

安装说明书

Installation Instructions

AC01- 连接器

AC01- connector



目录 Contents

1	警告 Warning	01
2	技术参数 Product Specifications	02
3	产品信息 Product Information	03
	3.1 产品图片 Picture	
	3.2 产品图纸 Drawing	
4	工厂、现场组装工艺流程 Factory and field wiring assembly process	03
	4.1 工具要求 Requirements for tools	
	4.2 装配说明 Instruction of receptacle assembly	
5	连接器对插及解锁 Connecting and disconnecting	05
	5.1 连接器对插 Connecting	
	5.2 连接器解锁 Disconnecting	
6	附件 Annex	05
	6.1 耐化学品附表 Chemical resistance form	
	6.2 连接器责任免除条款 The Connector liability exemption clause	

1.警告 Warning

1.1 在自行安装时，如果所有的零件和工具不是 QC 所规定的，或者忽略了准备和安装操作，我们将不保证产品安全性和技术参数一致性。

During yourself installation, if the used part and tool are not ruled by QC or if you ignore the preparation and operation, we won't insure the safety and compatible of the product technology yourself installation.

1.2 为防止电击，在拆装时 PV 连接器必须断开电源。

For protecting against electric shock, please cut off the power when installing PV connector.

1.3 终端产品必须提供防电击功能。

The final products must be supplied with the function electric shock proof.

1.4 不可在负载情况下拔出：在有负载的情况下，不能拔出插头连接器！关掉 DC/AC 直流 - 交流变频器使连接器处于无负载的状态。

Do Not Disconnect Under Load: PV plug connections must not be disconnected while under load. They can be placed in a no load state by switching off the DC/AC converter or breaking the AC circuit.

1.5 建议不要使用无镀锡电缆，因为电缆铜线被氧化后，压接部位的接触电阻可能会超过允许值。

H07RN cables without tinned are not recommended. Because the contact resistance of crimping place will probably exceed the permitted value since the copper wires are oxidized.

1.6 插入部件防水等级 IP68。它们不能长久置于水下使用。

Waterproof degree for inserted parts is IP68.

1.7 产品不得在含有烃、酚、酮、氨合物等与 PC 料有腐蚀的环境中使用。（如有疑问可咨询沙比克对 PC 料使用环境的说明）

Products can not be used in the environment includes hydrocarbon, phenol, ketone, ammoniate, etc that has corrosion of PC. (More information, please consult the PC usage environment illustration from SABIC.)

2.技术参数 Product Specifications

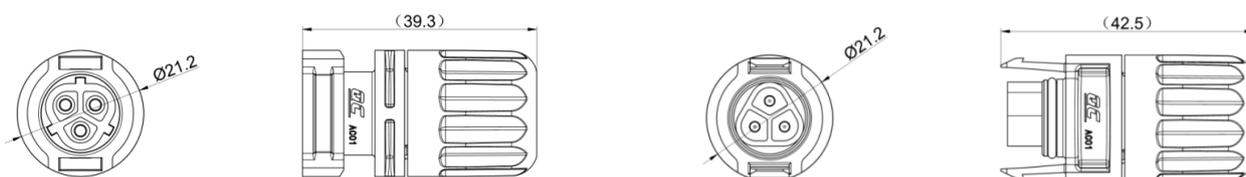
技术参数 Product Specifications	
电极芯数 Cable core number	(L+N+PE)
额定电压 Rated voltage	300V AC
额定电流 Rated current	10A
额定冲击电压 Rated impulse voltage	3000V
外壳防火等级 Shell Flame Class	UL94-V0
污染等级 Pollution degree	II
防护等级 IP degree	IP68
接触电阻 Contact resistance	$\leq 5\text{m}\Omega$

3.产品信息 Product Information

3.1 产品图片 Picture



3.2 产品图纸 Drawing



4. 工厂、现场组装工艺流程 Factory and field wiring assembly process

4.1 工具要求 Requirements for tools

Manufactured by QC Solar (Suzhou) Corporation	
4.1.1 电缆旋转剥皮器 Cable rotary stripper	4.1.2 剥线钳 Wire stripper
	
4.1.3 电烙铁 Rivet Plier	4.1.4 扳手 Wrench
	

4.2 母插装配说明 Instruction of Female receptacle assembly

4.2.1 剥线 Stripping

按要求切线、剥线，剥线长度为 2-4mm。

Please cut and strip the wire according to the requirements and the applicable stripping length is 2-4mm.

