

PEX-W5

Operating instructions



Application:

The current transformer PEX-W5 belongs to the RES or UPT temperature controller and is a part of the primary controlled impulse temperature control system.

Storage of the operating instructions:

Please read the operating instructions carefully before using the current transformer. Retain the operating instructions for future reference and ensure that important information and functions are available to the user.

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1 Safety

1.1 Intended Use

The current transformer may only be operated when correctly connected to the temperature controller. For more information, refer to the “Startup” and “Power supply” chapters in the corresponding documentation for the temperature controller.

The documentation of the temperature controllers is available in the download section at: www.ropex.com.

CAUTION	Non-observance or improper use may jeopardize the safety or the malfunction of the control loop. This is the responsibility of the user.
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1.2 Hazard classes

The table below shows the dangers and possible consequences of the keywords in the operating instructions.

Keyword	Definition	Consequences	for
DANGER	Imminent danger	High level of risk that can result in death or serious injury	People
WARNING	Possible dangerous situation	Medium level of risk that can result in serious injury	People
CAUTION	Less dangerous situation	Slight or minor injuries	People
NOTE	Possible harmful situation	Damage to the machine, its environment and the product	Equipment
INFORMATION	Additional information		People

1.3 Maintenance

The current transformer requires no special maintenance. Regular testing or retightening of the terminals is recommended. Dust deposits on the current transformer can be removed with dry compressed air.

NOTE	Dust deposits and contamination by liquids may lead to the loss of function. Installation in a control cabinet or terminal box with IP54 is recommended.
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1.4 Disposal

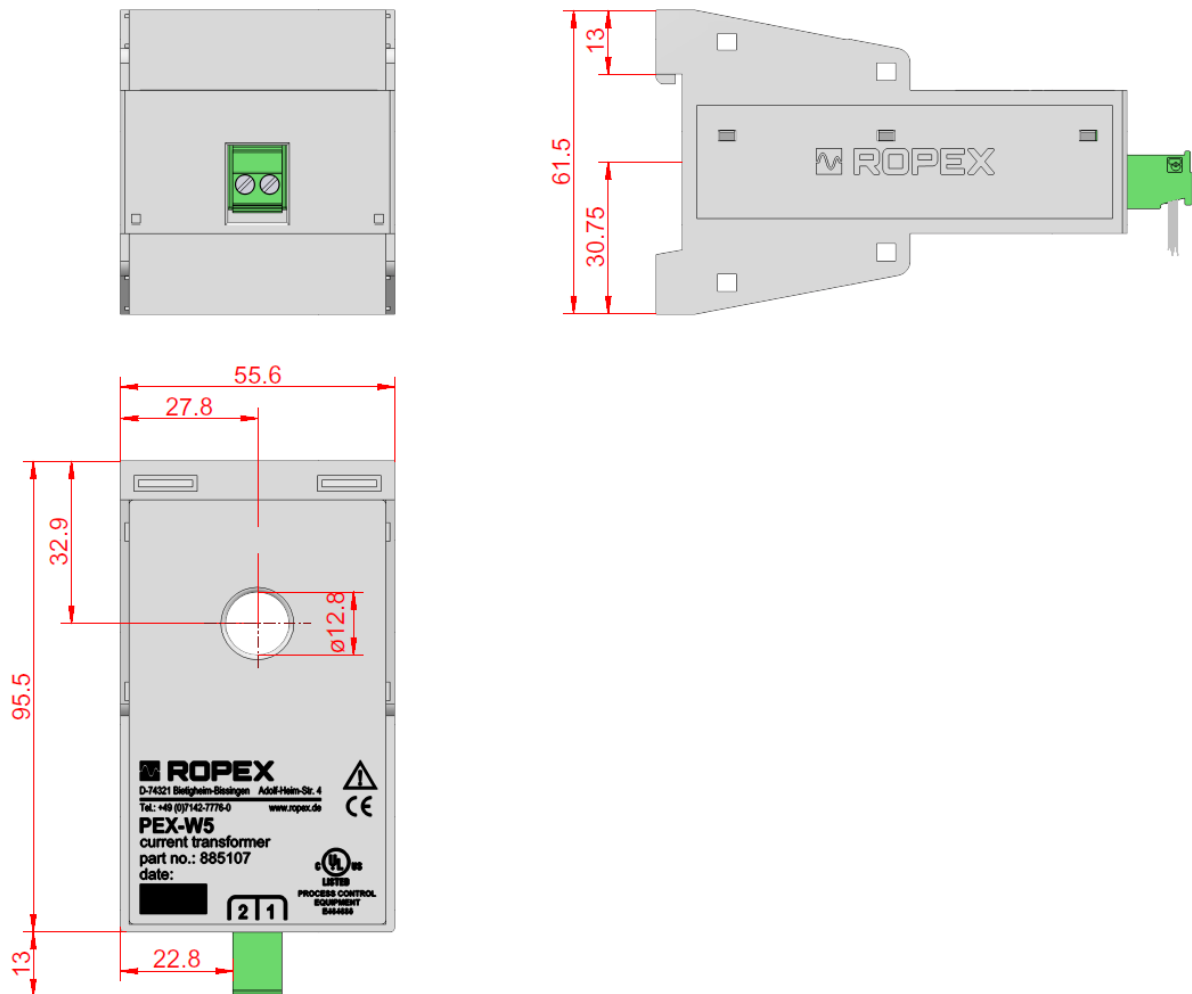
This device is covered by the EU Directive 2012/19/EU on the reduction of the increasing amount of electrical waste, the aim of which is to reduce waste from electrical and electronic equipment and to dispose of it in an environmentally sound manner.

