

Interconnect Diagrams

Objectives

This appendix contains the following interconnect diagrams:

- Ultra5000 and Motor Cable Diagrams
- Ultra5000 Power Wiring Diagrams
- Using an Emergency Stop Contactor
- Grounding for Ultra5000 CE Requirements
- Ultra5000 Shunt Module Information

Ultra5000 and Motor Cable Diagrams

This section provides information to assist you in wiring your MP, N, H/F, W, and Y-Series motors when connecting to your Ultra5000.

Ultra5000 Drive and Motor Cable Combinations

The following figures describe the motor power, feedback, and interface cables you will need for your specific Ultra5000 and motor combination.

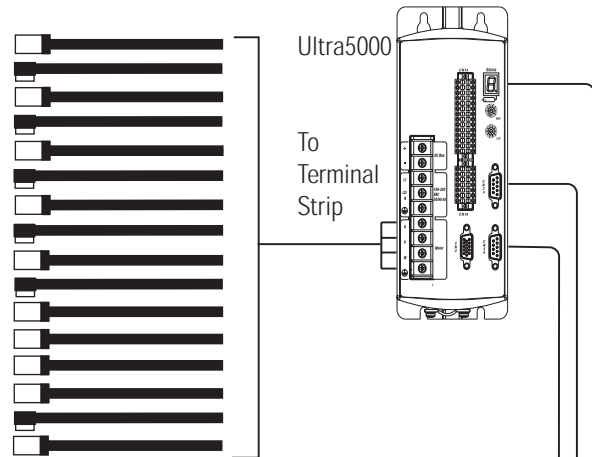
Figure B.1
Ultra5000 Motor/Drive Cable Connections

Motor Power Cables

500W, 1 kW, 2 kW Ultra5000 to H-Series Motors
 500W, 1 kW, 2 kW Ultra5000 to H-Series Motors
 15 kW Ultra5000 to H-Series Motors
 15 kW Ultra5000 to H-Series Motors
 2 or 3 kW Ultra5000 to H and F-Series Motors
 2 or 3 kW Ultra5000 to H and F-Series Motors
 7.5 kW Ultra5000 to H and F-Series Motors
 7.5 kW Ultra5000 to H and F-Series Motors
 15 kW Ultra5000 to H and F-Series Motors
 15 kW Ultra5000 to H and F-Series Motors
 500W, 1 kW, 2 kW Ultra5000 to MP-Series Motors
 2 or 3 kW Ultra5000 to MP-Series Motors
 7.5 kW Ultra5000 to MP-Series Motors
 500W, 1 kW, 2 kW Ultra5000 to N-Series Motors
 500W, 1 kW, 2 kW Ultra5000 to N-Series Motors
 500W, 1 kW, 2 kW Ultra5000 to Y-Series Motors

Catalog Number

2090-UXNPAH-16Sxx
 2090-UXNPAH-16Rxx
 2090-UXNPAH-6Sxx
 2090-UXNPAH-6Rxx
 2090-UXNPAHF-14Sxx
 2090-UXNPAHF-14Rxx
 2090-UXNPAHF-10Sxx
 2090-UXNPAHF-10Rxx
 2090-UXNPAHF-8Sxx
 2090-UXNPAHF-8Rxx
 2090-UXNPAMP-16Sxx
 2090-UXNPAMP-14Sxx
 2090-UXNPAMP-10Sxx
 2090-UXNPAN-16Sxx
 2090-UXNPAN-16Rxx
 2090-UXNPAY-16Sxx

