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Installation Manual for PV-JK03M/xy Series Cable Connector

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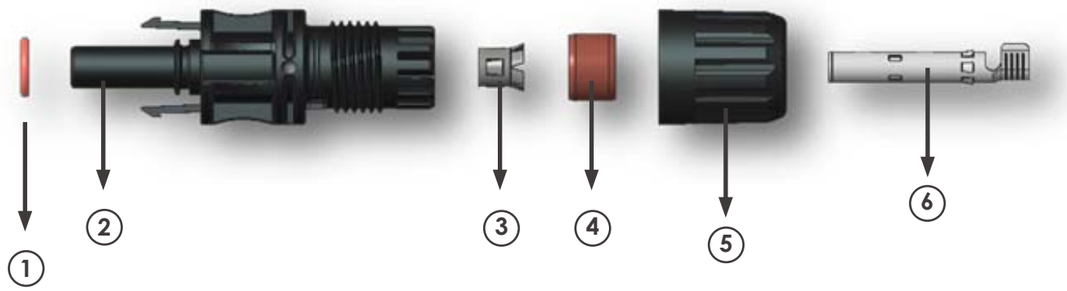
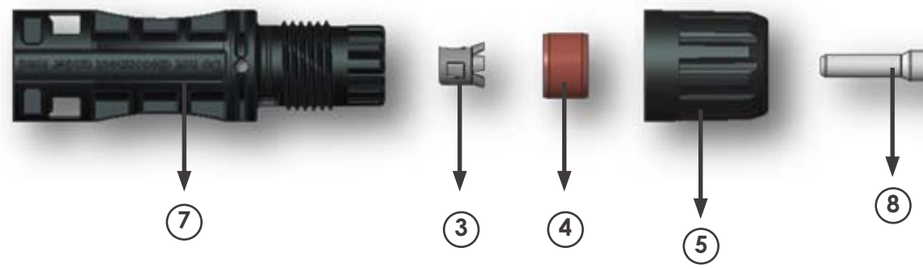
Products Overview





1. O Ring
2. Male Housing
3. Lock Termina
4. Cable Gland
5. Gland Nut
6. Female Terminal
7. Female Housing
8. Male Terminal

Tools and Parts Overview

Item	Tool Type	Tool Name	Pic.
1	JKT-01	Universal Tool	
2	JKT-02	Assembly Tool Open-end-Wrench	
3	JKT-03	Stripping Tool	
4	JKT-04	Crimping Tool	
5	4JB03M31005 4JB03M31007	Dust plug	

Technical Data

Type Name or Model No.	PV-JK03M/xy
Rated Voltage (V DC)	1000 V DC for PV-JK03M/1y 1500 V DC for PV-JK03M/2y
Rated Insulation Voltage	6000 V for PV-JK03M/1y 8000 V for PV-JK03M/2y
Rated Current (A DC)	30 A for PV-JK03M/xA; 45 A for PV-JK03M/xB; 50 A for PV-JK03M/xC; 60 A for PV-JK03M/xD
Application Class	Class A
Protection Class / Pollution Degree	Class II / 2
Ambient Temperature	-40℃ to +85℃
Upper Limit Temperature	100℃
Over Voltage Category	CAT III
Flammability Class	UL94 V-0/5VA
Degree of Protection, mated / unmated	IP68(1m, 2h) in mated condition IP2X in unmated condition
Wire Cross Section Area or Cross Section Range	30 1X2.5mm²(14AWG)for PV-JK03M/xA; 1X4.0mm²(12AWG)for PV-JK03M/xB; 1X6.0mm²(10AWG)for PV-JK03M/xC; 1X10.0mm²(8AWG)for PV-JK03M/xD;
Rewireable	No
Cable Diameter	5,00mm to 8,50mm
Contact Resistance	≤ 0.3 m Ω
Contact material	Copper, tin plated
Insulation Material	m-PPE /PC/ PA66
Existence of an enclosure	Enclosed connector
Certification Standard	IEC 62852 Edition 1.0 2014-11; UL6703

Note: PV-JK03M/xy (x=1 or 2, y=A or B or C or D)

Tools Instruction

The Stripping Tool-JKT-03 is applicable to 2.5mm²(14AWG) or 4.0mm²(12AWG) or 6.0mm²(10AWG) cable.
There is one stripping tool JKT-04 per tool set.
Function: Cutting the wire insulation (exposing the copper wire).

