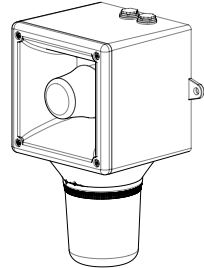


Installation/Anschluss
 Installation/Raccordement
 Installation/Connection

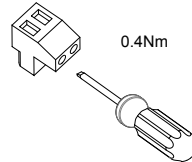
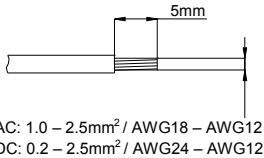
AB112L

- Sounder unit: Alarm horn sounder: 64 tones, 4 stages
- L.E.D Array Beacon
- 16 x High powered L.E.D's
- IP Rating: IP65
- 9 Selectable user modes
- 2 Stages on DC units only
- Temp: -40° to + 66°
- Unit weight: 2.1kg DC 2.4kg AC
- CE & UKCA
- 2-off M20 x 1.5 thread entries.



Unit Type Code	Nominal Voltage	Voltage Range	Nominal Current P1	Nominal Current P2	Nominal Beacon Current	Nominal SPL P1 / P2	Max SPL P1 / P2	Average SPL P1 / P2
AB112L.024.2	12VDC	10-50Vdc	280mA	376mA	250mA	113.7dB(A) / 116.6dB(A) Tone 44 @ 1m	115dB(A) / 118.4dB(A) Tone 4 @ 1m	110.8dB(A) / 114.8dB(A) All Tones @ 1m
AB112L.024.2	24VDC		225mA	430mA	250mA			
AB112L.024.2	48VDC		122mA	223mA	250mA			
AB112L.230.7	115VAC	90-253Vac 50/60Hz /120- 253Vdc	100mA	173mA	90mA			
AB112L.230.7	230VAC		65mA	105mA	50mA			

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



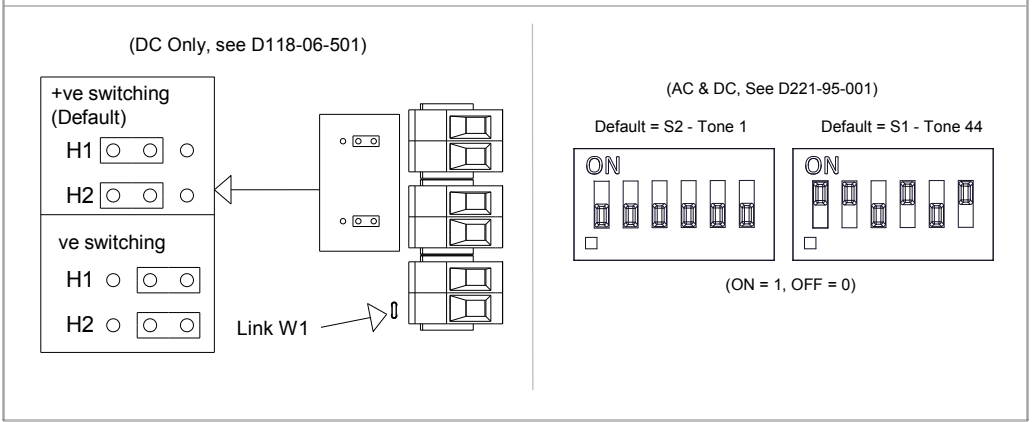
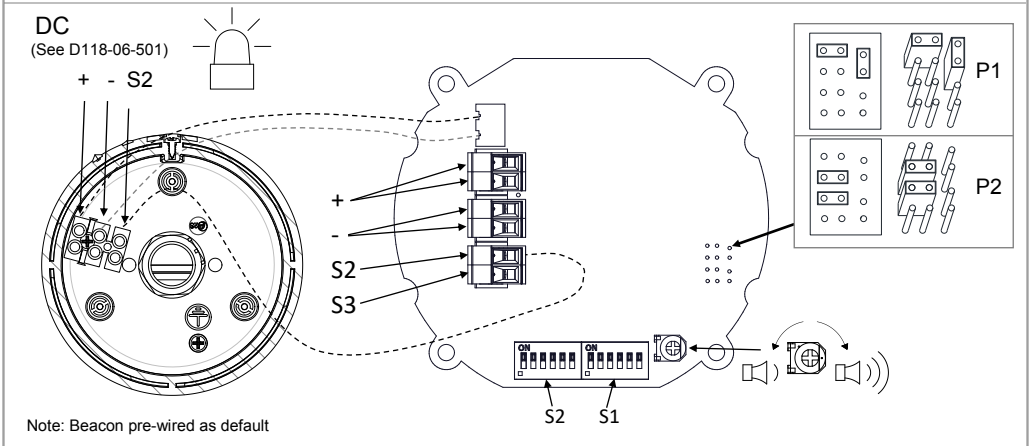
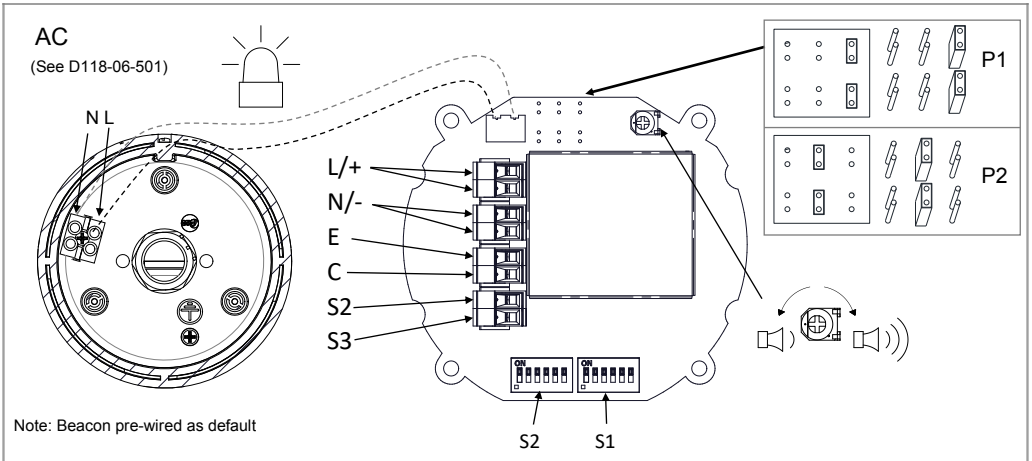
Attention: Installation must be carried out by an electrician in compliance with the latest codes and regulations.
 Attention: L'installation doit être effectuée par un électricien conformément aux derniers codes et réglementations.
 Achtung: Die Installation muss von einem Elektriker gemäß den neuesten Vorschriften und Bestimmungen durchgeführt werden.



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.

INSTRUCTION & SERVICE MANUAL

AB112L

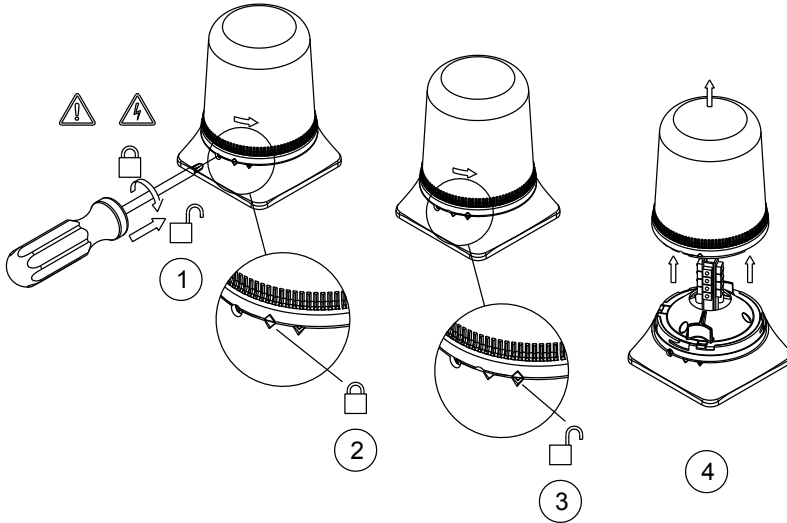


INSTRUCTION & SERVICE MANUAL

AB112L

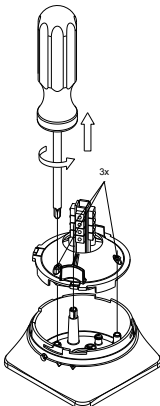
The Beacon lens cover is field replaceable.

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.

To access the beacon mode settings, remove the beacon lens following the steps above then remove the 3-off pozi head screws. Reinstall the beacon in the same orientation.



AB112L

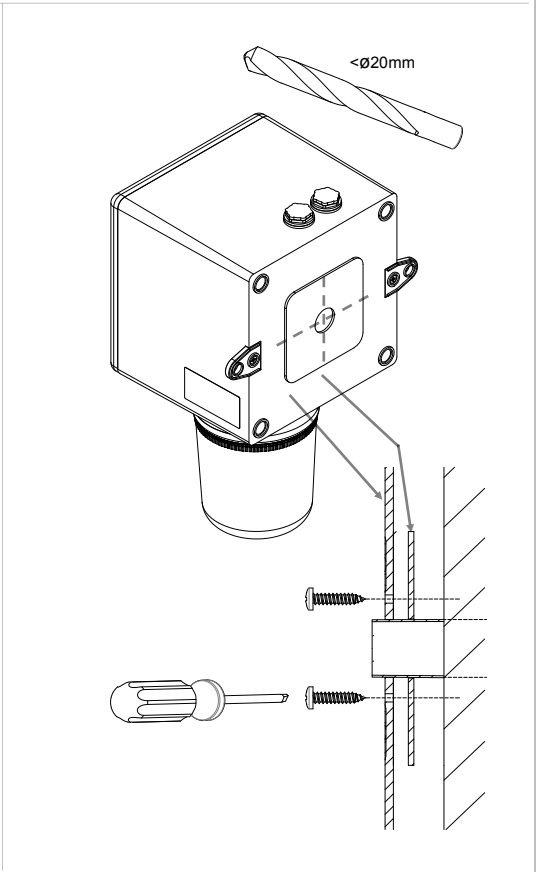
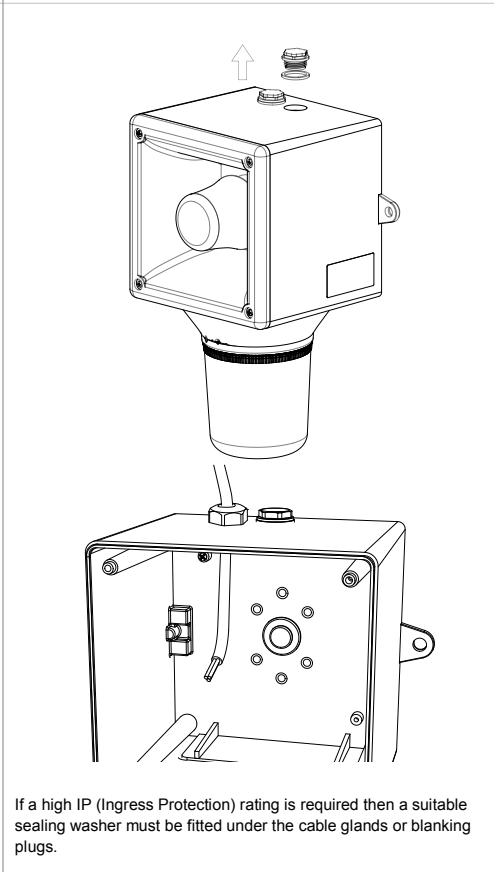
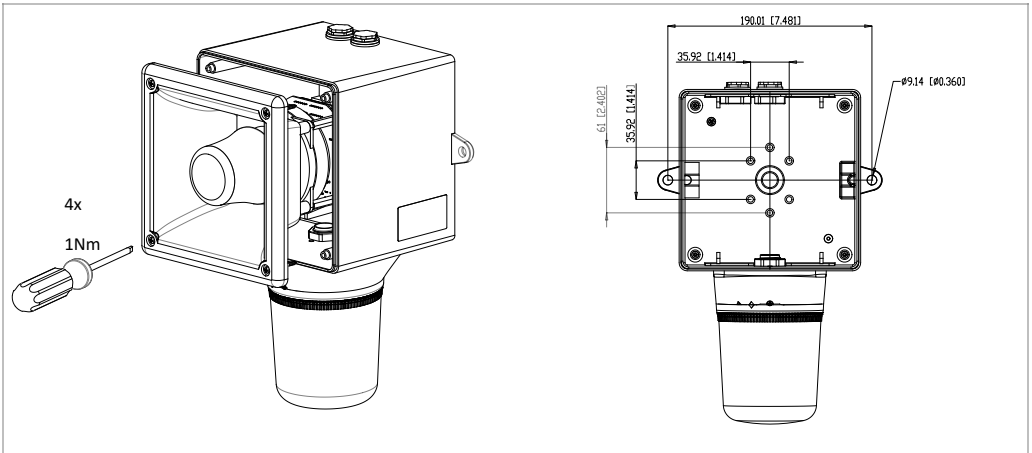
L.E.D Array Option Setting Table

