



CERTIFICATE NUMBER

DATE

04-LD412717/1-PDA

17 December 2008

ABS TECHNICAL OFFICE

London Engineering Department

CERTIFICATE OF Design Assessment

This is to Certify that a representative of this Bureau did, at the request of
Apollo Fire Detectors Ltd. - Havant

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate. It will remain valid as noted below or until the Rules or specifications used in the assessment are revised (whichever occurs first).


PRODUCT: Fire Detection System

MODEL: Series 60 IS

ABS RULE: 2008 Steel Vessel Rules 1-1-4/3.7, 4-7-3/11.5 and 4-8-3/13

OTHER STANDARD: EN54-5 and EN54-7 and ATEX Directive, 94/9/EC; IMO FSS Code Chapter 9;

AMERICAN BUREAU OF SHIPPING


Wing F. Cheung
Engineering Type Approval Co-ordinator

Apollo Fire Detectors Ltd.

36 Brookside Road
Havant
Hampshire PO9 1JR
United Kingdom
Telephone: 44-2392-492-412
Fax: 44-2392-492-754

MA Certificate No. 04-SO552545-X1

Product: Fire Detection System

Model: Series 60 IS

Intended Service:

Intrinsically safe automatic heat and smoke detectors for marine and offshore hazardous area applications

Description:

Fire detection systems include the following units:

- Heat Detector: Rating: Grade 1 - 60 Degree C. Part No. 55000-110;
- Heat Detector: Rating: Grade 2 - 65 Degree C. Part No. 55000-111;
- Heat Detector: Rating: Grade 3 - 75 Degree C. Part No. 55000-112;
- Heat Detector: Response Range 1 - 80 Degree C. Part No. 55000-113;
- Heat Detector: Response Range 2 - 100 Degree C. Part No. 55000-114;
- Ionisation smoke detector Part No. 55000-212;
- Integrating ionisation smoke detector Part No. 55000-213;
- IS base plate Part No. 45681-207.

Ratings:

- Nominal voltage: 14 to 28 V DC (non-polarised)
- Quiescent Current: 45 to 50 micro Amps, Alarm Current: 10 to 60 mA
- Operating temperature: - 20 to 60 degree C;
- Ingress protection: IP 20
- Classification: EEx ia IIC T5 or EEx ia IIC T4 (Ta < or = 60 degree C)
- Safety certification BAS02ATEX1288

Service Restrictions:

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined. The detection units must be connected to approved safety barriers for hazardous applications

Comments:

Each specific application and installation is to be reviewed particularly regarding cable parameters for compliance with limitations specified in 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.

- No. PP2028, Rev 5 - Product Brochure;
- No. Z20983 - Series 60 IS System Drawing



Term of Validity:

This Design Assessment Certificate number 04-LD412717/1-PDA, dated 17/Dec/2008 will expire on 16/Dec/2013 or at an earlier date should there be alterations to the product's design or changes to the referenced ABS Rules and other specifications, which affect the product. Product use on or after 1 January 2009, will be subject to compliance with the ABS Rules or specifications in effect when the vessel, MODU or facility is contracted. The product's acceptability on board ABS-classed vessels or facilities is defined in the service restrictions of this certificate.

STANDARDS

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ABS Rules:

2008 Steel Vessel Rules 1-1-4/3.7, 4-7-3/11.5 and 4-8-3/13

National:

EN54-5 and EN54-7 and ATEX Directive, 94/9/EC

International:

IMO FSS Code Chapter 9

