

DRUM AND CONTAINER HEATERS FROM FREEK

Heat up your drums and container with our heating elements. With us you will find the right solution both for standard containers and for individual applications.









Table of Contents & Selection Guide

We process polyester, silicone, teflon and fibre glass fabric for our drum and container heaters to suit the intended application. Some of the materials are coated and processed or combined in several layers. The following selection table will lead you directly to the most suitable product for you at **freek-fassheizungen.de**. There you will find detailed information on construction, technical data, heating times, occupational safety, as well as numerous detail images and useful downloads.

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HSSD - Side Drum Heater (up to 120 °C) - data sheet

Area of application

The HSSD - Side Drum Heater is an easy and actual aid to the warming of steel barrels. It has got a higher efficiency than the Insulated Jacket HISD, but no thermal insulating function. For a very quick heating and higher temperatures up to three drum heaters can be used simultaneously for a 200-liter barrel. The Side Drum Heater is available in four standard sizes (25 / 50 / 105 / 200 liters) and can of course be made to measure, too.

HSSD - Side Drum Heaters are suitable in particular to defrost frozen or other products, thus allowing to empty the barrels rapidly. Soaps, fats, varnishes and oily products can be melted as well, respectively reduced in their viscosity. In addition, the



products can be melted as well, respectively reduced in their viscosity. In addition, the 200-liter element can be used in conjunction with the HBD Base Drum Heater to shorten the heating-up time further.

Technical Data

max. temperature	120 °C
Outer material	Silicone
Insulation material	None
Protection class	II
Cable length	2 meters
Type of cable	HO7RN-F with Schuko-plug (without ground)
Fastening	Tension springs
Control	2 Capillary pipe thermostats
Control range	0 – 120 °C
Heating zones	1
Special sizes possible	yes

Drum size	Power at 230 V	Length	Width	matches Ø	Part-No.
25 liters	300 W	800 mm	12 <mark>5</mark> mm	274 – 276 mm	387A.006
50 liters	500 W	940 mm	125 mm	318 – 320 mm	387A.007
105 liters	800 W	1300 mm	125 mm	433 – 435 mm	387A.002
200 liters	1000 W	1665 mm	180 mm	577 – 600 mm	387A.004
200 liters	1500 W	1665 mm	180 mm	577 – 600 mm	387A.001

Operational safety

All HSSD Side Drum Heaters correspond to the EMV low-voltage guideline valid within the EC and are marked accordingly with the CE sign.

The electricity supply should be separated from the drum heater if the barrel is empty, during the filling process, or during installation and disassembly of the heater itself. The device should only be used in dry surroundings and with a ventilated barrel to avoid pressure building up inside the drum.

Contact

Friedr. Freek GmbH Sudetenstraße 9 58708 Menden

Tel.: +49 2373 9590 0 Fax.: +49 2373 9590 30

freek-fassheizungen.de





HSSD - Side Drum Heater (up to 120 °C) - Operating Instructions

Safety instructions

- 1. Read all instructions before using the heater.
- 2. When not in use unplug the mains lead.
- 3. Do not immerse the heater in liquids.
- 4. Do not touch the surface of the heater during operation. After switching off, allow the heater to cool completely before handling.
- 5. Use the heater only for its intended use, as described in these instructions.
- 6. Disconnect from the electrical supply before removing terminal cover.
- 7. The heater must not be used if it is damaged in any way. If the mains lead is damaged, it must be replaced by the manufacturer or a similarly qualified person in order to avoid hazard, using a special flexible cord.
- 8. The heater should be connected to the electrical supply via a residual current device or other equipment providing protection from electric shock.
- 9. During operation, vent the drum to avoid build up of internal pressure.

Electrical requirements

Check that the voltage marked on the heater corresponds to the electricity supply that it will be connected to which must be AC (Alternating Current).

The HSSD is of double insulated construction so does not require an earth connection. A suitable approved plug for the country in which the heater is being used should be fitted to the mains lead by a suitably qualified person.

Instructions for use

- 1. The Side Drum Heater (HSSD) is designed to be used on standard steel drums for the warming of the drum contents. Do not use it for plastic drums. In this case, there are special drum heaters with lower surface load.
- Fit the heater to the drum by wrapping around and securing with the quick spring fastening. Ensure the
 position chosen is fully covered by the contents of the drum.
- 3. Position the heater so only the amount of drum contents required is heated. This will aid warm up time. i.e. if the full contents of the drum are required position the heater at the bottom of the drum. If only a small amount of the contents is required the heater can be placed nearer the top of the drum. You can use several HSSD at the same time to reduce heat up time.
- 4. Set the thermostat to the required temperature.

 NOTE: The thermostat sensor is positioned to sense the temperature at the junction between heater surface and drum, not the drum contents. Obtaining the ideal temperature of the drum contents must be via experimentation and experience of the material being heated.
- 5. Plug the heater into the electricity supply. The red LED indicates "ready for operation".
- 6. The heater jacket will begin to heat up and continue until the required temperature set by the thermostat is reached. It will then cycle at this set point until the thermostat setting is changed or the heater is removed from the electricity supply. The orange LED lights up during heat up process.
- 7. Switch off and remove the heater from the drum before discharging the contents. This will avoid contaminating the heater from spillage's.





HSSD - Side Drum Heater (up to 120 °C) - Operating Instructions

Cleaning & storage

Before Cleaning the heater always disconnect from the electricity supply. Wipe the jacket and terminal box with a damp cloth. Do not use solvents or scouring agents and never immerse the heater in liquid.

When not in use, the heater can be folded rolled up for storage. Do not roll it tighter than a diameter of 150

mm. For further information on use or service contact the manufacturer or supplier.

Technical data

max. temperature	120 °C
Outer material	Silicone
Insulation material	none
Protection class	II
Cable length	2 meters
Type of cable	H07RN-F with Schuko-plug (without ground)
Fastening	Tension springs
Control	Capillary pipe thermostat
Control range	0 – 120 °C
Heating zones	1
Special sizes possible	yes

Drum size	Power at 230 V	Length	Width	matches Ø	Part-No.
25 liters	300 W	800 mm	125 mm	274 – 276 mm	387A.006
50 liters	500 W	940 mm	125 mm	318 – 320 mm	387A.007
105 liters	800 W	1300 mm	125 mm	433 – 435 mm	387A.002
200 liters	1000 W	1665 mm	180 mm	577 – 600 mm	387A.004
200 liters	1500 W	1665 mm	18 <mark>0</mark> mm	577 – 600 mm	387A.001

Find more information about us and our products on www.freek-fassheizungen.de or www.freek-heaters.com.

No warranty claims can be derived from these user instructions.

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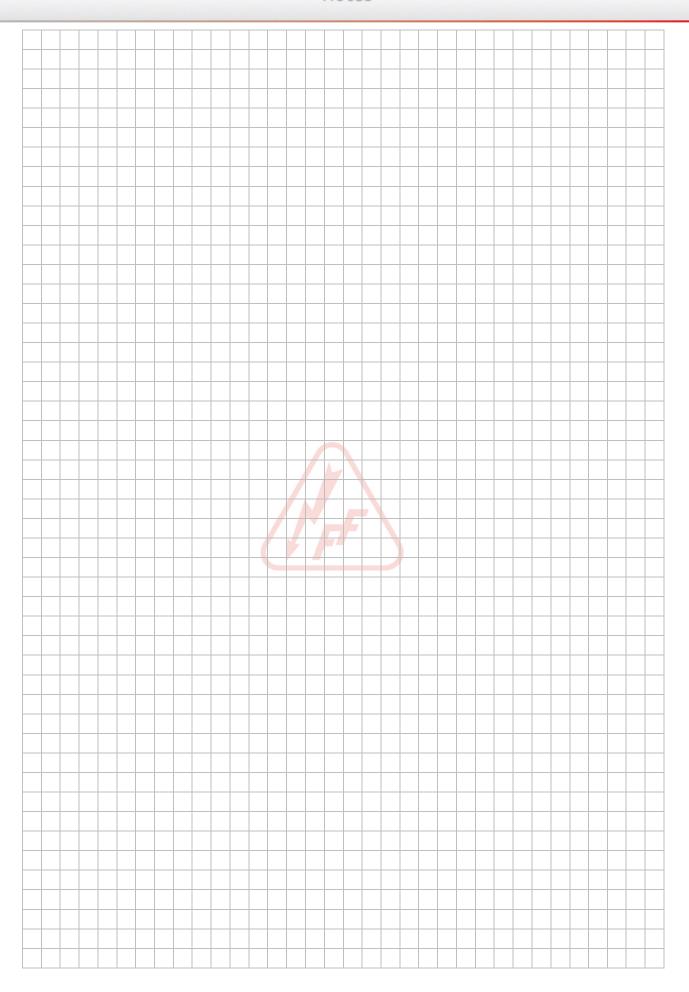
Friedr. Freek GmbH Sudetenstraße 9 58708 Menden

Tel.: +49 2373 9590 0

Fax.: +49 2373 9590 30









HISD_{pro} - Insulated Side Drum Heater (up to 90 °C) - data sheet

Area of application

The $HISD_{pro}$ - Side Drum Heater is a simple yet effective tool for the heating of barrels. It is available in four standard sizes (25 / 50 / 105 / 200 liters) and can be manufactured to customer specifications as well.

