

The Optimum Sealing System

Resistron® 400 Series Controllers

In-Cabinet Mounted



Perfect Seals... Every Time

RES 400 Series Controller Specifications



RES-401/403/406 RES-407/408/409

Controller Type	RES-401	RES-403	RES-406	RES-407	RES-408	RES-409
Features Applications	Low Cost	Standard Applications	PROFIBUS-DP Interface	With PLC-Interface	Separate Operation Terminal with LED-Display	CAN-Bus Interface
Control Loop	Primary	Primary	Primary	Primary	Primary	Primary
Auto Zero Calibration	Button Provided on Controller	Button Provided on Controller or 24VDC Signal	PROFIBUS-DP Interface	24VDC Signal	Operation Terminal	CAN-Bus Interface
Auto Optimization	Yes	Yes	Yes	Yes	Yes	Yes
Auto Freq. Adj. 47 63Hz	Yes	Yes	Yes	Yes	Yes	Yes
Set Point Selection	Potentiometer	Potentiometer	PROFIBUS-DP Interface	Potentiometer/Isolated Analog Input	Operation Terminal	CAN-Bus Interface
Analog Output for Act. Temp.	Yes	Yes	Yes	Yes	Yes	Yes
Temp. Range	300°C	300°C/500°C Selectable	300°C/500°C Selectable	300°C or 500°C Fixed	300°C or 500°C Fixed	300°C/500°C Selectable
Heatsealing Band Alloy	1100ppm/K	780/1100ppm/K or 3500ppm/K Selectable	780/1100ppm/K or 3500ppm/K Selectable	780/1100ppm/K or 3500ppm/K Selectable	780/1100ppm/K or 3500ppm/K Selectable	780/1100ppm/K or 3500ppm/K Selectable via CAN Interface
Alarm Indication	LED	LED	LED	LED	Display on Operation Terminal	LED
Alarm Output & Fault Diagnosis	No	Yes	Yes	Yes	Yes	Yes
Alarm Output Invertable	No	Yes	Yes	No	Yes	Yes
Modifications Available	No	Yes	Yes	Yes	Yes	Yes
Preheat Function	No	No	No	No	Yes via 24VDC Signal	No
Compatible With	RES-201	RES-203				

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-401, 403, 406, 407, 408, & 409 described in this document are conveniently "in-cabinet" mounted with temperature ranges up to 500°C depending on the unit 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-401 This Economy Controller has most of the features of the Basic RES-403 except temperature range is limited to 300°C and Remote Auto-calibration, Alarm Output, Fault Diagnostics, and Booster capability are not included.

RES-403 This Basic Controller will provide the same precise temperature control and microprocessor technology as the more expensive models. It also provides all of the features found in the RES-407 with the exception of PLC interface capabilities and remote analog Temperature Setting.

RES-406 The RES-406 is equipped with a PROFIBUS-DP interface. This interface can be used to control all the controller functions and poll controller information. The ACTUAL temperature

of the heat sealing band is supplied to the PROFIBUS interface and to an analog 0 to 10V DC output. The real heat sealing band temperature can thus be displayed on an external temperature meter. To increase operational safety and interference immunity, all PROFIBUS signals are electrically isolated from the controller and the heating circuit. Either coding switches on the temperature controller itself or the PROFIBUS interface can be used to adapt to different heat sealing band alloys (Alloy-20, NOREX etc.) and set to the required temperature range (0...300°C, 0...500°C etc.).

RES-407 Our most popular "in-cabinet" controller is versatile and designed to operate with or without a PLC interface. Cycle Start and Temperature Setting can be either local or remote control with a 24VDC signal. It has a temperature range of 500°C and features both Auto- calibration and an analog output of the actual temperature that is constantly monitored. Fault Detection includes Heatseal Band break, parallel band break, and ground fault detection. A diagnostic interface is provided for use with the optional Visualization Software. Safety is provided by an alarm for overheat or circuit fault. In addition, high loads are possible with the optional Booster. A 24 VDC auxiliary power supply is required.

RES-408 A separate panel mounted key-pad with a menu driven LED display is the outstanding advantage of this "in cabinet" controller. Seal Temperature and Preheat Temperature are displayed in real time or "hold" mode. Temperature range is a maximum of 500°C. Fault Detection features include error diagnosis in the event of an "Alarm" and both Pre-heat and Seal Heat can be activated remotely. Auto-Cal simplifies the calibration process and analog temperature output is also included for feedback to a meter or data-logger.

RES-409 Not unlike the RES-406, except that the RES-409 is equipped with a CAN-BUS interface. All of the features listed for the RES-406 apply to this controller.

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

TOSS Machine Components, Inc.