

OUTWARDLY PROJECTING 5 LAMP UV AIR PURIFIER

1. DESCRIPTION
2. ELECTRICAL ELEMENTS
3. INSTALLATION
4. UV LAMP
5. PERFORMANCE
6. WARRANTY

1. Description: Sanuvox Air Purifier or equivalent.
 - 1.1.1 A One Piece Anodized Aluminum Array that will provide a barrier wall of germicidal UV energy that will treat 100% of the air that passes through it.
 - 1.1.2 An Array will consist of an Outwardly Projecting Air Purifier to be used in an air duct supporting a longitudinal (parallel) airflow.
 - 1.1.3 The overall diameter of the Array will not exceed 4.25 inches (18.4cm)
 - 1.1.4 The one piece anodized aluminum Array will contain a plurality (5) of reflectors, having a generally parabolic inner surface and a UV lamp mounted to each reflector so that the generally parabolic reflector inner surface reflects all the UV radiation emitted by the UV lamps in a radial direction. The lamp assemblies will be positioned that a cylindrical Array of UV assemblies is obtained.
 - 1.1.5 An aluminum convex deflector element mounted to the support, so that airflow is directed over the UV lamp assemblies.
 - 1.1.6 The cone diameter shall not exceed 3.5 inches (8.75cm)
 - 1.1.7 The wire sets that are inside the duct connecting the Array to the ballast box shall be constructed of 18Awg, UL 1716 Teflon wire.
 - 1.1.8 The aluminum ballast box shall consist of one ballast for each lamp, (see 4.1.1) a resettable hour accumulating counter that will show the accumulated hours for each lamp, an LED "Lamp On" indicator for each lamp, an audible buzzer to indicate a "Lamp-Out" condition. A dry contact will be included to remotely monitor a lamp-out condition and a second dry contact to be able to remotely turn on and turn off the Array.

1. ELECTRICAL ELEMENTS

The ballasts shall be instant start, solid state electronic type, 120 VAC or 240VAC, 50-60Hz. high power factor, outdoor rated.

Electrical requirements if 115 VAC:

- 24 inch Array: 120VAC 50-60Hz, 3.5 amps, 360 watts
- 30 inch Array: 120VAC 50-60Hz, 4 amps, 400 watts
- 40 inch Array: 120VAC, 50-60Hz, 5 amps, 500 watts.
- 50 inch Array: 120VAC, 50-60Hz, 6 amps, 600 watts
- 60 inch Array: 120VAC, 50-60Hz, 7.5 amps, 750 watts.

2. INSTALLATION

- 2.1 The Array can be positioned either in the return side of the duct, or in the supply side of the duct.
- 2.2 The inside of the duct where the Array will be installed, must be lined with aluminum to reflect the UV intensity back into the duct. The aluminum must have a minimum coefficient of reflection of 85%.

3. UV LAMP

The Array will be available with UV lamp lengths of 24 inches, 30 inches, 40 inches, 50 inches, or 60 inches.

The high intensity UVC lamps will be of the low-pressure 19mm. (3.0 Torr) mercury laden argon-neon type with an internal Alumina coating to reduce solarization.

The UVC lamps are pure fused quartz, type 219 shell, properly doped with Titanium Oxide in order to filter out 99.99% of the 185 nm wavelength.

4. PERFORMANCE

The UV intensity for each individual lamp shall not be less than;
270 microwatts per/cm² at 36 inches for the 24 inch lamps,
290 microwatts per/cm² at 36 inches for the 30 inch lamps
500 microwatts per/cm² at 36 inches for the 40 inch lamps;
580 microwatts per/cm² at 36 inches for the 50 inch lamps;
640 microwatts per/cm² at 36 inches for the 60 inch lamps.

5. WARRANTY

The purifier will carry a 12,000 hour warranty on the UV lamps and electronics, a five year warranty on the ballast and all other parts.

6. Certification

- 6.1 The purifier must be CSA or UL Certified

Jan 2010