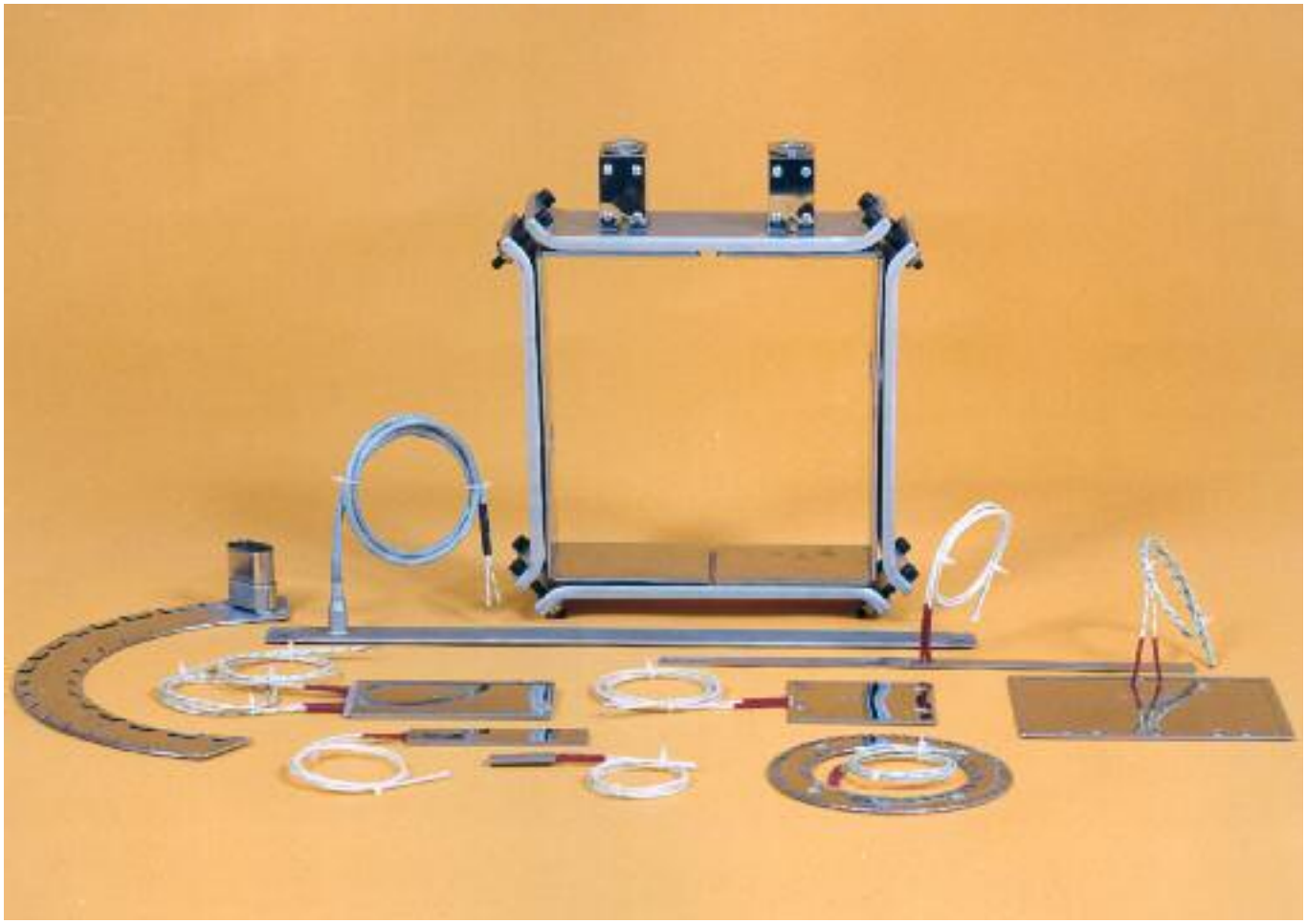
ELECTRIC HEATERS

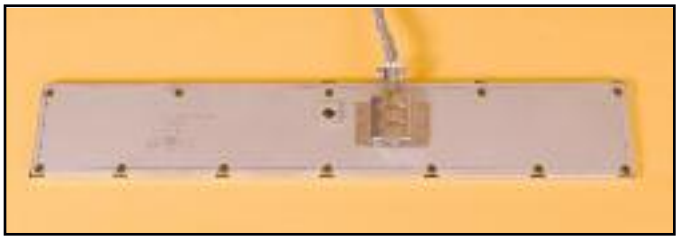
... Infinite solutions ...

