

**Castel MAC SpA**Via del Lavoro, 9 C.P. 172  
I - 31033 Castelfranco Veneto (TV)  
ITALY EUTel. +39 0423 738452  
Fax +39 0423 722811icematic@castelmac.it  
www.castelmac.it

## Fabbricatori di ghiaccio granulare | Ice flakers | Flockeneisbereiter

### Machines à glace en grains | Fabricadores de hielo in escamas

I MODELLI E LE SPECIFICHE POSSONO ESSERE CAMBIATI IN QUALUNQUE MOMENTO SENZA PREAVVISO  
 MODELS AND SPECIFICATIONS ARE SUBJECT TO BE CHANGED WITHOUT NOTICE  
 WIR BEHALTEN DAS RECHT VOR JEDERZEIT ANDERUNGEN DER MODELLE UND DER TECHNISCHEN ANGABEN VORZUNEHMEN  
 LES MODELES ET CARACTERISTIQUES DES APPAREILS PEUVENT ETRE CHANGES SANS PREAVIS  
 LOS MODELOS Y LAS ESPECIFICACIONES PODRAN MODIFICARSE EN CUALQUIER SIN PREVIO AVISO

# F120

Produzione di ghiaccio in 24 ore fino a  
Ice produced for 24 hours up to  
Eisproduktion in 24 Stunden bis zu  
Production de glace en 24 h jusqu'à  
Produccion de hielo en las 24 horas hasta

**kg. 120**

PRODUZIONE DI GHIACCIO  
ICE PRODUCTION  
EIS PRODUKTION  
PRODUCTION DE GLACE  
PRODUCCION DE HIELO

Raffreddamento unità condensatrice Condensing unit cooling Kondensatoreinheit Refroidissement de l'unité de condensation Refrigeración de la unidad condensadora	aria air Luft air aire	o acqua: consumo n. 18 litri per ora* or water: consumption n. 18 litres per hour* oder Wasser: Verbrauch n. 18 liter pro Stunde* ou eau: consommation n. 18 litres par heure* o agua: consumo n. 18 litros para hora*
--	------------------------------------	--

**RAFFR. AD ACQUA / WATER COOLED / WASSERGEKÜHLT**  
**REFR. A EAU / REFR. A AGUA**  
Temperatura acqua/Water temperature  
Wassertemperatur/Température eau  
Temperatura agua

Potenza assorbita / Absorbed power / Leistungsaufnahme Puissance absorbée / Potencia Absorbida	<b>W 500</b>
---	--------------

Refrigerante / Refrigerant / Kältemittel / Réfrigérant / Refrigerant	<b>R 134a</b>
--	---------------

Attacco entrata acqua / Water inlet connection / Anschluss für Wasserzufluss Prise entrée d'eau / Conexión entrada agua	<b>3/4" Gas</b>
--	-----------------

Attacco scarico acqua / Water output connection / Anschluss für Wasserabfluss Prise écoulement d'eau / Conexión desague	<b>mm. Ø 20</b>
--	-----------------

Alimentazione monofase/Single phase input/ Einphasige Spannung/Alimentation monophasé Alimentación monofásica	<b>220V-240V - 50 Hz</b>
---	--------------------------

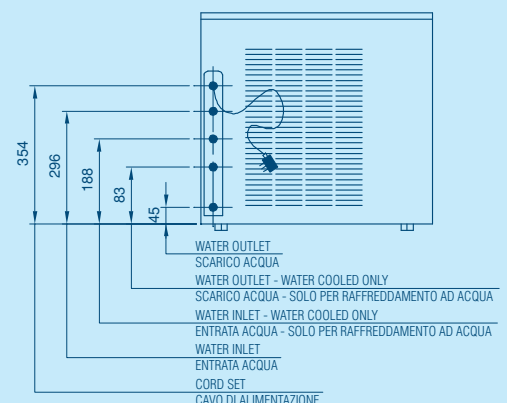
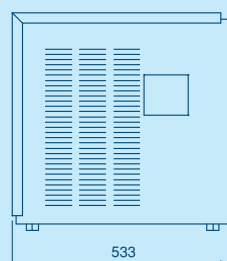
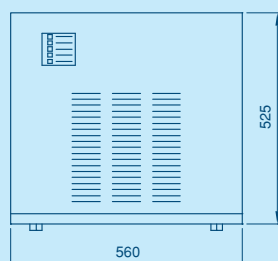
Alimentazione voltaggi speciali: Extra voltages: Andere Spannungen: Alimentation voltages spéciaux: Otros voltajes especiales:	a richiesta on request Lieferbar auf Wunsch sur demande según pedido
--	--

Deposito da abbinare / Bin to be used	<b>D101</b>
---------------------------------------	-------------

