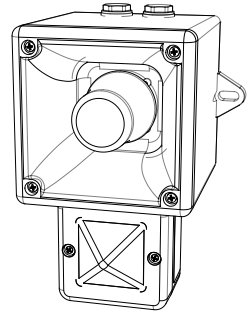


Installation/Anschluss
 Installation/Raccordement
 Installation/Connection

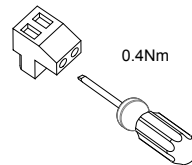
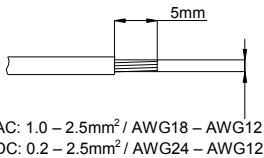
AL105

- -40°C to +66C (-40°F to 151°F)
- Type 4 / 4X / 3R / 13, IP66
- 1.8Kg (3.96lb)
- CE, AL105.024.2 & AL105.048.2 CPR compliant, All units UL Listed.



Unit Type Code	Nominal Voltage	Voltage Range	Nominal Sounder Current*	Nominal Beacon Current*	Nominal SPL	Max SPL	Average SPL
AL105.012.2	12 V dc	11.5-14V dc	17mA	341mA	105.3dB(A) Tone 44 @ 1m	110.9dB(A) Tone 4 @ 1m	105.2dB(A) All tones @1m
AL105.024.2	24V dc	20-28V dc	33.5mA	250mA			
AL105.048.2	48V dc	42-52V dc	113mA	170mA			
AL105.024.7	24V ac	24-28V ac 50/60Hz	42.5mA	300mA			
AL105.048.7	48V ac	48V ac ± 10% 50/60Hz	42mA	250mA			
AL105.115.7	115V ac	115V ac ± 10% 50/60Hz	25mA	70mA			
AL105.230.7	230V ac	230V ac ± 10% 50/60Hz	17mA	35mA			

*Nominal current at nominal voltage, Tone 12 / 1Hz Flash Pattern



Attention: Installation must be carried out by an electrician in compliance with the latest codes and regulations.

Attention: L'installation doit être effectuée par un électricien conformément aux derniers codes et réglementations.

Achtung: Die Installation muss von einem Elektriker gemäß den neuesten Vorschriften und Bestimmungen durchgeführt werden.



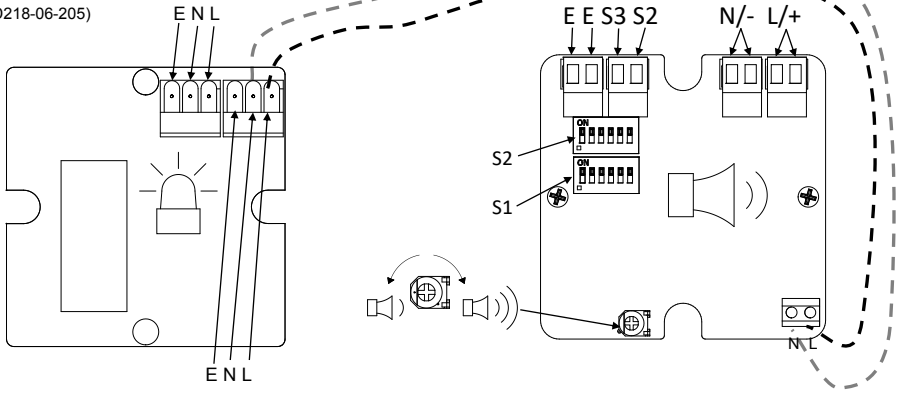
Attention: Disconnect from power source before installation or service to prevent electric shock

Attention: Débranchez-le de la source d'alimentation avant l'installation ou l'entretien pour éviter tout choc électrique.

Achtung: Vor Installation oder Wartung von der Stromquelle trennen, um einen Stromschlag zu vermeiden.

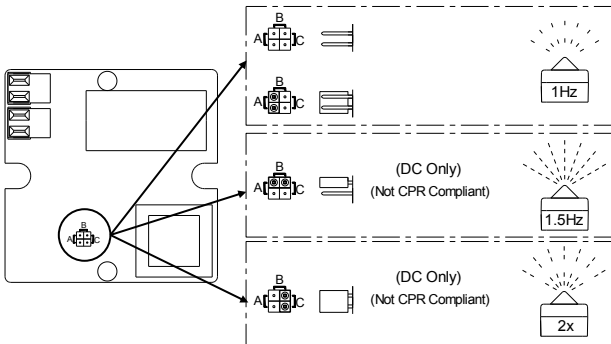
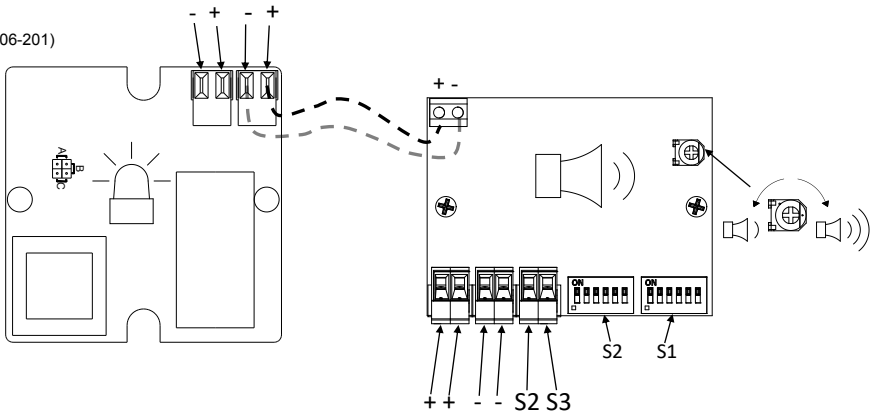
AC

