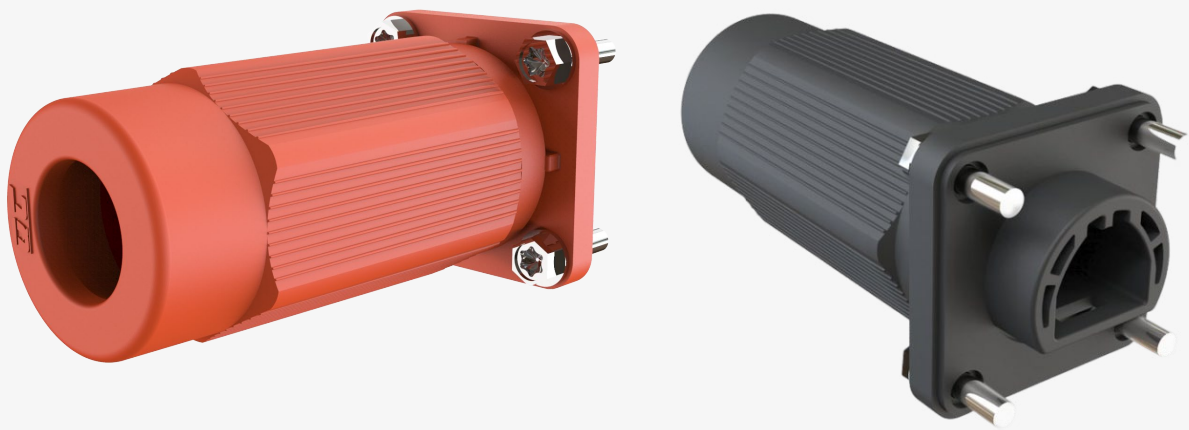


产品规格书

Product Specification



QE100 储能连接器

QE100 Energy Storage Connector

承认签章 (Confirmation)					
快可承认 (QC Solar confirmation)			客户承认 (Customer confirmation)		
批准 Approved by	审核 Audited by	设计 Designed by	采购 Purchased by	品保 Quality Assured by	技术 Technical verified by

目录

01/ 产品特性 / Product Features 01

02/ 连接器 BOM 清单 / Connector BOM to Female Connector List 02

03/ 产品规范性能 / Product specification 03

04/ 产品图纸 / Product drawings 04

05/ 认证证书 / Certificate 05

1. 产品特性 / Product Features



产品特性 Product Features	
设计依据标准 Design basis standard	IEC61984、PPP51090A、2PfG 2740/04.20、 UL4128
应用 Application	电池包、配电箱、逆变器 Battery pack、distribution box、Inverter
额定电流 Rated current	100A
电缆规格 Cable specification	16mm ²
额定电压 Rated voltage	1500V DC
使用温度范围 Operating temperature range	-40°C ~ +85°C
外壳防护等级 Enclosure rating	IP68
绝缘电阻 Insulation resistance	施加 DC1500V 电压，绝缘电阻 ≥ 500MΩ Apply DC1500V voltage, insulation resistance ≥ 500MΩ
接触电阻 Contact resistance	≤ 0.5mΩ
耐压 Withstand voltage	8000V DC 漏电流小于 1mA，无击穿现象 8000V DC leakage current is less than 1mA, no breakdown
防火等级 Fire-proof level	UL94 V-0
使用寿命 Service life	10-15 年 10-15 years
端子压接标准 Terminal crimping	推荐拉脱力值：≥ 960N Recommended pull-off force value: ≥ 960N 推荐压缩率：70% ~ 90% Recommended compression ratio: 70% ~ 90%

