

Kinetix 6000M Network Terminator

Catalog Number 2090-CTSRP

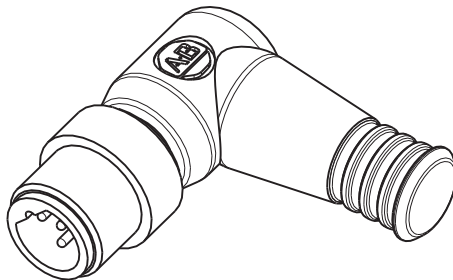
Topic	Page
Before You Begin	3
Install the Network Terminator	3
Specifications	5
Additional Resources	5

About the Network Terminator

The Kinetix® 6000M integrated drive-motor system transmits network signals across a series of network cables between each integrated drive-motor (IDM) unit in the system.

The network terminator is a male M12 connector with a backshell cover that seals the connector. The network terminator is installed on the last IDM unit in the system, where it terminates the network by returning the data signals through the daisy-chained network that connects the IDM units to the IPIM module.

2090-CTSRP Network Terminator



Important User Information

Solid state equipment has operational characteristics differing from those of electromechanical equipment. Safety Guidelines for the Application, Installation and Maintenance of Solid State Controls, publication [SGI-1.1](#), is available from your local Rockwell Automation sales office or online at <http://www.rockwellautomation.com/literature> describes some important differences between solid state equipment and hard-wired electromechanical devices. Because of this difference, and also because of the wide variety of uses for solid state equipment, all persons responsible for applying this equipment must satisfy themselves that each intended application of this equipment is acceptable.

In no event will Rockwell Automation, Inc. be responsible or liable for indirect or consequential damages resulting from the use or application of this equipment.

The examples and diagrams in this manual are included solely for illustrative purposes. Because of the many variables and requirements associated with any particular installation, Rockwell Automation, Inc. cannot assume responsibility or liability for actual use based on the examples and diagrams.

No patent liability is assumed by Rockwell Automation, Inc. with respect to use of information, circuits, equipment, or software described in this manual.

Reproduction of the contents of this manual, in whole or in part, without written permission of Rockwell Automation, Inc., is prohibited.

Throughout this manual, when necessary, we use notes to make you aware of safety considerations.

	WARNING: Identifies information about practices or circumstances that can cause an explosion in a hazardous environment, which may lead to personal injury or death, property damage, or economic loss.
	ATTENTION: Identifies information about practices or circumstances that can lead to personal injury or death, property damage, or economic loss. Attentions help you identify a hazard, avoid a hazard and recognize the consequences.
	SHOCK HAZARD: Labels may be on or inside the equipment, for example, drive or motor, to alert people that dangerous voltage may be present.
	BURN HAZARD: Labels may be on or inside the equipment, for example, drive or motor, to alert people that surfaces may reach dangerous temperatures.
IMPORTANT	Identifies information that is critical for successful application and understanding of the product.

Before You Begin

Observe the following precautions when installing the connector in a servo system. Failure to observe these safety notices could result in personal injury or damage to the motor and equipment.



SHOCK HAZARD: To avoid the hazard of electrical shock, be sure to ground any cable providing power at a minimum of one point. To prevent the build-up of electrical energy, factory-supplied cables use one of these grounding techniques:

- Bond the overall shield to the connector housing.
- Make sure there is a direct connection-to-ground for each cable shield.
- Connect an exposed cable braid or a ground wire, if present, to the power cable clamp, housing, or another suitable chassis ground.

Failure to observe these safety procedures could result in personal injury or equipment damage.



ATTENTION: Arcing or unexpected motion can occur if cables are connected or disconnected while power is applied to the IDM system. Before working on an IDM system, disconnect power and wait the full time interval as indicated in the warning on the IPIM module or verify the DC bus voltage at the IPIM module measures less than 50V DC.

Failure to observe this precaution could result in severe bodily injury or loss of life, and damage to the product will occur.

Install the Network Terminator

Follow these steps when installing the 2090-CTSRP network terminator.

