

AC - filter 金属化薄膜电容器 AKMJ - MC series Metalized film capacitor

铜螺母 / 螺杆引出, 塑料定位盖

绝缘, 安装简单方便

Copper nut / screw leads, insulated plastic cover positioning, easy installation

铝圆外壳封装, 干式树脂灌注

Aluminum round housing package, sealed with resin



耐压高, 具有自愈性

Resistance to high voltage, with self-healing

高纹波电流, 高dv/dt承受能力

High ripple current high dv/dt withstand capability

容量大, 体积小

Large capacity, small size

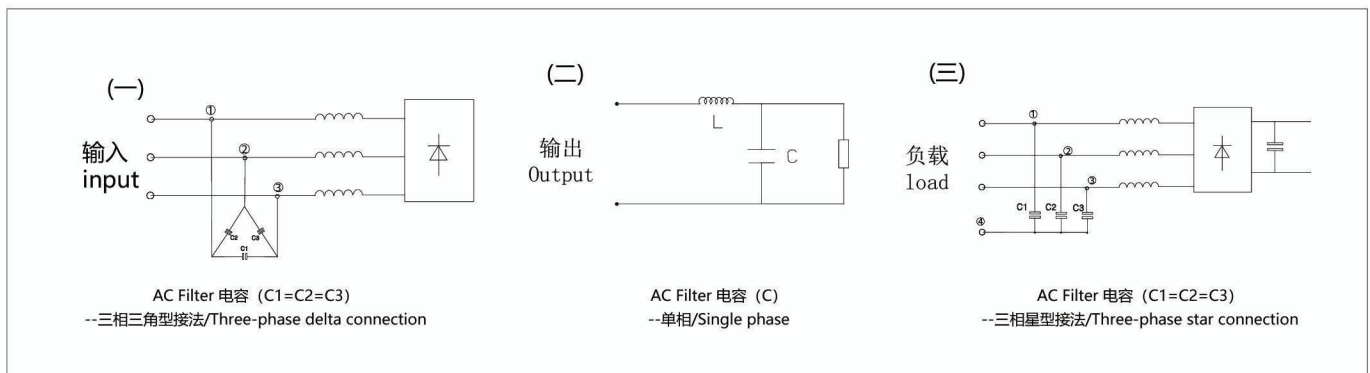
应用

- 广泛应用于电力电子设备中作交流滤波用。
- 在大功率UPS, 开关电源, 变频器等设备中作交流滤波, 治理谐波及提高功率因数。

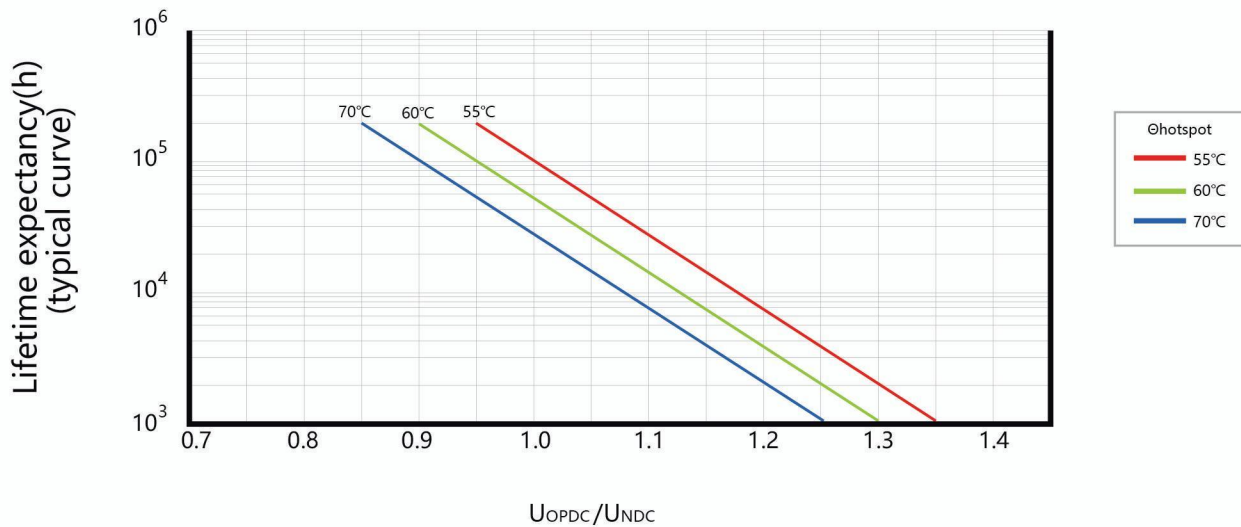
Application

- Widely used in power electronic equipment used for the AC filter.
- In the high-power UPS, switching power supply, inverter and other equipment for the AC filter, harmonics and improve power factor control.

