



# T.O.S.S.<sup>®</sup>

*The Optimum Sealing System*

## Resistron<sup>®</sup> 420/440/445 Series Controllers

Panel Mounted



*Perfect Seals... Every Time*

[www.tossheatseal.com](http://www.tossheatseal.com)

# RES 420/440/445 Series Controller Specifications



RES-420/440/445

Controller Type	RES-420	RES-440	RES-445
Features Applications	Standard Applications	With Timer Function, Simple Control Functions can be Realized	With Timer Function, Simple Control Functions can be Realized
Display	Multilingual LCD-Display (yellow/green), Alternative: VF-Display (blue)	Multilingual LCD-Display (yellow/green), Alternative: VF-Display (blue)	Multilingual LCD-Display (yellow/green), Alternative: VF-Display (blue)
Control Loop	Primary	Primary	Primary
Auto Zero Calibration	Keyboard	Keyboard	Keyboard or 24VDC Signal
Auto Optimization	Yes	Yes	Yes
Auto Freq. Adjustment 47... 63Hz	Yes	Yes	Yes
Set Point Selection	Keyboard	Keyboard	Keyboard or Isolated Analog Adjustment
Analog Output for Actual Temp.	No	Yes	Yes - Isolated
Temperature Range	200°C/300°C/400°C/500°C Selectable via Keyboard	200°C/300°C/400°C/500°C Selectable via Keyboard	200°C/300°C/400°C/500°C Selectable via Keyboard
Heatsealing Band Alloy	780ppm/K, 1100ppm/K or 3500ppm/K Selectable via Keyboard	780ppm/K, 1100ppm/K or 3500ppm/K Selectable via Keyboard	780ppm/K, 1100ppm/K or 3500ppm/K Selectable via Keyboard
Alarm Indication	Display	Display	Display
Alarm Output & Fault Diagnosis	Yes	Yes	Yes
Alarm Output Invertable	Yes	Yes	Yes
Modifications Available	Yes	Yes	Yes
Alarm Reset	Keyboard	Keyboard	Keyboard or 24VDC Signal
Preheat Function	No	Yes - via 24VDC Signal	Yes - via 24VDC Signal
Relay Output	No	Yes - Configuration via Keyboard	Yes - Configuration via Keyboard
Timer Function	No	Yes	Yes
"Temperature OK" Signal	No	Yes - Isolated	Yes - Isolated
Compatible With	RES-210, RES-211, RES-220 and RES-221	RES-222, RES-230, RES-241 and RES-242	RES-225

## The center of TOSS Technology is the ROPEX® Resistron® RES Heatseal Temperature Controller.

The Resistron® controller is specifically built with the high response and precise control needed for sealing the wide variety of polymeric films used in contemporary packaging.

Precise control assures easy validation because every sealing cycle will be the same, minute to minute, day to day, year to year. High response allows more cycles per minute because the heatseal band can be energized and brought to sealing temperature before the jaw bars close. Precise control eliminates temperature overshoot, extends heatseal band life and aids in the preservation of anti-stick cover strips.

The RES-420, 440 & 445 described in this document are conveniently panel mounted with temperature range of 0° - 500°C and voltage ratings of 115, 230, & 400 VAC. Power ratings are up to 15KVA by use of the optional booster. Be sure to call our TOSS Application Engineers for any assistance you may need in configuring your system.

**RES-420** This basic low cost panel mounted heatseal controller has a temperature control range of 0-500°C that is set on the panel. This unit has Auto – calibration and a start signal that may be

actuated manually from the control panel or from an external switch or timer. High loads are possible with the optional booster. An alarm switch, activated by overheat or other system fault, provides safety.

**RES-440** This workhorse controller is temperature control rated up to 500°C. It has all the features of the RES-420 plus programmable control for heat and cool timing as well as preheat capability. The sealing cycle can be activated by external switch or by a 24VDC. signal. It has analog output of the actual temperature for remote display and an end of cycle programmable relay. Further, this very popular controller has alarms and error diagnosis to identify faults if they occur.

**RES-445** This advanced model has all of the features of the RES-440, plus a complete set of terminals for connection to a PLC. This, in effect, enslaves the RES-445 to a master PLC so that it can be completely controlled by it. This feature is especially useful on machines that employ a multiplicity of temperature controllers.

### More Info

The full Operating Manuals may be downloaded at our web site, [www.tossheatseal.com](http://www.tossheatseal.com) or contact us at [info@tossheatseal.com](mailto:info@tossheatseal.com).



**FREE 9 Steps to Heatsealing Perfection** Order your free booklet and learn more about why TOSS Technology is unique. Visit our website: [www.tossheatseal.com](http://www.tossheatseal.com)

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