

CX92F系列 Seris

小型大功率继电器
Small high power relay



产品特点Product Features:

- 30A触点切换能力
30A contact switching capability
- 触点与线圈间耐压为4KV,爬电距离为8mm
The contact and coil withstand voltage is 4KV, and the creepage distance is 8mm
- 具有两组常开、两组转换触点形式
With two sets of normally open and two sets of switching contact forms
- 具有印制板式和面板式两种安装形式
Available in both printed board and panel installation forms
- 塑封型和防尘罩型可供选择
plastic sealing type and anti flux type are optional

触点负载 Contact Rating	
触点形式 contact form	2A 2C
触点材料 contact material	Silver alloy
额定负载(阻性) Rated load (Resistance)	NO:30A 250VAC, 30A 277VAC NC:3A 250VAC, 3A 277VAC
最大切换电压 Max. switching Voltage	277VAC
最大切换电流 Max. switching Current	30A
最大切换功率 Max. switching power	8310VA
机械耐久性Mechanical	5×10^6 次
电耐久性 Electrical durability	5×10^4 次 (NO:30A 277VAC, 阻性负载 Resistive load 室温Room temperature, 1s ON/9s OFF) 5×10^4 次 (NC:3A 277VAC, Resistive load 室温Room temperature, 1s ON/9s OFF)
接触电阻 ⁽¹⁾ Contact Resistance	$\leq 50m\Omega$ (1A 24VDC)

备注: 备注: 1. 上述值为初始值
2. 对于塑封型产品试验时, 应打开外壳上的透气孔
1. remarks: The above values are initial values
2. When experimenting with plastic encapsulated products, the vent holes on the housing should be opened

性能参数Performance Parameter	
绝缘电阻 Insulation resistance	1000M Ω (500VDC)
吸合时间(额定电压下) Operate Time	$\leq 25ms$ (直流型DC type)
释放时间(额定电压下) Release Time	$\leq 25ms$ (直流型DC type)
介质耐压 Dielectric Strength	断开的触点间BOC 1500VAC 1Min
	触点与线圈间BCC 4000VAC 1Min
	触点组间 Between contact circuits 2000VAC 1Min
浪涌电压(线圈与触点间) Surge voltage(BCC)	10KV (1. 2/50us)
线圈温升(额定电压下) coil temperature rise	$\leq 90K$
抗振动 Anti vibration	10Hz-55Hz 1. 65mm双振幅
抗冲击 Shock resistance	稳定性Error Operation: 98m/S ² 强度Endurance: 980m/S ²
环境温度 ambient temperature	交流型(AC type): -40 $^{\circ}C$ ~65 $^{\circ}C$ 直流型(DC type): -40 $^{\circ}C$ ~85 $^{\circ}C$
湿度范围humidity	5~85%RH 不结冰(no freezing)
引出端形式 Terminal style	PCB式、快连接式 PCB terminal, socket terminal
封装方式Type of Sealing	塑封型、防焊剂型 Plastic sealed type、 Solder resist type
重量Weight	约:75g

线圈参数Coil Specification (at 23 °C)

直流型 (DC type) 约: 1.7W

规格代号	额定电压 Nominal Voltage (VDC)	线圈电阻 Coil Resistance ($\Omega \pm 10\%$)	吸合电压 (VDC) ⁽¹⁾ Pull-In Voltage (Max)	释放电压 (VDC) ⁽¹⁾ Drop-Out Voltage (Min)	最大电压 (VDC) ⁽²⁾ Maximum Voltage (Max)
005D	5	15 × (1 ± 10%)	≤ 3.8	≥ 0.5	8.0
006D	6	21 × (1 ± 10%)	≤ 4.5	≥ 0.6	9.6
012D	12	85 × (1 ± 10%)	≤ 9	≥ 1.2	19.2
024D	24	339 × (1 ± 10%)	≤ 18	≥ 2.4	38.4
048D	48	1355 × (1 ± 10%)	≤ 36	≥ 4.8	76.8
110D	110	7117 × (1 ± 10%)	≤ 82.5	≥ 11	176

交流型 (AC type) 约: 4.0VA 50Hz

规格代号	额定电压 Nominal Voltage (VAC)	线圈电阻 Coil Resistance ($\Omega \pm 10\%$)	吸合电压 (VAC) ⁽¹⁾ Pull-In Voltage (Max)	释放电压 (VAC) ⁽¹⁾ Drop-Out Voltage (Min)	最大电压 (VAC) ⁽²⁾ Maximum Voltage (Max)
024A5	24	45 × (1 ± 10%)	≤ 19.2	≥ 4.8	26.4
120A5	120	1125 × (1 ± 10%)	≤ 96	≥ 24	132
208A5	208	3278 × (1 ± 10%)	≤ 166.4	≥ 41.6	229
220A5	220	3800 × (1 ± 10%)	≤ 176	≥ 44	242
240A5	240	4500 × (1 ± 10%)	≤ 192	≥ 48	264
277A5	277	5960 × (1 ± 10%)	≤ 221.6	≥ 55.4	305

