

CENTERLINE 2100 MCC with IntelliCENTER Technology Using a DeviceNet Network

Bulletin Number 2100

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Summary of Changes

This publication contains new and updated information as indicated in the following table.

Topic	Pages
Updated references to the DeviceNet® Media Design and Installation Guide.	Throughout
Updated product offerings.	Throughout
Updated the Additional Resources table.	24

Overview

This document describes cable system construction and components that are associated with a DeviceNet network that is factory-installed in Bulletin 2100 CENTERLINE® and IntelliCENTER® motor control centers (MCCs).



ATTENTION: Before performing any service or maintenance activities on MCC sections, disconnect all power sources.

DeviceNet Network

The DeviceNet network is a low-cost communication link to connect industrial devices (such as limit switches, photoelectric sensors, motor starters, push buttons, variable-frequency drives, and operator interfaces) to a network and minimize time-consuming and costly hardwiring.

A DeviceNet network is a simple, open networking solution based on the Producer/Consumer model. This technology allows for real-time control, data exchange, configuration capabilities, and collection of data at regular intervals or on demand. The network specifications and protocol are open—managed by the Open DeviceNet Vendor Association (ODVA)—meaning that vendors are not required to purchase hardware, software, or licensing rights to connect devices to a system. There are over 300 vendors offering DeviceNet products with over a half million installed nodes worldwide.

DeviceNet Network in MCCs

The DeviceNet network is ideally suited for MCC applications regarding cost and performance. This document details the applications of the DeviceNet network in MCCs, including cable system construction and common DeviceNet components.

System Architecture

When designing DeviceNet systems, it is necessary to consider the following factors:

- Node count
- Cable type and lengths
- Terminating resistors with internal and external devices

Node Count

A DeviceNet network can accommodate 64 nodes. Typically, three nodes are reserved for the scanner, personal computer, and a new device.

Performance, needs, and future expandability also affect node count. Use this table to set node count guidelines.

Communication Rate	Nodes - DeviceNet MCC	Nodes IntelliCENTER MCC
125 kBd	50	Not Supported
250 kBd	50	35
500 kBd ⁽¹⁾	50	50

(1) To achieve maximum performance of an IntelliCENTER MCC, use 500 kBd.

Cable Length Limitations

Cable lengths are calculated for two types of cables: trunk and drop. A trunk cable is all cable directly between terminating resistors. All other cable is a drop cable.

Communication Rate	Trunk	Drop ⁽²⁾
125 kBd	1378 ft (420 m)	512 ft (156 m)
250 kBd	656 ft (200 m)	256 ft (78 m)
500 kBd ⁽¹⁾	246 ft (75 m)	128 ft (39 m)

(1) To achieve maximum performance of an IntelliCENTER MCC, use 500 kBd.

(2) No single drop can exceed 20 ft (6 m) in length.

Equipment Necessary for Connecting the Computer

The following is the equipment that you need to connect your computer through your network.

- Laptop computer: 1784-U2DN USB to DeviceNet cable or 1784-PCD DeviceNet personal computer interface card and 1784-PCD1 cable
- Desktop computer: 1784-U2DN USB to DeviceNet cable or 1784-PCID DeviceNet personal computer interface card
- RS-232 interface (reduced performance): 1770-KFD module

TIP See the device user manual to set the communication rate.

TIP A 2100H-ICPC120 patch cable is necessary to connect the interface (laptop, desktop, RS-232) to IntelliCENTER MCC wireway.

Trunk Cable Routing - Series M Sections

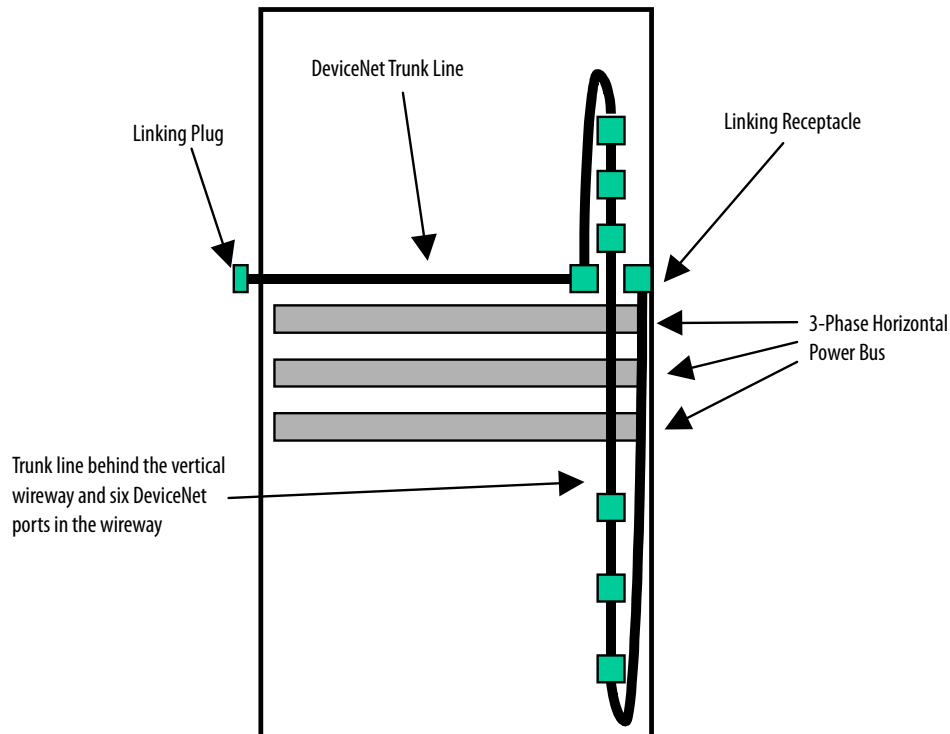
Series M sections are manufactured May 2001 and later.

The DeviceNet trunk line assembly is typically mounted in a channel above the horizontal power bus bars. If a neutral bus is mounted in the upper channel, the trunk line assembly is mounted below the horizontal power bus bars. The trunk line continues vertically, behind the vertical wireway, joined to the horizontal portion via a DeviceNet connector.

In a standard MCC section, the vertical segment of trunk line has six DeviceNet network ports that are directly connected to it, built into the back of the vertical wireway. Units with communicating devices have a DeviceNet drop line from the device, plugged into the ports. Each port is independent, which allows any unit to be plugged in and removed without affecting adjacent units. If a unit with a communicating device occupies a full section, only one DeviceNet port is supplied.

The trunk line terminates with a DeviceNet plug on the left side and a receptacle on the right side. It is accessible from any unattached side of a section by removing the center end cover plate.

Figure 1 - Typical Single MCC Section (Series M)



Trunk Cable Routing - Series L Sections

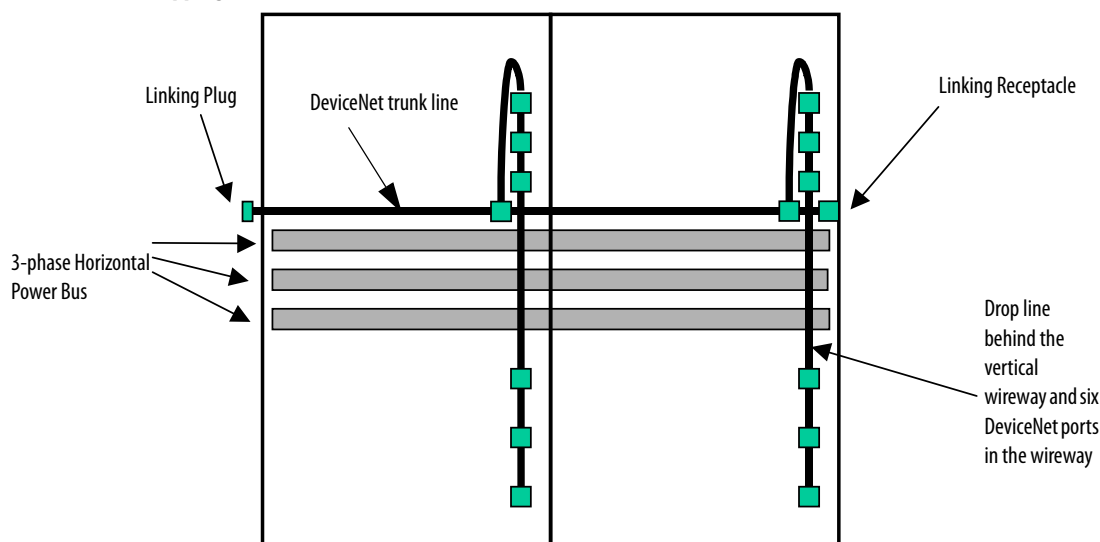
Series L Sections were manufactured through May 2001.

