

# MKPD-AP Series

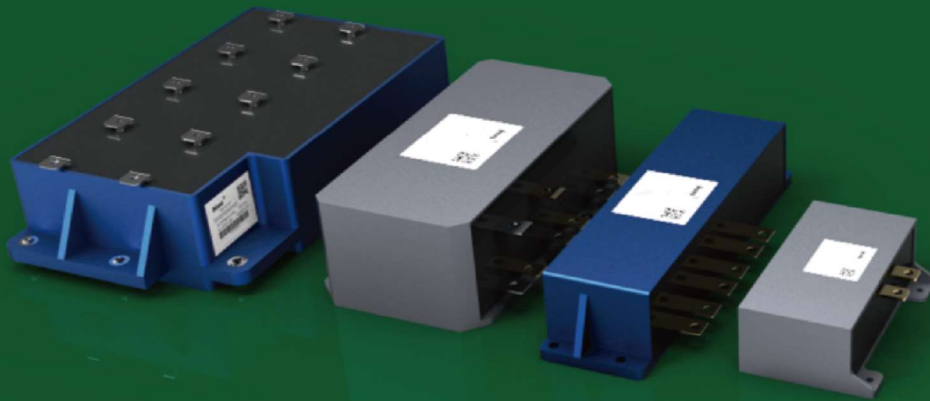
## 应用 / Application

● 针对节能环保新能源汽车配套的HEV/EV电驱控制器，为不同功率等级电驱提供解决方案；

For energy saving and environmental protection of new energy vehicles supporting the HEV/EV electric drive controller for different power levels of electric drive to provide solutions.

● 广泛应用于DC-LINK电路中，作直流滤波储能。

Widely used in DC-LINK circuit for DC filter energy storage.



## 特点 / Introduction

● 采用特殊结构材料设计，自愈性好，低损耗角，低等效串联电阻，低温升；

Special structure material design, self healing, low loss angle, low equivalent series resistance, low temperature rise;

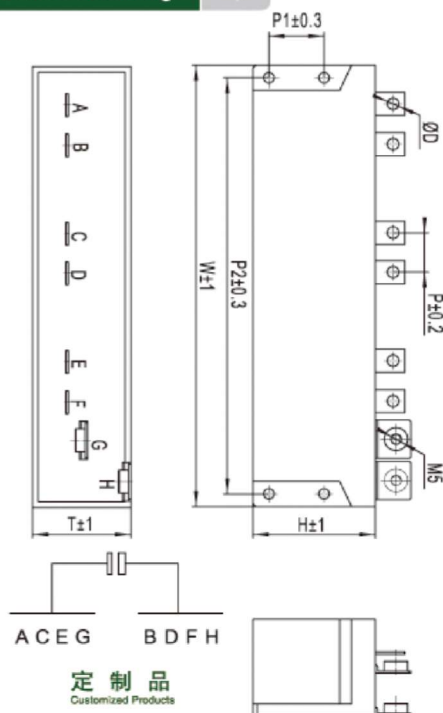
● 叠式母排引出，低杂散电感，广泛应用于IGBT直联式安装；

Stack type bus leads to low inductance, are widely used in the IGBT style, direct mounting;

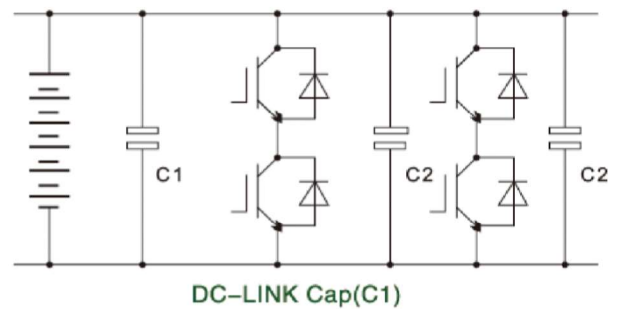
● 高温高导注塑塑料灌注，在高温高湿复杂的应用环境下，可长期稳定工作。

High temperature and high injection plastic perfusion, can long life work in high temperature and high humidity complex application environment.

## 外形图 / Outline Drawing



## 典型线路图 / Typical Circuit



## 技术参数 / Technical Data

执行标准 Implemented Standard	IEC61071、AEC Q200D
气候等级 Climatic Category	40/105/56
额定电压 (Un) Rated Voltage	200V.DC~1200V.DC
容量范围 (Cn) Capacitance Range	200 $\mu$ F~2000 $\mu$ F
电驱功率范围 (KW) Electric Drive Power Range	10KW~160KW
容量偏差 Capacitance Tolerance	$\pm 5\%$ (J)、 $\pm 10\%$ (K)
耐电压 Withstand Voltage	
极间 Between Terminals	1.5Un(VDC)/60S
极壳 Between Terminals And Case	3000V.AC/50Hz, 10S
绝缘电阻 Insulation Resistance	$\geq 10000S(100VDC, 60S \text{ at } 20^\circ C)$

## 订制品说明

● 由于客户实际使用环境的不同，与设计布局的迥异。我们将根据客户提供的信息，最大合理化提供电容器设计方案。所以请务必给我们提供与电容相关的电气特性、机械配合信息，并与我们的设计人员密切保持沟通；我们将在第一时间内为您拟定方案、制作技术规格书。

Because of the actual use of the environment, and the different design layout. According to the information provided by our customers, we will provide the most reasonable design scheme for the capacitor. So please be sure to provide us with the electrical characteristics of the electrical characteristics, machinery with information, and to maintain close communication with our designers; We will draw up a plan for you in the first time, the technical specification.

