

Kinetix 300 EtherNet/IP Indexing Servo Drives



The Kinetix 300 EtherNet/IP indexing drive provides a cost-effective single-axis solution for low axis count motion control applications. Using one standard Ethernet/IP network for an entire machine - including Motion, Control, I/O, and HMI simplifies wiring, reduces panel layout costs, and allows easy integration into manufacturing and enterprise systems. In addition, safe torque-off functionality helps protect personnel while increasing machine productivity.

Topic	Page
Kinetix 300 Servo Drive Components	231
Kinetix 300 Drive Power Specifications	233
Kinetix 300 Drive Accessory Specifications	235
Kinetix 300 General System Specifications	239
Kinetix 300 Connector and Indicator Locations	244
Kinetix 300 Drive Catalog Numbers	244

Kinetix 300 Servo Drive Components

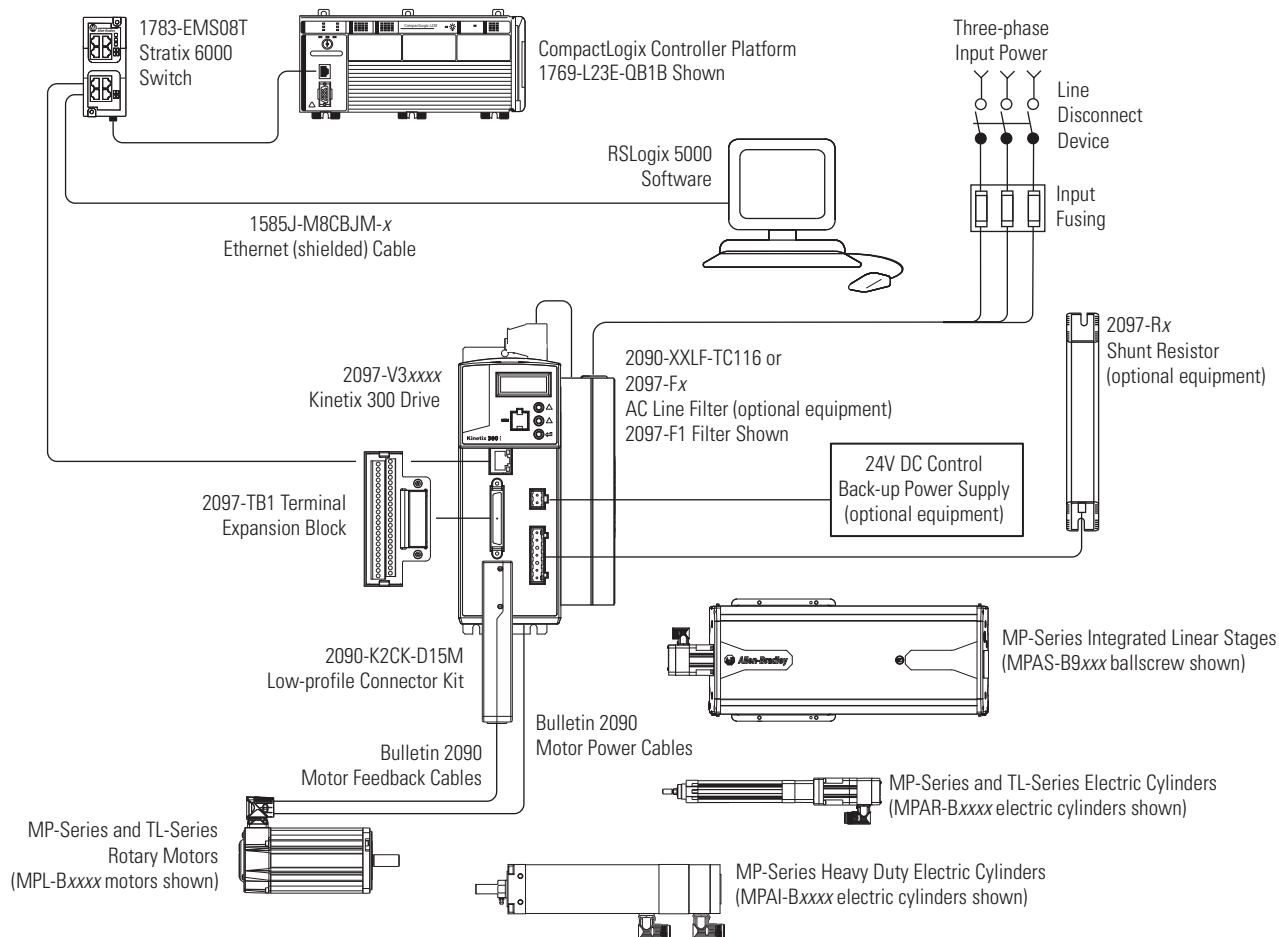
Kinetix 300 servo drive systems consist of these required components:

- One 2097-V3xxxx indexing drive
- One MP-Series or TL-Series servo motor or linear actuator
- One motor power and motor feedback cable
- One 2090-K2CK-D15M low-profile connector kit for motor feedback
- One 2097-TB1 I/O terminal expansion block
- 1585J-M8CBJM-x (shielded) Ethernet cable

Kinetix 300 servo drive systems may also include any of these optional components:

- One 2097-Fx or 2090-XXLF-TC116 AC line filter
- One 2097-Rx shunt resistor

Typical Configuration - Kinetix 300 Drive System



Kinetix 300 Drive (three-phase) Power Specifications

Attribute	2097-V34PR3	2097-V34PR5	2097-V34PR6
AC input voltage	480V rms three-phase		
AC input frequency	48...62 Hz		
Main AC input current ⁽¹⁾ Nom (rms) Max inrush (0-pk)	2.7 A 4.5 A	5.5 A 4.5 A	7.9 A 22.6 A
Integrated AC line filter	No	No	No
Control power back-up input voltage	20...26V DC		
Control power back-up input current Nom Max inrush (0-pk)	500 mA 30 A		
Continuous output current (rms)	2.0 A	4.0 A	6.0 A
Continuous output current (0-pk)	2.8 A	5.7 A	8.5 A
Peak output current (rms) ⁽²⁾	6.0 A	12.0 A	18.0 A
Peak output current (0-pk)	8.5 A	17.0 A	25.5 A
Continuous power output	1.00 kW	2.00 kW	3.00 kW
Shunt On	780V DC		
Shunt Off	750V DC		
Overvoltage	850V DC		
Short circuit current rating	100,000 A (rms) symmetrical		

(1) Kinetix 300 drive modules are limited to 1 AC mains power cycling per minute.

(2) Peak RMS current allowed for up to 2 seconds with a 50% duty cycle.

Kinetix 300 Drive Accessory Specifications

Kinetix 300 drive accessories include the I/O terminal block, memory module programmer, memory modules, AC line filters, and shunt resistors.

I/O Terminal Expansion Block

The 2097-TB1 I/O terminal expansion block is a drive-mounted breakout board for making flying-lead cable connections to the 50-pin IOD connector.

I/O Terminal Block Specifications (2097-TB1)

Wire Size	Change in Width ⁽¹⁾	Change in Depth ⁽¹⁾
1.5...0.2 mm ² (16...24 AWG)	10 mm (0.38 in.)	11 mm (0.42 in.)

(1) Add this value to the dimensions of your Kinetix 300 drive.

