02

金属化薄膜电容器
Metallized Film Capacitors

目录
CONTENTS

1、工作电压
薄膜电容的选用取决于施加的最高电压，并受施加的电压波形、电流波形、频率、环境温度（电容器表面温度）、电容量等因素的影响。使用前请先检查电容器两端的电压是否在额定值内。
2、 工作电流
通过电容器的脉冲（或交流）电流等于电容量C与电压上升速率的乘积，即I=Cxdv/dt.
由于电容器存在损耗，在高频或高脉冲条件下使用时，通过电容器的脉冲（或交流）电流会使电容器自身发热而有温升，将会有热击穿（冒烟、起火）的危险。因此，电容器安全使用条件不仅受额定电压（或类别电压）的限制，而且受额定电流的限制。
额定电流被认为是由击穿模式决定的脉冲电流（峰值电流、即由dv/dt指标所限制的）和连续电流（以峰值或有效值表示）组成，当使用时，需确认这两个电流都在允许范围之内。

3、 电容器充放电
由于电容充放电电流取决于电容量和电压上升速率的乘积，即使是低电压充放电，也可能产生大的瞬间充放电电流，这可能会导致电容器性能的损害，比如说短路或开路。当进行充放电时，请串联一个20Ω/V～1000Ω/V或更高的限流电阻，将充放电电流限制在规定的范围内。
当多个薄膜电容器并联进行耐电压测试或寿命测试时，请为每个电容器串联一个20Ω/V～1000Ω/V或更高的限流电阻。详见电容器标准。
4、 阻燃性
尽管在薄膜电容器外封装中使用了耐火性阻燃材料一阻燃环氧树脂或塑壳，但外部的持续高温或火焰仍可使电容器芯子变形而产生外封装破裂，导致电容器芯子熔化或燃烧。

5、 表面温升（ΔT）
当电容器用于交流及脉冲场合时，流经电容器的电流使其发热，如果发热量过大，会导致电容器短路甚至燃烧。所以流经电容器的电流不能超过产品目录所规定的最大数量及电容器在加载时监测温升就显得尤为必要。

1、Operation Voltage
The Film Capacitor varies in the maximum applicable voltage depending on the applied voltagewaveform, current waveform, frequency, ambient temperature (capacitor surface temperature), capacitance value, etc. Be sure to use capacitors within the specified values by checking the voltage waveform, current waveform, and frequency applied to them (In the application of high frequency, the permissible voltage varies with the type of the capacitor).
2、Operating Current
The pulse (or AC) current flowing through the capacitor is expressed as: I=Cxdv/dt.
Due to the fact that dissipation factor of the capacitor will generate the internal heat under the application of high frequency or high pulse current, temperature rise in it will occur and may cause deterioration of with rated voltage, even lead to break down (smoking or firing).Therefore, the safety use of capacitor must be within the rated voltage (or category voltage) and the permissible current.
The rated current must considered by dividing into pulse current (peak current) and continuous current depending on the break down mode, and when using, should make sure the both currents are within the permissible values.
3、Charging and discharging
Because the charging and discharging current of capacitor is obtained by the product of voltage rise rate(dv/dt)and open due to sudden charging and discharging current.When charging and discharging current.when charing and discharging ,Pass through a resistance of 20Ω/V to 1000Ω/V or more to limit current.
When connecting multiple film capacitors in parallel in withstand voltage test or life test,connect a resistance of 20Ω/V to 1000Ω/V or more in series to each capacitor.(For detail see the specification)
4、Flame retardation (only to CBB60&CBB61)
Although flame retardation epoxy resin or plastic case is used in the coating or encapsulating of plastic film cap. continuous outer high temperature or firing will break the coating layer or plastic case of the capacitor .and may lead to melting or firing of the capacitor element.
5、Surface overtemperature (ΔT)
When capacitor is used in A.C.or pulse applications the current that flows through the capacitor makes it heat up.If the capacitor heats up too much il might deteriorate causing a short circuit or fire.It is essential that the limits described in the catalogue are not exceeded and that a temperature check on

CBB65

产品特点 PRODUCT FEATURES

- 适用于频率为50Hz/60Hz交流电源供电的单相异步电动机启动和运转
  Applied to starting and running of AC single-phase asynchronism motors at 50Hz/60Hz frequency power
- 损耗小，绝缘电阻高
  Low Dissipation factor, high insulation resistance
- 自愈性能良好
  Good self-healing capability
- 防爆设计，安全性能可靠
  Anti-explosion design, more safety
- 产品执行标准IEC60252-1、UL810、GB/T3667.1-2016
  Product performance follows standard IEC60252-1、UL810、GB/T3667.1-2016
- 寿命等级为B、C级
  Life duration at Class B or C

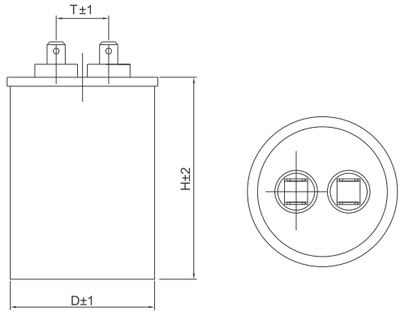
安全认证 Safety Certificate

CQC	CQC （中国）	GB/T 3667.1-2016 A.C motor capacitors （1）5μF～60μF,440VAC/450VAC Class C or Class B,50/60Hz,S1 or S2,SH,40/70/21 or 40/85/21 （2）5μF～98μF,330VAC Class C or Class B,50/60Hz, S1 or S2,SH,40/70/21 or 40/85/21 （3）5μF～130μF,250VAC Class C or Class B,50/60Hz, S1 or S2,SH,40/70/21 or 40/85/21
TUV	TUV （德国）	EN 60252-1：2011+A1:2013 A.C. motor capacitors （1）5μF～60μF,440VAC/450VAC Class C or Class B,50/60Hz,S1 or S2,SH,40/70/21 or 40/85/21 （2）5μF～98μF, 250VAC/ 330VAC Class C or Class B,50/60Hz, S1 or S2,SH,40/70/21 or 40/85/21
VDE	VDE （德国）	EN 60252-1：2011+A1:2013 A.C. motor capacitors 5μF～60μF,440VAC/450VAC Class C,50/60Hz, S2,SH,40/70/21
cULus	UL （美国）	UL 810,CSA C22.2.No190,max450VAC,50/60Hz

技术要求Technical Specifications

引用标准 Executing Standard	GB/T 3667.1-2016、IEC 60252-1、UL810
气候类别 Climatic Category	40 / 70 / 21、40 / 85 / 21
额定电压 Un Rated Voltage	250VAC、330VAC、440VAC、450VAC 50 / 60 Hz
容量范围 Capacitance Range	5μF～130μF
容量偏差 Capacitance Tolerance	±5%
安全防护等级 Class of safety protection	S1，S2
耐电压(两极之间) Test Voltage Between Terminals	2Un(VAC)，2s
耐电压(极壳之间) Test Voltage Between Terminals	2000VAC， 2s
损耗角正切 Dissipation Factor	tgδ≤0.0010（100Hz）
端子间绝缘电阻T-T Insulation Resistance(I.R.)	τ≥3000s（20℃，100V，60s）(注:τ=RC)
极壳间绝缘电阻T-C Insulation Resistance(I.R.)	R≥100 MΩ（ 20℃，100V，60s）

外型图 DIMENSION



规格尺寸表 RATINGS FOR SERIES

Un:250VAC			
Cn(μF)	D(mm)	H(mm)	T(mm)
5	40	55	16
6	40	55	16
7	40	55	16
7.5	40	55	16
8	40	55	16
10	40	55	16
13	40	55	16
15	40	55	16
20	40	65	16
25	40	65	16
30	45	65	18
35	45	65	18
40	50	65	18
45	50	65	18
50	50	75	18
55	50	75	18
60	50	85	18
65	50	85	18
70	50	85	18
75	50	85	18
80	50	95	18
90	50	100	18
100	50	110	18
110	50	120	18
120	55	110	20
130	55	120	20

Un:330VAC			
Cn(μF)	D(mm)	H(mm)	T(mm)
5	40	55	16
6	40	55	16
7	40	55	16
7.5	40	55	16
8	40	55	16
10	40	55	16
13	40	55	16
15	40	55	16
20	40	65	16
25	40	65	16
30	45	75	18
35	50	75	18
40	50	80	18
45	50	85	18
50	50	90	18
55	50	100	18
60	50	110	18
65	50	110	18
70	50	110	18
75	50	120	18
80	55	110	20
90	55	120	20
98	55	120	20

Un:440/450VAC			
Cn(μF)	D(mm)	H(mm)	T(mm)
5	40	55	16
6	40	55	16
7	40	55	16
7.5	40	55	16
8	40	55	16
10	40	60	16
13	45	60	16
15	45	65	16
20	50	65	18
25	50	65	18
30	50	75	18
35	50	85	18
40	50	90	18
45	50	110	18
50	50	120	18
55	55	110	20
60	55	120	20

CBB65S

产品特点 PRODUCT FEATURES

- 适用于频率为50Hz/60Hz交流电源供电的单相异步电动机启动和运转
  Applied to starting and running of AC single-phase asynchronism motors at 50Hz/60Hz frequency power
- 损耗小，绝缘电阻高
  Low Dissipation factor, high insulation resistance
- 自愈性能良好
  Good self-healing capability
- 防爆设计，安全性能可靠
  Anti-explosion design, more safety
- 产品执行标准IEC60252-1、UL810、GB/T3667.1-2016
  Product performance follows standard IEC60252-1、UL810、GB/T3667.1-2016
- 寿命等级为C级
  Life duration at Class C

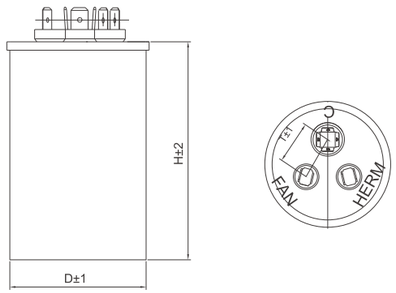
安全认证 Safety Certificate

	TUV （德国）	EN 60252-1：2011+A1:2013 A.C. motor capacitors （1）(15μF～60μF)+ (2μF～10μF),440VAC/450VAC Class C,50/60Hz,S1 or S2,SH,40/70/21 （2）(25μF～60μF)+ (5μF～15μF), 370VAC Class C,50/60Hz, S1 or S2,SH,40/70/21 （3）(20μF～80μF)+ (5μF～15μF),250VAC/300VAC Class C,50/60Hz,S1 or S2,SH,40/70/21
c UL us	UL （美国）	UL 810,CSA C22.2.No190,max450VAC,50/60Hz

