



Ultra5000 Intelligent Positioning Drive Installation Manual

Catalog Numbers 2098-IPD-005, 2098-IPD-005-DN,
2098-IPD-010, 2098-IPD-010-DN,
2098-IPD-020, 2098-IPD-020-DN

This document updates information about the 500, 1000, and 2000 Watt Ultra5000 drive products.

Use this document in conjunction with the Ultra5000 Intelligent Positioning Drive Installation Manual, publication [2098-IN001](#). To obtain a copy, contact your local Rockwell Automation office or distributor, or access the document on-line at <http://literature.rockwellautomation.com>.

The power board electronics have changed on these drives. The change includes an enhancement to the in-rush current limiting circuitry that lowers the maximum in-rush current from 100A to 20A, and changes the maximum power-up/power-down cycle rate from two contactor cycles per minute to once every 10 seconds for up to two minutes, not to exceed 12 cycles in five minutes. The hardware upgrade results in a series change (from A to B) for the drives.

Firmware and software supporting this change include:

- Ultra5000 Main firmware version 1.10
Ultra5000 Boot firmware version 1.06
Ultra5000 FPGA firmware version 1.06
- Ultraware version 1.63 is required to download firmware to Series B drives containing the new power board.

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Replace the General Power Specifications table with the one shown below. The new table includes in-rush current specifications for 500, 1000, and 2000 Watt Ultra5000 drives configured as Series A, or Series B drives.

General Power Specifications**2098-IPD-005-xx, -010-xx, and -020-xx**

The table below lists general power specifications and requirements for the Ultra5000 230V drives.

Specification	Description		
	2098-IPD-005, 2098-IPD-005-DN	2098-IPD-010, 2098-IPD-010-DN	2098-IPD-020, 2098-IPD-020-DN
AC Input Voltage ¹	100-240V _{rms} Single Phase		
AC Input Frequency	47 - 63 Hz		
AC Input Current ²			
Nominal	5A _{rms}	9A _{rms}	18A _{rms}
Maximum inrush (230V ac input) ³	100A (0-peak) - Series A 20A (0-peak) - Series B	100A (0-peak) - Series A 20A (0-peak) - Series B	100A (0-peak) - Series A 20A (0-peak) - Series B
Output Peak Current	7.5A (0-peak)	15A (0-peak)	30A (0-peak)
Continuous Output Current	2.5A (0-peak)	5A (0-peak)	10A (0-peak)
Energy Absorption Capability			
115V ac input	125 Joules		
230V ac input	51 Joules		
Continuous Power Output			
115V ac input	0.25 kW	0.5 kW	1.0 kW
230V ac input	0.5 kW	1.0 kW	2.0 kW

¹ Specification is for nominal voltage. The absolute limits are $\pm 10\%$, or 88-265V_{rms}.

² The 2098-IPD-005-xx, -010-xx, and -020-xx (230V) drives are limited to:

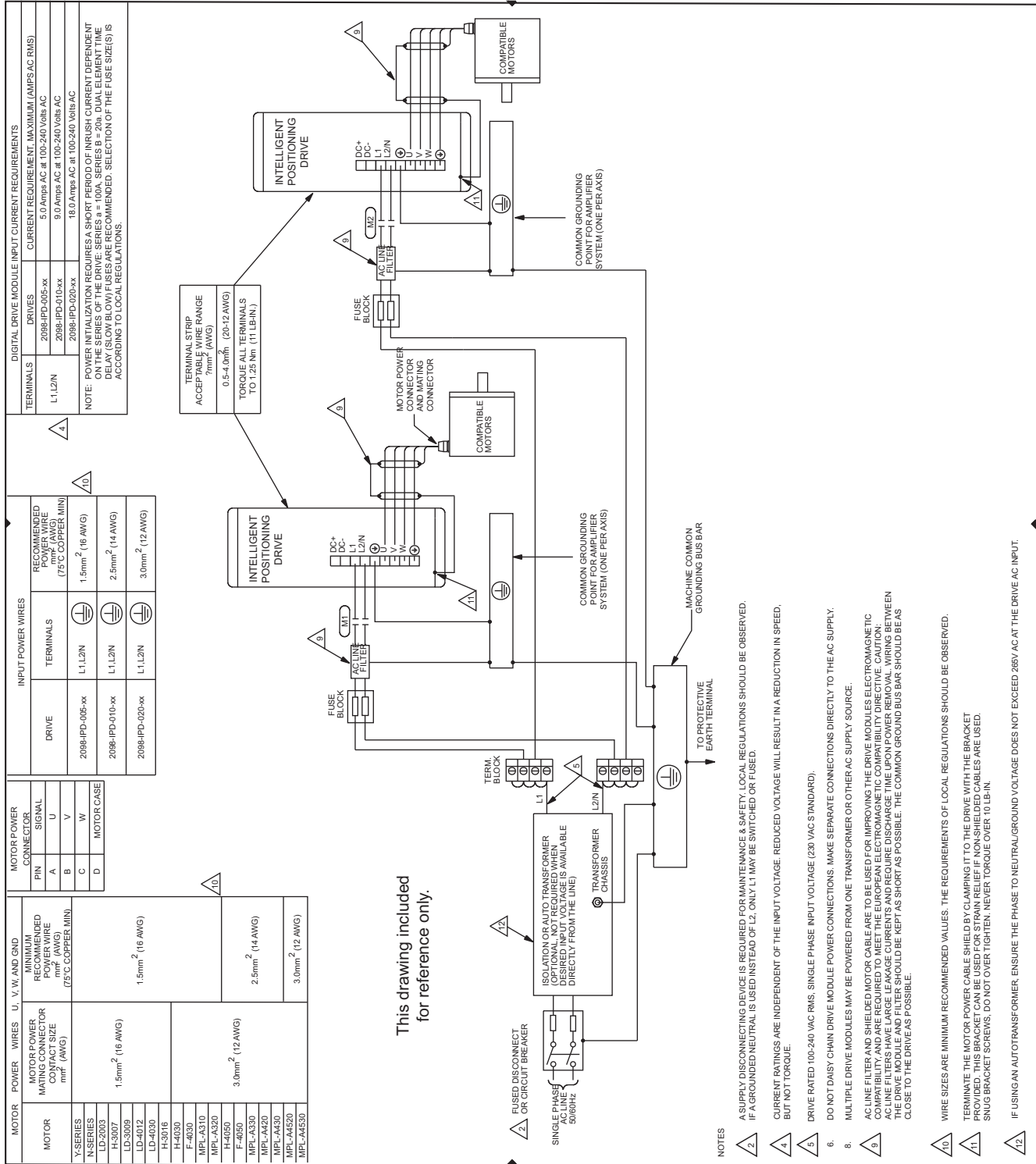
Series A - two contactor cycles per minute

Series B - one contactor cycle every 10 seconds for up to two minutes, not to exceed 12 cycles in five minutes

³ In-rush current limiting circuitry is enabled within 3 seconds after removal of AC line power.

Replace the figure shown below. The drawing provides the Input Current Requirements note for both A Series and B Series Ultra5000 drives.

Figure B.14 Typical Power Wiring of Ultra5000 System
2098-IPD-005-xx, -010-xx, and -020-xx



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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 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	1.440.646.3434 Monday – Friday, 8 a.m. – 5 p.m. EST
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