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Hotplate

HS33 *MANUAL*

Thank you very much for selecting Mi-sung products.

For your safety,please read the following before using.

Main products

- Temp controller
- Heating Tape
- Hot plate
- Digital Mantle,Analog Mantle,Rota Mantle
- Digital Stirrer
- Analog stirrer

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General Information

Unpack your item carefully and inspect for damage and report such damage or missing parts to your supplier right away.
Read your instruction manual carafully. Take time to save time while working with you item.
Make sure that every user has read and understood the instruction manual.
Please store the instruction manual in a place easily accessible to every user.

Safety Information

Please comply with all safety and accident-prevention regulations as in force for laboratory work!
Use extra care when working with flammable substance; refer to safety data sheets.
When connecting your item with your local power supply, please make sure your item is designed for your local supply voltage; go by data plate on the item.
Turn your power switch OFF whenever the item is not used, or before disconnecting the plug.
Use extra care when working in the vicinity of flammable and explosive substances. Motor are non-sparking type, however, the item itself is not explosion proof.
Please do not connect your instrument without a protective ground outlet.
Your item requires a solid stand.

Warning

To avoid electrical shock, always:

1. Use a properly grounded electrical outlet of correct voltage and current handling capacity.
2. Disconnectfrom power supply before servicing.

To avoid personal injury:

1. Do not use in the presence of flammable or combustible materials; fire or explosion may result.
   This item contains components which may ignite such materials.
2. Keep the item clean. Use non-abrasive cleaner. Alkali spills, hydrofluoric acid spills or phophoric acid spills may damage the item and lead to thermal failure. Unplug unit and remove spills promptly. Do not immerse unit for cleaning.
3. Do not remove or modify grounded power plug. Use only properly grounded outlets to avoid shoch hazard.
   Not rated for use in hazardous atmospheres.
4. Use appropriate hand and eye protection when handling hazardous chemicals.
5. Do not use in highly corrosive atmospheres; corrosive fumes and spill may damage your item and internal components,

Caution

Space instrument 12 inches away from combustible materials under any conditions.

1. Specifications

TYPE		Hotplate Stirrer
		HS33
Temperature	Range	Max. 380℃
	Display	Scale(temperature)
	Controller	Analog temperature controller
Watts		
Stirring	Speed	100 ~ 1300 rpm
	Speed display	Scale(rpm)
	Capacity(H2O)	up to 15L
Speed Controller		Feedback control
Top Plate		Ceramic coated top plate
Dimensions	Plate area(mm)	300 x 300
	Overall(WxDxH)	310 x 430 x 120
Electrical Supply		AC 220~230V / 50~60Hz

2. Functional Description

* HEATER Operation

* Connect the supplied power cord into connecting holder on rear side

1.Turn s/w No.2 to the right,then Heating runs with lighting on lamp No.1

2.Adjust the heating volume using s/w No.2

3.To stop the heating, turn s/w No.2 to the left, then heating stops with lamp No.1 off

* MOTOR Operation

1.Turn s/w No.4 to the right,then stirring runs with lighting on lamp No.3

2.Adjust the motor volume using s/w No.4

3.To stop the stirring, turn s/w No.4 to the left, then motor stops with lamp No.3 off

※Before using the instrument, read safety precautions carefully, then use this product properly.
※Touching the reactor block surfaces and vials while running, the hot may cause serious burns.
※Do not use the unit on other purpose.
※Avoid contact hot surface. The hot plate will remain hot without any visual indication on power as well as after power has been removed for sometime .

3. Temperature control

Heating temperature is controlled by analog temperature controller (Built-in K Type sensor)