



# 浙江和诚智能电气有限公司

ZHEJIANG HECHENG SMART ELECTRIC CO., LTD.

产品样册

PRODUCT CATALOGUE



创新·品质·专业·共赢

INNOVATION · QUALITY · PROFESSIONAL · WIN-WIN

# 公司简介 COMPANY PROFILE



浙江和诚智能电气有限公司（以下简称和诚电气）成立于2004年，现公司总部坐落于浙江省杭州市萧山区经济技术开发区知行路1125号，总部基地30000平方米。作为全球领先的新能源行业以及工业控制解决方案供应商，目前和诚电气的另一大生产基地设在安徽明光，其中工厂占地53,000m<sup>2</sup>，厂房占地20000m<sup>2</sup>。和诚电气专注于新能源汽车、光伏、储能以及HVAC/R行业、工业控制领域等，主要研发、生产和经营的产品有：陶瓷高压直流继电器/接触器，高压直流熔断器，空调接触器，IEC接触器，UL489断路器和隔离开关盒等，和诚电气产品均通过UL, CSA, INTERTEK, CE, CCC等认证。

和诚电气注重产品研发，公司每年营收的10%用于研发投入，2%用于IT投入，目前具备10年以上行业内工作经验的研发人员占比高达35%。

此外，和诚电气新引进先进的自动化生产线和先进的实验室检测设备，全流程严格执行IATF16949体系，PLM+ERP+MES实现工厂数字化、智能化，研发生产销售做到全过程可追溯溯源。

Zhejiang Hecheng Smart Electric Co., Ltd. (referred to as Hecheng Electric) was established in 2004 and is now headquartered at No.1125, Zhixing Road, Xiaoshan Economic and Technological Development Zone, Hangzhou City, Zhejiang Province. Hecheng headquarters base 30000 square meters. Hecheng is a leading supplier of new energy industry and industrial control solutions in the world. At present, another large production base of Hecheng Electric is located in Mingguang, Anhui Province, with an area of 14 acres and a plant area of 20000 square meters. Hecheng Electric focuses on new energy vehicles, photovoltaic, energy storage, HVAC/R, industrial control, etc. Hecheng's main R&D, production and operation products include: ceramic high-voltage DC relay/contactor, high-voltage DC fuse, air conditioning contactor, IEC contactor, UL489 circuit breaker and disconnect box, etc. Hecheng's products all have passed UL, CSA, INTERTEK, CE, CCC and other certifications.

Hecheng Electric aims at product research and development. 10% of the company's annual revenue is spent on R&D and 2% on IT penetration. Currently, the proportion of R&D personnel with more than 10 years of working experience in the industry is as high as 35%.

In addition, Hecheng Electric has introduced advanced automatic production lines and advanced laboratory testing equipment. We strictly implemented the IATF16949 system in the whole process. PLM + ERP + MES technology realizes the digitalization and intellectualization of the factory. The whole process of R&D, production and sales is able to be traced.

愿景  
Vision

致力于成为世界一流的新能源电气解决方案供应商。  
We are committed to becoming a world-class supplier of new energy electrical solution.

使命  
Mission

坚持初心，做好产品。  
We stick to our original intention and make high-demanding products.

价值观  
Values

以客户为中心，以奋斗者为荣；坚持初心，和衷共济，至诚守信。  
A customer-oriented company and always acts as a striver.  
Cooperation, sincerity and trustworthiness are our motto.

# 应用领域 APPLICATION AREA

储能  
Energy Storage

充电桩、换电站  
Charging Pile, Changing Station

光伏  
Photovoltaic

新能源汽车  
New Energy Vehicle



# 产品介绍 PRODUCT INTRODUCTION

## 直流继电器 DIRECT CURRENT RELAY



### 特性 Features:

- 陶瓷密封结构，腔内充有氢气混合气体，防止触点氧化，接触电阻低且稳定  
Ceramic seal structure, filled in H<sub>2</sub> mixed gas, resist contacts oxidation, the contact resistance is low and stable
- 陶瓷密封加磁吹灭弧设计，实现零飞弧，保证使用安全性和可靠性  
Ceramic seal structure with magnetic blow-out technology, realize zero arc, ensure the safety and reliability when you using
- 产品符合RoHS要求  
Full compliance with RoHS requirements

产品型号 Product Model																
	H	C	F	40	□	/	450	-	12	H	C	1	□	□	-	()
HC 公司代码 Company Code																
系列代码 Series Code	F: 方形系列 Square Series															
触点容量 (额定电流) Contact Rating (Rated Current)	40:40A; 60:60A; 100:100A; 150:150A; 200:200A 250:250A; 300:300A; 400:400A; 500:500A; 600:600A															
衍生型号 Derivative Model	无 Nil: 基本型 Basic Model; B: 衍生型 Derivative Model															
负载电压 Load Voltage	450: 450VDC; 800: 800VDC; 1000: 1000VDC; 1500: 1500VDC															
线圈电压 Coil Voltage	12: 12VDC; 24: 24VDC; 48: 48VDC															
主触点形式 Main Contact Type	H: 一组常开 SPST-NO															
线圈出线方式 Coil Input Terminal	L: 引出线 Lead Wire; C: 连接器 Connector; E: 引出线+连接器 Lead Wire + Connector															
负载引出端方式 Load Input Terminal	1: 内螺纹 Internal Thread; 2: 外螺纹 External thread (仅HCF600系列 Only HCF600 series)															
辅助触点 Auxiliary Contact	无 Nil: 无辅助触点 No Auxiliary Contact; H: 一组常开 SPST-NO															
安装形式 Mounting	无 Nil: 立式安装 Vertical Mounting															
特性号 Special Code	XXX: 客户特殊要求 Customer Special Code; 无 Nil: 标准性 Standard															

## 特性参数 CHARACTERISTIC PARAMETER

产品型号	HCF40	HCF60
产品图片		

### 主触点参数 MAIN CONTACT DATA

最大工作电压 Max. Switching Voltage	1000VDC	1000VDC
额定电流 Rated Current	40A	60A
触点形式 Contact Arrangement	一组常开 SPST-NO	一组常开 SPST-NO
触点压降 Contact Voltage Drop	≤0.12V (at 40A)	≤0.12V (at 60A)
短时承载电流 Limiting Short-time Current	60A:120min; 80A:20min; 160A:30s; 320A:2s; 400A:0.6s	90A:60min; 120A:20min; 240A:30s; 360A:2s; 600A:0.6s
电寿命 (阻性负载) Electrical Life(Resistive Load)	40A 450VDC 20000次(ops) 40A 800VDC 3000次(ops)	60A 450VDC 3000次(ops) 60A 800VDC 1000次(ops)
最大分断电流(阻性负载) Max. Breaking Current(Resistive Load)	400A 450VDC 1次(ops)	600A 450VDC 1次(ops)
过载分断(阻性负载) Overload Breaking(Resistive Load)	120A 450VDC 30次(ops)	200A 450VDC 100次(ops)

### 辅助触点参数 AUXILIARY CONTACT DATA

辅助触点 Auxiliary Contact	无 Nil	无 Nil
辅助触点形式 Auxiliary Contact Arrangement	/	/
辅助触点电流范围 Auxiliary Contact Current Range	/	/

### 线圈参数 COIL DATA

额定电压 Rated Voltage	12VDC	24VDC	48VDC	12VDC	24VDC	48VDC
吸合电压 Pick-up Voltage	≤9VDC	≤18VDC	≤36VDC	≤9VDC	≤18VDC	≤36VDC
释放电压 Drop-out Voltage	≥1.2VDC	≥2.4VDC	≥4.8VDC	≥1.2VDC	≥2.4VDC	≥4.8VDC
线圈功率 Rated Operating Power	约 Approx 3W	约 Approx 3W	约 Approx 3W	约 Approx 3W	约 Approx 3W	约 Approx 3W
最大允许电压 Max. Allowable Voltage	16VDC	32VDC	64VDC	16VDC	32VDC	64VDC

### 性能参数 CHARACTERISTICS DATA

介质耐压 Dielectric Strength	触点与线圈间 Between Contacts And Coil 断开触点间 Between Open Contacts	4000VAC 1min 3000VAC 1min	4000VAC 1min 3000VAC 1min
绝缘电阻 Insulation Resistance	触点与线圈间 Between Contacts And Coil 断开触点间 Between Open Contacts	1000MΩ(1000VDC) 1000MΩ(1000VDC)	1000MΩ(1000VDC) 1000MΩ(1000VDC)
耐冲击 Shock Resistance	功能性 Functional 强度 Destructive	20G 半正弦波 Half-Sine Wave 11ms 50G 半正弦波 Half-Sine Wave 6ms	20G 半正弦波 Half-Sine Wave 11ms 50G 半正弦波 Half-Sine Wave 6ms
耐振动 Vibration Resistance	功能性 Functional	5.79G (10~ 2000Hz, 随机Random)	5.79G (10~ 2000Hz, 随机Random)
吸合时间 Operate Time		Max:30ms	Max:30ms
释放时间 Release Time		Max:10ms	Max:10ms
机械寿命 Mechanical Life		2*10 <sup>5</sup> 次(ops)	2*10 <sup>5</sup> 次(ops)
重量 Weight		约 Approx 165g	约 Approx 165g

## 特性参数 CHARACTERISTIC PARAMETER

产品型号	HCF100	HCF150
产品图片		

### 主触点参数 MAIN CONTACT DATA

最大工作电压 Max. Switching Voltage	1000VDC	1000VDC
额定电流 Rated Current	100A	150A
触点形式 Contact Arrangement	一组常开 SPST-NO	一组常开 SPST-NO
触点压降 Contact Voltage Drop	≤0.1V (at 100A)	≤0.075V (at 150A)
短时承载电流 Limiting Short-time Current	120A:60min; 200A:5min; 400A:1min; 600A:15s; 1000A:0.6s	180A:120min; 225A:15min; 300A:2min; 600A:20s; 900A:8s; 1500A:0.6s
电寿命 (阻性负载) Electrical Life(Resistive Load)	100A 450VDC 1000次(ops) 100A 800VDC 500次(ops)	150A 450VDC 3000次(ops) 150A 800VDC 1000次(ops)
最大分断电流(阻性负载) Max. Breaking Current(Resistive Load)	600A 450VDC 1次(ops)	1500A 450VDC 1次(ops)
过载分断(阻性负载) Overload Breaking(Resistive Load)	200A 450VDC 100次(ops)	300A 450VDC 100次(ops)

### 辅助触点参数 AUXILIARY CONTACT DATA

辅助触点 Auxiliary Contact	无 Nil	可选配 Optional
辅助触点形式 Auxiliary Contact Arrangement	/	一组常开 SPST-NO
辅助触点电流范围 Auxiliary Contact Current Range	/	100mA/8VDC ~ 2A/30VDC