注意：不要切断和损坏线缆绝缘塑料下的铜丝线芯。

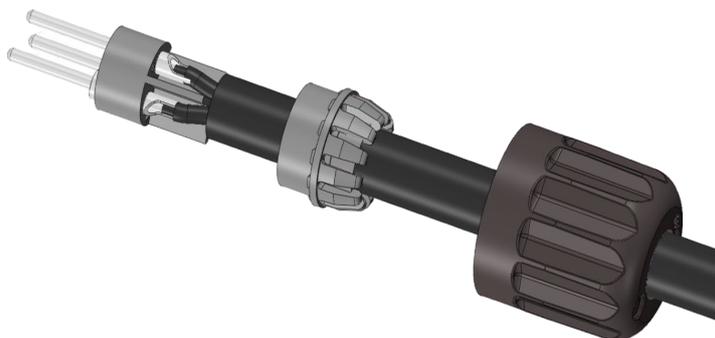
Note: Please pay attention and do NOT cut off and damage the copper wire core under the cable insulating plastic.



4.2.2 焊接 assembly

剥线完成之后，将电缆依次穿过螺帽，防水堵头后再进行加锡焊接，注意红色线接 L 极，蓝色线接 N 极，黄绿色线接 PE 极；插针、插套焊接组装步骤相同；

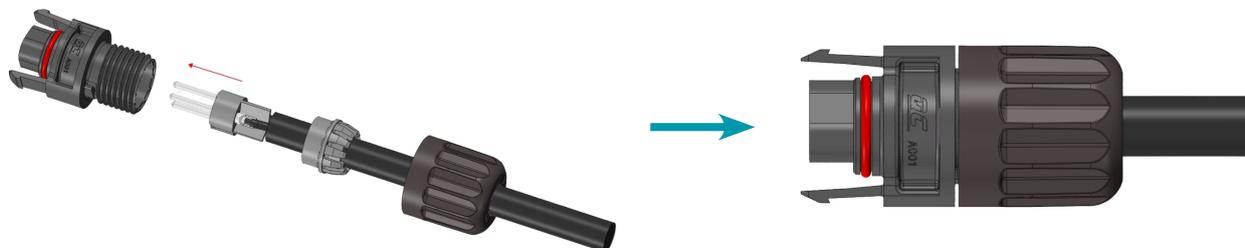
After the wire stripping is complete, pass the cable through the nut in turn, and then solder the waterproof plug. Note that the red wire is connected to the L pole, the blue wire is connected to the N pole, and the yellow-green wire is connected to the PE pole. The welding and assembly steps of pin and sleeve are the same



4.2.3 组装、锁紧 Assembling and locking

将焊接完成的插针装入到连接器腔体中，之后将螺帽锁紧即可，螺帽间隙 0-1mm，公插头和母插头组装步骤一致。

Insert the welded pin into the connector cavity, and then lock the nut. The nut gap is 0-1mm. The assembly steps of the male plug and the female plug are the same



5.连接器对插及解锁Connecting and disconnecting

5.1 连接器对插 Connecting

将连接器三个极分别对齐，直接对插即可；

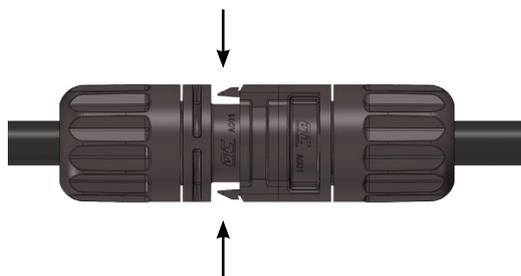
Align the three poles of the connector and insert them directly.



