



RTS_CequalisC HV Connector

**High voltage connector
product introduction**



High Voltage Connector高压连接器:

Components with one or more sets of conductor terminals that provide connection and disconnection functions between high-voltage cables, as well as between high-voltage cables and high-voltage components in electric vehicles.

具有一组或多组导体端子的组件，在高压电缆之间以及电动汽车中的高压电缆与高压元件之间提供连接和断开功能。

High Voltage Connector System高压连接器系统:

A connection device, consisting of high-voltage harnesses and high-voltage connectors, is designed to conduct B-level voltage circuits in electric vehicles.

一种由高压线束和高压连接器组成的连接装置，设计用于在电动汽车中进行B级电压电路

Voltage classification of a circuit电路的电压分级:

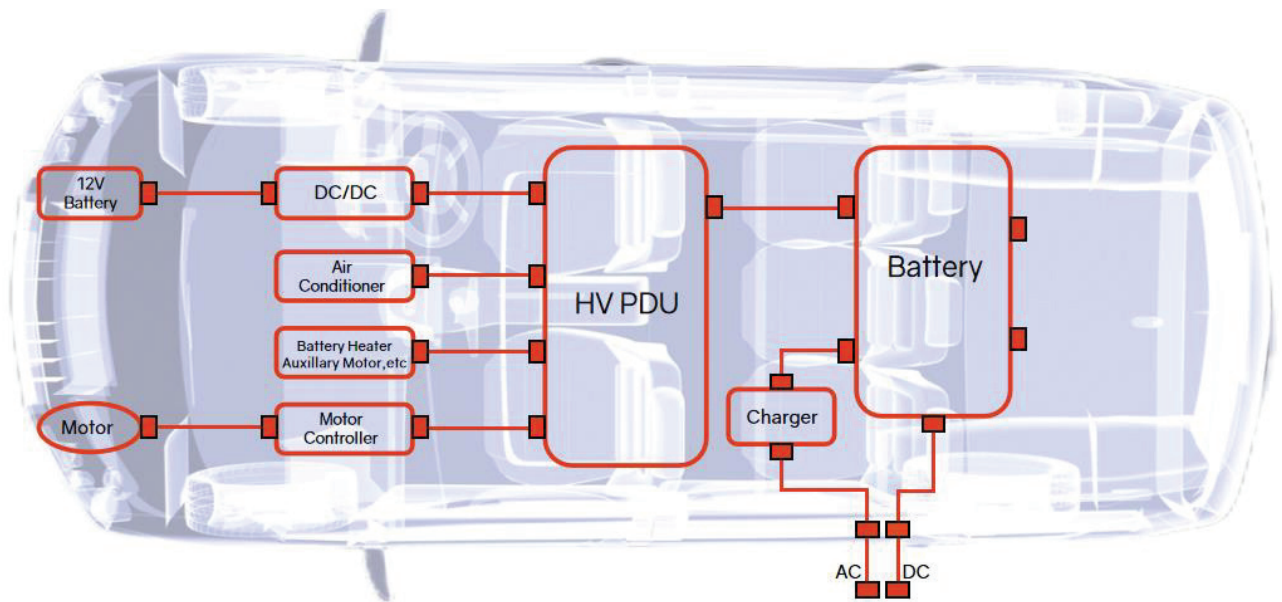
According to the working voltage of the circuit U. The circuit is divided into the following levels, as shown in Table 1.

根据电路u的工作电压，将电路分为以下几级，如表1所示。

Table 1 Voltage classification of the circuit
表1电路的电压分类

Voltage level 电压等级	Do the work. Electric voltage 工作电压	
	DC system V 直流系统 V	Alternating current system 交流系统 (13~150 Hz)V(rms)
A	$0 < U' \leq 60$	$0 < U \leq 25$
B	$60 < U \leq 1000$	$25 < U \leq 660$





*HV PDU: High voltage power distribution unit:高压配电装置

AC: Alternating current:交流电

DC: Direct current:直流电

DC/DC: Direct current to direct current:直流到直流

PTC: Positive Temperature Coefficient:正温度系数

Air Conditioner:空调

Battery Heater Auxillary Motor,etc:电池加热器、辅助电机等

Motor Controller:电动机控制器

12V Battery:12V电池

Charger:充电器



◆ Metal connector 金属连接器

◆ MSD

◆ PG head

◆ Charging interface 充电接口



◆ Plastic connector 塑料连接器

• Unshielded 无屏蔽



• Shielded 屏蔽



◆ Standard circular connector 标准圆形连接器

• Reverse bayonet connector 反卡扣式连接器



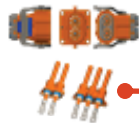
• Bayonet connector (ET) 卡扣式连接器



• Push-pull connector (PT) 推拉式连接器



Electric drive high voltage
connector
电动驱动高压连接器



DC/DC high voltage
connector
直流到直流高压连接器



PTC high voltage
connector
PTC高压连接器

Power line high
voltage connector
电力输送高压连接器



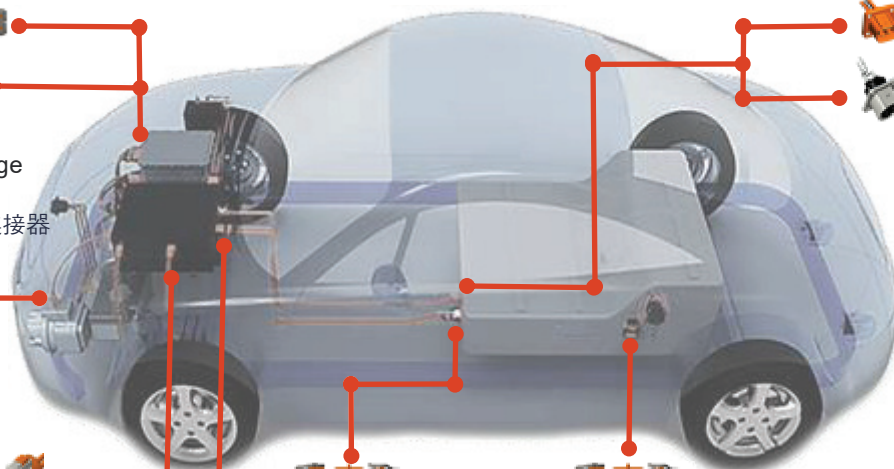
Charging input high
voltage connector
充电高压连接器