技术要求Technical Specifications

引用标准 Executing Standard	GB/T 3667.1-2016、IEC 60252-1、UL810
气候类别 Climatic Category	40 / 70 / 21
额定电压 Un Rated Voltage	250VAC、300VAC、370VAC、450VAC 50 / 60 Hz
容量范围 Capacitance Range	450V: (15μF～60μF)+(2μF～10μF)
	370V: (25μF～60μF)+(5μF～15μF)
	300V: (20μF～80μF)+(5μF～15μF)
	250V: (20μF～80μF)+(5μF～15μF)
容量偏差 Capacitance Tolerance	±5%
安全防护等级 Class of safety protection	S1，S2
耐电压(两极之间) Test Voltage Between Terminals	2Un(VAC)，2s
耐电压(极壳之间) Test Voltage Between Terminals	2000VAC， 2s
损耗角正切 Dissipation Factor	tgδ≤0.0010（100Hz）
端子间绝缘电阻T-T Insulation Resistance(I.R.)	τ≥3000s（20℃，100V，60s）(注:τ=RC)
极壳间绝缘电阻T-C Insulation Resistance(I.R.)	R≥100 MΩ（ 20℃，100V，60s）

外型图 DIMENSION



规格尺寸表 RATINGS FOR SERIES

Un:250/300/370VAC			
Cn(μF)	D(mm)	H(mm)	T(mm)
25+7	50	80	20
35+6	50	80	20
40+6	50	80	20
35+5	50	90	20
30+7	50	90	20
35+6	50	90	20
35+8	50	90	20
40+5	50	90	20
40+6	50	90	20
35+10	50	100	20
35+15	50	100	20
45+6	50	100	20
50+6	55	100	20
40+15	50	110	20
50+10	50	110	20
45+15	50	120	20
50+15	50	120	20
55+15	55	120	20
60+15	55	120	20

Un:450VAC			
Cn(μF)	D(mm)	H(mm)	T(mm)
15+2.5	50	70	20
17+2.5	50	70	20
17.5+2	50	70	20
20+2.5	50	80	20
25+2.5	50	85	20
25+6	50	90	20
30+3	50	90	20
30+4	50	100	20
30+5	50	100	20
30+6	50	100	20
30+8	50	110	20
35+4	50	110	20
35+5	50	100	20
35+7.5	50	120	20
35+8	50	110	20
40+4	50	120	20
40+5	50	120	20
40+7.5	50	120	20
40+8	50	120	20
45+5	55	120	20
45+7.5	55	120	20
45+8	50	130	20
50+5	55	120	20
50+7.5	55	120	20
50+8	55	120	20
55+5	55	120	20
55+7.5	55	130	20
55+8	55	130	20
60+7.5	55	130	20
60+8	55	130	20

CBB61

产品特点 PRODUCT FEATURES

- 适用于频率为50Hz/60Hz交流电源供电的单相异步电动机启动和运转
  Applied to starting and running of AC single-phase asynchronism motors at 50Hz/60Hz frequency power
- 损耗小，绝缘电阻高
  Low Dissipation factor, high insulation resistance
- 自愈性能良好
  Good self-healing capability
- 防爆设计，安全性能可靠
  Anti-explosion design, more safety
- 产品执行标准IEC60252-1、UL810、GB/T3667.1-2016
  Product performance follows standard IEC60252-1、UL810、GB/T3667.1-2016
- 寿命等级为B、C级
  Life duration at Class B or C

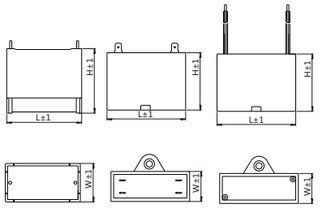
安全认证 Safety Certificate

CQC	CQC （中国）	GB/T 3667.1-2016 A.C motor capacitors （1）0.8μF～8μF,500VAC Class C,50/60Hz,S0,SH,40/70/21 （2）0.8μF～12.5μF,400VAC Class C,50/60Hz,S0,SH,40/70/21 （3）1μF～15μF,300VAC Class C,50/60Hz,S0,SH,40/70/21 （4）0.8μF～12μF,400VAC/450VAC Class C,50/60Hz, S3,SH,40/70/21 or 40/85/21 （5）1μF～15μF,250VAC/300VAC Class C,50/60Hz, S3,SH,40/70/21 or 40/85/21
TUV	TUV （德国）	EN 60252-1：2011+A1:2013 A.C. motor capacitors （1）0.8μF～8μF,500VAC Class C,50/60Hz,S0,SH,40/70/21 （2）1μF～15μF,300VAC Class C,50/60Hz,S0,SH,40/70/21 （3）0.8μF～12μF,400VAC/450VAC Class C,50/60Hz, S3,SH,40/70/21 or 40/85/21 （4）0.8μF～15μF,250VAC/300VAC Class C,50/60Hz, S3,SH,40/70/21 or 40/85/21
cULus	UL （美国）	UL 810,CSA C22.2.No190,max500VAC,50/60Hz

技术要求Technical Specifications

引用标准 Executing Standard	GB/T 3667.1-2016、IEC 60252-1、UL810
气候类别 Climatic Category	40 / 70 / 21、40 / 85 / 21
额定电压 Un Rated Voltage	250VAC、300VAC、400VAC、450VAC、500VAC 50 / 60 Hz
容量范围 Capacitance Range	5μF～15μF
容量偏差 Capacitance Tolerance	±5%
安全防护等级 Class of safety protection	S0，S3
耐电压(两极之间) Test Voltage Between Terminals	2Un(VAC)，2s
耐电压(极壳之间) Test Voltage Between Terminals	2000VAC， 2s
损耗角正切 Dissipation Factor	tgδ≤0.0010（100Hz）
端子间绝缘电阻T-T Insulation Resistance(I.R.)	τ≥3000s（20℃，100V，60s）(注:τ=RC)

外型图 DIMENSION



规格尺寸表 RATINGS FOR SERIES

Un:250VAC			
Cn(μF)	D(mm)	H(mm)	T(mm)
1	37	22	12
1.2	37	22	12
1.5	37	22	14
2	37	26	14
2.2	37	26	14
2.5	37	28	15
2.8	37	30	18
3	37	30	18
3.3	37	30	18
3.5	37	30	20
4	37	33	18
4.5	47	30	18
5	47	30	18
5.5	47	32	18
6	47	32	20
6.5	47	34	21
7	47	34	21
7.5	47	36	23
8	47	36	23
8.5	47	36	23
9	47	37	24
9.5	47	40	26
10	47	40	26
10.5	47	40	26
11	47	40	26
11.5	47	42	28
12	57	38	26
12.5	57	38	26
13	57	38	26
13.5	47	40	30
14	57	40	30
14.5	57	44	30
15	57	44	30

Un:300VAC			
Cn(μF)	D(mm)	H(mm)	T(mm)
1	37	22	12
1.2	37	22	12
1.5	37	22	14
1.8	37	25	14
2	37	26	14
2.2	37	26	14
2.5	37	28	15
2.8	37	30	18
3	37	30	18
3.3	37	30	18
3.5	37	30	18
4	37	33	20
4.5	47	30	18
5	47	30	18
5.5	47	32	18
6	47	32	20
6.5	47	34	21
7	47	34	21
7.5	47	36	23
8	47	36	23
8.5	47	36	23
9	47	37	24
9.5	47	40	26
10	47	40	26
10.5	47	40	26
11	47	40	26
11.5	47	42	28
12	57	38	26
12.5	57	38	26
13	57	38	26
13.5	47	40	30
14	57	40	30
14.5	57	44	30
15	57	44	30

Un:440/450VAC			
Cn(μF)	D(mm)	H(mm)	T(mm)
0.8	37	24	14
1	37	24	14
1.2	37	25	15
1.5	37	28	16
1.8	40	55	16
2	37	30	18
2.2	37	33	20
2.5	37	33	20
2.8	47	32	18
3	47	32	18
3.3	47	32	20
3.5	47	32	20
4	47	34	21
4.5	47	36	23
5	47	37	24
5.5	47	40	26
6	47	40	26
6.5	47	42	28
7	47	42	28
7.5	47	42	30
8	47	44	30
8.5	47	47	34
9	47	47	34
9.5	47	47	34
10	57	45	30
10.5	47	47	34
11	47	47	34
11.5	47	47	36
12	57	50	35

CBB60

产品特点 PRODUCT FEATURES

- 适用于频率为50Hz/60Hz交流电源供电的单相异步电动机启动和运转
  Applied to starting and running of AC single-phase asynchronism motors at 50Hz/60Hz frequency power
- 损耗小，绝缘电阻高
  Low Dissipation factor, high insulation resistance
- 自愈性能良好
  Good self-healing capability
- 采用阻燃外壳和高温硬化树脂灌封（UL94-V0）
  Use burning-proof case epoxy resin
- 防爆设计，安全性能可靠
  Anti-explosion design, more safety
- 出线方式可按客户需要
  Down-lead can be produced upon customer's demand
- **产品执行标准IEC60252-1、UL810、GB/T3667.1-2016**
  Product performance follows standard IEC60252-1、UL810、GB/T3667.1-2016
- **寿命等级为C级**
  Life duration at Class C

安全认证 Safety Certificate

CQC	CQC（中国）	GB/T 3667.1-2016 A.C motor capacitors 5μF～60μF, 250 VAC /300 VAC /400 VAC /450VAC Class C,50/60Hz,S0,SH,40/70/21
c UL us	UL（美国）	UL 810,CSA C22.2.No190,max450VAC,50/60Hz

技术要求Technical Specifications

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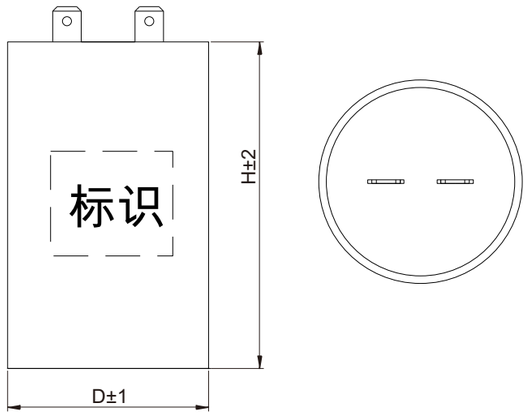
气候类别 Climatic Category	40 / 70 / 21
额定电压 Un Rated Voltage	250VAC、300VAC、400VAC、450VAC 50 / 60 Hz
容量范围 Capacitance Range	5μF～60μF
容量偏差 Capacitance Tolerance	±5%
安全防护等级 Class of safety protection	S0
耐电压(两极之间) Test Voltage Between Terminals	2Un(VAC)，2s
耐电压(极壳之间) Test Voltage Between Terminals	2000VAC， 2s
损耗角正切 Dissipation Factor	tgδ≤0.0010（100Hz）
端子间绝缘电阻T-T Insulation Resistance(I.R.)	τ≥3000s（20℃，100V，60s）(注:τ=RC)

外型图 DIMENSION



规格尺寸表 RATINGS FOR SERIES

Un:250VAC		
Cn(μF)	D(mm)	H(mm)
5	30	55
6	30	55
7	30	55
8	30	55
10	30	55
12	30	55
15	30	55
16	35	55
20	35	55
25	40	55
30	40	65
35	40	65
40	40	65
45	40	65
50	40	75
55	40	75
60	40	75

