

IBC SILICONE BAG-IN-BOX BASE HEATER

Installation & Operation



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About this manual

This manual applies to all standard and custom versions of our Bag-in-Box IBC base heater, unless otherwise stated. It was originally written in English. Other language versions are available on request or at the following address:

heating-manuals.com/



Product warranty

This product is warranted against defects in materials and workmanship within normal industrial use for one year or up to 1600 hours of use from the shipment date. If a defect occurs during the warranty period, the manufacturer will repair or replace the product free of charge. This warranty does not apply to any defect, failure, or damage resulting from improper use or inadequate maintenance and care.

Country of origin

This product is shipped from Denmark, EU.

Warning!



Read and understand this guide before installing and operating the product. Failure to follow the instructions may result in injury, electric shock, fire, or damage to the heating element or the heated material.

Important safety instructions

- For industrial use only. Must be operated by trained personnel familiar with heating equipment safety. It is not intended for household use or for heating living beings.
- Do not use this product near flammable liquids, materials, or in areas with explosion risk. For such environments, we recommend using our ATEX-certified products.
- The heater is intended for a specific size of Bag-in-Box-type IBCs. If used with other types of IBCs, this is done at the customer's own responsibility. We advise you to use it only with IBCs that have a solid base or a metal plate beneath the heating element, as grid-type bases on some IBCs may damage the heater.
- Always inspect the heater for physical damage before use.
- Never turn on the heater without a filled container to cool it.
- Use only with materials or liquids that allow heat transfer.
- Always monitor the heater while in use.
- Disconnect the heater when not in use.
- Never immerse the heater in liquids.
- Keep the heater away from sharp objects and do not drive or walk on it. Avoid sharp folds in the heating element, as they may damage the heating wires inside.
- Do not attempt to repair or modify damaged or faulty heaters. If the heater is damaged, disconnect it and contact the supplier.
- The end user is responsible for providing a suitable power outlet for the heater. See the "Preparation and electrical connection" section for detailed guidance.

Preparation and electrical connection

Unpacking and Inspection

Unpack and inspect the heating element for transport damage. Do not use the heater if damaged.

Standard Power Connector

Our heating elements are supplied with a Schuko combi connector as standard (120V models are supplied with a standard US connector). Other connector types are available on request.

Changing the power connector

If changing the connector to a local standard, a three-pin earthed version must be used.

The mains cable includes three colour-coded conductors:

- Line - Brown (Black on US models)
- Neutral - Blue (White on US models)
- Earth - Green/Yellow (Green on US models)

Do not shorten the mains cable. The supplied length complies with safety regulations.

All electrical wiring must be carried out by trained personnel and comply with local laws and regulations.

Power Supply

The user must ensure that the correct power supply is available. The power connection must be rated to support the heater's voltage and power.

Appropriate disconnection and protective devices must be installed. We recommend using a residual current device (RCD) or ground fault circuit interrupter (GFCI) for additional safety.

Health and Safety

Disconnect from the mains supply before handling if any physical damage is visible, to avoid the risk of electric shock.

Operating the heater

1. Check that the heating element and controller are intact and that there is no visible damage.
2. Ensure that the container and the material can withstand the setpoint temperature.
3. Place the heater at the bottom of the IBC before inserting the bag or tank. Ensure that there is a solid and level foundation for the heating element to avoid damage when pressure is added from the contents of the IBC.
4. Make sure that the controller is not covered.
5. Connect the heating element to the controller.
6. Connect the mains cable to the power supply and switch on the power.
7. Adjust the controller to the desired temperature.
8. If desired, activate the timer or ramp-up function on the controller as described on the next page.
9. Check the heating setup after 10 minutes to ensure that it is heating as expected.
10. Do not leave the heater unattended during operation.

Handling after use

Do not pull the cables when disconnecting. Always pull the plugs instead.

Storage

Do not fold the heating element when not in use, as sharp bends may break the heating wires inside.

Store using one of the following methods:

- Stack the heating elements flat and unfolded.
- Roll the heating elements loosely. Do not use the mains cable to wrap around the heating element. Secure with tape or straps if necessary. Do not stack the rolled elements higher than they can remain uncompressed.

Operating the DigiTherm controller

Indication of active heating element

A small dot in the lower right corner of the display will light up when the heating element is active.

Setpoint

Adjust to the desired temperature (setpoint) by pressing the up and down arrows. When the desired temperature is shown on the display, press the OK button.

Timer (A3)

Press the menu button, select A3 in the menu using the arrow buttons, and press OK. Set the desired runtime in hours and minutes [hh:mm]. The controller will stop activating the heating element when the selected time is reached. The remaining time will alternate on the display.

When the timer runs out, the display will show 00:00 and the heating element will remain inactive until the controller is rebooted.

Set the timer to 00:00 to disable it. Rebooting the controller will also disable any active timer and return the controller to normal untimed operation.

Ramp-up (A4)

This function gradually increases the setpoint from the starting temperature until the selected temperature is reached. The value alternates on the display.

Press the menu button, select A4 in the menu using the arrow keys, and press OK. Select the desired limit for the temperature increase in °C/min.

The controller remembers the setting after a restart, but the starting temperature is reset. Set the value to 0 to disable the function.

°C or °F (A5)

Press the menu button, select A5 in the menu using the arrow buttons, and press OK. Select the desired temperature unit and press OK to confirm.