The **DeviceNet trunk line assembly** typically is mounted in a channel above the horizontal power bus bars. If a neutral bus is mounted in the upper channel, the trunk line assembly is mounted below the horizontal power bus bars.

The **DeviceNet drop line** is located behind the vertical wireway and attaches to the trunk line via a DeviceNet connector. It has six DeviceNet ports that are directly connected to it that are built into the back of the vertical wireway. Units with connecting devices have a **DeviceNet drop line** from the device that plugs into the ports. Each port is independent, which allows any unit to be plugged in and removed without affecting adjacent units. If a communicating device is present in a unit that occupies a full section, one DeviceNet port is supplied.

The trunk line terminates with a DeviceNet plug on the leftmost side and a receptacle on the rightmost side of a shipping block. It is accessible from the unattached left and right sides of a shipping block by removing the center end cover plate.

Figure 2 - Typical Two-Section Shipping Block (Series L)



Determine Cable Lengths

To help determine cable lengths for your application, each MCC is shipped with documentation that identifies the trunk and drop length that is used within the MCC.

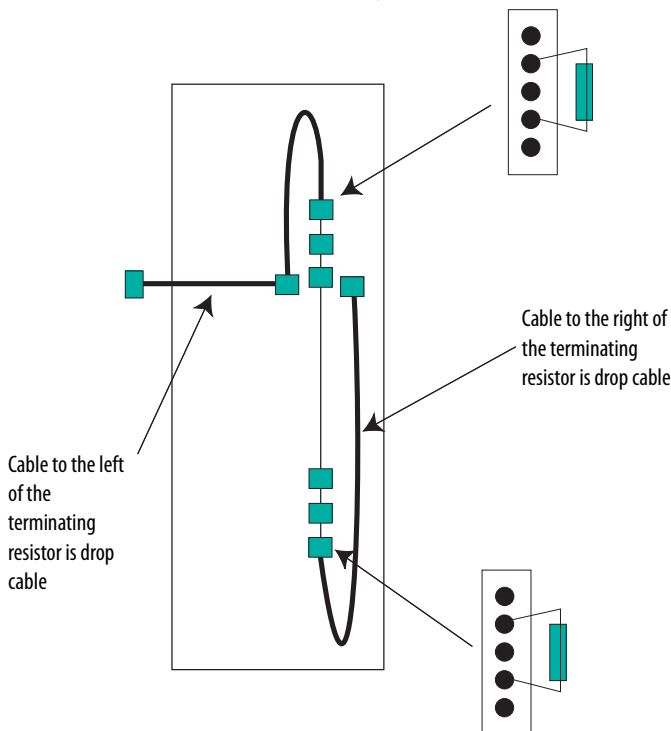
DeviceNet Network Specifications

NETWORK NUMBER: 01 BAUD RATE: 500 kbps TOTAL NUMBER OF NODES: 16	CURRENT DRAW: 2.115 A CUMULATIVE DROP LENGTH: 40.30 ft. CUMULATIVE TRUNK LENGTH: 93.70 ft.
NOTE - The cumulative length of the trunk and drop cables determine the maximum baud rate of the DeviceNet system. <ul style="list-style-type: none"> - 500 kB if the cumulative trunk length is less than 246 ft. (75 m) and the cumulative drop length is less than 128 ft. (39 m). - 250 kB if the cumulative trunk length is less than 656 ft. (200 m) and the cumulative drop length is less than 256 ft. (78 m). - 125 kB if the cumulative trunk length is less than 1378 ft. (420 m) and the cumulative drop length is less than 512 ft. (156 m). 	

Calculate Cable Lengths

You can calculate cable lengths by using the following guidelines:

- Series L MCC
 - Two feet trunk per section (exclude frame-mounted sections)
 - Seven feet drop per section (plus unit drop cables)
- Series M MCC
 - 14 feet trunk per section (exclude frame-mounted sections)
 - If you use a terminating resistor or extend the trunk from the top port:
 - Add three feet drop and subtract three feet trunk
 - If you use a terminating resistor or extend the trunk from the bottom port:
 - Add five feet drop and subtract five feet trunk
- All series
 - Three feet trunk for each frame-mounted section
 - Measure each unit drop cable or estimate 2 feet per unit drop cable
 - Add all trunk and drop cable lengths external to the MCC



MCC Cable Types



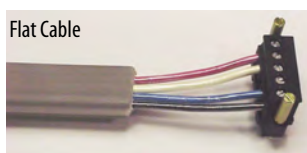
ATTENTION: Do not apply high voltage to any installed DeviceNet cable system or its connectors. The high voltage can destroy internal capacitors in the connectors. Insulation resistance tests can damage the internal capacitors.



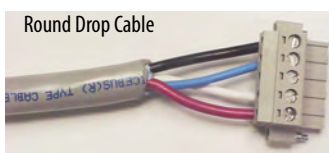
ATTENTION: You can use the Rockwell Automation media checker (catalog number 1788-MCHKR) with MCC DeviceNet installations. The cable length calculation is not accurate because of the internal capacitors in the connectors.

Three types of media (cable) are used in MCCs for DeviceNet communication:

Type	Flat <ul style="list-style-type: none"> • Class 1, 600 Volts, 8 amps • 4 conductor—unshielded 	Round <ul style="list-style-type: none"> • Class 1, 600 Volts, 8 amps • 4 conductor—unshielded 	Round <ul style="list-style-type: none"> • Class 1, 600 Volts, 8 amps • 4 Conductor—shielded
Use	Trunk lines (and drop lines in series L sections)	Connects units to DeviceNet ports (unit drop lines)	Trunk line to extend trunk beyond MCC
Part Number	1485C-P1E75 (75 m spool) 1485C-P1E200 (200 m spool) 1485C-P1E420 (420 m spool)	2100H-DNRC1 (50 m spool)	Belden 7897A, 7896A 1485C-P1BS75 (75 m spool)



Flat Cable



Round Drop Cable



Round Trunk Cable



ATTENTION: If the cable has a shield, it must be grounded at one end only.

IMPORTANT We do not recommend the use of both Class 1- and Class 2-rated cables within the same DeviceNet system. These two cable types are not compatible because the following properties are different:

- Insulation class
- Overcurrent protection requirements
- Network transmission

The use of Class 1- and Class 2-rated cables within the same DeviceNet system can result in application, code, and communication issues.

