



# COOLFOG

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# Proku

Store these directions for use along with the Coolfog Basic.  
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### **Important!**

In order to guarantee the safe, correct and economical use of the Coolfog Basic, you should pay particular attention to and observe all directives and safety instructions contained in these directions for use. If, after reading these directions for use, you still have questions, please contact your distributor. You will find the contact details at the end of these directions for use.

## 1. Introduction

These directions for use provide technical information about the Coolfog Basic, as well as assembly and installation instructions, operating instructions and maintenance and repair directives applicable to the Coolfog Basic.

### 1.1 Ultrasonic air humidification

During ultrasonic air humidification, vibrating plates are used to convert water into extremely fine cool water vapour. These vibrating plates are located just below the water's surface and agitate the water by means of high-frequency vibrations (1.7 MHz), hurling tiny water particles, 1 to 3 microns in size, from the water's surface. This creates a very fine mist, also called cold steam.

### 1.2 Applications

The Coolfog Basic has been designed for the following applications, on condition that the items inside the humidification area can withstand increased humidity:

- CA (Controlled Atmosphere) / ULO (Ultra Low Oxygen) storage
- Areas in which high relative humidity is desired
- Cold stores

The Coolfog Basic can be placed in a tank that needs to be refilled each time. The Coolfog Basic is also a replacement item for the Coolfog Comfort and the Coolfog Maxi.

The Coolfog Basic is intended for commercial use, thus excluding domestic use.

#### **Important!**

If used for the purpose of humidifying low-oxygen areas, work must always be carried out according to safety guidelines that apply to application in low-oxygen areas!

### 1.3 Packaging

The Coolfog Basic is supplied in recyclable packaging that does not need to be kept. The packaging contains the following components (see images):

- Transformer with mains electrical plug
- Float (packaged separately)
- Coolfog Basic (with 2 metre cable for connection to transformer)
- These directions for use



## 1.4 Warranty period

The Coolfog Basic is covered by a six-month warranty period. This warranty becomes void if the Coolfog Basic is not assembled and installed according to instructions or is handled without the necessary expertise.

Details related to the client, distributor, installer and the Coolfog Basic must be entered in chapter 7. Incomplete or omitted details will result in warranty cover on the Coolfog Basic being forfeited.

## 2. Safety guidelines

The Coolfog Basic may only be assembled and installed by authorised and competent persons. The client is responsible for checking the relevant qualifications.

Operation, maintenance and possible repairs may only be carried out by persons with knowledge about the product and who have the qualifications necessary to carry out the work in question. The client is responsible for checking the relevant qualifications.

Before the Coolfog Basic is moved or maintenance work is carried out on it, always shut off its 230 V electrical supply.

If it is noted that risk-free use of the Coolfog Basic is no longer possible, it must immediately be disabled and be secured to prevent unintentional activation. This may be the case under the following circumstances:

- The Coolfog Basic is damaged.
- The Coolfog Basic no longer functions correctly.

Below is a complete overview of the safety guidelines contained in these directions for use:

- In order to prevent electrocution, the humidifier must be connected to its electricity supply only after all installation work is complete.
- If used for the purpose of humidifying low-oxygen areas, work must always be carried out according to safety guidelines that apply to application in low-oxygen areas.

## 3. Assembly and installation instructions

The Coolfog Basic may only be assembled and installed by authorised and competent persons. The client is responsible for checking the relevant qualifications.

Attention must be paid to all details related to assembly and installation included in these directions for use.

All local guidelines that have a bearing on assembly and installation tasks must be taken into account.

### **Important!**

If the Coolfog Basic is not assembled and installed according to instructions, or if it is not handled with the necessary expertise, the warranty will become void.

### 3.1 Placement instructions

- The Coolfog Basic must be installed in a frost-free area in order to guarantee effective operation.
- The water temperature must be at least +5°C and must not exceed +34°C. Higher temperatures will cause permanent damage to the Coolfog Basic's vibrating plates and shortening its lifetime.

- If the Coolfog Basic is used in a tank other than the Coolfog Comfort or Coolfog Maxi, it is important for proper functioning that the tank is large enough. If the water volume is too small, the water will warm up and this makes the Coolfog Basic's vibrating plates wear extra hard. Your Coolfog Basic vibrating plate will need earlier replacement (see also 5.3).

### 3.2 Electrical connection (supply voltage 230 VAC)

- The Coolfog Basic must be connected to an earthed wall socket that forms part of an earthed electrical system.
- If desired, the wall socket can be fitted with a timer switch for setting activation times.
- Electrical cables must not be rolled up due to the risk of overheating.

#### **Warning!**

To prevent electrocution, the humidifier must be connected to the electrical supply only when all installation tasks are complete.

### 3.3 Water connections

- The Coolfog Basic must be installed in a frost-free area in order to guarantee effective operation.
- The Coolfog Basic must be included in company-specific risk management related to legionnaire's disease and in the corresponding Legionnaire's Disease containment plan, set up within the context of legionnaire's disease prevention.
- Distilled water cannot be used, as the water sensor on the Coolfog Basic will not work properly.
- When the Coolfog Basic is used in a tank other than the Coolfog Comfort or the Coolfog Maxi make sure the tank is large enough to prevent water from splashing outside the tank.
- Use of clean water is recommended. When the water is dirty, change it with clean water in time (dirty water will affect production of mist).

#### **Important!**

Legislation and regulation with respect to Legionnaire's Disease can differ per country. The client is responsible for observing applicable legislation and regulations.

### 3.4 Step-by-step assembly and installation

Below is a step-by-step plan according to which to assemble and install the Coolfog Basic.

