



EC Type Examination Certificate

Notified Body 0729

This is to certify that ABS Europe Ltd., as a Notified Body under the authorization of UK MCA by Merchant Shipping Regulations 2016, S.I. 2016 Number 1025 and MSN 1874 (M+F), as amended, did undertake the relevant type approval procedures for the equipment identified below and same was found to be in compliance with the provisions of these Regulations and EU Marine Equipment Directive 2014/90/EU of 18th September 2016.

ITEM NUMBER: MED/3.51(c), (d), (e), (f), (g), (h)

IMPLEMENTING REGULATIONS (EU) 2018/773

CERTIFICATE NUMBER: 11-LD792467-5-EC

APPLICANT: Apollo Fire Detectors Ltd

APPLICANT'S LOCATION: Hampshire, UK

PORT OFFICE: Southampton, UK

PRODUCT DESIGNATION: Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces
Heat Detectors MED/3.51(c); Smoke Detectors MED/3.51(d); Flame Detectors MED/3.51(e); MCPs MED/3.51(f); Isolators MED/3.51(g); I/O Devices MED/3.51(h);

STANDARDS AND REGULATIONS: SOLAS 74 Reg. II-2/7; SOLAS 74 Reg. X/3; IMO Res. MSC.98(73)-(FSS Code)9;
IMO Res.MSC.36(63)-(1994 HSC Code) 7; IMO Res.MSC.97(73)-(2000 HSC Code) 7;
IMO Res. MSC.391(95)-(IGF Code) 11, IMO MSC.1/Circ.1242;
EN 54-5:2000 inc. A1(2002), EN 54-5:2017, EN 54-7:2000 inc. A1(2002) & A2(2006), EN 54-10:2002 inc. A1(2005), EN 54-11:2001 inc. A1(2005); EN 54-17:2005 inc. AC:2007;
EN 54-18 (2005) including AC(2007);
IEC 60092-504 (2016), IEC 60533 (2015)

THIS CERTIFICATE IS ISSUED IN COMPLIANCE WITH CONFORMITY ASSESSMENT **MODULE B** OF THE REGULATIONS AND DIRECTIVES LISTED ABOVE.

ISSUE DATE: 30 August 2019

EXPIRATION DATE: 31 August 2022

SIGNATURE: N. Tyagi

Should the specified regulations or standards be amended during the validity of this certificate, the products are to be re-approved prior to being placed on board vessels to which the amended regulations or standards apply.

This "Mark of Conformity" may only be affixed to the above equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase Module (D, E or F) of Annex II of the Directive is fully complied with and controlled by a written agreement with a Notified Body.

The attached document list forms part of this Certificate.

Certificate No.: 11-LD792467-5-EC

Entry Date: 30 August 2019

**Name of Equipment/
Component Manufacturer:** Apollo Fire Detectors Ltd.
36 Brookside Road
Havant, Hampshire
England
PO9 1JR

Tel: +44-2392-492-412

Email: chris.ellis@apollo-fire.com

Website: www.apollo-fire.co.uk

Equipment/Component: Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces

- Heat Detectors, MED/3.51(c);
- Smoke Detectors, MED/3.51(d);
- Flame Detectors MED/3.51(e);
- Manual Call Points MED/3.51 (f);
- Short Circuit Isolators MED/3.51(g);
- Input/Output Devices MED/3.51(h);

Model: Apollo Analogue Addressable Range of Flame/Smoke/Heat Detectors, Manual Call Points and Accessories, XP95 Analogue Addressable Intrinsically Safe Range of Smoke/Heat Detectors, Manual Call Points.

Description: Analogue addressable detectors, call points and accessories
 45681-286MAR 20D Negative Isolating Base
 55000-027MAR UV Flame Detector
 55000-028MAR UV/IR2 Flame Detector
 55000-029MAR IR3 Flame Detector
 55000-034MAR IR3 Flame Detector
 55000-721MAR 20D Negative Isolator
 55000-770MAR DIN Rail Dual Isolator
 55000-771MAR DIN Rail Output Unit
 55000-772MAR DIN Rail Switch Monitor Plus
 55000-774MAR DIN Rail Input/Output Unit
 55000-775MAR DIN Rail Mini Switch Monitor
 55000-855MAR DIN Rail Single Channel Protocol Translator
 55000-856MAR DIN Rail Dual Channel Protocol Translator
 58000-400MAR Heat Detector
 58000-500MAR Ionisation Smoke Detector
 58000-600MAR Optical Smoke Detector
 58000-700MAR Multisensor Smoke Detector
 58100-970MAR Red Manual Call Point
 58100-971MAR Red Manual Call Point with Isolator
 58100-975MAR Waterproof Manual Call Point
 58100-976MAR Waterproof Manual Call Point with Isolator
 45681-215 Standard Base
 55000-440 Class A2S Heat Detector
 55000-540 Ionisation Smoke Detector
 55000-640 Optical Smoke Detector
 55100-940 Red Manual Call Point

Intended Service: Analogue addressable fire detection system detectors, call points and accessories for marine and offshore applications in process, machinery and accommodation spaces.

