

CERTIFICATE OF CONSTANCY OF PERFORMANCE

Issued by DBI Certification-UK, approved body No. 8504.

In compliance with UK STATUTORY INSTRUMENT 2020 No. 1359 Construction Products Regulation 2011 (retained EU law EUR 305/2011) as amended by the Construction Products (Amendment etc.) (EU Exit) Regulations 2019 and the Construction Products (Amendment etc.) (EU Exit) Regulations 2020, this certificate applies to the construction product

TAU-BSB-23R-01, TAU-BSB-23W-01, TAU-BSB-23W-01-BL

The product fulfils the essential characteristic:

See Annex 1

Intended use: Applications related to automatic fire alarm systems

Placed on the market under the name or trade mark of:
**Hyfire Wireless Fire Solutions Ltd
Unit B12a Holly Farm Business Park
Honiley, Warwickshire, CV81NP
United Kingdom**

and produced in the manufacturing plant:
UKCPA10005

This attests that all provisions concerning the performance described in Annex ZA of the standard(s)

EN 54-3:2001+A1:2002+A2:2006 : **Fire detection and fire alarm systems — Part 3: Fire alarm devices — Sounders**
EN 54-23:2010 : **Fire detection and fire alarm systems — Part 23: Fire alarm devices — Visual alarm devices**
EN 54-25:2008+AC:2012 : **Fire detection and fire alarm systems — Part 25: Components using radio links**

under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

CONSTANCY OF PERFORMANCE OF THE CONSTRUCTION PRODUCT.

This certificate was first issued on 2022-08-10 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

The attached annexes form part of this certificate.

Date of issue: **2022-08-10.**



Merete Poulsen
Responsible for evaluation



Steen Nilsson
Responsible for certification decision

Annex 1

EXTENT

Product description:

TAU-BSB-23R-01 Sounder and Visual Alarm Device using Radio Links
TAU-BSB-23W-01 Sounder and Visual Alarm Device using Radio Links
TAU-BSB-23W-01-BL Sounder and Visual Alarm Device using Radio Links

TAU-BSB-23R-01**Configuration**

The sounder and visual alarm device consists of a plastic enclosure (dimensions: 129 (d) x 55 (h) mm) with IP21C degree of protection, containing:

- No. 1 Main board (PCB code B40-TWBSX-0002)
- No. 1 Piezoelectric buzzer (trademark Kingstate, model KBIG5010N08028AZ)
- No. 3 Red LED (trademark CREE, model XPEBRD-L1-0000-00901)
- No. 2 Battery allocable (CR123A Lithium, 3 V – 1.25Ah)

Technical Characteristics

Tone patterns in compliance with EN 54-3:

- Warble Tone: 800 Hz for 500ms then 1000 Hz for 500 ms
- Continuous tone: 970 Hz continuous
- Slow Whoop (Dutch): 500-1200 Hz for 3500 ms, then off for 500 ms
- German DIN tone: 1200-500 Hz swept every 1000ms (1 Hz)

Coverage characteristics:

- C3-10 (high power)
- O1.7-6.0 (low power)

Flash rate: 0.5 Hz

Destination for use: Type A (for internal)

Operating frequency band: 868 MHz ; 916 MHz

Hardware identification of the microcontroller (U4 and U5):

- Texas Instruments, MSP430G2433 (U4)
- STMicroelectronics, STM32L051K86 (U5)

Firmware identification of the microcontroller (U4 and U5) used on the main board:

- 1_0_1 (U4) ; 0_1_14 (U5), using the 868 MHz frequency band
- 1_0_1 (U4) ; 0_1_14 (U5), using the 916 MHz frequency band

DBI Certification-UK Ltd.

Unit 1 & 2, Northcot Park, Station Road, Blockley, Gloucestershire GL56 9LH
E-mail: info@dbicertification.co.uk · www.dbicertification.co.uk



No. 23333

TAU-BSB-23W-01, TAU-BSB-23W-01-BL (Black version)

Configuration

The sounder and visual alarm device consists of a plastic enclosure (dimensions: 129 (d) x 55 (h) mm) with IP21C degree of protection, containing:

- No. 1 Main board (PCB code B40-TWBSX-0002)
- No. 1 Piezoelectric buzzer (trademark Kingstate, model KBIG5010N08028AZ)
- No. 3 White LED (trademark CREE, model XTEAWT-00-0000-00000BKE3)
- No. 2 Battery allocable (CR123A Lithium, 3 V – 1.25Ah)

Technical Characteristics

Tone patterns in compliance with EN 54-3:

- Warble Tone: 800 Hz for 500 ms then 1000 Hz for 500 ms
- Continuous tone: 970 Hz continuous
- Slow Whoop (Dutch): 500-1200 Hz for 3500 ms, then off for 500 ms
- German DIN tone: 1200-500Hz swept every 1000 ms (1Hz)