### 线圈参数 COIL DATA

额定电压 Rated Voltage	12VDC	24VDC	48VDC	12VDC	24VDC	48VDC
吸合电压 Pick-up Voltage	≤9VDC	≤18VDC	≤36VDC	≤9VDC	≤18VDC	≤36VDC
释放电压 Drop-out Voltage	≥1.2VDC	≥2.4VDC	≥4.8VDC	≥1.2VDC	≥2.4VDC	≥4.8VDC
线圈功率 Rated Operating Power	约 Approx 3W	约 Approx 3W	约 Approx 3W	约 Approx 6W	约 Approx 6W	约 Approx 6W
最大允许电压 Max. Allowable Voltage	16VDC	32VDC	64VDC	16VDC	32VDC	64VDC

### 性能参数 CHARACTERISTICS DATA

介质耐压 Dielectric Strength	触点与线圈间 Between Contacts And Coil	4000VAC 1min	4000VAC 1min
	断开触点间 Between Open Contacts	3000VAC 1min	3000VAC 1min
绝缘电阻 Insulation Resistance	触点与线圈间 Between Contacts And Coil	1000MΩ(1000VDC)	1000MΩ(1000VDC)
	断开触点间 Between Open Contacts	1000MΩ(1000VDC)	1000MΩ(1000VDC)
耐冲击 Shock Resistance	功能性 Functional 强度 Destructive	20G 半正弦波 Half-Sine Wave 11ms 50G 半正弦波 Half-Sine Wave 6ms	20G 半正弦波 Half-Sine Wave 11ms 50G 半正弦波 Half-Sine Wave 6ms
耐振动 Vibration Resistance	功能性 Functional	5.79G (10~ 2000Hz, 随机Random)	5.79G (10~ 2000Hz, 随机Random)
吸合时间 Operate Time		Max:30ms	Max:30ms
释放时间 Release Time		Max:10ms	Max:10ms
机械寿命 Mechanical Life		2*10 <sup>5</sup> 次(ops)	2*10 <sup>5</sup> 次(ops)
重量 Weight		约 Approx 165g	约 Approx 325g

## 特性参数 CHARACTERISTIC PARAMETER

产品型号	HCF200	HCF250
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产品图片



### 主触点参数 MAIN CONTACT DATA

最大工作电压 Max. Switching Voltage	1000VDC	1000VDC
额定电流 Rated Current	200A	250A
触点形式 Contact Arrangement	一组常开 SPST-NO	一组常开 SPST-NO
触点压降 Contact Voltage Drop	≤0.1V (at 200A)	≤0.125V (at 250A)
短时承载电流 Limiting Short-time Current	250A:15min; 320A:5min; 600A:30s; 900A:10s; 2000A:0.6s	375A:10min; 500A:120s; 1000A:20s; 2500A:0.6s
电寿命 (阻性负载) Electrical Life(Resistive Load)	200A 450VDC 1200次(ops) 200A 800VDC 500次(ops)	250A 450VDC 1000次(ops) 250A 800VDC 500次(ops)
最大分断电流(阻性负载) Max. Breaking Current(Resistive Load)	2000A 450VDC 1次(ops)	2000A 450VDC 1次(ops)
过载分断(阻性负载) Overload Breaking(Resistive Load)	300A 450VDC 100次(ops)	500A 450VDC 10次(ops)
耐短路电流 Short Circuit Current Withstanding	/	8000A(5ms)无冒烟, 无起火 No Smoke Or Fire

### 辅助触点参数 AUXILIARY CONTACT DATA

辅助触点 Auxiliary Contact	可选配 Optional	可选配 Optional
辅助触点形式 Auxiliary Contact Arrangement	一组常开 SPST-NO	一组常开 SPST-NO
辅助触点电流范围 Auxiliary Contact Current Range	100mA/8VDC ~ 2A/30VDC	100mA/8VDC ~ 2A/30VDC

### 线圈参数 COIL DATA

额定电压 Rated Voltage	12VDC	24VDC	48VDC	12VDC	24VDC	48VDC
吸合电压 Pick-up Voltage	≤9VDC	≤18VDC	≤36VDC	≤9VDC	≤18VDC	≤36VDC
释放电压 Drop-out Voltage	≥1.2VDC	≥2.4VDC	≥4.8VDC	≥1.2VDC	≥2.4VDC	≥4.8VDC
线圈功率 Rated Operating Power	约 Approx 6W	约 Approx 6W	约 Approx 6W	约 Approx 6W	约 Approx 6W	约 Approx 6W
最大允许电压 Max. Allowable Voltage	16VDC	32VDC	64VDC	16VDC	32VDC	64VDC

### 性能参数 CHARACTERISTICS DATA

介电耐压 Dielectric Strength	触点与线圈间 Between Contacts And Coil 断开触点间 Between Open Contacts	4000VAC 1min 3000VAC 1min	4000VAC 1min 3000VAC 1min
绝缘电阻 Insulation Resistance	触点与线圈间 Between Contacts And Coil 断开触点间 Between Open Contacts	1000MΩ(1000VDC) 1000MΩ(1000VDC)	1000MΩ(1000VDC) 1000MΩ(1000VDC)
耐冲击 Shock Resistance	功能性 Functional 强度 Destructive	20G 半正弦波 Half-Sine Wave 11ms 50G 半正弦波 Half-Sine Wave 6ms	20G 半正弦波 Half-Sine Wave 11ms 50G 半正弦波 Half-Sine Wave 6ms
耐振动 Vibration Resistance	功能性 Functional	5.79G (10~ 2000Hz, 随机Random)	5.79G (10~ 2000Hz, 随机Random)
吸合时间 Operate Time		Max:30ms	Max:30ms
释放时间 Release Time		Max:10ms	Max:10ms
机械寿命 Mechanical Life		2*10 <sup>5</sup> 次(ops)	2*10 <sup>5</sup> 次(ops)
重量 Weight		约 Approx 325g	约 Approx 400g



## 特性参数 CHARACTERISTIC PARAMETER

产品型号	HCF300	HCF400
产品图片		

### 主触点参数 MAIN CONTACT DATA

最大工作电压 Max. Switching Voltage	1000VDC	1500VDC
额定电流 Rated Current	300A	400A
触点形式 Contact Arrangement	一组常开 SPST-NO	一组常开 SPST-NO
触点压降 Contact Voltage Drop	≤0.15V (at 300A)	≤0.2V (at 400A)
短时承载电流 Limiting Short-time Current	450A:5min; 600A:120s; 1000A:25s; 2500A:0.6s	600A:15min; 900A:120s; 1200A:30s; 3000A:0.6s
电寿命 (阻性负载) Electrical Life(Resistive Load)	300A 450VDC 800次(ops) 300A 800VDC 500次(ops)	400A 450VDC 2000次(ops) 400A 800VDC 800次(ops) 400A 1000VDC 200次(ops)
最大分断电流(阻性负载) Max. Breaking Current(Resistive Load)	2000A 450VDC 1次(ops)	2500A 800VDC 1次(ops)
过载分断(阻性负载) Overload Breaking(Resistive Load)	600A 450VDC 10次(ops)	800A 450VDC 50次(ops)
耐短路电流 Short Circuit Current Withstanding	8000A(5ms)无冒烟, 无起火 No Smoke Or Fire	8000A(10ms)无冒烟, 无起火 No Smoke Or Fire

### 辅助触点参数 AUXILIARY CONTACT DATA

辅助触点 Auxiliary Contact	可选配 Optional	可选配 Optional
辅助触点形式 Auxiliary Contact Arrangement	一组常开 SPST-NO	一组常开 SPST-NO
辅助触点电流范围 Auxiliary Contact Current Range	100mA/8VDC ~ 2A/30VDC	100mA/8VDC ~ 2A/30VDC

### 线圈参数 COIL DATA

额定电压 Rated Voltage	12VDC	24VDC	48VDC	12VDC	24VDC	48VDC
吸合电压 Pick-up Voltage	≤9VDC	≤18VDC	≤36VDC	≤9VDC	≤18VDC	≤36VDC
释放电压 Drop-out Voltage	≥1.2VDC	≥2.4VDC	≥4.8VDC	≥1.2VDC	≥2.4VDC	≥4.8VDC
线圈功率 Rated Operating Power	约 Approx 6W	约 Approx 6W	约 Approx 6W	约 Approx 56W启动 Start; 5.4W保持 Hold	约 Approx 56W启动 Start; 5.4W保持 Hold	约 Approx 56W启动 Start; 5.4W保持 Hold
最大允许电压 Max. Allowable Voltage	16VDC	32VDC	64VDC	16VDC	32VDC	64VDC

### 性能参数 CHARACTERISTICS DATA

介质耐压 Dielectric Strength	触点与线圈间 Between Contacts And Coil	4000VAC 1min	4000VAC 1min
	断开触点间 Between Open Contacts	3000VAC 1min	3000VAC 1min
绝缘电阻 Insulation Resistance	触点与线圈间 Between Contacts And Coil	1000MΩ(1000VDC)	1000MΩ(1000VDC)
	断开触点间 Between Open Contacts	1000MΩ(1000VDC)	1000MΩ(1000VDC)
耐冲击 Shock Resistance	功能性 Functional 强度 Destructive	20G 半正弦波 Half-Sine Wave 11ms 50G 半正弦波 Half-Sine Wave 6ms	20G 半正弦波 Half-Sine Wave 11ms 50G 半正弦波 Half-Sine Wave 6ms
耐振动 Vibration Resistance	功能性 Functional	5.79G (10~ 2000Hz, 随机Random)	5.79G (10~ 2000Hz, 随机Random)
吸合时间 Operate Time		Max:30ms	Max:30ms
释放时间 Release Time		Max:10ms	Max:10ms
机械寿命 Mechanical Life		2*10 <sup>5</sup> 次(ops)	2*10 <sup>5</sup> 次(ops)
重量 Weight		约 Approx 400g	约 Approx 700g

## 特性参数 CHARACTERISTIC PARAMETER

产品型号	HCF400B	HCF500
产品图片		

### 主触点参数 MAIN CONTACT DATA

最大工作电压 Max. Switching Voltage	1500VDC	1500VDC
额定电流 Rated Current	400A	500A
触点形式 Contact Arrangement	一组常开 SPST-NO	一组常开 SPST-NO
触点压降 Contact Voltage Drop	≤0.2V (at 400A)	≤0.1V (at 500A)
短时承载电流 Limiting Short-time Current	600A:15min; 900A:120s; 1200A:30s; 3000A:0.6s	700A:8min; 1000A:50s; 2000A:5s; 3000A:1s
电寿命 (阻性负载) Electrical Life(Resistive Load)	400A 450VDC 2000次(ops) 400A 800VDC 800次(ops) 400A 1000VDC 200次(ops)	500A 450VDC 2000次(ops), 仅分断 Only Breaking 500A 800VDC 800次(ops), 仅分断 Only Breaking 500A 1000VDC 200次(ops), 仅分断 Only Breaking
最大分断电流(阻性负载) Max. Breaking Current(Resistive Load)	2500A 800VDC 1次(ops)	2500A 800VDC 1次(ops)
过载分断(阻性负载) Overload Breaking(Resistive Load)	800A 450VDC 50次(ops)	800A 450VDC 50次(ops)
耐短路电流 Short Circuit Current Withstanding	8000A(10ms)无冒烟, 无起火 No Smoke Or Fire	8000A(10ms)无冒烟, 无起火 No Smoke Or Fire

