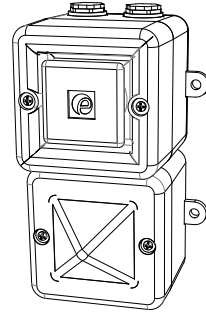


NOTICE D'INSTALLATION & D'UTILISATION

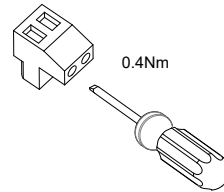
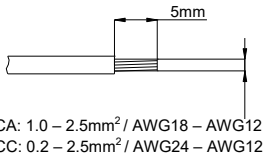
Combiné TONAFLASH® LED TL100HV2

- 40°C à +66°C (-40°F à 151°F)
- Type 3R / 13 (IP66, Testé indépendamment selon EN60529:1991)
- 0.46Kg (1.01lb)
- CE, Toutes les versions sont "UL Listed"



Référence	Tension Nominal	Tolérance (Tension)	Courant Nominal Sirène*	Courant Nominal Feu*	Pression sonore nominale	Pression sonore max.	Pression sonore moyenne
TL100HV2024	12 V cc	10-14Vcc	17mA	79.5mA	101.6dB(A) Son No. 44 @ 1m	110dB(A) Son No. 4 @ 1m	102.3dB(A) Tous les sons @1m
	24V cc	16-33Vcc (Regulated)	33.5mA	87mA			
TL100HV2048	48V cc	48-60Vcc	113mA	60mA			
TL100HV2230	48V ca	48 - 260Vca 50/60Hz	42.5mA	60mA			
	115V ca		25mA	34mA			
	230V ca		17mA	19mA			

*Courant nominal à la tension nominale, Son No. 1 / Flash 1Hz



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.

Attenzione: L'installazione deve essere eseguita da un elettricista in conformità con i codici e le normative più recenti.

Atención: La instalación debe ser realizada por un electricista de acuerdo con los últimos códigos y regulaciones.

Atenção: A instalação deve ser realizada por um eletricista de acordo com os códigos e regulamentos mais recentes.

ВНИМАНИЕ: установка должна выполняться электриком в соответствии с последними нормами и правилами.

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.

Attenzione: scollegare dall'alimentazione prima dell'installazione o dell'assistenza per evitare scosse elettriche.

Atención: desconéctelo de la fuente de alimentación antes de la instalación o el servicio para evitar descargas eléctricas.

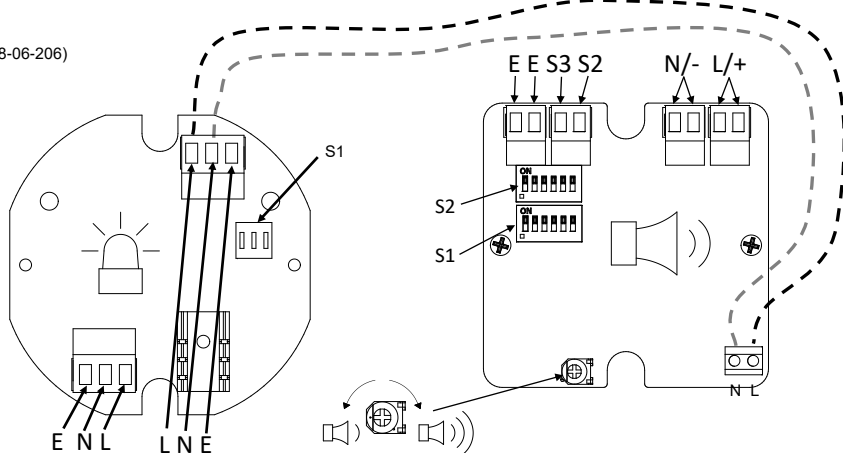
Atenção: Desconecte da fonte de alimentação antes da instalação ou serviço para evitar choque elétrico

ВНИМАНИЕ: отключите от источника питания перед установкой или обслуживанием, чтобы предотвратить поражение электрическим током.



