



NEA H 24 V & NEA H 230 V

REHAU ROOM THERMOSTAT

USER INSTRUCTIONS AND QUICK INSTALLATION GUIDE

www.rehau.co.uk

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Safety



Important info



Your benefit

Scope of supply



Thermostat (1 pc)



Anchors & Screws (2 pcs)



Manual (1 pc)

Introduction

Thank you for purchasing the REHAU room thermostat Nea. The Nea H is a parameterizable digital room thermostat which is available in 24 V and 230 V versions and offers simple temperature adjustment of your heating system.

By purchasing one of the REHAU room thermostats Nea you have decided on an electronic thermostat that allows you to adjust surface heating applications individually, such as underfloor, wall or panel heating. Tailor-made single room control can be implemented depending on system design. A clear energy saving is possible by reducing temperature.

We hope you enjoy this product.

Product compliance and safety

Product compliance

This product is CE compliant and meets the following EC Directives

- Electro-Magnetic Compatibility Directive 2004/108/EC
- Low Voltage Directive 2006/95/EC

Safety information



Use in accordance with the regulations.

The room thermostat Nea H is to be used for the room control of hot water surface systems inside the house and not considered for flow control or flow control supervision in case of heating or cooling. In this context the Nea H must be used exclusively to drive thermal actuators. The manufacturer is not liable for improper use.



Authorized specialists

The electrical installation must be performed according to the current national regulations as well as according to the

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regulations of your local electric power utility company. These instructions require special knowledge corresponding to an officially acknowledged degree in one of the following professions:

- Electrical Equipment Installer or Electronics Engineer

According to international regulations, as well as according to comparable professions within your specific country law.



Sources of danger

The thermostat must be disconnected from the mains supply or fuse **before** removing the cover.



Emergency

Switch off the voltage to the complete individual room temperature control system.

Installer parameter settings, expert level

The thermostat Nea is equipped with various parameters. These parameters can easily be modified for your specific application. See the Nea Service and Expert Parameters section at www.rehau.com/nea



Please note that the parameter sections must only be entered by an installer or competent person. Changing these parameters can have a serious effect on the heating system.



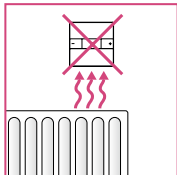
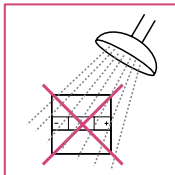
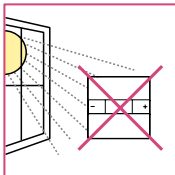
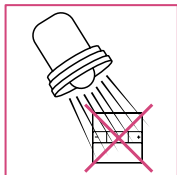
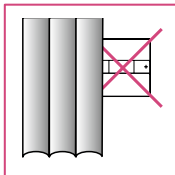
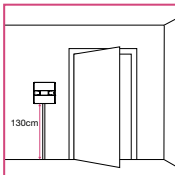
Please enter any parameter changes in the installer notes section.

Mounting position and installation



To ensure trouble free operation and efficient control. The room thermostat Nea is best positioned in a draft-free area and at 130 cm from the floor. Do

not position the thermostat near any heat source, behind curtains, direct sunlight or in an area of high humidity.



- Not to be positioned on exterior wall

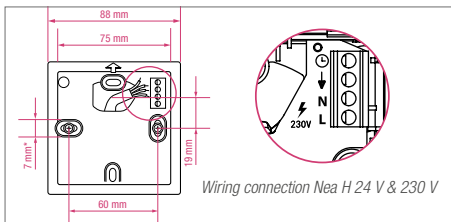
Installation



1 Wall mounting

For wall mounting, mark and mount the rear case to the wall. The Nea is suitable for wall boxes with a center hole distance of 60 mm.