典型线路图 Typical circuit diagram



预期寿命曲线图 Life expectancy in the graph



性能参数 Technical data

工作温度范围 / Operating temperature range	Max. Operating temperature, $T_{op,max}$: + 85°C	
	Upper category temperature : + 70°C	
	Lower category temperature re- 40°C	
容量范围(C_N) / Capacitance range	single phase	20 μ F - 500 μ F
	three phase	3 \times 40 μ F - 3 \times 200 μ F
额定电压(U_N) / Rated voltage	330V. AC / 50Hz - 1140V. AC / 50Hz	
容量偏差 / Cap.tol	$\pm 5\%$ (J) ; $\pm 10\%$ (K)	
耐电压 / Withstand voltage	vt - t	2.15 U_N / 10s
	vt - c	1000 + 2 $\times U_N$ V. AC 60s (min3000V. AC)
过电压 / Over voltage	1.1 U_N (30% of on - load - dur.)	
	1.15 U_N (30min / day)	
	1.2 U_N (5min / day)	
	1.3 U_N (1min / day)	
	1.5 U_N (100ms every time,1000 times during the lifetime)	
损耗角正切 / Dissipation factor	$\text{tg}\delta \leq 0.002$ f = 100Hz	
绝缘电阻 / Insulation resistance	介质损耗 $\text{tg}\delta_0 \leq 0.0002$	
耐脉冲电流冲击 / Withstand strike current	$R_s \times C \geq 10000\text{s}$ (at20°C 100V.DC)	
有效电流 / I_{rms}	具体见规格表/See the specification sheet	
阻燃性 / Flame retardation	具体见规格表/See the specification sheet	
阻燃性 / Flame retardation	UL94V -0	
最高使用海拔高度 / Maximum altitude	2000m	
	Derating should be considered when the altitude is between 2000m -5000m. (For each increase of 1000m, voltage and current will be reduced by 10%)	
预期寿命 / Life expectancy	100000h (U_N ; $\theta_{hotspot} \leq 55^\circ\text{C}$)	
引用标准 / Reference standard	IEC61071 ; IEC60831	