INFORMATION	This device must not be disposed of in the residual waste.
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To ensure material recycling or proper disposal, place the device in the designated municipal collection point and observe the local regulations.

Careless and uncontrolled disposal can cause damage to the environment and human health. By ensuring that your product is disposed of or recycled in a responsible manner, you contribute to the protection of the environment and human health.

2 Dimensions and assembly



The current transformer is mounted on a top hat rail (TS35) measuring 35 x 7.5 mm or 35 x 15 mm in accordance with DIN EN 50022.

Through the opening in the current transformer (diameter 12.8 mm), the high-current cable connected to the sealing tool must be routed. If the high current cable cannot be routed through the opening, a high current bar must be ordered, see chapter 3, how to order. The green connection terminal is intended for the measuring line I_R to the temperature controller.



NOTE	The general connection of the current transformer to the control system can be found in the corresponding controller documentation. Please note the connection in individual cases according to the ROPEX application report.
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CAUTION	The power supply to the temperature control circuit must be switched off before working on electrical equipment is connected.
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3 Technical data

	PEX-W5
Design	Housing for electrical cabinet mounting on a TS35 top hat rail in accordance with DIN EN 50022
Dimensions	Width: 55.6 mm Height: 64.5 mm Depth: 108.5 mm
Weight	0.18 kg including the plug-in connector part
Housing material	Plastic, polycarbonate, UL-90-V0
UL file	E464680
Mounting	When mounting the device, a clearance of 20 mm to other devices is recommended. When mounting multiple current transformers, no clearance is required between the transformers. For mounting on a horizontal hat rail, the clip must face downward. For mounting on a vertical hat rail, end holders are necessary to mechanically fix the device.
Degree of protection	IP 20
Ambient conditions:	Max. altitude 2000 m Ambient temperature: +5°C to 45°C Max. relative humidity: 80% at temperatures up to 31°C, decreasing linearly to 50% at 45°C
Connecting cable	Rigid or flexible cables are suitable Cross-section: 0.2 to 1.5 mm ² (AWG 24...16) via the plug-in connector Connector: Tightening torque 0.5 to 0.6 Nm Tool: Screwdriver SZS 0.6x3.5 mm Note: If ferrules are used, they must be crimped in accordance with DIN 46228 or IEC/EN 60947-1 to ensure proper electrical contact.
Measuring range	Measuring current $I_R = 500$ A (peak current) The continuous current is limited by the cable.
Power loss	Maximum 2.0 W (average)

4 How to order

 A grey metal current transformer with a green terminal block on the right side. The top surface has a circular hole and the ROPEX logo. Text on the top includes 'PEX-W5' and 'Article number 885107'. There are also CE and other certification marks.	<p>Current transformer</p> <p>PEX-W5: Article number 885107</p>
 A high current bar (HCB) consisting of a brass bar with two threaded terminals on top and a green terminal block on the front. The device is mounted on a grey metal base with the ROPEX logo and some technical text.	<p>High current bar</p> <p>HCB: article number 885110</p>