



ETHERMA ZESTO

Wall heating

Operating and assembly instructions

www.arcthermalproducts.co.uk (UK distributor)
www.etherma.com

ETHERMA^o
INGENIOUS HEATING

TABLE OF CONTENTS

1 FOREWORD	14	6.1 Installing the mounting rail	20
1.1 About this product.....	14	6.2 Installing the insulation panels	20
1.2 Intended use of the product.....	14	6.3 Positioning the grid heating mat	21
1.3 Target group.....	14	6.4 Connecting the grid heating mat	21
1.4 Legal information.....	15	6.5 Applying protective coating to grid heating mat	22
2 SAFETY-RELEVANT INFORMATION	16	6.6 Placing the tiles in position.....	22
2.1 General information.....	16	6.7 Installing the towel rail	22
2.2 Safety information.....	17	7 MALFUNCTIONS	23
3 PRODUCT DESCRIPTION	18	7.1 Possible causes of the following malfunctions:.....	23
3.1 Scope of delivery	18	8 COMMISSIONING	23
4 TECHNICAL DATA	18	9 ENERGY CONSUMPTION	23
5 PREPARATION FOR INSTALLATION	19	10 DISPOSAL	23
5.1 Tools for installation	19		
5.2 Preparation for electronic thermostat.....	19		
5.3 Preparation of the substrate.....	19		
6 INSTALLATION INSTRUCTIONS	20		

© 2019 ETHERMA GmbH

Original version 01 – EN, valid as of March 1st, 2019.

This manual is protected by copyright. All rights reserved.

This version replaces all previous versions.

The original manual was created in the German language.

Reproduction, translation and conversion into an electronic medium or any other machine-readable form in whole or in part is not permitted.

These operating instructions have been written to the best of our knowledge. Nevertheless, ETHERMA does not assume any liability for the completeness and correctness of the information.

The performance characteristics described shall only be binding if they were expressly agreed upon at the time the contract was concluded.

1 FOREWORD

ETHERMA would like to thank you for your trust and warmly compliment you on your purchase of the ZESTO wall heating with heated towel rail. We stand for constant innovation, highest product quality and

modern design and offer you a certified and reliable product with a modern, sophisticated design.

1.1 About this product

Your ZESTO wall heating with towel rail is a mains heating mat specially developed for wall installation. The factory-assembled grid heating mat with Teflon inner and outer insulation is

used for heating baths and has a towel rail that can be optionally extended to up to 4 units. The ZESTO wall heating is controlled via a thermostat included in the scope of delivery.

1.2 Intended use of the product

The device serves exclusively as an electric wall heating with towel rail. Up to 4 towel rails can be mounted.

The product and its accessories are intended exclusively for the described use with the sup-

plied and approved components. Any other use or use going beyond this is considered improper use. We do not assume any liability for damages resulting from this. Here, the risk shall be borne solely by the user/operator.

1.3 Target group

These operating and assembly instructions are intended for all persons who install and operate the product.

This manual provides important information for the safety, installation and use of your product. Please read the information in this manual carefully and follow all the instructions contained in it.

We shall not be liable if the following instructions are not observed. The device must not be used improperly, i.e. contrary to its intended use.

These operating instructions must be handed over to the operator after installation. In addition, the operator must be instructed in the operation of the system. These operating instructions must be kept with the device.

1.4 Legal information

CE Conformity

This system was developed and produced in conformity with the relevant directives and standards.

Manufacturer

ETHERMA Elektrowärme GmbH
Landesstraße 16
A-5302 Henndorf

Liability

The information, data and notes given in these operating instructions were up to date at the time of going to press. The images used are symbol photos and do not have to correspond to reality. The information, illustrations and descriptions in this manual cannot serve as a basis for any claims for changes to systems and components already supplied.

We reserve the right to make technical changes. Changes, errors and misprints do not justify a claim for damages.

The information in these operating instructions describes the properties of the product without guaranteeing them.

Warranty

The sales and delivery conditions of ETHERMA apply. Please observe our general terms and conditions.

