

BFV_{IBC} TANK-HEATERS

IBC/Tote tank-heaters installation manual



Installation manual

IBC tanks standard heaters



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Security instructions

Important

- Read and make sure you understand this manual before installing the heating blanket.
- Not understanding this manual correctly can cause serious accidents, injuries, and structural damage.

General points

No modifications or alterations can be made to the heating blanket without authorisation from the manufacturer, in the event of this, the guarantee will be invalidated.

National standards and safety regulations must be observed.

Fundamental safety instructions



Anyone involved with the operation, maintenance and repair of the heating jacket should read and be aware of the contents of the instruction manual.

The heating jacket should only be operated by trained personnel.



The mains supply connection has to be in accordance with the corresponding regulations. For safety reasons the equipment must be only operated, if a Residual Current protective Device (RCD) with a release current of 30 mA is connected upstream. This must be checked by a qualified electrician.

According to current regulations, electrical resources must be checked periodically.



Repairs on the electrical components in the heating jackets must be carried out by an electrician or trained personnel under the supervision of an electrician.



The heating jacket should only be used when it is in full working order under the supervision of the operator.



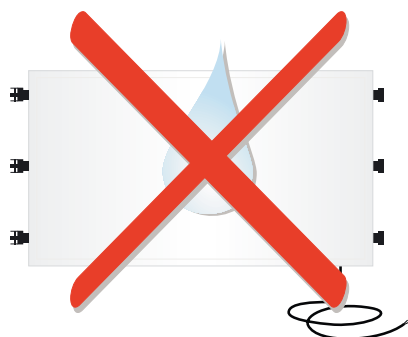
The heating jacket should not be used in damp or wet conditions and should not be exposed to aggressive chemicals. Do not use any other heating appliances in addition to the heating jacket.

Security instructions

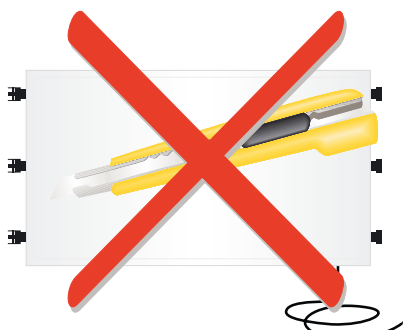
Important safety Instructions

The user who has not read or understand all the steps in these instructions is not qualified to use this product.

- Check for suspected damage to the heater like rips, punctures, etc.
- Never immerse the heater into liquids.
- Keep sharp metal objects away from the tank-heater.
- Avoid volatile fuels near the heater when it is running.



Do not dip into liquids



Do not expose to sharps



Avoid volatile fuels

- Do not use the heater with tears or breaks in the surface.
- If the heater is damaged or malfunctions, do not repair the heating blanket, contact the manufacturer.
- Do not crush the heater or subject it to severe stress, neither the power input cable (mains cable).
- When the heater is not in use, unplug from mains.
- Before removing the heater, wait until it is cold.
- Use the heater for its specific purpose, do not use it for other applications.
- Do not overlap the blanket when the tank-heater dimensions are larger than the container.