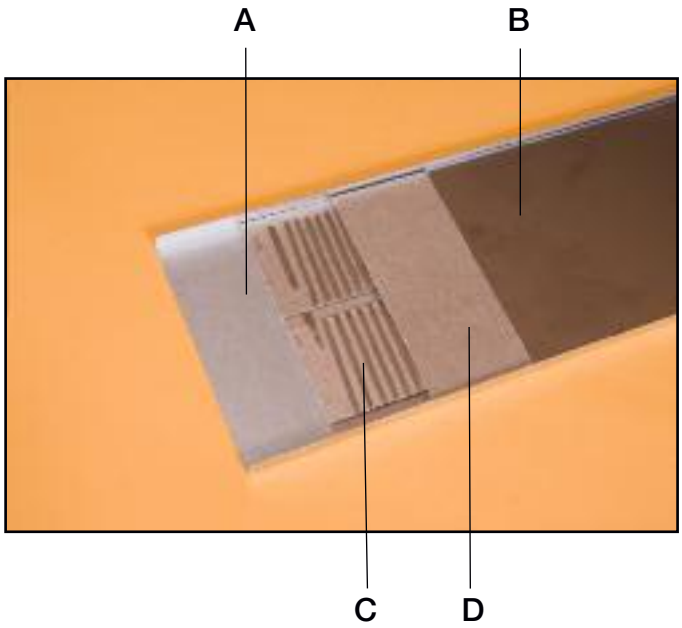
Mica insulated flat heaters



MODEL Z.37 (FLAT MICA)

Model Z.37
flat mica





(A) Internal plate
(B) External sheet
(C) Winding resisance
(D) Mica insulation

Technical data

Use

For heating flat surfaces of any dimension, such as:

- Molds for plastics
- Extrusion die drawplates
- Flat surfaces for presses
- Packaging machines
- Vacuum packaging machines
- Food industry machines
- Electrical motors and cabins, as anticondensation

Advantages of the mica band heaters

- Excellent heat exchange to the cylinder
- Heating uniformity
- Long life of the heater (when properly used)
- Easy to install
- High mechanical resistance
- Constant quality with time

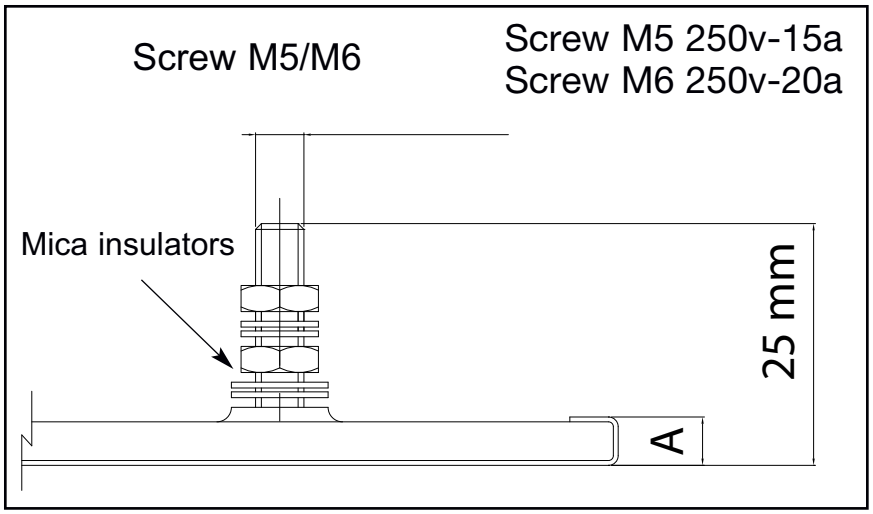
Dimensions

- Minimun width 20mm. with tolerance: +/-0.5mm
- Length upon request. Length tolerance +/-1mm, up to 500mm and +/-1.5mm over 500mm