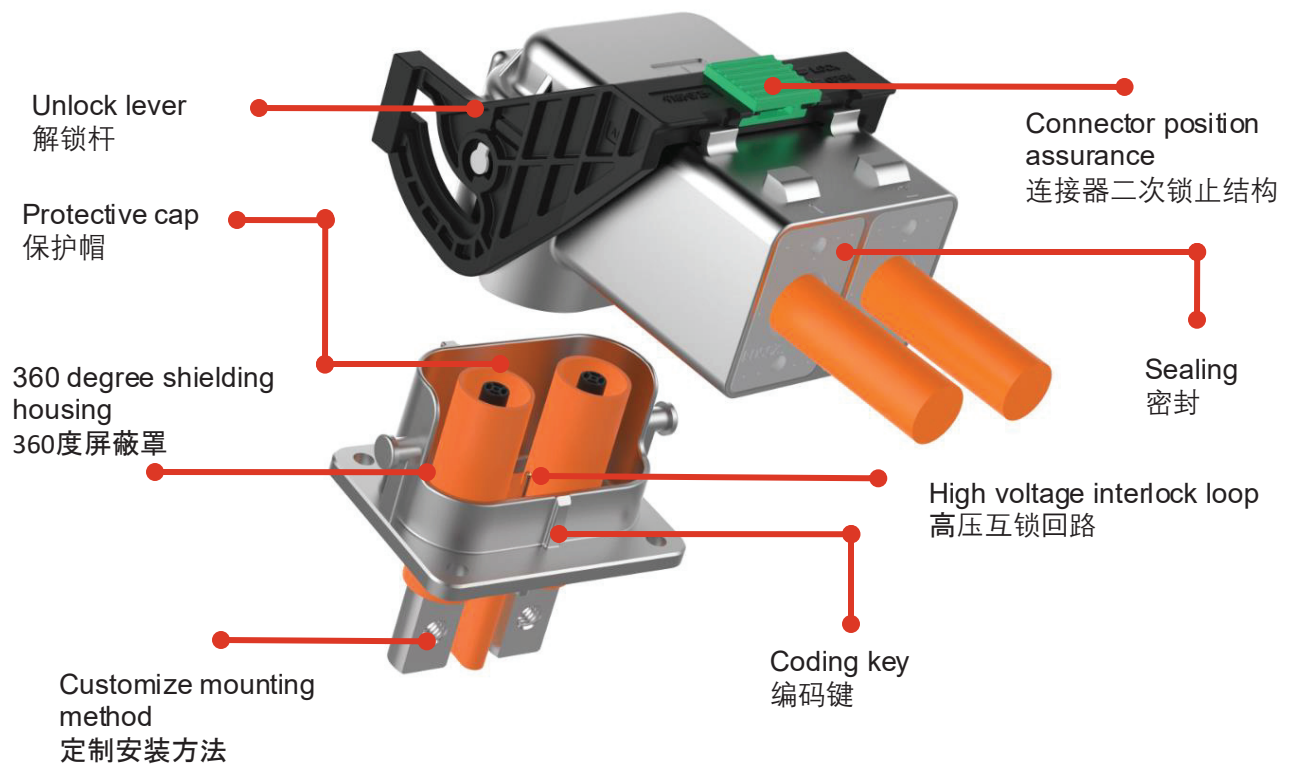


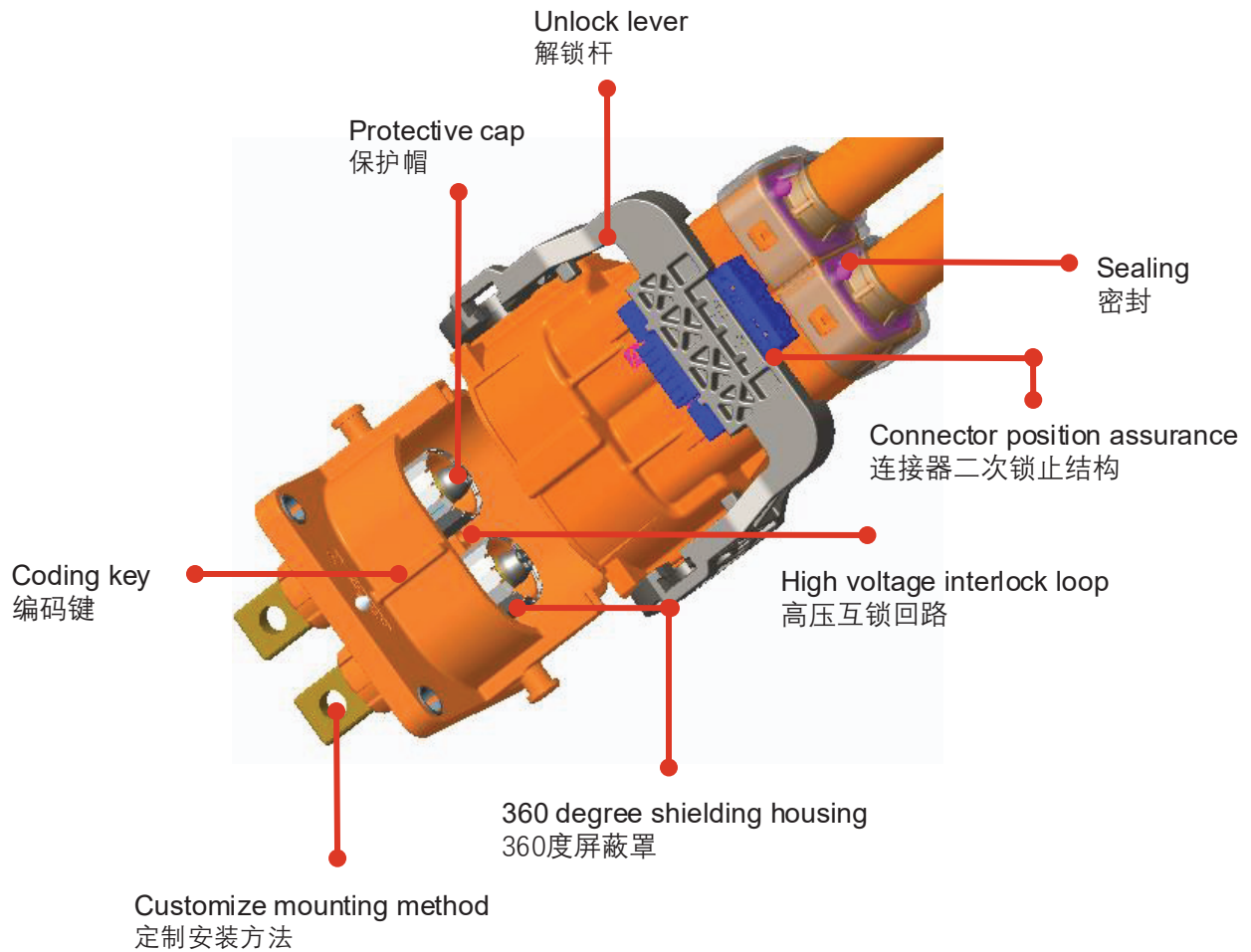
Electric heating
电加热



High voltage
connector
高压连接器









Product Advantages 产品优点

- Plastic housing with stamped terminals and high current carrying capacity. 塑料外壳带冲压端子和高载流能力。

Applications 应用

- Power electronics unit/power distribution unit (PEU/PDU) 电力电子单元/配电单元
- DC/DC 直流电到直流电
- Power temperature coefficient (PTC), etc. 功率温度系数 (PTC) 等。





1. Part number 料号

HVEM-2S-ASC6-0P/ HVEF-2S-ASC6-0P

2. Performance characteristics 性能特征

- **Number of Pins 芯数:** 2 pins
- **Operating Temperature 工作温度:** -40°C to +125°C
- **Rated Voltage 额定电压:** 1000V
- **Rated Current 额定电流:** 40A Max
- **Insulation Resistance 绝缘电阻:** 200MΩ Min
- **Withstanding Voltage 耐压:** 3000V AC
- **Wiring Specifications 接线规格:** 2.5mm² to 6mm²
- **Protection Rating 防护等级:** IP67, IP68, IP6K9K, IPXXB
- **Mechanical Durability 机械寿命:** 50 cycles Min
- **Shielding and Interlocking 屏蔽及互锁:** YES
- **Flame Retardant Rating 阻燃等级:** UL94 V-0
- **Reference Standards 参考标准:** LV215, USCAR-2, USCAR-37
- **Operation force 插拔力:** ≤75N

3. Mating design 对配设计

- **Cable 线缆**

4. Applicable cable 适配线缆

- 2.5mm² unshielded, Φ3.3-3.6mm (socket 插座)
- 4-6mm² unshielded, Φ4.0-5.0mm (socket 插座)
- 2.5mm² shielded, Φ4.2-4.7mm (plug 插头)
- 4mm² shielded, Φ5.3-5.8mm (plug 插头)
- 6mm² shielded, Φ6.0-6.5mm (plug 插头)