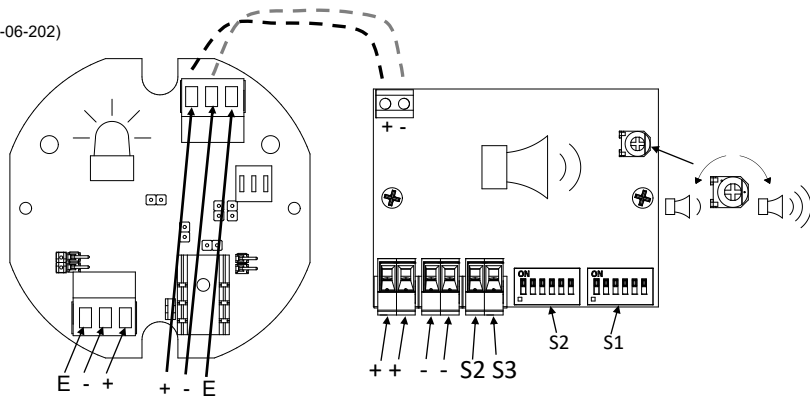
CA

(Voir D218-06-206)



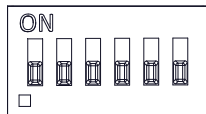
CC

(Voir D218-06-202)

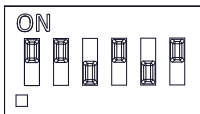


(CA & CC, Voir D221-95-001)

