



# Ferrite Core for Internal DPI Cables on PowerFlex® 700S Frame 3 and 4 Drives



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**ATTENTION:** To avoid an electric shock hazard, verify that the voltage on the bus capacitors has discharged before servicing the drive. Check the DC bus voltage at the Power Terminal Block by measuring between the +DC & -DC terminals, between the +DC terminal and the chassis, and between the -DC terminal and the chassis. The voltage must be zero for all three measurements.



**ATTENTION:** HOT surfaces can cause severe burns. **Do not** touch the heatsink surface during operation of the drive. After disconnecting power allow time for cooling.



**ATTENTION:** Hazard of permanent eye damage exists when using optical transmission equipment. This product emits intense light and invisible radiation. Do not look into SynchLink fiber-optic ports or SynchLink fiber-optic cable connectors.



**ATTENTION:** This drive contains **ESD** (Electrostatic Discharge) sensitive parts and assemblies. Static control precautions are required when installing, testing, servicing or repairing this assembly. Component damage may result if ESD control procedures are not followed. If you are not familiar with static control procedures, reference A-B publication 8000-4.5.2, “Guarding Against Electrostatic Damage” or any other applicable ESD protection handbook.

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## What This Kit Contains

Verify that your kit contains the items listed below. If your kit does not contain the correct items, contact your Rockwell Automation sales representative.

- Two Clamp-on Ferrite cores
- Static strap

**Note:** Two Ferrite cores are required for frame 4 drives and one Ferrite core is required for frame 3 drives.

## Tools That You Need

- Standard (flat blade) screwdriver

## What You Need to Do

To install the ferrite core(s):

- Step 1: Remove power from the drive
- Step 2: Open the main drive cover
- Step 3: Install the ferrite core(s)
- Step 4: Close the main drive cover
- Step 5: Document the change

### Step 1: Remove Power from the Drive



**ATTENTION:** To avoid an electric shock hazard, verify that the voltage on the bus capacitors has discharged completely before servicing. Check the DC bus voltage at the Power Terminal Block by measuring between the +DC and -DC terminals, between the +DC terminal and the chassis, and between the -DC terminal and the chassis. The voltage must be zero for all three measurements.

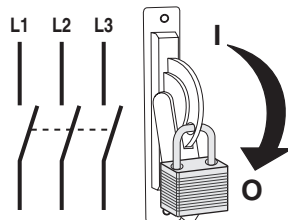
Remove power before making or breaking cable connections. When you remove or insert a cable connector with power applied, an electrical arc may occur. An electrical arc can cause personal injury or property damage by:

- sending an erroneous signal to your system’s field devices, causing unintended machine motion
- causing an explosion in a hazardous environment

Electrical arcing causes excessive wear to contacts on both the module and its mating connector. Worn contacts may create electrical resistance.

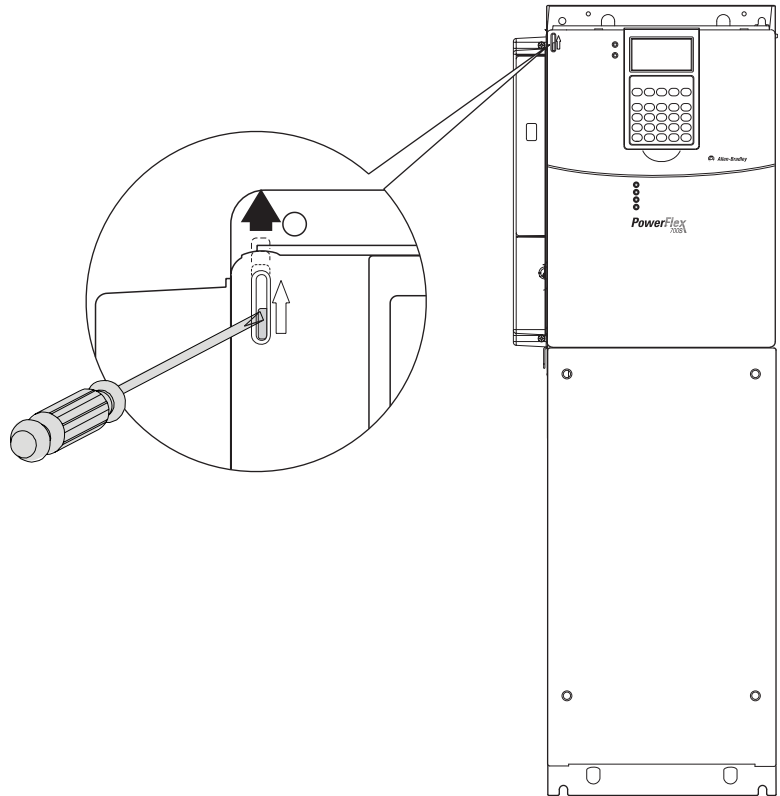
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1. Turn off and lock out input power.
2. Wait five minutes and then verify that there is no voltage at the drive’s input power terminals.
3. Check the DC bus voltage at the Power Terminal Block by measuring between the +DC and -DC terminals, between the +DC terminal and the chassis, and between the -DC terminal and the chassis. The voltage must be zero for all three measurements.