(See D218-06-205)



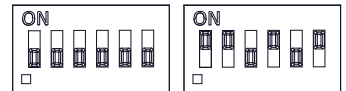
DC

(See D218-06-201)



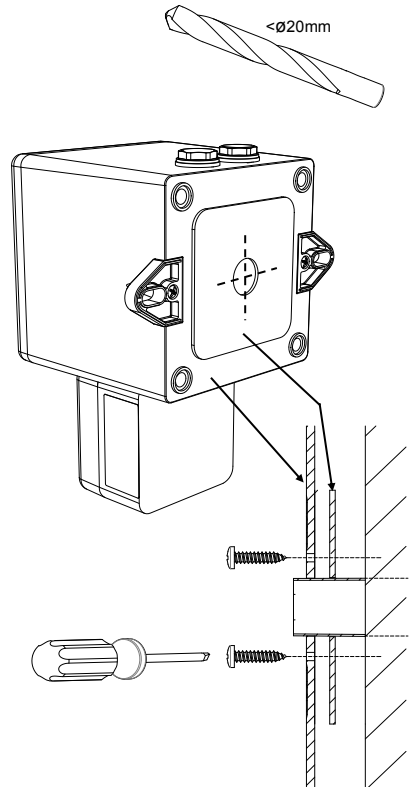
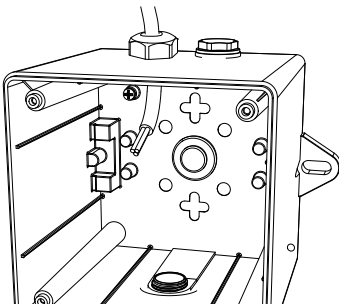
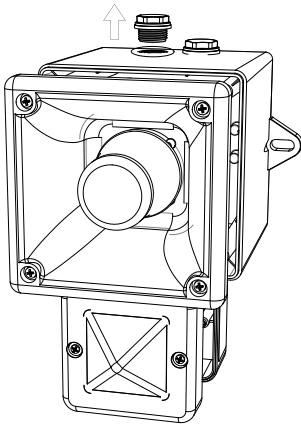
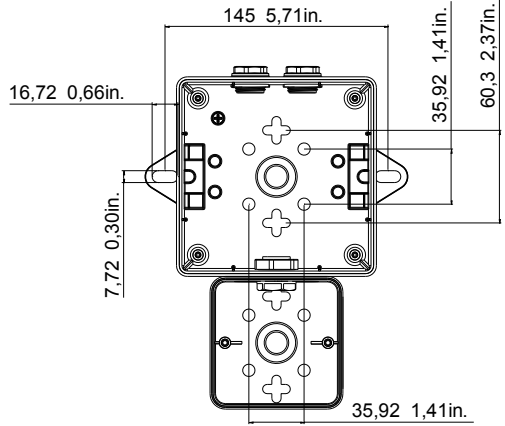
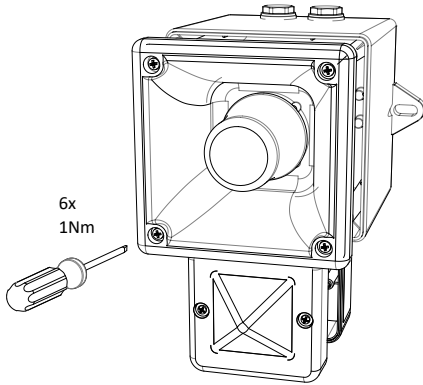
(AC & DC, See D221-95-001)

Default = S2 - Tone 1 Default = S1 - Tone 44



(ON = 1, OFF = 0)

INSTRUCTION & SERVICE MANUAL
AL105



Construction Product Regulation

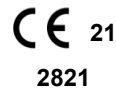
- AL105.024.2 & AL105.048.2 are compliant to EN54-3:2001+A1+A2 & EN54-23:2010
- VAD for use in fire detection and fire alarm systems installed in and around buildings
- Alarm devices – Sounder & Beacon
- Type 3R / 13, IP66, Independently tested to EN60529:1991, (IP33C Compliant to EN54-3)
- Type B Product, For Indoor & Outdoor use
- Observe Precautions for handling electrostatic devices
- -25°C to +55°C compliant to EN54-3 & EN54-23
- Cable Glands must be suitably sealed and meet minimum IP33 for EN54-3 applications
- Storage Temperature: -40°C to +70°C
- Maintenance – None
- Units can be mounted using 2-off \varnothing 7mm holes or through the back of the housing using the supplied gasket