5. Material 材料

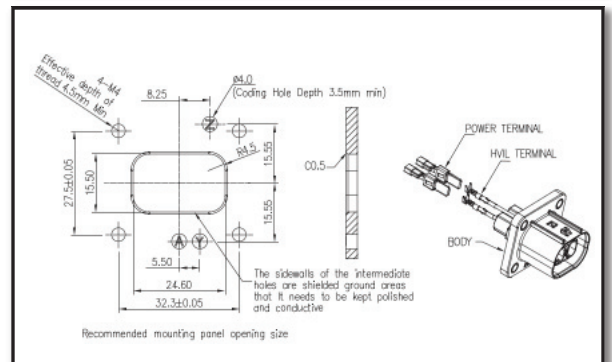
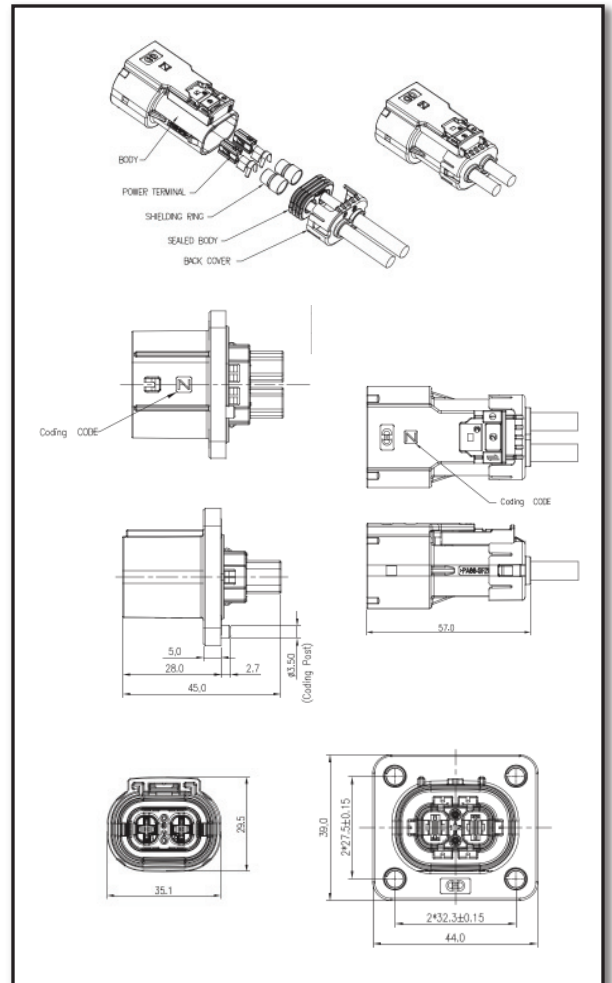
- **Housing 外壳:** Nylon66, UL94 V-0, orange
- **Insulation 绝缘:** Nylon66, UL94 V-0, black
- **Terminal 端子:** Copper alloy 铜合金, Silvering 镀银
- **Sealing 密封件:** Silicon rubber 硅橡胶

6. Product Advantages 产品优点

- Plastic housing with stamped terminals and high current carrying capacity. 塑料外壳带冲压端子和高载流能力。

7. Applications 应用

- Power electronics unit/power distribution unit (PEU/PDU) 电力电子单元/配电单元
- DC/DC 直流电
- Power temperature coefficient (PTC), etc. 功率温度系数 (PTC) 等





Product Advantages 产品优点

- Customized products to better match customer needs.
- Metal housing with circular stamped terminals, offering low cost and good performance.
- Socket tail with integrated copper busbar terminals, allowing direct connection to PCBA.
- 定制产品，更好的匹配客户需求。
- 金属外壳与圆形冲压端子，提供低成本和良好的性能。
- 插座尾部集成铜母线端子，允许直接连接到PCBA。

Applications 应用

- Power electronics unit/power distribution unit (PEU/PDU) 电力电子单元/配电单元
- DC/DC 直流电
- Power temperature coefficient (PTC), etc. 功率温度系数 (PTC) 等。





1. Part number料号

HVEM-2M-ASSN-0Y/ HVEF-2M-ASC3-0P

2. Performance characteristics性能特征

- **Number of Pins**芯数: 2 pins
- **Operating Temperature**工作温度: -40°C to +125°C
- **Rated Voltage**额定电压: 1000V
- **Rated Current**额定电流: 40A Max
- **Insulation Resistance**绝缘电阻: 200MΩ Min
- **Withstanding Voltage**耐压: 3000V AC
- **Wiring Specifications**接线规格: 2.5mm² to 6mm²
- **Protection Rating**防护等级: IP67, IP68, IP6K9K, IPXXB
- **Mechanical Durability**机械寿命: 50 cycles Min
- **Shielding and Interlocking**屏蔽及互锁: YES
- **Flame Retardant Rating**阻燃等级: UL94 V-0
- **Reference Standards**参考标准: LV215, USCAR-2, USCAR-37
- **Operation force**插拔力: ≤75N

3. Mating design对配设计

- **Cable**线缆

4. Applicable cable适配线缆

- 3mm² shielded, Φ5.1-5.5mm

5. Material材质

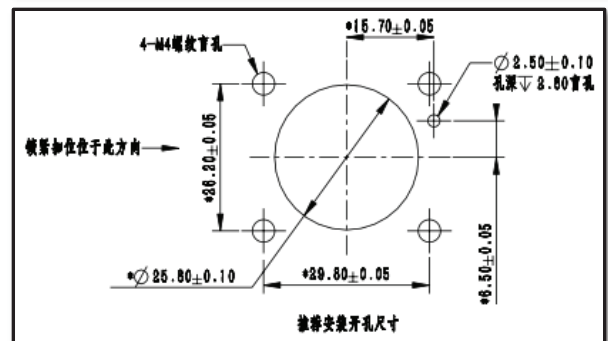
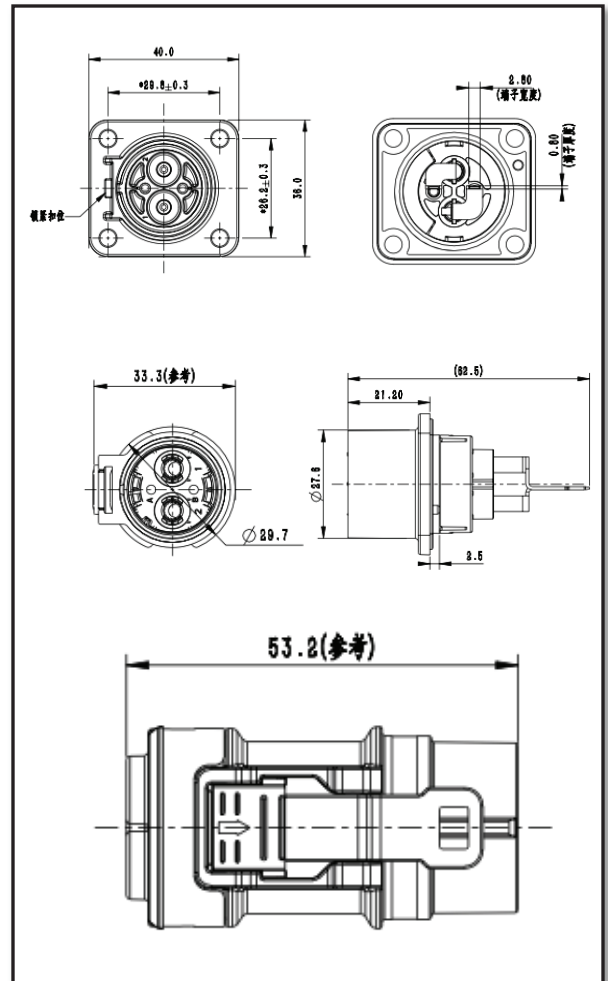
- **Housing**外壳: Aluminum alloy铝合金, Nickle plating表面镀镍
- **Insulation**绝缘件: PA66+25%GF, UL94 V-0
- **Terminal**端子: Copper alloy铜合金, silvering镀银
- **Sealing**密封件: Silicon rubber硅橡胶