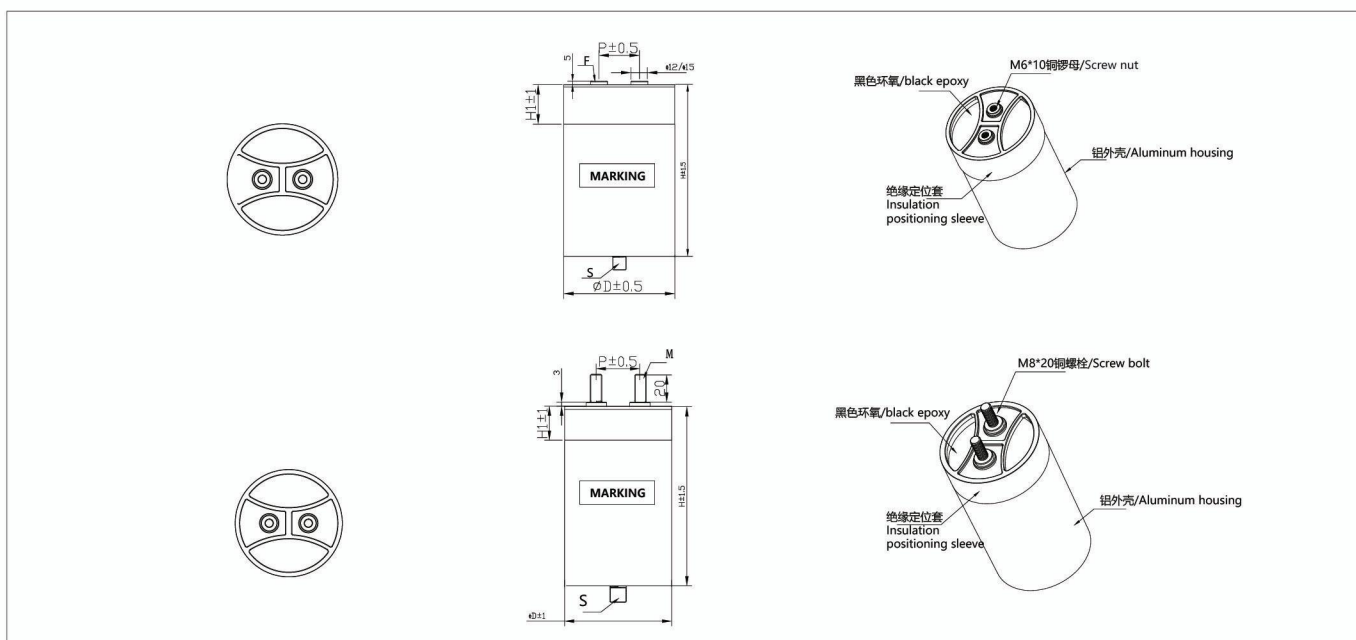


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单相交流电容外形图 The contour map

典型尺寸

∅D(mm)	P(mm)	H1(mm)	S	F	M
76	32	20	M12 x 16	M6 x 10	M8 x 20
86	32	20	M12 x 16	M6 x 10	M8 x 20
96	45	20	M12 x 16	M6 x 10	M8 x 20
116	50	30	M12 x 16	M6 x 10	M8 x 20
136	50	30	M16 x 25	M6 x 10	M8 x 20



产品编码说明 Part number system

Model				Capacitance		U _N (AC)				Cap. tol	diameter	Height			Lead	Bottom mount	Shell Oxidization	Internal feature code	Structure	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
A	M	C	3	0	7	0	3	3	0	J	E	1	3	0	*	*	*	*	*	
1	~	3	位: 型号代码/Model																	
4	~	6	位: 标称容量/Nominal Capacity e.g. 307= 30×10 ⁷ pF= 300μF																	
7	~	10	位: 额定电压 (交流) /U _N (AC) e.g. 0330=330V.AC																	
11	位: 容量偏差等级/Capacitance Tolerance ±5% (J) ; ±10% (K)																			
12	位: 外壳直径/Shell diameter A=φ55mm B=φ65mm C=φ76mm D=φ86mm E=φ96mm F=φ116mm G=φ136mm																			
13	~	15	位: 外壳高度/Shell height e.g. 130=130mm																	
16	位: 引出形式/Lead M: M8x20螺栓引出/Screw bolt F: M6x10螺母引出/Screw nut																			
17	位: 底部安装形式/Bottom mounted type S: 螺杆固定/Screw fixed T: 平底/Flat base																			
18	位: 外壳表面处理方式/Shell surface treatment 0: 无阳极氧化处理/Anode-free gasification treatment 1: 银色阳极氧化处理/Silver anodized finish																			
19	~	20	位: 内部特征码/Internal feature code																	
21	位: 结构特征码/Structure D: 三相三角形接法 (此时容量为3×××) / Three-phase delta connection (The capacity is now 3×××) 当为单相引出时, 此编码不标识 (即单相只有20位编码) When it is single-phase output, this code is not identified (that is, single-phase only has 20 bits of code)																			

规格表 Specification table

C _N (μF)	φD (mm)	H (mm)	ESL (nH)	dv/dt (V/μS)	I _p (kA)	I _s (kA)	I _{rms} 50°C (A)	ESR @1kHz (mΩ)	R _{th} (K/W)	P (mm)	Weight (kg)	Part number
U _N = 330V.AC U _{rms} 250V.AC U _s = 1200V												
80	76	80	40	80	6.4	19.2	30	4	4.2	32	0.5	AMC8060330*C080****
120	86	80	40	70	8.4	25.2	40	2.8	3.3	32	0.7	AMC1270330*D080****
150	96	80	45	70	10.5	31.5	50	3.5	1.7	45	0.75	AMC1570330*E080****
170	76	130	50	60	10.2	30.6	60	3.2	1.3	32	0.75	AMC1770330*C130****
230	86	130	50	60	13.8	41.4	70	2.4	1.3	32	1.1	AMC2370330*D130****
300	96	130	50	50	15.0	45.0	75	2.8	1.0	45	1.2	AMC3070330*E130****
420	116	130	60	50	21.0	63.0	80	1.9	1.2	50	1.6	AMC4270330*F130****
U _N =450V.AC U _{rms} 330V.AC U _s = 1520V												
50	76	80	40	90	4.5	13.5	30	4	4.2	32	0.5	AMC5060450*C080****
65	86	80	50	80	5.2	15.6	40	2.8	3.3	32	0.7	AMC6560450*D080****



