

DC-Support Capacitor

C56



Characteristics

- Polypropylene film dielectric
- Plastic shell packaging, dry resin perfusion
- Copper nut /screw elicited, large capacity, small size, easy installation
- High ripple current, high dV/dt withstand capacity
- Esistance to high voltage, with self-healing

Application

- Widely used in of DC-link circuit for energy storage.
- Can replace electrolytic capacitors, better performance and longer life.
- Pv inverter, wind power converter, All kinds of frequency converter and inverter power supply; Pure electric and hybrid cars; SVG,SVC devices and other kinds of power quality management.

Technical Data

● Reference Standards	GB/T 17702 IEC 61071
● Operating Temperature Range	-40°C~+85°C
● Capacitance Range	20µF~750µF
● Rated Voltage	700VDC~1800VDC
● Capacity Tolerance	±5%(J); ±10%(K)
● Test voltage between electrodes	1.5U _N (DC) 60S 25°C±5°C
● Test voltage between electrode and case	1000+2×U _N /√2(VAC) 50Hz 60S (min 3000VAC)
● Dissipation Factor	tgδ≤2×10 ⁻³ at 25°C±5°C, 1KHz
● Insulation Resistance	C•R≥5000S, at 100VDC, 25°C±5°C, 60S
● Life Expectancy	100000h at U _N and ≤70°C

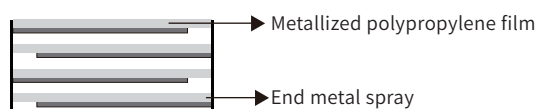
Overvoltage Operation

1.1×U _N	30% of on-load-dur.
1.15×U _N	30 min/day
1.2×U _N	5 min/day
1.3×U _N	1min/day
1.5×U _N	100ms every time, no more than 1000 times during the lifetime

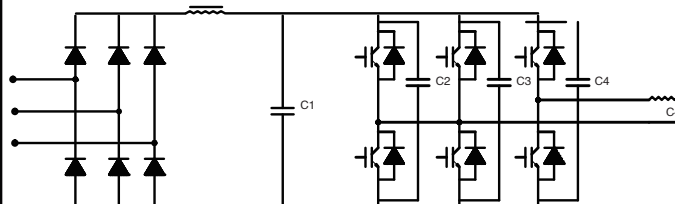
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DC-Link Capacitor

Construction Diagram

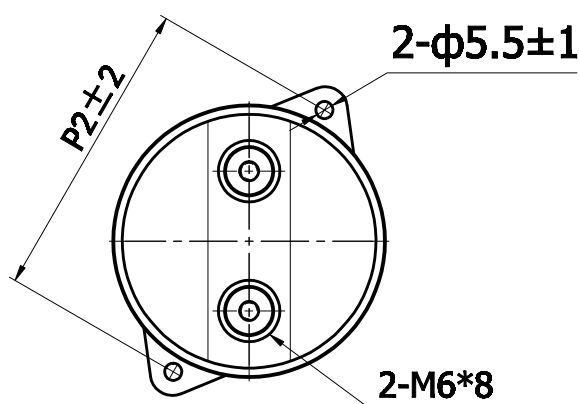
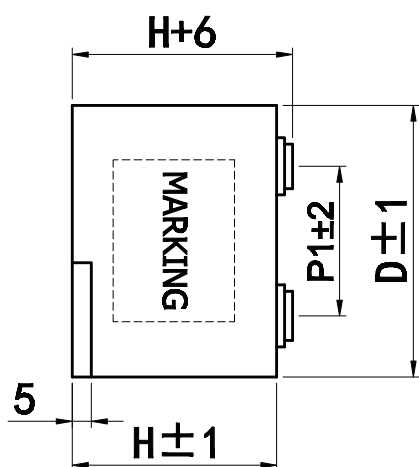


