

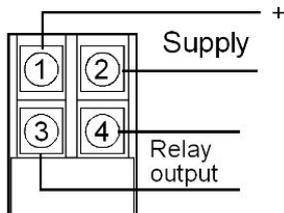
# Liquid Level Detector (v2)

# LLD207

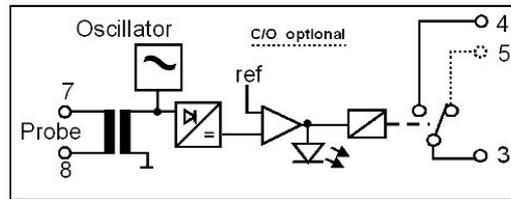
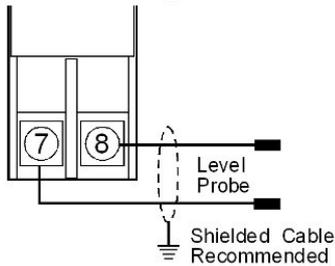
The LIQUID LEVEL DETECTOR LLD207 offers an economic solution to applications requiring an isolated liquid level or soil moisture detection. Due to its total width of only 23.5mm and the 35mm DIN-Rail mounting arrangement the LLD207 is ideal for field enclosures or as a "space saver" in larger control cabinets. Its transformer coupled input eliminates DC coating problems and low energy immunity to interference. A precision oscillator and amplifier drives the input transformer, when conduction occurs the detector relay trips. Front LED's indicate power trip condition. Power choices vary from 12Vdc to 280Vac. Double surge protection is standard as with all series 200 modules to prevent failure due to spikes induced by DC switched inductive loads.



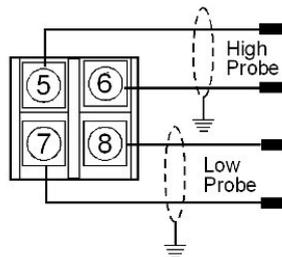
- Liquid level detection using conductive probes such as PR105-1
- Soil moisture monitoring using watermark soil moisture sensor SMS009.
- Tank level control (pump ON / OFF) using 2 x PR105-1 probes or 1 x PR105-3.
- Rain detection using the RD512 using the heater option and 3 μS sensitivity.



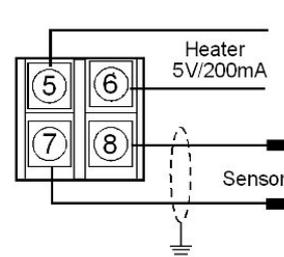
Standard Liquid Level



Tank Level Control



Rain Detector



## General Specifications

Size:	23.5W x 71H x 109D (mm).
Mounting:	Clip for 35mm DIN-Rail.
Housing material:	Polycarbonate.
Connection:	Screw terminals.
Weight:	0.130 kg.
Protection class:	IP40
Turn on settling time	less than 500 milliseconds.
Cable length:	Less than 50 metres with shielded data cable recommended. Distances of up to 100 metres are practical if 50pF/metre cable were used and only one probe is connected per shielded cable.
Probe excitation:	Standard 6Vpp, 1kHz Soil moisture sensor 1Vpp, 1kHz.
Operating temp. range:	-20...+70°C.
Relay Contact:	N/O 8A/250Vac resistive, 3.5A/250Vac inductive.
Power supply swing:	-20...+30% ( 24Vdc supply).
Output contact isolation:	2kV.
Input to power isolation:	Power options 1 and 2: 100Vac. Power options 3 and 4: 1000Vac / 1500Vdc.

Electromagnetic compatibility: AS/NZS 4251.1 (EN 50081.1)

In the interest of development and improvement, APCS reserve the right to amend, without notice, details contained in this publication. APCS will accept no legal liability for any errors, omissions or amendments.

\*) Price Extra..

## Ordering Key:

**LLD207 - X X X X X**

### Power Supply:

- \*) 1 = 12Vdc -20 + 30%
- \*) 2 = 24Vdc -20 + 30%
- \*) 3 = 80-280Vac 50/60Hz (80-280Vdc)
- \*) 4 = 16-48Vac 50/60Hz (10-60Vdc)
- \*) 9 = Other (specify)

### Input / Probe:

- 1 = Single probe.
- \*) 2 = Two probes for tank fill.
- \*) 3 = Two probes for tank drain.
- \*) 4 = Rain detector RD512 (probe + heater 5V / 200mA; only with power options 3 or 4).
- \*) 9 = Other (specify)

### Sensitivity:

- 1 = Standard tap water (>100μS).
- \*) 2 = Pure water (> 3μS).
- \*) 3 = Watermark Soil Moisture Sensor SMS009.
- \*) 9 = Other specify.

### Output:

- 1 = Normally open relay contact
- \*) 2 = Normally closed relay contact
- \*) 9 = Other (specify)

### Option:

- 0 = None.
- \*) 9 = Other (specify)