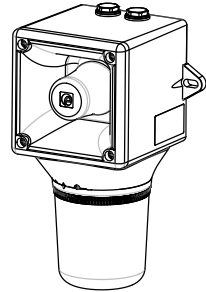


INSTRUCTION & SERVICE MANUAL

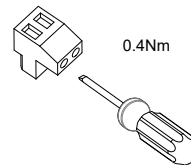
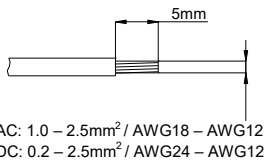
AB105RTH SpectrAlarm Combined Alarm Horn Sounder & Rotating Halogen Beacon

- Sounder unit: Alarm horn sounder: 64 tones, 4 stages
- Rotating Beacon: 20W/25W Halogen
- IP Rating: IP65
- Temp: -40° to + 66°
- Unit weight: 1.15kg DC 1.30kg AC
- CE & UKCA
- 2-off M20 x 1.5 thread entries.



Unit Type Code	Nominal Voltage	Voltage Range	Nominal Sounder Current	Nominal Beacon Current	Nominal SPL	Max SPL	Average SPL
AB105STRDC012	12VDC	10-15Vdc 20W	17mA	1720mA	105.3dB(A) Tone 44 @ 1m	110.9dB(A) Tone 4 @ 1m	105.2dB(A) All tones @1m
AB105STRDC024	24VDC	18-30Vdc 20W	33.5mA	910mA			
AB105STRAC115	115VAC	103.5-126.5Vac 50/60Hz 25W	25mA	216mA			
AB105STRAC230	230VAC	207-253Vac 50/60Hz 25W	17mA	117mA			

Supply voltage variation of +/-10% outside the voltage range is permissible
Nominal current at nominal voltage



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 electricista 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.

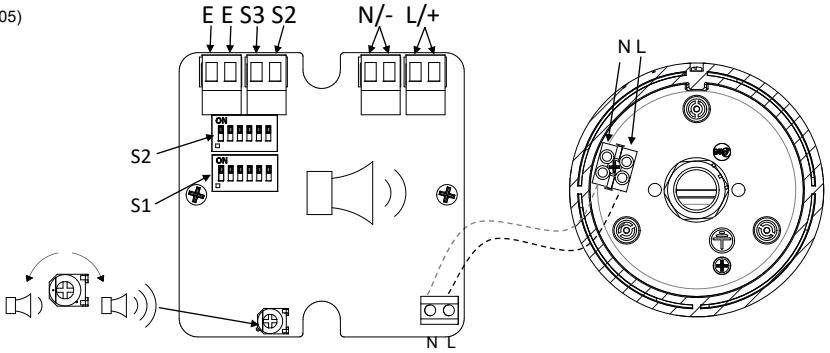
Atenção: Desconecte da fonte de alimentação antes da instalação ou serviço para evitar choque elétrico

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



AC

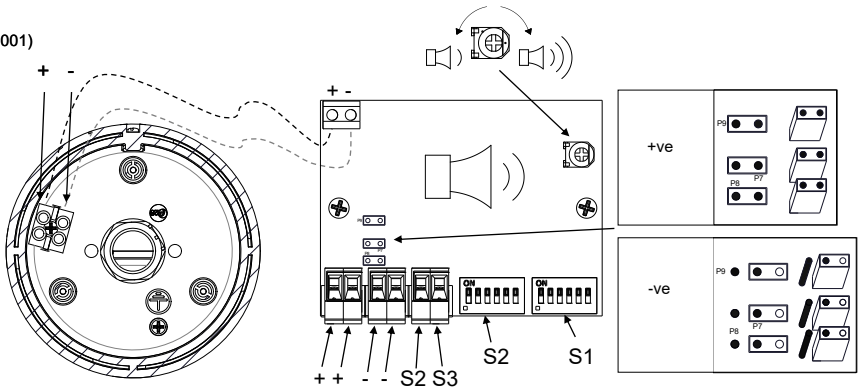
(See D118-06-005)



Note: Beacon pre-wired as default

DC

(See D118-06-001)



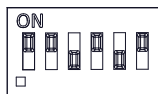
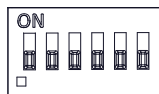
Note: Beacon pre-wired as default.

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

DC (+ve switching) see
D218-95-001)

Default = S2 - Tone 1

Default = S1 - Tone 44



(ON = 1, OFF = 0)

INSTRUCTION & SERVICE MANUAL
AB105RTH SpectrAlarm Combined Alarm Horn Sounder &
Rotating Halogen Beacon



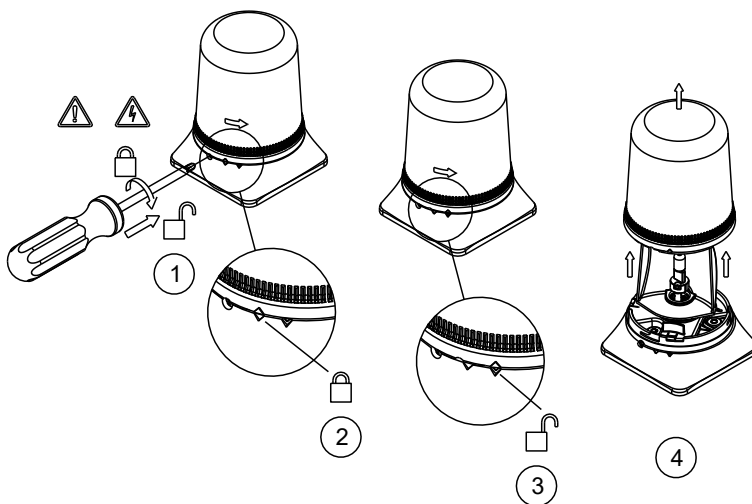
AC Units			
Stage	Alarm tone selection See above Tone table D221-95-001-IS	Wiring Schematic Config. No.	Method of operation as shown in wiring diagram D118-06-005
Stage 1	Use Switch 1 to select Stage 1 alarm tone	1a/2a	Connect Stage 1 Live to terminal 'L/+' and Stage 1 Neutral to terminal 'N/-'
Stage 2	Use Switch 2 to select Stage 2 alarm tone	1b/2b	Connect Stage 1 Live to terminal 'L/+' and Stage 1 Neutral to terminal 'N/-' & connect terminal 'S2' to Stage 1 Live
Stage 3	Pre-determined by Stage 1 selection - see Tone table D221-95-001-IS	1b/2b	Connect Stage 1 Live to terminal 'L/+' and Stage 1 Neutral to terminal 'N/-' & connect terminal 'S3' to Stage 1 Live
Stage 4	Pre-determined by Stage 1 selection - see Tone table D221-95-001-IS	1b/2b	Connect Stage 1 Live to terminal 'L/+' and Stage 1 Neutral to terminal 'N/-' & connect both terminals 'S2' & 'S3' to Stage 1 Live
DC Units			
Stage	Alarm tone selection See above	Wiring Schematic Config. No.	Method of operation as shown in wiring diagram D118-06-001
Common positive (negative switching) mode (Default) Tone table D221-95-001-IS			
Stage 1	Use Switch 1 to select Stage 1 alarm tone	1a/5a	Apply +ve to terminal '+' & -ve to terminal '-'
Stage 2	Use Switch 2 to select Stage 2 alarm tone	1b/5b	Apply +ve to terminal '+' & -ve to terminal '-' and also link terminal S2 to terminal '-'
Stage 3	Pre-determined by Stage 1 selection - see Tone table D221-95-001-IS	1c/5c	Apply +ve to terminal '+' & -ve to terminal '-' and also link terminal S3 to terminal '-'
Stage 4	Pre-determined by Stage 1 selection - see Tone table D221-95-001-IS	1c/5c	Apply +ve to terminal '+' & -ve to terminal '-' and also link S2 and S3 to terminal '-'
Common negative (positive switching) mode - Tone table D218-95-001-IS			
Stage 1	Use Switch 1 to select Stage 1 alarm tone	2a/6a	Apply +ve to terminal S2 & -ve to terminal '-'
Stage 2	Use Switch 2 to select Stage 2 alarm tone	2b/6b	Apply +ve to terminal S3 & -ve to terminal '-'
Stage 3	Pre-determined by Stage 1 selection - see Tone table D218-95-001-IS	2c/6c	Apply +ve to terminal '+' & -ve to terminal '-'

