Low Level Cutoff
LLC6 Series
Liquid Level Control

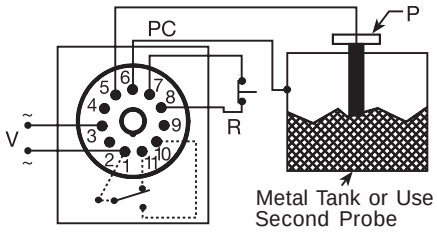
TEN YEAR 10 WARRANTY

- Designed for Low Level Cutoff Protection
- Energized on Wet Probe
- Fixed Time Delay of 1 ... 60 s
- Sense Resistance of 5K ... 250K Ω
- 24, 120, or 230 V AC Input Voltage Available
- 10 A, SPDT Relay Contacts

Description

The LLC6 Series is a plug-in single probe liquid level control designed for low liquid level cutoff protection. It offers a factory fixed time delay of 1 to 60 s and is available in input voltages of 24, 120, or 230 V AC. LED indicator illuminates whenever the LLC6's 10 A SPDT output relay is energized. Available with automatic/manual reset or a special manual reset with power outage feature, which auto resets the unit when power is restored and the water level is acceptable. 24 V AC and 120 V AC units are recognized as limit switches under UL353 (230 V AC units are UL508) and CSA certified under Standard 14.

- Approvals: cULus, CSA, CE



Dashed lines are internal connections.

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

PC = Probe Common P = Probe V = Voltage
R = Optional NC Reset Switch

Operation

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

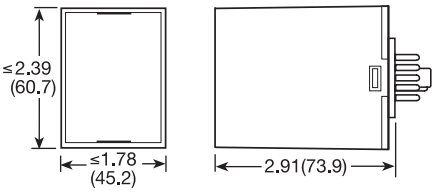
Manual Reset (Reset switch connected): When the liquid level falls below low level probe, the output relay and LED de-energize after a fixed time delay. When the liquid level rises to low level probe, the output relay and LED indicator remain de-energized until the manual reset switch is opened; then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

Ordering Table

LLC6 Series	X Input	X Time Delay (Fixed)	X Sense Resistance	X Reset
	–2 - 24 V AC –4 - 120 V AC –6 - 230 V AC	Specify Fixed Delay In Seconds [1 ... 60] In 1 S Increments	–F - Fixed Specify Fixed Resistance In Kilohms [5 ... 250] In 1 K increments	–M - Manual/Automatic Reset –P - Power Outage Manual Reset

Example P/N: LLC6410F25M

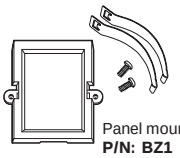


Inches (Millimeters)

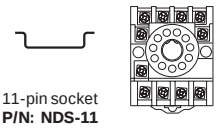
Technical Data

Control	
Type	ON/OFF (Single Level) Resistance sensor with built-in time delay to prevent rapid cycling
Sense Voltage	12 V AC nominal at probe terminals
Sense Resistance	5K ... 250K Ω factory fixed
Sense Resistance Tolerance	Fixed +/-10%
Time Delay	
Range	1 ... 60 s in 1 s increments
Tolerance	+/-20%
Repeat Accuracy	+/-10%
Time Delay vs. Temperature & Voltage	+/-10%
Power Outage Reset Delay	≤ 1 s
Input	
Voltage	24, 120, or 230 V AC
Tolerance 24 V AC	+20% ... -15%
120 or 230 V AC	+10% ... -20%
Frequency	50 ... 60 Hz
Output	
Type	Electromechanical relay
Form	Non-isolated (SPDT) contacts
Rating	10 A resistive at 240 V AC; 1/4 hp at 125 V AC 1/2 hp at 250 V AC
Protection	
Surge	IEEE C62.41-1991 Level A
Isolation Voltage	≥ 2500 V RMS between input & output terminals
Mechanical	
Mounting	Plug-in socket
Termination	11 Pin relay type
Package	2.91 x 2.39 x 1.78 in. (73.9 x 60.7 x 45.2 mm)
Environmental	
Operating Temperature	-40°C ... +60°C
Storage Temperature	-40°C ... +80°C
Humidity	95% relative, non-condensing
Weight	≅ 7.3 oz (207 g)

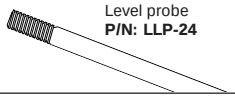
Accessories



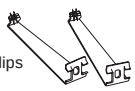
Panel mount kit
P/N: BZ1



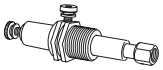
11-pin socket
P/N: NDS-11



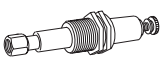
Level probe
P/N: LLP-24



Hold down clips
P/N: PSC11



Electrode with common connection
P/N: WCC-1138-3



Electrode
P/N: WCC-1138

See accessory page at the end of this section.