



# 規格承認書

(SPECIFICATION FOR APPROVAL)

File No.: Q/BH .TS16949.13TECH1303

Product Name: Capacitors for Power Electronics (PEC) -Rectangular

Product Type: DCMKP(UPS,大功率电源滤波电容器)

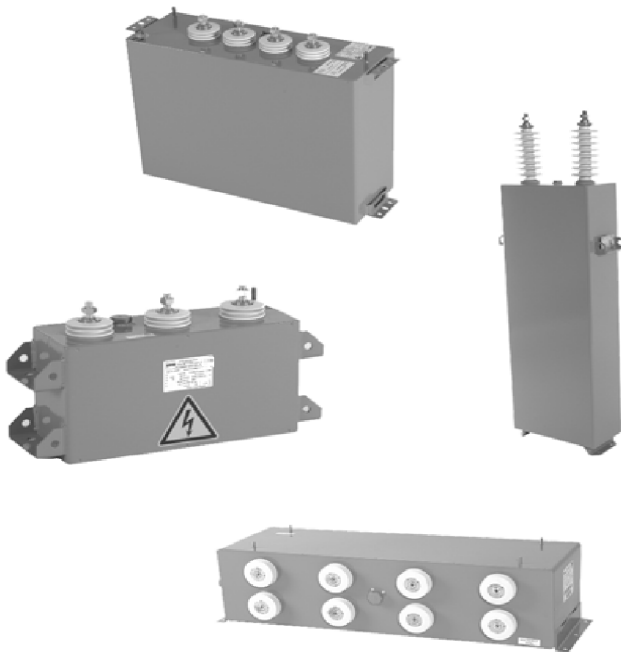
Product Code: DCMKP

Customer:

Customer Code:

Issue Date: (V3.0)

## Capacitors for Power Electronics (PEC) - Rectangular



### FEATURES

- High impulse current rating up to 600 A
- Low self inductance of < 30 nH
- High reliability and life expectancy
- Withstands heavy duty shock and vibration
- Non-polar dielectric
- Dry, resin filled

### APPLICATION

- DC linking in industrial and traction drives
- DC filtering in industrial and traction drives
- DC power storage for testing equipment
- Impulse discharge capacitors for magnetizing and welding

| QUICK REFERENCE DATA                   |  |
|--|--|
| DESCRIPTION                            | VALUE  |
| Rated DC voltage min.                  | 750 V  |
| Rated DC voltage max.                  | 10.0 kV  |
| Capacitance min.                       | 50 $\mu$ F   |
| Capacitance max.                       | 20 000 $\mu$ F   |
| Technology                             | Metallized polypropylene film  |
| Dissipation factor ( $\tan \delta_0$ ) | < $2 \times 10^{-4}$   |
| Capacitance tolerance                  | $\pm 5 \%$   |
| Operating temperature (hotspot)        | $\theta_{\min.} - 25 \text{ }^\circ\text{C}$<br>$\theta_{\max.} + 80 \text{ }^\circ\text{C}$                                     |
| Inductance                             | < 100 nH   |
| Lifetime expectancy                    | 250 000 h at $U_{\text{NDC}}$ and < 70 $^\circ\text{C}$ hotspot  |
| Reliability                            | 100 FIT  |
| Test voltage                           | Terminal/terminal = $1.5 \times U_{\text{NDC}}$ , 10 s;<br>Terminal/case = $2 \times U_{\text{NDC}} + 1000 V_{\text{AC}}$ , 60 s |
| Casing material                        | Aluminum or stainless steel, antimagnetic  |
| Filling                                | Resin polyurethane R40   |
| Standards                              | IEC 61071-1, IEC 61881, and EN 61071-1   |

