



# Declaration of Performance – DOP000045 According to Construction Products Regulation EU N° 305/2011

1. Unique Product identification code(s):

BF431A/CX/W, BF456A/CX/W, BF460A/CX/W

2. Type, batch or serial number(s) or any other element allowing identification of the construction product(s) as required pursuant to Article 11(4):

96dB(A) Base Sounder, white/clear plastic housing (**BF431A/CX/W**) C-3-8 Base VAD c/w 96dB(A) sounder, white/clear plastic housing (**BF456A/CX/W**) C-3-8 Base VAD, white/clear plastic housing (**BF460A/CX/W**)

3. Intended use or uses of the construction product(s), in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:

### Models BF431A/CX/W, BF456A/CX/W:

Sounders to EN54-3: 2001 for use in Fire detection and fire alarm systems in buildings

### Models BF431A/CX/W, BF456A/CX/W, BF460A/CX/W:

Short-circuit isolators to EN54-17: 2005 for use in Fire detection and fire alarm systems in buildings

#### Models BF456A/CX/W, BF460A/CX/W:

Visual alarm devices to EN54-23: 2010 for use in Fire detection and fire alarm systems in buildings

**4. Name, registered trade name** or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5):

Computionics Limited (C-TEC)
Challenge Way, Martland Park, Wigan, WN5 0LD. United Kingdom Tel: 01942 322744. Fax: 01942 829867

5. Where applicable, name and contact address of the authorized representative whose mandate covers the tasks specified in Article 12(2):

Not Applicable

6. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V:

System 1

**7. Notified body**, in the case of the declaration of performance concerning a construction product covered by a harmonized standard:

Loss Prevention Certification Board (LPCB) (Notified body number 0832) BRE Global, Bucknalls Lane, Garston, Watford, WD25 9XX United Kingdom

has performed type testing and the initial inspection of the manufacturing plant and of factory production control with continuous surveillance, assessment and approval of the factory production control under system 1 and issued the following certificate of constancy of performance:

**BF431A/CX/W:** 2831-CPR-F1114 **BF456A/CX/W:** 2831-CPR-F1115 **BF460A/CX/W:** 2831-CPR-F1116





# 8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:

Not applicable, see item 7

### 9(a). Declared performance applicable to models BF431A/CX/W, BF456A/CX/W:

All requirements including all Essential Characteristics and the corresponding performances for the intended use or uses indicated in 3. above have been determined as described in the hEN mentioned in the following table.

Harmonised Technical Specification		EN54-3: 2001 + A1:2002+A2:2006	
Essential Characteristics	Performance	Clause	
Performance parameters under fire condition			
- Sound level	Pass	4.2	
- Frequency and sound patterns	Pass	4.3	
- Reproducibility	Pass	5.2	
- Operational performance	Pass	5.3	
<ul> <li>Attention drawing signal and message broadcast sequences</li> </ul>	NPD	C.3.1	
- Synchronisation (option with requirements)	NPD	C.3.2	
- Broadcast message performance	NPD	C.5.1	
- Attention-drawing signal silence message sequence timing	NPD	C.5.2	
<ul> <li>Message synchronisation testing option with requirements</li> </ul>	NPD	C.5.3	
Operational reliability			
- Durability	Pass	4.4	
- Construction	Pass	4.5	
- Marking and data	Pass	4.6	
- Durability	Pass	5.4	
- General testing	NPD	C4	
Durability of operational reliability			
Temperature resistance:			
- Dry heat (operational)	Pass	5.5	
- Dry heat (endurance)	Pass	5.6	
- Cold (operational)	Pass	5.7	
- Damp heat, cyclic (operational)	Pass	5.8	
- Damp heat, steady state (endurance)	Pass	5.9	
Humidity resistance:			
- Damp heat, cyclic (operational)	Pass	5.8	
- Damp heat, steady state (endurance)	Pass	5.9	
- Damp heat, cyclic (endurance)	Pass	5.10	
Corrosion resistance:			
<ul> <li>Sulfur dioxide (SO<sub>2</sub>) corrosion (endurance)</li> </ul>	Pass	5.11	
Shock and vibration resistance:			
- Shock (operational)	Pass	5.12	
- Impact (operational)	Pass	5.13	
- Vibration, sinusoidal (operational)	Pass	5.14	
- Vibration, sinusoidal (endurance)	Pass	5.15	
Electrical stability:			
<ul> <li>Electromagnetic compatibility (EMC), immunity (operational)</li> </ul>	Pass	5.16	
Resistance to ingress:			
- Enclosure protection	Pass	5.17	

