

DRUM HEATING BFV

Drum heaters installation manual



- Heating cables
- Flexible electrical resistors
- Heating bases
- Heating modules
- Crankcase heaters
- Heating blankets
- Heating mats
- Heating foil
- Thermostats and temperature control devices
- Heating kits and accessories

Installation manual



BFV drum heaters

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Introduction to the installation manual

- Please read carefully this manual before installing the **BFV** drum heater.
- Not understanding clearly this manual may be the cause of serious accidents or injuries.
- The **BFV** drum heater must be installed only by qualified personal.

BFV drum heaters range

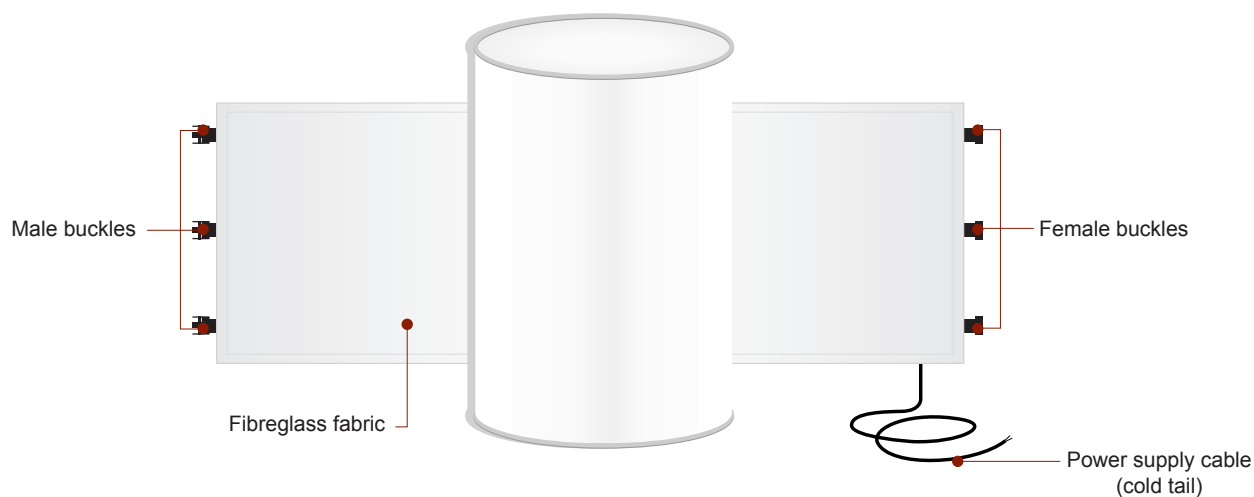
Utilities of the product:

The **BFV** drum heaters, are designed to heat the contents inside either metal or plastic drums.

For an optimal function of the drum heater, read the instructions carefully before use.



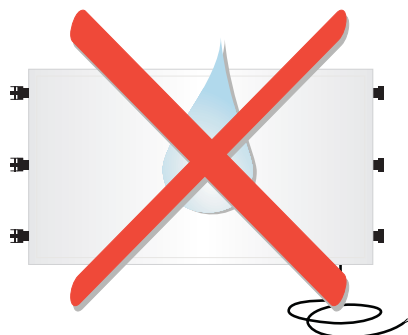
Model BFV



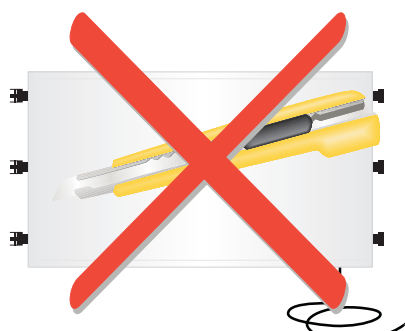
Important safety Instructions

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 drum 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 specific drums, not used for other applications.
- Do not overlap the blanket when the drum 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.).

Main specifications

- Complete coverage of double layer aluminized fiberglass, plus thermal silicone inner elements.
- On heat zone.
- Estimated thickness: 10 mm.
- Voltage: 230 V.
- Total power: see identification label or datasheet..
- **Temperature control device:**
These are two of the options we recommend.

DPA25A



Digital programmable thermostat **DP25A:**

- Control panels prepared to work outdoor, from -20 °C to +140 °C.
- Case with transparent window: IP-65
- Connection entrances: PG-9
- Relay output: 25 A
- Allows different types of sensors: PTC, PT100, etc.
- Voltage: 230 V

AT056



Economic analogue thermostat, model **AT056:**

- Temperature range: 0-90°C
- Voltage: 230V
- Maximum load current: 15 A
- On/Off differential: 4°C
- Sensor: Bulb and capillary sensing - 1 metre.