The end user must meet the following requirements

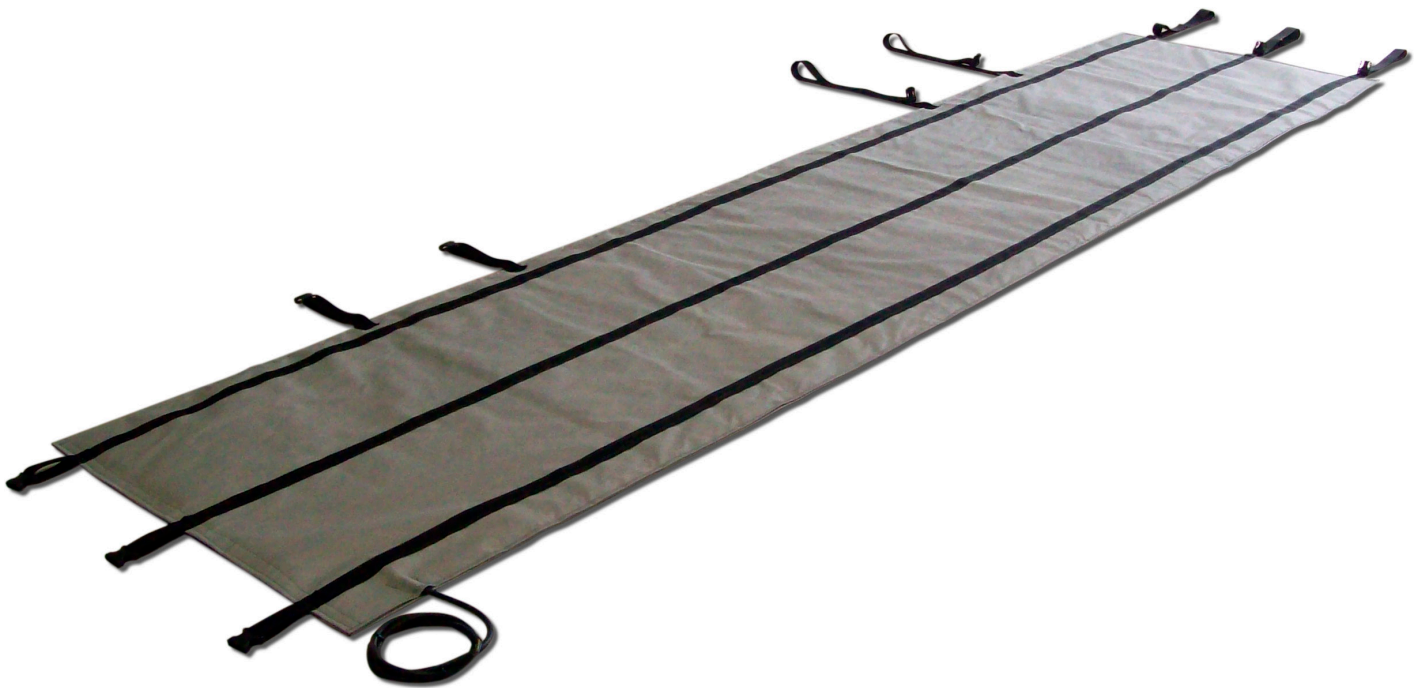
- Only qualified personnel are authorized to handle and connect the electrical wiring.
- All electrical wiring must follow the electrical applicable regulations.
- The final installation and wiring must comply with current regulations.
- The end user is responsible for providing a secure network and, if necessary, give it the necessary mechanisms for maximum safety (thermostats, icp, breaker, etc.).

Heating blankets for IBC/Tote tanks

Use and intended purpose

The **BFV**IBC heating blankets are designed for controlling and maintaining the temperature of drums (plastic or metal) from 25 to 200 liters.

- Viscosity control
- Freeze protection
- Temperature maintenance
- Solids fusion
- Heating to a required temperature
- Thermal mix



BFV
IBC/Tote

General characteristics



BFV
IBC tote

Technical characteristics

Range	BFVIBC
Application areas:	Temperature control and heating for IBC/Tote tanks 1.000 L
Power delivery at 230 V - 50 Hz:	Depending on model. See label or technical data sheet of the heating blanket
Maximum working temperature:	90° C ± 5° C
Minimum working temperature:	- 40° C ± 5° C
Heating conductor:	Ni/Cr 80/20
Conductor insulation:	Thermal silicone double insulation
Maximum working temp. of the conductor:	- 40 / 180° C
Heating blanket insulation:	Siliconed fiberglass fabric
	100% Textured filament fiberglass
	Treatment: One side silicone translucent
	Weft: EC-9-136 Tex * 1
	Warp: EC-9-136 Tex * 1
	Tensile strength
	Weft: 5000N/5 cm
	Warp: 3000N/5 cm
	Total thickness of the heating blanket: 14 mm
	Fabric: Cross Twill
	Fire resistance: IMO Res. MSC.61(67) FTP - Cod
Approximate dimensions:	4.400 x 1.000 x 14 mm
Type of fastener device:	Nylon straps with plastic buckles
Dielectric strength:	1.500 V 1 min. ≥ 50GΩ
Power cable:	Depending on model. See label or technical data sheet of the heating blanket
Standards:	2014 / 35 / UE
	2014 / 30 / UE
	EN60335-1
	EN ISO 12100-1 & 2
Safety thermostat:	Thermal fuse 130° C
Thermostat:	AT056: -10 / 90° C ±4° C 16A 230 V - 50 Hz Acerinox bulb and capillary sensing



BFVIBC tank-heater

Installation / Operating instructions:

Instructions for the **BFV**IBC range with an analogue thermostat AT056.