Typical Circuit

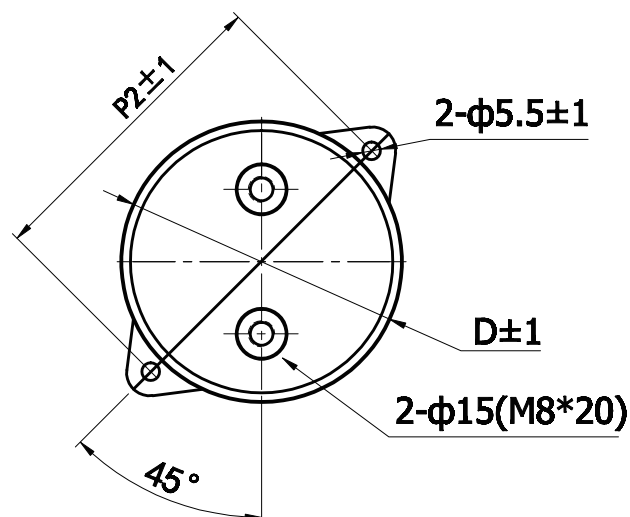
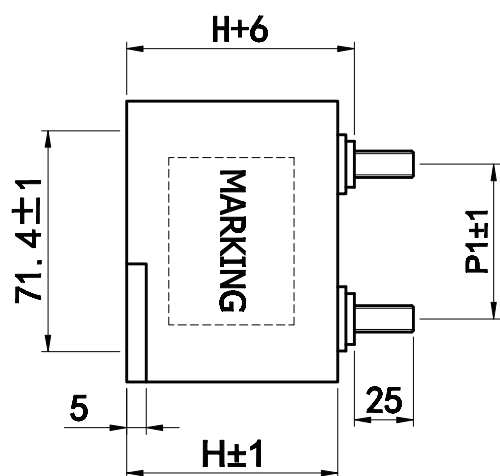


C1 stands for the AC Support Capacitor C56 in the main circuit diagram of three-phase inverter

