

FT56xy 说明书

2024.07.02 版本:A4

△请务必按照本说明进行操作，并且选择本说明指定的工具，否则可能会造成技术指标无法满足标准要求，同时避免可能导致个人伤害、产品损害等潜在危害。

△为防止触电，在安装时请与系统断开。

△请勿在负载下插拔，警示标识刻模在连接器本体上。

△务必使用符合相关光伏标准的线缆。

△推荐使用脱醇型硅胶；如果使用脱肟型硅胶，在生产储存过程中，必须使硅胶中的 2-丁酮肟完全挥发出去，否则可能会导致塑料零部件开裂，金属件被腐蚀等不良现象。

△对于 UL 1500Vdc 的系统电压，双组份灌封胶材料应通过 1500V 或更高电压的 IPT 测试 60 分钟。

△UL1000&UL1500Vdc 安装时盒体边缘单组硅胶溢胶需超过 2mm

△组件装配过程中，不能碰到对连接器有腐蚀作用的异物。

△如果组件安装后连接器没有即刻对插，需要使用防尘帽

△产品若有技术改进、外观变化，以机身铭牌及实物为准，变化将列入新版资料中，恕不另行通知。

△未经人和公司事先书面许可的情况下，严禁以任何形式复制、传递、分发和存储本文档中的内容。

FT56xy Instruction

July 2nd 2024, Rev :A4

△Make sure to carefully read and understand the instruction before installation. If tools other than those specified by the instruction used or if the assembly instructions described here are disregarded then compliance with the standard requirements can't be guaranteed. Meanwhile avoid potential hazards which may result in personal injury and product damage.

△For protection against electric shock, while being assembled or disassembled, make sure connectors isolated from the power supply.

△Connectors may not be connected or disconnected under load. . the warning mark is engraved on the connector body.

△The cables conformity with relevant photovoltaic standards must be used.

△We recommend you using dealcohol silicone. To use deoximation silicone will lead to metal parts corrosion and plastic parts crack if you do not fully volatilize 2-Butanone-oxime during production and storage.

△For system voltages of UL 1500Vdc, potting material with two-part liquid component should pass IPT 60 minutes at 1500V or more.

△ For UL1000&UL1500V DC,UL require the sealant should exceed the edge of junction box 2mm at least when junction box is installed.

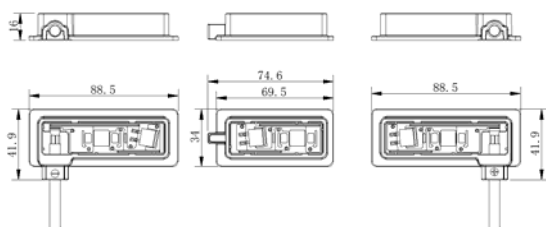
△During the assembly process, keep the connectors away from any corrosive materials.

△For field use, if connector can't be mated immediately, please use dustproof cap to protect connector.

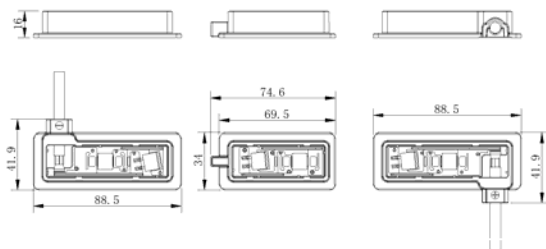
△Technological improvements and appearance changes may occur, please see the nameplate on the connectors and the connectors as the standard. The changes will be included in the new edition of instruction without extra notice.

