# IS-DL105L Intrinsically Safe Alarm Sounder & LED beacon



Intrinsically Safe combination L.E.D beacon/light & alarm horn.

The IS-DL105 unit is an intrinsically safe field mounting combined alarm horn with L.E.D. beacon/light which provides a a loud audible and bright flashing visual signal utilising a common zener barrier or galvanic isolator. The alarm horn features an alarm accept function - by closing a pair of external contacts (i.e push switch) the operator may silence the alarm for set periods between 5 seconds and 2 hours. If after the preset time the alarm condition still exists the sounder will activate again. Certified for use in application requiring Ex ia equipment to ATEX & IECEx the IS-DL105 is a globally accepted solution to fire or process control signalling.

#### Features

- Input overload and reverse current protection
- Prismatic lens optimises L.E.D effectiveness
- Marine grade aluminium enclosure
- Auto synchronised sound output
- External mounting lugs
- Duplicate cable terminations (in & out for daisy-chain installations)
- Available with custom tone configurations and frequencies.

### **Approvals**

- ATEX certificate: SIRA 04ATEX2 301X,
   ATEX certificate: SIRA 04ATEX2 302X,
   EN 60079-0: 2012, EN 60079-11: 2012,
   IEC 60079-26: 2014
- IECEx certificate: IECEx SIR 04.0038X, IECEx certificate: IECEx SIR 04.0039X, IEC 60079-0: 2011, IEC 60079-11: 2011,

IEC 60079-26:2014

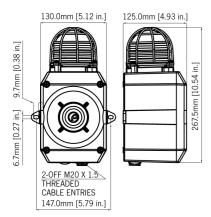












# **Specification**

# Sounder/horn:

Nominal output: 105dB(A) @ 1m +/- 3dB - Tone 2\* [96dB(A) @ 10ft/3mNo. of tones: 49 (UKOOA/PFEER compliant) No. of stages: 3 Max. 105dB(A); Volume control: Min. 96dB(A) - Tone 2 Effective range: 60m/197ft @ 1KHz Beacon/light: Light source: Array of 6 high intensity L.E.D's L.E.D. colours: Red, Amber, Blue & Green Standalone mode: 2 Hz (2 double flashes per second) Flash rate: On: 1 Hz (1 double flash per second) Silenced: 2 Hz (2 double flashes per second) (alarm accepted) General: Voltage: 16-28vdc via Zener barrier or galvanic isolator Current: 25mA typical when powered from 24v supply via 28v 300 Ohm Zener barrier Ingress protection: IP66 Rating: Continuous Enclosure material: A1-Si12 Marine Grade Aluminium RAL3000 Red or RAL7038 Grey Housing colour: Stainless Steel Fixings: Cable entries: 2 x M20 Terminals: 0.5 to 2.5mm<sup>2</sup>  $-40^{\circ}$  to  $+60^{\circ}$ C [-40° to  $+140^{\circ}$ F] Operating temp: -40° to +70°C [-40° to +158°F] Storage temp: Relative humidity: 90% at 20°C [68°F] Weight: 2.10kg/4.62lbs

### **Part Codes**

IS-DL105-[x]/[y]

ATEX / IECEx

II 1G Ex ia IIC T4 Ga (-40°C <=Ta<= +60°C)

[x]: Enxclosure colour: R: Red, G: Grey

[y]: LED colour R: Red, A: Amber, B: Blue, G: Green

May be powered from any certified Zener barrier or galvanic isolator

whose output parameters do not exceed:

Tone	etable				
<b>S 1</b> T 1	<b>Description</b> 340 Hz Continuous	<b>S 2</b> T 2	<b>S 3</b> T 5	<b>S 1</b> T 33	<b>Description</b> 745Hz @ 1Hz Interm
T 2	800/1000Hz @ 0.25 sec Alternating	T 17	T 5	T 34	1000 & 2000Hz @ 0.5
T 3	500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop	T 2	T 5	T 35	420Hz @ 0.625 sec /
T 4	800/1000Hz @ 1Hz Sweeping	T 6	T 5	T 36	500-1200Hz 3.75sec
T 5	2 400Hz Continuous	Т3	T 20	T 37	1000Hz Continuous
T 6	2 400/2 900Hz @ 7Hz Sweeping	T 7	T 5	T 38	2000Hz Continuous
T 7	2400/2900Hz @ 1Hz Sweeping	T 10	T 5	T 39	800Hz 0.25sec on, 1
T 8	500/1200/500Hz @ 0.3Hz Sweeping	T 2	T 5	T 40	544Hz (100mS)/440
T 9	1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P.	T 15	T 2	T 41	Motor Siren - slow ris
T 10	2 400/2 900Hz @ 2 Hz Alternating	T 7	T 5	T 42	Motor Siren - slow ris
T 11	1000Hz @ 1Hz Intermittent	T 2	T 5	T 43	1200 Hz Continuous
T 12	800/1000Hz @ 0.875Hz Alternating	T 4	T 5	T 44	Motor Siren - slow ris
T 13	2 400Hz @ 1Hz Intermittent	T 15	T 5	T 45	1KHz 1s on, 1s off Ir
T 14	800Hz 0.25sec on, 1 sec off Intermittent	T 4	T 5	T 46	1200/500Hz @ 1Hz -
T 15	800Hz Continuous	T 2	T 5	T 47	1KHz 1s on, 1s off Ir
T 16	660Hz 150mS on, 150mS off Intermittent	T 18	T 5	T 48	420Hz @ 0.625 sec
T 17	544Hz (100mS)/440Hz (400mS) - NF S 32-001	T 2	T 27	T 49	500-1200Hz 3.75sec
T 18	660Hz 1.8sec on, 1.8sec off Intermittent	T 2	T 5		
T 19	1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48265	T 2	T 5	_	
T 20	660Hz Continuous	T 2	T 5	=	
T 2 1	554Hz/440Hz @ 1Hz Alternating	T 2	T 5	-	
T 2 2	544Hz @ 0.875 sec. Intermittent	T 2	T 5	_	
T 23	800Hz @ 2 Hz Intermittent	T 6	T 5	_	
T 2 4	800/1000Hz @ 50Hz Sweeping	T 29	T 5	_	
T 25	2 400/2 900Hz @ 50Hz Sweeping	T 29	T 5	_	
T 26	Bell	T 2	T 15	_	
T 27	554Hz Continuous	T 26	T 5	_	
T 28	440Hz Continuous	T 2	T 5	_	
T 29	800/1000Hz @ 7Hz Sweeping	T 7	T 5	_	
T 30	300Hz Continuous	T 2	T 5	=	
T 31	660/1200Hz @ 1Hz Sweeping	T 26	T 5	_	

T 32 Two T chime.

S 2 S 3 T2 T5 T 38 T 45 T36 T5 T 35 T 5 T 9

T 45 T 34 T 45 T23 T17 T31 T27 T 5

T 5

T 5

T 5 T38 T34 T 47 T 37 T46 T37 T49 T5 T26 T37

T 2 T 2

T 2

T 2

T26 T15