

CX165F-43A系列 Seris

太阳能继电器
Solar relay



产品特点product features

- 43A触点切换能力
High contac capacity43A Contact swiching capability
- 适用于太阳能光伏发电用逆变器
pplicable to solar photovoltaic power
- 适用于UPS,触点间隙: 1.5mm 1.8mm
Suitable for UPS,contact clearance:1.5mm 1.8mm
- 整机施加线圈保持电压, 节省电力消耗
Apply coil to the entire machine to maintain voltage,saving power consumption
- 环保产品 (符合RoHS)
Environmental rotection products
- 外形尺寸: 31.8mm×27.4mm×19.5mm
Overall dimension:31.8mm×27.4mm×19.5mm

触点负载 Contact Rating

触点形式contact form	1H
触点材料	AgSn02
触点负载 (阻性) Rated loa (Resistance)	阻性负载: 43A 277VAC 感性负载: 35A 277VAC(COSφ=0.8)1s:9s
接触压降 contact voltage drop	典型值: 15mV (10A下测量) 最大值: 100mV (10A下测量)
最大切换电流 ⁽¹⁾ Max. switching Current	43A
最大切换电压 Max. switching Voltage	277VAC
最大切换功率 Max. switching power	11911VA
电耐久性 Electrical durability	3×10 ⁴ 次 (35A 250VAC 阻性负载, 1s通9s断)
机械耐久性Mechanical	1×10 ⁶ 次

- 1.继电器引出的电路应设计足够的载流截面, 避免发生过热现象
The circuit from the relay shall be designed with sufficient current carrying section to avoid overheating
- 2.对于塑封型产品试验时, 应打开外壳上的透气孔
2.When experimenting with plastic encapsulated products,the vent holes on the housing should be opened

线圈参数Coil parameters

额定线圈功率 Rated coil power	约2.25W
保持电压 Hold voltage	40%-110%U _N (环境温度23℃) 50%-70%U _N (环境温度85℃)

- 备注: 1.线圈保持电压为线圈施加额定电压100ms以后施加的线圈电压
2.继电器线圈不允许长时间施加超过保持电压的上限值, 防止几点过热烧毁
- 1.The coil holding voltage is the coil voltage applied after 100ms of rated voltage applied to the coil
 - 2.The relay coil is not allowed to be applied for a long time beyond the upper limit of the holding voltage to prevent the relay from overheating and burning out

性能参数Performance Parameter

绝缘电阻 Insulation resistance		1000MΩ (500VDC)
吸合时间 (额定电压下) Operate Time		≤15ms
释放时间 (额定电压下) Release Time		≤10ms
介质耐压 Dielectric Strength	断开触点间BOC	3000VAC/S 50/60Hz
	触点与线圈间BCC	4000VAC/S 50/60Hz
浪涌电压 (线圈与触点间) Surge voltage (BCC)		6KV (1.2/50us)
抗振动		10HZ~55HZ双振幅1.5mm
线圈温升 (额定电压下) Coil temperature rise		≤70K (触点负载电流35A, 50%额定电压激励, 环境温度85℃)
温度范围Temperature Range		-40℃~85℃ (不结冰) (NO freezing)
湿度 humidity		5%~85%RH
抗冲击 Shock	强度Endurance	981m/s ² Min
	稳定性 Error Operation	98.1m/s ² Min
重量Weight		约36克about36g
封装方式Type of Sealing		防焊剂型The flux type

备注: 上述值为初始值
remarks:The above values are initial values

安规认证 Safety certification

CQC CQC11002061851	43A 277VAC
TUV R 50267516	43A 277VAC

CX165F-43A系列Seris

太阳能继电器
Solar relay

线圈参数Coil Specification (at 23℃)

线圈灵敏度 sensitivity	额定电压 Nominal Voltage (VDC)	动作电压 ⁽¹⁾ Action voltage (VDC)	释放电压 ⁽²⁾ Drop-Out Voltage (Min)VDC	最大电压 ⁽²⁾ Maximum Voltage (Max)VDC	线圈电阻 Coil Resistance (Ω ±10%)
CX165F	5	≤3.75	≥0.25	5.5	11.1×(1±10%)
	12	≤9	≥0.6	13.2	64×(1±10%)
	24	≤18	≥1.2	26.4	256×(1±10%)
	48	≤36	≥2.4	52.8	1024×(1±10%)

备注：1. 上述值为初始值remarks:The above values are initial values
2. 最大电压是指继电器线圈在短时间内能够承受的最大值。
The maximum voltage refers to the maximum value that the relay coil can withstand in a short time