### 辅助触点参数 AUXILIARY CONTACT DATA

辅助触点 Auxiliary Contact	可选配 Optional	可选配 Optional
辅助触点形式 Auxiliary Contact Arrangement	一组常开 SPST-NO	一组常开 SPST-NO
辅助触点电流范围 Auxiliary Contact Current Range	100mA/8VDC ~ 2A/30VDC	100mA/8VDC ~ 2A/30VDC

### 线圈参数 COIL DATA

	12VDC	24VDC	48VDC	12VDC	24VDC	48VDC
额定电压 Rated Voltage	12VDC	24VDC	48VDC	12VDC	24VDC	48VDC
吸合电压 Pick-up Voltage	≤9VDC	≤18VDC	≤36VDC	≤9VDC	≤18VDC	≤36VDC
释放电压 Drop-out Voltage	≥1.2VDC	≥2.4VDC	≥4.8VDC	≥1.2VDC	≥2.4VDC	≥4.8VDC
线圈功率 Rated Operating Power	约 Approx 56W启动 Start; 5.4W保持 Hold	约 Approx 56W启动 Start; 5.4W保持 Hold	约 Approx 56W启动 Start; 5.4W保持 Hold	约 Approx 56W启动 Start; 5.4W保持 Hold	约 Approx 56W启动 Start; 5.4W保持 Hold	约 Approx 56W启动 Start; 5.4W保持 Hold
最大允许电压 Max. Allowable Voltage	16VDC	32VDC	64VDC	16VDC	32VDC	64VDC

### 性能参数 CHARACTERISTICS DATA

介质耐压 Dielectric Strength	触点与线圈间 Between Contacts And Coil 断开触点间 Between Open Contacts	4000VAC 1min 3000VAC 1min	4000VAC 1min 3000VAC 1min
绝缘电阻 Insulation Resistance	触点与线圈间 Between Contacts And Coil 断开触点间 Between Open Contacts	1000MΩ(1000VDC) 1000MΩ(1000VDC)	1000MΩ(1000VDC) 1000MΩ(1000VDC)
耐冲击 Shock Resistance	功能性 Functional 强度 Destructive	20G 半正弦波 Half-Sine Wave 11ms 50G 半正弦波 Half-Sine Wave 6ms	20G 半正弦波 Half-Sine Wave 11ms 50G 半正弦波 Half-Sine Wave 6ms
耐振动 Vibration Resistance	功能性 Functional	5.79G (10~ 2000Hz, 随机Random)	5.79G (10~ 2000Hz, 随机Random)
吸合时间 Operate Time		Max:30ms	Max:30ms
释放时间 Release Time		Max:10ms	Max:10ms
机械寿命 Mechanical Life		2*10 <sup>5</sup> 次(ops)	2*10 <sup>5</sup> 次(ops)
重量 Weight		约 Approx 700g	约 Approx 700g

## 特性参数 CHARACTERISTIC PARAMETER

产品型号	HCF500B	HCF600
产品图片		

### 主触点参数 MAIN CONTACT DATA

最大工作电压 Max. Switching Voltage	1500VDC	1500VDC
额定电流 Rated Current	500A	600A
触点形式 Contact Arrangement	一组常开 SPST-NO	一组常开 SPST-NO
触点压降 Contact Voltage Drop	≤0.1V (at 500A)	≤0.12V (at 600A)
短时承载电流 Limiting Short-time Current	700A:8min; 1000A:50s; 2000A:5s; 3000A:1s	700A:10min; 1000A:60s; 1600A:10s; 3000A:1s
电寿命 (阻性负载) Electrical Life(Resistive Load)	500A 450VDC 2000次(ops), 仅分断 Only Breaking 500A 800VDC 800次(ops), 仅分断 Only Breaking 500A 1000VDC 200次(ops), 仅分断 Only Breaking	600A 800VDC 500次(ops), 仅分断 Only Breaking 600A 1000VDC 100次(ops), 仅分断 Only Breaking 350A 1500VDC 1000次(ops), 仅分断 Only Breaking
最大分断电流(阻性负载) Max. Breaking Current(Resistive Load)	2500A 800VDC 1次(ops)	2500A 800VDC 1次(ops)
过载分断(阻性负载) Overload Breaking(Resistive Load)	800A 450VDC 50次(ops)	1000A 900VDC 50次 (ops)
耐短路电流 Short Circuit Current Withstanding	8000A(10ms)无冒烟, 无起火 No Smoke Or Fire	8000A(10ms)无冒烟, 无起火 No Smoke Or Fire

### 辅助触点参数 AUXILIARY CONTACT DATA

辅助触点 Auxiliary Contact	可选配 Optional	标配 Standard Configuration
辅助触点形式 Auxiliary Contact Arrangement	一组常开 SPST-NO	一组常开 SPST-NO
辅助触点电流范围 Auxiliary Contact Current Range	100mA/8VDC ~ 2A/30VDC	100mA/8VDC ~ 2A/30VDC

### 线圈参数 COIL DATA

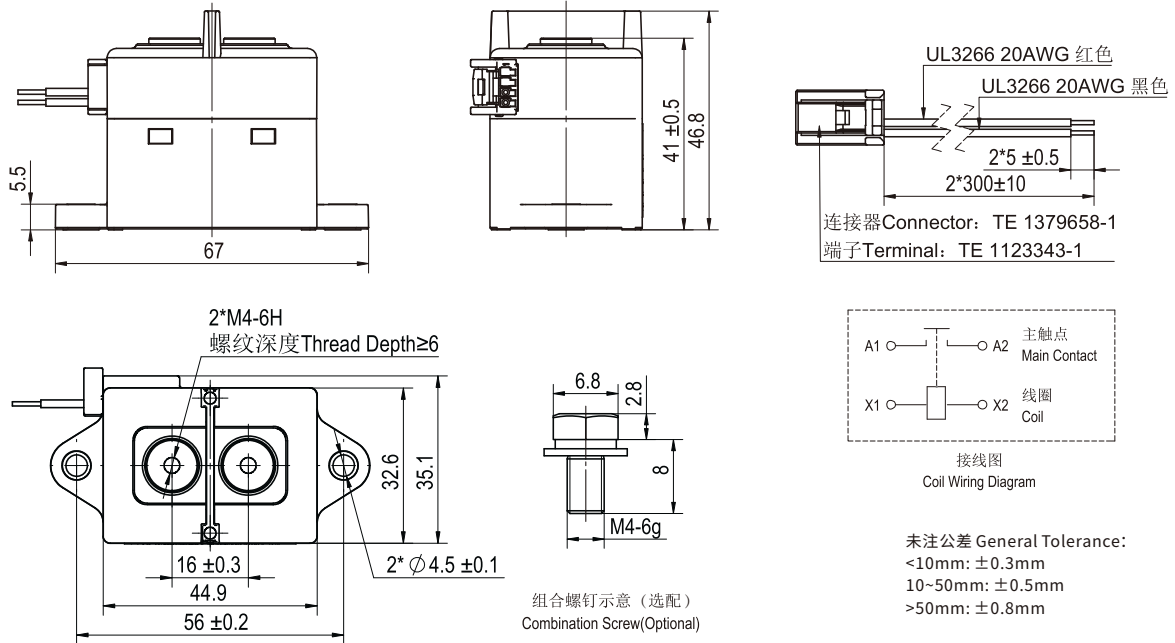
额定电压 Rated Voltage	12VDC	24VDC	48VDC	12VDC	24VDC	48VDC
吸合电压 Pick-up Voltage	≤9VDC	≤18VDC	≤36VDC	≤9VDC	≤18VDC	≤36VDC
释放电压 Drop-out Voltage	≥1.2VDC	≥2.4VDC	≥4.8VDC	≥1.2VDC	≥2.4VDC	≥4.8VDC
线圈功率 Rated Operating Power	约 Approx 56W启动 Start; 5.4W保持 Hold	约 Approx 56W启动 Start; 5.4W保持 Hold	约 Approx 56W启动 Start; 5.4W保持 Hold	约 Approx 65W启动 Start; 5.4W保持 Hold	约 Approx 65W启动 Start; 5.4W保持 Hold	约 Approx 65W启动 Start; 5.4W保持 Hold
最大允许电压 Max. Allowable Voltage	16VDC	32VDC	64VDC	16VDC	32VDC	64VDC

### 性能参数 CHARACTERISTICS DATA

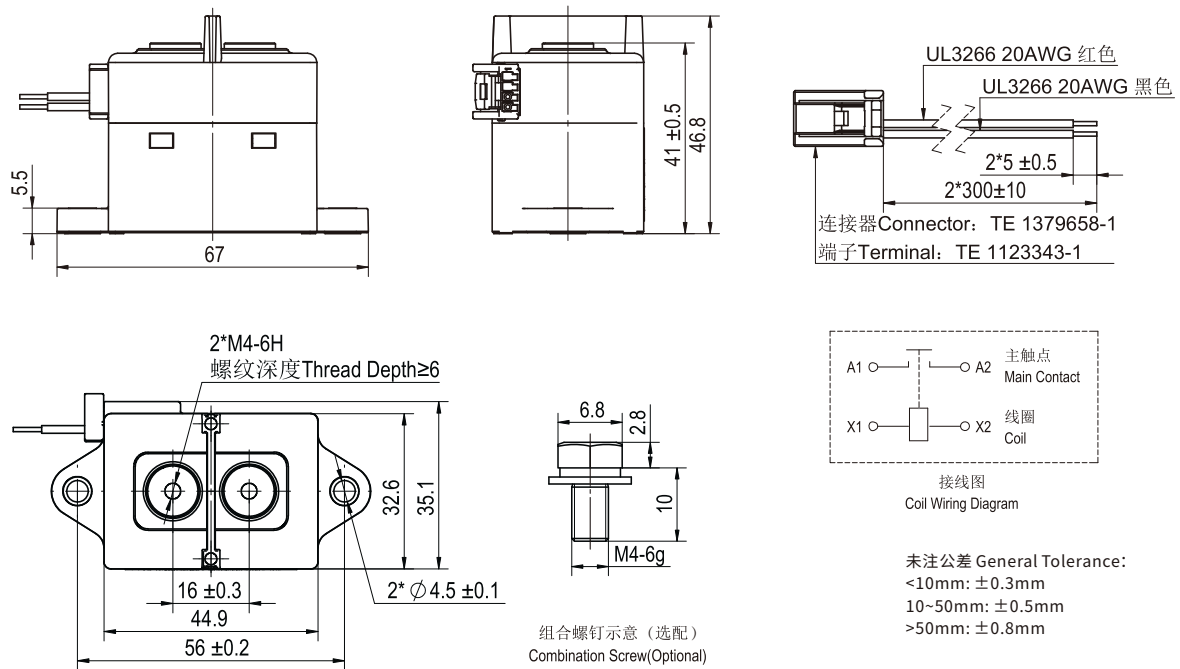
介质耐压 Dielectric Strength	触点与线圈间 Between Contacts And Coil	4000VAC 1min	4000VAC 1min
	断开触点间 Between Open Contacts	3000VAC 1min	4000VAC 1min
绝缘电阻 Insulation Resistance	触点与线圈间 Between Contacts And Coil	1000MΩ(1000VDC)	1000MΩ(1000VDC)
	断开触点间 Between Open Contacts	1000MΩ(1000VDC)	1000MΩ(1000VDC)
耐冲击 Shock Resistance	功能性 Functional 强度 Destructive	20G 半正弦波 Half-Sine Wave 11ms 50G 半正弦波 Half-Sine Wave 6ms	20G 半正弦波 Half-Sine Wave 11ms 50G 半正弦波 Half-Sine Wave 6ms
耐振动 Vibration Resistance	功能性 Functional	5.79G (10~ 2000Hz, 随机Random)	5.79G (10~ 2000Hz, 随机Random)
吸合时间 Operate Time		Max:30ms	Max:50ms
释放时间 Release Time		Max:10ms	Max:30ms
机械寿命 Mechanical Life		2*10 <sup>5</sup> 次(ops)	2*10 <sup>5</sup> 次(ops)
重量 Weight		约 Approx 700g	约 Approx 1300g

