



# 規格承認書

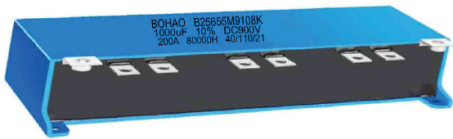
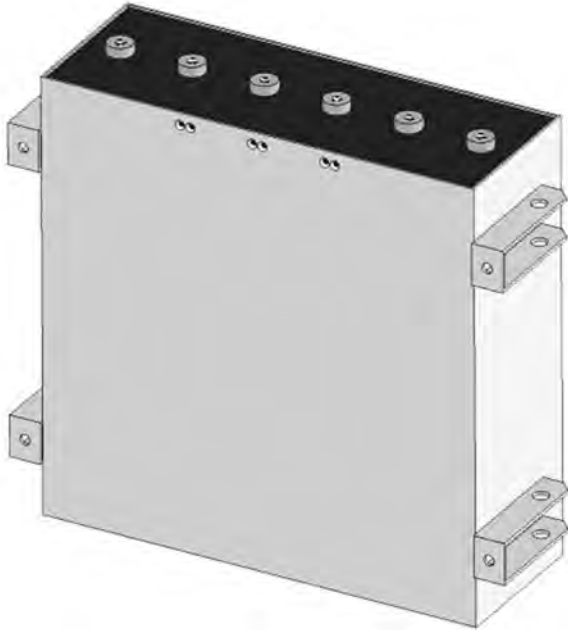
## (SPECIFICATION FOR APPROVAL)

File No.: Q/BH .TS16949.13TECH1303

Product Name: DC-Link Capacitor ( Customized products )  
Product Type: C3N(干式直流滤波定制电容器)  
Product Code: C3N  
Customer:  
Customer Code:  
Issue Date: (V3.0)

## 干式直流滤波电容器(定制品) DC-Link-Capacitor (Customized products)

### ■ 外形图 Outline Drawing



### ■ 特点

- 应用于直流滤波电路中，可替代电解电容
- 等效串联电阻小，能承受大的纹波电流
- 自感小
- 有自愈性
- 寿命长
- 树脂灌封

### ■ 应用场合

- 风能发电、太阳能发电用变频器上
- 交通工具
- 焊接设备，电梯，电机驱动

### ■ Features

- Used in DC-Link circuits, Can replace electrolytic capacitor
- Low ESR, high ripple current handling capabilities
- Low ESL
- Self-healing property
- Long lifetime
- Filled with resin

### ■ Applications

- Used in inverters of wind power and solar power
- Transportation
- Welders, Elevators, Motor Driver systems



