# Product data sheet

## Specifications

**Miniature circuit breaker (MCB), Multi9 C60SP, 2P, 1A, D curve, 10kA (UL1077), 10kA (IEC/EN 60947-2)**

M9F23201

**Product availability:** Stock - Normally stocked in distribution facility

**Price:** 218.00 USD

### Main

<table>
<thead>
<tr>
<th>Range</th>
<th>Multi9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name</td>
<td>Multi9 C60</td>
</tr>
<tr>
<td>Product or Component Type</td>
<td>Miniature circuit-breaker</td>
</tr>
<tr>
<td>Device short name</td>
<td>C60SP</td>
</tr>
<tr>
<td>Device Application</td>
<td>Distribution</td>
</tr>
<tr>
<td>Poles description</td>
<td>2P</td>
</tr>
<tr>
<td>Number of protected poles</td>
<td>2</td>
</tr>
<tr>
<td>Line Rated Current</td>
<td>1 A 77 °F (25 °C) EN/IEC 60947-2</td>
</tr>
<tr>
<td>Network type</td>
<td>DC, AC</td>
</tr>
<tr>
<td>Trip unit technology</td>
<td>Thermal-magnetic</td>
</tr>
<tr>
<td>Curve code</td>
<td>D</td>
</tr>
</tbody>
</table>

### Breaking capacity

- 14 kA AIR 240 V AC UL 1077
- 14 kA AIR 240 V AC CSA C22.2 No 235
- 10 kA AIR 480Y/277 V AC UL 1077
- 10 kA AIR 125 V DC UL 1077
- 10 kA AIR 480Y/277 V AC CSA C22.2 No 235
- 10 kA AIR 125 V DC CSA C22.2 No 235
- 6 kA Icu 440 V AC EN/IEC 60947-2
- 10 kA Icu 415 V AC EN/IEC 60947-2
- 20 kA Icu 240 V AC EN/IEC 60947-2
- 6 kA Icu 440 V AC GB 14048.2
- 10 kA Icu 415 V AC GB 14048.2
- 20 kA Icu 240 V AC GB 14048.2

### Suitability for isolation

Yes EN/IEC 60947-2

### Standards

- EN/IEC 60947-2
- GB 14048.2
- UL 1077
- CSA C22.2 No 235

### Product certifications

- IEC
- CCC
- UR
- CSA

### Complementary

<table>
<thead>
<tr>
<th>[Ue] rated operational voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>240 V AC 50/60 Hz</td>
</tr>
<tr>
<td>415 V AC 50/60 Hz</td>
</tr>
<tr>
<td>440 V AC 50/60 Hz</td>
</tr>
</tbody>
</table>

* Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.
<table>
<thead>
<tr>
<th>Magnetic tripping limit</th>
<th>12 x In +/- 20 % AC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17 x In +/- 20 % DC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>[Ics] rated service breaking capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5 kA 75 % EN/IEC 60947-2 - 440 V AC</td>
</tr>
<tr>
<td>7.5 kA 75 % EN/IEC 60947-2 - 415 V AC</td>
</tr>
<tr>
<td>15 kA 75 % EN/IEC 60947-2 - 240 V AC</td>
</tr>
<tr>
<td>4.5 kA 75 % GB 14048.2 - 440 V AC</td>
</tr>
<tr>
<td>7.5 kA 75 % GB 14048.2 - 415 V AC</td>
</tr>
<tr>
<td>15 kA 75 % GB 14048.2 - 240 V AC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>[Ui] rated insulation voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 V AC EN/IEC 60947-2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>[Uimp] rated impulse withstand voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 kV EN/IEC 60947-2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact position indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toggle</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Local signalling</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON/OFF indication</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mounting Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clip-on</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mounting Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIN rail</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9 mm pitches</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.19 in (81 mm)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.42 in (36 mm)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.83 in (72 mm)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gray</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mechanical durability</th>
</tr>
</thead>
<tbody>
<tr>
<td>20000 cycles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electrical durability</th>
</tr>
</thead>
<tbody>
<tr>
<td>10000 cycles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Provision for padlocking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Padlockable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Connections - terminals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tunnel type terminal top or bottom</td>
</tr>
<tr>
<td>0.00…0.04 in² (1…25 mm²) AWG 18…AWG 8) - rigid</td>
</tr>
<tr>
<td>Tunnel type terminal top or bottom</td>
</tr>
<tr>
<td>0.00…0.02 in² (1…16 mm²) AWG 18…AWG 8) - flexible with ferrule</td>
</tr>
<tr>
<td>Tunnel type terminal top or bottom</td>
</tr>
<tr>
<td>0.00…0.02 in² (1…16 mm²) AWG 18…AWG 8) - flexible</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wire stripping length</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.55 in (14 mm) for top or bottom connection</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tightening torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.13 lbf/in (2.5 N.m) top or bottom</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Earth-leakage protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environment</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>IP degree of protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP20 conforming to IEC 60529</td>
</tr>
<tr>
<td>IP40 (modular enclosure) conforming to IEC 60529</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pollution degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 EN/IEC 60947-2</td>
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<table>
<thead>
<tr>
<th>Tropicalisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 IEC 60068-1</td>
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<table>
<thead>
<tr>
<th>Relative humidity</th>
</tr>
</thead>
<tbody>
<tr>
<td>95 % 131 °F (55 °C)</td>
</tr>
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<table>
<thead>
<tr>
<th>Operating altitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>0…6561.68 ft (0…2000 m)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ambient air temperature for operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>-22…158 °F (-30…70 °C)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ambient Air Temperature for Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>-40…176 °F (-40…80 °C)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ordering and shipping details</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>00948-M9 GEN 2 CB UL1077 / IEC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Discount Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GTIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>3606481169068</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Returnability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country of origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR</td>
</tr>
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</table>

