■General Technical Characteristics 一般特性

High specific energy density, strong energy storage of the capacitors.
Low ESR, high ripple current and large peak current shock handling capabilities.
Low inductance, large dv/dt, good frequency characteristics.
Self-healing property.
Long lifetime ≥100,000h.
High vacuum oiling, good heat dissipation, stable and reliable performance of the capacitors
Huge capacitance.
High thermal conductivity.

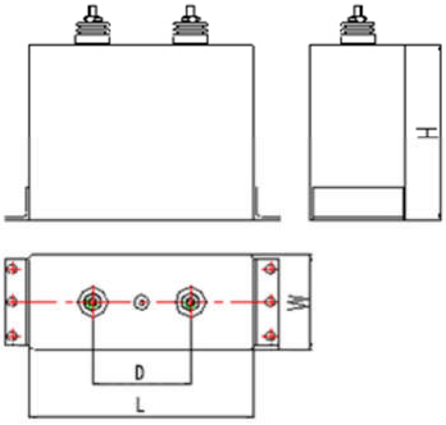
■Typical Applications 典型应用

Used in rail transit traction or ship drive converter.
Used in magnetizer, demagnetizer, laser power supply, medical equipment and energy storage welding machine.
Used in various high-power industrial inverters, such as high-voltage variable frequency drive device.
Used in power harmonic governance and SVG equipment.

■GENERAL TECHNICAL CHARACTERISTICS 技术特性

Case 外壳材料	Aluminum, plastic, 304 stainless steel
Output 引出端	Tinned brass fastens or screws
Installation 安装位置	Whatever Position
Recommended torque for screw connections 推荐连接扭矩	Internal thread M6-3Nm, M8-6Nm

■OUTLINE DRAWING 外形图



D: ≥60mm,
depends on customer's requirement.

■ELECTRICAL CHARACTERISTICS 电气特性

Reference standards 参考标准	IEC 61071, IEC 61881
Operating temperature 运行温度	- 40 to + 70 ℃ (hotspot temperature)
Storage temperature 存储温度	- 40 to + 85 ℃
θ HOTSPOT 存储温度	+ 70℃(oil), + 85 ℃(Dry)
Capacitance range 容量范围	500 to 5000μF
Rated voltage range 额定电压	1000 to 5000 Vdc
Capacitance tolerance 容量偏差	± 5%, ± 10%
Dissipation factor tan δ 损耗角正切	≤3×10^{-3} Measured at 100 Hz and 20±5℃
Life expectancy 预期寿命	≥100,000 hours at U_N

■TEST METHODS AND PERFORMANCES 测试方法

Test voltage terminal to terminal U_{TT} 两端耐压	(1.3~1.5)U_N for 10s
Test voltage terminal to case U_{TC} 端壳耐压	(2Un+1000)VAC/50Hz for 60s
Permissible relative humidity 允许相对湿度	75% Annual average ≤ on 30 days / year
Climatic Category IEC 气候类别	40/85/21
Failure rate 失效率	50 FIT
Capacitance deviation in the operating temperature range of -25℃ to +70℃	±1.5% max on capacitance value measured at +20℃

■HOW TO ORDER:

K1P	302D	108	K	S	M	A	***
Series Code:	Voltage:	Capacitance:	Cap. Tol.:	Shape:	Output:	Style:	Internal
K1P:	102D: 1000Vdc	108: 1000μF	J: ± 5%,	S: Square	F: Thread	A	Code
AGP Series	152D: 1500Vdc	158: 1500μF	K: ± 10%		M: Lead screw		

■ELECTRICAL SPECIFICATION 规格型号参考

Unit: mm

Part Number	Cap. (μF)	Dimension L	W	H	Imax (A)
U_{NDC} 1000Vdc					
K1P102D507KS## ***	500	180	100	160	50
K1P102D108KS##***	1000	230	100	210	95
K1P102D158KS##***	1500	250	120	220	108
K1P102D208KS##***	2000	250	120	270	144

Remark: 1. ## Output and style; *** Internal code.
2. Customization for special specification and requirement is available.

■ELECTRICAL SPECIFICATION 规格型号参考 Unit: mm

Part Number	Cap. (μF)	Dimension L	W	H	Imax (A)
U_{NDC} 1000Vdc					
K1P102D228KS##***	2200	280	120	260	159
K1P102D248KS##***	2400	300	120	270	173
K1P102D308KS##***	3000	300	120	325	217
K1P102D358KS##***	3500	340	120	320	250
K1P102D478KS##***	4700	450	120	320	335
K1P102D508KS##***	5000	350	120	430	358
U_{NDC} 1200Vdc					
K1P122D507KS##***	500	240	100	160	57
K1P122D108KS##***	1000	230	120	210	83
K1P122D128KS##***	1200	280	120	210	100
K1P122D158KS##***	1500	320	120	230	127
K1P122D208KS##***	2000	340	120	265	166
K1P122D258KS##***	2500	320	120	340	200
K1P122D408KS##***	4000	340	120	480	330
U_{NDC} 1500VDC					
K1P152D507KS##***	500	230	120	160	48
K1P152D108KS##***	1000	300	120	215	95
K1P152D158KS##***	1500	340	120	260	144
K1P152D208KS##***	2000	350	120	325	192
K1P152D258KS##***	2500	360	120	390	240
K1P152D328KS##***	3200	350	120	490	308
U_{NDC} 1600Vdc					
K1P162D407KS##***	400	240	120	160	45
K1P162D807KS##***	800	240	120	270	87
K1P162D108KS##***	1000	290	120	265	109
K1P162D128KS##***	1200	340	120	270	130
K1P162D248KS##***	2400	340	120	480	263
U_{NDC} 1800Vdc					
K1P182D108KS##***	1000	320	120	290	122
K1P182D208KS##***	2000	320	120	530	220
U_{NDC} 2000Vdc					
K1P202D507KS##***	500	320	120	230	75
K1P202D108KS##***	1000	320	120	410	150
K1P202D208KS##***	2000	380	120	650	300
U_{NDC} 2500Vdc					
K1P252D257KS##***	250	230	120	210	40
K1P252D507KS##***	500	310	120	290	80
K1P252D108KS##***	1000	340	120	480	166
U_{NDC} 3000Vdc					
K1P302D257KS##***	250	230	120	260	48
K1P302D507KS##***	500	350	120	325	96
K1P302D108KS##***	1000	350	120	600	190
U_{NDC} 3500Vdc					
K1P352D257KS##***	250	350	120	270	60
K1P352D507KS##***	500	350	120	490	120
U_{NDC} 4000Vdc					
K1P402D257KS##***	250	380	120	350	73
K1P402D507KS##***	500	380	120	650	150
U_{NDC} 5000Vdc					
K1P502D207KS##***	200	350	120	375	65
K1P502D257KS##***	250	500	120	320	80
K1P502D507KS##***	500	520	120	320	164

Remark: 1. ## Output and style; *** Internal code.

2. Customization for special specification and requirement is available.