



12V, 110V & 240V

## 3 CHANNEL FLOAT OPERATED TANK ALARM

Item code: TA-CATA

### FEATURES:

- Professional quality tank alarm with 3 input channels.
- Designed to detect overflow, low levels or bund alarm situations on one, two or three tanks.
- Suitable for use with diesel or biodiesel up to B100, oils or water. Diesel Exhaust Fluid option available.
- 230V, 110V or battery operation.
- IP55 weatherproof enclosure.
- Each channel can be used as an overflow, low level or bund alarm.
- High power alarm sounder, 98db at 1m.
- High visibility flashing xenon beacon.
- Plug & socket field connections for quick & easy installation.
- Test button checks probes, beacon & sounder.
- No xenon beacon on battery versions but individual channel LED's.
- Relay outputs available.
- Size: (mm) 163L x 115W x 250H.

### 110V OR 240V TANK ALARM KITS:

- Each kit comes with a 230V alarm box, tank float switch c/w flat plate/gasket for fitting to any tank & 1 1/2" cap for steel tanks.
- Our float switches are universal & can be used to detect an overflow/hi level, bunds or low level alarm.
- Relay Option - Volt free contacts for each channel (1 relay output per channel)
- Relay Option - Can be used to switch secondary equipment, sounders etc.

### 12V BATTERY TANK ALARM KITS:

- Similar to units above but powered via internal batteries. (batteries supplied, type D x 4) No xenon beacon.
- Battery life depends on number of test & alarm incidents.
- Relay Option - Volt free contacts for each channel (1 relay output per channel)
- Relay Option - Can be used to switch secondary equipment, sounders etc.

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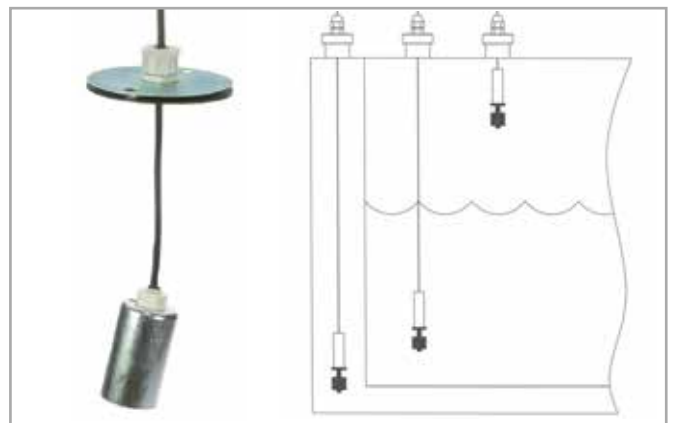


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## TANK FLOAT SWITCHES:

- The Float operated switch is designed to work with the tank alarm units shown right. Each switch can be configured & mounted in the tank to detect an overfill or high level condition, a low level or re-order condition or mounted in the bund or pipework system to detect a leak.
- Supplied with a flat plate & gasket for fitting to any tank. (Option 11/2" cap for steel tanks).
- Standard cable length of 5 metres.(Option 10m).



## ENVIRONMENTAL INFORMATION:

European Directives 2002/96/EC and 2003/108/EC require 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.

## IMPORTANT WARNING NOTES:

1. The PETRO Tank Alarm MUST NOT be used to monitor petrol or other highly flammable liquids with a flash point below 55°C.
2. It is designed for use with diesel, gas oil, water, hydraulic oil and heating oil. Can be used with Anti-freeze or Adblue if optional stainless steel float switch assembly is fitted.
3. It must not be sited adjacent to a petrol dispenser or in any other hazardous zone.
4. It must not be sited below ground level.
5. Installation of this equipment should be carried out by a qualified fuel installation engineer.
6. The installation must conform to all relevant electrical and local authority regulations and standards.
7. Only PETRO float switches can be used with the PETRO alarm.
8. This product must not be used if it is damaged.