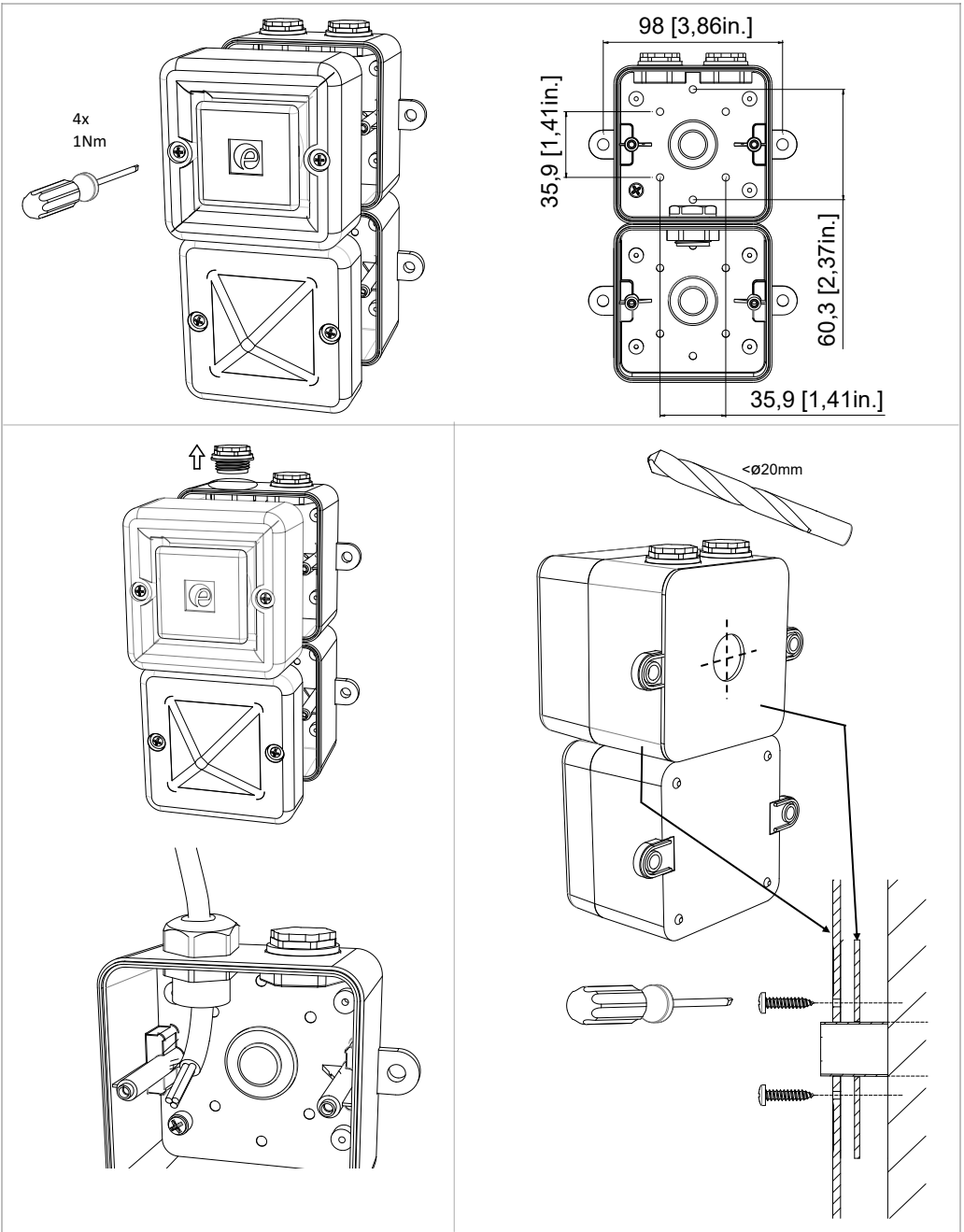
Par défaut = S2 - Son No. 1



Par défaut = S1 - Son No. 44

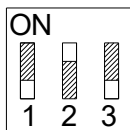


NOTICE D'INSTALLATION & D'UTILISATION
Combiné TONAFLASH® LED TL100HV2



S1 - Modes de fonctionnement du flash LED (CA & CC)

Le micro-interrupteur DIP permet de sélectionner le mode de fonctionnement du flash



Micro interrupteur DIP en position 1-OFF, 2-ON,3-OFF (0 1 0).

Cela correspond au mode Flash 1 Hz. Voir tableau ci-contre pour les autres modes.

Micro interrupteur	Mode de fonctionnement
0 0 0	Fixe
1 0 0	Clignotant
0 1 0	Flash 1Hz*
1 1 0	Flash 1.5Hz*
0 0 1	Double Flash
1 0 1	Triple Flash
0 1 1	Flash 2Hz*
1 1 1	Flash - Temporel

- 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:

AL100HDC: -40°C to +55°C / -40°F to +131°F

AL100HAC: -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
- 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
AL100HDC024	12V dc	10-14Vdc	79.5mA	17mA	168mA	125mA
	24V dc	16-33Vdc (Regulated)	87mA	33.5mA	183mA	
AL100HDC048	48V dc	48-60Vdc	60mA	113mA	115mA	
AL100HAC230	48V ac	48 - 260Vac 50/60Hz	60mA	42.5mA	166mA	42.5mA
	115V ac		34mA	25mA		
	230V ac		19mA	17mA		

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

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FIRE INSTRUCTION & SERVICE MANUAL

AL100H Range Alert/Aight Combined Sounder LED Beacons

UL464 / CAN/ULC-S525 & UL1638 / CAN/ULC-S526

Model: AL100HDC



Attention: Installation must be carried out by an electrician in compliance with the National Electrical Code, NFPA 70, and the National Fire Alarm Signaling Code, NFPA 72 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, et le code national d'alarme incendie et de signalisation NFPA 72 ou CSA 22.1 Code canadien de l'électricité, première partie, norme de sécurité relative aux installations électriques, Section 32



Attention: Disconnect from power source before installation or service to prevent electric shock / Débranchez-le de la source d'alimentation avant l'installation ou l'entretien pour éviter tout choc électrique.



Attention: Do not paint / Ne pas Peinturer

- -40°C to +66°C / -40°F to +151°F
- Units can be mounted using the 2-off ø6mm holes in the mounting lugs or through the back of the housing using the supplied gasket seal.
- AL100HDC024 is approved for use as an Audible & Visual signal appliance for fire alarm use – Private Mode. (UL464 & CAN/ULC-S525 & UL1638 & CAN/ULC-S526).
- AL100HDC024 produces a minimum sound pressure level of US: 79.55dB(A); CA: 85.2dB(A) at 10 feet (figures @ worst case 10Vdc).
- AL100HDC024 produces a minimum sound pressure level of US: 88.52dB(A); CA: 93.7dB(A) at 10 feet (@24Vdc)
- For Fire Alarm applications, the Sounder Volume must be at the highest setting, (see volume control section). For fire alarm use, Tone 12 as shown below must be selected:

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)
12	1000Hz(0.5s on, 0.5s off)x3 + 1s gap ISO 8201 Temporal Pattern		1 1 0 1 0 0	1	8

- For private mode fire alarm use, the beacons must only be fitted with clear plastic lens covers and must be set to one of the certified flash patterns of 1Hz, 1.5Hz or 2Hz.
- For light output ratings see below:

