SPECIFICATIONS

Input Voltage:	208-480VAC, Single Phase
Run Time:	30,000 Hours. Run timer and LED Indicator
Power:	50W
Wavelength:	265nm
UV Type:	UVC-LED
Dimensions:	30″L x 2.5″W x 1.5″H
Weight:	3.5 lbs.
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
Treatment Size:	Up to a 12-ton HVAC coil, or up to 4'x4' coil per single CX30
Mounting:	Various internal mounting options
Warranty:	3 years from date of installation

Indoor Air Quality Products

Scorpion CX30
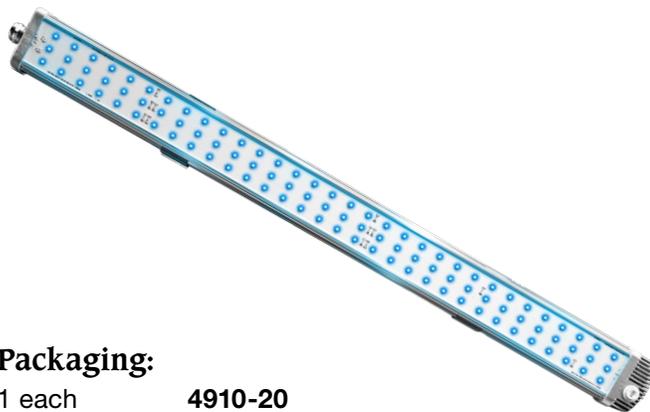
Packaging:
1 each   **4910-20**

IMPORTANT
• Only qualified technicians should install this product
• Install in accordance with relevant building codes
• Read instructions and safety instructions carefully before installation
WARNING: PROTECT EYES FROM UV LIGHT. TURN OFF UNIT OR DISCONNECT ALL POWER BEFORE SERVICING.

MOUNTING LOCATION
Before installing the Scorpion CX30, 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 antimicrobial effect, multiple Scorpion UVC-LED lights can be installed in the system. Below are various placement options for the Scorpion LED.
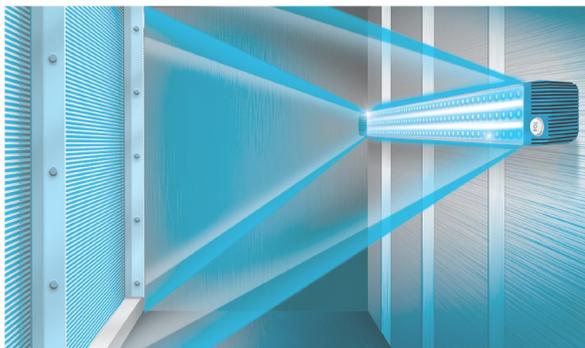
CX30 installed on a vertical coil
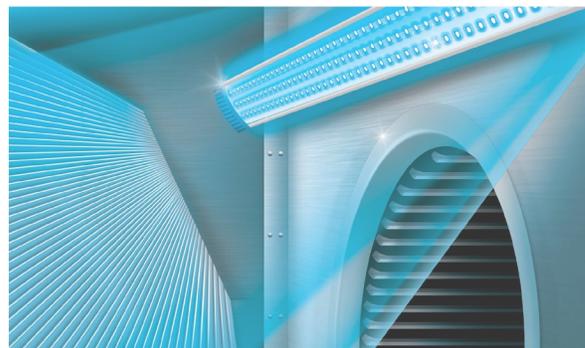
CX30 installed on a slant coil

MOUNTING INSTRUCTIONS – Using Provided Magnets
STEP 1: Confirm power is off to the system. Remove the access panel to the air handler.
STEP 2: Locate a magnetic surface across from the evaporator coil where you will install the CX30.
STEP 3: Adjust the included mounting brackets to the desired angle.
STEP 4: Attach the CX30 to the magnetic surface using the included magnets.
STEP 5: Secure the adjustable brackets using a phillips head screwdriver and the included 7mm socket to ensure the brackets are locked in place.
Continue to the wiring instructions to complete installation of the CX30.

