

Scotsman[®]

SERVICE MANUAL

DICE ICE

NXW SERIES 7



Dear Installer,

This manual is reserved for specialized technicians and is designed to provide:

- Technical specifications of our products, designed and manufactured to a high quality standard
- Start-up and operating instructions
- Principles of operation
- Ordinary and extraordinary cleaning and maintenance instructions.

We therefore advise you to read it carefully before installation and keep it for future reference. If any passages are not well understood, the manufacturer is available to provide any information. For safety and warranty reasons, the use of original Scotsman spare parts is mandatory. The use of non-original spare parts releases the manufacturer from any liability and automatically invalidates the warranty entitlement.



SERVICE MANUAL

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For any information always indicate:

- the product model
- the serial number
- the data on the purchase invoice

SAFETY

Explanation of pictograms

In order to make the reading clearer and more pleasant, symbols have been used within this manual to convey to the reader the meaning or importance of the information provided by the phrases alongside them.



Indicates that caution is required when carrying out an operation described by a paragraph bearing this symbol. The symbol also indicates that maximum operator awareness is required in order to avoid unwanted or dangerous consequences



It indicates important information to be read and respected.



It indicates prescriptions for actions that are to be avoided.



This symbol placed on the appliance or referred to in the manual identifies areas with electrical hazards.



Indicates earthing



Identifies the terminals which, when connected together, bring the various parts of an appliance or system to the same potential (not necessarily earth potential)



Indicates that the paragraph marked with this symbol must be read carefully before installation, use and maintenance of the product



To whom this manual is addressed

These instructions are primarily intended for the installer and maintenance personnel, who should read them carefully before working on the appliance. If you do not understand all the contents of the manual contact your local Scotsman distributor before working on the device.

Intended use and classification

- This appliance is an ice maker and should only be used for ice production (not as a container for bottles, cans, etc.).
- ⚠ The device is designed for use in domestic and similar applications such as:
 - the kitchen area for staff in shops, offices and other workplaces;
 - farms and by customers in hotels, motels and other residential environments;
 - bed and breakfasts;
 - catering services and similar applications, not for retail.

General Warnings

- ⚠ Partial or total non-observance of these instructions and the following prescriptions, installation, use, ordinary or extraordinary maintenance other than those indicated in the manual or improper use, tampering with or modification of the appliance or some of its parts (unless expressly authorised), use of non-original spare parts or spare parts not specific to the model, may
 - cause damage, injury or fatal accidents;
 - void the warranty
 - reduce or impair the quality and safety characteristics of the device;

In view of the continuous progress in the field of design, the manufacturer reserves the right to make changes to production and instructions, without this entailing an obligation to update previous production and instructions. If necessary, further copies or updates of these instructions should be requested from the manufacturer.

release the manufacturer from any liability.

- Installation must be carried out by authorised and specialised personnel, following the instructions in this manual.

Personnel must be properly trained and instructed on how to assemble the machine and how to work on electrical and refrigeration systems.

Under NO circumstances may the customer perform the operations described in this manual.

- Before installation:
 - check that the equipment complies with the regulations in force in the country of use and with the information on the rating plate;
- make sure you are familiar with all the safety and fire regulations in force in the country of use;
- check that a high-sensitivity differential magneto thermal switch (30 mA) to which the machine must be connected and a power socket with earth connection of the type in use in the country of
- use have already been set up in the vicinity of the equipment.

⊘ Do not transport, install or service the equipment without being provided with the personal protective equipment prescribed in this manual.

⚠ Keep all ventilation openings in the equipment casing free of obstructions.

⚠ Do not place objects that cause poor ventilation on and around the unit.

- Provide a location that ensures adequate clearance for safe maintenance work that must be carried out periodically on the machine.

- If the machine is being repaired, signal with appropriate signs placed in a visible position that it may NOT be used.

- Before working on the machine make sure

that any hot parts of the machine have returned to room temperature.

- Disconnect the equipment from the power supply before carrying out any installation or maintenance work, ordinary or extraordinary.

⊘ During the installation of the equipment, persons not involved in the installation are not permitted to pass or remain in the vicinity of the work area.

⊘ The equipment is NOT designed to be installed:

- in explosive atmospheres;
- outdoors, in places exposed to salt-laden sea air or direct sunlight and weather (rain, humidity, etc.).

- The equipment must be easy to move for any extraordinary maintenance: take care that any masonry work following installation (e.g. building walls, replacing doors with narrower ones, renovations, etc.) does not impede movement.

- The equipment must be transported by means suitable for its weight and size and equipped with personal protection. Small movements of the unit should always be performed by lifting it, NEVER by pushing or dragging it.

- If the equipment is fitted with wheels, take care not to push the equipment violently when moving it to prevent it from tipping over and being damaged. Also pay attention to any roughness of the sliding surface. Equipment with wheels cannot be levelled, so take care that the supporting surface is perfectly horizontal, flat and free of unevenness.

⊘ Do not overturn or lay the equipment on its side for maintenance.

Unauthorised interventions, tampering or modifications not in accordance with this

manual will invalidate the warranty.

- The rating plate provides important technical information: it is indispensable in the event of a service request for maintenance or repair of the equipment, and it is therefore not recommended to remove, damage or modify it.

- ⊘ It is absolutely forbidden to tamper with or remove the safety devices used (protective grilles, warning stickers, etc.). The manufacturer accepts no liability if the above instructions are not followed.

- Packaging material, being potentially hazardous, must be kept out of the reach of children or animals and properly disposed of according to local regulations.

- The equipment must be periodically checked by an authorised service center.

In order to ensure the best conditions of use and safety, they should be carried out in accordance with current national regulations or, preferably, annually.

- A stationary state, detected by visual inspection of the machine, does not guarantee with certainty that the equipment is switched off. In order to protect his own safety, the operator must check that the machine is not live, i.e. that its plug is disconnected or that the switch of the panel to which it is connected is in the 'OFF' position.

- When installing the machine ALWAYS replace any existing water supply pipes with the new ones supplied with the equipment. We recommend the installation of a water softener filter for the water connection.

- ⚠ WARNING: If the power cable is damaged, have it replaced by QUALIFIED PERSONNEL ONLY in order to prevent any risk.

Refrigerant Gas Safety Warnings

- ⚠ The appliance contains fluorinated green- house gases regulated by the Kyoto Protocol, in the quantities indicated on the rating plate.

- ⚠ The GWP (Global Warming Potential) of the gases R290 is 3.

- ⚠ Propane is a highly flammable gas. It is heavier than air; in the event of a refrigerant leak, it migrates to the ground. Propane used in refrigeration systems is odourless. The system is hermetically sealed.

Safety instructions for UV lamps (only for XSafe models)

- ⚠ This machine contains an apparatus that emits UV and generates dissolved O₃ in the air. O₃ can, under certain circumstances and if not properly managed, pose risks to human health. The XSafe device is designed to produce O₃ below legal limits when properly installed, operated and maintained.

- ⚠ Improper use of the device or damage to the housing can lead to the release of hazardous UV radiation. UV radiation can, even in small doses, cause damage to the eyes and skin. Luminaires that are obviously damaged must not be used.

- ⚠ Replacement of the UV lamp must NOT be carried out by the user, contact a specialist technician.

- ⚠ Please contact your local Scotsman dealer for the annual maintenance schedule.

TECHNICAL DATA | NXW 7

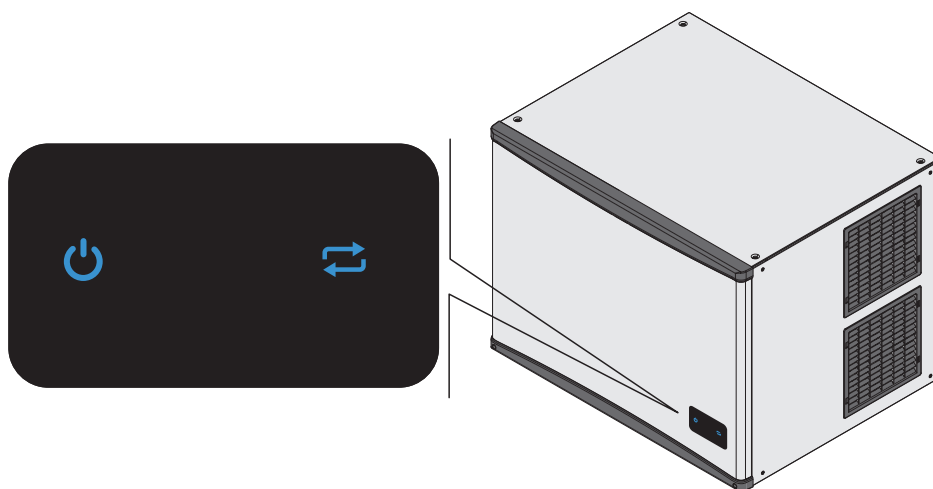
Operating limits (for NXW 7)

Parameters	Minimum	Maximum
Ambient temperature	10 °C	43 °C
Water temperature	5 °C	35 °C
Water pressure	0.1 MPa (1 bar)	0.5 MPa (5 bar)
Water hardness	7,12 °f (French degrees) 4°dH (German degrees)	17,8 °f (French degrees) 10°dH (German degrees)
Voltage tolerance compared to nameplate data	-10 %	+10 %
Sound level produced by the operation of the appliance	<75 dB(A)	

Refrigerant charge R 290

Model	Air cooling	Water cooling
NXW 307	130 g	149 g
NXW 507/457/607/707	149 g	149 g
NXW 1007	240 g	290 g

Model	Cycle suction pressure	High pressure cycle	Defrosting suction pressure	High defrosting pressure
NXW307	2.6	15	5,7	6,1
NXW507	2.4	15	5,6	6,5
NXW457	2.7	15	5,5	6,5
NXW607	2.7	16	6,0	7,3
NXW707	2.6	17	6,2	7,5
NXW1007	2.4	16	6,4	7,9



NXW Series 7

Modular ice maker without integrated ice container

For more technical information on the device, scan the QR code



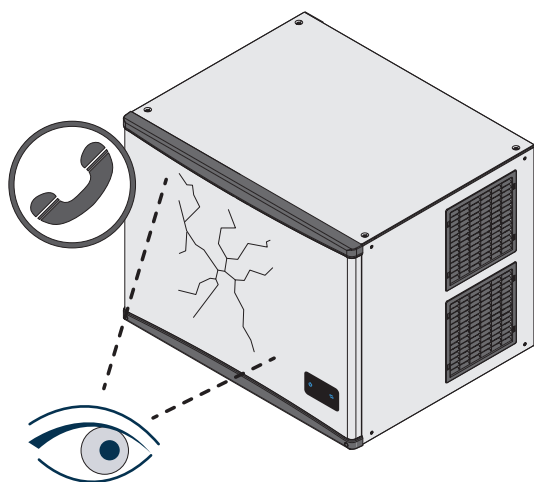
INSTALLATION

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PRELIMINARY CHECK

F01 After unpacking and before taking the appliance to the installation site:

- ① Remove the front and rear panels (if present) and visually check that it has not been damaged during transport; if damage or anomalies are noted, do not proceed with the installation but inform the carrier or the manufacturer accordingly without delay.
- ② Remove all internal supports used for shipping and protective adhesive tapes.
- ③ Check that:
 - the refrigerant circuit pipes do not touch other pipes or surfaces;
 - that the fan turns freely;
 - that the compressor is free to swing on its mounting brackets.
- ④ Also check that all components and accessories required for the model to be installed are present. The feet, if provided, are supplied disassembled and are stored inside the cell. If any components are missing or damaged, contact the manufacturer.



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- 5 Clean all internal and external surfaces of the appliance with a clean cloth moistened with water.

Before proceeding with installation, dispose of packaging in accordance with the regulations in force in the country of installation. This prevents them from being in the way when being transported to the installation site or from being played with by a child or animal with the risk of suffocation.

Materials used for packaging:

Pallet: wood

Corners: polystyrene

Outer box: cardboard

Straps, films, bags: plastic

Clips: metal

Note: Depending on the packaging, all or only some of the materials indicated may have been used.

TRANSPORT

The manufacturer is not liable for any inconvenience caused by transport under conditions other than those specified in this chapter.

Transport and lifting of the equipment must take place:

- in **full compliance with the accident prevention**

regulations and current regulations and with the utmost caution;

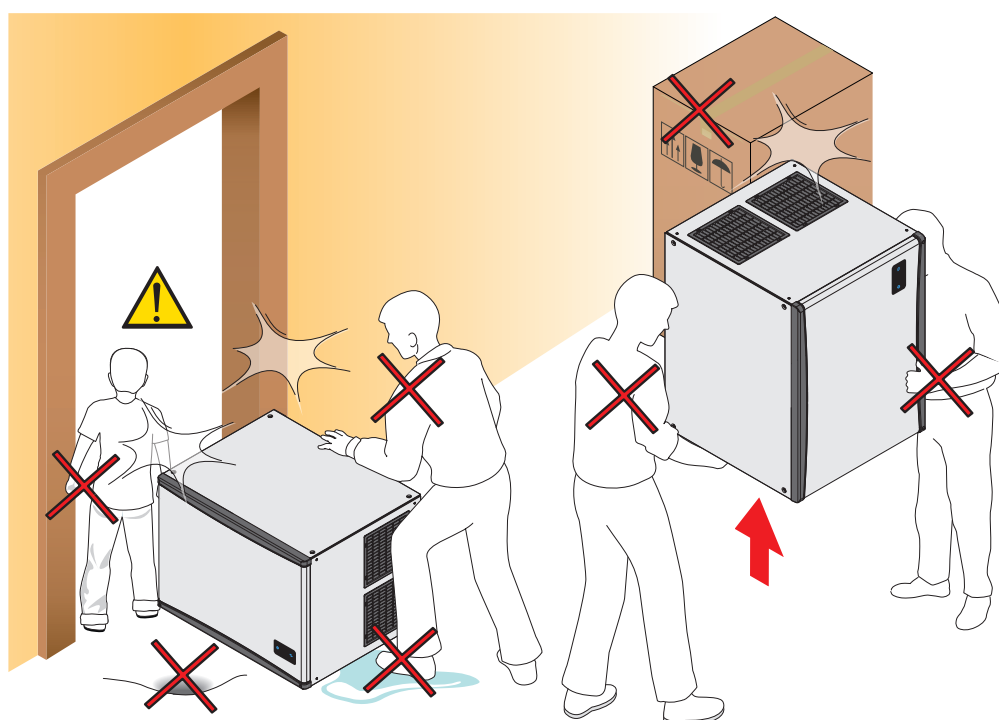
- by professionally qualified personnel, authorised
- and trained for the performance of these tasks and in **full possession of their physical and mental capacities**;
- **wearing all the appropriate PPE - Personal protective equipment**;
- **keeping the appliance in the vertical position**. If this is not possible, wait **24 hours** before putting it into operation;
- after ensuring that **no persons or objects** that may prevent the activities from being carried out in full safety are present in the working area;
- after ensuring that the **floor is smooth**, perfectly level, free of bumps and obstacles and not slippery.