On-axis light output rating per UL1638

Model	Intensity (cd) at 1Hz flash rate	Intensity (cd) at 1.5Hz flash rate	Intensity (cd) at 2Hz flash rate
AL100HDC024 (12Vdc Mode)	5.9	5.97	6.35
AL100HDC024 (24Vdc Mode)	11.65	12.32	12.38

- Connection Terminals: Pluggable
AC: 1.0 - 2.5mm² / AWG18 - AWG12
DC: 0.2 - 2.5mm² / AWG24 - AWG12
- Terminal Tightening torque 0.4Nm
- To maintain Ingress Protection, cable entries must be fitted with suitably rated cable glands or stopping plugs
- Units can be located indoor or outdoor wet use, wall or ceiling mounted and there are no limitations on orientation
- Factory finishes are not intended to be modified

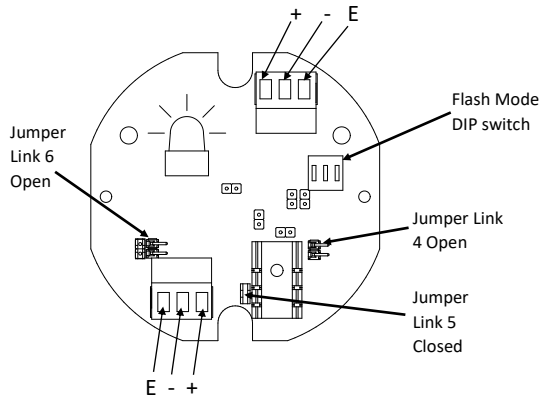
Surge current ratings for use in fire alarm systems

Model	Nominal Voltage	Voltage Range	Flash Rate	Initial Peak (mA)		Initial RMS (mA)	
				Beacon	Sounder	Beacon	Sounder
AL100HDC024	12Vdc	10 to 14Vdc	1 Hz	202	298	172	56.4
			1.5Hz	216		172	
			2Hz	224		172	
	24Vdc	16 to 33Vdc (Regulated)	1 Hz	950	204.3		
			1.5Hz	968.5	206.7		
			2Hz	969	205.2		

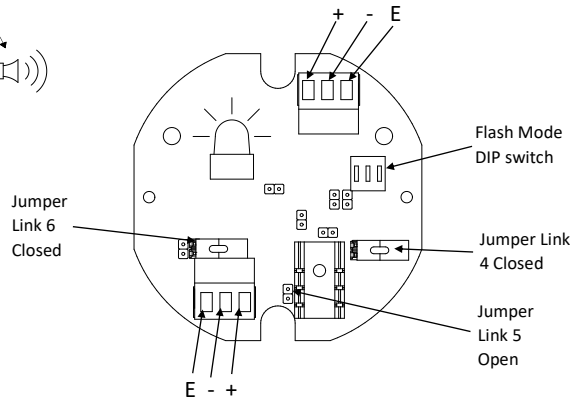
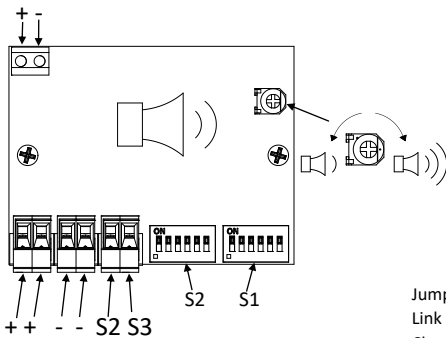
AL100HDC024 Sounder Directional Characteristics for Canadian Fire CAN/ULC-S525 at 10 feet

Horizontal Axis				Vertical Axis			
Angle	OSPL	Angle	OSPL	Angle	OSPL	Angle	OSPL
Ref. 90°	92.6 dB(A)	Ref. 90°	92.6 dB(A)	Ref. 90°	93 dB(A)	Ref. 90°	93 dB(A)
149°	-3 dB(A)	32°	-3 dB(A)	148°	-3 dB(A)	33°	-3 dB(A)
153°	-6 dB(A)	28°	-6 dB(A)	151.5°	-6 dB(A)	29°	-6 dB(A)
180°	87.2 dB(A)	0°	87 dB(A)	180°	87.2 dB(A)	0°	86.4 dB(A)

AL100HDC024 Beacon PCBA (24VDC Mode – Default Setting)





