Product Information

Display Controller

RES-5450
UPT-6450

With force and temperature measurement

Display Controllers

RES-5450

Same features like the RES-5400. Plus, force and temperature measurement.

Backwards compatible with the RES-415, RES-420, RES-430, RES-440, RES-445 in function and form factor

UPT-6450

Ideal for CIRUS sealing applications. Equipped with the same features as the UPT-6400 plus force and temperature measurement.

Backwards compatible with the UPT-640 in function and form factor

Product comparison

vs.

Customer advantage	RES-5450 UPT-6450	Competitive product
Visualization of the temperature curve	High resolution TFT display	Not available
On-site firmware update	Possible with ROPEXupdate	Not available
Simple configuration	Intuitive menu navigation ROPEXvisual (PC application)	Command interface via RS232/USB
Wide range power supply	110 V – 480 V	Not available
Monitoring the contact pressure	Force measurement with up to two load cells	Not available
Compatible with CIRUS sealing tools	Available	Not available
Security feature	Galvanically isolated output and input signals Heating circuit error monitoring / emergency shutdown (CBM-2)	Not available

RES-5450

Successor of the RES-440, RES-445

UPT-6450

Successor of the UPT-640

Highlights

✓ Graphical display of the measured values
✓ Recipe manager for up to 9 recipes
✓ TCR calculator: Adjustment of the heat sealing band TC by means of reference value input
✓ CSA approval

Standard features

✓ High resolution color display (TFT)
✓ Intuitive configuration menu
✓ Parts counter
✓ Wide voltage range (110...480 V mains supply)
✓ Galvanically isolated analog output
✓ USB-C for ROPEXvisual software
✓ On-site firmware update (ROPEXupdate)
✓ Dynamic QR code with instructions for troubleshooting (ROPEX website)

![ROPEX]

RES-5450

Successor of the RES-440, RES-445

UPT-6450

Successor of the UPT-640

Additional functions

- ✓ Direct PLC connection possible
- ✓ Several configurable galvanically isolated output and input signals
- ✓ Ambient temperature detection for AUTOCAL (sensor input)
- ✓ Integrated time control for simple machine sequences
- ✓ Status display of the outputs
- ✓ Force and temperature measurements with diagnostics (two channels)
- ✓ Preheat function: Adjustable base temperature of the heat sealing band (RES-5450)

Function comparison- RES Display Controller

Typ	Temperatur		Display	Diagnostics	Terminals		Approval	Diagnosis Tool	Voltage range	Features
	Adjustment	Output			Alarm	Booster				
RES-5200	Display	Display 0…10 VDC	TFT	●	●	●	CSA c us	ROPEXvisual	110…480 VAC	• Replacement for RES-415, RES-420 • Simple applications
RES-5400	Display ■ 0…10 VDC	Display ■ 0…10 VDC	TFT	●	●	●	CSA c us	ROPEXvisual	110…480 VAC	• Replacement for RES-415, RES-420, RES-440, RES-445 • Timer functions • Preheat • PLC interface
RES-5450	Display ■ 0…10 VDC	Display ■ 0…10 VDC	TFT	●	●	●	CSA c us	ROPEXvisual	110…480 VAC	• Replacement for RES-415, RES-420, RES-430, RES-440, RES-445 • Timer functions • Preheat • PLC interface • Force and temperature measurement

● Standard   ○ Option   ◆ Accessory   □ Galvanically not isolated   ■ Galvanically isolated   LCD = Liquid crystal display (green)   VFD = Vacuum flourescent display (blue)   TFT =Thin-film transistor

Function comparison- UPT Display Controller

Typ	Temperatur		Display	Diagnostics	Terminals		Approval	Diagnosis Tool	Voltage range	Features
	Adjustment	Output			Alarm	Booster				
UPT-640 *Last order 29.02.2024*	Display ■ 0…10 VDC	■ 0…10 VDC	● LCD ○ VFD	●	●	●	–	CI-USB-1	110…120 VAC 220…240 VAC 380…415 VAC	• Timer functions • Cooling system monitoring • PLC interface
UPT-6400	Display ■ 0…10 VDC	Display ■ 0…10 VDC	TFT	●	●	●	CSA ® C US	ROPEXvisual	110…480 VAC	• Replacement of UPT-640 • Timer functions • Cooling system monitoring • PLC interface
UPT-6450	Display 0…10 VDC	Display 0…10 VDC	TFT	●	●	●	CSA ® C US	ROPEXvisual	110…480 VAC	• Replacement of UPT-640 • Timer functions • Cooling system monitoring • PLC interface • Force measurement with diagnostics

● Standard ○ Option ◆ Accessory □ Galvanically not isolated ■ Galvanically isolated   LCD = Liquid crystal display (green)   VFD = Vacuum flourescent display (blue)   TFT =Thin-film transistor