Technical Features

- Specific Wattage up to 4W/cm2
- Working temperature up to 320°C
- Internal sheet made of high heat conductivity treated steel **(A)**
- External sheet made of stainless steel AISI 430 resistant to high temperatures **(B)**
- Resistive ribbons made of NiCr 80/20 **(C)**
- Insulation made of pure Mica for high temperatures**(D)**
- Heater's standard thickness 4 +/-0.5mm
- Fibreglass insulated feeding cable with pure Ni or CuNi conductor externally protected by a metal braiding (built in earth wire) (working temperature 320°C , peak 350°)
- Options:
  Pure Ni or CuNi conductors with silicon sleeve (max working Temperature 180°C, peak 200°)

Model Z.37
flat mica



A= 4 +/- 0,5 mm

Technical data

Feasible electric connections

- All monophase voltages
- Starting from 100mm width , it is possible to use a star (Y) or Delta three phase feeding

Testing

- A sophisticated testing equipment (TPC 2000) allows us to guarantee the entire product, because all heaters are hot tested , applying their actual working voltage
- TPC 2000 is complete with a printer certifying testing results
- Testing certificate for each single heater, upon request

Standard measurements

- Ohmic Value
- Dielectric strength
- Current loss
- Insulation resistance
- Earth wire efficiency

For further information please contact our technical dep.

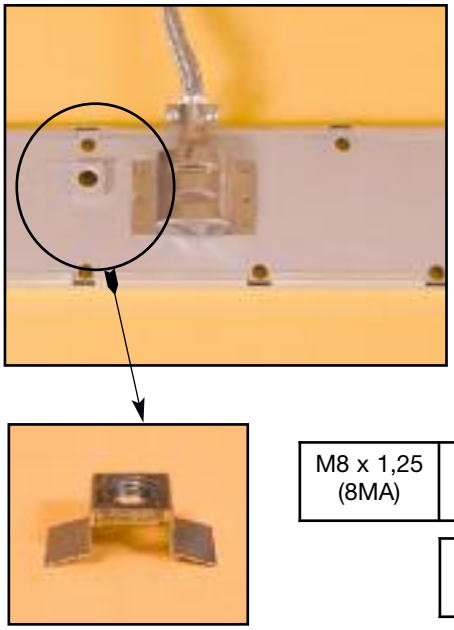
We reserve the right to change technical details.

How to order

Model Z.37

Application: .....
+ Article number (if known): .....
+ Length L (mm): .....
+ Width H (mm): .....
+ Feeding voltage. (V): .....
+ Wattage (W): .....
+ Exit type (MP..): .....
+ Exit position (mm): .....
+ Cable direction: .....
+ Cable Length (mm): .....
+ Any holes or slots.: .....
+ Position of the holes /slots (mm): ....
+ Hole's diameter in mm: .....
+ Any pressure plate: .....

Holes or slots



From width 30mm is possible to supply heaters with external thermo-couple holes or slots. It's also possible to provide a threaded connector as showed in the picture

Standard threads

M8 x 1,25 (8MA)	M10 x 1,5 (10MA)	M10 x 1 (10MB)	M12 x 1,75 (12MA)	M12 x 1,5 (12MB)	M12 x 1 (12MC)

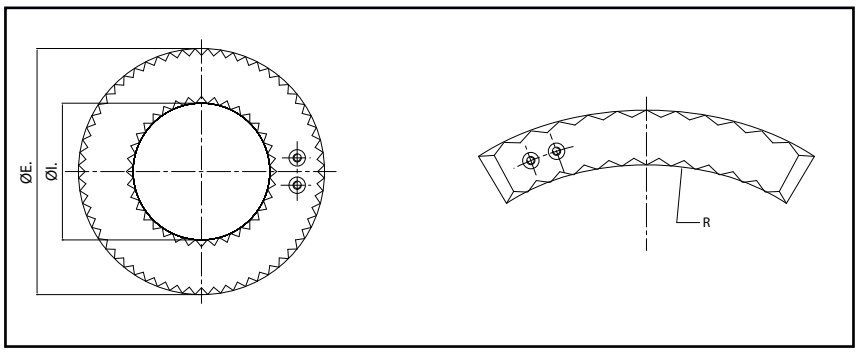
1/8" GAS	1/4" GAS	3/8" GAS

Special Executions

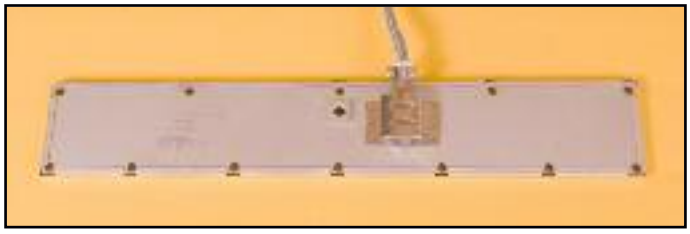
Z37C type
Circular or semi circular flat mica heaters

