Datasheet

Power line filter

for shielded rooms & secure area
250/277/480 V, 50/60 Hz, 1–100 A, 40 °C

Ordering code: B84299D6***A(B)00*

Date: 2011–07–22

Version: 06
# Power line filter B84299D6***A(B)00*

## for shielded rooms & secure area

### Technical data and measuring conditions

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated frequency</td>
<td>$f_R$ 50/60 Hz</td>
</tr>
<tr>
<td>Rated temperature</td>
<td>$T_R$ 40 °C</td>
</tr>
<tr>
<td>Overload capability (thermal)</td>
<td></td>
</tr>
<tr>
<td>for 3 min per hour or</td>
<td>1.5 x $I_R$</td>
</tr>
<tr>
<td>for 30 s per hour</td>
<td>2.5 x $I_R$</td>
</tr>
<tr>
<td>Climatic category (IEC 60068–1)</td>
<td>25/85/21</td>
</tr>
<tr>
<td>Rated frequency</td>
<td>$f_R$ 50/60 Hz</td>
</tr>
</tbody>
</table>

#### B84299D60*0B003 - Rated voltage

| Test voltage line to line for 2 s | $U_{test}$ 1768 V DC |
| Test voltage line to case for 2 s  | $U_{test}$ 2121 V DC |

#### B84299D6300B000 - Rated voltage

| Test voltage line to line for 2 s | $U_{test}$ 1768 V DC |
| Test voltage line to case for 2 s  | $U_{test}$ 2121 V DC |

#### B84299D6101A003 - Rated voltage

| Test voltage line to line for 2 s | $U_{test}$ 2158 V DC |
| Test voltage line to case for 2 s  | $U_{test}$ 2200 V DC |

### Characteristics and ordering codes

<table>
<thead>
<tr>
<th>$I_R$</th>
<th>LINE terminals: threaded studs</th>
<th>LOAD terminals: cables</th>
<th>$I_{leak}$ 2)</th>
<th>$R_{typ}$</th>
<th>Approx. weight</th>
<th>Ordering code</th>
<th>Approvals for USA, Canada: UL (listed) cUL (listed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>#6-32 UNC 2A</td>
<td>AWG 18</td>
<td>1.6</td>
<td>107</td>
<td>1.9</td>
<td>B84299D6010B003 x</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>#6-32 UNC 2A</td>
<td>AWG 18</td>
<td>1.6</td>
<td>107</td>
<td>1.9</td>
<td>B84299D6050B003 x</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>M6</td>
<td>AWG 12</td>
<td>1.6</td>
<td>157</td>
<td>1.5</td>
<td>B84299D6300B000 x</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>M6</td>
<td>AWG 10</td>
<td>1.6</td>
<td>1706</td>
<td>10.8</td>
<td>B84299D6300B003 x</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>M8</td>
<td>AWG 6</td>
<td>1.6</td>
<td>1714</td>
<td>22</td>
<td>B84299D6600B003 x</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>M10</td>
<td>AWG 2</td>
<td>1.6</td>
<td>3751</td>
<td>11.5</td>
<td>B84299D6101A003 x</td>
<td></td>
</tr>
</tbody>
</table>


3) X = approval granted  
P = pending  
D = design complies with  
= none

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Please read Cautions and warnings and important notes at the end of this document.

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Power line filter for shielded rooms & secure area

Circuit diagram for B84299D6010B003 and B84299D6050B003

Circuit diagram for B84299D6300B000

Circuit diagram for B84299D6300B003

Please read Cautions and warnings and important notes at the end of this document.
Power line filter B84299D6**A(B)00* for shielded rooms & secure area

Circuit Diagram for B84299D6600B003

Circuit Diagram for B84299D6101A003

Please read Cautions and warnings and important notes at the end of this document.
Dimensions for B84299D6010B003, B84299D6050B003

All dimensions are in mm.
Dimensions for B84299D6300B000

All dimensions are in mm.

Please read Cautions and warnings and important notes at the end of this document.
Dimensions for B84299D6300B003

All dimensions are in mm.

Please read Cautions and warnings and important notes at the end of this document.
Dimensions for B84299D6600B003

All dimensions are in mm.
Dimensions for B84299D6101A003

All dimensions are in mm.
Cautions and warnings

- Please note the advices in our data book “EMC Filters” (latest edition); attention should be paid to the chapter “General safety notes”.
- It shall be ensured that only qualified persons (electricity specialists) are engaged on work such as planning, assembly, installation, operation, repair and maintenance. They must be provided with the corresponding documentation.
- Danger of electric shock. EMC filters contain components that store an electric charge. Dangerous voltages can continue to exist at the filter terminals for longer than five minutes even after the power has been switched off.
- The protective earth connections shall be the first to be made when the EMC filter is installed and the last to be disconnected. Depending on the magnitude of the leakage currents, the particular specifications for making the protective-earth connection must be observed.
- Impermissible overloading of the EMC filter, such as with circuits able to cause resonances, impermissible voltages at higher frequencies etc. can lead to bodily injury and death as well as cause substantial material damages (e.g. destruction of the filter housing).
- EMC filters must be protected in the application against impermissible exceeding of the rated currents by overcurrent protective.
- In case of leakage currents $> 3.5 \text{ mA}$ you shall mount the PE conductor stationary with the required cross section before beginning of operation and save it against disconnecting. For leakage currents $I_L < 10 \text{ mA}$ the PE conductor must have a KU value of 4.5; for leakage currents $I_L > 10 \text{ mA}$ the PE conductor must have a KU value of 6.
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