## INSTALLATION INSTRUCTIONS:

### MOUNTING

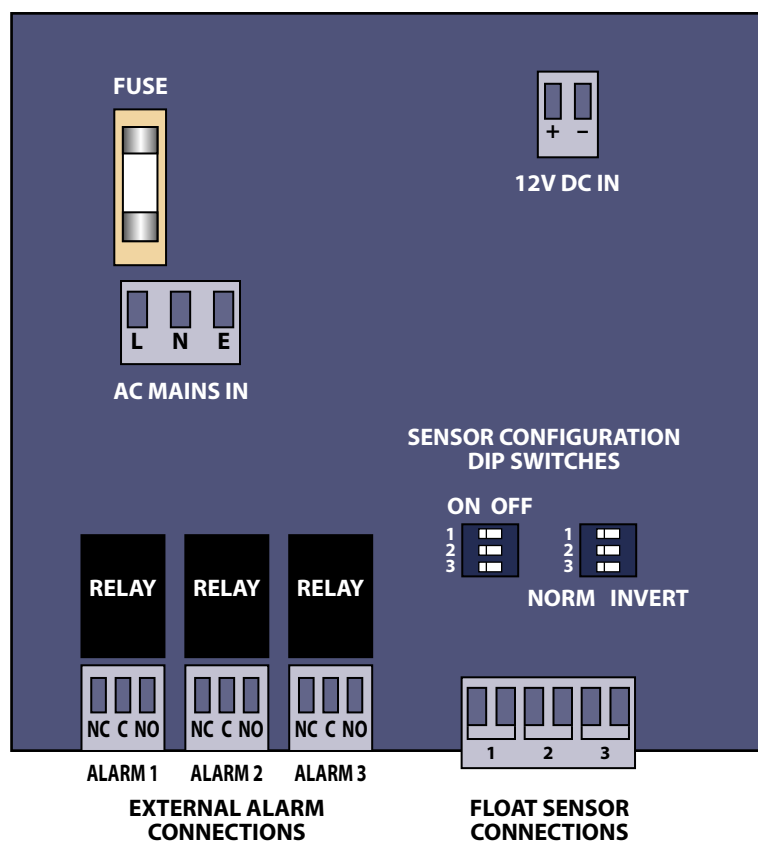
The float switch assembly is supplied with 5 metres of 2-core PUR fuel resistant cable that may be extended, as necessary, up to 100 metres.

1. Remove front display lid from alarm box and disconnect ribbon cable. Place the lid somewhere clean and safe.
2. Using wall-mounting bracket, fix alarm box into position.
3. Self-adhesive product labels are supplied and are to be fixed alongside the corresponding channel LED indicator on the front of the alarm unit.

### POWER SUPPLY

4. The TA2.POW is designed to have a continual 230V AC supply fused at a rating of 6 amps max. The TA2.POW.110 is designed to have continual 110V AC supply fused at a rating of 6 amps max. The TA2.BAT has an internal battery power supply. See Connections diagram.

### CONNECTIONS DIAGRAM





## FLOAT SWITCH INSTALLATION

- To ensure the float switch is positioned at the correct depth in the tank, locate the gland, fitted to the gland plate, at the appropriate point along the float switch cable.  
Carefully install float switch through a 30mm hole in the top of the tank, ensuring the sealing gasket is in place. Secure the gland plate to the tank using two self-tapping screws (not supplied). See Float switch installation diagram (page 3) Alternatively, for steel tank installations, an optional 1 1/2" brass cap (PETRO order ref - TA.CAP) can be used.