1. Verify power to the IPIM module is removed before making any connections or disconnecting any components of the system.



ATTENTION: Arcing or unexpected motion can occur if cables are connected or disconnected while power is applied to the IDM system. Before working on an IDM system, disconnect power and wait the full time interval as indicated in the warning on the IPIM module or verify the DC bus voltage at the IPIM module measures less than 50V DC.

Failure to observe this precaution could result in severe bodily injury or loss of life, and damage to the product will occur.

2. Attach the network terminator to the network-out connector on the last IDM unit in the system.

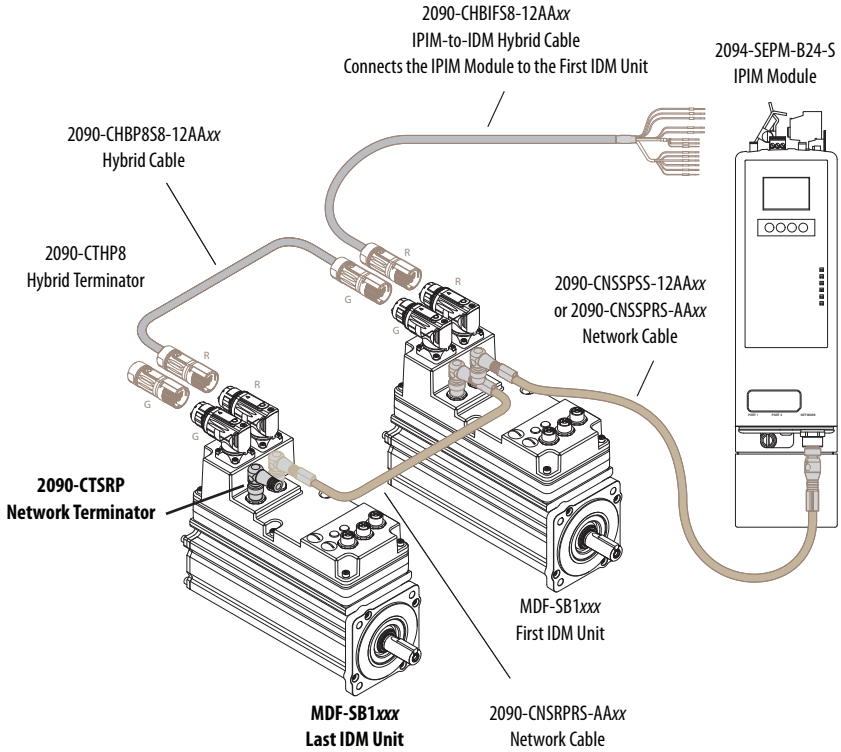


ATTENTION: The network terminator mounts on the connector in a fixed position, and cannot be moved to a different position.

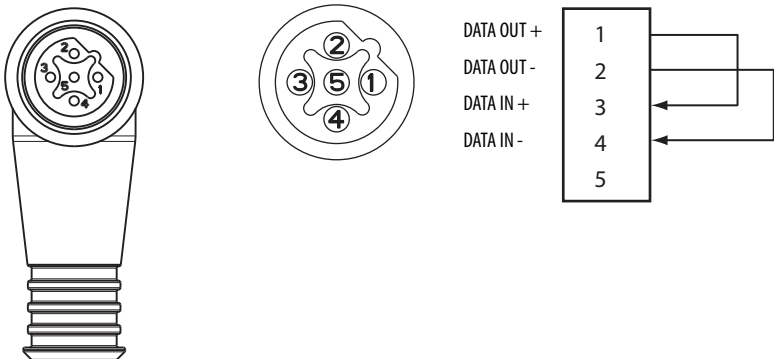
Attempting to rotate the network terminator could result in damage to the motor and equipment.

- Apply 0.8...1.2 N•m (7...11 lb•in) of torque to fully seat the contacts and secure the connection.