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规格表 Specification table

续上表

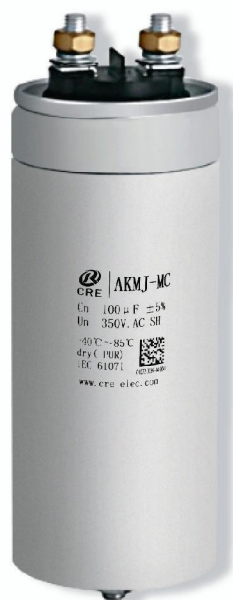
C_N (μ F)	ϕD (mm)	H (mm)	ESL (nH)	dv/dt (V/ μ S)	I_p (kA)	I_s (kA)	I_{rms} 50°C (A)	ESR @1kHz (m Ω)	R_{th} (K/W)	P (mm)	Weight (kg)	Part number
$U_N = 450V.AC U_{rms} 330V.AC U_s = 1520V$												
80	96	80	45	80	6.4	19.2	50	3.5	1.7	45	0.75	AMC8060450*E080****
100	76	130	50	70	7.0	21.0	60	3.2	1.3	32	0.75	AMC1070450*C130****
130	86	130	45	60	7.8	23.4	70	2.4	1.3	32	1.1	AMC1370450*D130****
160	96	130	50	50	8.0	24.0	75	2.8	1.0	45	1.2	AMC1670450*E130****
250	116	130	60	50	12.5	37.5	80	1.9	1.2	50	1.6	AMC2570450*F130****
$U_N = 690V.AC U_{rms} 500V.AC U_s = 2100V$												
40	76	130	50	100	4.0	12.0	30	2.8	6.0	32	0.75	AMC4060690*C130****
50	76	150	45	90	4.5	13.5	35	2.4	5.1	32	0.85	AMC5060690*C150****
60	86	130	45	80	4.8	14.4	40	2.2	4.3	32	1.1	AMC6060690*D130****
65	86	150	50	80	5.2	15.6	45	1.8	4.1	32	1.2	AMC6560690*D150****
75	96	130	50	80	6.0	18.0	50	1.5	4.0	45	1.2	AMC7560690*E130****
80	96	150	55	75	6.0	18.0	60	1.2	3.5	45	1.3	AMC8060690*E150****
110	116	130	60	70	7.7	23.1	65	0.8	4.4	50	1.6	AMC1170690*F130****
120	116	150	65	50	6.0	18.0	75	0.6	4.4	50	1.8	AMC1270690*F150****
$U_N = 850V.AC U_{rms} 600V.AC U_s = 2850V$												
25	76	130	50	110	2.8	8.3	35	1.5	8.2	32	0.75	AMC2560850*C130****
30	76	150	60	100	3.0	9.0	40	1.2	7.8	32	0.85	AMC3060850*C150****
32	86	130	45	100	3.2	9.6	50	1.15	5.2	32	1.1	AMC3260850*D130****
45	86	150	50	90	4.1	12.2	50	1.05	5.7	32	1.2	AMC4560850*D150****
40	96	130	50	90	3.6	10.8	50	1	6.0	45	1.2	AMC4060850*E130****
60	96	150	60	85	5.1	15.3	60	0.9	4.6	45	1.3	AMC6060850*E150****
60	116	130	60	80	4.8	14.4	65	0.85	4.2	50	1.6	AMC6060850*F130****
90	116	150	65	75	6.8	20.3	75	0.8	3.3	50	1.8	AMC9060850*F150****



AC - filter 金属化薄膜电容器 AKMJ - MC series Metalized film capacitor (Single phase)

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绝缘, 安装简单方便
Copper nut / screw leads, insulated
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installation

铝圆外壳封装, 油式/干式树脂灌注
Aluminum round housing package,
Oil type/dry type resin infusion



耐压高, 具有自愈性
Resistance to high voltage, with
self-healing

高纹波电流, 高dv/dt承受能力
High ripple current high dv/dt
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容量大, 体积小
Large capacity, small size