Ratings:

Apollo Analogue Addressable Range of Flame/Smoke/Heat Detectors, Manual Call Points and Accessories
 Nominal voltage 17 to 28V DC
 Operating temperature -20C to 60C, -30C to 70C or -40C to 70C dependent on model
 Quiescent current 100 microA to 400microA dependent on model

Apollo XP95 Analogue Addressable Intrinsically Safe Range of Smoke/Heat Detectors, Manual Call Points
 Nominal voltage: 14 to 22V DC;
 Operating temperature:-20C to 60C;
 Quiescent Current: 230microA to 340microA, Alarm Current: 10 to 60 mA;

Standards:

European Union Marine Equipment Directive 2014/90/EU referencing testing requirement of implementing regulations (EU) 2018/773

IMO Res.MSC.36(63)-(1994 HSC Code) 7;
 IMO Res.MSC.97(73)-(2000 HSC Code) 7;
 IMO Res.MSC.98(73)-(FSS Code) 9;
 IMO Res.MSC.391(95)-(IGF Code) 11;
 IMO MSC.1/Circ.1242;
 SOLAS 74 Reg. II-2/7;
 SOLAS 74 Reg. X/3
 IEC 60092-504:2016;
 IEC 60533:2015;
 EN 54-5 (2000) including A1(2002), EN 54-5 (2017);
 EN 54-7 (2000) including A1(2002) & A2 (2006);
 EN 54-10 (2002) including A1(2005);
 EN 54-11 (2001) including A1(2005);
 EN 54-17 (2005) including AC (2007);
 EN 54-18 (2005) including AC(2007);

Service Restrictions/Limitations:

Ex-certification is not covered by this certificate. Application or installation in hazardous area to be approved in each case according to Ex-Certification/ Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

Comments:

Should the specified regulations or standards be amended during the validity of this certificate, the products are to be re-approved prior to being placed on board vessels to which the amended regulations or standards apply.

This certificate will not be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with the Notified Body named on this certificate.

The "Mark of Conformity" shall be affixed to the above equipment in line with the requirements of Directive 2014/90/EU Articles 9 & 10.

A Manufacturer's Declaration of Conformity shall be compiled and distributed in line with the requirements of Directive 2014/90/EU Article 16.

Drawing Schedule:

Drawing No	Description
16-LD1536864-PDA	PRODUCT DESIGN ASSESSMENT
43781-263	XP95 INTRINSICALLY SAFE MANUAL CALL POINT PCB ASSEMBLY
45681-215	XP95 INTRINSICALLY SAFE MOUNTING BASE ASSY
55000-640	XP95 INSTRICALLY SAFE OPTICAL SMOKE DETECTOR GENERAL ASSEMBLY
43781-243	XP95 INTINSICALLY SAFE IONISATION SMOKE DETECTOR PCB ASSEMBLY
43781-245	XP95 INSTRINSICALLY SAFE HEAT DETCTOR PCB ASSEMBLY
43781-237	XP95 INTRINSICALLY SAFE OPTICAL SMOKE DETECTOR PCB ASSEMBLY
45681-211	XP95 ISOLATOR BASE ASSEMBLY
55000-028MAR	INTELLIGENT BASE MOUNTED UV/IR2 FLAME DETECTOR (MARINE)
55000-027MAR	INTELLIGENT BASE MOUNTED UV FLAME DETECTOR (MARINE)
43781-547	XP95 , NEGATIVE ISOLATOR , PCB ASSEMBLY
TE 238037	TECHNICAL EVALUATION OF THE MODIFIED APOLLO FIRE DETECTORS LTD
TE245407	TECHNICAL EVALUTATION OF MODEL 45681-393 APO
TE 252733	TECHNICAL EVALUATION OF THE APOLLO FIRE DETECTORS LTD
TE 222766	TECHNICAL EVALUATION OF THE APOLLO FIRE DETECTORS LIMITED
43781-964	XP95/DISCOVERY EN54 MCP PCB ASSEMBLY
TE 237126	TECHNICAL EVALUATION OF THE APOLLO FIRE DETECTORS LTD
TE 245499	TECHNICAL EVALUATION OF THE APOLLO FIRE DETECTORS LTD
TE 237154	TECHNICAL EVALUATION OF THE APOLLO 55000 -760 ANALOGUE ADDRESSABLE MINI SWITCH MONITOR
TE 223930	TESTING OF THE APOLLO XP995 I.S.
TE 260875	TECHNICAL EVALUATION OF THE APOLLO FIRE DETECTORS LTD
TE292207	BRE GLOBAL TEST REPORT
43781-271	ISOLATING BASE PCB ASSEMBLY
TE 90089	TEST REPORT
TE 90090	TEST REPORT
TE 236936	TECHNICAL EVALUATION OF THE APOLLO FIRE DETECTORS LTD
TE 234979	TECHNICAL EVALUATION OF THE APOLLO FIRE DETECTORS LTD
TE 231156	TECHNICAL EVALUATION OF THE APOLLO FIRE DETECTORS LTD
43781-291	DIN RAIL INPUT /OUTPUT UNIT PCB ASSEMBLY
43781-700	DISCOVERY IONISATION SMOKE DETECTOR PCB ASSEMBLY
43781-900	DISCOVERY, TEXAS CHIP, MULTISENSOR SMOKE DETECTOR, PCB ASSEMBLY