Default setting is 6

PCB EDGE	1	2	3	4	5	6	7	8	9
	○ ○ ○	○ ○ ○ □ ○	○ ○ ○ ○ □ ○	□ ○ ○ ○ ○ ○	□ ○ ○ ○ ○ ○	□ ○ ○ ○ ○ ○	□ ○ ○ ○ ○ ○	□ ○ ○ ○ ○ ○	□ ○ ○ ○ ○ ○

Stage 1	Frequency Description: Stage 1 (Ac & DC units)	Frequency Description: Stage 2 (DC unit only)
1	All L.E.D's on	Alternate Side Flash 2Hz
2	Rotating: Slow 1	Alternate Side Flash 2Hz
3	Single Strike Flash 2Hz	Rotating: Fast 2
4	Rotating: Fast 1	Single Strike Flash 2Hz
5	Rotating: Slow 2	Double Strike Flash 1Hz
6	Double Strike Flash 2Hz	Rotating: Fast 2
7	Rotating: Fast 2	Double Strike Flash 2Hz
8	Double Strike Flash 1Hz	Alternate Side Flash 2Hz
9	Alternate Side Flash 2Hz	Rotating: Fast 2

INSTRUCTION & SERVICE MANUAL
AB112L



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	2	44
4	1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s NF C 48-265		1 1 0 0 0	24	1
5	544Hz(100mS)/440Hz (400mS) NF S 32-001		0 0 1 0 0	19	1
6	1500/500Hz - (0.5s on , 0.5s off) x3 + 1s gap AS4428		1 0 1 0 0	44	1
7	500-1500Hz Sweeping 2 sec on 1 sec off AS4428		0 1 1 0 0	44	1
8	500/1200Hz @ 0.26Hz (3.3son, 0.5s off) Netherlands - NEN 2575		1 1 1 0 0	24	35
9	1000Hz (1s on, 1s off)x7 + (7s on, 1s off) IMO Code 1a		0 0 0 1 0	34	1
10	1000Hz (1s on, 1s off)x7 + (7s on, 1s off) IMO Code 1a		1 0 0 1 0	34	1
11	420Hz(0.5s on, 0.5s off)x3 + 1s gap ISO 8201 Temporal Pattern		0 1 0 1 0	1	8
12	1000Hz(0.5s on, 0.5s off)x3 + 1s gap ISO 8201 Temporal Pattern		1 1 0 1 0	1	8
13	422/775Hz - (0.85 on, 0.5 off) x3 + 1s gap NFPA - Temporal Coded		0 0 1 1 0	1	8
14	1000/2000Hz @ 1Hz Singapore		1 0 1 1 0	3	35
15	300Hz Continuous (f=300)		0 1 1 1 0	24	1
16	440Hz Continuous (f=440)		1 1 1 1 0	24	1
17	470Hz Continuous (f=470)		0 0 0 0 1	24	8
18	500Hz Continuous IMO code 2 (Low) (f=500)		1 0 0 0 1	24	8
19	554Hz Continuous (f=554)		0 1 0 0 1	24	8
20	660Hz Continuous (f=660)		1 1 0 0 1	24	35
21	800Hz IMO code 2 (High) (f=800)		0 0 1 0 1	24	35
22	1200Hz Continuous (f=1200)		1 0 1 0 1	24	35
23	2000Hz Continuous (f=2000)		0 1 1 0 1	3	35
24	2400Hz Continuous (f=2400)		1 1 1 0 1	20	35
25	440Hz @0.83Hz (50 cycles/minute) Intermittent (f=440, a=0.6, b=0.6)		0 0 0 1 1	44	8
26	470Hz @0.9Hz - 1.1s Intermittent (f=470, a=0.55, b=0.55)		1 0 0 1 1	44	8
27	470Hz @5Hz - (5 cycles/second) Intermittent (f=470, a=0.1, b=0.1)		0 1 0 1 1	44	8
28	544Hz @ 1.14Hz - 0.875s Intermittent (f=470, a=0.43, b=0.44)		1 1 0 1 1	24	8
29	655Hz @ 0.875Hz Intermittent (f=655, a=0.57, b=0.57)		0 0 1 1 1	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	24	8
31	660Hz @3.34Hz - 150mS on, 150mS off Intermittent (f=660, a=0.15, b=0.15)		0 1 1 1 1	24	8
32	745Hz @ 1Hz Intermittent (f=745, a=0.5, b=0.5)		1 1 1 1 1	24	8
33	800Hz - 0.25sec on, 1 sec off Intermittent (f=800, a=0.25, b=1)		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 1	24	19
35	1000Hz @ 1Hz Intermittent (f=1000, a=0.5, b=0.5)		0 1 0 0 1	24	19
36	2400Hz @ 1Hz Intermittent (f=2400, a=0.5, b=0.5)		1 1 0 0 1	24	19
37	2900Hz @ 5Hz Intermittent (f=2900, a=0.1, b=0.1)		0 0 1 0 1	24	19
38	363/518Hz @ 1Hz Alternating (f=363, f1=518, a=0.1)		1 0 1 0 1	8	19
39	450/500Hz @ 2Hz Alternating (f=450, f1=500, a=0.25)		0 1 1 0 1	8	19
40	554/440Hz @ 1Hz Alternating (f=440, f1=554, a=0.5)		1 1 1 0 1	24	19
41	554/440Hz @ 0.625Hz Alternating (f=440, f1=554, a=0.8)		0 0 0 1 1	8	19
42	561/760Hz @0.83Hz (50 cycles/minute) Alternating (f=561, f1=760, a=0.6)		1 0 0 1 1	8	19
43	780/600Hz @ 0.96Hz Alternating (f=600, f1=780, a=0.52)		0 1 0 1 1	8	19
44	800/1000Hz @ 2Hz Alternating (f=800, f1=1000, a=0.25)		1 1 0 1 1	24	19
45	970/800Hz @ 2Hz Alternating (f=800, f1=970, a=0.25)		0 0 1 1 1	8	19
46	800/1000Hz @ 0.875Hz Alternating (f=800, f1=1000, a=0.57)		1 0 1 1 1	24	19
47	2400/2900Hz @ 2Hz Alternating (f=2400, f1=2900, a=0.25)		0 1 1 1 1	24	19
48	500/1200Hz @ 0.3Hz Sweeping (f=500, f1=1200, a=3.34)		1 1 1 1 1	24	12
49	560/1055Hz @ 0.18Hz Sweeping (f=560, f1=1055, a=5.47)		0 0 0 1 1	24	12
50	560/1055Hz @ 3.3Hz Sweeping (f=560, f1=1055, a=0.3)		1 0 0 1 1	24	12
51	600/1250Hz @ 0.125Hz Sweeping (f=600, f1=1250, a=8)		0 1 0 0 1	24	12
52	660/1200Hz @ 1Hz Sweeping (f=660, f1=1200, a=1)		1 1 0 0 1	24	12
53	800/1000Hz @ 1Hz Sweeping (f=800, f1=1000, a=1)		0 0 1 0 1	24	12
54	800/1000Hz @ 7Hz Sweeping (f=800, f1=1000, a=0.14)		1 0 1 0 1	24	12
55	800/1000Hz @ 50Hz Sweeping (f=800, f1=1000, a=0.02)		0 1 1 0 1	24	12
56	2400/2900Hz @ 7Hz Sweeping (f=2400, f1=2900, a=0.14)		1 1 1 0 1	24	12
57	2400/2900Hz @ 1Hz Sweeping (f=2400, f1=2900, a=1)		0 0 1 1 1	24	12
58	2400/2900Hz @ 50Hz Sweeping (f=2400, f1=2900, a=0.02)		1 0 0 1 1	24	12
59	2500/3000Hz @ 2Hz Sweeping (f=2500, f1=3000, a=0.5)		0 1 0 1 1	24	12
60	2500/3000Hz @ 7.7Hz Sweeping (f=2500, f1=3000, a=0.13)		1 1 0 1 1	24	12
61	800Hz Motor Siren (f=800, a=1.6)		0 0 1 1 1	24	12
62	1200Hz Motor Siren (f=1200, a=2)		1 0 1 1 1	24	12
63	2400Hz Motor Siren (f=2400, a=1.7)		0 1 1 1 1	24	12
64	Simulated Bell		1 1 1 1 1	21	12

