



# UV STERILIZERS

UV RAYS sterilization equipments

A range of UV lamps fit for every use  
in water sterilization  
with flow rates demand  
from 300 to 2800 l/h  
with IN/OUT threaded connections  
from 1/8" to 1"

KOMFORT

# UV STERILIZERS

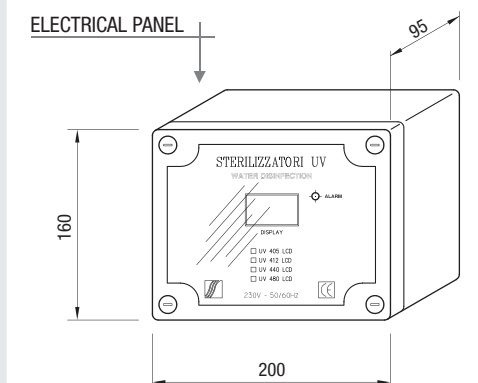
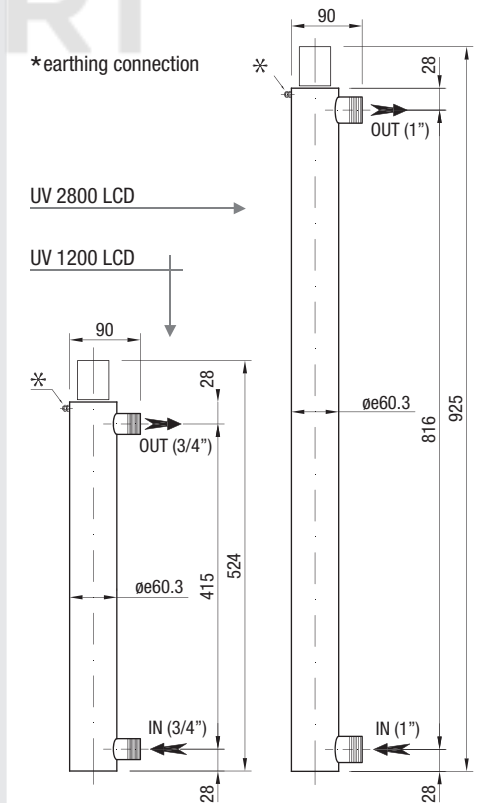
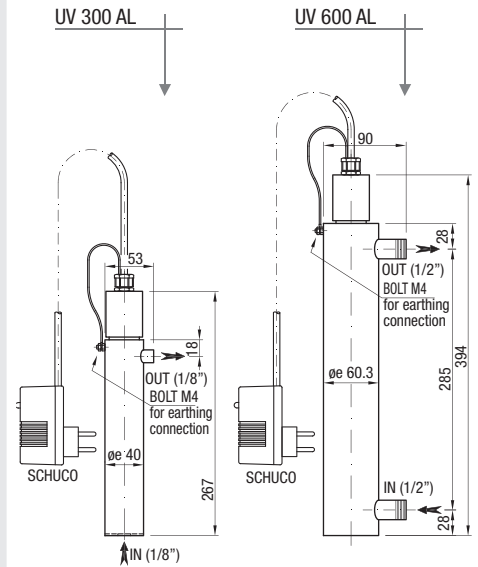
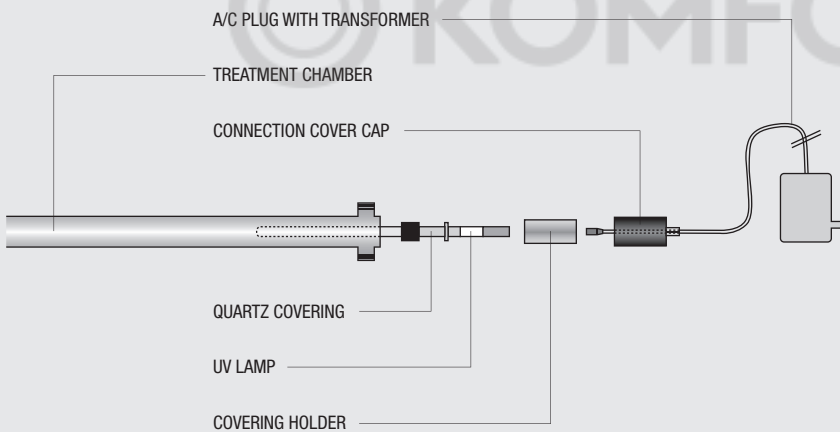
## STERILIZATION EQUIPMENTS

The small part of electro-magnetic spectrum having wave lengths included between 100 and 400 nm (thousandths of micron) is defined as the space of the ultra-violet irradiation. The UV-C are part of the subspace characterized by the wave lengths included between 100 and 280 nm. Electro-magnetic waves with different wave length and width induce interactions with the matter of different nature; the UV-C irradiation with  $\lambda = 254\text{nm}$  is particularly interesting thanks to its marked germicidal power.

