

## 2010, 2012 ROYAL SERIES



## WATER TEMPERATURE CONTROL SYSTEM

### TECHNOLOGICAL INNOVATION THROUGH RUGGED SIMPLICITY

Only the leader in temperature control could bring you a temperature control unit as rugged, reliable, and advanced as the Sterling Royal™ Series. Its new state-of-the-art design features simplified internal cast or non-ferrous fluid circuit with 40% fewer connections and 80% fewer mechanical parts. It also features a new higher-efficiency pump for higher flow rates at lower pressure. The result is dramatically enhanced water flow for superior temperature control.

#### Features

- Compact, rugged cabinet with easy-access side panels
- Cast-and-flange design to reduce connection points
- Half- and full-heat capability
- Dual stage Incoloy™ immersion heater with IEC contactors
- NEMA 12 electrical enclosure
- M2B+ microprocessor controller
- Brand fusing
- Automatic vent sequence
- Operating range of 32°F to 250°F (0°C to 121°C)
- Non-fused lockable rotary disconnect
- Forward-facing liquid-filled To and From Process pressure gauges
- 150 psig (1,034 kPa/10.3 bars) pressure relief valve

#### Options

- NEMA 4/4X
- All brass construction
- UL listed sub-panel
- 300°F (149°C) operation
- Off-the-shelf, DIN-style, auto-tuning PID fuzzy logic controller - accurate to within +/-1°F
- Audible/visual alarm
- Regulating/relief valve
- Modulating valves
- Flow meter
- Communications
- Quick-cool switch
- Remote controller
- Water purge
- Y-strainer
- International voltages



# 2010, 2012 ROYAL SERIES



## M2B+ Controller

- PID Control for both heating and cooling
- Built-in Ramp/Soak feature
- Setpoint, To Process, From Process, and DT displays
- Autovent sequence (adjustable from 1 to 10 minutes)
- °F or °C programmable
- 2 line by 20 character LCD to display status information and alarms



## 1/16 DIN Controller (optional)

The 1/16 DIN controller is standard and offers a user-friendly control panel that features a highly accurate non-proprietary controller with operating status and alarm indicating lights



Fully accessible NEMA 12 electrical enclosure meets NFPA 79 standards with branch fusing, disconnect switch and single-point connection

Front-facing, liquid-filled "to and from process" pressure gauges for enhanced accuracy and "at a glance" monitoring



Innovative, two-fastener, quick-release panels for ultra-easy internal access

Vertically mounted, higher efficiency centrifugal bronze fitted pump with seal flush line

Bolted pump assembly is identical for all pump sizes for quick, easy pump-size modification in the field



- Simplified three-point clear-flow design for balanced flow with lower pressure drop
- Solenoid and pressure relief valve located on exterior for easy maintenance and added safety