F02 Equipment must NOT be moved:

- manually;
- with straps;
- pulling or pushing them.



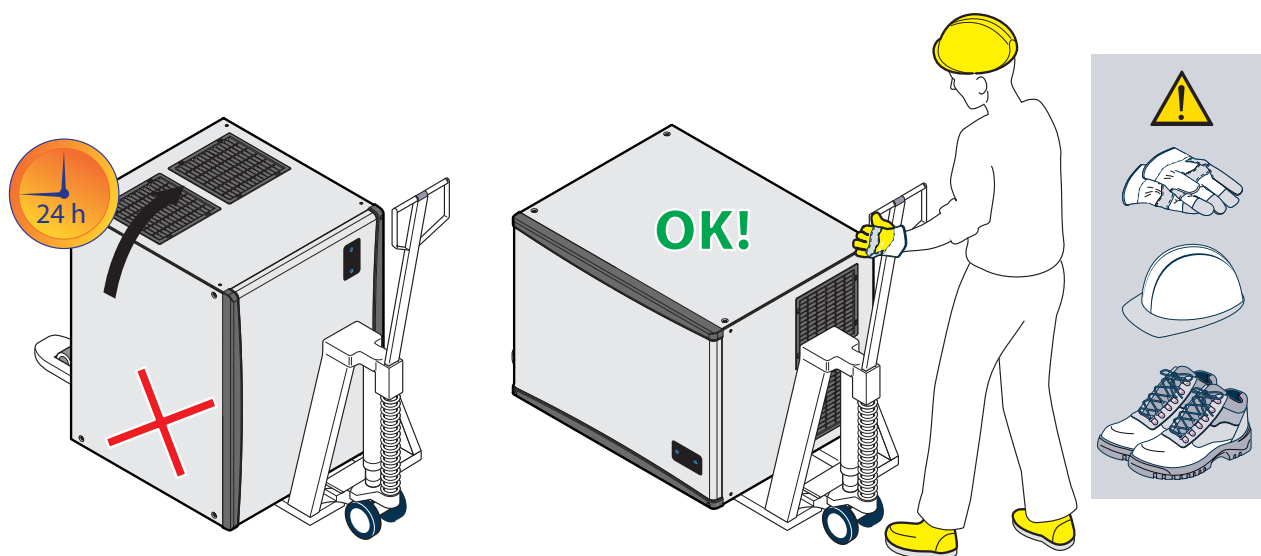
To find out the weight of the appliance being transported, please refer to the model data sheet, which can be downloaded using the QR code.



Proper transport of equipment

F03 Insert the forks of a **pallet truck** suitable for the weight of the appliance under the **sides** of the same, taking care not to damage the bottom. Raise the appliance high enough so that it can be moved easily and take special care to balance the weight, as the centre of gravity does not coincide with the geometric centre of the appliance. Pay attention to the inclination when moving; **always keep the appliance in the vertical position**. If this is not possible, wait **24 hours** before putting it into operation. When handling the appliance using a **pallet truck or forklift truck**, insert the forks on the inside of the feet (if present). In case of mistake, do not try to counteract the load but drop it.

- Lifting equipment (pallet trucks, forklift trucks, etc.) must be suitable for the masses, dimensions and movements to be carried out.
- When lifting each part, make sure to use lifting equipment with a lifting capacity that is at least 20% greater than the weight of the part.
- ⊘ It is forbidden to make modifications on one's own initiative or to use makeshift means to secure and lift machine parts.
- ⊘ The use of lifting equipment other than that specified in these instructions is prohibited.
- ⊘ No person should be in the vicinity of the machine during transport, except the person transporting it.



POSITIONING

Installation Warnings

The installation of the machine must **ONLY** be carried out by authorised and qualified personnel.

In this manual, the assembly instructions for various equipment are explained and only some of the currently available models are indicated. Unless expressly specified, **the instructions apply to all models**. Appropriate personal protective equipment must be worn during the installation operations. The installation location must meet the minimum installation requirements indicated by the manufacturer. The machine must be installed following the methods and meeting the requirements described in these instructions, as well as allowing for the required free surrounding spaces.

The installer must assess the installation position of the machine and equipment in such a way as to ensure that the assembly and disassembly of its various components is simple and convenient, and guarantee the necessary clearance and access to the machine for maintenance purposes.

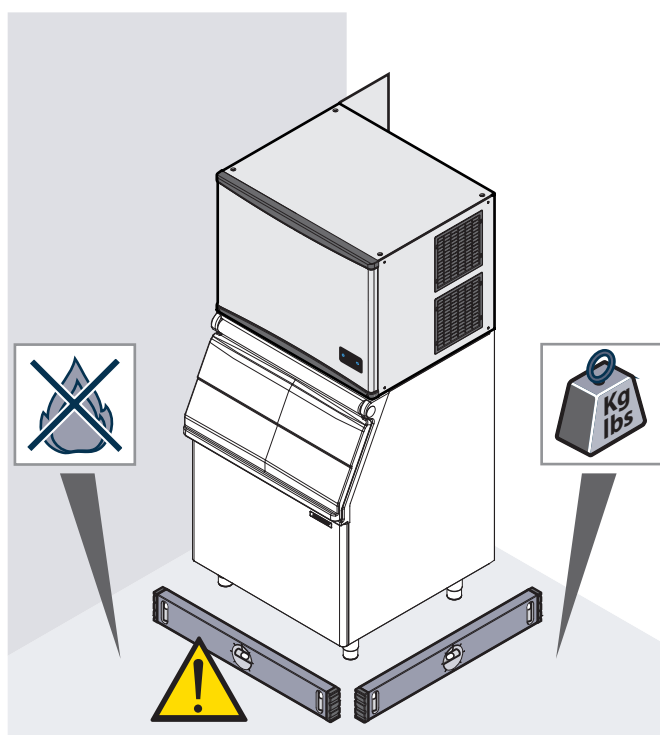
Preliminary Operations

CHECK OF THE SUPPLIED COMPONENTS

Check that all the components required for the installation have been received and are in good condition. If any are missing, do not proceed with the installation but promptly inform the manufacturer or dealer.

REMOVAL OF THE PROTECTIVE FILMS

F04 Slowly peel off the protective films from the appliance. Clean any glue residues with a suitable solvent without using tools or abrasive or acid detergents, which could damage the surfaces. Once removed, protective films must be kept out of the reach of children or animals, as they are potentially dangerous, and properly disposed of according to local regulations.



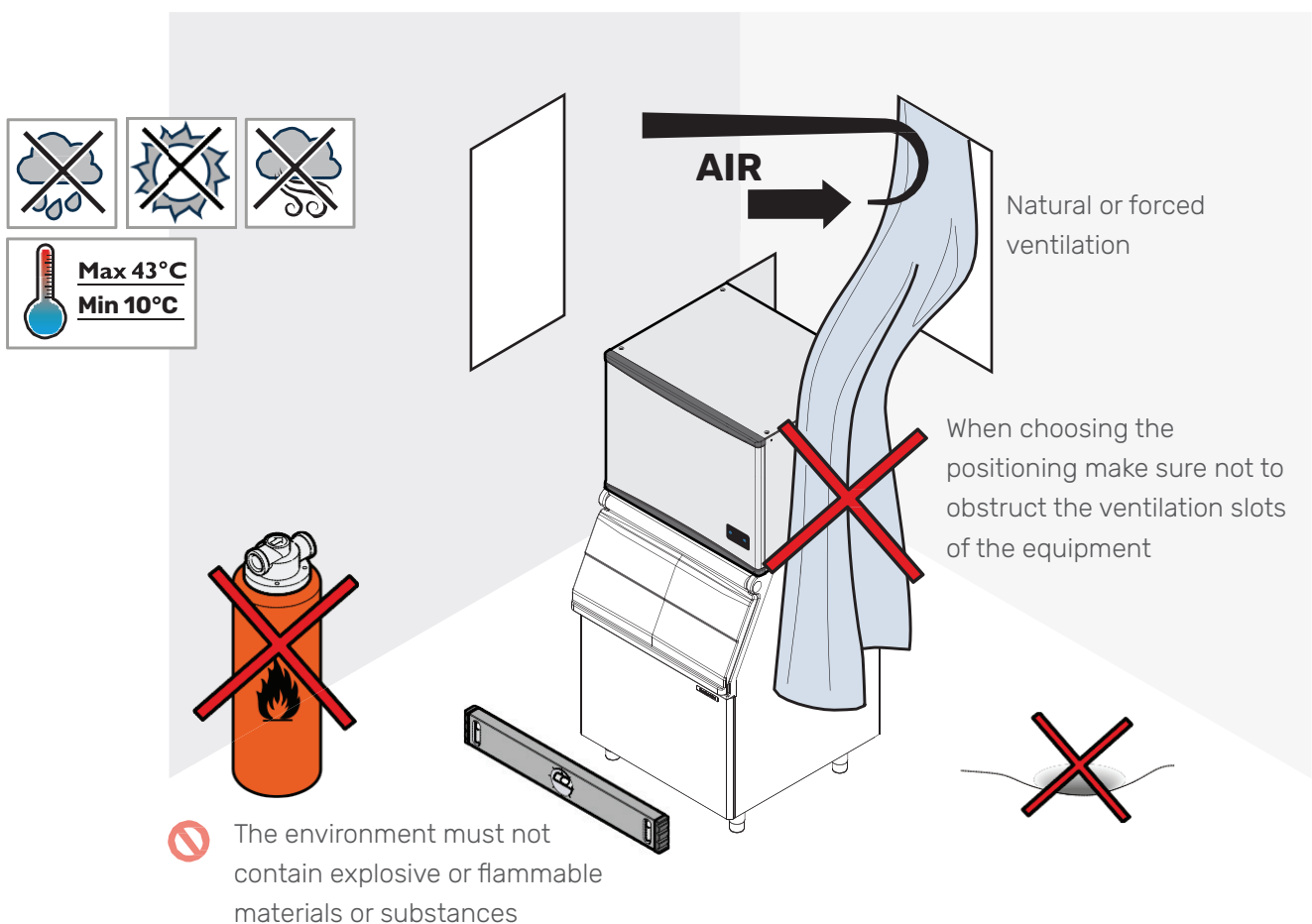
Positioning in the installation room

F05 **WARNING.** This ice maker is designed to be installed **inside rooms** solely dedicated to the **storage of foodstuffs** and which **comply with the current regulations in** terms of work safety, installations and fire prevention. Prolonged periods of operation at temperatures outside the following limits constitute misuse according to the SCOTSMAN warranty terms and automatically void the warranty.

The manufacturer's warranty does not cover oxidation due to installation in marine environments or in the presence of salt air.

 The appliance must not be exposed to vibrations, high-frequency noise, dust or foreign materials, as such exposure may lead to deterioration or mechanical failure. It must also not be exposed to the elements (rain, hailstones, fog, snow, etc.).

The appliance must be easy to move for any extraordinary maintenance that may be required. Pay attention that any masonry works subsequent to the installation (for example construction of walls, replacement of doors with narrower ones, renovations, etc.) do not hinder movement.

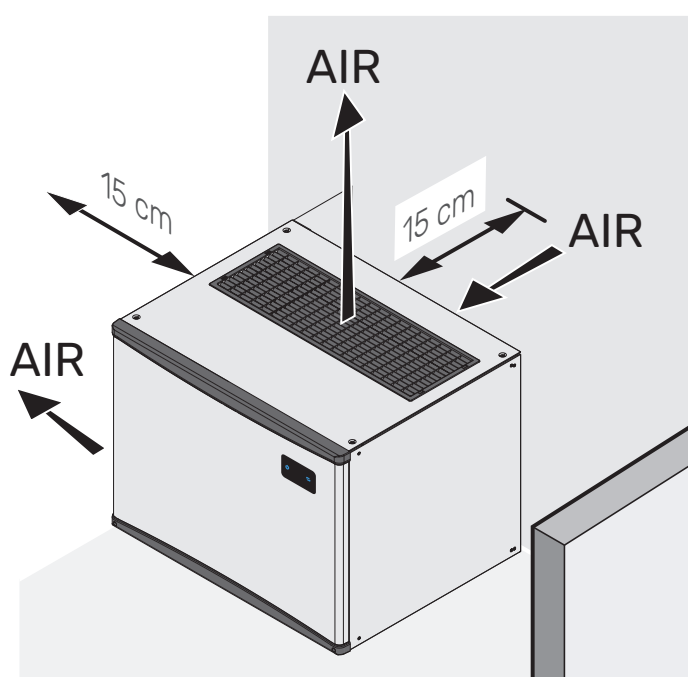


F06 Install the equipment:

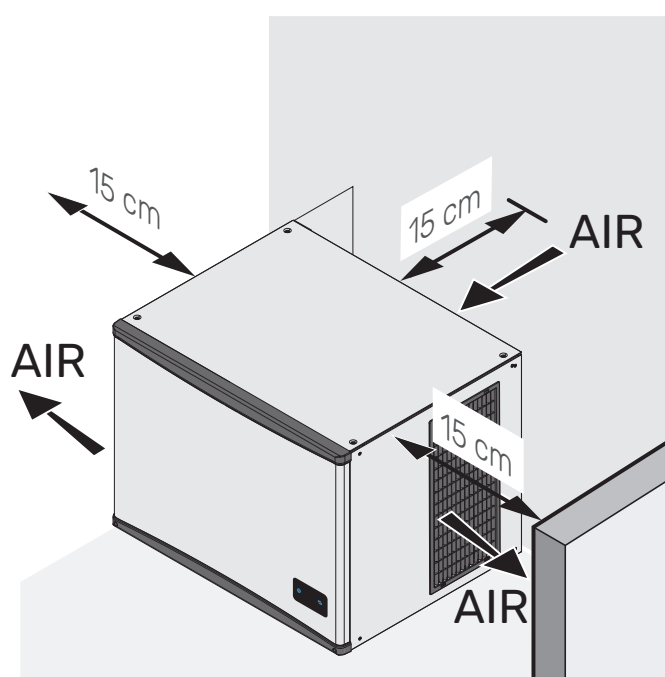
- so as to have easy access to electricity and water connections;
- leaving the spaces indicated in the figure from any walls or other neutral equipment;
- at a distance of about **15 cm** from hot equipment (e.g. fryers, ovens, hotplates, etc.).

 Attention! Do not install on containers with an area smaller than the machine base.

22" model NXW 307/507/707



30" model NXW 457/1007



CONNECTIONS

Warnings for connections

The equipment requires the following connections to the installations in the room:

- **water** connection (1 or 2 water sockets depending on the machine to be installed);
- **electrical** connection.

● All connections must be carried out by qualified personnel, wearing personal protective equipment (e.g. gloves, safety shoes, etc.) and in accordance with the regulations in force in the country of use, and in compliance with the regulations on installations and safety at work.