ROPEX- Explanation of terms

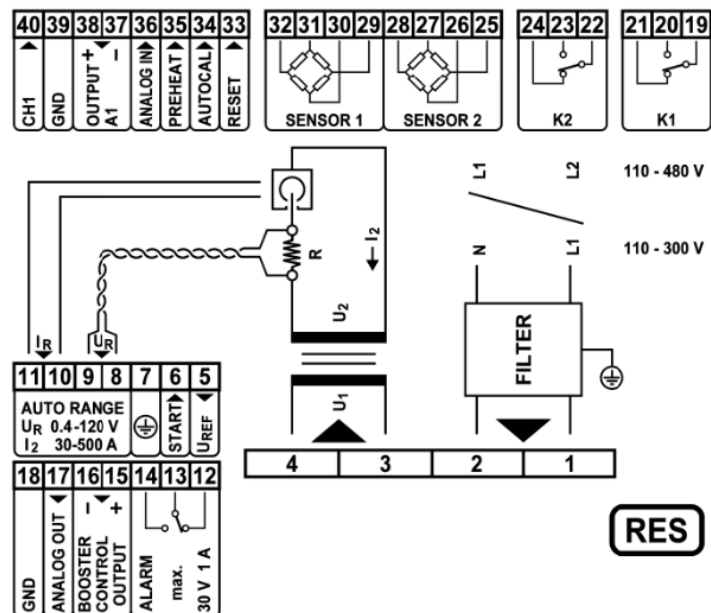| Function	Explanation
ROPEXupdate	You can use the ROPEXupdate application software to update the firmware version of your ROPEX temperature controller.
ROPEXvisual	With the ROPEXvisual® visualization software, you can both change the configuration of a 5000 or 6000 series temperature controller and document the current sealing parameters.
Force and temperature measurements with diagnostics (two channels)	**Force measurement**: The temperature controller checks whether the force sensor values are within an adjustable tolerance band "good window" and triggers an alarm if the limit values are exceeded or not reached. **Temperature measurement**: The temperature controller checks whether the sensor temperature is within an adjustable tolerance band "good window" and triggers an alarm when the limit values are undercut or exceeded.
TCR calculator	The TCR calculator can be used to determine the temperature coefficient (TCR) of the heat sealing band and heating element respectively.
Preheat	With the PREHEAT function, the heat sealing band can be heated to a preheat temperature. Subsequently, the heating time to the set target temperature can be shortened for time-critical applications.

Backwards compatibility

Wiring

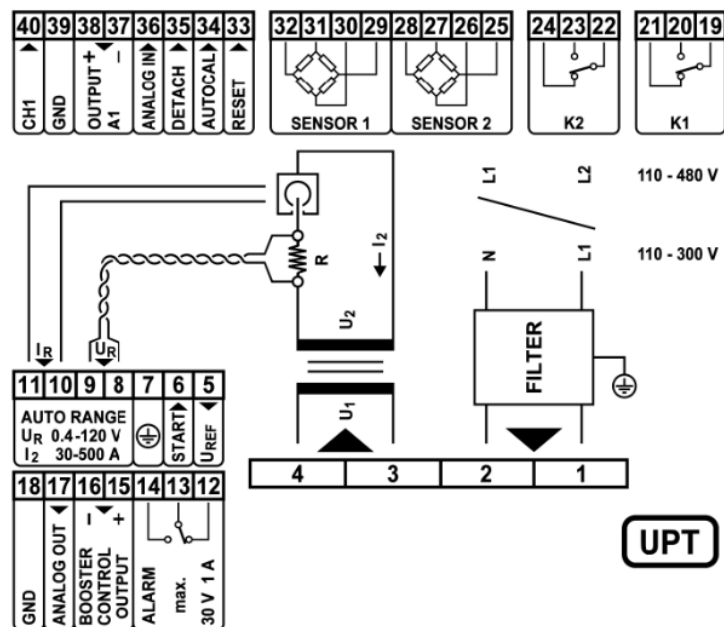The terminal numbers change, the functionality remains the same.