Warranty claims must be submitted to the manufacturer for inspection immediately after discovery of the defect or fault.

No liability is assumed for damages or malfunctions caused by:

- Failure to observe the operating instructions
- Alterations to the system made by the user
- Operating errors
- Maintenance tasks neglected
- Copyright

The copyright of this manual remains with the company.

Subject to technical changes without notice.

The warranty expires in all cases in which no liability claims can be asserted.

2 SAFETY-RELEVANT INFORMATION

2.1 General information

This manual contains instructions for your safety. Please follow all the instructions to avoid personal injury, as well as damage to the environment or property.

- Ensure that the temperature is at least 5° C when installing the grid heating mat.
- Observe relevant regulations of ÖVE (Austrian Federation for Electrical Engineering) & VDE (German Association for Electrical, Electronic and Information Technologies)
- Install the heating element only on a smooth, even surface
- Lay the grid heating mat spread out flat only, so as not to reduce the distance between the conductors
- Do not bend or kink heating cable
- Heating cables must not touch or cross each other
- Do not lay heating cables across expansion joints.
- Do not shorten heating cable
- Observe the relevant applicable national standards for the installation of grid heating mats.
- During installation, make sure that the heating element is not damaged (e.g. by dropping sharp objects on it, stepping on the heating element or carelessly applying the filler or plaster).
- Electrical work may only be carried out by qualified electricians.
- Initial commissioning and instruction of the operator must be carried out by the installing specialist company. The operator must be instructed in the function of the device.
- The connecting cable of the grid heating mat (cold end) must be routed in an installation pipe (requirements from VDE 0100 Part 520).
- Do not allow children to play with the device.
- Cleaning and user maintenance must not be carried out by children without supervision.
- Children 8 years of age and older as well as persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge may use the device if they have been supervised or instructed in the safe use of the device and understand the resulting dangers.

2.2 Safety information

The symbols used in the Betriebs- und Montageanleitung are listed and defined below.

DANGER

This symbol warns of an immediate hazard to the life or health of persons.

- › If not heeded, the hazard will result in death or serious injury.
-

WARNING

This symbol warns of a hazard for the health of persons.

- › If ignored, the hazard can result in death or serious injury.
-

CAUTION

This symbol warns of an impending danger of injury, considerable damage to property or damage to the environment.

- › If ignored, the hazard can result in injury and/or damage to property or to the environment.
-

2.3 Further symbols



NOTE

Helpful information for installation and operation

- › Neglecting to observe this can lead to impairments in function.
-



INFORMATION

Please refer to further literature

- › e.g. other applicable documents
-

3 PRODUCT DESCRIPTION

3.1 Scope of delivery

Your product contains the following components.

- ❶ Grid heating mat, 1 unit
- ❷ Dummy screws, 2 units
- ❸ Mounting rail, 1 unit
- ❹ Thermostat, 1 unit
- ❺ Towel rail^{*)}, 1 unit
- ❻ Insulating panel, 2 units

^{*)} The scope of delivery includes 1 towel rail. Optionally, up to 3 more towel rails (each with 2 dummy screws) can be installed. Retrofitting at a later date is not possible.

Additional applicable documents:

- Installation instructions for towel rail
- Operating instructions for thermostat
- Warning sticker for electrical cabinet
- Measurement record