Consult the rating plate

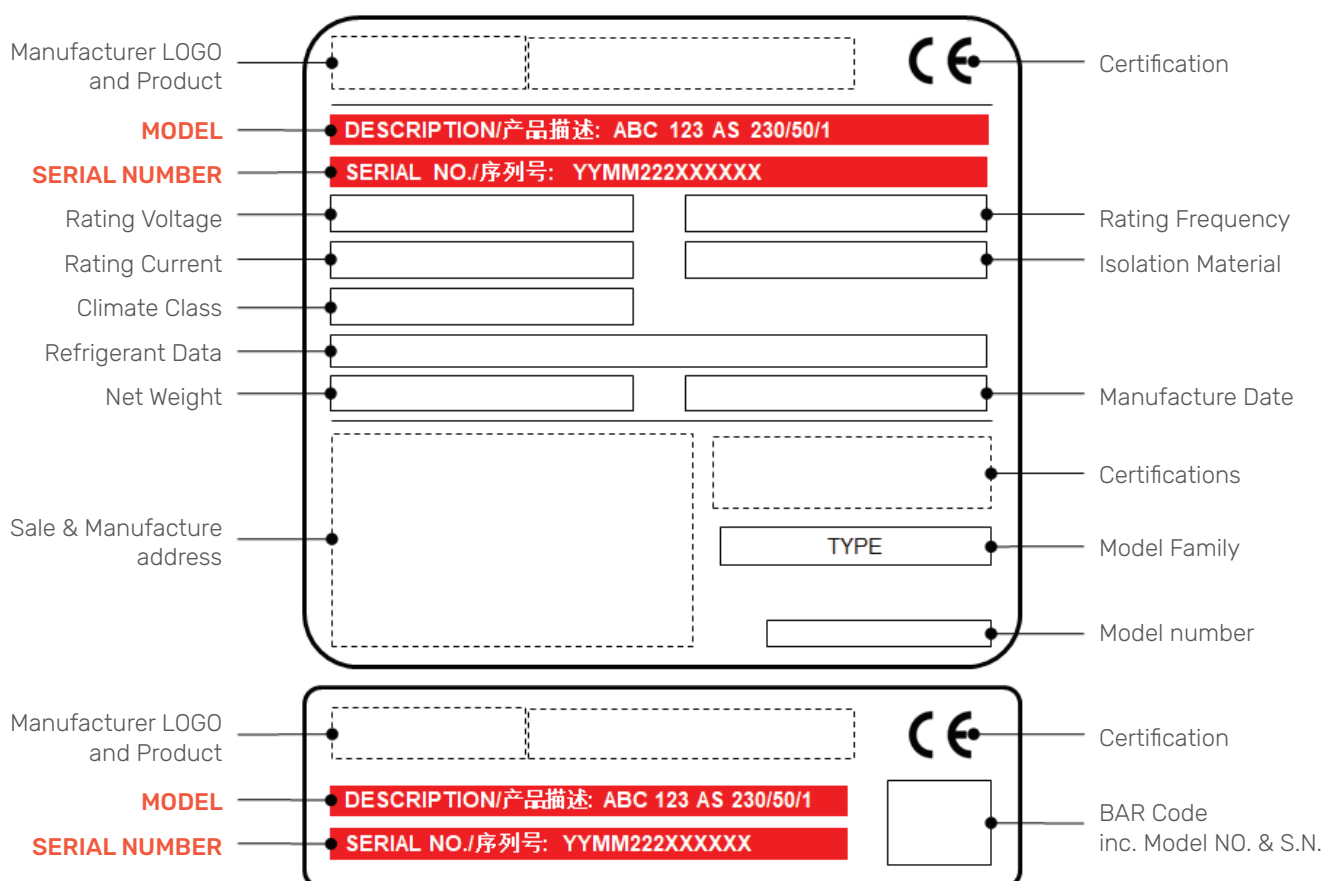
F06

Before making connections, it is necessary to check the date on the equipment to ensure that they correspond to those on the system; all data can be found on the rating plate on the back of the equipment. The rating plate provides important technical information: it is also indispensable in the event of a service request for maintenance or repair of the equipment. It is therefore recommended not to remove, damage or modify it.

Machine: Ice Maker Series NXW Series 7

Manufacturer:

Scotsman Ice Systems (SuZhou) Co., Ltd
Building 5, No. 525 South Lingang RD,
Yuewang, Shax Town, Taicang City,
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Water connection

Before making any water connections, it is mandatory to carefully read the safety warnings on p 4 of this manual. The following are supplied with the equipment:

Air models

- 1 reinforced plastic hose with female connection 3/4"
- 1 water outlet pipe diameter 20 mm, unthreaded

Water models

- 2 or 3 reinforced plastic hoses with 3/4" female coupling;
- 1 or 2 water outlet pipes diameter 20 mm, not threaded;
- 1 'Y' connection and hose clamps (if present).

CONNECTION TO THE WATER MAINS

The position of the inputs is different depending on the model. Please refer to the technical data sheet of the equipment to be installed.

Air-cooled models

The equipment requires the following water connections:

- 1 3/4" connection to the water mains in order to fill the machine with the drinking water required for making ice cubes.

Water-cooled models

The equipment requires the following water connections:

- 1 3/4" connection to the water mains in order to fill the machine with the drinking water required for making ice cubes;
- 1 3/4" connection to the water mains to load the water (not necessarily potable) required for the water condenser into the machine.

In both cases, interpose a shut-off tap (not supplied) to the water outlets so that they can be isolated if necessary.

INLET WATER CHARACTERISTICS

Water is the only ingredient for making ice; therefore, the characteristics of the feed water must not be neglected. For example, a supply water pressure of less than 1 bar can cause malfunctions in the appliance.

The use of excessively mineralized water could result in the production of opaque ice cubes and considerable fouling of the internal parts of the hydraulic circuit.

The incoming water must have the following characteristics:

- be **potable** (only the water used to create the ice cubes);
- have **temperature** between 5 °C and 35 °C;
- have **conductivity** of 100µ S/cm
- have a hardness maximum of 17.8 °f (French degrees) | 10 °dH (German degrees) and a minimum of 7.12 °f (French degrees) | 4 °dH (German degrees); if the water hardness is higher, use a water softener (not supplied). The choice of the type of softener is the responsibility of the installer. Damage to components due to lime scale deposits is not recognized under warranty;
- have a value of pressure between 1 Bar and 5 Bar; if the inlet pressure is lower than the indicated value, use a pump with a suitable flow rate (minimum flow rate 300 l/h), higher than the indicated value, use a pressure reducer.

EXHAUST CONNECTION

The position of the exhausts is different depending on the model. Please refer to the technical data sheet of the equipment to be installed.

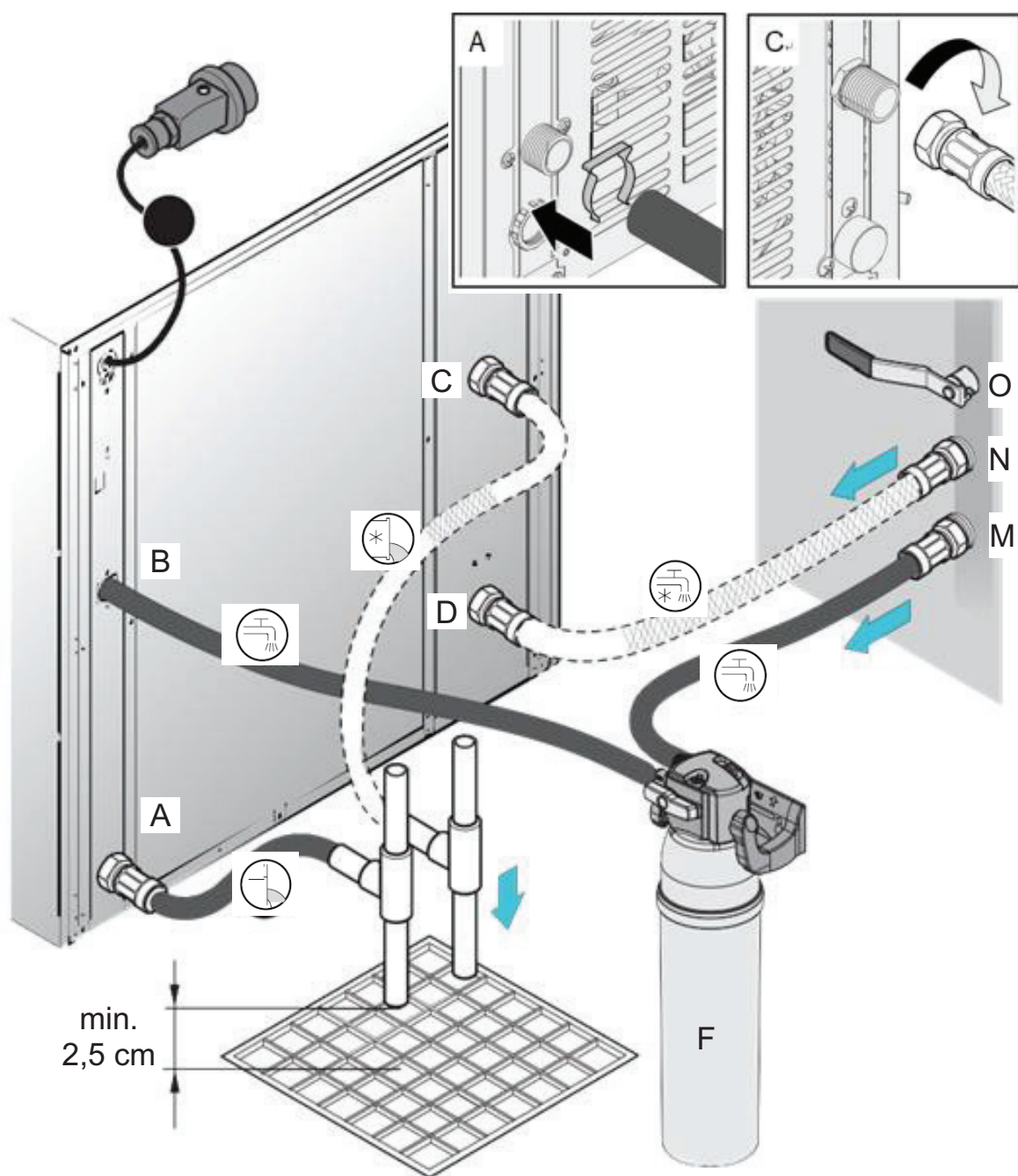
F07 Connect to **ø20mm 'A' fitting at" exhaust pipe** made of rigid plastic 18mm internal

diameter as an extension (tube not supplied).

The discharge of excess water takes place by gravity; to ensure a regular outflow, it is essential that the drain has a vent and goes into an open siphon. The choice of type and method of fixing is the responsibility of the installer; it is advisable to provide a slope and length to allow proper drainage of condensate and to install a siphon. An air gap of 2.5 cm must be maintained between the exhaust pipe and the evacuation area (grating or other receiving pipe). Compliance with this regulation ensures that potentially dangerous bacteria will NOT make their way up the drain and contaminate the equipment.

F07 Water-cooled appliances require a separate water drain line to be connected to the appropriate 3/4" fitting marked "Water drain - water-cooled only".

NXW Series 7



A: $\varnothing$ 20 mm water drain



B: 3/4" gas drinking water inlet



C: 3/4" gas water discharge (water-cooled models only)



D: 3/4" gas inlet (only mod. with water condensation)

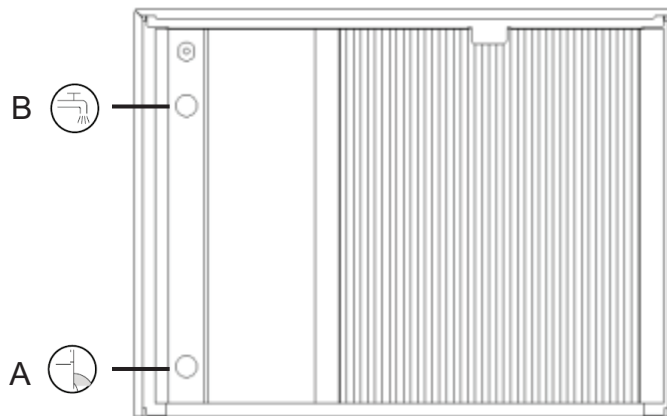
F: recommended softener filter (not supplied)

M: 3/4" potable water connection

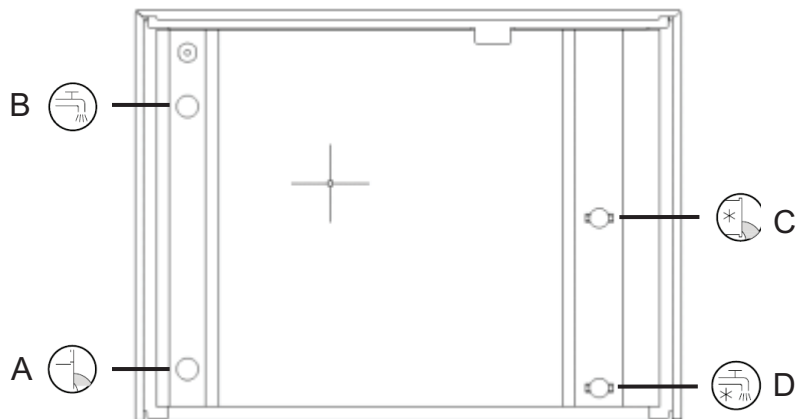
N: 3/4" water connection (only mod. with water condensation)

O: shut-off tap

NXW (Air cooled)



NXW (Water cooled)



-  **A:** ø 20 mm water drain
-  **B:** 3/4" gas drinking water inlet
-  **C:** 3/4" gas or 20 mm depending on model - water discharge (water-cooled models *only*)
-  **D:** 3/4" gas inlet (only mod. with water condensation)

Electrical connection

SAFETY WARNINGS

Before making any electrical connections, it is mandatory to carefully read the safety instructions on p. 4 of this manual and always compare the system data with the data on the rating plate.

 The connection to the mains power supply must comply with the regulations in force in the country where the equipment is installed and must be carried out by **qualified personnel authorised by the manufacturer**: failure to comply with these requirements may result in damage and injury, invalidates the warranty and releases the manufacturer from any liability. **Do not use adapters** or power strips for connection. **It is not possible to stretch or splice** the power cable in any way. **Do not roll** up the cable if it is too long and take care that it is not pinched, crushed or in the way of people passing by. The connection system must:

- have a **maximum voltage variation** of +/-10% with respect to what can be seen on the nameplate (low voltage can cause abnormal operation and can result in serious damage to protections and electrical windings);
- be provided with a correct **earth connection** using a single cable, without splices, not interrupted even by the circuit breaker. The yellow/green earth conductor must be at least 10 mm longer than the other conductors;
- have an easily accessible **ON/OFF thermal-magnetic circuit breaker**, with appropriate fuses (see rating plate) and with a contact opening distance such that complete disconnection is guaranteed under over voltage category III conditions. Disconnection devices must be incorporated into the power supply in accordance with the installation rules. This switch is

necessary to cut off the power supply to the machine if it is connected directly to an electrical cabinet or if its plug is located in a place that is difficult to access.

