamber, remove the four M6 hexagon socket head screws and withdraw the flameproof cover taking extreme care not to damage the flameproof joints in the process. M6 cover screws are Class A4-80 stainless steel and only screws of this category can be used for the enclosure.

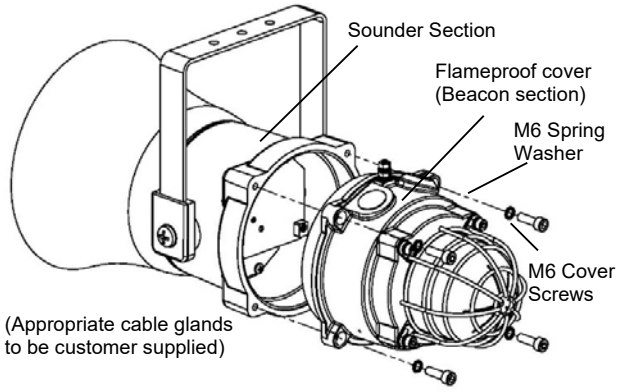


Fig. 2 Accessing the Explosion proof Enclosure.

On completion of the installation, the flameproof joints should be inspected to ensure that they are clean and that they have not been damaged during installation.

Check that the earth bonding wire between the two castings is secure and the ‘O’ ring seal is in place. When replacing the flameproof cover casting ensure that it is square with the flameproof chamber casting before inserting. Carefully push the cover in place allowing time for the air to be expelled. Only after the cover is fully in place should the four M6 Stainless Steel A4-80 cover bolts and their spring washer be inserted and tightened down. If the cover jams while it is being inserted, carefully remove it and try again. Never use the cover bolts to force the cover into position.

8. Selection of Cable. Cable Glands, Blanking Elements & Adapters

When selecting the cable size, consideration must be given to the input current that each unit draws (see table above), the number of sounders on the line and the length of the cable runs. The cable size selected must have the necessary capacity to provide the input current to all of the sounders connected to the line.

For ambient temperatures over +40ºC the cable entry temperature may exceed +70ºC and therefore suitable heat resisting cables and cable glands must be used, with a rated service temperature of at least 110ºC

The dual cable gland entries have an M20 x 1.5 entry thread. To maintain the ingress protection rating and mode of protection, the cable entries must be fitted with suitably rated ATEX / IECEx or UKEx certified cable glands and/or suitably rated ATEX / IECEx or UKEx certified blanking devices during installation according to EN / IEC60079-14.

If a high IP (Ingress Protection) rating is required then a suitable sealing washer must be fitted under the cable glands or blanking plugs.

For use in explosive dust atmospheres, a minimum ingress protection rating of IP6X must be maintained.

The BEx combined sounder/beacon range can be supplied with the following types of adapters:

M20 to ½" NPT
M20 to ¾" NPT
M20 to M25
It is important to note that stopping plugs cannot be fitted onto adapters, only directly onto the M20 entries.

Any other adapters used must be suitably rated and ATEX / IECEx or UKEx certified adapters.

9. Earthing

Both AC and DC sounder units must be connected to an earth. The units are provided with internal and external earth terminals which are both located on the terminal chamber section of the unit.

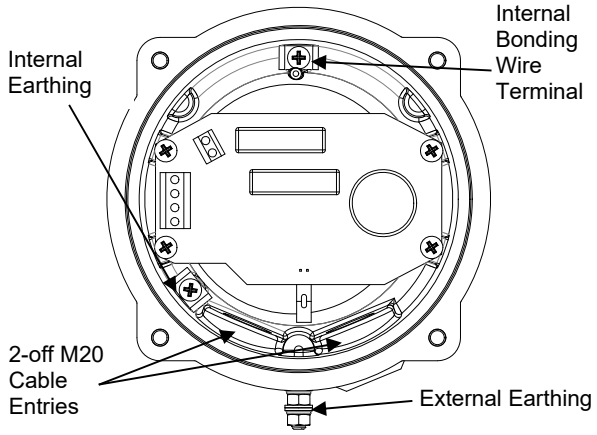


Fig. 3 Internal View of Cover

When using the internal earth terminal ensure that the stainless steel M4 flat washer is between the incoming earth wire and the enclosure.

Internal earthing connections should be made to the Internal Earth terminal in the base of the housing using a ring crimp terminal to secure the earth conductor under the earth clamp. The earth conductor should be at least equal in size and rating to the incoming power conductors. Tighten M4 Earth screw to 1Nm.

External earthing connections should be made to the M5 earth stud, using a ring crimp terminal to secure the earth conductor to the earth stud. The external earth conductor should be at least 4mm² in size. Tighten the Earth nut to 3Nm. Please firmly tighten the external grounding terminal so that the stud does not become loose and lay the ground wire so that it is not caught by twisting and sagging.

10. Cable Connections

The combined sounder beacon unit BExCTS110-05D has separate printed circuit boards in the sounder and beacon sections. The terminals for the incoming power supply and telephone signal are on the printed circuit board in the sounder section and the terminals for the beacon are on the printed circuit board in the beacon section (see figures 5a, 5b, 7a and 7b). See section 7 of this manual for access to the enclosure. See section 11 and 12 for AC and DC wiring diagrams respectively.