 $HISD_{pro}$ heater jackets are particularly suited to melt soaps, fats, varnishes and oil-based products, or respectively reduce their viscosity. The 200-liter element can be combined with the HBD - base drum heater to reduce the heat-up time.



These heater jackets are not only used on drums but also for the heating of glass-fibre reinforced plastics. They can be produced with any number of belts, e.g. to enable them to be clamped on to rotor blades.

Technical Data

Max. temperature of insulation	220 °C
Outer material	Silicone – coated fibreglass
Insulation material	Fibreglass
Protection class	II
Cable length	4 meters
Fastening	Quick-release buckles
Control	Capillary pipe thermostat or digital thermostat
Control range	0 – 90 °C (optional: 0 – 40 °C)
Capillary thermostat	0 - 90 C (optional: 0 - 40 C)
Control range	On demand (standard: 0 – 90 °C)
Digital thermostat	on demand (standard: 0 - 90 °C)
Heating zones	1
Special sizes possible	yes
Max. temperature	90 °C

					0 - 90 °C	0 - 40 °C	0 – 90°C
Drum size	Power at 230 V	Length	Width	matches Ø	Part- With capillary		Part-No. digital thermostat
25 liters	200 W	1020 mm	400 mm	277 – 323 mm	387C.002	387C.008	387H.002
50 liters	250 W	1250 mm	460 mm	350 – 398 mm	387C.003	387C.009	387H.003
105 liters	400 W	1650 mm	370 mm	478 – 525 mm	387C.004	387C.010	387H.004
200 liters	450 W	1950 mm	450 mm	573 – 621 mm	387C.005	387C.011	387H.005
200 liters	1200 W *	1950 mm	800 mm	573 – 621 mm	387C.001	387C.012	387H.006

^{*}for steel drums only

Operational safety

All $HISD_{pro}$ - Side Drum Heaters correspond to the EMV low-voltage guideline valid within the EC and are marked accordingly with the CE sign.

The electricity supply should be separated from the drum heater if the barrel is empty, during the filling process, or during installation and disassembly of the heater itself. The device should only be used in dry surroundings and with a ventilated barrel to avoid pressure building up inside the drum.

Contact

Friedr. Freek GmbH Sudetenstraße 9 58708 Menden

Tel.: +49 2373 9590 0 Fax.: +49 2373 9590 30

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HISD_{pro} - Insulated Side Drum Heater (up to 90 °C) - Operating Instructions

Safety instructions

- 1. Read all instructions before using the heater.
- 2. When not in use unplug the mains lead.
- 3. Do not immerse the heater in liquids.
- 4. Do not touch the surface of the heater during operation. After switching off, allow the heater to cool completely before handling.
- 5. Use the heater only for its intended use, as described in these instructions.
- 6. Disconnect from the electrical supply before removing terminal cover.
- 7. The heater must not be used if it is damaged in any way. If the mains lead is damaged, it must be replaced by the manufacturer or a similarly qualified person in order to avoid hazard, using a special flexible cord.
- 8. The heater should be connected to the electrical supply via a residual current device or other equipment providing protection from electric shock.
- 9. During operation, vent the drum to avoid build up of internal pressure.

Electrical requirements

Check that the voltage marked on the heater corresponds to the electricity supply that it will be connected to which must be AC (Alternating Current).

The HISD_{pro} is of double insulated construction so does not require an earth connection. A suitable approved plug for the country in which the heater is being used should be fitted to the mains lead by a suitably qualified person.

Instructions for use

- 1. The Insulated Side Drum Heater HISD_{pro} is designed to be used on plastic or steel drums for the warming of the contents.
- 2. Fit the heater to the drum by wrapping around and securing with the quick release buckles. Make sure that the jacket is wrapped tightly around the drum please use the belts.
- 3. Position the heater so only the amount of drum contents required is heated. This will aid warm up time. i.e. if the full contents of the drum are required position the heater at the bottom of the drum. If only a small amount of the contents is required the heater can be placed nearer the top of the drum.
- 4. Set the thermostat to the required temperature.

 NOTE: The thermostat sensor is positioned to sense the temperature at the junction between heater surface and drum, not the drum contents. Obtaining the ideal temperature of the drum contents must be via experimentation and experience of the material being heated.
- 5. The heater jacket will begin to heat up and continue until the required temperature set by the thermostat is reached. It will then cycle at this set point until the thermostat setting is changed or the heater is removed from the electricity supply.
- 6. Switch off and remove the heater from the drum before discharging the contents. This will avoid contaminating the heater from spillages.
- 7. Do not bend or crease the jacket when it is plugged in. This could lead to overheat and damage the jacket.





HISD_{pro} - Insulated Side Drum Heater (up to 90 °C) - Operating Instructions

Cleaning & storage

Before cleaning the heater always disconnect from the electricity supply. Wipe the jacket and terminal box with a damp cloth. Do not use solvents or scouring agents and never immerse the heater in liquid.

When not in use, the heater can be folded rolled up for storage. For further information on use or service contact the manufacturer or supplier.

Technical data

Max. temperature of insulation	220 °C
Outer material	Silicone – coated fibreglass
Insulation material	Fibreglass
Protection class	II
Cable length	4 meters
Fastening	Quick-release buckles
Control	Capillary pipe thermostat or digital thermostat
Control range Capillary thermostat	0 – 90 °C (optional: 0 – 40 °C)
Control range Digital thermostat	On demand (standard: 0 – 90 °C)
Heating zones	1
Special sizes possible	yes
Max. temperature	90 °C

					0 - 90 °C	0 - 40 °C	0 – 90°C
Drum size	Power at 230 V	Length	Width	matches Ø	Part- With capillary		Part-No. digital thermostat
25 liters	200 W	1020 mm	400 mm	277 – 323 mm	387C.002	387C.008	387H.002
50 liters	250 W	1250 mm	460 mm	350 – 398 mm	387C.003	387C.009	387H.003
105 liters	400 W	1650 mm	370 mm	478 – 525 mm	387C.004	387C.010	387H.004
200 liters	450 W	1950 mm	450 mm	573 – 621 mm	387C.005	387C.011	387H.005
200 liters	1200 W *	1950 mm	800 mm	573 – 621 mm	387C.001	387C.012	387H.006

^{*}for steel drums only

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No warranty claims can be derived from these user instructions.