- Operating temperature range of the heater: 0-90 °C.
- Power supply cable: 1,5 m. length, 3 x 1,5 mm² or 3 x 2,5 mm² (depending on the model), no plug, bare wire.
- Fits any container having the following dimensions:

Drums	200 Litres	200 Litres	200 Litres	100 Litres	50 Litres	25 Litres
Reference	BFV1770150750	BFV17704501000	BFV17709001500	BFV1385150750	BFV1005150300	BFV845150200
Length	1.770 mm	1.770 mm	1.770 mm	1.385 mm	1.005 mm	845 mm
Width	150 mm	450 mm	900 mm	150 mm	150 mm	150 mm
Power (W)	750 W	1.000 W	1.500 W	750 W	300 W	200 W
Voltage (V)	230 V					
Temp. Range	0 - 90 °C					

- All units are fitted with adjustable straps for easy connection.

Installation / Operating instructions:

Instructions for the **BFV** range with digital control box DP25A.

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

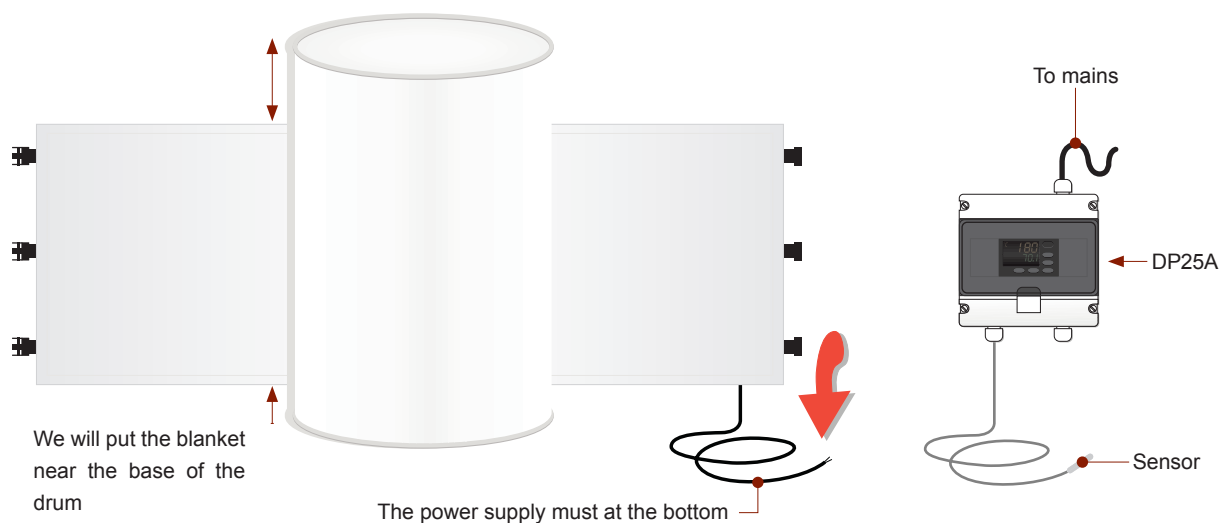
STEP 1

- 1.1. Get the drum heater out of the box.
- 1.2. We will make a visual inspection of the heating blanket. We will not use the heater if it shows a torn or damaged.
- 1.3. The inspection and installation is preferably done by two people.

