

# C-250 - C-400 - C-600 INSTRUCTION MANUAL ICE CUBES MACHINE

(including: exploded views, part list & diagrams)







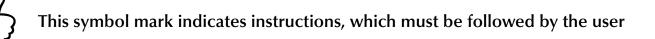
# CONTENTS

PRECAUTIONS	2
INSTALLATION	3 - 4
OPERATION	5
TIPS	6 - 7
TROUBLESHOOTINGS	
WARRANTY	
NAME AND CODE OF SPARE PARTS	10 - 11

#### PRECAUTIONS

#### SAFETYSYMBOLS

This symbol mark indicates improper use of the icemaker



Dear valued customer, The icemaker, you just bought, is possible to be installed and operate, by yourself without any help of a technician, only by reading carefully this "operating manual". But you can also ask for installation, help or be advised by authorized personnel from the merchandiser you bought this product. This icemaker is a Greek product and has been manufactured form Master Frost having its principal office in Lamia-Greece.

...Please also consider that you must always ask for the European Conformities mark-compliance with E.U. directives – and manufacturer elements. Closing I'd like to thank you for choosing "MASTER FROST" icemaker. Well THANK YOU!!

> With respect Production Manager Andrew Avdikos

Do not ever install your icemaker near heat sources.

The ambient working temperature MUST not exceed 32 Celsius nor underneath 10 Celsius.

If your icemaker works in a warm ambient temperature over 42 Celsius and starts and stops within few seconds, then there is a risk of destroying your compressor.

围阀@@ 706025-40-60 en ma 2012-07

The power supply will be connected with the icemaker MUST have its own fuse as you in figure 1.

INSTALLATION

The fuse must be:

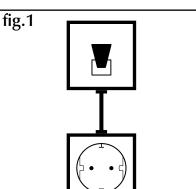
power cord

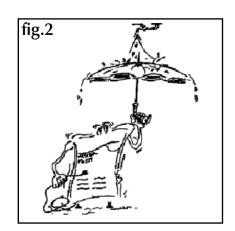
For the icemakers C-250/C,M-300/C, M-400/C, M-600/ C, M-800 10 Amps

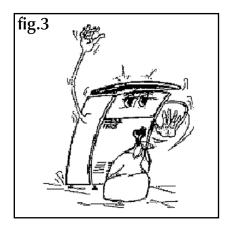
For the icemakers C, M-1200/C, M-1600/C, M-2800 16 Amps

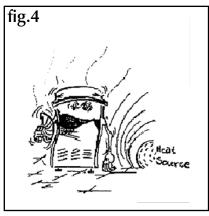
Do not pour water on your icemaker or the

Do not install the devise in small and narrow places that impede the free airflow IN and out of the air - duct. Always leave 25-30cm. distance from the air – duct of your icemaker before put anything that prevents airflow.





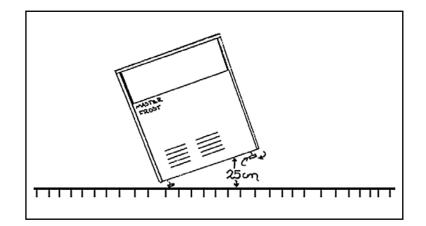




## **INSTALLATION**

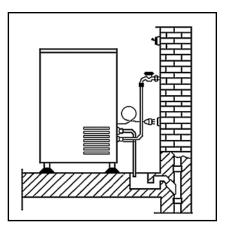
Inside the plastic bag you should find everything you need to start produce ice...

Lift the icemaker from one side, about 25 cm from the ground, and place its feet. Same do from other side.



Back of the icemaker you will find an inlet and outlet water. Place one side of granular pipe in outlet in outlet of icemaker and the other side to the drain of store –home. The other pipe, which have bolt in each side, is to be connected to the inlet of water. But first place in each bolt a rubber insulator (there are 2 rubbers in plastic bag). After that connect on side to inlet of icemaker and the other side to tap. Lastly allow inlet of water (open the tap) and then connect the power cord to plug. Now the apparatus will be supplied with tap water and after 2 min will start the cycle.

Do not place icemaker in position that allows the drain to be higher from outlet of water.



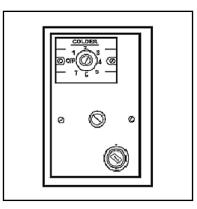
## **OPERATION**

Your icemaker has been adjusted from the factory to function after installation, without any other need of technician. But here you'll find how to make adjustment to your icemaker. Please note the adjustments are so easy to be done without the need of technical knowledge.