Wires having a cross sectional area between 0.5 mm² to 2.5mm² can be connected to each terminal way. If an input and output wire is required, the 2-off Live/Neutral or +/- terminals can be used. If fitting 2-off wires to one terminal way, the sum of the 2-off wires must be a maximum cross sectional area of 2.5mm². Strip wires to 8mm. Wires may also be fitted using ferrules. Terminal screws need to be tightened down with a tightening torque of 0.45 Nm / 5 Lb-in. When connecting wires to the terminals great care should be taken to dress the wires so that when the cover is inserted into the chamber the wires do not exert excess pressure on the terminal blocks. This is particularly important when using cables with large cross sectional areas such as 2.5mm².

11. AC Wiring

Four connections must be made to the BExCTS110-05D AC unit. A power supply input cable should enter the enclosure via one of the M20 entries and a telephone signal cable should enter through the other M20 entry.
Connect the power input (L) to the telephone board (L/+) terminal in the sounder section & power input (N) to the beacon board (N) terminal in the beacon section.
Connect the telephone signal input to (TB1) on the telephone board in the sounder section. See Figure 4

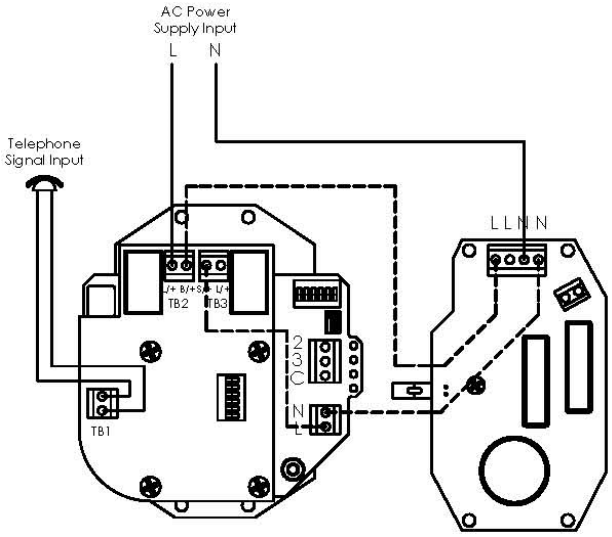


Fig 4 BExCTS110-05D AC Wiring Diagram

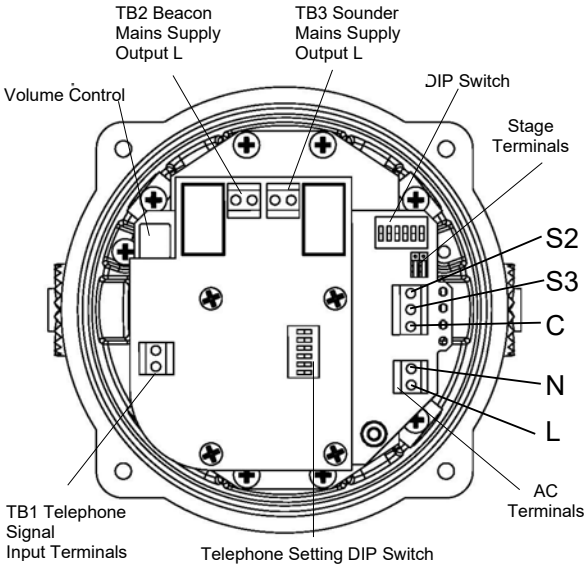


Fig. 5a Sounder AC Terminals

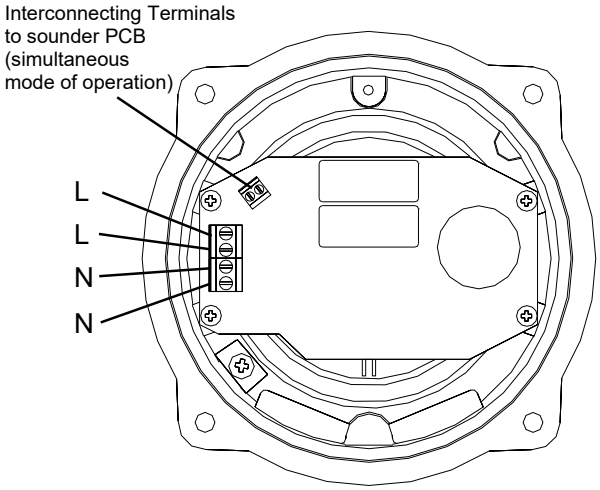


Fig. 5b Beacon AC Terminals

12. DC Wiring

Four connections must be made to the BExCTS110-05D DC unit. A power supply input cable should enter the enclosure via one of the M20 entries and a telephone signal cable should enter through the other M20 entry.
Connect the power input (+) to the telephone board (L/+) terminal in the sounder section & power input (-) to the beacon board (-) terminal in the beacon section.
Connect the telephone signal input to (TB1) on the telephone board in the sounder section. See Figure 5

