

# OMRON CX3

## Instruction Manual CX3 Nebuliser

Gebrauchsanweisung CX3 Inhalationsgerät

Gebruiksaanwijzing CX3 Vernevelaar

Manuel d'instuctions CX3 Nébuliseur

Manuale di istruzioni CX3 Nebulizzatore

Manual de instrucciones CX3 Nebulizador

English	Page	1 - 10
Deutsch	Seite	11 - 20
Nederlands	Pagina	21 - 30
Français	Page	31 - 40
Italiano	Pagina	41 - 50
Español	Página	51 - 60





**CX3**  
Nebuliser

## ***Table of Contents***

General information.....	2
Safety precautions.....	2
Description of OMRON CX3 Nebuliser.....	3
Description of OMRON CX3 Nebuliser kit.....	4
Inhaling with the OMRON CX3 Nebuliser.....	5
Cleaning and disinfection.....	7
Storage and maintenance.....	7
Filter.....	8
Possible problems and how to solve them.....	8
Technical data.....	9

## ***Dear Customer...***

Thank you for purchasing this OMRON product.

You can be sure that you have made a wise choice. By buying the OMRON CX3 Nebuliser, you have chosen a high-quality, innovative instrument.

During its development, particular attention was given to reliability and easy, convenient handling.

**Before using the nebuliser for the first time, please read through this manual carefully.**

If you still have any questions regarding its use, please contact the OMRON Customer service at the address shown on the packaging or in the enclosed instruction manual. They will be pleased to help you.

OMRON Healthcare Europe

## General Information

The OMRON CX3 is a nebuliser for the inhalation of medical aerosols to treat asthma, chronic bronchitis and other respiratory tract disorders. This nebuliser is suitable for all commonly used inhalation solutions. Use only the type and amount of medication prescribed by your doctor.

The advanced nebulisation system of the OMRON CX3 produces a very low particle size distribution and therefore a medication vapour that will reach effectively and reliably to the upper and lower respiratory passages.

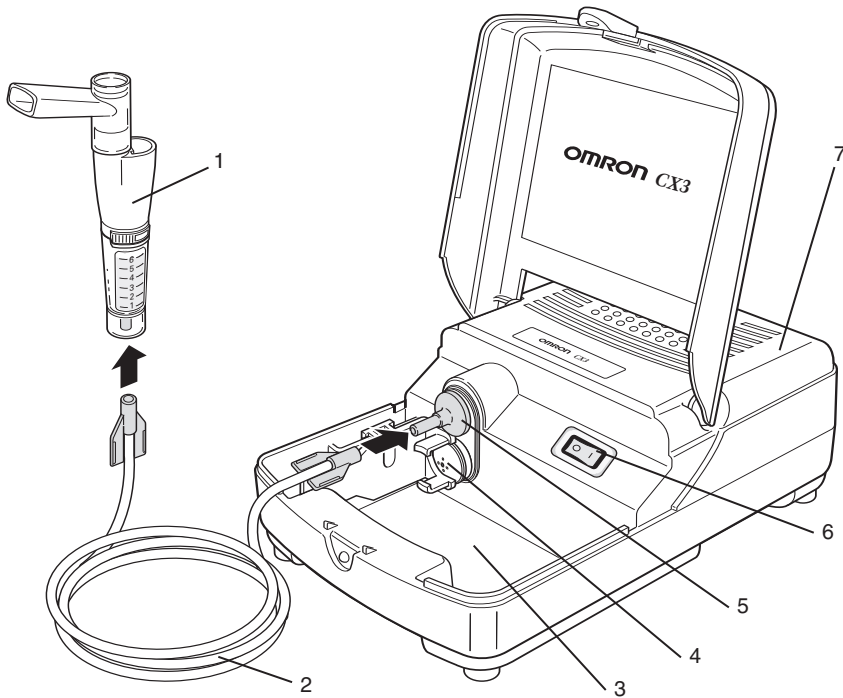
The OMRON CX3 is suitable for inhalation for both at home and in hospital or a doctor's practice.