#### Find the adjustment switches

Pull up the front cover of device and the adjustment switches will be appear. Find the screw type with the numbers around it. This switch enables the fluctuation of the size ice size.

With a screwdriver turn the switch right for increasing volume in each ice piece. Or turn it left to decrease volume in each ice peace. Minimum weight 10 grams and max 32 grams.



Do not fluctuate marginal the adjustments, on left end position the icemaker stops to function. On right end position the icemaker will make a big mass of ice. If such thing happened you must stop the icemaker

and wait till the ice melts. Or you can make the ice melt quicker by boiling eater and pour it on top of icemaker, after you take off first the top cover. So please make adjustments gradually per working cycle, till you will be satisfied with the size of ice.

Near the switch we mentioned there is another screw type switch. Through this switch is possible to make adjustments with the storage capacity. Same turn right for increase the capacity and left for decreasing the capacity of your icemaker storage.

The icemaker stops working when ice reaches the point you wish and starts again when a quantity of ice will be taken.

**DO NOT!** Try to adjust the red switch. This is a timer and never needs adjustment. For having best performance of your icemaker, you should clean once a month its condenser, mostly in summer time. The condenser is behind the front cover. Clean it with UP and DOWN movements ONLY!! Do not supply your icemaker with water from a tanker, which is exposed to the sun.

For cleaning the water storage, distributor and sprayers:

First lift off the top cover, then take of the door. Now pull up the white flags. Behind the flags is the water storage. Take off the sliding conveyor. Place your hands down of distributor and lift it first. Rotate it 60' and pull it out gently in such way, so you will disconnect the distributors pipe from pumps pipe. Now you can clean the icemaker. Please also consider the sprayers, which are on distributor. Take them off and clean them by brushing with toothbrush or mix water vinegar. Be careful when you are going to connect them in the distributor, you must put in such way to be parallel in to each other.



For having a quick cleaning of your icemaker just poor mix of water vinegar in water storage, then connect with 1.2 m Ø1/2' pipe the white hose you disconnect before the distributor. The other side of the long pipe places it in water storage. Now start the icemaker. Leave for 10 min and then stop it. After that, wash the water storage with water and then dry it. Connect everything from last piece to first. And place the machine into function again

Then icemaker has been designed for producing ice and not as storage to preserve fruits or bottles or in general to preserve foods, drinks. For example leaves from fruit or etiquettes from bottles could obstruct the drainage system.

In situation of malfunction of your icemaker, first refer to trouble shootings. If nothing performed after troubleshooting guiding, please ask for assistance by authorized personnel.

We suggest installing before inlet of water a softener in case the supplied water in hard. The softener could be a mechanical filter.

If you intent to use your icemaker periodically, through seasons, it is better to follow procedure of cleaning the device, plus stop power supply and blow air in pump circuit, in order to remove all water from pump circuit.

In case you need to transport your icemaker it's better to place it's at its feet. If thaw cannot be followed and the icemaker is placed in some else way, then after transportation leave in for 2 hours in its feet before using it.

### TIPS

If you decide to scrap your icemaker, please proceed as follows:

- 1. First disconnect power cord and cut wire from the point it comes out of the icemaker.
- 2. Dispose all materials to each kind.
- 3. Make sure refrigerant coolant coolant and oil from compressor, are not escaping to environment.
- 4. Make sure all above, proceeded in compliance with your country regulations.

Electrical safety against shock, is clearly bind with the appropriate connect it on icemakers power cord to an efficient earthling system. Be sure before installation there is an efficient earth system.

After installation destroy any plastic bag, that could cause suffocation to a child.

Do not leave a child to reach the icemaker with the intent to play with it.

