

Low-profile Connector Kit for I/O, Safety, and Auxiliary Feedback Signals

Catalog Number 2090-K6CK-D44M

About the Low-profile Connector Kit

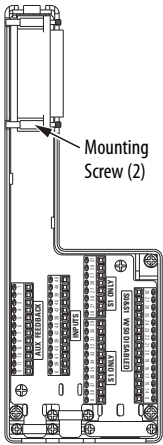
This low-profile 44-pin connector kit provides termination points for I/O, safety, and auxiliary feedback connections on the IOD connector of Kinetix® 6200 and Kinetix 6500 drives.

This kit also includes a motion-allowed jumper that you install when the safe torque-off functionality of 2094-xx02x-M0x-S0 control modules is not desired. The jumper does not apply to 2094-xx02x-M0x-S1 control modules.

These documents contain additional information for wiring the I/O, safety, and auxiliary feedback connections on Kinetix 6200 and Kinetix 6500 servo drives.

Resource	Description
Kinetix 6200 and Kinetix 6500 Modular Multi-axis Servo Drive User Manual, publication 2094-UM002	Provides information on wiring digital inputs, registration inputs, and auxiliary feedback (IOD) connections.
Kinetix 6200 and Kinetix 6500 Safe Speed Monitoring Servo Drives Safety Reference Manual, publication 2094-RM001	Provides information on wiring the safety (IOD) connections on 2094-xx02x-M0x-S1 control modules.
Kinetix 6200 and Kinetix 6500 Safe Torque-off Servo Drives Safety Reference Manual, publication 2094-RM002	Provides information on wiring the safety (IOD) connections on 2094-xx02x-M0x-S0 control modules.

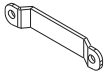
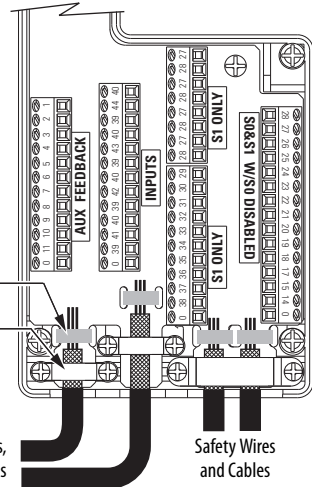
Install the Low-profile Connector Kit



1. Place exposed cable shield in the channel.
2. Route wires to terminals.
3. Place the shield clamp over the exposed shield.
4. Tighten screws, torque 0.4 N·m (3.5 lb·in).

Use tie wraps (4) for stress relief.

Use shield clamps (3) to maximize contact with cable shield for high-frequency bonding.



If necessary, turn clamp over to hold small wires secure.

Auxiliary Feedback Wires,
I/O Wires, and Cables

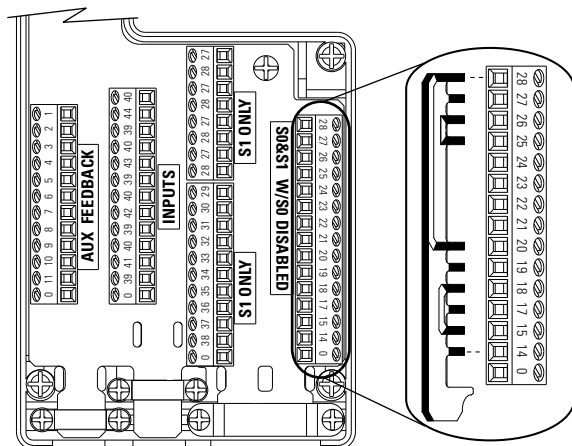
Safety Wires
and Cables

Attribute	2090-K6CK-D44M
Cable diameter	4...10 mm (0.16...0.39 in.)
Screw terminal wire size	0.06...1.31 mm ² (30...16 AWG)
Recommended wire strip length	5 mm (0.2 in.) single conductor
Recommended torque	
Mounting screw	0.4 N·m (3.5 lb·in)
Terminal screws	0.2 N·m (2.1 lb·in)
Clamp and cover screws	0.4 N·m (3.5 lb·in)



ATTENTION: This connector kit contains electrostatic discharge (ESD) sensitive parts that can be damaged if you do not follow ESD control procedures. If you are unfamiliar with ESD control procedures, refer to Guarding Against Electrostatic Damage, publication [8000-4.5.2](#), or any other applicable ESD protection handbook.