**NB:** Installation of the float switch should be as far away from the fill point of the tank as possible.

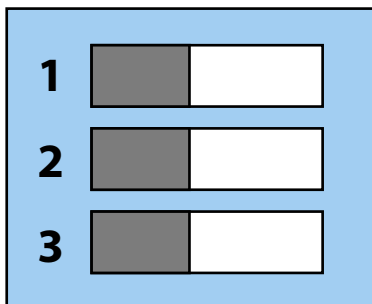
## FLOAT SWITCH ACTIVATION AND CONFIGURATION

- Connect the float switch cables to the float switch terminals inside the alarm box as per connections diagram.
- After connecting the desired amount of float switches, activate the corresponding channels by setting the appropriate channel activation dipswitch to "ON" position. See Dip switch settings diagram.  
**NB:** If a channel activation dipswitch is in the "OFF" position and a float switch connected to the corresponding terminals is operated, the alarm will not function.
- Set the high/low level dipswitches to the appropriate position (NORM = high level activation, INVERT = low level activation) to enable the corresponding float switches to detect either a high or low-level situation. See Dip switch settings diagram.

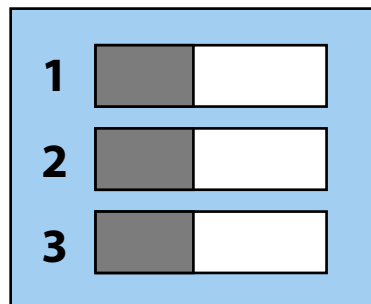
## DIPSWITCH SETTINGS DIAGRAM



**OFF                  ON**



**NORM                  INVERT**  
(HIGH LEVEL)      (LOW LEVEL)





## EXTERNAL RELAY OUTPUTS

9. Where external output relays have been fitted connect external cabling as per connections diagram. The relay contacts are rated at 250 volts, 10 amps max.

**NB:** The relays are a switch only and do not offer a power source for any external equipment. The relays **MUST NOT** be used to activate any equipment such as fuel pumps or safety valves.

## COMPLETION OF INSTALLATION

10. Install batteries provided (TA2.BAT & TA2.BATR Only).

11. Refit lid to alarm box ensuring that ribbon cable is reconnected to the main PCB and the lid seal is in place.

12. Switch on power. The green "POWER" LED should illuminate (TA2.POW, TA2.POWR, TA2.POW.110 & TA2.POWR.110 only).

## OPERATION:

### POWER STATUS

**MAINS VERSION:** The Power LED will remain illuminated to indicate that there is mains power to the unit

**BATTERY VERSION:** The Battery LED will flash every 2 seconds to indicate that there is battery power to the unit. If the battery charge is too low then the sounder will activate intermittently to indicate this.

### ALARM CONDITION

When a high or low-level alarm condition occurs the corresponding channel LED on the tank alarm lid is illuminated and the sounder/beacon will activate. The external relay will also be activated.

### FLOAT SWITCH FAULT INDICATION

If any of the channel LEDs flashes repeatedly then this indicates a fault with the float switch.

### ALARM MUTE

Pressing the mute button for 1.5 seconds will silence the sounder and stop the beacon flashing when an alarm condition is occurring. This will not de-activate any relays (if fitted). The relays will only be de-activated when float switch returns to its normal position.

If the mute button is not depressed the sounder will silence after 20 minutes leaving the beacon and channel LED on.

The channel LED will remain on until the alarm condition has been rectified (float switch returns to its normal position).

### ALARM TEST

To test the Tank Alarm, push and hold the test button on the lid. If the Tank Alarm is functioning correctly the sounder should activate, the beacon will flash (if fitted) and all activated channel LEDs will illuminate.

If any of the channel LEDs flashes repeatedly then this indicates a fault with the float switch.

Battery version: If no sounder is heard and no channel LED's illuminate, check batteries and change as necessary.

