

RUBBER HEATER FOR THE DRUM
RUBBER HEATER FOR THE PAIL (20 LITER)
RUBBER HEATER FOR THE SQUARE CAN (18 LITER)

SBH0610 (for drum, 3-phase 200V)
SBH0620 (for drum, single-phase 200V)
SBH0630 (for 20 liter pail, single-phase 200V)
SBH0640 (for 20 liter pail, 100V)
SBH0650 (for 18 liter square can, single-phase 200V)



INSTRUCTIONS MANUAL

Thank you for your choosing our product.

Read the instructions before use and keep in the convenient place for future reference.

Feature of the products

These rubber heaters combined with temperature controllers and adjustable fasteners are designed to heat drums, 20-liter pails and 18-liter square cans efficiently.

FOR SAFE USE

We use the following symbols for safe use of the product.



Improper use may cause the danger of death or injury.



Improper use may cause the danger of light injury or property damage.

WARNING

● Do not touch the rubber heater while heating or just after turning off.

It may cause burns.



● Do not pour water at the controller box.

Wet devices may cause electric shock or leakage.



● Do not alter or deform the rubber heater.

Do not cut, punch a hole or altering wires. Otherwise it may cause fire, electric shock, or failures.



● Do not use in the water or other liquids.

It may cause electric shock, leakage or failure.



WARNING

● Do not enclose the pail while heating.

Heating air-tight cans or pails may cause explosion, damage, burns, fire or failures.



● When you heat two drums or pails at the same time, keep them 1 meter or more from each other to prevent overheating.

It may cause damages, electric leakage, shocks, or fire.



● The heater does not turn off constantly even when you set the dial at the lowest temperature. Turn off the power by yourself in the following cases.

- In case you don't use the heater
- On attaching the rubber heater on the drums or pails
- On dismantling the rubber heater



● Do not use the heater in the flammable atmosphere nor heat flammable substances such as petroleum or gasoline.

It may cause explosions or fire.



● Do not cover on the rubber heater with insulator or other materials.

It brings overheat and may cause damage, fire, electric shock or leakage.



Use optional "Insulating Jacket" to keep the heat in.

● Use the heater only for JIS standardized drums, 20-liter pails or 18-liter square cans.

Inappropriate size of containers may cause electric leakage or disconnection.



● Do not use the heater in the following condition. It may cause fire, electric shock or failures.

- Use in the steamy or water dropping place.
- Use in the corrosive atmosphere.
- Use in the atmosphere of high humidity, such as bath.
- Use in the atmosphere at temperatures of 10 degrees Celsius below zero or less.
- Use in the atmosphere at temperatures of 50 degrees Celsius or more.
- Use in the place where other heaters or heating system are working.



● Do not touch with wet hands.

Do not handle the controller by wet hands. It may cause electric shock.



● Do not fix the rubber heater higher than the liquid level.

It may cause fire and disconnection.



● Do not attach the heater upside down.

It may overheat the controller and cause damages, electric leakage and shocks, or fire.



CAUTION

● Keep the heater from dust or dirt with the cover in normal temperature and humidity.

It may cause electric shock and leakage.



● Do not damage on the heater or cables.

Do not damage on the rubber heater or power cables. It may cause electric shock or failures.



● Use correct power voltage.

Do not use with any power voltage other than the indicated. It may cause failures.



● Do not pull the power cables.

Do not pull the power cables. It may cause failures.



● Mind your step when you set the heater close to the ground.

Damages on the heater may cause electric leakage and shock, or fire.



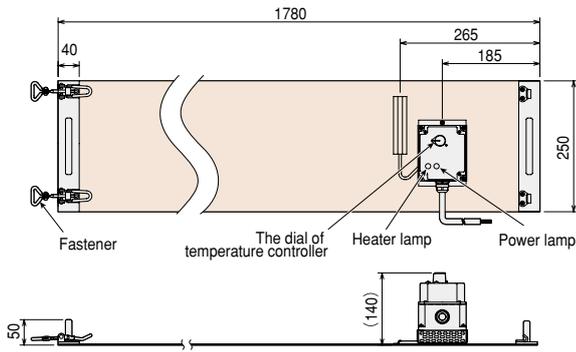
● Do not bend the heaters.

It may cause electric leakage or disconnection.