交流型 (AC type) 约: 4.0VA 60Hz

规格代号	额定电压 Nominal Voltage (VAC)	线圈电阻 Coil Resistance ($\Omega \pm 10\%$)	吸合电压 (VAC) ⁽¹⁾ Pull-In Voltage (Max)	释放电压 (VAC) ⁽¹⁾ Drop-Out Voltage (Min)	最大电压 (VAC) ⁽²⁾ Maximum Voltage (Max)
024A6	24	35.7 × (1 ± 10%)	≤ 19.2	≥ 4.8	26.4
120A6	120	830 × (1 ± 10%)	≤ 96	≥ 24	132
208A6	208	2600 × (1 ± 10%)	≤ 166.4	≥ 41.6	229
220A6	220	2870 × (1 ± 10%)	≤ 176	≥ 44	242
240A6	240	3800 × (1 ± 10%)	≤ 192	≥ 48	264
277A6	277	4700 × (1 ± 10%)	≤ 221.6	≥ 55.4	305

交流型 (AC type) 50Hz/60Hz

规格代号	额定电压 Nominal Voltage (VAC)	线圈电阻 Coil Resistance ($\Omega \pm 10\%$)	吸合电压 (VAC) ⁽¹⁾ Pull-In Voltage (Max)		释放电压 (VAC) ⁽¹⁾ Drop-Out Voltage (Min)		最大电压 (VAC) ⁽²⁾ Maximum Voltage (Max)
			50Hz	60Hz	50Hz	60Hz	
120A	120	950 × (1 ± 10%)	≤ 88	≤ 96	≥ 22	≥ 24	132
208A	208	2841 × (1 ± 10%)	≤ 160	≤ 166.4	≥ 40	≥ 41.6	229
240A	240	3800 × (1 ± 10%)	≤ 176	≤ 192	≥ 44	≥ 48	264
277A	277	5485 × (1 ± 10%)	≤ 200	≤ 221.6	≥ 50	≥ 55.4	305

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

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订货标记 Ordering Information

CX92F -012D -2C 2 F (XXX)

继电器型号 Relay model

线圈规格号
Coil specifications

XXXX:DC	(5, 6, 12, 24, 48, 110VDC)
XXXA5:AC	50Hz (24, 120, 208, 220, 240, 277VAC)
XXXA6:AC	60Hz (24, 120, 208, 220, 240, 277VAC)
XXXA:AC	50Hz/60Hz (120, 208, 240, 277VAC)

触点形式 contact form 2A:两组常开SPST-NO 2 Form A 2C:两组转换 SPDT 2 Form C

引出端形式⁽¹⁾ Terminal style 1:PCB terminal 2:socket terminal

封装方式⁽²⁾ Type of Sealing F:防焊剂型 Solder resist type S:塑封型 Plastic sealed

特性号⁽³⁾ XXX: 客户特殊要求 无: 标准型

Characteristic number XXX:Customer specific requirements None: Standard type

备注:

- 对于快连接式引出端形式，不允许焊接和整体清洗，对于印制板式引出端形式，当继电器装入PCB板焊接后，如需进行整体清洗或表面处理，请联系我司，以便商定合适的焊接条件、合适的产品规格。
- 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产品，并在实际使用中进行确认。
- 客户特殊要求由我司评审后，按特性号的形式标识。

remarks:

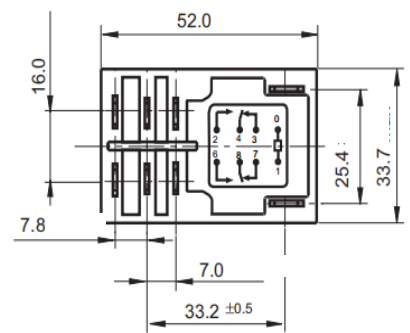
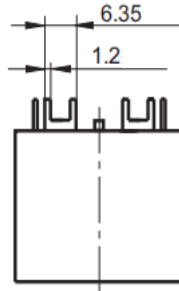
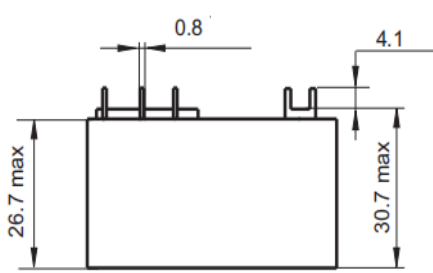
- For the quick connect type lead out form, welding and overall cleaning are not allowed. For the printed board type lead out form, if the relay needs to be cleaned or surface treated after being welded into the PCB board, please contact the company to agree on suitable welding conditions and product specifications
- When using in clean environment (without H₂S SO₂ NO₂ dust and other pollutants), it is recommended to use flux resistant products. When using in polluted environment (with a certain amount of H₂S SO₂ NO₂ dust and other pollutants), it is recommended to use plastic encapsulated products. please confirm in actual use.
- Special customer requirements will be identified in the form of characteristic numbers after our company's review.