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. Note: For forward voltage polarity line monitoring the maximum voltage is 4Vdc. For monitoring voltage, the installer should allow for system cabling and voltage drops

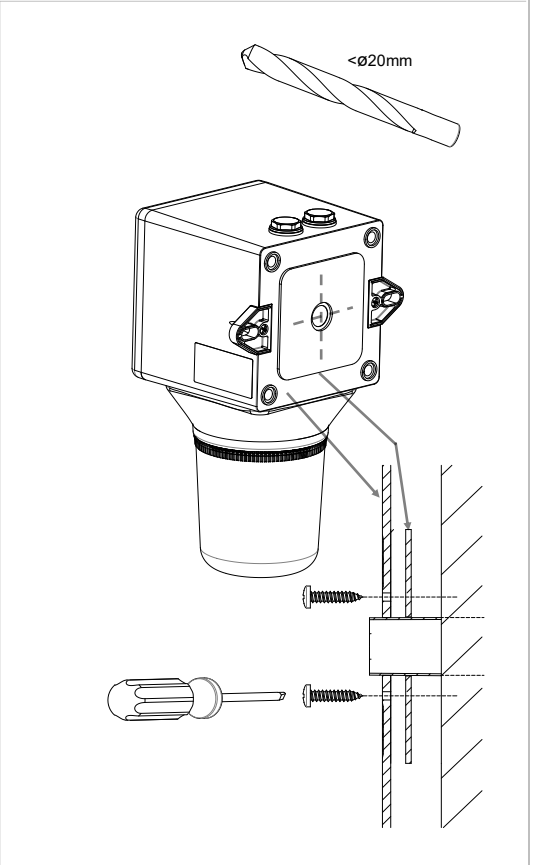
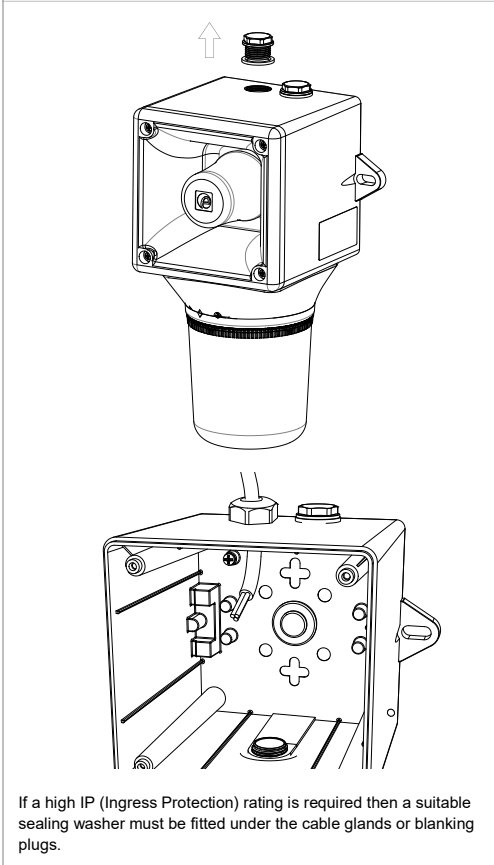
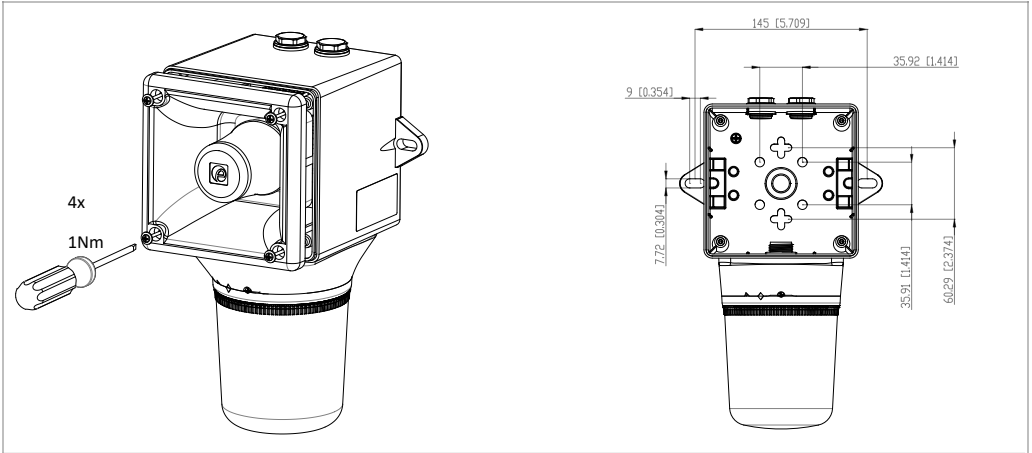
The Beacon lens cover is field replaceable.

To change the lens cover, rotate 1-off M4 pozi head screw clockwise, remove the existing lens by rotating the lens to align with the unlock markings as shown below. Replace the lens cover and rotate to the locked marking position. Rotate the 1-off M4 pozi head fastener anti-clockwise to secure the lens.




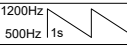
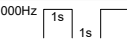
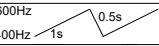
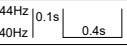
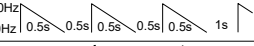
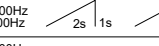
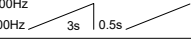
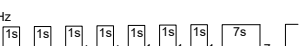
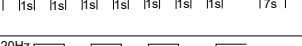
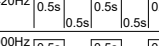
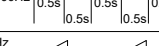
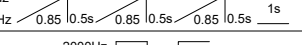
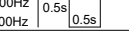

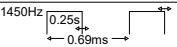
Attention: Lens on unit will be hot allow to cool prior to removal.

