

Certificate of Product Approval

Certificate Number: 166r-(cl-2)

Issue: 04

Honeywell Products & Solutions Sàrl (Trading as System Sensor)

Zone d'Activitiés La Pièce 16
CH-1180 Rolle
Switzerland



is certified by BRE Global Ltd. and is authorised to use the LPCB mark in association with the product(s) listed in this certificate and appendix having complied with the requirement(s) of the standards as detailed below:

Products

Audible Warning Devices

WSS-xC-lyy

DSS-xC-lyy

BRH-xC-lxx

BRS-xC-lxx

(refer to Appendix for details)

Standards

EN 54-3:2001 + A1:2002 + A2:2006

EN 54-17:2005

EN 54-23:2010

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Signed for BRE Global Ltd

P Halligan

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Appendix to Certificate No: 166r-(cl-2)

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Certified Product	Description	LPCB Ref.No.
WSS-xC-Iyy	<p>Analogue Addressable Wall Mounted Sounder / LED Strobe with Short Circuit Isolator (B501AP base)</p> <p>Notes:</p> <ol style="list-style-type: none"> The wall mounted VAD meets the requirements of EN 54-23: 2010 for the following category (light pattern details): <ul style="list-style-type: none"> - Category O – Open Class - Flash rate 1Hz - Synchronization x indicates body colour. D=Detector White, P=Pure White yy indicates customer and associated communication protocol. <ul style="list-style-type: none"> 01 indicates Advanced Protocol (and Honeywell 500 series protocol) 00 and 02-99 indicates Advanced Protocol (and System Sensor 500 series protocol) Type A with Bcc deep back box, Type B with Wcc deep back box Meets the requirements of EN54-3: 2001 at the following tones: <ol style="list-style-type: none"> 1) Alternating 525/440, 2Hz (100ms/400ms); 2) Alternating 800/922, 1Hz; 3) Alternating 800/922, 2Hz; 4) Alternating 2400/2900, 3Hz; 5) Alternating 2500/3100, 2Hz; 6) Alternating 988/645, 2Hz; 7) Continuous 630Hz; 8) Continuous 922Hz; 9) Continuous 1200Hz; 10) Continuous 2810Hz; 11) Sweep 150-1000Hz, rise 10s, stable 40s, fall 10s, stable 20s, then 	166r/01

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Certified Product	Description	LPCB Ref.No.
	repeating; 12) Intermittent 420Hz, 0.625s on, 0.625 sec off; 13) Sweep 500-1200Hz, 0.25 sec off, 3.75 sec on; 14) Intermittent 630, 3.33Hz, 150ms on, 150ms off; 15) Intermittent 922, 0.8Hz 0.25s on, 1s off; 16) Intermittent 922, 0.5Hz 1s on, 1s off; 17) Intermittent 2810, 1Hz; 18) Intermittent 922, 1Hz 500ms on, 500ms off; 19) Intermittent 950, 0.22Hz (0.5s on, 0.5s off) x 3, 1.5s off; 20) Continuous 800Hz; 21) Sweep 400-1200Hz, (0.5s on, 0.5s off) x 3, 1.5s off; 22) Sweep 1200 – 500Hz, 0.99Hz 1s on, 0.01s off; 23) Sweep 2400 – 2850, 7Hz; 24) Sweep 500 – 1200Hz, (0.5s off, 3.5s on); 25) Sweep 800 – 970, 50Hz; 26) Sweep 800 – 970, 7Hz; 27) Sweep 800 – 970, 1Hz; 28) Sweep 2400 – 2850, 50Hz; 29) Sweep 500 – 1000, 7Hz; 30) Sweep 500 – 1200 – 500, 0.166Hz rise 1s, stable 4s, fall 1s; 31) Sweep 800 – 1000, 2Hz; 32) Sweep 2400 – 2850, 1Hz	
DSS-xC-lyy	Analogue Addressable Type A Integrated Detector Base Sounder/Beacon with Short Circuit Isolator (B501AP base) Notes:	166r/02

