



INSTALLATION, OPERATION & MAINTENANCE MANUAL

AERISA

AerBrush (01, 02, 03 & 04)

05/18



INTRODUCTION

The Aerisa model AerBrush utilizes needle point brush type ionization in order to produce positive and negative oxygen ions. This equipment is highly effective at reducing odors, airborne pathogens and particulates by introducing the +/- O₂ ions into occupied spaces through existing air handling equipment and ductwork. The unit is designed to be installed within an AHU, a fan coil unit, PTAC, heat pump or even in a ductless split system. The AerBrush is fully self contained, housed within an ABS plastic enclosure and comes complete with mounting “wings”. The unit can come with 12V DC, 24V AC, 120V AC or 230V AC all without having to utilize an external power supply device.

Aerisa 1214 W. Boston Post Road, Suite 410, Mamaroneck, NY 10543

Tel: 480-302-6300

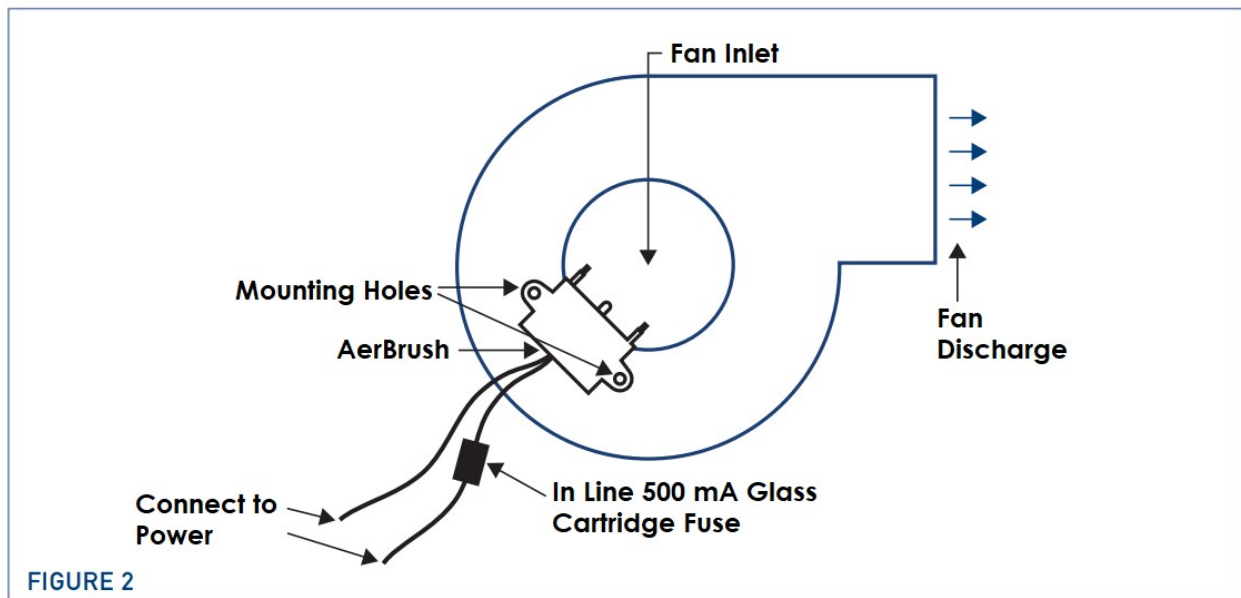
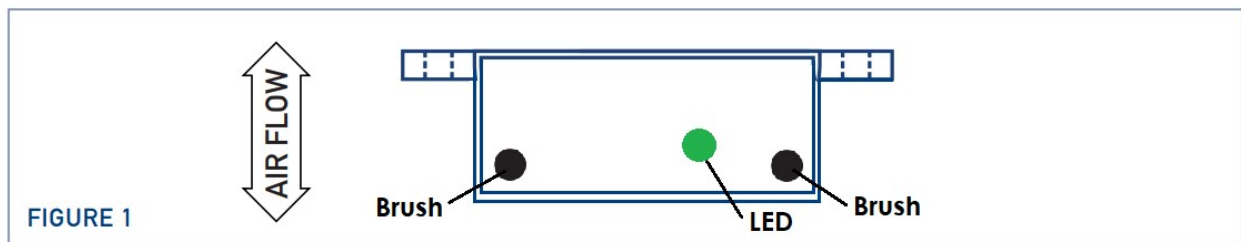
www.aerisa.com



MECHANICAL INSTALLATION INSTRUCTIONS

GENERAL MOUNTING CRITERIA:

1. Do not connect to power before mechanical installation is complete.
2. Mount ionization unit to allow access for general maintenance.
3. Mount the unit at or near the fan inlet using the holes in the mounting wings, insuring that the airstream flows over the 2 brushes simultaneously. See figures 1& 2.
4. The unit should be mounted downstream of the filter.
5. For best results avoid locations directly after a cooling coil or humidifier.

