

## A421ABC-2C

### Electronic Temperature Control



#### DESCRIPTION

Delta-Therm's A421ABC-2C is a single-stage, electronic temperature control with a single-pole, double-throw (SPDT) output relay. The control features an adjustable backlit LCD for viewing the sensed temperature and the status of other functions, and a 3-button touchpad for setup and adjustment. An LED indicates the on/off status of the output re-lay. The control has a setpoint range of -40°F (1°C) to 212°F. (100°C) The control operates at 120 or 240 VAC.

The A421ABC-2C control has simple on/off temperature settings for heating and cooling, an adjustable anti-short cycle delay, temperature setback and sensor offset capability. The control combines remote sensing capability and interchangeable sensors with electronic accuracy in a NEMA 1, high-impact plastic enclosure suitable for surface or DIN rail mounting.

#### APPLICATIONS

Pipe Tracing Systems  
Permafrost Prevention Systems  
Heating and Cooling Systems

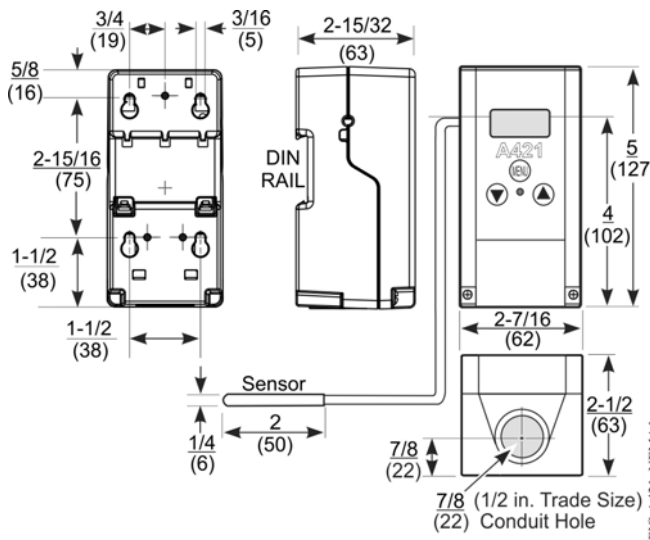
#### APPROVALS

cULus Listed

#### A421ABC SPECIFICATIONS

<b>Enclosure:</b>	NEMA 1 High Impact Gray Thermoplastic
<b>Setpoint Range:</b>	-40°F to 212°F (1°C to 100°C)
<b>Differential Range:</b>	1°F to 30°F (17°C to 1°C)
<b>Input Voltage:</b>	120 or 240 VAC, 50/60Hz
<b>Switch:</b>	Single pole, double throw (SPDT)
<b>Electrical Rating:</b>	16 Amps at 120 VAC 9.2 Amps at 208 VAC 8 Amps at 240 VAC
<b>Exposure Limits:</b>	-30°F to 140°F (34°C to 60°C)
<b>Sensor:</b>	A99BB-200C PTC Sensor with 6.5 Ft. (2m) Leads






**Detail 1.** Typical wiring diagram, for the A421ABC-2C Thermostat: 120 and 240 VAC Applications.

**SETUP, ADJUSTMENTS, AND JUMPER POSITIONING**

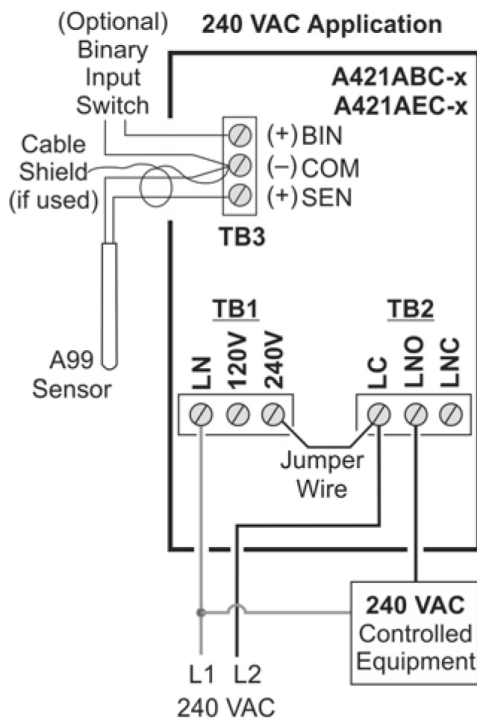
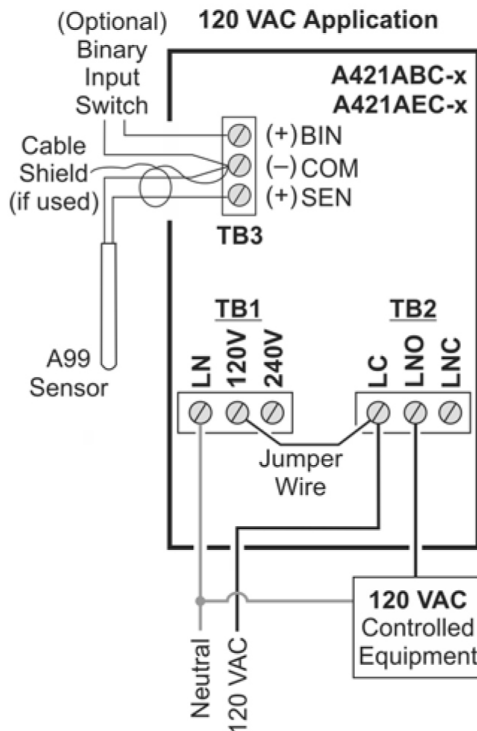
**Maximum Recommended Sensor Cable Lengths and Wire Sizes**

Wire Gauge	Maximum Sensor Cable Length* Ft. (m)
16 AWG	500' (150)
18 AWG	300' (100)
20 AWG	200' (60)
22 AWG	125' (40)

\*At the listed maximum cable lengths there is less than 1°F (0.6°C) error in the actual temperature vs. displayed temperature.



**WARNING** Risk of Electrical Shock. Disconnect or isolate all power supplies before making electrical connections. More than one disconnect or isolation may be required to completely de-energize equipment. Contact with components carrying hazardous voltage can cause electric shock and may result in severe personal injury or death.



**Detail 4.** Wiring the A421 Series Controls using the same power source to power the control operation and power the controlled equipment.