Stripping Tool - JKT-03

The Crimping Tool-JKT-04 is applicable to 2.5mm²(14AWG) or 4.0mm²(12AWG) or 6.0mm²(10AWG) cable.
There is one crimping tool-JKT-04 per tool set.
Function: The connection and crimping between the copper wire and metal terminals are all made by the crimping tool.

Crimping Tool- JKT-04

Assembly Tool -JKT-02： There are two assembly tools per tool set. Universal Tool-JKT-01 :There is a universal tool per tool set.
Function: To disassemble the cable connector and disconnect male / female cable connector.

Installation Instruction

5.1 Cable Preparation

Do not use untreated cables. Tinned wires are recommended.
When stripping the cable insulation “L”, 7mm to 9mm in length should be removed on the end of cable.
Do not cut the copper wire inside.

Fix the stripping tool, cutting length to 7mm to 9mm (the length of L should be fixed).
Take the cable one hand and take the stripping tool-JKT-03 the other hand.

Insert cables until the end touches fixed block.(Fig. 1)

Squeeze the handle of the stripping tool by hand, then cut and remove the cable insulation.(Fig. 2).

Figure 1

Figure 2

5.2 Cable Preparation

Open the crimping tool and press the clip. Insert the male/female terminal into appropriate groove until fully seated. To make the opening of the male/female terminal face up. (Fig. 3 & 4).

Squeeze the crimping tool gradually until the male/female terminal touches the lower half of the crimping mold.(Fig.5).

Figure 3

Figure 4

Figure 5

Insert the stripped wire into the male/female terminal until the cable insulation touches the opening of the male/female terminal. Press the crimping tool completely. (Fig. 6、7).

Be sure the crimping is completed and fixed. (Fig. 8).

Figure 6

Figure 7

Figure 8

5.3 Male/Female Terminals Installation

Insert the crimped male or female terminal into corresponding male or female cable connector (Fig. 9). Installation is completed when heard an audible click sound. (Fig. 10).

To fixed the gland nut by the open-end wrench of the assembly tool, and to fixed the male cable connector or female cable connector by the another assembly tool, then tighten the gland nut with the specified tightening torque.(Fig. 11).

Figure 9

Figure 10

Figure 11

Spin clockwise to fully tighten the gland nut. Clearance between the gland nut and the cable connector should be 1.0 to1.7mm (Fig. 12).

Insert the female cable connector into the male cable connector when the gland nut is fully tightened. The connection of female and male cable connector is complete when an audible click is heard. (Fig. 13 – 14).

Figure 12

Figure 13

Figure 14

5.4 Disconnecting Cable Connector

Insert the forks into the buckle of the cable connector by the universal tool. (Fig. 15)

Pull the cable connector by hand respectively. The cable connector can now be separated.(Fig. 16 to 17)

Figure 15

Figure 16

Figure 17

5.5 Installation Warning

- If parts and tools used are not specified by Jinko or not prepared and assembled as Jinko described during installation, the uniformity of safety and technical data on products are not guaranteed
- During assembling and using, the connector must not be touched with any machine oil, grease, solvent, with which connector would be out of action. Notice that the gloves the operators used must not contain the substance above. The male cable connectors and the female connectors must not plug together when soiled.
- The work described here must not be carried out on live or load-carrying part.
- Connectors must not be disconnected under load. Plugging and unplugging when voltage is permitted.
- The dust plug(4JB03M31005/4JB03M31007) should be placed to avoid exposing the dust and water when disconnected or disconnected after connected.
- The plug connectors are watertight in accordance with IP68 protection class. However, they are not suitable for continuous operation under water. Do not place the connectors directly on the proof membrane.
- The plug connection must not be subjected to continuous mechanical tension. The cable should be fixed with cable binders.
- For safety reason, the use of either PVC cables or untinned cables are prohibited

Notes: If you have any questions during installation, please feel free to contact us as follows:

Technical Service Europe Contact Information
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