

EC TYPE EXAMINATION (MODULE B) CERTIFICATE

This is to certify that:

LLOYD'S REGISTER VERIFICATION LIMITED (LRV), specified as a "notified body" under the terms of The Merchant Shipping (Marine Equipment) Regulations S.I. 1999 No. 1957, did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the requirements of Marine Equipment Directive (MED) 96/98/EC as modified by Commission Directives 98/85/EC, 2001/53/EC, 2002/75/EC, 2002/84/EC, 2008/67/EC, 2009/26/EC, 2010/68/EU, 2011/75/EU, 2012/32/EU, 2013/52/EU, 2014/93/EU and (EU) 2015/559 subject to any conditions in the Design Appraisal Document attached hereto.

Manufacturer	Crowcon Detection Instruments Ltd
Address	172 Brook Drive Milton Park Abingdon Oxon OX14 4SD
Annex A1 Item	A.1/3.30 PORTABLE OXYGEN ANALYSIS & GAS DETECTION EQUIPMENT
Product Type	GAS-PRO, TANK-PRO
Product Description	MULTI-GAS MONITOR
Specified Standard	EN 60945:2002 Including IEC 60945 Corrigendum 1: 2008, IEC 60092-504: 2001 Including IEC 60092-504 Corrigendum 1: 2011, IEC 60533: 1999 Cat 2: (Explosive Gas Atmospheres) EN 50104: 2010, EN 60079-0: 2012 Inc A11:2013, EN60079-1: 2007 including IEC 60079-1 Corrigendum 1:2008, EN 60079-10-1: 2009, EN 60079-11: 2012, EN 60079-29-1: 2007

The attached Design Appraisal Document (schedule) forms part of this certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.

Date of issue 24 May 2016 Expiry date 9 June 2020

Certificate No. MED 1500009/M2 Signed

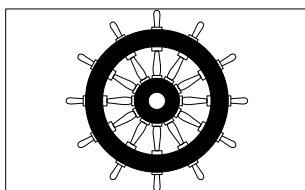
Sheet No 1 of 4 Name

P.A. Huntley-Hawkins
Lloyd's Register Verification Ltd
P.A. Huntley-Hawkins

LR427.2016.42
For and on behalf of Lloyd's Register Verification
LRV EC Distinguishing No. 0038

Note:

This certificate is not valid for equipment; the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify the notified body named on this certificate of any modification or changes to the equipment in order to obtain a valid Certificate.



Subject to compliance with the conditions in the attached Design Appraisal Document (schedule), which forms part of this certificate, and those of Articles 10.1(i) and 11 of the Directive, the Manufacturer is allowed to affix the "Mark of Conformity" to the Product described herein.

yy Last two digits of year mark affixed.

This certificate is issued under the authority of the MCA.

Lloyd's Register Verification Limited (Reg. no. 4929226) is a limited company registered in England and Wales. Registered office: 71 Fenchurch Street, London, EC3M 4BS, UK.
A subsidiary of Lloyd's Register Group Limited.

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Lloyd's Register

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Issue number 1

DESIGN APPRAISAL DOCUMENT

Date 24 May 2016	Quote this reference on all future communications MTES/ETS/TA/PAHH/MJH/WP25393285
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ATTACHMENT TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE No. MED 1500009/M2

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions and European Union legislation for the EC Type Examination of Marine Equipment for use on Merchant Ships Registered in the European Economic Area.

This Design Appraisal Document (schedule) forms part of the Certificate.