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Certified Product	Description	LPCB Ref.No.
	<p>1. The wall mounted VAD meets the requirements of EN 54-23: 2010 for the following category (light pattern details):</p> <ul style="list-style-type: none"> - Category O – Open Class - Flash rate 1Hz - Synchronization <p>2. x indicates body colour. D=Detector White, P=Pure White</p> <p>3. yy indicates customer and associated communication protocol.</p> <ul style="list-style-type: none"> 01 indicates Advanced Protocol (and Honeywell 500 series protocol) 00 and 02-99 indicates Advanced Protocol (and System Sensor 500 series protocol) <p>4. Meets the requirements of EN54-3 for all output levels at voltage range 15-29VDC and tones:</p> <ul style="list-style-type: none"> 1) 554/440, 2Hz (100ms/400ms); 2) 800/970, 1Hz; 3) 800/970, 2Hz; 4) 2400/2900, 3Hz; 5) 2500/3100, 2Hz; 6) 988/645, 2Hz; 7) 660Hz; 8) 970Hz; 9) 1200Hz; 10) 2850Hz; 11) 150-1000, rise 10s, stable 40s, fall 10s, stable 20s, then repeating; 12) 420Hz, 0.625s on, 0.625 sec off; 13) 500-1200Hz, 0.25 sec off, 3.75 sec on; 14) 660, 3.33Hz, 150ms on, 150ms off; 	

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	15) 970, 0.8Hz 0.25s on, 1s off; 16) 970, 0.5Hz 1s on, 1s off; 17) 2850, 1Hz; 18) 970, 1Hz 500ms on, 500ms off; 19) 950, 0.22Hz (0.5s on, 0.5s off) x 3, 1.5s off; 20) 800Hz; 21) 400-1200Hz, (0.5s on, 0.5s off) x 3, 1.5s off; 22) 1200 – 500Hz, 0.99Hz 1s on, 0.01s off; 23) 2400 – 2850, 7Hz; 24) 500 – 1200Hz, (0.5s off, 3.5s on); 25) 800 – 970, 50Hz; 26) 800 – 970, 7Hz; 27) 800 – 970, 1Hz; 28) 2400 – 2850, 50Hz; 29) 500 – 1000, 7Hz; 30) 500 – 1200 – 500, 0.166Hz rise 1s, stable 4s, fall 1s; 31) 800 – 1000, 2Hz; 32) 2400 – 2850, 1Hz.	
BRH-xC-lxx	Addressable Type A Detector Base Sounder Strobe Notes: 1. x indicates body colour. Detector White, P=Pure White 2. xx indicates customer and associated communication protocol. 01 indicates Advanced Protocol (and Honeywell 500 series protocol) 00 and 02-99 indicates Advanced Protocol (and System Sensor 500 series protocol) 3. Meets the requirements of EN 54-3:2001 for the following tones:	166r/03

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Certified Product	Description	LPCB Ref.No.
	<p>Tone 1 – Alternating 525 / 440Hz in 100ms/400ms</p> <p>Tone 2 – Alternating 800 / 922Hz for 1Hz</p> <p>Tone 3 – Alternating 800 / 922Hz for 2Hz</p> <p>Tone 4 – Alternating 2400 / 2900Hz for 3Hz</p> <p>Tone 5 – Alternating 2500 / 3100Hz for 2Hz</p> <p>Tone 6 – Alternating 988 / 645Hz for 2Hz</p> <p>Tone 7 – Continuous 630Hz</p> <p>Tone 8 – Continuous 922Hz</p> <p>Tone 9 – Continuous 1200Hz</p> <p>Tone 10 – Continuous 2810Hz</p> <p>Tone 11 – Sweep 150-1000-500Hz Rising from 500Hz to 1000Hz in 10s, Hold 100Hz for 40s Falling from 100Hz to 500Hz in 10s, Hold 500Hz for 20s</p> <p>Tone 12 – Intermittent 420Hz for 150ms on, 150ms off</p> <p>Tone 13 – Sweep 500-1200Hz Rising from 500Hz to 1200Hz in 0.25s, then 3.75s off</p> <p>Tone 14 – Intermittent 630Hz for 150ms on, 150ms off</p> <p>Tone 15 – Intermittent 922Hz for 0.25s on, 1s off</p> <p>Tone 16 – Intermittent 922Hz for 1s on, 1s off</p> <p>Tone 17 – Intermittent 2810Hz for 1Hz</p> <p>Tone 18 – Intermittent 922Hz for 500ms on, 500ms off</p> <p>Tone 19 – Intermittent 950Hz for 500ms on, 500ms off. Repeat 3 times then 1.5s off</p> <p>Tone 20 – Continuous 800Hz</p> <p>Tone 21 – Sweep 400-1200Hz Rising from 400Hz to 1200Hz in 500ms, then 500ms off. Repeat 3 times then 1.5s off</p>	