Each piece of equipment must also be included in an effective **equipotential system**  that complies with the regulations in force in the country of installation.

- Replacement of the power cable, if necessary, should only be carried out by a qualified and authorized technician. The cable may only be replaced with one of similar characteristics.

MAINS CONNECTION

The equipment can be supplied

- with power cable and plug or
- with cable without plug.

EQUIPMENT WITH POWER CABLE AND PLUG ALREADY FITTED

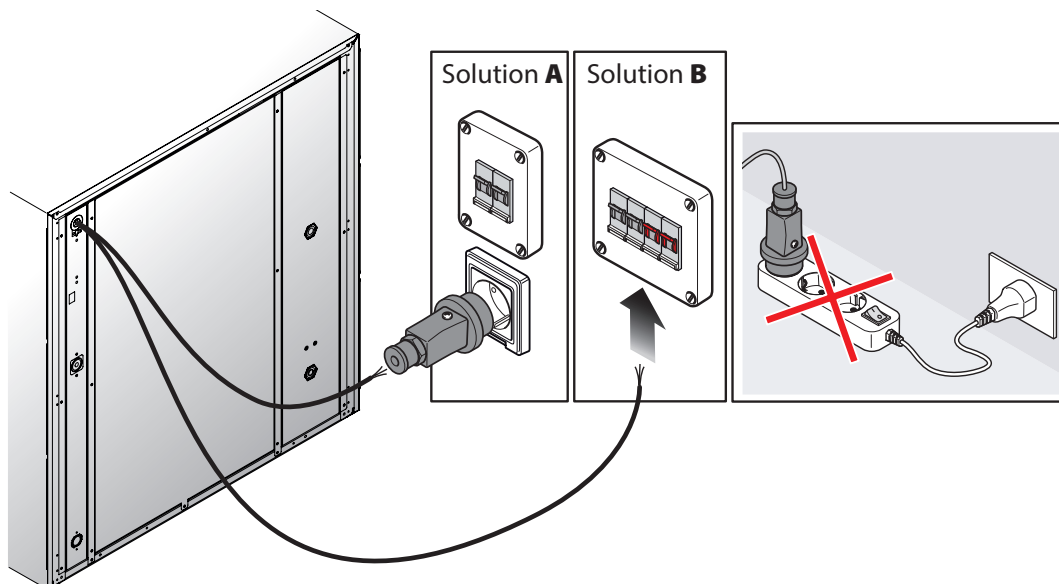
F08 To connect equipment **with an already fitted power cable and plug**, simply plug it into a socket of a suitable rating for the electrical characteristics of the machine, which can be seen on the rating plate.

EQUIPMENT WITHOUT PLUG FITTED

The connection must be carried out by qualified personnel in one of two ways:

- by fitting a **plug** appropriate to the electrical characteristics of the machine;
- by connecting to an **electrical panel** that complies with the regulations in force in the country where the equipment is installed.

All electrical data can be found in the data sheet of the equipment to be installed.



WIRING DIAGRAM | NW 307/457

230V~ / 50HZ / 1PH

- m = brown

bc = blue

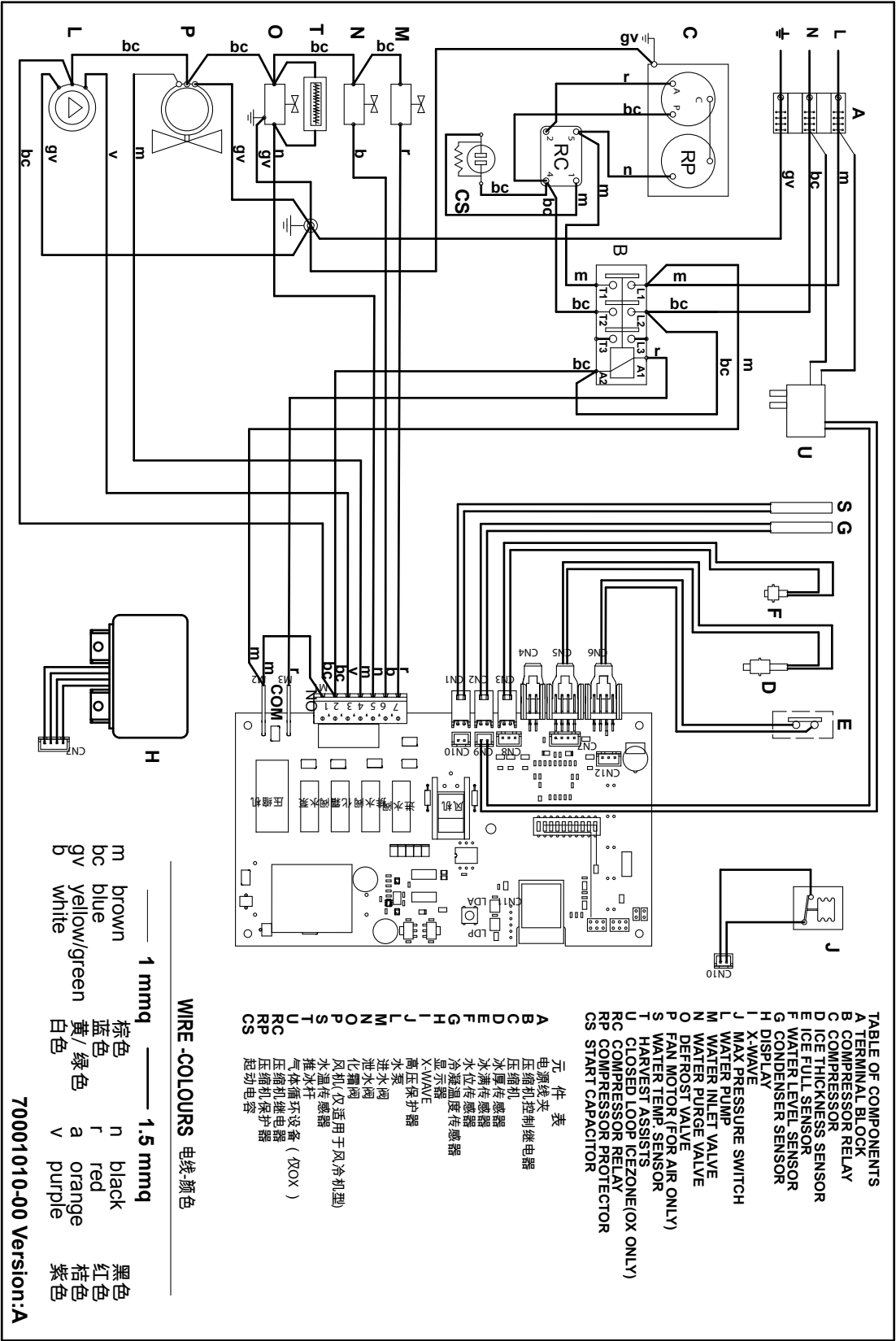
gv = yellow / green

b = white

n = black
- r = red

a = orange

v = purple

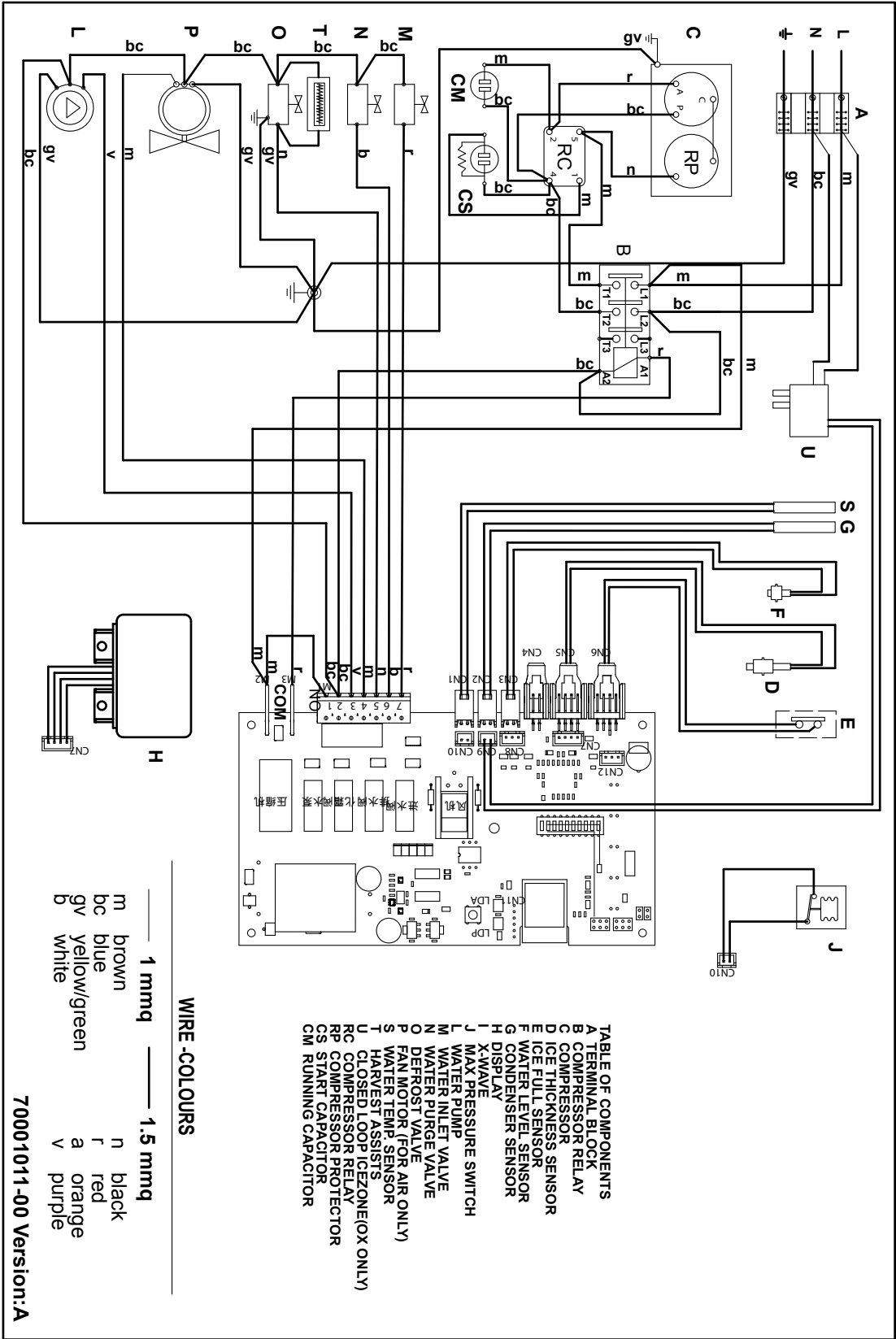


WIRING DIAGRAM | NXW 507/607

230V~ / 50HZ / 1PH

m = brown
bc = blue
gv = yellow / green
b = white
n = black

r = red
a = orange
v = purple



WIRING DIAGRAM | NXW707/ 1007

230V~ / 50HZ / 1PH

- m = brown

bc = blue

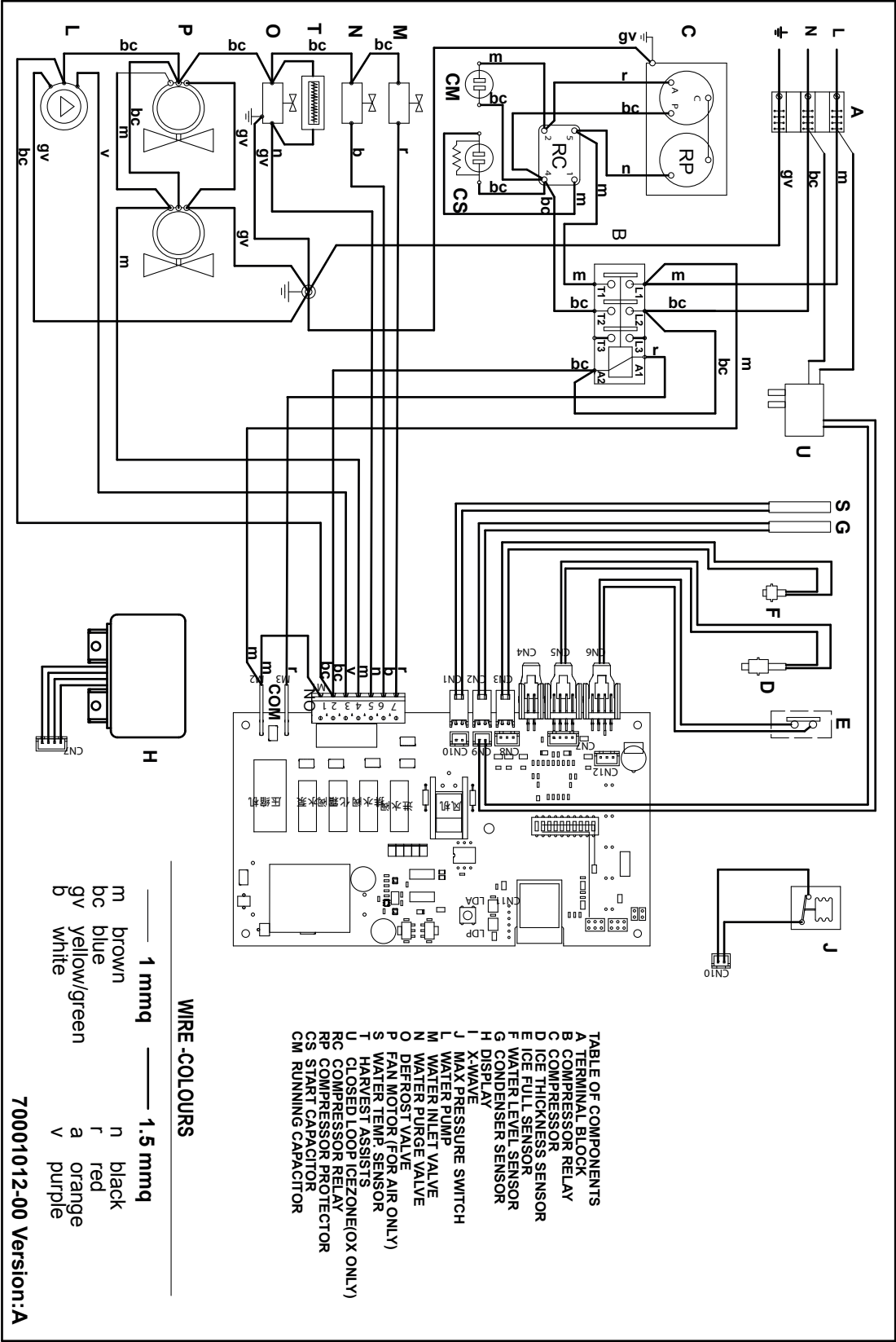
gv = yellow / green

b = white

n = black
- r = red

a = orange

v = purple



TESTING

After positioning and connecting the device, check that

	it is well leveled and that all specified clearances have been respected	p. 11
	room temperatures never fall below 10 °C, even during the winter months	p. 11
	all required electrical and plumbing connections have been made	p. 14
	the water shut-off tap(s) is/are in the ON - Open position	p. 15
	the inlet pressure of the hydraulic circuit is at least 1 Bar	p. 15
	the refrigerant circuit and hydraulic circuit piping do not emit vibrations	p. 15
	the voltage of the power supply line is the same as that specified on the rating plate	p. 18
	the inside walls of the ice container have been cleaned and disinfected	user manual enclosed with the device
	the compressor anchor bolts allow the compressor to swing on the supports	
	all documentation relating to the appliance and the references of the authorized service center have been handed over to the customer	

