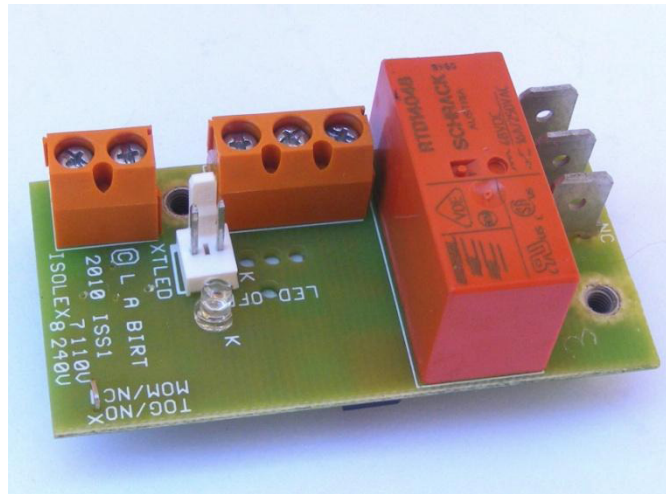


ISOLEX7™ 'NO-VOLT' ISOLATED SWITCH MODULE



At last, a 21st century, low cost alternative **to air switch systems and tubing**. These AC powered, miniature (60 X 30 mm) units utilise advanced ferro-magnetic technology to provide **full galvanic isolation to connected electrical switches**. The novel, low impedance technique, passes near zero current through the connected switch creating a safe, earthed '**electric free**' circuit.

The devices can be used with momentary or latching electrical switches, connected by up to 50 metres of **earthed** cable to the switch input. The module has an integral 16 amp changeover relay to control external power loads. Inbuilt safety circuits automatically de-energise the output if the connected switch wiring is **short circuited** or inhibit the output if the AC power is interrupted whilst the connected **switch is already on**. An on board (or optional remote) LED indicates relay active/inactive, diagnostic and fault 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)
- Switch circuit power - less than 30 microwatts
- Relay output - single pole changeover, 16A resistive @ 240V AC
- Operation - momentary operation or latch on/off action, link selectable
- Power up operate delay - 5 seconds switch line **diagnostic test**
- LED indication
 - Onboard green LED. Two pin Molex for remote LED
 - Blinking off - power up test, switch line signal OK
 - Blinking on - relay de-energised
 - Continuous on - relay energised
- Switch connection - 2 wire earthed or **1 wire** double earthed (see over)

INSTALLATION

SWITCH OPERATION

The unit is factory set for **momentary operation**

relay energises whilst the connected switch is closed

To select **latching operation** cut the wire link **X**

relay alternately energises/de-energises each time the connected switch is closed and opened

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

connect 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)

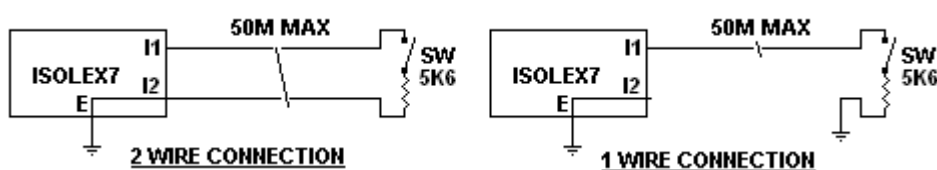
LOAD CONNECTION

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

SWITCH CONNECTION

Connect a 5.6 Kilohm 0.25W resistor onto one of the switch terminals. This enables the module to differentiate between a valid switch closure and a short circuited switch line.

Connect the switch/resistor combination to the **I1** and **I2** (earth) input terminals using either the 2 wire or 1 wire configuration shown below



MOUNTING

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

SWITCH WIRING DIAGNOSTIC TEST

Set the connected switch to off and 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.