| <b>TYPE DESCRIPTION</b>     |                        |                            |                        |                          |                          |                        |           |                |               |                |                |                |
|-----------------------------|------------------------|----------------------------|------------------------|--------------------------|--------------------------|------------------------|-----------|----------------|---------------|----------------|----------------|----------------|
| TYPE                        | C <sub>N</sub><br>[μF] | VOLTAGE<br>V <sub>DC</sub> | R <sub>S</sub><br>[mΩ] | R <sub>th</sub><br>[K/W] | I <sub>max.</sub><br>[A] | I <sub>p</sub><br>[kA] | î<br>[kA] | LENGTH<br>[mm] | WIDTH<br>[mm] | HEIGHT<br>[mm] | WEIGHT<br>[kg] | DRAWING<br>NO. |
| <b>DCMKP 0.9/625 μF</b>     |                        |                            |                        |                          |                          |                        |           |                |               |                |                |                |
| DCMKP 0.9/625 μF            | 625                    | 900                        | 0.1                    | 0.5                      | 500.0                    | 75                     | 225       | 340            | 175           | 510            | 40             | 07-B-1091      |
| <b>DCMKP 0.9/20 mF</b>      |                        |                            |                        |                          |                          |                        |           |                |               |                |                |                |
| DCMKP 0.9/20 mF             | 20 000                 | 900                        | 0.1                    | 0.5                      | 500.0                    | 75                     | 225       | 340            | 175           | 510            | 40             | 07-B-1091      |
| <b>DCMKP 1.1/9.0 mF</b>     |                        |                            |                        |                          |                          |                        |           |                |               |                |                |                |
| DCMKP 1.1/9.0 mF            | 9000                   | 1100                       | 0.8                    | 0.2                      | 100.0                    | 19                     | 58        | 280            | 175           | 480            | 31             | 07-B-1132      |
| <b>DCMKP 1.9/2.7 mF</b>     |                        |                            |                        |                          |                          |                        |           |                |               |                |                |                |
| DCMKP 1.9/2.7 mF            | 2700                   | 1900                       | 0.7                    | 0.4                      | 190.0                    | 10.5                   | 31.7      | 340            | 175           | 330            | 26             | 07-B-1285      |
| <b>DCMKP 1.9/4.0 mF/A</b>   |                        |                            |                        |                          |                          |                        |           |                |               |                |                |                |
| DCMKP 1.9/4.0 mF/A          | 4000                   | 1900                       | 0.5                    | 0.2                      | 300.0                    | 15.9                   | 47.6      | 340            | 175           | 505            | 39             | 07-B-1170      |
| <b>DCMKP 2.0/4.0 mF</b>     |                        |                            |                        |                          |                          |                        |           |                |               |                |                |                |
| DCMKP 2.0/4.0 mF            | 4000                   | 2000                       | 0.4                    | 0.5                      | 230.0                    | 16.1                   | 48.3      | 455            | 175           | 368            | 38             | 07-B-1270      |
| <b>DCMKP 2.0/7.25 mF</b>    |                        |                            |                        |                          |                          |                        |           |                |               |                |                |                |
| DCMKP 2.0/7.25 mF           | 7250                   | 2000                       | 0.5                    | 0.1                      | 240.0                    | 29.0                   | 87.2      | 340            | 175           | 820            | 63             | 07-B-1255      |
| <b>DCMKP 2.05/3.0 mF/B</b>  |                        |                            |                        |                          |                          |                        |           |                |               |                |                |                |
| DCMKP 2.05/3.0 mF/B         | 3000                   | 2050                       | 0.6                    | 0.3                      | 320                      | 12.5                   | 37.4      | 650            | 175           | 245            | 36             | 07-B-841       |
| <b>DCMKP 2.2/1.4 mF</b>     |                        |                            |                        |                          |                          |                        |           |                |               |                |                |                |
| DCMKP 2.2/1.4 mF            | 1400                   | 2200                       | 0.4                    | 0.5                      | 200.0                    | 13.2                   | 39.7      | 340            | 175           | 250            | 20             | 07-B-1230      |
| <b>DCMKP 2.8/4.0 mF/2</b>   |                        |                            |                        |                          |                          |                        |           |                |               |                |                |                |
| DCMKP 2.8/4.0 mF/2          | 4000                   | 2800                       | 0.3                    | 0.2                      | 560.0                    | 45.5                   | 136.6     | 1060           | 175           | 385            | 93             | 07-B-940       |
| <b>DCMKP 3.6/710 μF</b>     |                        |                            |                        |                          |                          |                        |           |                |               |                |                |                |
| DCMKP 3.6/710 μF            | 710                    | 3600                       | 0.6                    | 0.5                      | 240.0                    | 11.7                   | 35.0      | 455            | 340           | 175            | 35             | 07-B-1150      |
| <b>DCMKP 3.63/1.5 mF/2</b>  |                        |                            |                        |                          |                          |                        |           |                |               |                |                |                |
| DCMKP 3.63/1.5 mF/2         | 1500                   | 3630                       | 0.5                    | 0.3                      | 420.0                    | 20.0                   | 28.5      | 800            | 170           | 315            | 56             | 07-B-1134      |
| <b>DCMKP 3.75/1.25 mF/T</b> |                        |                            |                        |                          |                          |                        |           |                |               |                |                |                |
| DCMKP 3.75/1.25 mF/T        | 1250                   | 3750                       | 0.5                    | 0.3                      | 250.0                    | 20.7                   | 62.2      | 680            | 175           | 345            | 54             | 07-B-1265      |
| <b>DCMKP 4.0/625 μF</b>     |                        |                            |                        |                          |                          |                        |           |                |               |                |                |                |
| DCMKP 4.0/625 μF            | 625                    | 4000                       | 0.8                    | 0.7                      | 150.0                    | 10.1                   | 30.2      | 250            | 175           | 450            | 26             | 07-B-1311      |
| <b>DCMKP 4.25/2.57 mF/2</b> |                        |                            |                        |                          |                          |                        |           |                |               |                |                |                |
| DCMKP 4.25/2.57 mF/2        | 2570                   | 4250                       | 0.4                    | 0.3                      | 600.0                    | 36.8                   | 11.0      | 420            | 175           | 1140           | 109            | 07-B-1222      |
| <b>DCMKP 4.25/2.57 mF/4</b> |                        |                            |                        |                          |                          |                        |           |                |               |                |                |                |
| DCMKP 4.25/2.57 mF/4        | 2570                   | 4250                       | 0.4                    | 0.3                      | 600.0                    | 36.8                   | 11.0      | 420            | 175           | 1140           | 109            | 07-B-1222      |

**Notes**

- Every voltage, current, capacitance value, casing and terminal design is available on request
- All above listed types are for reference only!