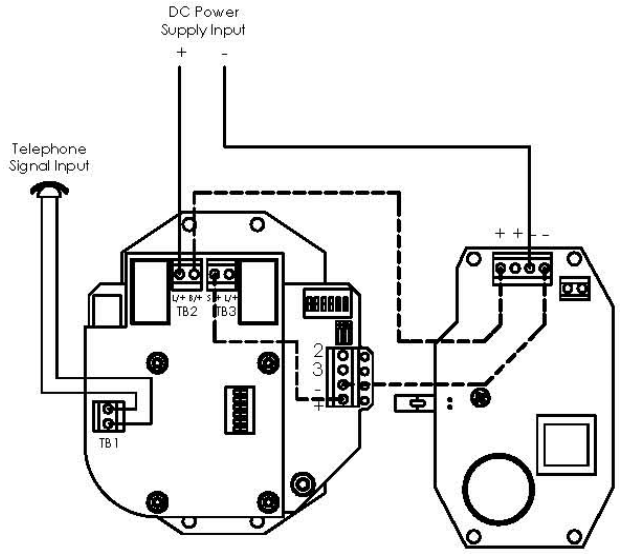
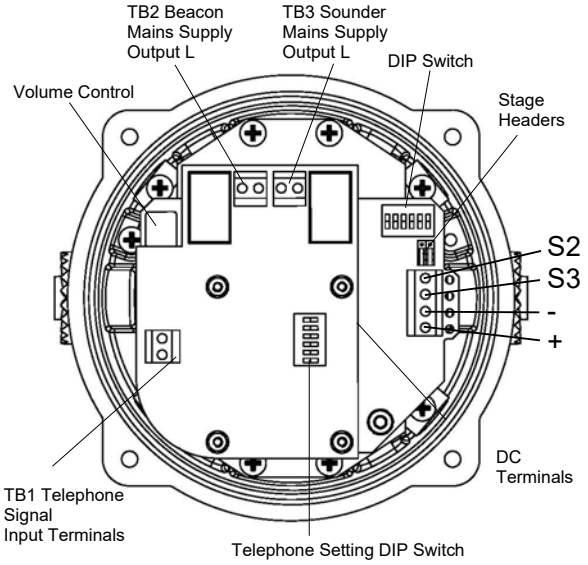


Fig 6 BExCTS110-05D DC Wiring Diagram



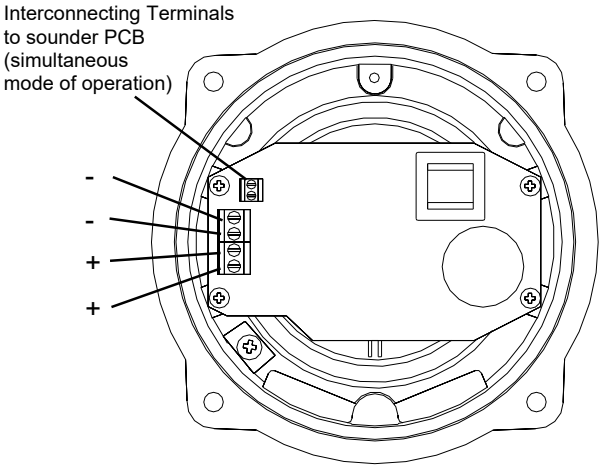
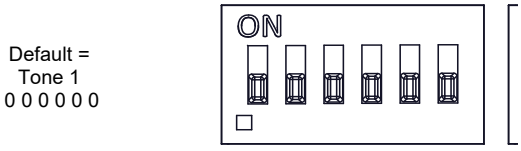


Fig. 7b Beacon DC Terminals

13. Settings

13.1 Tone Settings

The sounders have 32 different tones that can be selected for the first stage alarm. The sounders can then be switched to sound second and third stage alarm tones. The tones are selected by operation of a DIP switch on the pcb for both DC and AC units. The tone table D210-95-001-IS shows the switch positions for the 32 tones and which tones are available for the second and third stages. To operate the sounder on stage one simply connect the supply voltage to the normal supply terminals (+ve and –ve for DC units, L and N for AC units). Refer to wiring schematics D210-06-601 (DC) or D210-06-605 (AC).



(ON = 1, OFF = 0)

Figure 8: DIP switch configuration

13.2 Telephone Setting DIP & Continuous or Pulse Sounder Beacon Operation

The BExCTS110-05D combined sounder / beacon has a number of modes of operation. The sounder and beacon can be set individually to either run continuously or pulsed at the cadence of the ringing tone.
This is set by setting the DIP switches on the Telephone pcb (see figures 5a & 7a).

The Telephone Selection Table on page seven shows the switch positions 1 - 4 for the country setting and switch 5 for the beacon continuous or pulse mode and switch 6 for the sounder continuous or pulse mode. **When making any changes to the country selection, the unit needs to be de-energised for a minimum of 2 minutes for the changes to take effect**.

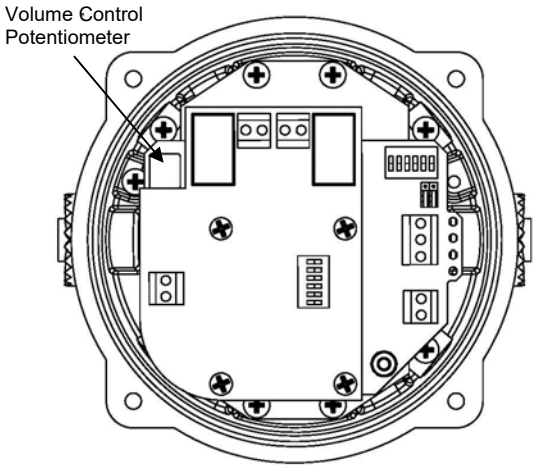
When pulse mode of operation is selected the tone, pattern will pulse on and off following the telephone input signal. Note if pulsed tone operation is selected it is advisable not to select any of the intermittent tones, such as tone 11.
The beacon will flash at the ringing cadence if pulse is selected.

13.3 Volume Control



Warning - High noise levels above 85dB(A) during operation. High levels of noise may cause hearing loss, wear suitable ear protection when equipment is in operation.