## Safety precautions

Please read the following safety precautions carefully, as they contain important information concerning safe setting up, use and maintenance of your nebuliser.

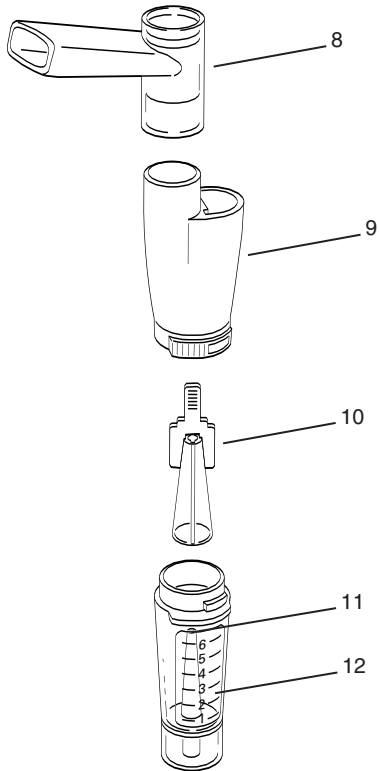
- Keep this manual for future reference.
- As soon as you have unpacked the nebuliser, check it for visible damages or defects. In particular check for cracks in the plastic housing, which could expose electrical components. If this is the case or if you are in doubt, contact your OMRON dealer directly.
- Only use the nebuliser for its intended purpose that means for inhalation therapy. Any other form of use constitutes an improper use and is therefore dangerous. The manufacturer cannot be held liable for any damage caused by improper or incorrect use.
- Do not leave the unit unattended with people who require supervision (e.g. people with infirmities or children).
- The unit does not contain any user serviceable parts and does not require oil. Do not attempt to lubricate any internal parts. Never open the unit.
- Make sure that the electrical rating shown on the rating label on the bottom of the unit corresponds to your mains voltage and frequency before plugging in the nebuliser.
- Always disconnect the nebuliser from the mains supply before you start cleaning it.
- The unit is not protected against water penetration, so: Never touch the unit when your hands are wet or moist. Do not use the nebuliser while you are in the bath or having a shower. Never submerge the nebuliser in water. In case this accidentally occurs, always first disconnect the power supply plug from the wall socket, before reaching for the unit. After having removed the unit from the water, do not use it again. Contact your OMRON dealer and have your unit checked.
- Always switch the unit off first, before you disconnect the power plug.
- Do not use the unit in the presence of anaesthetic mixtures which are inflammable when they come into contact with air, oxygen or nitrous oxide.
- Keep the power cable away from heated or hot surfaces.
- If you discover that the nebuliser or its mains cable is damaged or does not operate properly, switch it off immediately, disconnect the power plug and stop using it. Consult your OMRON service representative.
- Always use original OMRON nebuliser kit and air filter; order no. for replacements can be found in this manual.
- Do not block the air ventilation holes on left/right side of the compressor unit.
- Place the compressor unit on a plain and stable surface during operation.
- Although this device fulfils the provisions of the EMC (Electromagnetic Compatibility) directive, the use of it should be avoided in direct vicinity of other electric devices.
- This device is not suitable for use in anaesthetic breathing systems.
- Before using this device, be sure to confirm proper operation of the device: Prepare and fill the nebuliser-kit as instructed in the manual, followed by visual checking if aerosol comes out after power on of the device.
- Specifications regarding Output, Output rate and particle size may depend on the type of medication used. Especially suspensions and high viscosity medications may have big influence on the indicated specifications. See drug supplier's data sheet for further details.