# **TROUBLE SHOOTINGS**

	Check the plug – if there is any power.
The icemaker doesn't work	Check for short circuit – check fuses
	Check if the storage is full of ice. If so remove ice to perform
	production.
The icemaker works but it	Check the sliding conveyor. It might have remove from its position and prevent ice to fall in the storage by keeping it in the Water storage (behind flags). Light sliding conveyor slightlyto up step of water storage.
doesn't produce ice/or is melting in the storage	Check the drain, maybe the water comes back to storage and melts the ice. If so, you must install icemaker higker from drain.
	Last Unscrew back over, on left you will find a blach pipe. Squeeze it so any obstacle will remove.
The producing ice is	You must clean the distributor and sprayers. (See TIPS in this manual)
	Check for possible rubbish in filter of electro valve or pump.
unformed/bad shape	Check pump.
	Check electro valve.
The icemaker is working for long hour/s	Lift the front cover of device and with the brush cleans with UP and DOWN movements only the condenser (The component it is first to your disposal).
	Check the working temperature of icemaker. If it is over 42 Celsius,
	you have to decrease the ambient working temperature, or install icemaker somewhere else.
	If nothing of above change the problem Please call for assistance for authorized personnel, because the icemaker has lost its refrigerant. FREON (R404A) due to transportation, hit, of from long use.

# WARRANTY:

Master Frost SA products are covered from the Master Frost SA International limited warranty, according to the conditions and instructions as described in this manual. Please read the warranty and this manual before starting using your icemaker for first time...

When the product is delivered the sales distributor should fill in the invoice tax document the icemaker's serial number and date of purchase and give a copy to Master Frost SA. If the document cannot be presented then other evidence is required to validate the warranty.

#### Warranty periods:

The warranty period starts on the date of delivery to the first owner/user. The date of delivery should be noted additionally with the icemaker's serial number on the taxis document invoice.

All components or parts replaced or repaired under warranty will receive the remaining warranty of the parts, products, components replaced...

The warranty period has been set to **12 months** after date of purchase and covers every faulty part or component or product. It is usual the factory to ask for the icemaker's serial number, the faulty part serial number the invoice tax-document of date of purchase and for sending to our premises the faulty part.

**General:** This is to certify that Master Frost SA guarantees the product(s) indicated to be free from defects in material and workmanship under real working conditions and with the limitations specified in this manual.

Master Frost SA reserves the right to make changes in the product(s) manufactured and/or sold by Master Frost SA at any time without prior notice and without incurring any obligation to make the same or similar changes on product(s) previously manufactured or sold. Master Frost SA reserves the right to change design or construction that he may deem to be necessary for the benefit of our customer – end user...

#### What the Warranty Covers:

This warranty covers the cost of either replacing defective parts or of having such parts repaired or of any equivalent parts whichever is the lowest to Master Frost SA. All warranty repairs or replacements must carry out by authorized personnel or dealer.

#### What the Warranty Does not cover:

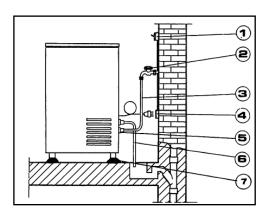
This warranty does not cover the following:

Any parts or product(s) damaged during transportation, bad installation, repair, and modifications to icemaker different than this manual allows The parts are faulty due to carelessness, miss of maintenance, improper use, miss of following instructions, repairs or maintenance from unauthorized personnel.

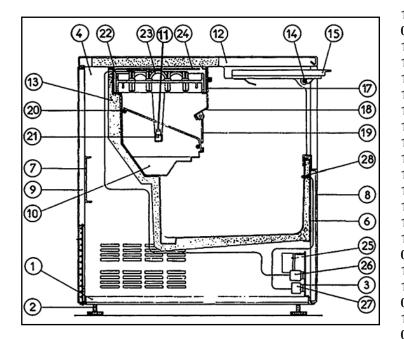
This warranty does not cover transportation fees for the products or spares under valid warranty. All transportation fees and authorized personnel fees are of the customer's responsibility.

# NAME AND CODE OF SPARE PARTS

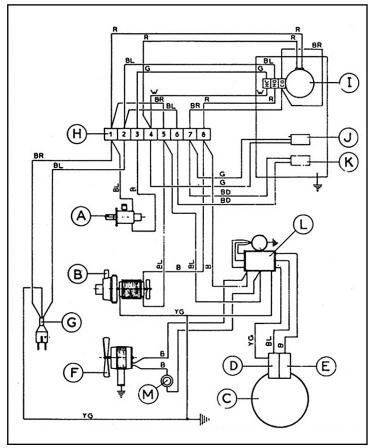
Technical data			
Model	C-250 (706.024)	C-400 (706.040)	C-600 (706.060)
Production / 24Hr.	25 Kg	40 Kg	60 Kg
Height mm	580 mm	750 mm	840 mm
Width mm	335 mm	485 mm	485 mm
Depth mm	580 mm	580 mm	580 mm
Compressor	295 W	527 W	537 W
Voltage	220 V/50 Hz	220 V/50 Hz	220 V/50 Hz
Cooling Gas	R-404A	R-404A	R-404A
Water Inlet	Ø ¾ GAS	Ø ¾ GAS	Ø ¾ GAS
Water Outlet	Ø 24 mm	Ø 24 mm	Ø 24 mm
Bin capacity	14 ~ 16 Kg	14 ~ 16 Kg	25 ~ 30 Kg
Net Weight	C:32 Kg	C:44 Kg	C:51.6 Kg
Gross Weight	C:34 Kg	C:47 Kg	C:52.5 Kg