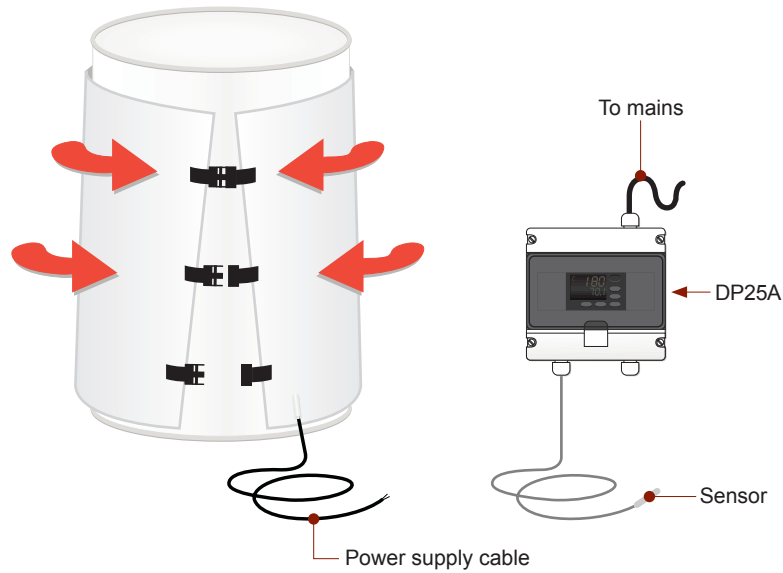


STEP 2

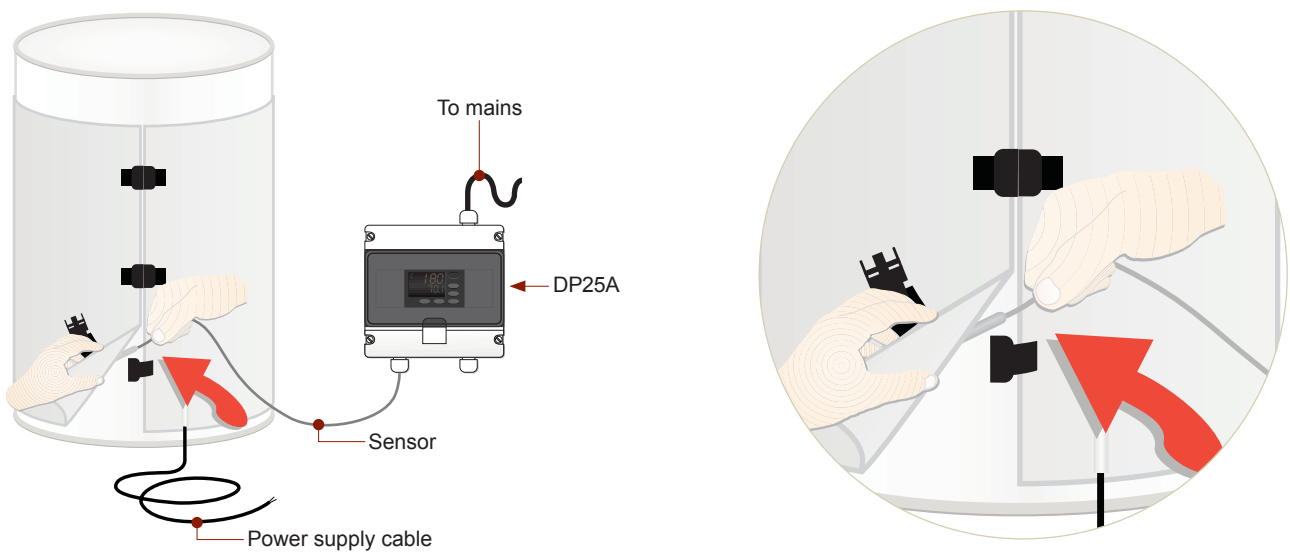
- 2.1. Place the heater on a clean and dry surface.
- 2.2. Look where to place the blanket: We recommend the bottom of the drum or container. The power supply of the heating mantle should be at the bottom.



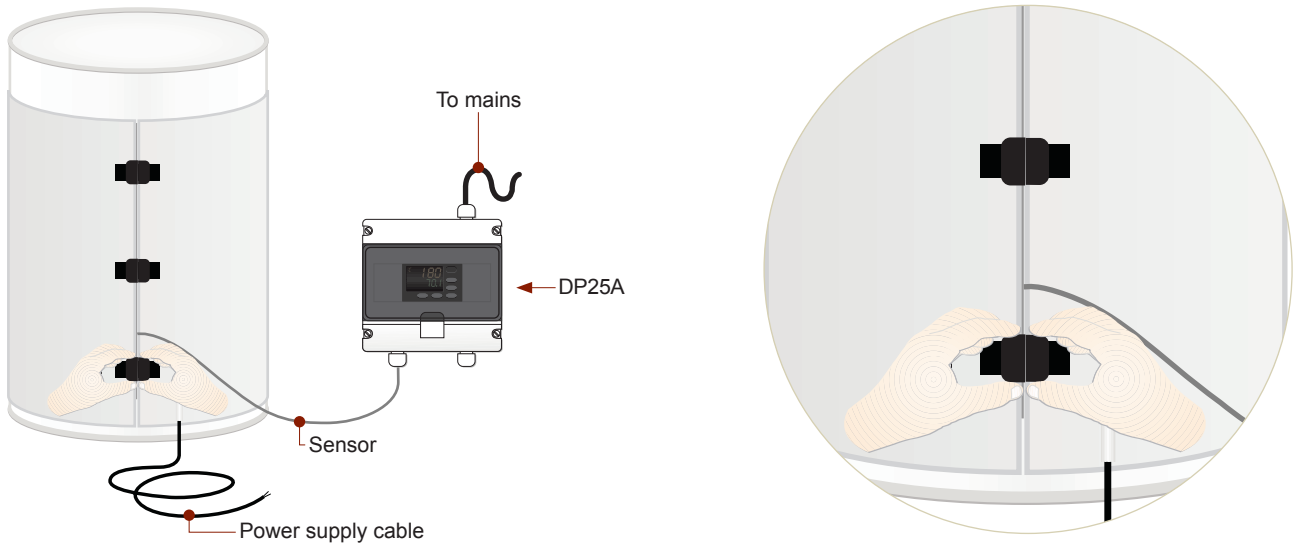
2.3. Adjust the blanket to the body of the drum with the help of the nylon straps. Close the upper buckle first and then the buckle right below, keeping the last buckle open, where we will place the sensor.



