



## Liquid Level Controller (Conductive Probes)

# LL1

- Controls the level of liquids in vessels
- Adjustable Sensitivity
- 2 or 3 probe Operation
- Relay output—8 amp @230 vac
- DC or AC powered versions
- Plug in or panel mounting
- Wide range of suitable probes available



### DESCRIPTION

The LL1 is designed to controls the levels of conductive liquids. It operates by sensing the conduction through the liquid between the probes. The voltage used on the probes is a low AC voltage that is safe and does not cause any electrolysis in the liquid and so does not produce any contamination.

The probes are usually stainless steel and one can be the actual liquid container if made from a conductive material.

### MODES OF OPERATION

**Three Probes:** This mode uses three probes, 'common' (which can be the vessel) that reaches to the lowest level of the liquid, a 'low' level and a 'high' level. The internal relay is energised when the 'low' probe is uncovered and is de-energised when the liquid level reaches the 'high' probe. By using the relay to control pumps or valves the level is maintained between the 'low' and high probes.

**Two Probes:** This mode uses the 'common' and a single 'level' probe. The relay is energised when the level is below the probe and de-energises when the level reaches the probe. This mode is not suitable for all installations since if the surface of the liquid is disturbed by waves the relay will be switching rapidly on and off which can cause problems with pumps etc.

**Sensitivity:** The control on the top of the unit is used to set the sensitivity of the probes to suit the conductivity of the liquid and to prevent false readings due to vapour etc.

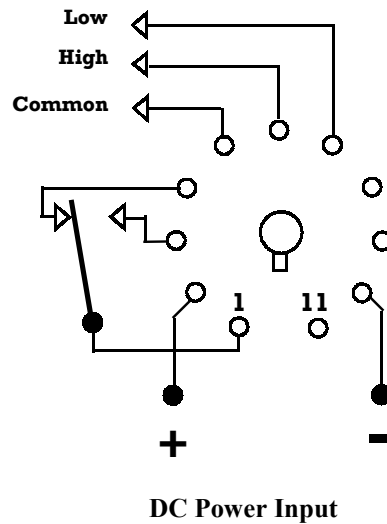
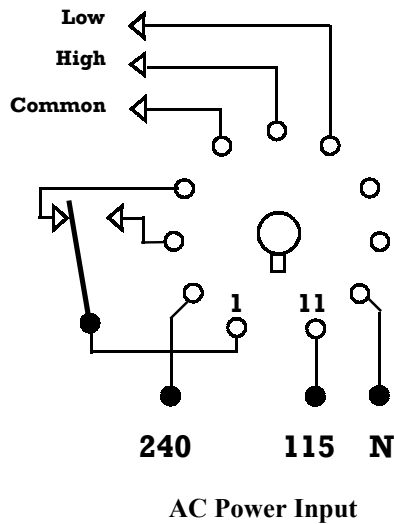
### SPECIFICATION

<b>Power Input:</b>	14 to 35 VDC @ 50 mA or 115/230 VAC 50-60 Hz (+/- 10)
<b>Probe supply:</b>	5 VAC @ 1 KHz
<b>Sensitivity:</b>	Adjustable between 2 and 50 Kilo ohms
<b>Relay:</b>	Single pole change over rated at 8 amps 230VAC
<b>Dimensions:</b>	48 x 48 x 135 mm ( 112 behind panel) Panel cut-out 45 x 45 mm
<b>Indication:</b>	Red LED for power supply indication Green LED for relay indication

# ABTEK CONTROLS



Connections



Accessories

- |                         |               |  |
|-------------------------|---------------|--|
| <b>Three Way Probe:</b> | <b>PLL-3W</b> | <b>(complete assembly)</b>                     |
| <b>Probe Holder:</b>    | <b>PH-3</b>   | <b>(holder for up to 3 probes PR-1M)</b>       |
| <b>1 Metre Probe</b>    | <b>PR-1M</b>  | <b>(1 metre long stainless steel probe)</b>    |
| <b>Probe Coupler</b>    | <b>PRC</b>    | <b>(used to join 2 or more PR-1M together)</b> |

Order code:                    {type} {Option}  
  
    i.e. LL1 , LL1.DC

**ABTEK CONTROLS** A Servecon Ltd Company

Unit 16 Chamberlains Industrial Estate, Sporehams Lane, Danbury, Essex CM3 4AJ  
Tel: 01245 222315 Fax: 01245 227072 Email sales@abtekcontrols.com

**WEB [www.abtekcontrols.com](http://www.abtekcontrols.com)**

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