**Step 2: Open the Main Drive Cover**

1. Locate the slot in the upper left corner of the main drive cover.
2. Slide the locking tab up.
3. Swing the cover open. Special hinges allow the cover to move away from the drive and lay on top of the adjacent drive (if present).



**Step 3: Install the Ferrite Core(s)**

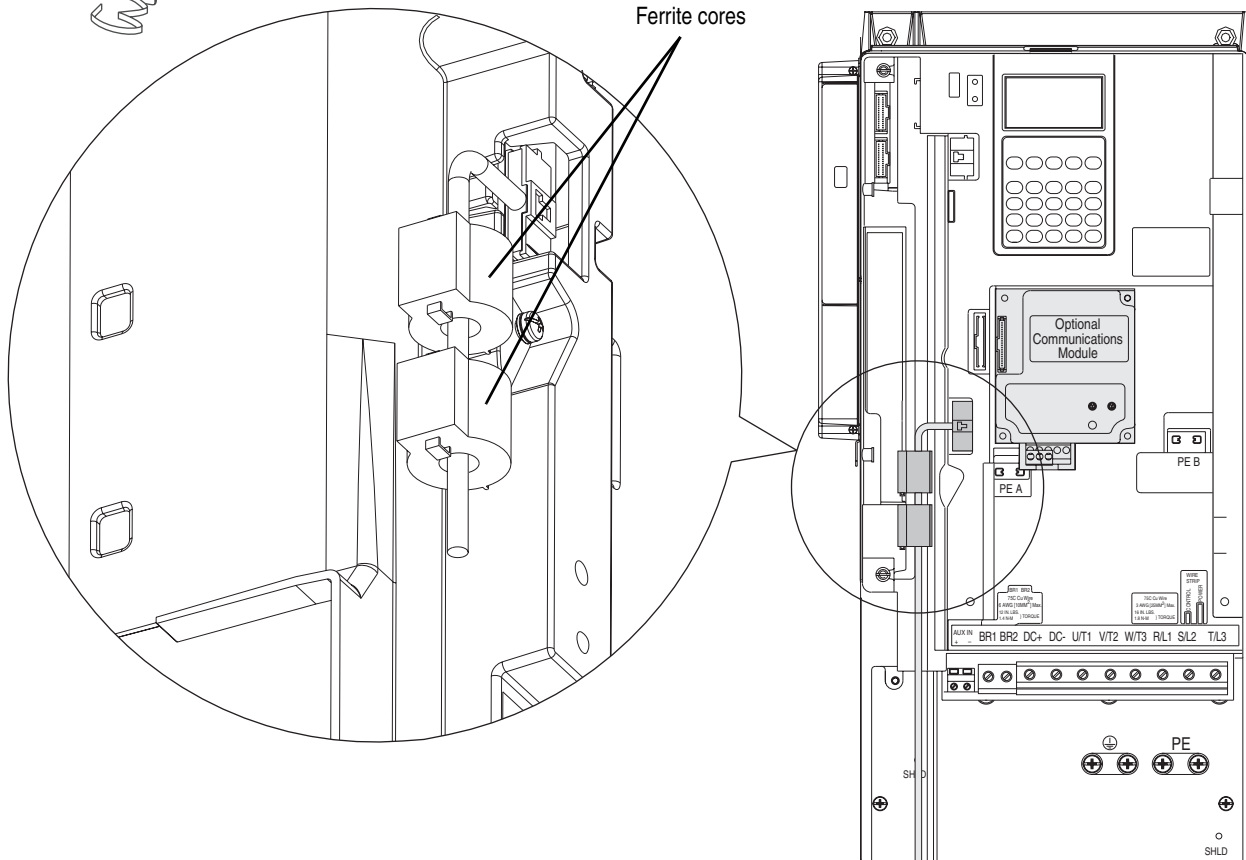
1. Open the ferrite core case(s) and place the core(s) on the internal DPI cable connected to Port 2.