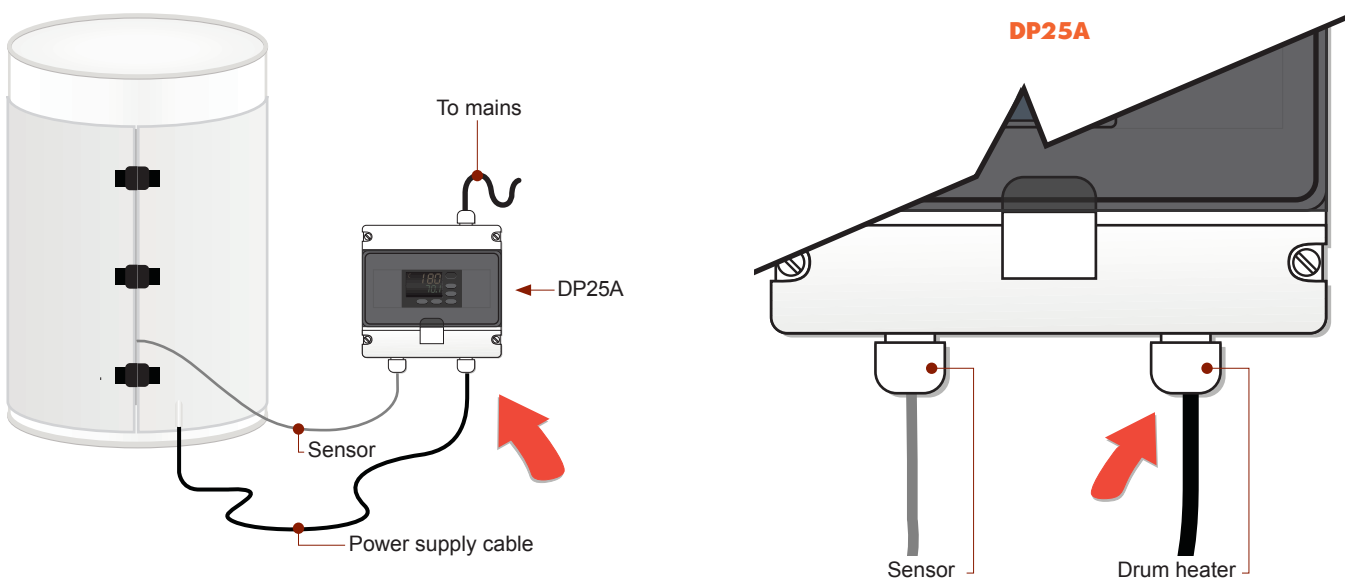
2.4. Insert the sensor between the drum and the blanket, preferably between the second and third buckle.