AL100HDC024 Sounder PCBA

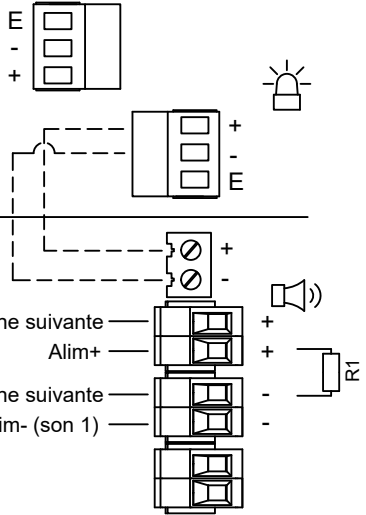
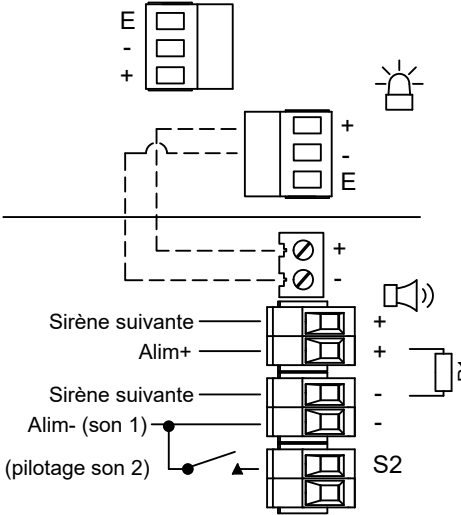
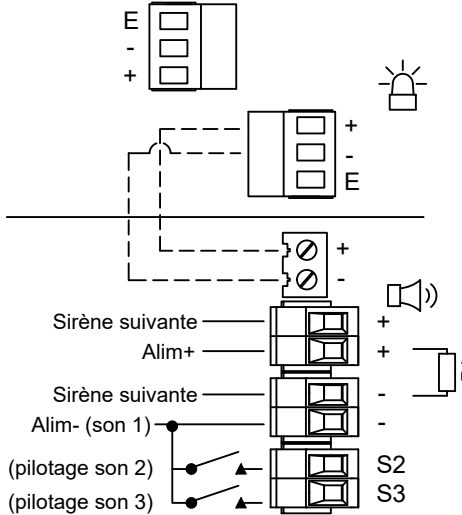



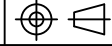
AL100HDC024 Beacon PCBA (12VDC Mode – Customer to Set)



Jumper Setting	Jumper Link 4	Jumper Link 5	Jumper Link 6
24VDC Mode	Open	Closed	Open
12VDC Mode	Closed	Open	Closed

1	2	3	4	5	6	7	8	9	10		
							ISSUE	MOD No.	REASON - INITIAL - DATE		
<p>— — CÂBLAGE ENTRE LE FEU & LA SIRÈNE FAIT EN USINE</p>							 <p>OPTION: RÉSISTANCE POUR LA SURVEILLANCE DE LIGNE : NON FOURNIE. VALEURS MINIMALES RECOMMANDÉES: 14V MAX = 120Ω MIN, 2W MIN OU 1KΩ MIN, 0,5W MIN 28V MAX = 470Ω MIN, 2W MIN OU 2,4KΩ MIN, 0,5W MIN</p>		<p>CONTACTS POUR LA SÉLECTION DES SONS NON INCLUS</p> 		<p>INTRODUCTION RSR - 25/06/2021</p>

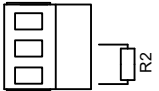
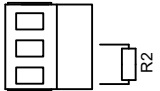
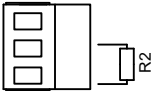



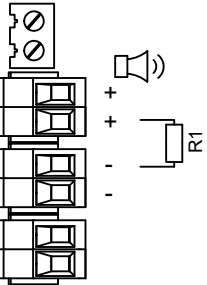
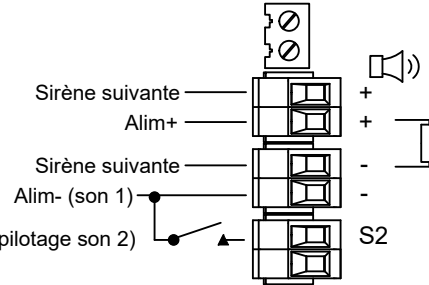
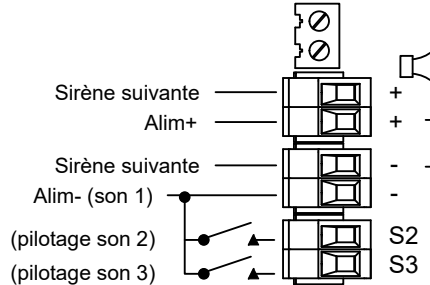
Activation simultanée de la sirène et du feu (par défaut)


