

DC-Link薄膜电容器  
DC-Link capacitor

特点 / Features

- ◆ 采用特殊设计构造的电极，耐电压，耐电流性能优越。
- ◆ 低损耗，低电感构造。
- ◆ 端子形状灵活，可满足客户的个性化需求。
- ★ High Voltage and High Ripple-Current Capability by original designed Electrode.
- ★ Low loss, Low inductance structure.
- ★ A flexible terminal form by customer requirement.

用途 / Applications

- ◆ 混合型动力汽车，电动汽车的变频电路。
- ◆ DC-Link capacitor。
- ★ Inverter for HEV and EV automotive.
- ★ DC-Link capacitor.

规格 / Specifications

使用温度范围	Temp. Range	- 40~+105℃
额定电压	Rated Voltage	500~800V.dc
容量范围	Capacitance Range	100~600μ F
容量偏差	Capacitance Tolerance	±5% (J) ,±10% (K)
损耗角正切	Dissipation Factor	0.002以下/or less(at 1kHz)
绝缘电阻	Insulation Resistance	3,000ΩF以上/or more

# DLC(A)

## Aluminum Case Dry type DC-Link Capacitor



### General characteristics

- **Application**
  - Inverters of wind power and solar power
  - Transportation HEV or EV
  - Motr drive system、Welders、Elevators
  
- **Reference standards**
  - IEC 61071 (GB/T 17702)、IEC 60068 (GB/T 2423)
  
- **Climatic Category**
  - 40/85/56
  
- **Construction**
  - Metallized safe film structure、wave cutting technology.
  - Resin filling Non PCB、Hard polyurethane (Dry type)
  
- **Features**
  - Used in DC-Link circuits、Can replace electrolytic capacitor.
  - Used in Low ESR、high ripple current handling capabilities.
  - Low ESL、Self healing property、Long lifetime.
  
- **Technical data**

Temp. range	-40°C~85°C	Cap. Tolerance	±5%(J) ±10%(K) ±20%(M)
Rated voltage	700V、900V、1100V、1300V	Tangent of angle	0.002 or less (at 100Hz 25°C)
	1500V、2000V.DC	Insulation resistance	3,000 Ω F or more
Capacitance	700V 360~2800 μ F	Voltage Proof	Between Terminals:
	900V 260~2100 μ F		1.5VR <sub>dc</sub> (10S)
	1100V 180~1400 μ F	Humidity	Terminals to Case:
	1300V 120~900 μ F		2*Vi+1000V (10S)
	1500V 90~470 μ F	Lifetime Expectancy	93% (on 56days)
	2000V 50~300 μ F		100 000h

# DLC(A)

## Aluminum Case Dry type DC-Link Capacitor



### Part number system

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
D	L	C	(A)													