Standby mode

Some versions of the DigiTherm controller include a standby function that can be used to disable the heating element temporarily without disconnecting it. This version can be recognised by a power symbol on the OK button.



To activate or deactivate the standby function, press and hold the button marked with the power symbol for three seconds. The display will flash "OFF" while in standby mode. On this version, the timer will also enter standby mode when the timer runs out.

Hysteresis

The controller will deactivate the heating when the selected setpoint is reached and reactivate it when the temperature falls 3 °C below the setpoint. The overall hysteresis of the heating element depends on the sensor position inside the heater and other factors, and will always be greater than the controller hysteresis.

Additional information

For other controller types or further information, visit the manuals homepage via the QR code on page 2.

External DigiTherm controller

External DigiTherm controllers function the same way as the integrated DigiTherm controller.

Connect the heating element to the controller before connecting the power supply to avoid damage to the connectors.



Test

The base heater should be tested with a filled container of the correct size and type. The contents should be a liquid with low viscosity and good heat conductivity, such as water, to achieve the most accurate test results.

The temperature should be set to less than the boiling point of the contents.

Testing the heating element on a table or metal plate is possible, although not as accurate as testing with a container. Avoid testing it on the floor or another very large surface, as this can prevent the setpoint temperature from being reached and may cause the heating element to overheat.

Calibration

If calibration or testing is required, we recommend using a setup as described above and recording any deviation between the selected setpoint and the actual temperature at the desired measuring point. The DigiTherm controller cannot be calibrated, but a manual offset of the setpoint can be used to compensate for any difference if desired.

The controller and sensor do not have a recommended calibration interval, as deviations caused by usage conditions have a greater effect on results than normal component drift over time.

Cleaning and maintenance

- Wipe the heater with a damp cloth.
- Inspect the heating element for any physical damage to the heater itself, the cables, or the plugs.
- Ensure that the heater is completely dry before rolling, stacking, or reuse.

Disposal

Heaters, cables, and controllers must be disposed of as electronic waste. Refer to local regulations for detailed guidance on correct disposal.

Error codes (DigiTherm controller)

Code	Description	Solution
00	Relay failure.	Contact the supplier for repair or replacement.
01 T	Internal temperature of the controller is too high.	Disconnect the heating element and allow it to cool down. Check for damage and return it to the supplier if necessary. Identify and correct the cause of overheating before re-use.
11 12 14 S1 S2 S3	Temperature sensor error. The controller is unable to measure the temperature correctly.	Check all connections and reboot the controller if using an external version. Contact the supplier for repair or replacement if the fault persists.
L	Load not detected. May be caused by a missing connection when using an external controller, by a burned thermal fuse, or by a broken heating wire.	Check all connections and reboot the controller if using an external version. Otherwise, contact the supplier for repair or replacement.

Repairs and Service

All repairs or modifications to the product must be carried out by the manufacturer.

When contacting the supplier regarding a fault, please include pictures of any error messages and of the installation setup, together with a description of the use, setpoint, and other relevant factors.

When returning the product for repair, please follow the instructions on the Return Material Authorization Form (RMA) on the next page. This form is always in English and must be completed in English.

Return Material Authorization Form (RMA)

Please follow these steps

1. Fill out this form in English.
2. Contact us to obtain an RMA number and write it on this form and in the shipping documents.
Returns without an RMA# will not be accepted.
3. Follow the cleaning and packing instructions in the manual.
4. Place the completed form inside the box with the products.
5. Ship to the provided address.

Customer information

RMA#: _____

Company: _____

Contact: _____

Address: _____

City/Zip: _____

E-mail: _____

Phone#: _____

List of returned products

Qty	Order#	Reason for return

List of substances or types of dust in contact with the equipment

We do not accept products with residue from food or hazardous chemicals for service or repair. Please contact us if you have any questions regarding this.

Name or type of substance	Associated Hazards

Return Conditions Confirmation

Responsible for the shipment	Date & Signature

DECLARATION OF CONFORMITY

Seller	(or use stamp above)	
Name		
Address		
Country		
Tel		
Hereby declares that the machinery		
Name	Container Heaters	
Function	Container heaters designed for heating and maintaining the temperature of drums, IBCs, and similar containers in industrial applications. They share a common construction and are divided into two types: • Standard – with a maximum temperature of 90°C. • High Temperature – with a maximum temperature of 200°C. The container heaters are available in various sizes and power ratings. All heating blankets are thermostatically controlled, using either a digital controller, analog controller, bi-metal thermostat, or connection for an external third-party controller. The products are intended for use in non-explosive environments and are connected to standard 230V AC (or 120V AC for certain models).	
Type - model	All standard or custom models, unless otherwise defined.	
Produced - year	2016-	
Manufactured in accordance with the following EC directives		
	2006/42/EF - Machine Directive	
	2014/35/EU - Low Voltage Directive	
	2011/65/EU (Including 2015/863 addition) – RoHS	
	2014/30/EU - EMC	
And using the following national standards and technical specifications		
	AT Executive Order No. 693 of 10 June 2013 – Technical requirements for the design of machinery (Danish implementation of Directive 2006/42/EC)	
Name		
Title		
Place		Signature
Date		

Related products

IBC heaters



Insulation jackets for
barrels and IBCs



Drum heaters
for food stuff



Drum heaters



Silicone drum heaters