Order Code: AL105.024.2
 Voltage Range: 20-28Vdc
 Nominal Voltage: 24Vdc
 Max Sounder Current: P1: 125mA @ 28Vdc
 Max Beacon Current: 271mA @ 20Vdc
 DP-2821-CPR-0109



Order Code: AL105.048.2 Voltage
 Range: 42-52Vdc
 Nominal Voltage: 48Vdc

Max Sounder Current: 125mA @ 52Vdc
 Max Beacon Current: 160mA @ 42Vdc
 DP-2821-CPR-0109



Approved Tones for EN54-3 Applications:

- (Alternating Tone) 800/1000Hz @ 2Hz Alternating Tone 44
- (Rising Tone) 500/1200Hz @ 0.26Hz (3.3s on, 0.5s off) Tone 8
- (Fainting Tone) 1200/500Hz @ 1Hz Tone 2
- (Continuous Tone) 800Hz Tone 21
- (Pulsed Tone) 660Hz (150ms on, 150ms off) Tone 31

AL105.024.2 / AL105.048.2 @ 1m

Angle	Horizontal Sound Output Max Voltage (60 Vdc) LAFmax,T dB(A)						Horizontal Sound Output Min Voltage (18 Vdc) LAFmax,T dB(A)					
	Tone 44	Tone 8	Tone 2	Tone 21	Tone 31	Tone 5	Tone 44	Tone 8	Tone 2	Tone 21	Tone 31	Tone 5
15°	93.9	94.6	93.7	94	91	91.8	90.8	91.2	90.5	90.9	88	89.1
45°	99.6	101.4	100.1	99.7	96.6	98.2	96.5	98.3	96.9	96.6	93.5	95.7
75°	102.5	103.9	103.5	102.6	102	100.6	100	101.1	100.6	100.1	98.7	98
105°	102.5	103.9	103.4	102.7	102	100.6	100	101.1	100.6	100.3	98.8	98.2
135°	99.5	101.4	100.1	99.7	96.4	98.1	96.4	98.2	96.9	96.6	93.5	95.5
165°	94.1	94.8	93.7	94.1	90.6	91.8	91.1	91.5	90.5	91.1	87.6	89.2

Angle	Vertical Sound Output Max Voltage (60 Vdc) LAFmax,T dB(A)						Vertical Sound Output Min Voltage (18 Vdc) LAFmax,T dB(A)					
	Tone 44	Tone 8	Tone 2	Tone 21	Tone 31	Tone 5	Tone 44	Tone 8	Tone 2	Tone 21	Tone 31	Tone 5
15°	93.8	94.7	93.5	94.3	90.2	91.8	90.7	91.5	90.2	91.2	87.3	89.2
45°	99.6	101.4	100.1	100	96.4	98.3	96.5	98.4	97	96.9	93.4	95.7
75°	103	104.2	103.7	103.2	101.5	100.6	99.8	101.1	100.5	100.1	98.5	98.1
105°	102.6	104.2	103.4	102.6	101.8	100.5	100	101	100.6	100	99	98
135°	99.5	101.4	100.1	99.8	96.4	98.3	96.3	98.2	97	96.6	93.5	95.7
165°	94.3	94.5	93.6	94.6	89.8	91.6	91.2	91.2	90.4	91.5	96.8	88.8

The units have been tested and approved to DNVGL-CG-0339 & EN54-3:2014 incl. A1:2019 for the installation on ships in the following locations:

- Temperature: A, B, C & D (Machinery spaces, control rooms, accommodation, bridge, inside cubicles, desks, etc..., pump rooms, holds, rooms with no heating, Open deck, masts)
 Humidity: A & B (All locations)
 Vibration: A (Bulkheads, Beams, Deck, Bridge)
 EMC: A (All locations except Bridge & open deck)
 Enclosure: A, B & C, IP66 (Control rooms, accommodation, bridge, engine room, open deck masts, below floor plates in engine room)

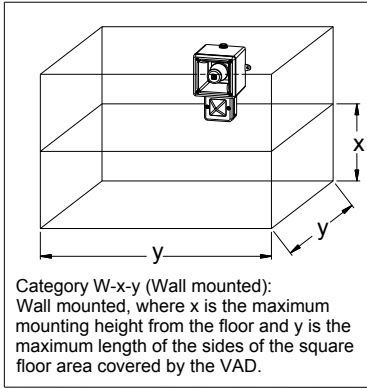
The units comply with Solas 74 Chapter II-2, Regulation 7 & Chapter X, Regulation 3 for installation on ships in the following locations:

- Temperature: D (Location -25° to +70°C)
 Vibration: A (General Applications)
 EMC: A (General Power Distribution Zone)
 Enclosure: IP66, Salt mist

INSTRUCTION & SERVICE MANUAL

AL105

AL105.024.2 & AL105.48.2 LIGHT OUTPUT



Note: CPR approved units must be positioned sounder on top, beacon below.

