

## About the Kinetix 6000 Drive Systems

The Kinetix 6000 multi-axis servo drives are designed to provide a Kinetix Integrated Motion solution for your drive/motor/actuator applications.

Table 2 - Kinetix 6000 Drive System Overview

System Component	Cat. No.	Description
Integrated Axis Module	2094-xCxx-Mxx-S	Integrated Axis Modules (IAM) with the safe torque-off feature with 200V or 400V-class AC input power. Contains an inverter and converter section. The peak enhancement feature is available on 400V-class (series B and later) IAM modules.
	2094-xCxx-Mxx	Integrated Axis Modules (IAM), with 200V or 400V-class AC input power (does not include the safe torque-off or peak-enhanced feature). Contains an inverter and converter section.
Axis Module	2094-xMxx-S	Axis Modules (AM) with safe torque-off are shared DC-bus inverters and rated for 200 or 400V-class operation. The AM module must be used with an IAM module. The peak enhancement feature is available on 400V-class (series B and later) AM modules.
	2094-xMxx	Axis Modules (AM) are shared DC-bus inverters rated for 200V or 400V-class input power (does not include the safe torque-off or peak-enhanced feature). The AM module must be used with an IAM module.
Shunt Module	2094-BSP2	The Bulletin 2094 shunt module mounts to the power rail and provides additional shunting in regenerative applications.
Kinetix 6000M IDM System	2094-SEPM-B24-S Bulletin MDF	The Kinetix 6000M integrated drive-motor (IDM) system consists of the IDM power interface module (IPIM) and up to 16 (Bulletin MDF) IDM units. The IPIM module mounts on the Bulletin 2094 power rail and provides power and communication to the IDM units. The IPIM module also monitors power output and provides overload protection.
Power Rail	2094-PRx 2094-PRx	The Bulletin 2094 power rail consists of copper bus bars and a circuit board with connectors for each module. The power rail provides power and control signals from the converter section to adjacent inverters. The IAM and AM power modules, shunt module, slot-filler modules mount to the power rail.
Slot-filler Module	2094-PRF	The Bulletin 2094 slot-filler module is used when one or more slots on the power rail are empty after all the other power rail modules are installed. One slot-filler module is required for each empty slot.
Logix 5000™ Controllers	1756-MxxSE modules 1768-M04SE module 1784-PM16SE PCI card	The Sercos interface module/PCI card serves as a link between the ControlLogix®/CompactLogix™/SoftLogix™ controllers and the Kinetix 6000 drive system. The communication link uses the IEC 61491 Serial Real-time COmmunication System (Sercos) protocol over a fiber-optic cable.
	1756-ENxTx modules	The Kinetix 6000M IPIM module connects to the EtherNet/IP™ network for monitoring, diagnostics, and firmware upgrades.
Studio 5000® Environment	9324-RLD300xxE	The Studio 5000 Logix Designer® application provides support for programming, commissioning, and maintaining the Logix 5000 family of controllers.
Rotary Servo Motors	Kinetix MP, Kinetix TL/TLY, Kinetix RDB, 1326AB, F-Series	Compatible rotary motors include the Kinetix MPL, MPM, MPF, and MPS 200V and 400V-class motors; Kinetix RDB; Kinetix TL and TLY; 1326AB (M2L/S2L) and 1326AB (resolver); and F-Series motors.
Linear Motors	Kinetix LDC and Kinetix LDL	Compatible motors include Kinetix LDC iron core (200V and 400V-class) and Kinetix LDL ironless (200V-class) linear motors.
Linear Actuators	Kinetix MP	Compatible actuators include Kinetix MPAS (200V and 400V-class) single-axis and Kinetix MPMA multi-axis integrated linear stages, and Kinetix MPAR and MPAL (200V and 400V-class) electric cylinders.
	Kinetix LDAT	Kinetix LDAT integrated linear actuators are compatible with 200V and 400V-class drive systems.
Cables	Kinetix 2090 power and feedback cables	Kinetix 2090 power and feedback cables are available with bayonet, threaded, and SpeedTec connectors. Power/brake cables have flying leads on the drive end and straight connectors that connect to servo motors. Feedback cables have flying leads that wire to low-profile connector kits on the drive end and straight connectors on the motor end.
	Kinetix 6000M integrated drive-motor cables	Kinetix 2090 integrated drive-motor (IDM) hybrid and network cables connect between the 2094 IPIM module and the Kinetix 6000M IDM units. Bulletin 889D and 879D cables connect between digital input connectors and sensors.
	Communication	Kinetix 2090 Sercos fiber-optic cables are available as enclosure only, PVC, nylon, and glass with connectors at both ends. Ethernet cables are available in standard lengths for Kinetix 6000M IPIM modules. Shielded cable is recommended.
AC Line Filters	2090-XXLF-xxxx	Bulletin 2090-XXLF-xxxx three-phase AC line filters are required to meet CE and UK in all 200V and 400V-class drive systems.
Line Interface Modules	2094-xLxx 2094-xLxxS 2094-XL75S-Cx	Line interface modules (LIM) include the circuit breakers, AC line filter (catalog numbers 2094-AL09 and 2094-BL02 only), power supplies, and safety contactor required for Kinetix 6000 operation. The LIM module does not mount to the power rail. You can purchase individual components separately in place of the LIM module.
External Shunt Modules	1394-SRxxxx	You can use Bulletin 1394 external passive shunt modules when the IAM/AM module internal shunt and power rail mounted 2094-BSP2 shunt module capability is exceeded.
Resistive Brake Module	2090-XBxx-xx	Resistive Brake Modules (RBM) include a safety contactor for use in a control circuit. Contactors and resistors reside in this module such that the motor leads can be disconnected from the drive with the permanent magnet motor brought to an immediate stop. This module does not mount to the power rail.