MP263 type

Circular flat mica heaters with central hole



Mica insulated flat heaters



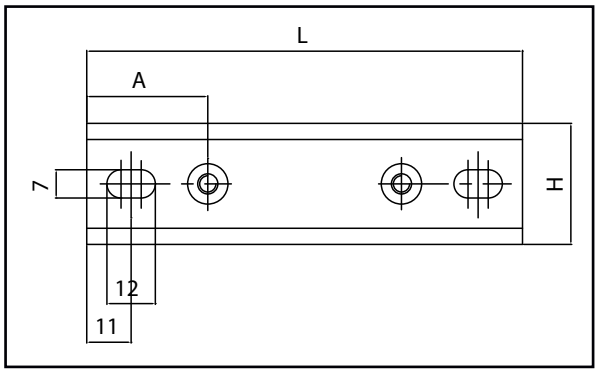
Z37H type
Flat mica heaters with heat - treated steel pressure plate thickness 6mm built-in (overall thickness 10mm +/- 0,5mm) with fixing holes according to customer requirements

Z37H type
Flat mica heaters with external heat - treated steel pressure plate (overall thickness 14mm +/-0.5mm) square/rectangular/U-shaped/L-shaped

Z38 type
Flat mica heaters with single insulated covering

Connections

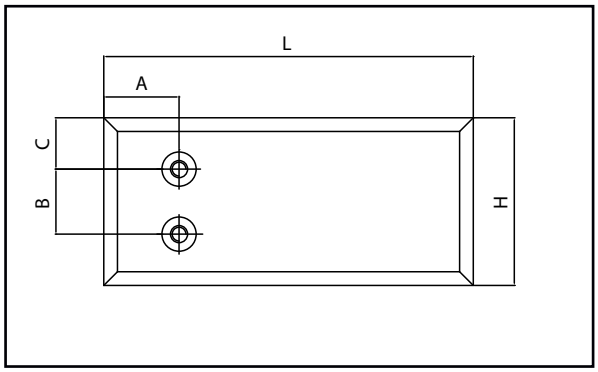
- Electric connections are reported as follow
- For futher requests, ask our technical departement



Output type MP 203

Ø Screw	min. H [mm]	min. A [mm]
M5	30	30
M6	35	35

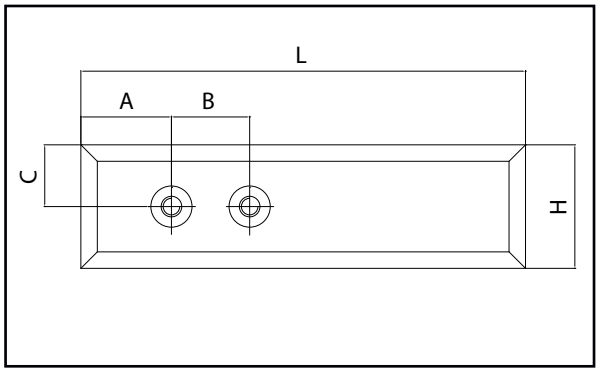
When ordering, specify
L = in mm
H = in mm
A = in mm



Output type MP 207

Ø Screw	min. H [mm]	min. A [mm]	min. B [mm]	min. C [mm]
M5	49	22	19	15
M6	60	27	25	17,5

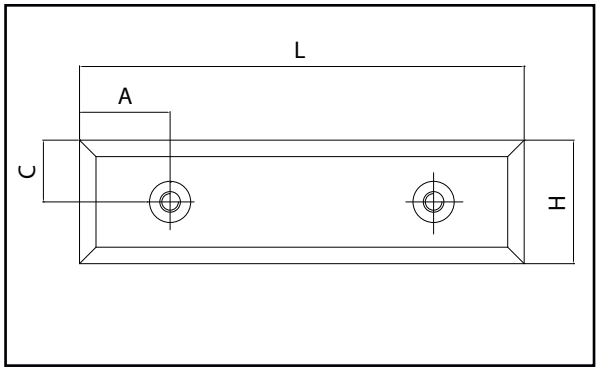
When ordering, specify
L = in mm
H = in mm
A = in mm
B = in mm
C = in mm