INSTRUCTION & SERVICE MANUAL
 AB105RTH SpectrAlarm Combined Alarm Horn Sounder &
 Rotating Halogen Beacon



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

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	2	44
2	1200/500Hz @ 1Hz DIN /PFEER P.T.A.P.		1 0 0 0 0	3	44
3	1000Hz @ 0.5Hz(1s on, 1soff) 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	35
16	440Hz Continuous (f=440)		1 1 1 1 0 0	24	35
17	470Hz Continuous (f=470)		0 0 0 0 1 0	24	35
18	500Hz Continuous IMO code 2 (Low) (f=500)		1 0 0 0 1 0	24	35
19	554Hz Continuous (f=554)		0 1 0 0 1 0	24	35
20	660Hz Continuous (f=660)		1 1 0 0 1 0	24	35
21	800Hz IMO code 2 (High) (f=800)		0 0 1 0 1 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	44	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	8
35	1000Hz @ 1Hz Intermittent (f=1000, a=0.5, b=0.5)		0 1 0 0 0 1	24	8
36	2400Hz @ 1Hz Intermittent (f=2400, a=0.5, b=0.5)		1 1 0 0 0 1	24	8
37	2900Hz @ 5Hz Intermittent (f=2900, a=0.1, b=0.1)		0 0 1 0 0 1	24	8
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 0 1 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 1 0 1 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

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

<p>-VE SWITCHING (DEFAULT) HEADER PINS P7, P8 & P9 NOT CONNECTED</p>							<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>ISSUE</th> <th>MOD No.</th> <th>REASON - INITIAL - DATE</th> </tr> <tr> <td>1</td> <td></td> <td>INTRODUCTION RSR- 08/08/2024</td> </tr> </table>		ISSUE	MOD No.	REASON - INITIAL - DATE	1		INTRODUCTION RSR- 08/08/2024
ISSUE	MOD No.	REASON - INITIAL - DATE												
1		INTRODUCTION RSR- 08/08/2024												
				<p>----- WIRING LINKING BEACON & SOUNDER FACTORY FITTED</p>										

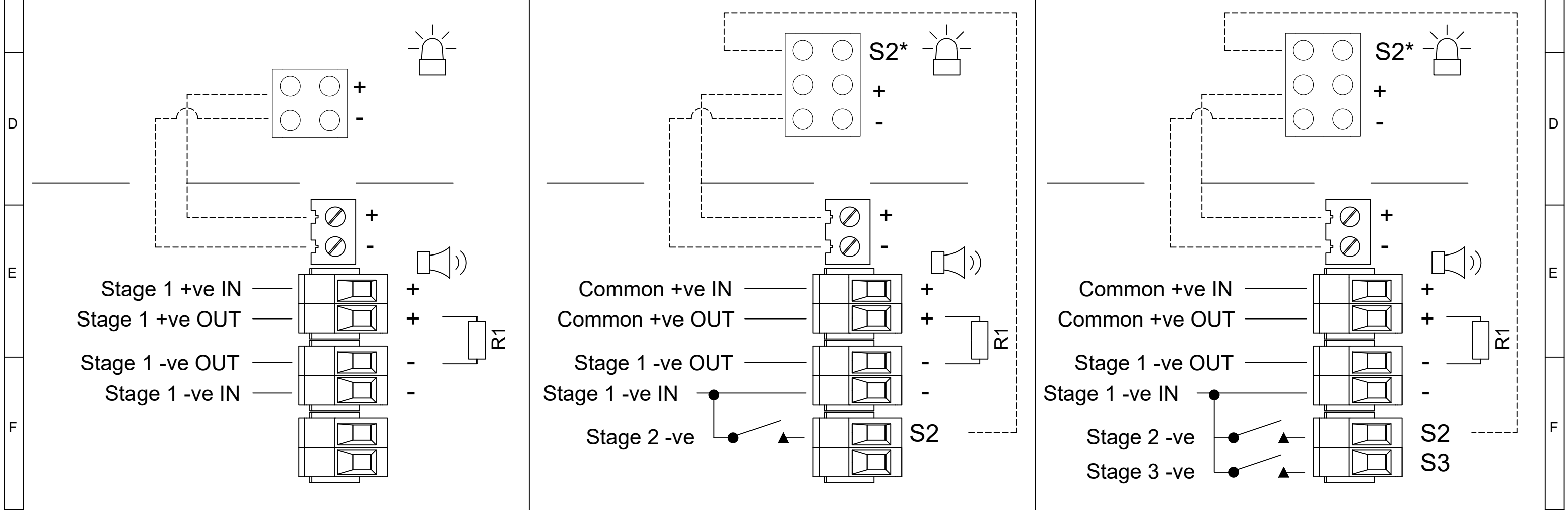
DC configuration -Linked Sounder & Beacon Activation (Default) / -ve Switching (Default P7, P8 & P9 setting)

Single Stage Configuration	Config.: 1a	Two Stage Configuration	Config.: 1b	Three/Four Stage Configuration	Config.: 1c
-----------------------------------	--------------------	--------------------------------	--------------------	---------------------------------------	--------------------

Line Monitoring	Common Positive (-ve Switching)	Common Positive (-ve Switching)
------------------------	--	--

<p>Stage 1: Apply Power to Stage 1 +ve & Stage 1 -ve</p>	<p>Stage 1: Apply Power to Common +ve & Stage 1 -ve Stage 2: Apply Power to Common +ve & Stage 1 -ve & connect Stage 2 -ve to Stage 1 -ve</p>	<p>Stage 1: Apply Power to Common +ve & Stage 1 -ve Stage 2: Apply Power to Common +ve & Stage 1 -ve & connect Stage 2 -ve to Stage 1 -ve Stage 3: Apply Power to Common +ve & Stage 1 -ve & connect Stage 3 -ve to Stage 1 -ve Stage 4: Apply Power to Common +ve & Stage 1 -ve & connect Stage 2 -ve & Stage 3 -ve to Stage 1 -ve</p>
--	---	---

	*Stage 2 not available for RTH beacon	*Stage 2 not available for RTH beacon
--	--	--



DRAWING TO BS8888:2000 GEOMETRIC TOLERANCES TO ISO1101:1983 LINEAR DIMENSIONAL TOLS ANGULAR DIMENSIONAL TOLS	DRAWN J.SPILLER DATE 11/06/2021	SURFACE FINISH WEIGHT (Kg)	MATERIAL	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.	 EUROPEAN SAFETY SYSTEMS LTD IMPRESS HOUSE MANSSELL ROAD ACTON LONDON W3 7QH WWW.E2S.COM	ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE	 A3	
STANDARDS AB105 RANGE	CHECKED R.N.POTTS DATE 11/06/2021	ALTERNATIVE MATERIAL	ALTERNATIVE MATERIAL	© EUROPEAN SAFETY SYSTEMS LTD. AS PER LATEST DATE OF ISSUE SHOWN ABOVE	TITLE AB105 SPECTRAALARM COMBINED SOUNDER & BEACON WIRING SHCEMATIC	SCALE NTS	SHEET 1 OF 4	DRAWING NUMBER D118-06-001

