

Power Electronic Capacitors (PEC)



FEATURES

- High ripple current
- High impulse current
- Low inductance
- High reliability and long life time
- Shock and vibration proof

APPLICATIONS

- DC link and DC filter in industrial converters and traction converters
- DC link in low-power drives
- DC link in wind turbine converters
- Impulse discharge capacitors for magnetizing and welding

QUICK REFERENCE DATA

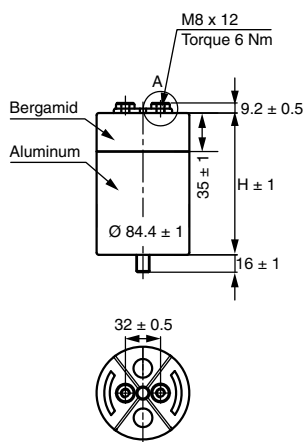
DESCRIPTION	VALUE
Rated DC voltage min.	900 V _{DC}
Rated DC voltage max.	2700 V _{DC}
Capacitance min.	40 µF
Capacitance max.	2235 µF
Capacitance tolerance	± 5 % or ± 10 %
Technology	Metallized polypropylene film, self-healing
Dielectric dissipation factor	< 2 x 10 ⁻⁴
Operating temperature min.	-40 °C
Operating temperature max.	+85 °C (hotspot)
Inductance	< 100 nH
Lifetime expectancy	> 100 000 h at U _{NDC} and < 70 °C hotspot
Reliability	< 100 FIT
Test voltage	U _{tt} = 1.5 x U _{NDC} /10 s; U _{tc} = 2 x U _{NDC} + 1000 V _{AC} /10 s
Casing	Aluminum / plastic
Filling	Dry resin (UL 94 V-0)
Standard	IEC 61071, IEC 61881-1



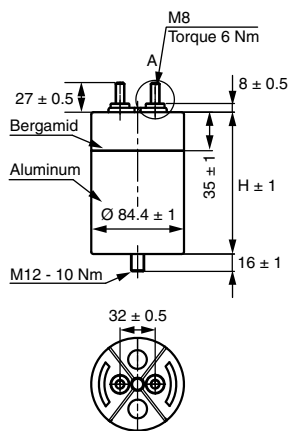
TYPE DESCRIPTION											
TYPE HDMKP...-...B / I	C_N (μF)	U_{NDC} (V_{DC})	R_S (mΩ)	R_{th} (K/W)	I_{max.} (A)	Î (kA)	Î_S (kA)	H (mm)	DIA. (mm)	MOQ / PU (pcs)	DRAWING NO.
HDMKP 900, U_{NDC} = 900 V											
900-360	360	900	1.8	8.5	39	1.4	4.1	105	84.4	4	1 and 2
900-460	460	900	2.6	6.9	37	1.3	3.8	135	84.4	4	1 and 2
900-720	720	900	1.3	4.1	78	2.7	8.1	185	84.4	4	1 and 2
900-950	950	900	1.7	3.3	66	2.6	7.8	235	84.4	4	1 and 2
900-1080	1080	900	0.8	2.9	100	4.1	12.2	260	84.4	4	1 and 2
900-2050	2050	900	1.0	2.4	100	5.3	15.9	235	116	4	3 and 4
900-2235	2235	900	0.5	2.2	150	7.9	23.7	260	116	4	3 and 4
HDMKP 1.1, U_{NDC} = 1100 V											
1.1-240	240	1100	2.1	8.5	36	1.1	3.4	105	84.4	4	1 and 2
1.1-325	325	1100	2.9	6.8	35	1.1	3.3	135	84.4	4	1 and 2
1.1-480	480	1100	1.3	4.4	65	2.3	6.8	185	84.4	4	1 and 2
1.1-650	650	1100	1.7	3.5	64	2.2	6.7	235	84.4	4	1 and 2
1.1-720	720	1100	0.8	3.3	93	3.4	10.1	260	84.4	4	1 and 2
1.1-1310	1310	1100	1.2	2.5	92	4.1	12.4	235	116	4	3 and 4
1.1-1425	1425	1100	0.6	2.3	136	6.2	18.6	260	116	4	3 and 4
HDMKP 1.35, U_{NDC} = 1350 V											
1.35-160	160	1350	2.6	8.7	32	0.9	2.7	105	84.4	4	1 and 2
1.35-200	200	1350	1.1	5.9	57	1.8	5.4	135	84.4	4	1 and 2
1.35-320	320	1350	1.7	4.3	57	1.8	5.4	185	84.4	4	1 and 2
1.35-400	400	1350	2.4	3.5	54	1.6	4.9	235	84.4	4	1 and 2
1.35-480	480	1350	1.1	3.1	84	2.7	8.1	260	84.4	4	1 and 2
1.35-910	910	1350	1.3	2.6	84	3.5	10.5	235	116	4	3 and 4
1.35-990	990	1350	0.6	2.3	126	5.2	15.5	260	116	4	3 and 4
HDMKP 1.5, U_{NDC} = 1500 V											
1.5-120	120	1500	2.9	8.7	31	0.8	2.4	105	84.4	4	1 and 2
1.5-165	165	1500	4.0	6.9	30	0.8	2.4	135	84.4	4	1 and 2
1.5-240	240	1500	1.8	4.3	56	1.6	4.8	185	84.4	4	1 and 2
1.5-330	330	1500	2.4	3.4	55	1.6	4.8	235	84.4	4	1 and 2
1.5-360	360	1500	1.2	3.1	81	2.4	7.2	260	84.4	4	1 and 2
1.5-620	620	1500	1.5	2.6	80	2.9	8.6	235	116	4	3 and 4
1.5-675	675	1500	0.7	2.4	121	4.3	12.9	260	116	4	3 and 4
HDMKP 1.7, U_{NDC} = 1700 V											
1.7-90	90	1700	3.2	8.7	28	0.7	2.1	105	84.4	4	1 and 2
1.7-125	125	1700	4.3	6.9	28	0.7	2.1	135	84.4	4	1 and 2
1.7-180	180	1700	1.9	4.4	51	1.4	4.2	185	84.4	4	1 and 2
1.7-250	250	1700	2.6	3.5	50	1.4	4.2	235	84.4	4	1 and 2
1.7-270	270	1700	1.2	3.2	76	2.1	6.3	260	84.4	4	1 and 2
1.7-460	460	1700	1.6	2.7	74	2.5	7.6	235	116	4	3 and 4
1.7-495	495	1700	0.8	2.4	111	3.8	11.4	260	116	4	3 and 4
HDMKP 2.0, U_{NDC} = 2000 V											
2.0-70	70	2000	3.6	8.8	26	0.6	1.8	105	84.4	4	1 and 2
2.0-90	90	2000	5.3	7.1	25	0.6	1.7	135	84.4	4	1 and 2
2.0-140	140	2000	2.1	4.5	48	1.2	3.6	185	84.4	4	1 and 2
2.0-180	180	2000	3.1	3.6	45	1.1	3.4	235	84.4	4	1 and 2
2.0-210	210	2000	1.3	3.3	71	1.8	5.4	260	84.4	4	1 and 2
2.0-390	390	2000	1.7	2.7	72	2.3	6.8	235	116	4	3 and 4
2.0-420	420	2000	0.8	2.4	106	3.4	10.3	260	116	4	3 and 4