2.5. Close the last buckle, and check one by one the straps, making sure the pressure is adequate.

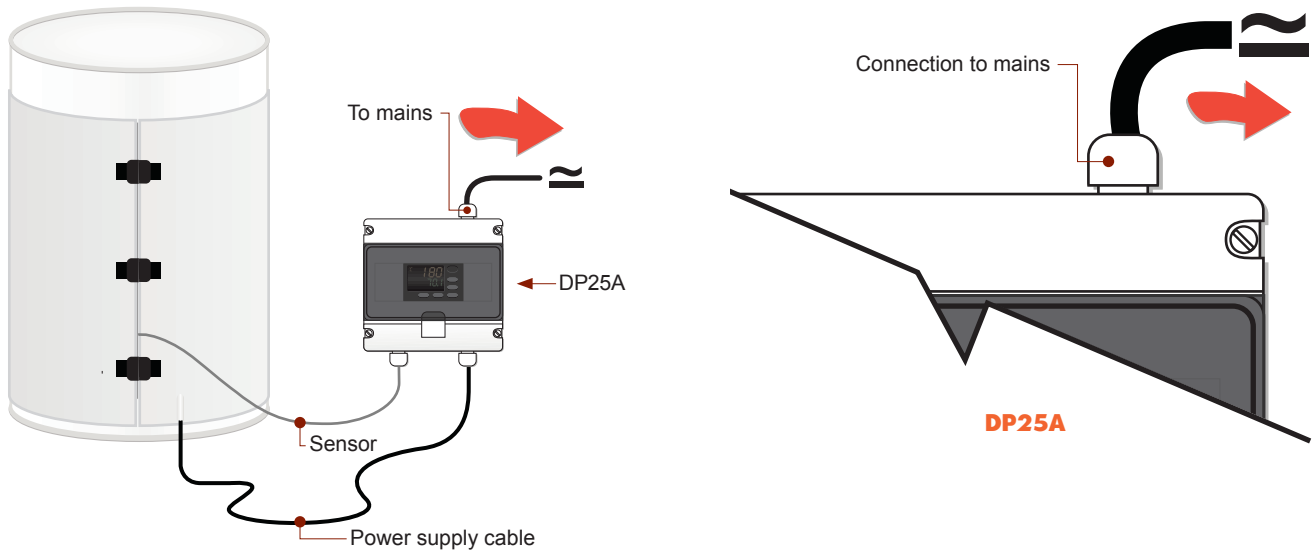


2.6. Connect the power supply of the blanket to the thermostat, using the terminal labeled as "Resistance" to make the connection.



STEP 3

3.1. Connect the input power cable to the mains.





3.2. The network where the drum heater is connected, should be properly evaluated taking into account power and voltage of the blanket, to avoid failures or errors.

STEP 4

4.1. Operating instructions of the **DP25A**:

Keys

 UP	 DOWN	 fnc	 Set	 aux
Scrolls through menu items Increases values on the display Programmable by parameter.	Scrolls through menu items Decreases values Programmable by parameter.	Opens QuickStart menu ESC (exit) function.	Opens Setpoint editing mode Opens the Programming Menu Activates functions Confirms commands.	Programmable by parameter.

Display and LEDs



Process value (PV):

Used to display the process value, and the labels of parameters, alarms and functions.

Set value (SV):

Used to display the setpoints, parameter values, function statuses, other statuses.

S.Str

ON if the Soft Start function is active;
OFF in all other cases;

Alarma

ON if there is an alarm; otherwise
OFF; flashes if an alarm is silenced.

out1 - out2

ON when output active; otherwise OFF;

horas

Indicates whether the temperature display is in °C or °F;
OFF for other units of measurement.

out2 Flashes if there is a delay, a protection, or activation is blocked.

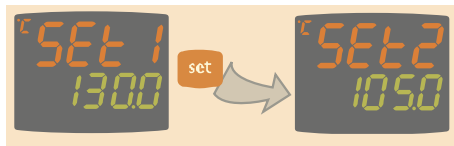
Aux

ON when output active; otherwise OFF.

Setting the Setpoints



1 When the initial display is present, press and release the "Set" key.



2 The PV display shows the label **SET1**, and the SV display shows the current Setpoint value. Press the "Set" key again to display Setpoint 2 in the same way.



3 The "UP" and "DOWN" keys can be used to change the Setpoint value shown on the SV display.



4 When the "Set" or "fnc" key is pressed, or the timeout has elapsed (15 sec), the new value appears and the initial display returns.

Installation / Operating instructions:

Instructions for the BFV range with the analogue thermostat AT056.