Coverage Area According to EN54-23
(Only units in the following table are VdS Approved)

Unit	Category W	Power
	W-2.4-4.8	11W
	V=55.3m	
	W-2.5-5	14W
	V=62.5m	

Approved Beacon for EN54-23 Applications:
Clear lenses are compliant with EN54-23

- All models are approved for use as Audible Signal and Visual Appliance for use as General Signaling: UL464A & CSA C22.2 No 205-17
- Type 4 / 4X / 3R / 13, IP66 independently tested to EN60529:1991
- 40°C to +66°C / -40°C to +151°F

General Signaling Canada:

AL105.xxx.2 DC: -40°C to +55°C / -40°F to +131°F

AL105.xxx.7 AC: -40°C to +40°C / -40°F to +104°F

- To maintain Ingress Protection, cable entries must be fitted with suitably rated cable glands or stopping plugs
- Mounting - Units can be mounted using 2 of the 4-off Ø7mm holes in the mounting lugs or through the back of the housing using the supplied gasket.
- EOL Monitoring (DC Only): End of Line Devices may be fitted between the +ve & -ve terminals of the PCBA. Please ensure that the device legs meet the wire size range stated for the connection terminals and are fitted correctly in order to avoid a short. Refer to the compatible control panel specification for EOL device values and ratings



Model	Nominal Voltage	Voltage Range	Nominal Operating Current*		Max Operating RMS#	
			Beacon	Sounder	Beacon	Sounder
AL105.012.2	12V dc	11.5-14Vdc	341mA	17mA	531mA	125mA
AL105.024.2	24V dc	20-28Vdc	250mA	33.5mA	271mA	
AL105.048.2	48V dc	42-52Vdc	170mA	113mA	170mA	
AL105.024.7	24V ac	24-28Vac 50/60Hz	300mA	42.5mA	426mA	42.5mA
AL105.048.7	48V ac	42-54Vac 50/60Hz	250mA	42mA	360mA	
AL105.115.7	115 Vac	103.5-126.5Vac 50/60Hz	70mA	25mA	101mA	
AL105.230.7	230 Vac	207-253Vac 50/60Hz	35mA	17mA	58mA	

*Nominal Voltage, 1Hz Flash Pattern & Tone 12; #Worst-case input voltage and worst case flash pattern



Attention: Installation must be carried out by an electrician in compliance with the National Electrical Code, NFPA 70 or CSA 22.1 Canadian Electrical Code, Part I, Safety Standard for Electrical Installations, Section 32. / L'installation doit exclusivement être réalisée par du personnel qualifié, conformément au code national d'électricité américain, NFPA 70 ou CSA 22.1 Code canadien de l'électricité, première partie, norme de sécurité relative aux installations électriques, Section 32

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							A		

--- WIRING LINKING BEACON & SOUNDER
FACTORY FITTED



OPTIONAL LINE MONITORING RESISTOR - CUSTOMER SUPPLIED.
RECOMMENDED MINIMUM VALUES: 100 OHM OR 1/2W MIN. 0.5W MIN.
250V MAX SYSTEM = 4700 MIN. 20W MIN OR 24KOHM 0.5W MIN

Linked Sounder & Beacon Activation (Default)

	Single Stage Configuration	Config.: 1a	Two Stage Configuration	Config.: 1b	Three/Four Stage Configuration	Config.: 1c
B	Stage 1: Apply Power to Stage 1 +ve & Stage 1 -ve	Common Negative	Stage 1: Apply Power to Stage 1 -ve & Common +ve Stage 2: Apply Power to Stage 1 -ve, Stage 2 -ve & Common +ve	Stage 1: Apply Power to Stage 1 -ve & Common +ve Stage 2: Apply Power to Stage 1 -ve, Stage 3 -ve & Common +ve Stage 4: Apply Power to Stage 1 -ve, Stage 2 -ve, Stage 3 -ve & Common +ve	Stage 1: Apply Power to Stage 1 -ve & Common +ve Stage 2: Apply Power to Stage 1 -ve, Stage 2 -ve & Common +ve Stage 3: Apply Power to Stage 1 -ve, Stage 3 -ve & Common +ve Stage 4: Apply Power to Stage 1 -ve, Stage 2 -ve, Stage 3 -ve & Common +ve	Stage 1: Apply Power to Stage 1 -ve & Common +ve Stage 2: Apply Power to Stage 1 -ve, Stage 2 -ve & Common +ve Stage 3: Apply Power to Stage 1 -ve, Stage 3 -ve & Common +ve Stage 4: Apply Power to Stage 1 -ve, Stage 2 -ve, Stage 3 -ve & Common +ve
C						
D						
E						
F						

