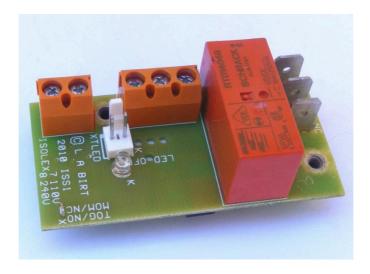
# ISOLEX8™ 'NO-VOLT' LIQUID LEVEL SENSOR



These miniature (60 X 30 mm), chassis mounting modules utilise advanced ferromagnetic technology to provide **full galvanic isolation** to liquid level sensing probes. The novel, low impedance technique, which essentially passes no current through the liquid, detects free ions in the liquid, providing reliable level sensing even in conditions of probe deposit build up. Simple, 1 sq cm stainless steel plates can be used as the level probes or alternatively standard products from probe manufacturers. **The module features a unique double earthed, one wire probe connection arrangement**.

The unit has an integral 16 amp changeover relay to control external power loads and is suitable for aqueous based liquids only. A five second re-operate delay prevents sporadic relay operation during 'water slop' conditions. The module has an on board (or optional remote) LED to indicate relay active/inactive and diagnostic conditions.

# **SPECIFICATION**

Operating temperature - -20 +65 Degrees C

Electrical connections - 5 off screw terminals, 3 off 6.3mm blades (relay contacts)

Supply voltage - 230V AC + 15 - 15%. 110V AC, 24V DC to order

Supply current - 2.5mA relay off, 10mA relay on (nominal)

Probe circuit power - less than 30 microwatts

Relay output - single pole changeover, 16A resistive @ 240V AC

Operation - relay on when probes in/out liquid, link selectable

Re-operate delay - 5 seconds nominal

LED indication - Onboard green LED. Two pin Molex for remote LED

Blinking off - power up test, probe line signal OK

Blinking on - relay de-energised

Continuous on - relay energised

• Probe connection - 2 wire earthed or **1 wire** double earthed (see over)

#### INSTALLATION

#### **PROBE OPERATION**

The unit is factory set for **out of water operation** relay energises whilst the probes

are out of water

To select in water operation, cut the wire link X relay energises whilst the probes

are in water

#### LED INDICATION

The unit is factory set for on board LED indication

To select **remote LED** indication 'spin cut' the copper pad marked **LED OFF** 

to disconnect the on board LED

**c**onnect the remote LED to the 2 pin Molex header (ensure LED cathode

connected to pin K)

#### **POWER CONNECTION**

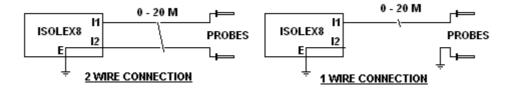
Connect Live, Neutral and Earth wires to 3 way terminal block (L,N,E marked on pcb)

## **LOAD CONNECTION**

Connect switched load to the 6.3mm blade terminals marked NO, C, NC

## **PROBE CONNECTION**

Connect the probes to the **I1** and **I2** (earth) input terminals using either the 2 wire or 1 wire configuration shown below. An earthed tank may be used as the **I2** probe. Keep the wiring length to a minimum (preferably below 20 metres) to reduce capacitive loading on the sensor input.



## **MOUNTING**

Finally, chassis mount the unit onto the two fixing pillars using M3 screws (40mm vertical centres, 17mm horizontal centres)

## PROBE WIRING DIAGNOSTIC TEST

Ensure that the probes (or sensing probe in earthed tank configurations) are not in contact with the liquid. Switch on the AC power to the unit. The LED will illuminate and blink for approximately 5 seconds if the length/capacitance of the switch wiring is within acceptable limits.