43781-292	DIN RAIL OUTPUT UNIT PCB ASSEMBLY
43781-293	XP95 DIN RAIL SWITCH MONITOR PLUS PCB ASSEMBLY
43781-296	XP95 DIN RAIL ZONE MONITOR UNIT PCB ASSEMBLY
45681-393CD SHT 1	DISCOVERY , ISOLATED SOUNDER BEACON BASE SCHEMATIC DIAGRAM
45681-393CD SHT 1	DISCOVERY , ISOLATED SOUNDER BEACON BASE SCHEMATIC DIAGRAM
45681-393	DISCOVERY SOUNDER BEACON BASE WITH ISOLATOR , GENERAL ASSEMBLY , STANDARD TONE
55000-181CD	MARINE SOUNDER CIRCUIT CONTROLLER CIRCUIT DIAGRAM
55000-029MAR	INTELLIGENT BASE MOUNTED IR3 FLAME DETECTOR (MARINE)
43781-968	DISCOVERY SOUNDER BEACON BASE, WITH ISOLATOR, PCB ASSEMBLY
43781-982	DIN RAIL MARINE SOUNDER CONTROL UNIT PCB ASSEMBLY
43781-306	XP95 DIN RAIL DUAL ISOLATOR PCB ASSEMBLY
55000-812CD	XP95 DIN RAIL ZONE MONITOR UNIT CIRCUIT DIAGRAM
55000-812CD	XP95 DIN RAIL ZONE MONITOR UNIT CIRCUIT DIAGRAM
55000-804CD	DIN RAIL OUTPUT UNIT SCHEMATIC DIAGRAM
55000-802CD	DIN RAIL DUAL ISOLATOR CIRCUIT DIAGRAM
55000-803CD	DIN RAIL I/O UNIT CIRCUIT DIAGRAM
55000-821CD	XP95 DIN RAIL SWITCH MONITOR PLUS CIRCUIT DIAGRAM
45681-210	LLOYDS AUDIT 2014
45681-394 MAR	LLOYDS AUDIT 2014
55000-027 MAR	TEST REPORT
55000-775 MAR	LLOYDS AUDIT 2014
45681-286 MAR	LLOYDS AUDIT 2014
55000-028 MAR	TEST REPORT
45681-210 Lloyds Audit 2014 - final	TESTED TO LLOYDS REGISTER TYPE APPROVAL TEST PRODUCT ID - 45681-210
45681-394 Lloyds Audit 2014 - final	TESTED TO LLOYDS REGISTER TYPE APPROVAL TEST PRODUCT ID 45681-394 MAR
55000-028 Test Report	TESTED TO LLOYDS REGISTER TYPE APPROVAL TEST PRODUCT ID 55000-028 MAR
55000-027 Test Report	TESTED TO LLOYDS REGISTER TYPE APPROVAL TEST PRODUCT ID 55000-027 MAR
45681-286 Lloyds Audit 2014 - final	TESTED TO LLOYDS REGISTER TYPE APPROVAL TEST PRODUCT ID 45681-286 MAR
SOU 1600611/1	INSULATION RESISTANCE TEST WITNESS
TEST REPORT INSULATION RESISTANCE TESTING	TEST REPORT

TEST REPORT INSULATION RESISTANCE TESTING	TEST REPORT
GB-BAS-ExTR12-0292-00_XP95IS Fire Monitors	GB-BAS-ExTR12-0292-00_XP95IS Fire Monitors
IECEX-BAS-12-0091X_3 - XP95 IS Range	IECEX-BAS-12-0091X_3 - XP95 IS Range
GB-BAS-ExTR15	GB-BAS-ExTR15
GB-BAS-ExTR13.0293-00	GB-BAS-ExTR13.0293-00
Test Report- GB-BAS-ExTR13.0090-00	Test Report- GB-BAS-ExTR13.0090-00
IR test LSR3570 witnessed	IR test- LSR3570 witnessed
TL18048	APOLLO FIRE SYSTEM B TEST REPORT
TL18049	APOLLO FIRE REPORT PHASE 2 SYSTEM A
TL18050	APOLLO FIRE REPORT PHASE 3 SYSTEM A
TL18049	APOLLO FIRE REPORT PHASE 2 SYSTEM B
18 R110 ER	TEST REPORT EUROFINS HURSLEY LTD. DATED 26 MAR 2018
1041 IR	TEST REPORT EUROFINS HURSLEY LTD. DATED 12 APR 2019
1278 CR	TEST REPORT FROM EUROFINS HURSLEY



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