DRAWING TO BE ISSUED TO ENRANCER'S TO ISO 1011:1983 GEOMETRIC TOLERANCES TO ISO 11:1983 DIMENSIONS TO ISO 1:1983 ANGULAR DIMENSIONAL TOLS		DRAWN R.S. RAIT		DATE 16/03/2021		SURFACE FINISH		WEIGHT (kg)	
STANDARDS ALERTALARM RANGE		CHECKED B.ISARD		DATE 16/03/2021		MATERIAL			
		APPROVED R.N.POTTS		DATE 16/03/2021		ALTERNATIVE MATERIAL			
THIS DRAWING AND ANY INFORMATION OR DESCRIPTION MATTER THEREIN IS UNMUTATED IN COMPLIANCE WITH THE REQUIREMENTS OF THE PROTECTIVE AND SECURITY SYSTEMS (PSS) ACT 2012. THE POLICE AND FIRE SERVICES MAY MANUFACTURE OR REPRODUCE THIS DRAWING FOR THEIR OWN USE WITHOUT THE NEED FOR PERMISSION FROM THE DRAWING OR INFORMATION MANUFACTURER OR FURNISHER. THIS DRAWING IS THE PROPERTY OF THE DRAWING OR INFORMATION MANUFACTURER AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF THE DRAWING OR INFORMATION MANUFACTURER.									
REG. NO. 179 ASPERLVAEST DATE OF ISSUE SHOWN ABOVE									
ALL DIMENSIONS IN MM IF IN QUOTE ASK - DO NOT SCALE				TITLE AL100X AL105 & DL105 DC COMBINED SOUNDER & XENON WIRING DIAGRAMS		SHEET 1 OF 2		DRAWING NUMBER D218-06-201	
SCALE				SHEET		DRAWING NUMBER			
NTS				1 OF 2		D218-06-201			

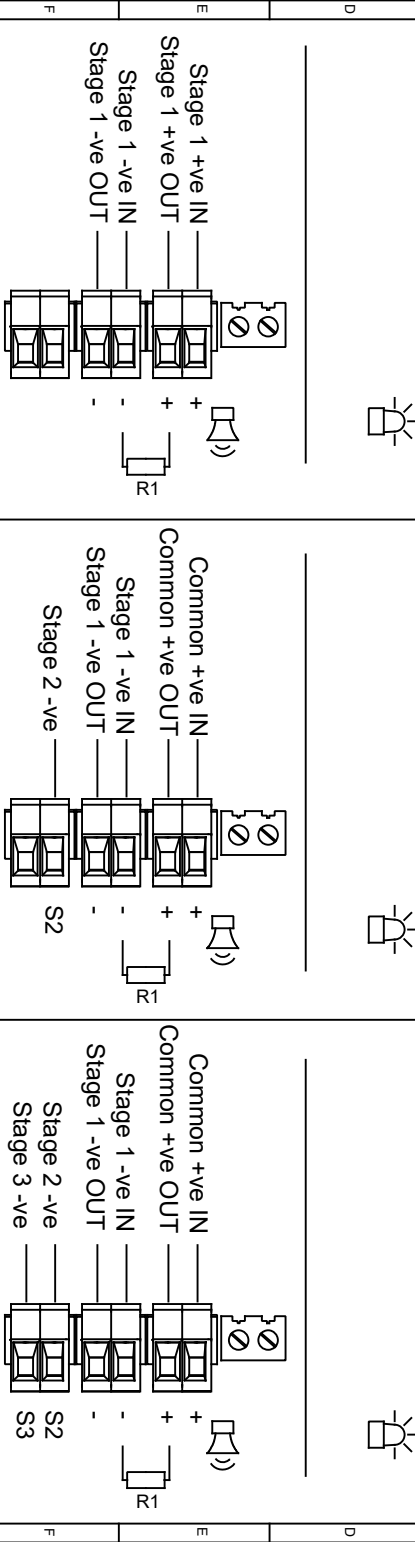
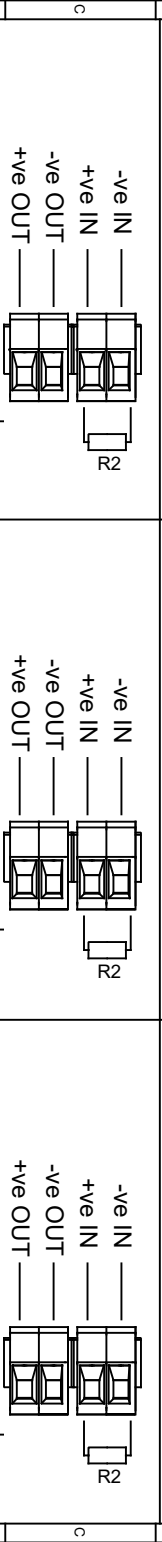
A

OPTIONAL LINE MONITORING RESISTOR, CUSTOMER SUPPLIER, RECOMMENDED MINIMUM VALUES: OR 1/402IN, 0.29V MAX 28V MAX SYSTEM = 470Ω MIN, 2W MIN OR 2.4KΩ MIN, 0.5W/MIN

ISSUE MOD NO REASON INITIAL DATE
 A INTRODUCTION RSK - 11/09/2021

Independent Sounder & Beacon Activation (Remove Link Wires)

Single Stage Configuration	Two Stage Configuration	Three/Four Stage Configuration
Line Monitoring	Common Positive	Common Positive
Stage 1: Apply Power to Stage 1 +ve & Stage 1 -ve	Stage 1: Apply Power to Stage 1 -ve & Common +ve Stage 2: Apply Power to Stage 1 -ve, Stage 2 -ve & Common +ve	Stage 1: Apply Power to Stage 1 -ve & Common +ve Stage 2: Apply Power to Stage 1 -ve, Stage 2 -ve & Common +ve Stage 3: Apply Power to Stage 1 -ve, Stage 3 -ve & Common +ve Stage 4: Apply Power to Stage 1 -ve, Stage 2 -ve, Stage 3 -ve & Common +ve
Config.: 5a	Config.: 5b	Config.: 5c