2
### Packing Units

<table>
<thead>
<tr>
<th>Unit Type of Package 1</th>
<th>PCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Units in Package 1</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Package 1 Height</strong></td>
<td>1.42 in (3.6 cm)</td>
</tr>
<tr>
<td><strong>Package 1 Width</strong></td>
<td>2.95 in (7.5 cm)</td>
</tr>
<tr>
<td><strong>Package 1 Length</strong></td>
<td>3.35 in (8.5 cm)</td>
</tr>
<tr>
<td><strong>Package 1 Weight</strong></td>
<td>8.25 oz (234.0 g)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit Type of Package 2</th>
<th>BB1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Units in Package 2</strong></td>
<td>6</td>
</tr>
<tr>
<td><strong>Package 2 Height</strong></td>
<td>3.15 in (8.0 cm)</td>
</tr>
<tr>
<td><strong>Package 2 Width</strong></td>
<td>3.46 in (8.8 cm)</td>
</tr>
<tr>
<td><strong>Package 2 Length</strong></td>
<td>8.86 in (22.5 cm)</td>
</tr>
<tr>
<td><strong>Package 2 Weight</strong></td>
<td>3.19 lb(US) (1.449 kg)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit Type of Package 3</th>
<th>S03</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Units in Package 3</strong></td>
<td>72</td>
</tr>
<tr>
<td><strong>Package 3 Height</strong></td>
<td>11.81 in (30.0 cm)</td>
</tr>
<tr>
<td><strong>Package 3 Width</strong></td>
<td>11.81 in (30.0 cm)</td>
</tr>
<tr>
<td><strong>Package 3 Length</strong></td>
<td>15.75 in (40.0 cm)</td>
</tr>
<tr>
<td><strong>Package 3 Weight</strong></td>
<td>39.52 lb(US) (17.928 kg)</td>
</tr>
</tbody>
</table>

### Offer Sustainability

<table>
<thead>
<tr>
<th>Sustainable offer status</th>
<th>Green Premium product</th>
</tr>
</thead>
<tbody>
<tr>
<td>REACh Regulation</td>
<td>REACh Declaration</td>
</tr>
<tr>
<td>EU RoHS Directive</td>
<td>Compliant</td>
</tr>
<tr>
<td>Mercury free</td>
<td>Yes</td>
</tr>
<tr>
<td>China RoHS Regulation</td>
<td>China RoHS declaration</td>
</tr>
<tr>
<td>RoHS exemption information</td>
<td>Yes</td>
</tr>
<tr>
<td>Environmental Disclosure</td>
<td>Product Environmental Profile</td>
</tr>
<tr>
<td>WEEE</td>
<td>The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.</td>
</tr>
<tr>
<td>Halogen content performance</td>
<td>Halogen free product</td>
</tr>
</tbody>
</table>

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**Recommended replacement(s)**