Somfort-Cire

## **Indoor Air Purification System**

## Model# 00700



Please take time to read these instructions. All instructions and precautions should be adhered to while operating this unit. Non-compliance with these installation and operating instructions voids the warranty.





VERIFIED ZERO OZONE MEETS UL 2998 OES NOT EMIT MORE THAN 0.005 PPM AS TESTED

## Comfort-Aire<sup>®</sup> by RGF<sup>®</sup>

Thank you for your purchase. Comfort-Aire<sup>®</sup> is an in-duct, whole home PCO combining LED UV and traditional UV-C germicidal light that is zero ozone compliant. The Comfort-Aire<sup>®</sup> proactively treats air inside the air-conditioned system reducing airborne microbials, bacteria, viruses, mold and VOCs. The new patent pending technology utilizes an exclusive hybrid hydrophilic washable ceramic catalyst and is powered by a proprietary low energy, ultra-long-life, LED array. By combining LED UV technology along with proven germicidal UV-C light technologies, the Comfort-Aire<sup>®</sup> provides superior indoor air purification.



## Comfort-Aire<sup>®</sup> INSTALLATION INSTRUCTIONS

THIS EQUIPMENT MUST ONLY BE INSTALLED BY A QUALIFIED INSTALLER. CET ÉQUIPEMENT DOIT ÊTRE INSTALLÉ UNIQUEMENT PAR UN INSTALLATEUR QUALIFIÉ.

#### NEVER EXPOSE UNPROTECTED EYES OR SKIN TO ULTRAVIOLET LIGHT. NE JEMAIS EXPOSER LES YEUX OU LA PEAU SANS PROTECTION AUX RAYONS ULTRAVIOLETS



- Your box contains the following:
- Comfort-Aire<sup>®</sup> unit
- •Four (4) mounting screws
- Six (6) wire nuts
- Instructions
- Caution UV Light In Use decal
- 24 VAC transformer



### FOR DRY LOCATIONS ONLY EMPLACEMENTS SEC SEULEMENT



## SUITABLE FOR USE IN AIR-HANDLING UNITS ADAPTÉ À UNE UTILISATION DE TRAITEMENT DE L'AIR

## INSTALLATION INSTRUCTIONS

## 1. Mounting Location:

- To maximize the effectiveness of Comfort-Aire<sup>®</sup>, it is recommended, whenever possible, to install Comfort-Aire<sup>®</sup> unit in the air plenum just after the air handling unit (supply side).
- Locate the unit in the plenum/duct box AFTER the fan. Position it near a suitable power source with enough room to accommodate the mounting plate.
- Once a suitable location is determined, position Comfort-Aire<sup>®</sup> unit midway in the air duct. Orient Comfort Aire<sup>®</sup> so the product logo and Countdown Timer are visible and readable. There is no specific air flow orientation.

## 2. Mounting Unit:



#### Figure 2

• Using a 4-1/2" hole saw, or the provided template, cut a hole into the plenum/duct box. Cutting into fiberboard is usually easier than metal, and can be done with a utility knife. Refer to Figure 2. Be sure to drill into the duct only. Do not penetrate into the mechanical areas of the HVAC system.



#### Figure 3

• Be sure the mating area of the duct surface is clean and dry. Secure the mounting plate to the duct by first peeling the paper backing off the self/adhesive sealing ring affixed to the back side of the mounting plate. Refer to Figure 3.



Figure 4

 Insert unit into opening. Once attached to duct, press firmly all around the flange to ensure a proper seal. Refer to Figure 4. In some installations, it may be preferred to secure the unit with the provided screws via the four (4) mounting holes located on Comfort-Aire<sup>®</sup> mounting plate.



#### Figure 5

 Once the unit is secure, apply aluminum sealing tape or mastic in compliance with local codes. To ensure an airtight seal make sure the corresponding sealing surface is clean and dry. Smooth and press firmly over entire surface to ensure a good seal. Refer to Figure 5.

> NOTE: BE SURE TO AFFIX CAUTION DECAL NEXT TO MOUNTED UNIT.

## 3. Electrical Connections:

For optimal performance and maximum cell life the Comfort Aire<sup>®</sup> air purification system and air handler should operate continuously. For wiring assistance, see installation instructions in this manual.