## 外形尺寸图 OUTLINE DIMENSIONS

HCF40/□-□-HC1、HCF60/□-□-HC1

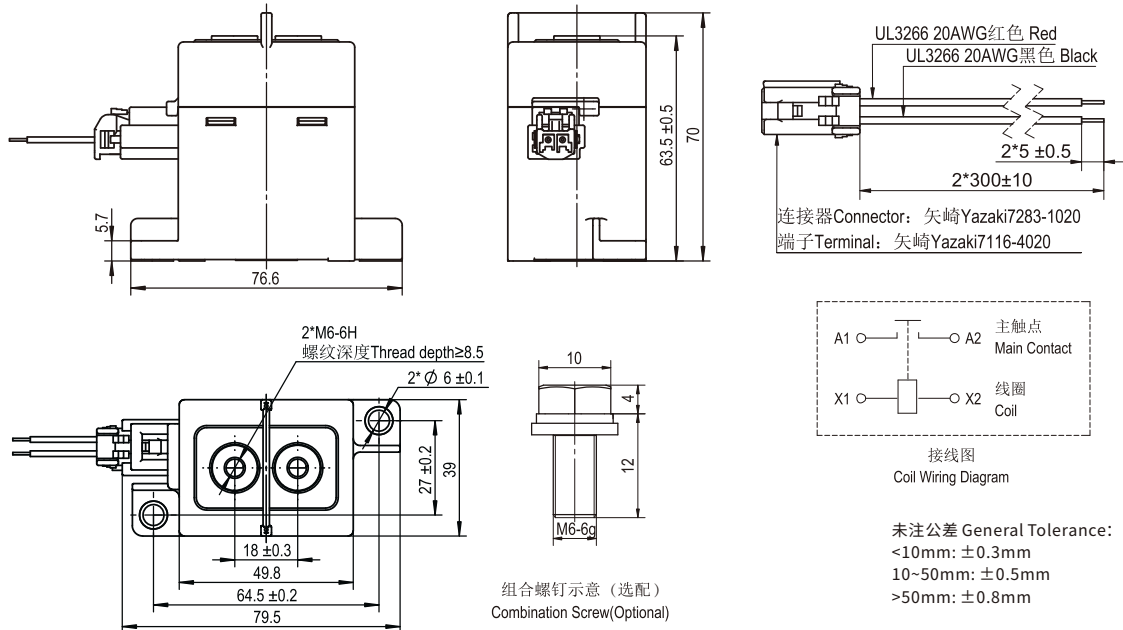


HCF100/□-□-HC1

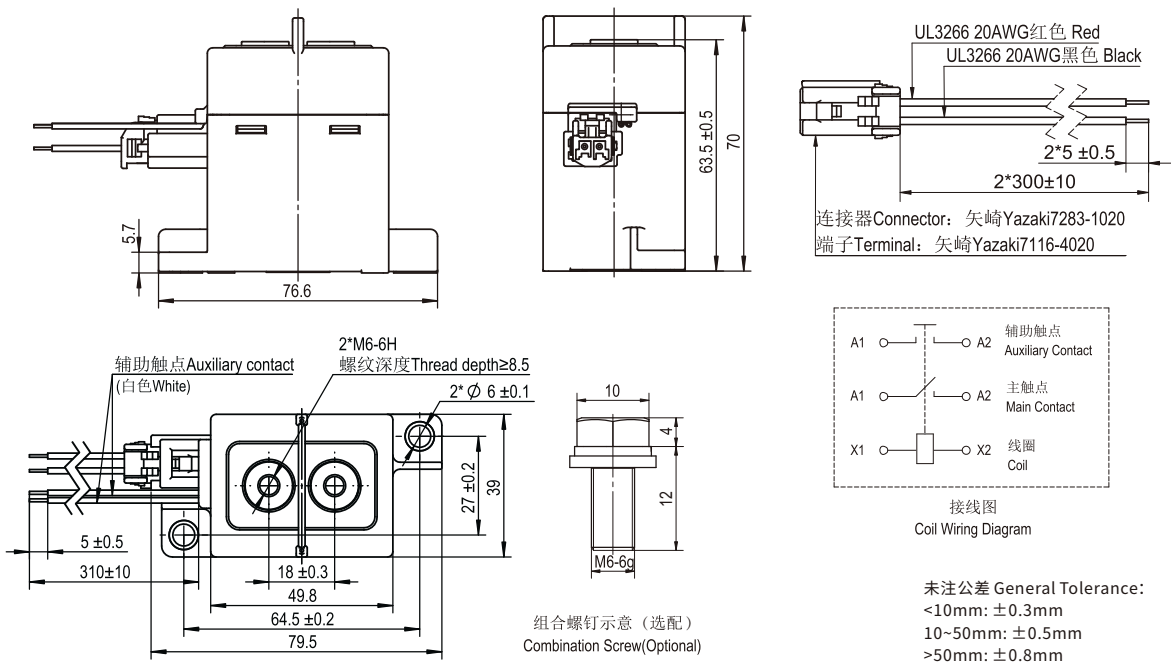


## 外形尺寸图 OUTLINE DIMENSIONS

HCF150/□-□-HC1

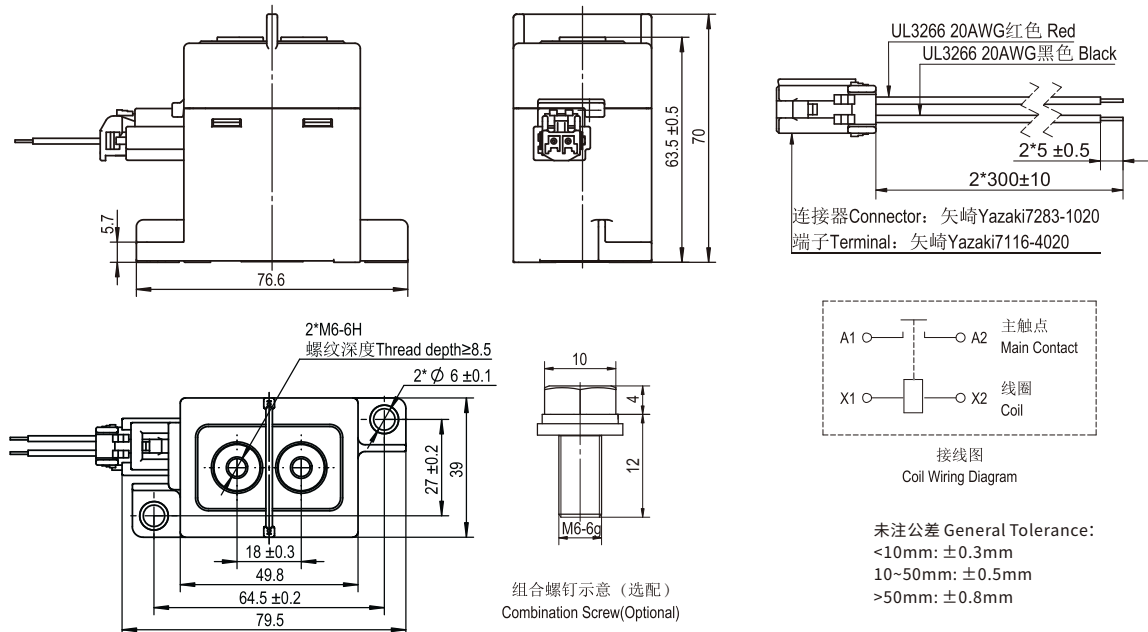


HCF150/□-□-HC1H

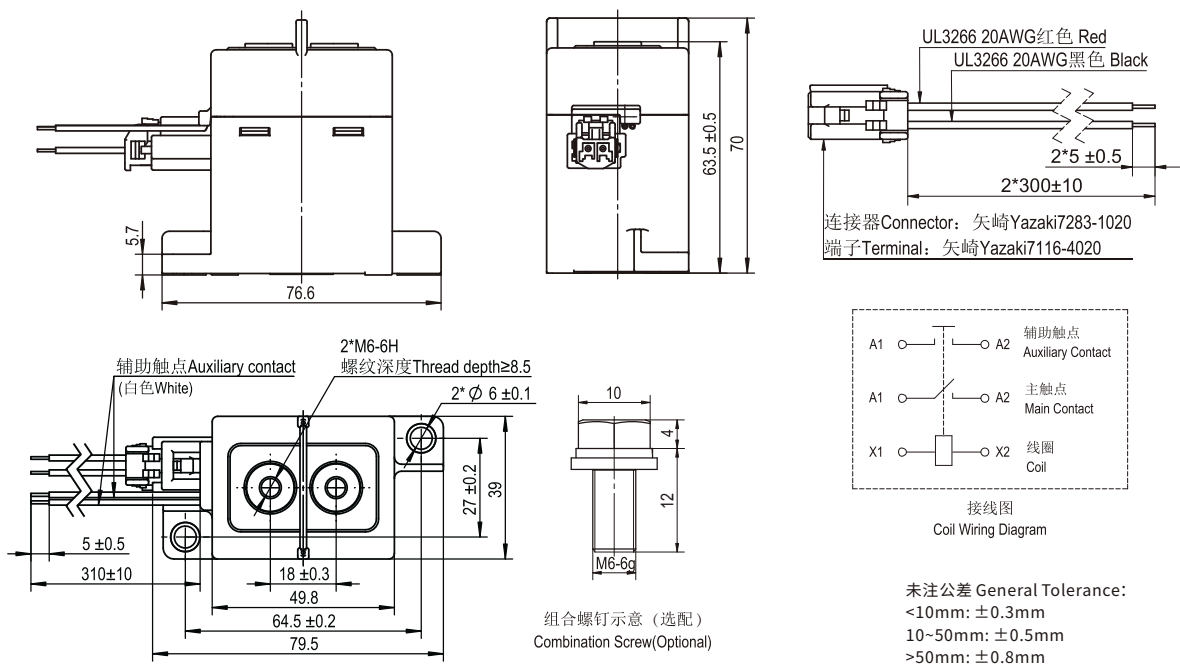


## 外形尺寸图 OUTLINE DIMENSIONS

HCF200/□-□-HC1

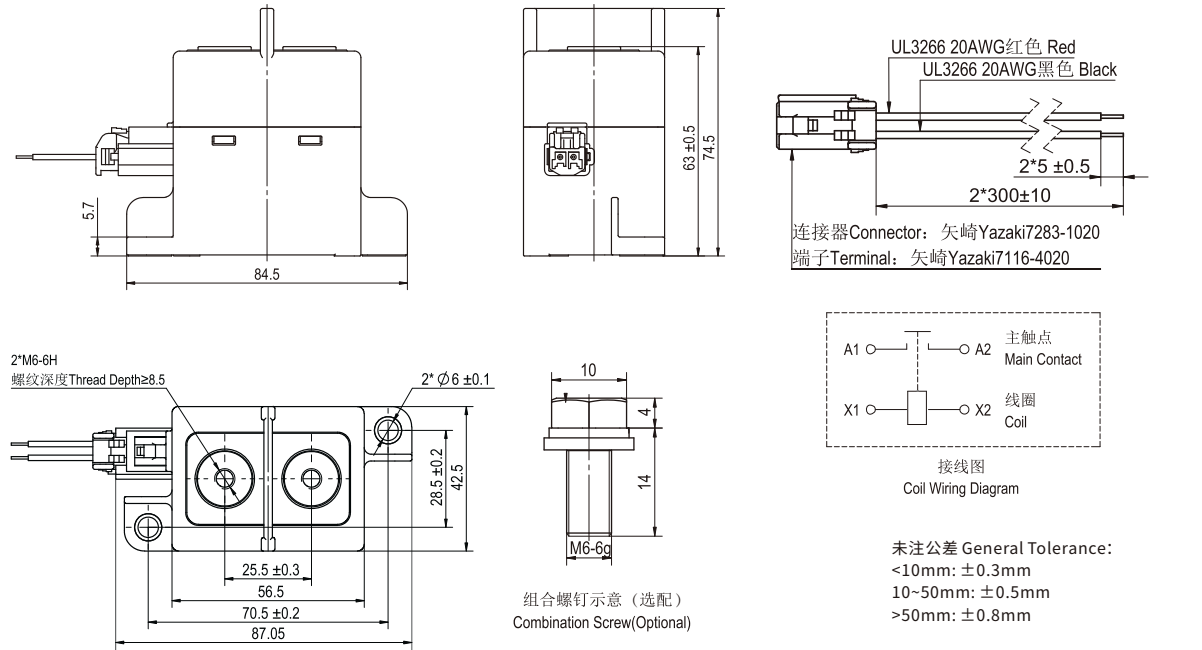


HCF200/□-□-HC1H

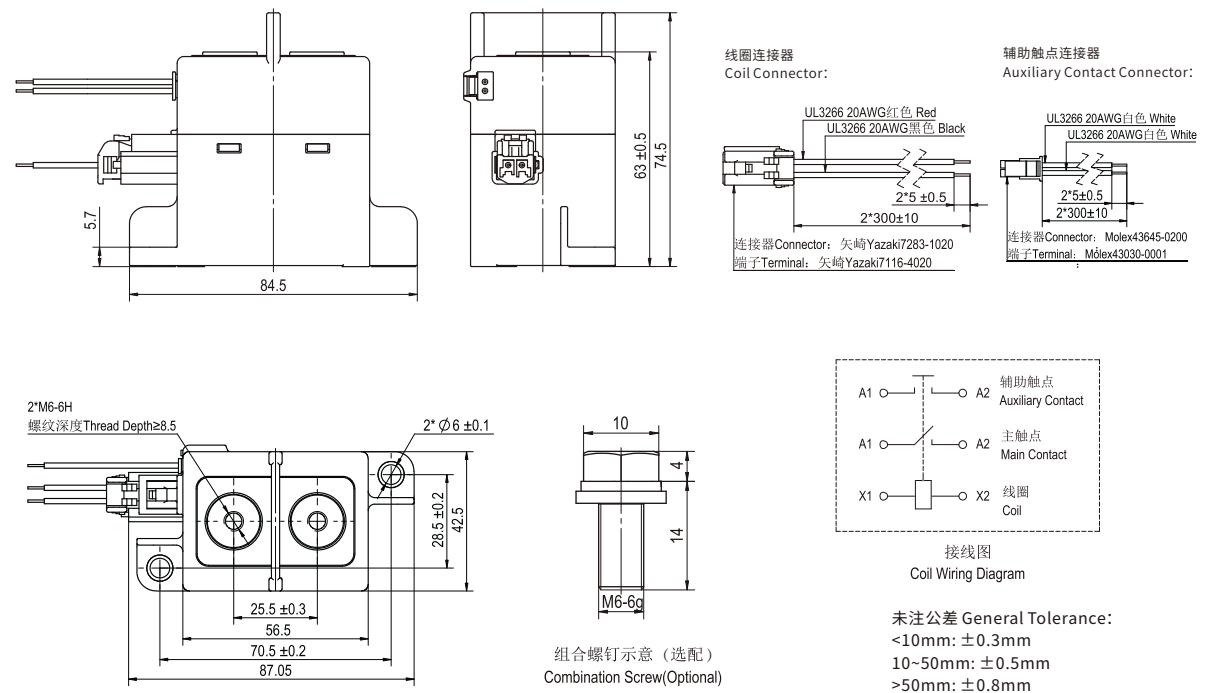


## 外形尺寸图 OUTLINE DIMENSIONS

HCF250/□-□-HC1

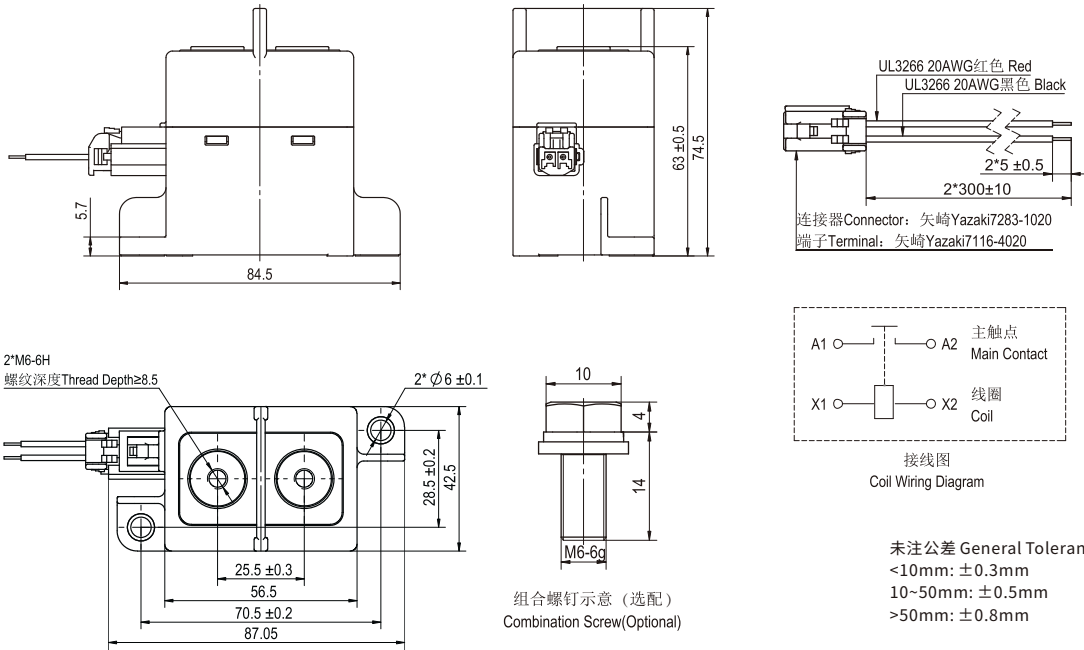


HCF250/□-□-HC1H

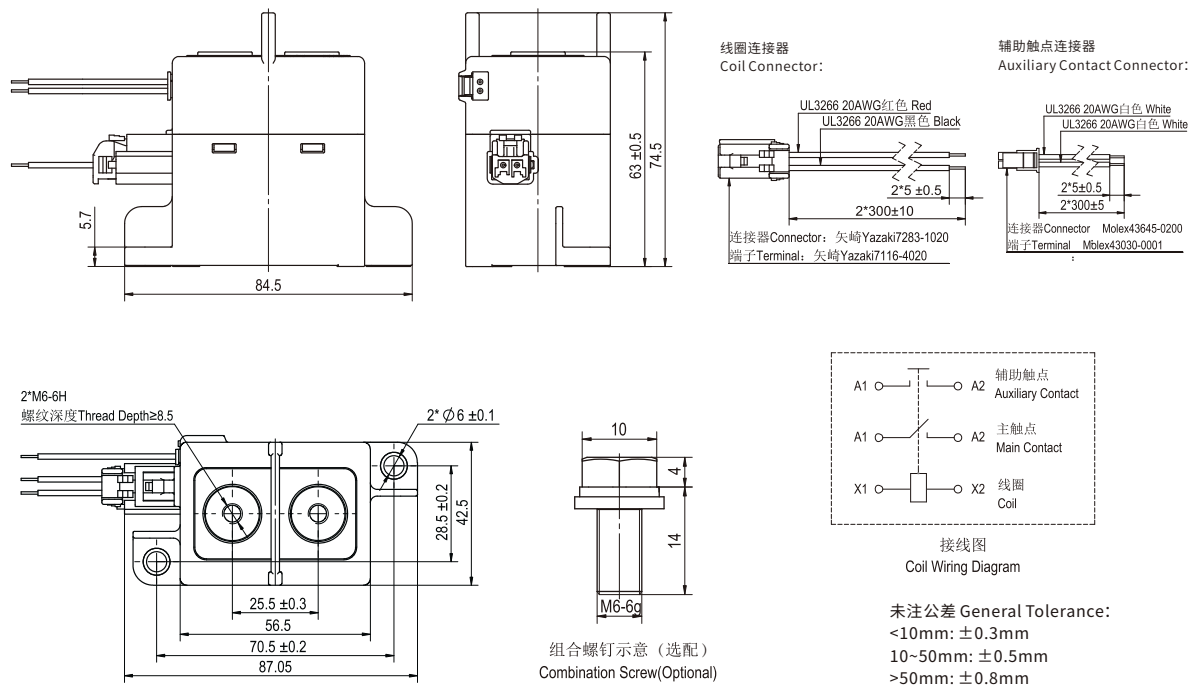


## 外形尺寸图 OUTLINE DIMENSIONS

HCF300/□-□-HC1



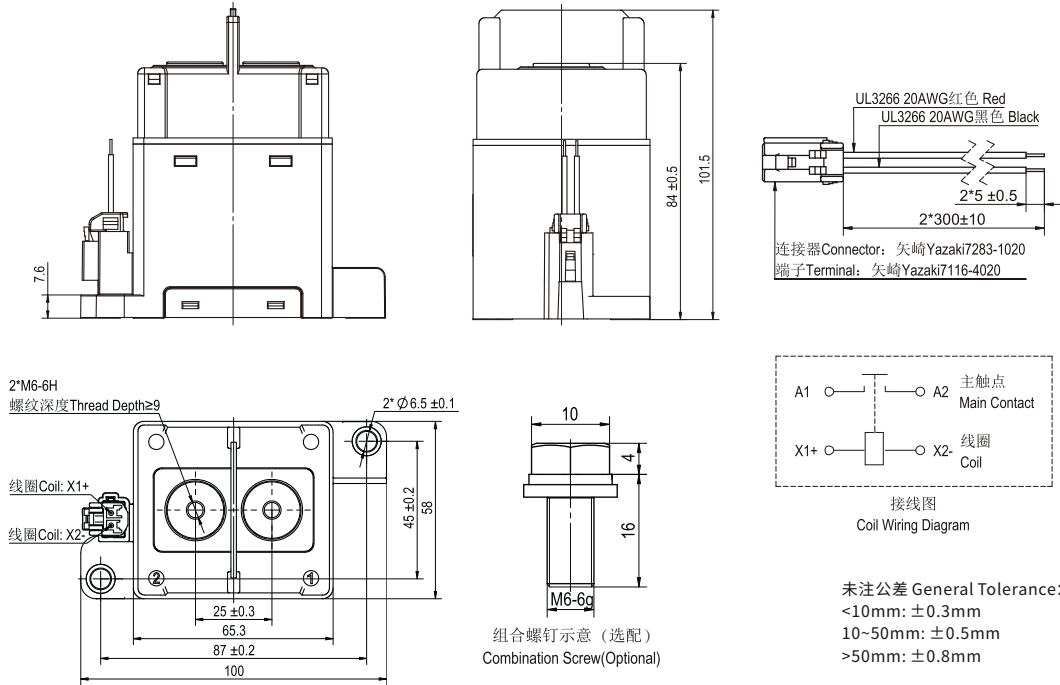
HCF300/□-□-HC1H



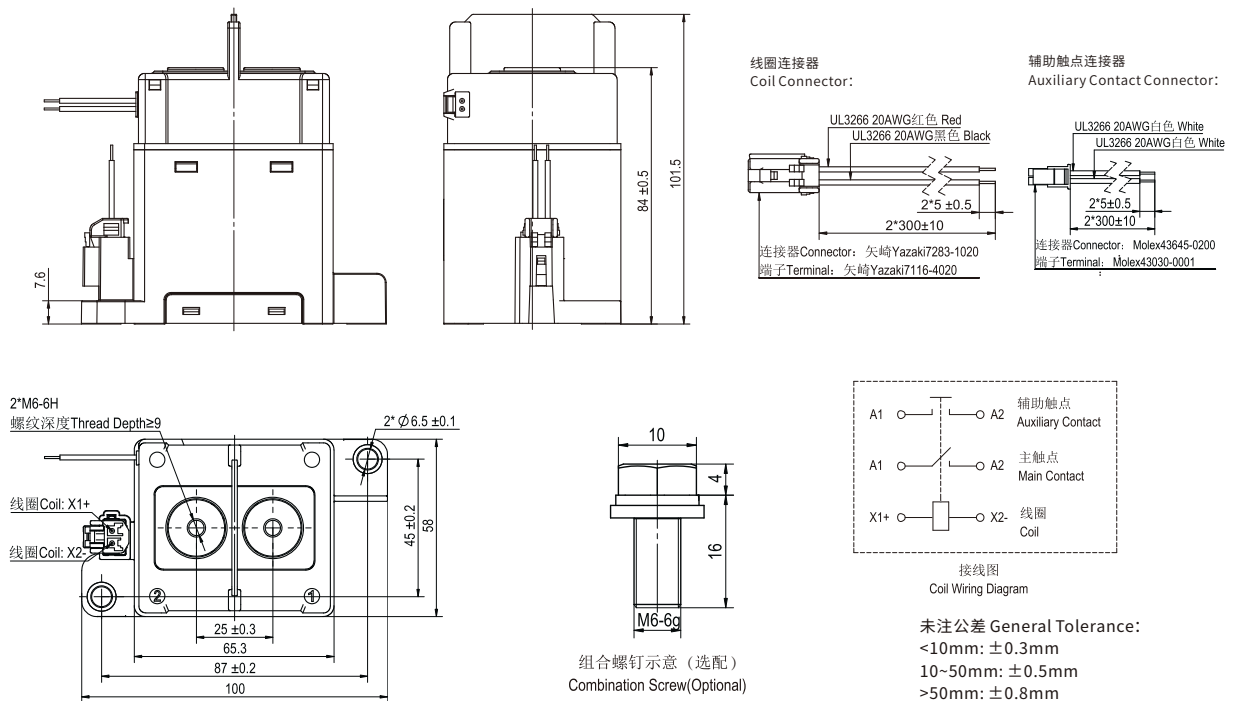


## 外形尺寸图 OUTLINE DIMENSIONS

### HCF400/□-□-HC1

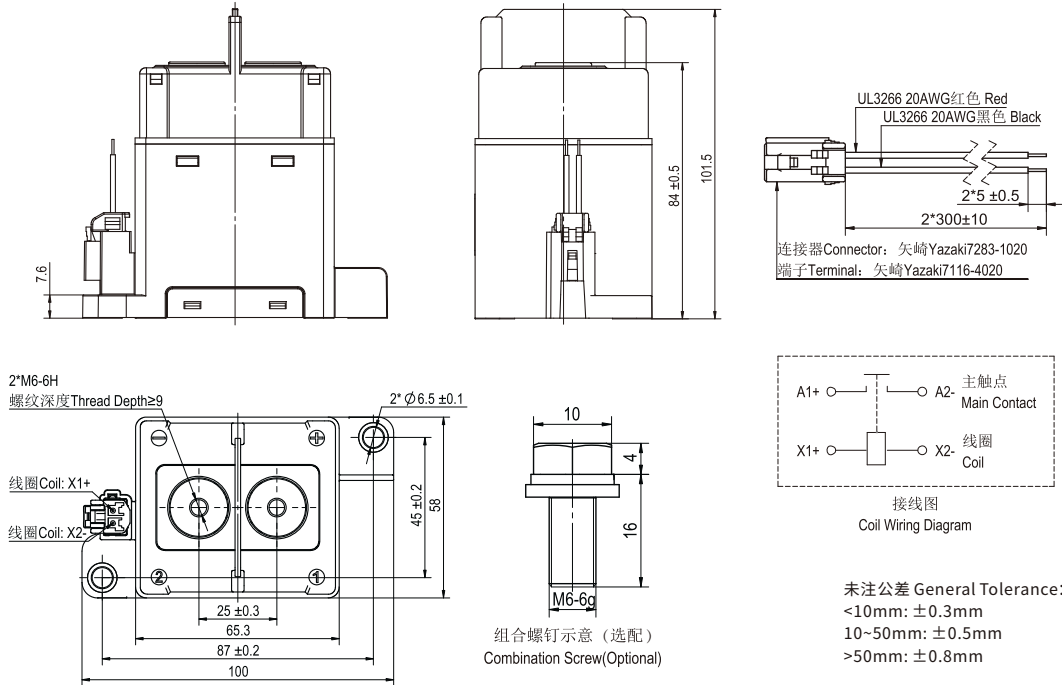


### HCF400/□-□-HC1H

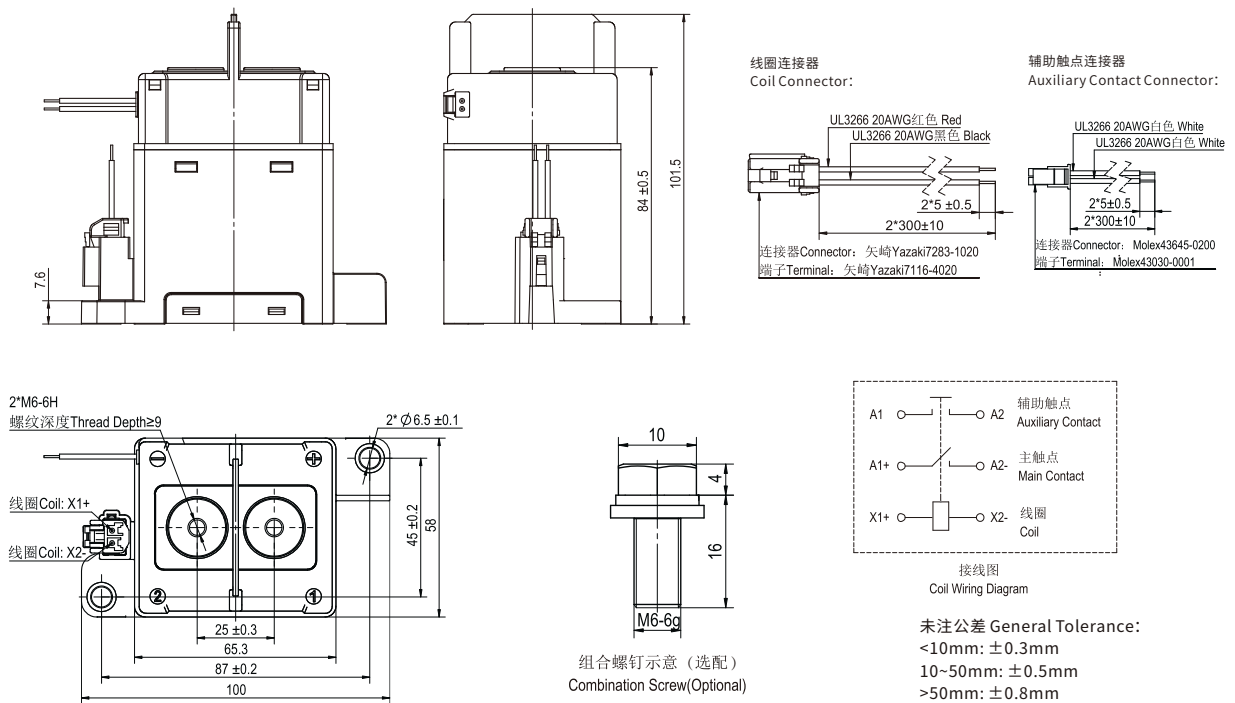


## 外形尺寸图 OUTLINE DIMENSIONS

### HCF400B/□-□-HC1

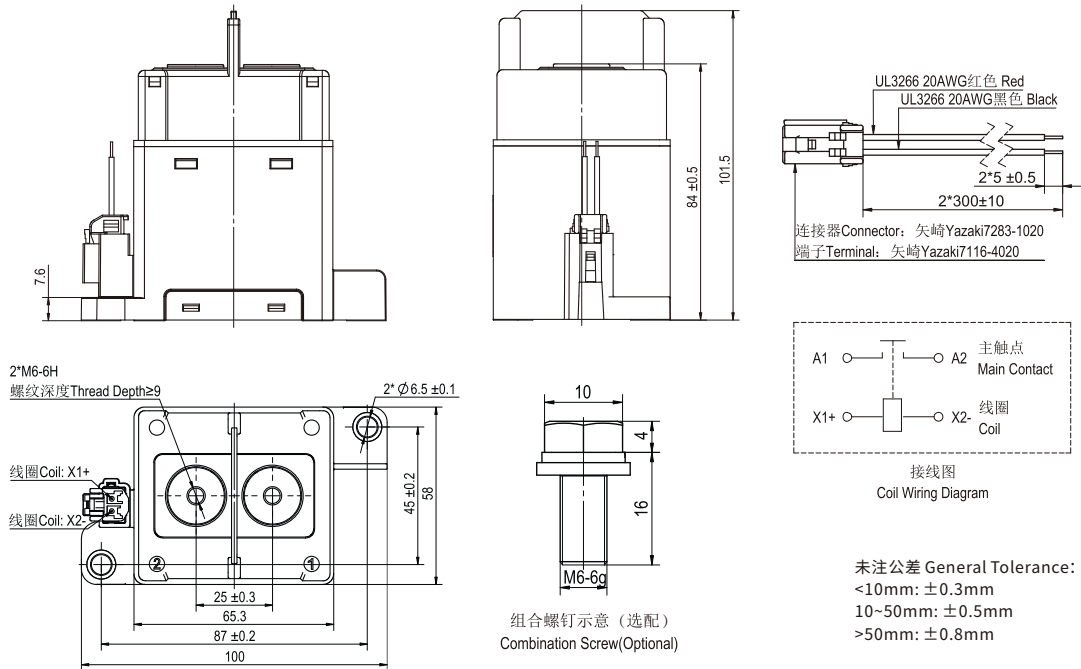