Carrozzeria / External structure Ausführung / Carrosserie / Carroceria	<b>inox</b>
---	-------------

Peso netto / Net weight / Netto Gewicht Poids net / Peso neto	<b>Kg. 45</b>
--	---------------

(\*) con temperatura acqua 15 °C  
with water temperature 15 °C  
mit Wassertemperatur 15 °C  
avec température eau 15 °C  
con temperatura agua 15 °C



**Dimensioni**  
**Dimensions**  
**Masse**  
**Dimensions**  
**Dimensiones**

## GENERAL INFORMATION AND INSTALLATION

### A. INTRODUCTION

This manual provides the specifications and the step-by-step procedures for the installation, start-up and operation, maintenance and cleaning for the **ICEMATIC F80C-F125C-F120-F200-SF300-SF500-SFN1000** Modular Icemakers. The Electronic Flakers and Super-flakers are quality designed, engineered and manufactured. Their ice making systems are thoroughly tested providing the utmost in flexibility to fit the needs of a particular user.

**NOTE.** *To retain the safety and performance built into this icemaker, it is important that installation and maintenance be conducted in the manner outlined in this manual.*

#### Storage Bin

Since the F series Modular Flakers do not have their own attached ice storage bins, it is necessary to use an auxiliary bin as detailed herebelow:

**D101** in combination with **F120-F200**

**D201** with its companion **NKF201** Top Cover in combination with **F120 - F200 - SF300 - SF500**

**D310** with its companion **NKF310** Top Cover in combination with **F120 - F200 - SF300 - SF500**

**B50** in combination with **SF300 - SF500**

**D500** with its companion **NKF500** Top Cover in combination with **SF300 - SF500**

**D700** with its companion **NKF700** Top Cover in combination with **SF500 - SFN1000**

### B. UNPACKING AND INSPECTION

#### Icemaker

1. Call your authorized ICEMATIC Distributor or Dealer for proper installation.
2. Visually inspect the exterior of the packing and skid. Any severe damage noted should be reported to the delivering carrier and a concealed damage claim form filled in subject to inspection of the contents with the carrier's representative present.
3.
  - a) Cut and remove the plastic strip securing the carton box to the skid.
  - b) Cut open the top of the carton and remove the polystyrene protection sheet.
  - c) Pull out the polystyrene posts from the corners and then remove the carton.

4. On models F120, F200, SF300 and SF500 remove the top and front panel while on model SFN1000 remove top and sides panels of the unit and inspect for any concealed damage. Notify carrier of your claim for the concealed damage as stated in step 2 above.

5. Remove all internal support packing and masking tape.

6. Check that refrigerant lines do not rub against or touch other lines or surfaces, and that the fan blades move freely.

7. Check that the compressor fits snugly onto all its mounting pads.

8. See data plate on the rear side of the unit and check that local main voltage corresponds with the voltage specified on it.

**CAUTION. Incorrect voltage supplied to the icemaker will void your parts replacement program.**

9. Remove the manufacturer's registration card from the inside of the User Manual and fill-in all parts including: Model and Serial Number taken from the data plate. Forward the completed self-addressed registration card to ICEMATIC/SCOTSMAN factory.

#### Storage bin (D101 - D201 - D310)

1. Follow the steps 1, 2 and 3 above to unpack the storage bin.
2. Unloose the two bolts and remove the protection plate from the drain fitting on model D310.
3. Carefully lay it down on its rear side and fit the four legs into their sockets.
4. Remove all internal support packing and masking tape as well as the plastic ice cube deflector which is not used with the SCOTSMAN Modular Flakers.

5. Remove the manufacturer's registration card from the inside of the User Manual and fill-in all parts including: Model and Serial Number taken from the data plate. Forward the completed self-addressed registration card to ICEMATIC/SCOTSMAN factory.

#### Storage bin (B 1025 S - B 1350 S)

1. Follow the steps 1, 2 and 3 above to unpack the storage bin.

2. Lay carefully down the bin on its back to protect the finish and remove the bolts holding the shipping skid to the bin.
3. Screw-in the legs into the corresponding tapped holes in the bin bottom and tighten to seat the legs well against the bin bottom.
4. Connect the water drain line to the 1" female drain fitting located in the bottom of the bin.

**CAUTIONS. Avoid excessive tightening force when connecting to this fitting. Do not apply excessive heat if any sweating of the fittings is necessary. Heat conduction through the metal may melt the threads in the plastic drain.**

5. On **model D700** only insert the longer side of each plastic inspection window in the upper track of the corresponding opening and push it to force the window to enter into its seat.

3. On **D201 and D310 Storage Bin** inspect its top mounting gasket which should be flat with no wrinkles, to provide a good sealing when the Top Cover is installed on top of it.