The high germicidal power of this wave length must be sought in DNA and in the link of its fundamental components (nucleotids). DNA is a macromolecule present in all living organisms in which all information necessary for life and reproduction reside. The alteration, induced by the UV-C irradiation, of some chemical links present among nucleotids is able to change the information contained and conveyed by DNA, these alterations prevent its normal activity and this irreversibly leads to the cellular death.

For being effective in the disinfection, an electro-magnetic wave, besides being of a certain kind ( $\lambda = 254\text{nm}$ ) it must possess also a minimum value of intensity to be able to ensure a minimum dose to water. A UV sterilizer, if correctly sized, is able to give water a dose sufficient for reducing almost all the commonest micro-organisms present in water. Normally a UV disinfection system must have a UV dose higher than  $300 \text{ J/m}^2$ .

UV-C rays are produced with the help of special fluorescent lamps containing mercury fumes, these lamps are made of a very pure quartz (>99.99%  $\text{SiO}_2$ ) transparent to the UV-C light which they emit in an almost monochromatic form (>95% of  $\lambda = 254\text{nm}$ ).





# UV 300 - UV 600



## UV 300 AL

### STERILIZERS WITH BALLAST

| CODE      | MAX FLOW RATE | NUMBER OF LAMPS | LAMP LIFE-SPAN | UV-C DOSE              | ELECTRICAL ABSORPTION |
|-----------|---------------|-----------------|----------------|------------------------|-----------------------|
| EA3500001 | 300 l/h       | 1 x 12 W        | 9000 HOURS     | ≥ 300 J/m <sup>2</sup> | 12 Wh                 |

#### UV CHAMBER

Material: AISI 304 - optional AISI 316L  
 IN / OUT: 1/8" F  
 Working pressure: 9 bar

#### TRANSFORMER

Electrical supply: 230V - 50/60 Hz  
 Red led of anomaly: YES  
 Connecting wire: 90 cm



## UV 600 AL

### STERILIZERS WITH BALLAST

| CODE      | MAX FLOW RATE | NUMBER OF LAMPS | LAMP LIFE-SPAN | UV-C DOSE              | ELECTRICAL ABSORPTION |
|-----------|---------------|-----------------|----------------|------------------------|-----------------------|
| EA3500002 | 600 l/h       | 1 x 16 W        | 9000 HOURS     | ≥ 300 J/m <sup>2</sup> | 16 Wh                 |

#### UV CHAMBER

Material: AISI 304 - optional AISI 316L  
 IN / OUT: 1/2" M  
 Working pressure: 9 bar

#### TRANSFORMER

Electrical supply: 230V - 50/60 Hz  
 Red led of anomaly: SI  
 Connecting wire: 90 cm

Dose valid with transmittance 99% at 1 cm - T 20°C - after 9000 hours

# UV 1200 - UV 2800

## UV 1200 LCD

### STERILIZERS WITH CONTROL PANEL

| CODE      | MAX FLOW RATE | NUMBER OF LAMPS | LAMP LIFE-SPAN | UV-C DOSE              | ELECTRICAL ABSORPTION | ELECTRICAL PANEL |
|-----------|---------------|-----------------|----------------|------------------------|-----------------------|------------------|
| EA3500003 | 1200 l/h      | 1 x 30 W        | 9000 HOURS     | ≥ 300 J/m <sup>2</sup> | 30 Wh                 | LCD / LCD PLUS   |

#### UV CHAMBER

Material: AISI 304 - optional AISI 316L  
 IN / OUT: 3/4" M  
 Working pressure: 9 bar

## UV 2800 LCD

### STERILIZERS WITH CONTROL PANEL

| CODE      | MAX FLOW RATE | NUMBER OF LAMPS | LAMP LIFE-SPAN | UV-C DOSE              | ELECTRICAL ABSORPTION | ELECTRICAL PANEL |
|-----------|---------------|-----------------|----------------|------------------------|-----------------------|------------------|
| EA3500004 | 2800 l/h      | 1 x 40 W        | 9000 HOURS     | ≥ 300 J/m <sup>2</sup> | 40 Wh                 | LCD / LCD PLUS   |

#### UV CHAMBER

Material: AISI 304 - optional AISI 316L  
 IN / OUT: 1" M  
 Working pressure: 9 bar

Dose valid with transmittance 99% at 1 cm - T 20°C - after 9000 hours

# CONTROL PANEL



#### LCD CONTROL PANEL

electrical alimentation 230V - 50/60 Hz  
 protection degree IP55  
 power cable 100 cm  
 cable lamps 100 cm  
 LCD Display with microprocessor control  
 count down hour-meter  
 red led of anomaly  
 alarm relay free contact NO/NC  
 alarm relay 230 V NO/NC outlet - 2 A max

#### LCD PLUS CONTROL PANEL

electrical alimentation 230V - 50/60 Hz  
 protection degree IP55  
 power cable 100 cm  
 cable lamps 100 cm  
 LCD Display with microprocessor control  
 count down hour-meter  
 red led of anomaly  
 alarm relay free contact NO/NC  
 alarm relay 230 V NO/NC outlet - 2 A max  
 display of Irradiation / temperature control  
 shutdown for high temperature UV chamber  
 resettable count down hour-meter with alarm for end lamp life