### HCF400B/□-□-HC1H

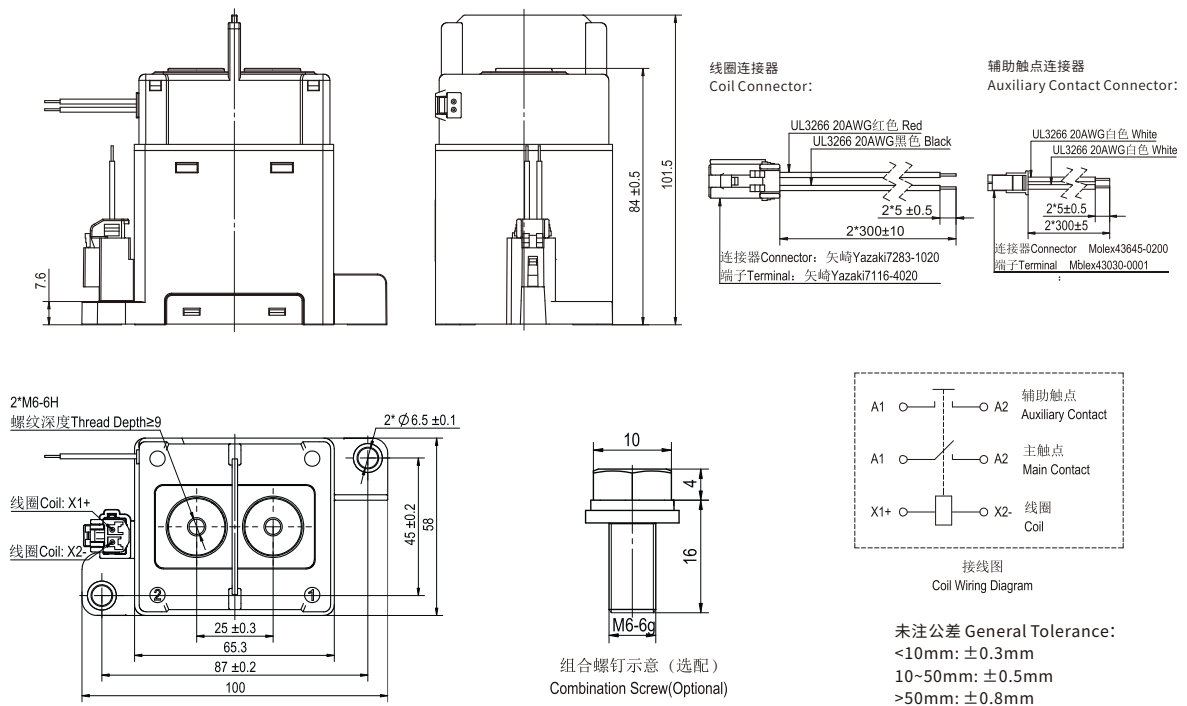


## 外形尺寸图 OUTLINE DIMENSIONS

### HCF500/□-□-HC1

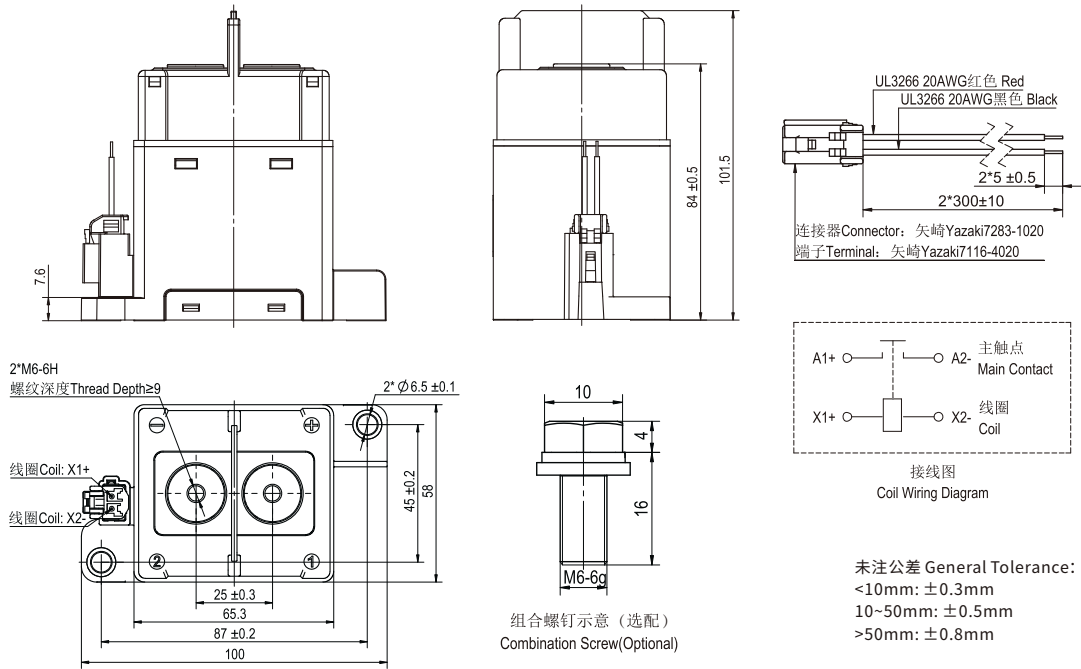


### HCF500/□-□-HC1H

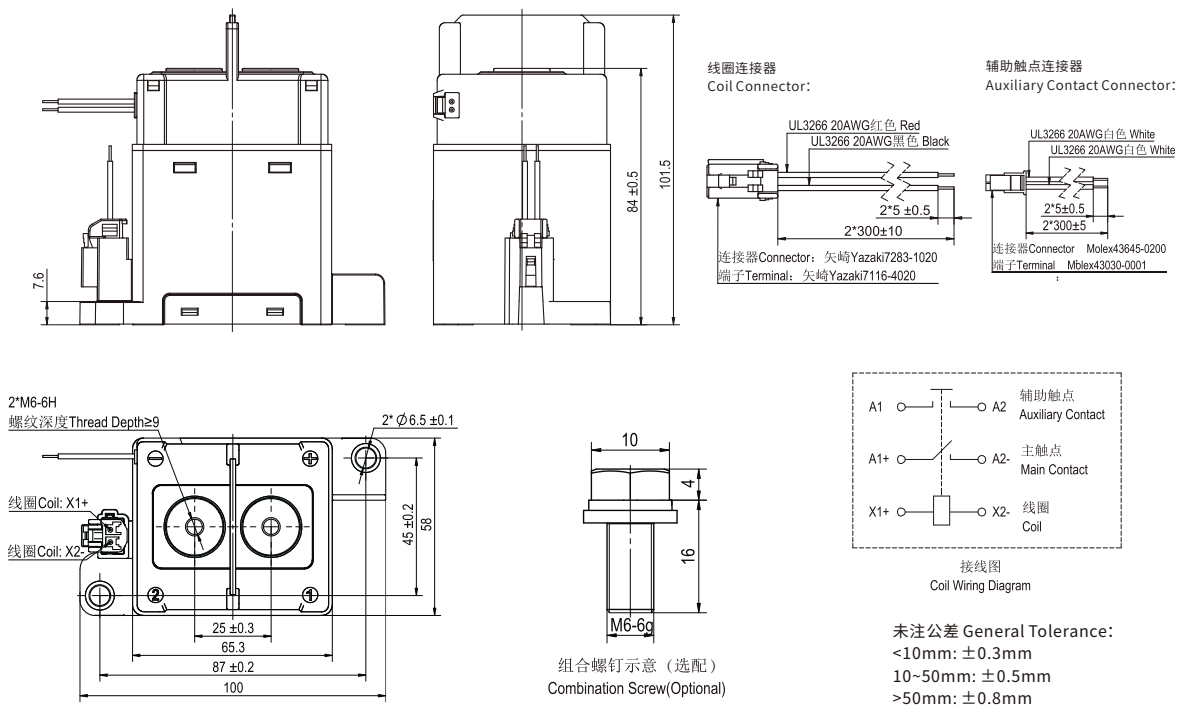


## 外形尺寸图 OUTLINE DIMENSIONS

### HCF500B/□-□-HC1

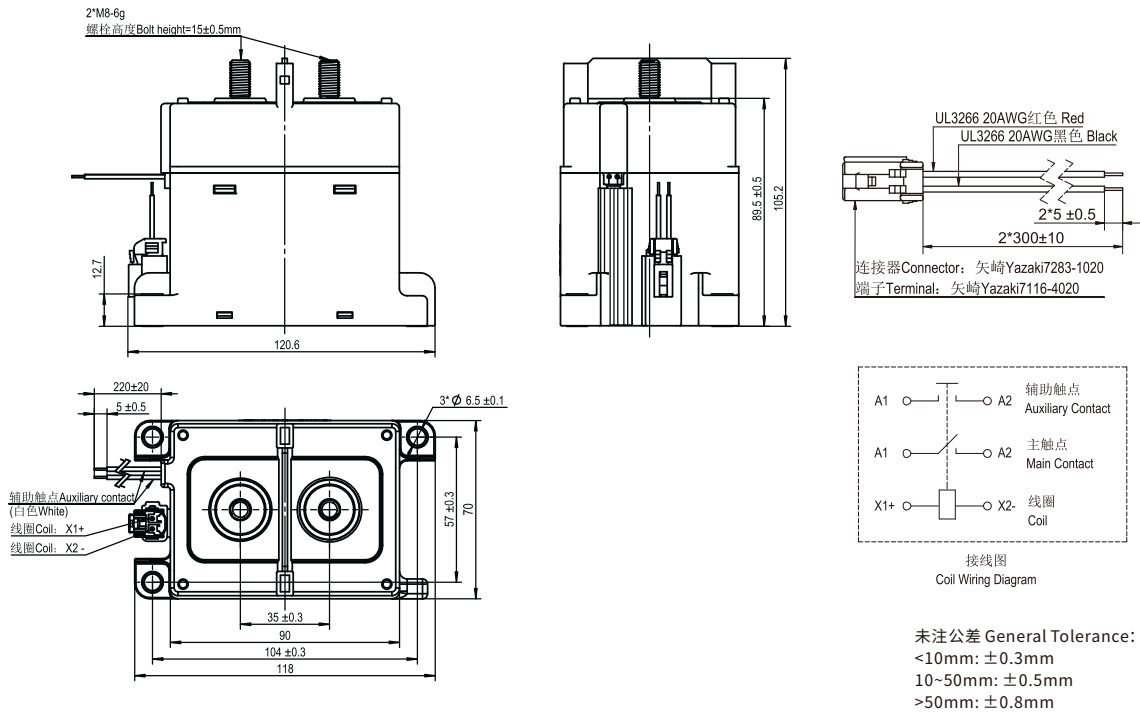


### HCF500B/□-□-HC1H



## 外形尺寸图 OUTLINE DIMENSIONS

HCF600/□-□-HC2H



# 使用注意事项 CAUTIONS

1. 请避免安装在强磁场（变压器、磁铁周围）或发热物体附近。  
Please avoid installing in strong magnetic fields (transformers, magnets around) or hot objects.
2. 使用环境温度-40°C~+85°C，湿度5%~85%RH。  
Use the environment temperature -40°C~+85°C, humidity 5%~85%RH.
3. 电寿命试验在L/R≤1ms条件下进行。  
Electrical life test under L/R ≤1ms condition.
4. 当继电器的线圈和触头有极性时，在进行线圈和触头的连接时，请按接线图的指示进行操作。  
When the coil and contact of the relay have polarity, connect the coil and contact according to the instructions of the wiring diagram.
5. 请注意：若线圈并联二极管使用，继电器释放时间会加长，造成电寿命降低。  
Please be attention: If parallel diode on coil will increase relay release time and decrease electrical life.