Coverage characteristics:

- C3-15 (high power)
- C3-10 (low power)
- O4.6-15 (high power)

Flash rate: 0.5 Hz

Destination for use: Type A (for internal)

Operating frequency band: 868 MHz ; 916 MHz

Hardware identification of the microcontroller (U4 and U5) used on the main board:

- Texas Instruments, MSP430G2433 (U4)
- STMicroelectronics, STM32L051K86 (U5)

Firmware identification of the microcontroller (U4 and U5) used on the main board:

- 1_0_1 (U4) ; 0_1_14 (U5), using the 868 MHz frequency band
- 1_0_1 (U4) ; 0_1_14 (U5), using the 916 MHz frequency band

List of optional functions with requirements (EN 54-23)

4.3.7 Synchronization

Performance

Essential characteristics	Clauses in EN 54-3:2001+A1:2002+A2:2006	Performance
Performance under fire conditions	4.2, 4.3, 5.2, 5.3	Pass
Operational reliability	4.4, 4.5, 4.6, 5.4	Pass
Durability of operational reliability and response delay; temperature resistance	5.5, 5.7, 5.8, 5.9	Pass
Durability of operational reliability; humidity resistance	5.8, 5.9	Pass
Durability of operational reliability; corrosion resistance	5.11	Pass
Durability of operational reliability; vibration resistance	5.12 to 5.15	Pass
Durability of operational reliability; electrical stability	5.16*	Pass
Durability of operational reliability; resistance to ingress	5.17	Pass
<i>5.16 applies only to sounders or voice sounders with active electronic components</i>		

Essential characteristics	Clauses in EN 54-23:2010	Level(s) or class(es)	Notes
Operational reliability: Duration of operation Provision for external conductors Flammability of materials Enclosure protection Access Manufacturer's adjustments On-site adjustment of behaviour Requirements for software controlled devices	4.2.1 4.2.2 4.2.3 4.2.4 4.2.5 4.2.6 4.2.7 4.2.8	None	Pass Pass Pass Pass Pass Pass Pass Pass
Performance parameters under fire condition: Coverage volume Variation of light output Minimum and maximum light intensity Light colour Light temporal pattern and frequency of flashing Marking and data Synchronization (option with requirements)	4.3.1 4.3.2 4.3.3 4.3.4 4.3.5 4.3.6 4.3.7		Pass Pass Pass Red/White Pass/0,5 Hz Pass Pass
Durability: Temperature resistance: Dry heat (operational) Dry heat (endurance) Cold (operational) Humidity resistance: Damp heat, cyclic (operational) Damp heat, steady state (endurance) Damp heat, cyclic (endurance) Shock and vibration resistance: Shock (operational) Impact (operational) Vibration (operational) Vibration (endurance) Corrosion resistance: SO2 corrosion (endurance) Electrical stability: EMC, immunity (operational)	4.4.1.1 4.4.1.2 4.4.1.3 4.4.2.1 4.4.2.2 4.4.2.3 4.4.3.1 4.4.3.2 4.4.3.3 4.4.3.4 4.4.4 4.4.5		Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass
Essential characteristics	Clauses in EN 54-25:2008+AC:2012		Performance
Performance parameters under fire conditions	4.1, 4.2.2, 5.2, 8.3.7		Pass
Response delay (response time to fire)	8.2.3, 8.2.6		Pass
Operational reliability	4.2.1, 4.2.3 to 4.2.7, 5.3, 5.4, 6, 7, 8.2.2, 8.2.4, 8.2.5, 8.2.7, 8.2.8, 8.2.9, 8.3.1, 8.3.2, 8.3.3, 8.3.4, 8.3.5, 8.3.6		Pass
Durability of operational reliability and response delay; temperature resistance	8.3.9, 8.3.10, 8.3.11		Pass
Durability of operational reliability; vibration resistance	8.3.16, 8.3.17 to 8.3.19		Pass
Durability of operational reliability; humidity resistance	8.3.12, 8.3.13, 8.3.14		Pass
Durability of operational reliability; corrosion resistance	8.3.15		Pass
Durability of operational reliability; electrical stability	8.3.20		Pass

Annex 2

TEST DOCUMENTATION

Test documentation can be found in case no. UKCSP10087.

Annex 3

TECHNICAL BASIS

File Number	Title	Date
BOM-TWBSB-0002	TAURUS WIRELESS BASE SOUNDER EN 54-23 RED LED (TW-BSB-23R-01) & TAURUS WIRELESS BASESOUNDER EN 54-23 WHITE LED (TW-BSB-23W-01) - 868 / 916 VARIANTS - Bill of Material	2022-03-25, Rev. N