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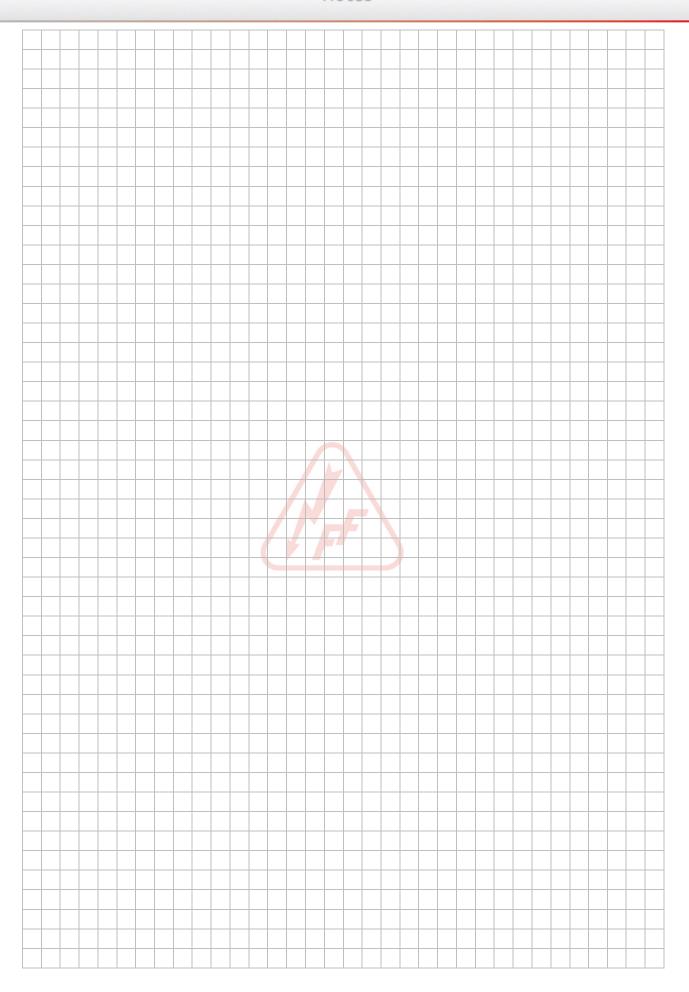
Friedr. Freek GmbH Sudetenstraße 9 58708 Menden

Tel.: +49 2373 9590 0

Fax.: +49 2373 9590 30









HTSD - High Temperature Drum Heater (up to 220 °C) - data sheet

Area of application

The HTSD-High Temperature Drum Heater is the high temperature version (220 °C) of the drum heaters and is exclusively suitable for steel drums. It is used in areas where large surfaces need heating over 90 °C. It is available in four standard sizes (25 / 50 / 105 / 200 liters) and can be manufactured to customer specifications as well.

HISD heater jackets are particularly suited to melt soaps, fats, varnishes and oil-based products, or respectively reduce their viscosity. The 200-liter element can be combined with the HBD - base drum heater to reduce the heat-up time.



Technical Data

Max. temperature of insulation	220 °C
Outer material	Silicone - coated fibreglass
Insulation material	Fibreglass
Protection class	II
Cable length	4 meters
Type of cable	H07RN-F with Schuko-plug
Fastening	Quick-release buckles
Control	Capillary pipe thermostat or digital thermostat
Control range Capillary thermostat	20 – 220 °C
Control range digital thermostat	On demand (standard: 0 – 220 °C)
Heating zones	1
Special sizes possible	yes

Drum size	Power at 230 V	Length	Width	Matches Ø	Part-No. With capillary thermostat	Part-No. With digital thermostat
25 liters	380 W	1020 mm	400 mm	277 - 398 mm	387G.003	387I.001
50 liters	450 W	1250 mm	440 mm	350 - 398 mm	387G.005	387I.002
105 liters	700 W	1650 mm	440 mm	477 - 525 mm	387G.018	387I.003
200 liters	1200 W	1950 mm	800 mm	573 - 621 mm	387G.001	387I.004
200 liters	1800 W	1950 mm	800 mm	573 - 621 mm	387G.016	387I.005

Operational safety

All HTSD - High Temperature Drum Heaters correspond to the EMV low-voltage guideline valid within the EC and are marked accordingly with the CE sign.

The electricity supply should be separated from the drum heater if the barrel is empty, during the filling process, or during installation and disassembly of the heater itself. The device should only be used in dry surroundings and with a ventilated barrel to avoid pressure building up inside the drum.

Contact

Friedr. Freek GmbH Sudetenstraße 9 58708 Menden

Tel.: +49 2373 9590 0

Fax.: +49 2373 9590 30





HTSD - High Temperature Drum Heater (up to 220 °C) - Operating Instructions

Safety instructions

- 1. Read all instructions before using the heater.
- 2. When not in use unplug the mains lead.
- 3. Do not immerse the heater in liquids.
- 4. Do not touch the surface of the heater during operation. After switching off, allow the heater to cool completely before handling.
- 5. Use the heater only for its intended use, as described in these instructions.
- 6. Disconnect from the electrical supply before removing terminal cover.
- 7. The heater must not be used if it is damaged in any way. If the mains lead is damaged, it must be replaced by the manufacturer or a similarly qualified person in order to avoid hazard, using a special flexible cord.
- 8. The heater should be connected to the electrical supply via a residual current device or other equipment providing protection from electric shock.
- 9. During operation, vent the drum to avoid building up of internal pressure.

Electrical requirements

Check that the voltage marked on the heater corresponds to the electricity supply that it will be connected to which must be AC (Alternating Current).

The HTSD is of double insulated construction so does not require an earth connection. A suitable approved plug for the country in which the heater is being used should be fitted to the mains lead by a suitably qualified person.

Instructions for use

- The High Temperature Drum Heater HTSD is designed to be used on steel drums for the warming of the contents. It must not be used for plastic drums. There are
- 2. Fit the heater to the drum by wrapping around and securing with the quick release buckles. Make sure that the jacket is wrapped tightly around the drum please use the belts.
- 3. Position the heater so only the amount of drum contents required is heated. This will aid warm up time. i.e. if the full contents of the drum are required position the heater at the bottom of the drum. If only a small amount of the contents is required the heater can be placed nearer the top of the drum.
- 4. Set the thermostat to the required temperature.

 NOTE: The thermostat sensor is positioned to sense the temperature at the junction between heater surface and drum, not the drum contents. Obtaining the ideal temperature of the drum contents must be via experimentation and experience of the material being heated.
- 5. The heater jacket will begin to heat up and continue until the required temperature set by the thermostat is reached. It will then cycle at this set point until the thermostat setting is changed or the heater is removed from the electricity supply.
- 6. Switch off and remove the heater from the drum before discharging the contents. This will avoid contaminating the heater from spillages.
- 7. Do not bend or crease the jacket when it is plugged in. This could lead to overheat and damage the jacket.





HTSD - High Temperature Drum Heater (up to 220 °C) - Operating Instructions

Cleaning & storage

Before cleaning the heater always disconnect from the electricity supply. Wipe the jacket and terminal box with a damp cloth. Do not use solvents or scouring agents and never immerse the heater in liquid.

When not in use, the heater can be folded rolled up for storage. For further information on use or service contact the manufacturer or supplier.

Technical Data

Max. temperature insulation	220 °C
Outer material	Silicone - coated fibreglass
Insulation material	Fibreglass
Protection class	II
Cable length	4 meters
Type of cable	H07RN-F with Schuko-plug
Fastening	Quick-release buckles
Control	Capillary pipe thermostat or digital thermostat
Control range	20 – 220 °C
Capillary thermostat	20-220 C
Control range	On demand (standard: 0 – 220 °C)
digital thermostat	on demand (standard of EEs e)
Heating zones	1
Special sizes possible	yes

Drum size	Power at 230 V	Length	Width	Matches Ø	Part-No. With capillary thermostat	Part-No. With digital thermostat
25 liters	380 W	1020 mm	400 mm	277 - 398 mm	387G.003	387I.001
50 liters	450 W	1250 mm	440 mm	350 - 398 mm	387G.005	387I.002
105 liters	700 W	1650 mm	440 mm	477 - 525 mm	387G.018	387I.003
200 liters	1200 W	1950 mm	800 mm	573 - 621 mm	387G.001	387I.004
200 liters	1800 W	1950 mm	800 mm	573 - 621 mm	387G.016	387I.005

