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ZYTRON®

PRODUCT INFORMATION SHEET

SERIES 565

NEMA 4X DUAL STAGE TEMPERATURE CONTROLLER

FEATURES

- COMPACT NEMA 4X WATERTIGHT ENCLOSURE**
- LARGE BRIGHT LED DISPLAY**
- SIMPLE 4 BUTTON OPERATION**
- SELECTABLE HEAT OR COOL MODE FOR STAGE 1 & 2**
- SPDT RELAY OUTPUTS FOR STAGE 1 & 2**
- VISUAL HIGH & LOW ALARMS (FLASHING DISPLAY)**
- RUGGED MOISTURE RESISTANT SENSOR INCLUDED**



Description

The Series 565 is a highly reliable, microprocessor based Dual Stage Digital Indicating On-Off Temperature Controller housed in a robust, corrosion resistant, plastic NEMA 4X enclosure. A large 3 digit LED temperature display is easily seen even in dimly lit areas. The field selectable 120/240VAC power input is standard and a 24VAC input is available as a factory option. Two (2) SPDT output relays conservatively rated for up to 10 Amps Resistive and 1/2 HP Motor are provided for each stage. Heavy duty screw terminals with wire clamping plates are provided for all electrical wiring connections. Provision is made for a standard 1/2" electrical conduit connection.

The Series 565 is supplied with a rugged solid state temperature sensor featuring $\pm 1^{\circ}\text{F}$ accuracy and housed in a moisture resistant .250" OD Stainless Steel probe with 6 ft of cable. An optional Teflon sleeve is available for applications requiring a direct liquid immersion and corrosion resistant sensor construction.

The large LED display and simple 4 button operator interface allows easy and accurate selection of $^{\circ}\text{F}$ or $^{\circ}\text{C}$ display units, Stage 1 & 2 set points, On-Off differential, Heating or Cooling operating mode, Alarm set points and sensor offset. A Lock function prevents unauthorized or unintentional changes to set points and other programmed values. All programmed values are retained in non-volatile memory for at least 10 years. An On/Off button allows the display and relay outputs to be de-energized when not in use.

Applications

Fermentation Tanks
Barrel Room Temperature Control
Automatic Cycling of Ventilation Fans
Storage Bin Temperature Alarm
Space Heating

Refrigerated storage tanks
Plating Bath Temperature Control
Heat tracing
Freeze control
Cooling Towers

Specifications

Input Voltage: 120/240VAC $\pm 15\%$, 50/60Hz; 24VAC input available (contact factory).

Outputs 1 & 2: SPDT relays rated for 120(208/240)VAC as follows.

	N.O.	N.C.
Resistive/GP	10(5) Amps	6(3) Amps
Horsepower	1/2 hp	1/4 hp
Pilot Duty	125VA	125VA

Control Action: On/Off with adjustable differential from 1 to 30°F (factory default 5°F)

Control Mode: Each stage can be set independently for Heating or Cooling mode; the factory default is Heating for Stage 1 and Cooling for Stage 2.

SP Range: -30°F to +220°F (-34°C to +105°C)

Temp. Display: 3 Digit, .56" High Red LED

Display Range: -67°F to +257°F (-55°C to +125°C)

Display Accuracy: $\pm 1^\circ\text{F}$ from 14°F to 185°F (-10°C to 85°C)

Sensor: Solid State Transducer probe assembly, P/N 50-4108-6

Annunciators: Red LEDs illuminate when output is energized and during programming.

Alarm Action: Display flashes when temperature exceeds either alarm set point.

Alarm SP Range: -30°F to +220°F (-34°C to +105°C) & OFF

Op Amb. Temp: -25°F to 140°F (-32°C to +60°C)

Storage Temp: -40°F to +185°F (-40°C to +85°C)

Environmental Protection: NEMA 4X (IP65)

ENCLOSURE DIMENSIONS (shown with mounting brackets installed)