Un:300VAC		
Cn(μF)	D(mm)	H(mm)
5	30	55
6	30	55
7	30	55
8	30	55
10	30	55
12	35	55
15	35	55
16	35	65
20	35	75
25	35	75
30	40	85
35	40	85
40	40	85
45	40	95
50	40	95
55	45	95
60	45	95

Un:400VAC		
Cn(μF)	D(mm)	H(mm)
5	30	55
6	30	55
7	30	55
8	35	55
10	35	55
12	35	55
15	40	55
16	40	55
20	40	65
25	40	75
30	45	75
35	45	80
40	45	85
45	45	95
50	45	95
55	45	95
60	50	95

Un:450VAC		
Cn(μF)	D(mm)	H(mm)
5	30	55
6	30	65
7	30	65
8	35	65
10	35	65
12	40	55
15	40	65
16	40	75
20	40	80
25	45	80
30	45	85
35	45	95
40	50	95
45	50	105
50	50	105
55	55	105
60	55	105

CBB65A

产品特点 PRODUCT FEATURES

- 适用于频率为50Hz/60Hz交流电源供电的单相异步电动机启动和运转
  Applied to starting and running of AC single-phase asynchronism motors at 50Hz/60Hz frequency power
- 损耗小，绝缘电阻高
  Low Dissipation factor, high insulation resistance
- 自愈性能良好
  Good self-healing capability
- **防爆设计，安全性能可靠**
  Anti-explosion design, more safety
- 出线方式可按客户需要
  Down-lead can be produced upon customer's demand
- 产品执行标准IEC60252-1、UL810、GB/T3667.1-2016
  Product performance follows standard IEC60252-1、UL810、GB/T3667.1-2016
- 寿命等级为A、B级
  Life duration at Class A or B级

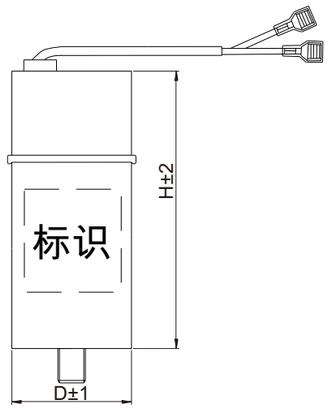
安全认证 Safety Certificate

CQC	CQC （中国）	GB/T 3667.1-2016 A.C motor capacitors （1）2μF～20μF, 450VAC Class B,50/60Hz,S2,SH, 40/85/21
TUV	TUV （德国）	EN 60252-1：2011+A1:2013 A.C. motor capacitors （1）2μF～20μF, 450VAC Class A or Class B,50/60Hz, S2, 40/85/21 （2）5μF～40μF, 250VAC Class A or Class B,50/60Hz, S2, 40/85/21
VDE	VDE （德国）	EN 60252-1：2011+A1:2013 A.C. motor capacitors 2μF～20μF,450VAC Class B,50/60Hz, S2,SH,40/85/21
cULus	UL （美国）	UL 810,CSA C22.2.No190,max450VAC,50/60Hz

技术要求Technical Specifications

引用标准 Executing Standard	GB/T 3667.1-2016、IEC 60252-1、UL810
气候类别 Climatic Category	40 / 85 / 21
额定电压 Un Rated Voltage	250VAC、450VAC 50 / 60 Hz
容量范围 Capacitance Range	2μF～40μF
容量偏差 Capacitance Tolerance	±5%
安全防护等级 Class of safety protection	S2
耐电压(两极之间) Test Voltage Between Terminals	2Un(VAC)，2s
耐电压(极壳之间) Test Voltage Between Terminals	2000VAC， 2s
损耗角正切 Dissipation Factor	tgδ≤0.0010（100Hz）
端子间绝缘电阻T-T Insulation Resistance(I.R.)	τ≥3000s（20℃，100V，60s）(注:τ=RC)

外型图 DIMENSION



规格尺寸表 RATINGS FOR SERIES

Un:250VAC		
Cn(μF)	D(mm)	H(mm)
5	30	75
6	30	75
7	30	75
8	30	80
9	30	80
10	40	80
11	40	80
12	40	80
13	40	80
14	40	80
15	40	80
16	40	80
17	40	80
18	40	80
19	40	80
20	40	90
25	40	90
30	45	90
35	45	90
40	50	95

Un:450VAC		
Cn(μF)	D(mm)	H(mm)
2	30	75
2.5	30	75
3	30	75
3.5	30	75
4	30	80
5	40	80
6	40	80
7	40	80
7.5	40	80
8	40	80
10	40	85
12	40	90
15	45	95
16	45	95
20	50	95

CBB65B

产品特点 PRODUCT FEATURES

- 适用于频率为50Hz/60Hz交流电源供电的单相异步电动机启动和运转
  Applied to starting and running of AC single-phase asynchronism motors at 50Hz/60Hz frequency power
- 损耗小，绝缘电阻高
  Low Dissipation factor, high insulation resistance
- 自愈性能良好
  Good self-healing capability
- **防爆设计，安全性能可靠**
  Anti-explosion design, more safety
- 出线方式可按客户需要
  Down-lead can be produced upon customer's demand
- 产品执行标准IEC60252-1、UL810、GB/T3667.1-2016
  Product performance follows standard IEC60252-1、UL810、GB/T3667.1-2016
- 寿命等级为C级
  Life duration at Class C级

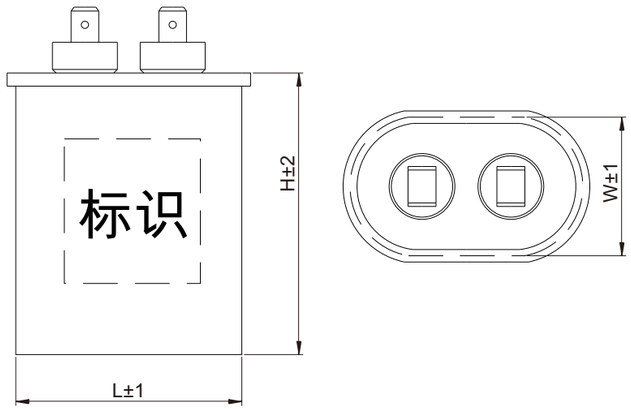
安全认证 Safety Certificate

c UL us	UL （美国）	UL 810,CSA C22.2.No190,max450VAC,50/60Hz
	TUV （德国）	EN 60252-1：2011+A1:2013 A.C. motor capacitors （1）3μF～15μF, 450VAC Class B,50/60Hz, S2, 40/70/21 or 40/85/21 （2）3μF～30μF, 250VAC/300 VAC/370 VAC Class B,50/60Hz, S2, 40/70/21 or 40/85/21

技术要求Technical Specifications

引用标准 Executing Standard	GB/T 3667.1-2016、IEC 60252-1、UL810
气候类别 Climatic Category	40/70/21、40 / 85 / 21
额定电压 Un Rated Voltage	250VAC、300VAC、370VAC450VAC 50 / 60 Hz
容量范围 Capacitance Range	3μF～30μF
容量偏差 Capacitance Tolerance	±5%
安全防护等级 Class of safety protection	S2
耐电压(两极之间) Test Voltage Between Terminals	2Un(VAC)，2s
耐电压(极壳之间) Test Voltage Between Terminals	2000VAC， 2s
损耗角正切 Dissipation Factor	tgδ≤0.0010（100Hz）
端子间绝缘电阻T-T Insulation Resistance(I.R.)	τ≥3000s（20℃，100V，60s）(注:τ=RC)

外型图 DIMENSION

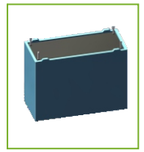


规格尺寸表 RATINGS FOR SERIES

Un:250/300/370VAC			
Cn(μF)	L(mm)	W(mm)	H(mm)
3	515	31.5	45
5	515	31.5	45
6	515	31.5	45
8	515	31.5	55
10	515	31.5	55
12	515	31.5	55
15	515	31.5	65
20	515	31.5	45
25	515	31.5	45
30	515	31.5	75

Un:400/450VAC			
Cn(μF)	L(mm)	W(mm)	H(mm)
3	51.5	31.5	45
4	51.5	31.5	45
5	51.5	31.5	50
6	51.5	31.5	55
8	51.5	31.5	55
10	51.5	31.5	65
12	51.5	31.5	65
14	51.5	31.5	75
15	51.5	31.5	75

产品特点 PRODUCT FEATURES

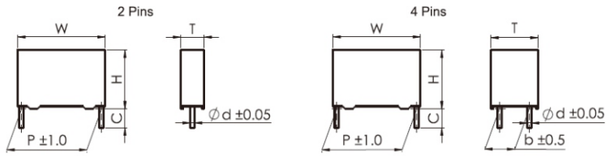


- 适用于工业变频、UPS、伺服逆变器等交流滤波应用中；
  Applied to AC output filter applications(Industrial frequency and UPS and Solar inverters)
- 损耗小，绝缘电阻高
  Low Dissipation factor, high insulation resistance
- 自愈性能良好
  Good self-healing capability
- 等效串联电阻小，耐大纹波；
  Low ESR, high current handling capabilities
- l性能稳定，可靠性高；
  Stable performance and high reliability
- 出线方式可按客户需要
  Down-lead can be produced upon customer's demand
- 产品执行标准IEC61071、GB/T17702-2013
  Product performance follows standard IEC61071、GB/T17702-2013

技术要求Technical Specifications

引用标准 Executing Standard	GB/T 17702-2013、IEC 61071
气候类别 Climatic Category	40 / 85 / 56
额定电压 Un Rated Voltage	250VAC～480VAC 50 / 60 Hz
容量范围 Capacitance Range	1μF～60μF
容量偏差 Capacitance Tolerance	±5%、±5%
耐电压(两极之间) Test Voltage Between Terminals	2Un(VAC)，2s
耐电压(极壳之间) Test Voltage Between Terminals	2000VAC, 2s
损耗角正切 Dissipation Factor	tgδ≤0.0010（100Hz）
端子间绝缘电阻T-T Insulation Resistance(I.R.)	τ≥5000s（20℃，100V，60s）(注:τ=RC)
最高使用海拔Max.Altitude	2000m
工作温度（外壳）Operating temperature(case)	-40℃～85℃
自感Ls Self Inductance(Ls)	< 1nH per mm of lead spacing
预期寿命 Expected lifetime	100 000h @ Un, at 70℃

外型图 DIMENSION



规格尺寸表 RATINGS FOR SERIES

Urms:180VAC Un:250VAC											
Cn(μF)	W(mm)	H(mm)	T(mm)	P(mm)	Pins	d(mm)	Ls(mm)	ESR@1KHz	Î(A)	$\hat{I}_s$(A)	Imax@70℃，10KHz
4.0	32	22	13	27.5	2	1	16	6.7	280	840	7
5.0	32	28	14	27.5	2	1	18	5.3	350	1050	8
6.8	32	33	18	27.5	2	1.2	21	3.9	476	1428	11
10	32	33	18	27.5	2	1.2	20	2.7	700	2100	13
10	41	32	17	37.5	2	1.2	22	4.9	400	1200	10
15	41	37	22	37.5	2	1.2	24	3.3	600	1800	14
18	42	36	23	37.5	2	1.2	25	2.7	720	2160	14
20	42	36	23	37.5	2	1.2	25	2.5	800	2400	14
22	41	41	26	37.5	2	1.2	20	2.2	800	2600	14