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成品 Finished Products



FT56xy-常规版(Normal)



FT56xy-负极镜像版(Mirrored negative)

主要技术规格 Main Technical Specification:

认证 Certifications	TUV	UL
额定电压 Rated Voltage	1500V for FT56xB 1000V for FT56xA	1500V for FT56xy ABGCD 1000V for FT 56xy ABQCD
最大工作电压 Max. Working (module) Voltage	100V	
额定电流 Rated Current	16A	20A
应用电缆线 Connecting Capacity	IEC:4mm ² suitable for 5.3-7.2 mm OD	12AWG PV cable ϕ 6.4mm
相对温度指数 RTI Of Insulating Materials	110°C	
安全等级 Safety Class	Class II	
污染等级 Pollution Degree	I (after potting, inside of box)	
防护等级 Protection Degree	IP65/IP68(1m,1h)	
反向电流 Reverse Current	41	
最大环境温度 Maximum Ambient Temperature	-40 ~+85°C	
应用连接器 Connector	TUV1000V: RHC2xyzu,EVO2,EVO2A,PV4-S1,MC4 TUV1500V: RHC2xyzu,EVO2,EVO2A,PV4-S1	UL1000V: RHC2xyzB,MC4,EVO2,EVO2A,PV4-S1 UL1500V: RHC2xyzC,MC4,EVO2,EVO2A,PV4-S1
连接方式 Type Of Connection	线 缆：压接 / Cable: Crimped-type 二极管：锡焊 / Diode: Soldered-type 焊 带：锡焊 / PV Ribbon: Soldered-type	

产品命名 Product's name

1、TUV 命名 (TUV name)：

产品完整名称为 FT56xy，xy 为变量，其中 x 代表电流；y 代表电压和壳体结构。

Product's full name is FT56xy, xy is variable, x is the information of rated current; y is system voltage and construction information.

x	1	One positive junction box+one neutral junction box+one negative junction box, rated current 16A,diode module,type PST4520A,by Renhe Photovoltaic Technology Co., Ltd. Peak reverse voltage 45V,average rectifier current 20A.
	2	One positive junction box+one neutral junction box+one mirrored negative junction box, rated current 16A,diode module,type PST4520A,by Renhe Photovoltaic Technology Co., Ltd. Peak reverse voltage 45V,average rectifier current 20A.
y	A	1000V system voltage with no brim
	B	1500V system voltage with no brim

2、UL 命名 (UL name)：

产品完整名称为 FT56xy ABCDE,其中 ABCDE 为变量,表示的信息如下：

Product's full name is FT56xy ABCDE. And the suffix ABCDE is variable, and the information they stand for is as follows.

A: 产品结构信息,The information of construction;B=a,b,c,d 模块信息 Diode module information, C=G or Q,额定电压信息 System voltage; D= a to t 连接器信息 Connector information; E= g or h: 线缆信息 Cable information.

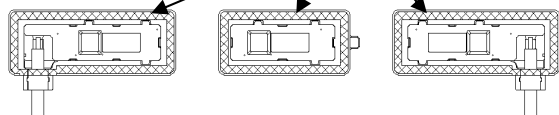
A	1	One positive junction box + one neutral junction box + one negative junction box
	2	One positive junction box + one neutral junction box + one mirrored negative junction box

