

**You have purchased an Acim Jouanin product and we thank you for the choice you have made.**

**We do recommend you to carefully read this document before setting up your device.**

**This documentation concerns safety instructions, but you can also download the complete User Manual of your device on the Acim Jouanin website: [www.acim-jouanin.fr](http://www.acim-jouanin.fr)**

#### PRECAUTION when receiving the product

- When unpacking the parcel, check the good condition of the apparatus. If there is something to be noticed, please refer to the “Accord-litige” label on the parcel.
- *Product delivered with sealed packaging:* Unfortunately, if the product is broken before opening the bag, send it back to us in its original packaging so that we replace it with a free of charge return. If the product is broken with an opened bag, a replacement is impossible.
- *Products with a maintaining metal sheet:* Interior metal sheet which maintains the product during transportation is to be removed before setting up the product.

#### Conditions of application

- This apparatus is sold for industrial purposes. Do not use this product for other use, as described in these instructions.
- Acim Jouanin would not be responsible for corporeal or material damages as well as losses or costs caused by an unsuitable use of the product or the failure to comply with the instructions here mentioned.
- *Heating material:* Do not use to heat or dry living elements (except specially made elements).
- This product must not be used if you notice any damage or breakage. Replace it immediately.
- If the apparatus is equipped with a power supply cable which is damaged, it has to be replaced by a skilled and authorized person..

#### ELECTRICAL PRECAUTIONS

The installation, configuration, startup and maintenance of the product have to be carried out by a skilled and authorized person who can work in a low-voltage electrical environment in the industrial sphere.

1. Switch off before any operation.
2. Make sure that the voltage of the product complies with your network voltage (Be careful of the products which have a multi-voltage system).  
Given that the power varies as voltage squared, any electric overload can affect the products. Regularly check that the heating material works within its limit parameters.
3. Electric wiring:
  - Use power supply cables with an appropriated cross-section to avoid any overheating.
  - *Heating material:* When the electric wiring (for example: terminal, terminal plate or terminal block strip) is located next to a heating surface, only use high temperature resistant cables.
  - *Heating material:* Make sure that the power supply cables are no in contact with the hot surface of the apparatus.
  - Protect power supply cables against: high temperatures, dampness, grease, material penetration, thermal shocks. Set up a mechanical protection particularly against cuts and excessive bendings.
4. *Heating material:* When it is necessary to wire a heating element with high working temperatures, use cable connectors (such as terminals) made of stainless steel, nickel, nickel-plated steel or other material that resist to high temperatures to avoid any damage on the connection.
5. The earth connection is compulsory for apparatus which belong to O1 and 1 classes.  
For the products equipped with threaded terminals, the recommended tightening torque is 1.2 Newton/meter. Anticipate the use of a key and above all, a counter key to tighten (avoid any torsion).
6. *Heating material:* To optimize the heating elements lifetime, we do recommend to use a regulation device. It is particularly important when using the elements in high temperatures or if you use a high powered heating element.
7. The temperature regulation is an important element to be taken into account:
  - The all-or-none regulation is often used when there are few regulation cycles.
  - The PID regulation with a static relay enables more frequent commutations and a more accurate regulation.
8. To guarantee a total electric security, we do recommend to set up a differential circuit breaker which complies with standards in force, as well as any other required protection according to the standards.
9. *Heating material:* Using heating elements with high temperatures or with high power induces a higher leakage current. We recommend to take into account the impact of the leakage current when designing electric protection devices.
10. After any electric intervention, do not forget to reposition all the safety devices which are linked to operators security.

#### SECURITY INSTRUCTIONS

##### Normative precautions

- The heating or non-heating devices provided by Acim Jouanin, are components that you will integrate in your own installation. It is up to you to conform with rules, standards and regulations in force.



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12 5001.00 Instructions are given for information purposes. We reserve the right to modify them according to technical evolution.

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#### SECURITY INSTRUCTIONS (continuation)

##### Precautions for explosive areas

- Do not set up the apparatus next to a combustible material, in an explosive area nor in an environment with highly flammable fumes... (except specially made elements).

##### Burn risks – Heating material

- Do not touch the surface of the heating elements when working.
- Make sure that a universally understandable burn prevention warning is placed next to the heating elements.
- Take all precautions to insure the security of goods and persons when working and after the shutdown of the equipment.
- After having cut the power supply, let the heating element cool before touching.

##### Mechanical precautions

- The apparatus are not designed to take mechanical blows.

##### Fire risks

- Take all precautions to insure the security of goods and persons against fire risks that may be caused by electrical defects, when working and after the shutdown of the equipment.

##### Dampness

- Do not touch the control device of the apparatus with damp hands.
- Avoid any water projection on the apparatus (except specially made elements).
- Avoid any liquid penetration by the connection which would damage the device.

#### VARIOUS PRECAUTIONS

- Do not immerse the apparatus in a liquid (except specially made elements).
- Do not hold the device by the cable.

##### Thermal exchanges – Heating materials \*

- Most of the heating devices that work by conduction must not work at no load.
- To facilitate the thermal exchange, the welcoming surface of the heating element must be clean, smooth and without material. If you have canvassed it, wipe it up. Any contaminant or imperfection on the surface can cause a bad heat transfer by conduction and generate an early destruction of the band heater.
- Remove any depositing from the surface of the heating element. It induces overheating areas and makes the elements work unnecessarily

##### Thermal exchanges – Heating materials \* (continuation)

- The apparatus to heat liquids have to be switched on only when the heating area is immersed.
- Make sure that the apparatus for air heating have a good flow and an air temperature to ensure a good thermal exchange.

##### Cleaning

- Sometimes, clean the apparatus to avoid any overheating.
- Heating materials:* Before cleaning the heating element, disconnect it and let it cool. Wipe it as well as the connection box, with a wet fabric. Do not use solvents or recurring products. Do not immerse the heating element in a liquid.

#### PARTICULAR PRECAUTIONS - SUMMARY OF THE USER MANUAL TO BE DOWNLOADED ON [www.acim-jouanin.fr](http://www.acim-jouanin.fr)

##### Band heaters \*

- Band heaters which work by conduction must not work at no load. (see paragraph « Thermal exchanges » here above).
- When setting up the band heaters, the looseness between the band heater and the element to be heated has to be as small as possible.
- After several regulation cycles, band heaters must be tightened under heat to compensate the looseness of the band heater. Adjust the band heater positioning if you require. It can be adjusted under heat by tapping with a plastic sledgehammer so that it takes on the shape of the pipe. Regularly check the clamping so that the band heater perfectly takes on the shape of the pipe.

##### Cartridge heaters \*

- The cartridge heaters which work by conduction must not work at no load. (see paragraph « Thermal exchanges » here above).
- The bore which receives the cartridge heater has to be perfectly cylindrical, cleaned with perfect finishing.
- Check that the looseness between the insertion gap and the cartridge is as small as possible. H7 bore recommended.
- When inserting the cartridge heater in its insertion gap, its power supply cables and its head must be out of the gap. Nevertheless, the cartridge heater must not be more than 5mm out of the insertion gap: risk of destruction of the heating area.
- Make sure there is no grease on the head nor on the leads: risk of destruction of the cartridge heater.

#### WARRANTY LIMITATION:

- The warranty get stopped when instructions here above mentioned are not respected, including: fixing, transformation, incorrect voltage, destruction of the connection (cable) even accidental one, etc...
- In case of claim, send back the material to carry out an assessment.

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