

## UV - FCU-CL

### disinfection system for FAN COIL and Air Handling Units. (U.T.A.)

The UV-FCU-CL air disinfection system can be applied for air disinfection in fancoils and air handling units. (U.T.A.). For installation on FANCOIL it is sufficient to fix the supplied clips in the space between the fan and the heating/cooling battery; the lamp is inserted between the above sections and locked with the clips. Installation is simple and it is also possible to use it on already installed and working fan coils (re-trofit technology on already existing systems). The supplied electronic power supply unit, which is small in size, is supplied with a plug/socket connection system that simplifies lamp replacement. For the sanitization of the air and the radiant batteries in the air treatment units (A.T.U.) the UV-FCU-CL device directly radiates, with UV-C rays, air filters and cooling and/or humidification batteries inside the A.T.U., to avoid the formation and growth of microorganisms potentially harmful to people's health. The use of the UV-FCU-CL represents an economical and reliable solution to stop the access of microbes to social rooms or to controlled contamination chambers, through a simple installation that is safe for the personnel, since everything is limited to an irradiation inside the AHU ducts, allowing a considerable saving in management costs and health protection from infectious diseases such as:

- 1) Sick Building Syndrome;
- 2) Legionnaires' disease (Legionella Pneumophila - typhus of legionnaires);
- 3). Tuberculosis (Mycobacterium Tub.)
- 4) Monday or humidifier fever.



#### WHAT ARE UV-C RAYS?

Light in a broad sense can be divided in visible, infra-red and ultraviolet rays.

Ultra-violet rays (invisible) can be classified in:

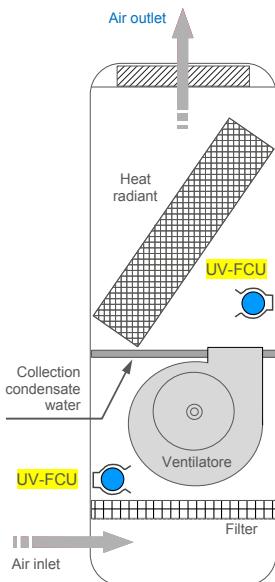
- UV - A (with tanning properties)
- UV - B (with therapeutic properties)
- UV – C (with germicidal properties)

The germicidal effects of the UV-C radiation destroy DNA of Bacteria, Viruses, Spores, Fungi, Moulds and Mites avoiding their growth and proliferation.

UVGI technology is a physic disinfection method with a great costs/benefits ratio, it's ecological, and, unlike chemicals, it works against every microorganisms without creating any resistance.



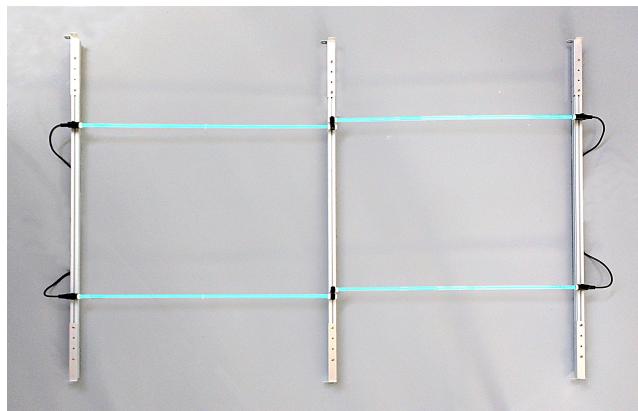
Application in FANCOIL



Application Scheme

## UV - FCU-CL

### small system, great result



UV-FCU applied in AHU



#### TECHNICAL CHARACTERISTICS

- UV-C selective Light Progress lamp (peak emission at 253.7 nm.) with high efficiency, ozone free, of pure quartz
- "Quick replace" plug/socket connection system for quick release and replacement.
- IP44 protection
- High performance UV-C selective lamp (at 253.7 nm.).
- Possibility of installation as a retrofit technology on already installed and operating systems.
- All materials used are tested to withstand intense UV-C rays.
- Power supply with electronic ballast specific for UV-C lamps.
- Fall protection glass with UVLON PIPE
- CE mark (LVD - EMC - MD).



UV-FCU-CL works by direct irradiation, with its application we obtain a strong reduction of the microbes present both on the exposed surfaces and in the passing air, such as: Bacillus, Coli, Clostridium, Legionella, Vibrio, Salmonella, Pseu-domonas, Staphylococcus, Streptococcus, Virus, mould. This allows the sanitization of the air and the radiant batteries in the FANS (FANCOIL) and the U.T.A. Inserted in the section between the fan and the radiant thermal battery UV-FCU-CL disinfects the heat exchange fins receptacle of dirt and microbes radiating them directly and eliminates all bacteria and viruses from the air. The ignition of the appliances can be managed by means of special control units (MASTER series), which can manage various operations:

- Programmed switching on. It is possible to program the time of irradiation by means of an adjustable timer.
- Automatic switch-off. A safety system switches off the lamps in case of entry of personnel.
- Fault alarm. In case of failure of one or more lamps, a light on the panel will be activated.
- Hour counter. Management of the replacement of lamps about to run out of life.
- Automatic switch-off. A safety system switches off the lamps when personnel enter.
- Fault alarm. A warning light is switched on in the event of a fault.
- Hour counter. Control of the replacement of lamps about to run out of life.

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