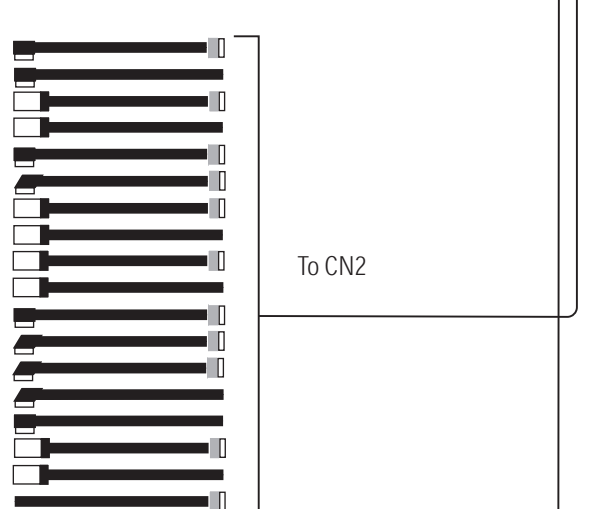


Feedback Cables

Ultra5000 CN2 port to H-Series Motors, RA
 Flying Leads on drive-end to H-Series Motor, RA
 Ultra5000 CN2 port to H and F-Series Motors
 Flying Leads on drive-end to H and F-Series Motor
 Ultra5000 CN2 port to H and F-Series Motors, RA
 Ultra5000 CN2 port to H and F-Series Motors, RA, skewed
 Ultra5000 CN2 port to MP-Series Motors
 Flying Leads on drive-end to MP-Series Motor
 Ultra5000 CN2 port to N-Series Motors
 Flying leads on drive-end to N-Series Motors
 Ultra5000 CN2 port to N-Series Motors, RA
 Ultra5000 CN2 port to N-Series Motors, RA, skewed
 Ultra5000 CN2 port to N-Series Motors, RA, skewed
 Flying leads on drive-end to N-Series Motors, RA, skewed
 Flying leads on drive-end to N-Series Motors, RA
 Ultra5000 CN2 port to Y-Series Motors
 Flying Leads on drive-end to Y-Series Motor
 Drive Feedback Cable (CN2) to flying leads, straight

Catalog Number

2090-UXNFBH-Rxx
 2090-UXNFDH-Rxx
 2090-UXNFBHF-Sxx
 2090-UXNFDHF-Sxx
 2090-UXNFBHF-Rxx
 2090-UXNFBHF-Kxx
 2090-UXNFBMP-Sxx
 2090-UXNFDMP-Sxx
 2090-UXNFBN-Sxx
 2090-UXNFDN-Sxx
 2090-UXNFBN-Rxx
 2090-UXNFBN-Kxx
 2090-UXNFDN23-Kxx
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 2090-UXNFBY-Sxx
 2090-UXNFDY-Sxx
 2090-UXNFM-Sxx

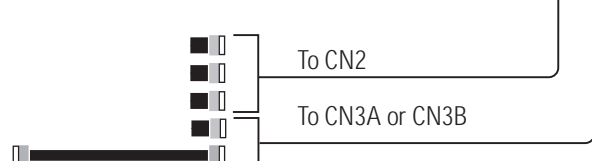


Interface Cables and Kits

Ultra5000 CN2 port drive mounted breakout board
 CN2 Breakout Board Kit (see description on page C-8)
 CN2 Breakout Board Cable (see description on page C-8)
 Ultra5000 CN3 port drive mounted breakout board
 Ultra5000 CN3 port to personal computer

Catalog Number

2090-UXBB-DM15
 2090-UXBK-D15xx
 2090-UXBC-D15xx
 2090-UXBB-DM09
 2090-UXPC-D09xx



Standard cable lengths are: 01, 03, 09, 15, 30 meters (3.3, 9.8, 29.5, 49.2, 98.5 ft). Where xx is the length in meters.

2090-UXBC-D15xx is limited to 1, 3, 9 or 15 meters (3.3, 9.8, 29.5, or 49.2 ft).

e.g., Length of 2090-UXBB-DM15 is a fixed 15 meters (listed as Ultra5000 CN2 port drive mounted breakout board under Interface Cables and Kits).

Figure B.12
Ultra5000 to Y-Series Motor Configuration (mating connector)