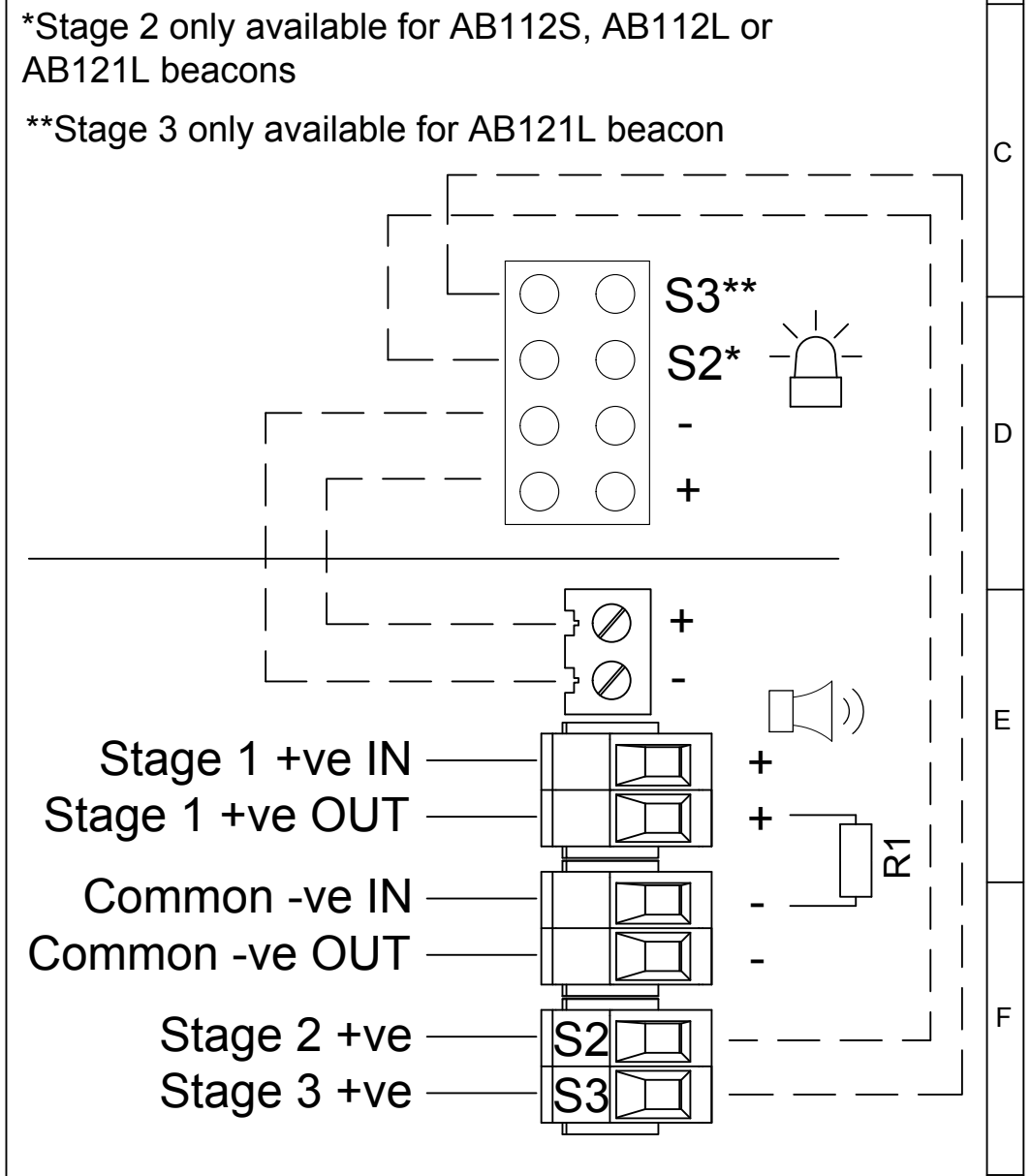
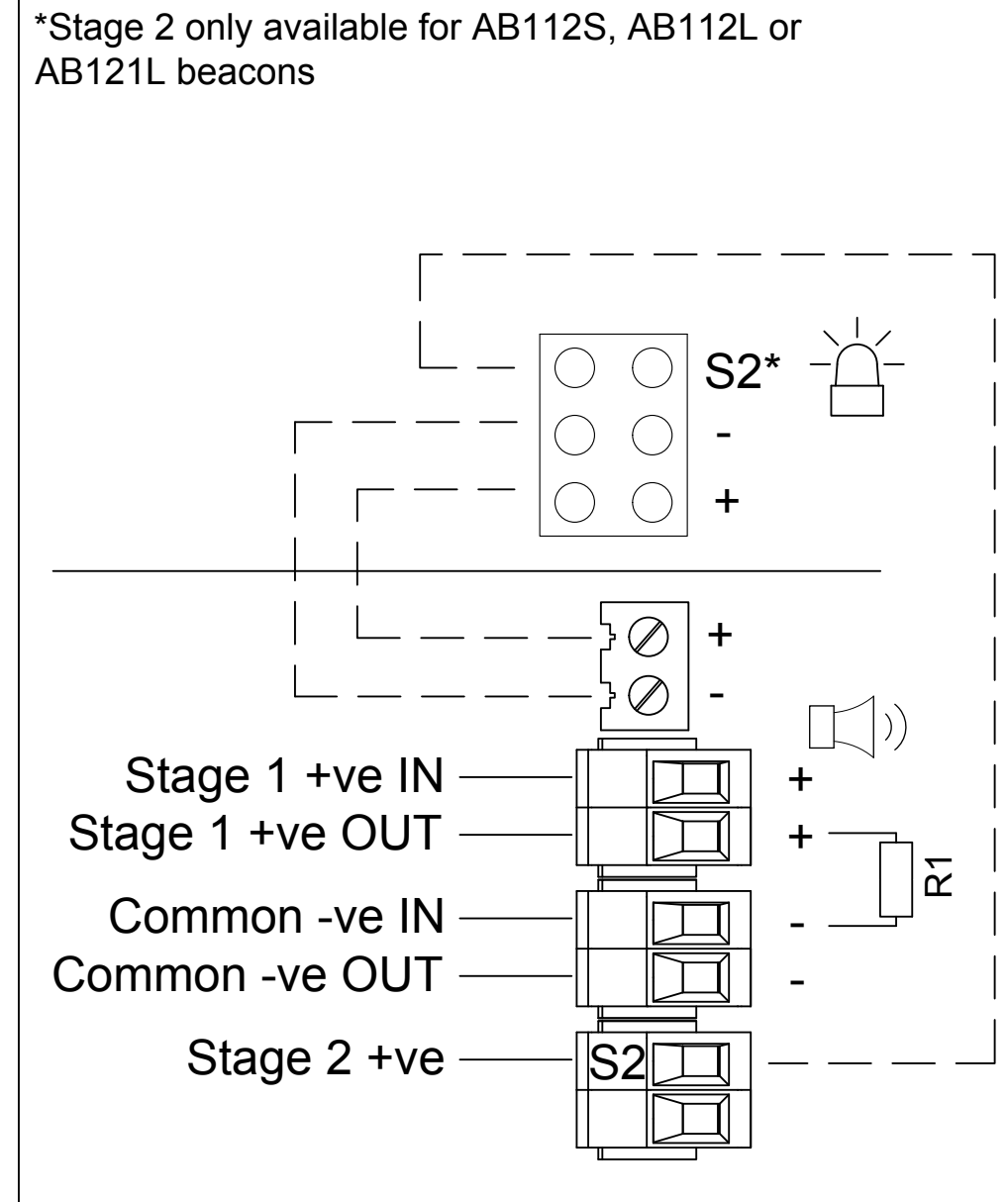
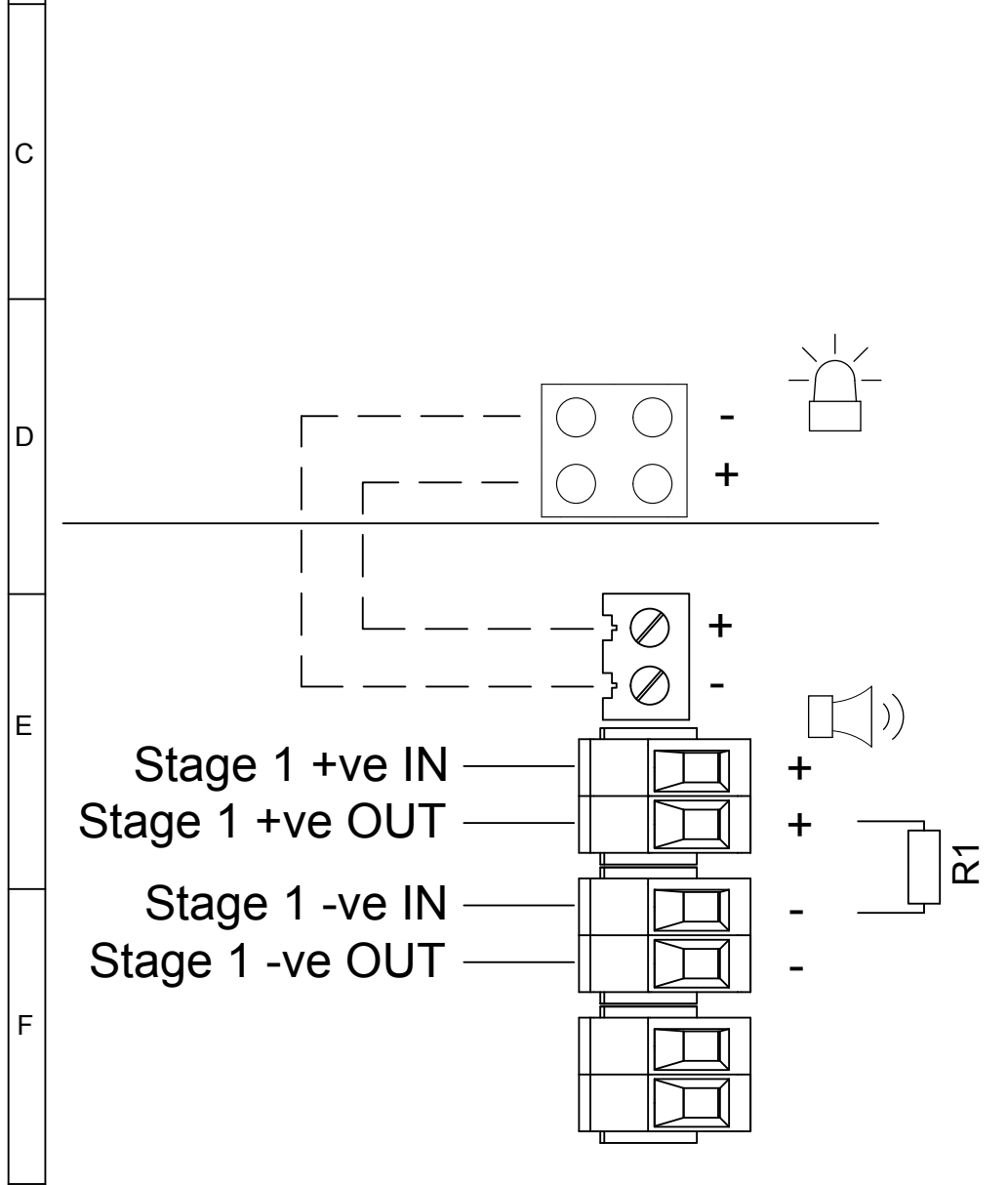
1	2	3	4	5	6	7	8	9	10
							ISSUE	MOD No.	REASON - INITIAL - DATE
							A		INTRODUCTION JS- 28/06/2021

— — WIRING LINKING BEACON & SOUNDER
FACTORY FITTED

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

Linked Sounder & Beacon Activation (Default)

Single Stage Configuration	Config.: 1a	Two Stage Configuration	Config.: 1b	Three/Four Stage Configuration	Config.: 1c
Line Monitoring Set to positive switching (default)		Common Negative Set to positive switching (default)		Common Negative Set to positive switching (default)	
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 2 +ve & Common -ve		Stage 1: Apply Power to Stage 1 +ve & Common -ve Stage 2: Apply Power to Stage 2 +ve & Common -ve Stage 3: Apply Power to Stage 3 +ve & Common -ve Stage 4: Apply Power to Stage 2 +ve, Stage 3 +ve & Common -ve	



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.	ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE		A3
	J.SPILLER	28/06/2021						
	CHECKED	DATE	ALTERNATIVE MATERIAL					
	B.ISARD	28/06/2021						
STANDARDS	APPROVED	DATE			SCALE	SHEET	DRAWING NUMBER	
SPECTRALARM RANGE	R.N.POTTS	28/06/2021			NTS	1 OF 8	D118-06-501	