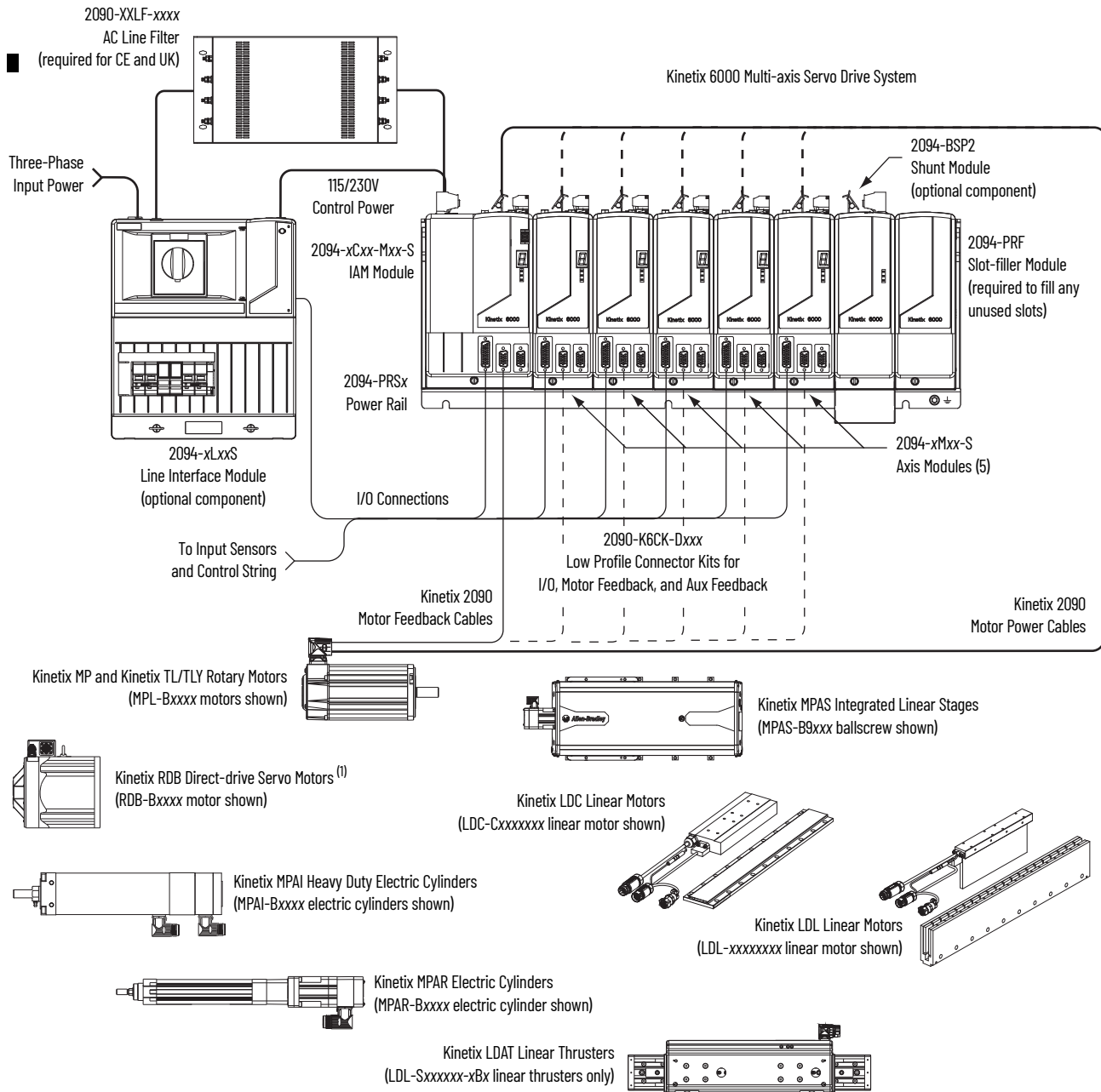
# Typical Hardware Configurations

Typical Kinetix 6000 system installations include three-phase AC configurations, with and without the line interface module (LIM), and DC common-bus configurations.



**SHOCK HAZARD:** To avoid personal injury due to electrical shock, place a 2094-PRF slot-filler module in all empty slots on the power rail. Any power rail connector without a module installed disables the Bulletin 2094 system; however, control power is still present.

Figure 1 - Typical Kinetix 6000 System Installation (with LIM)



(1) Kinetix RDB direct-drive servo motors require the 2090-K6CK-KENDAT low-profile feedback module.