ESTAdry ACMKP
Low-Voltage Power Capacitors

KEY BENEFITS

• Compact design with high outputs up to 30 kvar
• Very low losses: < 0.25 W per kvar
• Optimized diameter and height for excellent heat dissipation
• Highest overcurrent capability: up to 3 times rated current
• Highest inrush current capability of 300 times rated current
• Life expectancy of > 130 000 operating hours

APPLICATIONS

• Recommended for power factor correction and filters in low-voltage (≤ 1000 V) applications

RESOURCES

• For technical questions contact esta@vishay.com
ESTAdry ACMKP
Low-Voltage Power Capacitors

TECHNICAL DATA

STANDARDS
IEC 09391-1 + 2 (15134)

Overvoltage
Ucn + 10 % (up to 480 V)
Ucn + 15 % (up to 525 V)
Ucn + 30 % (up to 660 V)

Overcurrent
1.3 x In
1.5 x In (with 10 % overvoltage, 15 % overcapacitance and harmonics included, continuous operation)

Tolerance on capacitance
± 5 %

Test voltage, terminal-to-terminal
2.15 x Ucn; AC; 2 s

Test voltage, terminal-to-casing
4800 V, AC; 2 s

Inrush current
300 times rated current in

Contact
≤ 0.25... ≤ 0.45 W/min

Statistical life expectancy
> 100,000 operating hours

Degree of protection
IP55 (terminal cover for higher protection class, for instance IP65; IP44 upon request, indoor mounting)

Ambient temperature category
– 45°C

Permitted casing temperature
Max. 65°C (measured on top of the can)

Permissible relative humidity
Maximum 95 %

Maximum allowed altitude
2000 meters above sea level

Mounting position
Vertical and horizontal

Mounting and grounding
Threaded M12 stud at the bottom of the container

Safety features
3-phase overvoltage tear-off fuse, self healing

Casing
Aluminum

Dielectric
Polypropylene film, self-healing

Impregnant
Dry capacitor, gas design

Terminals
Casing Ø 84 mm: MS screw-on terminals

DIMENSIONS

in millimeters

RATED VOLTAGE 400 V, 50 Hz, 3 PHASE, DELTA CONNECTION: IP00; D-203

<table>
<thead>
<tr>
<th>TYPE</th>
<th>ARTICLE NO.</th>
<th>OUTPUT cap 400 V</th>
<th>OUTPUT cap 415 V</th>
<th>CAPACITANCE μF</th>
<th>CURRENT A</th>
<th>VAC</th>
<th>DIA. mm</th>
<th>HEIGHT mm</th>
<th>WEIGHT kg</th>
<th>DRAWING</th>
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<tbody>
<tr>
<td>ACMKP525.3.10.90</td>
<td>5348-50803-xx</td>
<td>10.5</td>
<td>2 x 10.5</td>
<td>23.7 ± 0.8</td>
<td>14</td>
<td>84</td>
<td>140</td>
<td>8.0</td>
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<tr>
<td>ACMKP525.3.13.80</td>
<td>5348-50822-xx</td>
<td>13.8</td>
<td>2 x 13.8</td>
<td>29.4 ± 0.8</td>
<td>22</td>
<td>84</td>
<td>185</td>
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<tr>
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<td>5348-50831-xx</td>
<td>18.8</td>
<td>2 x 18.8</td>
<td>35.1 ± 0.8</td>
<td>29</td>
<td>84</td>
<td>230</td>
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<td>ACMKP525.3.20.00</td>
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RATED VOLTAGE 440 V/415 V, 50 Hz, 3 PHASE, DELTA CONNECTION: IP00; D-203

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<th>OUTPUT cap 415 V</th>
<th>CAPACITANCE μF</th>
<th>CURRENT A</th>
<th>VAC</th>
<th>DIA. mm</th>
<th>HEIGHT mm</th>
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RATED VOLTAGE 525 V/480 V, 50 Hz, 3 PHASE, DELTA CONNECTION: IP00; D-203

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<th>CAPACITANCE μF</th>
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<th>DIA. mm</th>
<th>HEIGHT mm</th>
<th>WEIGHT kg</th>
<th>DRAWING</th>
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