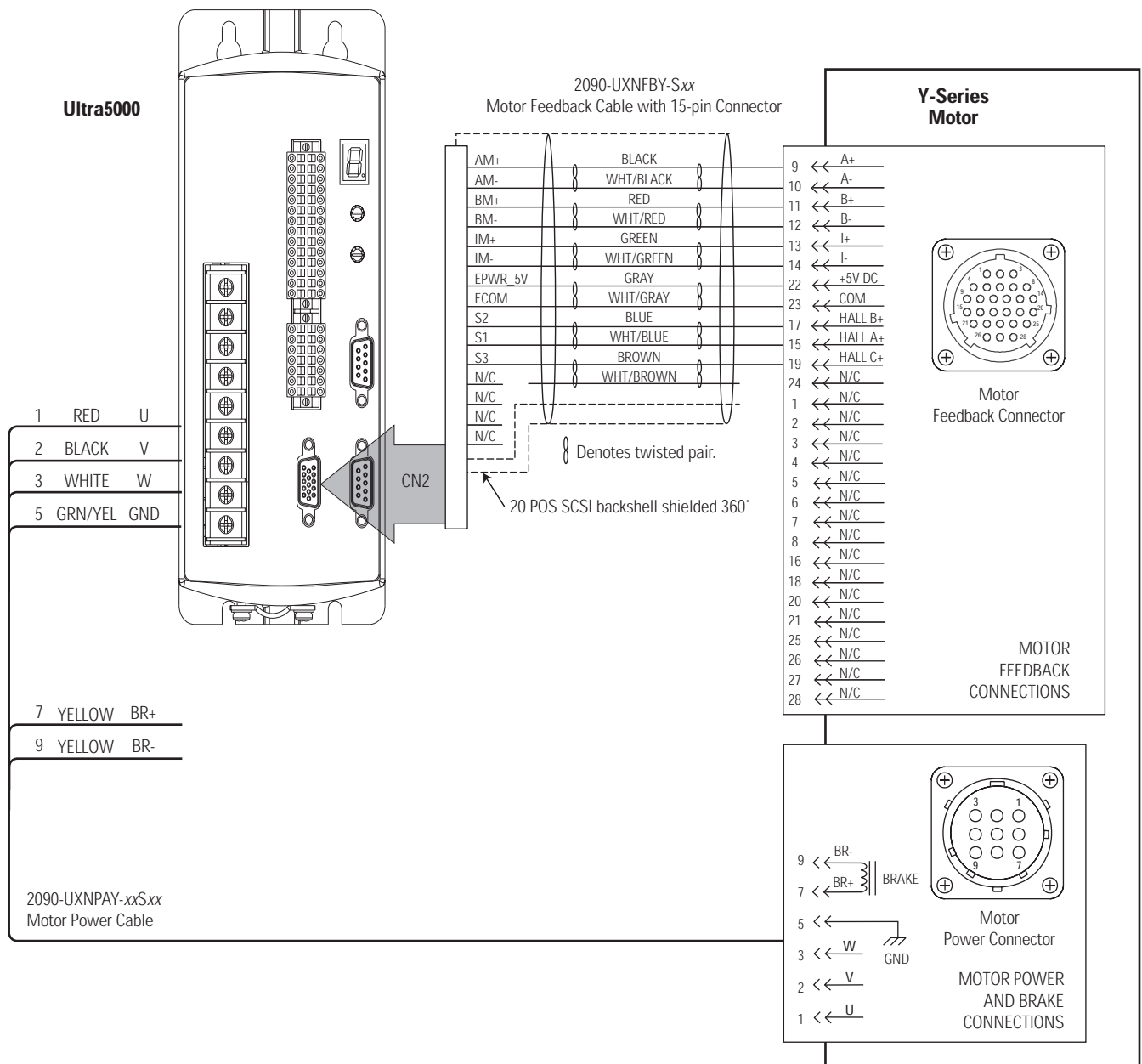
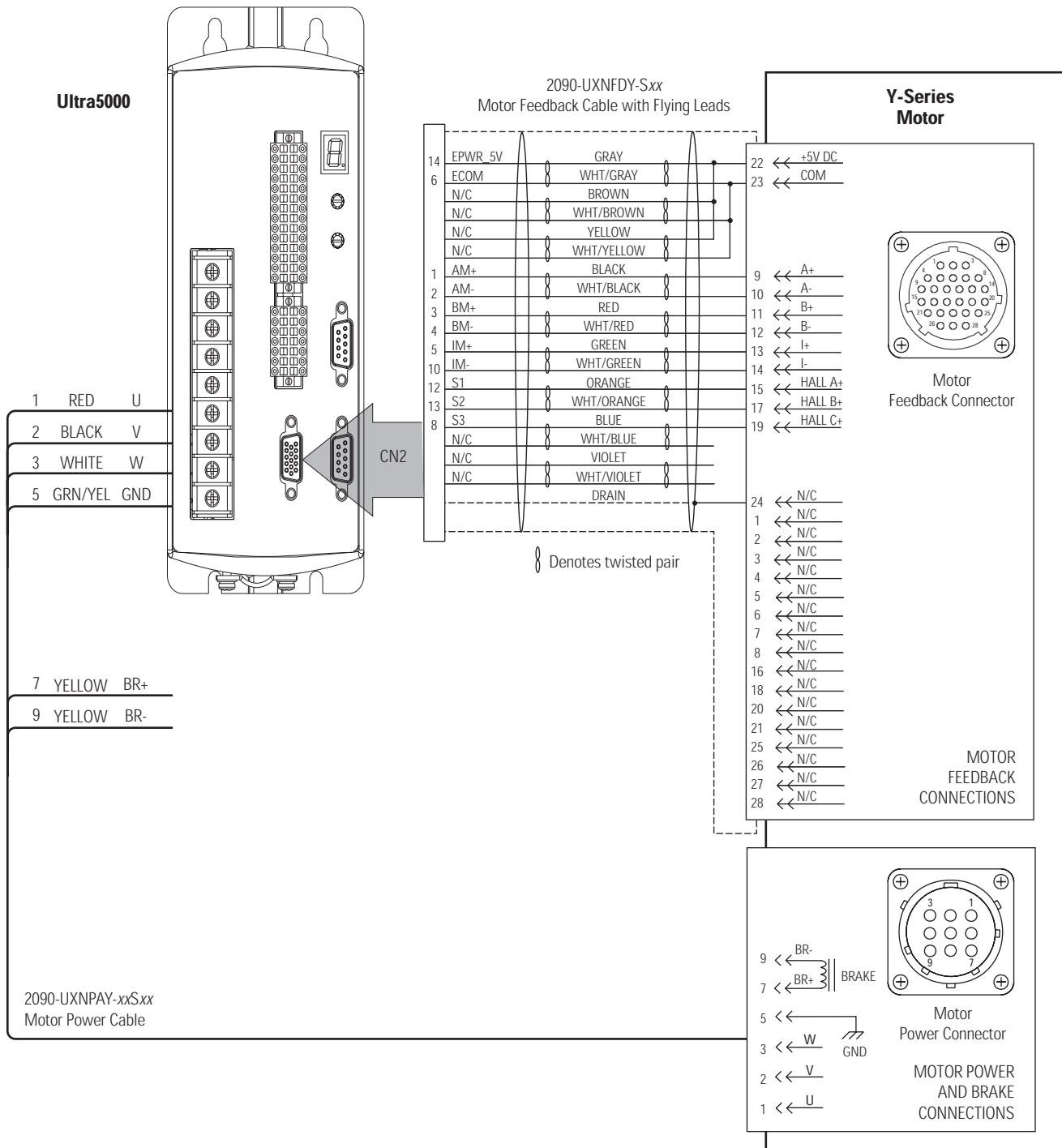


