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"MEDI" MEDICATION ATOMIZER WITH MEMBRANE COMPRESSOR 443

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MEDI MEDICATION ATOMIZER WITH MEMBRANCE COMPRESSOR 443

Manufactured by VEB Medizin Fabrik Leipzig, 39a Frenze-Flemming Street, Leipzig, East Germany (Kleemann & Kayser, Erfurt)

Purpose and General Remarks:

The medication atomizer is intended to make effective the inhalation of medication for treatment of the upper respiratory ducts, of the bronchial ramifications and of tubercular diseases, and to make possible the resorption of medication by the circulation. The ability for resorption of medication by the lung has the advantage that the medication is not altered in contrast to other types of administration (oral, rectal). The employment of the medication atomizer has given excellent results with the following disorders: catarrh, bronchial asthma, hay fever, bronchoectasis, pneumonia, phthisis as well as cardiac and circulatory insufficiency. ()

Design and Technical Characteristics:

The apparatus consists of the following main components: completely enclosed compressor with drive motor; atomizer head with detachable medication glass; respiratory mask with attached hose; handle simultaneously designed as "air buffer"; round base plate with rubber-covered three-point support.

The membrane compressor incorporated in the apparatus produces compressed air absolutely free of oil for atomizing the medication which prevents irritation of the respiratory tracts. The apparatus is easily portable and can be placed on the table or on the floor as desired.

Operation merely requires plugging into an outlet for 220V AC. Flush and functional design with harmonizing enclosures, corrosion-proof surface of all parts, full sterilization of the atomizing aggregates, simple manipulation, no adjustment required.

Method of Operation:

The compressed air completely free of oil produced in the compressor is conducted through an atomizer jet where it entrains the inhalation agent contained in the medication glass and projects it against a bell-shaped glass. This process results in a very fine distribution of the medication into droplets with a magnitude of 1-5 μ which is inhaled as an aerosol by the patient through the atomizing

head, respiratory hose and mask. Because of its fine distribution, the aerosol is able to penetrate into the smallest ramifications of the tracheal system as far as the alveoli so that the resorption of the medication by the circulatory system becomes possible by inhalation.

Technical Data:

Construction: over-all height 600 mm, over-all diameter 270 mm; weight about 15 kg. Operation (at atmospheric pressure of 2): degree of atomization, 1-5 μ ; quantity of aerosol, 10 lit/min; density of aerosol, 10-15 mm³/lit; aerosol dose, 100-150 mm³/min.