

# **Technical Data**

# HYTEK ATEX APPROVED HIGH LEVEL ALARM



Applies to the following models **only**:

- HLA3A.BP - HLA3A.BS - HLA3A.BSP - HLA3A.BAB

### Please read carefully before commencing installation

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#### **ENVIRONMENTAL INFORMATION**



European Directive 2012/19/EU requires that the equipment bearing this symbol on the product and/or its packaging must not be disposed of with unsorted municipal waste. The symbol indicates that this product must be disposed of separately from regular household waste streams. It is your responsibility to dispose of this and other electric and electronic equipment via designated collection facilities appointed by the government or local authorities.

#### **PRODUCT DESCRIPTION**

The Hytek High Level Alarm is designed to provide visual and audible alarms whenever a predetermined level in a storage tank is reached. The system consists of a weighted float sensor that is connected, with a 5 metre fuel resistant cable, to the weatherproof bund alarm box containing the visual and audible alarms.

This alarm is approved to operate with flammable liquids classed as category 1, 2 or 3 in accordance with European Regulation No. 1272/2008. It is ATEX certified in accordance with EN 60079-0:2012 and EN 60079-11:2012. It is also IECEx certified in accordance with IEC 60079-0:2011 Ed 6 and IEC 60079-11:2011 Ed 6.

The alarm box, featuring the warning devices and test button, must be located outside any hazardous zone and bears the following certification marking and number:

CML16ATEX2356X IECEx CML 16.0129X

(Ex ia IIA Ga] -20°C to +40°C (£ 2503

The float sensor(s) can be located in hazardous zones 0, 1 or 2 and beathe following certification marking and number:	rs
CML 16ATEX2355X IECEx CML 16.0128X CML 16ATEX2356X IECEx CML 16.0129X	
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#### **CONDITIONS OF CERTIFICATION**

- 1. Due to safety critical internal creepage and clearance distances in the control unit, if installed in a location other than a clean and dry environment, the user shall ensure that the control unit is additionally provided with protection having an ingress protection rating of at least IP54 and is maintained throughout the lifetime of the equipment.
- 2. The float switch incorporates an isolated metal part which could become either charged in use or be a discharge point for charged liquids upon filling or emptying. The float switch shall only be used in applications where static generated via contact liquids are controlled so not to be considered an ignition source.
- 3. Only alkaline batteries of the same make shall be used as replacements.

#### **IMPORTANT WARNING NOTES**

- 1. This alarm is designed for use with liquids classed as category 1, 2 or 3 in accordance with European Regulation No. 1272/2008, including petrol, diesel, gas oil, water, hydraulic oil and heating oil.
- 2. The alarm box featuring the warning devices and test buttons must not be installed in a hazardous zone. The float sensor can be located in zones 0, 1 or 2 with the supplied connecting wire running to the alarm box.
- 3. The user must ensure that chemicals present in the atmosphere do not affect the performance or degrade the polycarbonate enclosure.
- 4. Use only the correct ATEX/IECEx certified float switches supplied.
- 5. The installation must be carried out by qualified installation engineers in accordance with the requirements of EN 60079-14 the latest relevant electrical and local authority regulations and standards.
- 6. It must not be used with any liquids or applications other than those specified. We will accept no warranty claims or liability if it is used for other liquids or applications.
- 7. This product must not be used if it is damaged.