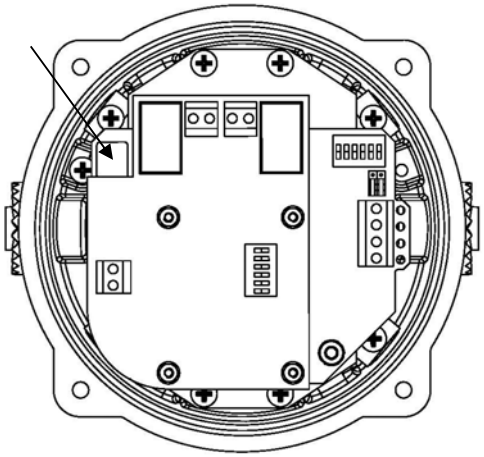
The output level of the BEx sounder can be set by adjusting the volume control potentiometer (see Fig 9a/9b) with the exception of 12V DC units. For maximum output, set the potentiometer fully clockwise.



BExCTS110-05D AC

Fig. 9a Location of Volume Control Potentiometer

Volume Control
Potentiometer



BExCTS110-05D DC

Fig. 9b Location of Volume Control Potentiometer

14. Interchangeable & Spare Parts



Warning – Hot surfaces. External surfaces and internal components may be hot after operation, take care when handling the equipment.

The beacon cover is interchangeable, contact E2S Ltd for a replacement cover available in various colours.

To change the cover, unscrew the M5 socket head screws and remove the M5 screws, M5 spring & flat washers.

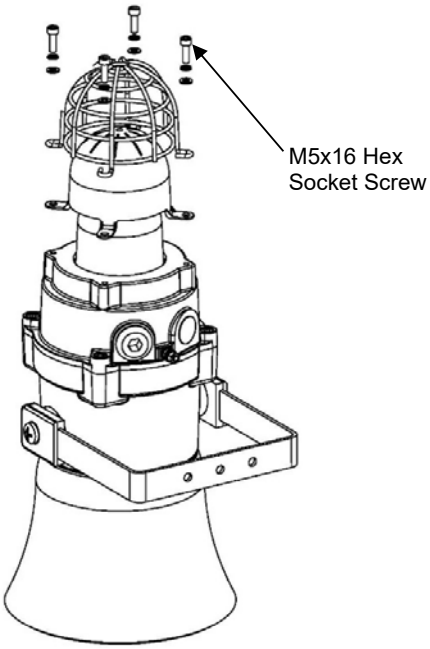


Fig. 10 Removal of cover

Remove the guard and replace the old cover with the new cover.

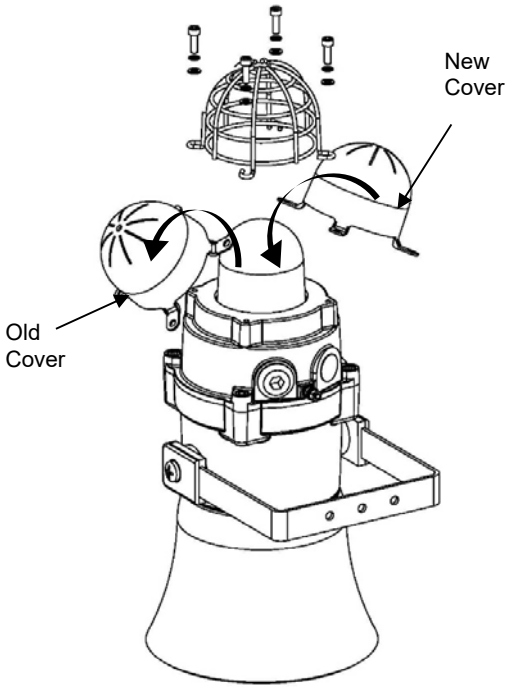


Fig. 11 Changing of cover

Fit the guard back on to the cover and casting, align the holes of the guard, cover and casting. To reattach the cover, the fixings MUST be in the order shown in figure 12.

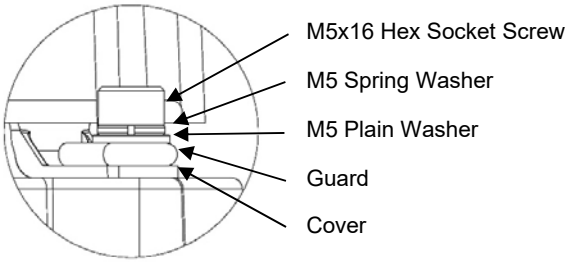


Fig. 12 Cover and Guard Fixtures

15 Maintenance, Overhaul & Repair

Maintenance, repair and overhaul of the equipment should only be carried out by suitably qualified personnel in accordance with the current relevant standards:

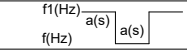
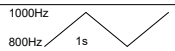
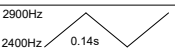
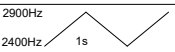
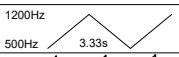
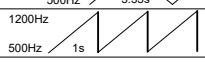
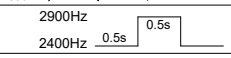
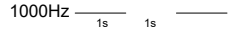
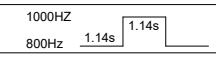
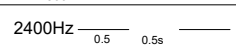
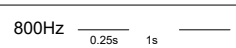
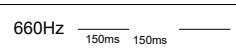
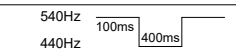
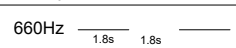
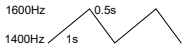
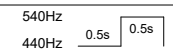
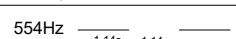
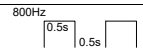
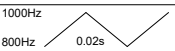
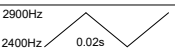
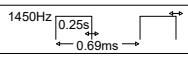
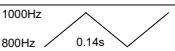
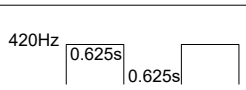
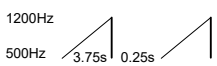
EN60079-19 IEC60079-19	Explosive atmospheres - Equipment repair, overhaul and reclamation
EN 60079-17 IEC60079-17	Explosive atmospheres - Electrical installations inspection and maintenance

The acoustic horn is made out of ABS plastic, therefore to avoid a possible ELECTROSTACTIC CHARGE the unit must only be cleaned with a damp cloth.

