

Curtis® liquid level controls with Models LCS/LHS

Two sensitivity ranges for detection up to 3,000,000 ohms

Features

- Low cost Model LCS for Standard Applications up to 100,000 ohms
- High-Sensitivity Model LHS for Special Applications from 100,000 to 3,000,000 ohms
- Solid-State Amplifier with Potentiometer for Signal Sensitivity Adjustment
- Positive ON/OFF Operation Eliminates Relay Chatter
- Circuit Limits Short Circuit Probe Current to 10MA/24VAC
- Holding Circuit for Differential Levels, or Manual Reset
- Pre-Wired Auxiliary Contactor Available for Handling Heavy Loads and Motor Ratings Exceeding Capacity of Plug-In Relay



Specifications

	Model	Input Supply
Input Supply:	LCS-10/LHS-1	120VAC, 50/60 Hz
	LCS-20/LHS-2	240VAC, 50/60 Hz
	LCS-30	24VAC, 50/60 Hz.

Maximum Allowable Supply Voltage Variation: $\pm 10\%$

Maximum Power Consumption: 3 Watts

Detectable Range: Up to 100,000 ohms (LCS); Up to 3,000,000 ohms (LHS)

Adjustable Range: 1,000 to 100,000 ohms (LCS); 1,000 to 3,000,000 ohms (LHS)

Operating Point Differential: 3% (Typical)

Signal or Probe Voltage: 24VAC

Maximum Signal or Probe Current: 10MA

Short Circuit Probe Current: 10MA

Control Relay: Plug-in type with dust cover

Probe Contacts: Internally Connected for Holding Circuit

Load Contacts: LCS – SPDT, 1/4 HP, 10 amp Non-inductive, 120VAC 1/3 HP at 240 VAC
LHS – SPDT, 1/6 HP, 10 amp Non-inductive, 120VAC 1/3 HP at 240VAC

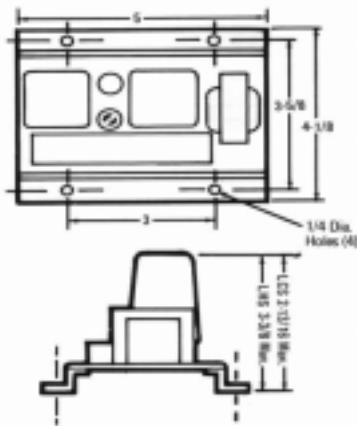
Auxiliary Contactor: DPST-NO-DB, rated 1 HP at 120VAC, 2 HP at 240VAC

Ambient Operating Temperature: $+32^{\circ}\text{F}$ to $+140^{\circ}\text{F}$

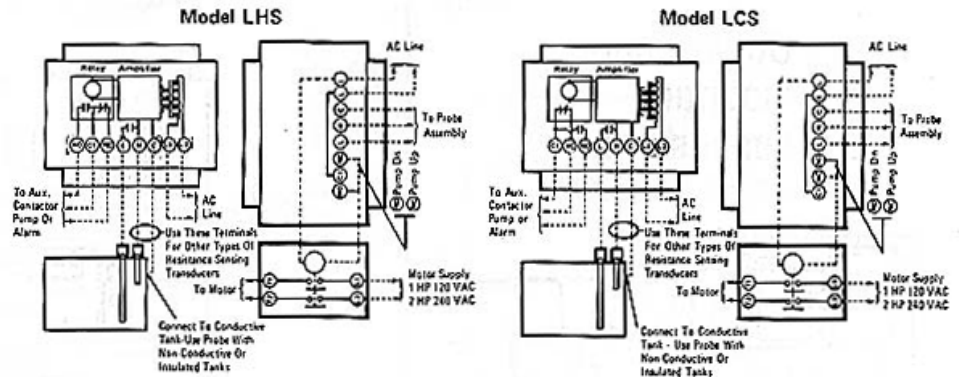
Standard Termination: Barrier-type terminal blocks accepting wire up to No. 12AWG. Auxiliary contactor has combination screw/double .250" quick-connects

Mounting Style: Flange

Outline and Mounting



Connection Diagrams



Models LCS/LHS is a forward mode control. The control relay is energized when liquid rises to contact the "H" probe. The control relay is pulled in and remains energized until liquid drops below the "L" probe. Sensitivity is adjustable.

Ordering Information

Typical Curtis Model Number

Model (Also refer to "Specifications" above) _____
 Contactor (add "C" if desired) _____
 Enclosure – specify only if necessary –
 N3-NEMA 3, N3C-NEMA 3/
 Contactor, N4 – NEMA 4 JIC _____

LCS-20 - -

The composite number above reads as an LCS amplifier for 240VAC supply, without enclosure and without contactor.
 For further information on catalog listed controls contact your area Curtis representative or Curtis distributor.
 For custom design or modification contact your area Curtis representative or the factory direct.