Configuration pour 1 son		Config.: 1a	Configuration pour 2 sons		Config.: 1b	Configuration pour 3 et 4 sons		Config.: 1c
Surveillance de ligne		Alim+ commune		Alim+ commune		Alim+ commune		
Son 1 : alimenter Alim+ et Alim- (son 1)		Son 1 : alimenter Alim+ et Alim- (son 1) Son 2 : alimenter Alim+ et Alim- (son 1) et connecter Alim- (son 1) à S2		Son 1 : alimenter Alim+ et Alim- (son 1) Son 2 : alimenter Alim+ et Alim- (son 1) et connecter Alim- (son 1) à S2 Son 3 : alimenter Alim+ et Alim- (son 1) et connecter Alim- (son 1) à S3 Son 4 : alimenter Alim+ et Alim- (son 1) et connecter Alim- (son 1) à S2 et S3				
								

G	<p>DRAWING TO BS8888:2000 GEOMETRIC TOLERANCES TO ISO1101:1983 LINEAR DIMENSIONAL TOLS ANGULAR DIMENSIONAL TOLS</p>	<p>DRAWN R.S.RAIT</p>	<p>DATE 25/06/2021</p>	<p>SURFACE FINISH</p>	<p>WEIGHT (Kg)</p>	<p>THIS DRAWING AND ANY INFORMATION OR DESCRIPTIVE MATTER THEREIN IS COMMUNICATED IN CONFIDENCE AND IS THE COPYRIGHT PROPERTY OF EUROPEAN SAFETY SYSTEMS LTD. NEITHER THE WHOLE OR ANY EXTRACT MAY BE DISCLOSED, LOANED, COPIED OR USED FOR MANUFACTURING OR TENDERING PURPOSES WITHOUT THEIR WRITTEN CONSENT.</p> <p>EUROPEAN SAFETY SYSTEMS LTD. AS PER LATEST DATE OF ISSUE SHOWN ABOVE</p>	 <p>EUROPEAN SAFETY SYSTEMS LTD IMPRESS HOUSE MANSELL ROAD LONDON W3 7QH WWW.E2S.COM</p>	<p>ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE</p>		 <p>A3</p>
	<p>STANDARDS ALERTALARM RANGE</p>	<p>CHECKED B.ISARD</p>	<p>DATE 25/06/2021</p>	<p>MATERIAL</p>	<p>ALTERNATIVE MATERIAL</p>			<p>TITLE AL100H, AL105NH & DL105H DC COMBINED SOUNDER & LED WIRING DIAGRAMS</p>		
	<p>APPROVED R.N.POTTS</p>	<p>DATE 25/06/2021</p>	<p>SCALE NTS</p>	<p>SHEET 1 OF 2</p>	<p>DRAWING NUMBER D218-06-252</p>					

1	2	3	4	5	6	7	8	9	10
<p>OPTION: RÉSISTANCE POUR LA SURVEILLANCE DE LIGNE : NON FOURNIE. VALEURS MINIMALES RECOMMANDÉES: 14V MAX = 1200 MIN, 2W MIN OU 1KG MIN, 0,5W MIN 28V MAX = 4700 MIN, 2W MIN OU 2,4KG MIN, 0,5W MIN</p> 							<p>ISSUE MOD No. REASON - INITIAL - DATE</p> <p>A INTRODUCTION RSR - 25/06/2021</p>		
<p>CONTACTS POUR LA SÉLECTION DES SONS NON INCLUS</p> 									


Activation indépendante de la sirène et du feu (retirer le câblage entre le feu et la sirène)