Units must not be opened while an explosive atmosphere is present.

If opening the unit during maintenance operations a clean environment must be maintained and any dust layer removed prior to opening the unit.

Telephone Selection Settings	DIP Switch Settings	DIP Switch Settings
Dialing Country Setting	**1 2 3 4**	**5 6**
Australia Ireland New Zealand Singapore South Africa UK	0 0 0 0	
Belgium Canada Cyprus Hong Kong Spain Turkey USA	1 0 0 0	
Czech Republic Finland France Germany Greece Italy Luxemburg Netherlands Norway Switzerland	0 1 0 0	
Austria Iceland Portugal Sweden	1 1 0 0	
Denmark	0 0 1 0	
Pulse or Continuous Setting		
Beacon & Sounder Continuous		0 0
Beacon Continuous, Sounder Pulsed		0 1
Beacon Pulsed, Sounder Continuous		1 0
Beacon & Sounder Pulsed		1 1

Stage 1 Set DIP SW 1 Tone No.	Tone Description	Tone Visual	Stage 1 DIP SW 1 Settings 1 2 3 4 5 6	Stage 2	Stage 3
1	Continuous1000Hz Toxic Gas Alarm		0 0 0 0 0 0	1	11
2	Alternating 800/1000Hz at 0.25s Intervals		1 0 0 0 0 0	17	5
3	Slow Whoop 500/1200Hz at 0.3Hz with 0.5s gap repeated		0 1 0 0 0 0	2	5
4	Sweeping 800/1000Hz at 1Hz		1 1 0 0 0 0	6	5
5	Continuous at 2400Hz		0 0 1 0 0 0	3	27
6	Sweeping 2400/2900Hz at 7Hz		1 0 1 0 0 0	7	5
7	Sweeping 2400/2900Hz at 1Hz		0 1 1 0 0 0	10	5
8	Siren 500/1200/500Hz at 0.3Hz		1 1 1 0 0 0	2	5
9	Sawtooth 1200/500Hz at 1Hz		0 0 0 1 0 0	15	2
10	Alternating 2400/2900Hz at 2Hz		1 0 0 1 0 0	7	5
11	Intermittent 1000Hz at 0.5Hz General Alarm		0 1 0 1 0 0	31	1
12	Alternating 800/1000Hz at 0.875Hz		1 1 0 1 0 0	4	5
13	Intermittent 2400Hz at 1Hz		0 0 1 1 0 0	15	5
14	Intermittent 800Hz 0.25s on 1s off		1 0 1 1 0 0	4	5
15	Continuous at 800Hz		0 1 1 1 0 0	2	5
16	Intermittent 660Hz 150mS on, 150mS off		1 1 1 1 0 0	18	5
17	Alternating 544Hz (100mS)/440Hz(400mS)		0 0 0 0 1 0	2	27
18	Intermittent 660Hz 1.8s on, 1.8s off		1 0 0 0 1 0	2	5
19	1400Hz to 1600Hz sweeep up over 1s - 1600Hz to 1400Hz sweep down over 0.5s		0 1 0 0 1 0	2	5
20	Continuous 660Hz		1 1 0 0 1 0	2	5
21	Alternating 554/440Hz at 1Hz		0 0 1 0 1 0	2	5
22	Intermittent 554Hz at 0.875Hz		1 0 1 0 1 0	2	5
23	800Hz pulsing at 2Hz		0 1 1 0 1 0	6	5
24	Sweeping 800/1000Hz at 50Hz		1 1 1 0 1 0	29	5
25	Sweeping 2400/2900Hz at 50Hz		0 0 0 1 1 0	29	5
26	Simulated Bell Sound		1 0 0 1 1 0	2	1
27	Continuous 554Hz		0 1 0 1 1 0	26	5
28	Continuous 440Hz		1 1 0 1 1 0	2	5
29	Sweeping 800/1000Hz at 7Hz		0 0 1 1 1 0	7	5
30	420Hz repeating 0.625s on, 0.625s off Austrailian Alert Signal		1 0 1 1 1 0	32	5
31	1200/500Hz at 1Hz Prepare to Abandon Platform		0 1 1 1 1 0	11	1
32	Sweeping 500/1200Hz 3.75s on, 0.25s off 15Hz		1 1 1 1 1 0	26	1