Figure B.13
Ultra5000 to Y-Series Motor Configuration (flying leads)



Cables

Use the following tables to identify motor power, feedback, interface, and brake cables for your Ultra5000. Length of cable *xx* is in meters (01, 03, 09, 15, and 30) unless otherwise noted.

Motor Power Cables

Applicable Drive(s)	Description	Catalog Number
2098-IPD-005, -010, -020	H-Series Motor Power Cable, non-flex, 16 AWG, right angle	2090-UXNPAH-16Rxx
	H and W-Series Motor Power Cable, non flex, 16 AWG, straight	2090-UXNPAH-16Sxx
	MP-Series Motor Power Cable, non flex, 16 AWG, straight	2090-UXNPAMP-16Sxx
	N-Series Motor Power Cable, non-flex, 16 AWG, right angle	2090-UXNPAN-16Rxx
	N-Series Motor Power Cable, non flex, 16 AWG, straight	2090-UXNPAN-16Sxx
	Y-Series Motor Power Cable, non flex, 16 AWG, straight	2090-UXNPAY-16Sxx
2098-IPD-020, -030, -HV030	H and F-Series Motor Power Cable, non-flex, 14 AWG, right angle	2090-UXNPAHF-14Rxx
	H, F and W-Series Motor Power Cable, non flex, 14 AWG, straight	2090-UXNPAHF-14Sxx
	MP-Series Motor Power Cable, non flex, 14 AWG, straight	2090-UXNPAMP-14Sxx
2098-IPD-030, -050, -075, -100, -150, -HV030, -HV050, -HV100, -HV150	MP-Series and 1326AB-Bxxxx-M2L or -S2L Motor Power Cable, non flex, 16 AWG, straight	2090-UXNPBMP-16Sxx
2098-IPD-075	H and F-Series Motor Power Cable, non-flex, 10 AWG, right angle	2090-UXNPAHF-10Rxx
	H and F-Series Motor Power Cable, non flex, 10 AWG, straight	2090-UXNPAHF-10Sxx
	MP-Series Motor Power Cable, non flex, 10 AWG, straight	2090-UXNPAMP-10Sxx
2098-IPD-075, -100, -150, -220, -HV100, -HV150 -HV220	MP-Series and 1326AB-Bxxxx-M2L or -S2L Motor Power Cable, non flex, 8 AWG, straight	2090-UXNPBMP-10Sxx
2098-IPD-075, -100, -150, -HV100, -HV150	MP-Series Motor Power Cable, non flex, 8 AWG, straight	2090-UXNPBMP-14Sxx
2098-IPD-150, --220, HV150, -HV220	MP-Series Motor Power Cable, non flex, 8 AWG, straight	2090-UXNPBMP-8Sxx
2098-IPD-150, -HV150	H-Series Motor Power Cable, non-flex, 6 AWG, right angle	2090-UXNPAH-6Rxx
	H-Series Motor Power Cable, non-flex, 6 AWG, straight	2090-UXNPAH-6Sxx
	H-8xxx Motor Power Cable, non-flex, 6 AWG, straight	2090-UXNPAHF-6Sxx
	H and F-Series Motor Power Cable, non-flex, 8 AWG, right angle	2090-UXNPAHF-8Rxx
	H and F-Series Motor Power Cable, non-flex, 8 AWG, straight	2090-UXNPAHF-8Sxx