Comfort Aire<sup>®</sup> may be connected to any suitable 120, 205 or 240 VAC source with the supplied 40VA transformer. When installing multiple units on an HVAC system, it is recommended that a properly sized secondary 24 VAC transformer be utilized.

When using secondary transformer, ensure it is installed in accordance with all applicable local codes by a qualified installer.

Use the provided wire splices for the electrical connections (ensure any connections used conform to local codes.) Refer to Figure 6 and the Wiring Color Code chart for correct voltage connections.

Comfort Aire® can also be powered with an optional 24 VDC transformer with wall outlet plug (Part# COMFORT-AIRE-PCO-DC). To connect power, insert transformer power connector plug to the Comfort-Aire device. Connect the transformer wall outlet plug to any available 110 V power outlet.





CAUTION: ENSURE THAT THE 24V TRANSFORMER PROVIDES AT LEAST 700mA FOR EACH UNIT INSTALLED ON THE CIRCUT ATTENTION: ASSUREZ-VOUS QUE LE TRANSFORMATEUR 24V FOURNIT AU MOINS 700MA À CHAQUE APPAREIL INSTALLÉ SUR LE CIRCUIT.

Technical Support: 800-678-9888 M-F 8AM – 5PM Eastern

## 4. Maintenance of the Germicidal UV-C Lamp

Comfort-Aire<sup>®</sup> includes a Countdown Timer for visual indication of the lamp replacement. The timer counts down in weeks from 3-years (153 weeks) to zero indicating UV-C Lamp change is required. Comfort-Aire<sup>®</sup> also includes a UV-C Lamp-On status indicator.



## 5. UV-C Lamp Replacement

Disconnect power to the Comfort-Aire® by removing the power cord.

Remove the Comfort-Aire<sup>®</sup> cover by undoing the two (2) cover screws.



Disconnect the UV-C lamp power cord from the blue power ballast.

•Twist UV-C Lamp base counter-clockwise to release the lamp.

Remove the UV-C lamp from the Comfort-Aire<sup>®</sup> base.

 Insert the new UV-C lamp into the Comfort-Aire<sup>®</sup> base and securing by twisting the UV-C lamp base clockwise.

Reconnect UV-C lamp power cord to the blue power ballast.

Reset the Countdown Timer with a paperclip or similar object.

•Replace the Comfort-Aire<sup>®</sup> cover and secure with two (2) cover screws.

Reconnect power to the Comfort-Aire<sup>®</sup>.

 Ensure Countdown Timer is reset to 153 weeks and Lamp-On status indicator illuminates.



## 6. LED UV Cell Replacement

The LED UV Cell should be replaced after five (5) years with RGF P/N SA-PHIC-PCO-LED.



Disconnect power to the Comfort-Aire<sup>®</sup>.

Remove the white cover by unscrewing the two (2) cover screws.



Unscrew four (4) wing nuts and pull to remove the main assembly of the Comfort-Aire $^{\rm \tiny \odot}$  out of the duct.



(4x) wing nuts



Disconnect the LED UV Cell power cord from the blue power ballast.



Unscrew four (4) screws; remove and place the catalyst magazine aside.

(4x) screws







Remove the LED UV Cell and pull the power cord out of the hole on the plate.





Reverse the above procedure to install the new LED UV CELL.

## 7. Maintenance Of The Ceramic Catalyst

Only in high smoke and particulate load environments it is recommended to clean the ceramic catalyst every six (6) months.

Rotate tab which holds the ceramic catalyst. Refer to Figure 7.



Figure 7

Slide the ceramic catalyst out. Refer to Figure 8. The individual ceramic catalyst matrixes can be removed from the assembly and washed with warm water and a mild detergent. In environments such as heavy smoking rooms the ceramic can be immersed in boiling water for several minutes. Be sure each ceramic catalyst is completely dry before reassembling and returning to the Comfort-Aire<sup>®</sup> unit.



Figure 8

#### FREQUENTLY ASKED QUESTIONS

#### Why should I register the warranty?

Registering the unit with the manufacturer extends the warranty from (5) five years to (7) seven years. Register warranty online at **www.h-cwarranty@marsdelivers.com** to receive two (2) extra years of warranty protection.

#### How long is the warranty?

Three (3) years for the UV lamp from the original date of purchase. Unregistered unit: Five (5) years for the unit from the original date of purchase.

