FEATURES

Sub-panel Mount
Dual Output (10A/1A S.S.)
Time Proportioning (Both Outputs)
Automatic Reset (Both Outputs)
Adjustable Rate (Both Outputs)
115/230 VAC Operation
Field Selectable
Analog and Digital Meter Drive
for Temperature Indication
RTD, Thermistor, and Thermocouple Sensor Inputs
Adjustable Dead Band, 1°F, Reset, Rate
Range Change Possible by
Change of Bridge Board
Sensor Change Possible by
Change of Bridge Board
Program Input Bridge Boards
Available
Remote or Integral Set Point
Potentiometer

GENERAL

The Series 258 sub-panel controller is a dual output, heat/cool temperature controller with time proportioning, auto reset, and rate for each output as the control mode. There are potentiometers for external adjustment of each of these features. The controller will accept thermistor, RTD, or thermocouple inputs. The standard bridge boards will drive a full scale analog meter and special bridge boards feature a 5 mv/LSD output capable of driving a digital meter. The special bridge boards will accept the standard type of wet point assembly or they will accept a 5 mv/LSD program input.

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DATA SHEET
258 SERIES

SPECIFICATIONS:

CONTROL MODE:
Dual output with time proportioning, automatic reset, and rate on both outputs.

OUTPUTS: HEATING:
Solid state zero switching, isolated triac rated 15 amps at 120/240 VAC. 
Note: Load current must be 1 amp to insure proper triac switching.

COOLING:
Solid state zero switching, isolated triac rated 1 amp at 120/240 VAC. 
Note: Load current must be 0.5 amp to insure proper triac switching.

AUXILIARY OUTPUTS: Depends on model. Available options:
1) 0 to 1 mA available for direct temperature indication on calibrated meter.
2) 5 mv/°F available for direct temperature indication on digital meter — RTD models only.

LINE VOLTAGE: 120/240 VAC ± 20%, 50/60 Hz.

POWER CONSUMPTION: Less than 3.5 V.A.

OPERATING AMBIENT: 30 to 150°F.

CONTROL ACCURACY:
Typically ± 1/7° C, depending on design of thermal system.

SET POINT SHIFT W/AMBIENT:
Typically 5 microvolts/°F ambient referred to the input (thermocouple model).
Typically ± 1°F (RTD and thermistor models).

SET POINT SHIFT W/LINE VOLTAGE:
± 20% change in line voltage will produce a set point shift of less than ± 20% of span.

RTD and Thermistor Models — Sensor and control circuits are isolated from line and load.

SENSOR PROTECTION:
RTD and Thermocouple Models — In the event of an open sensor, the cooling output will energize.
Thermistor Models — In the event of a shorted sensor, the cooling output will energize.

GOLD JUNCTION COMPENSATION:
Automatic, thermocouple is connected directly to unit.

PROPORTIONAL BAND: Adjustable 5 to 90°F.

AUTOMATIC RESET: Adjustable 5 to 65 seconds per minute (equivalent to 2 to 20 minutes).

RATE: Adjustable 0 to 5 minutes.

CONTROL TIME: 5 seconds cycle time automatically when control is within proportional band — typically 5 seconds minimum, 60 seconds maximum.

MASTER BAND: (Cooling Potentiometer) Adjustable from 0 to a minimum of 10%.

SET POINT ADJUSTMENTS: Depends on model. Available options:
1) Integral set point.
2) Remote set point.
3) 5 mv/°F with auxiliary remote set point for local/remote capability. (5 mv signal supplied with external programmer)