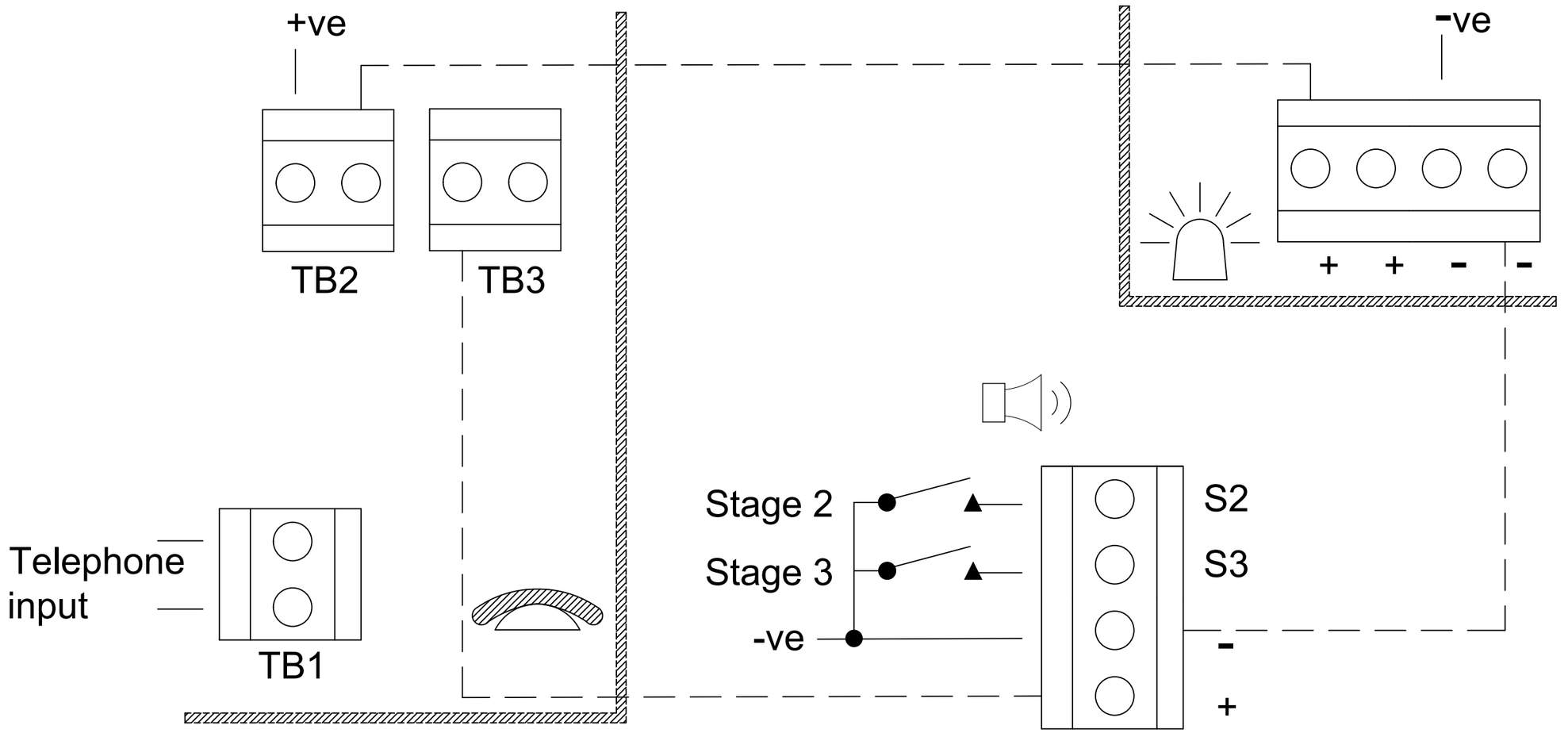
ISSUE	MOD No.	REASON - INITIAL - DATE
1		INTRODUCTION RSR - 13/09/2022

SWITCHES FOR STAGE OPERATION
CUSTOMER SUPPLIED

WIRING LINKING BEACON &
SOUNDER FACTORY FITTED

Standard Configuration, Factory Wired (Beacon & Sounder to be operate Simultaneously) | Config.: 1a

Apply power to +ve & -ve terminals
Apply dial tone to Telephone input terminals
For Stage 2: Power +ve & -vel terminals or telephone input terminals and connect -ve to Stage 2
For Stage 3: Power +ve & -ve terminals or telephone input terminals and connect -ve to Stage 3



DRAWING TO BS8888:2000 GEOMETRIC TOLERANCES TO ISO1101:1983 LINEAR DIMENSIONAL TOLS ANGULAR DIMENSIONAL TOLS	DRAWN R.S.RAIT DATE 13/09/2022	SURFACE FINISH / WEIGHT (Kg)	ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE
STANDARDS BEx	CHECKED B.ISARD DATE 13/09/2022	MATERIAL	A3
	APPROVED R.N.POTTS DATE 13/09/2022	ALTERNATIVE MATERIAL	TITLE BExCTS110D SOUNDER/BEACON WIRING DIAGRAMS

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LONDON W3 7QH
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SCALE	SHEET	DRAWING NUMBER
NTS	1 OF 1	D210-06-681