## Description of the OMRON CX3 Nebuliser



1. Nebuliser kit
2. Air tube
3. Storage compartment for accessories
4. Air filter compartment (air inlet)
5. Air outlet connection
6. Power OFF/ON switch [O/I]
7. Compressor unit

## Description of the nebuliser kit



- 8. Mouthpiece
- 9. Nebuliser cap
- 10. Vaporiser head
- 11. Jet nozzle (inside medication tank)
- 12. Medication tank

## Inhaling with the OMRON CX3 Nebuliser

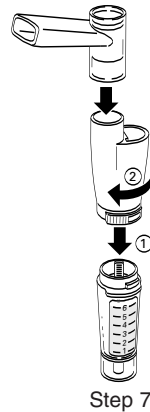
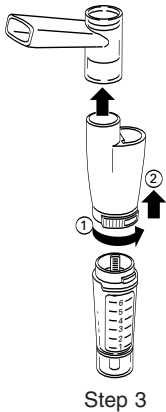
Before using the nebuliser, the nebuliser kit must be cleaned according to the cleaning and disinfection instruction within this manual.

1. Make sure that the filter compartment (air inlet) is not covered, otherwise the unit may become overheated.
2. Make sure that the power switch is set to the OFF (O) position and plug in the mains cable.

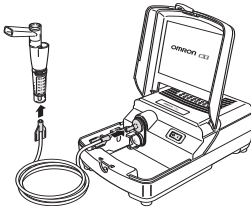


For steps 3 ~ 7, refer to the drawing below.

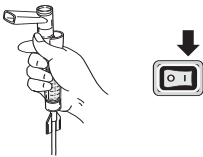
3. Remove the nebuliser cap from the medication tank by turning it counterclockwise and lifting it. Remove the mouthpiece.
4. Remove the vaporiser head.
5. Fill the medication tank with the prescribed amount and type of medication (max 6 ml).
6. Reinsert the vaporisation head.
7. Reconnect the nebuliser cap to the medication tank and fit the mouthpiece.



8. Connect the airtube; one end to the compressor unit and the other end to the bottom of the medication tank:



9. Hold the nebuliser in the position as shown below and switch the unit to ON (I) position.



10. When inhaling you should sit upright and relaxed. If you must be treated in bed, support yourself with pillows so that you are sitting as upright as possible. The design of this nebuliser kit enables its use in a tilted position. This is especially an advantage for a person who wants to use the device while lying in bed. Always be calm and relaxed when you inhale. Breathe in slowly and deeply so that the medication can reach deep into the bronchial tubes. Hold your breath for a short time, then breathe out slowly while removing the mouthpiece from your mouth. Do not try to breathe too quickly. Pause when you feel like having a rest.

Breathe in:



Breathe out:



11. When the treatment is finished, set the OFF/ON switch (O/I) to the OFF (O) position and disconnect the power plug from the wall socket.

12. Clean the nebuliser kit (refer to the cleaning instructions).

Note: If a mask (optional accessory) is used, remove the mouthpiece from the nebuliser cap and connect the mask instead. Place it with the rubber band onto the face so that the mask will enclose the nose and the mouth. The tightness of the rubber band can be adjusted. The mask has openings which will enable unres-trained breathing.

## ***Cleaning and disinfection***

It is recommended that the nebuliser, mask (optional accessory) and mouthpiece (not the air tube) are thoroughly rinsed with hot tap water after each use and cleaned with a mild detergent after the last treatment of the day.

Do not use any volatile fluids, like benzene or alcohol, etc.

The same pieces must also be disinfected daily by soaking them in a commercially available disinfectant (strictly follow the instructions enclosed with the disinfectant).

If your doctor or respiratory therapist specifies a different cleaning procedure, follow their instructions.

For hygienic reasons, each person should use their own nebuliser kit. It is recommended to replace the nebuliser kit **every 6 months (or earlier in case the nebuliser is obstructed)** in order to maintain effective inhalation.

Rinsing after each treatment:

- Remove the mouthpiece from the medication cap.
- Remove the air tube from the medication tank.
- Unscrew the nebuliser cap from the medication tank and remove the vaporiser head.
- Rinse all parts mentioned above, with the exception of the airtube, under hot tap water.
- Dry with clean paper towels or let them air dry.
- Reassemble the nebuliser.

