Split Core Self Power AC Current Sensor CYCS11-x0S4

This device CYCS11-x0S4 is a self-powered 1-element ac current transducer. The input and outputs are electrically isolated from each other. It needs no external power supply. Its ac current input is achieved by passing through the aperture of the case. The output is 0-5V dc or 0-10V dc voltage. It can be applied widely to various measuring and controlling systems such as communication system, electrical power system, railway and various industrial control systems.

Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated input current range</td>
<td>20A, 50A, 75A, 100A, 150A, 200A</td>
</tr>
<tr>
<td>Frequency of Input current</td>
<td>Typ. 50-60Hz, max. 5kHz</td>
</tr>
<tr>
<td>Output signal</td>
<td>0-5V, 0-10V, tracing voltage 5V</td>
</tr>
<tr>
<td>Measuring accuracy</td>
<td>1.0%</td>
</tr>
<tr>
<td>Isolation between input and output</td>
<td></td>
</tr>
<tr>
<td>Load resistance</td>
<td>≥3MΩ</td>
</tr>
<tr>
<td>Isolation withstanding voltage</td>
<td>2.5 kV DC, 1min, leakage current 1mA</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-10°C ~ +60°C</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-25°C ~ +70°C</td>
</tr>
<tr>
<td>Relative humidity</td>
<td>10% ~ 90%</td>
</tr>
<tr>
<td>Response time</td>
<td>≤500ms</td>
</tr>
<tr>
<td>Overload capacity</td>
<td>20 times</td>
</tr>
<tr>
<td>Frequency range</td>
<td>45 ~ 65Hz</td>
</tr>
<tr>
<td>Mounting</td>
<td>Din rail/screw</td>
</tr>
<tr>
<td>Case style and Window size</td>
<td>S4 with aperture Ø31mm</td>
</tr>
</tbody>
</table>

Definition of Part number:

<table>
<thead>
<tr>
<th>CYCS11</th>
<th>x</th>
<th>0</th>
<th>S4</th>
<th>1.0</th>
<th>m</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Series name</th>
<th>Output signal</th>
<th>Power supply</th>
<th>Case style</th>
<th>Accuracy class</th>
<th>Input current range (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CYCS11</td>
<td>x=1: tracing voltage 5V</td>
<td>0: none</td>
<td>S4</td>
<td>1.0%</td>
<td>20A, 50A, 75A, 100A, 150A, 200A</td>
</tr>
<tr>
<td></td>
<td>x=3: 0-5V DC</td>
<td></td>
<td></td>
<td></td>
<td>100A, 150A, 200A</td>
</tr>
<tr>
<td></td>
<td>x=8: 0-10V DC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CYCS11-30S4: Output voltage 0-5V DC, input current 20A, 50A and 75A, 100A, 150A and 200A
CYCS11-80S4: Output voltage 0-10V DC, input current 100A, 150A and 200A

Typical Example: CYCS11-30S4-1.0-50A Split Core Self Power AC Current sensor with Output signal: 0-5V DC
Rated input current: 50A AC/RMS
Accuracy: 1.0%
DIMENSIONS (mm)

Dimensions: 100mm x 83mm x 36mm
Aperture: Ø31 mm

CONNECTION

The current carrying cable must pass through the window. The phase of output is the same as that of the current passing the window in the direction of the arrow indicated on the case.

6: GND 8: Voltage output
Applications:

- Multi-point current sensing and control panels
- Monitor motor faults
- Monitor heating elements
- Monitor lighting elements

Notice:

1. If you want to open/ close the split core, press and move the orange bolt to the open/close direction

2. The conductor carrying the input current should pass through the center of the aperture as perpendicularly as possible. And then lock the bolt.

3. Make sure that the polarities are in right connection.

4. If a meter is used to calibrate the output of the transducer, please make sure that the accuracy of the meter is higher than the transducer.