2. Electrical Characteristics

<table>
<thead>
<tr>
<th>Item</th>
<th>SSNZ-15F</th>
<th>SSNZ-25F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Impedance</td>
<td>250 ± 10%</td>
<td>250 ± 10%</td>
</tr>
<tr>
<td>Input Current Range</td>
<td>10 A</td>
<td>20 A</td>
</tr>
<tr>
<td>Load Voltage Range</td>
<td>85 to 244 V AC</td>
<td>110 to 264 V AC</td>
</tr>
<tr>
<td>Load Current Range</td>
<td>150 mA AC rms</td>
<td>300 mA AC rms</td>
</tr>
<tr>
<td>On State Voltage Drop</td>
<td>Below 1.5 V AC rms</td>
<td>Below 1.5 V AC rms</td>
</tr>
<tr>
<td>Off State Leakage Current</td>
<td>Below 0.5 mA AC rms</td>
<td>Below 0.5 mA AC rms</td>
</tr>
<tr>
<td>Power Adjustment Range</td>
<td>0 to 100%</td>
<td>0 to 100%</td>
</tr>
<tr>
<td>Output power accuracy</td>
<td>Setting power</td>
<td>Setting power</td>
</tr>
<tr>
<td>Load Voltage Frequency Range</td>
<td>50 to 60 Hz</td>
<td>50 to 60 Hz</td>
</tr>
<tr>
<td>Current Consumption</td>
<td>250 mA AC rms</td>
<td>500 mA AC rms</td>
</tr>
<tr>
<td>Analog Input</td>
<td>0.5 mA AC rms</td>
<td>1.5 mA AC rms</td>
</tr>
<tr>
<td>Ext. volume</td>
<td>7.0 mA AC rms</td>
<td>14.0 mA AC rms</td>
</tr>
<tr>
<td>Ramp-up/Ramp-down Time</td>
<td>Approx 0.5 to 40 seconds</td>
<td>Approx 0.5 to 40 seconds</td>
</tr>
<tr>
<td>Weight</td>
<td>Approx. 200 g</td>
<td>Approx. 400 g</td>
</tr>
</tbody>
</table>

Note: The lengths of Ramp-up and Ramp-down time are the same.

4. Load mitigation

3. Input current vs. Output power

- Ramp-up time: 0.5 to 40 seconds
- Ramp-down time: 0.5 to 40 seconds

4. Load mitigation

- When three units are adhered
- When eight units are adhered

SAFETY INSTRUCTION

1. Risk of electric shock
   - Do not connect products in series to raise strength or in parallel to raise the current volume.
   - Do not connect products with different current ratings.
   - Do not use the product under the following condition:
     - Exposed to corrosive gas.
     - Exposed to dust or metal powders.
     - In the high heat or high humidity.
     - Exposed to water, oil, or chemicals.
     - Do not overload or overload the product.

2. Risk of fire or burn
   - Do not use the product near inflammable gas or explosive gas.
   - Keep combustibles away from the product.
   - Do not use the product in a high heat or high humidity environment.

3. Others
   - Do not disassemble the product.
   - Do not use the product near a water source.
   - Do not use the product near a fire or fire extinguisher.

WARNING

- Incorrect application may result in damage to the unit or other equipment.

- Incorrect application may result in fire or potential hazard to human body.
NOTICE

• The figures, diagrams and numeric values used in this manual are only for purpose of illustration.

• RKC is not responsible for any damage or injury that is caused as a result of using this instrument, instrument failure or indirect damage.

• RKC is not responsible for any damage and/or injury resulting from the use of instruments made by imitating this instrument.

• Periodic maintenance is required for safe and proper operation of this instrument. Some components have a limited service life, or characteristics that change over time.

• Every effort has been made to ensure accuracy of all information contained herein. RKC makes no warranty expressed or implied, with respect to the accuracy of the information. The information in this manual is subject to change without prior notice.

• No portion of this document may be reprinted, modified, copied, transmitted, digitized, stored, processed or retrieved through any mechanical, electronic, optical or other means without prior written approval from RKC.

• Check specifications or any standards if it conforms to the product when used with other equipment. We are not responsible for the item’s conformity if the pre-confirmation is not carried out.

• When using the product with the following application, do not apply the maximum ratings on the item and take safety measures in advance in order to minimize the damage to the product.

  a) When using outside, using under the condition with potential damage by chemicals or electric obstruction or under the condition not specified in the instruction manual or specifications.

  b) Any facilities of nuclear power control, incineration, railways, airways, vehicles, medical devices, safety devices and the facilities regulated by administrative organ or private sectors.

  c) Any system or machinery which may endanger person or property.

  d) Any facilities which requires high reliability such as the suppliers of gas, electricity and water or the system continuously operating 24 hours.

  e) Any other application when an advanced security is required.

1. Dimensions and Mounting
This product can be mounted on a DIN rail and the wall of a panel.

(1) Dimensions

![Diagram showing dimensions](image)

(2) Panel Processing

![Diagram showing panel processing](image)

(3) Torque rate against panel
When mounting the product onto the panel, the tightening torque should be 1.18 to 1.47 N·m.

(4) Mounting direction
- Vertical direction
- Horizontal direction

2. Regarding Wiring and Connection
When a load is not connected rightly, a fault may be happened. Please connect the load according to the connection example.

(1) Example of connection with temperature controller

![Diagram showing connection example](image)

(2) Example connection adopting external volume (Manual setting)

![Diagram showing external volume connection](image)

3. Notes on electric circuit design

(1) Protective circuit on output side

a) The product is composed of semi-conductor elements and there is a possibility that the unit fails due to surge voltage and overcurrent. Failures are generally caused by short circuit and it becomes uncontrollable when load is at on state. It is, therefore, more secured to use the product with breaker or contactor as the protective circuit.

b) Output element damages if output side has short-current or overcurrent.

Apply rapid blow fuse within the following range on load circuit:

- Surge: > IR
- Current: 1 cycle surge on current

(2) Input wiring

a) Wire size
- Single wire: 0.14 to 0.5 mm²
- Stranded wire: 0.14 to 0.5 mm²
- AWG: 20 to 26

b) Screw torque

![Table showing screw torque](image)

3. Output wiring

a) Ring terminals

![Diagram showing ring terminals](image)

b) Screw terminals

![Diagram showing screw terminals](image)