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

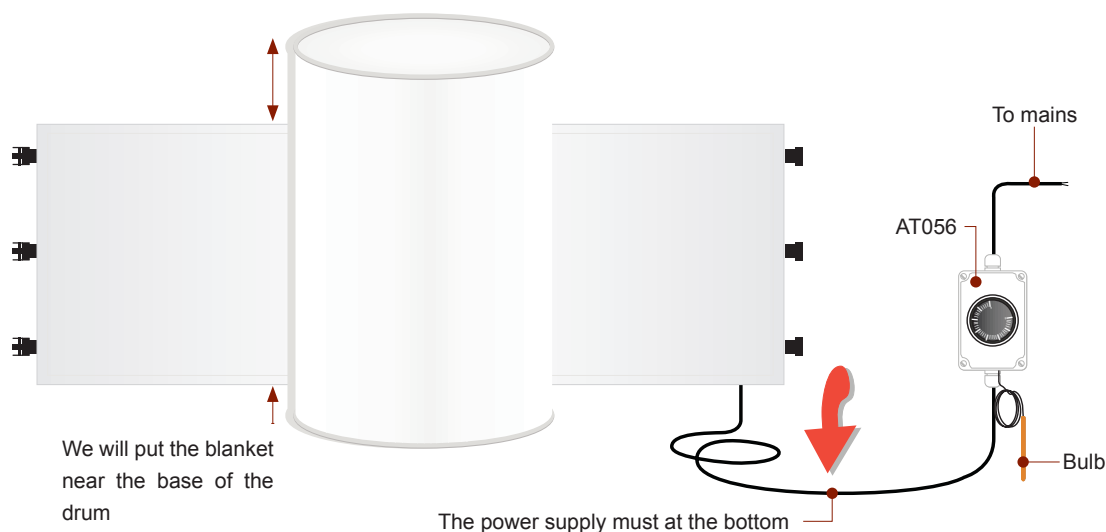
STEP 1

- 1.1. Get the drum heater out of the box. We will be careful with the thermostat AT056, connected to the blanket by the power supply cable.
- 1.2. We will make a visual inspection of the heating blanket. We will not use the heater if it shows a torn or damaged.
- 1.3. The inspection and installation is preferably done by two people.

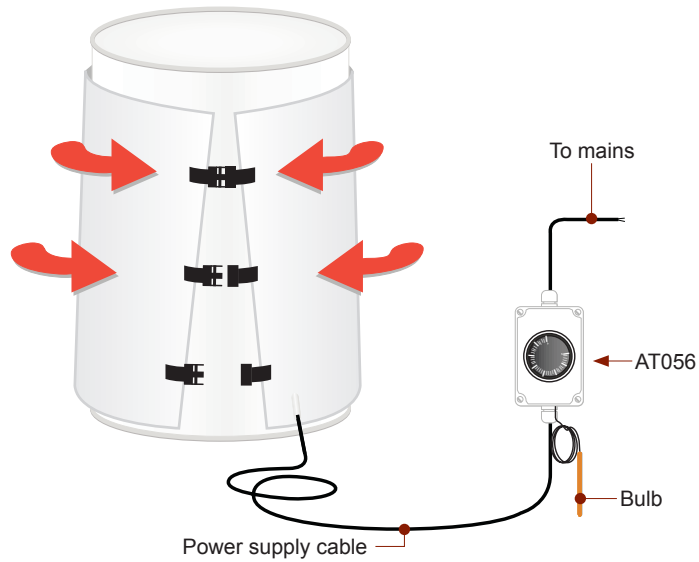


STEP 2

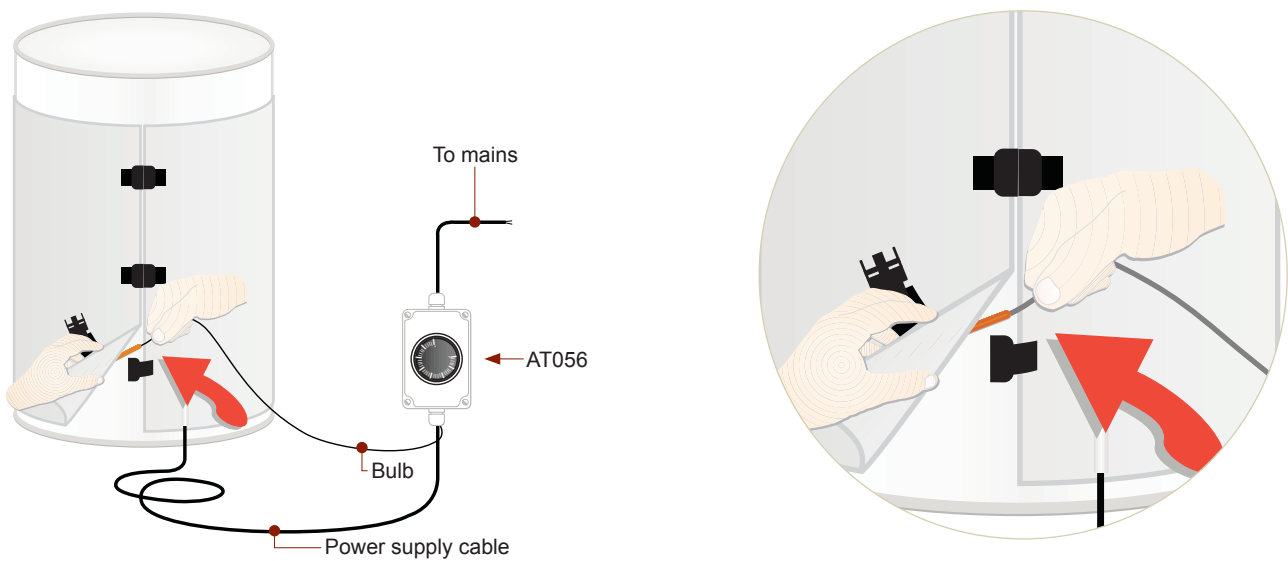
- 2.1. Place the heater on a clean and dry surface.
- 2.2. Look where to place the blanket: We recommend the bottom of the drum or container. The power supply of the heating mantle should be at the bottom.