APPROVAL DOCUMENTATION

Gas-Pro User & Operator Manual Issue 10	10 Apr 2016
ENG-000028 Issue 6 Minimum Manual Content Gas-Pro-Certification Control Document	20 Apr 2016
ENG-000024 Issue 3 Gas-Pro Sensors-Certification Control Document	20 Apr 2016

DRAWINGS

Gas-Pro Electronic Certified Drawings

1004-1027-CD-CERT: Gas-Pro Display	03 Mar 2011
1004-1027-PCB-CERT: Gas-Pro Display	16 Mar 2011
1004-1027-PL-CERT: Gas-Pro Display Certified Parts List	03 Mar 2011
1004-1042-01-CD-CERT: Gas-Pro B3 Main PCB	31 Mar 2011
1004-1042-01-PL-CERT: Gas-Pro B3 Main PCB	15 Apr 2011
1004-1042-CD-CERT: Gas-Pro B3 Main PCB	18 Apr 2011
1004-1042-PCB-CERT: Gas-Pro B3 Main PCB	01 Mar 2011
1004-1042-PL-CERT: Gas-Pro B3 Main PCB Parts List	13 Apr 2015
1004-1047-01-CD-CERT: Gas-Pro B2 Main PCB	31 Mar 2011
1004-1047-01-PL-CERT: Gas-Pro B2 Main PCB Parts List	17 Apr 2011
1004-1047-CD-CERT: Gas-Pro B2 Main PCB	10 Mar 2011
1004-1047-PCB-CERT: Gas-Pro B2 Main PCB	10 Mar 2011
1047-1047-PL-CERT: Gas-Pro B2 Main PCB Parts List	15 Apr 2015
1004-1080- CD-CERT: Gas Pro B1 Main PCB	10 Mar 2011
1004-1080- PCB-CERT: Gas Pro B1 PCB	10 Mar 2011
1004-1080-CD-CERT Issue 2: Gas Pro B1 Main PCB (Circuit Diagram)	16 Dec 2015
1004-1080-PCB-CERT Issue 2: Gas Pro B1 Main PCB (PCB Layout)	17 Dec 2015
1004-1080-CD-CERT: Gas-Pro B1 Main PCB	10 Mar 2011
1004-1080-PCB-CERT: Gas-Pro B1 Main PCB	10 Mar 2011
1004-1080-PL-CERT: Gas-Pro B1 Main PCB Parts List	17 Apr 2015
ECAD-000106-01-CD-CERT: Gas-Pro B4 Main PCB Version 4b	29 Sept 2013
ECAD-000106-01-PL-CERT: Gas-Pro Main PCB Version 4b Parts List	30 Apr 2015
ECAD-000106-CD-CERT: Gas-Pro B4 Main PCB Version 4	26 Sept 2013
ECAD-000106-PCB-CERT: Gas-Pro B4 Main PCB Version 4	19 Nov 2013
ECAD-000106-PL-CERT: Gas-Pro B4 Main PCB Version 4	30 Apr 2015

Gas-Pro Mechanical Certified Drawings

1004-1005: Front Case Moulding	12 Nov 2013
1004-1006: Rear Case Moulding	16 Jan 2015
1004-1008: Pumped Flow Plate Assembly	08 Apr 2010
1004-1009: Pumped Flow Plate	08 Apr 2010