1	2	3	4	5	6	7	8	9	10
							ISSUE	MOD No.	REASON - INITIAL - DATE
							1		INTRODUCTION RSR- 08/08/2024

-VE SWITCHING (DEFAULT)
HEADER PINS P7, P8 & P9 NOT CONNECTED

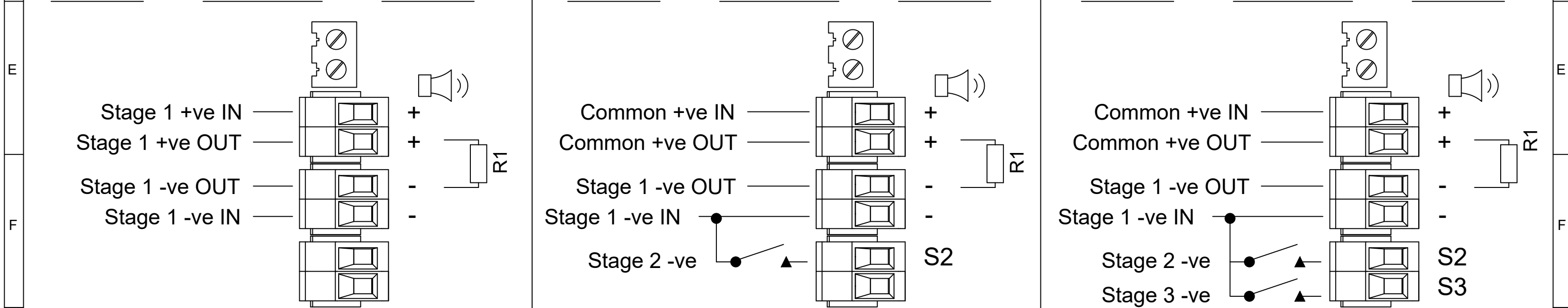
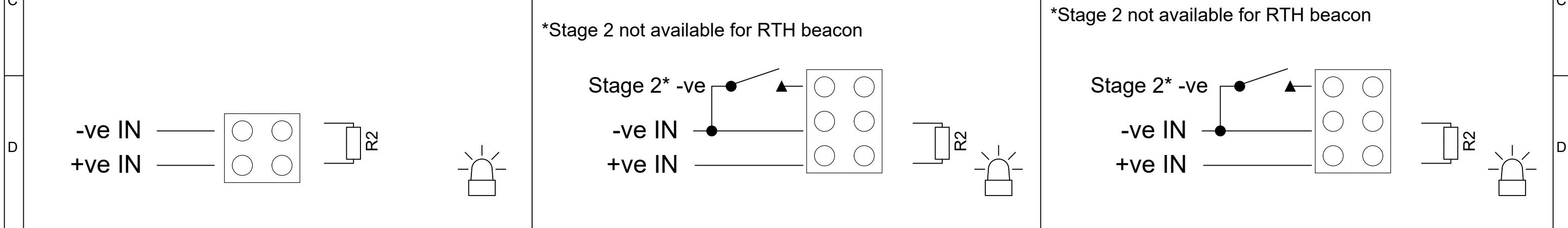
OPTIONAL LINE MONITORING RESISTOR, CUSTOMER SUPPLIED, RECOMMENDED MINIMUM VALUES:
 14V MAX SYSTEM = 120Ω MIN, 2W MIN OR 1KΩ MIN, 0.5W MIN
 28V MAX SYSTEM = 470Ω MIN, 2W MIN OR 2.4KΩ MIN, 0.5W MIN

DC configuration -Independent Sounder & Beacon Activation (Remove Link Wires) / -ve Switching (Default P7, P8 & P9 setting)

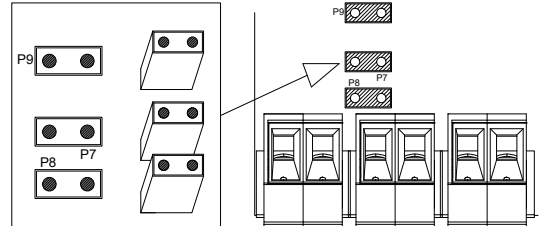

Single Stage Configuration	Config.: 2a	Two Stage Configuration	Config.: 2b	Three/Four Stage Configuration	Config.: 2c
-----------------------------------	-------------	--------------------------------	-------------	---------------------------------------	-------------

Line Monitoring	Common Positive (-ve Switching)	Common Positive (-ve Switching)
------------------------	--	--

Stage 1: Apply Power to Stage 1 -ve & Stage 1 +ve	Stage 1: Apply Power to Common +ve & Stage 1 -ve Stage 2: Apply Power to Common +ve & Stage 1 -ve & connect Stage 2 -ve to Stage 1 -ve	Stage 1: Apply Power to Common +ve & Stage 1 -ve Stage 2: Apply Power to Common +ve & Stage 1 -ve & connect Stage 2 -ve to Stage 1 -ve Stage 3: Apply Power to Common +ve & Stage 1 -ve & connect Stage 3 -ve to Stage 1 -ve Stage 4: Apply Power to Common +ve & Stage 1 -ve & connect Stage 2 -ve & Stage 3 -ve to Stage 1 -ve
---	---	---

