



The LLC8 Series is a low cost, single-probe conductive liquid level control designed for low liquid level cutoff protection. It offers a factory fixed time delay of 1 - 60s and is available for input voltages of 24, 120, or 230VAC. LED indicator illuminates whenever the LLC8's isolated, 10A, SPDT output relay is energized. Sense resistance is fixed from 5K - 250KΩ. Available with manual/automatic reset or a special manual reset with a power outage feature that auto resets the unit when power is restored and the water level is acceptable. 24 and 120VAC units are UL recognized as limit switches under UL353 (230VAC units are UL 508) and CSA certified under Standard 14.

For more information see:
Appendix B, page 167, Figure 28 for dimensional drawing.
Appendix C, page 170, Figure 25 for connection diagram.

Operation

Automatic Reset (Reset switch not connected): When liquid rises to low level cutoff probe, output relay and LED indicator energize. When liquid falls below the low level cutoff probe, the output relay and LED indicator de-energize after a fixed time delay.

Manual Reset (Reset switch connected): When the liquid level falls below low level probe, the output relay and LED de-energize after a fixed time delay. When the liquid level rises to low level probe, the output relay and LED indicator remain de-energized until the NC manual reset switch is opened; then they energize immediately.

Power Outage Manual Reset (Reset switch connected): A power outage causes the output relay and LED indicator to de-energize. Upon restoration of power, if the liquid is touching the low level probe, the output relay and LED indicator will re-energize. If the liquid level is below the low level probe, the output relay and LED indicator remain de-energized until the NC reset switch is opened.

Features:

- Designed for low level cutoff protection
- Energized on wet probe
- Fixed time delay 1 - 60s
- Fixed sense resistance of 5K - 250KΩ
- 24, 120, or 230VAC input voltages available
- Isolated, 10A, SPDT output contacts

Approvals:   

Auxiliary Products:

- **Quick connect to screw adaptor:**
P/N: P1015-18
- **Electrode:** P/N: PHST-38QTN
- **Threaded probe (24"):** P/N: LLP-24
- **Female quick connect:**
P/N: P1015-13 (AWG 10/12)
P/N: P1015-64 (AWG 14/16)
P/N: P1015-14 (AWG 18/22)

Available Models:

LLC825F5M	LLC843F26P
LLC843F10M	LLC845F25P
LLC843F10P	LLC8610F12M
LLC843F26M	

If desired part number is not listed, please call us to see if it is technically possible to build.

Order Table:

LLC8	X	X	X	X
Input	Time Delay (fixed)	Sense Resistance	Reset	
2 - 24VAC	Specify fixed delay in seconds (1-60) in 1s increments	F - Fixed (Specify fixed resistance in kilohms (5-250) in 1K increments.)	M - Manual/Automatic Reset	
4 - 120VAC			P - Power outage manual reset	
6 - 230VAC				

Specifications

Control	Protection
Type Resistance sensing for conductive liquids with time delay	Surge IEEE C62.41-1991 Level A
Sense Voltage 12VAC nominal at probe terminals	Isolation Voltage. ≥ 2500V RMS input to output terminals
Sense Resistance Fixed 5K - 250KΩ	Mechanical
Sense Resistance Tolerance. ±10%	Mounting 0.5 in. (12.7 mm) x .187 (4.76 mm) dia. nylon standoffs (3)
Time Delay	Termination Electrical 0.25 in. (6.35 mm) male quick connect terminals
Tolerance ±20%	Reset Switch & Probe(s) 0.187 x 0.03 in. (4.75 x 0.76 mm) male quick connect terminals
Repeat Accuracy ±10%	Environmental
Time Delay vs Temp. & Voltage. ±10%	Operating/Storage Temperature. -40° to 60°C / -40° to 80°C
Power Outage Reset Delay. ≤1s	Coating Printed circuit board is conformal coated to resist moisture & corrosion
Input	Humidity. 95% relative, non-condensing
Voltage 24, 120, or 230VAC	Weight ≈ 5 oz (141.7 g)
Tolerance	
24VAC. -15% - 20%	
120 or 230VAC. -20% - 10%	
AC Line Frequency 50/60 Hz	
Output	
Type Electromechanical relay	
Form. Isolated SPDT	
Rating 10A resistive @ 120/240VAC; 1/4 hp @ 125VAC; 1/2 hp @ 250VAC	