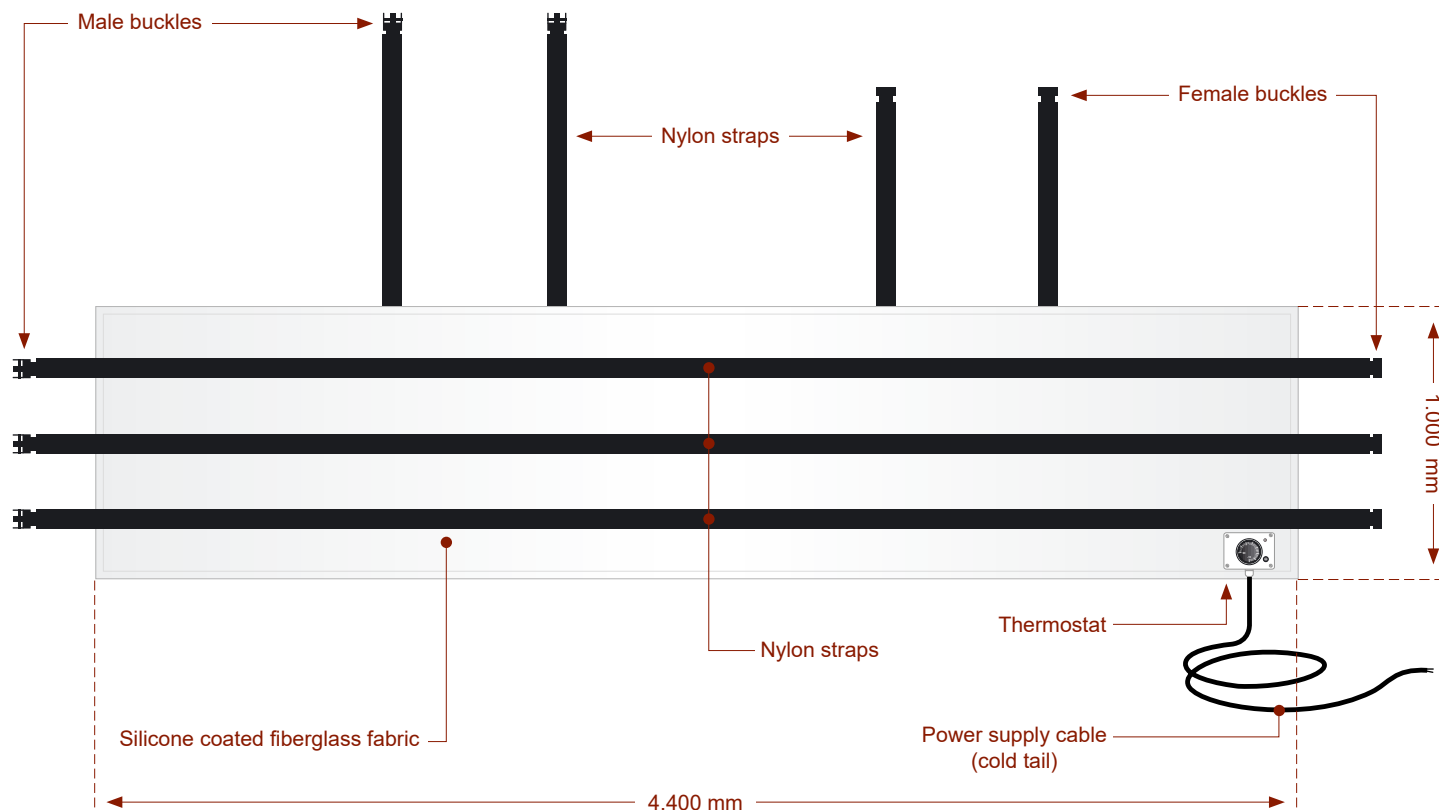
It is important to read and fully understand this manual before operating the tank-heater.

