Nu-Calgon Instruction Bulletin

SPECIFICATIONS

Input Voltage:	110/120-240/277VAC
Run Time:	30,000 hours
Power:	25W/525mW
Wavelength:	265nm
UV Type:	UVC-LED
Dimensions:	14.4L x 3.5H x 3.5W
Weight:	1 lb.
Safety Ratings:	UL 2998, UL 867
Approvals:	ETL Listed, ETL Classified, CARB Compliant
Surge Protection:	Internal surge protection
Mode Options:	Continuous mode or air flow sensor mode
Mounting:	Various internal mounting options
Warranty:	3 Years or 30,000 Hours

IMPORTANT!
- Only qualified technicians should install this product
- Install in accordance with relevant building codes
- Always wire into door interlock switch before use
- Read instructions carefully including safety warnings
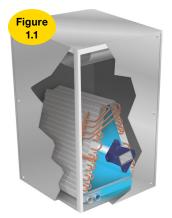
Indoor Air Quality Products
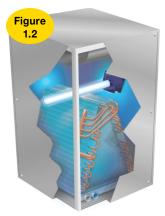
Scorpion HX15

Packaging:
1 each   **4910-11**

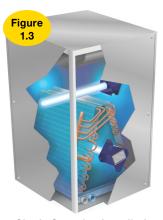**WARNING: PROTECT EYES FROM UV LIGHT. TURN OFF UNIT OR DISCONNECT ALL POWER BEFORE SERVICING.**

Before installing the Scorpion HX15, it is necessary to determine the optimal mounting location inside the air system. Consider an installation location that will allow the Scorpion UVC LED light to shine on the greatest surface area of the coil. For enhanced anti-microbial effect, multiple Scorpion UVC LED lights can be installed in the system. Below are various placement options for the Scorpion LED.
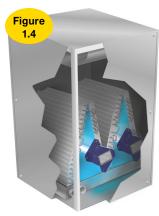

Figure 1.1

Single Scorpion installed inside the coil

Figure 1.2

Single Scorpion installed above the coil

Figure 1.3

Single Scorpion installed inside the coil and a second installed above the coil

Figure 1.4

Single Scorpion installed inside each opening of the "W" coil

MOUNTING DIRECTIONS

OPTION 1: Scorpion installed inside the coil using the integrated magnet

STEP 1: Confirm power is off to the system. Remove the access panel to the air handler.

STEP 2: Remove the "A" panel on the evaporator coil to gain access to the center of the coil.

STEP 3: Using the Scorpion's integrated magnet, attach the Scorpion to the metal "A" panel on the far side of the evaporator coil.

For a "W" or "N" shaped coil, install a second Scorpion inside the second section of coil. See example image in Figure 1.4.

STEP 4: Run the wires down the cabinet, cut a small access hole for the wires if one does not exist.

STEP 5: Replace the "A" panel on the evaporator coil that was previously removed.

OPTION 2: Scorpion installed inside the coil using the provided hardware

STEP 1: Confirm power is off to the system. Remove the access panel to the air handler.

STEP 2: Drill a 1 ¼" hole in the "A" plate of the evaporator.

STEP 3: Insert the supplied grommet into the hole drilled into the "A" plate.

STEP 3: Insert the LED bulb in the grommet which is placed inside of the drilled 1 ¼" opening.

STEP 4: Secure the Scorpion to the "A" plate using the provided hardware.

For a "W" or "N" shaped coil, install a second Scorpion inside the second section of coil after drilling the 1 ¼" hole in the second panel, inserting the grommet, and securing the Scorpion. See example image in Figure 1.4.
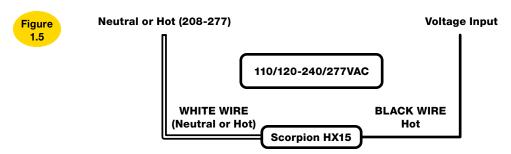
OPTION 3: Scorpion installed above the coil
STEP 1: Confirm power is off to the system. Remove the access panel to the air handler.
STEP 2: Using either the integrated magnet or supplied hardware, secure the Scorpion to the side wall of the unit above the coil. See figure 1.2 for example.

WIRING DIRECTIONS
STEP 1: Connect the Scorpion to 110-277VAC power using the white (neutral) and black (hot) wires. The Scorpion HX15 can be wired to 110-277VAC input and connected to the door interlock switch so the Scorpion powers down if the door/access panel is open. See figure 1.5 below for wiring diagram. Wire the Scorpion to continuous power, do not connect to the blower relay. See Step 2 for option modes to cycle the Scorpion with the fan.

Figure 1.5

Neutral or Hot (208-277)   Voltage Input

110/120-240/277VAC

WHITE WIRE   BLACK WIRE
(Neutral or Hot)   Hot
Scorpion HX15

STEP 2: Set the Scorpion power switch to **"ON"** for constant run mode. Set the power switch to **"CYCLE"** to run only when the fan is running and The integrated air flow sensor activates the Scorpion to power on. **(The cycle mode is recommended for longer service life for most applications.)** When first turning on the Scorpion in CYCLE mode (air flow sensor mode) the LEDs will stay illuminated up to 120 seconds for an initial calibration. After the calibration period the Scorpion LEDs will turn off, and will then only turn back on when the fan is running and there is continuous airflow.
STEP 3: Replace the access panel to the unit.
STEP 4: Place the provided WARNING/INSTALL DATE sticker on the exterior of the unit.
STEP 5: Add the date of installation using permanent marker on the sticker.
STEP 6: Restore power to the unit.
STEP 7: Register the Scorpion's warranty at www.nucalgon.com.scorpionregistration

IMPORTANT!
Some materials inside the air system (including filter media, flex duct, wiring etc.) may not be UV light resistant. Use reflective tape to cover these components.

LIMITED WARRANTY:
The Scorpion offers a limited warranty for three years or 30,000 hours of run time that covers any defects in material or workmanship under normal use. For a valid warranty your Scorpion must be registered through Nu-Calgon on the date of installation 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 Scorpion warranty does not cover labor, return shipping charges, damage from improper installation or improper voltage usage. The Scorpion warranty begins on the date that the unit was installed. Installation of your Scorpion 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.