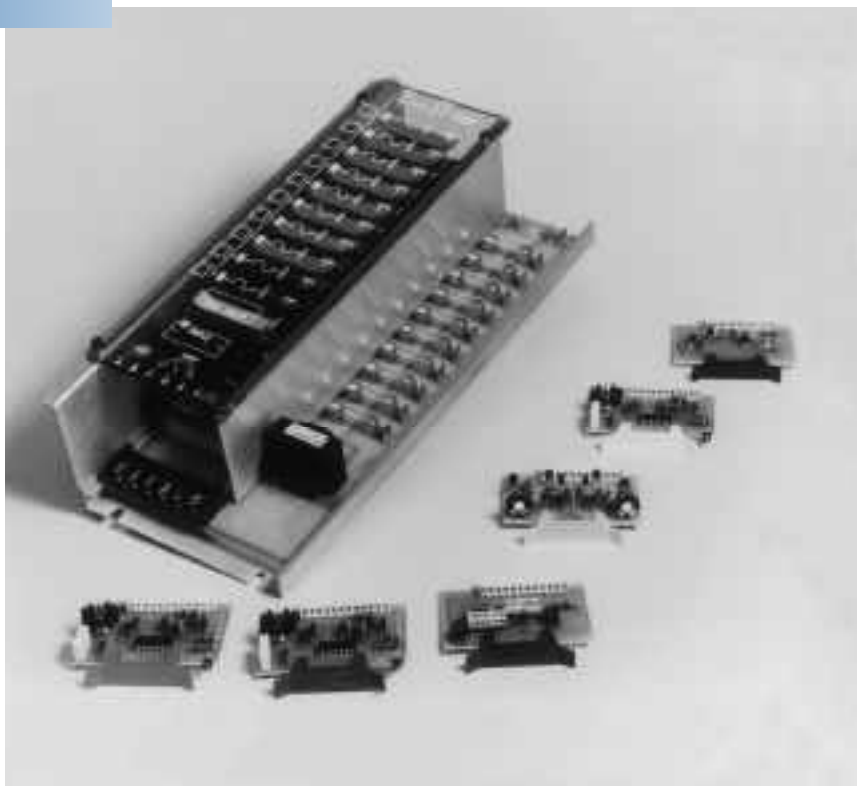
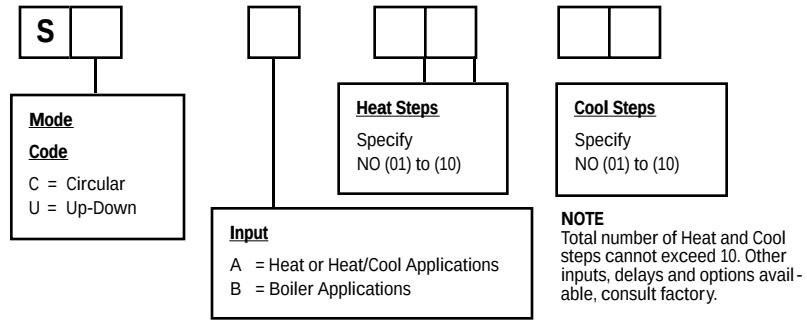
Solid-State Staging Controllers

- *Solid-State Output Stages*
- *Up-Down or Circular Mode*
- *Optically Isolated Input*
- *Logic Status Lights*
- *Field Changeable, Plug-in Circuit Boards*
- *Versatile Current, Voltage, or Resistance Input*
- *10-Stage Capacity*
- *Fused Output Stages*



Ordering Information



Example:
SUA-08-02 – Series (S) staging controller (U) up-down mode (A) 4-20 mA, or 135Ω, 10 seconds standard input, (8) heat stages, (2) cool stages.

Determine desired mode of operation, i.e., circular, up-down, type of input to stager and number of steps to be switched.

CIRCULAR MODE: Recommended for heating only application.

UP-DOWN MODE: Required for heating/cooling applications and priority load sequencing.

SERIES SC & SU SOLID-STATE STAGING CONTROLLERS

SPECIFICATIONS

Power Requirements:	120 V, 50/60 Hz, (±10%, to ± 20% Vac) 4 VA plus total VA of all devices staged, i.e., contactor coil VA
Output Capability:	1 amp per step continuous; 10 amps per step inrush
Signal Input (Terminals A-B):	mA dc; 4-20 mA standard for 1-5 Vdc; 60 mA and 9 V maximum input. "A" configuration
Signal Input (Terminals C-D-E):	135 slide-wire or potentiometer; 100 to 1000 V acceptable. "A" configuration
Signal Isolation:	1500 volts from power and ground
Time Delay:	Adjustable 2 to 12 seconds per step; automatic slow down near balance
Cycling:	Adjustable from differential to time proportioning
Ambient Temperature:	32˚ to 131˚F (0˚ TO 55˚ C)

All specifications subject to change.

TYPE A INPUT (FOR HEAT OR HEAT/COOL APPLICATIONS)

Series SC and SU Staging controllers are multi-purpose units designed for maximum flexibility and serviceability. Standard units are designed for pilot duty sequencing of multiple stages of heating or heating and cooling applications. Series SCA and SUA controllers require 4-20 mAdc signals from a temperature controller or a slide-wire potentiometer. All input signals to the Series SC and SU controllers are optically isolated.

TYPE B INPUT (FOR BOILER APPLICATION)

The Series SC and SU Staging Controllers, when ordered with Type "B" input card, require no driver or temperature controller input signal. The "B" input card (field interchangeable with "A" type) makes the staging controller a complete thermistor sensing temperature controller with a multi-stage output. Input is from a thermistor probe connected to terminals A-B and temperature setting potentiometer across C-D-E. A special feature of this unit is that output power is off for "open" or shorted process sensor. High accuracy is obtained by using narrow setpoint spans. Available ranges: 50-180˚F or 100-200˚F