Step 1

- 1.1. Get the IBC heating jacket out of the box.
- 1.2. Make a visual inspection of the heating blanket. Do not use the heater if it shows a torn or damaged.
- 1.3. The inspection and installation should be done by at least two qualified employees.

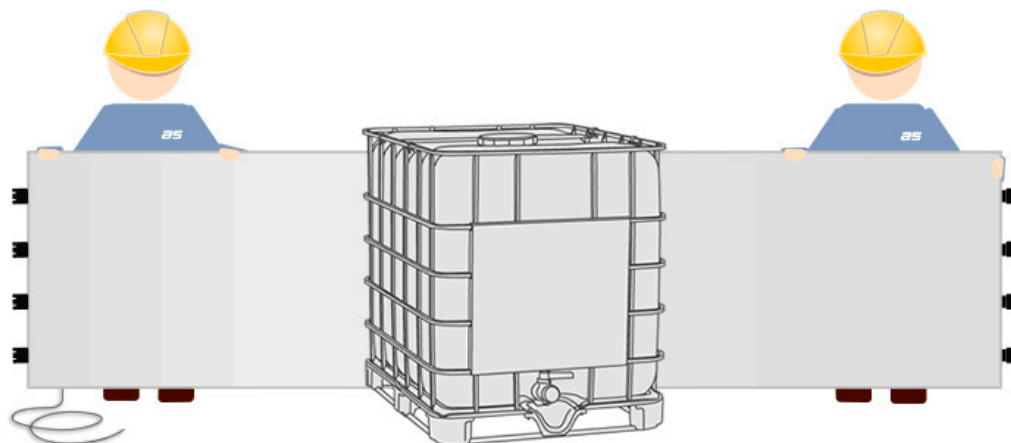
Step 2

- 2.1. Place the heater on a clean and dry surface.

