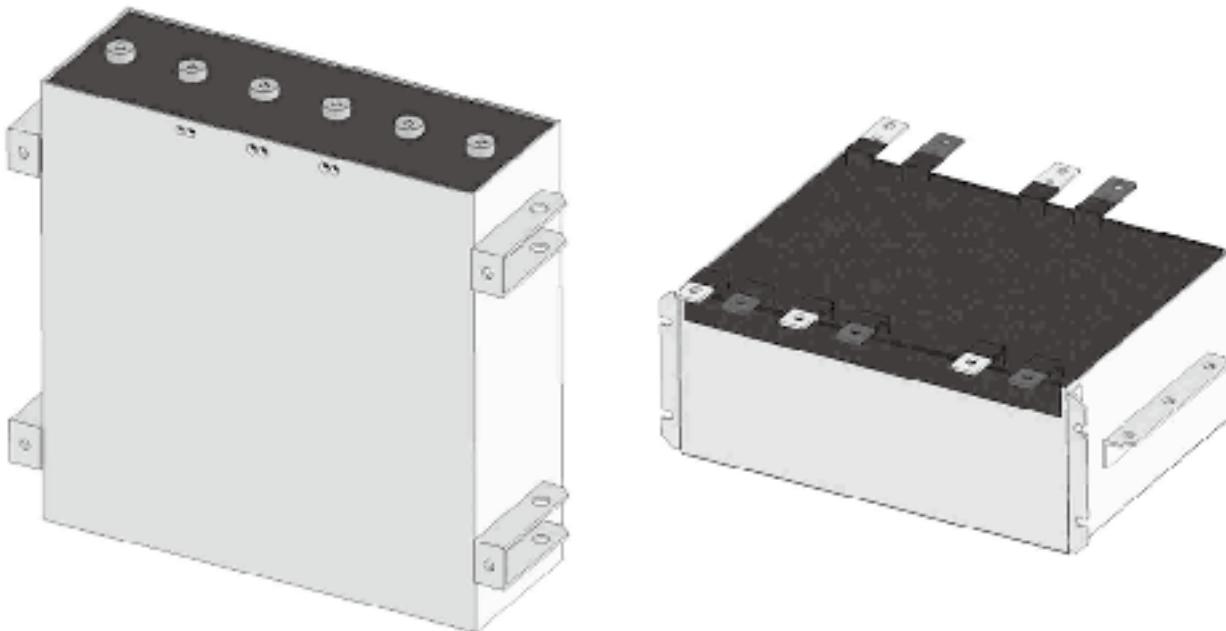


干式直流滤波电容器（定制品）

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
- 树酯灌封

■ 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 L_s
- Self-healing property
- Long lifetime
- Filled with resin