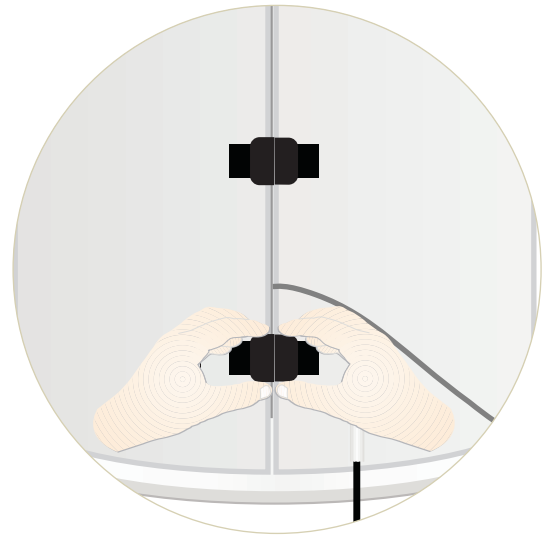
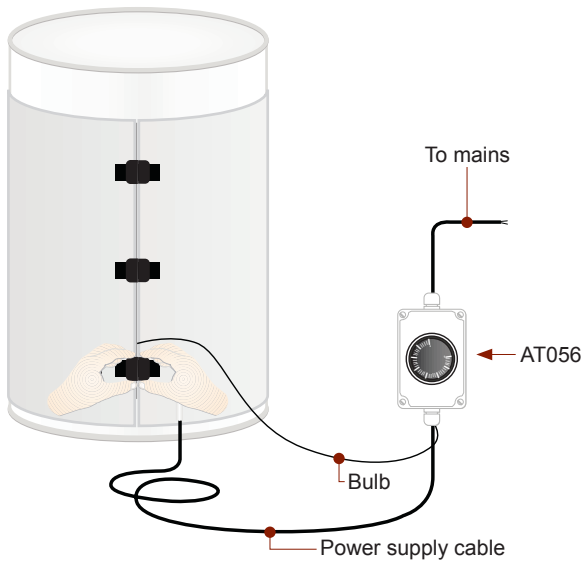
2.3. Adjust the blanket to the body of the drum with the help of the nylon straps. Close the upper buckle first and then the buckle right below, keeping the last buckle open, where we will place the bulb.



2.4. Insert the bulb between the drum and the blanket, preferably between the second and third buckle.

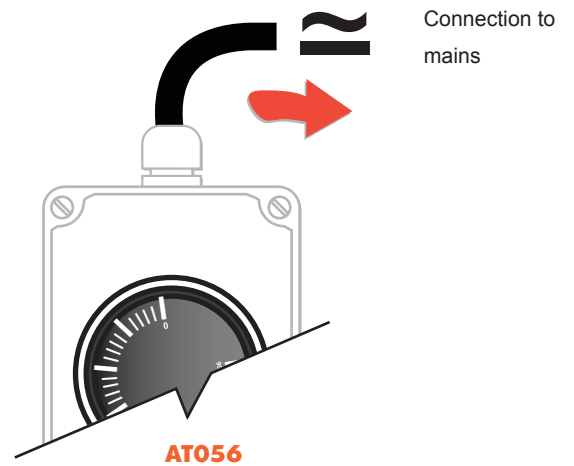
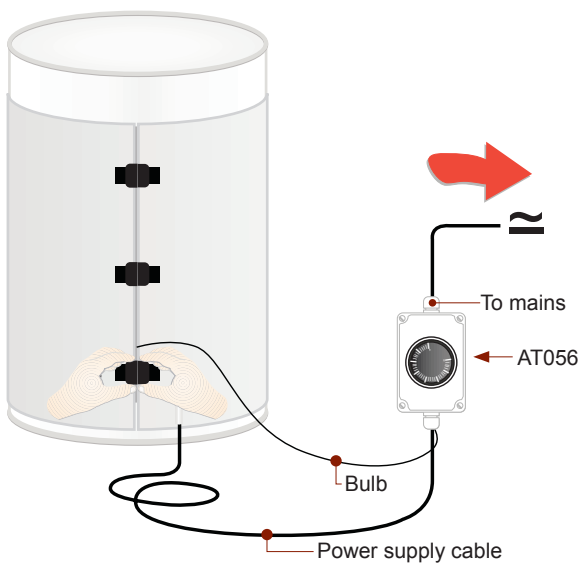