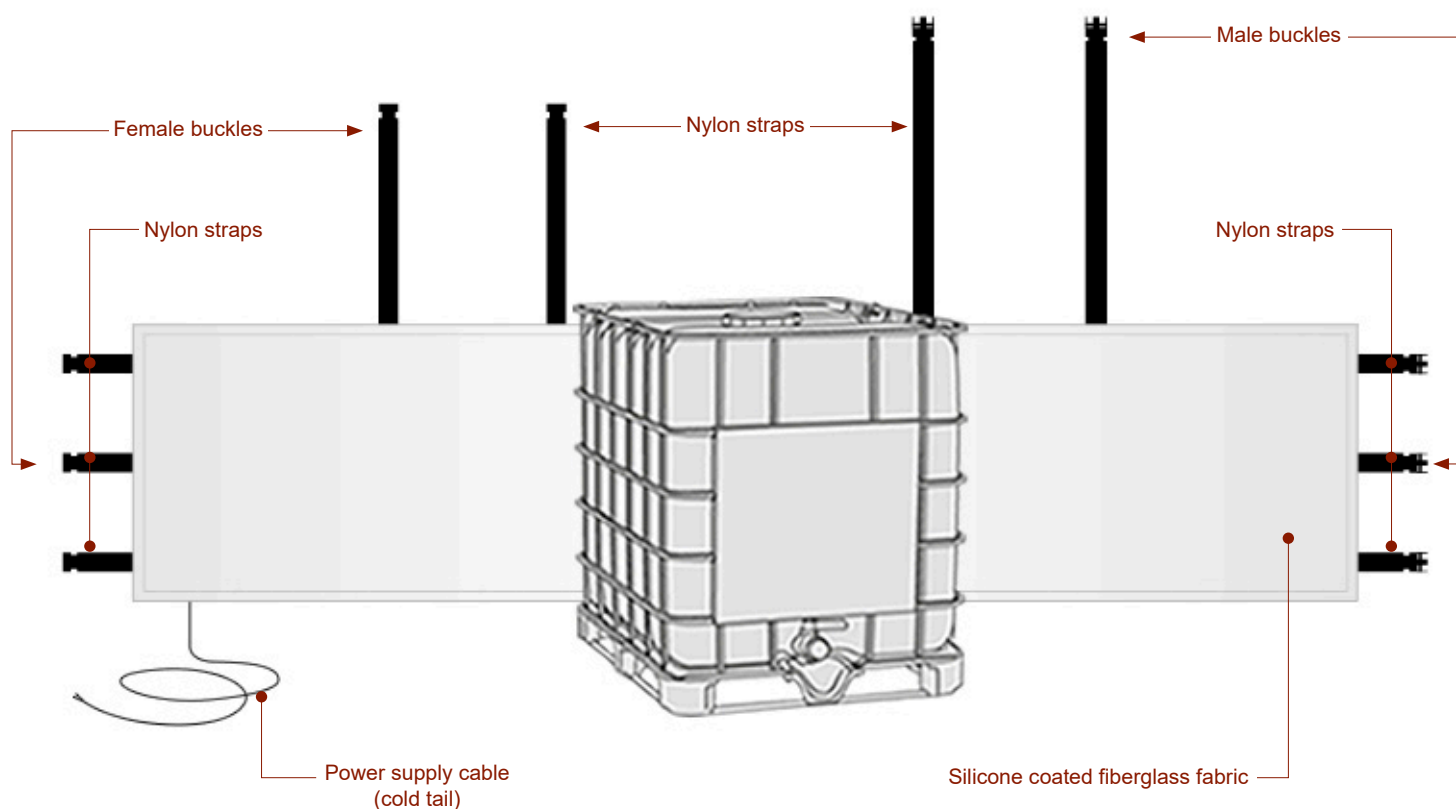


Installation of the BFV IBC tank-heaters

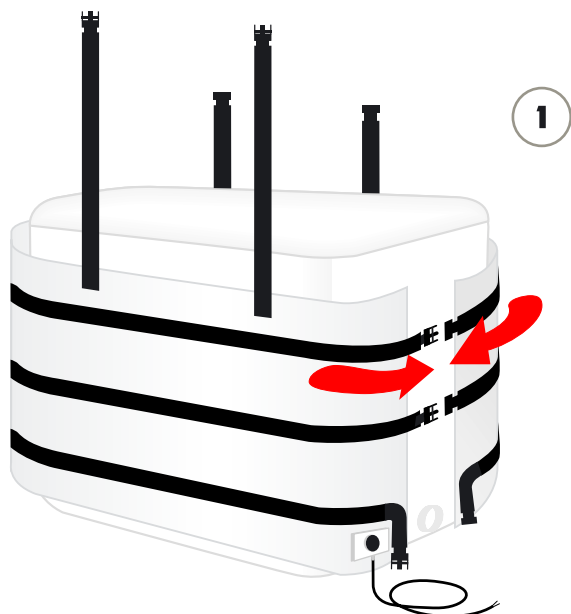
It is recommended that the installation of the blanket be carried out, at least, by two qualified workers.



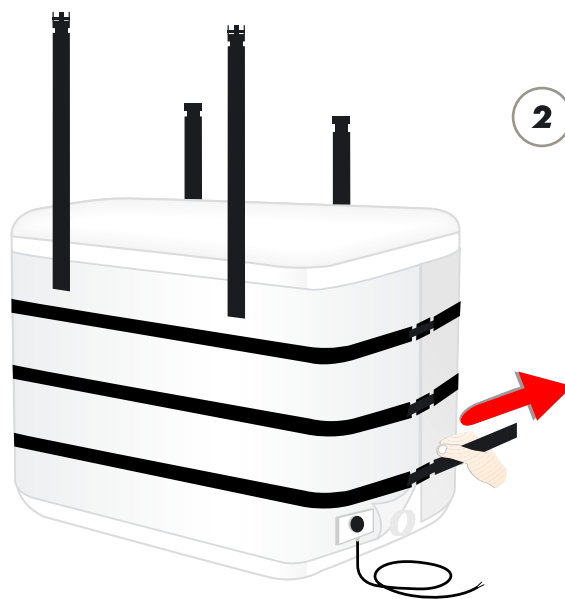
2.2. Place the blanket around the tank, ensuring that the power supply cable of the heating blanket stays at the base of the tank, and the upper straps are facing up.