6. HCF400/400B/500/500B/600系列继电器内置单触发脉冲发生电路，请通过快速上升沿（脉冲式供电方式）驱动线圈；继电器接通信号后，约300ms后线圈电流自动切换，请避免间隔不满300ms的重复切换操作。  
HCF400/400B/500/500B/600 series relays have a built-in one-shot pulse generator circuit, please drive the coil with a quick startup (pulse power supply mode); after the signal enters relay, automatic coil current switching occurs after approximately 300ms, please avoid repetitive switch in which interval time is less than 300ms.
7. 请避免在引出端上粘附油脂等异物，建议使用下表推荐规格导线，否则有可能造成引出端异常发热。  
Please avoid the adhesion of oil and other foreign material on the lead sheet, it is recommended to use wires of the recommended specifications in the table below, otherwise it may cause the abnormal fever in the lead-out part.

电流等级 current rating	40A	60A	100A	150A	200A	250A	300A	400A	500A	600A
公称截面积 nominal area	≥10mm <sup>2</sup>	≥16mm <sup>2</sup>	≥35mm <sup>2</sup>	≥50mm <sup>2</sup>	≥60mm <sup>2</sup>	≥100mm <sup>2</sup>	≥100mm <sup>2</sup>	≥150mm <sup>2</sup>	≥200mm <sup>2</sup>	≥400mm <sup>2</sup>

