# NC (NEMA 4X) Series

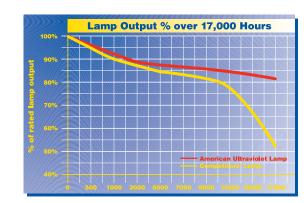
**American Ultraviolet High-output NC (NEMA 4X) Series germicidal fixtures** feature the externally mounted design of the American Ultraviolet DC Series, however, they include weather-resistant NEMA 4X housing that makes them ideal for outdoor HVAC units.

## **Applications**

NC (NEMA 4X) Series fixtures are installed on the exterior of rooftop A/C units or ductwork and enable easy access to difficult to reach outdoor locations. They are available in one-lamp and two-lamp configurations and can be installed vertically or horizontally. Only the lamp(s) and input power wiring penetrate the HVAC unit, while ballast and lamp harness remain external (housed inside the NEMA 4X enclosure).

The NC (NEMA 4X) Series fixtures contain American Ultraviolet's high-output "green" lamps ( $\leq 8$  mg of mercury; 2-year guarantee), and a five year ballast (non-prorated 5-year warranty) in a NEMA 4X housing specifically engineered for rooftop units and other AC systems mounted outdoors. The NC Series delivers the best and longest-lasting UVC performance available. It has been independently tested to deliver greater output (produces 11.7  $\mu$ W/cm² per linear inch of lamp arc length at 1 meter) than any other ultraviolet device under HVAC operating conditions (45° F at 400 fpm air velocity), and the increased output of American Ultraviolet lamps provide the most reliable germicidal performance and longest service life.

American Ultraviolet NC (NEMA 4X) Series lamps are high-output (800mA), T5 diameter, and constructed of hard glass tubing for superior UV transmittance. They come in lengths of 14, 16, 24, 33 and 45 inches to meet different size requirements. The lamps produce no ozone and retain, at a minimum, 80% of their initial output after 2 years (17,000 hours). Fixtures are available with four voltage options (115/208/230/277 VAC, 50/60 Hz, single phase).



#### **Benefits**

- Improves Indoor Air Quality (IAQ) by reducing bacteria, viruses and mold that either grow or pass through the packaged equipment. Reduces the risk of cold, flu, allergies and other illnesses associated with HVAC systems.
- High-output, "green" lamps contain ≤ 8 mg of mercury
- Two-year (17,000 hours) guarantee on lamps with only 20% decrease in output over the two years
- Five-year non-prorated warranty on the ballast
- Reduces HVAC energy costs by restoring heat transfer and net cooling capacity
- Continuously cleans coils and drain pans, eliminating costly cleaning programs and the use of harmful chemicals and disinfectants
- Produces no ozone or other secondary contaminates
- Quick and easy installation





#### **NC (NEMA 4X) SERIES SPECIFICATIONS:**

The NC Series lamp and power supply is factory assembled and tested in the USA prior to shipment. Each assembly shall consist of NEMA 4X housing, electronic ballast(s), lamp(s) and wiring harness.

**FIXTURE:** Housing shall be powder coated aluminum to withstand the elements and HVAC environments, and shall meet NEMA 4X requirements. Housing shall be equipped with a bottom electrical opening to facilitate wiring fixture to the HVAC unit's power. It shall incorporate all components into one integral assembly that maximizes integrity and serviceability. It shall be designed for mounting from outside the airstream with only the lamp(s) in the conditioned air. The lamp mounting shall allow for quick and easy removal during lamp replacement.

**BALLAST:** The solid-state ballast (furnished with this series) is a Class P rapid start with a power factor minimum of .95. It is available as a 120, 208, 230 or 277 VAC, 50/60 Hz, single phase, and is designed to maximize photon production in air temperatures of 35-170° F. Minimum ballast start temperature is minus 20 degrees F. Ballasts have a RFI - EMI rating as defined by FCC part 18A for industrial/commercial applications in regards to suppression. Ballast is UL listed for use in HVAC applications.

**LAMPS:** NC (NEMA 4X) Series lamps are high-output (800mA), T5 diameter, and constructed of hard glass tubing for superior UV transmittance. Lamps are "green" containing  $\leq 8$ mg of mercury and they produce no ozone. Lamps shall retain, at a minimum, 80% of initial output after 2 years (17,000 hours) of use. Electrodes are designed to maximize plasma convection and stability for superior lamp performance and life. Lamps are rated to produce 11.7  $\mu$ W/cm² per linear inch of lamp arc length at a distance of 1 meter in a 45° F and 400 fpm airstream.

**INDEPENDENT TESTING:** Units are tested by an independent test laboratory in accordance with the general provisions of IES Lighting Handbook, 1981 Applications Volume, and provide output per inch of glass of not less than  $11.7 \,\mu\text{W/cm2}$  at 1 meter in a 400 fpm airstream of  $45^{\circ}$  F.





## **ORDERING SPECIFICATIONS**

1 Lamp Fixtures	Insertion Depth	# of Lamps per Fixture	Lamp Used	Voltage	2 Lamp Fixtures	Insertion Depth	# of Lamps per Fixture	Lamp Used	Voltage
NC14-1-120	14"	1	SBL410	120	NC14-2-120	14"	2	SBL410	120
NC14-1-230	14"	1	SBL410	208/230	NC14-2-230	14"	2	SBL410	208/230
NC14-1-277	14"	1	SBL410	277	NC14-2-277	14"	2	SBL410	277
NC16-1-120	16"	1	SBL430	120	NC16-2-120	16"	2	SBL430	120
NC16-1-230	16"	1	SBL430	208/230	NC16-2-230	16"	2	SBL430	208/230
NC16-1-277	16"	1	SBL430	277	NC16-2-277	16"	2	SBL430	277
NC24-1-120	24"	1	SBL415	120	NC24-2-120	24"	2	SBL415	120
NC24-1-230	24"	1	SBL415	208/230	NC24-2-230	24"	2	SBL415	208/230
NC24-1-277	24"	1	SBL415	277	NC24-2-277	24"	2	SBL415	277
NC33-1-120	33"	1	SBL420	120	NC33-2-120	33"	2	SBL420	120
NC33-1-230	33"	1	SBL420	208/230	NC33-2-230	33"	2	SBL420	208/230
NC33-1-277	33"	1	SBL420	277	NC33-2-277	33"	2	SBL420	277
NC45-1-120	45"	1	SBL445	120	NC45-2-120	45"	2	SBL445	120
NC45-1-230	45"	1	SBL445	208/230	NC45-2-230	45"	2	SBL445	208/230
NC45-1-277	45"	1	SBL445	277	NC45-2-277	45"	2	SBL445	277

Represented by:

# **American Ultraviolet**

Since 1960. It's all we do.

www.americanultraviolet.com

212 South Mt. Zion Road • Lebanon, IN 46052 (765) 483-9514 • (800) 288-9288 Fax: (765) 483-9525