* screw head maximum size



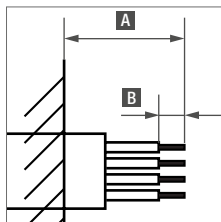
2 Wiring connections

Solid and stranded wire

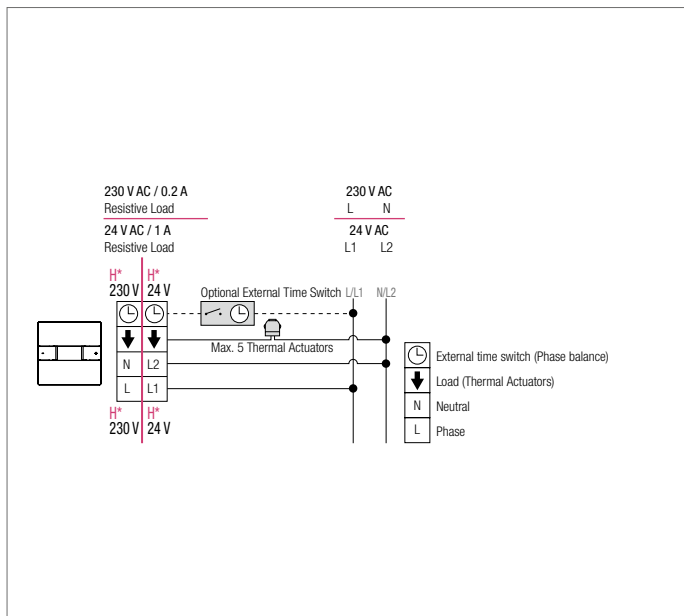
max 1.5 mm² square

A 55 mm

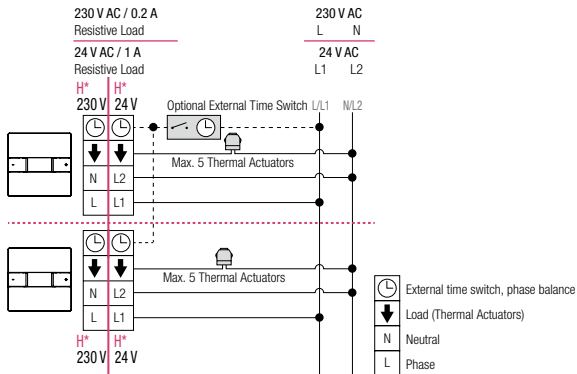
B 8 mm



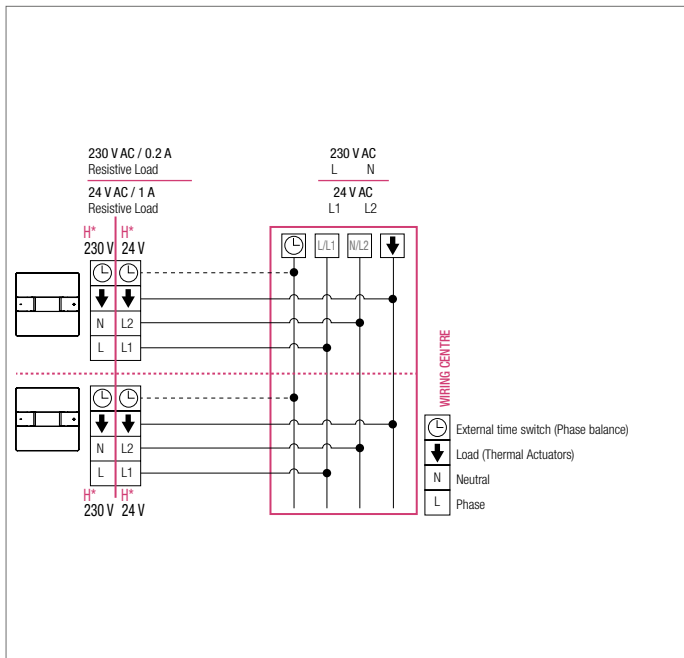
Nea H wiring



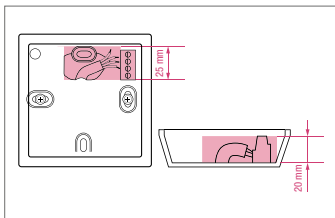
* Room thermostat Nea H 230 V and 24 V are separate models



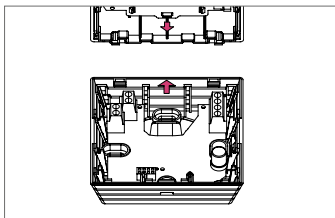
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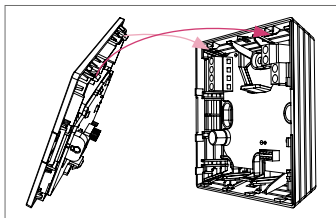


i Ensure that the cable is contained within the shaded area.

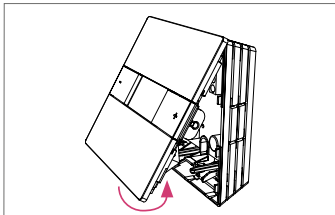


👍 Ensure that the two arrows are aligned properly before closing.

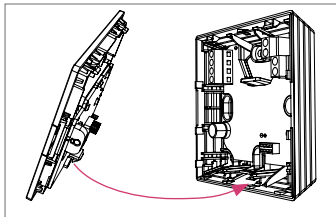
3 Locate the front cover on rear case, ensuring that the hinged clips are located first.



4 Locate hinge first



- 5 Gently locate the cover locking clip in rear case location and close it.

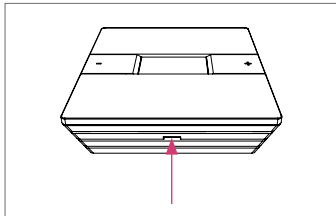


- Ensure cover locking clip is secure in the rear case.



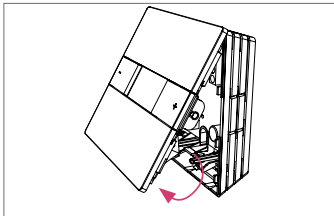
Removing cover from the Nea

- 1 Use tool to gently push the cover locking clip vertically.