TYPE DESCRIPTION											
TYPE HDMKP...-...B / I	C _N (μF)	U _{NDC} (V _{DC})	R _S (mΩ)	R _{th} (K/W)	I _{max.} (A)	Î (kA)	Î _S (kA)	H (mm)	DIA. (mm)	MOQ / PU (pcs)	DRAWING NO.
HDMKP 2.25, U_{NDC} = 2250 V											
2.25-55	55	2250	4.1	8.9	24	0.5	1.6	105	84.4	4	1 and 2
2.25-75	75	2250	5.7	7.1	23	0.5	1.6	135	84.4	4	1 and 2
2.25-110	110	2250	2.4	4.6	44	1.1	3.2	185	84.4	4	1 and 2
2.25-150	150	2250	3.3	3.6	44	1.1	3.2	235	84.4	4	1 and 2
2.25-165	165	2250	1.5	3.3	65	1.6	4.8	260	84.4	4	1 and 2
2.25-320	320	2250	1.8	2.7	68	2.1	6.2	235	116	4	3 and 4
2.25-345	345	2250	0.9	2.5	99	3.1	9.3	260	116	4	3 and 4
HDMKP 2.7, U_{NDC} = 2700 V											
2.7-40	40	2700	4.6	8.8	22	0.5	1.4	105	84.4	4	1 and 2
2.7-50	50	2700	7.0	7.2	21	0.4	1.3	135	84.4	4	1 and 2
2.7-80	80	2700	2.7	4.6	41	0.9	2.8	185	84.4	4	1 and 2
2.7-100	100	2700	3.9	3.7	39	0.8	2.5	235	84.4	4	1 and 2
2.7-120	120	2700	1.7	3.3	61	1.4	4.2	260	84.4	4	1 and 2
2.7-220	220	2700	2.1	2.8	62	1.7	5.1	235	116	4	3 and 4
2.7-240	240	2700	1.0	2.5	91	2.6	7.7	260	116	4	3 and 4

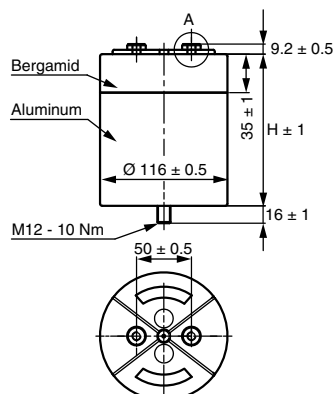
DIMENSIONS in millimeters



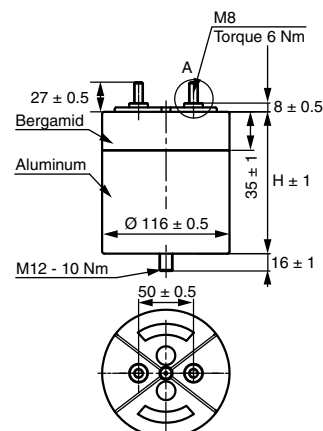
Drawing 1
i.e.: HDMKP...-...I



Drawing 2
i.e.: HDMKP...-...B



Drawing 3
i.e.: HDMKP...-...I



Drawing 4
i.e.: HDMKP...-...B

Contact Us

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



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