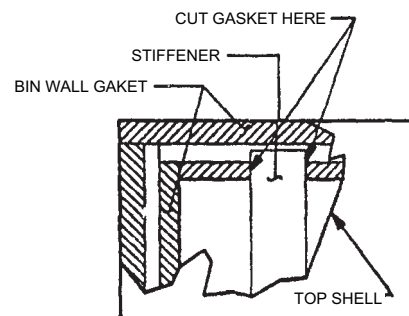
4. Place the NK201-NKF310 Top Cover on top of Storage bin using care not to wrinkle or tear the gasket.

5. On the **D500 and D700 Storage Bin** unloose the screws securing the S.S. Top Cover to the storage bin and remove it.

6. Lay out on the bin top the plan of the ice machine as it will be located on the bin and cut an opening in the bin top for the ice drop area; cover the edges of the opening with vinyl tape.

7. Install the gasket-on the bin top-around ice drop opening of the bin top; apply sealant along the inside of the gasket.

8. Position and install the four aluminium front to rear stiffeners (U shaped) paying attention to the guideline shown on the drawing.



**NOTE.** Bin wall gasket must be cut to clear the stiffener ends as shown on drawing. Do not put any stiffeners crossing the ice drop opening.

### C. LOCATION AND LEVELLING

**WARNING.** This Modular Flaker and Superflaker is designed for indoor installation only. Extended periods of operation at temperature exceeding the following limitations will constitute misuse under the terms of the ICEMATIC Manufacturer's Limited Warranty resulting in **LOSS** of warranty coverage.

1. Position the storage bin in the selected permanent location.  
Criteria for selection of location include:
  - a) Minimum room temperature 10°C (50°F) and maximum room temperature 40°C (100°F).
  - b) Water inlet temperatures: minimum 5°C (40°F) and maximum 35°C (90°F).
  - c) Well ventilated location for air cooled models (clean the air cooled condenser at frequent intervals).
  - d) Service access: adequate space must be left for all service connections through the rear of the ice maker. A minimum clearance of 15 cm (6") must be left at the sides of the unit for routing cooling air drawn into and exhausted out of the compartment to maintain proper condensing operation of air cooled models.
2. Level the Storage Bin Assy in both the left to right and front to rear directions by means of the adjustable legs.

9. Install the bin top in its position onto the bin top by:
  - place the rear side of top against rear edge of the bin
  - lower the front of the top onto the stiffeners
  - re-fit the screws previously removed as per step 5

10. Install the Modular Flaker or Superflaker onto the Top Cover of storage bin pay attention to match the ice chute with the Bin Top opening.

### Installation of lift door catch (D500)

On the Storage Bin D500 when the ice maker is installed flush with the bin front it is required to mount the lift door catch as detailed herebelow.

1. Open all the way the lift door in the upright position then place the door catch on the front face of the ice maker and tape it in place.

2. Drill two 3 mm holes in correspondance of the catch mounting holes.
3. Remove the tape and fasten the catch using the two self-tapping screws supplied.

#### D. ELECTRICAL CONNECTIONS

See data plate for current requirements to determine wire size to be used for electrical connections. All ICEMATIC icemakers require a solid earth wire.

All ICEMATIC ice machines are supplied from the factory completely pre-wired and require only electrical power connections to the wire cord provided at the rear of the unit.

Make sure that the ice machine is connected to its own circuit and individually fused (see data plate for fuse size).

The maximum allowable voltage variation should not exceed -10% and +10% of the data plate rating. Low voltage can cause faulty functioning and may be responsible for serious damage to the overload switch and motor windings.

**NOTE.** All external wiring should conform to national, state and local standards and regulations.

Check voltage on the line and the ice maker's data plate before connecting the unit.

#### E. WATER SUPPLY AND DRAIN CONNECTIONS

##### GENERAL

When choosing the water supply for the ice flaker consideration should be given to:

- a) Length of run
- b) Water clarity and purity
- c) Adequate water supply pressure

Since water is the most important single ingredient in producing ice you cannot emphasize too much the three items listed above.

Low water pressure, below 1 bar may cause malfunction of the ice maker unit.

Water containing excessive minerals will tend to produce scale build-up on the interior parts of the water system while too soft water (with too low contents of mineral salts), will produce a very hard flaker ice.

##### WATER SUPPLY

Connect the 3/4" GAS male of the water inlet fitting, using the food grade flexible hose supplied to the cold water supply line with regular plumbing fitting and a shut-off valve installed in an accessible position between the water supply line and the unit.

If water contains a high level of impurities, it is

advisable to consider the installation of an appropriate water filter or conditioner.

#### WATER SUPPLY - WATER COOLED MODELS

The water cooled versions of ICEMATIC Ice Makers require two separate inlet water supplies, one for the water making the flaker ice and the other for the water cooled condenser.

