



# PowerFlex 20-HIM-A3/-A5/-C3S/-C5S Series C HIM Firmware 6.001

This release note describes major revision 6, minor revision 1 of firmware for the PowerFlex 20-HIM-A3/-A5/-C3S/-C5S Series C HIM (Human Interface Module).

**Important:** Firmware 6.001 can only be updated into a 20-HIM-A3/-A5/-C3S/-C5S Series C HIM and is not compatible with a 20-HIM-A3/-A5/-C3S/-C5S Series A or Series B HIM. Conversely, firmware 5.001 or earlier is not compatible with a 20-HIM-A3/-A5/-C3S/-C5S Series C HIM.

## Introduction

The following information is included in this document:

Topic	Page
<a href="#">Enhancements</a>	<a href="#">1</a>
<a href="#">Corrected Anomalies</a>	<a href="#">1</a>
<a href="#">Determining Firmware Revision</a>	<a href="#">2</a>
<a href="#">Firmware Updating</a>	<a href="#">4</a>
<a href="#">Restrictions</a>	<a href="#">7</a>
<a href="#">Compatible Revisions</a>	<a href="#">8</a>
<a href="#">Rockwell Automation Support</a>	<a href="#">8</a>
<a href="#">Product Satisfaction Return</a>	<a href="#">8</a>

## Enhancements

This section describes the enhancement provided in this revision of firmware.

- Added support for the Preload Reference Event which is used for bumpless transfer with PowerFlex 700VC and PowerFlex 700H drives.
- The redesigned and simplified circuit board provides better HIM reliability.
- The HIM can now flash the LCD backlight to annunciate that a fault or alarm is present by using newly added Parameters 5 - [Fault Dspy Type] and 6 - [Alarm Dspy Type].
- The HIM is now brand-neutral, allowing it to successfully connect to and be used with an Allen-Bradley brand DPI drive (PowerFlex 7-Class) or a Reliance Electric brand DPI drive.













## Corrected Anomalies

There are no anomalies corrected in this revision of firmware.

## Determining Firmware Revision

This section describes procedures to determine the firmware revision of your PowerFlex 20-HIM-A3 / -A5 / -C3S / -C5S Series C HIM.

### Using the 20-HIM-A3 / -A5 / -C3S / -C5S HIM

Step	Example Screens
1. In the Main Menu, press the  or  key to scroll to <b>Device Select</b> .	<pre> F-&gt;   Stopped     Auto ----- ----- -----         0.0        Hz ----- ----- ----- Main Menu: Parameter <b>Device Select</b> Memory Storage                     </pre>
2. Press the  (Enter) key to enter this selection.	<pre> F-&gt;   Stopped     Auto ----- ----- ----- Pt1: 20-HIM-xx SER C Main Menu: <b>Diagnostics</b> Parameter Device Select                     </pre>
3. Press the  or  key to scroll to <b>20-HIM-xx SER C</b> .	<pre> F-&gt;   Stopped     Auto ----- ----- ----- Pt1: 20-HIM-xx SER C Diagnostics: Events Device Items <b>Device Version</b>                     </pre>
4. Press the  (Enter) key to display the HIM Main Menu.	<pre> F-&gt;   Stopped     Auto ----- ----- ----- Pt1: 20-HIM-xx SER C   ▲Prev ▼Next 20-HIM-xx SER C  FW: 5.004 HW: B Date: 11/14/2009                     </pre>
5. In the HIM Main Menu, press the  or  key to scroll to <b>Diagnostics</b> .	
6. Press the  (Enter) key to enter this selection.	
7. Press the  or  key to scroll to <b>Device Version</b> .	
8. Press the  (Enter) key to display the Product Data screen.	

