

# ELECTRIC WATER GRILL

## HS-1 , HS-1½ , HS-2

### HS1-S70, HS1/2-S70, HS2-S70

## SPECIFICATIONS

The tables below refer to the specifications of models HS.

### Appliance's Dimensions

MODEL	LENGTH (mm)	WIDTH (mm)	HEIGHT (mm)
HS-1	490	500	230
HS-1½	700	500	230
HS-2	940	500	230
HS1-S70	540	700	230
HS1/2-S70	700	700	230
HS2-S70	1035	700	230

### Electrical Supply

HS-1	230V AC / 400V 2N AC 50Hz
HS-1½, HS1S70, HS1/2S70, HS2S70	230V AC / 400V 3N AC 50Hz
HS-2	230V AC / 400V 2N AC 50Hz

### IP Grating

IP 20

### Appliance's Safety

Complies to **EN 60335-1** and **60335-2-48** requirements.

**CE** marking.

### Power

MODEL	POWER IN TOTAL
HS-1	5.000 Watt
HS-1½	7.500 Watt
HS-2	10.000 Watt
HS1-S70	8.100 Watt
HS1/2-S70	11.100 Watt
HS2-S70	16.200 Watt

## **Main Parts**

- Supporting feet.
- AISI 430 stainless steel body.
- Cast iron or INOX Ø6 grid ribbed or smooth (one piece for HS-1 and HS-1½ model, and two for HS-2)
- INOX Ø6 grid (one piece for HS1-S70 and HS1½-S70 model, and two for HS2-S70).
- AISI 430 stainless steel frames of grills.
- Fire resistant frame handles.
- AISI 430 water through.
- Aluminum bases for grills support and rotation.

## **Electrical Components**

- Wire heating elements:

HS-1 : 2 x 2.500 Watt.

HS-1½ : 3 x 2.500 Watt.

HS-2 : 4 x 2.500 Watt.

HS1-S70 : 3 x 2.700 Watt

HS1/2-S70 : 3 x 3.700 Watt

HS2-S70 : 6 x 2.700 Watt

- 0-12 zimenstat

HS1/HS1-S70 : 2 pieces

HS1½/HS1½-S70 : 2 pieces

HS2/HS2-S70 : 3 pieces

- Indicating lamps for heating elements operation.

HS1/HS1-S70 : 2 pieces

HS1½/HS1½-S70 : 2 pieces

HS2/HS2-S70 : 3 pieces

- Fire resistant wiring.

- Terminals' fasteners.

- Relay for mixed operation of heating elements (for HS-1 and HS-1½)

HS1/HS1-S70 : 0

HS1½/HS1½-S70 : 1 pieces

HS2/HS2-S70 : 2 pieces

- Gland for supply cord.

- Earth terminal.

- Potential equivalent terminal, marked P.A.

- Six polar polyamide connection for supply cord.

# 1. GENERAL INFORMATION

- ⇒ This technical manual includes instructions for the installation, operation, care and maintenance of water-grills type HS-1, HS-1½, HS-2 HS1-70, HS1/2-70 & HS2-70 manufactured by **NORTH**. Please, read carefully and keep it for future reference. This manual should be referred to both by installing or service technicians and the operators of the equipment.
- ⇒ After you remove the packing make sure that no damage was caused during shipping. If in doubt, we recommend that an authorized technician examine the appliance before you proceed with the installation.
- ⇒ The appliance requires electrical connection. Before proceeding, make sure that main voltage meet the requirements of the appliance. This information is available on a label, on the right side of the appliance, as you face it. **In case of incongruence or if in doubt, do not connect the apparatus. Ask for the equipment to be checked by specialized personnel.**
- ⇒ **NORTH** Water-grill equipment is commercial grade appliances and should, be used by personnel who are specially trained in their use.
- ⇒ All procedures concerning installation and connection of the appliance must be carried out exclusively by specialized technicians according to specifications valid in the country where installation is taking place.
- ⇒ Before any routine cleaning, disconnect from electricity mains. The same procedure must be followed in case of malfunction of the appliance, while waiting for the service technician.
- ⇒ Authorized personnel using original spare parts only must exclusively carry out any repairs.
- ⇒ The manufacturer cannot be held responsible for damage caused to persons, animals or property due to misuse, tampering, unauthorized modification, or uses other than ones mentioned and / or considered in this manual.

## **2. TECHNICAL INSTRUCTIONS**

# **INSTALLATION AND SERVICE INSTRUCTIONS**

**NORTH WATER-GRILL IS PROFESSIONAL EQUIPMENT.  
ALL ASSEMBLY AND CONNECTION PROCEDURES,  
TESTING AND REQUIRED REPAIRS  
MUST BE CARRIED OUT  
BY SPECIALIZED AND AUTHORIZED PERSONNEL ONLY.**

.....

**NORTH ENTERPRISES CANNOT BE HELD RESPONSIBLE  
FOR ANY NEGATIVE CONSEQUENCES IN CASE OF  
INTERVENTIONS BY NON-SPECIALIZED TECHNICAL PERSONNEL  
OR DUE TO NONCOMPLIANCE WITH FACTORY INSTRUCTIONS.**

## 2.1 INSTALLATION OF THE APPLIANCE.....

After making sure the appliance is intact, place it in position so that it is stable and there is adequate operating space around it.

Make sure that all parts are at hand, i.e.:

- Water-grill HS.
- Water through.
- Instruction manual.

**Attention!** To avoid accidents, keep all packing materials (cardboard, plastic bags, metal items, etc) away from children.