Urms:250VAC Un:350VAC											
Cn(μF)	W(mm)	H(mm)	T(mm)	P(mm)	Pins	d(mm)	Ls(mm)	ESR@1KHz	Î(A)	$\hat{I}_s$(A)	Imax@70℃，10KHz
1.0	32	18	9.0	27.5	2	1	20	19.3	90	270	3
1.5	32	20	11.0	27.5	2	1	20	12.9	135	405	4
2.0	32	22	13	27.5	2	1	20	9.6	180	540	5
2.2	32	22	13	27.5	2	1	20	8.8	198	594	6
2.5	32	22	13	27.5	2	1	20	7.7	225	675	6
3.0	32	24.5	15	27.5	2	1	20	6.4	270	810	7
3.3	32	24.5	15	27.5	2	1	21	5.8	297	891	8
3.5	32	28	14	27.5	2	1	23	5.5	315	945	8
4.0	32	33	18	27.5	2	1.2	22	4.8	360	1080	10
4.5	32	33	18	27.5	2	1.2	23	4.3	405	1215	10
5.0	32	33	18	27.5	2	1.2	23	3.9	450	1350	11
6.8	32	37	22	27.5	2	1.2	24	2.8	612	1836	14
4.7	41	26	15	37.5	2	1.2	24	7.8	282	846	7

Urms:300VAC Un:425VAC											
Cn(μF)	W(mm)	H(mm)	T(mm)	P(mm)	Pins	d(mm)	Ls(mm)	ESR@1KHz	Î(A)	$\hat{I}_s$(A)	Imax@70℃，10KHz
3.3	41	18	9.0	27.5	2	1.2	22	9.2	231	696	7
3.5	42	20	11.0	27.5	2	1.2	23	8.6	245	735	7
4.0	41	22	13	27.5	2	1.2	24	7.6	280	840	8
4.5	41	22	13	27.5	2	1.2	24	6.7	315	945	9
4.7	41	22	13	27.5	2	1.2	24	6.4	329	987	9
5.0	41	24.5	15	27.5	2	1.2	24	6.0	350	1050	10
6.0	41	24.5	15	27.5	2	1.2	24	5.0	420	1260	11
6.8	41	28	14	27.5	2	1.2	25	4.4	476	1428	12
8.0	41	33	18	27.5	2	1.2	25	3.8	560	1680	13
10	41	33	18	27.5	2	1.2	26	3.0	700	2100	14
12	32	33	18	27.5	2	1.2	28	2.5	840	2520	14
15	32	37	22	27.5	4	1.2	29	2.1	1050	3150	14
18	41	26	15	37.5	4	1.2	30	3.8	720	2160	17

Urms:350VAC Un:480VAC											
Cn(μF)	W(mm)	H(mm)	T(mm)	P(mm)	Pins	d(mm)	Ls(mm)	ESR@1KHz	Î(A)	$\hat{I}_s$(A)	Imax@70℃，10KHz
1	32	22	13	27.5	2	1	18	19.6	51	153	3.2
1.5	32	24.5	15	27.5	2	1	19	14	76	229	4.2
2	32	30	16	27.5	2	1	21	11.1	102	306	5
2.5	32	33	18	27.5	2	1	22	7.0	127	382	6.2
3	32	37	22	27.5	2	1	24	5.8	153	458	7.4
3.5	32	37	22	27.5	2	1	24	5.0	178	535	7.9
4	32	37	18	27.5	2	1	29	4.4	204	611	8.2
4.5	42	37	22	37.5	2	1	31	7.6	164	493	8
5	42	37	22	37.5	2	1	30	7.0	182	547	8.3
6	42	41	26	37.5	2	1	32	6.2	219	657	9.7
8	42	41	26	37.5	2	1	32	5.1	292	876	10.5
12	57	43	30	52.5	4	1.2	32	4.4	312	937	14.1
15	57	45	35	52.5	4	1.2	32	3.7	391	1172	16.4
16	57	45	35	52.5	4	1.2	33	3.5	417	1250	16.8
18	57	50	35	52.5	4	1.2	33	3.2	469	1406	17.1

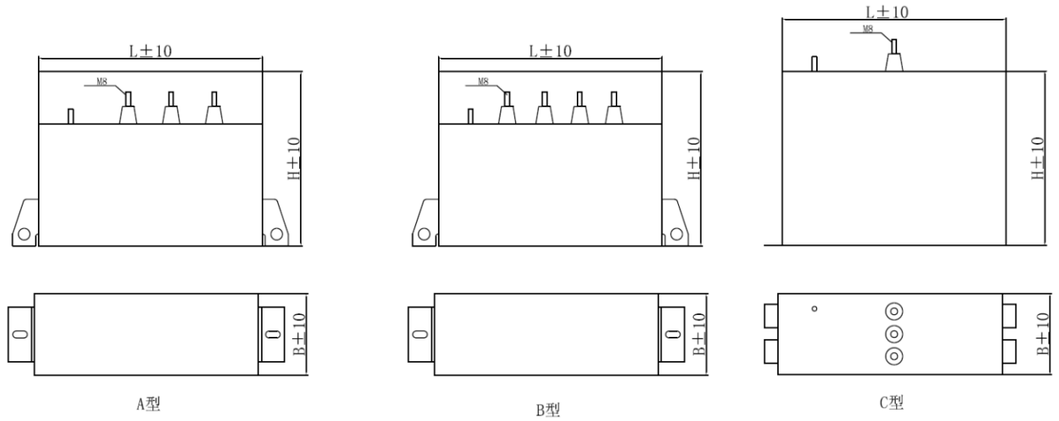
产品特点 PRODUCT FEATURES

- 适用于工厂、商场、住宅等低压配电系统中，起到无功补偿和滤波作用，可提高电网功率因数，降低线路损耗，改善电网运行质量，保护电器运行安全
  Applicable for low-voltage electric power system in factory , shopping mall and residence with function of compensation with no power and wave- filtrating , rasing pwer factor of electric net , reducing circuitry dissipation, improving operation of electic net and ensuring safe performance of electric equimpment
- 损耗小，绝缘电阻高
  Low Dissipation factor, high insulation resistance
- 自愈性能良好
  Good self-healing capability
- 防爆设计，内置放电电阻，安全性能可靠
  Anti-explosion design, inner discharging resistance , more safety
- 性能稳定，可靠性高；
  Stable performance and high reliability
- 产品执行标准IEC 60831-1、GB/T 12747.1&2-2017
  Product performance follows standard IEC 30831-1、GB/T 12747.1&2-2017

技术要求Technical Specifications

引用标准 Executing Standard	GB/T 12747.1&2-2017、IEC 60831-1
气候类别 Climatic Category	-25/55
额定电压 Un Rated Voltage	250VAC～525VAC 50 / 60 Hz
容量范围 Capacitance Range	10μF～100μF
容量偏差 Capacitance Tolerance	-5%～+10%
耐电压(两极之间) Test Voltage Between Terminals	2.15Un(VAC)，2s
耐电压(极壳之间) Test Voltage Between Terminals	3000VAC, 10s
损耗角正切 Dissipation Factor	tgδ≤0.0010（100Hz）
端子间绝缘电阻T-T Insulation Resistance(I.R.)	τ≥5000s（20℃，100V，60s）(注:τ=RC)
最高使用海拔Max.Altitude	2000m
工作温度（外壳）Operating temperature(case)	-25℃～55℃
预期寿命 Expected lifetime	100 000h @ Un, at 70℃

外型图 DIMENSION



规格尺寸表 RATINGS FOR SERIES

Un 400V 50/60Hz △

Qn (Kvar)	L (mm)	B (mm)	H (mm)	Shape
10	130	130	305	A
15	130	130	305	A
20	190	130	305	A
25	190	130	305	A
30	330	140	305	A
40	330	140	305	A
50	390	140	305	A
60	390	140	305	A
75	335	140	500	C
100	335	140	500	C

Un 450V 50/60Hz △

Qn (Kvar)	L (mm)	B (mm)	H (mm)	Shape
10	130	130	305	A
15	190	130	305	A
20	190	130	305	A
25	190	130	305	A
30	330	140	305	A
40	330	140	305	A
50	390	140	305	A
60	390	140	305	A
75	335	140	500	C
100	335	140	500	C

Un 480V 50/60Hz △

Qn (Kvar)	L (mm)	B (mm)	H (mm)	Shape
10	130	130	305	A
15	190	130	305	A
20	190	130	305	A
25	190	130	305	A
30	330	140	305	A
40	330	140	305	A
50	390	140	305	A
60	390	140	305	A
75	335	140	500	C
100	335	140	500	C

Un 525V 50/60Hz △

Qn (Kvar)	L (mm)	B (mm)	H (mm)	Shape
10	130	130	305	A
15	190	130	305	A
20	190	130	305	A
25	190	130	305	A
30	330	140	305	A
40	330	140	305	A
50	390	140	305	A
60	390	140	305	A
75	335	140	500	C
100	335	140	500	C

Un 280V 50/60Hz YN

Qn (Kvar)	L (mm)	B (mm)	H (mm)	Shape
10×3	390	140	305	B
20×3	390	140	305	B

ACSB

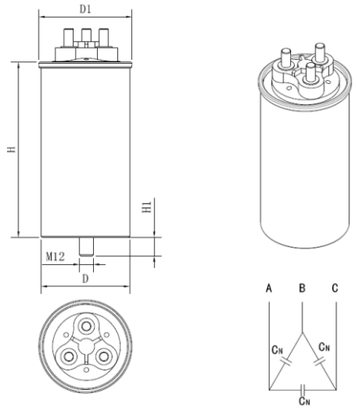
产品特点 PRODUCT FEATURES

- 适用于三相功率因数校正、LCL滤波，工业变频、UPS、伺服逆变器等交流滤波应用中
  Suitable for power factor correction and LCL filter,Applied to AC output filter applications Industrial frequency and UPS and Solar inverters
- 损耗小，绝缘电阻高
  Low Dissipation factor, high insulation resistance
- 自愈性能良好
  Good self-healing capability
- 防爆设计，内置放电电阻，安全性能可靠
  Anti-explosion design, inner discharging resistance , more safety
- 性能稳定，可靠性高；
  Stable performance and high reliability
- 产品执行标准IEC 60831-1、GB/T 12747.1&2-2017、IEC 61071、GB/T 17702-2013
  Product performance follows standard IEC 60831-1、GB/T 12747.1&2-2017、IEC 61071、GB/T 17702-2013