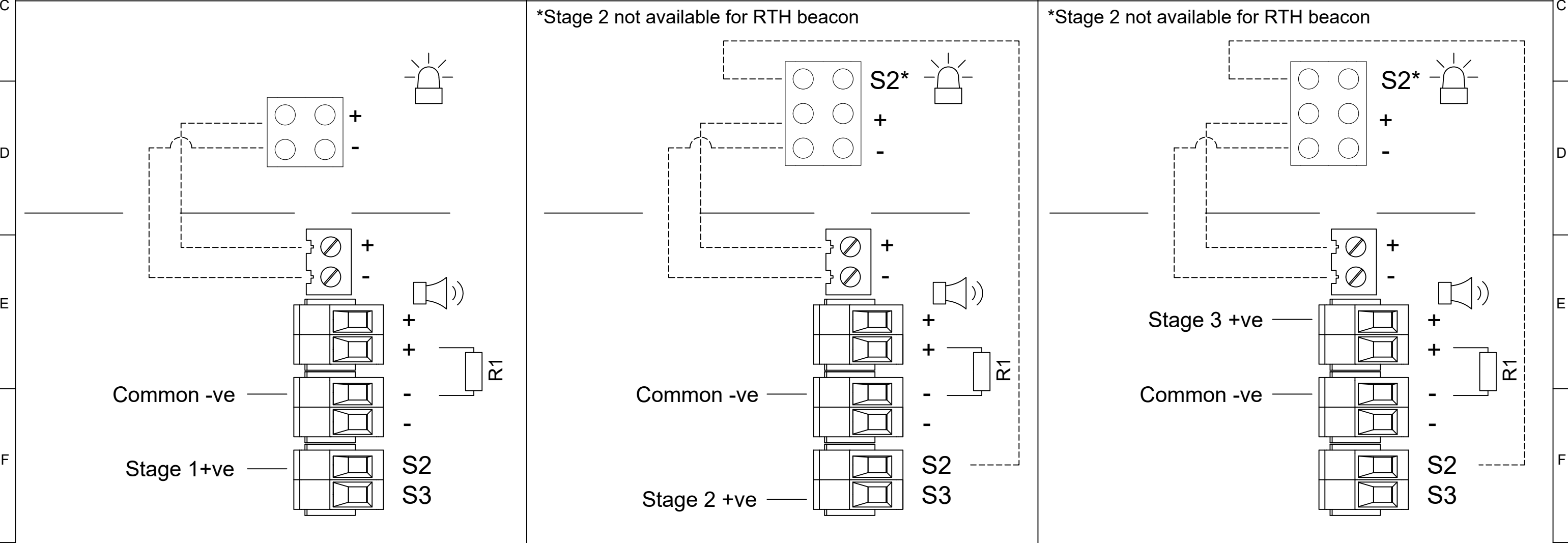



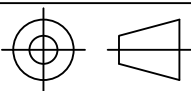
DRAWING TO BS8888:2000 GEOMETRIC TOLERANCES TO ISO1101:1983 LINEAR DIMENSIONAL TOLS ANGULAR DIMENSIONAL TOLS	DRAWN DATE J.SPILLER 11/06/2021	SURFACE FINISH WEIGHT (Kg)	MATERIAL	THIS DRAWING AND ANY INFORMATION OR DESCRIPTIVE MATTER THEREIN IS COMMUNICATED IN CONFIDENCE AND IS THE COPYRIGHT PROPERTY OF 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.		ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE		A3
STANDARDS	CHECKED DATE APPROVED DATE R.N.POTTS 11/06/2021	ALTERNATIVE MATERIAL	ALTERNATIVE MATERIAL	EUROPEAN SAFETY SYSTEMS LTD. AS PER LATEST DATE OF ISSUE SHOWN ABOVE	EUROPEAN SAFETY SYSTEMS LTD IMPRESS HOUSE MANSSELL ROAD ACTON LONDON W3 7QH WWW.E2S.COM	TITLE AB105 SPECTRAALARM COMBINED SOUNDER & BEACON WIRING SHCEMATIC		
		SCALE NTS	SHEET 2 OF 4	DRAWING NUMBER D118-06-001				

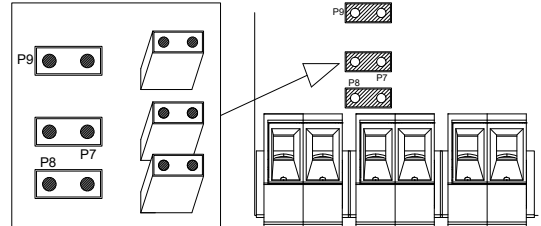

	1	2	3	4	5	6	7	8	9	10	
A	<div style="display: flex; justify-content: space-between;"> <div style="width: 25%;"> <p>+VE SWITCHING CUSTOMER TO MOVE HEADER PINS P7, P8 & P9 SO THEY ARE CONNECTED</p>  </div> <div style="width: 25%; border: 1px solid black; padding: 5px;"> <p>OPTIONAL LINE MONITORING RESISTOR, CUSTOMER SUPPLIED, RECOMMENDED MINIMUM VALUES: 14V MAX SYSTEM = 120Ω MIN, 2W MIN OR 1KΩ MIN, 0.5W MIN 28V MAX SYSTEM = 470Ω MIN, 2W MIN OR 2.4KΩ MIN, 0.5W MIN</p>  </div> <div style="width: 25%; border: 1px solid black; padding: 5px;"> <p>----- WIRING LINKING BEACON & SOUNDER FACTORY FITTED</p> </div> </div>							ISSUE	MOD No.	REASON - INITIAL - DATE	A
								1		INTRODUCTION RSR- 08/08/2024	

Linked Sounder & Beacon Activation (Default) / +ve Switching (Customer to set P7, P8 & P9 as above)

	Config.: 5a	Config.: 5b	Config.: 5c
Stage 1 Configuration	Stage 2 Configuration	Stage 3 Configuration	Stage 3 Configuration
Common Negative (+ve Switching)			
<p>Single Stage Line Monitoring, Maximum Monitoring Voltage 4Vdc Not to be used for reverse polarity line monitoring Stage 1: Apply Stage 1 +ve to terminal 'S2' & Common -ve to terminal '-'</p>	<p>Single Stage Line Monitoring, Maximum Monitoring Voltage 4Vdc Not to be used for reverse polarity line monitoring Stage 2: Apply Stage 2 +ve to terminal 'S3' & Common -ve to terminal '-'</p>	<p>Single Stage Line Monitoring, Maximum Monitoring Voltage 4Vdc Not to be used for reverse polarity line monitoring Stage 3: Apply Stage 3 +ve to terminal '+' & Common -ve to terminal '-'</p>	



<p>DRAWING TO BS8888:2000 GEOMETRIC TOLERANCES TO ISO1101:1983 LINEAR DIMENSIONAL TOLS ANGULAR DIMENSIONAL TOLS</p> <p>STANDARDS AB105 RANGE</p>	<p>DRAWN J.SPILLER</p>	<p>DATE 11/06/2021</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 ACTON LONDON W3 7QH WWW.E2S.COM</p>	<p>ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE</p>		<p>A3</p>		
	<p>CHECKED R.N.POTTS</p>	<p>DATE 11/06/2021</p>	<p>MATERIAL</p>	<p>TITLE AB105 SPECTRAALARM COMBINED SOUNDER & BEACON WIRING SHCEMATIC</p>							
	<p>APPROVED R.N.POTTS</p>	<p>DATE 11/06/2021</p>	<p>ALTERNATIVE MATERIAL</p>	SCALE			SHEET	DRAWING NUMBER			
				NTS			3 OF 4	D118-06-001			

	1	2	3	4	5	6	7	8	9	10	
A	<p>+VE SWITCHING CUSTOMER TO MOVE HEADER PINS P7, P8 & P9 SO THEY ARE CONNECTED</p> 							ISSUE	MOD No.	REASON - INITIAL - DATE	A
								1		INTRODUCTION RSR- 08/08/2024	
<p style="text-align: center;">OPTIONAL LINE MONITORING RESISTOR, CUSTOMER SUPPLIED, RECOMMENDED MINIMUM VALUES: 14V MAX SYSTEM = 120Ω MIN, 2W MIN OR 1KΩ MIN, 0.5W MIN 28V MAX SYSTEM = 470Ω MIN, 2W MIN OR 2.4KΩ MIN, 0.5W MIN</p> 											