外形尺寸、接线、安装孔位图
Overall dimension, wiring and installation hole bitmap

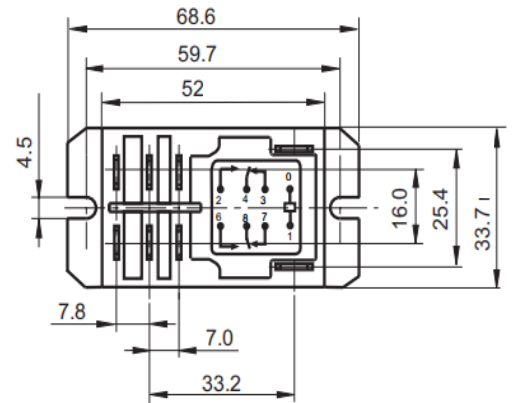
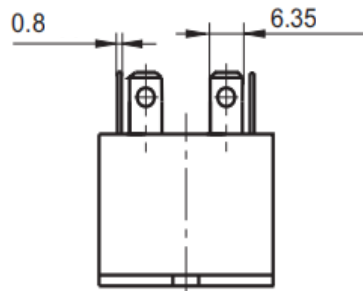
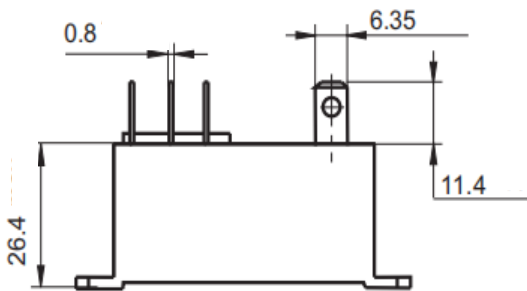
外形尺寸

Outline Dimensions

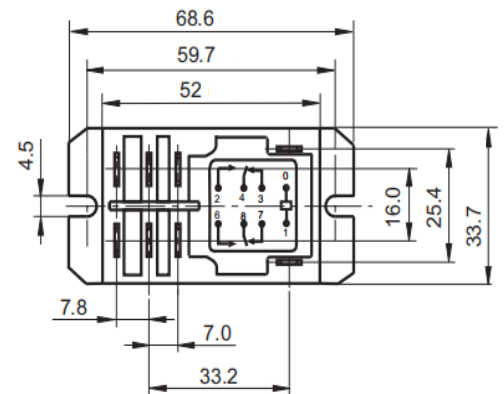
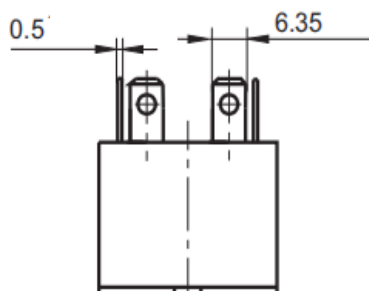
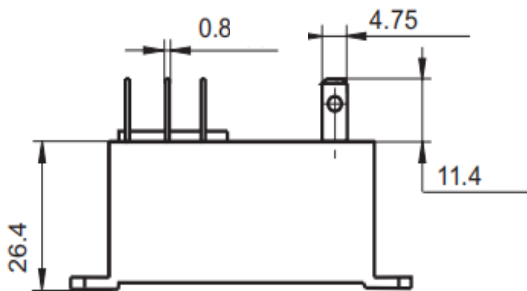
1型 (PCB引出脚)



2型 (QC引出脚)



3型 (QC引出脚)

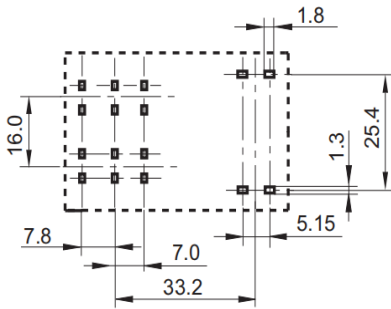


外形尺寸、接线、安装孔位图

Overall dimension, wiring and installation hole bitmap

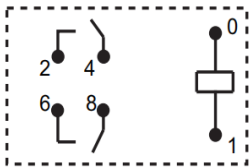
安装孔位图(底视图)

PCB Layout (Bottom view)