**Important:** Two Ferrite cores are required for frame 4 drives and one Ferrite core is required for frame 3 drives.

**Important:** The core(s) must be placed as close as possible to the connector on the communication module circuit board.



**Example of frame 4 drive shown.**



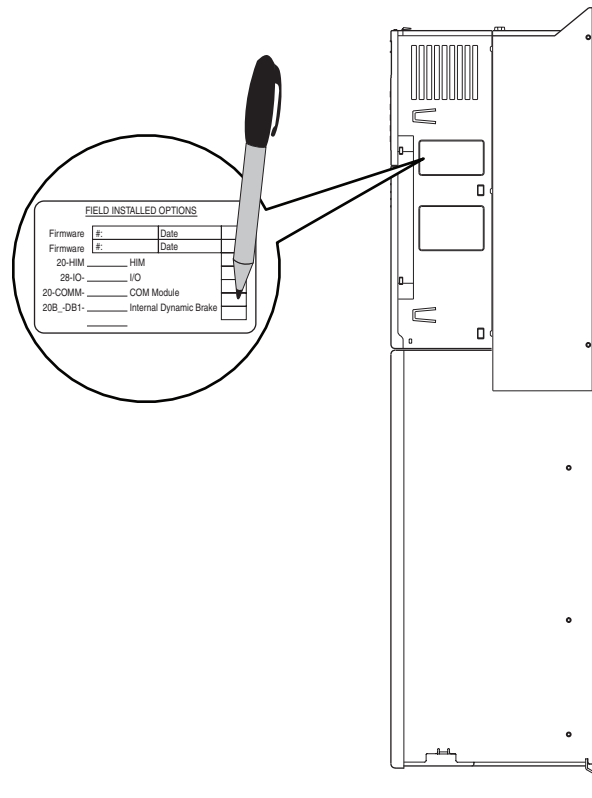
2. Close the ferrite core case(s).

**Step 4: Close the Main Drive Cover**

Close the main drive cover in reverse order of opening (refer to Step 2: [Open the Main Drive Cover on page 3](#)).

**Step 5: Document the Change**

Document the installation of the ferrite core(s) on the “Field Installed Options” label located on the side of the drive.



## Technical Support Options

For U.S. Allen-Bradley Drives Technical Support:

Telephone:	(1) 262.512.8176
Fax:	(1) 262.512.2222
Email:	support@drives.ra.rockwell.com
Online:	<a href="http://www.ab.com/support/abdrives">www.ab.com/support/abdrives</a>

Rockwell Automation provides technical information on the web to assist you in using our products. At <http://support.rockwellautomation.com>, you can find technical manuals, a knowledge base of FAQs, 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.

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://support.rockwellautomation.com>.

## Installation Assistance

If you experience a problem with a hardware module 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 module up and running:

United States	1.440.646.3223 Monday – Friday, 8am – 5pm EST
Outside United States	Please contact your local Rockwell Automation representative for any technical support issues.

## New Product Satisfaction Return

Rockwell tests all of our 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:

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

[www.rockwellautomation.com](http://www.rockwellautomation.com)

### Power, Control and Information Solutions

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Europe/Middle East/Africa: Rockwell Automation SA/NV, Vorstlaan/Boulevard du Souverain 36, 1170 Brussels, 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