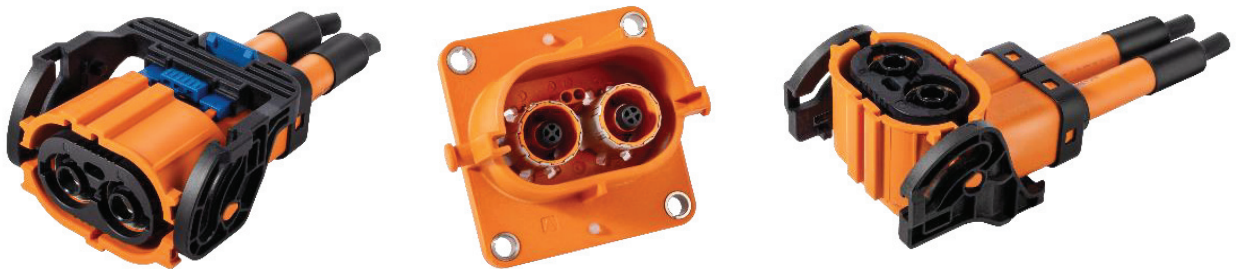
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- Metal housing with circular stamped terminals, offering low cost and good performance.
- Socket tail with integrated copper busbar terminals, allowing direct connection to PCBA.
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- 金属外壳与圆形冲压端子, 提供低成本和良好的性能。
- 插座尾部集成铜母线端子, 允许直接连接到PCBA。

7. Applications应用

- Power electronics unit/power distribution unit (PEU/PDU)电力电子单元/配电单元(PEU/PDU)
- DC/DC直流电
- Power temperature coefficient(PTC), etc.功率温度系数(PTC)等。





Product Advantages 产品优点

- Plastic housing with circular stamped terminals. 带有圆形冲压端子的塑料外壳。

Applications 应用

- Power electronics unit/power distribution unit (PEU/PDU) 电力电子单元/配电单元
- Battery 电池
- Microcontroller unit (MCU), etc. 微控制器 (MCU) 等。



1. Part number料号

HVEM-2S-ASFN-0Y/ HVEF-2S-ASCJ-0P/ HVEF-2T-ASCJ-0P

2. Performance characteristics性能特征

- **Number of Pins**芯数: 2 pins
- **Operating Temperature**工作温度: -40°C to +125°C
- **Rated Voltage**额定电压: 1000V
- **Rated Current**额定电流: 200A Max
- **Insulation Resistance**绝缘电阻: 200MΩ Min
- **Withstanding Voltage**耐压: 3000V AC
- **Wiring Specifications**接线规格: 25mm² to 50mm²
- **Protection Rating**防护等级: IP67, IP68, IP6K9K, IPXXB
- **Mechanical Durability**机械寿命: 50 cycles Min
- **Shielding and Interlocking**屏蔽及互锁: YES
- **Flame Retardant Rating**阻燃等级: UL94 V-0
- **Reference Standards**参考标准: LV215, USCAR-2, USCAR-37
- **Operation force**插拔力: ≤100N

3. Mating design对配设计

- **Cable**线缆

4. Applicable cable适配线缆

- 50mm² shielded, $\Phi 15.5 \pm 0.3$ mm
- 35mm² shielded, $\Phi 14.1 \pm 0.3$ mm
- 25mm² shielded, $\Phi 11.9 \pm 0.3$ mm