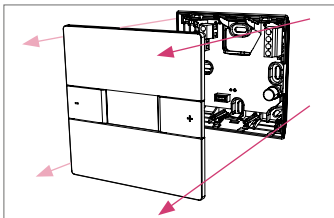


- Recommended width 5 mm for tool.







- 2 Pull the base of the cover assembly away from rear case.



- 3 Remove cover and put in safe place.



LCD icon

Indicator	Description	Explanation
	Temperature	Shows the actual room (R) temperature or the set (S) point temperature. The set point temperature is your required room temperature
R	Room temperature	The displayed temperature is the current room temperature
S	Set point temperature	The displayed temperature is the required room temperature
	Heating active	Heating mode is active
	Normal mode	Operation mode normal is active
	Reduced mode	Operation mode reduced is active
	Time switch program	The thermostat will automatically select operation mode normal and reduced based on the external time switch
	Lock mode	Protect the room thermostat against unauthorized access

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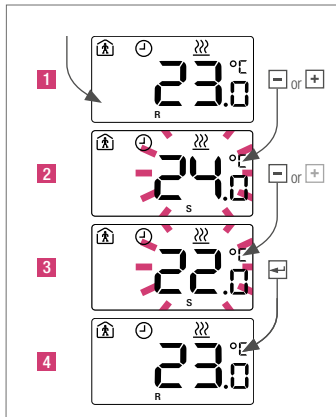
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Adjusting set temperature

Reducing set temperature

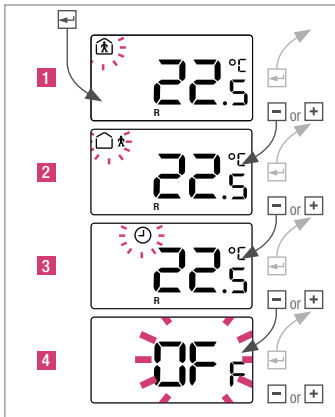


To view the set point temperature only press once



Operational modes

Selection - Standard thermostat





- 1** Normal operation: Default set point 22°C
- 2** Reduced operation: Default set point 18°C
- 3** Auto operation: Only with external time switch
- 4** Operational mode off (optional)

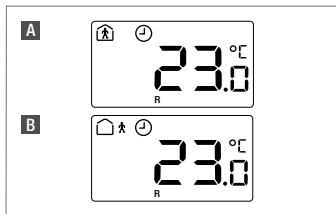


When the Nea is set to OFF there is automatic frost protection active. If the

temperature falls below 5 °C the heating valve will be activated.

 If an external time switch is activated and the clock is displayed then the change in set temperature is temporary. The set point will return to normal / reduced on next time switch program change. To accept changes, press .

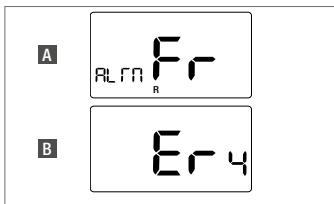
Auto - Standard thermostat



A Time switch program activ; normal mode

B Time switch program activ; reduced mode

Display messages



A Frost protection is active

B Room temperature out of sensor range



Frost protection display will remain until any key is pressed.

General function information

Valve protection

To protect the valves the output is turned on for 5 minutes in every week. This function stops the valve from getting stuck due to long periods of inactivity.

Pulse width modulation

Room temperature control is achieved by

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opening and closing the circuit control valves for defined times. The opening time of the valves is determined by the required energy supply.

PI control

The PI control adjusts the control signal gradually to the demand of the system, in order to optimize the control result. This optimization must be applied very cautiously in case of surface heating and cooling.

Cleaning your Nea

Only use a soft, dry, solvent-free cloth for cleaning.



A blown fuse can indicate an error within your system. Before replacing

the fuse, the system must be checked by an authorized specialist.

Technical data

	Nea H 230 V	Nea H 24 V
Operating voltage	230V-AC+/-10%	24V-AC+20%-10%
Max. switch current	0.2 A*	1 A*
Fuse	0.63 A T	1 A T
Safety	Class II	Class III
Max no. of actuators	5 x 3 W	
Degree of protection	IP30	
Anfi freeze operation	5 °C	
Valve protection function	5 min/week	
Dimensions frontside	88 x 88 (mm)	
Dimensions backside	75 x 75 (mm)	
Depth	26 (mm)	
Storage temperature	-20 to 60 °C	
Ambient temperature	0 to 50 °C	
Relative humidity	Max. 80 %, non condensing	

* Resistive load

Insofar as the intended application deviates from that described in the relevant Technical Information brochure, the user must consult REHAU and must receive express written consent from REHAU before commencing this utilization. If the user fails to do so, the sole responsibility for the utilization shall lie with the individual user. In this case, the application, use and processing of products are beyond our control. Should a case of liability arise, however, this shall be limited to the value of the goods delivered by us and used by you in all cases of damage. Claims arising from granted guarantees shall become invalid in the case of intended applications that are not described in the Technical Information brochures.

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