The generation of electromagnetic disturbance between equipment can interfere with system functionality. To maintain complete system functionality it is important to limit these types of interferences. KEMET’s complete line of EMI filtering products address EMI issues across a multitude of applications.

Many countries regulate equipment testing for EMI disturbance immunity and emission. These tests are often mandatory before the final product can be released into the marketplace. If there is a mandatory test, the permitted disturbance levels are defined in standards. If the product cannot meet the standards, the solution is often to add an EMI filter to the design.

EMI filters consist of combinations of capacitive and inductive elements that reduce the disturbance levels in the frequency range specified by the design.

KEMET offers a broad portfolio of EMI filters to accommodate a variety of applications:

**General Purpose Filters**
- A variety of PCB-mount and spade-lug terminated filters for standard line voltage up to 16 A
- Various configurations for moderate to high performance attenuation
- Applications include consumer goods, domestic appliances, business equipment, low-power switch mode power supplies and digital equipment

**IEC-Inlet / Power Entry Modules**
- Various configurations of IEC connectors, EMI filters, fuses, switches and voltage selectors
- Current ratings from 1 A to 16 A
- Applications include office equipment, computers and medical devices

**Chassis Mount Filters**
- Single and three phase filters with or without neutral connection, with various types of terminal blocks, screw terminals, bus-bars or flexible wires and different geometries
- Current ratings from 1 A to 2,500 A
- Voltage ratings from 250 to 690 VAC and 1,500 VDC
- Single or multi-stage options for alternative performance levels
- Applications include industrial frequency inverters, motor drives, switch mode power supplies, medical equipment and renewable energy systems

**Power & Small Signal Feed-Through Filters and Capacitors**
- A wide range of current ratings from 0.1 A to 800 A in various configurations of capacitors and inductors
- Excellent stability properties and attenuation up to the GHz region
- Applications include screen rooms, power supplies, medical, telecommunication systems and military equipment

**Special Purpose Filters**
- Power line filters for screen rooms
- DC filters for solar panel arrays
- Filters for light fittings

**Customized solutions**
- For applications requiring customized solutions, KEMET’s filter research and development team offers complete collaborative design services to meet your specific geometric and electrical specifications
# EMI Filters for Light Fittings

## Cylindrical Case General Purpose Filters

<table>
<thead>
<tr>
<th>Series</th>
<th>Current Rating (A)</th>
<th>Maximum Voltage Rating</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLH...DK</td>
<td>1.4 – 7</td>
<td>250 VAC</td>
<td>• Complies with EN/IEC 60939</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Complies with EN 55015 for light fittings</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• No increase in ground current</td>
</tr>
</tbody>
</table>

## General Purpose PCB Mount Filters

<table>
<thead>
<tr>
<th>Series</th>
<th>Current Rating (A)</th>
<th>Maximum Voltage Rating</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FNC</td>
<td>10 – 16</td>
<td>275 VAC</td>
<td>• Suited for consumer goods, appliances, vending machines, etc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Compact design, spade lug terminations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Push-fit or stud-mount options</td>
</tr>
<tr>
<td>FAA, FAH</td>
<td>0.5 – 10</td>
<td></td>
<td>• Compact PCB design</td>
</tr>
<tr>
<td>FLH</td>
<td>0.5 – 6</td>
<td>250 VAC</td>
<td>• High performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Medical application options</td>
</tr>
<tr>
<td>FAMAV</td>
<td>3.3 – 16</td>
<td></td>
<td>• High performance filter</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• High RF attenuation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Single or two stage designs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Medical application options</td>
</tr>
</tbody>
</table>

## Chassis Mount Single Phase Filters

### Chassis Mount Single Phase General Purpose Filters

<table>
<thead>
<tr>
<th>Series</th>
<th>Current Rating (A)</th>
<th>Maximum Voltage Rating</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAI</td>
<td>1 – 30</td>
<td>250 VAC</td>
<td>• Single or multistage chassis mount filters</td>
</tr>
<tr>
<td>FAK</td>
<td>3 – 20</td>
<td></td>
<td>• Metal enclosures, various terminations</td>
</tr>
<tr>
<td>FAM</td>
<td>1 – 40</td>
<td></td>
<td>• Medical versions available</td>
</tr>
<tr>
<td>FAR</td>
<td>0.5 – 8.5</td>
<td></td>
<td>• High symmetric and asymmetric attenuation</td>
</tr>
<tr>
<td>FAS</td>
<td>1 – 10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Chassis Mount Single Phase General Purpose Filters • Multistage

<table>
<thead>
<tr>
<th>Series</th>
<th>Current Rating (A)</th>
<th>Maximum Voltage Rating</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBK</td>
<td>10 – 30</td>
<td>250 VAC</td>
<td>• Multistage chassis mount filters</td>
</tr>
<tr>
<td>FBR</td>
<td>1 – 16</td>
<td></td>
<td>• Metal enclosures, various terminations</td>
</tr>
<tr>
<td>FBS</td>
<td>1 – 16</td>
<td></td>
<td>• Medical application options</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• General purpose, high and very high performance</td>
</tr>
</tbody>
</table>
## Chassis Mount Single Phase Filters