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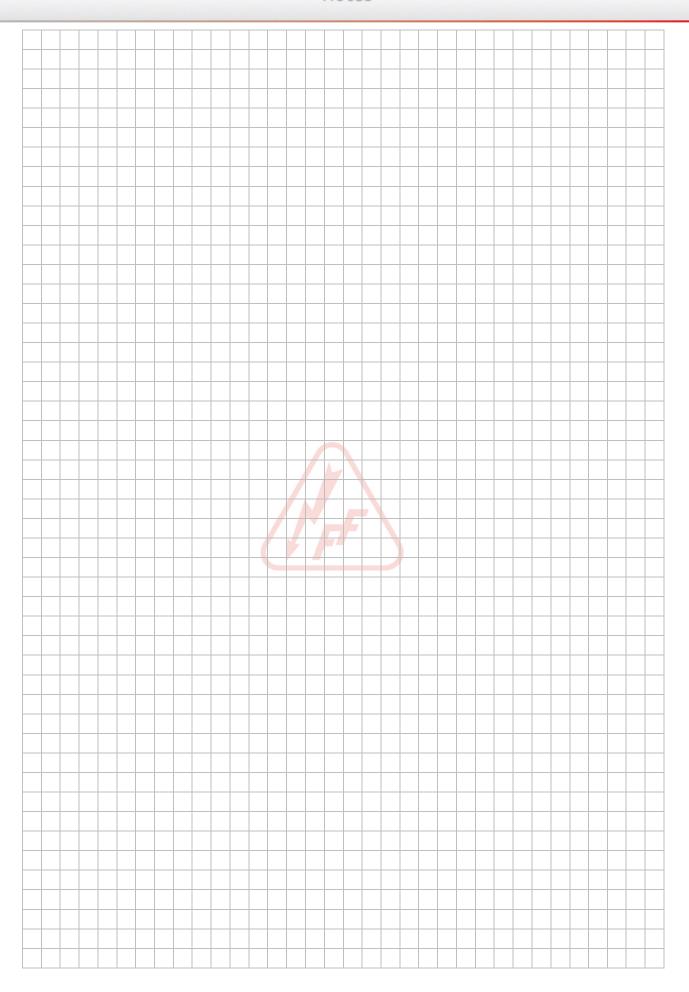
Friedr. Freek GmbH Sudetenstraße 9 58708 Menden

Tel.: +49 2373 9590 0

Fax.: +49 2373 9590 30









HSHP - Drum Heater (up to 220 °C) - data sheet

Area of application

The HSHP – High Power Drum Heater (220 °C) is suitable for steel drums (and with restrictions also for plastic drums). The outer material is a Teflon which is released for contact with food. The material possesses high levels of chemical and acid resistance. However, products such as waxes, soaps and materials with high water content can be heated excellently as well. The jacket is lightweight, robust and free of silicone. The excellent thermal transfer properties due to the perfect fit result in homogenous temperatures.

Our drum heater is available in the standard size of 200 liters but can also be made to customer specification.



Technical Data

Max. temperature of insulation	220 °C
Outer material	Waterproof Teflon (PTFE)
Insulation material	Fibreglass
Protection class	II
Cable length	4 meters
Type of cable	H07RN-F with Schuko-plug
Fastening	Quick-release buckles
Control	Capillary pipe thermostat or digital thermostat
Control range capillary thermostat	20 – 220 °C (optional: 0 – 40 °C, 0 - 90 °C, 0 – 120 °C)
Control range digital thermostat	On demand (standard: 0 – 220 °C)
Heating zones	1 (2 heating zones on demand)
Special sizes possible	yes
Food approval	EU 10/211. US FDA regulation - 21 CFR 177 1550

Drum size 200 liters					
Power at 230 V	Length	Width	Matches Ø Control Range Part-No		Part-No.
			/ /- /- /- /- /- /- /- /- /- /- /- /- /-	0 – 40 °C	387B.006
		\		0 – 90 °C	387B.007
1200 W	1950 mm	850 mm	573 – 621 mm	0 – 120 °C *	387B.003
				20 – 220 °C *	387B.001
				Digital thermostat 0 – 220°C *	387F.001
				0 – 40 °C	387B.008
				0 – 90 °C	387B.009
1800 W *	1950 mm 850 mm	573 – 621 mm	0 – 120 °C	387B.004	
			20 – 220 °C	387B.002	
				Digital thermostat 0 – 220°C*	387F.002

^{*} for steel drums only

Operational safety

All HSHP-drum heaters are stamped with the CE-mark, are EMV-compatible and comply with the current EU-regulation for low-voltage.

For safety reasons we recommend to separate the electricity supply from the drum heater when the drum is empty or during the filling process, or during the installation or the disassembly of the heater itself. The device should only be used in dry surroundings and with a ventilated barrel to avoid pressure building up inside the drum.

Contact

Friedr. Freek GmbH Sudetenstraße 9 58708 Menden

Tel.: +49 2373 9590 0 Fax.: +49 2373 9590 30 shop.freek.de freek-fassheizungen.de

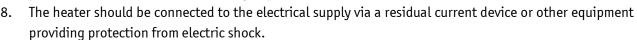


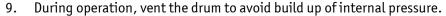


HSHP - Drum Heater (up to 220 °C) - Operating Instructions

Safety instructions

- 1. Read all instructions before using the heater.
- 2. When not in use unplug the mains lead.
- 3. Do not immerse the heater in liquids.
- 4. Do not touch the surface of the heater during operation. After switching off, allow the heater to cool completely before handling.
- 5. Use the heater only for its intended use, as described in these instructions.
- 6. Disconnect from the electrical supply before removing terminal cover.
- 7. The heater must not be used if it is damaged in any way. If the mains lead is damaged, it must be replaced by the manufacturer or a similarly qualified person in order to avoid hazard, using a special flexible cord.







Check that the voltage marked on the heater corresponds to the electricity supply that it will be connected to which must be AC (Alternating Current).

The HSHP is of double insulated construction so does not require an earth connection. A suitable approved plug for the country in which the heater is being used should be fitted to the mains lead by a suitably qualified person.

Instructions for use

- 1. The High Power Drum Heater (HSHP) is designed to be used on steel drums for the warming of the drum contents. It can be used on plastic drums if the thermostat allows a max. temperature of 90°C and the surface load does not exceed 750 W/m².
- 2. Fit the heater to the drum by wrapping around and securing with the quick release buckles. Ensure the position chosen is fully covered by the contents of the drum.
- 3. Position the heater so only the amount of drum contents required is heated. This will aid warm up time. i.e. if the full contents of the drum are required position the heater at the bottom of the drum. If only a small amount of the contents is required the heater can be placed nearer the top of the drum.
- 4. Set the thermostat to the required temperature.

 NOTE: The thermostat sensor is positioned to sense the temperature at the junction between heater surface and drum, not the drum contents. Obtaining the ideal temperature of the drum contents must be via experimentation and experience of the material being heated.
- 5. Plug the heater into the electricity supply. The red LED indicates "ready for operation".
- 6. The heater jacket will begin to heat up and continue until the required temperature set by the thermostat is reached. It will then cycle at this set point until the thermostat setting is changed or the heater is removed from the electricity supply.
- 7. Switch off and remove the heater from the drum before discharging the contents. This will avoid contaminating the heater from spillages.
- 8. Do not bend or crease the jacket when it is plugged in. This could lead to overheat and damage the jacket.





HSHP - Drum Heater (up to 220 °C) - Operating Instructions

Cleaning & storage

Before Cleaning the heater always disconnect from the electricity supply. Wipe the jacket and terminal box with a damp cloth. Do not use solvents or scouring agents and never immerse the heater in liquid.

When not in use, the heater can be folded rolled up for storage. For further information on use or service contact the manufacturer or supplier.