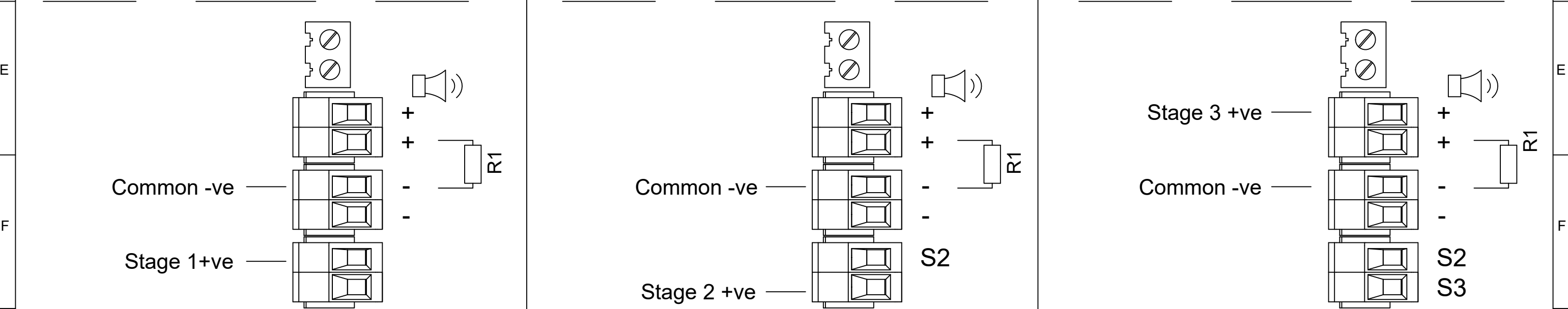
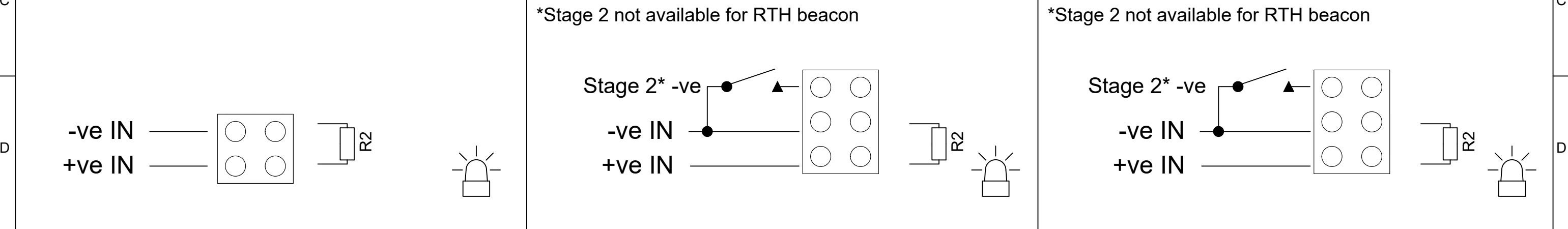
Independent Sounder & Beacon Activation (Remove Link Wires) / +ve Switching (Customer to set P7, P8 & P9 as above)


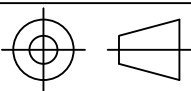
Stage 1 Configuration	Config.: 6a	Stage 2 Configuration	Config.: 6b	Stage 3 Configuration	Config.: 6c
------------------------------	-------------	------------------------------	-------------	------------------------------	-------------

Common Negative (+ve Switching)

<p>Single Stage Line Monitoring, Maximum Monitoring Voltage 4Vdc Not to be used for reverse polarity line monitoring Stage 1: Apply Stage 1 +ve to terminal 'S2' & Common -ve to terminal '-'</p>	<p>Single Stage Line Monitoring, Maximum Monitoring Voltage 4Vdc Not to be used for reverse polarity line monitoring Stage 2: Apply Stage 2 +ve to terminal 'S3' & Common -ve to terminal '-'</p>	<p>Single Stage Line Monitoring, Maximum Monitoring Voltage 4Vdc Not to be used for reverse polarity line monitoring Stage 3: Apply Stage 3 +ve to terminal '+' & Common -ve to terminal '-'</p>
---	---	--

*Stage 2 not available for RTH beacon



<p>DRAWING TO BS8888:2000 GEOMETRIC TOLERANCES TO ISO1101:1983 LINEAR DIMENSIONAL TOLS ANGULAR DIMENSIONAL TOLS</p> <p>STANDARDS</p>	<p>DRAWN J.SPILLER</p>	<p>DATE 11/06/2021</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 ACTON LONDON W3 7QH WWW.E2S.COM</p>	<p>ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE</p>		<p>A3</p>
	<p>CHECKED</p>	<p>DATE 11/06/2021</p>	<p>MATERIAL</p>	<p>TITLE AB105 SPECTRAALARM COMBINED SOUNDER & BEACON WIRING SHCEMATIC</p>					
	<p>APPROVED</p>	<p>DATE 11/06/2021</p>	<p>ALTERNATIVE MATERIAL</p>	<p>SCALE NTS</p>			<p>SHEET 4 OF 4</p>	<p>DRAWING NUMBER D118-06-001</p>	