Configuration pour 1 son		Config.: 5a	Configuration pour 2 sons		Config.: 5b	Configuration pour 3 et 4 sons		Config.: 5c
Surveillance de ligne			Alim+ commune			Alim+ commune		
Son 1 : alimenter Alim+ et Alim- (son1)			Son 1 : alimenter Alim+ et Alim- (son 1) Son 2 : alimenter Alim+ et Alim- (son 1) et connecter Alim- (son 1) à S2			Son 1 : alimenter Alim+ et Alim- (son 1) Son 2 : alimenter Alim+ et Alim- (son 1) et connecter Alim- (son 1) à S2 Son 3 : alimenter Alim+ et Alim- (son 1) et connecter Alim- (son 1) à S3 Son 4 : alimenter Alim+ et Alim- (son 1) et connecter Alim- (son 1) à S2 et S3		
<p>Terre ———</p> <p>Alim - ———</p> <p>Alim + ———</p> 			<p>Terre ———</p> <p>Alim - ———</p> <p>Alim + ———</p> 			<p>Terre ———</p> <p>Alim - ———</p> <p>Alim + ———</p> 		
<p>Feu Suivant (Alim +)</p> <p>Feu Suivant (Alim -)</p> <p>Feu Suivant (Terre)</p> 			<p>Feu Suivant (Alim +)</p> <p>Feu Suivant (Alim -)</p> <p>Feu Suivant (Terre)</p> 			<p>Feu Suivant (Alim +)</p> <p>Feu Suivant (Alim -)</p> <p>Feu Suivant (Terre)</p> 		
<p>Sirène suivante</p> <p>Alim+ ———</p> <p>Sirène suivante</p> <p>Alim- (son 1) ———</p> 			<p>Sirène suivante</p> <p>Alim+ ———</p> <p>Sirène suivante</p> <p>Alim- (son 1) ———</p> <p>(pilotage son 2)</p> 			<p>Sirène suivante</p> <p>Alim+ ———</p> <p>Sirène suivante</p> <p>Alim- (son 1) ———</p> <p>(pilotage son 2)</p> <p>(pilotage son 3)</p> 		

G	<p>DRAWING TO BS8888:2000 GEOMETRIC TOLERANCES TO ISO1101:1983 LINEAR DIMENSIONAL TOLS ANGULAR DIMENSIONAL TOLS</p>	<p>DRAWN DATE</p> <p>R.S.RAIT 25/06/2021</p>	<p>SURFACE FINISH</p> <p>WEIGHT (Kg)</p>	<p>THIS DRAWING AND ANY INFORMATION OR DESCRIPTIVE MATTER THEREIN IS COMMUNICATED IN CONFIDENCE AND IS THE COPYRIGHT PROPERTY OF EUROPEAN SAFETY SYSTEMS LTD. NEITHER THE WHOLE OR ANY EXTRACT MAY BE DISCLOSED, LOANED, COPIED OR USED FOR MANUFACTURING OR TENDERING PURPOSES WITHOUT THEIR WRITER'S CONSENT.</p> <p>EUROPEAN SAFETY SYSTEMS LTD. AS PER LATEST DATE OF ISSUE SHOWN ABOVE</p>	<p>©</p>	<p>ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE</p>		<p>A3</p>		
	<p>STANDARDS</p> <p>ALERTALARM RANGE</p>	<p>CHECKED DATE</p> <p>B.ISARD 25/06/2021</p>	<p>MATERIAL</p>						<p>EUROPEAN SAFETY SYSTEMS LTD IMPRESS HOUSE MANSELL ROAD LONDON W3 7QH WWW.E2S.COM</p>	<p>TITLE AL100H, AL105NH & DL105H DC COMBINED SOUNDER & LED WIRING DIAGRAMS</p>
	<p>APPROVED DATE</p> <p>R.N.POTTS 25/06/2021</p>	<p>ALTERNATIVE MATERIAL</p>	<p>SCALE</p> <p>NTS</p>						<p>SHEET</p> <p>2 OF 2</p>	<p>DRAWING NUMBER</p> <p>D218-06-252</p>

ISSUE	MOD No	REASON - INITIAL - DATE
A		INTRODUCTION RSR - 25/06/2021

— — CÂBLAGE ENTRE LE FEU & LA SIRÈNE
FAIT EN USINE

 CONTACTS POUR LA SÉLECTION
DES SONS NON INCLUS

Activation indépendante de la sirène et du feu (retirer le câblage entre le feu et la sirène)

