

Cooling Coil UV Disinfection Systems Specifications

CC Series High-Output UV systems are designed specifically for UV disinfection of cooling coils in HVAC applications. The UV systems can be mounted in various configurations to irradiate cooling coils and drain pans and for optimum air decontamination. Individual UV fixtures can be mounted to plenum walls or multiple fixtures can mount to frame assemblies that span supply ducts or cooling coils.



Applications: Coil Clean (CC) Series UV fixtures are ideal for internal installation in medium to large HVAC systems in commercial, industrial, health care and institutional buildings. They are an excellent choice for mounting close to the coil and drain pan areas to continuously disinfect them with germicidal UV and inhibit the growth of mold and mildew in these areas.



Water-tight lamp connection

The CC UV Systems are moisture proof and are offered in single and double lamp configurations. They can be mounted individually or in built-up banks, or in parallel rack-system configurations in a variety of locations, including coils, drain pans, ductwork, mixed air plenums and exhaust systems. The CC fixtures are available in 18", 24", 36", 48" and 60" lengths and 115, 208, 230 or 277VAC voltage options, providing installation flexibility to accommodate virtually any HVAC system.

The CC fixtures are designed for moisture-proof applications with UVC lamps that incorporate a built-in outer quartz sleeve with protective boot on the power end for sealing purposes.



Connect the fixtures to 1 power source

Power is brought to the lamp with coated lead wires through a waterproof connector that is securely sealed to the lamp. The UV lamps are rated for two-year continuous operational life with approximately 20% drop in UVC output at end of lamp life.

Features and Benefits of CC germicidal UV systems installation:

- Improves Indoor Air Quality (IAQ) by reducing bacteria, viruses, mold and spores that either grow or pass through the air handling systems. Reduces the risk of cold, flu, allergies and other illness associated with air handling systems
- “Green” lamps contain $\leq 8\text{mg}$ of mercury



Hardwire UV fixtures are also available

- Two-year (17,000 hours) guarantee on lamps with only 20% decrease in UV output over the two years
- Five-year, non-prorated warranty on the ballast
- Continuously cleans coils, drain pans, plenums and ducts - eliminating costly cleaning programs and the use of harmful chemicals and disinfectants
- Reduces HVAC energy costs by restoring heat transfer and net cooling capacity
- Produces no ozone or any other secondary contaminants
- Plug-in connections mean no field wiring required to connect fixture to fixture when building banks of rack systems

SPECIFICATIONS: Every CC UV System is manufactured and factory assembled and tested prior to shipment. Each UV fixture consists of housing, reflector, electronic ballast(s), lamp bracket, plug-in power connectors and high output UV lamp(s).

FIXTURE: The housings of the UV systems are constructed of heavy gauge hospital grade stainless steel. Reflectors are fabricated from the highest grade bright annealed polished stainless steel, which has a reflectivity rate of 88% when exposed to short-wave UVC in the range of 254 nm. All components are in one integrated assembly to maximize serviceability.



CUSTOM UV RACKS: Custom UV configurations available to meet any requirements. Multiple-lamp racks, as shown on the picture, can be custom designed and built for any coil or air handler.

BALLAST: The solid-state electronic ballast (furnished with this series), is a Class P rapid start with a power factor minimum of .95. It is available for 120, 208, 230, or 277VAC 50/60Hz and is designed to maximize photon production in air temperatures of 35° to 175° F. Minimum ballast start temperature is minus 20° F. Ballasts have an RFI - EMI rating as defined by FCC part 18A for industrial / commercial applications in regards to suppression. Ballasts are UL listed and suitable for use in air handling spaces.

LAMPS: CC Series UVC lamps are high-output (800mA), T5 tube diameter, and constructed from hard glass tubing for superior UV transmittance. Lamps are “green”, containing ≤8mg of mercury (Hg) and they produce no ozone. Lamps shall retain, at minimum, 80% of initial output after 17,000 hours of use. They are sealed for moisture protection with a water-tight connection. Electrodes are designed to maximize plasma convection and stability for superior lamp performance. Lamps are rated to produce 11.7μW/cm² per linear inch of lamp arc length at 1m in airstreams of 400FPM velocities at temperatures of 45° F.

INDEPENDENT TESTING: Units are tested in accordance with the general provisions of IES Lighting Handbook, 1981 Applications Volume, and provide output per 1" arc length of not less than 11.7μW/cm² at 1m in a 400FPM airstream of 45° F.

CC UV Air Cleaners and Surface Sterilizers Technical Data

CC UV Disinfection System Models	UV Lamp # of lamps	UVC Output Watts	UV Intensity μW/cm ² @1m	Coil Coverage /Sq. Ft./	Length
CC18-1	GCL 18 1 UV lamp	10	175	2	18"
CC18-2	GCL 18 2 UV lamps	20	350	4	18"
CC24-1	GCL 24 1 UV Lamp	16.2	245	3	24"
CC24-2	GCL 24 2 UV Lamps	32.4	490	6	24"
CC36-1	GCL 36 1 UV lamp	25	386	5	36"
CC36-2	GCL 36 2 UV Lamps	50	772	10	36"
CC48-1	GCL 48 1 UV lamp	36.1	526	7	48"
CC48-2	GCL 48 2 UV Lamps	72.2	1,052	14	48"
CC60-1	GCL 60 1 UV lamp	46	667	10	60"
CC60-2	GCL 60 (2) 2 UV Lamps	92	1,334	19	60"