<p>DRAWING TO BE RELEASED TO ISO 10111:1983 GEOMETRIC TOLERANCES TO ISO 1101:1983 UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS IN MILLIMETERS</p>	<p>DRAWN R. S. RAIT</p>	<p>DATE 16/03/2021</p>	<p>SURFACE FINISH</p>	<p>WEIGHT (KG)</p>	<p>ALL DIMENSIONS IN MM IF IN QUOTE ASK - DO NOT SCALE</p>
<p>STANDARDS ALERT/ARM RANGE</p>	<p>CHECKED B. ISARD</p>	<p>DATE 16/03/2021</p>	<p>MATERIAL</p>	<p>THIS DRAWING AND ANY INFORMATION OR DESCRIPTIVE MATTER THEREIN IS UNCLASSIFIED IN COMPLIANCE WITH THE NATIONAL SECURITY INFORMATION ACT AND IS RELEASED TO THE PUBLIC. THE HOLDING COMPANY MAY MANUFACTURE OR REPRODUCE THIS DRAWING FOR OTHER PURPOSES WITHOUT THEIR WRITTEN CONSENT. BIRCHFIELD ELECTRONICS LTD AS PER LATEST DATE OF ISSUE SHOWN ABOVE</p>	<p>TITLE AL100X AL105 & DL105 DC COMBINED SOUNDER & XENON WIRING DIAGRAMS</p>
	<p>APPROVED R. N. POTTS</p>	<p>DATE 16/03/2021</p>	<p>ALTERNATIVE MATERIAL</p>	<p>SCALE NTS</p>	<p>SHEET 2 OF 2 DRAWING NUMBER D218-06-201</p>

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							A		INTRODUCTION RSK - 16/04/2021



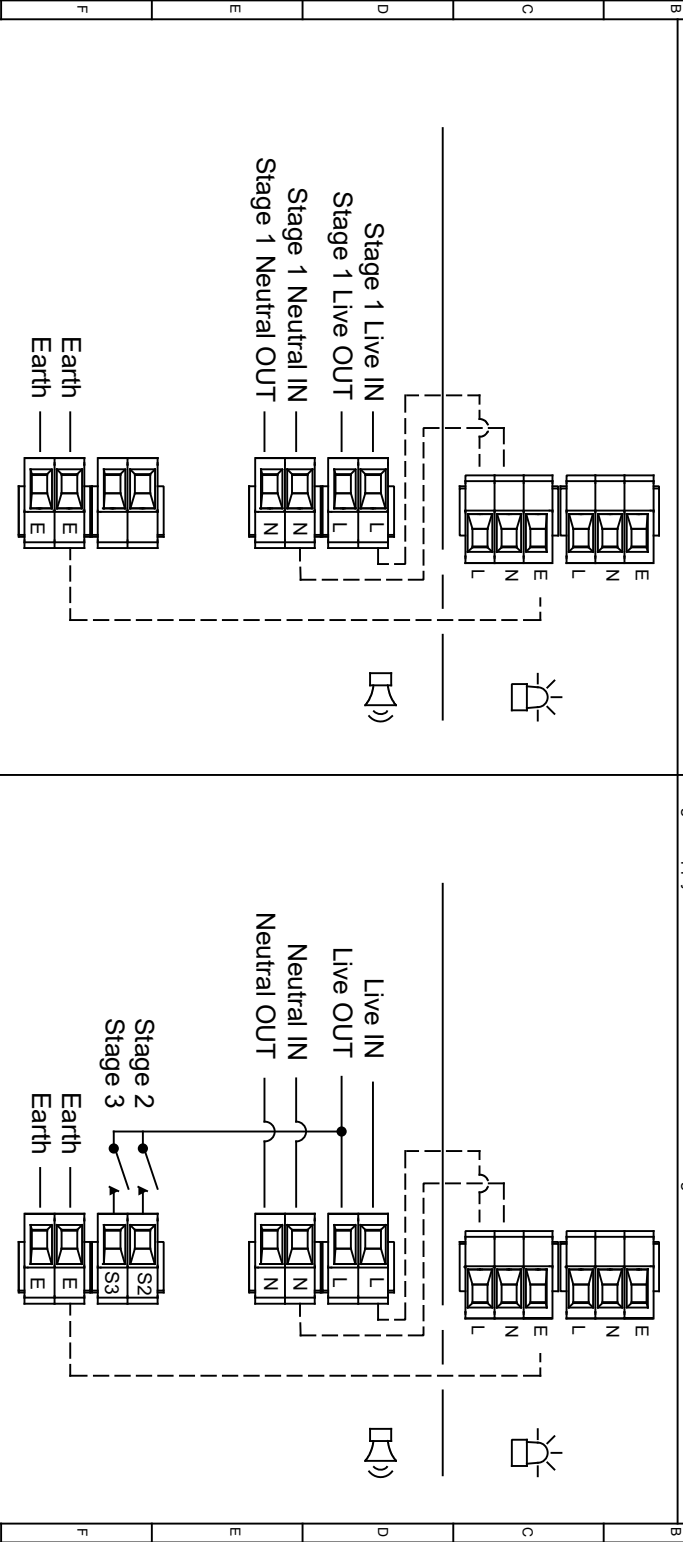
Linked Sounder & Beacon Activation (Default)