Terminating Resistors



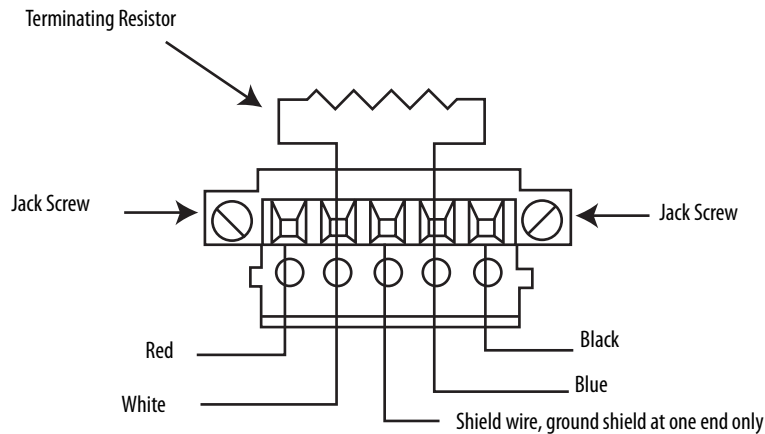
ATTENTION: Before performing any service or maintenance activities on MCC sections, disconnect all power sources.

Terminating resistors are necessary at the ends of trunk lines to reduce reflections of the communication signals on the network. Terminating resistors must be equal to 121 ohms 1%, 1/4 W, metal film (terminating resistor part number 1485A-C2).

IMPORTANT The DeviceNet network operates correctly only when there are exactly two terminating resistors, one at each end of the trunk line.

MCC line-ups ship with a clear bag that contains two, five-terminal plug connectors with terminating resistors installed and two DeviceNet splitter connectors (kit part number 2100H-DNTR1). The resistors are inserted in the second terminal from each end (connected to the white and blue conductors) of both plugs (See [Figure 3](#)). The DeviceNet splitter connector is used to plug two DeviceNet connectors into one wireway port.

Figure 3 - Five-terminal Plug Connector, Plug Number 22112-215-01, with Jack Screws



The bag is attached to a wireway tie bar, in the vertical wireway of the section that contains documentation (identified by a label on the horizontal wireway cover of this section). The vertical wireway door of this section also has a label to identify the kit location: 'DEVICENET TERMINATING RESISTOR KIT LOCATED BEHIND THIS DOOR' (Figure 4). If the section does not contain a vertical wireway, the bag is attached to a wireway tire bar on the right side of the section and the label is on the door of the section.

Figure 4 - DeviceNet Terminating Resistor Kit



Guidelines to Install Terminating Resistors

When you install terminating resistors, apply these two rules:

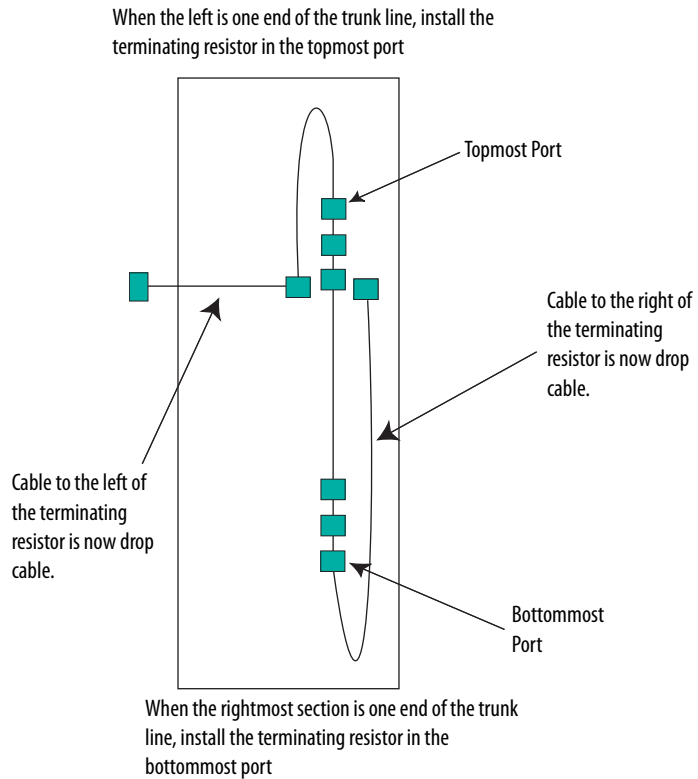
1. Use only two terminating resistors in any network.
2. Install terminating resistors at the ends (communication and/or physical) of the trunk line.

Incorrect placement of terminating resistors and/or the use of more than two resistors causes improper network operation and results in communication losses.

For visibility, accessibility, and safety, the ideal locations for terminating resistors within a DeviceNet MCC are the vertical wireway ports closest to the physical ends of the total trunk line.

- In a leftmost section, this location is the topmost port.
- In a rightmost section, this location is the bottommost port.

When connecting a DeviceNet MCC to remote equipment, the trunk line can end at a device, such as a PLC card. In these instances, install a terminating resistor in the final connector to that device.



IMPORTANT The portion of the MCC trunk line that is to the left of the leftmost terminating resistor and to the right of the rightmost terminating resistor is considered drop cable and must be included in the total drop cable calculations. See [Calculate Cable Lengths](#).

Installing Terminating Resistor Examples

When you install resistors, determine the type of DeviceNet architecture. There are two types of architecture:

- All devices internal to the MCC
- Devices internal and external to the MCC

Installing Terminating Resistors with all Devices Internal to the MCC

This architecture is the simplest. Since all devices are internal to the MCC, no special wiring is necessary.

[Figure 5](#), [Figure 6](#), and [Figure 7](#) show typical designs and placements of terminating resistors.

[Figure 5](#) shows an MCC with a DeviceNet scanner that is located in a section with no plug-in units. In this section, there are no wireway plugs.

Figure 5 - DeviceNet Scanner Installed in a Section; No Other Plug-in Units One DeviceNet Network

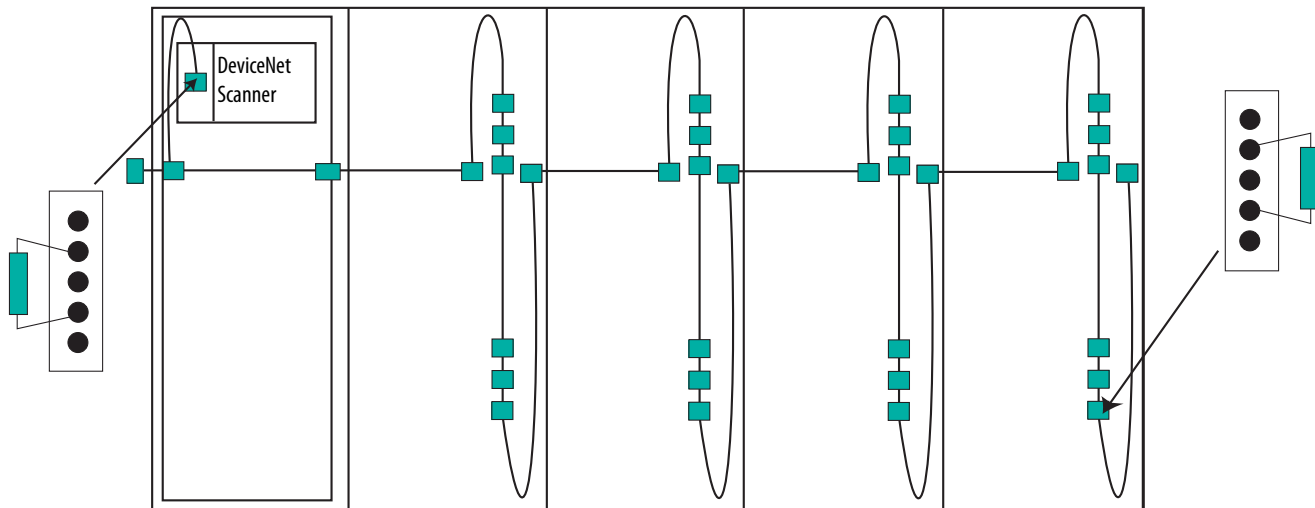


Figure 6 shows a typical MCC with the DeviceNet scanner that is located in a plug-in unit.

