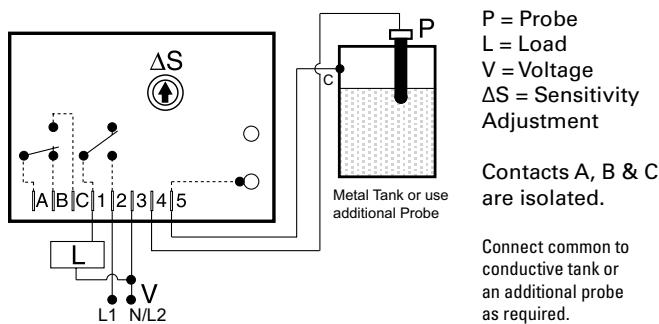


# LLC1 SERIES

## Open Board Liquid Level Controls



### Wiring Diagram



### Ordering Information

MODEL	INPUT VOLTAGE	OPERATION	TIME DELAY	SENSE RESISTANCE	MOUNTING
LLC14A1AX	120VAC	Drain	1s	Adjustable	0.5 in nylon standoffs (3)
LLC14A5AX	120VAC	Drain	5s	Adjustable	0.5 in nylon standoffs (3)
LLC14B15AX	120VAC	Fill	15s	Adjustable	0.5 in nylon standoffs (3)
LLC14B1AX	120VAC	Fill	1s	Adjustable	0.5 in nylon standoffs (3)
LLC14B60AX	120VAC	Fill	60s	Adjustable	0.5 in nylon standoffs (3)
LLC16A25AX	230VAC	Drain	25s	Adjustable	0.5 in nylon standoffs (3)
LLC16A3AX	230VAC	Drain	3s	Adjustable	0.5 in nylon standoffs (3)

If you don't find the part you need, call us for a custom product 800-843-8848

### Description

The LLC1 Series is a single probe conductive liquid level control designed for OEM equipment and commercial appliances. This unit may be ordered with fixed fill or fixed drain operation. A time delay (1-60s) prevents rapid cycling of the output relay. On adjustable units, the sensitivity adjustment allows accurate level sensing while ignoring foaming agents and floating debris. Isolated AC voltage is provided at the probe to prevent electrolysis. A trickle current of less than 1mA determines the presence or absence of liquid between the probe and common. The LLC1 Series printed circuit board is conformal coated to resist moisture and corrosion.

### Operation

**Drain (Pump-Down Mode):** When the liquid level rises and touches the probe, a fixed time delay begins. This time delay prevents rapid cycling of the output relay and its load. At the end of the time delay, the output relay energizes and remains energized until the liquid level falls below the probe. The output relay then de-energizes and remains de-energized until the liquid again touches the probe.

**Fill (Pump-Up Mode):** When the liquid level falls below the probe, a fixed time delay begins. This time delay prevents rapid cycling of the output relay and its load. At the end of the time delay, the output relay energizes and remains energized until the liquid level rises and touches the probe. The output relay then de-energizes and remains de-energized until the liquid level again falls below the probe.

### Features & Benefits

FEATURES	BENEFITS
<b>Isolated AC voltage on probe</b>	Prevents scale buildup on the probe
<b>Open PCB design</b>	Cost effective design for OEM equipment and commercial appliances
<b>Conformally coated PCB</b>	Protects against moisture and corrosion
<b>Sensitivity adjustment</b>	Provides accurate level sensing while ignoring foam or floating debris

# LLC1 SERIES

## Accessories



**P1015-13** (AWG 10/12), **P1015-64** (AWG 14/16),  
**P1015-14** (AWG 18/22) **Female Quick Connect**

These 0.25 in. (6.35 mm) female terminals are constructed with an insulator barrel to provide strain relief.



**P1015-18 Quick Connect to Screw Adapter**

Screw adapter terminal designed for use with all modules with 0.25 in. (6.35 mm) male quick connect terminals.



**PHST-38QTN Electrode**

Designed for a maximum steam pressure of 240 PSI; 400° F. UL353 Recognized.



**LLP-24 Threaded Probe (24")**

Threaded stainless steel probe measuring 24" (61 cm) long. For use with PHST-38QTN liquid level control electrodes.

## Specifications

**Control**

**Type**

ON/OFF (single level) resistance sensor with built-in time delay to prevent rapid cycling

Low voltage AC between probe & common. Isolated from input & output.

Fixed or adjustable to 250KΩ

Adjustable - guaranteed range Factory fixed ±10%

**Time Delay**

**Range**

Fixed 1 - 60s in 1s increments

**Input**

**Voltage**

24, 120, or 230VAC

**Tolerance**

-15% - 20%

**24VAC**

-20% - 10%

**120 & 230VAC**

50/60 Hz

**AC Line Frequency**

**Output**

Electromechanical relay

**Type**

Non-isolated, SPST & Isolated, SPDT contacts

**Form**

10A resistive @ 120/240VAC & 28VDC;

**Rating**

1/3 hp @ 120/240VAC

**Life**

Mechanical -  $1 \times 10^7$ ; Electrical -  $1 \times 10^5$

**Protection**

IEEE C62.41-1991 Level A

$\geq 1500V$  RMS between input, output & probe

**Surge**

Surface mount to probe common with two #6 (M3.5 x 0.6) screws or 0.50 in. (12.7 mm)

nylon standoffs with three #6 (M3.5 x 0.6) screws (use Terminal 5 for probe common)

0.25 in. (6.35 mm) male quick connect terminals

**Isolation Voltage**

$\geq 1500V$  RMS between input, output & probe

**Mechanical**

Mounting

Surface mount to probe common with two #6 (M3.5 x 0.6) screws or 0.50 in. (12.7 mm)

nylon standoffs with three #6 (M3.5 x 0.6) screws (use Terminal 5 for probe common)

0.25 in. (6.35 mm) male quick connect terminals

**Termination**

$\geq 1500V$  RMS between input, output & probe

**Dimensions (Open Board)**

**H** 88.9 mm (3.5"); **W** 69.9 mm (2.75");

**D** 50.8 mm (2.0")

**Environmental**

-20° to 55°C/-40° to 80°C

**Operating/Storage**

Printed circuit board is conformal coated to

**Temperature**

resist moisture and corrosion

**Coating**

$\cong 8.7$  oz (247 g)

**Weight**

ООО "ЛайфЭлектроникс"

"LifeElectronics" LLC

ИНН 7805602321 КПП 780501001 Р/С 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 30101810900000000703 БИК 044030703

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибуторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибуторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помочь разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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