INFORMATION UNLIMITED INC  Negative Ion High Voltage Power Supplies

SS-013SD18 Air Purification

**SPECIFICATION**

**CAUTION: DO NOT EARTH GROUND THE 0V OUTPUT LEAD!!**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>SPEC.</th>
<th>REMARK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>INPUT VOLTAGE (B+ )</td>
<td>115 VAC</td>
<td>± 10 VAC</td>
</tr>
<tr>
<td>2</td>
<td>INPUT CURRENT NO LOAD</td>
<td>70 mA</td>
<td>± 20 mA</td>
</tr>
<tr>
<td>3</td>
<td>INPUT CURRENT ON LOAD</td>
<td>120 mA</td>
<td>± MAX mA</td>
</tr>
<tr>
<td>4</td>
<td>OUTPUT EHV NO LOAD</td>
<td>- 9 KVDC</td>
<td>± 1 KV</td>
</tr>
<tr>
<td>5</td>
<td>OUTPUT EHV NO LOAD</td>
<td>- 18 KVDC</td>
<td>± 1 KV</td>
</tr>
<tr>
<td>6</td>
<td>DRIVE FREQ.</td>
<td>20.0 KHZ</td>
<td>± 1 KHZ</td>
</tr>
</tbody>
</table>

**TEST CIRCUIT:**

```
AC115V  
50/60HZ  
INPUT  

DRIVE CIRCUIT  
FREQ: 20.0KHZ  

F.B.T.  

-18KVDC  
OUTPUT  
-9KVDC  
0V  

BLACK WIRE 1015 AWG 22 600V  
0V  

RED WIRE 3239 AWG 22 20KV  
-9KVDC  

RED WIRE 3239 AWG 22 20KV  
-18KVDC  

DO NOT EARTH GROUND  

SS-013SD18  

UNT: mm  
104  
52.5  
33.5  
32.5  
10.5  
83  
10.5
```
ELECTROSTATIC DUST COLLECTION PRINCIPLE

Is the use of an electrostatic precipitator charge opposites attract theory, and applied high pressure to form two polar opposite electric field, in the role of Coulomb forces, the soot particles are charged after moving to the collecting plate and attached to the dust collection plate, and thus reach air purification purposes.

System flow Introduction

Untreated fumes from the duct guide into the dust collector, first enter the filter, the soot in the filter after this primary filter into the dust collection area, this area is divided into two stages of processing fumes, the first stage is generated by a high voltage electrode lines corona current, so that soot particulates positively charged, to reach the second stage of the collecting plate under the action of the Coulomb force, smoke that is attached to the negatively charged dust collection plates and dust collection plate surface line into oil, oil relations due to gravity, partly along the metal plate on the contact surface drip tank, and then the guide plate and the guide hole is exported outside the case, the dust collection plate after fumes saturated, cleaned restitution, can be recycled.