Connector Data



Kit pin numbering corresponds to the IOD connector. Pins 27, 28, 39, and 40 are given multiple terminals to accommodate additional connections.

Motion-allowed Jumper Installation
(applies to 2094-xx02x-M0x-50 control modules)

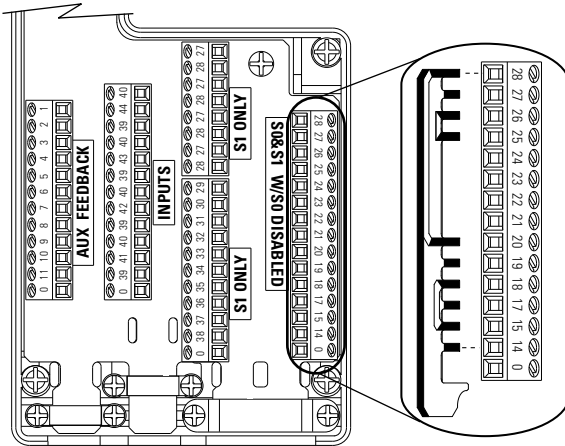
IOD Pin ⁽¹⁾	Signal
0	Shield
1	AUX_SIN+
	AUX_A+
2	AUX_SIN-
	AUX_A-
3	AUX_COS+
	AUX_B+
4	AUX_COS-
	AUX_B-
5	AUX_DATA+
	AUX_I+
6	AUX_DATA-
	AUX_I-
7	AUX_CLK+
8	AUX_CLK-

IOD Pin ⁽¹⁾	Signal
9	EPWR_5V
10	ECOM
11	EPWR_9V
12	-
13	-
14	24VPWR ⁽²⁾
15	24VCOM ⁽²⁾
16	-
17 (A1)	SPWR
18 (A2)	SCOM
19 (S12)	SS_IN_CHO
20 (S22)	SS_IN_CH1
21 (34)	SS_OUT_CHO
22 (44)	SS_OUT_CH1
23 (S52)	SLS_IN_CHO

(1) Designators in parentheses refer to the Guardmaster® MSRS7P safety relay and PowerFlex® 750-Series safety option terminals.

(2) Use this supply to power the Safety 24V (SPWR/SCOM) input. Do not connect this 24V to any external safety device. These pins do not apply to 2094-xx02x-M0x-S1 control modules.

Connector Data (continued)



Kit pin numbering corresponds to the IOD connector. Pins 27, 28, 39, and 40 are given multiple terminals to accommodate additional connections.

Motion-allowed Jumper Installation (applies to 2094-xx02x-M0x-S0 control modules)

IOD Pin ⁽¹⁾	Signal
24 (S62)	SLS_IN_CH1
25	RESET_REF
26 (S34)	RESET_IN
27 (S11)	TEST_OUT_0
28 (S21)	TEST_OUT_1
29 (68)	SLS_OUT_CHO
30 (78)	SLS_OUT_CH1
31 (S32)	DM_IN_CHO
32 (S42)	DM_IN_CH1
33 (X32)	LM_IN_CHO
34 (X42)	LM_IN_CH1

IOD Pin ⁽¹⁾	Signal
35 (51)	DC_OUT_CHO
36 (52)	DC_OUT_CH1
37 (S72)	ESM_IN_CHO
38 (S82)	ESM_IN_CH1
39	24V _{PWR} ⁽²⁾
40	24V _{COM} ⁽²⁾
41	INPUT 1
42	INPUT 2
43	INPUT 3
44	INPUT 4

(1) Designators in parentheses refer to the Guardmaster MSR57P safety relay and PowerFlex 750-Series safety option terminals.

(2) Use these signals as a 24V DC source to operate the digital inputs (50 mA maximum per input).

Rockwell Automation maintains current product environmental information on its website at <http://www.rockwellautomation.com/rockwellautomation/about-us/sustainability-ethics/product-environmental-compliance.page>.

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