**NB:** Always push the Tank Alarm test button before filling the tank.

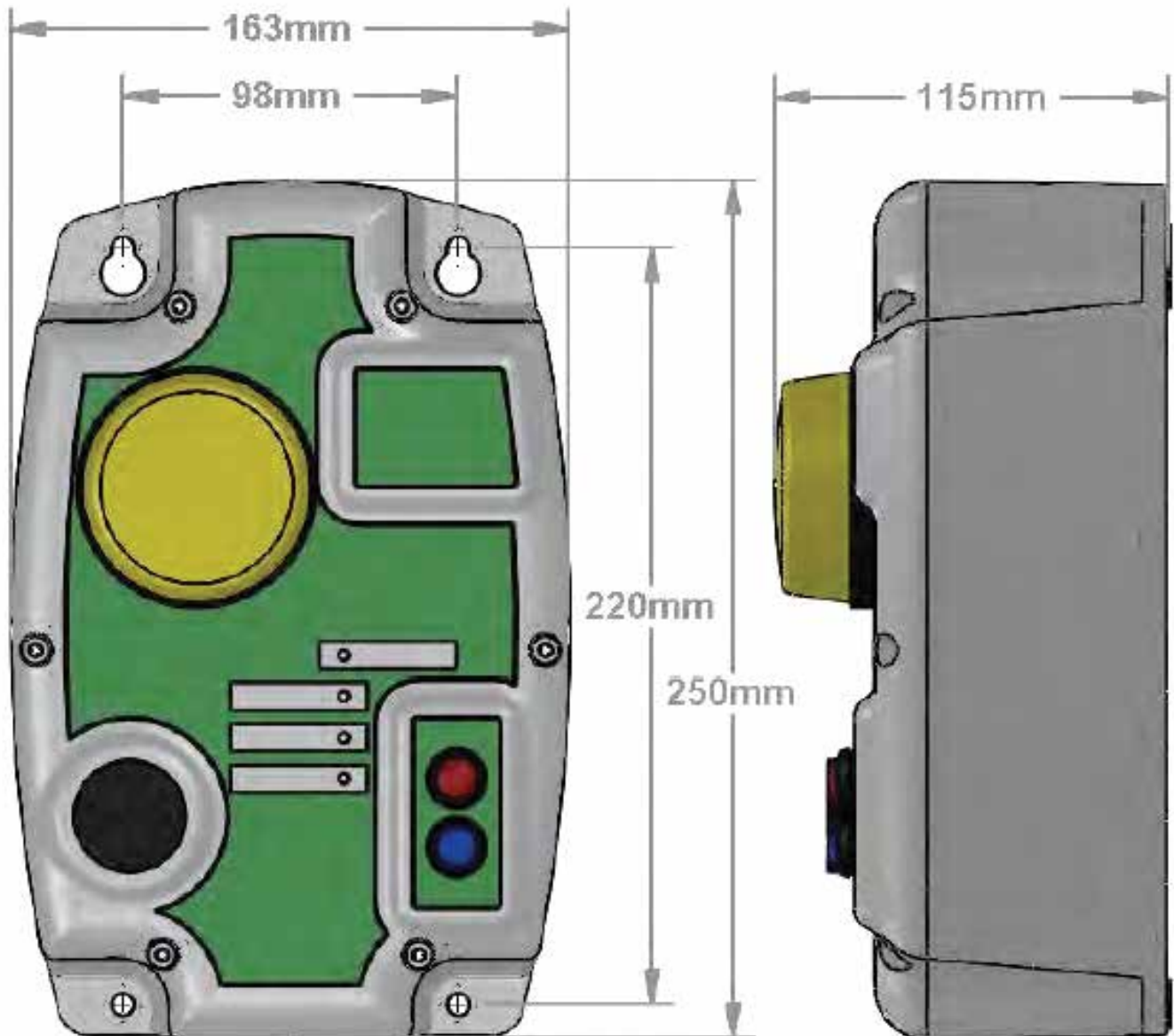
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## FITTING DIMENSIONS:





