

# Wiring Kinetix or Ultra3000 Servo Drives to Elwood High Performance Motors SX-Series Incremental Encoder-based Motors

## About This Publication

This publication provides tables for wiring the flying leads from an Elwood High Performance Motors SX-Series motor with an incremental encoder to a Kinetix® or Ultra™ 3000 drive.

Contact Elwood (<http://www.elwood.com/sx>) for motor installation instructions.

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**IMPORTANT** Be sure to correctly connect shields and ground the motor frame.

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## Applicable Drives

Ultra3000	Kinetix 350	Kinetix 6000	Kinetix 6500
Kinetix 300	Kinetix 2000	Kinetix 6200	

## Wiring the Power Connections

Kinetix Drive	Elwood SX-Series Power		Ultra3000 Drive
Terminal	Wire Color	Signal	Terminal
U	Black	Phase A	U
V	Red	Phase C	V
W	White	Phase B	W
Ground	Green	Ground	Ground
MBRK-	Orange	Brake - Com	MBRK-
MBRK+	Brown	Brake +24V DC	MBRK+
Wire to MF-16 (TS+) <sup>(1) (2)</sup>	Blue	Over Temp	Wire to CN2-11 (TS+) <sup>(3)</sup>
Wire to MF-17 (TS-) <sup>(1) (2)</sup>	Blue	Over Temp	Wire to CN2-6 (TS-) <sup>(3)</sup>

(1) Terminate with a low-profile connector kit (catalog number 2090-K6CK-D15MF) on Kinetix 6000, Kinetix 6200, and Kinetix 6500 drives.

(2) Terminate with a low-profile connector kit (catalog number 2090-K2CK-D15M) on Kinetix 300/350 and Kinetix 2000 drives.

(3) Terminate with a low-profile connector kit (catalog number 2090-UXBB-DM15) on Ultra3000 drives.

# Wiring the Incremental Encoder Connections

Kinetix Drives		Elwood SX-Series Feedback			Ultra3000 Drives		
Signal	MF-Pin #	Wire Color	Signal	Notes	Signal	CN2-Pin #	
A+	1	White/Green	A+	—	A+	1	
A-	2	Green/White	A-		A-	2	
B+	3	White/Blue	B+		B+	3	
B-	4	Blue/White	B-		B-	4	
Index+	5	Wht/Orange	Z+		Index+	5	
ECOM	6	Blue/Red	Com		ECOM	6	
S3	8	Red/Orange	W		S3	8	
Index-	10	Orange/White	Z-		Index-	10	
S1	12	White/Gray	U		S1	12	
S2	13	White/Brown	V		S2	13	
EPWR_5V	14	Red/Blue	+V DC		EPWR_5V	14	
Overtemp <sup>(1) (2)</sup>	16	Blue	Over Temp		From motor power cable	TS+ <sup>(3)</sup>	11
Overtemp <sup>(1) (2)</sup>	17	Blue	Over Temp			TS- <sup>(3)</sup>	6
—	Connector Shield	Drain Wire/Shield	—		—	—	ConnectorShield

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