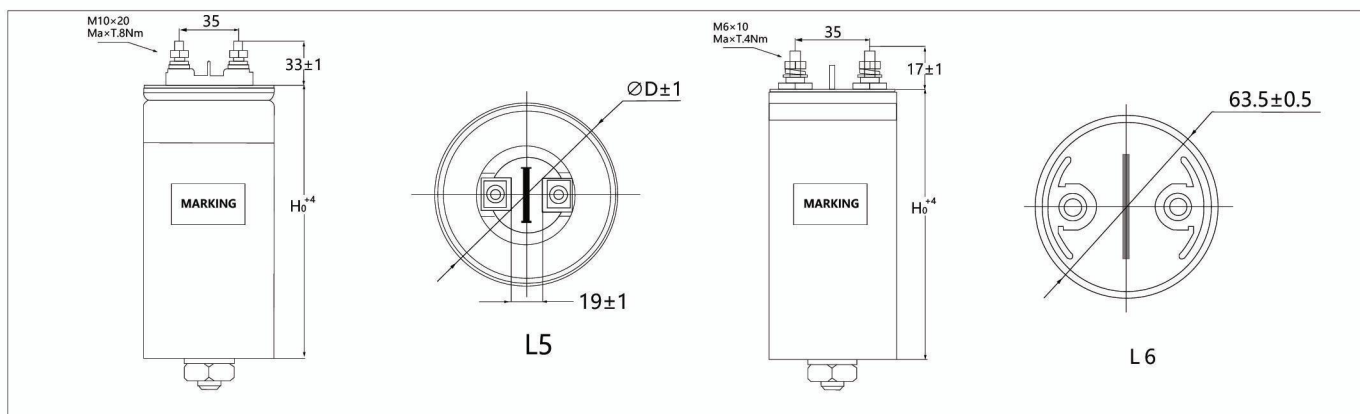
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典型线路图 Typical circuit diagram



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性能参数 Technical data

工作温度范围 / Operating temperature range	Max.Operating temperature,Top,max : + 85°C Upper category temperature : + 70°C Lower category temperature re:- 40°C
容量范围(C _N) /Capacitance range	20μF - 200μF
额定电压(U _N) / Rated voltage	200V.AC~1000V.AC
容量偏差 / Cap.tol	±5% (J) ; ±10% (K)
耐电压 / Withstand voltage	vt - t 1.5U _{rms} / 10s vt - c 3000V.AC / 2S,50/60Hz
过电压 / Over voltage	1.1U _{rms} (30% of on – load – dur.) 1.15U _{rms} (30min / day) 1.2U _{rms} (5min / day) 1.3U _{rms} (1min / day)
损耗角正切 / Dissipation factor	tgδ≤0.002 f = 100Hz
自感/ Self inductance	< 70 nH per mm of lead spacing
绝缘电阻 / Insulation resistance	Rs×C≥ 10000s (at20°C 100V.DC)
耐脉冲电流冲击 / Withstand strike current	具体见规格表/See the specification sheet
有效电流 / Irms	具体见规格表/See the specification sheet
阻燃性 / Flame retardation	UL94V -0
寿命预期/ Life time expectancy	Useful life time: > 100000h at U _{NDC} and 70°C FIT: < 10×10 ⁻⁹ /h(10 per 10 ⁹ component h) at 0.5×U _{NDC} ,40°C
电解质/ Dielectric	Metallized polypropylene
结构/ Construction	Filling with inert gas/ silicone oil, Non-inductive, over-pressure
外壳/ Case	Aluminum case
引用标准/ Reference standard	IEC61071,GB17702,UL810

规格表 Specification table

C _N (μF)	φD (mm)	H (mm)	I _{max} (A)	I _p (A)	I _s (A)	ESR (mΩ)	R _{th} (K/W)	P (mm)
U _{rms} =300V.AC,U _N =420V.AC								
150	76	175	29	1270	3810	2.83	5.21	35
200	76	235	28	1300	3900	2.2	6.63	35
U _{rms} =330V.AC,U _N =460V.AC								
80	76	105	20	890	2670	2.45	7.38	35
100	76	105	26	980	2940	2.68	6.52	35
200	86	175	33	1750	5250	1.5	5	35
U _{rms} =400V.AC,U _N =560V.AC								
50	76	110	29	785	2355	3.5	9.53	35
100	86	150	41	2648	7944	2.82	6.26	35
200	86	240	49	3467	10401	2.53	4.89	35
350	116	210	68	3200	9600	1	4.2	35
U _{rms} =480V.AC,U _N =680V.AC								
70	76	145	50	4000	12000	2	6.23	35
100	96	125	80	3500	10500	2	3.9	35
160	86	200	36	3000	9000	1.5	4.8	35
250	96	240	55	2700	8100	1.21	4.25	35
300	86	285	78	2500	7500	1.2	3.85	35