1	2	3	4	5	6	7	8	9	10
							ISSUE	MOD No.	REASON - INITIAL - DATE
							A		INTRODUCTION JS- 28/06/2021

— — WIRING LINKING BEACON & SOUNDER
FACTORY FITTED

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

SWITCHES FOR STAGE OPERATION
CUSTOMER SUPPLIED

Linked Sounder & Beacon Activation (Default)

Three/Four Stages. Voltage Free 2nd, 3rd & 4th Stage Activation Configuration	Config.: 2	Two Stage Configuration	Config.: 3
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Common Positive
Customer Set H1 & H2 to Negative Switching (See Below)

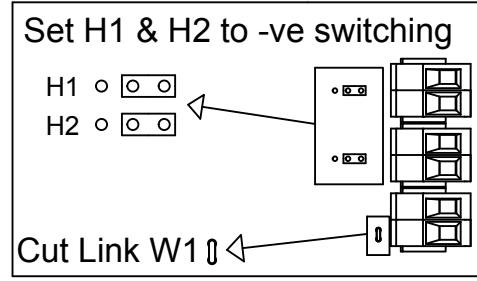
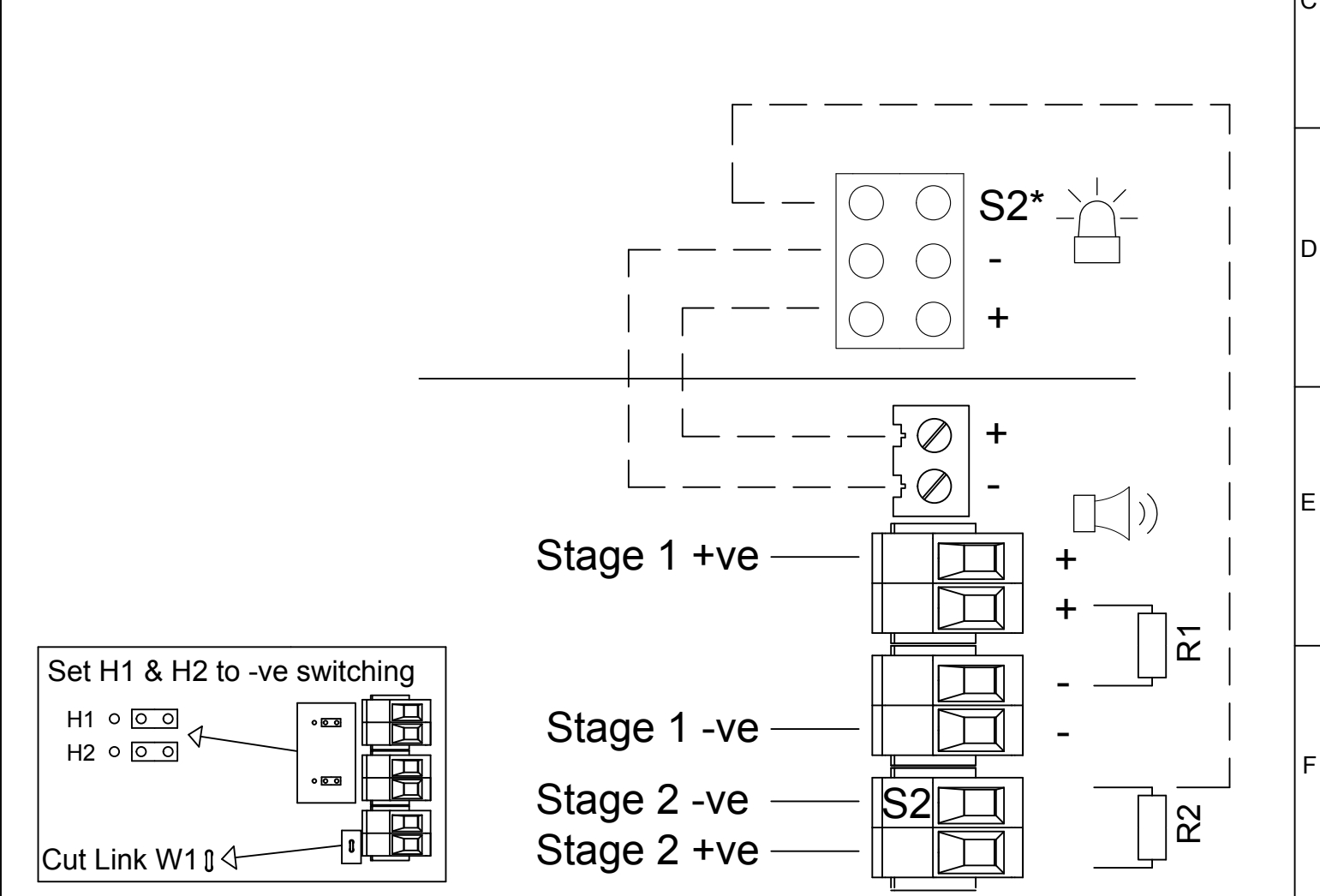
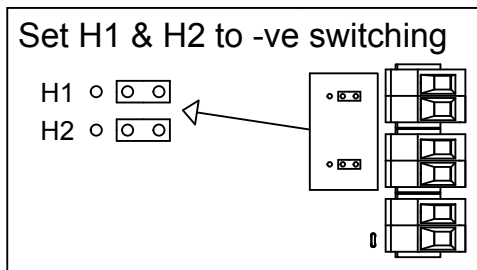
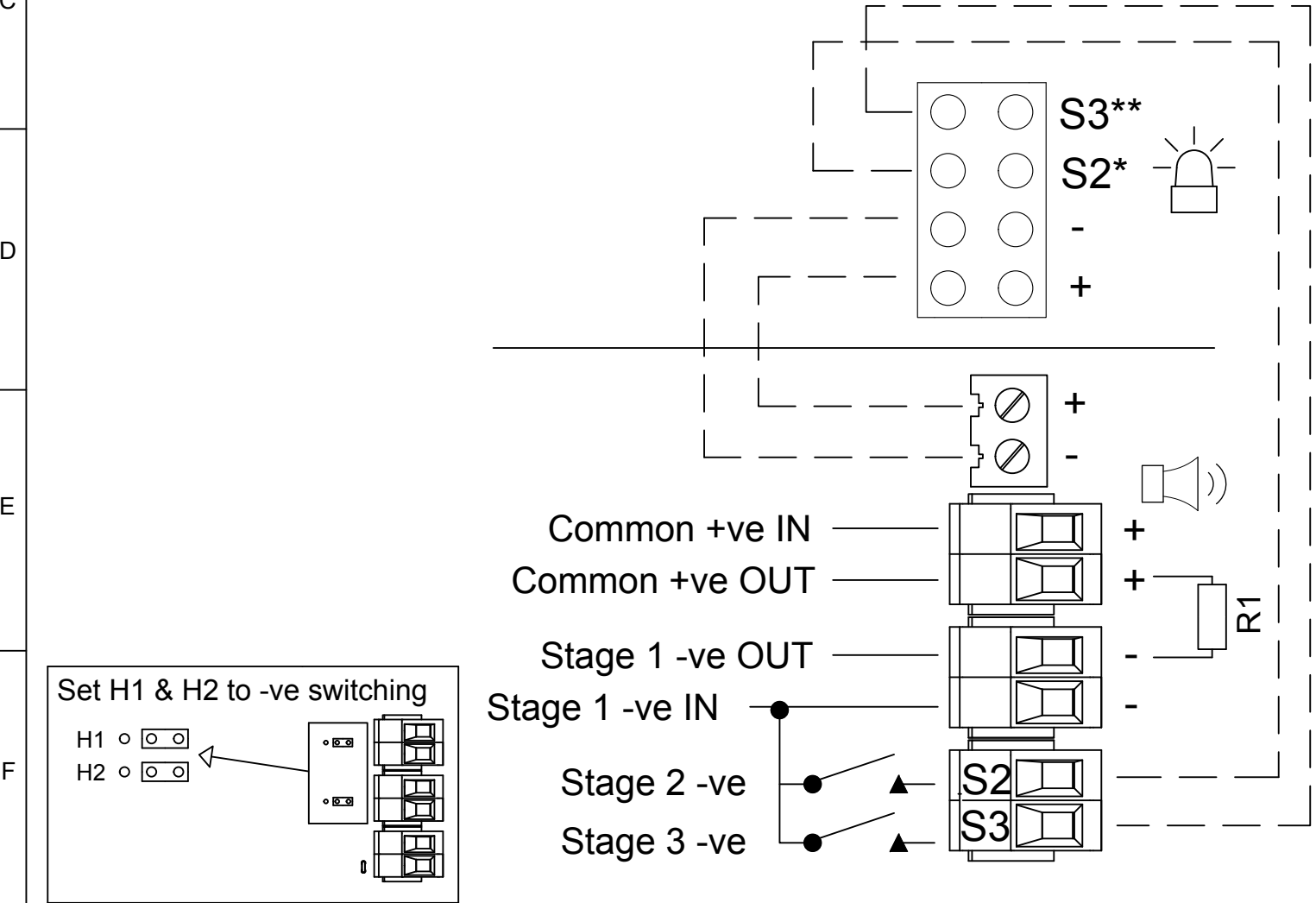
Stage 1: Apply Power to Common +ve & Stage 1 -ve
 Stage 2: Apply Power to Common +ve & Stage 1 -ve & connect Stage 2 -ve to Stage 1 -ve
 Stage 3: Apply Power to Common +ve & Stage 1 -ve & connect Stage 3 -ve to Stage 1 -ve
 Stage 4: Apply Power to Common +ve & Stage 1 -ve
 & connect Stage 2 -ve & Stage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

Independent Stage Input
Reverse Polarity Stage Monitoring

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

*Stage 2 only available for AB112S, AB112L or AB121L beacons
 **Stage 3 only available for AB121L beacon

*Stage 2 only available for AB112S, AB112L or AB121L beacons



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.	ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE		A3
	J.SPILLER	28/06/2021						
	CHECKED	DATE						
	B.ISARD	28/06/2021						
STANDARDS	APPROVED	DATE	ALTERNATIVE MATERIAL			TITLE		
SPECTRALARM RANGE	R.N.POTTS	28/06/2021				AB112/AB121 SOUNDER & BEACON WIRING DIAGRAMS		
						SCALE	SHEET	DRAWING NUMBER
						NTS	2 OF 8	D118-06-501