# 直流滤波电容

## DC-Filter Capacitor



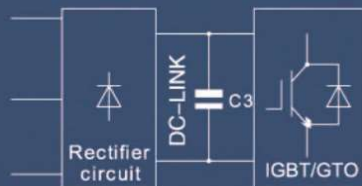
### MKPD-LS Series



#### 应用 / Application

- 广泛应用于DC-LINK电路中，作滤波储能用；  
Widely used in DC-LINK circuit for filtering energy storage;
- 能替代电解电容，性能更优，寿命更长；  
Can replace electrolytic capacitors, better performance and longer life;
- 风能发电，光伏发电用逆变器；各种变频器；电动汽车及混合动力车；SVG、电焊机、电源、感应加热设备。  
Wind power ,photovoltaic power inverter;electric vehicles and hybrid vehicles,SVG,welding equipment,power supplies and induction heating equipment,for the DC link filter.

#### 典型应用电路 / Typical Circuit

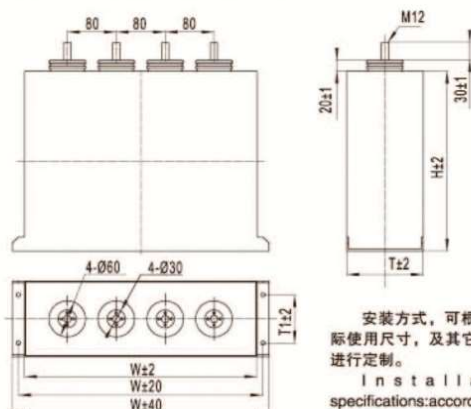


Wind power ,photovoltaic power inverter;electric vehicles and hybrid vehicles,SVG,welding equipment,power supplies and induction heating equipment,for the DC link filter.

#### 特点 / Introduction

- 金属外壳封装，高温高导填充料注塑；  
Metal enclosure package, high temperature and high conductive filler injection molding;
- 引出形式多样化选择，安装简单方便，阻燃定位盖绝缘；  
Leads to the form of diverse choices , installation is simple and convenient, flame retardant positioning cover insulation;
- 容值高，体积小，高耐压水平，自愈性强；  
High capacitance, small size, high pressure level, self healing;
- 大纹波电流，DV/DT承受能力。  
Large ripple current, DV/DT bearing capacity.

#### 外形图 / Outline Drawing



安装方式，可根据客户实际使用尺寸，及其它相关参数进行定制。  
Installation specifications: according to the actual size of customers, and other related parameters to customize.

#### 订制品 Customized Products

引出方式及材质 Extraction methods and materials			
螺母型 Nut Type	M6*Φ15	方块电极 Block Electrode	M6、M8 螺孔/Screw
	M8*Φ20	外壳材质 Shell material	
	M8	不锈钢、铝 Stainless steel, aluminum	
螺杆型 Screw Type	M10	引出材质 Lead Material	
	M12	紫铜 Copper	

#### 常用规格 / Dimension

##### 谐振电源直流滤波用

Un(V.DC)	Cn(μF)	ESR(mΩ)	DV/DT(V/μS)	Irms(A) @40°C	外形尺寸(mm)	引出M6nut脚距P(mm)
800	30	≤2.5	50	50A	95*74*30	28-30
	45	≤2.5	50	50A	95*74*45	28-30
	50	≤2.5	50	50A	95*74*45	28-30

##### SVG/SVC直流滤波用

Un(V.DC)	Cn(μF)	ESR(mΩ)	DV/DT(V/μS)	Irms(A) @40°C	外形尺寸(mm)	引出M6nut脚距P(mm)
1200	700	≤1.2	12	85A	240*88*120	80
	900	≤1.0	12	85A	240*88*120	80

##### DC-LINK直流滤波用

Un(V.DC)	Cn(μF)	ESR(mΩ)	DV/DT(V/μS)	Irms(A) @40°C	外形尺寸(mm)	引出脚距P M12 screw(mm)
2000	800	≤1.2	12	120A	340*125*190	80
	4000	≤0.8	10	280A	420*235*360	80
3000	660	≤1.0	12	150A	420*235*175	80
	1250	≤0.8	10	200A	420*235*360	80