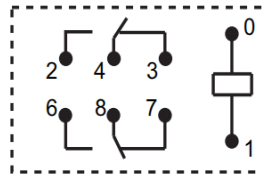


接线图(底视图)

Wiring Diagram
(Bottom view)



两组常开2A



两组转换2C

备注:

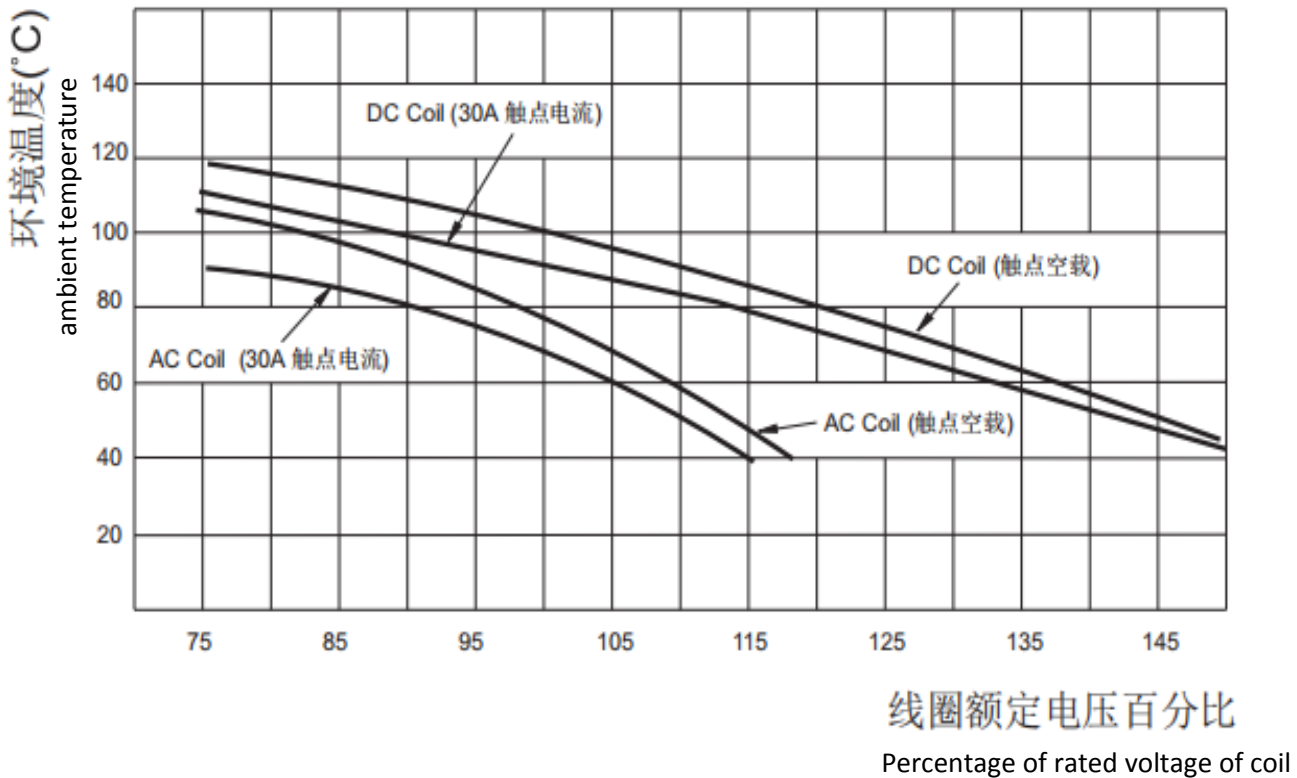
1. 产品外形图的引脚标注尺寸为沾锡前尺寸 (沾锡后会变大), 安装孔尺寸为推荐的PCB板孔的设计尺寸, 具体PCB板孔设计尺寸可根据产品实物进行测绘、调整。
2. 产品部分外形尺寸未注尺寸公差, 当外形尺寸 $\leq 1\text{mm}$, 公差为 $\pm 0.2\text{mm}$; 当外形尺寸在 $(1\sim 5)\text{mm}$ 之间时, 公差为 $\pm 0.3\text{mm}$; 当外形尺寸 $> 5\text{mm}$, 公差为 $\pm 0.4\text{mm}$
3. 安装孔尺寸中未注尺寸公差为 $\pm 0.1\text{mm}$

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 mountin 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 il not marked with dimensional tolerance,when teh overall dimension $\leq 1\text{mm}$ Tolerance is $\pm 0.2\text{mm}$ When the overall dimension is $(1\sim 5)\text{mm}$ Between 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 $\pm 0.1\text{mm}$

最大允许环境温度曲线

Maximum allowable ambient temperature curve



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。若有疑问，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.