

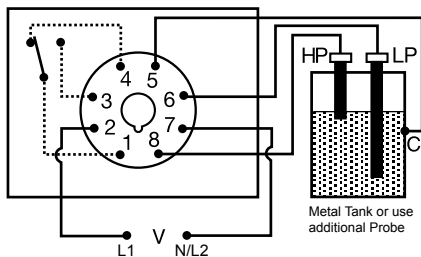
LLC5 SERIES

Liquid Level Controls



8-PIN

Wiring Diagram



HP = HIGH LEVEL PROBE
LP = LOW LEVEL 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 LLC5 provides dual probe conductive liquid level control in a convenient octal plug-in package. Models are available for fixed fill or drain operation. Isolated, pulsed DC voltage on the probes prevents electrolytic plating. Less than 1 mA of current is used to sense the presence of conductive liquid between the probes and common. On adjustable units, the sensitivity adjustment eliminates false tripping caused by floating debris and foaming agents.

Operation

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

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

Features & Benefits

FEATURES	BENEFITS
Unique Probe Protection logic	Probes are protected from scale build up through pulsed DC signal between the probes.
LED status indicator	Visual indication of relay engagement in pump-up or pump-down activity
Isolated 5A SPDT contacts	Allows control of loads for AC voltage

Ordering Information

MODEL	LINE VOLTAGE	DESCRIPTION
LLC52AA	24VAC	For Drain (pump-down) operation with adjustable sense resistance
LLC52BA	24VAC	For Fill (pump-up) operation with adjustable sense resistance
LLC54AA	120VAC	For Drain (pump-down) operation with adjustable sense resistance
LLC54AAS	120VAC	For Drain (pump-down) operation with adjustable sense resistance and reverse connection (#8 low, #6 high)
LLC54AF10	120VAC	For Drain (pump-down) operation with fixed sense resistance of 10 kΩ
LLC54BA	120VAC	For Fill (pump-up) operation with adjustable sense resistance
LLC54BAS	120VAC	For Fill (pump-up) operation with adjustable sense resistance and reverse connection (#8 low, #6 high)
LLC56AA	230 VAC	For Drain (pump-down) operation with adjustable sense resistance

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. Rated at 10A @ 300VAC. 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.

Note: use of the PSC8 clips partley covers the LED window of the LLC5 unit. Use of alternative socket base P1011-6 with its corresponding hold down clips PSCRB8 do not cover up the LED window, but the socket base is not DIN rail mountable.

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

Protection Relays

Pump Controls and Liquid Level Controls

LLC5 SERIES

Accessories



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

Resistance sensing for high & low level detection of conductive liquids
 Pulsed DC at probe terminals
 Factory fixed or adjustable to 100K Ω

Sensing Voltage Sensing Resistance Sensing Resistance Tolerance

Adjustable: 1K $\pm$ 500 Ω at low end; 100K Ω $\pm$ 25%, 0% at high end
 Factory fixed: $\pm$ 10% or 500 Ω whichever is greater
 Debounce time delay < 1s

Response Time

Input Tolerance 24VAC 120 & 230VAC

-15%, +20%
 -20%, +10%

AC Line Frequency

50/60 Hz

Output

Type

Electromechanical relay

Form

Isolated, SPDT

Rating

5A resistive @ 240VAC, 1/10 hp @ 240VAC

Protection

Isolation Voltage

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

Mechanical

Mounting

Plug-in socket

Dimensions

H 60.7 mm (2.39"); **W** 45.2 mm (1.78");
D 76.5 mm (3.01")

Termination

Octal 8-pin plug-in

Environmental

Operating/Storage

Temperature

-20° to 60°C / -40° to 80°C

Weight

6 oz (170 g) approx.