



## *Confirmation of Product Type Approval 01/AUG/2011*

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

This is to certify that, 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 06/JAN/2014 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.

### KENTEC ELECTRONICS LTD. 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 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.

**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:**

Unit Certification is not required for this product.

**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.

**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. EMC Test Report No. 228-7161856 & 228-4944547-1; Marine Test Report No. 224-7000367; Environmental Test Report No. 224-7000367-1; Performance

Test Report No. 224-7138115; Safety Test Report No. 222-7000365; Software Report No. 703002; Compass Safe Test Report No. 75902741 THC 01; SD 785 and SD 785MAH - PCB Schematic; SD 586 SYNCRO AS Loop-2 Board; 1096M - Product Manual, 1100 - User Manual and 80161 M2 Data Sheet.

**Term of Validity:**

This Product Design Assessment (PDA) Certificate 09-LD405702-1-PDA, dated 07/Jan/2009 remains valid until 06/Jan/2014 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:**

2009 Steel Vessel Rules 1-1-4/7.7, 4-7-3/11.5 and 4-9-7

**National Standards:**


EN54-2 (2000) and EN54-4 (2000)

**International Standards:**

IMO FSS Code Chapter 9

**Government Authority:****EUMED:****Others:**

Model Certificate	Model Certificate No	Issue Date	Expiry Date
PDA	09-LD405702-1-PDA	07/JAN/2009	06/JAN/2014



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.