Connect the 3/4" GAS male fitting of the water inlet, using the flexible hose supplied to the cold water supply line with regular plumbing fitting and a shut-off valve installed in an accessible position between the water supply line and the unit.

#### WATER DRAIN

The recommended drain tube is a plastic or flexible hose with 18 mm (3/4") I.D. which runs to an open trapped and vented drain. When the drain is a long run, allow 3 cm pitch per meter (1/4" pitch per foot).

Install a vertical open vent on drain line high point at the unit drain connection to ensure good draining.

The ideal drain receptacle is a trapped and vented floor drain.

#### WATER DRAIN - WATER COOLED MODELS

Connect the 3/4" GAS male fitting of the condenser water drain, utilizing a second flexible hose to the open trapped and vented drain.

This additional drain line must not interconnect to any other of the units drains.

**NOTE.** The water supply and the water drain must be installed to conform with the local code. In some case a licensed plumber and/or a plumbing permit is required.

#### F. FINAL CHECK LIST

1. Is the unit in a room where ambient temperatures are within a minimum of 10°C (50°F) even in winter months?
2. Is there at least a 15 cm (6") clearance around the unit for proper air circulation?
3. Is the unit level? (IMPORTANT)
4. Have all the electrical and plumbing connections been made, and is the water supply shut-off valve open?
5. Has the voltage been tested and checked against the data plate rating?
6. Has the water supply pressure been checked to ensure a water pressure of at least 1 bar (14 psi).

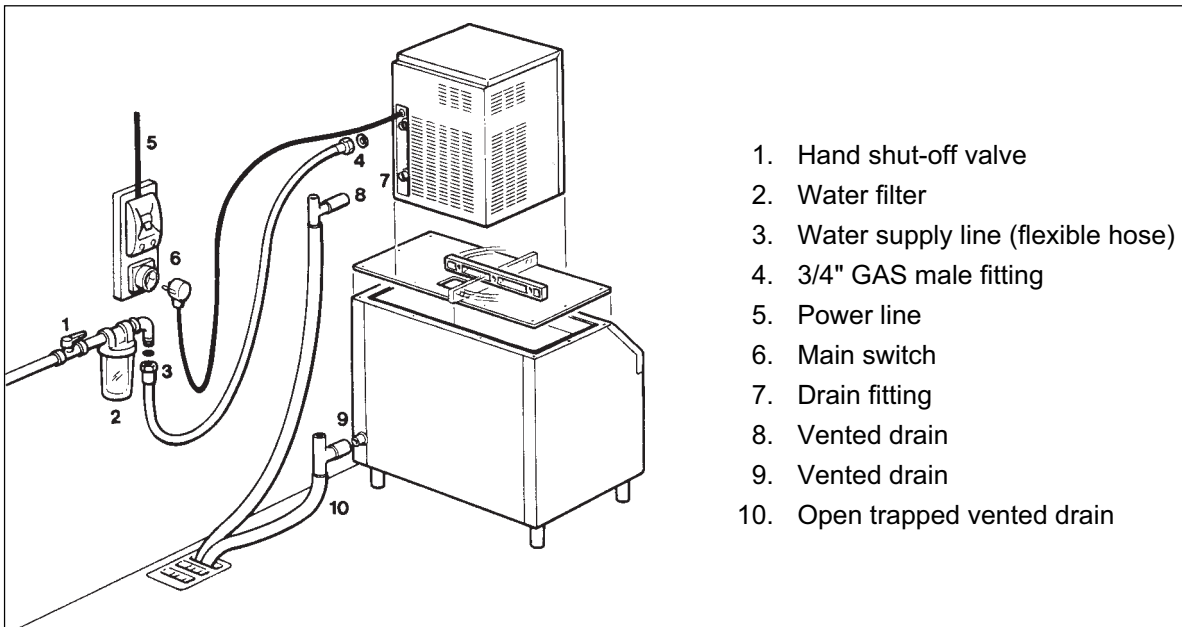
7. Have the bolts holding the compressor down been checked to ensure that the compressor is snugly fitted onto the mounting pads?
8. Check all refrigerant lines and conduit lines to guard against vibrations and possible failure.
9. Have the bin liner and cabinet been wiped clean?
10. Has the owner/user been given the User

Manual and been instructed on the importance of periodic maintenance checks?

11. Has the Manufacturer's registration card been filled in properly? Check for correct model and serial number against the serial plate and mail the registration card to the factory.

12. Has the owner been given the name and the phone number of the authorized ICEMATIC Service Agency serving him?

### G. INSTALLATION PRACTICE



**WARNING.** This icemaker is not designed for outdoor installation and will not function in ambient temperatures below 10°C (50°F) or above 40°C (100°F). This icemaker will malfunction with water temperatures below 5°C (40°F) or above 35°C (90°F).