07

规格表 Specification table

C_N (μF)	ϕD (mm)	H (mm)	I_{max} (A)	I_p (A)	I_s (A)	ESR (m Ω)	R_{th} (K/W)	P (mm)
Urms=500V.AC, UN=700V.AC								
33	76	115	29	752	2256	3.86	9.05	35
60	76	150	33	953	2859	3.72	7.23	35
100	76	200	37	1047	3141	3.05	6.78	35
133	86	200	40	1392	4176	2.87	6.41	35
200	96	220	45	3800	11400	1.25	3.89	35
250	96	240	50	4000	12000	1.15	3.56	35
Urms=550V.AC, UN=780V.AC								
22	63.5	90	24	500	1500	4.01	12.4	35
50	63.5	140	34	980	2940	3.58	7.1	35
100	76	200	50	3500	10500	1.6	6.84	35
133	86	200	55	4000	12000	1.5	6.84	35
Urms=600V.AC, UN=850V.AC								
150	96	240	52	3000	9000	2.1	3.87	35
200	116	240	55	3200	9600	1.89	3.12	35
Urms=640V.AC, UN=900V.AC								
15	63.5	90	22	350	1050	5.7	10.74	35
2	76	130	29	680	2040	4.28	7.93	35
33	76	130	33	800	2400	3.56	7.39	35
68	86	240	45	1496	4488	2.56	5.61	35
Urms=850V.AC, UN=1200V.AC								
50	96	240	62	2700	8100	1	4.05	35
Urms=1000V.AC, UN=1400V.AC								
30	86	175	38	650	1950	3.68	5.44	35
Urms=1400V.AC, UN=1900V.AC								
15	116	150	35	740	2220	2.5	5.21	35



AC - filter 金属化薄膜电容器 AKMJ - MC series Metalized film capacitor (Three phase)

铜螺母 / 螺杆引出, 塑料定位盖

绝缘, 安装简单方便

Copper nut / screw leads, insulated plastic cover positioning, easy installation

铝圆外壳封装, 油式/干式树脂灌注

Aluminum round housing package, Oil type/dry type resin infusion

容量大, 体积小

耐压高, 具有自愈性

Resistance to high voltage, with self-healing

高纹波电流, 高dv/dt承受能力

High ripple current high dv/dt withstand capability

容量大, 体积小

Large capacity, small size



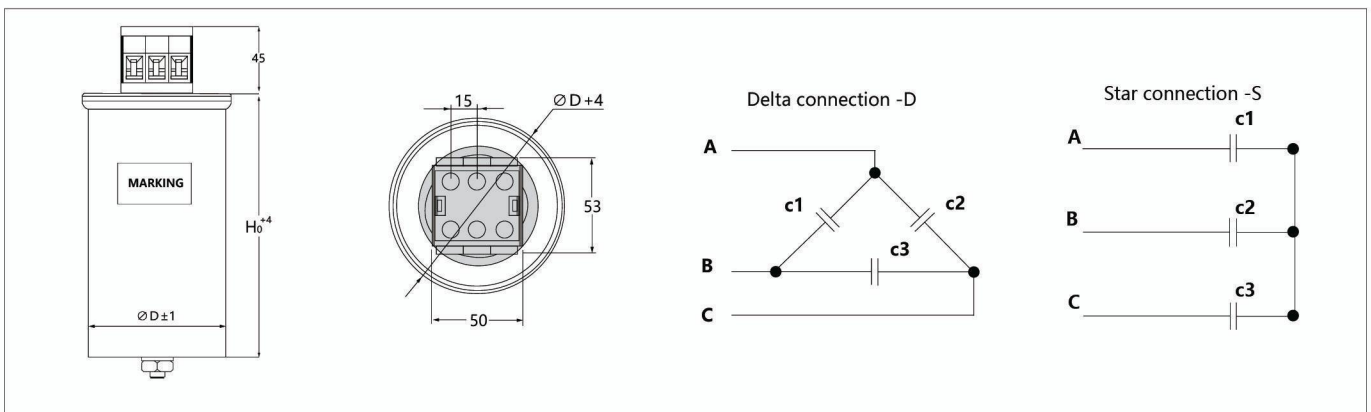
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典型线路图 Typical circuit diagram