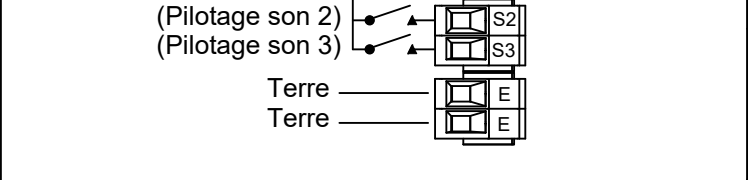
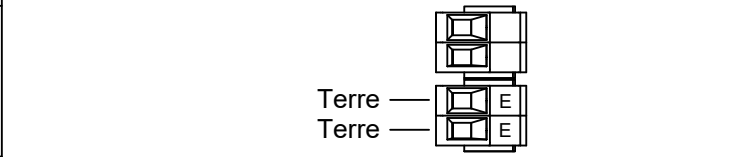
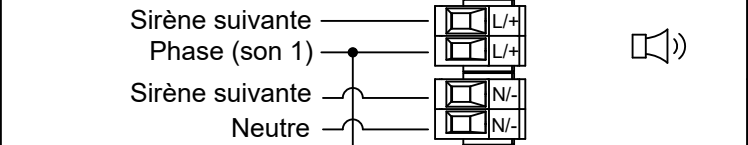
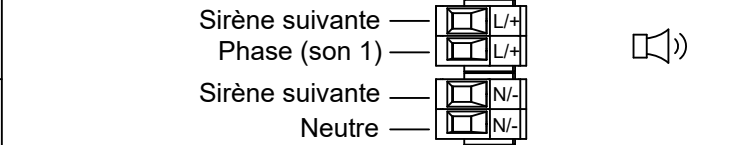
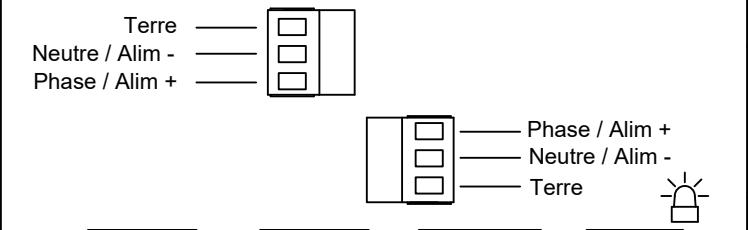
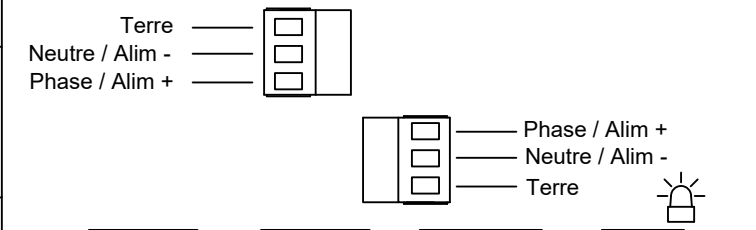
Configuration pour 1 son Config.: 2a Configuration pour 2 et 3 sons Config.: 2b

Son 1 : alimenter Phase (son 1) et Neutre

Son 1 : alimenter Phase (son 1) et Neutre

Son 2 : alimenter Phase (son 1) et Neutre et connecter S2 à Phase (son 1)

Son 3 : alimenter Phase (son 1) et Neutre et connecter S3 à Phase (son 1)



DRAWING TO BS8888:2000 GEOMETRIC TOLERANCES TO ISO1101:1983 LINEAR DIMENSIONAL TOLS ANGULAR DIMENSIONAL TOLS	DRAWN	DATE	SURFACE FINISH	WEIGHT (Kg)
	R.S.RAIT	25/06/2021		
	CHECKED	DATE		
STANDARDS	B.ISARD	25/06/2021	ALTERNATIVE MATERIAL	©
	APPROVED	DATE		
	R.N.POTTS	25/06/2021		
ALERTALARM RANGE				

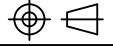
MATERIAL
ALTERNATIVE MATERIAL

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ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE			A3
TITLE AL100H, AL105NH & DL105H AC COMBINED SOUNDER & LED WIRING DIAGRAMS			
SCALE	SHEET	DRAWING NUMBER	
NTS	2 OF 2	D218-06-256	

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 1 0 1 1	24	12
55	800/1000Hz @ 50Hz Sweeping (f=800, f1=1000, a=0.02)		0 1 0 1 0 1	24	12
56	2400/2900Hz @ 7Hz Sweeping (f=2400, f1=2900, a=0.14)		1 1 1 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