

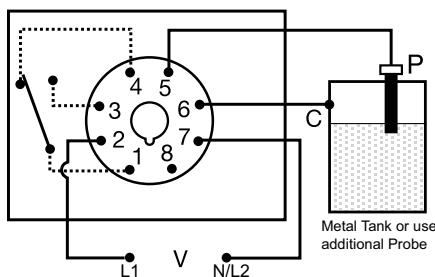
LLC4 SERIES

Octal Plug-In Liquid Level Controls



8-PIN

Wiring Diagram



P = Probe
C = Probe Common
V = Voltage

Relay contacts are isolated.

Connect common to conductive tank. Additional probe is necessary for non-conductive or insulated tanks.

Description

The LLC4 combines resistance sensing circuitry with solid-state timing to provide single probe level maintenance. On adjustable units, the sensitivity adjustment allows accurate level sensing while ignoring foaming agents and floating debris. Isolated 12VAC is provided at the probe to prevent electrolysis. A trickle current of less than 1mA determines the presence or absence of conductive liquid between the probe and common. The LLC4 Series can be used with many types of low voltage (resistance changing) transducers to perform other control functions like temperature limit control, photo limit control, condensation sensing, and ice sensing.

Operation

Drain (Pump-Down Mode): When the liquid level rises and touches the probe, the 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 energize and remain energized until the liquid level falls below the probe level. The output relay de-energize and remain de-energized until the liquid rises and touches the probe.

Fill (Pump-Up Mode): When the liquid level falls below the probe, the 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 energize and remain energized until the liquid level rises and touches the probe. The output relay then de-energize and remain de-energized until the liquid level again falls below the probe level.

Features & Benefits

FEATURES	BENEFITS
Isolated 12VAC probes	Prevents scale buildup on probe
Industry standard 8-pin octal plug connection	Eliminates need for special connectors
Sensitivity adjustment	Provides accurate level sensing while ignoring foam or floating debris

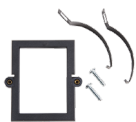
Ordering Information

MODEL	INPUT VOLTAGE	OPERATION	TIME DELAY	SENSE RESISTANCE	MODEL	INPUT VOLTAGE	OPERATION	TIME DELAY	SENSE RESISTANCE
LLC42A10A	24VAC	Drain	10s	Adjustable 1 - 250kΩ	LLC44B1A	120VAC	Fill	1s	Adjustable 1 - 250kΩ
LLC42A1A	24VAC	Drain	1s	Adjustable 1 - 250kΩ	LLC44A60A	120VAC	Drain	60s	Adjustable 1 - 250kΩ
LLC42B15A	24VAC	Fill	15s	Adjustable 1 - 250kΩ	LLC44B20A	120VAC	Fill	20s	Adjustable 1 - 250kΩ
LLC44A10A	120VAC	Drain	10s	Adjustable 1 - 250kΩ	LLC44B2A	120VAC	Fill	2s	Adjustable 1 - 250kΩ
LLC44A15A	120VAC	Drain	15s	Adjustable 1 - 250kΩ	LLC44B30A	120VAC	Fill	30s	Adjustable 1 - 250kΩ
LLC44A1A	120VAC	Drain	1s	Adjustable 1 - 250kΩ	LLC44B4A	120VAC	Fill	4s	Adjustable 1 - 250kΩ
LLC44A2A	120VAC	Drain	2s	Adjustable 1 - 250kΩ	LLC44B5A	120VAC	Fill	5s	Adjustable 1 - 250kΩ
LLC44A4A	120VAC	Drain	4s	Adjustable 1 - 250kΩ	LLC44B5F100	120VAC	Fill	5s	Fixed 100kΩ
LLC44A5A	120VAC	Drain	5s	Adjustable 1 - 250kΩ					

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

LLC4 SERIES

Accessories



BZ1 Front Panel Mount Kit

Provides an easy method of through-the-panel mounting of 8- or 11-pin plug-in timers, flashers, and other controls.



NDS-8 Octal 8-pin Socket

8-pin 35mm DIN rail or surface mount. Surface mounted with two #6 (M 3.5 x 0.6) screws or snaps onto a 35 mm DIN rail. Uses PSC8 hold-down clips.



PSC8 Hold-down Clips

Securely mounts plug-in controls in any position. Provides protection against vibration. Use with NDS-8 Octal Socket. Sold in pairs.



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
12VAC
Fixed or adjustable to 250K Ω

Sensing Voltage **Sensing Resistance** **Sensing Resistance** **Tolerance**

Adjustable: 1K $\pm$ 500 Ω at low end;
250K $\pm$ 25% at high end
Factory fixed: $\pm$ 10% or 500 Ω , whichever is greater

Input **Voltage** **Tolerance** **24VAC** **120 & 230VAC** **AC Line Frequency** **Output** **Type** **Form** **Rating**

24, 120, or 230VAC

-15%, +20%

-20%, +10%

50/60 Hz

Electromechanical relay
Isolated, SPDT
4A resistive @ 240VAC;
1/10 hp @ 240VAC

Protection **Surge** **Isolation Voltage** **Mechanical** **Mounting** **Termination** **Dimensions**

IEEE C62.41-1991 Level A
 $\geq$ 1500V RMS between input, output & probe

Plug-in socket
Octal 8-pin plug-in
H 73.9 mm (2.91"); **W** 60.7 mm (2.39");
D 45.2 mm (1.78")

Environmental **Operating/Storage** **Temperature** **Weight**

-20° to 60°C/-40° to 80°C
 $\approx$ 6 oz (170 g)