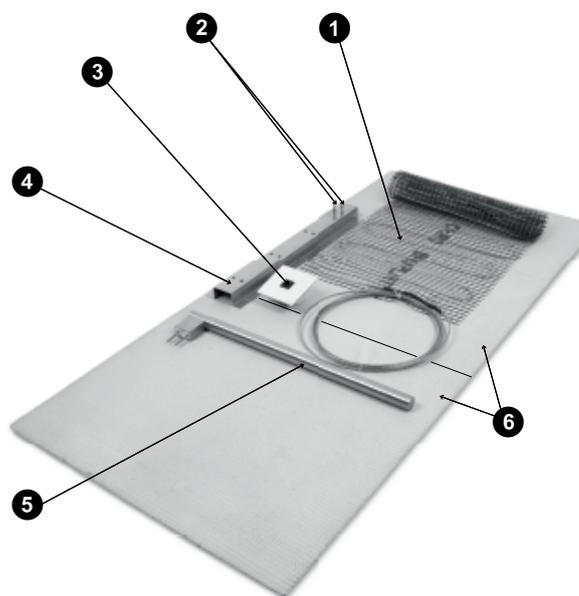


Fig. 1: Scope of delivery - Product overview

4 TECHNICAL DATA

General	
Type	ETZ-230-1CR
Voltage:	230 V
Output	
	230 W
Dimensions (L x W x H)	
Mounting rail	490 × 90 × 30 mm
Insulating panels	850 × 600 × 6 mm
Grid heating mat	1250 × 400 × 3.3 mm
Wall covering	
Flexible adhesive	Cover for heating element: ≥ 5 mm
Clay plaster	Cover for heating element: ≥ 20 mm

The power supply must be protected by a residual current device with a maximum current of 30 mA and a circuit breaker with a maximum current of 16 A (according to DIN VDE 0100 part 753).

Type plate



Typ: **ETZ-230-1CR**

Art.Nr. 40645

EAN:



ETHERMA ZESTO-230-1CR
 Set bestehend aus Wandheizmatte 230W, Spannung 230V, Handtuchhalter ZESTO und Thermostat eTOUCH hybrid inkl. Befestigungszubehör und Dämm
 Made in Austria|produced by ETHERMA|www.etherma.com

5 PREPARATION FOR INSTALLATION

5.1 Tools for installation

Assembly of mounting rail:

- 6 screws / 6 dowels
(depending on substrate)
- Cordless screwdriver / hammer drill

Perforating the insulating panel:

- Drill

Affixing insulating panels/grid heating mat:

- Flexible adhesive
- Clay plaster

Installation of heating mat:

- Plastic nails, corrosion-resistant nails or (if necessary) hot glue

5.2 Preparation for electronic thermostat

- A switch box at a height of approx. 140 cm. must be provided.
- Insert the installation pipe for the connecting pipe in the masonry.

5.3 Preparation of the substrate

Plasterboard or concrete:

- Primer or adhesion primer is required.

Brick, H-brick or Ytong:

- Primer / adhesion primer not required.

6 INSTALLATION INSTRUCTIONS

6.1 Installing the mounting rail

- (1) Take out the wall for the mounting rail **1** (recommended in the upper part of the heating mat).
- (2) Mount the mounting rail **2** in the recess created. Fasten with 6 screws **3**.
- (3) Insert 2 dummy screws per towel rail next to each other into the rail holes in the desired position **4** (optional positions **5**). Up to 4 towel rails can be mounted. (I.e. up to 8 dummy screws).

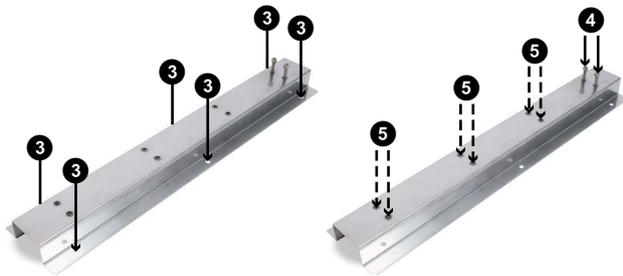


Fig. 3:

- 3** Screws for mounting rail
- 4** Position of dummy screws
- 5** Optional positions for dummy screws