技术要求Technical Specifications

引用标准 Executing Standard	IEC 60831-1、GB/T 12747.1&2-2017、IEC 61071、GB/T 17702-2013
气候类别 Climatic Category	-40℃～+85℃
额定电压 Un Rated Voltage	250VAC～525VAC 50 / 60 Hz
额定频率 Rated Frequency	50 / 60 Hz
容量范围 Capacitance Range	10μF～100μF
容量偏差 Capacitance Tolerance	-5%～+10%
耐电压(两极之间) Test Voltage Between Terminals	2.15Un(VAC)，2s
耐电压(极壳之间) Test Voltage Between Terminals	3000VAC, 10s
损耗角正切 Dissipation Factor	tgδ≤0.0010（100Hz）
端子间绝缘电阻T-T Insulation Resistance(I.R.)	τ≥5000s（20℃，100V，60s）(注:τ=RC)
最高使用海拔Max.Altitude	2000m
工作温度（外壳）Operating temperature(case)	-40℃～+85℃
预期寿命 Expected lifetime	100 000h @ Un, at 70℃
过电压 Over voltages	1.1Urms,@8h/days
	1.15Urms,@30min/days
	1.2Urms,@5min/days
	1.3Urms,@1min/days
最大安装扭矩 Max.Torque of Installation	M12:10N・m
最大电极扭矩 Max.Torque of terminals	M8:4N・m；M6:3N・m；M5:2N・m
安装位置 Mounting position	Vertical
防爆装置 Explosion-proof device	Three phase overpressure disconnector

外型图 DIMENSION



规格尺寸表 RATINGS FOR SERIES

Urms 230V Un 325V 50/60Hz					
Cn（μF）	D（mm）	D1（mm）	H（mm）	Rth（K/W）	Imax（A）
3×84	76	79	200	4.5	3×34
3×105	76	79	230	4.0	3×36
3×160	86	80	230	3.5	3×43
3×250	116	121	200	3.1	3×53
3×330	116	121	230	2.7	3×54

Urms 540V Un 760V 50/60Hz					
Cn（μF）	D（mm）	D1（mm）	H（mm）	Rth（K/W）	Imax（A）
3×19	76	79	170	5.1	3×32
3×23	76	90	170	5.0	3×33
3×39	86	100	200	4.0	3×39
3×48	86	100	230	3.6	3×40
3×96	136	142	230	2.8	3×47

Urms 850V Un 1200V 50/60Hz					
Cn（μF）	D（mm）	D1（mm）	H（mm）	Rth（K/W）	Imax（A）
3×8	76	79	170	5.6	3×24
3×12	86	90	170	4.8	3×29
3×23	86	90	230	3.4	3×37
3×38	116	121	230	2.9	3×42
3×55	136	142	230	2.5	3×45

Urms 440V Un 625V 50/60Hz					
Cn（μF）	D（mm）	D1（mm）	H（mm）	Rth（K/W）	Imax（A）
3×13	76	79	140	6.2	3×22
3×33	76	79	200	4.0	3×28
3×50	86	80	200	3.4	3×34
3×66	86	80	230	2.9	3×36
3×100	116	121	200	2.8	3×43
3×154	136	142	200	2.3	3×48
3×170	136	142	230	2.2	3×45

产品特点 PRODUCT FEATURES

- 适用于工业变频、高端电源、太阳能逆变器等高性能直流滤波、母线支撑应用中，可替代电解电容器
  Applied to DC-Link circuits , can replace electrolytic capacitor
- 损耗小，绝缘电阻高
  Low Dissipation factor, high insulation resistance
- 自愈性能良好
  Good self-healing capability
- 等效串联电阻小，耐大纹波
  Low ESR, high current handling capabilitie
- 性能稳定，可靠性高；
  Stable performance and high reliability
- 产品执行标准IEC 61071、GB/T 17702-2013
  Product performance follows standard IEC 60831-1、GB/T 12747.1&2-2017、IEC 61071、GB/T 17702-2013

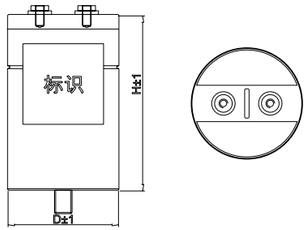
安全认证 Safety Certificate

	TUV（德国）	EN 61071, 600VDC～1500VDC,45μF～5200μF,-40℃～85℃ 证书号：R50429744
	UL（美国）	UI810，max 4000VDC,105℃ 证书号：E305089

技术要求Technical Specifications

引用标准 Executing Standard	IEC 61071、GB/T 17702-2013
气候类别 Climatic Category	-40℃～+85℃
工作温度（外壳）Operating temperature(case)	-40℃～+85℃
额定电压 Un Rated Voltage	600VDC～4000VDC
容量范围 Capacitance Range	45μF～5200μF
容量偏差 Capacitance Tolerance	±5%、±10%
耐电压(两极之间) Test Voltage Between Terminals	1.5Un(VDC)，10s
耐电压(极壳之间) Test Voltage Between Terminals	($\sqrt{2}$Un+1000)VAC 50Hz，20±5℃ 10s
损耗角正切 Dissipation Factor	tgδ≤0.0010（100Hz）
端子间绝缘电阻T-T Insulation Resistance(I.R.)	τ≥5000s（20℃，500V，60s）(注:τ=RC)
最高使用海拔Max.Altitude	2000m
安装位置 Mounting position	Vertical
预期寿命 Expected lifetime	100 000h @ Un, at 70℃
过电压 Over voltages	1.1Un,@8h/days
	1.15Un,@30min/days
	1.2Un,@5min/days
	1.3Un,@1min/days
最大安装扭矩 Max.Torque of Installation	M12:10N·m
最大电极扭矩 Max.Torque of terminals	M8:4N·m；M6:3N·m；M5:2N·m

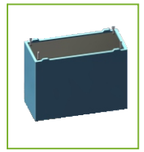
外型图 DIMENSION



规格尺寸表 RATINGS FOR SERIES

Un(VDC)	Cn（μF）	ESR@1KHz（mΩ）	L（nH）	Imax@60℃（A）	D（mm）	H（mm）
600	480	1.5	45	55	76	95
600	820	1.5	62	45	76	155
600	1100	1.4	40	64	86	155
600	2000	1.1	55	67	116	140
600	3000	0.8	50	100	116	230
700	360	1.6	45	53	76	95
700	820	1.4	40	64	86	155
700	1000	1.7	55	55	86	190
700	1800	1	45	85	116	175
700	2500	0.8	50	100	116	230
800	290	2	55	47	76	95
800	400	2.6	60	45	76	120
800	580	2.2	65	49	86	140
800	650	1.5	50	61	86	155
800	750	1.3	55	60	86	175
800	1200	1.2	65	65	116	140
800	1800	0.8	50	100	116	230
800	3200	0.8	65	100	136	295
900	290	2	55	47	76	95
900	400	2.6	60	45	76	120
900	580	2.2	65	49	86	140
900	650	1.5	50	61	86	155
900	750	1.3	55	60	86	175
900	1200	1.2	65	65	116	140
900	1800	0.8	50	100	116	230
900	3200	0.8	65	100	136	295
1100	180	2.3	55	44	76	95
1100	250	3	60	42	76	120
1100	360	3.5	55	54	76	175
1100	420	1.7	50	57	86	155
1100	620	1.4	60	59	116	120
1100	750	1.6	65	56	116	140
1100	920	1.1	60	81	116	175
1100	1200	1.0	50	100	116	230
1200	140	2.7	55	40	76	95
1200	240	2	50	53	76	155
1200	320	2.5	65	46	86	135
1200	470	1.7	50	57	86	225
1200	620	1	50	83	116	155
1200	720	1.2	60	78	116	175
1200	950	0.9	50	100	116	230
1300	120	2.9	55	39	76	95
1300	210	2.1	50	52	76	155
1300	270	3.3	65	40	86	140
1300	430	1.6	60	55	116	120
1300	520	1.5	60	65	116	252
1300	630	1.2	60	78	116	175
1300	820	0.9	50	100	116	230
1500	90	3.3	55	36	76	95
1500	150	2.4	50	49	76	155
1500	200	3	65	42	86	135
1500	320	1.9	60	51	116	120
1500	470	1.3	60	66	116	175
1500	600	1	50	75	116	230

产品特点 PRODUCT FEATURES



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  Good self-healing capability
- 等效串联电阻小，耐大纹波
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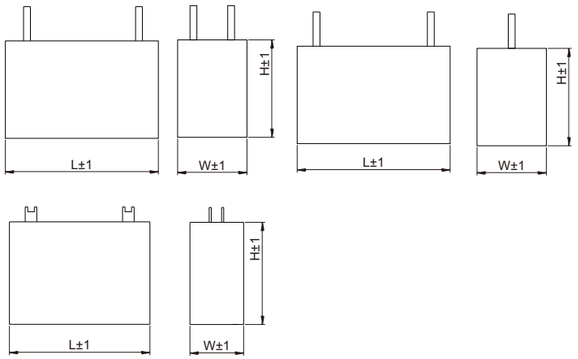
  Product performance follows standard IEC 60831-1、GB/T 12747.1&2-2017、IEC 61071、GB/T 17702-2013

技术要求Technical Specifications

引用标准 Executing Standard	IEC 61071、GB/T 17702-2013
气候类别 Climatic Category	-40℃～+85℃
工作温度（外壳）Operating temperature(case)	-40℃～+85℃
额定电压 Un Rated Voltage	450VDC～1200VDC
容量范围 Capacitance Range	5μF～190μF
容量偏差 Capacitance Tolerance	±5%、±10%
耐电压(两极之间) Test Voltage Between Terminals	1.5Un(VAC)，2s
耐电压(极壳之间) Test Voltage Between Terminals	($\sqrt{2}$Un+1000)VAC 50Hz，20±5℃ 10s
损耗角正切 Dissipation Factor	tgδ≤0.0010（100Hz）
端子间绝缘电阻T-T Insulation Resistance(I.R.)	τ≥5000s（20℃，500V，60s）(注:τ=RC)
最高使用海拔Max.Altitude	2000m
安装位置 Mounting position	PCB
预期寿命 Expected lifetime	100 000h @ Un, at 70℃
过电压 Over voltages	1.1Un,@8h/days
	1.15Un,@30min/days
	1.2Un,@5min/days
	1.3Un,@1min/days