*Chassis Mount Single Phase High Performance Filters*

<table>
<thead>
<tr>
<th>Series</th>
<th>Current Rating (A)</th>
<th>Maximum Voltage Rating</th>
<th>Benefits</th>
</tr>
</thead>
</table>
| FLL2…AN  | 8 – 63             | 250 VAC                | • General applications  
              • High attenuation  
              • Industrial environments  
              • Motor drive   |

## Single Phase Power Line Filters for Shielded Rooms

<table>
<thead>
<tr>
<th>Series</th>
<th>Current Rating (A)</th>
<th>Maximum Voltage Rating</th>
<th>Benefits</th>
</tr>
</thead>
</table>
| FLL2…SR  | 1 – 100            | 480 VAC                | • High attenuation  
              • Multistage design   |

## Chassis Mount DC EMI Filters for Photovoltaic Inverters

<table>
<thead>
<tr>
<th>Series</th>
<th>Current Rating (A)</th>
<th>Maximum Voltage Rating</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLL2…PV</td>
<td>25 – 1,600</td>
<td>1,200 VDC</td>
<td>• Solar panel inverters</td>
</tr>
</tbody>
</table>

## Chassis Mount Three Phase Filters

*Chassis Mount Three Phase and Neutral Filters • General Purpose*

<table>
<thead>
<tr>
<th>Series</th>
<th>Current Rating (A)</th>
<th>Maximum Voltage Rating</th>
<th>Benefits</th>
</tr>
</thead>
</table>
| FLLD3…AW | 3 – 20             | 440 VAC                | • Good high frequency attenuation  
              • Screw or spade lug terminations  
              • Low profile and compact   |

## Chassis Mount Three Phase and Neutral Filters • High Performance

<table>
<thead>
<tr>
<th>Series</th>
<th>Current Rating (A)</th>
<th>Maximum Voltage Rating</th>
<th>Benefits</th>
</tr>
</thead>
</table>
| FLLD3…AB | 25 – 63            | 440 VAC                | • High symmetric and asymmetric attenuation  
              • Screw or terminal block connectors   |
| FLLD4…DN | 8 – 64             | 520 VAC                | • Low earth leakage  
              • Compact light weight  
              • Screw terminals  
              • Industrial environments   |
### Chassis Mount Three Phase Filters

**• High Performance • High Voltage**

<table>
<thead>
<tr>
<th>Series</th>
<th>Current Rating (A)</th>
<th>Maximum Voltage Rating</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLLD3…HN</td>
<td>8 – 450</td>
<td>520 VAC</td>
<td>• High performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• High attenuation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• High voltage</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Industrial environments</td>
</tr>
<tr>
<td>FLLD3…HNR2</td>
<td>8 – 300</td>
<td>520 VAC</td>
<td>• Slim design</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• High attenuation performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Safety block or thread terminations available</td>
</tr>
<tr>
<td>FLLD3…SH</td>
<td>8 – 130</td>
<td>520 VAC</td>
<td>• Slim design</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• High attenuation performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Multi-stage circuitry</td>
</tr>
<tr>
<td>FLLD3…FP</td>
<td>8 – 130</td>
<td>520 VAC</td>
<td>• Slim design</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• High attenuation performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Multi-stage circuitry</td>
</tr>
<tr>
<td>FLLD3…BN</td>
<td>7 – 180</td>
<td>520 VAC</td>
<td>• Slim design</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Industrial environments</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Motor run</td>
</tr>
</tbody>
</table>

### Chassis Mount Three Phase Filters • High Current • High Voltage

<table>
<thead>
<tr>
<th>Series</th>
<th>Current Rating (A)</th>
<th>Maximum Voltage Rating</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLLD3…PV</td>
<td>150 – 2,500</td>
<td>690 VAC</td>
<td>• Compact high current filter</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Alternative energy inverters (wind, solar, etc.)</td>
</tr>
</tbody>
</table>

### Feed-Through Filters and Capacitors

**Power Feed-Through Filters and Capacitors**

<table>
<thead>
<tr>
<th>Series</th>
<th>Current Rating (A)</th>
<th>Maximum Voltage Rating</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLLDH, FLLDU</td>
<td>16 – 300</td>
<td>250 / 440 VAC</td>
<td>• Single line, high performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• PI configuration</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Excellent attenuation up to GHz range</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Rugged sealed construction</td>
</tr>
<tr>
<td>FLLCC</td>
<td>25 – 800</td>
<td>440 VAC</td>
<td>• Single line, high performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• C configuration</td>
</tr>
</tbody>
</table>

### Small Signal Feed-Through Filters and Capacitors

<table>
<thead>
<tr>
<th>Series</th>
<th>Current Rating (A)</th>
<th>Maximum Voltage Rating</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFCL</td>
<td>1 – 10</td>
<td>250 VAC</td>
<td>• CL configuration</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Film dielectric</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Self-healing characteristics</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Excellent temperature stability</td>
</tr>
<tr>
<td>AFFI</td>
<td>0.5 – 30</td>
<td>630 VDC</td>
<td></td>
</tr>
<tr>
<td>AFCC 190</td>
<td>5 – 63</td>
<td>630 VDC</td>
<td></td>
</tr>
</tbody>
</table>
Countries and Areas listed below represent KEMET operations throughout the world.

Bulgaria  Indonesia  Singapore
China     Italy       South Korea
Finland   Japan       Sweden
France    Macedonia   Taiwan
Germany   Malaysia    United Kingdom
Hong Kong Mexico     USA
India     Portugal    

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