Bourns Releases New Current Sense Transformers

Model PCS020 and PCS040 Series

Riverside, California – July 28, 2022 – Bourns Custom Magnetics Product Line is introducing the new Model PCS020 and PCS040 Series Current Sense Transformers. Both series are ideal for use in a variety of applications such as switched-mode power supplies, motor control, overload sensing, and other AC current applications.

The PCS020 and PCS040 series have a current rating of 20 A and 40 A respectively, are ideal for frequencies up to 1 MHz, and have an operating temperature range from -40 °C to +125 °C. The isolation between windings is designed at 500 V\textsubscript{RMS} for the PCS020 and 800 V\textsubscript{RMS} for the PCS040 series. Both series are RoHS compliant*. Please see the table below for additional information regarding the available part numbers for these transformers.

<table>
<thead>
<tr>
<th>Bourns Part Number</th>
<th>Turns Ratio Pri. : Sec.</th>
<th>Secondary Inductance Min. (mH)</th>
<th>Pri. Ref. (mΩ)</th>
<th>Sec. Max. (Ω)</th>
<th>Volt-time Product on Sec. Max. (V-µsec)</th>
<th>Terminating Resistance (1 V Sec./40 A Pri.) (Ω)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCS020-EE05081S</td>
<td>1:20</td>
<td>0.081</td>
<td>7</td>
<td>0.4</td>
<td>10.8</td>
<td>1</td>
</tr>
<tr>
<td>PCS020-EE05180S</td>
<td>1:30</td>
<td>0.18</td>
<td>7</td>
<td>0.87</td>
<td>16.2</td>
<td>1.5</td>
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<tr>
<td>PCS020-EE05320S</td>
<td>1:40</td>
<td>0.32</td>
<td>7</td>
<td>1.14</td>
<td>21.6</td>
<td>2</td>
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<tr>
<td>PCS020-EE05500S</td>
<td>1:50</td>
<td>0.5</td>
<td>7</td>
<td>1.5</td>
<td>27</td>
<td>2.5</td>
</tr>
<tr>
<td>PCS020-EE05730S</td>
<td>1:60</td>
<td>0.73</td>
<td>7</td>
<td>1.98</td>
<td>32.4</td>
<td>3</td>
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<tr>
<td>PCS020-EE05980S</td>
<td>1:70</td>
<td>0.98</td>
<td>7</td>
<td>4.75</td>
<td>37.8</td>
<td>3.5</td>
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<tr>
<td>PCS020-EE0502KS</td>
<td>1:100</td>
<td>2.0</td>
<td>7</td>
<td>5.5</td>
<td>54</td>
<td>5</td>
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<td>PCS020-EE0503KS</td>
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<td>3.0</td>
<td>7</td>
<td>7</td>
<td>67.5</td>
<td>6.25</td>
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</tbody>
</table>

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Samples and production quantities are now available.

For additional details on Bourns® transformers, visit the Bourns website at www.bourns.com/products/magnetic-products/transformers-power.

If you have questions or need additional information, please feel free to contact Bourns Customer Service/Inside Sales.

### Features
- Rated current on primary up to 20 A (PCS020) and 40 A (PCS040)
- Surface mount
- Frequency up to 1 MHz
- Operating temperature range: -40 to +125 °C
- RoHS compliant*

### Applications
- Switched-mode power supplies
- Motor control
- Overload sensing
- AC current applications

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