外型图 DIMENSION

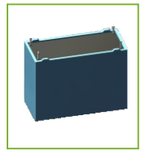


规格尺寸表 RATINGS FOR SERIES

U(VDC)	C(uF)	L(mm)	W(mm)	H(mm)	tanδ×(10-4)@1KHz	ESR@10KHz(mΩ)
450	5	32	27	11	10	8.5
450	10	32	35	15	10	4.5
450	22	32	37	22	10	5
450	30	42	40	20	15	8
450	35	42	40	24	15	5
450	40	42	40	25	15	4
450	50	42	45	28	15	3
450	60	42	46	30	15	3
450	75	57	45	30	35	5.5
450	80	57	45	30	35	5
450	110	57	50	35	35	4
450	190	57	65	45	35	4
600	5	32	27	13	11	19
600	6	32	30	13	11	18.6
600	7	32	30	15	11	15.9
600	8	32	30	15	11	13.9
600	10	32	30	16	11	11.1
600	18	32	37	22	11	6.2
600	20	42	35	20	20	9.8
600	22	42	35	20	20	8.9
600	25	42	40	20	20	15.4
600	30	42	40	24	20	18.5
600	35	42	44	24	20	20.1
600	40	57	40	23	36	9.8
600	45	57	40	23	36	8.7
600	50	57	43	25	36	7.8
600	55	57	50	30	36	7.1
600	60	57	50	35	36	6.5
600	65	57	50	35	36	6
600	70	57	50	35	36	5.6
600	75	57	50	35	36	5.2
600	80	57	50	35	36	4.9
600	85	57	55	40	36	4.8
600	90	57	55	40	36	4.6
600	95	57	55	40	36	4.4
600	100	57	55	40	36	4.2
600	110	57	60	45	36	3.8
800	5	32	30	15	10	18.2
800	6	32	33	18	10	15.1
800	7	32	33	18	10	13
800	8	32	35	20	10	12.5
800	10	32	37	22	10	11
800	15	42	40	20	18	11.9
800	20	42	40	24	18	8.9
800	25	57	40	23	33	14.3
800	30	57	40	23	33	11.9
800	35	57	43	25	33	10.2
800	40	57	45	30	33	8.9
800	45	57	45	30	33	7.9
800	50	57	50	30	33	7.1
800	55	57	50	35	33	6.5
800	60	57	50	35	33	5.9

U(VDC)	C(uF)	L(mm)	W(mm)	H(mm)	tanδ×(10-4)@1KHz	ESR@10KHz(mΩ)
800	65	57	55	45	33	5.5
800	70	57	55	45	33	5.1
800	75	57	55	40	33	4.8
800	80	57	55	40	33	4.6
800	85	57	60	45	33	4.5
800	90	57	60	45	33	4.2
800	95	57	60	45	33	4
800	100	57	60	45	33	3.8
800	110	57	65	45	33	3.5
1100	2	32	27	13	8	27.9
1100	5	32	37	22	8	14
1100	6	32	40	22	8	10.2
1100	7	42	40	20	15	20.7
1100	8	42	37	22	15	18.1
1100	10	42	40	24	15	12.1
1100	15	42	45	30	15	9.7
1100	20	42	50	35	15	14.5
1100	30	57	50	35	27	9.7
1100	40	57	55	45	27	7.8
1100	45	57	55	45	27	6.9
1100	50	57	60	45	27	6.2
1200	5	32	37	22	7	12.7
1200	6	42	40	20	13	18.6
1200	7	42	40	22	13	15.9
1200	8	42	44	24	13	13.9
1200	10	42	44	24	13	11.1
1200	15	57	45	25	24	15.9
1200	20	57	45	30	24	11.9
1200	30	57	55	40	24	8
1200	40	57	60	45	24	6
1200	45	57	60	45	24	5.3

产品特点 PRODUCT FEATURES



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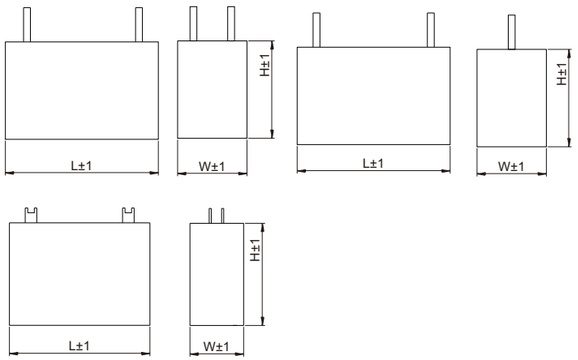
  Low Dissipation factor, high insulation resistance
- 自愈性能良好
  Good self-healing capability
- 等效串联电阻小，耐大纹波
  Low ESR, high current handling capabilitie
- 超薄型，安全膜设计
  Low building height,Segmented metallized-film design
- 性能稳定，可靠性高；
  Stable performance and high reliability
- 产品执行标准IEC 61071、GB/T 17702-2013
  Product performance follows standard IEC 60831-1、GB/T 12747.1&2-2017、IEC 61071、GB/T 17702-2013

技术要求Technical Specifications

引用标准 Executing Standard	IEC 61071、GB/T 17702-2013
气候类别 Climatic Category	-40℃～+85℃
工作温度（外壳）Operating temperature(case)	-40℃～+85℃
额定电压 Un Rated Voltage	450VDC～1200VDC
容量范围 Capacitance Range	5μF～190μF
容量偏差 Capacitance Tolerance	±5%、±10%
耐电压(两极之间) Test Voltage Between Terminals	1.5Un(VAC)，2s
耐电压(极壳之间) Test Voltage Between Terminals	($\sqrt{2}$Un+1000)VAC 50Hz，20±5℃ 10s
损耗角正切 Dissipation Factor	tgδ≤0.0010（100Hz）
端子间绝缘电阻T-T Insulation Resistance(I.R.)	τ≥5000s（20℃，500V，60s）(注:τ=RC)
最高使用海拔Max.Altitude	2000m
安装位置 Mounting position	PCB
预期寿命 Expected lifetime	100 000h @ Un, at 70℃
过电压 Over voltages	1.1Un,@8h/days
	1.15Un,@30min/days
	1.2Un,@5min/days
	1.3Un,@1min/days

外型图 DIMENSION



规格尺寸表 RATINGS FOR SERIES

U(VDC)	C(uF)	L(mm)	W(mm)	H(mm)	tanδ×(10-4)@1KHz	ESR@10KHz(mΩ)
450	5	32	27	11	10	8.5
450	10	32	35	15	10	4.5
450	22	32	37	22	10	5
450	30	42	40	20	15	8
450	35	42	40	24	15	5
450	40	42	40	25	15	4
450	50	42	45	28	15	3
450	60	42	46	30	15	3
450	75	57	45	30	35	5.5
450	80	57	45	30	35	5
450	110	57	50	35	35	4
450	190	57	65	45	35	4
600	5	32	27	13	11	19
600	6	32	30	13	11	18.6
600	7	32	30	15	11	15.9
600	8	32	30	15	11	13.9
600	10	32	30	16	11	11.1
600	18	32	37	22	11	6.2
600	20	42	35	20	20	9.8
600	22	42	35	20	20	8.9
600	25	42	40	20	20	15.4
600	30	42	40	24	20	18.5
600	35	42	44	24	20	20.1
600	40	57	40	23	36	9.8
600	45	57	40	23	36	8.7
600	50	57	43	25	36	7.8
600	55	57	50	30	36	7.1
600	60	57	50	35	36	6.5
600	65	57	50	35	36	6
600	70	57	50	35	36	5.6
600	75	57	50	35	36	5.2
600	80	57	50	35	36	4.9
600	85	57	55	40	36	4.8
600	90	57	55	40	36	4.6
600	95	57	55	40	36	4.4
600	100	57	55	40	36	4.2
600	110	57	60	45	36	3.8
800	5	32	30	15	10	18.2
800	6	32	33	18	10	15.1
800	7	32	33	18	10	13
800	8	32	35	20	10	12.5
800	10	32	37	22	10	11
800	15	42	40	20	18	11.9
800	20	42	40	24	18	8.9
800	25	57	40	23	33	14.3
800	30	57	40	23	33	11.9
800	35	57	43	25	33	10.2
800	40	57	45	30	33	8.9
800	45	57	45	30	33	7.9
800	50	57	50	30	33	7.1
800	55	57	50	35	33	6.5
800	60	57	50	35	33	5.9

U(VDC)	C(uF)	L(mm)	W(mm)	H(mm)	tanδ×(10-4)@1KHz	ESR@10KHz(mΩ)
800	65	57	55	45	33	5.5
800	70	57	55	45	33	5.1
800	75	57	55	40	33	4.8
800	80	57	55	40	33	4.6
800	85	57	60	45	33	4.5
800	90	57	60	45	33	4.2
800	95	57	60	45	33	4
800	100	57	60	45	33	3.8
800	110	57	65	45	33	3.5
1100	2	32	27	13	8	27.9
1100	5	32	37	22	8	14
1100	6	32	40	22	8	10.2
1100	7	42	40	20	15	20.7
1100	8	42	37	22	15	18.1
1100	10	42	40	24	15	12.1
1100	15	42	45	30	15	9.7
1100	20	42	50	35	15	14.5
1100	30	57	50	35	27	9.7
1100	40	57	55	45	27	7.8
1100	45	57	55	45	27	6.9
1100	50	57	60	45	27	6.2
1200	5	32	37	22	7	12.7
1200	6	42	40	20	13	18.6
1200	7	42	40	22	13	15.9
1200	8	42	44	24	13	13.9
1200	10	42	44	24	13	11.1
1200	15	57	45	25	24	15.9
1200	20	57	45	30	24	11.9
1200	30	57	55	40	24	8
1200	40	57	60	45	24	6
1200	45	57	60	45	24	5.3

产品特点 PRODUCT FEATURES

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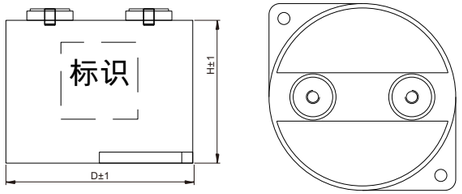
- 自愈性能良好
  Good self-healing capability
- 等效串联电阻小，耐大纹波
  Low ESR, high current handling capabilitie
- 性能稳定，可靠性高；
  Stable performance and high reliability
- 产品执行标准IEC 61071、GB/T 17702-2013
  Product performance follows standard IEC 60831-1、GB/T 12747.1&2-2017、IEC 61071、GB/T 17702-2013

技术要求Technical Specifications

引用标准 Executing Standard	IEC 61071、GB/T 17702-2013
气候类别 Climatic Category	-40℃～+85℃
工作温度（外壳）Operating temperature(case)	-40℃～+85℃
额定电压 Un Rated Voltage	600VDC～1500VDC
容量范围 Capacitance Range	25μF～600μF
容量偏差 Capacitance Tolerance	±5%、±10%
耐电压(两极之间) Test Voltage Between Terminals	1.5Un(VDC)，10s
耐电压(极壳之间) Test Voltage Between Terminals	(√2 Un+1000)VAC 50Hz，20±5℃ 10s
损耗角正切 Dissipation Factor	tgδ≤0.0010（100Hz）
端子间绝缘电阻T-T Insulation Resistance(I.R.)	τ≥5000s（20℃，500V，60s）(注:τ=RC)
最高使用海拔Max.Altitude	2000m
安装位置 Mounting position	Vertical
预期寿命 Expected lifetime	100 000h @ Un, at 70℃
过电压 Over voltages	1.1Un,@8h/days
	1.15Un,@30min/days
	1.2Un,@5min/days
	1.3Un,@1min/days
最大安装扭矩 Max.Torque of Installation	M12:10N・m
最大电极扭矩 Max.Torque of terminals	M8:4N・m；M6:3N・m；M5:2N・m

