

Product Specifications & Installation Guide Series C-Flex

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Series C-Flex

The Series C -Flex from Top Product Innovations is a highly versatile ion device that is designed to be installed on the cooling coil in ductless AC systems or PTACS. The device requires no replacement parts and it can be integrated into wall or ceiling cassette indoor coils of ductless mini-splits, PTAC units or other systems where there may not be enough room to install other indoor air quality products between the filter and coil. The 18" inch flexible ion bar can be used on coils up to 30 inches wide. The 36" inch flexible ion bar can be used for coils up to 48" inches wide. For coils beyond the ionizer length, center the ionizer on the coil to make sure the ionization best covers the coil width. Simply peel off the paper backing to the ionization bar and stick it across the width of the coil. Connect the appropriate leads of the device to 110VAC to 240VAC, peel off the power supply paper backing and mount. Reassemble the equipment and turn on power to the unit.

Ductless Mini-Split and PTAC Mounting & Wiring Instructions:

1. Turn power off to the ductless mini-split or PTAC.
2. Remove the filter screens and cover, exposing the coil surface and power box.
3. Peel paper backing off ion strip and adhere it to the finned surface. Some ductless mini-split units are provided with a plastic strip along the top of the coil. If the plastic strip is provided, mount the ion bar to the plastic strip. **FIG 6. CAUTION:** Keep emitter tips away from loose wires or anything grounded.
4. Each AHU brand will have different space restraints for the power supply. Find an appropriate place to mount the power supply and remove the paper backing. Press the power supply firmly to the mounting location. See Fig 6.
5. Run wires to the electrical compartment. Connect the black wire to 110-240VAC and the white wire to neutral. For 208-240VAC installations connect the white wire to the other hot leg, depending on power supplied.
6. Trim wires to length and connect to the appropriate power terminals, normally L1 and L2. Secure wires properly with wire ties or other NEC approved methods.
7. Replace cover and filter screens.

Operation:

1. Turn power on to AHU.
2. The ion device will be powered when power is applied to the AHU. Note: the ion device is designed to remain energized 24/7 and does not have to cycle with the fan.
3. Once power is applied, the integral LED will illuminate proving the device is active.

BAS Alarm Operation:

1. The purple wires connect to the integral alarm relay. When the unit is powered and there are no faults, the alarm contacts will be closed. When there is a fault, the contacts will open.

Maintenance:

1. Remove power from the AHU and remove the required parts to access the ion bar. Confirm the ion bar power supply LED is not illuminated. It is good practice to ensure all voltage is removed from the ion bar to take a screw driver with insulated handle and touch a carbon fiber brush brass connector on one side to another on the opposite side. This will discharge any remaining voltage that could cause a potential shock hazard during maintenance.
2. Use a wet wipe or damp cloth to clean the ionizer bar. A soft bristle brush, like a toothbrush, can also be used to clean debris from ion emitters. Do not expose the ion bar to corrosive cleaners.

Specifications:	120VAC to 240VAC
Input Voltage:	5 Watts
Power: Frequency:	50/60 HZ
Output Voltage:	2KV
Output Current	1mA
Dimensions (Power Supply):	" 0"H x 2 0"W x 3"L
Dimensions 36":	1.5"W x 36"L x 0.05"H
Dimensions 18":	1.5"W x 18"L x 0.05"H
Power Supply Weight:	0.5 lbs
Model Number String:	C-Flex 18 or C-Flex 36
Electrical Listings:	UL, cUL
Alarm Contacts:	"Dry Contact" / LED Status
CFM Rating	18" 1800 CFM 36" 3200 CFM

How to Reduce the Length of the Series C-Flex ion bar:

1. Measure how much past the end of the coil the flexible ion bar extends.
2. Bend the bar back on top of itself (DO NOT bend under with the sticky backing facing each other) so the brush pairs on the top will lay next to the brush pairs on the bottom, shown in Figure 1. The brass housings should be touching.
3. Peel the backing off of the ion bar and press it down to the cooling coil starting at the power entry side of the device. DO NOT press down on the end of the ion bar that will need folded to shorten the length. See Figure 2.
4. Fold the ion bar back to achieve the length required, lining up the bottom and top layer brush pairs as shown in Figure 1, and place a piece of electrical tape across the joint. See Figure



Fig 1.

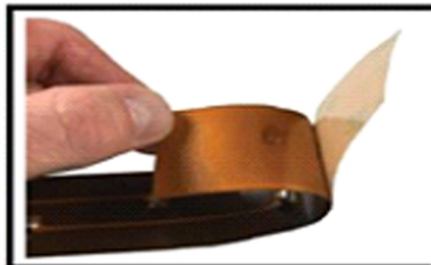


Fig 2.



Fig 3.



Fig 4.



Fig 5.

Secure the power supply to the back of the cabinet.



Mount the Series C-Flex unit to top of coil surface or plastic strip if available.

Fig 6.