RES-5450

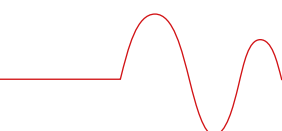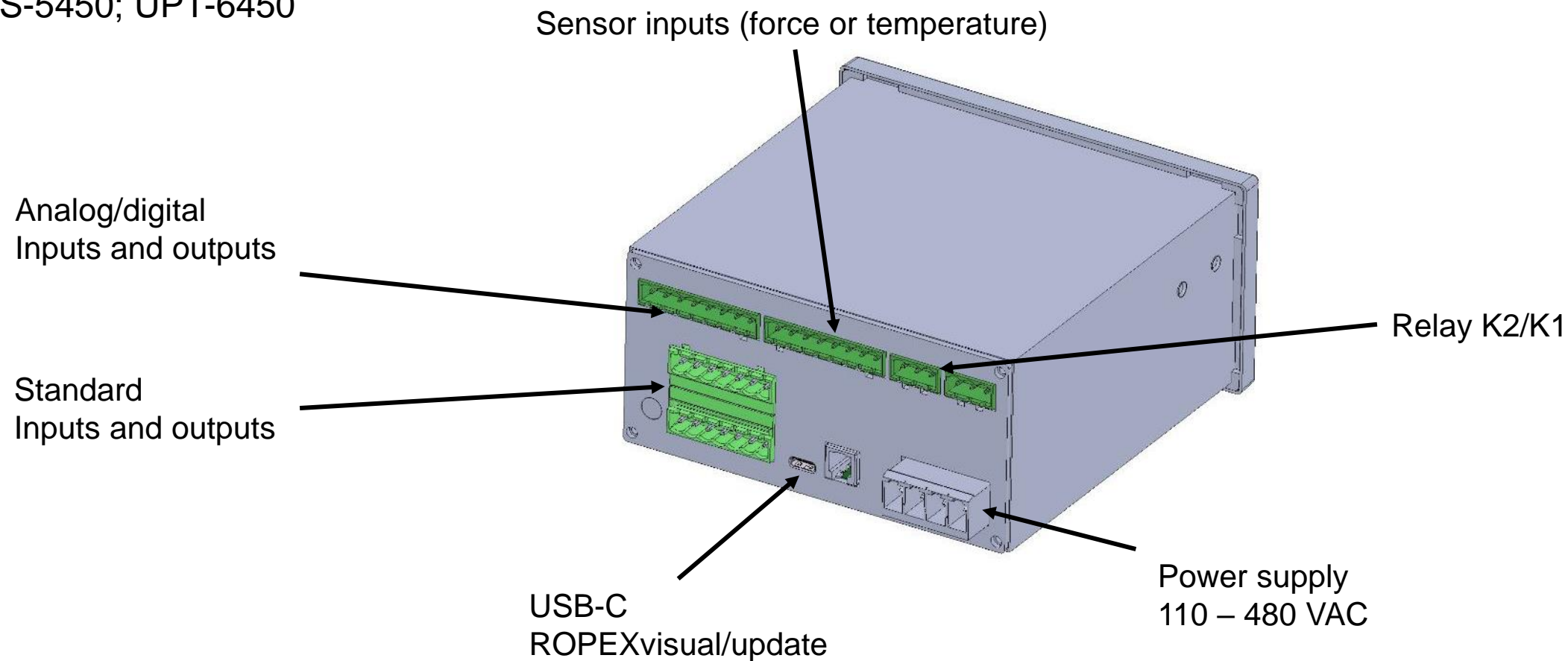# Backwards compatibility

Wiring

The terminal numbers change, the functionality remains the same.

UPT-6450

Backwards compatibility

RES-5450; UPT-6450

Sensor inputs (force or temperature)

Analog/digital
Inputs and outputs

Standard
Inputs and outputs

Relay K2/K1

USB-C
ROPEXvisual/update

Power supply
110 – 480 VAC

Display Controller

With force and temperature measurement

RES-5450

UPT-6450

- Orders possible from now on
- Delivery expected from the second half of 2024

ROPEX Display Controllers

Now available:

Available in Q2/2024:

RES-5200

RES-5400

UPT-6400

With force and temperature measurement delivery expected from second half of 2024:

RES-5450

UPT-6450

Contact

ROPEX Industrie-Elektronik GmbH

Sales

Adolf-Heim-Str. 4
74321 Bietigheim-Bissingen, Germany

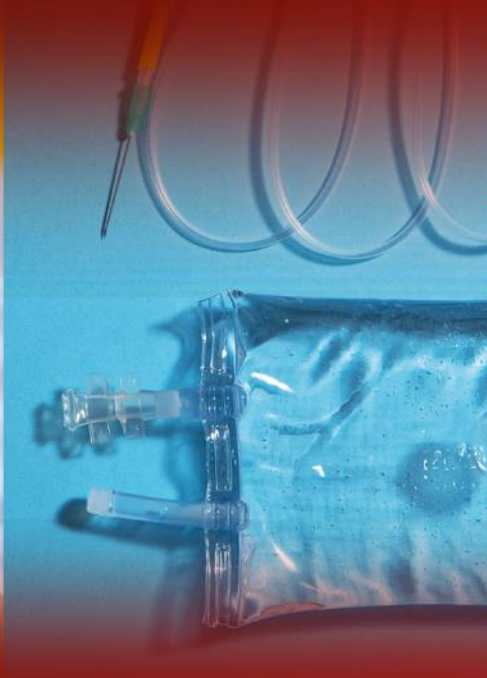+49 7142 7776 0

info@ropex.de

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