**Important!** Install the water-grill on a flat non-flammable surface, away from flammable walls.

## 2.2 ELECTRICAL CONNECTION.....

Remove the rear cover of the appliance.

- Enter a suitable supply cord through the gland.
- Depending on the available power supply connect the cables.

### α. Two phases power supply

HS-1 , HS-2	HS-1½, HS1-S70, HS11/2-S70, HS2-S70
Connect the phases to L1, L2. Connect the earth neutral to N1 or N2. Connect the earth.	Connect the phases to L1, L2 and L3. Connect the neutral to N1 or N2. Connect the earth

### β. Single phase power supply

HS-1 , HS-2	HS-1½
Remove the provided bridges and short circuit L1, L2. Connect the phase to L1 or L2, the neutral to N1 or N2 and earth to earth terminal.	Remove the provided bridges and short circuit L1, L2 and L3. Connect the phase to L1 or L2 or L3, the neutral to N1 or N2 and the earth terminal.

- Connect P.A. terminal to water piping using a 10 mm<sup>2</sup> wire.

**IT IS STRONGLY RECOMMENDED TO USE A QUALIFIED ELECTRICIAN FOR ALL ELECTRICAL CONNECTIONS.**

**THE MANUFACTURER CANNOT BE HELD RESPONSIBLE FOR ACCIDENTS AND DAMAGE CAUSED TO PERSONS, ANIMALS OR PROPERTY DUE TO NONCOMPLIANCE WITH THESE INSTRUCTIONS.**

### 2.3 POSSIBLE PROBLEM.....

Even if the appliance is used correctly, some problems may arise for various reasons. The table that follows mentions some possible problems and some possible causes.

**In case of problem we control first if the electrical supply to the machine is right or not.**

POSSIBLE PROBLEM	POSSIBLE CAUSES
Machine is not operating	Check if there is damage to 1) all heating elements 2) the edge of cord connected with the heating element 3) connection of relay.4) zimenstat (switch)
Heating element is not operating	Check if there is damage to 1) the heating element 2) the edge of cord connected with heating element 3) connection of relay

### 2.3 REPLACEMENT OF ELECTRICAL ELEMENTS.....

To replace heating elements open the back of the frames, disconnect wires and remove the supporting nuts.

For zimenstat and indicating lamps open the cover on the front inside section of the appliance; where as for relays and others the rear of the appliance.

### CUT OFF THE POWER SUPPLY BEFORE COVER REMOVAL.

### 2.4 TRAINING.....

The personnel who are to install and connect the appliance must train the users appropriately so that they can handle the operation and safety measures of the appliance.

### **ATTENTION !!!**

- Check that main voltage in your working area is suitable for the settings on the label and that the appliance is properly earthed.
- Before any service activity takes place or any parts are replaced on the appliance, make sure that power supply is turned off.

**THE MANUFACTURER CANNOT BE HELD RESPONSIBLE FOR ACCIDENTS AND DAMAGE CAUSED TO PERSONS, ANIMALS OR PROPERTY DUE TO NONCOMPLIANCE WITH THESE INSTRUCTIONS.**

### **3. OPERATION INSTRUCTIONS**

## **INSTRUCTIONS TO PERSONNEL FOR OPERATION AND CARE OF WATER-GRILLS HS-1, HS1½, HS-2**

NORTH WATER-GRILL IS PROFESSIONAL EQUIPMENT.  
ALL ASSEMBLY AND CONNECTION PROCEDURES,  
TESTING AND REQUIRED REPAIRS MUST BE CARRIED OUT  
BY SPECIALIZED AND AUTHORIZED PERSONNEL ONLY.

.....

NORTH ENTERPRISES CANNOT BE HELD RESPONSIBLE FOR ANY  
NEGATIVE CONSEQUENCES IN CASE OF INTERVENTIONS BY  
NON-SPECIALIZED TECHNICAL PERSONNEL OR DUE TO  
NONCOMPLIANCE WITH FACTORY INSTRUCTIONS.

### **3.1 TURNING ON THE APPLIANCE .....**

After making sure the appliance has been correctly connected to electricity, you can start using it.

Depending on the heating position select zimenstat (0-12). Zimenstat control operation of heating elements and adjust the power:

- HS-1: Each zimenstat adjusts the power to one heating element.
- HS-1½: The left side zimenstat adjusts the power to the two left side heating elements, and the right side zimenstat the power the right side heating element.
- HS-2: Each one of the two right side zimenstat adjust the power to the corresponding heating elements of the right grill, where as the left side zimenstat the two heating elements of the left grill.

Depending on the heating requirements set zimenstat:

- Position 0 : To stop operation.
- Position 1-7 : To sustain temperature.
- Position 8-11 : To grill.
- Position 12 : To operate at maximum power.

On positions 1-11 heating elements operation is interrupted when desire level is attained. On position 12 the operation is continuous. The indicating lamps follow the operation of the corresponding heating element.

In the basin, before grunt's operation, put 10-15 cm height water, to have a successful roasting and convenience as far as it concerns basin's cleaning.

### **3.2 CLEANING AND MAINTENANCE.....**

- \* Turn off the heating elements before any cleaning or maintenance procedures. Let the appliance cool and make sure it has been unplugged from the main supply.
- \* At the end of the working day, to put out the fat, raise the frame upwards, pull the orthostat outwards and the frame stays upright to put out and clean fat collecting basin.
- \* Never use running water to clean the Water-grill appliance.