5. Material材料

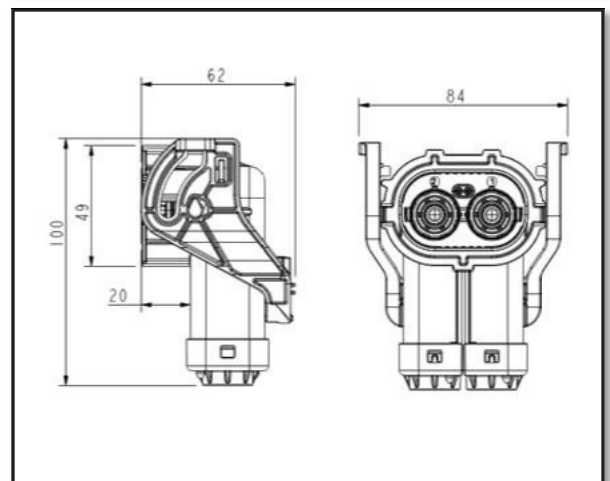
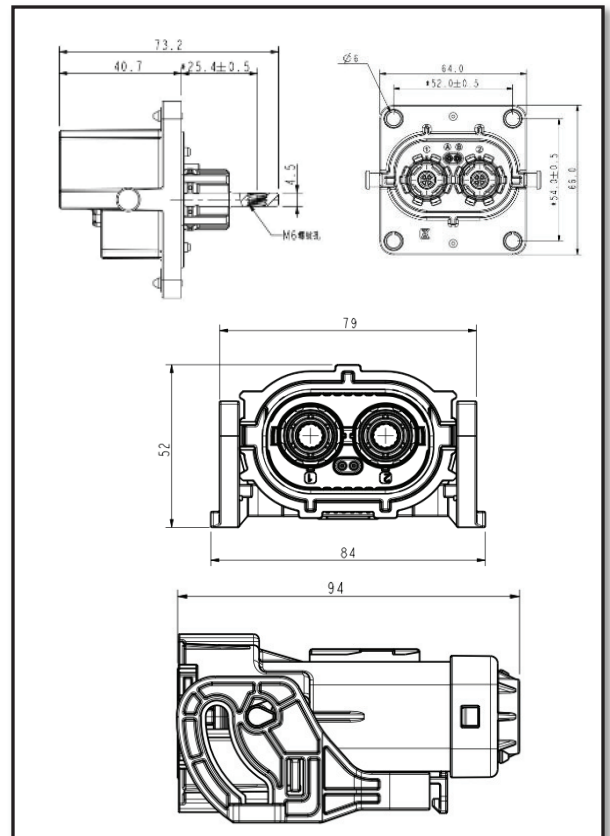
- **Housing**外壳/insulation绝缘件: Nylon PA66+25%GF, UL94 V-0
- **Terminal**端子: Copper alloy铜合金, silvering镀银
- **Sealing**密封件: Silicon rubber硅橡胶

6. Product Advantages产品优点

- Plastic housing with circular stamped terminals.带有圆形冲压端子的塑料外壳。

7. Applications应用

- Power electronics unit/power distribution unit (PEU/PDU)电力电子单元/配电单元
- Battery电池
- Microcontroller unit (MCU), etc. 微控制器 (MCU) 等。





Product Advantages 产品优点

- High compatibility in installation dimensions. 安装尺寸高度兼容。

Applications 应用

- Motor 发动机
- Microcontroller unit (MCU), etc. 微控制器 (MCU) 等。



1. Part number料号

HVEW-2S-N0CJ-0P/ HVEW-3S-N0CJ-0P

2. Performance characteristics性能特征

- **Part Number:** HVEW-2S-N0CJ-0P/ HVEW-3S-N0CJ-0P
- **Number of Pins** 芯数: 2 pins & 3 pins
- **Operating Temperature** 工作温度: -40°C to +125°C
- **Rated Voltage** 额定电压: 1000V
- **Rated Current** 额定电流: 200A Max
- **Insulation Resistance** 绝缘电阻: 200MΩ Min
- **Withstanding Voltage** 耐压: 3000V AC
- **Wiring Specifications** 接线规格: 25mm² to 50mm²
- **Protection Rating** 防护等级: IP67, IP68, IP6K9K
- **Mechanical Durability** 机械寿命: 50 cycles Min
- **Shielding and Interlocking** 屏蔽及互锁: YES
- **Flame Retardant Rating** 阻燃等级: UL94 V-0
- **Reference Standards** 参考标准: LV215, USCAR-2, USCAR-37
- **Operation force** 插拔力: NONE

3. Mating design对配设计

- **Cable** 线缆

4. Applicable cable适配线缆

- 50mm² shielded, $\Phi 15.5 \pm 0.3\text{mm}$
- 35mm² shielded, $\Phi 14.1 \pm 0.3\text{mm}$
- 25mm² shielded, $\Phi 11.9 \pm 0.3\text{mm}$
- 16mm² shielded, $\Phi 9.9 \pm 0.3\text{mm}$

5. Material材料

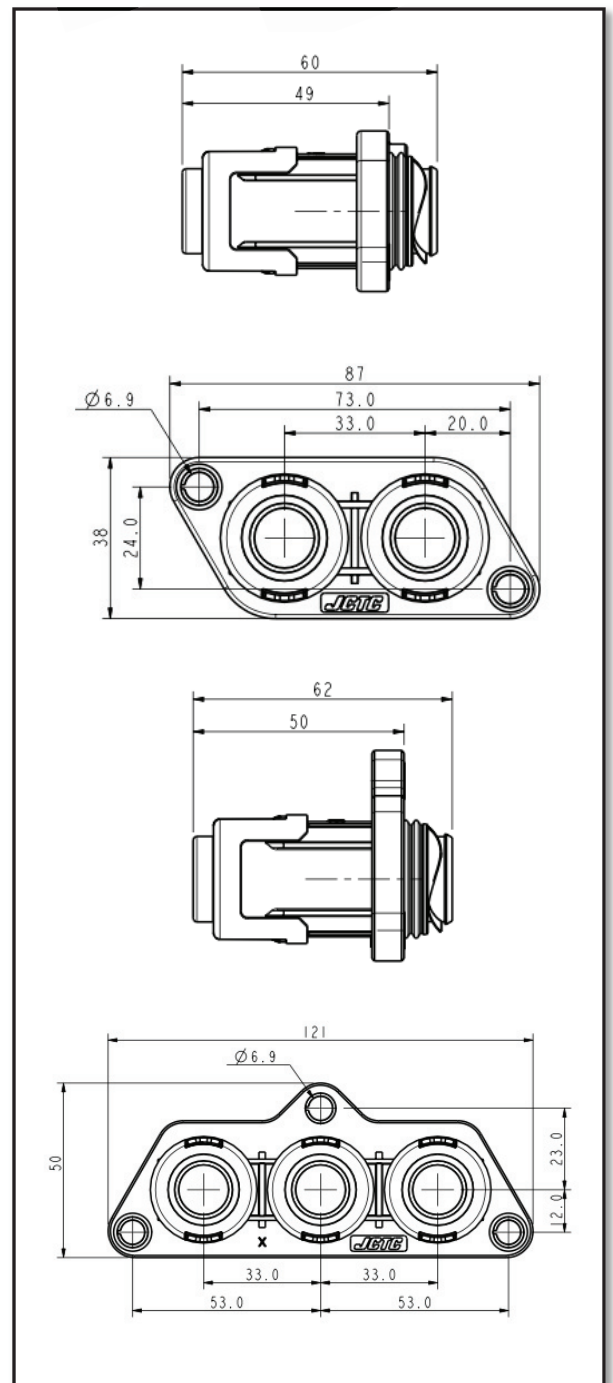
- **Housing** 外壳/insulation 绝缘件: Nylon PA66+25%GF, UL94 V-0
- **Shield** 屏蔽: Aluminum alloy 铝合金
- **Sealing** 密封件: Silicon rubber 硅橡胶