Kinetix 6000M Cable Routing Diagram



2090-CTSRP Network Terminator Outline, Pinout, and Schematic



Specifications

Additional specifications for each cable are available in the Kinetix Motion Accessories Technical Data, publication [GMC-TD004](#).

Attribute	2090-CTSRP
Wire size	22 AWG
Connector install torque	0.8...1.2 N·m (7...11 lb·in)

Additional Resources

These documents contain additional information concerning related products from Rockwell Automation.

Resource	Description
Kinetix 6000M Integrated Drive-Motor System User Manual, publication 2094-UM003	Information on installing, configuring, starting, and troubleshooting a servo drive system with a servo motor.
Kinetix 6000M Integrated Drive-Motor Installation Instructions, publication MDF-IN001	Information on the installation of your Kinetix 6000M integrated drive-motor.
Allen-Bradley Industrial Automation Glossary, publication AG-7.1	A glossary of industrial automation terms and abbreviations.
System Design for Control of Electrical Noise Reference Manual, publication GMC-RM001	Information, examples, and techniques designed to minimize system failures caused by electrical noise.
Kinetix Rotary Motion Specifications Technical Data, publication GMC-TD001	Catalog numbers and product specifications, including performance, environmental, certifications, load force, and dimension drawings for Allen-Bradley rotary motors.
Kinetix Motion Accessories Technical Data, publication GMC-TD004	Catalog numbers, specifications, and dimensions for Allen-Bradley servo drive accessories.
Kinetix Motion Control Selection Guide, publication GMC-SG001	General product specifications for Kinetix motion control products.

You can view or download publications at <http://www.rockwellautomation.com/literature>. To order paper copies of technical documentation, contact your Allen-Bradley® distributor or Rockwell Automation® sales representative.

Notes:

Notes:

Rockwell Automation Support

Rockwell Automation provides technical information on the Web to assist you in using its products.

At <http://www.rockwellautomation.com/support>, you can find technical manuals, technical and application notes, sample code and links to software service packs, and a MySupport feature that you can customize to make the best use of these tools. You can also visit our Knowledgebase at <http://www.rockwellautomation.com/knowledgebase> for FAQs, technical information, support chat and forums, software updates, and to sign up for product notification updates.

For an additional level of technical phone support for installation, configuration and troubleshooting, we offer TechConnect support programs. For more information, contact your local distributor or Rockwell Automation representative, or visit <http://www.rockwellautomation.com/support/>.

Installation Assistance

If you experience a problem within the first 24 hours of installation, please review the information that's contained in this manual. You can also contact a special Customer Support number for initial help in getting your product up and running.

United States or Canada	1.440.646.3434
Outside United States or Canada	Use the Worldwide Locator at http://www.rockwellautomation.com/support/americas/phone_en.html , or contact your local Rockwell Automation representative.

New Product Satisfaction Return

Rockwell Automation tests all of its products to ensure that they are fully operational when shipped from the manufacturing facility. However, if your product is not functioning and needs to be returned, follow these procedures.

United States	Contact your distributor. You must provide a Customer Support case number (call the phone number above to obtain one) to your distributor to complete the return process.
Outside United States	Please contact your local Rockwell Automation representative for the return procedure.

Documentation Feedback

Your comments will help us serve your documentation needs better. If you have any suggestions on how to improve this document, complete this form, publication [RA-DU002](#), available at <http://www.rockwellautomation.com/literature/>.

Allen-Bradley, Kinetix, and Rockwell Automation are trademarks of Rockwell Automation, Inc.

Trademarks not belonging to Rockwell Automation are property of their respective companies.

Rockwell Otomasyon Ticaret A.Ş., Kar Plaza İş Merkezi E Blok Kat:6 34752 İçerenköy, İstanbul, Tel: +90 (216) 5698400

www.rockwellautomation.com

Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444
Europe/Middle East/Africa: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640
Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

Publication 2090-IN036B-EN-P - March 2012

PN-143961

Supersedes Publication 2090-IN036A-EN-P - February 2012

Copyright © 2012 Rockwell Automation, Inc. All rights reserved. Printed in the U.S.A.