



Confirmation of Product Type Approval

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product.

This certificate reflects the information on the product in the ABS Records as of the date and time the certificate is printed.

Pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 26/JAN/2014. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until 13/JAN/2019 subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Product Name: Fire Alarm Control Panel
Model Name(s): Syncro ASM

Presented to:

KENTEC ELECTRONICS LTD.
UNIT 25-27 DARTFORD TRADE PARK
FAWKES AVENUE
DARTFORD
United Kingdom

Intended Service:

Analogue addressable fire detection systems with General Emergency Alarm function for marine and offshore applications in process, machinery and accommodation spaces.

Description:

Single or two loops analogous addressable fire control and alarm system comprising 16 zonal LED indicators, 2 programmable sounder circuits, 5 programmable inputs and 3 programmable relays. Expandable up to 512 additional programmable input / output via Syncro I/O Modules. Supports up to 126 Apollo and 127 Hochiki fire detection devices and up to 64 panels can be connected via built-in RS 485 fault tolerant serial network card. The following specific designations form part of the of product range: MA80161M2, MA80162M2 and MH80161M2, MH80162M2. The panel also incorporates a general emergency alarm function capable of sounding the general emergency alarm signal on the connected sounders consisting of seven or more short blasts followed by one long blast as required by 7.2.1.1 of the International Life Saving Appliance Code 2010 Edition

Tier:

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Ratings:

Mains supplies: 110 or 230 V AC, 50 or 60 Hz; Nominal voltage: 24 V DC, 3 Amps; Battery (24 Hour Standby): 9AH 12V DC. Network connection: RS 485 and RS 232

Service Restrictions:

Requirement for Unit Certification of Fire and Gas Detection System Alarm and

Control Panels was introduced in the Rules for Building and Classing Mobile Offshore Drilling Units 2012. Any panel intended for installation on a Mobile Offshore Drilling Unit with a contract date of 1 January 2012 or later is to be Unit Certified including Survey at the Plant of Manufacture and witnessing of Factory Acceptance Test in accordance with 6-1-8/13 Table 1 of the Rules for Building and Classing Mobile Offshore Drilling Units 2014. Use of the General Emergency Alarm function in conjunction with the fire detection system is subject to acceptance by the Flag Administration. Where the General Emergency Alarm function is utilised the source of electrical power is to meet the requirements of II-1/42 or II-1/43 of SOLAS as applicable

Comments:

Tests and approval are for hardware only. Each configuration and external connection is to be specifically approved, particularly cable parameters for compliance with the limitations specified in the hazardous area certificates. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes / Documentation:

This Product Design Assessment (PDA) is valid only for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product. BSI Test Reports BSI 222/7000365, BSI 228/7161856 Iss 2, BSI 2284944547, BSI 244/7000367, BSI 244/7138115; TUV Test Report 75902741 THC 01 Iss 1; FDA Technologies Test Report 703002

Term of Validity:

This Product Design Assessment (PDA) Certificate 09-LD405702-2-PDA, dated 14/Jan/2014 remains valid until 13/Jan/2019 or until the Rules or specifications used in the assessment are revised (whichever occurs first). This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product. Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA. Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

ABS Rules:

2014 Steel Vessel Rules 1-1-4/7.7, 4-7-3/11.1.3, 4-7-3/11.3.1, 4-9-8, 2014 MODU Rules 6-1-8/9

National Standards:

EN54-2 (1997 +A1:2006), EN54-4 (1998)

International Standards:

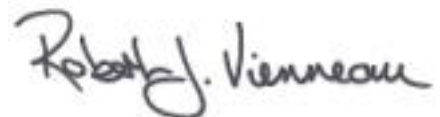
IMO FSS Code Chapter 9 2007 Edition, Supplement June 2012, MSC.311(88); LSA Code 2010 7.2.1.1

Government Authority:

EUMED:

Others:

Model Certificate	Model Certificate No	Issue Date	Expiry Date
PDA	09-LD405702-2-PDA	14/JAN/2014	13/JAN/2019



ABS Programs

ABS has used due diligence in the preparation of this certificate and it represents the information on the product in the ABS Records as of the date and time the certificate was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.