6. Product Advantages产品优点

- High compatibility in installation dimensions. 安装尺寸高度兼容。

7. Applications应用

- Motor 发动机
- Microcontroller unit (MCU), etc. 微控制器 (MCU) 等。





Product Advantages 产品优点

- Small in size with high current capacity. 体积小，电流容量大。

Applications 应用

- New energy vehicles / energy storage batteries. 新能源汽车/储能电池。

1. Part number料号

HVMC-2S-NSFN-0Y

2. Performance characteristics性能特征

- **Number of Pins**芯数: 2 pins
- **Operating Temperature**工作温度: -40°C to +125°C
- **Rated Voltage**额定电压: 1500V
- **Rated Current**额定电流: 380A Max
- **Insulation Resistance**绝缘电阻: 200MΩ Min
- **Withstanding Voltage**耐压: 4260V AC
- **Wiring Specifications**接线规格: NONE
- **Fuse Specifications**保险丝规格: NONE
- **Protection Rating**防护等级: IP67
- **Mechanical Durability**机械寿命: 200 cycles Min
- **Flame Retardant Rating**阻燃等级: UL94 V-0
- **Reference Standards**参考标准: USCAR-2, USCAR-37
- **Operation force**插拔力: ≤75N

3. Mating design对配设计

- **Cable**线缆

4. Applicable cable适配线缆

- 0.75-1.55mm²

5. Material材质

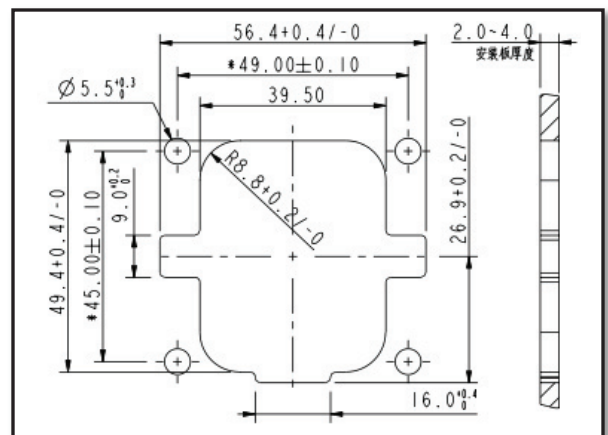
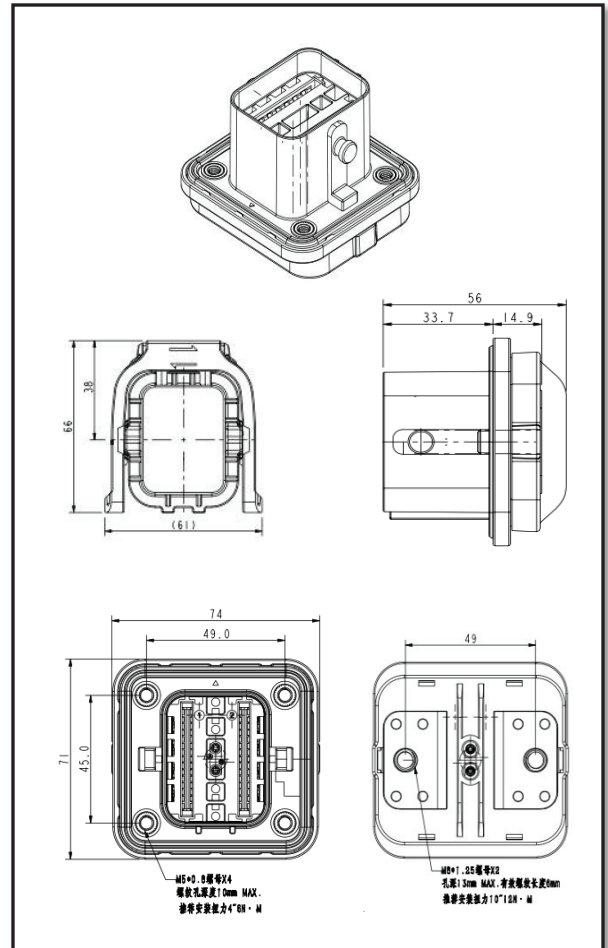
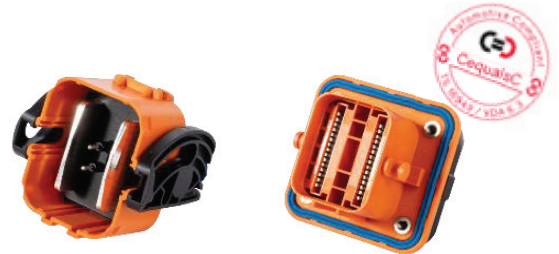
- **Housing**外壳/insulation绝缘件: Nylon PA66+25%GF, UL94 V-0
- **Terminal**端子: Copper alloy铜合金, silvering镀银
- **Sealing**密封件: Silicon rubber硅橡胶