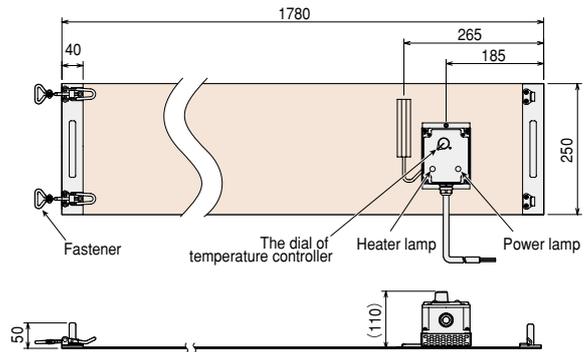


NAMES OF PARTS

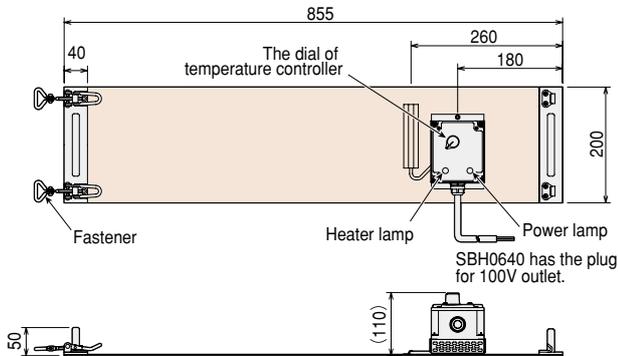
● For drum (3-phase 200V) SBH0610



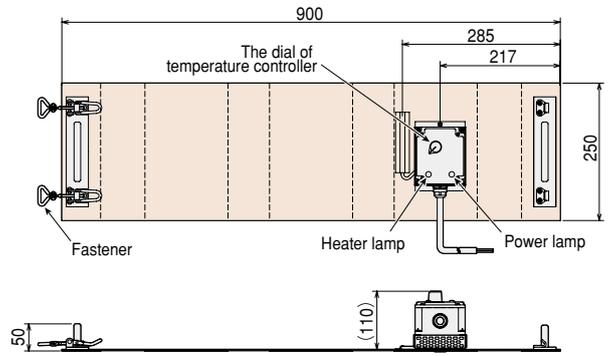
● For drum (single-phase 200V) SBH0620



● For 20-liter pail SBH0630/SBH0640



● For 18-liter square can SBH0630/SBH0640



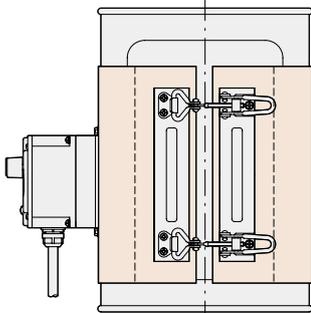
HOW TO USE

- ① Adjust the fasteners and attach the rubber heater tightly with the drum or pail.
- ② Set the target temperature with the dial of the controller.
- ③ Connect the power cables and turn on.
 100V model : Connect the plug into 100V outlet.
 200V model : Fix crimping terminals on power cables. Confirm the power is off, and connect the power cables with 200V source. Turn on the power switch.
- ④ Turn off the breaker or disconnect from the outlet.

 **The heater does not turn off constantly even when you set the dial at the lowest temperature.**

When you use SBH0650 (for 18-liter square can),

Keep the fastener in the center of a side surface to attach.



- ⑤ If you need to dismantle the rubber heater, leave it to room temperature and wear protection gloves.

SPECIFICATIONS

Name		Drum		20-liter pail		18-liter square can
Model number	SBH0610	SBH0620	SBH0630	SBH0640	SBH0650	
Product code	06020010	06020020	06020030	06020040	06020050	
Voltage	3-phase 200V	Single-phase 200V	Single-phase 200V	100V	Single-phase 200V	
Wattage	2 kW		700W		650W	
Specifications of the temperature controller	The range of temperature	30 ~ 80 °C				
	Control method	Liquid expansion thermostat On/Off control (two-position control)				
Environmental temperature in use	-10 ~ 50 °C					
Power cables	Flexible cable 2 m (1.25mm ²)					
	3 wires	2 wires (SBH0640 has the plug for 100V outlet)				
Weight	3.4 kg		2.2 kg		2.5 kg	
Pail application	JIS standard steel drum Nominal capacity 200 liter		JIS standard steel pail Nominal capacity 18 / 20 liter (inside diameter 286 mm)		JIS standard metal 18-liter square can	

This product has no grounding terminals.

TROUBLE SHOOTING

TROUBLE	CAUSE	ACTION
Unlit power lamp	Disconnection of power cables	Check the power cables
	Trouble on the power lamp	Replacement of the heater lamp
Unlit the heater lamp	The target temperature is too low	Adjustment of the target temperature
	Trouble on the heater lamp	Replacement of the power lamp
	Burnout of the thermal fuse	Replacement of the thermal fuse
	Trouble on the temperature controller	Replacement of the temperature controller
Impossible to control temperature	Trouble on the temperature controller	Replacement of the temperature controller
	The target temperature is too high	Adjustment of the target temperature
No heating while the heater lamp on	Burnout of the rubber heater	Replacement of the rubber heater
	The target temperature is too low	Adjustment of the target temperature
	Trouble on the temperature controller	Replacement of the temperature controller

Dried atmosphere may cause static electricity. It has no harmful influence for heater functional.

Stop the operation of the heater immediately when you find any trouble on it and inform HAKKO ELECTRIC CO., LTD. or your distributors.

AFTER SALE SERVICE

If you have any questions about our products, contact with your distributors, or the Sales Head Office of HAKKO ELECTRIC CO., LTD. The addresses and phone numbers are as follows.

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