Zytron Control Products, Inc.
20 Lexington Ave. Trenton, NJ 08618
Tel (609) 771-0101
Fax (609) 771-0020

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 ±1°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 °F or °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 ±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: ±1°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)