6. Product Advantages产品优点

- Small in size with high current capacity.体积小, 电流容量大。

7. Applications应用

- New energy vehicles / energy storage batteries.新能源汽车/储能电池。





Product Advantages 产品优点

- Integrated terminals for high current capacity and low temperature rise
- Plastic casing, 15% smaller in size compared to similar products in the market.
- 集成端子，大电流容量，低温升
- 塑料外壳，尺寸比市场上同类产品小15%。

Applications 应用

- Energy storage battery. 储能电池。



1. Part number料号

HVSF-1T-ASCM-0P / HVSM-1S-ASFN-1Y

2. Performance characteristics性能特征

- **Number of Pins** 芯数: 1 pin
- **Operating Temperature** 工作温度: -40°C to $+125^{\circ}\text{C}$
- **Rated Voltage** 额定电压: 1500V
- **Rated Current** 额定电流: 350A Max
- **Insulation Resistance** 绝缘电阻: 200M Ω Min
- **Withstanding Voltage** 耐压: 4260V AC
- **Wiring Specifications** 接线规格: 95mm² to 108mm²
- **Protection Rating** 防护等级: IP67
- **Mechanical Durability** 机械寿命: 500 cycles Min
- **Flame Retardant Rating** 阻燃等级: UL94 V-0
- **Reference Standards** 参考标准: UL4128, USCAR-2, USCAR-37
- **Operation force** 插拔力: $\leq 75\text{N}$

3. Mating design对配设计

- **Copper rows through waist-shaped holes** 铜排过腰形孔
- **Copper rows through threaded holes** 铜排过螺纹孔

4. Terminal system端子系统

- 95mm² unshielded 非屏蔽, $\Phi 16.9 \pm 0.5\text{mm}$
- 4/0 AWG unshielded 非屏蔽, $\Phi 19.5 \pm 0.5\text{mm}$

5. Material材质

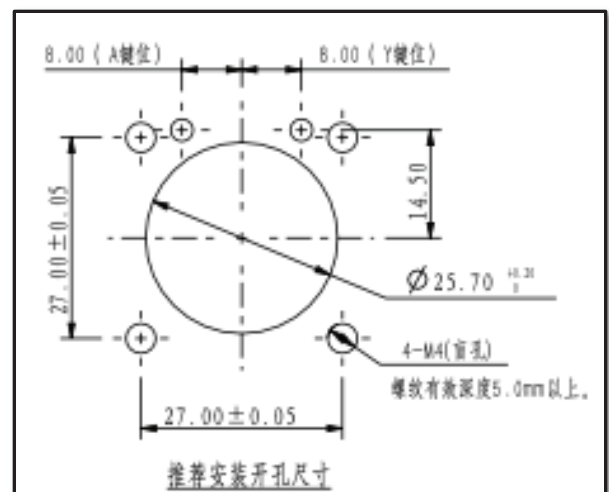
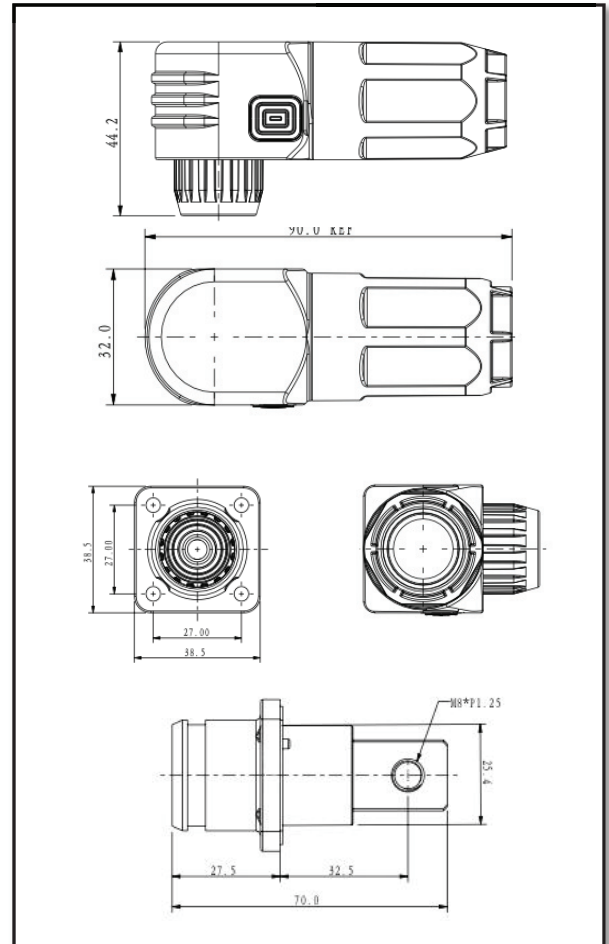
- **Insulation** 绝缘: Nylon66, UL94 V-0, orange/black
- **Terminal** 端子: Copper alloy 铜合金, silvering 镀银 /tinning 镀锡
- **Sealing** 密封件: Silicon rubber 硅橡胶

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- Plastic casing, 15% smaller in size compared to similar products in the market.
- 集成端子, 大电流容量, 低温升
- 塑料外壳, 尺寸比市场上同类产品小15%。

7. Applications应用

- Energy storage battery. 储能电池。



Thank You!

