**GLOBAL PLASMA SOLUTIONS**

**MODEL - GPS-2400**

Installation, Operation & Maintenance Manual

<table>
<thead>
<tr>
<th>MODEL</th>
<th>VOLTAGE/VA (max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPS-2400-1</td>
<td>115 VAC / 10VA</td>
</tr>
<tr>
<td>GPS-2400-2</td>
<td>208-277 VAC / 10VA</td>
</tr>
<tr>
<td>GPS-2400-3</td>
<td>24 VAC / 10VA</td>
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The GPS-2400 is a versatile product and can mount in any HVAC system. The GPS-2400 is designed for airflows from 0 to 2,400 CFM or 0 to 6 tons of cooling.

**Mechanical Installation**

1. Find a suitable location in the air stream. The optimal location is after a prefilter, but before the cooling coil. The unit can also be mounted in the supply air. The normal mounting location is the inlet to the fan, see Fig 1.

2. Using a self-tapping sheet metal screw, mount the GPS-2400 such that air will flow across the carbon fiber needles simultaneously, like a football through a field goal post. See air flow direction shown. Unit can mount in any position/angle.

**DO NOT:**

1. DO NOT MOUNT THE UNIT SO THE CARBON FIBER BRUSHES ARE LESS THAN 1 INCH FROM ANY METAL, WIRES OR GROUNDED OBJECTS.

2. DO NOT ALLOW THE POWER WIRES TO LAY NEAR OR TOUCH THE BRUSHES

KEEP ALL WIRES AWAY FROM THE CARBON FIBER BRUSHES

ALLOW AT LEAST 1 INCH OF SPACING BETWEEN THE CARBON FIBER BRUSHES AND ANYTHING METAL OR GROUNDED

THE INSTALLER MAY USE A WIRE TIE OR ELECTRIC TAPE TO HOLD THE POWER ENTRY WIRES DOWN TO THE SIDE OF THE GPS-2400 BOX
Wiring Instructions:

1. Follow all electric codes in your locality.
2. Review the model number found on the GPS-2400 product and wire it only to the voltage range shown below.
3. Disconnect power to the air handler the GPS-2400 is mounted during install.
4. If connecting to a 24VAC power source with a grounded transformer leg, connect the grounded leg to the black wire.
5. Unit can be powered 24/7 or it may be interlocked by others.
6. Green light will illuminate when powered and operating.
7. Do not touch carbon fiber brushes during operation!

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<tr>
<th>Model</th>
<th>Voltage Range</th>
<th>VA</th>
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<tr>
<td>GPS-2400-1</td>
<td>110-120 VAC / 10VA</td>
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</tr>
<tr>
<td>GPS-2400-2</td>
<td>208-277 VAC / 10VA</td>
<td></td>
</tr>
<tr>
<td>GPS-2400-3</td>
<td>20-30 VAC / 10VA</td>
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CRITICAL! MAKE SURE TO SECURE POWER WIRES SO THEY ARE NOT TOUCHING THE ELECTRODES/BRUSHES! GPS’ SUGGESTS USING A WIRE TIE OR ELECTRIC TAPE TO SECURE WIRES TO GPS-2400 HOUSING

Operation

1. The GPS-2400 may be powered 24/7 or it can cycle with the fan. This decision is to be made by the installer after consulting with their client.
2. When the unit is powered, the green LED will illuminate if there are no faults.
3. To confirm output, you may use a non-contact voltage detector placed several inches above the carbon fiber brushes. Alternately, you can use a high voltage probe and multi-meter to confirm you have high voltage on the carbon fiber brushes.

Maintenance

1. The GPS-2400 is designed to not require replacement parts.
2. Based on the mounting location, filtration effectiveness and environment, the carbon fiber brushes may become dirty over time. Dirt accumulation on the carbon fiber brushes will reduce the cold plasma output.
3. To clean the brushes, remove power from the air handler and the GPS-2400 unit. Using a nylon brush similar to a tooth brush, gently wipe off the carbon fiber tips. After cleaning, restore power.
4. The cleaning interval will vary by application, but it is recommended to review the brush cleanliness while changing the system filter.

Warranty

The GPS-2400 is warranted for three years. If during the warranty period a claim is made, GPS will replace the product. GPS’ warranty does not cover labor, return shipping charges or damage from connecting the unit to the wrong voltage. See GPS’ standard warranty, terms and conditions for further information.

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