2. 连接器BOM清单 /Connector BOM to Female Connector List

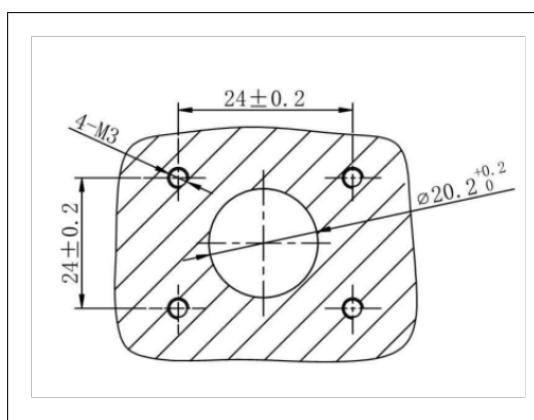
苏州快可光伏电子股份有限公司 QC Solar (Suzhou) Corporation					
产品名称 Product name	储能连接器	材料清单 Bill Of Materials		版 本 Version	A/0
产品型号 Product	QE100			张 数 Page	1
客 户 Customer	/			发行日期 Version Date	2022.10.13
产品名称 Product name	名 称 Name	材 质 Material	生产厂商 Manufacturer	数 量 Quantity	备 注 Remark
1	插座壳体 (橙色 / 黑色)	PA66+GF	/	1 PCS	
2	螺帽 (橙色 / 黑色)	PA66+GF	/	1 pcs	
3	堵头	硅胶	/	1 PCS	
4	密封垫	硅胶	/	1 PCS	
5	密封圈	硅胶	/	1 pcs	
6	GT16-6 端子	紫铜镀锡	/	1 pcs	
7	四方螺母	不锈钢	/	1 pcs	
8	M6*12 十字盘头 组合螺钉	不锈钢	/	1 pcs	
9	M3*10 梅花外六角 组合螺钉	不锈钢	/	4 PCS	
10	黑色热缩管	PE	/	/	
11	白色热缩号码管	PE	/	/	
12	16mm ² 线缆	/	/	/	
以上原料符合欧盟 ROHS 要求 Above materials matched the ROHS rules					
制 表: Written By:		审 核: Checked by:		批 准: Approved By:	