Technical data

Max. temperature insulation	220 °C	
Outer material	Waterproof Teflon (PTFE)	
Insulation material	Fibreglass	
Protection class	II	
Cable length	4 meters	
Type of cable	H07RN-F with Schuko-plug	
Fastening	Quick-release buckles	
Control	Capillary pipe thermostat or digital thermostat	
Control range	20 – 220 °C (optional: 0 – 40 °C, 0 - 90 °C, 0 – 120 °C)	
Capillary thermostat	20 - 220 C (optionat: 0 - 40 C, 0 - 30 C, 0 - 120 C)	
Control range	On demand (standard: 0 – 220 °C)	
Digital thermostat	, , , , , , , , , , , , , , , , , , ,	
Heating zones	1 (2 heating zones on demand)	
Special sizes possible	yes	
Food approval	EU 10/211. US FDA regulation - 21 CFR 177 1550	

Drum size 200 liters					
Power at 230 V	Length	Width	Matches Ø	Control Range	Part-No.
			V /-\	0 – 40 °C	387B.006
				0 – 90 °C	387B.007
1200 W	1950 mm	850 mm	573 – 621 mm	0 – 120 °C*	387B.003
1200 W	1950 111111	ווווון טכט	373 - 021 11111	20 – 220 °C*	387B.001
			-	Digital thermostat	387F.001
				0 - 220°C*	36/1.001
			0 – 40 °C	387B.008	
		1950 mm 850 mm	573 – 621 mm	0 – 90 °C	387B.009
1800 W *	1050 mm			0 – 120 °C	387B.004
1000 W	1950 111111			20 – 220 °C	387B.002
			Digital thermostat	387F.002	
				0 – 220°C*	30/1.002

^{*}for steel drums only

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No warranty claims can be derived from these user instructions.

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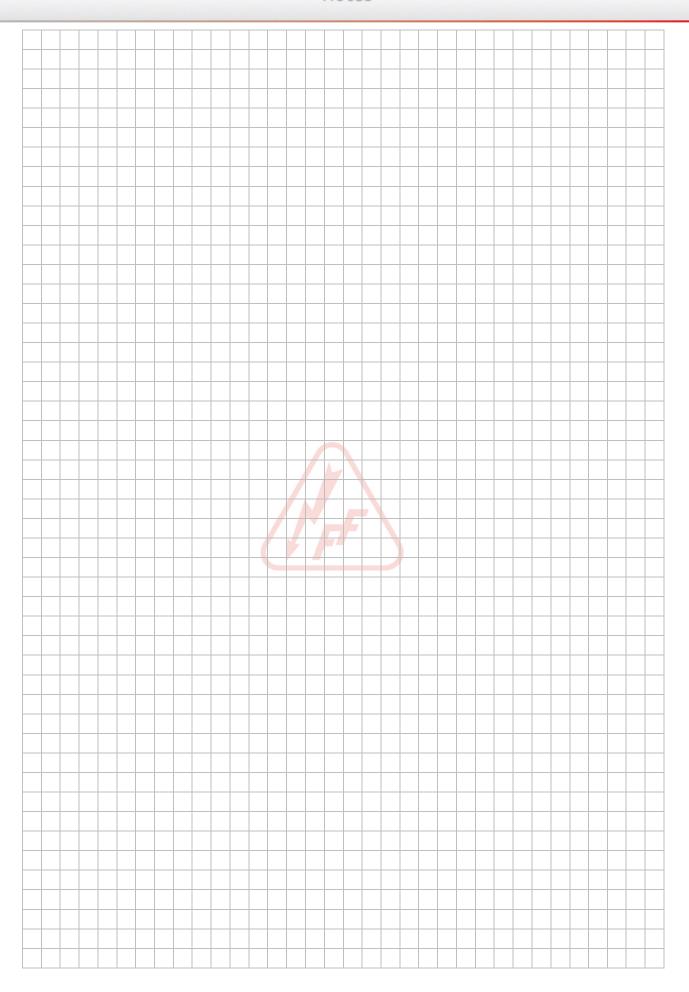
Friedr. Freek GmbH Sudetenstraße 9 58708 Menden

Tel.: +49 2373 9590 0

Fax.: +49 2373 9590 30 freek-fassheizungen.de









HBD - Base Drum Heater (up to 150 °C) - data sheet

Area of application

HBD - Base Drum Heaters are especially designed to heat up soaps, fats, paints, waxes and oil-based materials. The design of the heater is designed for 200 l steel drums. With restrictions on the heating efficiency also smaller barrels can be heated with HBD. The constant temperature of the heating plate is achieved through the use of a silicone mat heater and an additional insulation to the floor panel.



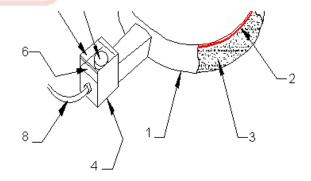
Technical Data

max. temperature	150 °C	
Outer material	steel	
Insulation material	none	
Protection class	II	
Cable length	2 meters PVC cable with braided metal sleeve and PVC sheath	
Type of cable	PVC cable with braided metal sleeve and PVC sheath	
Fastening	-	
Control Capillary pipe thermostat		
Control range	0 – 150 °C	
Heating zones 1		
Special sizes possible	no	

Power at 230 V	Heating surface size	Control unit size	Total size	Part-No.
900 W	Height 70 mm Ø Top 550 mm Ø Bottom 600 mm	Height 105 mm Length 280 mm	Height 105 mm Length 880 mm Width 600 mm	387N.001

Legend:

- 1) Base
- 2) Heating mat
- 3) Thermal insulation
- 4) Controller & housing
- 5) Control dial
- 6) Access to control dial
- 7) Vision panel
- 8) Cable



Operational safety

HBD Base Drum Heaters correspond to the EMV low-voltage guideline valid within the EC and are marked accordingly with the CE sign.

It is always important to ensure that the barrel has a sufficient ventilation and exhaust before it is heated.

Contact

Friedr. Freek GmbH Sudetenstraße 9 58708 Menden

Tel.: +49 2373 9590 0

Fax.: +49 2373 9590 30



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HBD - Base Drum Heater (up to 150 °C) - Operating Instructions

Safety instructions

- 1. Read all instructions before using the heater.
- 2. When not in use unplug the mains lead.
- 3. Do not immerse the heater in liquids.
- Do not touch the surface of the heater during operation. After switching off, allow the heater to cool completely before handling.
- 5. Use the heater only for its intended use, as described in these instructions.
- 6. Disconnect from the electrical supply before removing terminal cover.
- 7. The heater must not be used if it is damaged in any way. If the mains lead is damaged, it must be replaced by the manufacturer or a similarly qualified person in order to avoid hazard, using a special flexible cord.
- 8. The heater should be connected to the electrical supply via a residual current device or other equipment providing protection from electric shock.
- 9. During operation, vent the drum to avoid building up of internal pressure.

Electrical requirements

Check that the voltage marked on the heater corresponds to the electricity supply that it will be connected to which must be AC (Alternating Current).

The HBD is of double insulated construction so does not require an earth connection. A suitable approved plug for the country in which the heater is being used should be fitted to the mains lead by a suitably qualified person.

Instructions for use

- 1. The Base Drum Heater HBD is designed to be used for 200L steel drums for the warming of the contents.
- 2. The heater is not designed for use with plastic drums, as the adjustable temperature is higher than the maximum permitted temperature for plastic drums. We therefore do not assume any warranty for the use of plastic containers on our HBD Base Drum Heaters.
- 3. Put the drum on the steel plate of the heater. Make sure that the drum is in flush contact with the steel plate.
- 4. Set the thermostat to the required temperature.
 - NOTE: The thermostat sensor is positioned to sense the temperature at the junction between heater surface and drum, not the drum contents. Obtaining the ideal temperature of the drum contents must be via experimentation and experience of the material being heated.
- 5. Plug the heater into the electricity supply.
- 6. The HBDwill begin to heat up and continue until the required temperature set by the thermostat is reached. It will then cycle at this set point until the thermostat setting is changed or the heater is removed from the electricity supply.
- 7. Switch off and remove the heater from the drum before discharging the contents. This will avoid contaminating the heater from spillages.





HBD - Base Drum Heater (up to 150 °C) - Operating Instructions

Cleaning & storage

Before cleaning the heater always disconnect from the electricity supply. Wipe the jacket and terminal box with a damp cloth. Do not use solvents or scouring agents and never immerse the heater in liquid.

When not in use, the heater can be folded rolled up for storage. For further information on use or service contact the manufacturer or supplier.