■ Applications

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



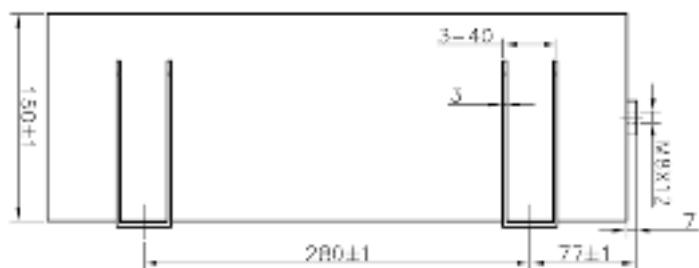
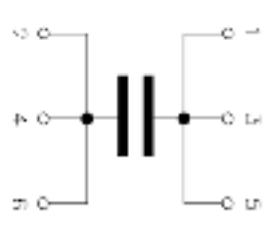
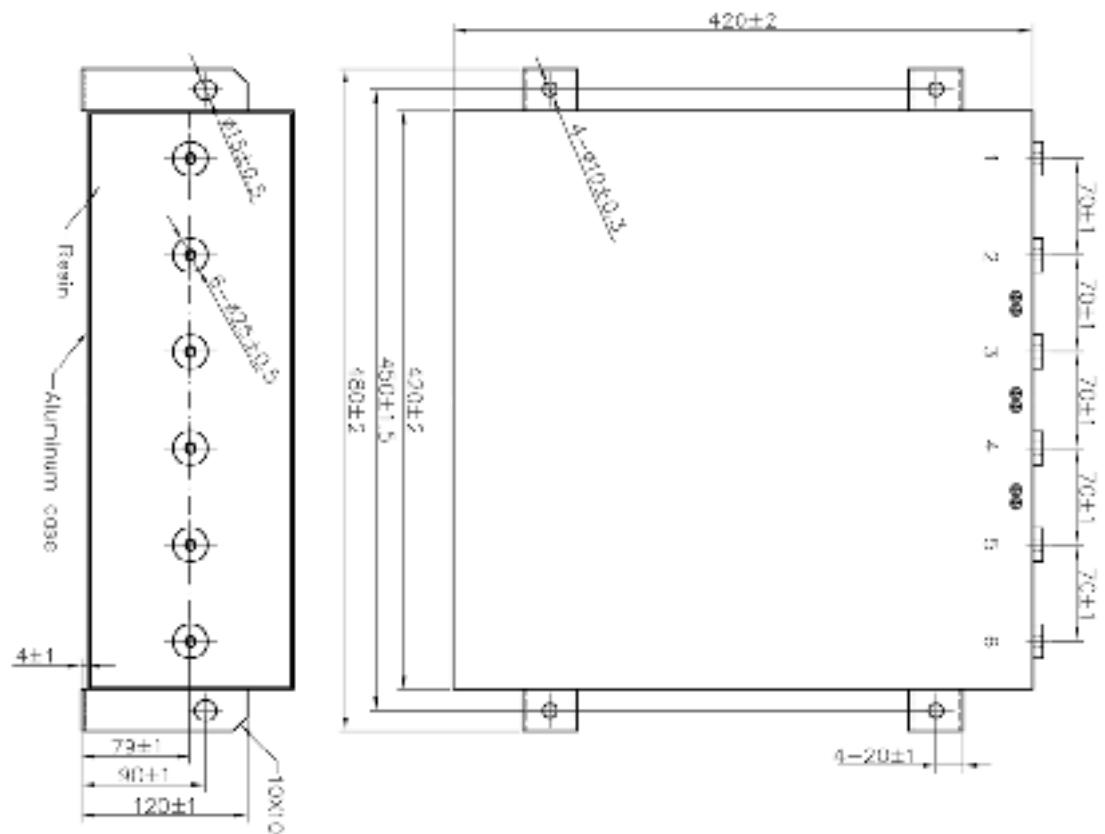
C3N

■ 产品代码 Part number

C3N8U189K0*****

■ 技术参数 Technical datas

引用标准 Reference standards	IEC 61071
额定电压 Rated voltage (U_N)	680Vdc
额定电容量 Rated capacitance (C_N)	18 000 μ F
电容量偏差 Capacitance tolerance	$\pm 10\% (K)$
介质损耗因素 Dielectric dissipation factor($\operatorname{tg} \delta_d$)	0.0002
电容器的损耗因素 Loss factor of the capacitor($\operatorname{tg} \delta$)	$\leq 0.0040 @ 100\text{Hz}$
运行温度范围 (θ_{case}) Operating temperature range (θ_{case})	-40°C ~ 85°C
热点温度 Hot-spot temperature (θ_{hs})	$\leq 85^\circ\text{C}$ ($\theta_{hs} = \theta_{amb} + I^2_{rms} \times (R_s + \operatorname{tg} \delta_d / (2 \times \pi \times f_{ripple} \times C_N) \times R_{th})$)
贮存温度范围 Storage temperature range	-40°C ~ 85°C
气候类别 Climatic category	40/85/56
主体尺寸 Body dimension	L × W × H: 420mm × 150mm × 420mm
近似重量 Approximate weight	38kg
外壳类型 Case	Aluminum
电极端子 Terminals	3 couples of thread hole M8 × 12, tinned brass
最大电极扭矩 Max. torque of terminals	6Nm
电气间隙 Clearance	$\geq 20\text{mm}$
爬电距离 Creepage distance	$\geq 25\text{mm}$
耐电压 (两极之间) Test voltage between terminals	1.5 U_N (10s, 20°C ± 5°C)
耐电压 (极壳之间) Test voltage between terminals and case	3 500Vac (10s, 50/60Hz, 20°C ± 5°C)
绝缘电压 Insulation voltage (U_i)	$U_N / \sqrt{2}$ Vac, 50/60Hz
非周期冲击电压 Non-recurrent surge voltage (U_s)	1 050Vdc
最大电流 Maximum current (I_{max})	480A @ $\theta_{amb}=50^\circ\text{C}$
最大峰值电流 Maximum current (\hat{I})	15 000A
最大冲击电流 maximum surge current (\hat{I}_s)	60 000A
串联电阻 Series resistance (R_s)	0.3mΩ @ 1kHz, 20°C (approximate TCR: 0.004/°C)
热阻 Thermal resistance (R_{th})	0.4K/W
自感 Self-inductance (L_s)	$\leq 50\text{nH}@1\text{MHz}$
绝缘电阻 Insulation resistance (IR × C_N)	$\geq 10 000\text{s}$ (20°C, 100Vdc, 1min)
最高使用海拔 Max. altitude	2 000m
预期寿命 Expected lifetime	100 000hrs @ U_N , $\theta_{hs}=70^\circ\text{C}$
失效率 Failure rate	100FIT