The exterior of both the air tube and compressor unit should be cleaned once daily with a clean, damp piece of cloth. Do not use any volatile fluids. Never submerge the compressor unit in water! If there is some moisture in the air tube, connect the air tube to the compressor unit and leave the other end open. Then switch on the compressor unit and blow the tube dry.

## ***Storage and maintenance***

- Put the nebuliser kit and air tube in a clean bag and place them in the compressor storage compartment.
- Wrap the mains cable and place it in its storage compartment at the rear of the compressor unit.
- Keep the compressor lid closed when not in use.
- Do not store the compressor on the floor.
- The unit does not contain any user serviceable parts and does not require oil. Do not attempt to lubricate any internal parts. Do not open the compressor unit.
- In case of any problem with your nebuliser please contact your local OMRON service representative (address on/inside package).
- Disposal of this product should be carried out in accordance with the national regulations for the disposal of electronic products.

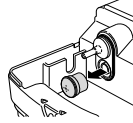


## Filter

Check once a month whether the filter in the filter compartment is still white and clean. If it turns dirty, replace it. However this filter should be replaced at least once a year.

Procedure for replacing:

1. Slide the filter cover open to expose the filter compartment.



2. Remove the dirty filter with a small, pointed object.



3. Replace with a clean OMRON filter (order no.8403).

A set of 5 spare filters is provided with the nebuliser.

4. Slide the filter cover closed.

Caution: Do not use cotton or any other material to replace the filter. Do not wash or clean the filter. Use only OMRON filters. Do not operate without a filter.

## Possible problems and how to solve them

If the OMRON CX3 does not nebulise, or only very weakly, check the following points:

- Make sure that the power supply plug is firmly fitted onto the wall socket.
- Make sure that the ends of the air tube are fitted tightly onto the compressor unit and onto the medication tank.
- Check whether the medication tank is empty. If so, and if necessary, refill the medication tank.
- Is the vaporiser head installed correctly in the medication tank? If not, install it and press it down into the jet nozzle.
- Check whether the air tube is twisted. If so, untwist.
- Check whether the jet nozzle is blocked. If so, unblock it by cleaning the medication tank. If not possible to unblock, replace the nebuliser kit.
- Check whether the air filter is clean. If not, replace it (refer to section 'Filter' in this manual).

## Technical data

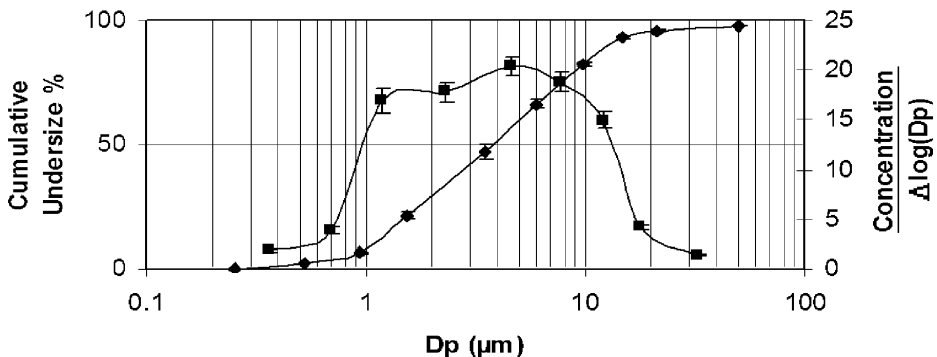
This device fulfills the provisions of the EC directive 93/42/EEC (Medical Device Directive) and the European Standard EN13544-1:2001, Respiratory therapy equipment - Part1: Nebulizing systems and their components.