[illegible]

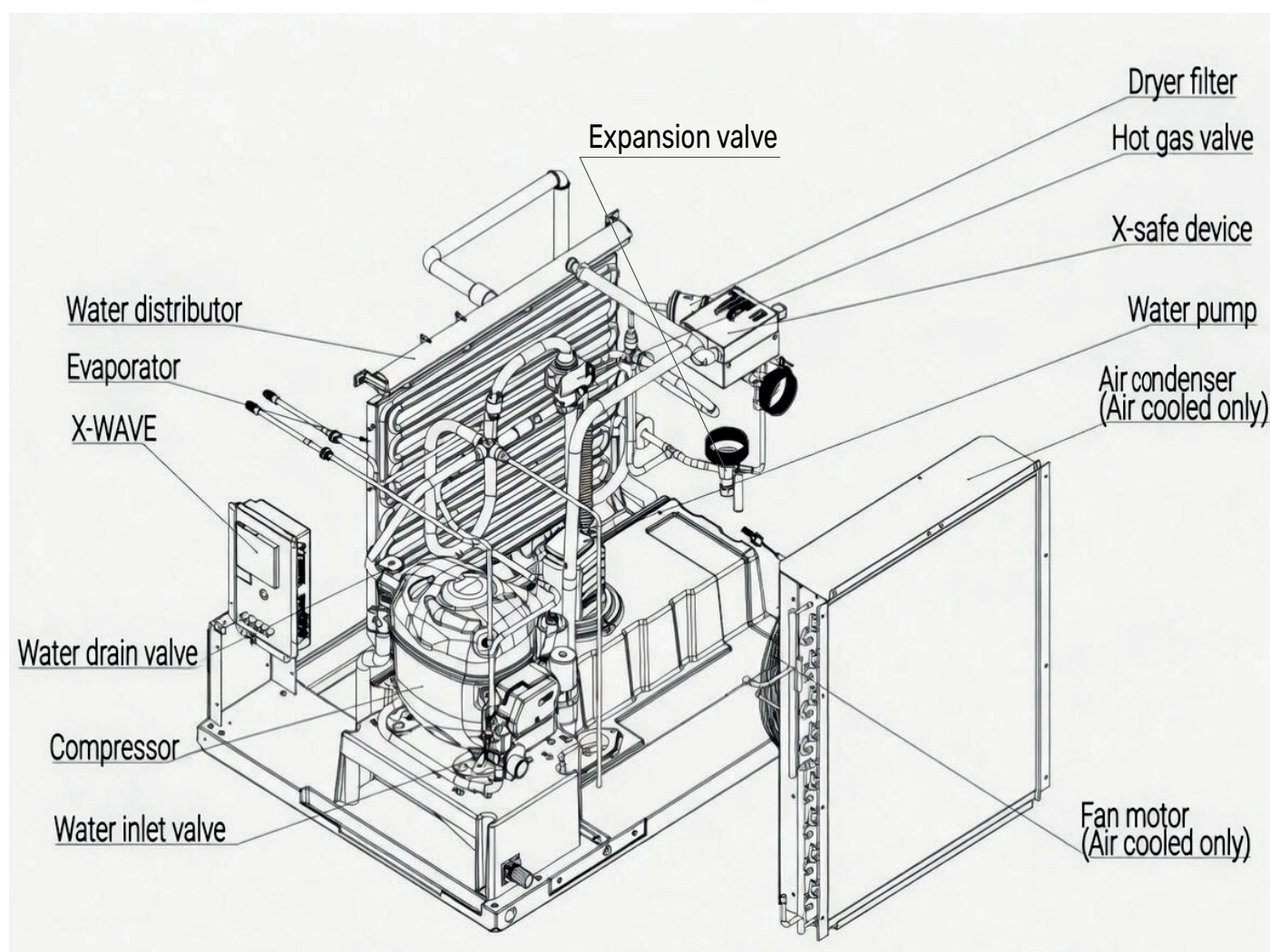
NOTES

COMPONENTS DESCRIPTION25

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NXW series 7



COMPONENTS DESCRIPTION

UV lamp and ozone (mod. XSafe only)

This natural **UV lamp-based** sanitizing system is integrated inside the machine and guarantees absolute purity and hygiene.

The XSafe system provides quarterly or annual maintenance.

QUARTERLY MAINTENANCE | UV LAMP CLEANING

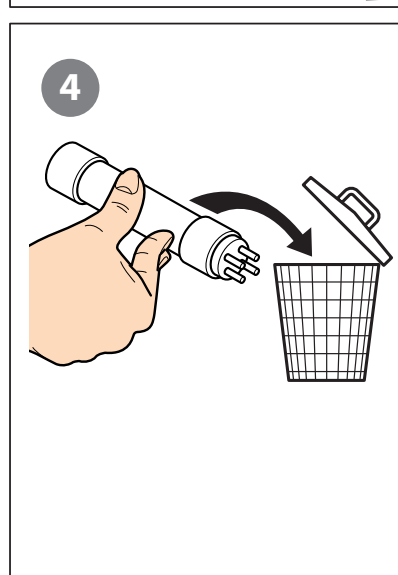
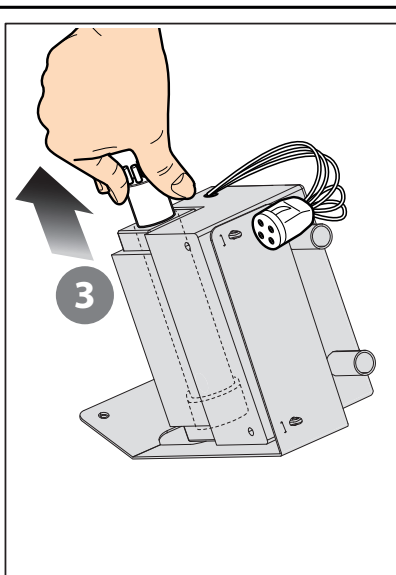
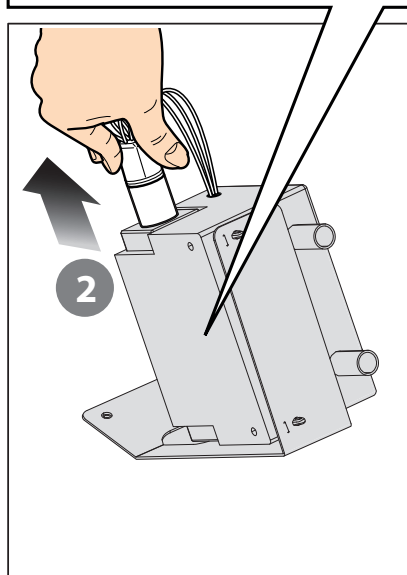
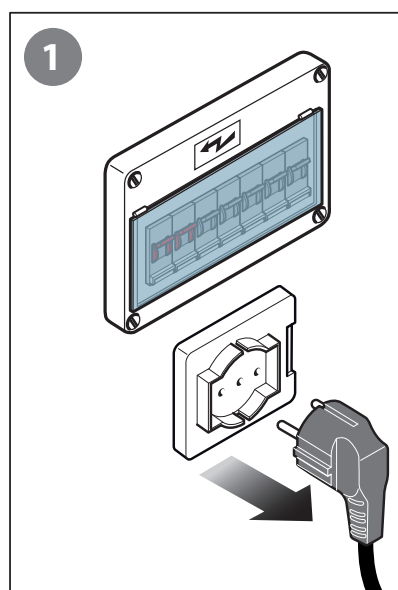
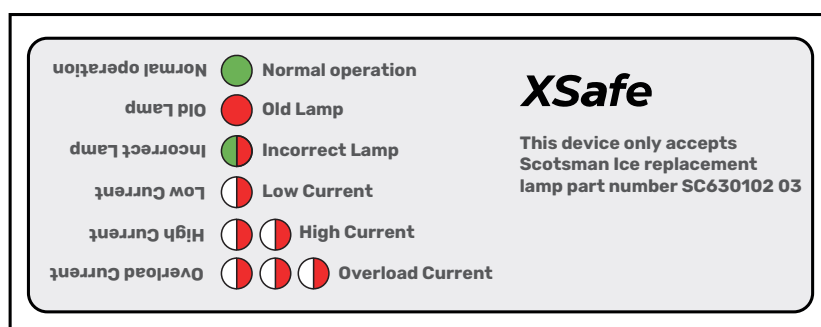
If the XSafe is in a dusty environment, check **every three months** that the lamp is cleaned, this will considerably prolong its life. If it needs to be cleaned, **wear gloves** and remove it as indicated below.

Attention! When handling the UV lamp, avoid touching the glass element with bare hands as oil and skin residues can adversely affect the performance of the lamp.

Once removed, clean it with a very soft cloth freshly soaked in a specific detergent compatible with quartz glass (e.g. denatured alcohol). Wait until the lamp is perfectly dry and reassemble it.

ANNUAL MAINTENANCE | UV LAMP REPLACEMENT

When the **RED LED lights up**, this indicates that the UV lamp needs to be replaced, but regardless of whether the LED lights up, it must be changed every twelve months to ensure maximum functionality and efficiency.



F10 HOW TO EXTRACT THE UV LAMP

- 1 Disconnect the power supply from the ice machine,** remove its covers and access panels until the XSafe device is accessible (see fig F11 and F12 on the previous pages for positioning inside the machine).
- 2 Make sure that the entire XSafe device is cold.**
Wear protective gloves. Disconnect the bulb holder from the lamp by pulling it gently. Important: Do not detach the lamp holder by pulling it by the connecting wires, this will damage it and may cause danger of electrocution when reconnecting. The 4 connection pins of the UV lamp will be exposed.
- 3** Push the UV lamp from behind until it comes out by about 2 cm; this will facilitate its removal.
- 4** Dispose of the old UV lamp in accordance with hazardous waste disposal regulations (these UV lamps contain small traces of mercury).
- 5** Insert the new UV lamp, making sure that its 4 connection pins are exposed so that the lamp holder can be reconnected. Only use a UV lamp SC630102 03 SCOTSMAN, the use of a different type of lamp invalidates the warranty. Attention! When handling the new UV lamp, avoid touching the glass element with bare hands as oil and skin residues can adversely affect the performance of the lamp.
- 6** Replace the covers and panels removed from the ice machine and reconnect it to the power supply.

FREQUENTLY ASKED QUESTIONS

What is Scotsman XSafe?

XSafe is a natural sanitising system based on the UV lamp. It is integrated inside the appliance and guarantees absolute purity and hygiene:

- treats the air with ozone technology in the food area of the ice maker;
- keeps the ice maker and container clean, reduces mold, viruses and other micro-organisms;
- is fully automated and chemical-free.

How does it work?

The XSafe process replicates the positive effects of UV sunlight. The UV lamp generates a mixture of free oxygen atoms (O), hydroxyl radicals (HO), ozone (O₃) and super oxide ions (O₂⁻); this mixture is highly active against molds, viruses and other micro-organisms.

Is XSafe dangerous to humans?

The XSafe device is designed to produce O₃ below legal limits when properly installed, operated and maintained.

Does the XSafe system contaminate or change the taste of ice?

No. The XSafe system works without the use of chemicals and the reactive oxygen mixture does not transfer any taste or odour to the ice.

Is it possible to install xsafe ON any Scotsman machine?

Yes, the XSafe XR-30 kit can also be installed externally on all SCOTSMAN NW series ice machines.

Why is XSafe better than devices that add ozone to water?

Because all the internal parts of the machine not in direct contact with water would not be sanitised and because there is ice it could change the taste and appearance.

Is any operation required on the part of the operator?

The XSafe system requires no operation by the operator. It works automatically 24 hours a day, regardless of whether the machine is producing ice or is on stand-by.

Is XSafe effective against Covid-19?

XSafe was tested on influenza A virus (avian influenza virus), which is a similar type of virus to Covid-19 (they belong to the same family). The result was an inactivation efficiency of 99.99%. A specific test on Covid-19 is being investigated and results are expected in six months.

Does XSafe also sanitise the ice scoop?

Yes, if the scoop is kept inside the ice tray.

Does XSafe sanitise incoming water?

XSafe was developed for the treatment of the internal areas of the ice machine (ice compartment). It will certainly have a slight disinfectant effect on the incoming water, but if it is not drinkable, it must be purified and filtered by other suitable means before being used.

Will the ice machine still need a water filter?

To ensure that the ice machine produces clear and pure ice, it is always recommended to install a suitable filter system. The XSafe system has no beneficial effect on the formation of fouling; if the ice machine uses water with high hardness, it will certainly need a water filter.

Does XSafe also reduce the frequency of machine descaling?

No, XSafe only affects organic micro-organisms, not inorganic materials such as limestone, salts, sand, etc.

Is XSafe noisy?

No, XSafe does not produce noise.

With XSafe fitted, is it still necessary to empty and clean the ice machine?

Yes. Periodically, however, it is necessary to switch off and empty the ice machine to prevent physical contaminants and dirt from entering the machine.

How can it be verified that XSafe is working properly?

On the XSafe there are LEDs that indicate the status of the machine, the lighting of the BLUE LED indicates normal operation.

How often should the internal UV bulb be replaced?

The UV lamp should only be replaced every year with an original SCOTSMAN lamp by the Technical Service Department, this guarantees the perfect effectiveness of the system. If the lamp is not replaced every year, in addition to the loss of efficacy, the manufacturer's guarantee lapses.

Can the UV bulb be replaced by the end user?

Replacement of the UV lamp must NOT be carried out by the user, contact a specialist technician.

Personal notes

[illegible]

COMPONENT DESCRIPTION

Condenser temperature sensor

The **condenser temperature sensor probe** (located in contact with the condenser tube coil) detects temperature variations and transmits signals by supplying low-voltage current to the P.C. BOARD. In air-cooled versions, based on the received current, the P.C. BOARD microprocessor supplies high-voltage power to the fan motor through a TRIAC, allowing the fan to cool the condenser and reduce its temperature. If the condenser temperature rises to 70°C (158°F), the current reaching the microprocessor will trigger an immediate shutdown of the machine, indicated by a blinking Red LED. The machine will attempt an automatic restart twice. However, if high temperature occurs a third time, the machine will shut down completely. Pressing the MODE button will initiate the startup cycle.

Water temperature sensor

The **water temperature sensor**, located in the water sump, is used to detect the temperature of circulating water in real time and sent signals to PC board with which controls the operation of pump during ice freezing cycle.

