

RES-5027

Changeover instructions RES-407->RES-5027



The new RESISTRON temperature controller RES-5027 (production date starting from 01/2020) has been equipped with a more powerful processor to enable new functionalities. In addition, new functions and interfaces have been integrated. In its current version, the RES-5027 can replace several modifications of the RES-407. It can thus be integrated into existing systems as a replacement.

The changes of the new generation are described below.

Device connection

1. Device selection

The power supply for the RES-5027 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.

Power supply	RES-407 Art. no.	RES-5027 Art. no.
115 VAC	740701	7502700
230 VAC	740702, 790014 (special version with SW05)	
400 VAC	740703, 790024 (special version with SW05)	

2. 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-407 with Art. no.

740701
740702
740703
790014
790024

Power supply terminal for RES-5027 with Art. no.

7502700

3. Associated components

The correct functioning of the RES-5027 is only guaranteed in conjunction with the following components:

- PEX-W3: Current transformer without UL
Article number: 885105 (no longer available)
- PEX-W4: Current transformer with UL
Article number: 885106 (no longer available)
- PEX-W5: Current transformer with UL
Article number: 885107
- LF-06480: Line filter 6 A, 480 VAC with UL
Article number: 885500
- LF-10520: Line filter 10 A, 520 VAC with UL and CSA
Article number: 885504
- LF-35480: Line filter 35 A, 480 VAC without UL
Article number: 885506
- LF-50520: Line filter 50 A, 520 VAC with UL and CSA
Article number: 885509



The temperature controller RES-5027 may only be operated with the specified components in order to avoid malfunctions.

New functionalities

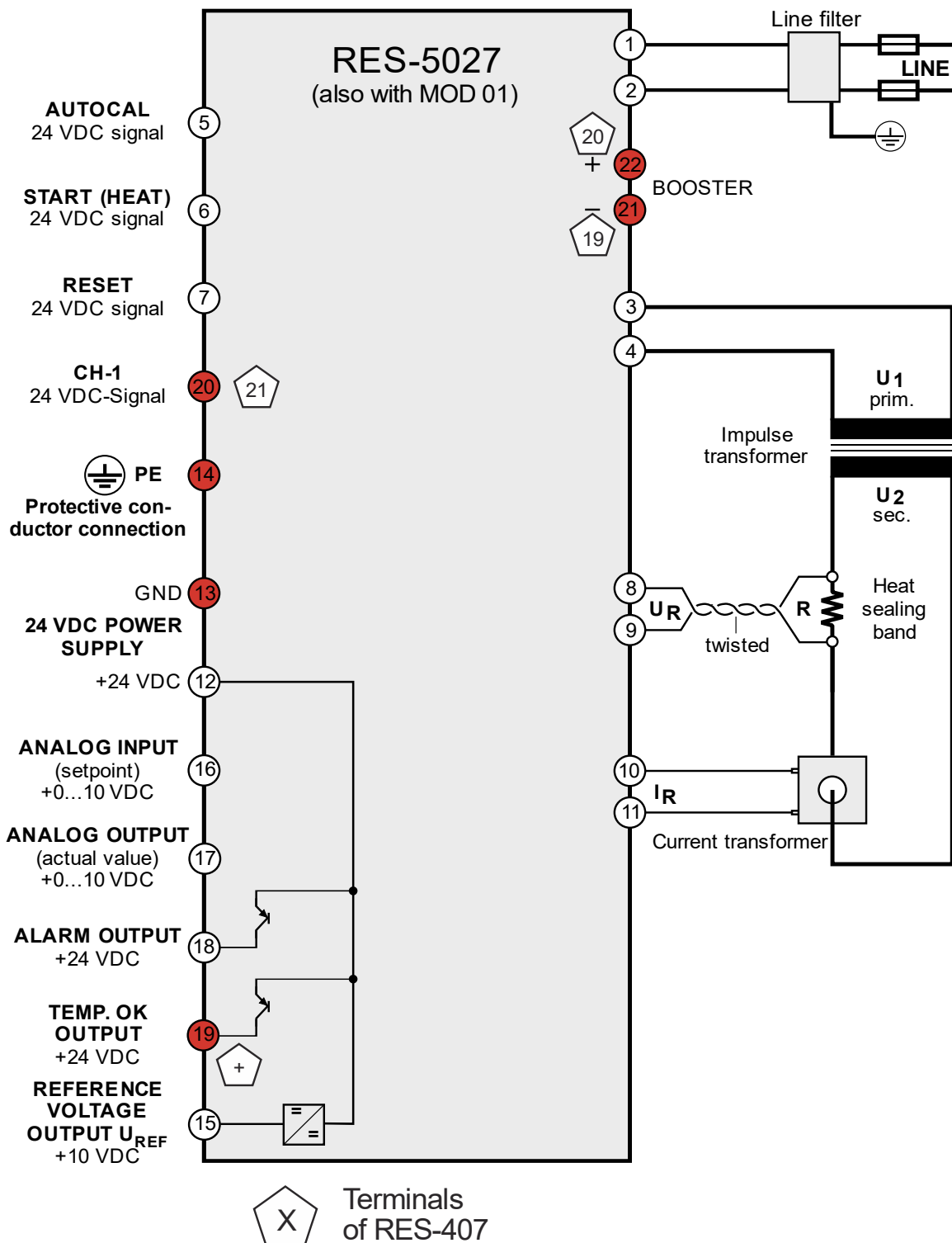
- A micro USB interface is available directly on the device. The RES-5027 can be connected directly to a PC to facilitate maintenance and startup using the ROPEX Visual[®] visualisation software, which can be downloaded free of charge. The CI-USB-1 can no longer be used for this purpose.
- A booster output is available as standard (formerly MOD 26).
- A temperature OK output configurable via ROPEX Visual[®] is available (formerly MOD 40 or MOD 46).
- An input for activating constant output rate mode is available (formerly special version SW05).

A detailed description of the new functionalities is given in the operating manual of the RES-5027. The [operating manual](#) and the [visualisation software](#) ROPEX Visual[®] can be downloaded free of charge from the download area at <https://ropex.de>.

Certification

- The RES-5027 has UL certification for USA and Canada (cULus), file number: E464680

Wiring diagram RES-5027



The terminal assignment was changed as follows:

previous assignment RES-407		new assignment RES-5027	
13	Functional earth connection and GND together	13	GND
14	Functional earth connection and GND together	14	Protective conductor connection

“+”	with MOD 40: Output for 95% of setpoint reached	19	Output for temperature OK or 95% of setpoint reached (can be configured via ROPEX Visual®)
“+”	with MOD 46: Output for temperature OK		
19	with MOD 26: Booster connection „-“	21	Booster connection „-“
20	with MOD 26: Booster connection „+“	22	Booster connection „+“
21	with special software 05: Input CH-1 for constant output rate mode	20	Input CH-1 for constant output rate mode