1、Digit 1 to 4 : Type of capacitor

2、Digit 5 to 6 : Rated voltage

07 = 700 V.DC      13 = 1300 V.DC

09 = 900 V.DC      15 = 1500 V.DC

11 = 1100 V.DC    20 = 2000 V.DC

3、Digit 7 to 9 : Rated capacitance value

e.g.: 367 =  $36 \times 10^7 \mu\text{F} = 360 \times 10^3 = 360 (\mu\text{F})$

4、Digit 10 : capacitance tolerance

J :  $\pm 5\%$

K :  $\pm 10\%$

M :  $\pm 20\%$

5、Digit 11 : indicates lead type

1 : male terminal

2 : female terminal

6、Digit 12 : between terminals pitch

A : P = 32mm

B : P = 35mm

C : P = 50mm

7、Digit 13 : Indicates Bolt Type

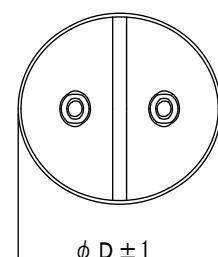
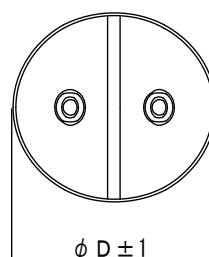
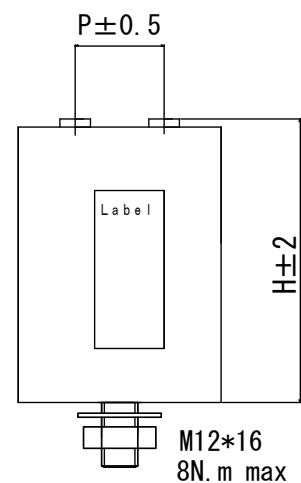
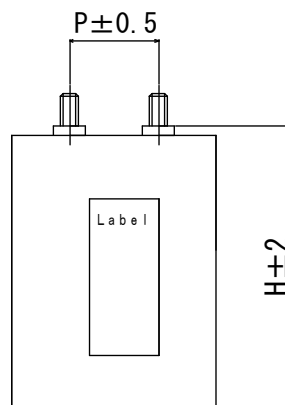
1 : M5

2 : M6

3 : M8

8、Digit 14 to 17 : Model code

(internal use)



**DLC(A)**  
**Aluminum Case Dry type DC-Link Capacitor**



W.V	Capacitance ( $\mu$ F)	Dimension (mm)		ERS max 1KHz(m $\Omega$ )	Ls max (nH)	Irms (A)	Part number
		Dmax	Hmax				
700V.DC	360	76	95	1.8	70	55	DLC(A)07367****
	450	76	125	2.1	70	60	DLC(A)07457****
	480	86	95	1.5	65	60	DLC(A)07487****
	550	76	145	2.4	70	50	DLC(A)07557****
	600	86	125	1.8	60	50	DLC(A)07607****
	650	76	175	2.0	65	55	DLC(A)07657****
	700	86	145	1.9	60	60	DLC(A)07707****
	900	86	175	1.7	60	60	DLC(A)07907****
	1100	116	125	1.4	55	70	DLC(A)07118****
	1400	116	145	1.2	60	75	DLC(A)07148****
	1700	116	175	1.3	60	75	DLC(A)07178****
	2200	136	145	0.9	60	80	DLC(A)07228****
	2800	136	175	1.1	60	80	DLC(A)07288****
900V.DC	260	76	95	2.8	70	47	DLC(A)09267****
	360	86	125	2.4	70	45	DLC(A)09367****
	380	76	95	2.8	65	55	DLC(A)09387****
	450	76	145	3.2	70	43	DLC(A)09457****
	500	86	125	3.2	60	50	DLC(A)09507****
	600	86	175	2.6	60	49	DLC(A)09607****
	750	86	145	2.2	60	60	DLC(A)09757****
	1000	116	175	1.8	55	65	DLC(A)09108****
	1100	116	125	1.6	50	65	DLC(A)09118****
	1400	136	145	2.0	55	80	DLC(A)09148****
	1500	116	175	2.4	55	80	DLC(A)09158****
	1700	136	145	1.8	55	85	DLC(A)09178****
	2100	136	175	2.1	55	85	DLC(A)09218****
1100V.DC	180	76	95	2.0	80	42	DLC(A)11187****
	220	86	95	2.2	60	45	DLC(A)11227****
	240	76	125	2.4	70	45	DLC(A)11247****
	300	76	145	2.9	70	42	DLC(A)11307****
	330	86	125	3.1	70	40	DLC(A)11337****
	360	76	175	3.3	75	55	DLC(A)11367****
	420	86	145	2.2	60	54	DLC(A)11427****
	500	86	175	1.6	60	59	DLC(A)11507****
	650	116	125	1.6	55	58	DLC(A)11657****
	750	116	145	1.5	60	59	DLC(A)11757****
	900	136	125	1.3	60	70	DLC(A)11907****
	940	116	175	1.2	55	70	DLC(A)11947****
	1000	136	145	1.1	60	75	DLC(A)11108****
1400	136	175	0.9	70	80	DLC(A)11148****	