1. Remove the float from its packaging.



2. Fit the two float components together to form a shallow tray



3. Remove the Coolfog Basic and transformer from its packaging



4. Place the Coolfog Basic inside the float



5. Carefully place the float on the bottom of the Coolfog Comfort, Coolfog Maxi or another kind of tank

6. Connect the cable from the Coolfog Basic to the transformer



7. Connect the Coolfog Basic mains plug to an earthed wall socket forming part of an earth leakage protected electrical system

#### 4. Operating instructions

This section describes the general instructions for use.

- The transformer must not be covered because it heats up during humidification.
- Do not touch the Coolfog Basic's vibrating plates or the transformer when the system is electrically active.
- Fingers or other body parts must not be placed within 10 cm of the Coolfog Basic's vibrating plates when these are active.
- The Coolfog Basic must be included in company-specific risk management related to Legionnaire's Disease and in the corresponding Legionnaire's Disease containment plan, set up within the context of Legionnaire's Disease prevention.
- Distilled water cannot be used, as the water sensor on the Coolfog Basic will not work properly.
- If there are doubts about the quality or water hardness, it is advisable to use a water softener.
- The Coolfog Basic must be cleaned using nothing other than a soft cloth.
- The water temperature must be at least +5°C and must not exceed +34°C. Higher temperatures will cause permanent damage to the Coolfog Basic vibrating plates.

## 5. Maintenance and repair instructions

The operation of the Coolfog Basic must be checked on a daily basis. Regular maintenance is essential in order to ensure hygiene and the effective operation of the Coolfog Basic.

**Attention!** If the Coolfog Basic is to be inactive for a long period of time, the Coolfog Basic must be stored in a dry place and not left in a tank filled with water.

### 5.1 Maintenance

How often the Coolfog Basic should be cleaned depends on water quality. Cleaning of the Coolfog Basic should take place at least once every three months. Use nothing other than a soft cloth to clean the Coolfog Basic. Do not use soap or other detergents.

#### **Warning!**

If used for the purpose of humidifying low-oxygen areas, work must always be carried out according to safety guidelines that apply to application in low-oxygen areas!

### 5.2 Malfunctions

Malfunction	Possible cause	Action to take
The Coolfog Basic has shut down automatically.	<ul style="list-style-type: none"> <li>No electricity supply</li> <li>Water level is too low</li> <li>Coolfog Basic not working or defective</li> </ul>	<ul style="list-style-type: none"> <li>Restore electricity supply</li> <li>Refill the tank</li> <li>Check Coolfog Basic and replace if necessary; see §5.3</li> </ul>
The water in the Coolfog Basic is frozen.	<ul style="list-style-type: none"> <li>Surrounding temperature and/or water temperature too low and/or not frost-free</li> </ul>	<ul style="list-style-type: none"> <li>See §3.1</li> </ul>

### 5.3 Replacement

The 'Coolfog Basic' must be replaced after 8,500 active hours or within 1 year, depending on what comes first. Its lifespan also depends on the surrounding temperature. Higher surrounding temperatures will result in a shorter lifespan.

### 5.4 Disassembly

For transportation purposes, the Coolfog Basic must be disassembled to prevent damage to its components.

1. Remove the plug of the transformer from the wall socket.
2. Disconnect the Coolfog Basic cable from the transformer.
3. Carefully disassemble the Coolfog Basic and float.
4. The Coolfog Basic is now disassembled and ready for transport.

## 6. Technical specifications

Mains voltage	230 VAC/50Hz
Total power consumption	450 VA - 450 W - 2.3 A
Transformer voltage	input - 230VAC/50 Hz, output - VAC36V - 450 W
Transformer power consumption	2 A / 230 V
Coolfog Basic maximum capacity	6 litres per hour
Coolfog Basic lifespan	8,500 operating hours (app. 1 year if constantly active)
Water particle size	1 to 3 microns
Maximum water hardness	8°dH (German degrees)
Surrounding temperature	frost-free
Coolfog Basic water temperature	+5°C minimum to +34°C maximum
Weight Coolfog Basic (packaged)	8 kg



## 7. Contact details

Once you have assembled and installed the Coolfog Basic, enter the following details. Incomplete or omitted details will result in forfeiture of warranty cover on the Coolfog Basic.

Please contact your distributor or installer if you experience any problems.

### Client details

Name : \_\_\_\_\_  
Address : \_\_\_\_\_  
City : \_\_\_\_\_  
Telephone no. : \_\_\_\_\_  
E-mail address : \_\_\_\_\_

### Distributor details

Name : Proku  
Address : P.O. Box 1  
City : Dreumel  
Telephone no. : +31 (0) 487-745014  
E-mail address : info@proku.nl  
Website : www.proku.nl

### Installer details

Name : \_\_\_\_\_  
Address : \_\_\_\_\_  
City : \_\_\_\_\_  
Telephone no. : \_\_\_\_\_  
E-mail address : \_\_\_\_\_  
Engineer : \_\_\_\_\_  
Installation date : \_\_\_\_\_

### Coolfog Basic details

Serial number : \_\_\_\_\_  
(on side of lid)  
Website : www.proku.nl

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Baliac, Provincialeweg 40, 5334 JH Velddriel, the Netherlands, declares – with full cognisance – that the Coolfog Basic, manufactured by Baliac and supplied by Proku conforms to the following CE directives

- EMC directive (2004/108/EC)



Baliac and Proku shall in no case whatsoever be held liable for any losses resulting from the use of the Coolfog Basic (see our supply and payment terms and conditions, number 2011/6, held by the Arnhem District Court. A copy can be found on our website: [www.proku.nl](http://www.proku.nl) or can be sent to you free of charge upon request.)