ICE full sensor and magnet

The **Ice full sensor**, located on the side of the evaporator, and the magnet, positioned on the right side of the ice deflector, are used to detect whether the ice deflector or slide returns to its original position after the harvest cycle.

If the storage bin is full, the ice blocks the deflector or slide board from returning to its original position. As a result, the unit will stop and restart automatically once the ice is removed. The Bin Full Yellow LED will indicate this status. When ice is removed or shifted in the storage bin, the ice deflector resets. The magnetic sensor detects the magnetism, clearing the Bin Full status, and the unit enters the freezing cycle.

Note:

If the "Ice Bin Full" status is cleared within 3 minutes, the OPER light will flash quickly. After 3 minutes, the ice machine will automatically enter the freezing cycle. If the "Ice Bin Full" status is cleared after more than 3 minutes, the ice machine will enter the freezing cycle only when it is manually restarted.

Compressor Contactor or Relay (For NXW307/507/457/607/707/1007)

Located in the control box or compressor accessory box, the compressor contactor or relay functions to carry the compressor line current. The contactor or relay is wired to receive power from the P.C. Board.

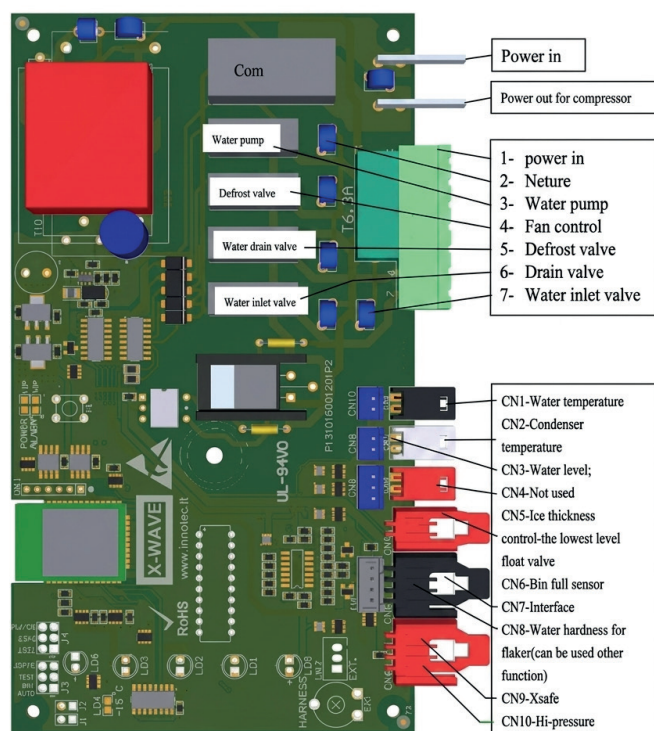
PC board

The PC board, fitted in its box located beneath the machine's front panel

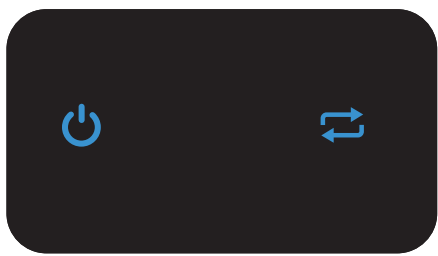
- at the bottom for 30" models
- at the upper right for 22" models

It consists of one power-in high voltage transformer, one PC board with both high and low voltage and a display panel connected with the PC board.

The PC board is the brain of the ice machine; it receives signals transmitted from the four sensors through its microprocessor to control the operations of the different electrical components of the ice machine (such as compressor, Fan, defrosting valve, water inlet valve, drain valve, water pump).



Led display



NXW 7 SERIES | X-Wave Display screen
Display screen can be seen: Power symbol and Cycle symbol, indicating the function and operation status as follows: Two buttons are present: the POWER button on the left, and the LOOP button on the right. The POWER button is used to turn on and off the machine, while the LOOP button has a double function: scroll through the pages and send commands. The OLED display shows information about the current state of the machine.

Alarms NXW Xwave Mode

SYMBOL SHOWN	DESCRIPTION
A01	No water
A02	Evaporator sensor fault
A03	Condenser sensor fault
A06	Condenser temperature too high
A07	Condenser temperature too low
A09	Condenser temperature too high at startup
A10	Ice level sensor fault
A12	Test mode timeout
A14	XSafe fault
A16	High pressure
A17	Ice thickness sensor fault
A18	Water circuit fault
A20	Freezing timeout
A21	Defrosting timeout
A22	Water pump fault

Condenser air filter (Air-cooled version only)

The condenser air filter is located at the back of the unit on the NXW series. It can be easily removed for cleaning or replacement by simply pulling it out. To maintain the ice machine’s efficiency, it is recommended to clean the air filter monthly. If the filter becomes damaged due to aging, contact a Scotsman service agent for replacement.

Water distributor

The water distributor is located on the evaporator and evenly distributes water across the entire upper frame, ensuring a more uniform and complete ice formation.

Water pump

The water pump remains off at the first 30 seconds of the freezing cycle, then begins to operate continuously till the water temperature is less than 2°C it will keep off for 30 seconds to prevent cavitation issues. After that it operates throughout the freezing cycle, ensuring

a steady flow of water through the ice molds of the evaporator to produce ice cubes. It then runs according to the X-WAVE settings. It is recommended to check the water pump at least every 3 months.

Water inlet solenoid valve

– 3/4” Male Fitting

The water inlet solenoid valve is energized via the P.C. BOARD during the first 5 minutes of the loading phase (when the appliance starts up) and during the defrost cycle. When energized, it is controlled by both the P.C. BOARD and the Water Level Sensor.

The water inlet solenoid valve is also activated at the beginning of the freezing cycle until the water reaches the maximum level in the sumphuihn, as detected by the Water Level Sensor.

After 5 minutes from the start of the freezing cycle, the Water Inlet Valve is reactivated for a short period to refill the sump up to the maximum level again. This process helps minimize the risk of slush ice formation.

Hot gas solenoid valve

The hot gas solenoid valve consists of two main components: the body and the coil. Located on the compressor discharge line, it is activated by the electronic board during the defrosting (and charging) cycle, allowing hot gas, pumped by the compressor, to flow directly into the evaporator coil. This process helps detach the ice cubes from the cells.

Water drain solenoid valve

The water drain solenoid valve, remaining energized throughout the harvest cycle, together with the pump, which operates at the start of the defrosting cycle (controlled by the P.C. BOARD and ice level sensor), it allows all residual water—rich in limescale and minerals deposited during the previous cycle—to drain from the pump tray.

This ensures that the machine uses clean water for each new cycle, preventing the accumulation of impurities and limescale, which could eventually cause partial or total blockage of the machine's water circuit.

Fan motor (Air cooled models)

The fan motor, electrically connected to the relay on the P.C. BOARD, operates during the freezing cycle, circulating air through the condenser fins.

Normally, the fan operates intermittently to maintain the temperature and, consequently, the condensing pressure within two pre-set values.

Compressor

the hermetic compressor is the heart of the system, responsible for circulating refrigerant throughout the entire system. It draws in refrigerant as a low-pressure, low-temperature vapor, then compresses it, increasing both its pressure and temperature. As it passes through the exhaust valve into the circuit, it transforms into high-pressure, high-temperature vapor.

Water Regulating Valve (Water cooled models)

The Water Regulating Valve maintains a constant compressor head pressure by controlling the incoming water flow through the water condenser on water-cooled models.

The valve operates based on the high-side refrigerant

pressure. By rotating the adjusting screw located on top of the valve, the water flow through the water-cooled condenser can be increased or decreased, which in turn will decrease or increase the compressor operating head pressure.

Float Valve Sensor

(For NXW series models)

Located to the right of the evaporator and above the water sump, the float valve sensor consists of a reed switch and a float ball. The float ball, made of magnetic material, is equipped with a magnet and is present by Manufacturer and MUST NOT be adjusted. Once ice forms in each mold and the water level in

the water sump drops, the Float Valve Sensor sends a signal to the P.C. BOARD, indicating that the ice is thick enough. After receiving the signal, the P.C. BOARD initiates a 10-second delay before starting the harvest cycle.

High Pressure Control switch

The High-Pressure Control Switch is installed in the ice machine. When a failure occurs and the high pressure exceeds 25 bar(362.6psi) for NXW 7 Series, the switch cuts off the electricity supply to protect the machine. The ALARM HI PRESS indicator light will remain on continuously until the high pressure decreases to 18bar (261psi) for NXW 7 Series, at which point the ice machine can be restarted.

Water level sensor

The water level sensor is located at the top of the water tank. When the water level reaches a certain point during filling, the magnetic sensor of the water level float sensor detects magnetism and sends a signal to the P.C. BOARD.

Once the P.C. BOARD receives the signal, it powers off the water inlet valve, stopping the water filling process. The water level sensor is installed on a support bracket and can be adjusted.

Note:

If the water level in the water tank is too high and overflows during filling, it means that the water level sensor is not controlling the water inlet valve properly. In this case, the sensor position should be adjusted lower.

Harvest assist

(For NXW307/507/457/607/707/1007)

The Harvest Assist operates during the Harvest Cycle, pushing the ice cube block out. This process reduces the Harvest Cycle time and increases production.

Thermostatic Expansion Valve

The thermostatic expansion valve regulates the refrigerant flow to the evaporator and reduces the liquid refrigerant pressure from the condensing pressure to the evaporating pressure.

Personal notes

[illegible]

WORK PHASES

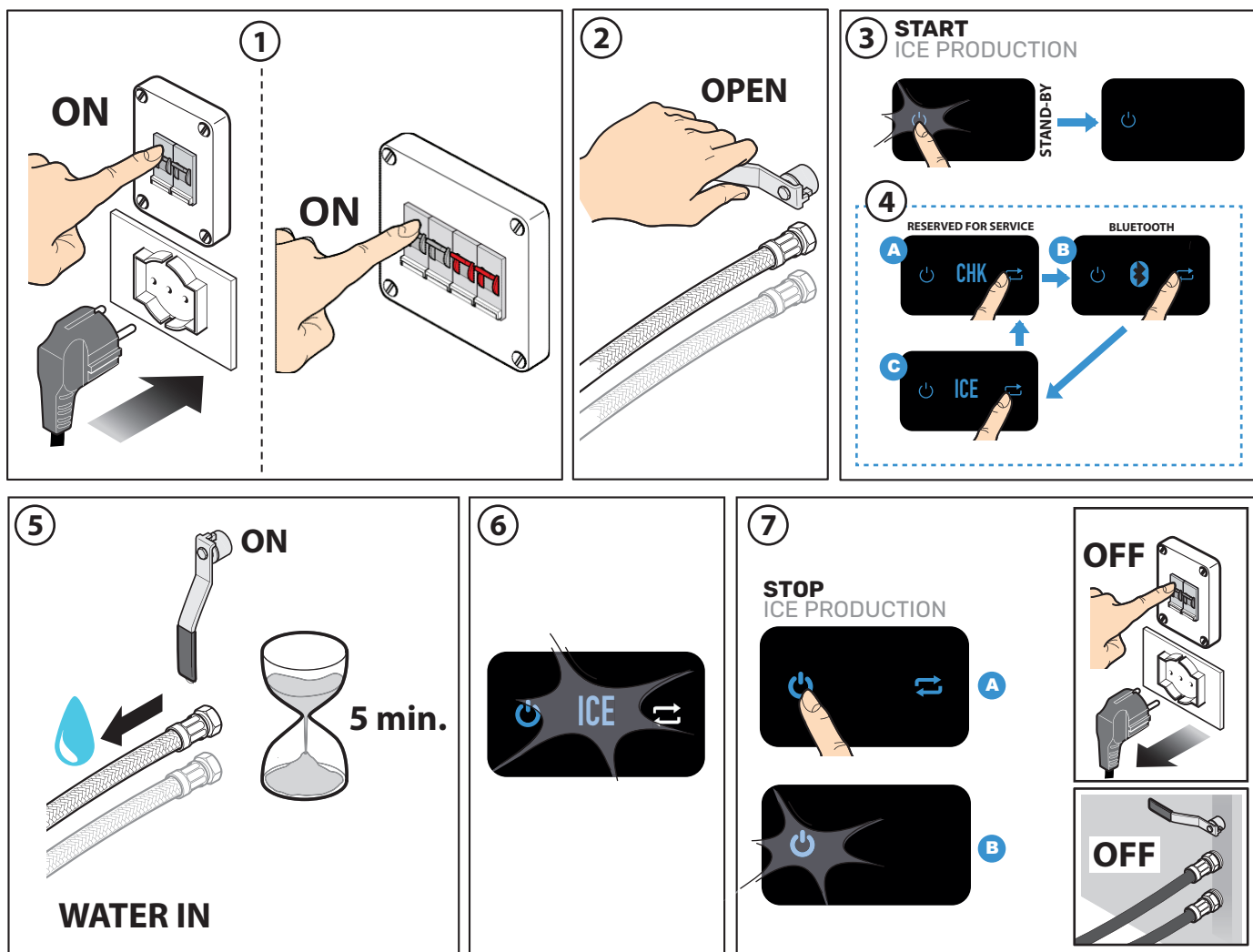
START-UP LOADING.....	32
PRODUCTION PHASE (FREEZING CYCLE)	34
How the process happens refrigerant state changes	34
Freezing phase.....	36
HARVEST CYCLE.....	37

START-UP | LOADING

After the appliance has been correctly installed and connected to the electricity and water supply, follow the procedure below to start it up:

- 1 **Power the machine** by plugging it into a socket with a suitable capacity or by connecting it to a disconnect box.
- 2 **Open the water supply** tap to allow the machine to fill with water.
- 3 Display power on symbol . Tap the icon  to start up the machine.

The appliance automatically starts charging water. Then the machine automatically starts to work within 5 min.



