



## Artisan Technology Group is your source for quality new and certified-used/pre-owned equipment

- FAST SHIPPING AND DELIVERY
- TENS OF THOUSANDS OF IN-STOCK ITEMS
- EQUIPMENT DEMOS
- HUNDREDS OF MANUFACTURERS SUPPORTED
- LEASING/MONTHLY RENTALS
- ITAR CERTIFIED SECURE ASSET SOLUTIONS

### SERVICE CENTER REPAIRS

Experienced engineers and technicians on staff at our full-service, in-house repair center

### *InstraView*<sup>SM</sup> REMOTE INSPECTION

Remotely inspect equipment before purchasing with our interactive website at [www.instraview.com](http://www.instraview.com) ↗

### WE BUY USED EQUIPMENT

Sell your excess, underutilized, and idle used equipment. We also offer credit for buy-backs and trade-ins. [www.artisanng.com/WeBuyEquipment](http://www.artisanng.com/WeBuyEquipment) ↗

### LOOKING FOR MORE INFORMATION?

Visit us on the web at [www.artisanng.com](http://www.artisanng.com) ↗ for more information on price quotations, drivers, technical specifications, manuals, and documentation

**Contact us:** (888) 88-SOURCE | [sales@artisanng.com](mailto:sales@artisanng.com) | [www.artisanng.com](http://www.artisanng.com)



## **Recommended Filtering for Auxiliary +5V Logic Power of the Ultra3000™ Digital Servo Drives**

### **Catalog Numbers:**

<b>2098-DSD-005</b>	<b>2098-DSD-010</b>	<b>2098-DSD-020</b>
<b>2098-DSD-005X</b>	<b>2098-DSD-010X</b>	<b>2098-DSD-020X</b>
<b>2098-DSD-005-DN</b>	<b>2098-DSD-010-DN</b>	<b>2098-DSD-020-DN</b>
<b>2098-DSD-005X-DN</b>	<b>2098-DSD-010X-DN</b>	<b>2098-DSD-020X-DN</b>
<b>2098-DSD-005-SE</b>	<b>2098-DSD-010-SE</b>	<b>2098-DSD-020-SE</b>

Use this document in conjunction with the *Ultra3000 Digital Servo Drives Installation Manual* (2098-IN003x-EN-P).

### **Explanation of Condition**

The 500W, 1kW, and 2kW models of the 230V Ultra3000 Family support powering of drive logic with an external +5V power supply, independent of the main AC supply. Certain installations utilizing this feature may report erroneous IPM faults. In such instances, the display flashes an E..0..5 error code.

The following combination of installation features is generally associated with the occurrence of this problem on the drives listed above:

- Use of the auxiliary +5V logic power supply feature.
- Motor power cables longer than 15 m (50 ft).
- Inadequate or non-existent AC input line filtering.