3. 产品规范性能/ Product specification performance

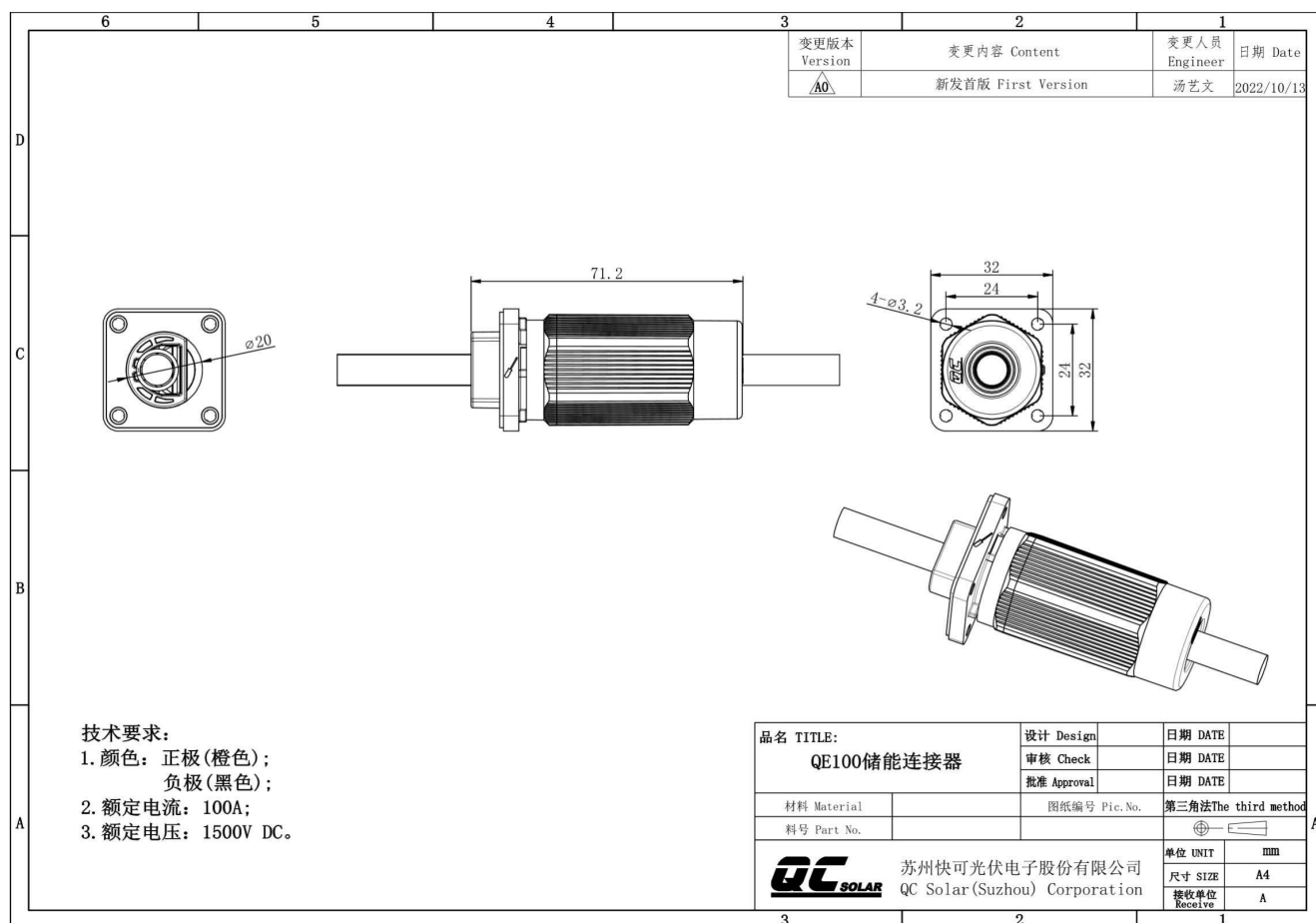
项目	测试条件	测试要求
接触电阻 Contact resistance	试验电压不超过 DC20mV, 电流不超过 100mA Test voltage does not exceed DC20mV, current does not exceed 100mA	接触电阻 $\leq 0.5\text{m}\Omega$ Contact resistance of male and female terminals $\leq 0.5\text{m}\Omega$
绝缘耐压 Insulation withstand voltage	在连接器中所有相邻但不相连通的导体之间以及所有导体与屏蔽层或外壳之间, 施加 DC2500V 和 AC1600V 各 1 分钟 Between all adjacent but not connected conductors in the connector and between all conductors and the shielding layer or shell, apply DC2500V and AC1600V for 1 minute each	漏电流 $<10\text{mA}$, 每个 pin 之间及 pin 与外壳之间无电击穿电弧或闪烁的现象 Leakage current $<10\text{mA}$, no electric arc or flicker between each pin and between the pin and the shell
温升 Temperature rise	额定电流通电, 温度测定 The rated current is energized and the temperature is measured	端子温升不超过 45K Terminal temperature rise does not exceed 45K
耐热性 Heat Resistance	把连接器放入 $125\pm 2^\circ\text{C}$ 温度箱中, 放置 48H, 再回到室温中放置 1-2H Put the connector into a $125\pm 2^\circ\text{C}$ temperature box, leave it for 48 hours, and then return to room temperature for 1-2 hours	测试后, 样品无损坏, 无开裂, 无性能减弱, 无影响正常使用的问题出现 After the test, the sample has no damage, no cracking, no performance degradation, and no problems that affect normal use
耐寒性 Cold Resistance	把连接器放入 $-40\pm 2^\circ\text{C}$ 温度箱中, 放置 48H, 再回到室温中放置 1-2H Put the connector into a $-40\pm 2^\circ\text{C}$ temperature box, leave it for 48 hours, and then return to room temperature for 1-2 hours	测试后, 样品无损坏, 无开裂, 无性能减弱, 无影响正常使用的问题出现 After the test, the sample has no damage, no cracking, no performance degradation, and no problems that affect normal use
耐湿性 Humidity	$40\pm 2^\circ\text{C}$ 、相对湿度 90-95% 的空气中; 放置 96 小时; 再回到室温中 0.5 小时内测定 $40\pm 2^\circ\text{C}$, relative humidity 90-95% in the air; placed for 96 hours; then returned to room temperature within 0.5 hours of measurement	测试后, 样品无损坏, 无开裂, 无性能减弱, 无影响正常使用的问题出现 After the test, the sample has no damage, no cracking, no performance degradation, and no problems that affect normal use
冷热循环 Hot and cold cycle	连接器在以下的条件下完成 100 次的循环: $-40\pm 2^\circ\text{C}$ 持续 30min, $125\pm 2^\circ\text{C}$ 持续 30min, 切换时间 30 秒 The mating connector completes 100 cycles under the following conditions: $-40\pm 2^\circ\text{C}$ for 30min, $125\pm 2^\circ\text{C}$ for 30min, switching time 30 seconds	测试后, 样品无损坏, 无开裂, 无性能减弱, 无影响正常使用的问题出现 After the test, the sample has no damage, no cracking, no performance degradation, and no problems that affect normal use