Type:	OMRON CX3 (NE-C16)
Dimensions:	180 (W) x 110 (H) x 290 (D) mm.
Weight:	approx. 2.3 kg
Nebulisation rate:	0.25* ml/min average
Particle size (MMAD**):	3.8 $\mu$ m (also refer to particle size distribution curve)
OUTPUT:	0.28 ml
OUTPUT RATE:	0.06 ml/min
Max. A-weighted sound pressure level:	58 dB
Minimum recommended fill volume:	2 ml
Max. air flow:	10 l/m
Max. air pressure:	2.5 bar (250 kPa)
Capacity of medication tank:	6 ml
Operating conditions:	Temperature: 10° C ~ 40° C Humidity: 10% ~ 95% RH
Storage conditions:	Temperature: -25° C ~ 70° C Humidity: 10% ~ 95% RH
Supply voltage:	AC 230 V, 50 Hz
Power consumption:	Less than 100 W
Electrical safety:	Fuse T2.5A/250V, Class 2, Type B
Contents of the package:	Compressor unit, nebuliser kit, air tube, 5 spare filters, instruction manual, guarantee card

\* value measured with 0.9% NaCl solution.  
Please note that specifications may vary with medication type used.

\*\*MMAD = Mean Mass Aerosol Diameter

### CX3 particle size distribution curve



Optional accessories/spare parts:  
Nebuliser kit (including mouthpiece, medication tank, nebuliser cap, air tube), order no. = MJD  
Air filter (set = 5 pcs), order no. = 8403  
Flexible adult mask, order no. = MAF  
Flexible child mask, order no. = MPF

Subject to technical modification without prior notice.

Symbols:



= Class II



= Type B

O/I = power switch OFF/ON



= Warning: read the instruction manual carefully

**Important information regarding Electro Magnetic Compatibility (EMC)**

With the increased number of electronic devices such as PC.s and mobile (cellular) telephones, medical devices in use may be susceptible to electromagnetic interference from other devices. Electromagnetic interference may result in incorrect operation of the medical device and create a potentially unsafe situation.

Medical devices should also not interfere with other devices.

In order to regulate the requirements for EMC (Electro Magnetic Compatibility) with the aim to prevent unsafe product situations, the IEC60601-1-2 standard has been implemented. This standard defines the levels of immunity to electromagnetic interferences as well as maximum levels of electromagnetic emissions for medical devices.

This medical device manufactured by OMRON Healthcare conforms to this IEC60601-1-2:2001 standard for both immunity and emissions.

Nevertheless, special precautions need to be observed:

o Do not use mobile (cellular) telephones and other devices, which generate strong electrical or electromagnetic fields, near the medical device. This may result in incorrect operation of the unit and create a potentially unsafe situation. Recommendation is to keep a minimum distance of 7 m. Verify correct operation of the device in case the distance is shorter.

Further documentation in accordance with IEC60601-1-2:2001 is available at OMRON Healthcare Europe at the address mentioned in this instruction manual.

Documentation is also available at [www.omron-healthcare.com](http://www.omron-healthcare.com)

**Correct Disposal of This Product (Waste Electrical & Electronic Equipment)**

This marking shown on the product or its literature, indicates that it should not be disposed of, with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

<b>Manufacturer</b>	<b>OMRON HEALTHCARE EUROPE B.V.</b> Kruisweg 577, 2132 NA Hoofddorp The Netherlands <a href="http://www.omron-healthcare.com">www.omron-healthcare.com</a>	
<b>Omron subsidiary</b>	<b>OMRON HEALTHCARE UK LTD.</b> Opal Drive Fox Milne, Milton Keynes MK 15 0DG, United Kingdom	
<b>Omron Niederlassung</b>	<b>OMRON Medizintechnik Handelsgesellschaft m.b.H.</b> Windeckstr. 81a, 68163 Mannheim, Germany <a href="http://www.omron-medizintechnik.de">www.omron-medizintechnik.de</a>	
<b>Succursale Omron</b>	<b>OMRON SANTÉ FRANCE SAS</b> 14, rue de Lisbonne, 93561 Rosny-sous-Bois Cedex, France	