Figure 6 - DeviceNet Scanner Installed in a Plug-in Unit One DeviceNet Network

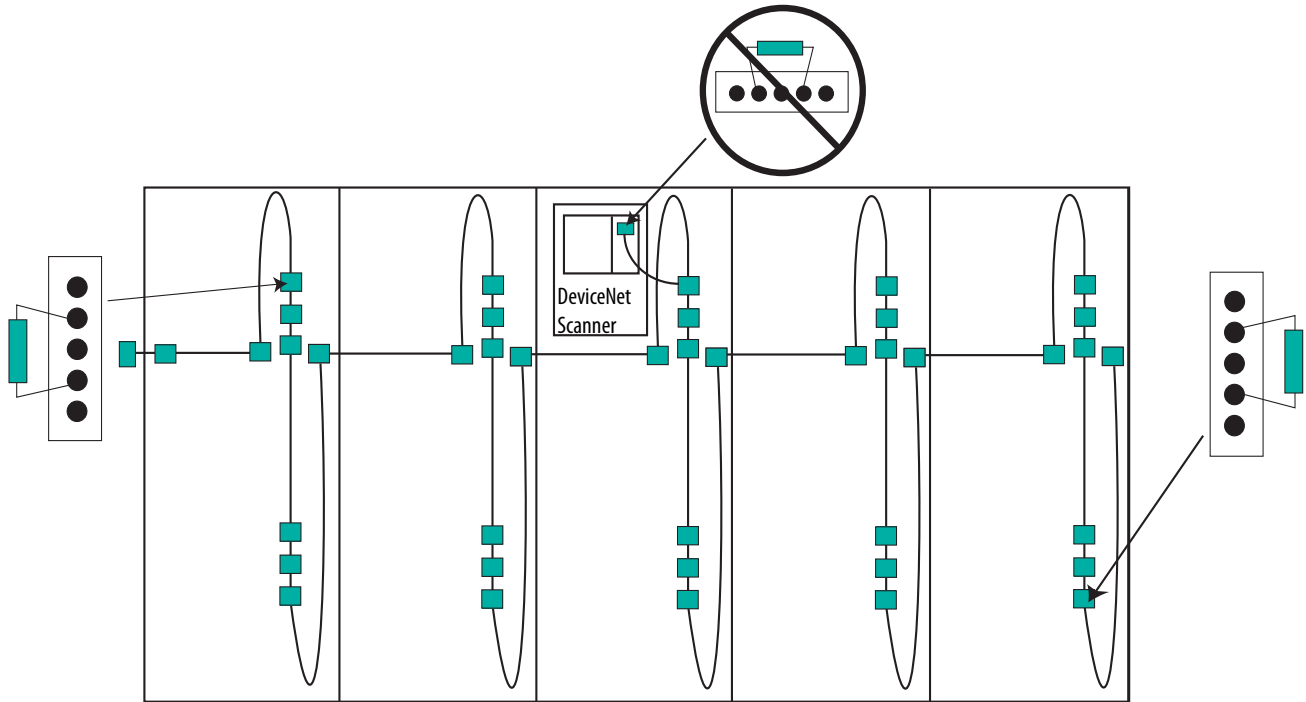
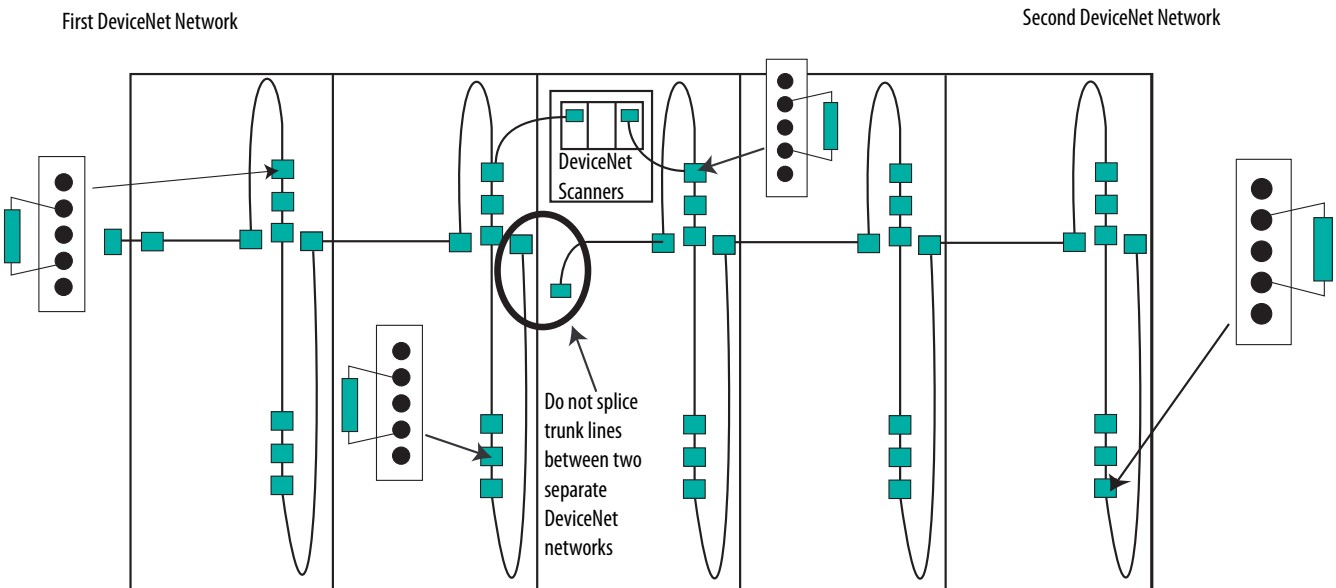


Figure 7 shows an MCC with two DeviceNet scanners and two different networks. When an MCC has two networks, four terminating resistors are needed.

Figure 7 - DeviceNet Scanner Installed in a Plug-in Unit Two DeviceNet Networks



Installing Termination Resistors with Devices Internal and External to the MCC

This architecture is more complex, because external devices must be wired to the internal network of the MCC. Careful attention must be given to the type of cable that is selected and the method of installation.

[Figure 8](#), [Figure 9](#), [Figure 10](#) and [Figure 11](#) show where to place the terminating resistors when you use external devices.

[Figure 8](#) has a DeviceNet scanner remote from the MCC. In this example, the cable from the scanner to the MCC wireway port is an extension of the DeviceNet trunk.