耐冲击性 Shock	DC 1mA 通电状态下; 嵌合轴沿相互垂直的 6 个方向; 以 490m/s ² {50G} 冲击; 各 3 次 490m/s ² {50G}, 3 strokes in each X.Y.Z. axes. When DC 1mA is energized; the mating axes are along 6 mutually perpendicular directions; impact at 490m/s ² {50G}; 3 strokes in each X.Y.Z. axes	外观无损坏; 瞬断时间 ≤ 1ms。 No damage to the appearance; Instantaneous time ≤ 1ms.
防水等级 Water proof grade	IP68, 一米水深, 测试 1H, 湿漏电测试 IP68, one meter water depth, test 1h, wet leakage test	绝缘电阻 ≥ 400MΩ Insulation resistance Not less than 400MΩ

4.产品图纸/Product drawings



插座安装尺寸图
socket installation size drawing



5. 认证证书/Certificate

Zertifikat		Certificate		 TÜVRheinland®	
Zertifikat Nr. Certificate No.	Blatt Sheet				
R 50563246	0001				
Ihr Zeichen Client Reference	Unser Zeichen Our Reference	Ausstellungsdatum	Date of Issue		
F.G.Y.	01-ZYF-CN220Q2P 001	04.11.2022	(day/mo/yr)		
Genehmigungsinhaber License Holder		Fertigungsstätte Manufacturing Plant			
QC Solar (Suzhou) Corporation		QC Solar (Suzhou) Corporation			
No. 31, Xinfu Road, SIP		No. 31, Xinfu Road, SIP			
Suzhou		Suzhou			
215123 Jiangsu		215123 Jiangsu			
P.R. China		P.R. China			
Prüfzeichen Test Mark  Type Approved Safety Regular Production Surveillance www.tuv.com ID 1111261051		Geprüft nach Tested acc. to 2 PFG 2740/04.20			
Zertifiziertes Produkt (Geräteidentifikation) Certified Product (Product Identification)		Lizenzentgelte - Einheit License Fee - Unit			
Connector (Connector for Energy Storage System) ®					
Type Designation	: QE100				
Rated Voltage	: DC 1500V				
Rated Current	: 100A				
Temperature Limits	: -40°C to +125°C				
Ambient Temperature	: -40°C to +85°C				
Overvoltage Category	: III				
Pollution Degree	: 2				
Degree of Protection	: IP68 (after mounted and mated, IPX0: 1h immersion in 1m water)				
ANLAGE (Appendix): 1.0					
Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht. This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.					
TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg http://www.tuv.com/safety E-mail: markcheck@tuv.com Fax: +49 221 896-3935					
Zertifizierungsstelle  Paulus Hou					

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