

Resistance Sensors (Pump Up Logic with Heater Burn Out Protection)

Models NS210 and NS211

FEATURES

- 100% functionally tested
- Solid state sensing circuitry
- Isolated UL Class II sensing voltage
- 1/4" male fast-ons for circuit connection
- Conformal coating to protect circuit from harsh environments
-  File #E61377

Operating Logic: Assuming an empty tank, upon application of voltage to the system, the fill output is turned on and the heater output is off. As the liquid fills the tank, and when it reaches the low probe (above heater), the heater output is turned on. The level will rise until it reaches the high probe causing the fill output to turn off. As liquid is removed from the tank, 2 to 4 seconds after it breaks contact with the high probe, the fill output is turned on and stays on until the liquid reaches the high probe. This time delay eliminates fill output chatter if the liquid is splashing.

If the tank is non-conductive, a third (common) probe must be installed at a level where it will always be submerged.

SPECIFICATIONS

CONTROL TYPE

On/Off Resistance Sensing:

On low probe: probe resistance below set point activates heater output

On high probe: probe resistance above set point activates fill output after a 2 to 4 sec. delay

Sensing Voltage: 15 VAC, max. RMS

Sensing Current: 2 mA, max. RMS

Sensitivity Adjustment: Factory set at 50 K ohms $\pm 10\%$

INPUT

Operating Voltage: 24, 120, 240 VAC, $\pm 10\%$

Power Consumption: 3.0 VA max.

Frequency: 50/60 Hz

OUTPUT

Type: Relay contacts, switch loads to L1

Rating: 5 A resistive at 240 VAC

Life:

Mechanical: 5,000,000 cycles

Electrical: 100,000 min. at full load

PROTECTION

Isolation: 1500 VAC between probe and other terminals

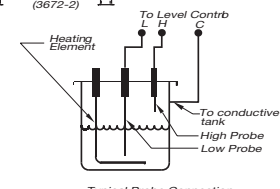
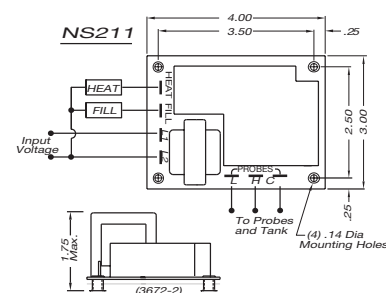
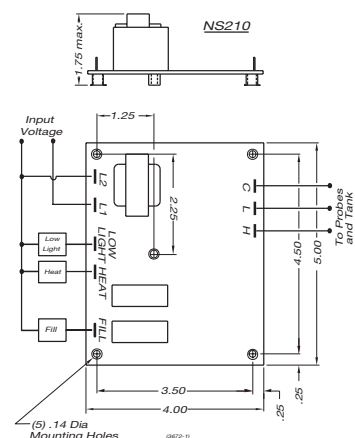
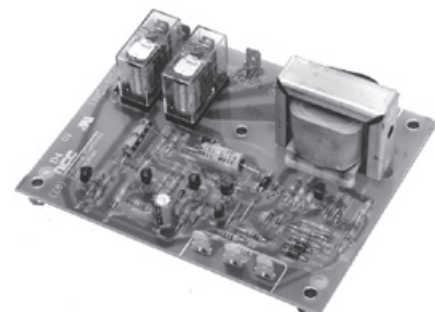
MECHANICAL

Terminations: 1/4" x .032" male fast-ons

Mounting: 4 - .141" dia. mounting holes

ENVIRONMENTAL

Operating Temperature: 0°C to 55°C



ORDERING INFORMATION

LOGIC TYPE	INPUT VOLTAGE	PART NUMBER
Pump Up	24 VAC	LNC-NS210-024
Pump Up	120 VAC	LNC-NS210-120
Pump Up	240 VAC	LNC-NS210-240
Pump Up	120 VAC	LNC-NS211-120

ACCESSORY	PART NUMBER
Probe Holder with Ground	LLH-11383-010
Probe, 6" Long, 1/4" Dia., S.S.	LLP-06.00-OSS
Probe, 12" Long, 1/4" Dia., S.S.	LLP-12.00-OSS
Probe, 24" Long, 1/4" Dia., S.S.	LLP-24.00-OSS
Probe Assembly, Plastic Body	LLP-001/2-011