



INSTRUCTION MANUAL

GB

SHOCK CHILLER/FREEZERS..... DM-S-951xx

SHOCK CHILLER DM-S-95205
DM-S-952xx

ISO 9001:2000





This note denotes information particularly important for the end user's security and proper use of the appliance. The instruction manual should be studied carefully before setting the appliance into motion.

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ATTENTION CONTROLLER OPERATION AND ELECTRICAL WIRING DIAGRAM IN
APPENDIX NO:
3a - SHOCK CHILLER
3b - SHOCK CHILLER/FREEZERS

PURPOSE OF USE

Chillers and shock chillers/freezers belong to a group of professional refrigerated and refrigerating-freezing equipment. Depending on the type they are produced in two variants:

Chillers and chillers/freezers are used by catering companies, restaurants, bakeries, confectioneries, hospitals and similar outlets, where it is necessary to blast chill or freeze food immediately after it is processed in high temperatures (cooking, baking, frying etc.).

Blast Chillers and Chillers/Freezers are fitted with:

- forced air-circulation system ensuring uniform chilling in the chamber
- ecological refrigerant R 404A
- isolation made of energy-saving polyurethane boards 60mm in thickness
- self-closing door (chillers/freezers)
- automatic thawing system
- user-friendly controlling interface
- a probe enabling to monitor the temperature of chilled/ frozen dish (optional)
- automatic recognition of probe presence
- six independent working programs for chillers
 - soft chill without hold from +70°C to +3°C in 90 minutes
 - soft chill with hold in +3°C
 - blast freeze without hold from +70°C to +3°C in 90 minutes
 - blast freeze with hold in +3°C
 - hold function
 - cooler defrost
- six independent working programs for chillers/freezers
 - soft chill without hold from +70°C to +3°C in 90 minutes
 - blast chill with hold in +3°C
 - soft chill and freezing with hold from +70°C to +3°C in 90 minutes
 - blast chill and freezing with hold in -18°C
 - hold function
 - cooler defrost
- programs operate either by use of a probe placed in the product being chilled/frozen or on time
- open door sound indicator
- end of cycle sound indicator
- real cycle duration time indicator
- surface warming preventing freezing on and hardening of the (chillers/freezer) door gasket
- possibility to communicate with an external printer which records time and temperature reached in a work cycle, date and time of its commencement and end as an indispensable part of HACCP (optional).

Blast chillers or chillers/freezer is an important constituent of every kitchen. It gives completely new possibilities of prolonging the freshness of food thanks to the use of a modern technology of blast chilling/ freezing. This technology enables to prepare high quality products some time in advance.

It consists in chilling or freezing of a dish prepared in high temperature in convection-steam type ovens. Food preserved in such a way can be stored up to several days when chilled and up to several months when frozen, depending on a particular production method. Chilling of a dish from +70°C to + 3°C takes 90 minutes, and freezing to -18°C takes 270 minutes.

Advantages of blast chilling/freezing are as follows:

- long period of food evaporation process is eliminated
- dish distinctive taste and scent is kept
- multiplying of bacteria is stopped. Normally they multiply between + 5°C and + 65°C
- the top quality and safety is guaranteed to a client

Blast chilling/freezing technology enables to assure HACCP quality standards.

COOLING SYSTEM OPERATION

In the appliance there is a one-step compressing cooling circulation. The cooling system is filled with an ecological refrigerant (R404A – the date on the data plate). The element which expands is a thermostatic expansion valve.

INTERIOR TEMPERATURE REGULATION

The chamber sensor of the electronic temperature controller is placed on the back casing of the cooler. The controller is programmed in such a way that the appliance can reach temperature of the chamber and product in accordance with the work program chosen. Information about controller operation and choice of a suitable work program is presented in Appendix No 3a and 3b.

PREPARING THE START-UP

Prior to first commencement of the appliance a protective foil has to be removed. The exterior and interior surfaces have to be washed with warm water and a degreasing agent used for dishwashing.



Abrasives or other agents which can scratch the surface must not be used. Do not use water jet to wash but a wet cloth only.

After washing and before connecting to power supply the appliance has to be left to dry up.



The appliance should be kept away from heat source and should not be exposed to sun rays.

The appliance can be levelled by screwing or unscrewing the adjustable legs. Precise levelling will prevent noisy work of the compressor.

With planning of placing the appliance, you should take into account the place for free open the doors and eventual entering of trolley.

ELECTRIC TERMINAL

The appliance is designed for 230V 50Hz power supply and should be supplied from a separate low voltage circuit secured by fuses not exceeding 16A.

The appliance is fitted with a protective PE cable.

Prior to change of the connector the flexible conductor has to be fitted with an adequate terminal (Y-type terminal).



The appliance can be started only after the effectiveness of fire precautions has been verified by measurements conducted in accordance with the regulations in force.

After it is confirmed that the electrical system meets the above mentioned requirements, the unit can be finally connected to power supply by placing the connector in the plug-in socket.

The unit prepared according to the above guidelines is ready to operate.



Since the appliance could get out of plumb by radius bigger than 30°, connecting of the appliance to power supply should be delayed by 3-4 hours. Otherwise the condensation unit can be damaged.