Single Stage Configuration Config.: 1a1 Three/Four Stage Configuration Config.: 1b

Stage 1: Apply Power to Stage 1 Live & Stage 1 Neutral Stage 1: Apply Power to Live & Neutral

Stage 2: Apply Power to Live & Neutral & connect Stage 2 to Live

Stage 3: Apply Power to Live & Neutral & connect Stage 3 to Live



DRAWING TO BE ENRAGED TO ISO 1011:1983 GEOMETRIC TOLERANCES TO ISO 1101:1983 ANGULAR DIMENSIONAL TOLS		DRAWN R. S. RAIT		DATE 16/03/2021	SURFACE FINISH		WEIGHT (KG)	THIS DRAWING AND ANY INFORMATION OR DESCRIPTIVE MATTER THEREIN IS UNMUTATED IN COPY REPRODUCED SYSTEMS UNLESS THE WHOLE OR ANY EXTRACTION MAY MANUFACTURING OR TENDERING PURPOSES WITHOUT THEIR WRITTEN CONSENT. BIRCHWOOD ELECTRICAL SERVICES LTD. AS PER LATEST DATE OF ISSUE SHOWN ABOVE		ALL DIMENSIONS IN MM IF IN POINT 'ASK' DO NOT SCALE		TITLE: AL 100X, AL 105 & DL 105 COMBINED SOUNDER & XENON WIRING DIAGRAMS		SCALE: 1 OF 2		DRAWING NUMBER D218-06-205	
STANDARDS ALERT/ALARM RANGE		CHECKED B. ISARD		DATE 16/03/2021	ALTERNATIVE MATERIAL			©									
APPROVED R. N. POTTS				DATE 16/03/2021													