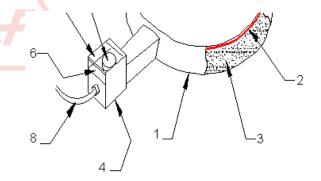
Technical data

max. temperature	150 °C	
Outer material	steel	
Insulation material	none	
Protection class	II	
Cable length	2 meters	
Type of cable	PVC cable with braided metal sleeve and PVC sheath	
Fastening	-	
Control	Capillary pipe thermostat	
Control range	0 – 150 °C	
Heating zones	1	
Special sizes possible	no	

Power at 230 V	Heating surface size	Control unit size	Total size	Part-No.
900 W	Height 70 mm Ø Top 550 mm Ø Bottom 600 mm	Height 105 mm Length 280 mm	Height 105 mm Length 880 mm Width 600 mm	387N.001

Legend:

- 1) Base
- 2) Heating mat
- 3) Thermal insulation
- 4) Controller & housing
- 5) Control dial
- 6) Access to control dial
- 7) Vision panel
- 8) Cable



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Contact

Friedr. Freek GmbH Sudetenstraße 9 58708 Menden

Tel.: +49 2373 9590 0

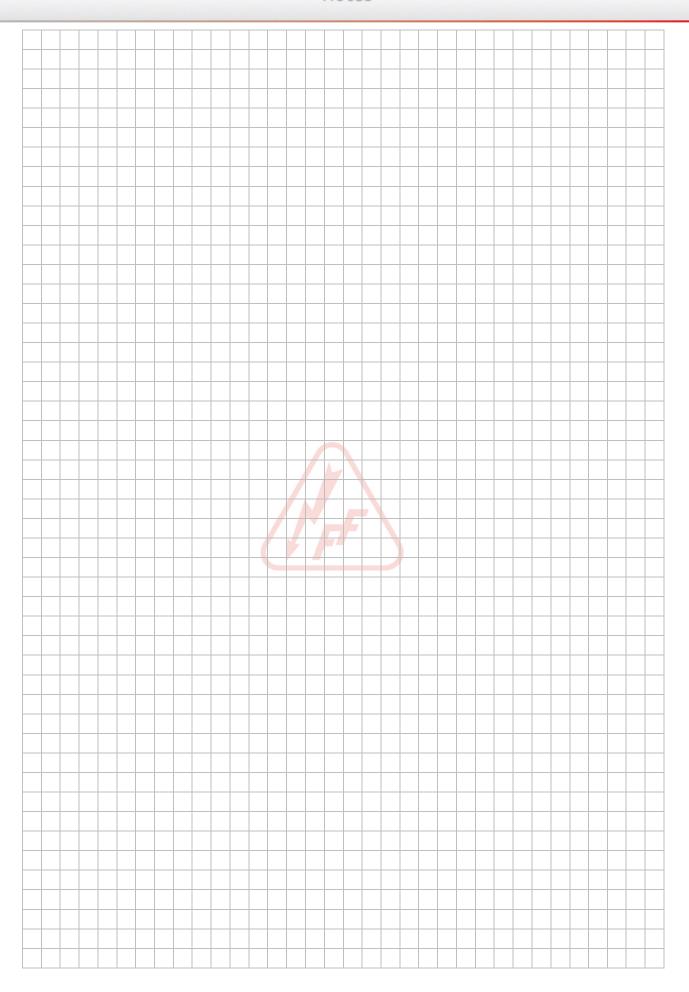
Fax.: +49 2373 9590 30 freek-fassheizungen.de



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IBC/A - Container Base Heater (up to 150 °C) - data sheet

Area of application

IBC/A-Container Base Heaters are used for the heating of bagin-box containers. It's a silicone heater mat that is placed below the bag before that is filled. For a faster warming, an additional unheated insulating sheath covering the four sides and the unheated insulating lid (HILC) can be used.



Technical Data

max. temperature	150 °C	
Outer material	Silicone	
Insulation material	None	
Protection class	II	
Cable length	2 meters	
Type of cable	H07RN-F with Schuko-plug	
Fastening	-	
Control	Electronic control	
Control range	0 – 150 °C	
Heating zones	1	
Special sizes possible	yes	

Container size	Power at 230 V	Length	Width	Part-No.
1000 liters	2700 W	1035 mm	850 mm	387K.004

Operational safety

All IBC/A-Container Base Heaters correspond to the EMV low-voltage guideline valid within the EC and are marked accordingly with the CE sign..

The electricity supply should be separated from the container heater if the container is empty, during the filling process, or during installation and disassembly of the heater itself. The device should only be used in dry surroundings and with a ventilated container to avoid pressure building up inside the container.

Contact

Friedr. Freek GmbH Sudetenstraße 9 58708 Menden Tel.: +49 2373 9590 0

Fax.: +49 2373 9590 30

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IBC/A - Container Base Heater (up to 150 °C) - Operating Instructions

Safety instructions

- 1. Read all instructions before using the heater.
- 2. When not in use unplug the mains lead.
- 3. Do not immerse the heater in liquids.
- 4. Do not touch the surface of the heater during operation. After switching off, allow the heater to cool completely before handling.
- 5. Use the heater only for its intended use, as described in these instructions.
- 6. Disconnect from the electrical supply before removing terminal cover.
- 7. The heater must not be used if it is damaged in any way. If the mains lead is damaged, it must be replaced by the manufacturer or a similarly qualified person in order to avoid hazard, using a special flexible cord.
- 8. The heater should be connected to the electrical supply via a residual current device or other equipment providing protection from electric shock.
- 9. During operation, vent the container to avoid building up internal pressure.

Electrical requirements

Check that the voltage marked on the heater corresponds to the electricity supply that it will be connected to which must be AC (Alternating Current).

The IBC/B is of double insulated construction so does not require an earth connection. A suitable approved plug for the country in which the heater is being used should be fitted to the mains lead by a suitably qualified person.

Instructions for use

Before placement of the IBC inner bag, the heater mat should be placed flat on to the base of the container with the printing upwards. Position the cut-out section of the mat evenly around the drain of the IBC and ensure that the sides of the mat are not riding up the walls. Position the power lead of the heater mat up the inside wall of the container and over the side.

Place the bag inside the IBC spreading it as evenly as possible over the surface of the heater mat. When filling, continue to push the walls of the bag outwards to ensure it sits flat on the heater mat and so ensuring good heat transfer to the contents.

When the bag is full, place the cable and plug that is protruding, on top of the bag.

Heating Operation

When the contents of the IBC are required to be heated follow the steps detailed below.

- Open the lid of the IBC and retrieve the heater mat cable from the top of the bag.
 Place the cable over the side of the container.
- 2) Clip the control box over the top edge of the container side by means of the stainless steel bracket on the rear of the box. Ensure that the box is not facing direct sunlight, as this will increase the internal temperature of the box. On containers with a metal frame it is important that the bracket is in firm contact with the metal of the container as this contact forms an electrical earth.
- 3) Connect the 3-core supply cable from the control box to a 230V single phase earthed supply and switch on.
- 4) At this point, the controller will be displaying or as it is not receiving a signal from the heater mat sensor. However, the heater mat should not be plugged in until the residual current device has been tested. Test the RCD by pressing the test button (T). This should cause the device to trip (Lever trips to the "+" position). If the device does not trip, disconnect the power supply and <u>do not</u> use the equipment. If the RCD tests satisfactorily, continue as below but do not re-set the device at this stage.





IBC/A - Container Base Heater (up to 150 °C) - Operating Instructions

- 5) Insert the plug on the heater mat cable into the socket in the control box. The plug locates in a keyway in the socket, so can only be inserted in one orientation. When the plug is fully inserted; lock in position by turning the locking ring clockwise.
- 6) Re-set the RCD by pushing the lever to the "0" position and then to the l position. Power will now be applied to the heater mat. The required switch off temperature should now be set on the controller.
- 7) Set the switch off temperature of the controller (0 to 150°C) in the following way:
 - a) Press button L1. The controller will display "1SP" for 2 seconds followed by the current switch off temperature.
 - b) Change the switch off temperature by using the arrow keys ▲ & ▼
 - c) When the required switch off temperature is displayed close the lid of the control box and the controller will revert to operating mode.

Cleaning & storage

Before Cleaning the heater always disconnect from the electricity supply. Wipe the jacket and terminal box with a damp cloth. Do not use solvents or scouring agents and never immerse the heater in liquid. When not in use, the heater can be folded coiled up for storage. Please do not coil the mat tighter than dia.