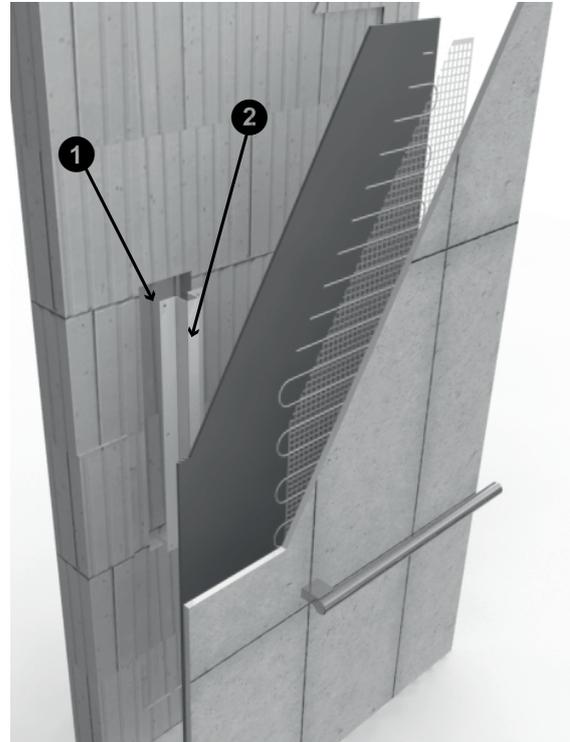


Fig. 2:

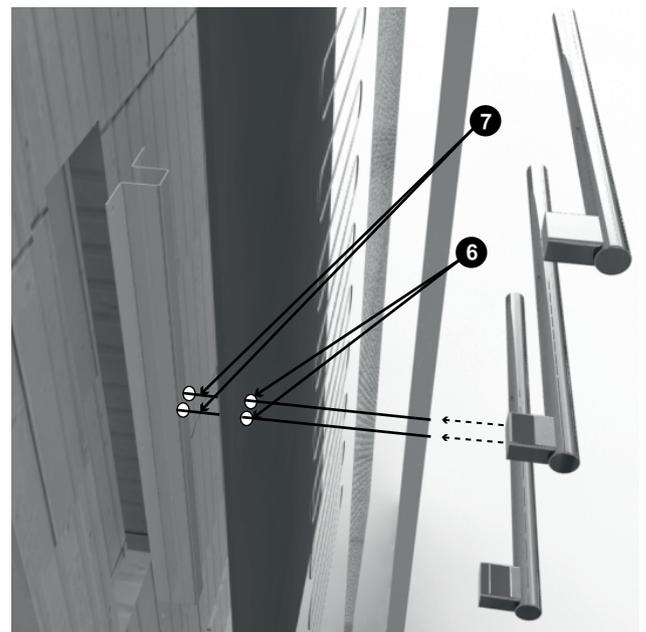
- 1** Recess for mounting rail
- 2** Mounting rail

6.2 Installing the insulation panels

- (1) Make 2 drill holes **6** in one of the two insulation panels for dummy screws **7**.
 - › Make the drill holes to the side (later, the heating mat must not cover these bore-holes).
- (2) Apply flexible adhesive to the insulation panels.
- (3) Affix insulation panels on the wall seamlessly one above the other. The narrower side faces upwards. (Drill the boreholes via the dummy screws **7**).

Fig. 4:

- 6** Drill holes on insulation panel
- 7** Dummy screws



6.3 Positioning the grid heating mat

- (1) Unroll grid heating mat 8
- (2) Affix grid heating mat with temperature limiter 13 above and the connection 14 below onto the insulating panels next to the dummy screws.
 - > The temperature limiter 13 must be located above, and the connection 14 below.
 - > The heating element 9 must face towards the back, towards the insulation panels, the grid 12 towards the front.
 - > The heating mat 8 must lie flat on the insulation panels 11.
 - > The grid heating mat 8 is self-adhesive. If necessary, additionally fasten to the insulation panels 11 with plastic nails, corrosion-resistant nails or hot glue.