④ If press the Loop the display can show:

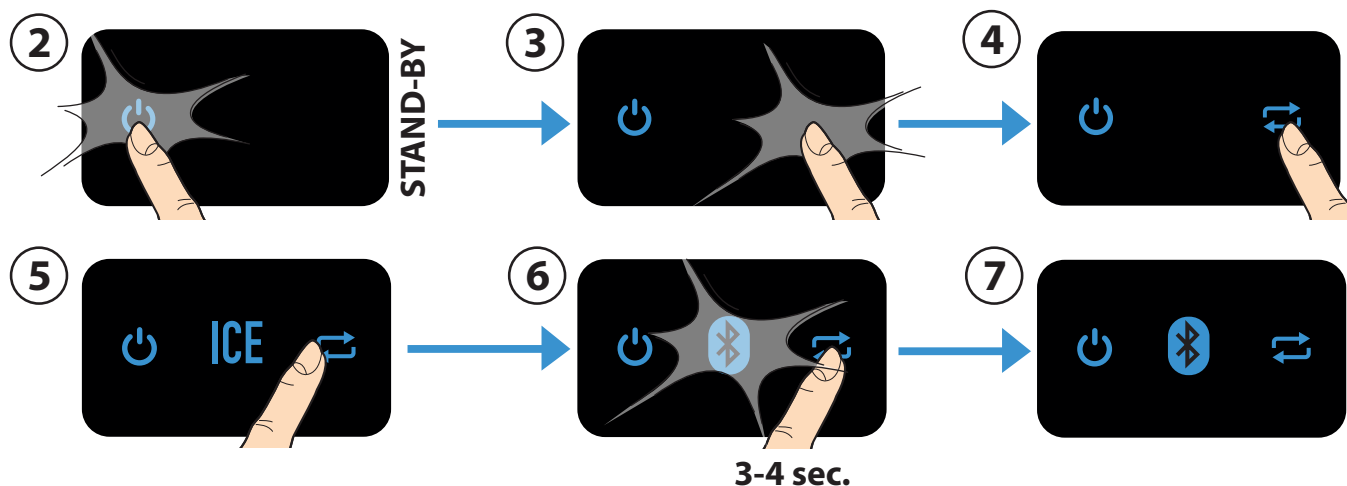
- 1) CHK: The machine will go to self-check phase.
- 2) WAI: After CHK, machine will go to next phase, waiting process. This phase is about 60 second.
- 3) WSH: washing phase, it is about 2 minutes. And drain water 30s.
- 4) PB: balance phase, hot gas valve turned on 30s, compressor works from last 5s.
- 5) ICE: freezing cycle, water fills from start. Water pump delays 30s to work.
- 6) HOT: defrosting cycle, ice drops from evaporator.
- 7) BF: bin full phase.

From PHASE (2-7) menu is possible to skip the current machine phase by HOLD on LOOP button. The order of the phases is as follows:

- WAI -> WSH
- WSH -> PB
- PB -> ICE
- ICE -> HOT
- HOT -> BF
- BF -> WAI



① Play Store | App Store → App Scotsman Ice XWave



② Tap loop symbol it can cycle to **bluetooth**

③ Open your phone to connect the machine with X-wave APP. App will show the status of ice machine.

④ Power off machine- tap the symbol" , it becomes slow blink, all Leds are turned off.

⑤ Standby, The machine is turned off. The POWER button LED is in SLOW_BLINK and the LOOP LED is turned off. The user can turn on the machine by TAP on POWER button: the display goes into HOME menu.

⑥ Manual Cleaning management: tap the power led, turned off machine, tap the power led again, --tap loop --tap CLE, the machine gets into the manual cleaning process.

PRODUCTION PHASE (FREEZING CYCLE)

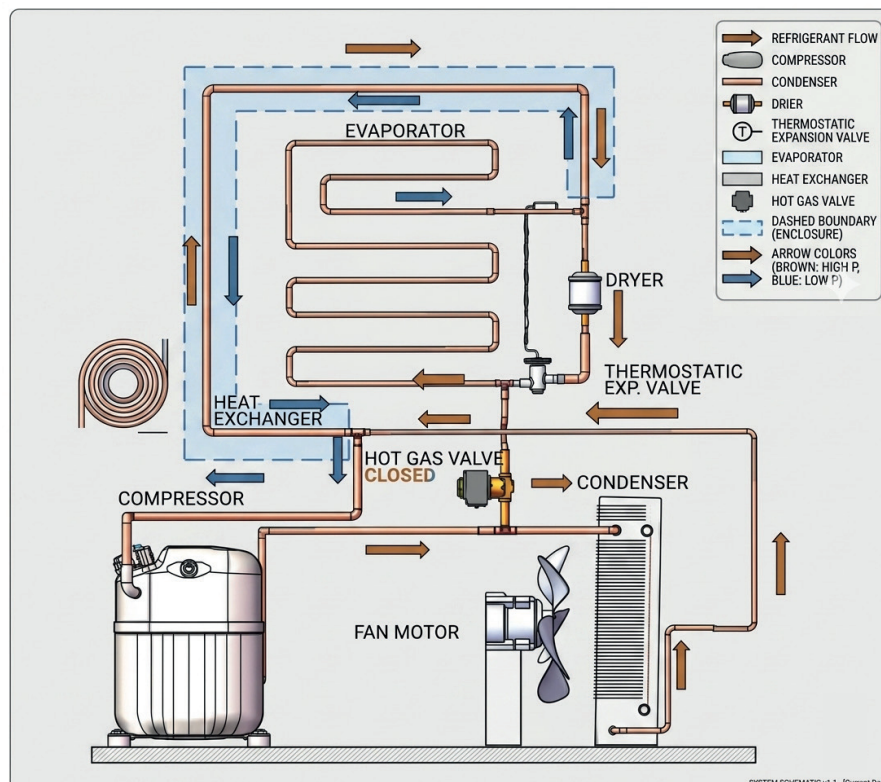
After about **5 minutes**, loading is complete, the green 'Freezing' light comes on and the ice cube production cycle begins.

How the process happens | refrigerant state changes

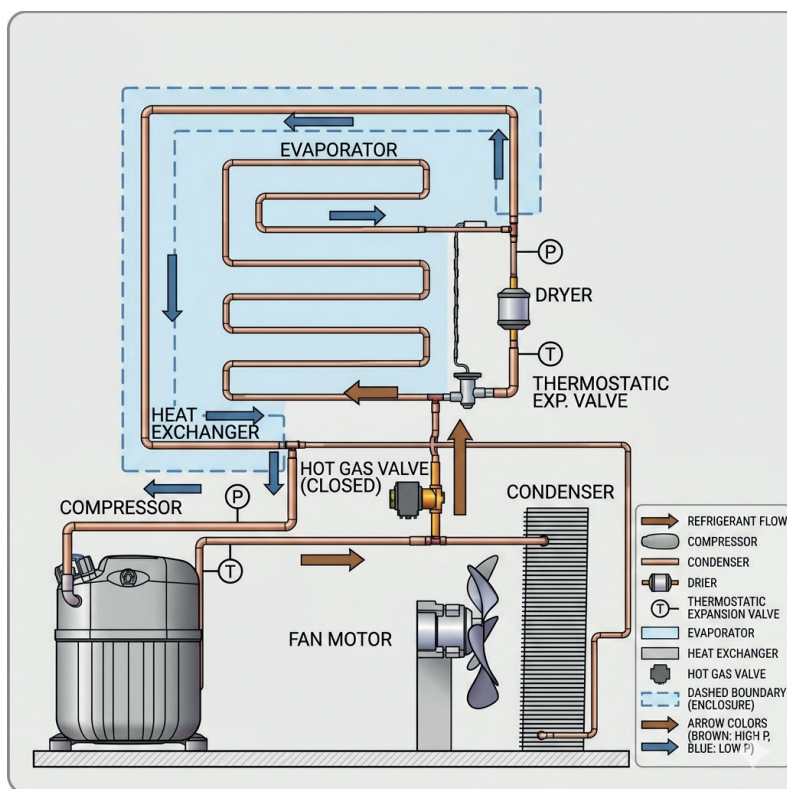
F12 Refrigerant in its gaseous, high-temperature state is pumped by the compressor and, as it passes through the condenser, it is transformed into liquid refrigerant. The liquid line allows the refrigerant to flow from the condenser to the TXV through the filter drier. As it passes through the TXV, the liquid refrigerant gradually loses pressure and, consequently, temperature. Water, sprayed into the water distributor tube by the water pump, transfers heat to the refrigerant circulating inside the coil, causing it to evaporate and change its physical state from liquid to vapor.

The vaporized refrigerant, after passing through the accumulator, is then sucked back into the compressor via the suction line.

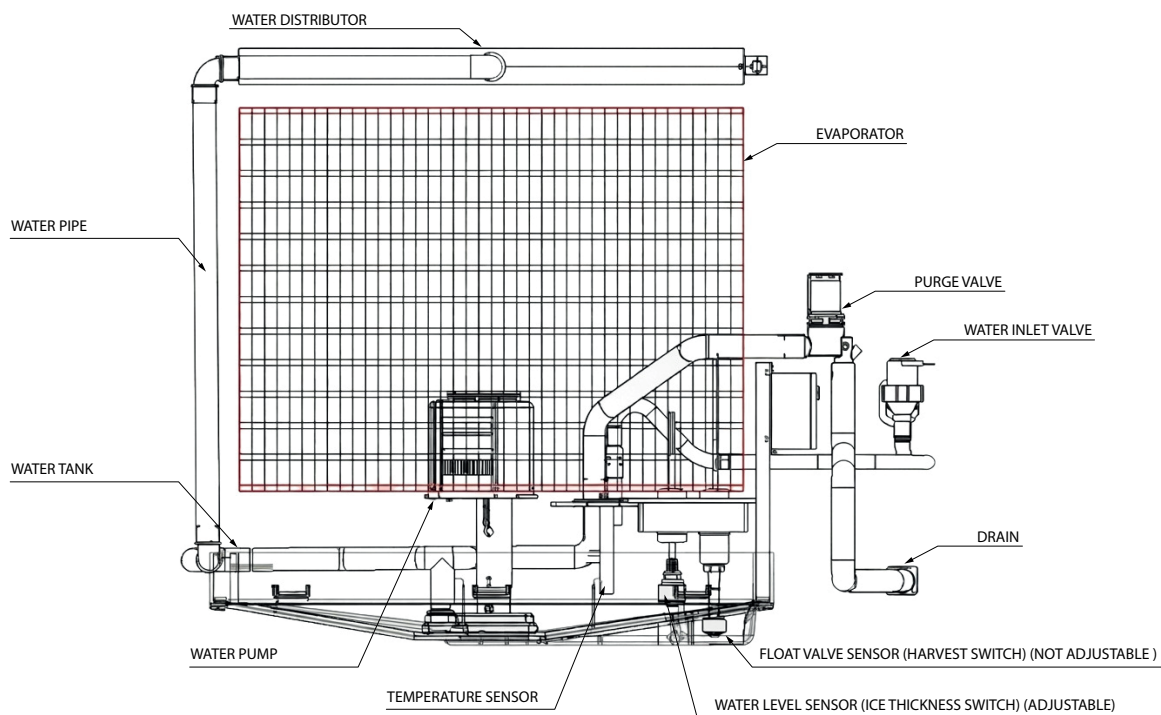
FREEZING PHASE



HARVEST PHASE



F13



F14

Freezing phase

(Controlled by the magnet sensor and float valve sensor)

(Controlled by the magnet sensor and float valve sensor)

During the freezing process, water is continuously sprayed into the water distributor tube, while the evaporator temperature gradually drops.

When the water level reaches the bottom limiter of the float valve sensor, the P.C. BOARD takes control of the freezing cycle until its completion, indicated by the lighting of the Green LED.

During the Freezing Phase, the following components are in operation:

- Compressor (air-cooled models)
- Water pump
- Fan motor (air-cooled models), controlled by the
- condenser temperature sensor located between the condenser fins.

CONDENSATION TEMPERATURE CONTROL

In air-cooled appliances, when the condenser temperature exceeds a certain threshold, the condenser temperature probe changes its electrical potential, transmitting a low-voltage current to the P.C. BOARD microprocessor. The microprocessor then processes the received signal and activates the fan motor via a relay at the P.C. BOARD output.

As a result, the condenser temperature decreases. Once the temperature probe detects that the temperature has returned to its initial value, it restores its electrical potential, reducing the current flow to the P.C. BOARD and stopping the fan motor.

If the condensation temperature reaches 70°C (water-cooled appliances) and (air-cooled appliances) due to: dirty condenser (air-cooled appliances)

- *insufficient condensing water (water-cooled appliances);*
- *blown or blocked fan (air-cooled appliances);*
- *room temperature above 40 °C;*

The condenser temperature probe immediately stops the operation of the device to prevent prolonged operation under abnormal conditions, while simultaneously activating the red warning lamp.

To restart the device, it is necessary to:

- *eliminate the cause of the condenser temperature probe tripping;*
- *switch off the machine,*
- *wait a few seconds and switch the machine on again.*

The appliance will restart from "clean phase".



Controls during the start-up and production phase (freezing)

F08 Install pressure gauges on both the high and low valves to check the condensation and suction pressures. In air-cooled models, the condensing pressure is kept constant within the values indicated on p 7, regulated by the probe/sensor located between the condenser fins.

F08 Observe that the water flows correctly through the holes of the distributor tube and that it evenly covers the evaporator cells. Check that the plastic curtain is properly positioned to prevent water from escaping. The following table shows which contacts and components are energized or not during the various stages of the freezing cycle. Refer to the circuit diagram for reference.

FREEZING CYCLE		
Powered electrical components	ON	OFF
Compressor		
Fan Motor		
Hot gas valve		
Water inlet valve		
Water drain valve		
Water pump		
Harvest assist		
Sensors and electrical controls	ON	OFF
Condenser temperature sensor		
Water temperature sensor		
Float valve control (NXW)		
Bin full sensor		
Water level control		

HARVEST CYCLE

As soon as the float valve sensor reaches the bottom position the appliance enters the defrosting cycle.

During the harvest cycle, the components in operation are:

- compressor;
- water inlet valve;
- hot gas valve;
- water drain valve;
- water pump.

The inflowing water passes through the water inlet solenoid valve and the flow control, which is located inside the valve (for models with an ice collector) or in the internal water supply line (for modular cube models), before reaching the water sump.

The water level in the tank is regulated by the water level sensor control.

The refrigerant, in its gaseous state, is pumped by the compressor and diverted from the open hot gas valve directly to the evaporator coil, following the most direct path—bypassing the condenser.

The hot gas circulating inside the evaporator coil raises the temperature of the cells, causing the ice cubes to detach. The detached cubes then fall by gravity into the ice container.

The following table shows which contacts and components are energized or not during the various stages of the ice-making cycle. Refer to the circuit diagram for reference.

DEFROSTING CYCLE (Water discharge phase)		
Powered electrical components	ON	OFF
Compressor		
Fan Motor		
Hot gas valve		
Water inlet valve		
Water drain valve		
Water pump		
Harvest assist		
Sensors and electrical controls	ON	OFF
Condenser temperature sensor		
Water temperature sensor		
Float valve control (NXW)		
Bin full sensor		
Water level control		

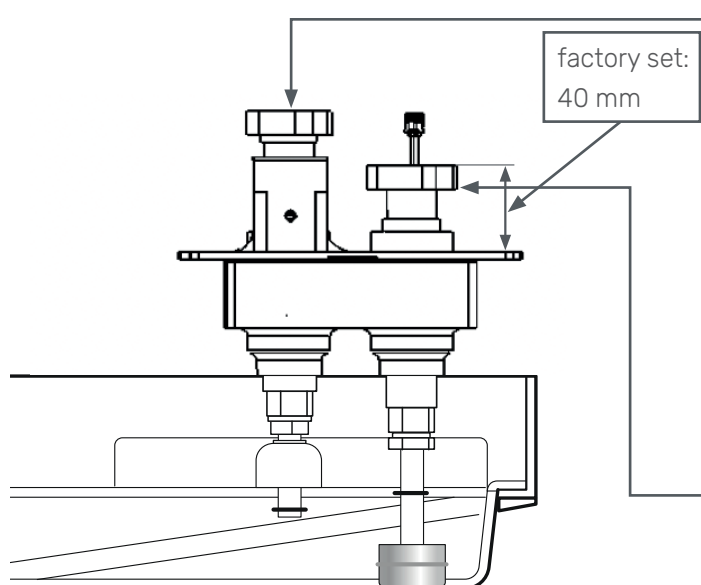
Checks during the harvest phase

Observe the ice cubes produced.