Figure 8 - DeviceNet Scanner Remote from MCC One DeviceNet Network

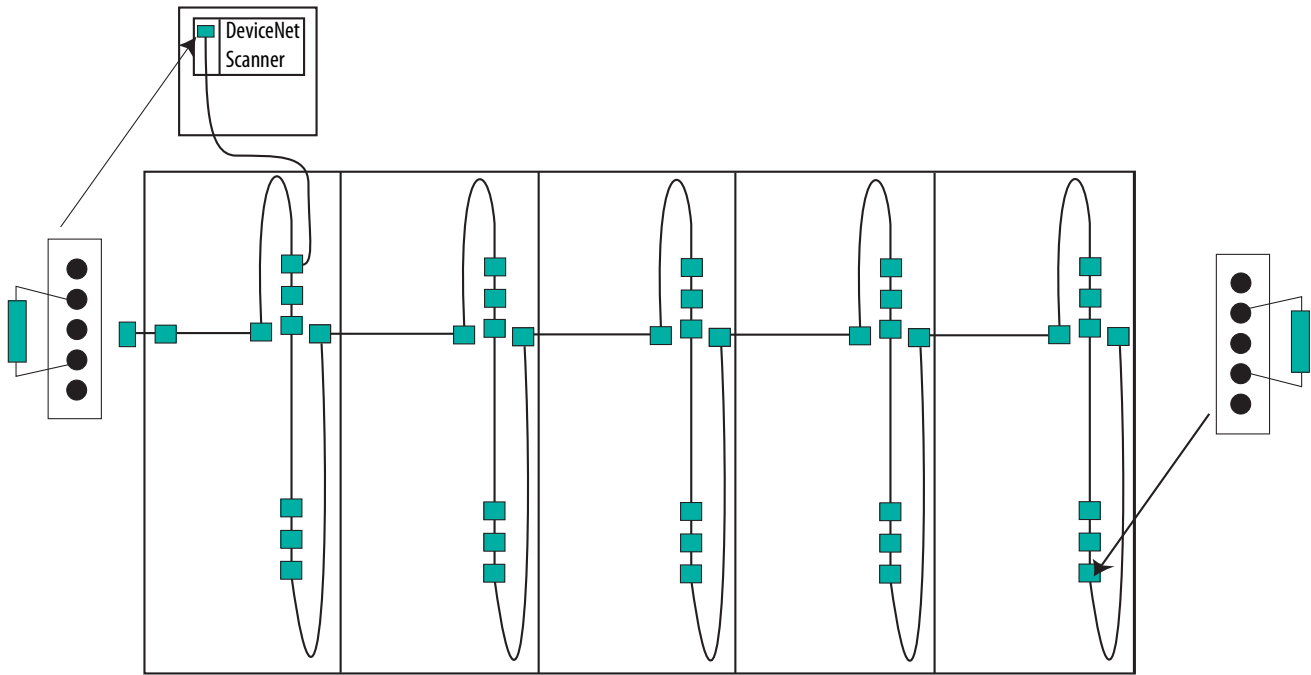


Figure 9 shows one MCC with two DeviceNet networks and two remote scanners. When an MCC has two networks, you use four terminating resistors. In this example, the cable from the scanner to the MCC wireway port is an extension of the DeviceNet trunk.

Figure 9 - DeviceNet Scanner Remote from MCC Two DeviceNet Networks

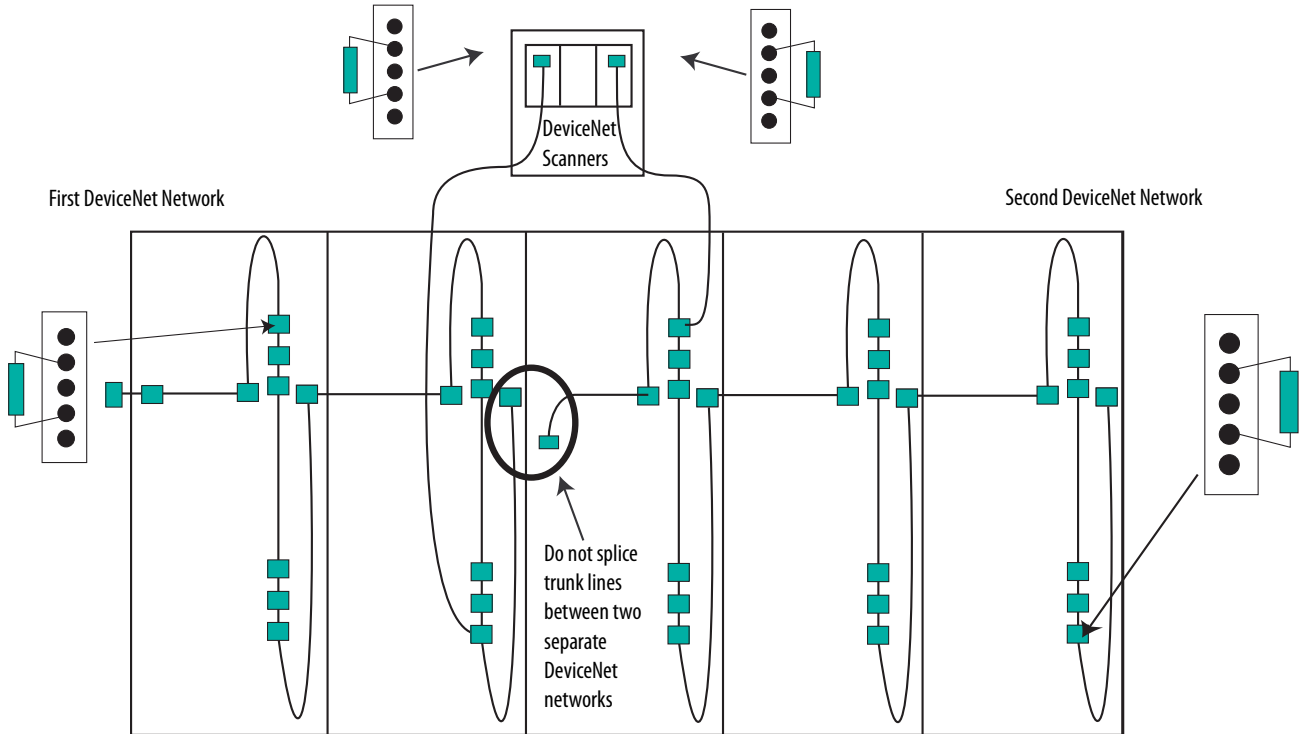


Figure 10 shows two MCC lineups that are connected as one network with one remote scanner. The cable that connects to the two MCCs must be a trunk cable. Also, the cable from the scanner to the MCC wireway port is an extension of the DeviceNet trunk.

Figure 10 - DeviceNet Scanner Remote from MCCs One DeviceNet Network; Divided MCC Line-up

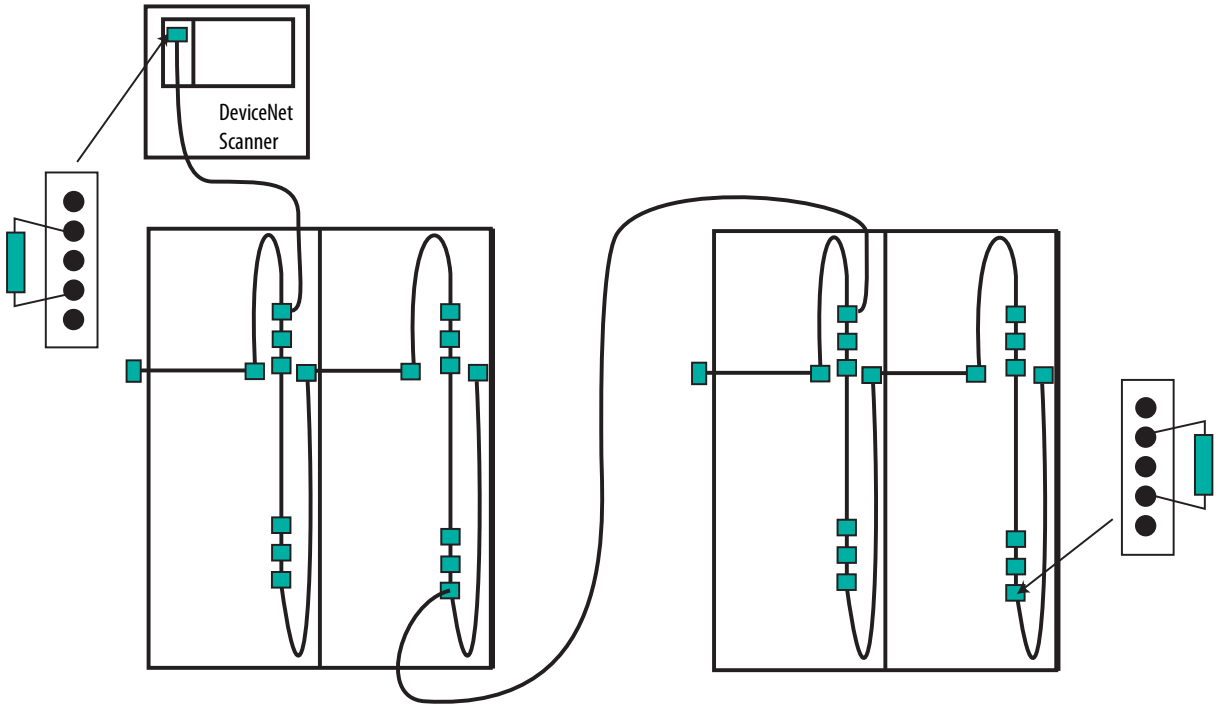
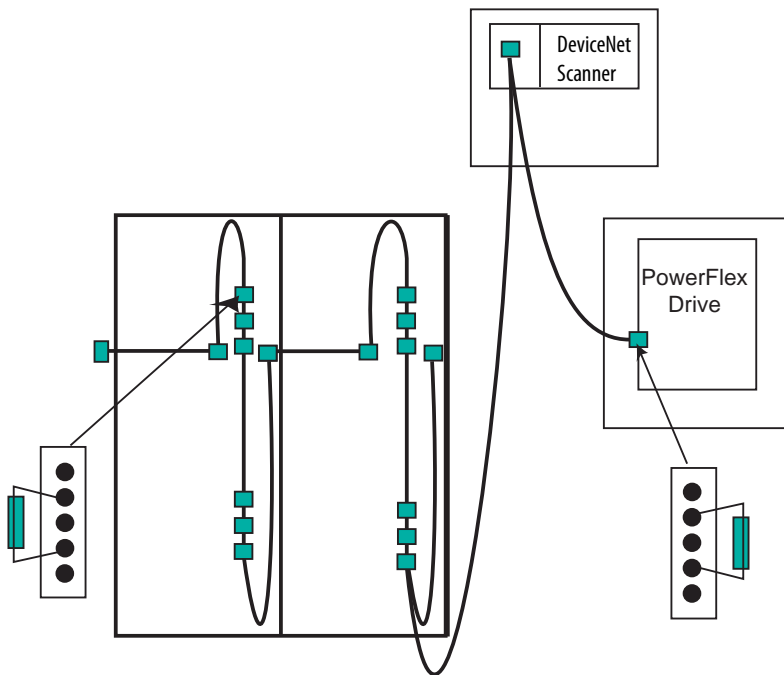
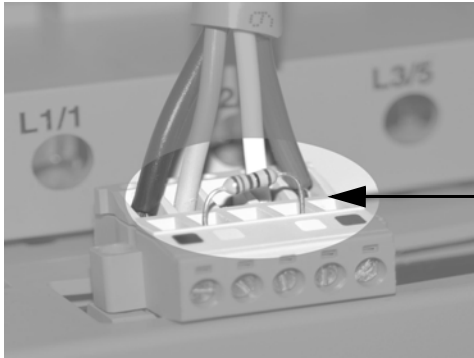