1	2	3	4	5	6	7	8	9	10
							ISSUE	MOD No.	REASON - INITIAL - DATE
							A		INTRODUCTION JS- 28/06/2021

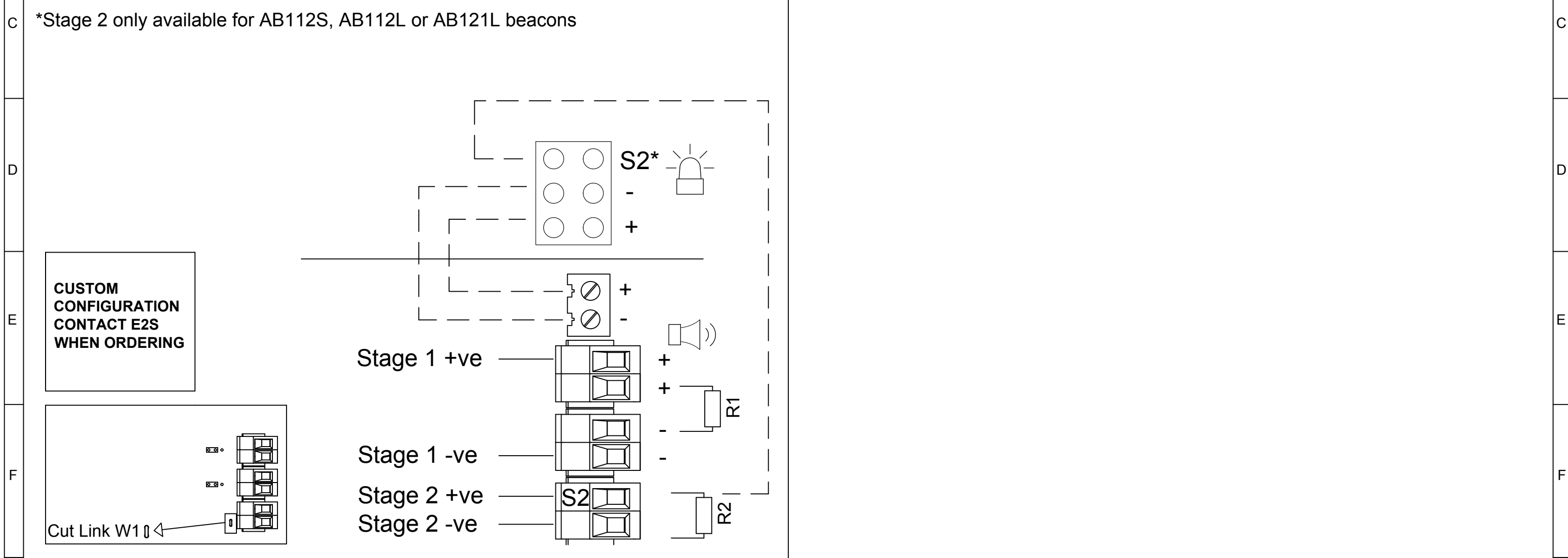
— — WIRING LINKING BEACON & SOUNDER
FACTORY FITTED

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

SWITCHES FOR STAGE OPERATION
CUSTOMER SUPPLIED

Linked Sounder & Beacon Activation (Default)


Two Stage Configuration		Config.: 4
independent Stage Input		
Line Stage Monitoring (Use suitable monitoring relays/modules)		
Not to be used for reverse polarity monitoring		
Stage 1: Apply Power to Stage 1 +ve & Stage 1 -ve		
Stage 1: Apply Power to Stage 2 +ve & Stage 2 -ve		



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.	ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE		A3
	J.SPILLER	28/06/2021						
	CHECKED	DATE	ALTERNATIVE MATERIAL					
	B.ISARD	28/06/2021						
STANDARDS	APPROVED	DATE			SCALE	SHEET	DRAWING NUMBER	
SPECTRALARM RANGE	R.N.POTTS	28/06/2021			NTS	3 OF 8	D118-06-501	

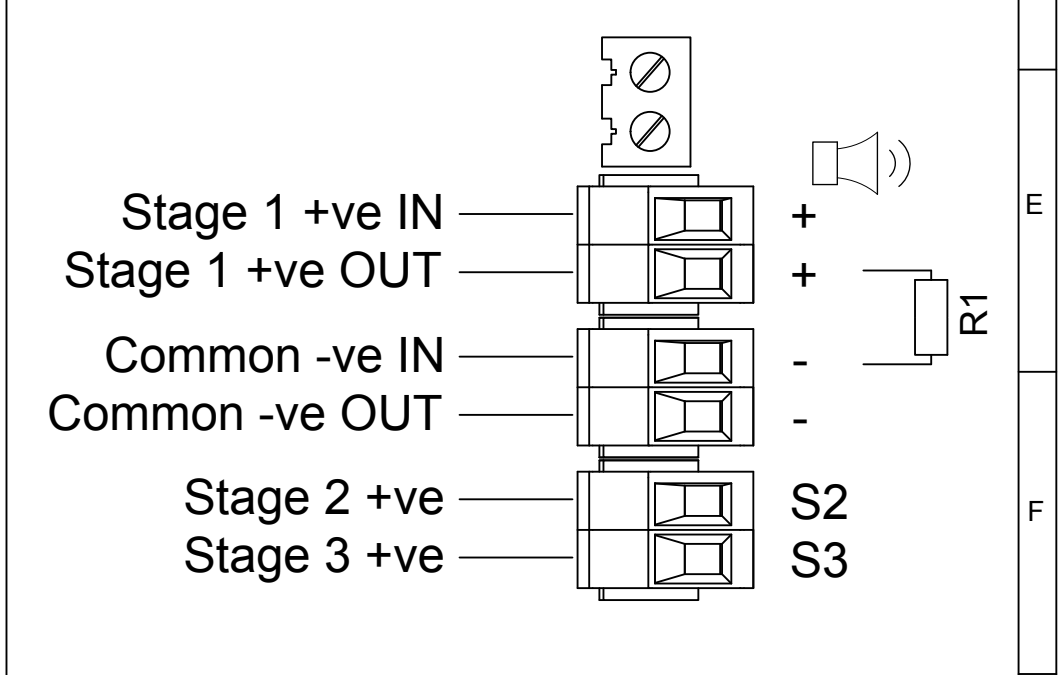
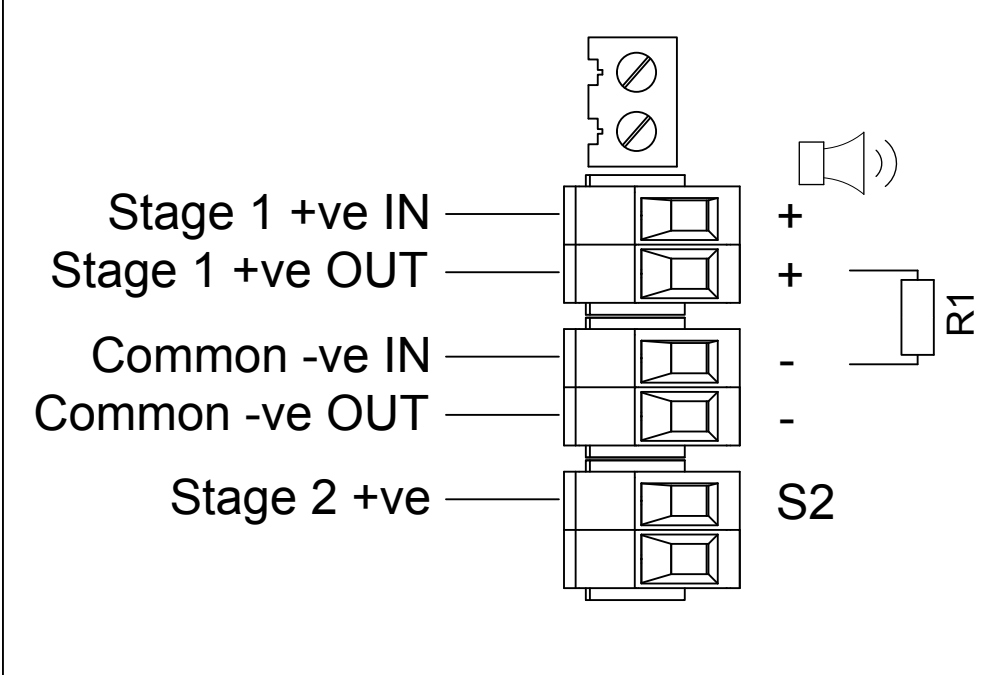
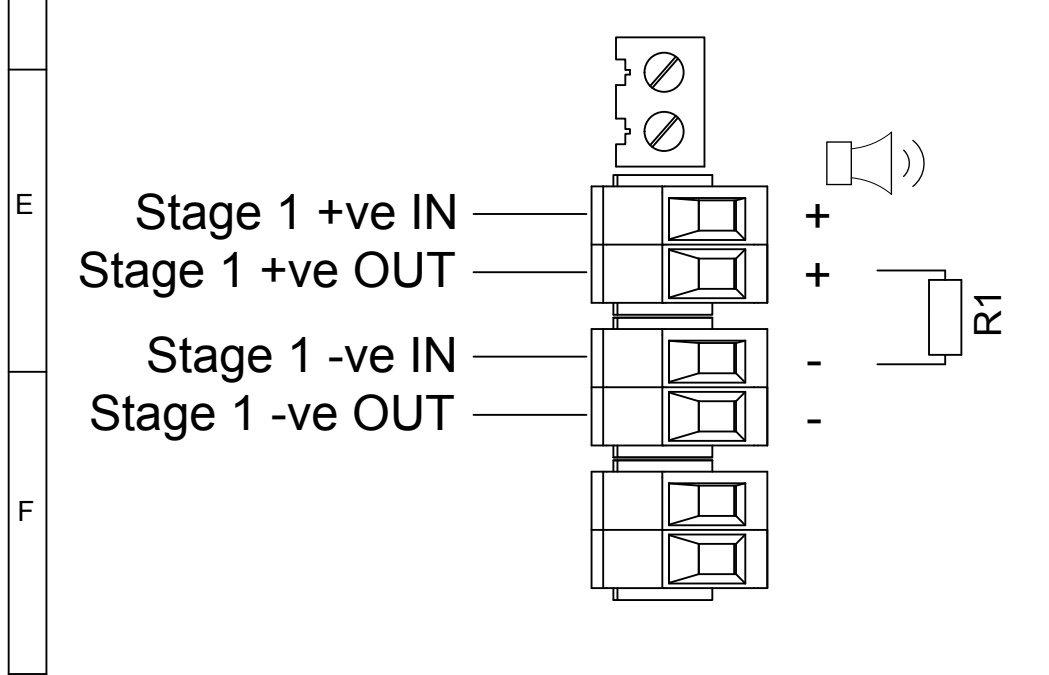
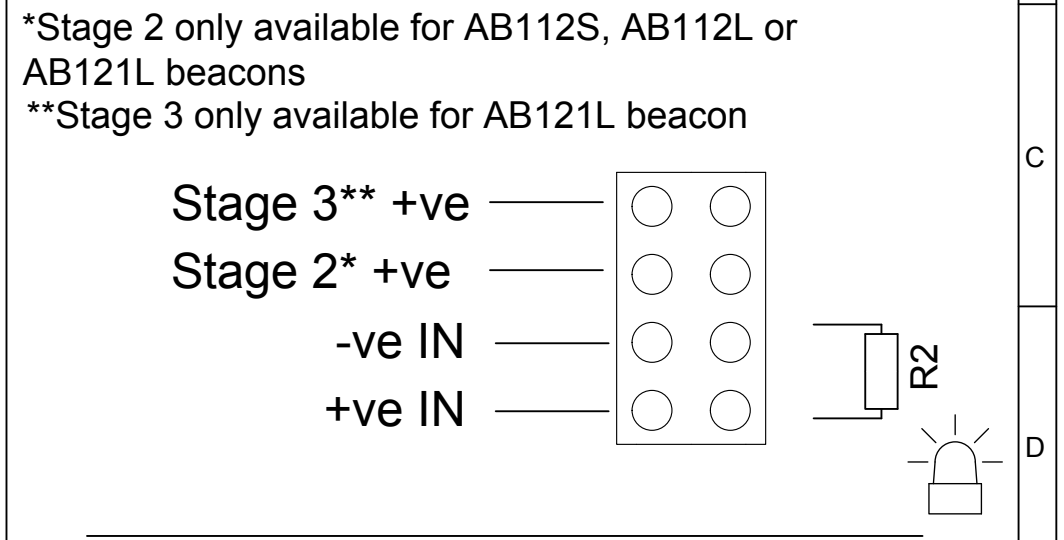
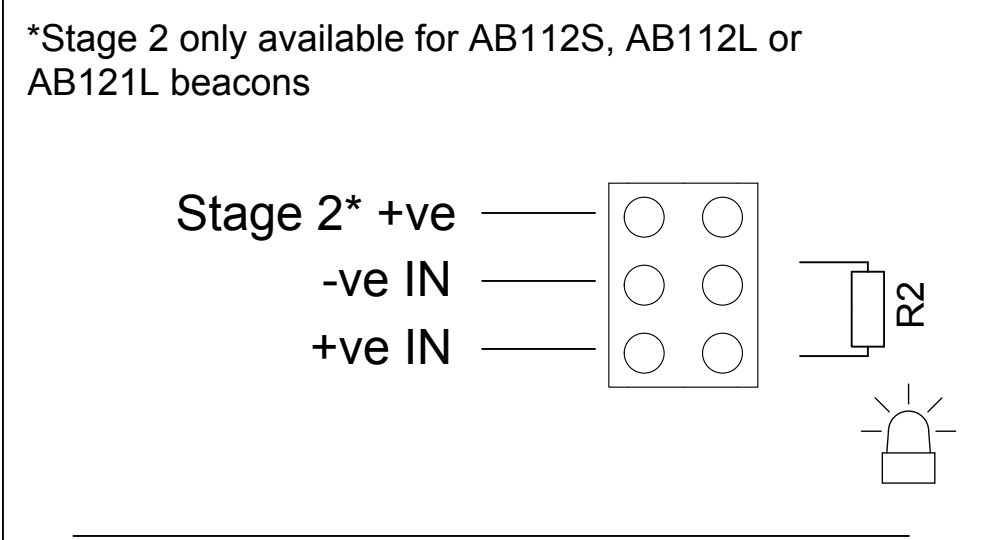
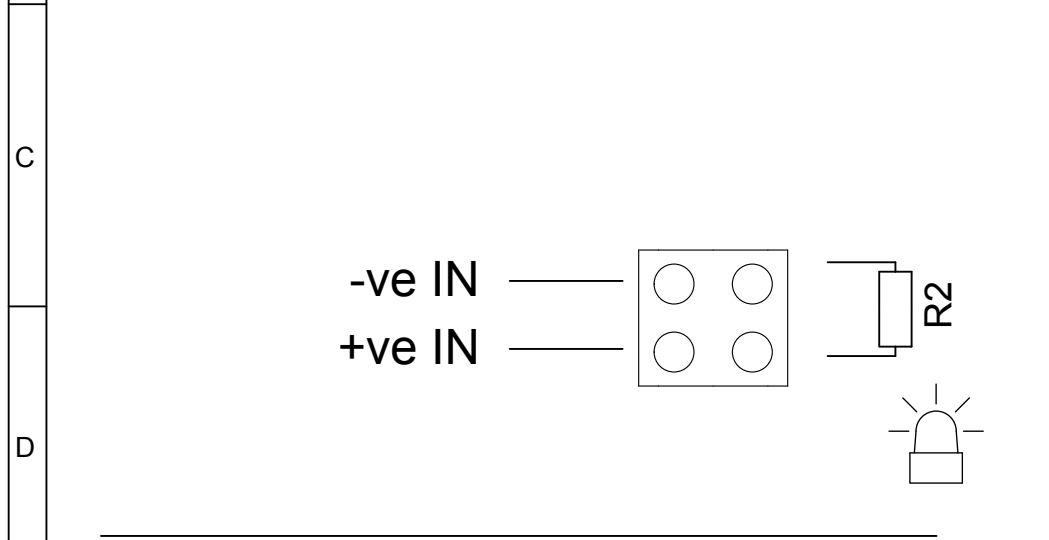
ISSUE	MOD No.	REASON - INITIAL - DATE
A		INTRODUCTION JS- 28/06/2021