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1004-1014: Battery Tray	15 Jun 2010
1004-1016: B2 Potting Box	22 Oct 2010
1004-1022: Non Pumped Flow Plate Assembly	08 Apr 2010
1004-1023: Non Pumped Flow Plate	15 Jun 2010
1004-1049: Gas-Pro-Certification GA MCAD Issue 5	25 Apr 2016
1004-1075: Gas Pro Battery Assembly Issue 2	26 Aug 2010
1004-1076 Gas Pro ATEX Certification Label Issue 3	07 July 2010
1004-1077: B3 Potting Box	07 July 2010
1004-1086: Display Board PCB Assembly	15 Jun 2010
1004-1089: Display Board PCB Assembly Wireless	04 Aug 2010
1004-1090: Display to Main Board Connection	10 Nov 2010
1004-1091: B3 and B4 Main Board Potting Detail	18 Sept 2010
1004-1093: B1 Potting Box	09 Feb 2011
1004-1094: B2 Main Board Potting Detail	21 Feb 2011
1004-1095: B1 Main Board Potting Detail	21 Feb 2011
1004-1096: Charging Cables	09 Apr 2010
1004-1098: Charger Certification Label	01 Feb 2011
1004-1099: B3 Sensor Insulator	20 Jan 2011
1004-1101: B2 Sensor Insulator	23 Feb 2011
1004-1266: B1 Sensor Insulator	23 Feb 2011
1004-2501: Comms Certification Label	01 Feb 2011
1004-2502: Power & Comms Certification Label	01 Feb 2011
1004-2503: Car Charger Certification Label	01 Feb 2011
1004-6000: Battery Connection	22 Feb 2011
1004-6003: Pump Cable Restraint	22 Feb 2011
1004-6005: KNF Pump-PJ25004-NMS020	23 Feb 2011
1004-6010: Flow Plate Assembly Two	08 Apr 2010
1004-7001: Standard Parts	22 Feb 2011
1004-7002: Connecting Cable- Main Board to Display Board	22 Feb 2011
1004-7003: Piezo Transducer	23 Feb 2011
3072: Grip Clip	21 Feb 2011
CAB HARM MAIN_Issue 4	12 Aug 2010
GA Harmony Conn_Issue 2	05 Jan 2011
GASPRO LCD and Backlight	14 Mar 2011
MCAD-003241 Issue : IR Sensor Shield	13 Jan 2016
MCAD-003242 Issue 1: Front Case RFI Shielding	13 Jan 2016
MCAD-003243 Issue 1: Rear Case RFI Shielding	13 Jan 2016
MCAD-000713: Dust Filter Plate	05 Sept 2013
MCAD-000743: Dust Filter Flow Plate Assy	05 Sept 2013
MCAD-002434: B4 Sensor Insulator	19 Sept 2013
MCAD-003205: MED Atex/IECEX Certification Label	07 July 2010



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TEST REPORTS & CERTIFICATION

ACF-4787317703 DEMKO 11 ATEX 1031772X REV.5 Cert	29 Apr 2016
AICP-4787317703: IECEX Test Report Cover	29 Apr 2016
AIEA-4787317703:-IEC60079-0/11: IECEX Test Report Addendum	29 Apr 2016
AIND-4787317703:-IEC60079-0ED.6: IECEX Test Report of National Differences	29 Apr 2016
AIND-4787317703:-IEC60079-11ED.6: IECEX Test Report of National Differences	29 Apr 2016
IECEX ULD 11.0004X Issue 6: IECEX Certificate of Conformity	29 Apr 2016
TL16038 Crowcon Gas Pro EMC Report Issue 2	04 Apr 2016
TL14065A-EMC Test Report	03 Dec 2014
TL14065A-ENV Test Report	22 Dec 2014
TL14065B-ENV BS EN 50104 Compatibility Test Report	08 Jan 2015
TL14065C-ENV Test Report BS 60079-29-1 Compatibility	09 Jan 2015
TL14065B-EMC BS EN 50270 & BS EN 61000-6-3 +A1 Test Report	03 Dec 2014

CONDITIONS OF CERTIFICATION

1. Production items of the subject equipment are to be manufactured in accordance with either an approved Production Quality Assurance system (Module D), a Product-Quality assurance system (Module E) or a Product Verification Process (Module F). The wheelmark cannot be affixed to the product until a conformity assessment module is in place.
2. Each item, batch or lot of the equipment is to be issued with a "Declaration of Conformity" and have the "Mark of Conformity" affixed after a conformity assessment module is in place.
3. The following Standards are not applicable for this certificate;
EN 60079-15: 2010
EN 60079-26: 2007

PLACE OF PRODUCTION

Crowcon Detection Instruments Ltd
172 Brook Drive
Milton Park
Abingdon
Oxon
OX14 4SD



P.A. Huntley-Hawkins
Marine Technology & Engineering Services, Southampton
Lloyd's Register EMEA
For and on behalf of Lloyd's Register Verification
LRV EC Distinguishing No. 0038