MOUNTING INSTRUCTIONS – Using Self Tapping Hardware
STEP 1: Confirm power is off to the system. Remove the access panel to the air handler.
STEP 2: Locate a surface across from the evaporator coil where you can install CX30 with sheet metal screws.
STEP 3: Using a Philips screwdriver remove the provided magnet from the adjustable bracket.
STEP 4: Adjust the included mounting brackets to the desired angle.
STEP 5: Secure the CX30 to the desired location through the holes in the adjustable mounting bracket using the provided hardware.
STEP 6: Secure the adjustable brackets using a phillips head screwdriver and the included 7mm socket to ensure the brackets are locked in place.
Continue to the wiring instructions to complete installation of the CX30.

WIRING DIRECTIONS

STEP 1: Connect the Scorpion to high voltage 208-480VAC power using the white (neutral) and black (hot) wires. Connect the green (ground) wire to a proper ground source. See figure 1.3 below.

Step 1A: The Scorpion can be wired directly to the HVAC system power or add a transformer as needed.
Wire the Scorpion to continuous power, do not connect to the blower relay.

Step 1B: For safety, ensure the black (hot) wire is wired through the unit's door interlock switch as shown in Figure 1.3.
This will ensure the CX30 does not power on when the door is opened and the safety switch is engaged.

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.scorpion-registration
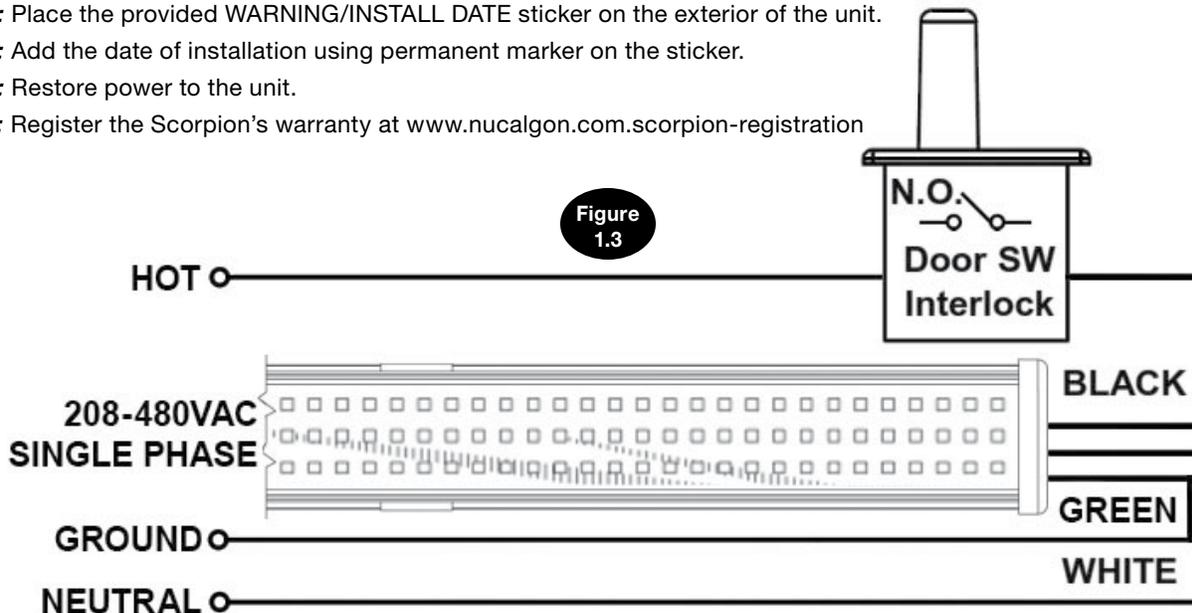
CX30 UVC-LED Wiring Diagram

INSTALLING SIGHT GLASS

Step 1: Find a proper location on the outside of the ductwork where you will be able to see the Scorpion's 30,000 hour timer LED. The LED timer is located on the endcap of the Scorpion CX30.

Step 2: Drill a ½˝ hole through the ductwork.

Step 3: Firmly press the provided sight glass into the hole for your viewport.

REPLACING THE CX30 – 30,000 Hour Run Timer

The Scorpion CX30 needs to be replaced after 30,000 hours of run time. The CX30 is equipped with a run timer and LED that will notify you when it needs to be replaced. When the CX30 hits 30,000 hours of run time, the red LED on the endcap of the Scorpion will change from solid red to blinking red. A blinking red LED means the CX30 is no longer providing complete disinfecting capabilities and needs to be replaced.

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.