Meets the requirements of EN54-3 for the following (operating voltage range 17-28 VDC):

- 1. Tone 1 Primary
- Evacuate, 550Hz for 0.5s, 825Hz for 0.5s
- Alternating, 925Hz for 0.25s, 626Hz for 0.25s
- Dutch slow sweep, 500Hz to 1200Hz for 3.5s on, 0.5s off
- 2. Can be used as either:
- A stand alone device with locking white cap (BF330CTLIDW), or red cap (BF330CTLIDR), or
- A stacked VAD base combination with detectors from the Apollo Discovery range

 $\epsilon$ 



# 9(b). Declared performance applicable to models BF431A/CX/W, BF456A/CX/W, BF460A/CX/W:

All requirements including all Essential Characteristics and the corresponding performances for the intended use or uses indicated in 3. above have been determined as described in the hEN mentioned in the following table.

Harmonised Technical Specification		EN54-17: 2005
Essential Characteristics	Performance	Clause
Performance under fire conditions		
- Reproducibility (1)	Pass	5.2
Operational reliability		
- General requirements	Pass	4
Durability of operational reliability (temperature resistance)		
- Dry heat (operational)	Pass	5.4
- Cold (operational)	Pass	5.5
Durability of operational reliability (vibration resistance)		
- Shock (operational)	Pass	5.9
- Impact (operational)	Pass	5.10
- Vibration, sinusoidal (operational)	Pass	5.11
- Vibration, sinusoidal (endurance)	Pass	5.12
Durability of operational reliability (humidity resistance)		
- Damp heat, cyclic (operational)	Pass	5.6
- Damp heat, steady state (operational)	Pass	5.7
Durability of operational reliability (corrosion resistance)		
- Sulphur dioxide (SO <sub>2</sub> ) corrosion (endurance)	Pass	5.8
Durability of operational reliability (electrical stability)		
- Variation in supply voltage	Pass	5.3
- Electromagnetic Compatibility (EMC), Immunity tests (operational)	Pass	5.13
(1) This is assuming that the effect of the fire is to cause a short circuit in the transmission pa	ath that is protected by these	devices.





## 9(c). Declared performance applicable to models BF456A/CX/W, BF460A/CX/W:

Harmonised Technical Specification		EN54-23: 2010
Essential Characteristics	Performance	Clause
Operational reliability		
- Duration of operation	Pass	4.2.1
- Provision for external conductors	Pass	4.2.2
- Flammability of materials	Pass	4.2.3
- Enclosure protection	Pass	4.2.4
- Access	Pass	4.2.5
- Manufacturer's adjustments	Pass	4.2.6
- On-site adjustment of behaviour	Pass	4.2.7
- Requirements for software controlled devices	Pass	4.2.8
Performance parameters under fire condition		
- Coverage volume	Pass	4.3.1
- Variation of light output	Pass	4.3.2
- Minimum and maximum light intensity	Pass	4.3.3
- Light colour	White	4.3.4
- Light temporal pattern and frequency of flashing	Pass/0.5Hz	4.3.5
- Marking and data	Pass	4.3.6
- Synchronisation (option with requirements)	Pass	4.3.7
Durability		
Temperature resistance:		
- Dry heat (operational)	Pass	4.4.1.1
- Dry heat (endurance)	Pass	4.4.1.2
- Cold (operational)	Pass	4.4.1.3
Humidity resistance:		
- Damp heat, cyclic (operational)	Pass	4.4.2.1
- Damp heat, steady state (endurance)	Pass	4.4.2.2
- Damp heat, cyclic (endurance)	Pass	4.4.2.3
Shock and vibration resistance:		
- Shock (operational)	Pass	4.4.3.1
- Impact (operational)	Pass	4.4.3.2
- Vibration (operational)	Pass	4.4.3.3
- Vibration (endurance)	Pass	4.4.3.4
Corrosion resistance:		
- SO2 corrosion (endurance)	Pass	4.4.4
Electrical stability:		
- EMC, immunity (operational)	Pass	4.4.5

- 1. Meets the requirements of EN54-23 for the following:
- Category C-3-8
- Flash rate 0.5Hz
- Synchronisation
- Operating voltage range 21-28 VDC
- 2. Can be used as either:
- A stand alone device with locking white cap (BF330CTLIDW), or red cap (BF330CTLIDR), or
   A stacked VAD base combination with detectors from the Apollo Discovery range

### 10. Empowered Signatory of Company

Name: Stephen Brown

Position: Research & Development Manager

Signature:

Date: 23 January 2020

Declaration of Performance • Approved Document No. DOP0000045 R2 • Page 4 of 4