



RES-5008

Changeover instructions RES-403 ->RES-5008





The new RESISTRON temperature controller RES-5008 (production date starting from 11/2020) has been equipped with a more powerful processor to enable new functionalities. In addition, new functions and interfaces have been integrated. The current version of the RES-5008 is functionally downward compatible with the previous devices. It can thus be integrated into existing systems as a replacement.

In particular, the T-408-1 operator terminal replaces the obsolete set point potentiometers PD-3/PD-5 and the temperature meters ATR-3/ATR-5.



The assignment of the connection terminals was changed.

The changes of the new generation are described below.

New functionalities

- A micro USB interface is available directly on the device. The RES-5008 can be connected directly to a PC to
 facilitate maintenance and commissioning using the ROPEXvisual[®] visualisation software, which can be downloaded free of charge. The CI-USB-1 can no longer be used for this purpose.
- The display and control panel T-408-1 can be used to configure the temperature set point, execute the AUTOCAL function and read alarm codes.
- The BOOSTER connection is provided as standard. The MOD-26 (BOOSTER connection) is no longer required.
- The ALARM output provides an additional normally closed contact.
- The PREHEAT input can be used to hold the heat sealing band at a defined preheat temperature level.
- As of firmware 305 the PREHEAT input can be configured as AUTOCAL or RESET input by means of ROPEXvisual[®].

A detailed description of the new functionalities is given in the operating instructions of the RES-5008. The operating instructions and the visualisation software ROPEXvisual[®] can be downloaded free of charge from the download area at <u>https://ropex-group.com</u>.

Discontinued functionalities

• The modifications MOD40 (Temperature reached signal) and MOD46 (Temperature OK signal) are not available for the RES-5008. Please contact ROPEX for support.

Version 1

Tel.: +49 (0)7142-7776-0 Fax: +49 (0)7142-7776-211



• The 24 VDC input "AUTOCAL" is not available for RES-5008 with firmware older than 305. Please use the display and operating panel T-408-1 for executing the AUTOCAL function. As of firmware 305 the PREHEAT input can be configured as AUTOCAL input by means of ROPEXvisual[®].

Certification

• The RES-5008 has UL certification for USA and Canada (cULus), file number: E464680

Device connection

1. Device selection

The power supply for the RES-5008 can be in the range from 110 VAC to 480 VAC. It is no longer necessary to distinguish between the power supplies 115 VAC, 230 VAC or 400 VAC.

Mains power supply	RES-403 Art. no.	RES-5008 Art. no.
115 VAC	740301	
230 VAC	740302	7500800
400 VAC	740303	

2. Supply

Apart from the mains power supply, the RES-403 did not require any other voltage supply. The RES-5008 on the other hand requires an additional 24 VDC supply, which must be connected to terminals 5 (+) and 7 (-). As long as only this 24 VDC supply is switched on and the mains power supply is still missing, the RES-5008 remains in a standby state. The actual value 0 °C is displayed on the connected T-408-1 operator terminal. As soon as the power supply is switched on, the RES-5008 changes to measurement mode or control mode.

3. Terminal assignment

The terminal strip for the power supply (terminals 1 to 4) is no longer mechanically compatible with the previous terminal strip. However, the terminal assignment has remained identical. Representation of the terminal strips:





Power supply terminal for RES-403 with Art. no. 740301 740302

740302 740303 Power supply terminal for RES-5008 with Art. no. 7500800



The assignment of the terminal strips for the control signals (terminals 5 to 18) is no longer compatible with the previous assignment. The following changes were made:

Signal	Previous assignment RES-403	New assignment RES-5008	
+24 VDC	-	5	
ALARM OUTPUT	5, 6	14, 13	
U _R voltage measurement	7	8	
AUTOCAL	8	18 (configure PREHEAT input as AUTOCAL input by means of ROPEXvisual®)	
START (HEAT)	12	16	
Ground (Protective conductor connection)	13	6	
Reference ground (GND) for I/O signals	13	7	
ANALOG OUTPUT	14	17	
Internal ground	15, 16	7	
SET POINT potentiometer	17	- (use terminal T-408-1)	
START (contact)	18 (connect to 15)	16 (connect to 5)	







Associated components

The correct functioning of the RES-5008 is only guaranteed in conjunction with the following components:

Component	Туре	Art. no.
Operator terminal	T-408-1	885441
Current transformer	PEX-W5 (with UL)	885107
	PEX-W4 (with UL, obsolete)	885106
	PEX-W3 (without UL, obsolete)	885105
Line filter	LF-06480 (6 A, 480 VAC with UL)	885500
	LF-10520 (10 A, 520 VAC with UL and CSA)	885504
	LF-20520 (20 A, 520 VAC with UL and CSA)	885510
	LF-30520 (30 A, 520 VAC with UL and CSA)	885511
	LF-50520 (50 A, 520 VAC with UL and CSA)	885509
	LF-35480 (35 A, 480 VAC without UL)	885506

The temperature controller RES-5008 may only be operated with the specified components in order to avoid malfunctions.