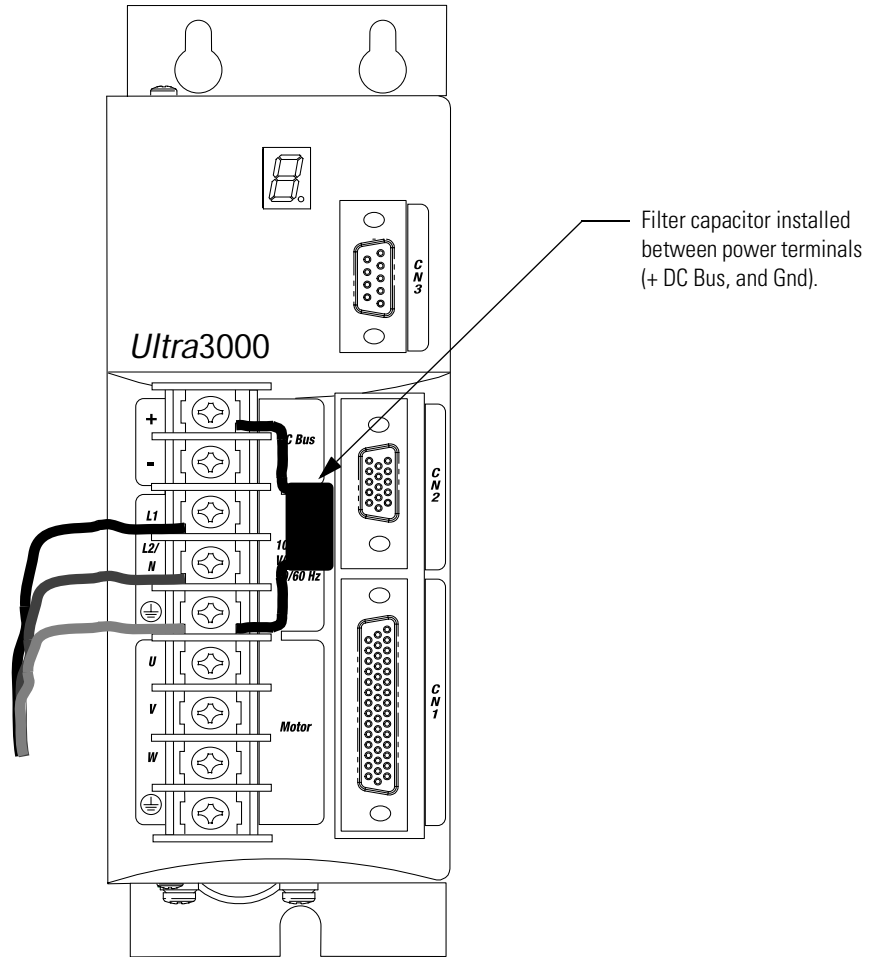
### **Recommended Solution**

In most cases, a properly installed AC line filter provides the necessary filtering to eliminate the erroneous faults. Refer to *System Design for Control of Electrical Noise* (publication GMC-RM001x-EN-P) for recommended installation guidelines of AC line filters.

If an AC line filter is not practical for the application, or does not provide adequate filtering, a filter capacitor can be installed directly on the power terminal block as shown in Figure 1. Contact Technical

Support and a filter capacitor will be shipped free of charge. In the U.S. call 952-914-3990, and in Europe call 44 1270 580142.

**Figure 1 Filter Capacitor Installation on Ultra3000 Drive**



Allen-Bradley is a registered trademark of Rockwell Automation.  
Ultra3000 is a trademark of Rockwell Automation.  
SERCOS is a trademark of the Interests Group SERCOS interface c.V. (IGS).

[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, 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

Publication 2098-DU001A-EN-P — February 2002

0013-2050-001

Copyright © 2002 Rockwell Automation. All rights reserved. Printed in the USA.



## Artisan Technology Group is your source for quality new and certified-used/pre-owned equipment

- FAST SHIPPING AND DELIVERY
- TENS OF THOUSANDS OF IN-STOCK ITEMS
- EQUIPMENT DEMOS
- HUNDREDS OF MANUFACTURERS SUPPORTED
- LEASING/MONTHLY RENTALS
- ITAR CERTIFIED SECURE ASSET SOLUTIONS

### SERVICE CENTER REPAIRS

Experienced engineers and technicians on staff at our full-service, in-house repair center

### *InstraView*<sup>SM</sup> REMOTE INSPECTION

Remotely inspect equipment before purchasing with our interactive website at [www.instraview.com](http://www.instraview.com) ↗

### WE BUY USED EQUIPMENT

Sell your excess, underutilized, and idle used equipment. We also offer credit for buy-backs and trade-ins. [www.artisanng.com/WeBuyEquipment](http://www.artisanng.com/WeBuyEquipment) ↗

### LOOKING FOR MORE INFORMATION?

Visit us on the web at [www.artisanng.com](http://www.artisanng.com) ↗ for more information on price quotations, drivers, technical specifications, manuals, and documentation

**Contact us:** (888) 88-SOURCE | [sales@artisanng.com](mailto:sales@artisanng.com) | [www.artisanng.com](http://www.artisanng.com)