

Title: 50-Pin Terminal Block Cable

Product(s): JZSP-CKIOD-xx, JZSP-CKIOD-xx(A), JUSP-WA50P-xx

Doc. No. TN.SigmaII.08

About This Document

This document describes the possible differences between cables shipped from Yaskawa that are included in terminal block connector kits with part number JUSP-WA50P-xx.

About JZSP-CKIOD-xx And JZSP-CKIOD-xx(A) Cables

The JZSP-CKIOD-* cables are designed to be used with a Wago terminal block. The cable and the terminal block are both included in kit part number JUSP-WA50P-xx, and are designed to be used for the Sigma-II SERVOPACK.

- The cables may be used for Sigma-5 and Sigma-7 SERVOPACKs as well.
 - To use the cable for the Sigma-5 or Sigma-7 SERVOPACKs, consider this entire document, and also refer to Yaskawa.com document number TN.MCD.14.
- The terminal block kit JUSP-WA50P-xx can contain either cable.
 - See the “Cable Differences” section below.

Cable Differences

The cables may have varying outer specifications, but the functionality is the same.

- **JZSP-CKIOD-xx** (without the **(A)**) was available until 2004. The cable has a metal connector on the terminal block side, and a 3M connector hood on the SERVOPACK side. An image is below.



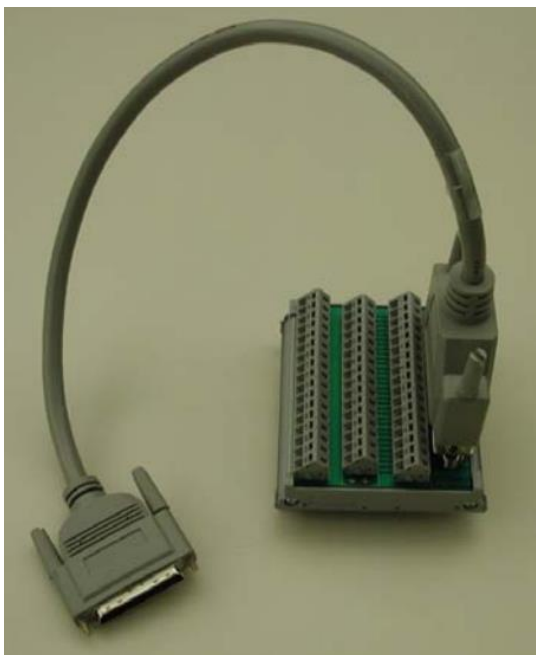
- The shield is connected to the connectors on both sides of the cable.
- The 3M connector hood is the “wide” CN1 connector case described in Yaskawa.com document number TN.MCD.14.

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- The **first version of JZSP-CKIOD-xx(A)** became available after 2004, to 2010. The cable has overmolded connectors on both sides. An image is below (shown attached to terminal block).



- The shield is connected only to the SERVOPACK side of the cable.
- The SERVOPACK side connector has a “thin” profile, much like the “thin” CN1 connector case described in Yaskawa.com document number TN.MCD.14.
- A **second version of JZSP-CKIOD-xx(A)** became available after 2010, to 2016 (2017 for some cable lengths). The cable has small differences from the first version of JZSP-CKIOD-xx(A), as follows.
 - Variations:
 1. Internal color code
 2. Printing on cable
 3. Outer jacket color variation (slight difference)
 - The shield is connected only to the SERVOPACK side of the cable.
 - The SERVOPACK side connector has a “thin” profile, much like the “thin” CN1 connector case described in Yaskawa.com document number TN.MCD.14.

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- The **third version of JZSP-CKIOD-xx(A)** has 2 variations, and becomes available in 2017. Aside from the variations, the cable is built exactly the same with the exact same parts as **JZSP-CKIOD-xx**. The 2 variations are as follows
 - Variations:
 1. Gray outer jacket (exact same as JZSP-CKIOD-xx)
 2. Beige outer jacket
 - The raw cable is from the same vendor as the gray outer jacket cable.
 - The only change is the color.
 - The shield is connected to the connectors on both sides of the cable.
 - The 3M connector hood is the “wide” CN1 connector case described in Yaskawa.com document number TN.MCD.14.

- The **forth version of JZSP-CKIOD-xx(A)** becomes available in 2017. The cable has a metal connector on the terminal block side, and a 3M connector hood on the SERVOPACK side. An image of the metal connector is below.



- The shield is connected only to the SERVOPACK side of the cable.
- The 3M connector hood is the “thin” CN1 connector case described in Yaskawa.com document number TN.MCD.14.

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Cable Shielding

Regarding connection to the terminal block hood:

Different models of the cable either have the shield connected to the connector on the terminal block side of the cable, or they do not have the connection, as indicated in this document for each model.

Historically, in either case, if there are any issues regarding noise, follow the EMC Installation Conditions for the SERVOPACK that the cable is connected to.

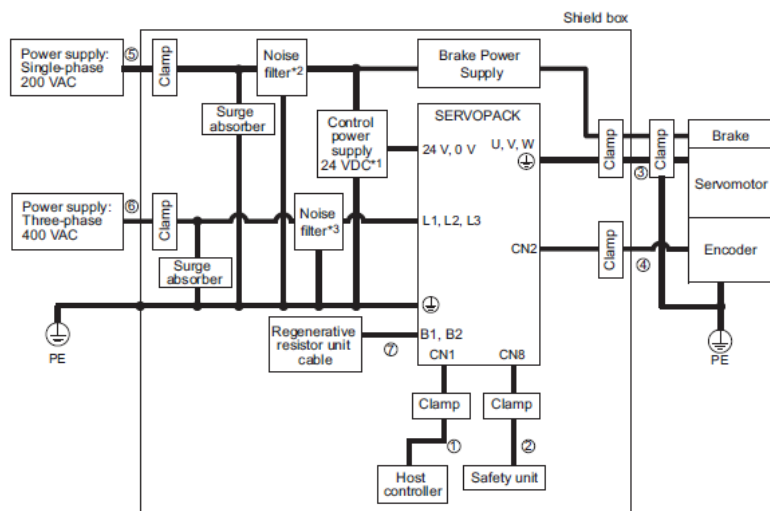
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For example, in Yaskawa.com document SIEPS80000043 (Sigma-5 Setup Manual), an EMC Installation Condition is as shown:

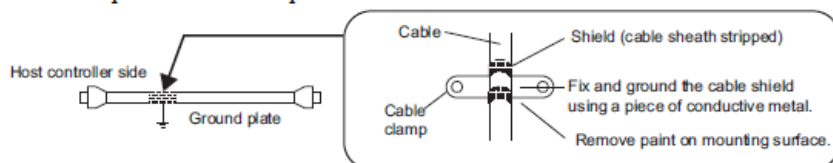
- SGDV-□□□□D01A (□□□ = 210, 260, 280, 370)



■ Fixing the Cable

Fix and ground the cable shield using a piece of conductive metal.

- Example of Cable Clamp



This describes that the outer jacket of the CN1 cable is to be removed, to expose the cable shield, and that a metal clamp is to be fixed to the machine, clamping the jacket.