订货标记Ordering Information

CX165F - SS - 1 12 P M F xxx

(XXX) 特殊号：客户特殊要求
无：标准型

绝缘等级 F:F 级
触点形式: M:常开型

线圈功耗: 高功耗型(约 2.25W)

线圈电压: 05:5V,12:12V, 24:24V
24:24V,48:48V

触点组数: 1:1 组

密封方式: SS:防焊剂型

品名: CX165F

备注：

- 在洁净环境（不含H2S、SO2、NO2、粉尘等污染物）下使用时，推荐使用防焊剂型产品
- 在污染环境（含一定量 的H2S、SO2、NO2 粉尘等污染物）下使用时建议选用塑封型产品，并请在实际使用中进行确认。
- 当继电器装入PCB板焊接后，如需进行整体清洗或表面处理，请与我司联系，以便商定合适的焊接条件、合适的产品规格。

remark

(1)When using in clean enbironment (without H2S SO2 NO2 dust and other pollutants),it is recommended to Use flux resistant products

(2). When using in polluted environ ment(with a certain amount of H2S SO2 NO2dust and other pollutants), it is recom mended to use plastic encapsulated products.please confirm in actual use.

(3)After the relay is installed into the PCB board for welding, if it needs overall cleaning or surface treatment, please Contact me to negotiate the appropriate welding conditions and product specifications.

CX165F-43A系列 Series

太阳能继电器
Solar relay

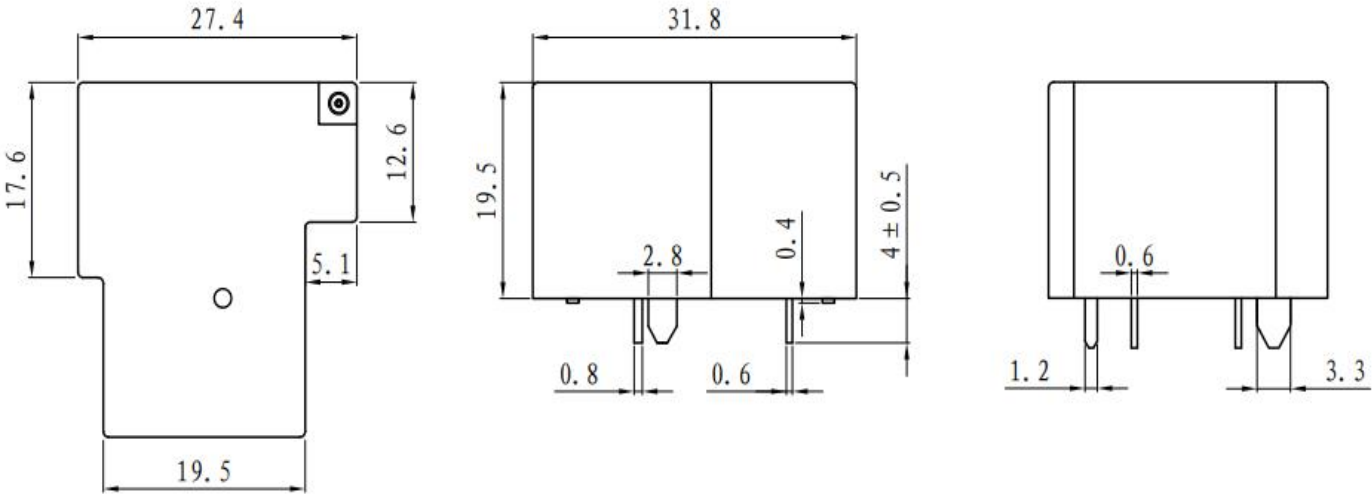
类型category

型号	CX165F
线圈灵敏度 Coil sensitivity	标准直流线圈 Standard DC coil
	1A
防焊剂型 The flux type	CX165F-SS-1□□PMF