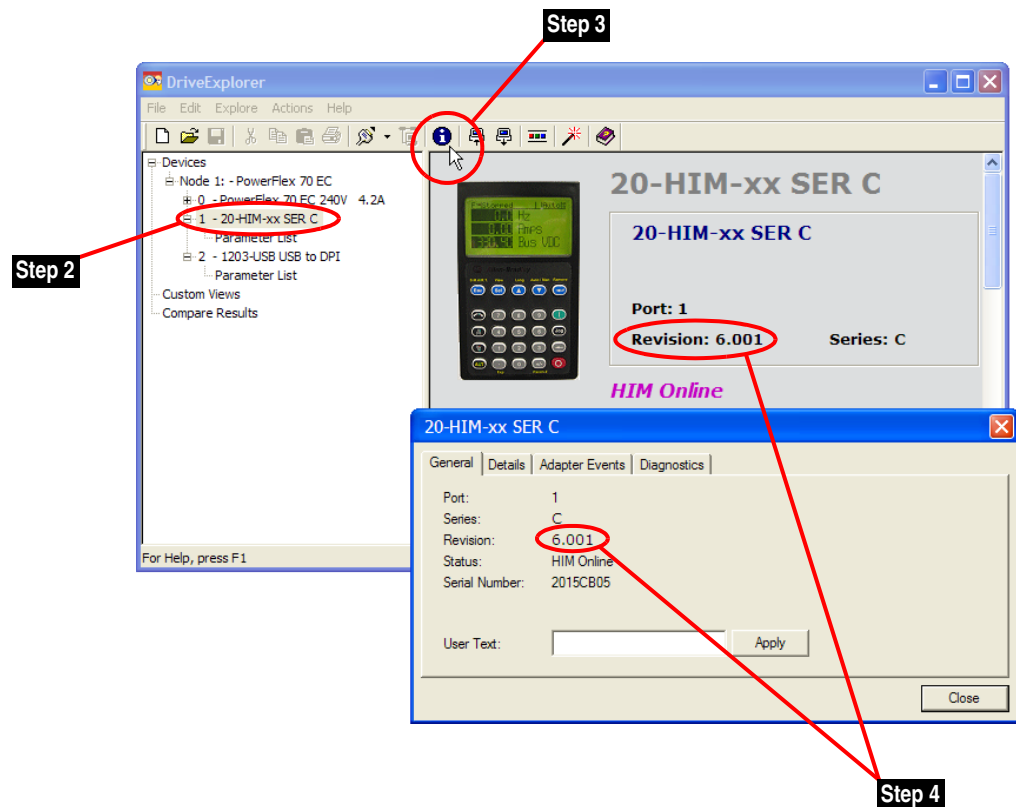
## Using DriveExplorer Lite/Full

1. Launch DriveExplorer and go online (via 1203-USB or 1203-SSS converter) with the drive that is connected to the HIM. As an alternative when using DriveExplorer Full, you can go online with the drive on Ethernet through a connected 20-COMM-E communication adapter.
2. In the DriveExplorer treeview, click on the 20-HIM-xx SER C as shown in [Figure 1](#).
3. Click the information icon to display the HIM's Properties screen.
4. The "Revision:" field shows the present revision (for example, 5.004) of the HIM firmware.



**TIP:** When clicking on the 20-HIM-xx SER C using version 5.01 or higher DriveExplorer Lite/Full, the HIM firmware revision is also shown in the right pane of the DriveExplorer window.

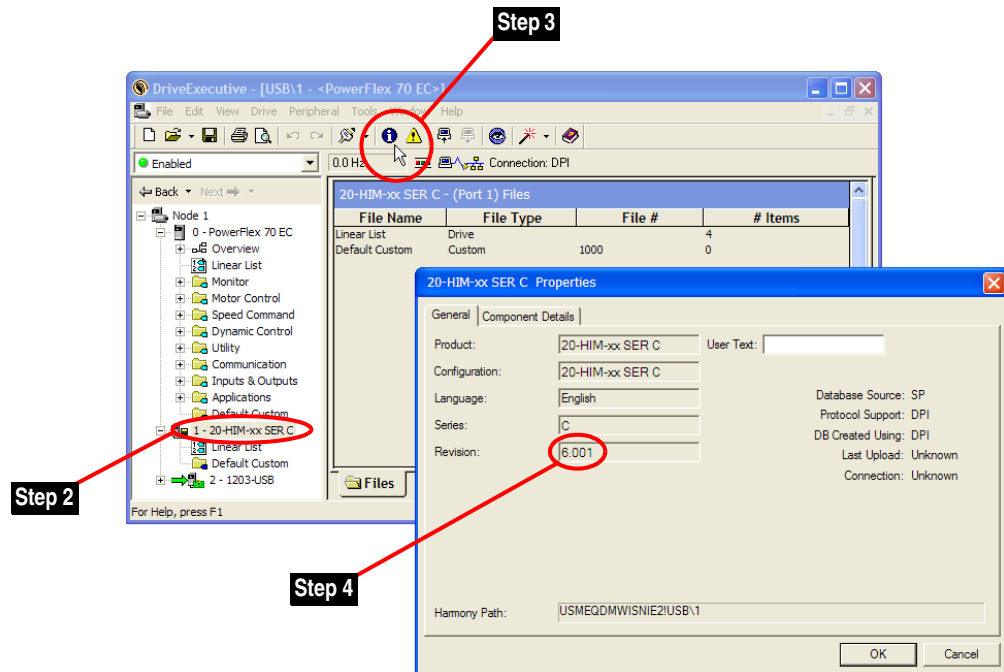
**Figure 1 Information Icon in DriveExplorer Window**