Figure 11 shows a remote scanner and a remote device. This example is one network and all cable external to the MCC must be trunk cable.

Figure 11 - DeviceNet scanner remote from MCCs One DeviceNet Network

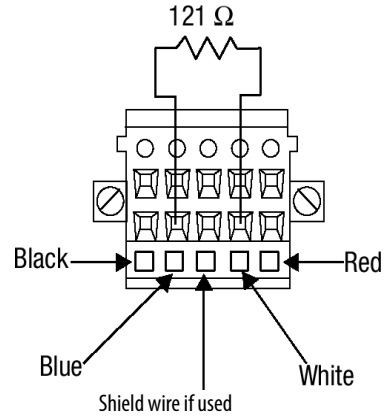


IMPORTANT If the terminating resistor is being placed at a device that is remote from the MCC, remove the resistor from the supplied plug and install the resistor in an open row of terminals on a ten-terminal plug.



Ten-terminal plug connector with terminating resistor plugged into a DeviceNet module

Terminating Resistor



Terminating resistor position in open row of terminals on a ten-terminal plug connector

Add a Motor Control Center Unit to a DeviceNet System

Use this section to add Bulletin 2100 units to a DeviceNet MCC. Each DeviceNet component is factory-wired within the unit and has a communication cable that plugs into the device on one end and generally into a vertical wireway DeviceNet port on the other end.



ATTENTION: Before performing any service or maintenance activities on MCC units or sections, disconnect all power sources.

For a CENTERLINE MCC with a Class 1 DeviceNet cabling system, follow these steps.

1. Determine the proper length of patch cable by measuring from the DeviceNet device in the unit to the DeviceNet port in the vertical wireway.

IMPORTANT You can make the cable as short as is practical; excessive drop lengths can lower data transmission rates. See DeviceNet Media Design and Installation Guide, publication [DNET-UM072](#), for specific design parameters.

2. Cut the cable to the desired length by removing material from the end of the cable that has no connector plug.
3. Strip the cable and attach the separate five-terminal plug connector.
The wire is color-coded for simplified wiring.
4. Insert the one connector into the DeviceNet port on the component in the unit and insert the other plug connector into the DeviceNet port in the vertical wireway.

5. Torque the screws on both connectors to 5 lb•in (0.55 N•m).

If there is a need to plug in more devices than available DeviceNet ports in the vertical wireway, use a DeviceNet splitter connector (catalog number: 1485P-P1J5-UU5). The splitter connector lets you plug two devices into one port.

Figure 12 - Connecting the Unit DeviceNet Cable to the DeviceNet port in the Back of the Vertical Wireway



Splice DeviceNet Communication Cables in Motor Control Centers

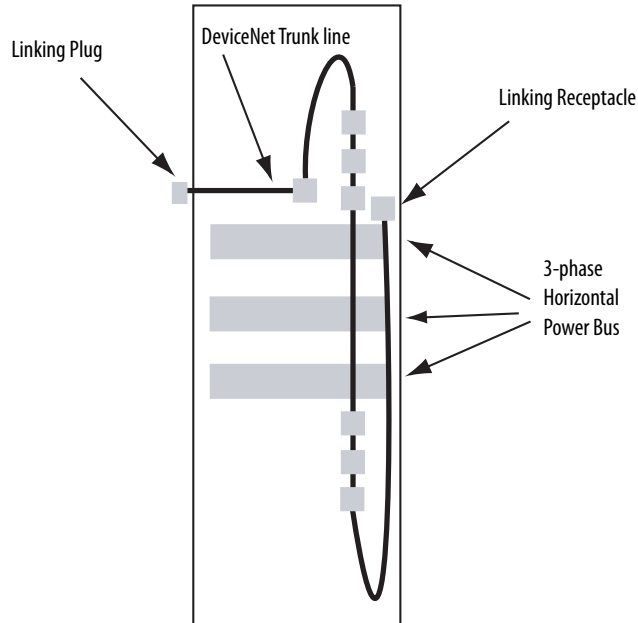
This section describes the recommended procedure for splicing DeviceNet communication cables (trunk lines) in MCCs. Use this section with *Joining and Splicing Vertical Sections*, publication [2100-IN010](#). You can splice cable to the leftmost or rightmost section of an MCC lineup.

1. Join the sections, following the instructions in publication [2100-IN010](#).
2. To access splice connections, remove the red bus cover through the vertical wireway opening.
3. Splice the horizontal bus, following the instructions in publication [2100-IN010](#).
Do not replace covers or plates now.
4. To splice DeviceNet trunk lines between separate sections, connect the linking plug from the right section into the left-section linking receptacle and torque connector screws to 5 lb•in (0.6 N•m).
5. When joining new sections to an existing MCC, remove the terminating resistor from the original final section (the one to which new sections were spliced).
6. Install the terminating resistor according to the [Terminating Resistors](#) information supplied in the sections on pages [8...15](#).

7. When new sections are added, always complete the following design calculations:
- Check the total number of nodes. See [System Architecture](#), which begins on page 3. If the number of nodes exceeds the guidelines, add a network.
 - Recalculate the total power consumption. If power consumption exceeds 8 A, add a power supply.
 - Verify the cumulative trunk length. See [System Architecture](#).
 - Verify the cumulative drop length. See [System Architecture](#).

