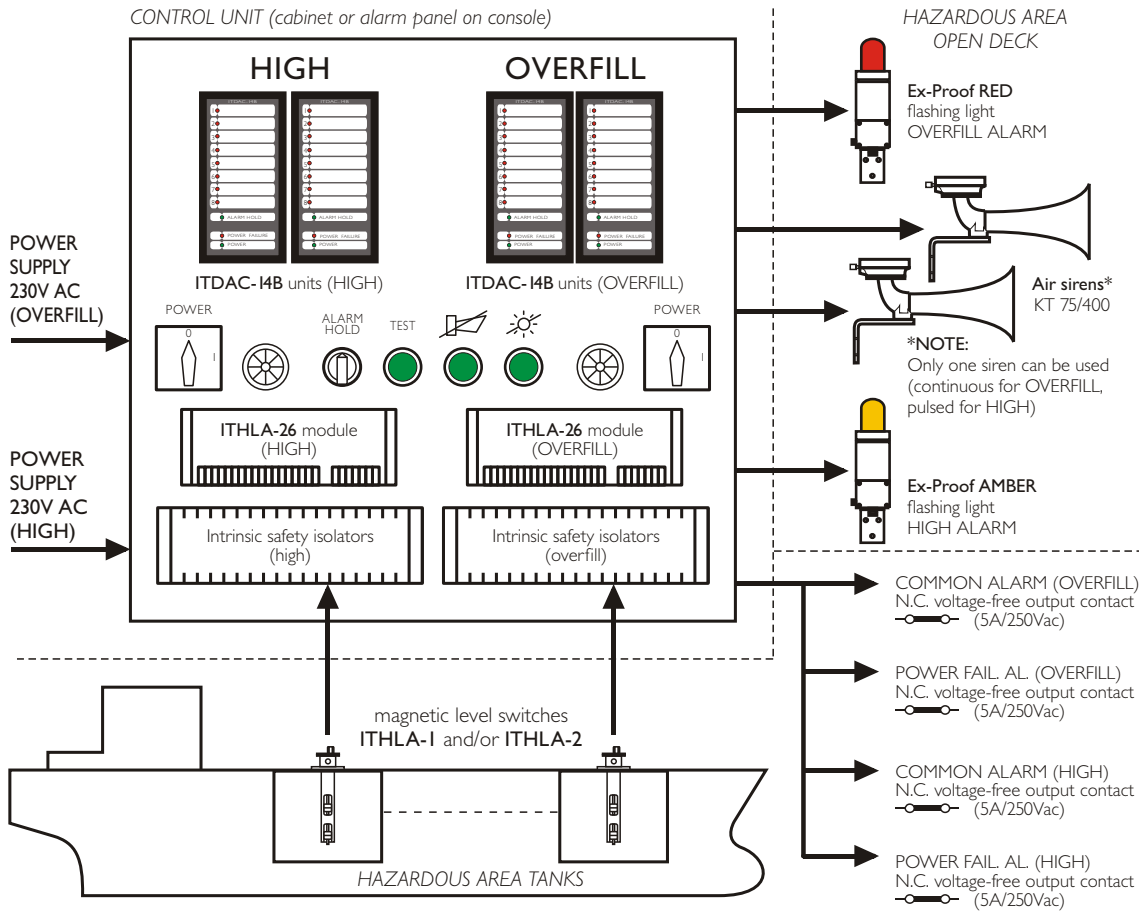


# HIGH LEVEL AND OVERFILL ALARM SYSTEM ITHLA

High level and overfill alarm system type ITHLA is designed for use on board all types of liquid cargo ships. It is tailor made, following specific requirements and meets requirements of all major classification societies.

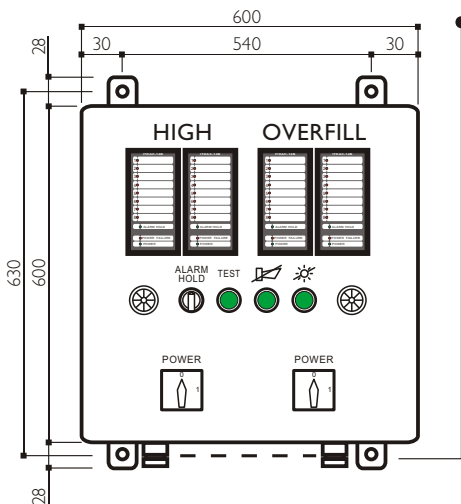


High level and overfill alarm system consists of:

- Control unit with completely separate high and overfill alarm
- Magnetic level switches type ITHLA-1 (single point alarm) and/or ITHLA-2 (double point alarm)
- Output signalling devices: ex proof flashing lights and air sirens KT 75/400

New types for high temperature are available: ITHLA-2(1)/200 for up to 200°C  
 ITHLA-2(1)/B for up to 280°C (see separate leaflet)