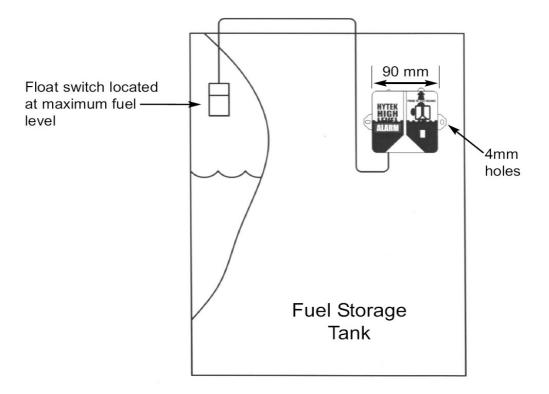
#### **INSTALLATION**

- 1. Using the mounting lugs provided, fix the high level alarm box in the position required using the supplied screws.
- 2. For steel storage tanks fit the black cable gland from float switch to brass cap then slide onto float switch cable. For plastic storage tanks fit the black cable gland from float switch to the metal plate and gasket then slide onto the float switch cable.
- 3. Hang the float switch inside the fuel storage tank and ensure it does not foul inside. For steel tanks (HLA3A.BSP) the brass cap will thread onto a 1 ½" tank fitting. For plastic tanks (HLA3A.BP) the cable is secured using the plate and screws provided.
- 4. Locate the float switch so it will be activated when the level in the tank reaches the required maximum height and secure in position using the gland on the cap/plate.
- 5. Remove the Hytek bund alarm box cover (2 screws on the front), push the float switch cable through the gland on the underside of the box and connect the float sensor to the screw terminals shown in the image below with the red wire in the left terminal. Tighten cable gland. Connect the battery connector to the battery.



Press green button on top of the alarm box. Ensure a series of short beeps can be heard and the light flashes. Replace cover and screw down firmly.

## **INSTALLATION DIAGRAM**



#### **OPERATION**

The Hytek High Level Alarm will operate when the float switch is activated by a rising liquid level in the fuel storage tank. The alarm will sound as a rising beep every 2.5 seconds and the light will flash simultaneously.

To silence the alarm, press the green button. The light will continue to flash until the liquid level in the tank bund drops below the level of the float switch.

The battery will power the Hytek High Level Alarm for 72 hours in full alarm mode with both the sounder and light activated. Low battery power is indicated by a short beep every 25 seconds.

When the battery is low and the alarm is activated the alarm will sound as a rising beep every 5 seconds to conserve power.

The light will flash every 25 seconds in normal operation (not in alarm mode) to indicate that the bund alarm is operating correctly.

If the float switch is disconnected or the cable has been severed the Hytek High Level Alarm will emit a short beep every 5 seconds. The light and sounder can be tested at any time by pressing the green button once. If the Hytek High Level Alarm is functioning correctly a short series of beeps will sound and the light will flash.

#### E.U. DECLARATION OF CONFORMITY

Company Name: Hytek (GB) Ltd

Address: Delta House, Green Street. Elsenham,

Bishops Stortford, Hertfordshire, CM22 6DS, UK

Date of Issue: 22<sup>nd</sup> December 2017

Equipment Details: Hytek ATEX Bund and High Level Alarms

BA3A.BP, BA3A.BS, BA3A.BSP, BA3A.BAB HLA3A.BP, HLA3A.BS, HLA3A.BSP, HLA3A.BAB

Applicable Directives: 2014/30/EU EMC Directive

& Standards EN 61326-1:2013

Electromagnetic compatibility (EMC) – Group 1, Class B Eq. (Emissions)

EN 61326-1:2013

Electromagnetic compatibility (EMC) – Industrial Environment (Immunity)

2014/35/EU Low Voltage Directive

2006/42/EC Machinery Directive

2012/19/EU Waste Electrical & Electronic Equipment Regulations

2011/65/EU Restriction of Hazardous Substances Directive (RoHS2)

2014/34/EU ATEX Directive

ATEX - EN 60079-0:2012 + A11:2013 and EN 60079-11:2012 IECEx - IEC 60079-0:2011 Ed 6 and IEC 60079-11:2011 Ed 6

EC Type examination Certificate No.:CML 16ATEX2356X

**IECEx CML 16.0129X** 

Marking:

Alarm Box: Float Sensor

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IECEx CML 16.0129X IECEx CML 16.0128X

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-20°C to +40°C Notified Body: CML Ltd. Unit 1 Newport Business Park,

New Port Road, Ellesmere Port, CH65 4LZ UK

Notified Body Number CML 2503

Declaration Number: **EU131/4** 

On behalf of the above named company, I declare under our sole responsibility 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.

Clive Wellings, Technical Manager

22<sup>nd</sup> December 2017, Bishops Stortford, Herts

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