8. 为防止出现松动，继电器安装时使用垫圈螺钉锁紧，各部位的螺钉锁紧扭矩和开孔尺寸请控制在以下范围：  
In order to prevent loosening, please use the washer screw to lock when the relay is installed, the screw locking torque of each part and hole size should be controlled in the following range:

继电器壳体安装部位 relay shell installation department			主负载安装部位 main loading installation part	
螺钉型 screw type	扭力 twisting for	底板建议开孔尺寸 recommended hole size for	螺钉型 screw type	扭力 twisting for
M4	1.8-2.8N.m	Ø 4.5mm	M4	1.8-2.8N.m
M5	3-4N.m	Ø 5.5mm	M5	3-4N.m
M6	6-8N.m	Ø 6.5mm	M6	6-8N.m
			M8 (螺母Nut)	9-10N.m

9. 螺钉安装时，螺纹咬合深度不能过浅，否则有可能导致滑牙松脱，建议咬合深度至少螺纹深度的2/3。  
When screw installation, depth of match should not be too shallow, otherwise may lead to screw loose, recommend 2/3 of length of thread at least.
10. 继电器安装底板倒角外圆大小不宜过大，否则安装时继电器安装衬套易松动，请参考图1：  
Relay installation baseboard hole can't be chamfered too much, otherwise relay shell bushes will loose, please refer to figure 1:
11. 当接触器使用1个及多个导电铜排连接时，请确保导电铜排与触点端面紧密贴合（多个铜排需确保大电流的导电铜排最贴近触点端面，小电流的导电铜排其次），然后是平垫圈、弹簧垫圈、螺母。不正确的连接顺序可能造成严重过热，请参考图2：  
When contactor is connected with one or more busbars, please ensure that the busbars are tightly fitted to the contact terminal face (when there are multiple busbars, please ensure that the busbar with large current is closest to the contact terminal face, and the busbars with low current come next), then the flat washer, spring washer and screw. Incorrect connection order can cause severe overheating, please refer to figure 2:

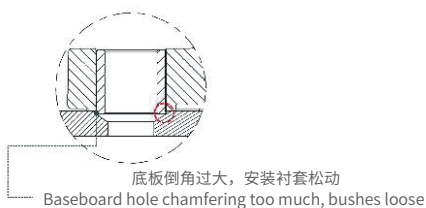


图 1(Fig 1)

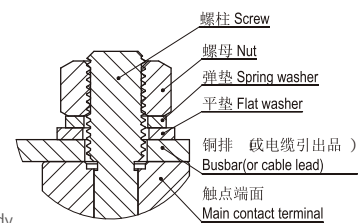
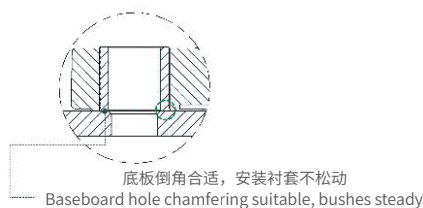
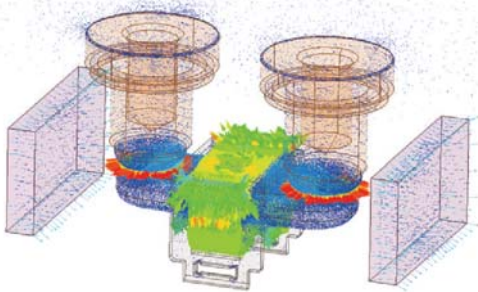
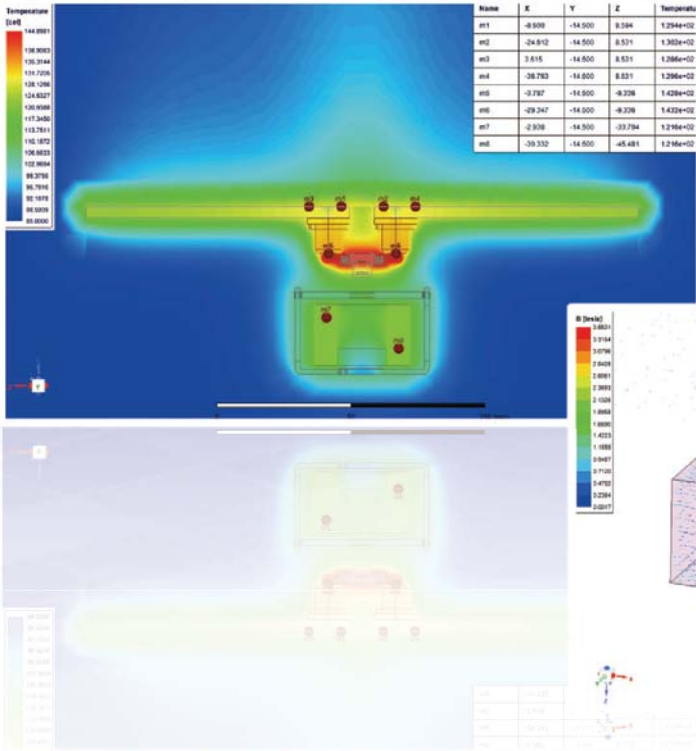
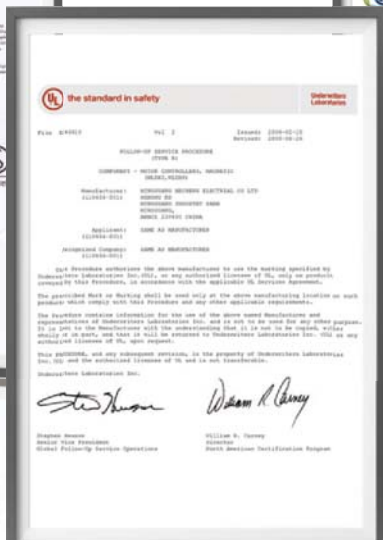
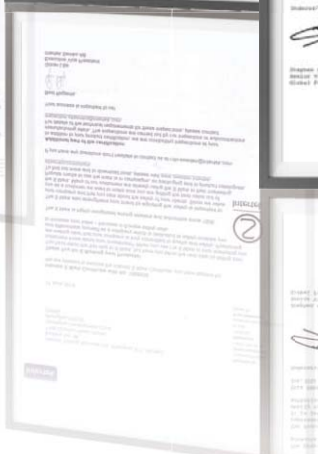


图 2(Fig 2)

# 致力于成为世界一流的新能源电气解决方案供应商

We are committed to becoming a world-class supplier of new energy electrical solution









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