

INTRODUCTION

N321S is a controller for solar heating applications. It commands a water circulation pump through the temperature differential between the solar collector and the thermal reservoir or pools.

The controller has two NTC temperature sensor inputs, one to read the temperature at the collector and one to read the reservoir. The control output activates the water pump.

It also includes functions for preventing damage to the tubes during the winter and to avoid overheating, thereby preventing tube damage and thermal discomfort.

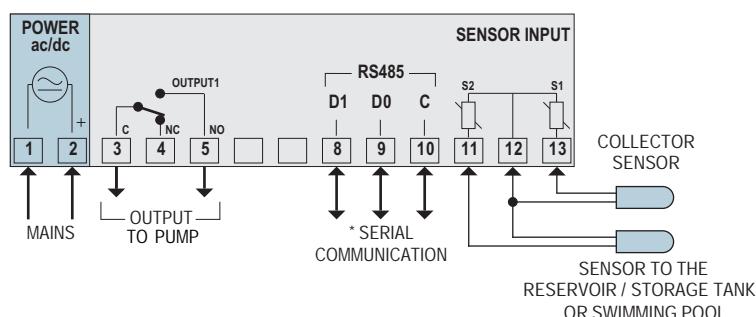
CE (European Union) and UL (United States and Canada) certifications compliant.

**FEATURES & SPECIFICATIONS**

- One SPDT relay outlet, 1 HP(16A resistive)/250Vac for pump control
- Temperature measuring range: NTC: -50 to 120 °C
- Differential control
- Anti-freezing setpoint
- Anti-overheating setpoint
- 3½-digit LED Display
- Sensor offset adjustment
- Adjustable hystereses
- Configurable setpoint minimum and maximum limits
- Program retention during power failures
- Configurable password equipment protection
- Silicone keys with excellent durability
- Accuracy: 0.6 °C (NTC)
- Resolution: 0.1 °C from -19.9 to 199.9 °C
- Front-panel with IP65 protection
- Sampling: 1.5 time per second
- Power supply: 100 to 240 Vac/dc ±10%
- Frequency: 50~60 Hz (standard model)
- Consumption: 5VA
- Dimensions: 75 x 33 x 75 mm
- Panel cutout: 70 x 29 mm
- Weight: 120 g
- Operational temperature: 0 to 40 °C
- Storage temperature: -20 to 60 °C

OPTIONAL

- RS485 interface with Modbus RTU protocol
- Power supply: 12 to 24 Vdc

ELECTRICAL CONNECTIONS

* OPTIONAL FEATURE

HOW TO SPECIFY

MODEL: **N321S - A - B - C**, where:

A: Sensor:	NTC
B: Communication:	Blank or 485 (RS485, RTU Modbus Protocol)
C: Power supply:	Blank (100-240 Vac/dc) or 24V (24 Vac/dc)