2.5. Close the last buckle, and check one by one the straps, making sure the pressure is adequate.



STEP 3

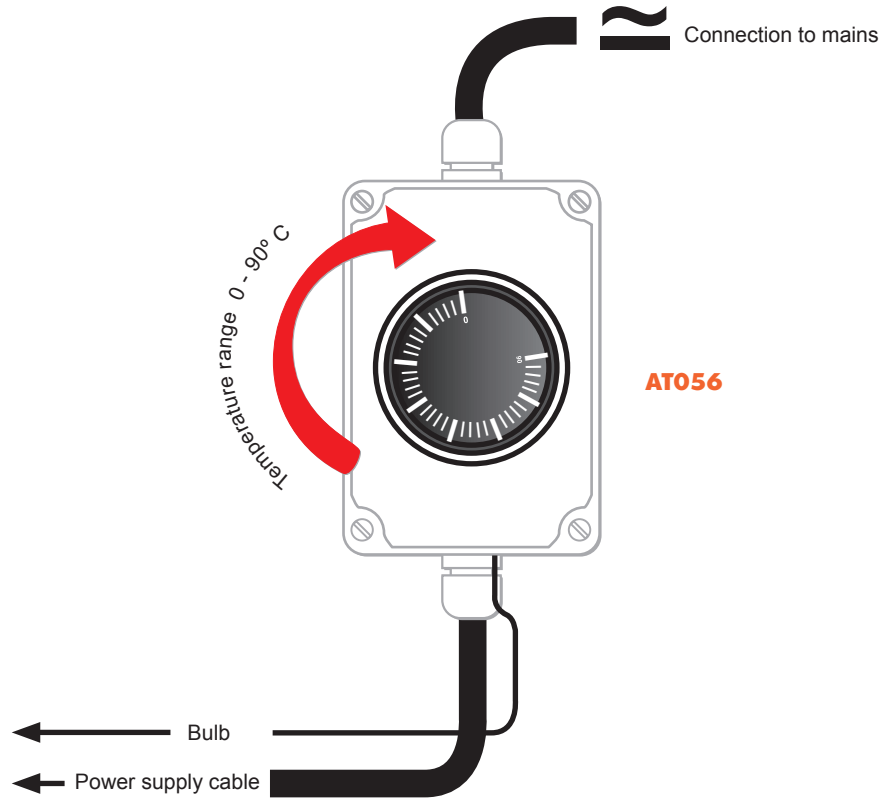
3.1. Connect the power supply cable to the mains.



3.2. The network where the drum heater is connected, should be properly evaluated taking into account power and voltage of the blanket, to avoid failures or errors.

STEP 4

4.1. Set the radio button of the thermostat to the desired working temperature. The thermostat can be adjusted from 0 to 90 ° C.



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 drum heater does not heat:

1. Make sure the blanket is connected to the correct voltage supply. You will find technical specifications of the drum heater at the label attached to the cord or at the product data sheet.
2. Unplug the heating blanket:
 - **For blankets with the DP25A digital thermostat:** Turn-off the thermostat, turn it on again, and check the set temperature SET POINT.
 - **For blankets with the analogue thermostat AT056:** Turn the radio button at 0 °C, re-connect it and re-select the desired temperature work.
3. Check that the drum heater is connected to a magneto-thermic switch with enough amperage.
4. Verify the power supply cable of the heating blanket, is not damaged.

Remember that **BFV** drum heaters range, are designed for a specific use, giving it another utility may vary its efficiency and performance..



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• **Heating floor** •

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