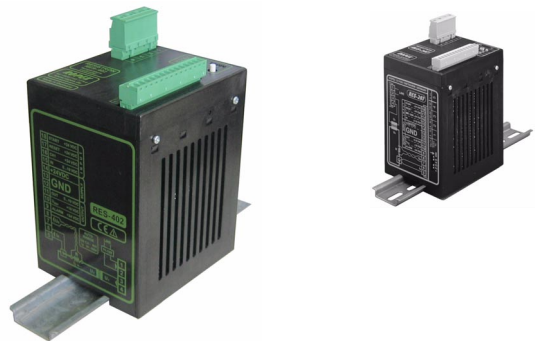


## Replacing <sup>GB</sup> RES-207/RES-402

### Replacement Instructions



The RESISTRON temperature controller RES-402 can be used as an alternative to the RES-207-0-3 controller.

The steps that are necessary to convert from RES-207-0-3 (standard model without modifications) to RES-402 are described below.

These instructions only provide a brief overview of the two controllers. If in doubt, please refer to the latest version of the controller documentation, which is always binding.

The conversion from controller types RES-207-0-5 and RES-207-1-x is not described here. Please contact ROPEX for further informations.

**⚠ The function „SSR mode“ is NOT available for the RES-402. Please contact ROPEX for further informations when this function has been used.**

### Replacement steps

#### 1. Select the controller

Select an RES-402 with the same line voltage as the existing RES-207-0-3 controller (115VAC, 230VAC or 400VAC). The RES-402 controller has the following order numbers:

Line voltage:	115VAC ↘	RES-402/115VAC Art. No. 740201
	230VAC ↘	RES-402/230VAC Art. No. 740202
	400VAC ↘	RES-402/400VAC Art. No. 740203

No modifications are available for the RES-402 controller.

#### 2. Select the required components

Trouble-free operation of the RES-402 controller is only guaranteed in combination with the following components:

- PEX-W2: Current transformer
- LF-06480: Line filter 6A, 480VAC

**⚠ The RES-402 controller must always be used together with the PEX-W2 current transformer. Other transformers may cause the equipment to malfunction. If the PEX-W2 has already been used with the RES-207, it can continue to be used with the new controller.**

### 3. Configure/start up the RES-402

The RES-402 must be started up as described in "Startup and operation" in the latest version of the controller documentation.

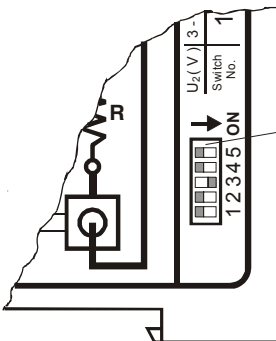
The controllers RES-207 and RES-402 are compatible acc. the electrical wiring of the terminals expect terminal 16 (refer: wiring diagram).

The function „SSR mode“ is not available for the RES-402. Because of this, terminal 16 of the RES-402 shall not be used.

**⚠ The settings of the DIP switches on the RES-207 are NOT the same as those on the RES-402. Please set these switches in accordance with the ROPEX Application Report, in order to avoid malfunctions.**

**As of January 2006 the function AUTORANGE is integrated in the RES-402. The voltage and current ranges will be adjusted automatically when AUTOCAL is performed.**

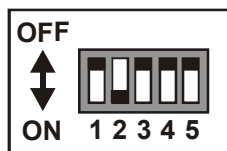
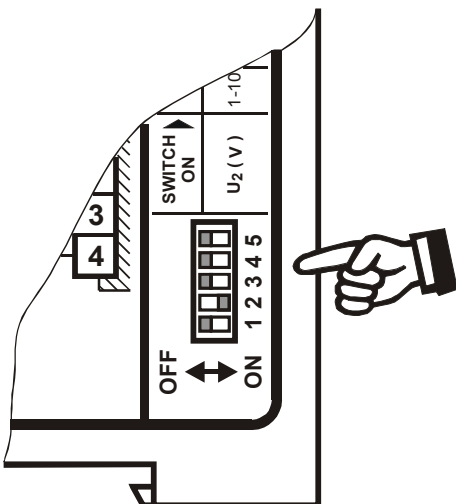
#### Old setting ranges on the RES-207:



Set the DIP switch to select the secondary voltage range that will be used. With extreme low resistance heatseal elements (less than 100 mOhm) or with extremely high secondary currents (larger than 80A) additional switch No.5 must be ON.