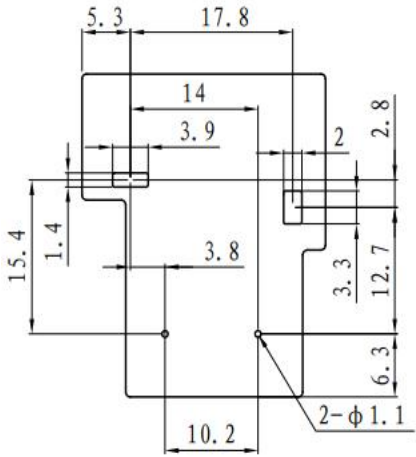
外形尺寸、接线、安装孔位图

Overall dimension,wiring and installation hole bitmap

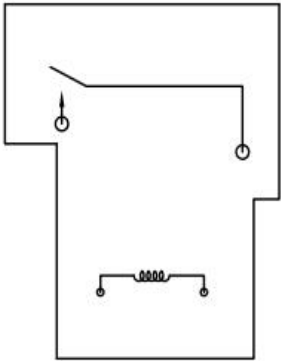
外形尺寸
Outline Dimensions



安装孔位图(底视图)
PCB Layout (Bottom view)



接线图(底视图)
Wiring Diagram (Bottom view)



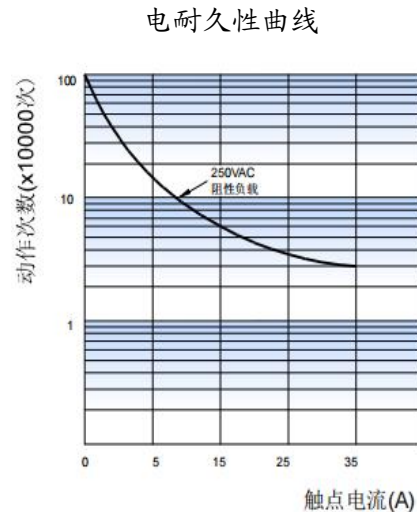
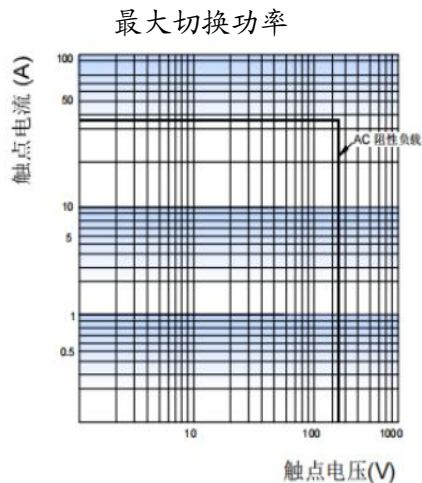
备注:

1. 产品外形图的引脚标注尺寸为沾锡前尺寸（沾锡后会变大），安装孔尺寸为推荐的PCB板孔的设计尺寸，具体PCB板孔设计尺寸可根据产品实物进行测绘、调整。
2. 产品部分外形尺寸未注尺寸公差，当外形尺寸 $\leq 1\text{mm}$ ，公差为 $\pm 0.2\text{mm}$ ；当外形尺寸在 $(1\sim 5)\text{mm}$ 之间时，公差为 $\pm 0.3\text{mm}$ ；当外形尺寸 $> 5\text{mm}$ ，公差为 $\pm 0.4\text{mm}$
3. 安装孔尺寸中未注尺寸公差为 $\pm 0.1\text{mm}$

DISCLAIMER:

1. The pin dimension in the outline drawing or the product is the dimension before dipping tin (It gets bigger when stained with tin). The size of mounting hole is the recommended design size of PCB hole. The specific PCB hole design size can be mapped and adjusted according to the actual product.
2. The overall dimension of the product if not marked with dimensional tolerance, when the overall dimension $\leq 1\text{mm}$, Tolerance is $\pm 0.2\text{mm}$. When the overall dimension is $(1\sim 5)\text{mm}$, Tolerance is $\pm 0.3\text{mm}$. When the overall dimension $> 5\text{mm}$, Tolerance is $\pm 0.4\text{mm}$.
3. The dimension tolerance of mounting hole without dimension injection is $\pm 0.1\text{mm}$.

性能曲线图 Performance Curve



测试条件：阻性负载，

备注:

具体参数型号和产品性能以我司承认书为准，本产品规格书仅作参考，若有更改，恕不另行通知。

对科信而言，不可能评定继电器在每个具体应用领域的所有性能参数要求，因而客户应该根据具体的使用条件，选择与之相匹配的产品。如有疑问，请与科信联系 以便获取更多的技术支持。但产品选型责任仅由客户负责。

DISCLAIMER:

The specific parameters, models, and product performance shall be subject to our company's acceptance letter. This product specification sheet is for reference only and is subject to change without prior notice.

For AFE, it is not possible to assess all performance requirements for relays in each specific application area and therefore the customer should select a suitable product for each specific application, please contact AFE for additional technical support. But the responsibility of product selection is only the responsibility of the customer.