





UK Approved Body Authorised by the MCA Certificate number: 74090/A0 UK File number: MPA2204302 Item number: UK/3.30b This certificate is not valid when

This certificate is not valid when presented without the full attached schedule composed of 7 sections

Approved Body 8517 - UNITED KINGDOM MARINE EQUIPMENT APPROVAL

UK TYPE-EXAMINATION (MODULE B) CERTIFICATE

This is to certify that Bureau Veritas SA UK Branch Office did undertake the relevant type approval procedures for the type of equipment identified below which was found to be in compliance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended, subject to any conditions in the schedule attached hereto.

This certificate is issued to:

HONEYWELL ANALYTICS Ltd.

POOLE - UNITED KINGDOM

for the type of product

PORTABLE OXYGEN ANALYSIS AND GAS DETECTION EQUIPMENT - CATEGORY 2 (EXPLOSIVE GAS ATMOSPHERES)

BW Flex Seires

Requirements:

SOLAS 74 convention as amended, Regulations II-2/4, VI/3.

IMO Res. MSC.98(73) -(FSS Code)- as amended by MSC.206(81), MSC.217(82), MSC.292(87), MSC.311(88), MSC.327(90), MSC.339(91) and MSC.457(101), 15

EN 60945:2002 incl. /Corr.1:2008

EN 50104:2019,

EN 60079-29-1:2016, EN 60079-0:2018 AC:2020, EN 60079-1:2014, EN 60079-10-1:2015, EN 60079-11:2012, EN

60079-15:2010, EN 60079-26:2015

IEC 60092-504:2016 and IEC 60533:2015

IMO MSC.1/Circ.1477 and IMO MSC.1/Circ.1581

The attached (schedule of approval) forms part of this certificate.

This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with.

This certificate will expire on: 15 Feb 2028

Issued by Bureau Veritas SA UK Branch Office

(Approved Body 8517)

At BV LONDON, on 15 Feb 2023,

Spencer Yule

This certificate was created electronically and is valid without signature



Note 1: This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the approved body named on this certificate.

Note 2: Should the specified Regulations or standards be amended during the period of validity of this certificate, the product(s) is/ are to be re-approved prior to it/ they being placed on the UK market and on board vessels to which the amended regulations of standards apply.

Note 3: "The Mark of Conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body."

Note 4: In case limitations of use apply, these should be indicated in the Annex.

This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION: BW Flex-i and BW Flex 4

Technical Specifications:

Technical Specifications.	
Working Temperature	: -40°C to 60°C
Working Humidity	: 5% to 95%
Ingress Protection	: IP66 & IP68
Ex Marking	: Ex ia I Ma, Ex ia IIC T4 Ga
Alarms and Type	: Visual, vibrating, audible (95 db) Low, High, TWA, STEL, Negative Drift, Over Limit, Multi-alarm
Typical Battey life	: 40 days @ 8 hours of use per day
Sensor Type	: Electrochemical Sensors, catlytic combusion sensor
Gas and Measuring Range	: catalytic LEL

2. DOCUMENTS AND DRAWINGS:

Honeywell:

- BW Flex datasheet, No. GAS_BW_Flex Series_DS Rev.A, dated Jan. 2021.
- BW Flex Quick Reference Guide, NO. M05-4002-001-Rev.A, dated 23-10-2020.
- BW Flex PCB Drawing, No. M05-1001-PCB Rev.5, dated 20-07-2020.
- BW Flex Main Board Circuit Diagram, No. 904-E300-030.34 Rev.5, dated 21-07-2020.
- Risk Analysis Assessment, dated 07-04-2022.

Ex certificate:

- IECEx Certificate IECEx SIR 20.0020X Issue 1, dated 09-11-2020.
- EU Type Examination Certificate, No. Sira 20 ATEX2012X Issue 3, dated 14-04-2022.
- EU Type Examination Certificate No.1, No. FTZU 22 ATEX 0031X, dated 20-12-2022.
- ATEX Assessment Report No. 22/0031/1, dated 20-12-0022.
- CSA Certificate of Compliance, No. 80028223, dated 14-07-2022.

3. TEST REPORTS:

MS TESTING:

- Test Report No. TL 21052A, dated 07-01-2022.
- Test Report No. TL 21052B, dated 07-01-2022.
- Test Report No. TL 22291, dated 21-10-2022.

Intertek:

- IP Test Report No. 201001243SHA-5001, dated 02-11-2020.

FTZU:

- Type Examination certificate, No. FTZU 22 E 0009, dated 31-10-2022.
- Test Report No. 22.0149-84, dated 24-02-2022.

4. APPLICATION / LIMITATION:

- 4.1 As per Requirements of Regulations stated on the front page of this certificate.
- 4.2 The equipment fulfils the EMC requirements for installation on the Bridge and Deck Zone.
- 4.3 EN 60079-10-1, EN60079-15 and EN 60079-26 are not applicable to the above products.
- 4.4 Ex-certification is not covered by this certificate, Applications in hazardous areas are to be approved in each case according to the Rules and Conditions for Safe Use specified in a valid Ex-Certificate issued by a Notified or Recognised Certification Body.

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5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 This certificate alone does not allow the applicant to issue the UK Declaration of Conformity and to affix the mark of conformity (United Kingdom conformity mark) to the products corresponding to this type. To this end, the production-control phase module D Production Quality Assurance or module E Product Quality Assurance or module F Product Verification of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended, is to be complied with and controlled by a written inspection agreement with an Approved Body.
- 5.2 For information concerning the production phase modules, **HONEYWELL ANALYTICS Ltd.** has declared the following manufacturing site(s):

HONEYWELL ANALYTICS Ltd.
Hatch Pond House
4 Stinsford Road
Nuffield Estate
POOLE
UNITED KINGDOM

5.3 - The following component(s) shall comply with the requirements of Merchant Shipping (Marine Equipment) Regulations 2016, as amended, and be marked with the United Kingdom Conformity Mark:

- BW Flex-i and BW Flex 4

6. MARKING OF PRODUCT:

Reference is made to the Merchant Shipping (Marine Equipment) Regulations 2016, as amended, Part3: In particular Article 15.3 specifies that the United Kingdom conformity mark shall be followed by the identification number of the Approved Body involved in the production control phase (module D, E or F) and by the year in which the mark is affixed (4 digits or last 2 digits).

7. OTHERS:

It is **HONEYWELL ANALYTICS Ltd.**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

*** END OF CERTIFICATE ***