## COMPONENTS TECHNICAL CHARACTERISTICS AND DIMENSIONS



### CONTROL UNIT

- Power supply 230V AC - separate for high and for overfill
- Alarm units ITDAC-14B for alarm indication - up to 8 alarm points  
 For more than eight points, more units can be used, with common control buttons (electrically separated contacts for high and for overfill) and power failure battery
- ITHLA-26 Power and Input/output units for power supply and external signalling devices (flashing lights and air siren) connection; N.C. voltage-free output contacts for common and power failure alarm included
- Intrinsic safety isolators for magnetic level switches connection. Magnetic level switches connection cables are fully controlled (short circuit, line break, resistance)
- ITHLA-INT module with control buttons: ALARM HOLD switch, TEST and alarm reset (light and audio) pushbuttons
- Type approved by GL, DNV, BV, RINA, CRS and others on request

**MAGNETIC LEVEL SWITCHES**



- Types: **ITHLA-2** (double point)
- ITHLA-1** (single point)
- ITHLA-2/200** (double point)
- ITHLA-1/200** (single point)

When high level or overflow alarm is required, single point magnetic level switch ITHLA-1 is used; when both (high level and overflow) alarms are required, double point magnetic level switch ITHLA-2 should be used

AISI 316L stainless steel construction with flange DN 100, NP10/NP16

Can be tested from outside of tank

A float with built-in magnet moves with liquid level and activates reed switch fitted in the stem

Can be installed in dangerous area and connected only over intrinsic safety isolator situated in non-hazardous area

Working pressure: up to 4 bar for wetting part

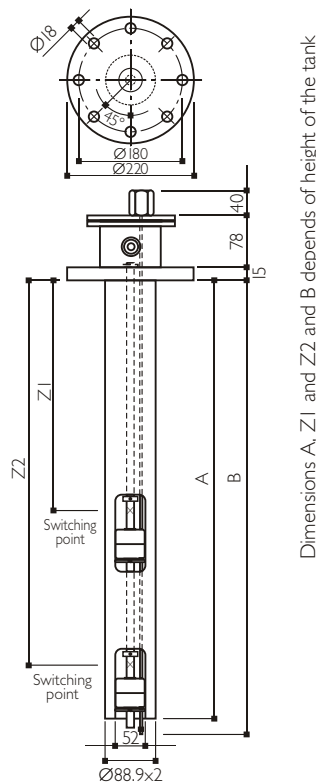
Connection head protection: IP 56

Operating temperature: -25°C up to +90°C for ITHLA-2(1) types

For high temperature operation new types are available:

**ITHLA-2(1)/200** for -25°C up to +200°C

**ITHLA-2(1)/B** for -25°C up to +280°C (see separate leaflet)



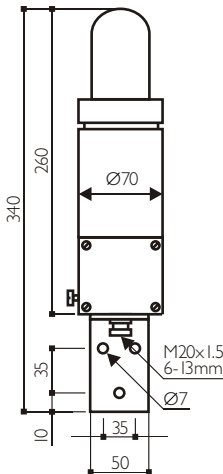
Dimensions A, Z1 and Z2 and B depends of height of the tank

**EX PROOF FLASHING LIGHTS**

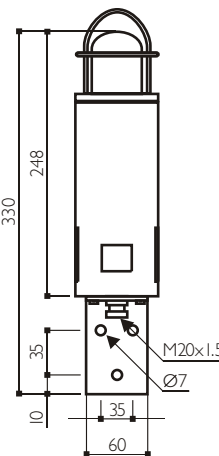
**TECHNICAL CHARACTERISTICS**

- Type: 6161 or CWB-ATEX or XB9
- Explosion protection: EEx d IIC T5/T6 (EEx d IIC T5/T6 (XB9))
- Power supply 230V AC
- Consumption 80mA (60mA (XB9))
- Flashing power 5J
- Primary fuse 0.20AT
- Protection IP66
- Weight approx. 1.5 kg (1.6 kg (XB9))
- Colours: red, amber

**6161 or CWB-ATEX**



**XB9**

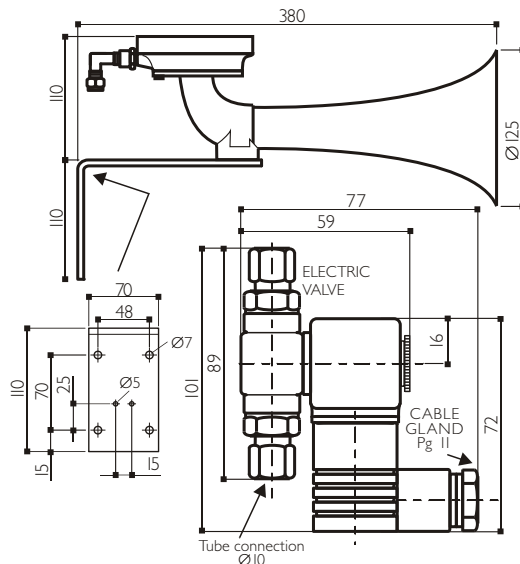


**AIR SIREN KT 75/400**



**TECHNICAL CHARACTERISTICS**

- Frequency: basic tone 400 Hz
- Sound pressure level: 136dB(A) at 1 m, 120dB(A) at 6 m
- Working pressure: in inlet 2-12 bar
- Weight: 0.34 kg
- Valve solenoid power supply 230V AC
- Cable connector protection: IP 65



All dimensions are in mm.