150 mm. For further information on use or service contact the manufacturer or supplier.

Technical data

max. temperature	150 °C	
Outer material	Silicone	
Insulation material	None	
Protection class	II	
Cable length	2 meters	
Type of cable	HO7RN-F with Schuko-plug	
Fastening	-	
Control	Electronic control	
Control range	0 – 150 °C	
Heating zones	1	
Special sizes possible	yes	

Container size	Power at 230 V	Length	Width	Part-No.
1000 liters	2700 W	1035 mm	850 mm	387K.004

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No warranty claims can be derived from these user instructions.

Contact

Friedr. Freek GmbH Sudetenstraße 9 58708 Menden Tel.: +49 2373 9590 0

Fax.: +49 2373 9590 30

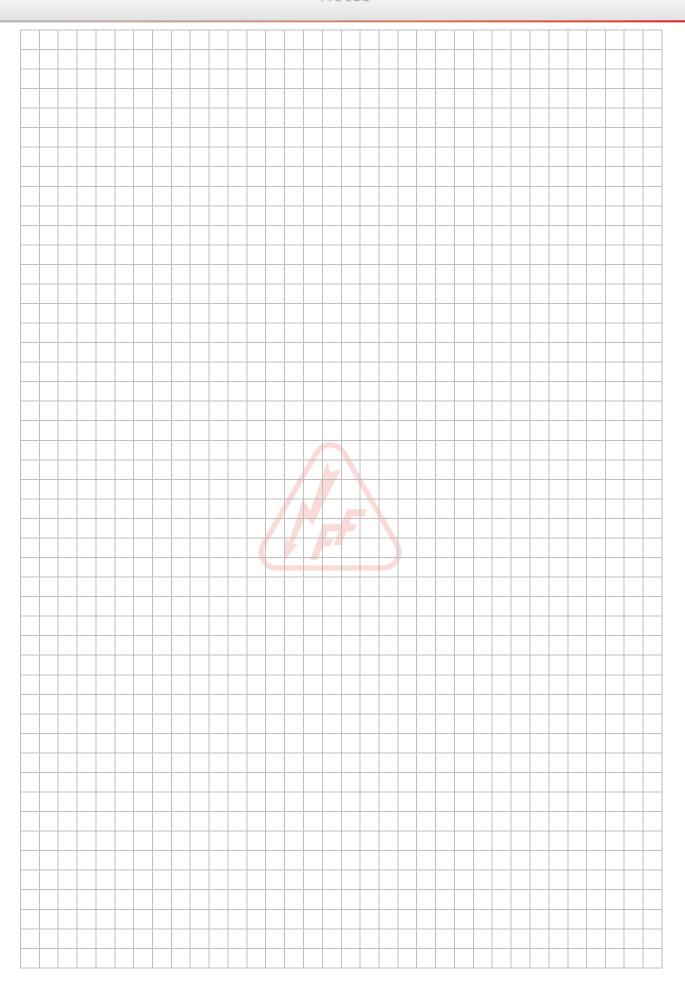
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09/2019





IBC/B_{pro} - Container Jacket Heater (up to 90 °C) - data sheet

Area of application

The IBC/B_{pro} -Container Jacket Heater is an insulated heater jacket for the heating of bottle-in-a-cage containers. All four sides of the container are covered by the heater. The heater has two separate heating circuits (top and bottom), allowing for an economical heating of half-filled containers, too. An unheated insulating lid can be used in addition to reduce the heat-up time.



Technical data

Max. temperature insulation	220 °C
Outer material	Silicone - coated fibreglass
Insulation material	Fibreglass
Protection class	II
Cable length	4 meters
Type of cable	HO7RN-F with Schuko-plug
Fastening	Quick-release buckles
Control	2 Capillary pipe thermostats or 2 digital thermostats
Control range Capillary thermostat	0 – 90 °C (or 0 – 40 °C)
Control range Digital thermostat	On demand (standard: 0 – 90 °C)
Heating zones	2
Special sizes possible	yes
Max. temperature	90 °C

Container size	Power at 230 V	Length	Width	Part-No. (with capillary thermostat)	Part-No. (with digital thermostat)
1000 liters	2 x 1000 W	4400 mm	1000 mm	387E.001	387J.001

Operational safety

All IBC/ B_{pro} -Container Jacket Heater correspond to the EMV low-voltage guideline valid within the EC and are marked accordingly with the CE sign.

The electricity supply should be separated from the container heater if the container is empty, during the filling process, or during installation and disassembly of the heater itself. The device should only be used in dry surroundings and with a ventilated container to avoid pressure building up inside the container.

Contact

Friedr. Freek GmbH Sudetenstraße 9 58708 Menden

Tel.: +49 2373 9590 0

Fax.: +49 2373 9590 30





IBC/Bpro - Container Heater (up to 90 °C) - Operating Instructions

Safety instructions

- Read all instructions before using the heater.
- 2. When not in use unplug the mains lead.
- Do not immerse the heater in liquids.
- Do not touch the surface of the heater during operation. After switching off, allow the heater to cool completely before handling.
- Use the heater only for its intended use, as described in 5. these instructions.
- Disconnect from the electrical supply before removing terminal cover.
- 7. The heater must not be used if it is damaged in any way. If the mains lead is damaged, it must be replaced by the manufacturer or a similarly qualified person in order to avoid hazard, using a special flexible cord.



- The heater should be connected to the electrical supply via a residual current device or other equipment providing protection from electric shock.
- During operation, vent the container to avoid building up internal pressure.

Electrical requirements

Check that the voltage marked on the heater corresponds to the electricity supply that it will be connected to which must be AC (Alternating Current).

The IBC/B_{pro} is of double insulated construction so does not require an earth connection. A suitable approved plug for the country in which the heater is being used should be fitted to the mains lead by a suitably qualified person.

Instructions for use

- The Container Heater IBC/B_{pro} is designed to be used on bottle-in-a-cage container for the warming of the contents.
- Fit the heater to the container by wrapping around and securing with the quick release buckles. Make sure that the jacket is wrapped around the whole container without creases.
- Use both heating circuits if the container is full. Switch off the upper heat circuit when the filling level is near half. You can set different temperatures for the two heating circuits. Please note that the thermostat sensor is positioned to sense the temperature at the junction between heater surface and container, not the container contents. Obtaining the ideal temperature of the contents must be via experimentation and experience of the material being heated.
- Plug the heater into the electricity supply.
- The heater jacket will begin to heat up and continue until the required temperature set by the thermostat is reached. It will then cycle at this set point until the thermostat setting is changed or the heater is removed from the electricity supply.
- Switch off and remove the heater from the drum before discharging the contents. This will avoid contaminating the heater from spillages.
- Do not bend or crease the jacket when it is plugged in. This could lead to overheat and damage the jacket.





IBC/Bpro - Container Heater (up to 90 °C) - Operating Instructions

Cleaning & storage

Before cleaning the heater always disconnect from the electricity supply. Wipe the jacket and terminal box with a damp cloth. Do not use solvents or scouring agents and never immerse the heater in liquid.

When not in use, the heater can be folded rolled up for storage. For further information on use or service contact the manufacturer or supplier.