B	a	Rated current 20A, diode module, type PST4520A, by Renhe Photovoltaic Technology Co., Ltd. Peak reverse voltage 45V, average rectifier current 20A.
	b	Rated current 20A, diode module, type PST4020, by Renhe Photovoltaic Technology Co., Ltd. Peak reverse voltage 45V, average rectifier current 20A.
	c	Rated current 20A, diode module, type PST4530/T, by Renhe Photovoltaic Technology Co., Ltd. Peak reverse voltage 45V, average rectifier current 30A.
	d	Rated current 20A, diode module, type PST5040D, by Renhe Photovoltaic Technology Co., Ltd. Peak reverse voltage 50V, average rectifier current 40A.
C	G	1500V system voltage
	Q	1000V system voltage
D	d	Connector, type PV-KST4(female), PV-KBT4(male), followed by 6, followed by "IT", followed by -UR, by STAUBLI ELECTRICAL CONNECTORS AG (E343181), rated 1500V dc, 30A max with 12 AWG cable.
	h	Connector, type PV-KST4-EVO2(female), PV-KBT4-EVO2(male), followed by 6, followed by "I", followed by -UR, by STAUBLI ELECTRICAL CONNECTORS AG (E343181), rated 1000V/1500V dc, 35A max with 12AWG cable.
	j	Connector, type PV-KST4-EVO2(female), PV-KBT4-EVO2(male), followed by 6, followed by "IT", followed by -UR, by STAUBLI ELECTRICAL CONNECTORS AG (E343181), rated 1000V/1500V dc, 35 A max with 12 AWG cable.
	t	Connector, Type PV-KST4-EVO 2A/6II (female) and PV-KBT4-EVO 2A/6II (male), STAUBLI ELECTRICAL CONNECTORS AG (E343181), rated 1500V dc, 39A max with 12AWG cable.
	m	Connector, type PV4-S1yx, rated 1500V, 40A, TYCO ELECTRONICS(SHANGHAI) CO LTD (E353372), y could be M or F, x could be 4, dc max with 12AWG
	r	Connector, type RHC2xyzB, male and female, by Zhejiang RENHE PHOTOVOLTAIC TECHNOLOGY CO LTD (E344325), rated 1000V dc, 20A max with 12AWG cable.
E	s	Connector, type RHC2xyzC, male and female, by Zhejiang RENHE PHOTOVOLTAIC TECHNOLOGY CO LTD (E344325), rated 1500V dc, 20A max with 12AWG cable.
	g	PV wire, 12AWG, by Zhejiang RENHE PHOTOVOLTAIC TECHNOLOGY CO LTD (E332136), sunlight resistant, 90°C wet or dry. Rated 2000V, 48 strands, 6.42mm OD
	h	PV wire, 12AWG, by Zhejiang RENHE PHOTOVOLTAIC TECHNOLOGY CO LTD (E332136), sunlight resistant, 90°C wet or dry. Rated 2000V, 56 strands, 6.42mm OD

安装过程 Installation

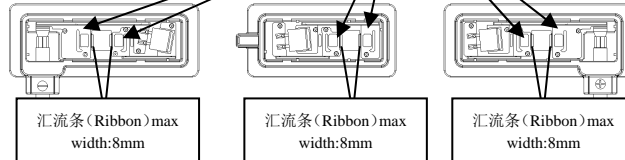
1. 接线盒粘接 Pasting

涂硅胶区域 (溢胶不小于 2mm)
Sealant area (The outer silicone width is at least 2mm)



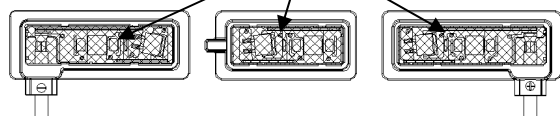
2. 汇流条安装 Ribbon installation

汇流条焊接处
Soldering area



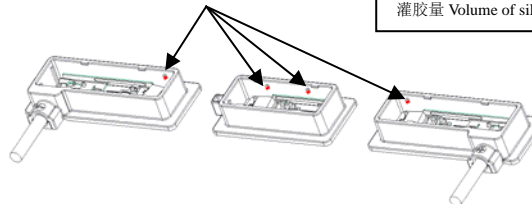
3. 灌胶区域 Potting

灌胶区域 Potting area



4. 最低灌胶面 Lowest potting level

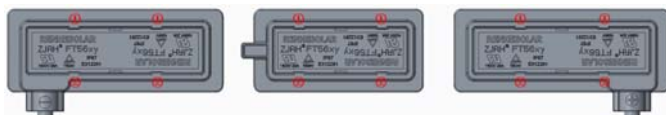
最低灌胶面 lowest potting level,
灌胶量 Volume of silicon: 32.2ml



盒盖的安装和打开/Installation and opening of lid

盒盖安装/Installation of lid:

- 1、插入1号两个卡扣/ Insert the number 1 double buckle;
- 2、压入2号两个卡扣/ Press the cover into the number 2 double buckle



盒盖打开/Opening of lid:

用螺丝刀插入3号的任一卡槽中向外撬即可打开盖板

Insert any one of the number 3 with a screwdriver the lid can be opened by prying out in the groove

