

## Power Electronic Capacitors (PEC)



### FEATURES

- High impulse current rating
- Low inductance
- High reliability and lifetime expectation
- Resistance to heavy-duty shock vibration
- Non-polar dielectric
- Dry resin filled

### APPLICATIONS

- DC linking and harmonic filtering in industrial converters and traction converters and transportation
- DC linking in low-power drives
- Impulse discharge capacitors for magnetizing and welding

### ADDITIONAL RESOURCES

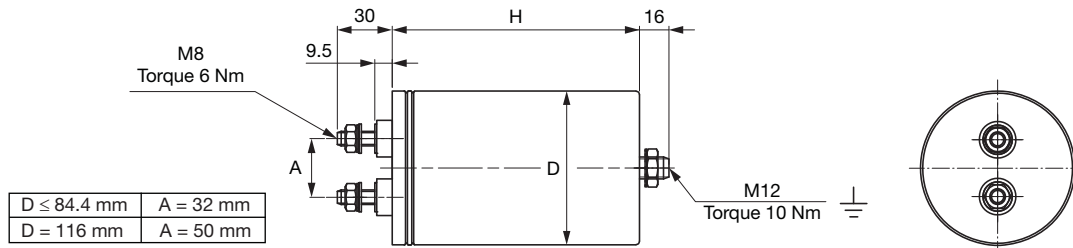

[3D Models](#)

QUICK REFERENCE DATA	
DESCRIPTION	VALUE
Rated DC voltage min.	880 V <sub>DC</sub>
Rated DC voltage max.	2200 V <sub>DC</sub>
Capacitance min.	30 μF
Capacitance max.	1000 μF
Capacitance tolerance	± 5 % or ± 10 %
Technology	Metallized polypropylene film, self-healing
Dielectric dissipation factor	< 2 x 10 <sup>-4</sup>
Operating temperature min.	-40 °C
Operating temperature max.	+85 °C (hotspot)
Inductance	< 100 nH
Lifetime expectancy	> 100 000 h at U <sub>NDC</sub> and < 70 °C hotspot
Reliability	< 200 FIT
Test voltage	U <sub>tt</sub> = 1.5 x U <sub>NDC</sub> /10 s; U <sub>tc</sub> = 2 x U <sub>NDC</sub> + 1000 V <sub>AC</sub> /10 s
Casing	Aluminum
Filling	Dry resin (UL 94 V-0)
Standard	IEC 61071, IEC 61881-1