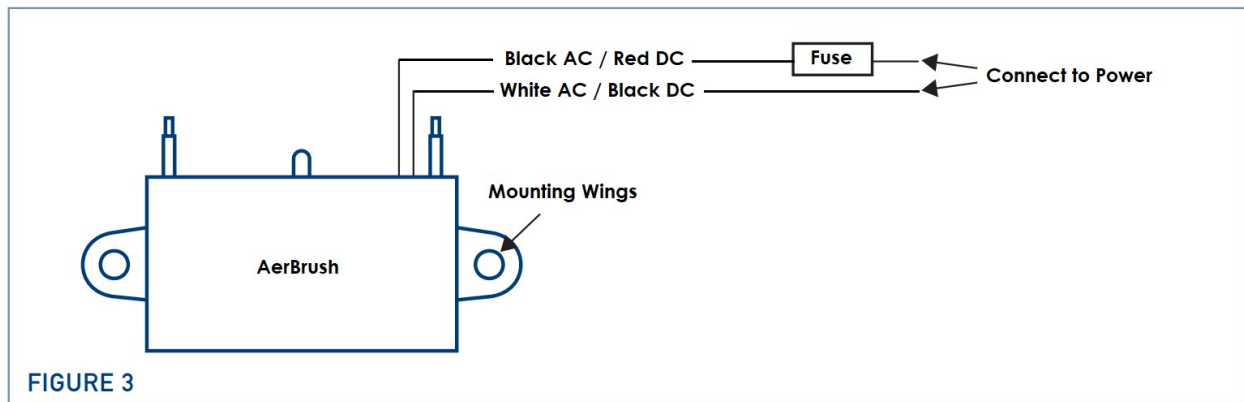




ELECTRICAL INSTALLATION INSTRUCTIONS

Warning: Do not connect to power before installation is complete. Always disconnect power to the unit before handling the ionizer.

1. All field wiring to be in accordance with NEC and Authorities Having Jurisdiction (AHJ).
2. Connect power to ionizer using appropriate voltage per the following. See figure 3.
AerBrush-01=12V DC AerBrush-02=24V AC AerBrush-03=120V AC AerBrush-04=230V AC
3. For 120V AC and 230V AC models the installer shall provide a grounding method per the local AHJ.
4. For best results interlock ionizer with fan relay.
5. Apply power to unit. Confirm that green indicator light illuminates indicating that the ionizer is functioning properly.



OPERATION

1. When power is supplied to the ionizer, the ionizer will be activated and will illuminate the green ion indicator light.
2. The ionization unit is self balancing and does not require any type of adjustment.

TROUBLESHOOTING

If the unit is not working, check the following:

1. The supply fan is running and that the green light illuminates.
2. Check the power input connections to the ionization unit. Verify all connections are correct and tightened. Reconnect any loose wires as necessary.



SEQUENCE OF OPERATION

1. For units that are interlocked with the supply fan control, the BAS controls the start/stop of the air conditioning unit supply fan.

INSTALLATION INSTRUCTIONS FOR OPTIONAL DRY CONTACTS

The AerBrush unit has an option to include dry contacts which will indicate ionizer functionality to a BAS (Building Automation System).

1. All field wiring to be in accordance with NEC and Authorities Having Jurisdiction (AHJ).

2. Connect power to ionizer using appropriate voltage per the following. See figure 4.

AerBrush-01=12V DC AerBrush-02=24V AC AerBrush-03=120V AC AerBrush-04=230V AC

3. For 120V AC and 230V AC models the installer shall provide a grounding method per the local AHJ.

4. For best results interlock ionizer with fan relay.

5. Apply power to unit. Confirm that green indicator light illuminates and that the dry contacts indicate that the ionizer is functioning properly.