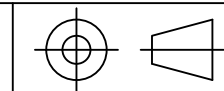
OPTIONAL LINE MONITORING RESISTOR, CUSTOMER SUPPLIED,
RECOMMENDED MINIMUM VALUES:
14V MAX SYSTEM = 120Ω MIN, 2W MIN OR 1KΩ MIN, 0.5W MIN
28V MAX SYSTEM = 470Ω MIN, 2W MIN OR 2.4KΩ MIN, 0.5W MIN



Independent Sounder & Beacon Activation (Remove Link Wires)

Single Stage Configuration	Config.: 5a	Two Stage Configuration	Config.: 5b	Three/Four Stage Configuration	Config.: 5c
Line Monitoring Set to positive switching (default)		Common Negative Set to positive switching (default)		Common Negative Set to positive switching (default)	
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 2 +ve & Common -ve		Stage 1: Apply Power to Stage 1 +ve & Common -ve Stage 2: Apply Power to Stage 2 +ve & Common -ve Stage 3: Apply Power to Stage 3 +ve & Common -ve Stage 4: Apply Power to Stage 2 +ve, Stage 3 +ve & Common -ve	



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.	ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE		A3
	J.SPILLER	28/06/2021				TITLE AB112/AB121 SOUNDER & BEACON WIRING DIAGRAMS		
	CHECKED	DATE				SCALE	SHEET	DRAWING NUMBER
	B.ISARD	28/06/2021				NTS	4 OF 8	D118-06-501
STANDARDS	APPROVED	DATE	ALTERNATIVE MATERIAL					
SPECTRALARM RANGE	R.N.POTTS	28/06/2021						

1	2	3	4	5	6	7	8	9	10
							ISSUE	MOD No.	REASON - INITIAL - DATE
							A		INTRODUCTION JS- 28/06/2021

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

SWITCHES FOR STAGE OPERATION
CUSTOMER SUPPLIED

Independent Sounder & Beacon Activation (Remove Link Wire)

Three/Four Stages. Voltage Free 2nd, 3rd & 4th Stage Activation Configuration	Config.: 6	Two Stage Configuration	Config.: 7
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Common Positive
Customer Set H1 & H2 to Negative Switching (See Below)

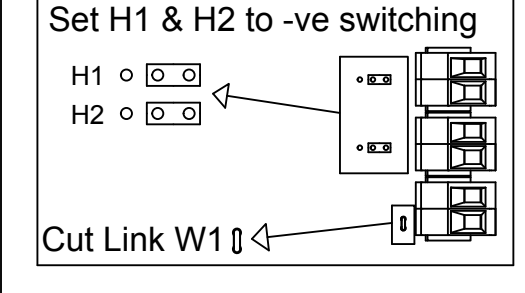
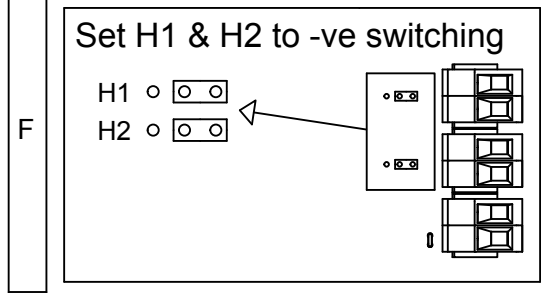
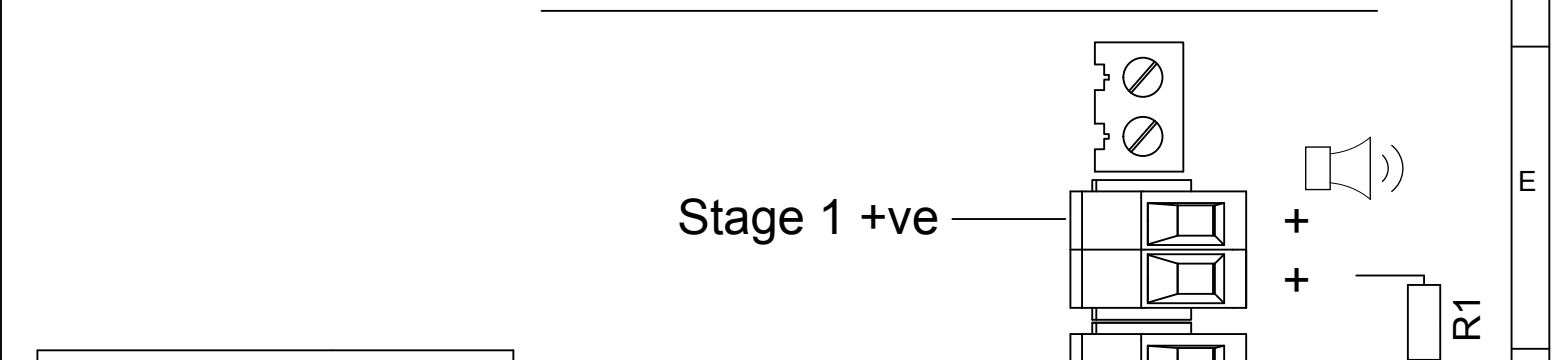
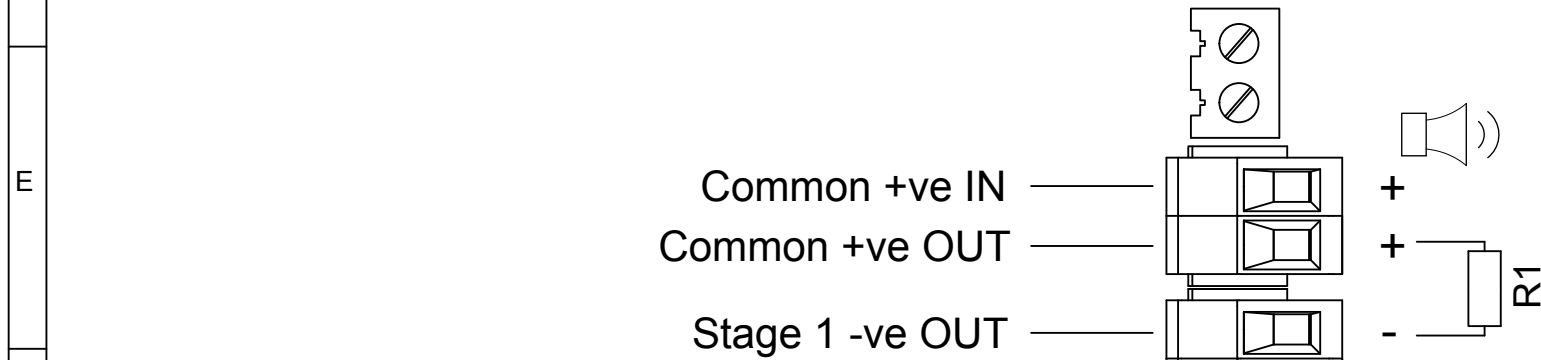
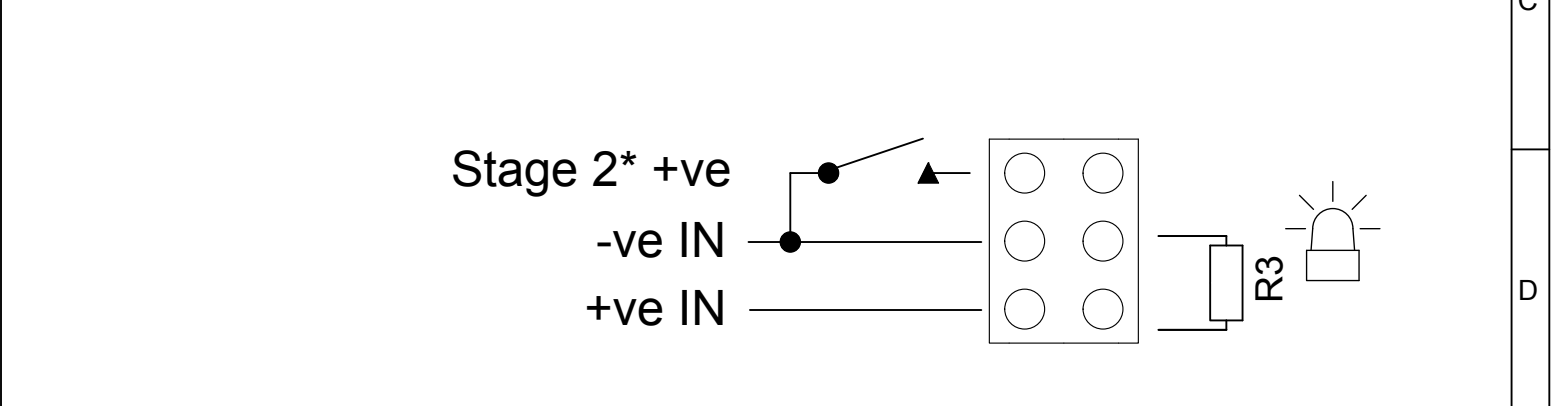
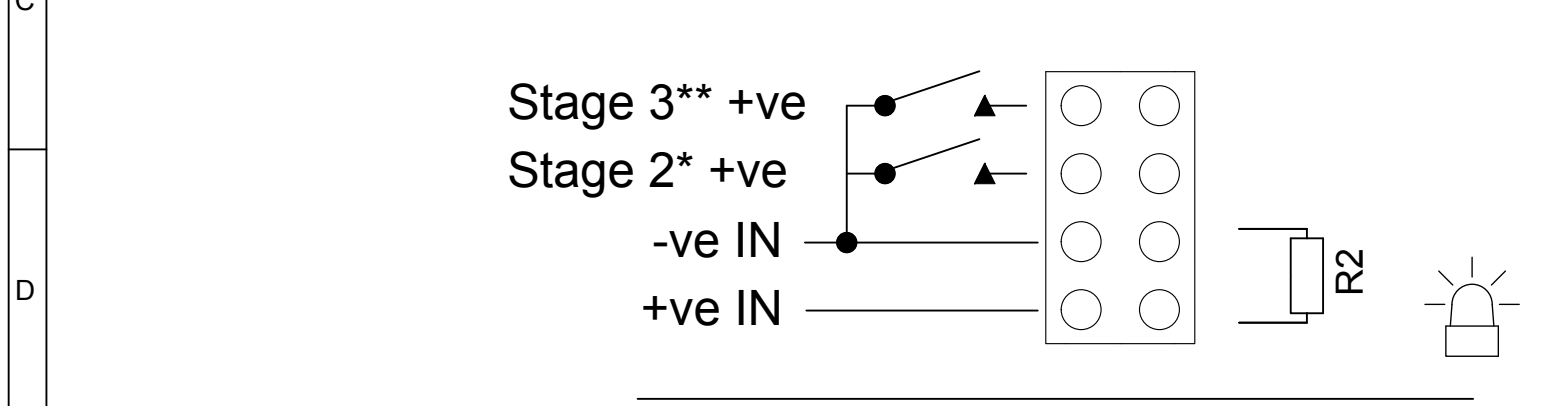
Stage 1: Apply Power to Common +ve & Stage 1 -ve
 Stage 2: Apply Power to Common +ve & Stage 1 -ve & connect Stage 2 -ve to Stage 1 -ve
 Stage 3: Apply Power to Common +ve & Stage 1 -ve & connect Stage 3 -ve to Stage 1 -ve
 Stage 4: Apply Power to Common +ve & Stage 1 -ve
 & connect Stage 2 -ve & Stage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