Installation of the BFVIBC tank-heaters



2.3. Fasten first the upper transverse strap, but don't tighten it strong until you have fastened the other straps.



2.4. Once the other two straps have been fastened tighten up until the tension of the straps is adequate.



2.5. Once the transversal straps have been adjusted, fasten the vertical straps.



2.6. When the placement process is finished, verify that the overall pressure of the straps is correct.

- To get the best performance from the heating blanket, it must be tightly fitted to the body of the drum

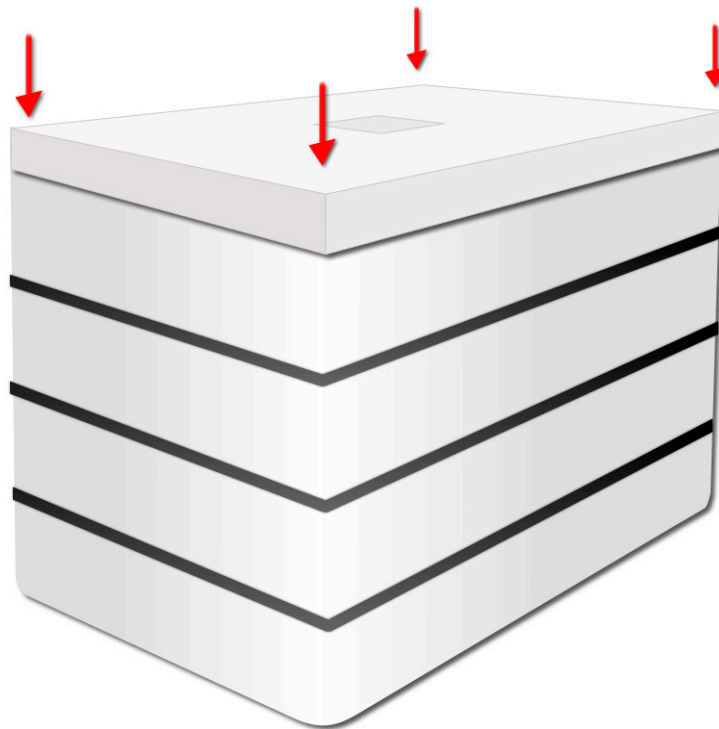
Installation of the BFVIBC tank-heaters

IBC Top cover (optional): Top cover to complement the heating jackets for IBC/Tote tanks.

- Unheated top cover.
- Upper window to access the tank cap.



2.7. If you have also purchased the non-heated top cover (optional), once you have the heating blanket correctly positioned around the tank, we will fit the cover so that it fits correctly.



Thermostat

AT056-i

These instructions are for heating blankets that incorporate the analog thermostat integrated **AT056-i**:

- BFVIBC440010002800
- BFVIBC440010002000/TH2
- BFVIBC440010002800/400
- BFVIBC440010003000/TH3

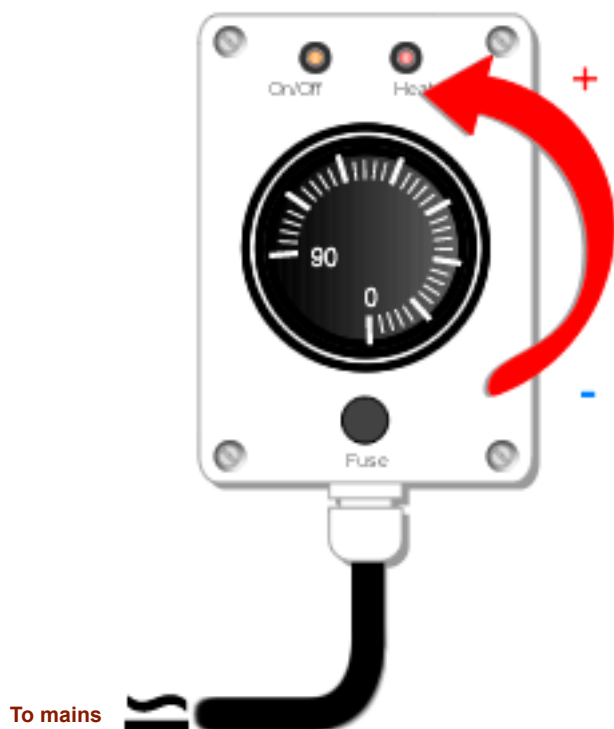
AT056-i



AT056-i: Integrated economic analog thermostat:

- Analog thermostat.
- Temperature range: 0-90° C
- Voltage: 230 V
- Maximum load current: 15 A
- On/Off differential: 4° C
- Inner sensor

For heating blankets incorporating the adjustable analog thermostat **AT056-i**: Set the thermostat knob to the desired working temperature. The thermostat can be adjusted from 0 to 90° C.