$U_2$ (V)	3 - 10	8 - 30	20 - 60	50 - 80	$I_2 > 80A$
Switch No.	1	2	3	4	5

#### New setting ranges on the RES-402: (Up to Dez. 2005)



⇒ Factory settings

$U_2$ ↓	DIP switch			$I_2$ ↓	DIP switch	
	1	2	3		4	5
1...10V	ON	OFF	OFF	30...100A	OFF	OFF
6...60V	OFF	ON	OFF	60...200A	ON	OFF
20...80V	OFF	OFF	ON	120...400A	ON	ON

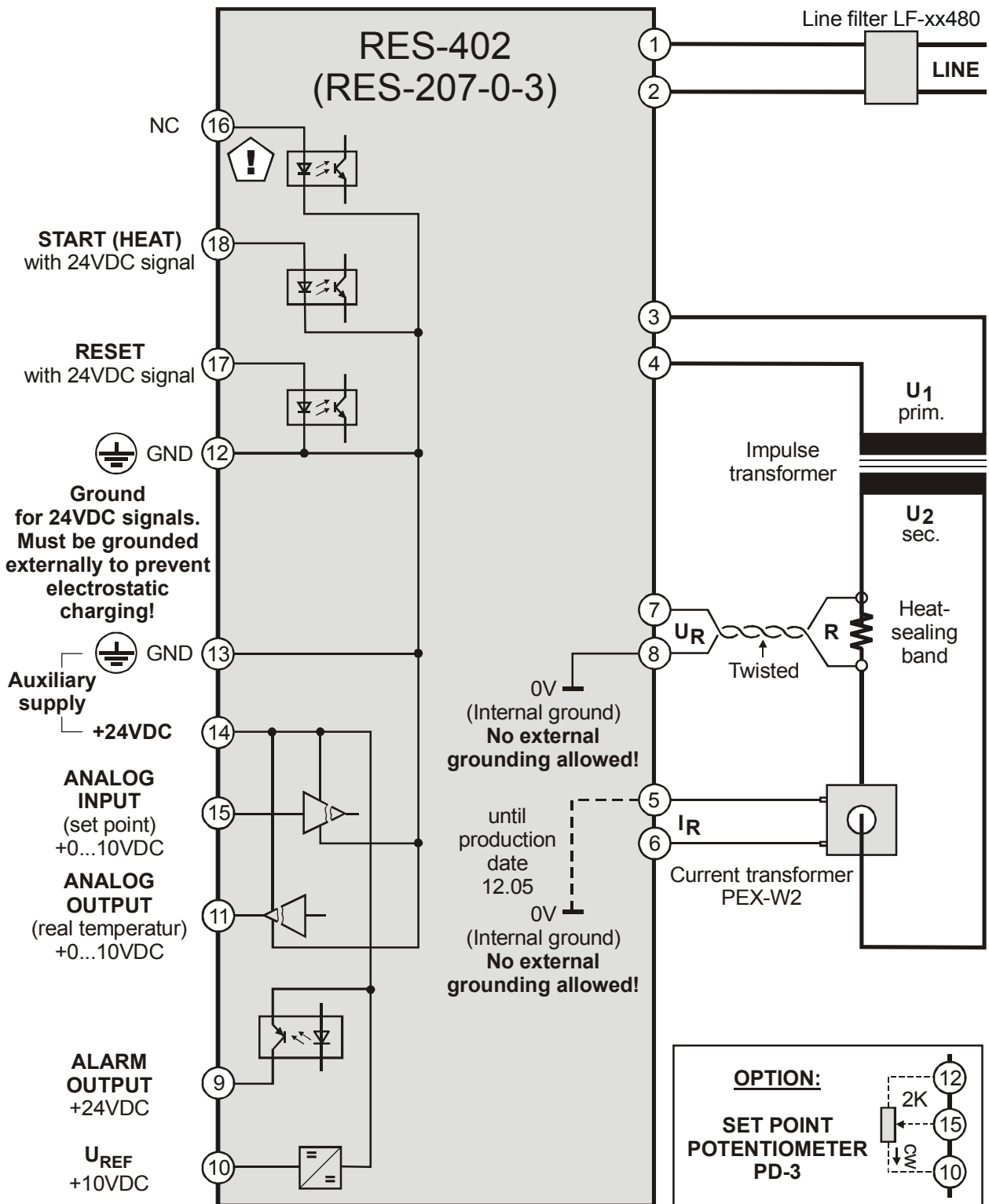
The table below compares the two controllers. These settings can be taken as a guide (e.g. when the controller is started up the first time):

	RES-207	RES-402 (Up to Dez. 2005)
	DIP switch <b>ON</b>	
$U_2$	1	1
	2	2
	3	3
	4	3
$I_2$	5	4

Function AUTORANGE on the RES-402  
(As of Jan. 2006):

As of January 2006 the RES-402 has no DIP switches anymore. The voltage range (0,4...120V) and the current range (30...500A) will be adjusted automatically when AUTOCAL is performed.

## Wiring diagram of the RES-402/-207



**The function "SSR mode" is not available for the RES-402 !**