Independent Stage Input
Reverse Polarity Stage Monitoring

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

*Stage 2 only available for AB112S, AB112L or AB121L beacons
 **Stage 3 only available for AB121L beacon


*Stage 2 only available for AB112S, AB112L or AB121L beacons



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.	ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE		A3
	J.SPILLER	28/06/2021						
	CHECKED	DATE	ALTERNATIVE MATERIAL					
STANDARDS	B.ISARD	28/06/2021				TITLE	AB112/AB121 SOUNDER & BEACON WIRING DIAGRAMS	
SPECTRALARM RANGE	APPROVED	DATE				SCALE	NTS	
	R.N.POTTS	28/06/2021				SHEET	5 OF 8	
						DRAWING NUMBER	D118-06-501	

1	2	3	4	5	6	7	8	9	10
							ISSUE	MOD No.	REASON - INITIAL - DATE
							A		INTRODUCTION JS- 28/06/2021

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



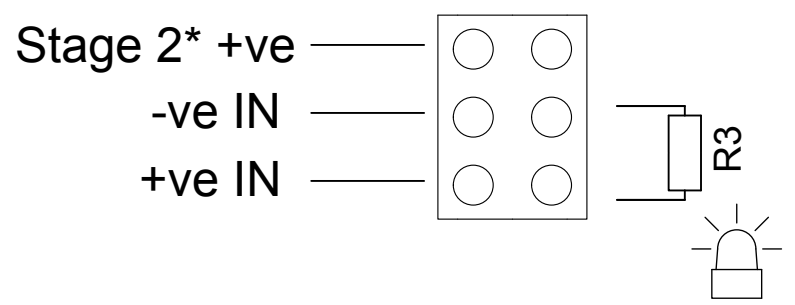
SWITCHES FOR STAGE OPERATION
CUSTOMER SUPPLIED



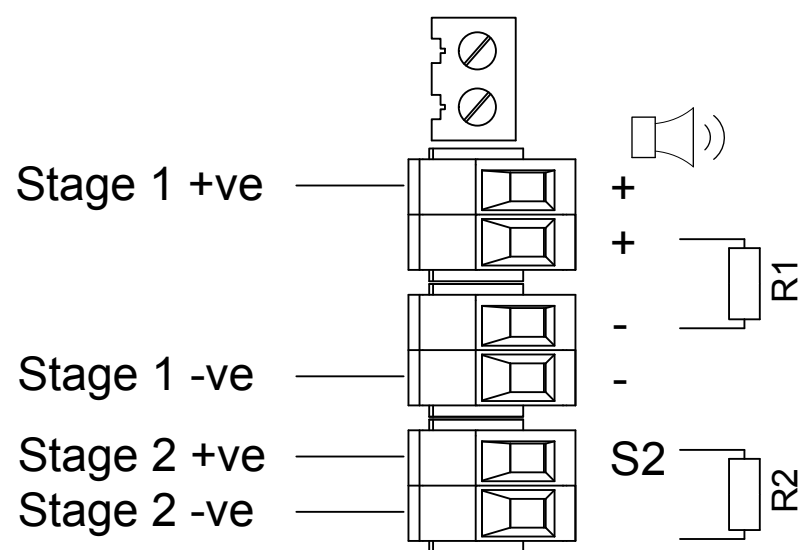
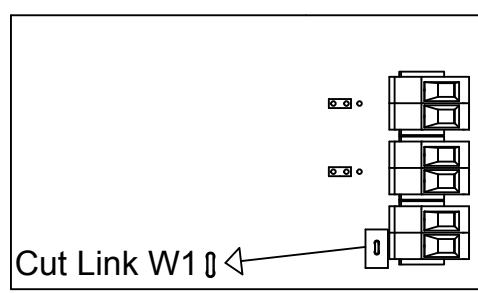
Independent Sounder & Beacon Activation (Remove Link Wires)



Two Stage Configuration				Config.: 8
Independent Stage Input				
Line Stage Monitoring (Use suitable monitoring relays/modules)				
Not to be used for reverse polarity monitoring				
Stage 1: Apply Power to Stage 1 +ve & Stage 1 -ve				
Stage 1: Apply Power to Stage 2 +ve & Stage 2 -ve				

*Stage 2 only available for AB112S, AB112L or AB121L beacons				
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CUSTOM CONFIGURATION CONTACT E2S WHEN ORDERING



G	DRAWING TO BS8888:2000 GEOMETRIC TOLERANCES TO ISO1101:1983 LINEAR DIMENSIONAL TOLS ANGULAR DIMENSIONAL TOLS	DRAWN J.SPILLER	DATE 28/06/2021	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.	ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE	 	A3
	STANDARDS SPECTRALARM RANGE	CHECKED B.ISARD	DATE 28/06/2021	MATERIAL	ALTERNATIVE MATERIAL		TITLE AB112/AB121 SOUNDER & BEACON WIRING DIAGRAMS		
		APPROVED R.N.POTTS	DATE 28/06/2021				SCALE NTS	SHEET 6 OF 8	DRAWING NUMBER D118-06-501