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Certified Product	Description	LPCB Ref.No.
	<p>Tone 22 – Sweep 1200-500Hz Falling from 1200Hz to 500Hz in 1000ms, 10ms off</p> <p>Tone 23 – Sweep 2400-2850Hz for 7Hz</p> <p>Tone 24 – Sweep 500-1200Hz Rising from 500Hz to 1200Hz in 0.5s, then 3.5s off</p> <p>Tone 25 – Sweep 800-970Hz for 50Hz</p> <p>Tone 26 – Sweep 800-970Hz for 7Hz</p> <p>Tone 27 – Sweep 800-970Hz for 1Hz</p> <p>Tone 28 – Sweep 2400-2850Hz for 50Hz</p> <p>Tone 29 – Sweep 500-1000Hz for 7Hz</p> <p>Tone 30 – Sweep 500-1200-500Hz Rising from 500Hz to 1200Hz in 1s, Hold 1200Hz for 4s Falling from 1200Hz to 500Hz in 1s</p> <p>Tone 31 – Sweep 800-1000Hz for 2Hz</p> <p>Tone 32 – Sweep 2400-2850Hz for 1Hz</p> <p>4. The Ceiling mounted VAD meets the requirements of EN 54-23:2010 for the following:</p> <ul style="list-style-type: none"> - Category ratings High C-3-15, Low C-3-11 & O-1-4 - Synchronization - Flash rate 0.5Hz & 1Hz - Red LED - Clear lens 	
BRS-xC-lxx	<p>Addressable Type A Detector Base Sounder Strobe</p> <p>Notes:</p> <p>1. x indicates body colour. Detector White, P=Pure White</p> <p>2. xx indicates customer and associated communication protocol.</p> <p>01 indicates Advanced Protocol (and Honeywell 500 series protocol)</p>	166r/04

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	<p>00 and 02-99 indicates Advanced Protocol (and System Sensor 500 series protocol)</p> <p>3. Meets the requirements of EN 54-3:2001 for the following tones:</p> <ul style="list-style-type: none"> Tone 1 – Alternating 525 / 440Hz in 100ms/400ms Tone 2 – Alternating 800 / 922Hz for 1Hz Tone 3 – Alternating 800 / 922Hz for 2Hz Tone 4 – Alternating 2400 / 2900Hz for 3Hz Tone 5 – Alternating 2500 / 3100Hz for 2Hz Tone 6 – Alternating 988 / 645Hz for 2Hz Tone 7 – Continuous 630Hz Tone 8 – Continuous 922Hz Tone 9 – Continuous 1200Hz Tone 10 – Continuous 2810Hz Tone 11 – Sweep 150-1000-500Hz Rising from 500Hz to 1000Hz in 10s, Hold 100Hz for 40s Falling from 100Hz to 500Hz in 10s, Hold 500Hz for 20s Tone 12 – Intermittent 420Hz for 150ms on, 150ms off Tone 13 – Sweep 500-1200Hz Rising from 500Hz to 1200Hz in 0.25s, then 3.75s off Tone 14 – Intermittent 630Hz for 150ms on, 150ms off Tone 15 – Intermittent 922Hz for 0.25s on, 1s off Tone 16 – Intermittent 922Hz for 1s on, 1s off Tone 17 – Intermittent 2810Hz for 1Hz Tone 18 – Intermittent 922Hz for 500ms on, 500ms off Tone 19 – Intermittent 950Hz for 500ms on, 500ms off. Repeat 3 times then 1.5s off 	

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	<p>Tone 20 – Continuous 800Hz</p> <p>Tone 21 – Sweep 400-1200Hz Rising from 400Hz to 1200Hz in 500ms, then 500ms off. Repeat 3 times then 1.5s off</p> <p>Tone 22 – Sweep 1200-500Hz Falling from 1200Hz to 500Hz in 1000ms, 10ms off</p> <p>Tone 23 – Sweep 2400-2850Hz for 7Hz</p> <p>Tone 24 – Sweep 500-1200Hz Rising from 500Hz to 1200Hz in 0.5s, then 3.5s off</p> <p>Tone 25 – Sweep 800-970Hz for 50Hz</p> <p>Tone 26 – Sweep 800-970Hz for 7Hz</p> <p>Tone 27 – Sweep 800-970Hz for 1Hz</p> <p>Tone 28 – Sweep 2400-2850Hz for 50Hz</p> <p>Tone 29 – Sweep 500-1000Hz for 7Hz</p> <p>Tone 30 – Sweep 500-1200-500Hz Rising from 500Hz to 1200Hz in 1s, Hold 1200Hz for 4s Falling from 1200Hz to 500Hz in 1s</p> <p>Tone 31 – Sweep 800-1000Hz for 2Hz</p> <p>Tone 32 – Sweep 2400-2850Hz for 1Hz</p> <p>4. The Ceiling mounted VAD meets the requirements of EN 54-23:2010 for the following:</p> <ul style="list-style-type: none"> - Category ratings C-3-8.5 & O-1-3 - Synchronization - Flash rate 0.5Hz & 1Hz - Red LED - Clear lens 	

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