

SELF-CLEANING AIR IONIZATION SYSTEM FOR RESIDENTIAL/COMMERCIAL A/C SYSTEMS

- A patented self-cleaning design
- Needlepoint ionization actively treats air in homes and buildings
- Meet's UL 2998 Zero Ozone Emission Certification
- External mount install for systems up to 12 tons (4800 CFM)
- Designed for easy internal mount at the fan coil
- No maintenance for the life of the NuShield
- Flexible design with no replacement parts
- Patented multi-voltage input – 24VAC to 240VAC
- Reduces certain bacteria and viruses*
- Reduces odors, smoke and other airborne particles
- Keeps coil cleaner longer
- Integral alarm contact for remote monitoring
- UL and cUL certified
- CARB certified
- Three-year limited warranty

Description

NuShield-CX is a self-cleaning, bi-polar ionization generator for actively treating a building's air quality that does not require replacement parts in a year or two like competing UV lights or other ionizer technologies. In addition, the NuShield-CX produces and maintains unparalleled ionization output and capabilities. As the air flows past the NuShield-CX, the device emits positive and negative ions that actively treat the supply air, reducing certain bacteria and viruses* in the coil and living space. The ionization process also reduces smoke, odors (cooking, pet, VOCs), as well as other particles (no more sunbeams) in the air. NuShield meets UL 2998 zero ozone emission certification.

Application

Although suitable for residential applications, the NuShield-CX is specially designed for light commercial systems up to 12 tons (4800 CFM) with no maintenance or replacement parts needed. NuShield-CX can be easily externally mounted in any ducted HVAC system. NuShield-CX always works at peak performance, producing over 200 millions ions/cc per polarity (400 million total ions/cc), making it superior to other market approaches. The NuShield-CX includes a self-cleaning cycle, integral alarm contact (for remote monitoring), and patented multi-voltage input.

Indoor Air Quality

NuShield®-CX

Commercial Air Ionization System



Packaging

1 each

4900-55

Specifications

Input Voltage:	24VAC to 240VAC
Power (VA):	<10VA
Frequency:	50/60 HZ
System Size:	Up to 12 tons (4800 CFM)
Ion Output:	200 millions ions/cc per polarity (400 million total ions/cc)
Dimensions:	5.4" x 5.4" x 2.1"
Weight:	2 lb
Electrical Approvals:	UL and cUL certified
Service Temp. Range:	-40°F to 160°F

NuShield-CX Installation Instructions

Installation Location

WARNING: MAKE SURE POWER IS DISCONNECTED TO THE HVAC EQUIPMENT BEFORE INSTALLATION

Nu-Calgon recommends mounting the NuShield-CX downstream of the last filter in the HVAC system. Alternate mounting locations are on the supply air duct or the return air duct after the filter. The duct must have a depth greater than 8 inches for the unit to operate properly. The weatherproof housing will allow mounting indoors or out.

NOTE: Use Temperature - Maximum ambient temperature in which unit shall be used: 140°F / 60°C.



Mechanical Installation

1. Ensure power to the HVAC equipment and the NuShield-CX has been disconnected.
2. Find an appropriate location. Verify the 8-inch depth clearance for the NuShield-CX.
3. Cut a 4-inch round hole in the duct.
4. Install the NuShield-CX so that airflow is passing by both emitters at the same time in line with the airflow indicator on the product. The conduit and connection grommet should be pointed down or to the side. Secure to the duct with provided screws.

Wiring

1. Confirm the power is off prior to wiring. Follow all local and national electrical and building codes.
2. Nu-Calgon recommends the NuShield-CX be powered constantly but it may be switched with the system or blower.
3. The NuShield-CX will self-adjust to voltages from 24VAC to 240VAC. Output and performance will not be affected by choice of input voltage. Connect the power wires as follows:

Black = 24 - 240VAC

White = Neutral or L2

Green = Ground

Brown = Dry Contacts/BAS Alarm

4. Wire in BAS terminals (optional). The NuShield-CX is equipped with dry contacts that are normally open and close when the NuShield-CX is on and has no faults. The contacts are rated up to 250VAC and 1A.

Operation

CAUTION! NEVER TOUCH BRUSHES WHILE OPERATING, SHOCK MAY OCCUR

Once powered, the unit initiates an internal check of all systems. If the auto cleaning wiper blade is not in the "home" position, it will move to the home position in series with the airflow and a green LED on the NuShield-CX will illuminate.

Cleaning Cycle

The NuShield-CX comes with a factory preset cleaning cycle designed to clean the emitters once per day.

Troubleshooting

1. Unit will not power up, no display:
 - a. Confirm proper voltage is applied to the correct terminal(s).
 - b. Try an alternate power source. If using 24v try using 120v or vice versa.
2. If unit does not operate properly after verifying the above instructions please contact Nu-Calgon for additional assistance.
3. If unit does not operate properly after verifying the above instructions
 - a. Contact Nu-Calgon for additional assistance.

Three-Year Limited Warranty - The NuShield-CX offers a limited warranty for three years that covers any defects in material or workmanship under normal use. If you make a claim during the warranty period, you must provide proof of purchase and proof of proper installation by a licensed contractor for the warranty to be valid. The NuShield warranty does not cover labor, return shipping charges, damage from improper installation or improper voltage usage. The NuShield warranty begins on the date that the unit was purchased. Installation of your NuShield by any person other than a licensed contractor will void the warranty. Contact your local Nu-Calgon account manager or info@nucalgon.com with further questions. *Visit NuShieldair.com for performance data.