TYPE DESCRIPTION											
TYPE DCMKP...-...IBR	C <sub>N</sub> (μF)	U <sub>NDC</sub> (V <sub>DC</sub> )	R <sub>S</sub> (mΩ)	R <sub>th</sub> (K/W)	I <sub>max.</sub> (A)	İ (kA)	İ <sub>S</sub> (kA)	H (mm)	DIA. (mm)	MOQ / PU (pcs)	DRAWING NO.
<b>DCMKP 880, U<sub>NDC</sub> = 880 V</b>											
880-200	200	880	3.0	10.4	27	0.8	2.3	105	64	9	1
880-270	270	880	4.2	8.3	26	0.7	2.2	130	64	9	1
880-370	370	880	1.8	8.4	38	1.4	4.2	105	84.4	4	1
880-510	510	880	2.4	6.7	38	1.4	4.2	130	84.4	4	1
<b>DCMKP 1.1, U<sub>NDC</sub> = 1100 V</b>											
1.1-130	130	1100	3.7	10.4	24	0.6	1.8	105	64	9	1
1.1-175	175	1100	5.1	8.3	24	0.6	1.8	130	64	9	1
1.1-240	240	1100	2.1	8.5	35	1.1	3.4	105	84.4	4	1
1.1-280	280	1100	8.0	5.7	22	0.6	1.8	185	64	9	1
1.1-330	330	1100	2.9	6.8	34	1.1	3.4	130	84.4	4	1
1.1-525	525	1100	4.6	4.8	33	1.1	3.4	185	84.4	4	1
1.1-1000	1000	1100	2.6	3.7	50	2.1	6.3	185	116	4	1
<b>DCMKP 1.3, U<sub>NDC</sub> = 1300 V</b>											
1.3-90	90	1300	4.3	10.4	22	0.5	1.5	105	64	9	1
1.3-120	120	1300	6.1	9.3	20	0.5	1.5	130	64	9	1
1.3-165	165	1300	2.5	8.6	31	0.9	2.8	105	84.4	4	1
1.3-195	195	1300	9.5	5.8	21	0.5	1.5	185	64	9	1
1.3-230	230	1300	3.4	6.9	31	0.9	2.8	130	84.4	4	1
1.3-365	365	1300	5.3	4.8	31	0.9	2.8	185	84.4	4	1
1.3-710	710	1300	3.0	3.8	46	1.7	5.2	185	116	4	1
<b>DCMKP 1.55, U<sub>NDC</sub> = 1550 V</b>											
1.55-65	65	1550	5.1	10.5	19	0.4	1.3	105	64	9	1
1.55-90	90	1550	6.9	8.4	20	0.4	1.3	130	64	9	1
1.55-120	120	1550	2.9	8.7	28	0.8	2.4	105	84.4	4	1
1.55-145	145	1550	11.0	5.8	19	0.4	1.3	185	64	9	1
1.55-165	165	1550	4.0	7.0	29	0.8	2.4	130	84.4	4	1
1.55-265	265	1550	6.2	4.9	28	0.8	2.4	185	84.4	4	1
1.55-520	520	1550	3.5	3.8	42	1.5	4.5	185	116	4	1
<b>DCMKP 1.75, U<sub>NDC</sub> = 1750 V</b>											
1.75-50	50	1750	5.5	10.4	19	0.4	1.1	105	64	9	1
1.75-65	65	1750	7.9	8.4	18	0.4	1.1	130	64	9	1
1.75-90	90	1750	3.2	8.7	27	0.7	2.1	105	84.4	4	1
1.75-110	110	1750	12.2	5.8	18	0.4	1.1	185	64	9	1
1.75-125	125	1750	4.3	7.0	27	0.7	2.1	130	84.4	4	1
1.75-200	200	1750	6.9	4.9	26	0.7	2.1	185	84.4	4	1
1.75-390	390	1750	3.9	3.9	40	1.3	3.9	185	116	4	1

TYPE DESCRIPTION											
TYPE DCMKP...-...IBR	C <sub>N</sub> (μF)	U <sub>NDC</sub> (V <sub>DC</sub> )	R <sub>S</sub> (mΩ)	R <sub>th</sub> (K/W)	I <sub>max.</sub> (A)	Î (kA)	Î <sub>S</sub> (kA)	H (mm)	DIA. (mm)	MOQ / PU (pcs)	DRAWING NO.
<b>DCMKP 2.0, U<sub>NDC</sub> = 2000 V</b>											
2.0-35	35	2000	6.8	10.7	16	0.3	0.9	105	64	9	1
2.0-50	50	2000	9.1	8.5	17	0.3	0.9	130	64	9	1
2.0-70	70	2000	3.6	8.8	25	0.6	1.8	105	84.4	4	1
2.0-85	85	2000	13.9	5.6	17	0.3	1.0	185	64	9	1
2.0-110	110	2000	4.8	7	26	0.6	1.9	130	84.4	4	1
2.0-160	160	2000	7.6	5.7	23	0.6	1.9	185	84.4	4	1
2.0-310	310	2000	4.3	3.9	38	1.2	3.5	185	116	4	1
<b>DCMKP 2.2, U<sub>NDC</sub> = 2200 V</b>											
2.2-30	30	2200	7.1	10.5	16	0.3	0.9	105	64	9	1
2.2-40	40	2200	10.2	8.5	16	0.3	0.9	130	64	9	1
2.2-55	55	2200	4.1	8.9	23	0.5	1.5	105	84.4	4	1
2.2-70	70	2200	15.1	5.8	16	0.3	0.9	185	64	9	1
2.2-80	80	2200	5.3	7	24	0.6	1.8	130	84.4	4	1
2.2-130	130	2200	8.4	4.9	24	0.6	1.7	185	84.4	4	1
2.2-250	250	2200	4.71	3.9	36	1.1	3.1	185	116	4	1

**DIMENSIONS** in millimeters


Drawing 1

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Other voltage, current, and capacitance values are available on request without additional cost and lead time for the individual design.



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