

# Intrinsically Safe (IS) Products ATEX 94/9/EC, ATEX 2014/34/EU and IECEx Installation Guide

#### General

All Apollo IS devices are intended for use in hazardous area systems complying with the European ATEX directive 94/9/EC that deals with products used in hazardous areas. All such systems must incorporate a certified safety barrier or interface to limit the voltage and power to the circuit. Information on suitable barriers and interfaces can be obtained from Apollo.

These notes are intended to supplement the mandatory requirements of the ATEX directive or other applicable regulations. They should not be taken as full instructions for the design and installation of intrinsically safe systems. These activities must be carried out only by qualified personnel.

#### Certification

The XP95 IS range of detectors and manual call points (MCPs) and the Orbis IS range of detectors are BASEEFA certified as components. Their component certification allows them to be used in certified intrinsically safe systems.

Each product range is covered by a system certificate issued by BASEEFA in Apollo's name. Systems installed according to Apollo system drawings will be covered by the system certification. The use of barriers, interfaces, or other components not included in the system drawing will invalidate the certification.

The system certificate number must be marked on the installed system, preferably on the barrier or interface housing. The system is certified to ATEX only.

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# **Explosion Protection Category**

All Apollo XP95 IS detectors and call points comply with the categories:

II IG Ex ia IIC T5 -20°C≤Ta≤45°C (T4≤60°C) Ga

Orbis IS detector categories are:

II IG Ex ia IIC T5 -50°C≤Ta≤40°C (T4≤60°C) Ga

The ATEX EC type examination certificate numbers applicable to Apollo IS devices are given in the table below:

ATEX Certificate	Apollo Product	
BAS02ATEX 1289X	XP95 IS Detectors	
BAS02ATEX 1290X	XP95 IS Call Points	
Baseefa 06 ATEX 0007X	Orbis Detectors	
IECEx Certificate		
IECEX BAS 12.0091X	XP95 IS Detectors	
IECEX BAS 12.0091X	XP95 IS Call Points	
IECEX BAS 06.0002X	Orbis Detectors	

Copies of all component and system certificates, and system drawings are available from Apollo on request.

#### Installation of Detectors

Detectors must be fitted to certified IS bases. Use of any other bases will invalidate the detector certification. Orbis detectors may be fitted to Series 60 systems using an Orbis IS base adaptor.

The bases must be installed in such a way that all wiring is protected to at least IP20. This requirement will be met if bases are flush mounted. If bases are mounted on BESA boxes, or other boxes having a diameter less than 85mm, they should be fitted with XP95 backplates (Apollo part number 45681-233).

Remote LED indicators may be fitted to Orbis or to XP95 detectors. The LEDs need not be certified but should be either 3mm or 5mm in diameter. The LED terminations must be protected to at least IP20 and the circuits must be segregated from other circuits.

#### Special Conditions for Safe Use

To avoid problems with electrostatic charging of the enclosure, the equipment must not be located in a dust-laden airflow or cleaned with a dry cloth or with solvents.

#### Installation of Manual Call Points

Manual call points must be installed to comply with the requirements of the ATEX directive or another applicable code of regulations. All unused cable entry ports must be sealed using suitable stopping plugs to give the required level of ingress protection.

### Dust Cover (For 55200-940, 55200-942 and 55200-944 only)

To ensure optimal performance, leave the dust cover on the product and remove on commissioning.

#### **Further Information**

For further information see Apollo publications PP1095 for the XP95 ranges respectively. For information on Orbis see publication PP2250

# See also www.apollo-fire.co.uk/resources/ATEX

ATEX en français, Deutsch, Italiano, Español, Česky, slovenšèina, Svenska, Nederlands, português, Ελληνικά, Suomi, Dansk, Magyar, Polski, Lietuvių kalba, Eesti, Latviešu, slovenský jazyk

### Apollo Fire Detectors Ltd Declaration of Conformity

Notified Body for EC Type Examination and Production : Baseefa 1180 Buxton UK Harmonised Standards used : EN60079-0:2012, EN60079-11:2012

Provisions of the Directive fulfilled by the Equipment :