SIZE: Check that the ice bridge is the correct size, approximately 3–5 mm.

If necessary, after the second ice production cycle, an adjustment is required. Loosen or tighten the screw as shown in the illustration below.

NOTE: A cube ice machine produces an “ICE PLATE” that breaks apart when it falls into the storage bin. Adjusting the float valve sensor or ice thickness sensor to produce individual ice cubes may cause machine malfunctions.



Water level adjustment - can also adjust the thickness of the ice block.

- ① Clockwise turn the valve stem, lower water level at the same time makes the ice thin. It is suggested that 1/4 turn be one adjustment point.
- ② Turn the valve stem counterclockwise, improve the water level, and at the same time make the ice thickness. It is suggested that 1/4 turn be one adjustment point.

The defrosting trigger float valve has been adjusted at the factory and cannot be used as an ice thickness float valve for adjustment.

DIAGNOSTICS

SCREEN

POWER



CHK

LOOP



LED DIAGNOSTICS

CHK : Check

WAI : Preheating

ICE : Freezing

BF : Bin full

CLE : Manual cleaning required

XS : XSafe maintenance required

WSH : Washing

PB : Pressure balance

HOT : Defrosting

TST : Test mode

BUTTONS

⏻ POWER

↺↻ LOOP

LED	ALARM
A01	No water; machine blocked after 10 trials. Manually restart.
A02	Water temperature sensor fault; machine blocked. Manually restart.
A03	Condenser temperature probe fault; machine blocked. Manually restart.
A06	Condenser temperature too high; machine blocked. Manually restart.
A07	Condenser temperature too low.
A10	Ice level sensor fault; machine blocked. Manually restart.
A12	Test mode timeout.
A14	XSafe fault.
A16	High pressure.
A17	Ice thickness sensor fault; machine blocked. Manually restart.
A18	Water circuit sensor fault; machine blocked. Manually restart.
A19	Water temperature too high; machine blocked. Manually restart.
A20	Freezing timeout; machine blocked. Manually restart.
A21	Defrosting timeout; machine blocked. Manually restart.
A22	Water pump fault; machine blocked. Manually restart.
Note: If you hold (HOLD) and simultaneously touch (TAP) the POWER button, the machine can be restarted. If the alarm persists, contact technical support.	

70001021-00 Version: A

SYMPTOMS	POSSIBLE CAUSE	SUGGESTED REMEDIES
The compressor cycles intermittently	• Low voltage	• Check. the circuit for overload • Check. the supply voltage • If low contact an electrician
	• Non-condensable gases in the system	• Discharge, Evacuate, and Recharge
	• Partially disconnected	• Check at the various terminals
	• Mechanical problems	• Replacing the compressor
Opaque cubes	• Water shortage	• See remedies for lack of water
	• Dirty water	• Using a water filter or purifier
	• Built up impurities	• Use SCOTSMAN descaling fluid as instructed
Cubes too small or over size	• Freezing cycle too short or long	• Adjust water level float valve sensor (NXW)
	• Moisture in the system	• As above
	• Lack of water	• See remedies for lack of water
	• Lack of refrigerant	• Check for leaks
	• Evaporator sensor not functioning	• Replace sensor
Lack of water	• Water sprays through the curtain	• Check and replace curtain
	• Water inlet valve does not open	• Replace valve
	• Water leakage from tank	• Locating and repairing it
	• Water level sensor not function	• Replace water level sensor
	• Leakage through drain valve	• Replace it
Irregular and Opaque Ice Cubes	• Partly clogged distributor tube hole	• Remove and clean
	• Lack of water	• See remedies for water shortage
	• Unbalanced luminaire	• Levelling as required
Decline in production	• Inefficient compressor	• Replace
	• Water inlet valve leakage	• Repair or replace
	• Non-condensable gases in the system	• Discharge, Evacuate, and Recharge
	• Too little air circulation or room temperature too high	• Changing the Place of Installation
	• Refrigerant overload	• Adjust discharge charge slowly
	• Partially clogged capillary tube	• Drain, replace dehumidifier filter vacuum and recharge
	• Hot gas valve leakage	• Replace
	• Lack of refrigerant	• Load as per nameplate
	• Excessive discharge pressure	• See wrong discharge pressure
Inefficient defrosting	• Defrosting time too short	• Check and adjust DIP SWITCH 3
	• Water inlet valve	• Check filter and flow control. If necessary, widen the orifice
	• Water inlet valve does not open	• Replace coil or valve
	• Hot gas valve does not open	• Replace valve assembly
	• Water dispenser tube	• Cleaning the holes
	• Delivery pressure too low	• See wrong discharge pressure
Harvest not occurring	• Electronic board not functioning	• Replace PC board
	• Hot gas valve does not open	• Blown coil, replace
Excessive water on the machine base	• Leakage from pipes	• Check, tighten or replace pipes

MAINTENANCE

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GENERAL

A SCOTSMAN Ice System represents a significant investment of time and money in any company's business. To ensure the best return on investment, it must receive periodic maintenance.

It is the USER'S RESPONSIBILITY to ensure that the machine is properly maintained, as this is preferable and less costly in the long run. Preventive maintenance helps avoid downtime by keeping the machine clean, adjusted as needed, and by replacing worn parts before they cause failures. Below is a list of recommended maintenance tasks that will help keep your machine running efficiently with minimal issues. The frequency and procedures for maintenance and cleaning can be adjusted based on operating conditions. Cleaning, in particular, depends on local water quality, ambient conditions, and the volume of ice produced. Each ice machine must be maintained individually, in accordance with the specific requirements of its location.

Note:

Cleaning should be adjusted according to the local water quality and the operating conditions of each ice machine. Frequently check the cleanliness of the ice cubes and the components of the water system both before and after cleaning to determine the necessary cleaning frequency and procedures.

Icemaker maintenance

The following maintenance on the ice machine should be scheduled at least two times per year:

1. Unplug the power plug at the end of the defrost cycle.

2. Check and clean the water inlet strainer.
3. Check that the ice machine is leveled in side to side and in front to rear directions.
4. Use SCOTSMAN ice machine cleaning / Sanitizing liquid to clean and sanitize water system, evaporator and ice storage bin. And scoop out ice cubes store into bin to prevent them contaminated with solution.

Note:

Cleaning and sanitizing requirements vary depending on local water conditions and individual user operations. Regularly check the clarity of the ice cubes and visually inspect the water system components, evaporator plates, and sump assembly both before and after cleaning. This will help determine the appropriate cleaning frequency and procedure for specific locations.

5. When air cooled icemaker stops, can remove the air filter.
6. Check for water leaks and tighten drain pipe. Pour water into storage bin to verify whether the drain pipe is Smooth and clean.
7. Check for refrigerant leaks. Check size, condition and quality of ice cubes Perform adjustment of cube size control as required.

Ice storage bin maintenance

- The interior liner of the bin comes into direct contact with food products, specifically ice, and must be cleaned and sanitized regularly.
- **Sanitize it once a week** using a commercial food-grade sanitizer, following the manufacturer's recommended dilution.

Cabinet exterior

- Wipe the exterior of the unit and bin cabinet using clean cloth or disposable paper wipers, soaked in warm water with a mild detergent solution.

Water System Cleaning and Sanitizing

Cleaning

1. Prepare SCOTSMAN cleaning solution for the ice machine in a plastic container.

- NXW307	270 ml (Water 3.0L)
- NXW507	330 ml (Water 3.6L)
- NXW707	350 ml (Water 3.9L)
- NXW 457	320 ml (Water 3.5L)
- NXW 607	360 ml (Water 4.0L)
- NXW1007	540 ml (Water 5.9L)

Warning:

Before opening the cleaning solution, carefully read the instructions to avoid damage.

Note:

Cleaning solution for ice machine is corrosive. If it splashing on your mouth can cause mouth burns, So don't make it splash. In case cleaning solution splashes on your mouth or eyes, use a lot of water or milk to wash and should go to hospital immediately. When washing the external surface, children are not allowed to close. Cleaning solution should be kept away from children.

2. Scoop out all the ice cubes stored into the bin to prevent them from being contaminated with the cleaning solution.
3. Remove front panel, and evaporator deflector on NXW series.
4. Use a brush to apply the cleaning solution, dissolving impurities on the ice module of the evaporator and removing scale deposits.
5. Power ON the icemaker, using the display and press loop button until CLE appears, keep pressed the loop button, the CLE will start blinking;
6. The icemaker enters in cleaning phase, wait 30" and pour the descaling solution into the water sump (during the first 30" the icemaker energizes the purge valve, if the solution is poured before these 30", it will be wasted). The unit will restart automatically or remain in stand-by mode, depending on the setting of the PCB (see XWave app).
7. Turn on the power switch, press "clean button" and hold for 5 seconds, let the machine go to the Cleaning and rinsing procedure (Cleaning RED light will blink fast), all cleaning and rinsing time is about 40

minutes.

8. Remove the water distributor pipe and the water sump and all water tube to wash them separately.
9. Turn off the power switch after the cleaning and rinsing process is completed. Turn on the power switch again; the ice machine will start the freezing cycle normally.

Sanitizing

1. Prepare sanitizing solution for the ice machine in a plastic container

Warning:

Before opening the cleaning solution, carefully read the instructions to avoid damage.

Note:

The sanitizing solution for the ice machine is corrosive. If it splashes into your mouth, it can cause burns. Avoid splashing at all times. If the sanitizing solution comes into contact with your mouth or eyes, immediately rinse thoroughly with plenty of water or milk and seek medical attention immediately. When cleaning the external surface, keep children away. The sanitizing solution should always be stored safely and out of reach of children.

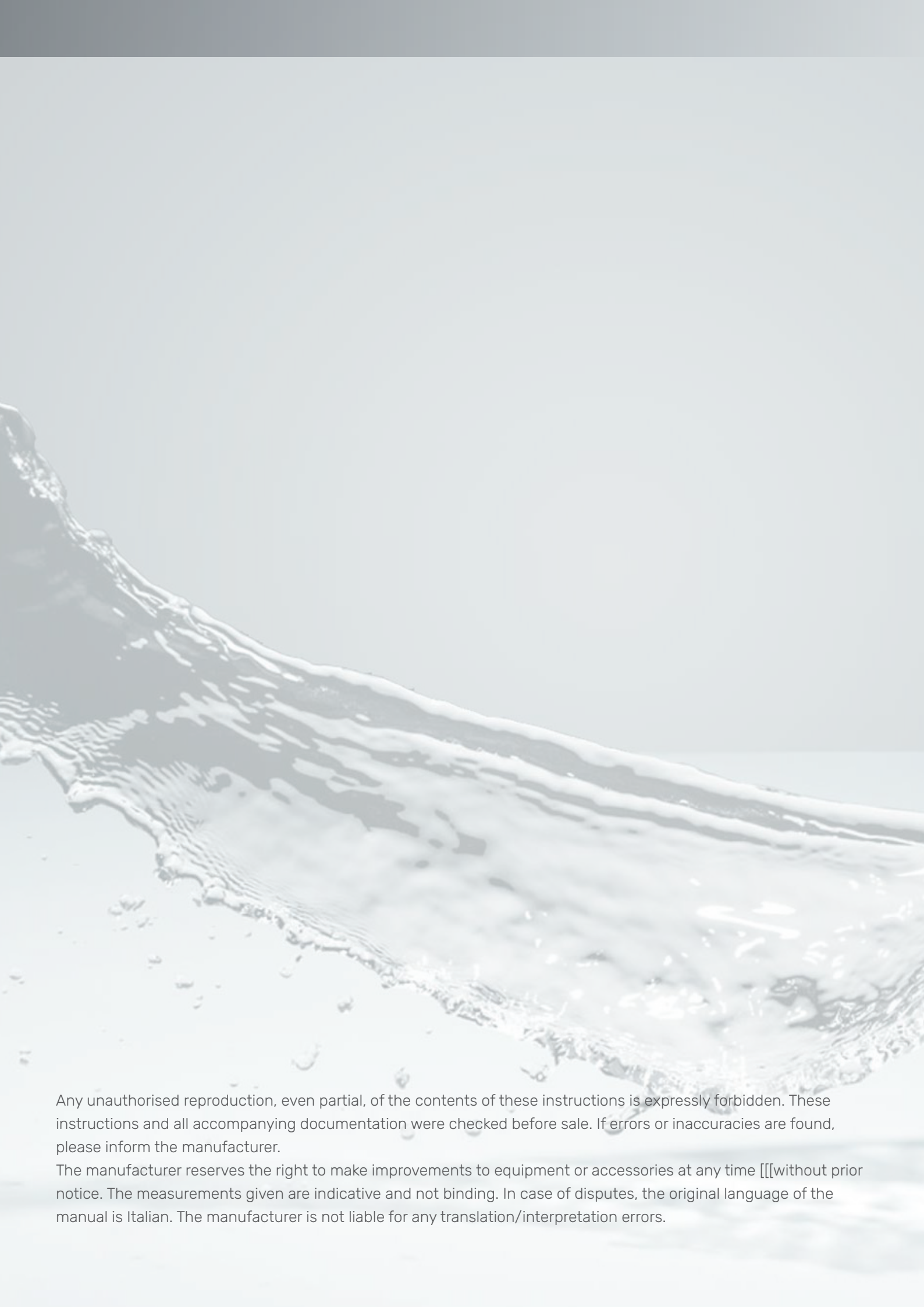
2. Follow the same procedure as cleaning to sanitize the ice machine and ice bin. After the cleaning or sanitizing procedure is completed, reinstall all parts that were previously removed. Turn on the power switch and check the next batch of ice cubes to ensure that all solution residues are gone and that there is no odor or taste.

Winter Maintenance Procedures

Important!

Whenever the ice machine is taken out of operation during the winter months, the following procedure must be performed. Failure to do so may result in serious damage and void all warranties.

Check the ice machine. If ice is being made, initiate the harvest cycle or wait for the freezing cycle to end. At the beginning of the harvest cycle, cut off the water supply to the ice machine. At the end of the harvest cycle, turn off the power switch and drain the water from the system completely, as much as possible. Remove all ice from the storage bin and discard it.



Any unauthorised reproduction, even partial, of the contents of these instructions is expressly forbidden. These instructions and all accompanying documentation were checked before sale. If errors or inaccuracies are found, please inform the manufacturer.

The manufacturer reserves the right to make improvements to equipment or accessories at any time [[[without prior notice. The measurements given are indicative and not binding. In case of disputes, the original language of the manual is Italian. The manufacturer is not liable for any translation/interpretation errors.



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