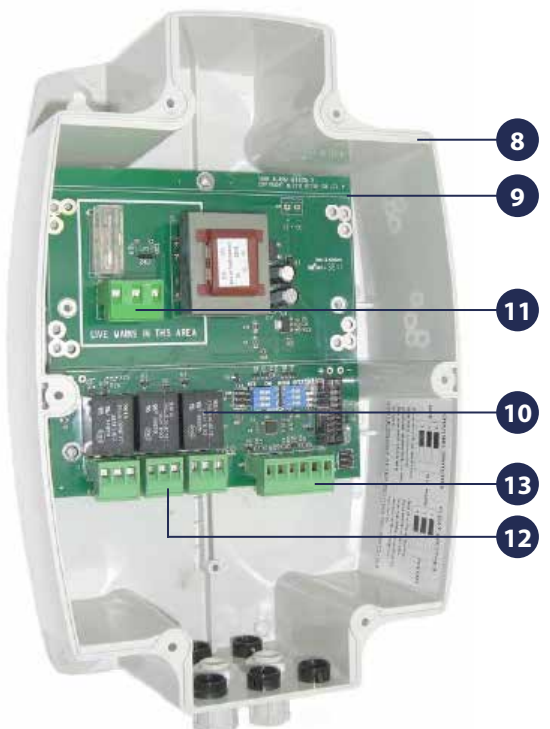
## PARTS LIST: TA2.POW (230V AC) - SHOWN

No.	Exploded View Ref.	Description
1	TA2.LID	Tank alarm lid with all components - MAINS
	TA2.LID.BAT	Tank alarm lid with all components - BATTERY
2	TA.BEACON	Tank alarm amber beacon
3	TA.LABM2	Display lid label (mains)
	TA.LABB2	Display lid label (battery)*
4	TA.SOUND	Tank alarm sounder
5	TC.AT	Tank alarm test button
6	TC.AS	Tank alarm mute button
7	TA.GLND	Cable gland PG7
8	TA.BOX2	Tank alarm box (base only)
9	TA.PCBMAINSR	Alarm PCB 230Vac with Relays
	TA.PCBMAINS	Alarm PCB 230Vac*
	TA.PCB.110R	Alarm PCB 110Vac with Relays*
	TA.PCB.110	Alarm PCB 110Vac*
	TA.PCBBATTR	Alarm PCB 6Vdc Battery with Relays*
	TA.PCBBATT	Alarm PCB 6Vdc Battery*
10	TA.RELAY	10 amp relay (3 per unit)
11	TA.CONM	Plug connector (230/110v mains)
12	TA.CONR	Plug connector (relays)
13	TA.CONF	Plug connector (floats)
14	BLANK.12.7	12.7mm hole blank *
15	TA.LABP	Product label (9 labels per sheet) *
16	TA.PCBDISP	Alarm display PCB*

\*not shown

## SPARES: TA2.POW (230V AC) - SHOWN

Part No.	Description
TA.F5	5m universal float switch
TA.F10	10m universal float switch
TA.F5.SS	5m stainless steel float switch
TA.CAP	1 ½" threaded brass cap for steel tanks
TA.CABLE	Extra cable to extend float switches
TA.CABEXT	Use to join extra cable - IP68 rated
TA.BATTERY	Type D battery (4 per unit)





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## E.C. DECLARATION OF CONFORMITY:

Date of Issue:	28th May 2014
Equipment Details:	TA2.BAT, TA2.BATR, TA2.POW, TA2.POWR Tank Alarms
Applicable Standards:	EMC (EMC etc.) EN61326-1:2006 Group 1, Class B equipment (emissions section only)  EN61326-1:2006 Industrial Location Immunity (immunity section only)  2006/95/EC Electrical Equipment (Low Voltage)  Machinery Directive 2006/42/EC  Waste Electrical and Electronic Equipment Regulations 2006 2002/96/EC 2003/108/EC  2011/65/EU RoHS Directive
Certificate Numbers and Details:	EMC test report number R3012 Issue1 By dB Technology 23 Headington Drive Cherry Hinton Cambridge CB1 4HE
Authorized By:	Clive Wellings - Technical Manager
Declaration Number:	EC10