DLC(A)  
Aluminum Case Dry type DC-Link Capacitor



W.V	Capacitance ( $\mu$ F)	Dimension (mm)		ERS max 1KHz(m $\Omega$ )	Ls max (nH)	Irms (A)	Part number
		Dmax	Hmax				
1300V.DC	120	76	95	2.9	75	39	DLC(A)13127****
	160	76	125	3.7	70	37	DLC(A)13167****
	170	86	95	3.7	70	37	DLC(A)13177****
	210	76	145	4.1	70	36	DLC(A)13217****
	230	86	125	2.3	60	52	DLC(A)13237****
	240	76	175	2.3	60	50	DLC(A)13247****
	270	86	145	3.3	65	44	DLC(A)13277****
	320	86	175	1.9	55	55	DLC(A)13327****
	430	116	125	1.6	60	55	DLC(A)13437****
	520	116	145	1.8	60	53	DLC(A)13527****
	630	116	175	1.2	60	60	DLC(A)13637****
	660	136	125	1.7	50	70	DLC(A)13667****
	750	136	145	1.7	60	80	DLC(A)13757****
	900	136	175	1.4	60	80	DLC(A)13907****
1500V.DC	90	76	95	3.1	80	35	DLC(A)15906****
	120	76	125	3.8	70	40	DLC(A)15127****
	130	86	95	2.8	60	38	DLC(A)15137****
	150	76	145	4.2	75	40	DLC(A)15157****
	170	76	175	4.8	85	45	DLC(A)15177****
	200	86	145	3.6	60	50	DLC(A)15207****
	230	116	95	2.4	60	60	DLC(A)15237****
	240	86	175	4.5	60	55	DLC(A)15247****
	320	116	125	2.4	60	65	DLC(A)15327****
	390	116	145	2.6	60	70	DLC(A)15397****
	470	116	175	3.1	60	70	DLC(A)15477****
2000V.DC	50	76	95	4.8	80	30	DLC(A)20507****
	60	86	95	4.1	60	30	DLC(A)20607****
	70	76	125	6.5	80	30	DLC(A)20707****
	100	86	125	6.8	60	35	DLC(A)20108****
	150	86	175	8.5	80	40	DLC(A)20158****
	190	116	125	3.2	60	60	DLC(A)20198****
	220	116	145	3.5	60	60	DLC(A)20228****
	270	136	125	3.4	60	60	DLC(A)20278****
300	116	175	4.2	60	60	DLC(A)20308****	

# DLC(B)

## Plastic Case Dry type DC-Link Capacitor



### General characteristics

- **Application**
  - Inverters of wind power
  - Motr drive system
  - Welders、Elevators
- **Reference standards**
  - IEC 61071 (GB/T 17702)
- **Climatic Category**
  - 40/105/56 ( $V_R \leq 900V_{dc}$ )
  - 40/85/56 ( $V_R > 900V_{dc}$ )
- **Construction**
  - Metallized polypropylene or safe film structure.
  - Plastic case、filled with epoxy resin.
- **Features**
  - Used in DC-Link circuits、Can replace electrolytic capacitor.
  - Used in Low ESR、high ripple current handling capabilities.
  - Low ESL、Self healing property、Long lifetime.
- **Technical data**

Temp. range	-40°C~85°C	Cap. Tolerance	±5%(J) ±10%(K) ±20%(M)
Rated voltage	600V、700V、900V、1100V	Tangent of angle	0.002 or less (at 100Hz 25°C)
	1200V、1500V.DC	Insulation resistance	3,000 Ω F or more
Capacitance	600V 120~500 μ F	Voltage Proof	Between Terminals :
	700V 100~350 μ F		1.5V <sub>Rdc</sub> (10S)
	900V 68~300 μ F	Lifetime Expectancy	Terminals to Case :
	1100V 47~200 μ F		2*V <sub>i</sub> +1000V (10S)
	1200V 25~80 μ F		100 000h
1500V 18~68 μ F			

# DLC(B) Plastic Case Dry type DC-Link Capacitor



## Part number system

1	2	3	4	5	6	7	9	10	11	12	13	14	15	16	17
D	L	C	(B)												