外型图 DIMENSION



规格尺寸表 RATINGS FOR SERIES

Un(VDC)	Cn（μF）	ESR@1KHz（mΩ）	L（nH）	Imax@60℃（A）	D（mm）	H（mm）
600	170	0.8	25	60	84.5	41
600	260	0.9	32	64	84.5	50
600	380	1	40	62	84.5	65
600	600	1.1	40	73	115	64
800	100	0.9	25	57	84.5	41
800	150	1.0	32	61	84.5	50
800	220	1.1	40	60	84.5	65
800	350	1.3	40	67	115	64
900	100	0.9	25	57	84.5	41
900	150	1.0	32	61	84.5	50
900	220	1.1	40	60	84.5	65
900	350	1.3	40	67	115	64
1100	66	1.2	25	49	84.5	41
1100	100	1.3	32	53	84.5	50
1100	140	1.5	40	51	84.5	65
1100	230	1.4	40	64	115	64
1300	47	1.3	25	47	84.5	41
1300	70	1.4	32	51	84.5	50
1300	100	1.8	40	47	84.5	65
1300	160	1.6	40	60	115	64
1400	40	1.3	25	47	84.5	41
1400	56	1.5	32	50	84.5	50
1400	86	1.8	40	46	84.5	65
1400	130	1.7	40	58	115	64
1500	35	1.4	25	45	84.5	41
1500	50	1.6	32	48	84.5	50
1500	76	1.9	40	45	84.5	65
1500	110	1.8	40	57	115	64

DCLD

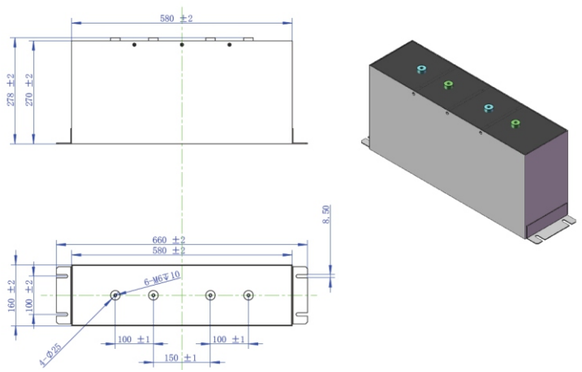
产品特点 PRODUCT FEATURES

- 适用于工业变频、高端电源、太阳能逆变器等高性能直流滤波、母线支撑应用中，可替代电解电容器
  Applied to DC-Link circuits，can replace electrolytic capacitor
- 损耗小，绝缘电阻高
  Low Dissipation factor, high insulation resistance
- 自愈性能良好
  Good self-healing capability
- 等效串联电阻小，耐大纹波
  Low ESR, high current handling capabilitie
- 性能稳定，可靠性高；
  Stable performance and high reliability
- 产品执行标准IEC 61071、GB/T 17702-2013
  Product performance follows standard IEC 60831-1、GB/T 12747.1&2-2017、IEC 61071、GB/T 17702-2013

技术要求Technical Specifications

引用标准 Executing Standard	IEC 61071、GB/T 17702-2013
气候类别 Climatic Category	-40℃～+85℃
工作温度（外壳）Operating temperature(case)	-40℃～+85℃
额定电压 Un Rated Voltage	2000VDC
容量范围 Capacitance Range	2000μF
容量偏差 Capacitance Tolerance	±5%、±10%
耐电压(两极之间) Test Voltage Between Terminals	1.5Un(VDC)，10s
耐电压(极壳之间) Test Voltage Between Terminals	($\sqrt{2}$Un+1000)VAC 50Hz，20±5℃ 10s
损耗角正切 Dissipation Factor	tgδ≤0.0010（100Hz）
端子间绝缘电阻T-T Insulation Resistance(I.R.)	τ≥5000s（20℃，500V，60s）(注:τ=RC)
最高使用海拔Max.Altitude	2000m
安装位置 Mounting position	Vertical
预期寿命 Expected lifetime	100 000h @ Un, at 70℃
过电压 Over voltages	1.1Un,@8h/days
	1.15Un,@30min/days
	1.2Un,@5min/days
	1.3Un,@1min/days
最大安装扭矩 Max.Torque of Installation	M8:4N・m；M6:3N・m；M5:2N・m
最大电流 Imax	200A @ 10KHz at 60℃
最大冲击电流 maximum surge current $\hat{i}_s$(A)	8000A
等效串联电阻 ESR	0.5mΩ @ 1KHz
自感 ESL	≤30nH@ 1MHz

外型图 DIMENSION



DCLD

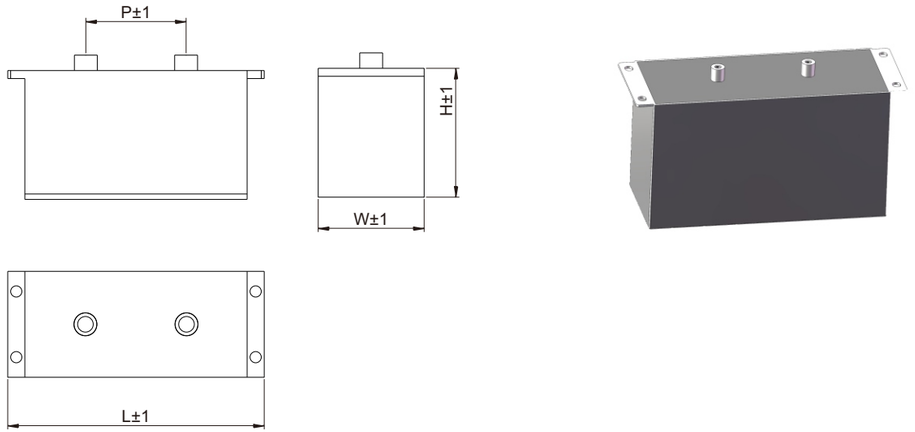
产品特点 PRODUCT FEATURES

- 适用于工业变频、高端电源、太阳能逆变器等高性能直流滤波、母线支撑应用中，可替代电解电容器
  Applied to DC-Link circuits，can replace electrolytic capacitor
- 损耗小，绝缘电阻高
  Low Dissipation factor, high insulation resistance
- 自愈性能良好
  Good self-healing capability
- 等效串联电阻小，耐大纹波
  Low ESR, high current handling capabilitie
- 性能稳定，可靠性高；
  Stable performance and high reliability
- 产品执行标准IEC 61071、GB/T 17702-2013
  Product performance follows standard IEC 60831-1、GB/T 12747.1&2-2017、IEC 61071、GB/T 17702-2013

技术要求Technical Specifications

引用标准 Executing Standard	IEC 61071、GB/T 17702-2013
气候类别 Climatic Category	-40℃～+85℃
工作温度（外壳）Operating temperature(case)	-40℃～+85℃
额定电压 Un Rated Voltage	700VDC
容量范围 Capacitance Range	1200μF
容量偏差 Capacitance Tolerance	±5%、±10%
耐电压(两极之间) Test Voltage Between Terminals	1.5Un(VDC)，10s
耐电压(极壳之间) Test Voltage Between Terminals	($\sqrt{2}$Un+1000)VAC 50Hz，20±5℃ 10s
损耗角正切 Dissipation Factor	tgδ≤0.0010（100Hz）
端子间绝缘电阻T-T Insulation Resistance(I.R.)	τ≥5000s（20℃，500V，60s）(注:τ=RC)
最高使用海拔Max.Altitude	2000m
安装位置 Mounting position	Vertical
预期寿命 Expected lifetime	100 000h @ Un, at 70℃
过电压 Over voltages	1.1Un,@8h/days
	1.15Un,@30min/days
	1.2Un,@5min/days
	1.3Un,@1min/days
最大安装扭矩 Max.Torque of Installation	M8:4N・m；M6:3N・m；M5:2N・m
最大电流 Imax	200A @ 10KHz at 60℃
最大冲击电流 maximum surge current $\hat{i}_s$(A)	8200A
等效串联电阻 ESR	1mΩ @ 1KHz
外形尺寸 Outline size	L:240mm×W:88mm×H:120mm(P=80mm)

外型图 DIMENSION



DCH

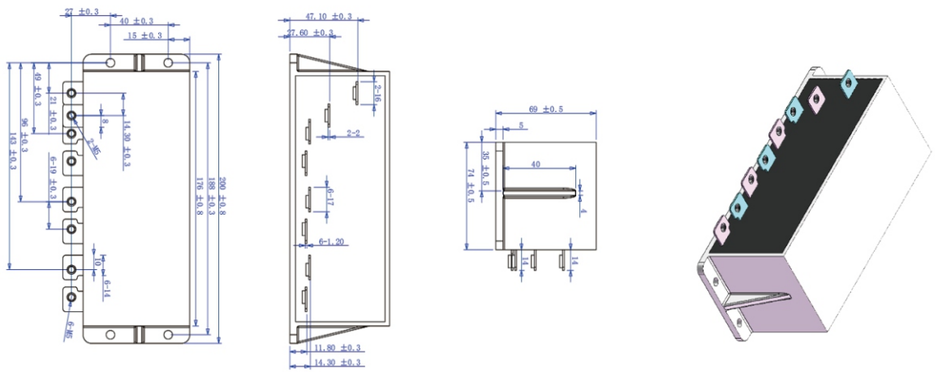
产品特点 PRODUCT FEATURES

- 适用于工业变频、电动汽车和混动汽车等高性能直流滤波、母线支撑应用中
  Applied to High performance DC filter applications(Industrial frequency and EV、HEV)
- 损耗小，绝缘电阻高
  Low Dissipation factor, high insulation resistance
- 自愈性能良好
  Good self-healing capability
- 等效串联电阻小，耐大纹波
  Low ESR, high current handling capabilitie
- 性能稳定，可靠性高；
  Stable performance and high reliability
- 产品执行标准IEC 61071、GB/T 17702-2013
  Product performance follows standard IEC 60831-1、GB/T 12747.1&2-2017、IEC 61071、GB/T 17702-2013

技术要求Technical Specifications

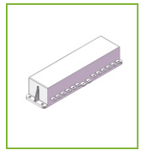
引用标准 Executing Standard	IEC 61071、GB/T 17702-2013
气候类别 Climatic Category	-40℃～+85℃
工作温度（外壳）Operating temperature(case)	-40℃～+85℃
额定电压 Un Rated Voltage	500VDC
容量范围 Capacitance Range	750μF
容量偏差 Capacitance Tolerance	±5%、±10%
耐电压(两极之间) Test Voltage Between Terminals	1.5Un(VDC)，10s
耐电压(极壳之间) Test Voltage Between Terminals	($\sqrt{2}$Un+1000)VAC 50Hz，20±5℃ 10s
损耗角正切 Dissipation Factor	tgδ≤0.0010（100Hz）
端子间绝缘电阻T-T Insulation Resistance(I.R.)	τ≥5000s（20℃，500V，60s）(注:τ=RC)
最高使用海拔Max.Altitude	2000m
安装位置 Mounting position	Vertical
预期寿命 Expected lifetime	100 000h @ Un, at 70℃
过电压 Over voltages	1.1Un,@8h/days
	1.15Un,@30min/days
	1.2Un,@5min/days
	1.3Un,@1min/days
最大安装扭矩 Max.Torque of Installation	M8:4N・m；M6:3N・m；M5:2N・m
最大电流 Imax	150A @ 10KHz at 60℃
最大冲击电流 maximum surge current $\hat{i}_s$(A)	7500A
等效串联电阻 ESR	0.5mΩ @ 1KHz
自感 ESL	≤25nH@ 1MHz