## Using DriveExecutive

1. Launch DriveExecutive and go online (via 1203-USB or 1203-SSS converter) with the drive that is connected to the HIM.
2. In the DriveExecutive treeview, click on 20-HIM-xx SER C as shown in [Figure 2](#).
3. Click the information icon to display the HIM's Properties screen.
4. The "Revision:" field shows the present revision (for example, 5.004) of the HIM firmware.

**Figure 2** Information Icon in DriveExecutive Window



## Firmware Updating

This section describes procedures to update your HIM firmware. Flash kits for drives, communications adapters, and peripherals are provided on the Allen-Bradley Web Updates site located at <http://www.ab.com/support/abdrives/webupdate>. Updating can only be performed using a 1203-USB or 1203-SSS converter. For information about how to connect to your drive, see the 1203-USB or 1203-SSS User Manual. They can be viewed/downloaded on the Literature Library web site located at [www.literature.rockwellautomation.com](http://www.literature.rockwellautomation.com).



**ATTENTION:** Risk of permanent equipment damage exists. Once an update has been started, do not remove power from the drive until after the download has completed and the HIM has re-initialized with the connected drive. If power is removed before this occurs, the HIM may be permanently damaged. A HIM that has been damaged in this way cannot be repaired.

## Installing the Flash Kit

1. Go to the Allen-Bradley Web Updates site at <http://www.ab.com/support/abdrives/webupdate> and install the flash kit for the PowerFlex 7-Class HIM Series C. (This also automatically installs the ControlFLASH software on your computer.)
2. You are now ready to use DriveExplorer, DriveExecutive, ControlFLASH or HyperTerminal to update the HIM. Refer to the respective section below and follow the instructions.

## Using DriveExplorer Lite/Full to Update Firmware

1. With the Flash Kit installed (see [Installing the Flash Kit](#)), launch DriveExplorer and go online (via a 1203-USB or 1203-SSS converter) with the drive that is connected to the HIM.
2. In the DriveExplorer treeview, click on 20-HIM-xx SER C. Then click the information icon as shown in [Figure 1](#) to display the HIM's Properties screen.
3. On the HIM Properties screen, click the Details tab.

**Important:** This update may cause the HIM parameters to revert to their default values. You may want to save your configuration using DriveExplorer or the HIM CopyCat feature before updating.

4. To start the update, click the **Flash Update...** button. Then select "6.001.xx" from the list of available updates and click **Next >**. Follow the remaining screen prompts until the update procedure completes and displays the new firmware revision (6.001).

## Using DriveExecutive to Update Firmware

1. With the Flash Kit installed (see [Installing the Flash Kit](#)), launch DriveExecutive and go online (via 1203-USB or 1203-SSS converter) with the drive that is connected to the HIM.
2. In the DriveExecutive treeview, click on the 20-HIM-xx SER C. Then click the information icon as shown in [Figure 2](#) to display the HIM's Properties screen.
3. On the HIM Properties screen, click the Component Details tab.

**Important:** This update may cause the HIM parameters to revert to their default values. You may want to save your configuration using DriveExecutive or the HIM CopyCat feature before updating.

4. To start the update, click the **Flash Update** button. Then select the 20-HIM-xx SER C from the list of available devices and click **Next >**.

5. Select “6.001.xx” from the list of available updates and click **Next >**. Follow the remaining screen prompts until the update procedure completes and displays the new firmware revision (6.001).

### Using ControlFLASH to Update Firmware

1. With the Flash Kit installed (see [Installing the Flash Kit on page 5](#)), launch ControlFLASH by selecting **Start > (All) Programs > Flash Programming Tools > ControlFLASH**.
2. On the ControlFLASH Welcome screen, click **Next >**.
3. Choose the 20-HIM-Ax (even though, for example, you may be flash updating a 20-HIM-CxS) from the list and click **Next >**.