# Who do I contact about the warranty or if I have a question about the unit?

Comfort-Aire<sup>®</sup> warranty department at www.h-cwarranty@marsdelivers.com

For Technical Product Support call 800-678-9888 M-F 8AM– 5PM Eastern

#### Are there any limits to the warranty? Yes.

Yes, please refer to the Limited Warranty for full details.

#### Can the unit be installed on the return air side of the HVAC?

Yes, but the best location for your Comfort Aire<sup>®</sup> unit is in the plenum just after the air handler. This allows for full distribution and extended air treatment. In situations where it is impossible to locate the unit after the air handler, it is acceptable to locate the Comfort Aire<sup>®</sup> unit before the air handler; however, the high moisture content of the cooling coils and the high temp of the heating coils will reduce the effective treatment capacity of the unit.

## LIMITED EXPRESS WARRANTY

Congratulations on the purchase of your new Comfort-Aire Indoor Air Purification System. It has been designed for long life and reliable service and is backed by one of the strongest warranties in the industry. Your unit automatically qualifies for the warranty coverage listed below, provided you keep your proof of purchase (receipt)for the unit and meet the warranty conditions.

#### LIMITED FIVE (5) YEAR EXPRESS WARRANTY

Comfort-Aire warrants this Air Purification System to be free from defects in workmanship and materials for normal use and maintenance for five (5) years for the unit and three (3) years for the bulb from the original date of purchase and when installed by a licensed HVAC contractor. Note: Unit warranty can be extended from 5 years to 7 years by registering the product at www.comfort-aire.com within 30 days of purchase. See enclosed card for details.

#### EXCEPTIONS

The Limited Express Warranty does not cover normal maintenance. Additionally, labor charges, diagnostic charges, transportation charges and any other service calls/repairs are not covered by this Limited Warranty. It also does not cover any portion or component of the system that is not supplied by Comfort-Aire, regardless of the cause of failure of such portion or component.

This warranty does not cover damage caused, in the sole and non-reviewable discretion of Comfort-Aire, by misuse, negligence, accident, incorrect application, wiring, or improper installation, decomposition from chemical action, humidity, moisture, or wear by abrasive materials.

#### CONDITIONS FOR WARRANTY COVERAGE

Unit must be operated according to Comfort-Aire operating instructions included with the unit and cannot have been subjected to accident, alteration, improper repair, neglect or misuse, or an act of God.

Serial number has not been removed.

Damage has not been as a result of inadequate wiring or voltage conditions.

Air flow around any section of the unit has not been restricted. Unit remains in the original installation.

Must be installed by a licensed HVAC contractor.

Unit must receive regular annual maintenance to include inspection to ensure adequate air flow and operation free of debris.

## **REMEDY PROVIDED BY THE LIMITED EXPRESS WARRANTY**

The sole remedy under the Limited Express Warranty is replacement of the defective unit. Labor to diagnose and replace the defective unit is not covered by this Limited Express Warranty. If for any reason the replacement product is no longer available during the warranty period, Comfort-Aire shall have the right to allow a credit in the amount of the current suggested retail price of the product instead of providing replacement.

Material claimed to be defective and covered by this warranty must be returned by the installing contractor to the supplying wholesaler for consideration for an over-the-counter replacement or purchase price credit. The wholesaler will in turn initiate an RGA with Comfort-Aire to return the product prepaid to Comfort-Aire for consideration for replacement or credit.

#### MARS

13490 Lakefront Drive Earth City, MO 63045

#### LIMITATION OF LIABILITY

All warranties implied by law are limited in duration to the one-term of the warranty. **We will not be liable for any consequential or incidental damages caused by any defect in this unit.** This warranty gives you specific legal rights and you may also have other rights which vary from state to state. Some states do not allow limitation on how long an implied warranty lasts or do not allow the exclusion of limitation of incidental or consequential damages, so the above limitation may not apply to you. No warranties are made for units sold outside the continental United States and Canada.

Please visit <u>www.comfort-aire.com</u> to register your new product

# TEMPLATE

Remove page and tape to duct work where unit will be installed. Using suitable tool cut through template and duct work.



HOUSING CONTAINS EXPOSED NON-METALLIC MATERIALS SUITABLE FOR AIR-HANDLING INSTALLATIONS

MATÉRIAUX NON MÉTALLIQUES EXPOSÉS POUVANT ÊTRE UTILISÉS DANS DES ESPACES DE TRAITEMENT DE L'AIR.



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