USE AND OPERATION

It is recommended to introduce occasional breaks in the appliance operation in order to clean the interior and compressor condenser.

In order to perform the activities specified above you should disconnect the appliance by using the power switch and taking the connecting plug out of the plug-in socket.

In order to clean the unit condenser the front unit chamber night blind should be removed.

The unit condenser should be cleaned at least once a month. A soft brush or vacuum cleaner can be used in order to clean the unit condenser.



Water jet cannot be used to clean the appliance. The producer will not assume responsibility for the damage of the condensation unit if the cleanness of condenser has not been observed.

The appliance is equipped with a drawer-type tray placed under the condensation unit to collect drips created during thawing process.

APPROPRIATE AND SAFE WORK REGULATIONS



In order to assure safe, long-term and failure-free operation of an appliance the following rules should be observed:

- *To instruct maintenance staff in the regulations concerning use of electrical appliances, in safety at work regulations as well as in first aid procedures in emergency situations*
- *To instruct maintenance in regulations concerning proper handling of an appliance*
- *It is forbidden to connect an appliance to power supply, which has not been properly checked as regards conformity to fire precautions.*
- *It is forbidden to connect an appliance to the plug-in socket not fitted with neutralising plug*
- *It is forbidden to wash, clean or repair an appliance when it is connected to power supply*
- *Any repair can be performed only by an authorised person and in line with the rule saying that used/damaged parts can be replaced only with new and identical ones*
- *The manufacturer declines all responsibility for all damages arising from improper use of an appliance inconsistent with its purpose*
- *It is forbidden to draw night blind in the condensation unit chamber because it can cause improper functioning of an appliance. The minimum space between night blind and the condensing chamber should be 1 meter*
- *An appliance should be used in the environment where the temperature ranges between 16 and 30°C (in models DMP up to 25°C), where relative humidity does not exceed 60% and in dry and airy room*

TRANSPORT

The manufacturer dispatches the appliances on pallets protected by cardboard shapes and foil. The appliance should be protected in transport against shifting.

The appliances should be transported in work mode.



The manufacturer declines all responsibility for an appliance which was damaged in transport.

TECHNICAL SPECIFICATION

Table 1 Shock chiller/freezers

Data	Catalogue No	
	DM-S-95106	DM-S-95110
Type	P - Transverse arrangement of GN 1/1 containers (unit is equipped with fixed racking as standard) W - Longitudinal arrangement of GN1/1 containers (unit is equipped with fixed racking as standard) D - Transverse arrangement of GN 1/1 containers (unit is compatible to work with DORAM oven)	
Width [mm]	900	
Depth [mm]	830	
Height [mm]	1610	1860
Number and type containers to put	6 x GN 1/1 H = 40 mm	10 x GN 1/1 H=40mm
GN Container filling height	~ 40 mm	
Productivity [kg/cycle]	25	36
Power supply [V/Hz]	230 / 50	
Installed power	1600	2000
Refrigerant	R 404 A	
Air circulation	Forced (fan-type)	
Controlling	Digital	
Equipment	Product probe Optional- printer	

Table 2 Shock chiller

Data	Catalogue No					
	DM-P 95205	DM-S 95205	DM-S			
			95206	95210	95220	95221
Standard of realization / Type	Standard: 5 sets of grates	Standard: 5 sets of grates	Type: P ¹ , W ² , D ³		Standard: P ¹	Standard: D ³
Width [mm]	1325		900		800	
Depth [mm]	700	800	830		930	
Height [mm]	850		1610	1860	2250	2410
Number and type containers to put	5 x GN 1/1 H = 65	5 tac 400 x 600 H = 20	6 x GN 1/1 H = 40	10 x GN 1/1 H = 40	20 x GN 1/1 H = 40	20 x GN 1/1 H = 40
GN Container filling height	~ 40 mm					
Productivity [kg/cycle]	15		25	36	72	72
Power supply [V/Hz]	230 / 50					
Installed power	1000			1300	2500	
Refrigerant	R404A					
Air circulation	Forced (fan-type)					
Controlling	Digital					
Equipment	Product probe					


Explanations :

¹ Transverse arrangement of GN 1/1 containers (unit is equipped with fixed racking as standard)

² Longitudinal arrangement of GN1/1 containers (unit is equipped with fixed racking as standard)

³ Transverse arrangement of GN 1/1 containers (unit is compatible to work with DORAM oven)

DATA PLATE

	Manufacturer information		Place on mark {signature} of article
Name of the appliance, type	<input style="width: 100%;" type="text"/>		
Factory number	<input style="width: 100%;" type="text"/>	Rated voltage	<input style="width: 100%;" type="text"/>
Total weight	<input style="width: 100%;" type="text"/>	Current frequency	<input style="width: 100%;" type="text"/>
Climate class	<input style="width: 100%;" type="text"/>	Appliance power	<input style="width: 100%;" type="text"/>
Compressor type	<input style="width: 100%;" type="text"/>	Max lighting power	<input style="width: 100%;" type="text"/>
Refrigerant	<input style="width: 100%;" type="text"/>	Heating units power	<input style="width: 100%;" type="text"/>
Refrigerant weight	<input style="width: 100%;" type="text"/>	Temperature range	<input style="width: 100%;" type="text"/>

NOTES

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