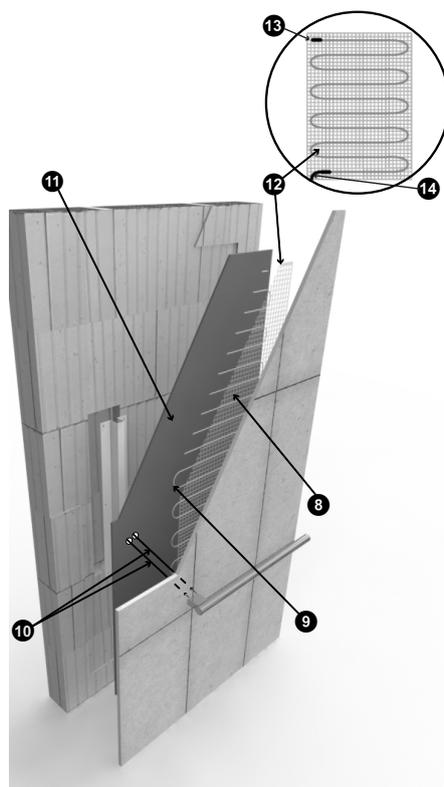


Fig. 5:

- | | |
|----------------------|------------------------|
| 8 Grid | 12 Grid heating mat |
| 9 Heating element | 13 Temperature limiter |
| 10 Dummy screws | 14 Connection |
| 11 Insulation panels | |

6.4 Connecting the grid heating mat

- (1) Pull the connection cable 15 into the pipe provided for this purpose, which leads to the thermostat 16.
- (2) Check grid heating mat for continuity, resistance and insulation value. Compare the resistance value with the rating plate of the mat and enter it in the test report (see Appendix for test report). Deviations from -5 % to +10 % of the nominal value are permissible.
- (3) Attach the warning sticker to the electrical distribution.

Variant 1:

Week program

Variant 2:

Timer

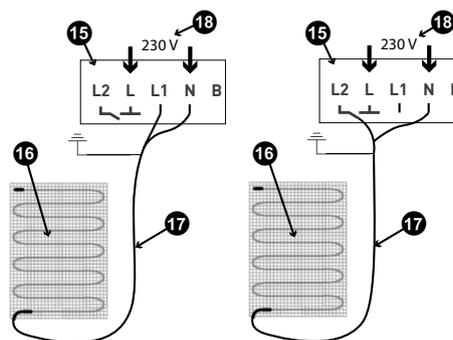


Fig. 6:

- 15 Thermostat (in flush-mounted connection box)
- 16 Grid heating mat
- 17 Connector cable for grid heating mat (blue = N, black = L1 / L2, yellow / green = earthing)
- 18 to electric distributor

ELECTRIC SHOCK HAZARD

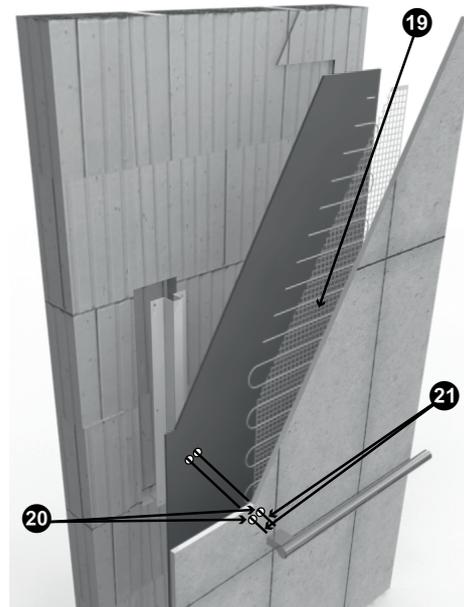
A switching device with a contact opening width of at least 3 mm is required as a disconnecting device. e.g. switch, fuse, earth leakage circuit breaker. The isolating circuit must be all-pole. Apply protective coating. (Requirements EN 60335-1; 7.12.2)

6.5 Applying protective coating to grid heating mat

- (1) Apply the protective layer for the grid heating mat **19** with flexible adhesive or clay plaster.
- (2) Apply textile glass grille as plaster reinforcement over the entire grid heating mat **19**. There needs to be an overhang of 25 cm all-round, 40 cm in the case of clay plaster.
- (3) The reinforcement of plasters serves to restrict cracks to a harmless level. It cannot completely prevent the formation of cracks, but it can prevent their harmful effects (see ÖNORM B 3346, point 6.3.6).

