

# 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

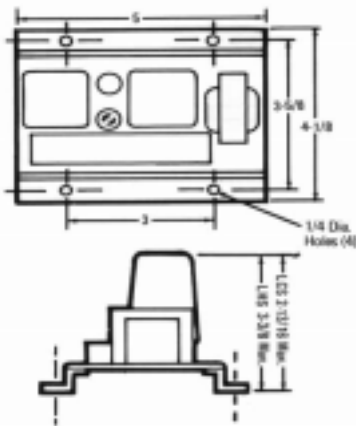


### Specifications

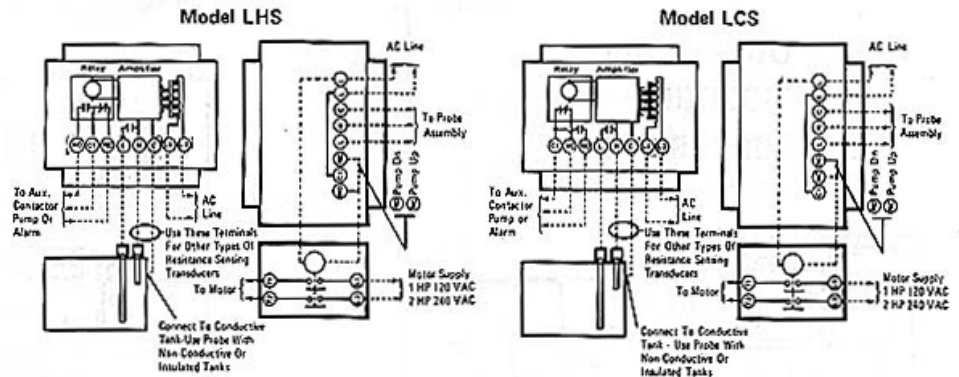
	Model	Input Supply
Input Supply:	LCS-10/LHS-1	120VAC, 50/60 Hz
	LCS-20/LHS-2	240VAC, 50/60 Hz
	LCS-30	24VAC, 50/60 Hz.
Maximum Allowable Supply Voltage Variation: ± 10%		
Maximum Power Consumption: 3 Watts		
Detectable Range: Up to 100,000 ohms (LCS); Up to 3,000,000 ohms (LHS)		
Adjustable Range: 1,000 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° F to +140° 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

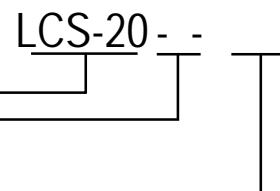


Models LCS/LHS is a forward mode control. The control relay is energized when liquid rises to contact the "H" probe. The control relay is pulled in and remains energized until liquid drops below the "L" probe. Sensitivity is adjustable.

### 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 \_\_\_\_\_



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.