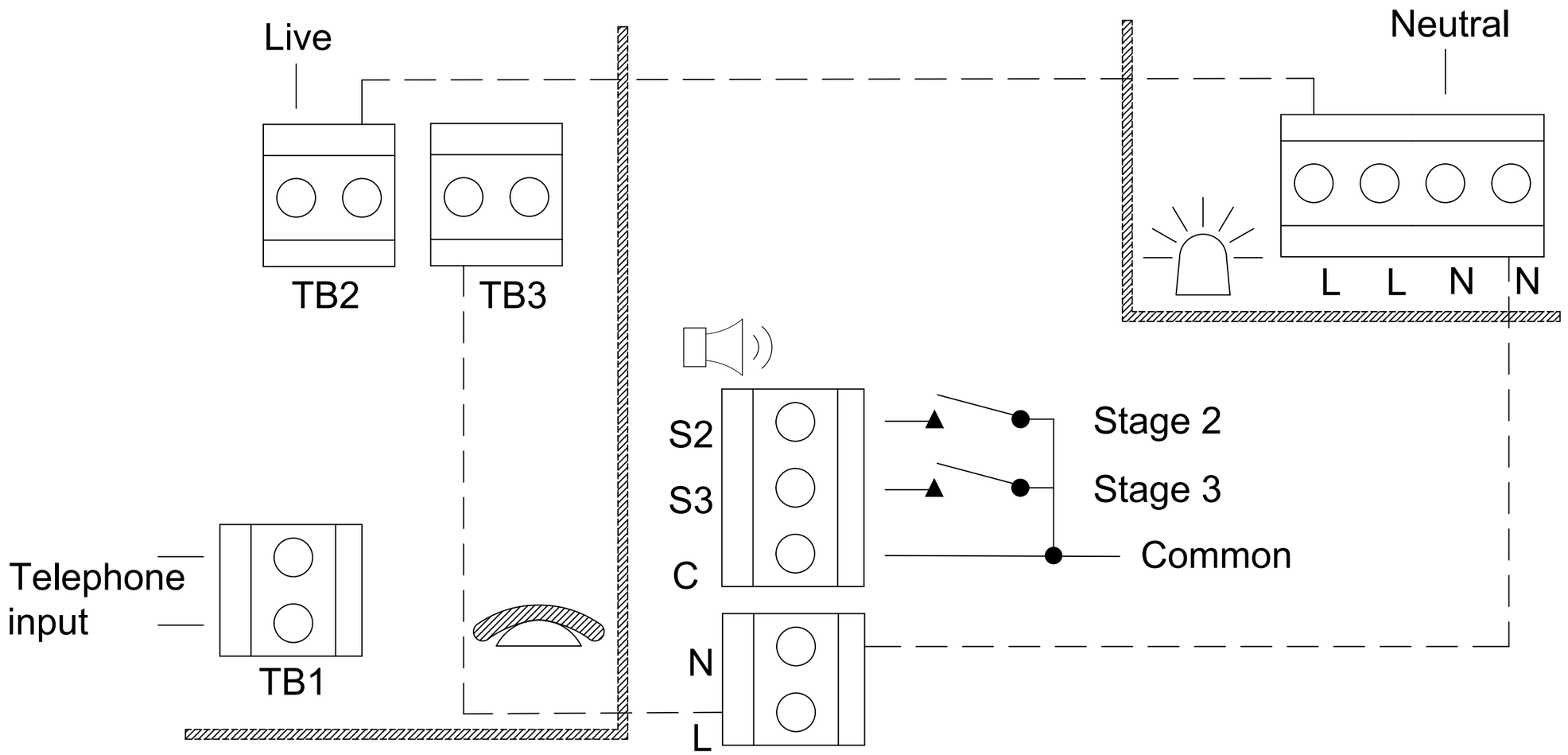
ISSUE	MOD No.	REASON - INITIAL - DATE
1		INTRODUCTION RSR - 13/09/2022

SWITCHES FOR STAGE OPERATION
CUSTOMER SUPPLIED

WIRING LINKING BEACON &
SOUNDER FACTORY FITTED

Standard Configuration, Factory Wired (Beacon & Sounder to be operate Simultaneously) | Config.: 1a

Apply power to Live & Neutral terminals
Apply dial tone to Telephone input terminals
For Stage 2: Power Live & Neutral terminals or telephone input terminals and connect Common to Stage 2
For Stage 3: Power Live & Neutral terminals or telephone input terminals and connect Common to Stage 3



DRAWING TO BS8888:2000
GEOMETRIC TOLERANCES TO ISO1101:1983
LINEAR DIMENSIONAL TOLS
ANGULAR DIMENSIONAL TOLS

STANDARDS
BEx

DRAWN	R.S.RAIT	DATE 13/09/2022
CHECKED	B.ISARD	DATE 13/09/2022
APPROVED	R.N.POTTS	DATE 13/09/2022

SURFACE FINISH | WEIGHT (Kg)
MATERIAL
ALTERNATIVE MATERIAL

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ALL DIMENSIONS IN MM
IF IN DOUBT, ASK -
DO NOT SCALE

A3

TITLE BExCTS110D SOUNDER/BEACON WIRING DIAGRAMS

SCALE	SHEET	DRAWING NUMBER
NTS	1 OF 1	D210-06-685

EU Declaration of Conformity

Manufacturer:	European Safety Systems Ltd. Impress House, Mansell Road, Acton London, W3 7QH United Kingdom
Authorised Representative:	E2S Warnsignaltechnik UG Charlottenstrasse 45-51 72764 Reutlingen Germany
Equipment Type:	BExCS110-05D, BExDCS110-05D, BExCS110-05D-R, BExDCS110-05D-R, BExCS110-05D-P, BExDCS110-05D-P, BExCS110-05D-R-P, BExDCS110-05D-R-P, BExCL15-05D, BExDCL15-05D, BExCL15-05D-R, BExDCL15-05D-R, BExCL15-05D-P, BExDCL15-05D-P, BExCL15-05D-R-P, BExDCL15-05D-R-P, BExCTS110-05D, BExDCTS110-05D, BExCTS110-05D-R, BExDCTS110-05D-R, BExCTS110-05D-P, BExDCTS110-05D-P, BExCTS110-05D-R-P, BExDCTS110-05D-R-P, BExCS110-L1D, BExDCS110-L1D, BExCS110-L1D-R, BExDCS110-L1D-R BExCS110-L2D, BExCS110-L2D-R, BExCA110-05D-P

Directive 2014/34/EU: Equipment and Protective Systems for use in Potentially Explosive Atmospheres (ATEX)