C3N

■ 产品代码 Part number

C3N3A608J0*****

■ 技术参数 Technical datas

引用标准 Reference standards	IEC 61071
额定电压 Rated voltage (U_N)	1 000Vdc
额定电容量 Rated capacitance (C_N)	6 000μF
电容量偏差 Capacitance tolerance	± 5%(J)
介质损耗系数 Dielectric dissipation factor($\tg \delta_d$)	0.0002
电容器的损耗因素 Loss factor of the capacitor($\tg \delta$)	≤ 0.0020 @ 100Hz
运行温度范围 (θ_{case}) Operating temperature range (θ_{case})	-40°C ~ 85°C
热点温度 Hot-spot temperature (θ_{hs})	≤ 85°C ($\theta_{hs} = \theta_{amb} + I^2_{rms} \times (R_s + \tg \delta_d / (2 \times \pi \times f_{ripple} \times C_N)) \times R_{th}$)
贮存温度范围 Storage temperature range	-40°C ~ 85°C
气候类别 Climatic category	40/85/56
主体尺寸 Body dimension	L × W × H: 380mm × 160mm × 282mm
近似重量 Approximate weight	24kg
外壳类型 Case	Aluminum
电极端子 Terminals	5 couples of lugs, tinned copper
电气间隙 Clearance	≥ 15mm
爬电距离 Creepage distance	≥ 50mm
耐电压 (两极之间) Test voltage between terminals	1.5 U_N (10s, 20°C ± 5°C)
耐电压 (极壳之间) Test voltage between terminals and case	4 000Vac (10s, 50/60Hz, 20°C ± 5°C)
绝缘电压 Insulation voltage (U_I)	$U_N / \sqrt{2}$ Vac, 50/60Hz
非周期冲击电压 Non-recurrent surge voltage (U_S)	1 500Vdc
最大电流 Maximum current (I_{max})	350A @ $\theta_{amb}=50^\circ\text{C}$
最大峰值电流 Maximum current (\hat{I})	6 000A
最大冲击电流 maximum surge current (\hat{I}_S)	24 000A
串联电阻 Series resistance (R_s)	0.3mΩ @ 1kHz, 20°C (approximate TCR: 0.004/°C)
热阻 Thermal resistance (R_{th})	0.7K/W
自感 Self-inductance (L_s)	≤ 30nH @ 1MHz
绝缘电阻 Insulation resistance (IR × C_N)	≥ 10 000s (20°C, 100Vdc, 1min)
最高使用海拔 Max. altitude	2 000m
预期寿命 Expected lifetime	100 000hrs @ U_N , $\theta_{hs}=70^\circ\text{C}$
失效率 Failure rate	100FIT