Figure 13 - MCC Section (Series M)

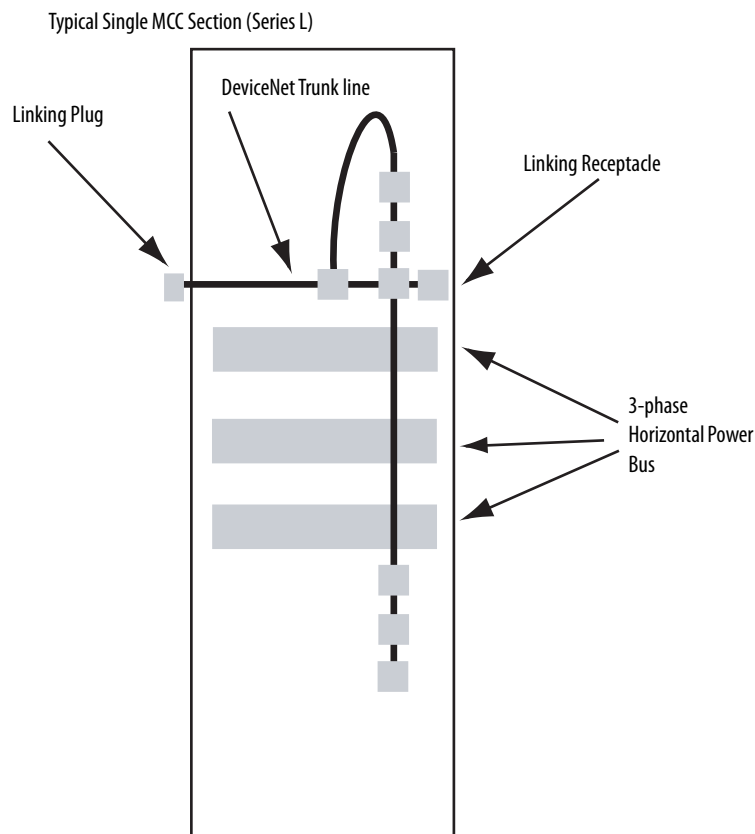
Typical Single MCC Section (Series M)



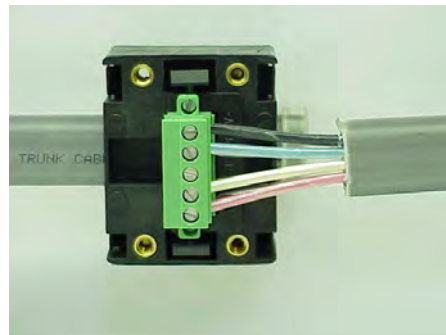
Front View of DeviceNet Splice (Series M)



Figure 14 - MCC Section (Series L)



Front View of DeviceNet Splice (Series L)



DeviceNet Power Supply

IMPORTANT The DeviceNet cable system requires a 24V DC power source to operate. The power supply must satisfy these requirements:

- Meet NEC Class 1 requirements as outlined in Article 725
- Be DeviceNet compatible as specified in the ODVA requirements

Power supplies that do not satisfy both points can result in damage to the DeviceNet signal and components, and a failure to comply with NEC, local codes, and inspection.

We can provide a power supply unit (catalog number 2100-DPS__) with the MCC that meets all DeviceNet network requirements (consult your local Rockwell Automation salesperson or Allen-Bradley distributor). The power supply is available in three configurations:

- With circuit breaker
- With fusible disconnect and control transformer
- With no disconnecting means, which requires a separate 110...120V source
- Redundant configurations are also available



A cable connects the output of the power supply to a DeviceNet port in the back of the vertical wireway. The cable is already connected when the power supply unit ships installed in the MCC.

Remote power supplies are required to meet the following specifications, per ODVA:

- Rated 24V DC ($\pm 1\%$)
- Rise time of less than 250 ms to within 5% of 24V DC at full load of 8 A
- Current limit protection of 8 A continuous and 10 A for the first 250 ms
- Sized correctly to provide each device with its required power—each device typically requires 90...165 mA
- Derated for temperature by using manufacturer guidelines

Connect Power Supplies—Remote or in the MCC Line-Up

Follow these guidelines to connect power supplies to minimize voltage drops in the DeviceNet system and help confirm proper supply voltage to system devices. See DeviceNet Media Design and Installation Guide, publication [DNET-UM072](#), for detailed connecting instructions.

Series M Sections

For line-ups with more than eight sections, connect the power supply to the DeviceNet system within one section, on either side, of the middle of the line-up.

For line-ups with eight or fewer sections, connect the power supply to the DeviceNet system where it is convenient (no location restrictions).

Series L Sections

Connect the power supply to the DeviceNet system where it is convenient (no location restrictions).

Network Grounding at the Power Supply

Ground the DeviceNet cable at only one location. The ideal choice is at the power supply. Ground the power supply and 24V DC common (black wire) by using #8 AWG wire.

Best Grounding Practice

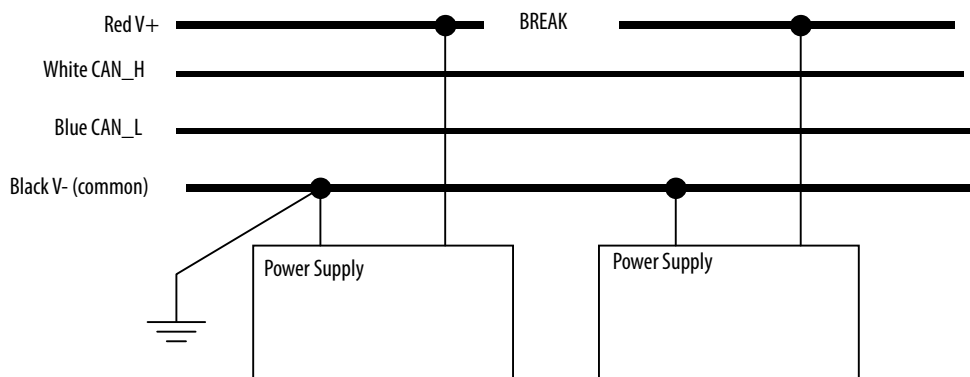
- If the power supply comes installed in the MCC, the black 24V DC common terminal is grounded within the unit. To improve the grounding, use #8 AWG green wire and ground the black 24V DC common terminal to a stable ground *external* to the MCC (or to an optional TE ground inside the MCC).
- If the power supply is external, the same grounding recommendations apply.

Connecting Two Power Supplies

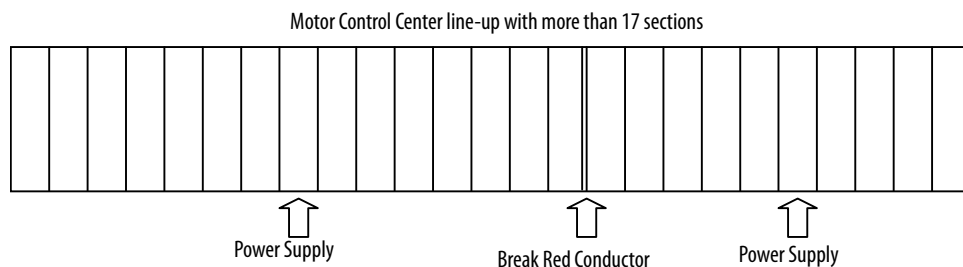
Install an additional 24V DC Class 1 power supply for MCC line-ups with more than 17 sections. When you use two power supplies, you must break the red conductor between the power supplies. Locate a linking connector between sections and disconnect the red conductor ([Figure 15](#)).

Ground only ONE of the two power supplies.

Figure 15 - Connecting Two Power Supplies



Position each power supply to make sure that it feeds a maximum of eight sections to the left or right (see the sample line-up).