性能参数 Technical data

工作温度范围 / Operating temperature range	Max.Operating temperature,Top,max : + 85°C Upper category temperature : + 70°C Lower category temperature re- -40°C
容量范围(C _N)/Capacitance range	3*17~3*200μF
额定电压(U _N) / Rated voltage	400V.AC~850V.AC
容量偏差 / Cap.tol	±5% (J) ; ±10% (K)
耐电压 / Withstand voltage	vt - t 1.25U _N (AC) / 10s or 1.75U _N (DC) / 10s vt - c 3000V.AC / 2s, 50/60Hz
过电压 / Over voltage	1.1Urms (30% of on – load – dur.) 1.15Urms (30min / day) 1.2Urms (5min / day) 1.3Urms (1min / day)
损耗角正切 / Dissipation factor	tgδ≤0.002 f = 100Hz
自感/ Self inductance	< 70 nH per mm of lead spacing
绝缘电阻 / Insulation resistance	R _s ×C _z ≥ 10000s (at20°C 100V.DC)
耐脉冲电流冲击 / Withstand strike current	具体见规格表/See the specification sheet
有效电流 / Irms	具体见规格表/See the specification sheet
阻燃性 / Flame retardation	UL94V -0
寿命预期/ Life time expectancy	Useful life time: > 100000h at U _{NDC} and 70°C FIT: < 10×10 ⁹ /h(10 per 10 ⁹ component h) at 0.5×U _{NDC} ,40°C
电解质/ Dielectric	Metallized polypropylene
结构/ Construction	Filling with inert gas/ silicone oil, Non-inductive, over-pressure
外壳/ Case	Aluminum case
引用标准/ Reference standard	IEC61071,UL810

规格表 Specification table

C _N (μF)	φD (mm)	H (mm)	I _{max} (A)	I _p (A)	I _s (A)	ESR (mΩ)	R _{th} (K/W)
Urms=400V.AC							
3*17	65	150	20	450	1350	3*1.25	6.89
3*30	65	175	25	890	2670	3*1.39	6.25
3*50	76	205	33	1167	3501	3*1.35	4.85
3*66	76	240	40	1336	4007	3*1.45	3.79
3*166.7	116	240	54	1458	4374	3*0.69	3.1
3*200	136	240	58	2657	7971	3*0.45	2.86
Urms=450V.AC							
3*50	86	205	30	802	2406	3*1.35	4.36
3*80	86	285	46	1467	4401	3*1.89	3.69
3*100	116	210	56	2040	6120	3*1.5	3.8
3*135	116	240	58	2680	8040	3*1.6	3.1
3*150	136	205	67	3060	9180	3*2.5	3.2
3*200	136	240	60	3730	11190	3*2	3.46



AC - filter 金属化薄膜电容器 AKMJ - MC series Metalized film capacitor (Three phase)

规格表 Specification table

C_N (μF)	φD (mm)	H (mm)	I_{max} (A)	I_p (A)	I_s (A)	ESR (m Ω)	R_{th} (K/W)
Urms=530V.AC							
3*50	86	240	32	916	2740	3*1.75	3.64
3*66	96	240	44	1547	4641	3*1.36	3.32
3*77	106	240	48	1685	5055	3*1.16	3.21
3*100	116	240	65	2000	6000	3*1.87	4.2
Urms=690V.AC							
3*25	86	240	29	697	2091	3*2.22	3.54
3*33.4	96	240	36	837	2511	3*1.81	3.21
3*55.7	116	240	44	1395	4185	3*1.24	3.04
3*75	136	240	53	2100	6300	3*1.31	2.87
Urms=850V.AC							
3*25	96	240	30	679	2037	3*1.95	3.25
3*31	106	240	36	906	2718	3*1.57	2.98
3*55.7	136	240	49	1721	5163	3*0.9	2.56
Urms=1200V.AC							
3*12	116	245	56	1300	3900	3*3.5	3.6
3*20	136	245	56	3300	9900	3*4	2.29