1、Digit 1 to 4 : Type of capacitor

2、Digit 5 to 6 : Rated voltage

06 = 600 V.DC

07 = 700 V.DC

09 = 900 V.DC

3、Digit 7 to 9 : Rated capacitance value

e.g.: 127 =  $12 \times 10^7 \text{pF} = 120 \times 10^3 = 120 (\mu\text{F})$

4、Digit 10 : capacitance tolerance

J :  $\pm 5\%$

K :  $\pm 10\%$

M :  $\pm 20\%$

5、Digit 11 : indicates lead type

1 : male terminal

2 : female terminal

6、Digit 12 : P1

A : P = 45mm

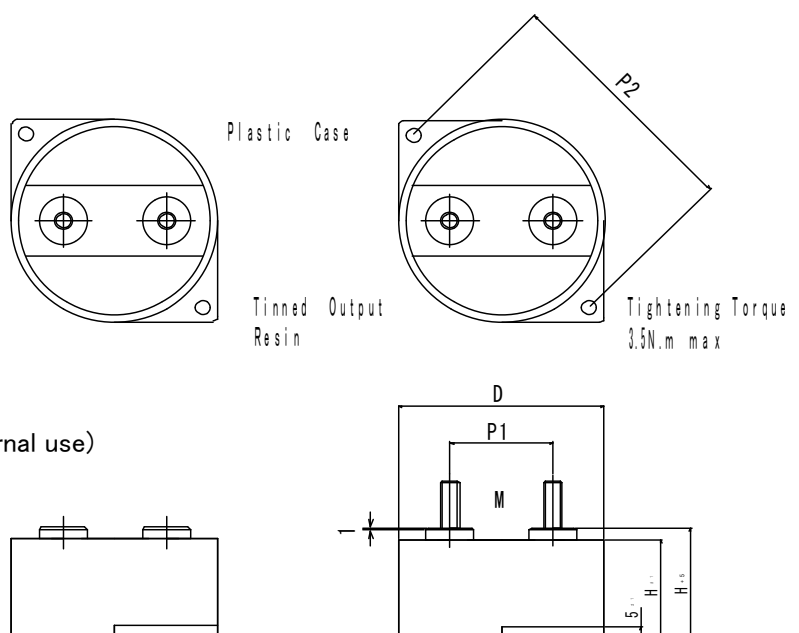
B : P = 60mm

7、Digit 13 : P2

A : P = 101mm

B : P = 133mm

8、Digit 14 to 17 : Model code (internal use)



# DLC(B)

## Aluminum Case Dry type DC-Link Capacitor



W.V	Capacitance ( $\mu$ F)	Dimension (mm)		Ls max (nH)	dv/dt (V/ $\mu$ S)	Irms (A)	ERS max 1KHz(m $\Omega$ )	Part number
		Dmax	Hmax					
600V.DC	120	86	41	25	37	90	0.7	DLC(B)06127****
	200	86	51	32	25	90	0.8	DLC(B)06207****
	270	86	65	40	16	85	0.9	DLC(B)06277****
	350	115	51	32	25	120	0.6	DLC(B)06357****
	500	115	65	40	26	125	0.7	DLC(B)06507****
700V.DC	100	86	41	25	48	90	0.6	DLC(B)07107****
	150	86	51	32	32	90	0.7	DLC(B)07157****
	220	86	65	40	21	85	0.9	DLC(B)07227****
	250	115	51	32	32	115	0.6	DLC(B)07257****
	350	115	65	40	21	120	0.7	DLC(B)07357****
900V.DC	68	86	41	25	56	80	0.8	DLC(B)09686****
	100	86	51	32	37	80	0.9	DLC(B)09107****
	140	86	65	40	25	75	1.2	DLC(B)09147****
	200	115	51	32	37	110	0.6	DLC(B)09207****
	300	115	65	40	25	115	0.7	DLC(B)09307****
1100V.DC	47	86	41	25	73	70	1.0	DLC(B)11476****
	68	86	51	32	49	70	1.2	DLC(B)11686****
	100	86	65	40	33	65	1.5	DLC(B)11107****
	140	115	51	32	49	105	0.8	DLC(B)11147****
	200	115	65	40	33	110	0.9	DLC(B)11207****
1200V.DC	25	86	41	25	90	60	1.2	DLC(B)12256****
	35	86	51	32	70	60	1.5	DLC(B)12356****
	50	86	65	40	50	55	2.0	DLC(B)12506****
	60	115	51	32	70	100	1.0	DLC(B)12606****
	80	115	65	40	50	110	1.3	DLC(B)12806****
1500V.DC	18	86	41	25	113	55	1.2	DLC(B)15186****
	25	86	51	32	85	55	1.7	DLC(B)15256****
	35	86	65	40	60	50	2.2	DLC(B)15356****
	47	115	51	32	85	100	1.1	DLC(B)15476****
	68	115	6	40	60	105	1.3	DLC(B)15686****