Performance EMI Filter

- Rated currents from 1 to 10 A
- Dual-stage filter
- Compact housing
- Integrated earth line choke

Performance indicators

<table>
<thead>
<tr>
<th>Attenuation performance</th>
<th>standard</th>
<th>high</th>
<th>very high</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated current [A]</td>
<td>0</td>
<td>20</td>
<td>40</td>
</tr>
</tbody>
</table>

Technical specifications

- Maximum continuous operating voltage: 250 VAC, 50/60 Hz
- Operating frequency: DC to 400 Hz
- Rated currents: 1 to 10 A @ 40°C max.
- High potential test voltage: P -> PE 2000 VAC for 2 sec, P -> N 760 VAC for 2 sec
- Temperature range (operation and storage): -25°C to +100°C (25/100/21)
- Flammability corresponding to: UL 94 V-2 or better
- Design corresponding to: UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939
- MTBF @ 40°C/230 V (MIL-HB-217F): 970,000 hours

Approvals

- UL
- CSA
- IEC
- ROHS

Features and benefits

- FN 343 filters are designed for easy and fast chassis mounting
- Increased attenuation performance based on dual-stage filter design and earth line choke
- All FN 343 single-phase filters provide an excellent attenuation performance, based on chokes with high saturation and excellent thermal behavior
- Faston connection
- Integrated earth line choke
- Compact design
- Custom-specific versions on request

Typical applications

- Electrical and electronic equipment
- Consumer goods
- Household equipment
- Power supplies
- Office automation equipment
- Datacom equipment
- Industrial equipment auxiliary supply

Typical electrical schematic
Filter selection table

<table>
<thead>
<tr>
<th>Filter</th>
<th>Rated current @ 40°C (25°C)</th>
<th>Leakage current* @ 230 VAC/50 Hz</th>
<th>Inductance L</th>
<th>Capacitance Cx</th>
<th>Capacitance Cy</th>
<th>Resistance R</th>
<th>Input/Output connections</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>FN 343-1-05</td>
<td>1 (1.15)</td>
<td>340</td>
<td>5.9</td>
<td>95</td>
<td>0.46</td>
<td>100</td>
<td>2.2</td>
<td>1 -05</td>
</tr>
<tr>
<td>FN 343-3-05</td>
<td>3 (3.4)</td>
<td>340</td>
<td>1.1</td>
<td>2</td>
<td>0.4</td>
<td>100</td>
<td>2.2</td>
<td>1 -05</td>
</tr>
<tr>
<td>FN 343-6-05</td>
<td>6 (6.9)</td>
<td>340</td>
<td>0.43</td>
<td>0.77</td>
<td>0.4</td>
<td>100</td>
<td>2.2</td>
<td>1 -05</td>
</tr>
<tr>
<td>FN 343-10-05</td>
<td>10 (11.5)</td>
<td>340</td>
<td>0.27</td>
<td>0.66</td>
<td>0.4</td>
<td>100</td>
<td>2.2</td>
<td>1 -05</td>
</tr>
</tbody>
</table>

* Maximum leakage under normal operating conditions. Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

Typical filter attenuation

Per CISPR 17; A=50 Ω/50 Ω sym; B=50 Ω/50 Ω asym; C=0.1 Ω/100 Ω sym; D=100 Ω/0.1 Ω sym

Mechanical data

Dimensions

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>1 to 10 A</th>
<th>Tolerances</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>70</td>
<td>±0.5</td>
</tr>
<tr>
<td>B</td>
<td>69</td>
<td>±0.5</td>
</tr>
<tr>
<td>C</td>
<td>30.3</td>
<td>±1</td>
</tr>
<tr>
<td>D</td>
<td>50</td>
<td>±1</td>
</tr>
<tr>
<td>E</td>
<td>64.8</td>
<td>±1</td>
</tr>
<tr>
<td>F</td>
<td>60</td>
<td>±0.2</td>
</tr>
<tr>
<td>G</td>
<td>27</td>
<td>±0.5</td>
</tr>
<tr>
<td>H</td>
<td>12.3</td>
<td>±0.5</td>
</tr>
<tr>
<td>J</td>
<td>25</td>
<td>±0.5</td>
</tr>
<tr>
<td>K</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>6.3</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>6.3 x 0.8</td>
<td></td>
</tr>
</tbody>
</table>

All dimensions in mm; 1 inch = 25.4 mm
Tolerances according: ISO 2768-m/EN 22768-m
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