Fig. 7:

- 19** Grid heating mat
- 20** Dummy screws
- 21** Perforations in tiles for dummy screws



6.6 Placing the tiles in position

- (1) Drill two holes in the tiles at dummy screw level **22**.
- (2) Apply the last and final layer of plaster or flexible adhesive with the tiles, drilling the holes **22** through the dummy screws **23**.

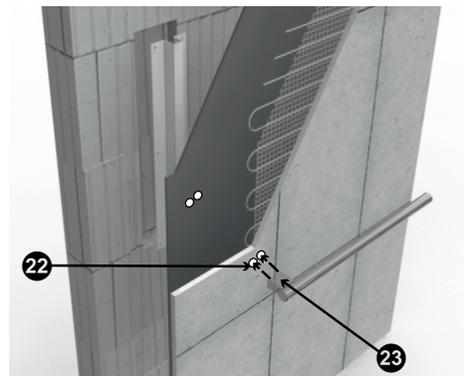


Fig. 8:

- 22** Tile drill holes for dummy screws
- 23** Towel rail

6.7 Installing the towel rail

- (1) After tiling, remove the dummy screws from the tile holes **24**.
- (2) Insert the towel rail **25** through the tile holes **24**.



The assembly instructions for the towel rail can be found in the appendix.

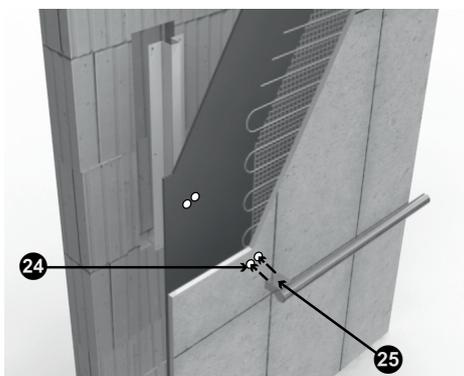


Fig. 9:

- 24** Tile drill holes for dummy screws
- 25** Towel rail

7 MALFUNCTIONS

7.1 Possible causes of the following malfunctions:

Device does not heat up:

- Circuit breaker triggered or defective
- External switch in the supply line switched off
- Target temperature of the thermostat is set at a value lower than the actual temperature of the room
- Temperature of the temperature limiter in the network heating mat exceeded

Radiating heat too low:

- Distance between radiant heater and person too large
- Obstructing object located between radiant heater and person

8 COMMISSIONING



NOTE

Keep measurement record with the device.



NOTE

After the plaster or tile adhesive has hardened (observe manufacturer's instructions) and at the earliest after 24 hours, the heating can be put into operation.

The following documents must be handed over to the operator or permanently stored in the electrical distribution system:

- Technical documentation including accompanying documents

9 ENERGY CONSUMPTION

In conjunction with an ecodesign-compliant thermostat, the product data conform to the EU regulations for

environmentally sound design of energy-related products (ErP).

10 DISPOSAL

Old electrical and electronic appliances often contain valuable materials. However, they may also contain harmful substances that were necessary for their function and safety. Disposed of with the non-recyclable waste or due to incorrect treatment, these substances can damage the environment. Please help us protect the environment!

Therefore, never dispose of your old appliance in the residual waste (non-recyclable waste). Ensure that your old appliance is disposed of in accordance with local regulations. Dispose of packaging material, later replacement parts or device parts properly.

ETHERMA
Elektrowärme GmbH
Landesstraße 16
A-5302 Henndorf

Tel.: +43 (0) 6214 | 76 77
Fax: +43 (0) 6214 | 76 66
Web: www.etherma.com
Mail: office@etherma.com

ETHERMA
Elektrowärme
GmbH
Landesstraße

Backnang | 71332 | BP 9700W
Fax: +49 (0) 7141 629481
Mail: office@etherma.com

ETHERMA[®]
INGENIOUS HEATING