MCC line-ups with more than 17 sections can exceed the 75 meters (246 feet) trunk length limit to support 500 Kbps communication. When the trunk length exceeds this limit, 250 Kbps communication is specified.

System Design Installation Checklist

When installing an MCC with DeviceNet network, use the following checklist before you apply power to the network:

- Number of nodes does not exceed 64, with three nodes reserved for scanner (node 00), personal computer (node 62), and new device (node 63)
- Individual drop lengths do not exceed 20 feet (6 m)
- Cumulative drop length does not exceed the desired network communication rate limit: 128 ft (39 m) at 500 Kbps, 256 ft (78 m) at 250 Kbps, or 512 ft (156 m) at 125 Kbps
- Total trunk length does not exceed the maximum allowable per the network communication rate: 246 ft (75 m) at 500 Kbps, 656 ft (200 m) at 250 Kbps, or 1378 ft (420 m) at 125 Kbps

IMPORTANT For MCCs with IntelliCENTER technology, 500 Kbps provides optimum performance, but you can use 250 Kbps. A communication rate of 125 Kbps is not recommended.

- Verify that all devices are programmed to the same communication rate. Autobaud can be used for each device. The scanner then sets the communication rate for the entire system.
- Verify that terminating resistors are in place at the trunk line terminations and measure for proper resistors (121 ohms, 1/4 W, 1%, metal film).
- Verify that the power supply for the system is 24V DC.
- Total power load and distribution points do not exceed 8 A.
- The system has one, and only one, earth ground for the V-.
- There is an earth ground connection.
- All connections are inspected for loose wires, opens, and shorts.

DeviceNet Software Installation Checklist

The following general steps, along with references for more information, are provided to assist with the DeviceNet software installation process.

1. Install the communication card in your personal computer.
2. Load the Windows hardware drivers for the communication card.
3. Load RSNetWorx™ for DeviceNet and RSLinx® software.
4. Configure the RSLinx driver.
 - Within the RSWho function, make sure no unrecognized devices (for example, '?' symbols) appear for any devices. If an unrecognized device appears, load the Electronic Data Sheet (EDS) file. See [How to Find Electronic Data Sheets \(EDS\)](#) on page 23 for further details.

IMPORTANT Do not leave the RSWho constantly browsing. Be sure to close the RSWho screen or disable the Autobrowse.

5. Use RSNetWorx for DeviceNet to program and configure devices (for example, full load current, acceleration rate).

Do not download to a device before uploading from that device. Otherwise, the node and communication rates are overwritten, which requires each device to be individually manually reprogrammed.

Make sure to set communication-loss behavior for each device.

IMPORTANT You can use RSNetWorx for DeviceNet to change communication rates and node numbers, but remember that the devices are normally pre-programmed at the factory.

6. Use RSNetWorx for DeviceNet to program the DeviceNet scanner.

IMPORTANT When you use a 2100-GK61 communication module, keep in mind that there are two extra bytes of receive data for the inputs on the 2100-GK61. Confirm that the number of bytes in the scanner configuration corresponds with the number of bytes in the device. See the 2100-GK61 user manual (publication [2100-UM001](#), chapter 4) for more details.

7. Write the PLC program.

8. If IntelliCENTER software is provided, follow the instructions in the IntelliCENTER Software User Manual, publication [MCC-UM002](#).

How to Find Electronic Data Sheets (EDS)

After installing IntelliCENTER software, you must register an Electronic Data Sheet (EDS) file for each unique device in the MCC. This section details how to perform that task.

Definition of EDS Files

EDS files are simple text files that are used by network configuration tools—such as RSNetWorx, and IntelliCENTER software—to help identify products and easily commission them on a network. EDS files describe a product device type, product revision, and configurable parameters on a DeviceNet network.

Necessary EDS Files

For IntelliCENTER MCCs, the data CD contains a directory (<cdrom>:\<order>\<item>\EDS) of all EDS files necessary for the devices in your IntelliCENTER MCC. The installation program automatically registers the EDS files.

For IntelliCENTER and DeviceNet MCCs, a separated 'EDS file' CD is provided. This CD contains EDS files for all DeviceNet products that are found in MCCs.

Installing EDS Files

The EDS files are installed with a program from Rockwell Software® that is also on the IntelliCENTER data CD (in the same directory as the EDS files). This program is called 'RSHWare.exe.'

To install the EDS files:

1. Run the program RSHWare.exe.
2. Click Add/Remove.
3. Select Register an EDS file. Click Next.
4. Select Register a directory of EDS files.
5. Browse to the EDS directory on the data CD.
6. Click Next.
The Installer displays the test results.
7. Click Next to continue.
8. Change the graphic image for each device if necessary and click Next to continue.
The Installer displays the final task summary.
9. Click Next to continue.
10. Click Finish when completed.

Finding EDS Files for Other Devices

EDS files can be obtained at <https://compatibility.rockwellautomation.com/>.

Uploading EDS Files from the Device

You can use RSNetWorx for DeviceNet to upload an EDS file directly from the device. If an EDS file cannot be found by other methods, refer to the RSNetWorx help file for steps to upload an EDS file.

Additional Resources

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

Resource	Description
CENTERLINE 2100 Motor Control Centers brochure, publication 2100-BR006	Provides information on the product offerings of the CENTERLINE 2100 motor control centers.
IntelliCENTER Software User Manual, publication MCC-UM002	Provides information on the use of IntelliCENTER software.
Integrated, Intelligent Motor Control Centers, publication 2100-WP001	
Joining and Splicing Vertical Sections, publication 2100-IN010	Provides information for joining and splicing vertical sections.
DeviceNet Media Design Installation Guide, publication DNET-UM072	Provides information for planning and installing a DeviceNet network.
KwikLink™ Radiated Immunity Testing, publication 1485-WP001	Provides information for the KwikLink flat media system.
IntelliCENTER software information website. https://ab.rockwellautomation.com/Motor-Control/Motor-Control-Centers/IntelliCENTER-Software	Provides information, documentation, and resources for IntelliCENTER software for CENTERLINE motor control centers.
Motor control centers information website. https://ab.rockwellautomation.com/Motor-Control/Motor-Control-Centers	Provides information, documentation, and resources for motor control centers.
DeviceNet (Allen-Bradley) information website. https://ab.rockwellautomation.com/Networks-and-Communications/DeviceNet-Network	Provides information for DeviceNet products and media.
Electronic data sheets (EDS) files https://compatibility.rockwellautomation.com/	Provides a site to access EDS files for products.
Open DeviceNet Vendor Association (ODVA) https://www.odva.org/	Provides information, documentation, and resources for a DeviceNet network.
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines for installing a Rockwell Automation industrial system.
Product Certifications website, rok.auto/certifications	Provides declarations of conformity, certificates, and other certification details.

You can view or download publications at <http://www.rockwellautomation.com/literature/>.

Notes:

Rockwell Automation Support

Use the following resources to access support information.

Technical Support Center	Knowledgebase Articles, How-to Videos, FAQs, Chat, User Forums, and Product Notification Updates.	www.rockwellautomation.com/knowledgebase
Local Technical Support Phone Numbers	Locate the phone number for your country.	www.rockwellautomation.com/global/support/get-support-now.page
Direct Dial Codes	Find the Direct Dial Code for your product. Use the code to route your call directly to a technical support engineer.	www.rockwellautomation.com/global/support/direct-dial.page
Literature Library	Installation Instructions, Manuals, Brochures, and Technical Data.	www.rockwellautomation.com/literature
Product Compatibility and Download Center (PCDC)	Get help determining how products interact, check features and capabilities, and find associated firmware.	www.rockwellautomation.com/global/support/pcdc.page

Documentation Feedback

Your comments will help us serve your documentation needs better. If you have any suggestions on how to improve this document, complete the How Are We Doing? form at http://literature.rockwellautomation.com/idc/groups/literature/documents/du/ra-du002_-en-e.pdf.

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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