**Important:** This update may cause the HIM parameters to revert to their default values. You may want to save your configuration using the HIM CopyCat feature, DriveExplorer or DriveExecutive before updating.

4. Expand the treeview for the communication path you are using, and select the drive icon that represents the drive connected to the HIM you are flash updating. Then click **OK**.
5. If the Multiple Assemblies Found window is displayed, select “Port X - 20-HIM-xx SER C” from the list and click **OK**.
6. With the Firmware Revision window displayed, select “6.001.xx” from the list of available updates and click **Next >**. Follow the remaining screen prompts until the update procedure completes and displays the new firmware revision (6.001).

### Using HyperTerminal to Update Firmware

1. With the Flash Kit installed (see [Installing the Flash Kit on page 5](#)), launch HyperTerminal and go online (via 1203-USB or 1203-SSS converter) with the drive that is connected to the HIM.
2. Press the **Enter** key until the main menu ([Figure 3](#)) appears.

**Figure 3 Main Menu**

```
Main Menu - Enter Number for Selection
1> Display Setup Parameters
2> Display Event Queue
3> Flash Upgrade
```

3. In the main menu, press **3** to flash update. Then press the number key that corresponds to the “20-HIM-xx SER C” in the list, and press **Y** (for Yes) to update the firmware. The terminal program will start displaying the letter “C.” This signals the XMODEM protocol that the download may proceed. You then have one minute to start the transfer.

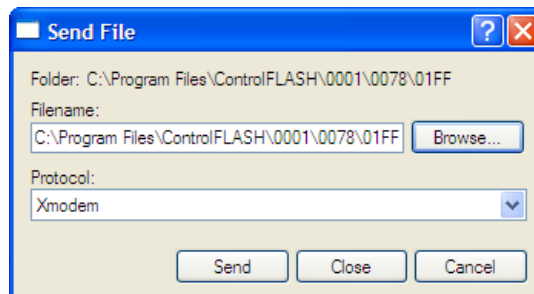


**ATTENTION:** Risk of injury or equipment damage exists. When you perform an update, the drive will fault if it is receiving control I/O. Verify that the drive has stopped safely before beginning an update.

4. Select **Transfer > Send File** to display the Send File screen (Figure 4).
5. Click **Browse** and navigate to the flash file located in:

C:\Program Files\ControlFLASH\0001\0078\01FF

**Figure 4 Send File Screen**



6. In the Select File to Send window list, click on the “20-HIM-Ax BOOT 3.001.04.bin” file. Then click **Open**. This file name now appears in the Filename box in the Send File screen.
7. In the Protocol box, select “Xmodem.”
8. Click **Send**. A dialog box appears and reports the progress of the update. When it is complete, the message “Flash Complete” appears. Press any key to continue.

**Important:** Keep the HIM powered for 15 seconds after the operation has completed or until the HIM has re-initialized with the connected drive.



**TIP:** To cancel the firmware update at any time, press **CTRL-X**.

9. Repeat steps 2 through 8 for the “20-HIM-Ax APP 6.001.07.bin” file.
10. Press the **Enter** key to return to the main menu.

## Restrictions

No restrictions apply to this revision of firmware.

## Compatible Revisions

To use this revision of firmware, update your system tools as follows:

Update this...	To this or later...
DriveExplorer Lite/Full	4.01
DriveExecutive	3.01
PowerFlex 7-Class Drive	all revisions compatible
20-HIM-xx Series C HIM	all revisions compatible
RSLinx Classic	2.43

## Rockwell Automation Support

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 Frequently Asked Questions (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.

Rockwell Automation also provides complimentary phone support for drives, communication adapters, and peripherals. If you experience a problem with the HIM, please review the information in its User Manual. For further help in getting your HIM operational, contact a Customer Support representative:

United States	(1) 262.512.8176 Monday – Friday, 7am – 6pm CST
Outside United States	Please contact your local Rockwell Automation representative for any technical support issues.

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>.

## Product Satisfaction Return

Rockwell Automation tests all 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 to complete the return process.
Outside United States	Please contact your local Rockwell Automation representative for return procedure.

U.S. Allen-Bradley Drives Technical Support - Tel: (1) 262.512.8176, Fax: (1) 262.512.2222, Email: [support@drives.ra.rockwell.com](mailto:support@drives.ra.rockwell.com), Online: [www.ab.com/support/abdrives](http://www.ab.com/support/abdrives)

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