AT056-i
INTEGRATED



• **Attention:** Removing the seal invalidates the warranty.

Thermostat

DP400

Programmable digital thermostat

These instructions are for heating blankets that incorporate the digital programmable thermostat **DP400**:

- BFVIBC**440010002000/400/3** IP65
- BFVIBC**440010002800/400/3**

DP400



DP400: Programmable digital thermostat

- IP65
- Magnetothermic
- Temperature range: -40/140° C
- Voltage: 3~400 V - triphasic
- Connector: RSTN with grounding

* You will find the instruction handbook attached to the thermostat.

If your heating blanket incorporates the **DPA** programmable digital thermostat, you must follow the instructions in the manual that will be included with the thermostat.

Operation and maintenance

Operation

It is very important that when we use the heating blanket to heat the drum and its contents, safety is guaranteed.

1. Check the electrical cable and the distribution box before using the heating blanket. Let's check that they do not present any damage.
2. Wrap the drum that we want to heat with the heating blanket.
3. Tight the heating blanket with the straps so that it adapts well to the container, firm, but without being extremely tight.
4. Make sure that the container is always open, to avoid pressure build-up from heating.
5. The heating blanket has an adjustable thermostat. We will turn the knob until we get the desired value. The temperature It is not the inner temperature, but the temperature of the walls of the container.
6. Connect the heating blanket only when it is properly placed, the top of the container is open and the temperature is regulated.
7. Monitor the heating process. We will not let the heating blanket work without the supervision of a qualified operator.
8. ATTENTION! During heating, superheated vapors may be released.
9. ATTENTION! During heating, hot surfaces will emerge.
10. When we finish using the heating blanket, we will first unplug it from the power supply and let it cool down to not suffer burns.
11. Let the blanket cool by spreading it carefully on a flat surface. We will not leave it rolled up or folded.
12. Once cold, we will keep it in a place where it is not exposed to moisture, sharp objects, etc.

Maintenance and conservation

Before cleaning the heating blanket, we will unplug it from the power supply.

We will pass a damp cloth on the surface of the blanket.

We will not use solvents or bleach and we will never immerse it in any type of liquid.

Waste management



Following the Electrical and Electronic Equipment Act, owners of old equipment are required by law to take old electrical and electronic equipment to a waste collection point. Help protect the environment; do not throw your old equipment in the household trash.

Troubleshooting

Contact details

Please, read this manual before you contact **Elementos Calefactores AS**, or your local distributor.

This guide is designed to answer frequently asked questions. If you can not identify the problem or need additional assistance, please contact **Elementos Calefactores AS** through the following data:

Telf. 00 34 93 486 36 82

Fax: 00 34 93 486 38 14

E-mail: as@elementoscalefactores.com

Troubleshooting solutions guide

The tank-heater does not heat:

1. Make sure the blanket is connected to the correct voltage supply. You will find technical specifications of the tank-heater at the label attached to the cord or at the product data sheet.
2. Unplug the heating blanket:
 - For blankets with the analogue thermostat **AT056-i** (AT057-i, AT058-i...), turn the radio button at 0 °C, re-connect it and re-select the desired temperature work.
 - For blankets with the **DPA** digital thermostat, turn-off the thermostat, turn it on again, and check the set temperature SET POINT.
3. Check that the tank-heater is connected to a magneto-thermic switch with enough amperage.
4. Verify the power supply cable of the heating blanket, is not damaged.

Important

Remember that the **BFVIBC** heating jackets range, are designed for a specific use. Giving them another use can affect its effectiveness, cause structural damage, and even cause serious accidents to the personnel who handle the blankets.

The improper use or manipulation of the heating blanket, as well as its components and accessories, may invalidate the warranty.



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