外型图 DIMENSION



DCH

产品特点 PRODUCT FEATURES

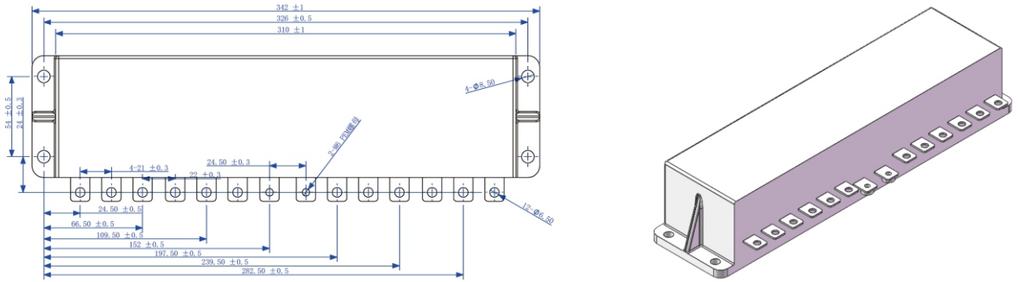


- 适用于工业变频、电动汽车和混动汽车等高性能直流滤波、母线支撑应用中
  Applied to High performance DC filter applications(Industrial frequency and EV、HEV)
- 损耗小，绝缘电阻高
  Low Dissipation factor, high insulation resistance
- 自愈性能良好
  Good self-healing capability
- 等效串联电阻小，耐大纹波
  Low ESR, high current handling capabilitie
- 性能稳定，可靠性高；
  Stable performance and high reliability
- 产品执行标准IEC 61071、GB/T 17702-2013
  Product performance follows standard IEC 60831-1、GB/T 12747.1&2-2017、IEC 61071、GB/T 17702-2013

技术要求Technical Specifications

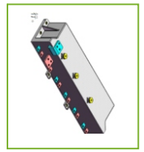
引用标准 Executing Standard	IEC 61071、GB/T 17702-2013
气候类别 Climatic Category	-40℃～+85℃
工作温度（外壳）Operating temperature(case)	-40℃～+85℃
额定电压 Un Rated Voltage	500VDC
容量范围 Capacitance Range	800μF
容量偏差 Capacitance Tolerance	±5%、±10%
耐电压(两极之间) Test Voltage Between Terminals	1.5Un(VDC)，10s
耐电压(极壳之间) Test Voltage Between Terminals	($\sqrt{2}$Un+1000)VAC 50Hz，20±5℃ 10s
损耗角正切 Dissipation Factor	tgδ≤0.0010（100Hz）
端子间绝缘电阻T-T Insulation Resistance(I.R.)	τ≥5000s（20℃，500V，60s）(注:τ=RC)
最高使用海拔Max.Altitude	2000m
安装位置 Mounting position	Vertical
预期寿命 Expected lifetime	100 000h @ Un, at 70℃
过电压 Over voltages	1.1Un,@8h/days
	1.15Un,@30min/days
	1.2Un,@5min/days
	1.3Un,@1min/days
最大安装扭矩 Max.Torque of Installation	M8:4N・m；M6:3N・m；M5:2N・m
最大电流 Imax	180A @ 10KHz at 60℃
最大冲击电流 maximum surge current $\hat{i}_s$(A)	8000A
等效串联电阻 ESR	0.5mΩ @ 1KHz
自感 ESL	≤25nH@ 1MHz

外型图 DIMENSION



DCH

产品特点 PRODUCT FEATURES

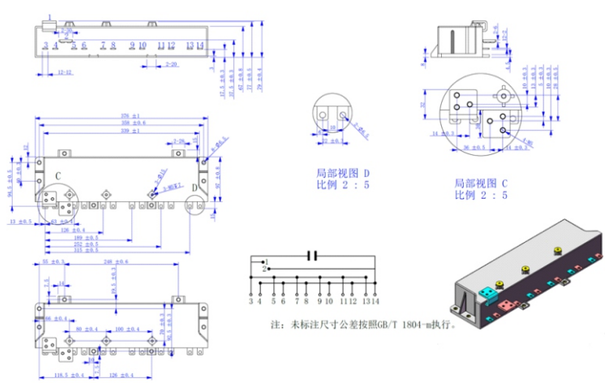


- 适用于工业变频、电动汽车和混动汽车等高性能直流滤波、母线支撑应用中
  Applied to High performance DC filter applications(Industrial frequency and EV、HEV)
- 损耗小，绝缘电阻高
  Low Dissipation factor, high insulation resistance
- 自愈性能良好
  Good self-healing capability
- 等效串联电阻小，耐大纹波
  Low ESR, high current handling capabilitie
- 性能稳定，可靠性高；
  Stable performance and high reliability
- 产品执行标准IEC 61071、GB/T 17702-2013
  Product performance follows standard IEC 60831-1、GB/T 12747.1&2-2017、IEC 61071、GB/T 17702-2013

技术要求Technical Specifications

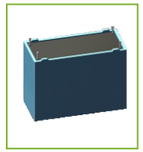
引用标准 Executing Standard	IEC 61071、GB/T 17702-2013
气候类别 Climatic Category	-40℃～+85℃
工作温度（外壳）Operating temperature(case)	-40℃～+85℃
额定电压 Un Rated Voltage	800VDC
容量范围 Capacitance Range	1100μF
容量偏差 Capacitance Tolerance	±5%、±10%
耐电压(两极之间) Test Voltage Between Terminals	1.5Un(VDC)，10s
耐电压(极壳之间) Test Voltage Between Terminals	($\sqrt{2}$Un+1000)VAC 50Hz，20±5℃ 10s
损耗角正切 Dissipation Factor	tgδ≤0.0010（100Hz）
端子间绝缘电阻T-T Insulation Resistance(I.R.)	τ≥5000s（20℃，500V，60s）(注:τ=RC)
最高使用海拔Max.Altitude	2000m
安装位置 Mounting position	Vertical
预期寿命 Expected lifetime	100 000h @ Un, at 70℃
过电压 Over voltages	1.1Un,@8h/days
	1.15Un,@30min/days
	1.2Un,@5min/days
	1.3Un,@1min/days
最大安装扭矩 Max.Torque of Installation	M8:4N・m；M6:3N・m；M5:2N・m
最大电流 Imax	150A @ 10KHz at 60℃
最大冲击电流 maximum surge current i_s(A)	10000A
等效串联电阻 ESR	0.5mΩ @ 1KHz
自感 ESL	≤25nH@ 1MHz

外型图 DIMENSION



DCX

产品特点 PRODUCT FEATURES

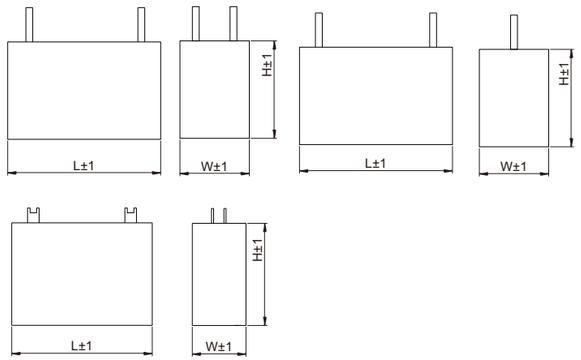


- 适用于高频脉冲电路中，作为IGBT吸收电容
  Applied to high voltage high frequency circuit as snubber capacitor for IGBT
- 损耗小，绝缘电阻高
  Low Dissipation factor, high insulation resistance
- 自愈性能良好
  Good self-healing capability
- 等效串联电阻小，耐大纹波
  Low ESR, high current handling capabilitie
- 性能稳定，可靠性高；
  Stable performance and high reliability
- 产品执行标准IEC 61071、GB/T 17702-2013
  Product performance follows standard IEC 60831-1、GB/T 12747.1&2-2017、IEC 61071、GB/T 17702-2013

技术要求Technical Specifications

引用标准 Executing Standard	IEC 61071、GB/T 17702-2013
气候类别 Climatic Category	-40℃～+85℃
工作温度（外壳）Operating temperature(case)	-40℃～+85℃
额定电压 Un Rated Voltage	700VDC～2500VDC
容量范围 Capacitance Range	0.33μF～6.8μF
容量偏差 Capacitance Tolerance	±5%、±10%
耐电压(两极之间) Test Voltage Between Terminals	1.5Un(VAC)，2s
耐电压(极壳之间) Test Voltage Between Terminals	($\sqrt{2}$Un+1000)VAC 50Hz，20±5℃ 10s
损耗角正切 Dissipation Factor	tgδ≤0.0010（100Hz）
端子间绝缘电阻T-T Insulation Resistance(I.R.)	τ≥5000s（20℃，500V，60s）(注:τ=RC)
最高使用海拔Max.Altitude	2000m
安装位置 Mounting position	PCB
预期寿命 Expected lifetime	100 000h @ Un, at 70℃
过电压 Over voltages	1.1Un,@8h/days
	1.15Un,@30min/days
	1.2Un,@5min/days
	1.3Un,@1min/days

外型图 DIMENSION



DCX

规格尺寸表 RATINGS FOR SERIES

U(VDC)	C(uF)	L(mm)	W(mm)	H(mm)	Imax(10KHz)@70℃	ESR@100KHz(mΩ)
700	1	37	16	30	14	5
700	2	42	20	40	18	4
700	2.2	42	20	40	18.5	4
700	4.7	42	30	45	23	3.5
700	6.8	57	30	45	24	2.5
850	0.47	37	15	25	15	5
850	1	37	20	34	17	5
850	2	42	20	40	19	4.5
850	4.7	57	30	45	24.5	4
850	6.8	57	35	50	27	4
1200	0.33	37	15	25	15	4.5
1200	0.47	37	16	30	16	4.5
1200	0.68	37	20	34	17	4.5
1200	1	42	20	40	19	4
1200	2	42	30	45	20	4
1200	4	57	35	50	24	3.8
1700	0.33	37	20	34	15.5	5.5
1700	0.47	42	24	36	16	4
1700	0.68	42	24	44	18	3.5
1700	1	42	30	45	20	3.5
1700	1.5	57	35	50	22	3.5
1700	2.2	57	35	50	24	3
2000	0.1	37	15	25	14	8
2000	0.22	37	16	30	15.5	6
2000	0.33	37	20	34	16	6
2000	0.47	42	20	40	17	4
2000	0.68	42	24	44	18.5	3.5
2000	1	57	30	45	24	4
2500	0.1	37	16	30	15	8.5
2500	0.22	42	20	40	17	4
2500	0.33	42	24	44	17.5	4
2500	0.47	42	30	45	18	3.5
2500	0.68	57	30	45	18.5	3.5
2500	1	57	35	50	19.5	3.5