Technical data

Max. temperature insulation	220 °C	
Outer material	Silicone - coated fibreglass	
Insulation material	Fibreglass	
Protection class	II	
Cable length	4 meters	
Type of cable	HO7RN-F with Schuko-plug	
Fastening	Quick-release buckles	
Control	2 Capillary pipe thermostats or 2 digital thermostats	
Control range	0 – 90 °C (or 0 – 40 °C)	
Capillary thermostat	0-90 (010-40)	
Control range	On demand (standard: 0 – 90 °C)	
Digital thermostat	On demand (standard: 0 = 90°C)	
Heating zones	2	
Special sizes possible	yes	
Max. temperature	90 °C	

Container size	Power at 230 V	Length	Width	Part-No. (with capillary thermostat)	Part-No. (with digital thermostat)
1000 liters	2 x 1000 W	4400 mm	1000 mm	387E.001	387J.001

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Contact

Friedr. Freek GmbH Sudetenstraße 9 58708 Menden

Tel.: +49 2373 9590 0 Fax.: +49 2373 9590 30

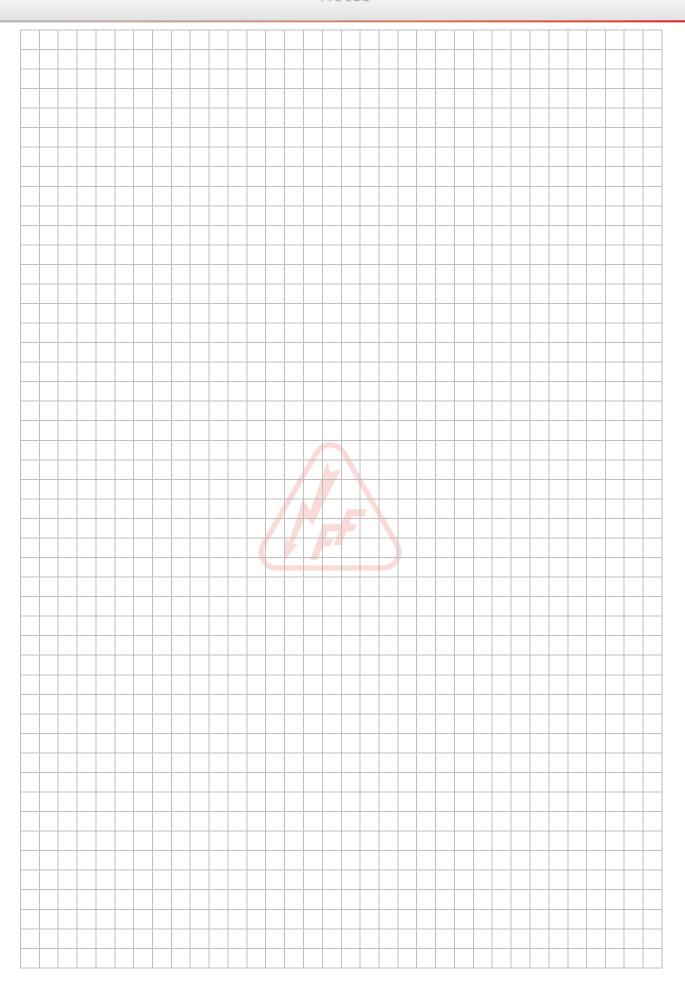
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HIJD - Unheated Drum Insulating Jacket - data sheet

Area of application

The HIJD - Unheated Drum Insulating Jacket is perfectly suited to minimise heat loss.

The combination with the Base Drum Heater HBD is possible to accelerate the heating-up process.





- Teflon-/polyester material
- heat insulating
- water resistant
- easy handling
- closable flap for filling access
- bespoke sizes possible
- can be used with base drum heater HBD
- standard sizes: 25 l, 50 l, 105 l & 200 l
- short delivery time

Aus den Benutzerhinweisen können keine Garantieansprüche abgeleitet werden.

Contact

Friedr. Freek GmbH Sudetenstraße 9 58708 Menden

Tel.: +49 2373 9590 0

Fax.: +49 2373 9590 30

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HILD - Unheated Drum Insulating Lid - data sheet

Area of application

The Unheated Drum Insulation Lid HILD is the perfect addition for all drum heater types HISD, HTSD and HSHP and fits all steel and plastic drums with a 200 or 220 l volume. The low priced and heavy-duty lid does not only reduce energy losses but also shortens the heating up process. Possible heat losses on top of the drum are reduced to a minimum.

The drum insulation is available in two different materials. Depending on the drum heater in use you can choose between silicone-coated glass fibre and PTFE material.



Technical data

max. temperature insulation	220 °C
Outer material	Silicone-coated glass fibre, resp. PTFE
Insulation material	Glass fibre
Protection class	-
Cable length	-
Type of cable	-
Fastening	-
Control	- //' //
Control range	-
Heating zones	-
Special sizes possible	-

Drum size	Outer material	Power at 230 V	Ø	Part-No.
200 / 220 (for HISD / HTSD)	Silicone-coated glass fibre	-	appr. 600 mm	387R.006
200 / 220 (for HSHP)	PTFE	-	appr. 600 mm	387R.017

Contact

Friedr. Freek GmbH Sudetenstraße 9 58708 Menden

Tel.: +49 2373 9590 0 Fax.: +49 2373 9590 30

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HIJC - Unheated Container Insulating Jacket - data sheet

Area of application

The HIJC unheated container insulating jacket is ideal to reduce heat loss and fits on containers.

The combination with the Container Base Heater IBC/A is possible to accelerate the heating-up process.

The unheated insulating cover consists of waterproof polyurethane-coated polyester with flame-retardant coating.



Technical Data

max. temperature insulation	90 °C
Outer material	Flame retardant waterproof polyurethane-coated polyester
Insulation material	Fibreglass
Protection class	-
Cable length	-
Type of cable	-
Fastening	-
Control	- / / / _ \
Control range	-
Heating zones	- / / - /
Special sizes possible	yes

Container size	Power at 230 V	Length	Width	Part-No.
1000 liters	-	4400 mm	1000 mm	387R.009

Contact

Friedr. Freek GmbH Sudetenstraße 9 58708 Menden

Tel.: +49 2373 9590 0

Fax.: +49 2373 9590 30 freek-fassheizungen.de





HILC_{pro} - Unheated Container Insulating Lid - data sheet

Area of application

The use of our high-quality HILC_{pro} insulating covers allows you to clearly increase the efficiency of your container heating. The low-cost and robust bonnet will have paid for itself after a short while just through the saving of energy. Heat-losses whilst heating or maintaining heat in the container are reduced and, in addition, a stove effect will develop around the container bag. This signifies three essential advantages for you:



- Target temperature is reached faster
- Lower energy consumption during the heating-up process
- A more uniform heating of the container contents

The insulating cover consists of the same rugged material as the container jacket heater IBC/B_{pro} and comes with an opening that can be closed with a Velcro flap (250 x 250 mms) to guarantee quick and easy access to the container and its content.

The unheated insulating cover consists of waterproof polyurethane-coated polyester with flame-retardant coating.

Technical data

max. temperature insulation	90 °C
Outer material	Silicone - coated fibreglass
Insulation material	Fibreglass
Protection class	-
Cable length	-
Type of cable	-
Fastening	-
Control	-
Control range	-
Heating zones	-
Special sizes possible	-

Container size	Power at 230 V	Length	Width	Part-No.
1000 Liter	-	1000 mm	1000 mm	387R.018

Contact

Friedr. Freek GmbH Sudetenstraße 9 58708 Menden

Tel.: +49 2373 9590 0 Fax.: +49 2373 9590 30

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HILC - Unheated Container Insulating Lid - data sheet

Area of application

The use of our high-quality HILC insulating covers allows you to clearly increase the efficiency of your container heating. The low-cost and robust bonnet will have paid for itself after a short while just through the saving of energy. Heat-losses whilst heating or maintaining heat in the container are reduced and, in addition, a stove effect will develop around the container bag. This signifies three essential advantages for you:



- Target temperature is reached faster
- Lower energy consumption during the heating-up process
- A more uniform heating of the container contents

The insulating cover consists of the same rugged material as the container jacket heater IBC/B and comes with an opening that can be closed with a Velcro flap (250 x 250 mms) to guarantee quick and easy access to the container and its content.

The unheated insulating cover consists of waterproof polyurethane-coated polyester with flame-retardant coating.

Technical data

max. temperature insulation	90 °C
Outer material	Flame retardant waterproof polyurethane-coated polyester
Insulation material	Fibreglass
Protection class	- (/ /)
Cable length	-
Type of cable	-
Fastening	-
Control	-
Control range	-
Heating zones	-
Special sizes possible	yes

Container size	Power at 230 V	Length	Width	Part-No.
1000 Liter	-	1000 mm	1000 mm	387R.001

Contact

Friedr. Freek GmbH Sudetenstraße 9 58708 Menden

Tel.: +49 2373 9590 0 Fax.: +49 2373 9590 30

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