

ELECTRONIC SINGLE STAGE

CONTROLSTAT series CE

For control of single stage residential and commercial oil and gas fired and electric boilers and furnaces.





- Set minimum required temperature for auxiliary output.
- Two solid state temperature sensors.
- System status indicators.
- Manual on/off override.
- Alarm contact triggered by accessory input and high limit sensor.
- Alarm contact can be connected to external security system signalling device or dialer.
- Accessory input can be attached to filter monitor, fuel sensor, leak detector, dry fire sensor, Flair Flame Quality Indicator (FQI) or other device.
- Damper (oil and gas models only) interlocked to combustion circuit opens prior to combustion; closes after combustion to reduce stack losses.

ON/FIRINGO ALARM/AUXO TEMP ON/OFF SYSTEM HIGH LIMIT

DIMENSIONS

3-1/4" (82.6 mm) 5-43/64" (144.1 mm) 1-3/16" (30.2 mm) (39.3 mm)

Controlstat

SPECIFICATIONS

Operating Voltage: Temperature Differential: Sensor System: Type:

Quantity:

Switches:

Slide: Rotating:

Indicator LED's:

Alarm function:

Dimensions: Case: Color: 24, 115 and 230 vac, 50-60 Hz approx. ±0.8°F (.4°C) Negative Temperature Coefficient (NTC) Well, surface and duct mount sensors are available 1 for temperature control

set TEMPerature set HIGH LIMIT temperature set ACCessory temperature system: ON (Steady Green) / FIRING (Flashing Green) ALARM (Flashing Red)

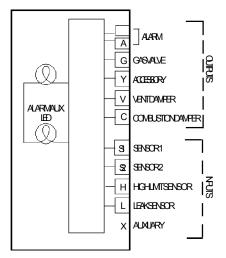
SYSTEM: ON/OFF

Includes 1 latched (manually reset) and 1 unlatched relay contact. Alarm function triggers both relays. Accessory

function only triggers unlatched relay.

5.6 x 2.9 x 1.18 Inches (143.4 x 74.2 x 30.2 mm) High impact flame resistant ABS matte black

MODEL NUMBERS AND DESCRIPTIONS FOR VARIOUS APPLICATIONS



Model Number:

CSESGB02 Gas Boilers CSESGF02 Gas Furnaces

Description: For gas-fired boilers and

Temperature Range:

100 °F - 220 °F Operating range: High limit: 180 °F - 220 °F Accessory: 100 °F - 180 °F

CSESGW02 Residential Gas Water

Heaters

Temperature Range:

100 °F - 160 °F Operating range: High limit: 200 °F Accessory: 100 °F - 140 °F

CSESGW02 Commercial Gas Water

Heaters

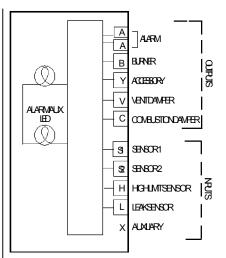
Temperature Range:

100 °F - 180 °F Operating range: 200 °F High limit: Accessory: 100 °F - 160 °F

Switching Current at 24 VAC:

Gas valve: 1 A Pump/Fan: 10 A Vent damper: 1 A 1 A Combustion damper:

Weight: .4 lbs. (880 g)



Model Number:

CSESOB04 Oil Boilers CSESOF04 Oil Furnaces

For oil-fired boilers and Description:

furnaces Temperature Range:

> 100 °F - 220 °F Operating range: High limit: 180 °F - 220 °F 100 °F - 180 °F Accessory:

CSESGW04 Residential Oil Water

Heaters

Temperature Range:

100 °F - 160 °F Operating range: High limit: 200 °F 100 °F - 140 °F Accessory:

CSESGW04 Commercial Oil Water Heaters

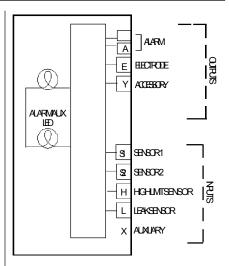
Temperature Range:

100 °F - 180 °F Operating range: High limit: 200 °F Accessory: 100 °F - 160 °F

Switching Current at 120 VAC:

Burner: 10 A Pump/Fan: 10 A Vent damper 1 A Combustion damper: 1 A

Weight: .4 lbs. (880 g)



Model Number:

CSESEB04 Electric Boilers CSESEB07 Electric Boilers CSESEF04 Electric Furnaces CSESEF07 Electric Furnaces

Description: For electric boilers and

Temperature Range:

Operating range: 100 °F - 220 °F High limit: 180 °F - 220 °F 100 °F - 180 °F Accessory: Residential Electric Water Heaters

CSESEW04 115VAC CSESEW07 230VAC

Temperature Range:

100 °F - 220 °F Operating range: 180 °F - 220 °F High limit: Accessory: 100 °F - 180 °F

Switching Current at 120 VAC:

Burner: 10 A Pump/Fan: 10 A .4 lbs. (880 g) Weight:

ACCESSORIES

Temperature Sensor Immersion (well) XXXXXXX Surface mount XXXXXXX **Duct mount** XXXXXXX **Auxiliary Relay** XXXXXXX Leak Sensor XXXXXXX Transformers: 40 VA TR140100 20 VA TR120100 Relay Transformers: 20 VA (2) SPST 120 VAC relay TR440200

REFERENCES

For More Information On: See Other controllers for

two-stage and proportional systems This section

Zone Actuators Star Actuator section Zone Valves Star Valve section Wiring Panels Control Panels section

Weather Compensation Weather Compensation Controls

Controls section

Warranty & pricing Pricing and terms section

Flair pursues a policy of constant improvement. For this reason, all specifications are subject to change without notice.

20 VA (1) SPST 120 VAC relay



TR440300