- 1) Fuse switch
- 2) Water Tap
- 3) Water Inlet Hose
- 4) Earthed Socket
- 5) Solenoid Valve
- 6) Water Drain
- 7) Levelling foot

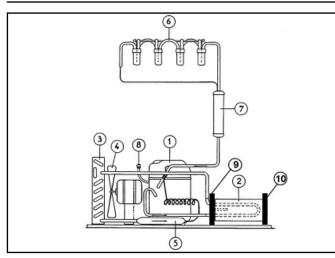


11.20.38	1)	Base
02.30.32	2)	Levelling foot
11.20.44	3)	Instruments lid
11.10.38	4)	Left lid
11.20.46	5)	Frond stand
11.20.50	6)	Rear stand
11.20.07	7)	Front lid
11.20.32	8)	Rear lid
11.30.07	9)	Water inner tank
11.10.42	10)	Top lid
11.10.01	11)	Foamed tank
11.60.15	12)	Door stand
11.10.28	13)	Door
11.20.15	14)	Evaporator gasket support
11.10.31	15)	Flags support
02.30.15	16)	Flags
10.10.05	17)	Sliding conveyor
11.40.03	18)	Water distributor
02.30.13	19)	Evaporator gasket
11.10.25	20)	Evaporator
02.20.11	21)	Plastic cover
07.10.10	22)	Timer
07.10.11	23)	Evaporator thermostat
07.10.12	24)	Ice bin thermostat
11.40.01	25)	Thermostat protector tube



#### WATER CIRCUIT DIAGRAM

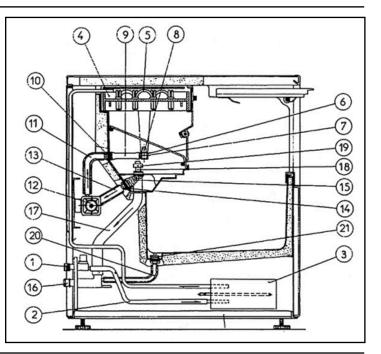
071009	1)	Water inlet electric valve
114049	2)	Water inlet pipe
111023	3)	Heat - Water exchanger
113011	4)	Evaporator Gasket
111026	5)	Evaporator
114004	6)	Water Distributor
023011	7)	Plug for water distributor
023012	8)	Sprayers
114045	9)	Distributor inlet hose
023002	10)	Delivery pump connecting pipe
023058	11)	Delivery pump hose
071018	12)	Water pump
023059	13)	inlet pump hose
023003	14)	inlet pump connecting pipe
023007	15)	Pump filter
023008	16)	Water drain
023078	17)	Overflow drain hose
023005	18)	Overflow
023006	19)	Overflow cup
023079	20)	Bin drain hose
023004	21)	Bin drain connecting pipe



#### **ELECTRIC DIAGRAM**

- A) Water inlet electric valve
- B) Water pump
- C) Compressor
- D) Compressor starting relay
- E) Thermal overload
- F) Electric fan
- G) Plug
- H) Terminal block
- I) Timer
- J) Bin thermostat
- K) Evaporator thermostat
- L) Electric distribution box
- M) Pressostat

BL	BLUE
В	BLACK
G	GREEN
R	RED
W	WHITE
BD	BLUE DARK
BR	BROWN
YG	YELLOW/GREEN



# REFRIGERATION DIAGRAM AIR COOLED CIRCUIT

- 111051 1) Compressor
- 111023 2) Hot gas valve
- 072018 3) Condenser
- 071006 4) Electric fan
- 072021 5) Molecular sieve filter
- 111026 6) Evaporator
- 111019 7) Capillary exchanger
- ----- 8) Filling valve
- 111072 9) Ring cup
- 111074 10) Ring cup 2