Notified Body for EU type Examination (Module B):	Dekra Certification B.V. Notified Body No.: 0344 Meander 1051, 6825 MJ Arnhem, The Netherlands
EU-type Examination Certificate (Module B):	KEMA 01ATEX2223X
Notified Body for Quality Assurance Notification / Conformity to EU-type based on quality assurance of the production process (Module D):	Sira Certification Service Notified Body No.: 2813 CSA Group Netherlands B.V, Utrechtseweg 310, 6812 AR, Arnhem, Netherlands
Quality Assurance Notification (Module D):	SIRA 05 ATEX M342
Provisions fulfilled by the equipment:	II 2G Ex db IIB T5 or T4 Gb II 2D Ex tb IIIC T70°C to T125°C Db IP6X Dust Protection to EN60079-0 / EN60079-31
Standards applied:	EN 60079-0:2012 + A11:2013 / EN IEC 60079-0: 2018 EN 60079-1:2014 EN 60079-31:2014 IP6X Dust Protection to EN60079-0 / EN60079-31

Directive 2014/30/EU: Electromagnetic Compatibility Directive (EMC)

Standards applied:	EN 61000-6-1:2007 EN 61000-6-2:2005 EN 61000-6-3:2007 / A1:2011 / AC: 2012 EN 61000-6-4:2007 / A1: 2011

Directive 2011/65/EU: Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

The product and all the components contained within it are in accordance with the restriction of the use of hazardous substances in electrical and electronic equipment, including amendment Directive 2015/863/EU.

Regulation (EC) 1907/2006: Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

The product and all the components contained within it are free from substances of very high concern.

Other Standards and Regulations

EN 60529:1991 + A1:2000 + A2:2013. - Degrees of protection provided by enclosures (IP code) – enclosure rated IP66/67

EU Declaration of Conformity

On behalf of European Safety Systems Ltd., I declare that, on the date the equipment accompanied by this declaration is placed on the market, the equipment conforms with all technical and regulatory requirements of the above listed directives, regulations and standards.

This Declaration is issued under the sole responsibility of the manufacturer.



Martin Streetz
Quality Assurance Manager

Document No.: DC-005_Issue_P
Date and Place of Issue: London, 21/05/2020

UKCA Declaration of Conformity

Manufacturer:	European Safety Systems Ltd. Impress House, Mansell Road, Acton London, W3 7QH United Kingdom
Equipment Type:	BExCS110-05D, BExDCS110-05D, BExCS110-05D-R, BExDCS110-05D-R, BExCS110-05D-P, BExDCS110-05D-P, BExCS110-05D-R-P, BExDCS110-05D-R-P, BExCL15-05D, BExDCL15-05D, BExCL15-05D-R, BExDCL15-05D-R, BExCL15-05D-P, BExDCL15-05D-P, BExCL15-05D-R-P, BExDCL15-05D-R-P, BExCTS110-05D, BExDCTS110-05D, BExCTS110-05D-R, BExDCTS110-05D-R, BExCTS110-05D-P, BExDCTS110-05D-P, BExCTS110-05D-R-P, BExDCTS110-05D-R-P, BExCS110-L1D, BExDCS110-L1D, BExCS110-L1D-R, BExDCS110-L1D-R BExCS110-L2D, BExCS110-L2D-R, BExCA110-05D-P

Directive UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1 : Product or Protective System Intended for use in Potentially Explosive Atmospheres (UKCA)

Notified Body for UK type Examination (Module B):	UL International (UK) Ltd Notified Body No.: 0843 Unit 1-3 Horizon Kingsland Business Park, Wade Road, Basingstoke, Hampshire RG24 8AH UK
UK-type Examination Certificate (Module B):	UL21UKEX2639X
Notified Body for Quality Assurance Notification / Conformity to EU-type based on quality assurance of the production process (Module D):	Sira Certification Service Notified Body No.: 0518 Rake Lane, Eccleston, Chester CH4 9JN, UK
Quality Assurance Notification (Module D):	CSAE 22UKQAN0046
Provisions fulfilled by the equipment:	II 2G Ex db IIB T5…T4 Gb II 2D Ex tb IIIC T70°C…T125° Db IP6X Dust Protection to EN60079-0 / EN60079-31
Standards applied:	EN IEC 60079-0: 2018 EN 60079-1: 2014 EN 60079-31: 2014

Directive 2014/30/EU: Electromagnetic Compatibility Directive (EMC)

Standards applied:	EN 61000-6-1:2007 EN 61000-6-2:2005 EN 61000-6-3:2007 / A1:2011 / AC: 2012 EN 61000-6-4:2007 / A1: 2011

Directive 2011/65/EU: Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

The product and all the components contained within it are in accordance with the restriction of the use of hazardous substances in electrical and electronic equipment, including amendment by Directive 2015/863/EU.

Regulation (EC) 1907/2006: Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

The product and all the components contained within it are free from substances of very high concern.

Other Standards and Regulations

EN 60529:1991 / A1:2000 / A2:2013 - Degrees of protection provided by enclosures (IP code) – enclosure rated IP66/67

UKCA Declaration of Conformity

On behalf of European Safety Systems Ltd., I declare that, on the date the equipment accompanied by this declaration is placed on the market, the equipment conforms with all technical and regulatory requirements of the above listed directives, regulations and standards.

This Declaration is issued under the sole responsibility of the manufacturer.



Martin Streetz
Quality Assurance Manager

Document No.: DC-106_Issue_A
Date and Place of Issue: London, 12/09/2022