----- WIRING LINKING BEACON & SOUNDER
FACTORY FITTED

SWITCHES FOR STAGE OPERATION
CUSTOMER SUPPLIED

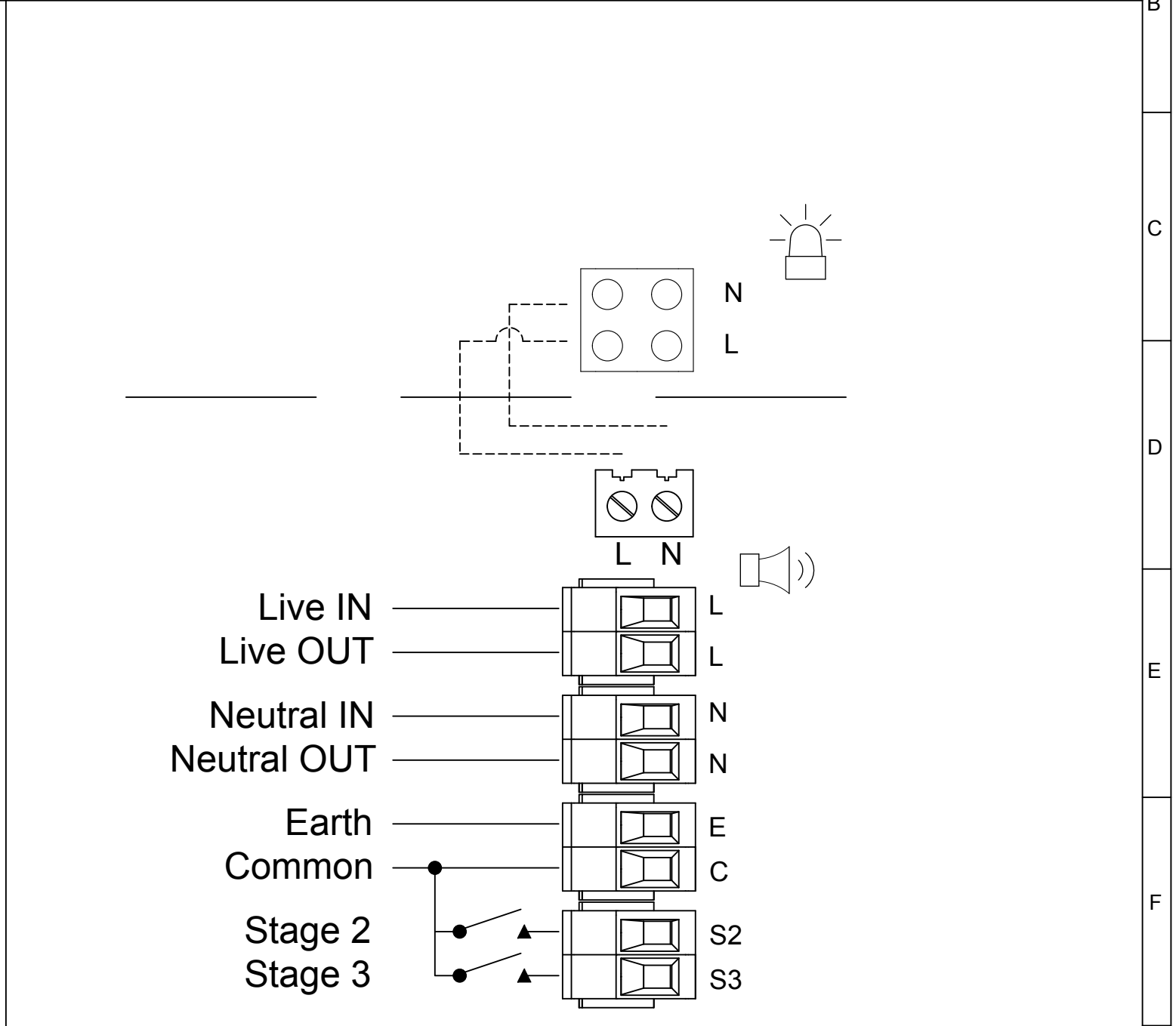
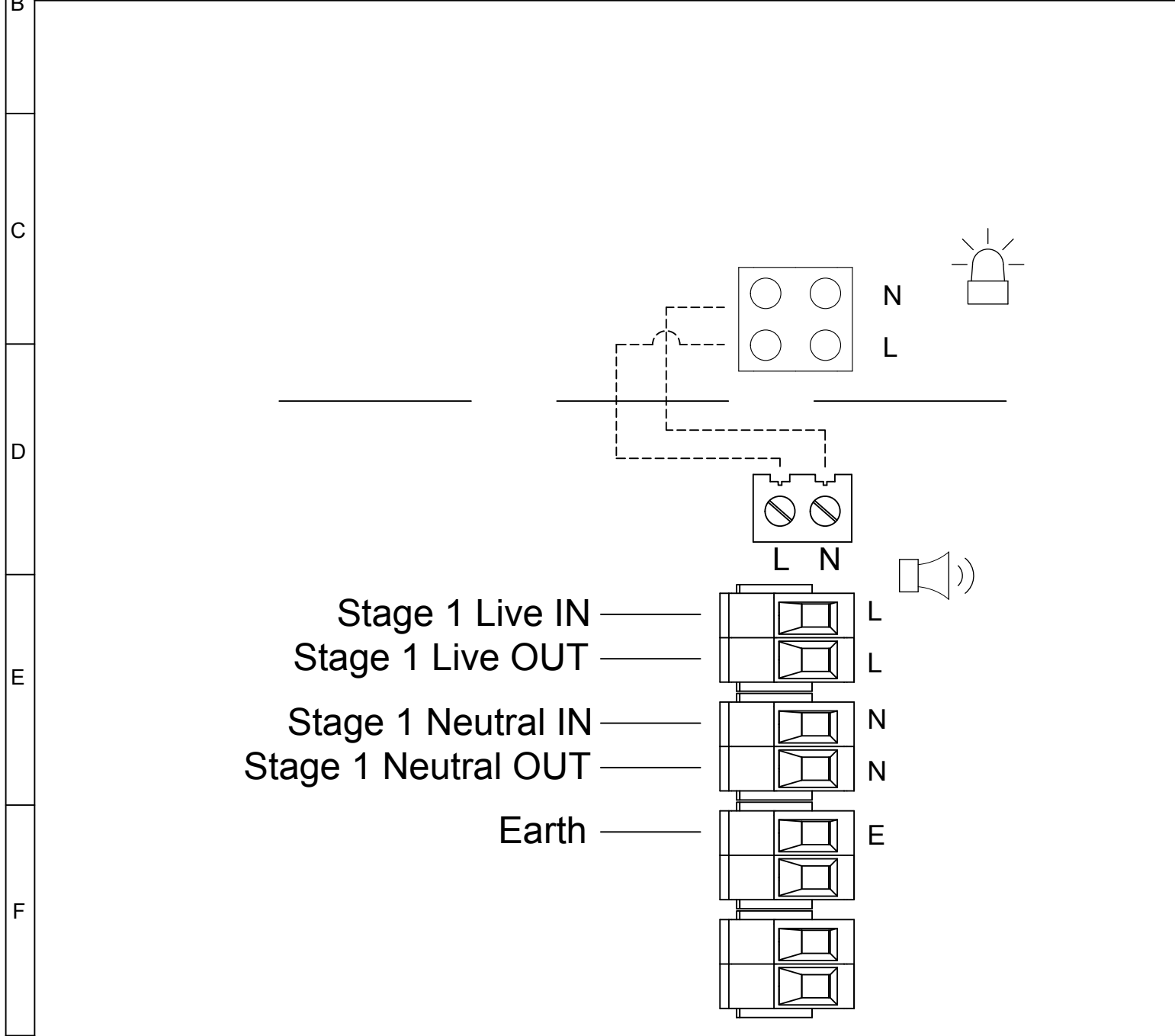
Linked Sounder & Beacon Activation (Default)

Single Stage Configuration Config.: 9a

Three/Four Stage Configuration Config.: 9b

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



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

STANDARDS
SPECTRALARM RANGE

DRAWN	DATE	
J.SPILLER	28/06/2021	
CHECKED	DATE	
B.ISARD	28/06/2021	
APPROVED	DATE	
R.N.POTTS	28/06/2021	

SURFACE FINISH	WEIGHT (Kg)	
MATERIAL		
ALTERNATIVE MATERIAL		

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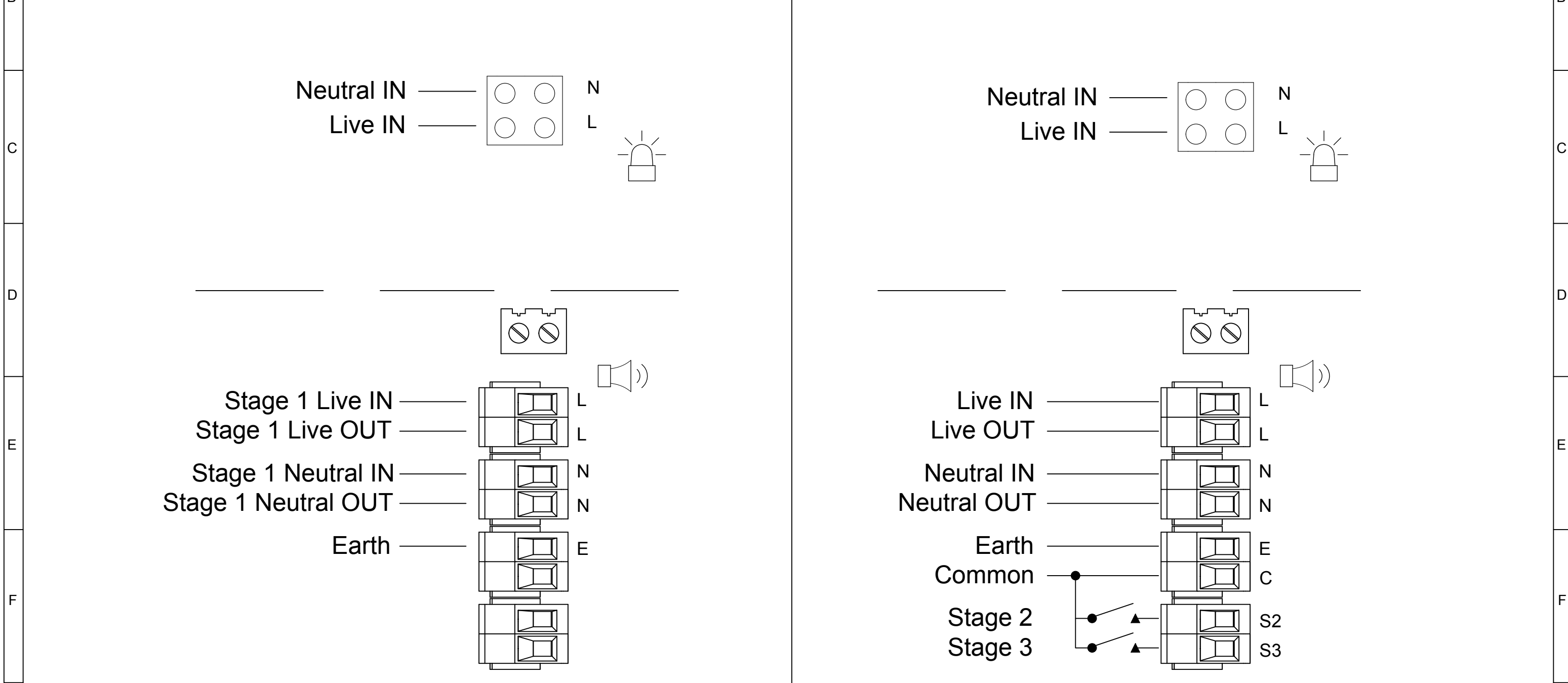
ALL DIMENSIONS IN MM
IF IN DOUBT, ASK -
DO NOT SCALE

		A3
TITLE AB112/AB121 SOUNDER & BEACON WIRING DIAGRAMS		
SCALE	SHEET	DRAWING NUMBER
NTS	7 OF 8	D118-06-501

SWITCHES FOR STAGE OPERATION
CUSTOMER SUPPLIED

Independent Sounder & Beacon Activation (Remove Link Wires)

Single Stage Configuration Stage 1: Apply Power to Stage 1 Live & Stage 1 Neutral	Config.: 10a	Three/Four Stage Configuration Stage 1: Apply Power to Live & Neutral Stage 2: Apply Power to Live & Neutral & connect Stage 2 to Common Stage 3: Apply Power to Live & Neutral & connect Stage 3 to Common	Config.: 10b
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DRAWING TO BS8888:2000 GEOMETRIC TOLERANCES TO ISO1101:1983 LINEAR DIMENSIONAL TOLS ANGULAR DIMENSIONAL TOLS	DRAWN J.SPILLER	DATE 28/06/2021	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.	ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE		A3		
	STANDARDS SPECTRALARM RANGE	CHECKED B.ISARD	DATE 28/06/2021	MATERIAL		TITLE AB112/AB121 SOUNDER & BEACON WIRING DIAGRAMS				
		APPROVED R.N.POTTS	DATE 28/06/2021	ALTERNATIVE MATERIAL		SCALE	SHEET	DRAWING NUMBER		
						NTS	8 OF 8	D118-06-501		