5.2 连接器解锁 Disconnecting

连接器解锁时，拇指和食指分别按住连接器的卡勾，按照图示箭头方向稍用力按压的同时，即可将连接器分离

When the connector is unlocked, the thumb and index finger respectively hold down the hook of the connector, and at the same time press slightly in the direction of the arrow shown, the connector can be separated.



6.附件Annex

6.1 连接器责任免除条款 The Connector liability exemption clause

有违反下列情况之一者，并导致产品出问题，造成任何损失，我公司将不承担任何责任。

There exist following case, and lead to product goes wrong, any loss caused, product manufacturers will not take any responsibility.

1. 产品运输、仓储 Product transportation and storage

1.1 产品在运输、仓储过程中，不可与“附件 2”表中有关化学品存放在一起，使产品经受这些化学品污染；
Products in the process of transportation, warehouse, can not stored with "attachment 2" in the table of chemicals together that lead the product pollution with these chemicals;

1.2 产品在运输、仓储过程中，不可对产品过分承压，撞击等破坏产品行为； Products in the process of transportation, warehouse, can not pressure too much on products and such as impact damage behavior;

1.3 产品在运输、仓储过程中，常温存储，应注意避光、防水、防尘等方面防护，以免降低产品相关性能，电站现场应特别注意； Products in the process of transportation, warehouse, should room temperature storage, avoid light, should waterproof, dustproof, and should be paid attention to protection, so as not to reduce product performance, pay special attention to product when in power station;

1.4 产品正常存储时间 2 年； Product health storage for 2 years;

2. 产品安装、使用环境 Product installing and operating environment

2.1 产品正常工作环境温度 -40~+85°C； The product health working environment temperature - 40 ~ + 85 °C ；

2.2 产品现场安装，需按照“快可”产品“安装使用说明书”操作。 The Product installing should be in accordance with the QC Solar product installation instructions.

3. 产品与化学品兼容性见“附件 - 耐化学品附表” Products and chemical compatibility See Chemical resistance form

4. 连接器在未耦合情况下，产品将不能满足任何 IP 防护等级，也不能正常使用 The connector under the condition of disconnect, the product will not be able to meet any IP protection grade, also can't normal use

4.1 产品插合后满足 IP68 防护等级要求，不能长期置于水下工作； Products meet IP68 degree of protection requirement after connects, while it can't work under water for a long time;

4.2 连接器在未对插的情况下，不可长时间放置于户外，这样可能会造成金属件腐蚀，并使连接器性能降低； Connector in the case of disconnect, should not placed in the outdoor for long time, so may be the cause of the corrosion of the metal, and lower the connector performance;

4.3 连接器在户外安装、使用过程中，如果不能及时对插，请做好连接器防护工作，防止连接器受到水、尘等的污染，影响产品使用性能。 Connector in the process of outdoor installation and use, if not to connect in time, please do a good job in the connector protection, protect the connector from water, dust and other pollution, affect the product performance.

5. 连接器在安装、使用过程中，不可将连接器过分碰撞，拖在水中、草丛中、地上等防止连接器使用前内部受到污染，降低产品性能 Connector in the process of installation and use should not be collision, drag in the water, grass, and the ground to prevent the pollution of inside the connector before use, reduce the product performance.

此免责条款最终解释权归“苏州快可光伏电子股份有限公司”或“QC solar”所有

This disclaimer final explanation right belongs to the "QC Solar (Suzhou) Corp." or "QC solar"

QC Solar (苏州) 公司有权对产品的印刷错误、改进和创新进行一定的修改，当这些变化发生时，不会事先通知。如果对不同语言的版本有任何误解，请考虑中文版本。

QC Solar (Suzhou) Corp. has the rights to make certain amendment for the printing errors, improvements and innovation for the products, and there will be no prior notice when these changes happen. If there was any misunderstanding for the version in different language, please regard Chinese version as the right one.

快速可靠, 成就客户!

Quick and reliable, QC Solar devotes to satisfying customers.



苏州快可光伏电子股份有限公司

QC Solar (Suzhou) Corporation

 中国苏州工业园区新发路 31 号 (No.31,Xinfa Road,SIP,Suzhou,China, 215123.)

 0086-0512-62603392

 market@quick-contact.com

 www.quick-contact.com



快可官方微信