

Certificate number: 19375/B0 BV

File number: AP 3797

Product code: 3820H

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

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

HONEYWELL ANALYTICS Ltd.

POOLE - UNITED KINGDOM

for the type of product

GAS DETECTION AND ALARM SYSTEMS

System 57 Gas Detection System

Requirements:

BUREAU VERITAS Rules for the Classification of Steel Ships. EN 60079-29-1:2007, EN 50271:2001.

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 06 Sep 2017

For BUREAU VERITAS,

At BV LONDON, on 06 Sep 2012,

Spencer Yule



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 will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine Division 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 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:

The System 57 Gas Detection System is based on.:

1.1 - Hardware:

Power input card for DC voltage.

Control cards, single channel and four channels for connection to catalytic or 4-20 mA sensors, with analogue and digital display and 3 levels of alarm and with alarm inhibit and fault indications.

Engineering card for calibration, adjustment and printout.

Termination cards for connections to field wiring and relays.

Individual systems incorporate various combinations of these items.

All cards are rack mounted providing up to 64 channels of gas detection.

Card Series	Description	Part Number	Software Version
5701	AC/DC System 57 Power Supply (8 or 16 ways)	05701-A-0406/0405	N/A
5701	DC Input Card	05701-A-0325	N/A
5701	Gas Control Card (Catalytic or 4/20 mA Input)	05701-A-0301/0302	V2.60
5701	High Integrity Relays Card	05701-A-0330	V1.0
5701	Relays Card (Double / Triple)	05701-A-0xxx	N/A
5701	Field Interface Card	05701-A-0326	N/A
5704	Gas Control Card (Catalytic or 4/20 mA Input)	05704-A-0144/0145	V1.70
5704	Engineering Card	05704-A-0361	V2.2 or V2.5
5704	Quad Relays Card	05704-A-0121	N/A

2. DOCUMENTS AND DRAWINGS:

Document "Sieger System 57, 5704F Control System", referenced MAN0546.PM6 05704-M-5002, issue 01, dated 03/1999. Document "Sieger System 57, 5704 Control System", referenced MAN0448.P65 005704-M-5001 A02279, issue 13, dated 01/2010.

Document "Sieger System 57, 5701 Control System", referenced MAN0443.P65 05701-M-5001 A02279, issue 14, dated 01/2010.

3. TEST REPORTS:

EXAM / DEKRA:

EC-Type Examination Certificate No. BVS 04ATEXG001X dated 13/08/2004 with its 2 Supplements, last update on 12 April 2012 (EN 60079-29-1:2007).

AQLEMC: Test Report No. 1007B/30 dated 07/10/2003.

TÜV: Test report No. OO614977/01 dated 09/2006.

HURSLEY EMC Services: EMC Test Report No. 09J160 CR, Issue 1, dated 11th September 2009(EN 50270).

4. APPLICATION / LIMITATION:

- 4.1 BUREAU VERITAS Rules for the Classification of Steel Ship.
- 4.2 Approval also valid for ships to be granted with the notations: AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.
- 4.3 The equipment fulfils the EMC requirements for installation on the Bridge and Deck Zone.
- 4.4 This certificate does not cover any Gas Detectors. Only type approved detectors shown to be compatible with System 57 are to be used with it
- 4.5 Only Hardware and Software successfully tested together in compliance with the regulations as referred to in page one, according to the declaration of the manufacturer are covered by this certificate.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 The System 57 Gas Detection Systems are to be manufactured, examined and tested by HONEYWELL ANALYTICS Ltd., in accordance with the type described in this certificate and Bureau Veritas Rules for the Classification of Steel Ships.
- 5.2 Production sites are to be recognized by Bureau Veritas as per NR320 for HBV products. To this end **HONEYWELL ANALYTICS Ltd.** has to make the necessary arrangements for a Society's Surveyor to perform visits and product audits at the production sites.
- 5.3 HONEYWELL ANALYTICS Ltd. has declared to Bureau Veritas that the type of product described in this certificate are manufactured at the following production site:

HONEYWELL ANALYTICS Ltd. Hatch Pond House, 4 Stinsford Road Nuffield Estate POOLE, BH17 ORZ UNITED KINGDOM

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6. MARKING OF PRODUCT:

- 6.1 Trade name.
- 6.2 Date of manufacture and serial number.
- 6.3 Equipment type or model identification under which it was type-tested.

7. OTHERS:

- 7.1 This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time and that **HONEYWELL ANALYTICS Ltd.**, **United Kingdom**, will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of use and general maintenance of the units and the conditions of this approval.
- 7.2 This certificate supersedes the Type Approval Certificate N° 19375/A0 BV issued on 06 April 2007 by the Society.

*** END OF CERTIFICATE ***