

Technical instruction
Manual for use and maintenance



DISPLAY SHOWCASE

MODELS

FSTAR80 – FSTAR100 – FSTAR120 – FSTAR2W – FSTAR3W – FSTAR4W

These appliances comply with requirements of E.E.C 72/23 EN 60 335-1 & EN 60335 – 2-49

SOTIRIOS D. PRODANAS & CO

PROFESSIONAL ELECTRIC & GAS MACHINES FOR RESTAURANT – PATISseries – SNACK BAR

OFFICE – FACTORY : National Road Kilkis-Thessaloniki P.C 545 00 Tel.: ++30 23410 41991 Fax: ++30 23410 41539

P.O Box 400 70, P.C : 560 00 www.north.gr - e-mail : info@north.gr

DISPLAY SHOWCASE F STAR

SPECIFICATIONS

The tables below refer to the specifications of models F STAR W.

Appliance's Dimensions

MODEL	LENGTH (mm)	WIDTH (mm)	HEIGHT (mm)
F STAR W2	760	630	590
F STAR W3	1100	630	590
F STAR W4	1450	630	590
F STAR 80	1000	510	470
F STAR 100	1200	510	470
F STAR 120	800	510	470

Electrical Supply

Monophase supplying : 230 V ~ 50 Hz

IP Grating

IP 20

Appliance's Safety

Complies to **EN 60335-1** and **EN 60335-2-49** requirements.

CE marking.

Power

MODEL	POWER IN TOTAL
F STAR W2	2.000 Watt
F STAR W3	2.500 Watt
F STAR W4	3.000 Watt
F STAR 100	1.600 Watt
F STAR 120	2.000 Watt
F STAR 80	1.300 Watt

Main Parts

- AISI 430 stainless steel body.
- AISI 430 stainless steel water drawer.
- Curved crystals and two drawing crystals.

Electrical Components

- Wire heating elements:
 - F STAR W2 : 2.000 Watt
 - F STAR W3 : 2.500 Watt
 - F STAR W4 : 3.000 Watt
 - F STAR 100 : 1.600 Watt.
 - F STAR 120 : 2.000 Watt.
 - F STAR 80 : 1.300 Watt.
- Central main ignition.
- Thermostat 90°C
- Motor
- Indicating lamp
- Switch on/off for the motor
- Lighting switch on/off.
- Fluor lighting
- Polyamide fastener lids.
- Terminals' fasteners.
- Earth terminal.

1. GENERAL INFORMATION

- ⇒ This technical manual includes instructions for the installation, operation, care and maintenance of heating air cupboard type FSTAR W 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** cupboards equipment are commercial grade appliances and should, there for, 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.
- ⇒ Any repairs must be exclusively carried out by authorized personnel using **original spare parts only**.
- ⇒ 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 CUPBOARDS ARE 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.:

- Heating air cupboard
- One shelf
- Two drawing crystals
- Water drawer
- Instruction manual

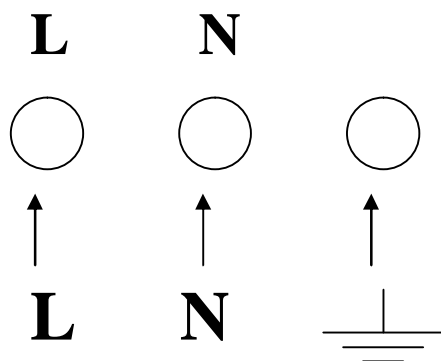
Attention ! To avoid accidents, keep all packing materials (cardboard, plastic bags, metal items, etc) away from children.

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

2.2 ELECTRICAL CONNECTION.....

Monophase supplying (H0RN-F 3X4 mn cord)

Connect phase to L, natural to N and earth -to-earth.



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 OPERATION INSTRUCTIONS.....

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

Open main ignition on position 1 (on) and depending on the heating requirements, choose the position of desirable temperature 0-90°C. Thermostat control's resistance's operation according with the desirable temperature.

Open motor with the indicating switch on position on

2.4 CLEANING AND MAINTENANCE.....

Caution ! Never use running water to clean the appliance.

2.5 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 damages to 1)the heating element 2)the egde of cord connected with the connector strip.
Heating element is not operating	Check if there is to 1)the heating element 2)the edge of supply cord connected with heating element 3)the thermostat 4)the main switch on/off.
Light is not operating	Check if there is damages to 1)Lamp 2)switch on-off 3)the internal lamp holder 4)the starter 5)bad contact between lamp and lamp holder

2.6 REPLACEMENT OF ELECTRICAL ELEMENTS.....

To replace thermostat, indicating lamp-lighting ignition, unscrew the 4 screws, they are in the right down position of the appliance. Pull the cover down and make the replacement of the corresponding spare part, bringing the cover in it's position, screw it and put it in operation.

To replace heating element, motor take away the 4 screws right and left, placed on the support crystal cover. Unscrew supply cord, which is in the lighting element, lift and drag the cover with the crystals forward.

For changes at the lighting elements, pull the protective cover outwards and replace lamp, starter or ballast. Put the protective in it's position, buttoning and it is ready again for operation.

CUT OFF THE POWER SUPPLY BEFORE COVER REMOVAL.

2.7 TRAINING.....

The personnel who are to install and connect the appliance must train the user 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.