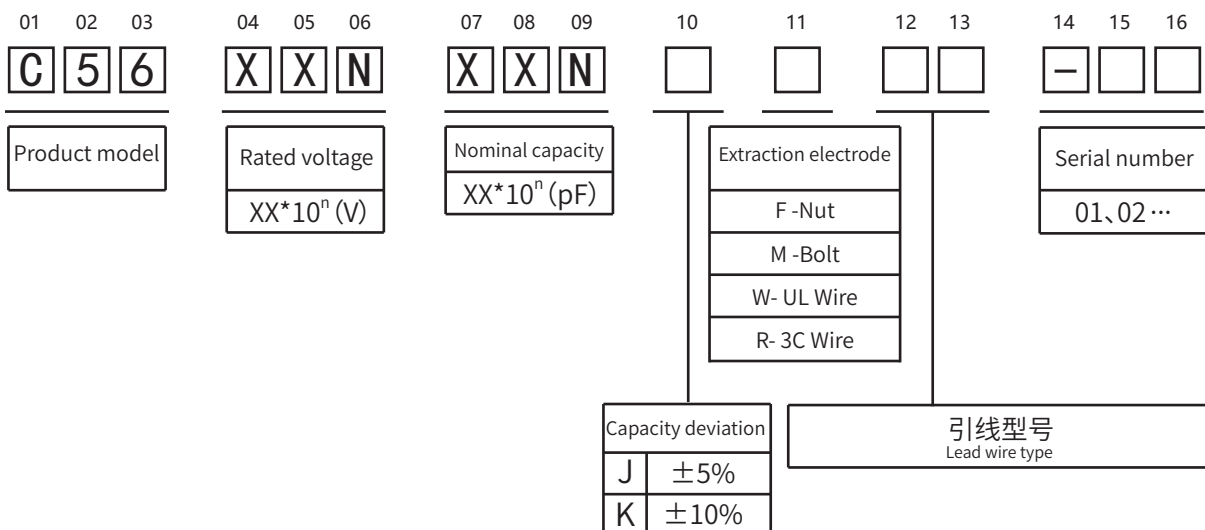
Product Shape



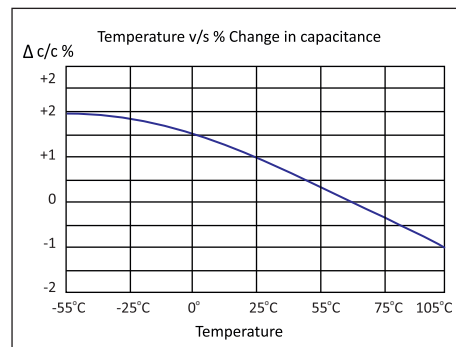
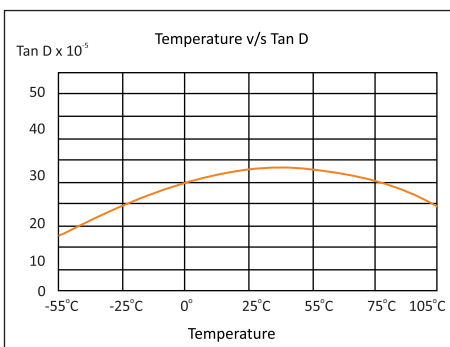
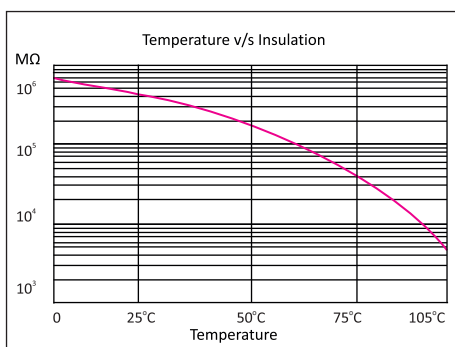
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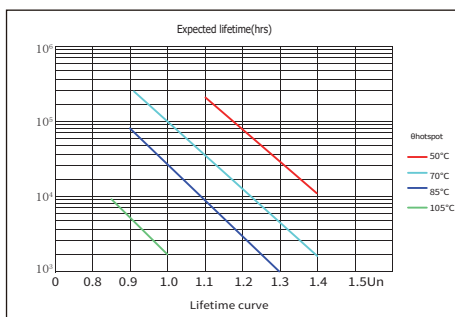
Product Coding



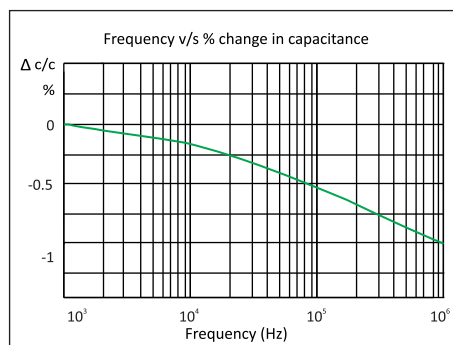
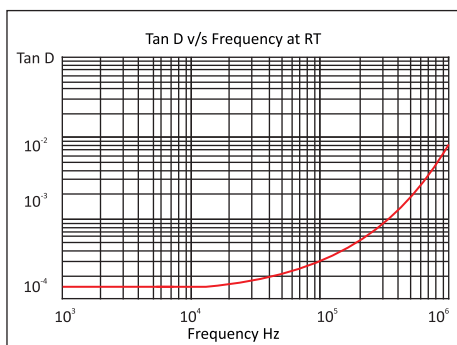
Frequency Characteristics



Life Expectancy



Temperature Characteristics



Article Table

Part Number	CAP μF	Dimension (mm)		dv/dt (V/μs)	I _{peak} (A)	I _{rms} @100KHz50°C (A)	ESL (nH)	ESR @10KHz20°C (mΩ)	Output
		L	D						
U _N 700VDC									
C56701157K•••••	150	51	85	35	5250	85	0.4	<30	M6
C56701247K•••••	240	65	85	23	5520	60	1	<40	M6
U _N 900VDC									
C56901107K•••••	100	51	85	45	4500	75	0.55	<30	M6
C56901157K•••••	150	65	85	30	4500	55	1.1	<40	M6
U _N 1000VDC									
C56102806K•••••	80	51	85	50	4000	70	0.6	<30	M6
U _N 1100VDC									
C56112706K•••••	70	51	85	55	3850	70	0.65	<30	M6
C56112106K•••••	100	65	85	36	3600	50	1.3	<40	M6
U _N 1250VDC									
C561252506K•••••	50	51	85	65	3250	65	0.75	<30	M6
C561252756K•••••	75	65	85	40	3000	45	1.5	<40	M6
U _N 1450VDC									
C561452406K•••••	40	51	85	70	2800	60	0.8	<30	M8
C561452506K•••••	50	65	85	48	2400	45	1.6	<40	M6
U _N 1800VDC									
C56182256K•••••	25	51	85	90	2250	55	1	<30	M8
C56182356K•••••	35	65	85	60	2100	40	2	<40	M8

The above table / graphics are for reference only, subject to the actual product (unit: mm)