 $\begin{array}{l} XP95-Group II Category 1G Ex ia IIC T5 Ga \left(-20^\circ C \leq Ta \leq +45^\circ C\right) \text{ or EX ia IIC T4 Ga} \left(-20^\circ C \leq Ta \leq 60^\circ C\right) \\ Orbis - Group II Category 1G Ex ia IIC T4 Ga (-50^\circ C \leq Ta \leq +60^\circ C) / T5 (-50^\circ C \leq Ta \leq +40^\circ C) \\ MCP - Group II Category 1G / 1D Ex ia IIC T5 Ga (-20^\circ C \leq Ta \leq +45^\circ C) \text{ or Ex ia IIC T4 Ga} (-20^\circ C \leq Ta \leq +60^\circ C) \\ \text{or Ex ia IIIC T135^\circ C Da} \left(-20^\circ C \leq Ta \leq +60^\circ C\right) \end{array}$ 

The products listed below are manufactured at the premises of Apollo Fire Detectors Ltd. 36 Brookside Road, Havant, Hampshire, PO9 1JR, England.

Product Name	Models Covered	EC type Examination Certificate	Derived from Un-configured Platform
Orbis IS	Multisensor	Baseefa06ATEX0007X/4 Issued 23 February 2015	400-OH-00012
Orbis IS	Optical Smoke Detector	Baseefa06ATEX0007X/4 Issued 23 February 2015	400-OP-00013
Orbis IS	Heat Detector A1R /A1S/A2S/BR/BS/CS	Baseefa06ATEX0007X/4 Issued 23 February 2015	400-HT-00011
XP95 IS	Heat Detector 55000-440	BAS02ATEX1289X/7, Issued 23 February 2015, IECEx BAS 12.0091X	
XP95 IS	Optical Smoke Detector 55000-640	BAS02ATEX1289X/7, Issued 23 February 2015, IECEx BAS 12.0091X	
XP95 IS	Ionisation Smoke Detector 55000-540	BAS02ATEX1289X/7, Issued 23 February 2015, IECEx BAS 12.0091X	
XP95 IS MCP	Manual Call Point 55100-940, 55100-942, 55100-944	BAS02ATEX1290X/10, Issued 23 February 2015, IECEx BAS 12.0091X	
XP95 IS MCP	MEDC Manual Call Point 55000-960, 55000-961, 55000-962, 55000-963, 55000-964, 5500-965, 55000-966, 55000-967	BAS02ATEX1290X/10, Issued 23 February 2015, IECEx BAS 12.0091X	
XP95 IS MCP	Push Button Manual Call Point 55000-970, 55000-971, 55000-972, 55000-973	BAS02ATEX1290X/10, Issued 23 February 2015, IECEx BAS 12.0091X	
XP95 IS MCP	55200-940, 55200-942, 55200-944	BAS02ATEX1290X/10, Issued 23 February 2015, IECEx BAS 12.0091X	
1: EN 60079-0:2012	Electrical Apparatus	Explosive atmospheres. Equipment. General requirements	
2: EN 60079-11:2012	Electrical Apparatus	Explosive atmospheres. Equipment protection by intrinsic safety 'i'	

Directives also applicable: Electromagnetic Compatibility 2004/108/EC; Construction Products Directive 89/106/EEC; Marine Equipment Directive 96/98/EC. European Directive On Equipment and Protective Systems Intended for the use in Potentially Explosive Atmospheres.

This declaration is valid for Directive 94/9/EC until 19 April 2016

This declaration is valid for Directive 2014/34/EU from 20 April 2016

This Directive has been enacted into the UK law by the Statutory Instrument No. 1996-192, The Equipment and Protective Systems Intended for the Use in Potentially Explosive Atmospheres Regulations 1996.

On behalf of the above named company, I declare that, on the date the equipment accompanied by this declaration is placed on the market, the equipment conforms with all technical and regulatory requirements of the above listed directives. Both Software and Electronics Team Leader, Mr Rob Knight, and Lead Electronics Engineer, Mr Mark Schofield have been designated as the responsible person(s) for the purpose of the Regulations.

Sianature:

...... Mr Rob Knight (Software and Electronics Team Leader)

M. W. Schrield Signature:

.. Mr Mark Schofield (Lead Electronics Engineer)

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