Output type MP 211

Ø Screw	min. H [mm]	min. A [mm]	min. B [mm]	min. C [mm]
M5	30	22	19	15
M6	35	27	25	17,5

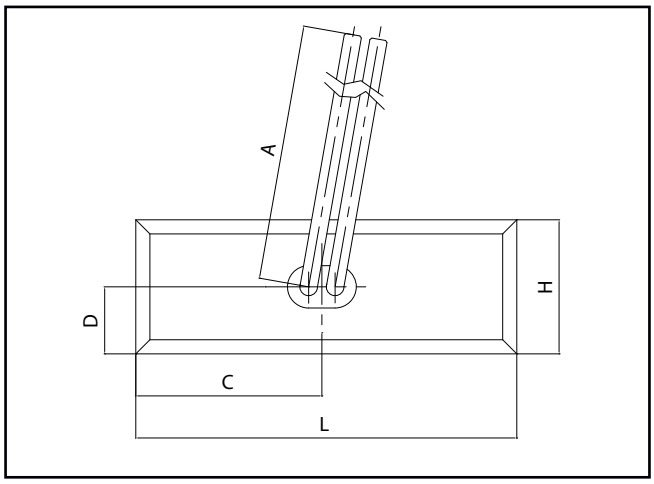
When ordering, specify
L = in mm
H = in mm
A = in mm
B = in mm
C = in mm