Stage 1 Set DIP SW 1 Tone No.	Tone Description	Tone Visual	Stage 1 & 2 DIP SW 1/2 Settings 1 2 3 4 5 6	Stage 3 Set DIP SW 1 (S3)	Stage 4 Set DIP SW 1 (S2 + S3)
1	1000Hz PFEER Toxic Gas		0 0 0 0 0 0	2	44
2	1200/500Hz @ 1Hz DIN /PFEER P.T.A.P.		1 0 0 0 0 0	3	44
3	1000Hz @ 0.5Hz(1s on, 1s off) PFEER Gen. Alarm		0 1 0 0 0 0	2	44
4	1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s NF C 48-265		1 1 0 0 0 0	24	1
5	544Hz(100mS)/440Hz (400mS) NF S 32-001		0 0 1 0 0 0	19	1
6	1500/500Hz - (0.5s on, 0.5s off) x3 + 1s gap AS4428		1 0 1 0 0 0	44	1
7	500-1500Hz Sweeping 2 sec on 1 sec off AS4428		0 1 1 0 0 0	44	1
8	500/1200Hz @ 0.26Hz (3.3son, 0.5s off) Netherlands - NEN 2575		1 1 1 0 0 0	24	35
9	1000Hz (1s on, 1s off)x7 + (7s on, 1s off) IMO Code 1a		0 0 0 1 0 0	34	1
10	1000Hz (1s on, 1s off)x7 + (7s on, 1s off) IMO Code 1a		1 0 0 1 0 0	34	1
11	420Hz(0.5s on, 0.5s off)x3 + 1s gap ISO 8201 Temporal Pattern		0 1 0 1 0 0	1	8
12	1000Hz(0.5s on, 0.5s off)x3 + 1s gap ISO 8201 Temporal Pattern		1 1 0 1 0 0	1	8
13	422/775Hz - (0.85 on, 0.5 off) x3 + 1s gap NFPA - Temporal Coded		0 0 1 1 0 0	1	8
14	1000/2000Hz @ 1Hz Singapore		1 0 1 1 0 0	3	35
15	300Hz Continuous (f=300)		0 1 1 1 0 0	24	1
16	440Hz Continuous (f=440)		1 1 1 1 0 0	24	1
17	470Hz Continuous (f=470)		0 0 0 0 1 0	24	8
18	500Hz Continuous IMO code 2 (Low) (f=500)		1 0 0 0 1 0	24	8
19	554Hz Continuous (f=554)		0 1 0 0 1 0	24	8
20	660Hz Continuous (f=660)		1 1 0 0 1 0	24	35
21	800Hz IMO code 2 (High) (f=800)		0 1 0 1 0 0	24	35
22	1200Hz Continuous (f=1200)		1 0 1 0 1 0	24	35
23	2000Hz Continuous (f=2000)		0 1 1 0 1 0	3	35
24	2400Hz Continuous (f=2400)		1 1 1 0 1 0	20	35
25	440Hz @0.83Hz (50 cycles/minute) Intermittent (f=440, a=0.6, b=0.6)		0 0 0 1 1 0	44	8
26	470Hz @0.9Hz - 1.1s Intermittent (f=470, a=0.55, b=0.55)		1 0 0 1 1 0	44	8
27	470Hz @5Hz - (5 cycles/second) Intermittent (f=470, a=0.1, b=0.1)		0 1 0 1 1 0	44	8
28	544Hz @ 1.14Hz - 0.875s Intermittent (f=470, a=0.43, b=0.44)		1 1 0 1 1 0	24	8
29	655Hz @ 0.875Hz Intermittent (f=655, a=0.57, b=0.57)		0 0 1 1 1 0	24	8
30	660Hz @0.28Hz - 1.8sec on, 1.8sec off Intermittent (f=660, a=1.8, b=1.8)		1 0 1 1 1 0	24	8
31	660Hz @3.34Hz - 150mS on, 150mS off Intermittent (f=660, a=0.15, b=0.15)		0 1 1 1 1 0	24	8
32	745Hz @ 1Hz Intermittent (f=745, a=0.5, b=0.5)		1 1 1 1 1 0	24	8
33	800Hz - 0.25sec on, 1 sec off Intermittent (f=800, a=0.25, b=1)		0 0 0 0 0 1	24	8
34	800Hz @ 2Hz IMO code 3.a (High) Intermittent (f=800, a=0.25, b=0.25)		1 0 0 0 0 1	24	19
35	1000Hz @ 1Hz Intermittent (f=1000, a=0.5, b=0.5)		0 1 0 0 0 1	24	19
36	2400Hz @ 1Hz Intermittent (f=2400, a=0.5, b=0.5)		1 1 0 0 0 1	24	19
37	2900Hz @ 5Hz Intermittent (f=2900, a=0.1, b=0.1)		0 0 1 0 0 1	24	19
38	363/518Hz @ 1Hz Alternating (f=363, f1=518, a=0.1)		1 0 1 0 0 1	8	19
39	450/500Hz @ 2Hz Alternating (f=450, f1=500, a=0.25)		0 1 1 0 0 1	8	19
40	554/440Hz @ 1Hz Alternating (f=440, f1=554, a=0.5)		1 1 1 0 0 1	24	19
41	554/440Hz @ 0.625Hz Alternating (f=440, f1=554, a=0.8)		0 0 0 1 0 1	8	19
42	561/760Hz @0.83Hz (50 cycles/minute) Alternating (f=561, f1=760, a=0.6)		1 0 0 1 0 1	8	19
43	780/600Hz @ 0.96Hz Alternating (f=600, f1=780, a=0.52)		0 1 0 1 0 1	8	19
44	800/1000Hz @ 2Hz Alternating (f=800, f1=1000, a=0.25)		1 1 0 1 0 1	24	19
45	970/800Hz @ 2Hz Alternating (f=800, f1=970, a=0.25)		0 0 1 1 0 1	8	19
46	800/1000Hz @ 0.875Hz Alternating (f=800, f1=1000, a=0.57)		1 0 1 1 0 1	24	19
47	2400/2900Hz @ 2Hz Alternating (f=2400, f1=2900, a=0.25)		0 1 1 1 0 1	24	19
48	500/1200Hz @ 0.3Hz Sweeping (f=500, f1=1200, a=3.34)		1 1 1 1 0 1	24	12
49	560/1055Hz @ 0.18Hz Sweeping (f=560, f1=1055, a=5.47)		0 0 0 0 1 1	24	12
50	560/1055Hz @ 3.3Hz Sweeping (f=560, f1=1055, a=0.3)		1 0 0 0 1 1	24	12
51	600/1250Hz @ 0.125Hz Sweeping (f=600, f1=1250, a=8)		0 1 0 0 1 1	24	12
52	660/1200Hz @ 1Hz Sweeping (f=660, f1=1200, a=1)		1 1 0 0 1 1	24	12
53	800/1000Hz @ 1Hz Sweeping (f=800, f1=1000, a=1)		0 1 0 0 1 1	24	12
54	800/1000Hz @ 7Hz Sweeping (f=800, f1=1000, a=0.14)		1 0 0 0 1 1	24	12
55	800/1000Hz @ 50Hz Sweeping (f=800, f1=1000, a=0.02)		0 1 0 0 1 1	24	12
56	2400/2900Hz @ 7Hz Sweeping (f=2400, f1=2900, a=0.14)		1 1 0 0 1 1	24	12
57	2400/2900Hz @ 1Hz Sweeping (f=2400, f1=2900, a=1)		0 0 0 1 1 1	24	12
58	2400/2900Hz @ 50Hz Sweeping (f=2400, f1=2900, a=0.02)		1 0 0 1 1 1	24	12
59	2500/3000Hz @ 2Hz Sweeping (f=2500, f1=3000, a=0.5)		0 1 0 1 1 1	24	12
60	2500/3000Hz @ 7.7Hz Sweeping (f=2500, f1=3000, a=0.13)		1 1 0 1 1 1	24	12
61	800Hz Motor Siren (f=800, a=1.6)		0 0 1 1 1 1	24	12
62	1200Hz Motor Siren (f=1200, a=2)		1 0 1 1 1 1	24	12
63	2400Hz Motor Siren (f=2400, a=1.7)		0 1 1 1 1 1	24	12
64	Simulated Bell		1 1 1 1 1 1	21	12