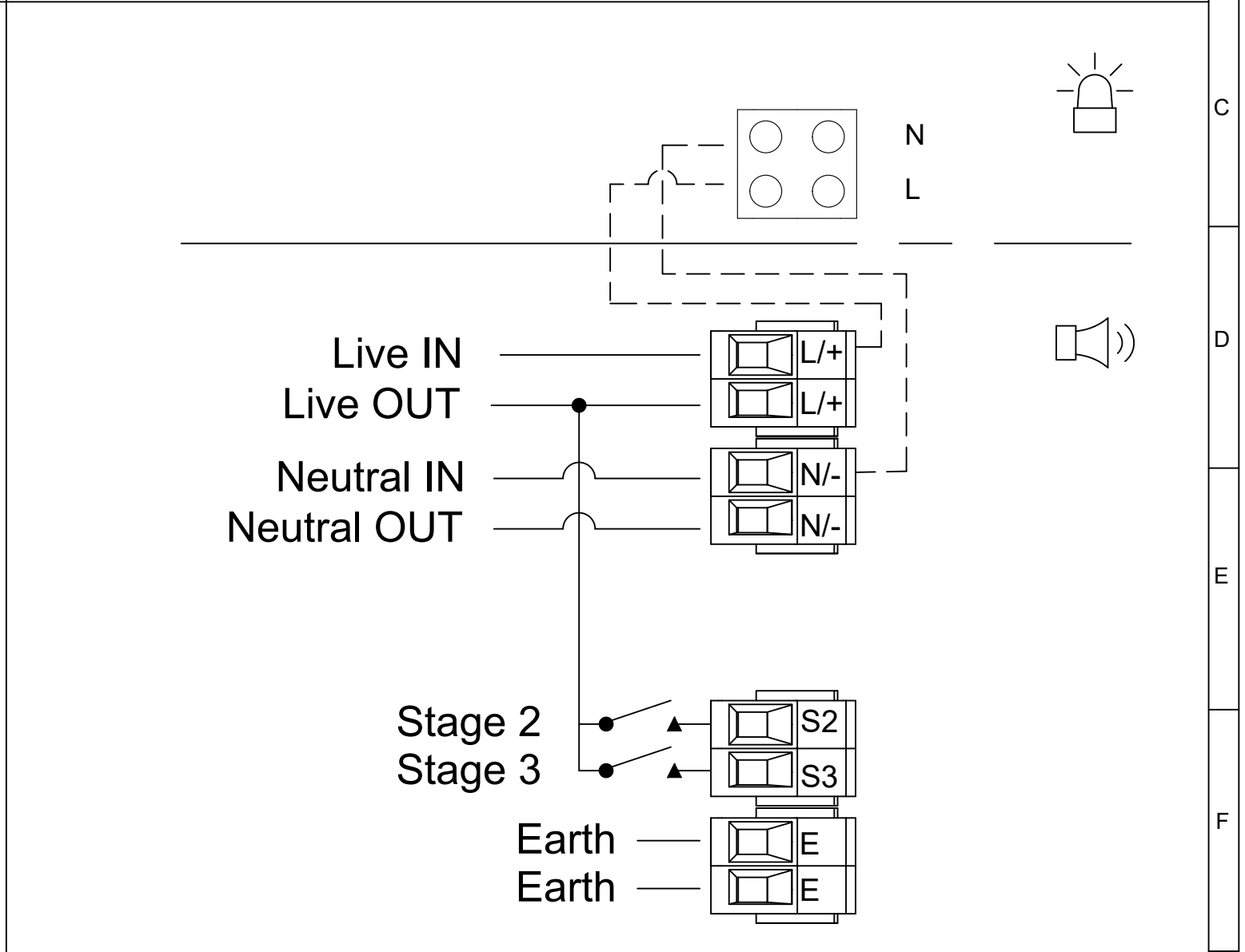
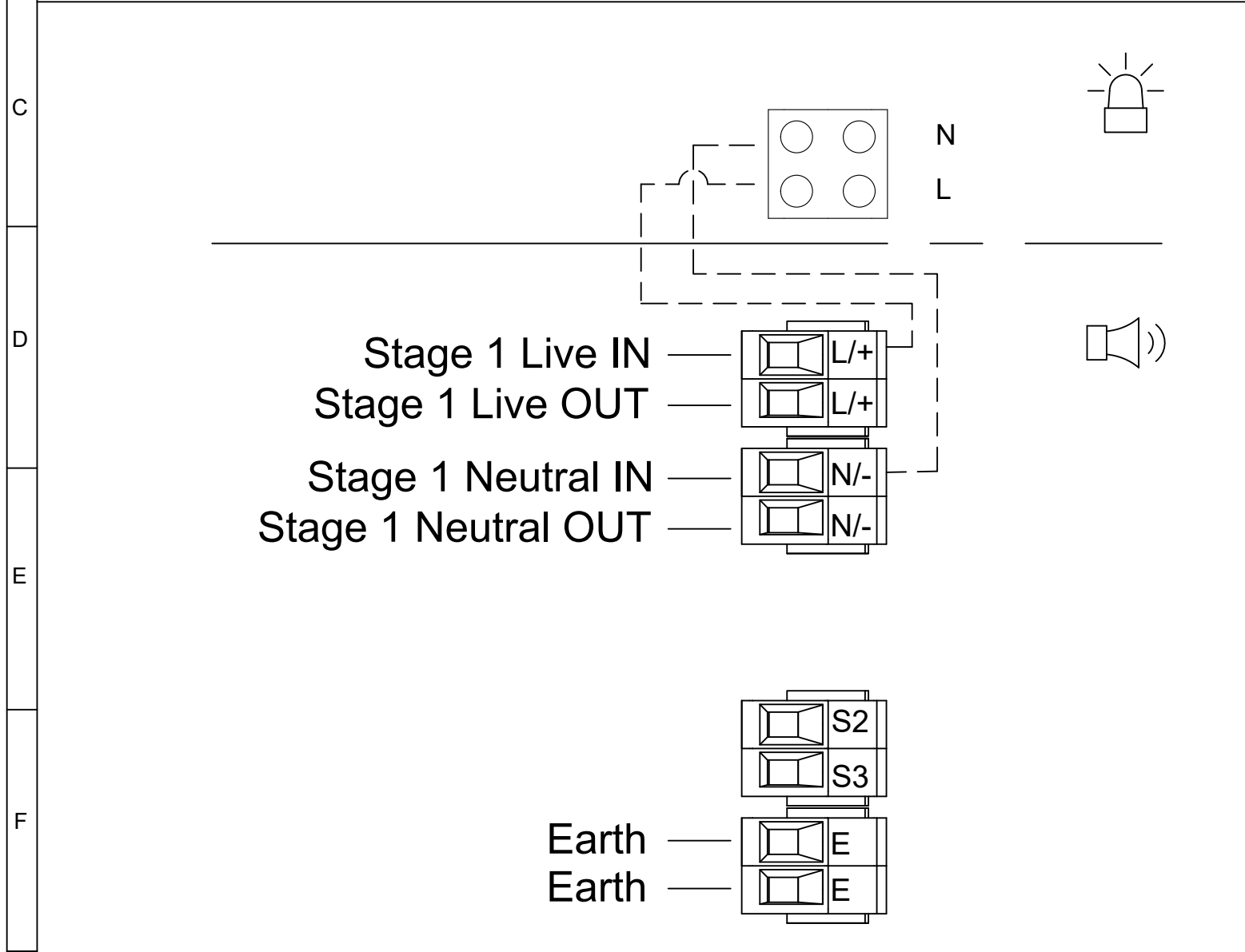
1	2	3	4	5	6	7	8	9	10
							ISSUE	MOD No.	REASON - INITIAL - DATE
							1		INTRODUCTION RSR- 08/08/2024

— — WIRING LINKING BEACON & SOUNDER
FACTORY FITTED

SWITCHES FOR STAGE OPERATION
CUSTOMER SUPPLIED

Linked Sounder & Beacon Activation (Default)

Single Stage Configuration				Config.: 1a	Three/Four Stage Configuration				Config.: 1b
Stage 1: Connect Stage 1 Live to terminal 'L/+' & Stage 1 Neutral to terminal 'N/-'					Stage 1: Connect Stage 1 Live to terminal 'L/+' & Stage 1 Neutral to terminal 'N/-'				
					Stage 2: Connect Stage 1 Live to terminal 'L/+' & Stage 1 Neutral to terminal 'N/-' and link terminal 'S2' to Stage 1 Live				
					Stage 3: Connect Stage 1 Live to terminal 'L/+' & Stage 1 Neutral to terminal 'N/-' and link terminal 'S3' to Stage 1 Live				
					Stage 4: Connect Stage 1 Live to terminal 'L/+' & Stage 1 Neutral to terminal 'N/-' and link both terminals 'S2' & 'S3' to Stage 1 Live				