Output type MP 215

Ø Screw	min. H [mm]	min. A [mm]	min. C [mm]
M5	30	22	15
M6	35	27	17,5

When ordering, specify
L = in mm
H = in mm
A = in mm
C = in mm



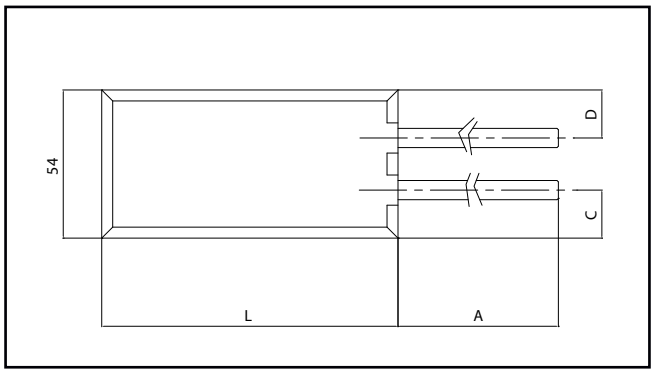
Output type MP 219

Min H= 20mm

Teflon-fibreglass insulated nickel feeding cables

When ordering, specify

L = in mm **C** = in mm
H = in mm **D** = in mm
A = in mm



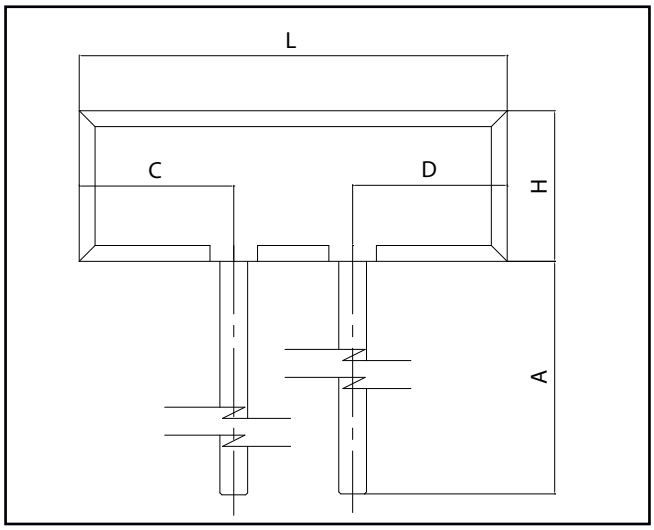
Output type MP 223

Min H= 20mm

Teflon-fibreglass insulated nickel feeding cables

When ordering, specify

L = in mm **C** = in mm
H = in mm **D** = in mm
A = in mm



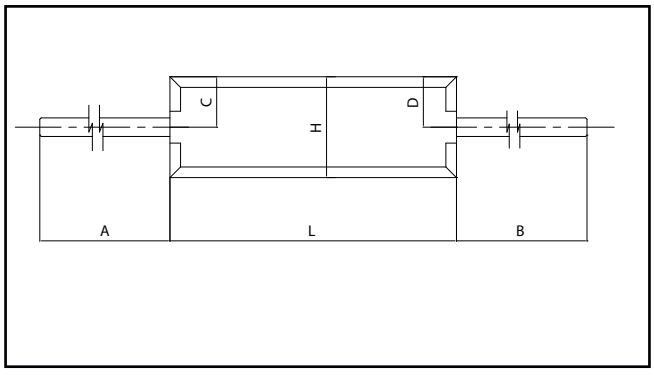
Output type MP 227

Min H= 20mm

Teflon-fibreglass insulated nickel feeding cables

When ordering, specify

L = in mm **C** = in mm
H = in mm **D** = in mm
A = in mm



Output type MP 231

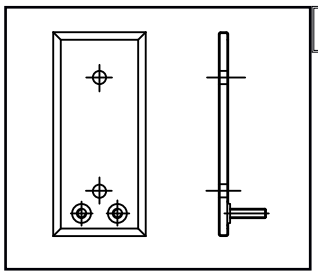
Min H= 20mm

Teflon-fibreglass insulated nickel feeding cables

When ordering, specify

L = in mm **B** = in mm
H = in mm **C** = in mm
A = in mm **D** = in mm

Mica insulated flat heaters

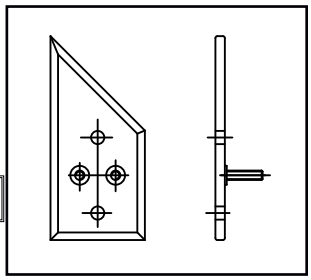


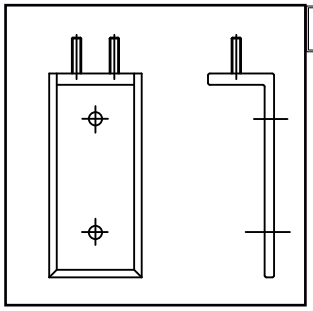
Output type MP 243

Flat mica with holes

Output type MP 247

Flat mica with holes and a 45° tilted side



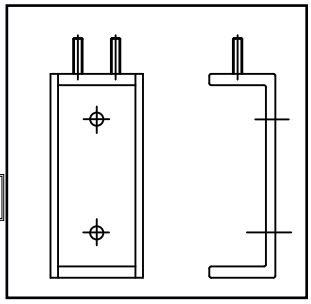


Output type MP 251

Flat mica with holes - “L”shape

Output type MP 255

Flat mica with holes - “U”shape



Please check all our connection option at the following link

Installation and storage instruction

Installation

- When installing the mica flat heater , please make sure to hold it tightly screwing up to the plate.
  When reached the working temperature or after 30 min. heating screw it up still further. Do the same after few hours in order to compensate the thermal linear expansion of the heater.
  Not doing the operation described above may cause the over heating of the parts of the heater that are not perfectly in contact with the nozzle pointed out by a colour change purple - black and consequently the resistive filament may burn.

Storage

- Store at room temperatre in a dry place

Operation

- Security procedures for the handling of electrical items and applications must be followed
- Do not touch nozzle heater bands while in use because the can get very hot
- Please make sure that the heating elements can not touch flammable material while in use

It's very important to follow these advices in order to have a loger lifetime of the heater.

General information

- If our mica bands heater are delivered with feeding cables without insulation (naked connection) or with removable insulation (covered with gls-sleeving) the customer himself has to take care about the protection

Connections

- Protect connections aganist the ingress of liquids and gases to avoid short circuits
- Install the connections away from sharp edges or parts since this may also cause short circuits
- Protect connection leads against the effects of temperature and lay them in a proper way
- Pay attention to the connection voltage

Temperature control

- Temperature controllers have to match the power consumption and the used temperature sensor.
- Only install temperature controllers with automatic soft start function so that any moisture which may have entered the heating element will escape slowly