#### 技术参数 / Technical Data

执行标准 Implemented Standard	IEC61070、IEC61881
气候等级 Climatic Category	40/85/21
额定电压 (Un) Rated Voltage	450V.DC-6000V.DC
容量范围 (Cn) Capacitance Range	30 μ F-20000 μ F
容量偏差 Capacitance Tolerance	± 5%(J)、± 10%(K)
耐电压 Withstand Voltage	
极间 Between Terminals	1.5Un(VDC)/60S
极壳 Between Terminals And Case	1000+2xUn/√2V.AC 60S
绝缘电阻 Insulation Resisitance	≥ 10000S(100VDC,10S at 50Hz)



# 滤波 / 耦合电容

Filter / Coupling Capacitor

**SPGL**  
STANDARD-POWER

## MKPD-MT Series



### 应用 / Application

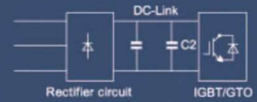
● 广泛应用于DC-LINK电路中, 作高频滤波和退耦用途;

Widely used in DC-LINK circuit for High-frequency filtering and decoupling;

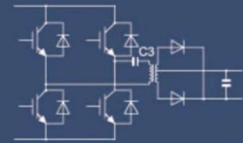
● 广泛应用于电力电子电路中, 作隔离耦合用途。

Widely used in power electronic circuits, for coupling purposes.

### 典型应用电路 / Typical Circuit



Filter/Decoupling capacitors (C2)



Coupling capacitors (C3)

### 特点 / Introduction

● 玛拉胶带封装, 阻燃环氧树脂注塑;

Mylar tape package, flame retardant epoxy resin injection molding;

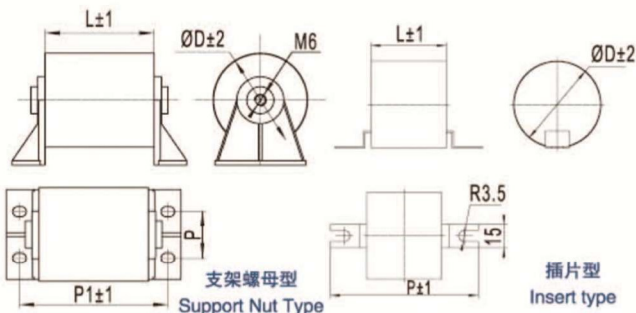
● 安装灵活方便, 引出方式可多样化选择;

The installation is flexible and convenient, and the way of extraction can be varied;

● 无感式结构, ESL低、ESR小, 高频大电流承受能力, 温升低, 寿命长等特点。

Non inductive structure, ESL low, ESR small, high frequency and high current capacity, temperature low, long life and other characteristics.

### 外形图 / Outline Drawing



### 技术参数 / Technical Data

执行标准 Implemented Standard	GB/T 17702、IEC61071
气候等级 Climatic Category	40/85/21
额定电压 (Un) Rated Voltage	350V.DC~2000V.DC
容量范围 (Cn) Capacitance Range	10 μ F~200 μ F
容量偏差 Capacitance Tolerance	± 5%(J)、± 10% (K)
耐电压 Withstand Voltage	
极间 Between Terminals	1.5Un(VDC)/60S
绝缘电阻 Insulation Resistance	≥ 5000S(100VDC,60S at 20°C)

### 常用规格 / Dimension

Cn(μ F)	Φ D(mm)	L(mm)	ESR@ 1kHz(mΩ)	ESL (nH)	DV/DT (V/μ S)	Ipk(A)	Irms(A) @40°C
Un 350V.DC-700.DC		Us 525V-1050V		Ur100V-200V			
20	38	40	3.3	25	60	1200	30
30	45	40	3.2	25	60	1800	40
40	45	50	3.0	25	50	2000	35
50	49	50	3.0	25	50	2500	40
60	54	50	3.0	25	50	3000	45
100	62	60	2.9	25	40	4000	50
Un 800V.DC		Us 1200V		Ur250V			
20	44	40	2.9	25	60	1200	39
30	54	40	2.7	25	70	2100	43
40	62	40	2.5	25	70	2800	50
50	69	40	2.1	25	75	3750	55
60	64	50	2.3	25	60	3600	55
70	70	50	2.0	25	60	4200	60
80	73	50	2.1	25	60	4800	60
100	82	50	1.8	25	60	6000	65
Un 1000V.DC~1100V.DC		Us 1500V-1650V		Ur 270V-300V			
10	42	40	3.3	25	60	600	35
20	50	50	3.1	25	60	1200	40
30	60	50	3.1	25	60	1800	55
40	69	50	2.7	25	60	2400	60
50	68	60	2.6	25	50	2500	60
60	75	60	2.2	25	50	3000	70
70	81	60	1.9	25	50	3500	70
80	86	60	1.6	25	50	4000	75
Un 1400V.DC		Us 2100V		Ur 380V			
5	46	40	3.3	25	60	300	36
10	48	60	3.3	25	60	600	38
20	67	60	3.1	25	60	1200	60
Un 1800V.DC		Us 2100V		Ur 380V			
8	46	60	3.3	25	75	600	35
10	50	60	3.3	25	75	750	40