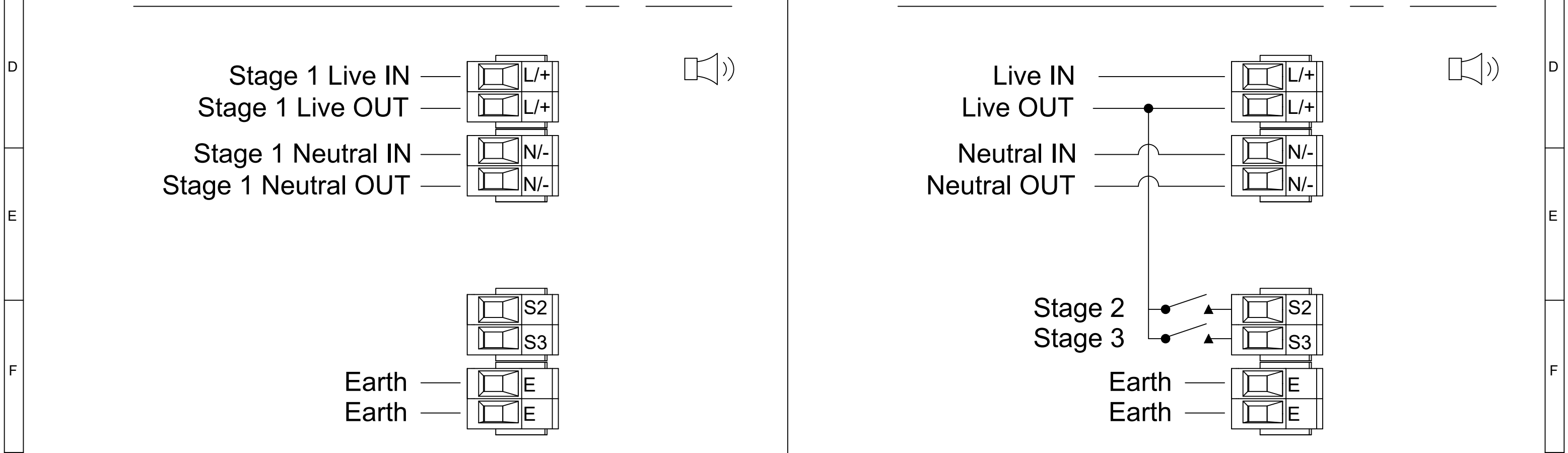
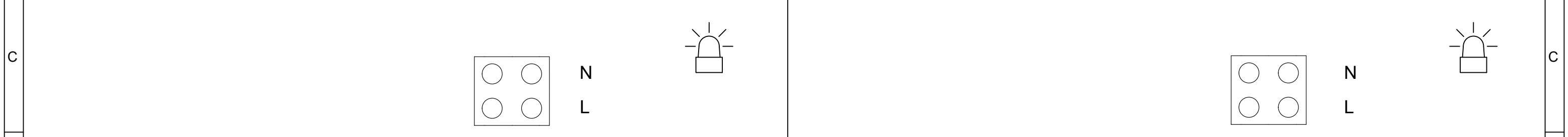
DRAWING TO BS8888:2000 GEOMETRIC TOLERANCES TO ISO1101:1983 LINEAR DIMENSIONAL TOLS ANGULAR DIMENSIONAL TOLS	DRAWN	DATE	SURFACE FINISH	WEIGHT (Kg)	THIS DRAWING AND ANY INFORMATION OR DESCRIPTIVE MATTER THEREIN IS COMMUNICATED IN CONFIDENCE AND IS THE COPYRIGHT PROPERTY OF EUROPEAN SAFETY SYSTEMS LTD. NEITHER THE WHOLE OR ANY EXTRACT MAY BE DISCLOSED, LOANED, COPIED OR USED FOR MANUFACTURING OR TENDERING PURPOSES WITHOUT THEIR WRITTEN CONSENT.	 warning signals EUROPEAN SAFETY SYSTEMS LTD IMPRESS HOUSE MANSELL ROAD ACTON LONDON W3 7QH WWW.E2S.COM	ALL DIMENSIONS IN MM			A3
	J.SPILLER	11/06/2021	MATERIAL				IF IN DOUBT, ASK - DO NOT SCALE			
	CHECKED	DATE	ALTERNATIVE MATERIAL				TITLE AB105 SPECTRAALARM COMBINED SOUNDER & BEACON WIRING SHCEMATIC			
	R.N.POTTS	11/06/2021					SCALE	SHEET	DRAWING NUMBER	
STANDARDS	APPROVED	DATE			NTS	1 OF 2	D118-06-005			
AB105 RANGE	R.N.POTTS	11/06/2021								

SWITCHES FOR STAGE OPERATION
 CUSTOMER SUPPLIED

Independent Sounder & Beacon Activation (Remove Link Wires)

Single Stage Configuration	Config.: 2a	Three/Four Stage Configuration	Config.: 2b
Stage 1: Connect Stage 1 Live to terminal 'L/+' & Stage 1 Neutral to terminal 'N/-'		Stage 1: Connect Stage 1 Live to terminal 'L/+' & Stage 1 Neutral to terminal 'N/-'	
		Stage 2: Connect Stage 1 Live to terminal 'L/+' & Stage 1 Neutral to terminal 'N/-' and link terminal 'S2' to Stage 1 Live	

		Stage 3: Connect Stage 1 Live to terminal 'L/+' & Stage 1 Neutral to terminal 'N/-' and link terminal 'S3' to Stage 1 Live	
		Stage 4: Connect Stage 1 Live to terminal 'L/+' & Stage 1 Neutral to terminal 'N/-' and link both terminals 'S2' & 'S3' to Stage 1 Live	



DRAWING TO BS8888:2000 GEOMETRIC TOLERANCES TO ISO1101:1983 LINEAR DIMENSIONAL TOLS ANGULAR DIMENSIONAL TOLS	DRAWN	DATE	SURFACE FINISH	WEIGHT (Kg)	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. © EUROPEAN SAFETY SYSTEMS LTD. AS PER LATEST DATE OF ISSUE SHOWN ABOVE	 EUROPEAN SAFETY SYSTEMS LTD IMPRESS HOUSE MANSELL ROAD ACTON LONDON W3 7QH WWW.E2S.COM	ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE			A3		
	J.SPILLER	11/06/2021						TITLE AB105 SPECTRAALARM COMBINED SOUNDER & BEACON WIRING SHCEMATIC				
	CHECKED	DATE						SCALE	SHEET	DRAWING NUMBER		
	R.N.POTTS	11/06/2021						NTS	2 OF 2	D118-06-005		
STANDARDS	APPROVED	DATE	ALTERNATIVE MATERIAL									
AB105 RANGE	R.N.POTTS	11/06/2021										

Page left Intentionally blank

Page left Intentionally blank

Page left Intentionally blank