C3N

**Guang Zhou Nan Cai Electronic CO.,LTD.**  
<http://www.cgznc.com>

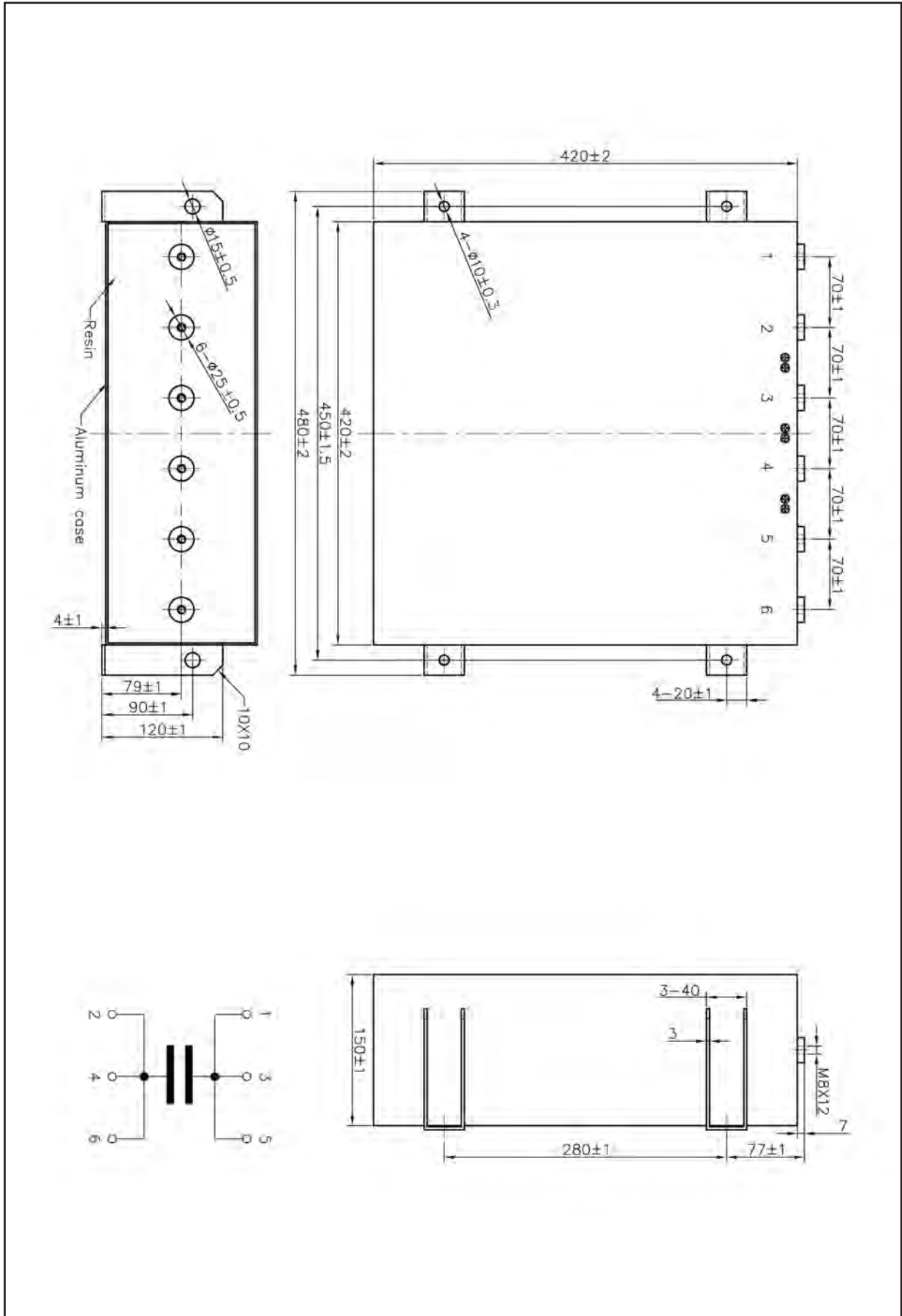
■ 产品代码 **Part number**

C3N8U189K0\*\*\*\*\*

■ 技术参数 **Technical Data**

引用标准 Reference Standard	IEC 61071	
气候类别 Climatic Category	40/85/56	
工作温度范围 Operating Temperature Range	-40°C~85°C [ $\Theta_{\max(\text{hotspot})} \leq 85^\circ\text{C}$ ]	
贮存温度范围 Storage Temperature Range	-40°C~85°C	
额定电压(U <sub>N</sub> ) Rated Voltage	680Vdc	
额定容量(C <sub>N</sub> ) Rated Capacitance	18 000μF	
电容量允许偏差 Capacitance Tolerance	± 10%(K)	
耐电压 Voltage Proof	极间 Between Terminals:	1.5U <sub>N</sub> (10s, 20°C ± 5°C)
	极壳之间 Between Terminals And Case:	3 500Vac(10s, 50Hz, 20°C ± 5°C)
介质损耗 tg δ <sub>o</sub>	0.0002	
电容器损耗 tg δ	<0.0025(50Hz)	
IR x C <sub>N</sub>	≥ 10 000s (20°C, 100Vdc, 1min)	
等效串联电阻 ESR(1kHz)	0.3mΩ	
自感 L <sub>s</sub>	<50nH	
最大纹波电流值 Max. ripple. I <sub>rms</sub>	480A	
î	10KA	
î <sub>s</sub>	40KA	
U <sub>s</sub>	1 050Vdc	
极间爬电距离 Creepage distance(T/T)	≥43.5mm	
极间电气距离 Clearance(T/T)	≥50mm	
极壳爬电距离 Creepage distance(T/C)	≥20mm	
极壳电气距离 Clearance(T/C)	≥25mm	
电极尺寸 Dimensions of terminals	M8 x 12( x 6)	
电极材质 Material of terminals	Tinning brass	
外壳材质 Material of case	Aluminum	
最大电极扭矩 Max Torque of terminals	14Nm	
预期寿命 Expected Lifetime	100 000 hours(U <sub>N</sub> , $\Theta_{\text{hotspot}}=70^\circ\text{C}$ )	
失效率 Failure rate	50 FIT	
尺寸 Dimension(l x w x h)	420mm x 150mm x 420mm	
重量 Weigt	≈38kg	

\* ESR: 电容器内部串联电阻总和; \* ESR: The sum of all ohmic resistances occurring inside the capacitor.





# C3N

■ 产品代码 **Part number**

C3N3A608J0\*\*\*\*\*

■ 技术参数 **Technical Data**

引用标准 Reference Standard	IEC 61071	
气候类别 Climatic Category	40/85/56	
工作温度范围 Operating Temperature Range	-40°C~85°C [ $\Theta_{\max(\text{hotspot})} \leq 85^\circ\text{C}$ ]	
贮存温度范围 Storage Temperature Range	-40°C~85°C	
额定电压( $U_N$ ) Rated Voltage	1 000Vdc	
额定容量( $C_N$ ) Rated Capacitance	6 000 $\mu$ F	
电容量允许偏差 Capacitance Tolerance	$\pm 5\%$ (J)	
耐电压 Voltage Proof	极间 Between Terminals:	1.5 $U_N$ (10s, 20°C $\pm$ 5°C)
	极壳之间 Between Terminals And Case:	4 000Vac(10s, 50Hz, 20°C $\pm$ 5°C)
介质损耗 $\text{tg } \delta_o$	0.0002	
电容器损耗 $\text{tg } \delta$	<0.0020(50Hz)	
$IR \times C_N$	$\geq 10\ 000\text{s}$ (20°C, 100Vdc, 1min)	
等效串联电阻 ESR(1kHz)	0.4m $\Omega$	
自感 $L_s$	<30nH	
最大纹波电流值 Max. ripple. $I_{\text{rms}}$	400A	
$\hat{I}$	1 500A	
$\hat{I}_s$	6 000KA	
$U_s$	1 500Vdc	
极间爬电距离 Creepage distance(T/T)	20mm	
极间电气距离 Clearance(T/T)	$\geq 50\text{mm}$	
电极材质 Material of terminals	Tinning copper	
外壳材质 Material of case	Aluminum	
预期寿命 Expected Lifetime	100 000 hours( $U_N$ , $\Theta_{\text{hotspot}} = 70^\circ\text{C}$ )	
失效率 Failure rate	50 FIT	
尺寸 Dimension(l x w x h)	380mm x 160mm x 282mm	
重量 Weigt	$\approx 23\text{kg}$	

\* ESR: 电容器内部串联电阻总和; \* ESR: The sum of all ohmic resistances occurring inside the capacitor.

