Kinetix 5500 Servo Drive Components

Kinetix 5500 servo drive systems consist of these required components:

- One 2198-H*xxx*-ERS or 2198-H*xxx*-ERS2 servo drive
- One Kinetix VP servo motor, induction motor, LDAT-Series linear thruster, or MP-Series rotary motor or linear actuator
  - MP-Series (400V-class) motors and actuators require 2198-H2DCK converter kits
  - LDAT-Series linear thrusters and MP-Series (200V-class) motors/actuators require 2198-H2DCK (series B or later) converter kits
- One 2090-CS*x*M1DF-*xx*AA*xx* (standard, non-flex) or (2090-CS*x*M1DF-*xx*AF*xx* (continuous-flex) cable for motor power, feedback, and brake connections
- One 1606-XL*xxx* 24V power supply for control and motor brake power
- 1585J-M8CBJM-*x* (shielded) Ethernet cable

Kinetix 5500 servo drive systems can also include any of these optional components:

- One 2198-CAPMOD-1300 capacitor module
- One 2198-DB*xx*-F AC line filter
- One 2097-R*x* shunt resistor
- Bulletin 2198 shared-bus connection system

For detailed Kinetix 5500 drive system requirements, refer to the Kinetix 5500 Drive Systems Design Guide, publication GMC-RM009.

Kinetix 5500 Servo Drive Selection

Drive Cat. No. (hardwired STO)	Drive Cat. No. (integrated STO)	Frame Size	Input Voltage	Continuous Output Power kW	Continuous Output Current A 0-pk
2198-H003-ERS	2198-H003-ERS2	1	195…264V rms, single-phase 195…264V rms, three-phase 324…528V rms, three-phase	0.2 kW 0.3 kW 0.6 kW	1.4
2198-H008-ERS	2198-H008-ERS2			0.5 kW 0.8 kW 1.6 kW	3.5
2198-H015-ERS	2198-H015-ERS2	2		1.0 kW 1.5 KW 3.2 kW	7.1
2198-H025-ERS	2198-H025-ERS2		195…264V rms, three-phase 324…528V rms, three-phase	2.4 kW 5.1 kW	11.3
2198-H040-ERS	2198-H040-ERS2			4.0 kW 8.3 kW	18.4
2198-H070-ERS	2198-H070-ERS2	3		7.0 kW 14.6 kW	32.5

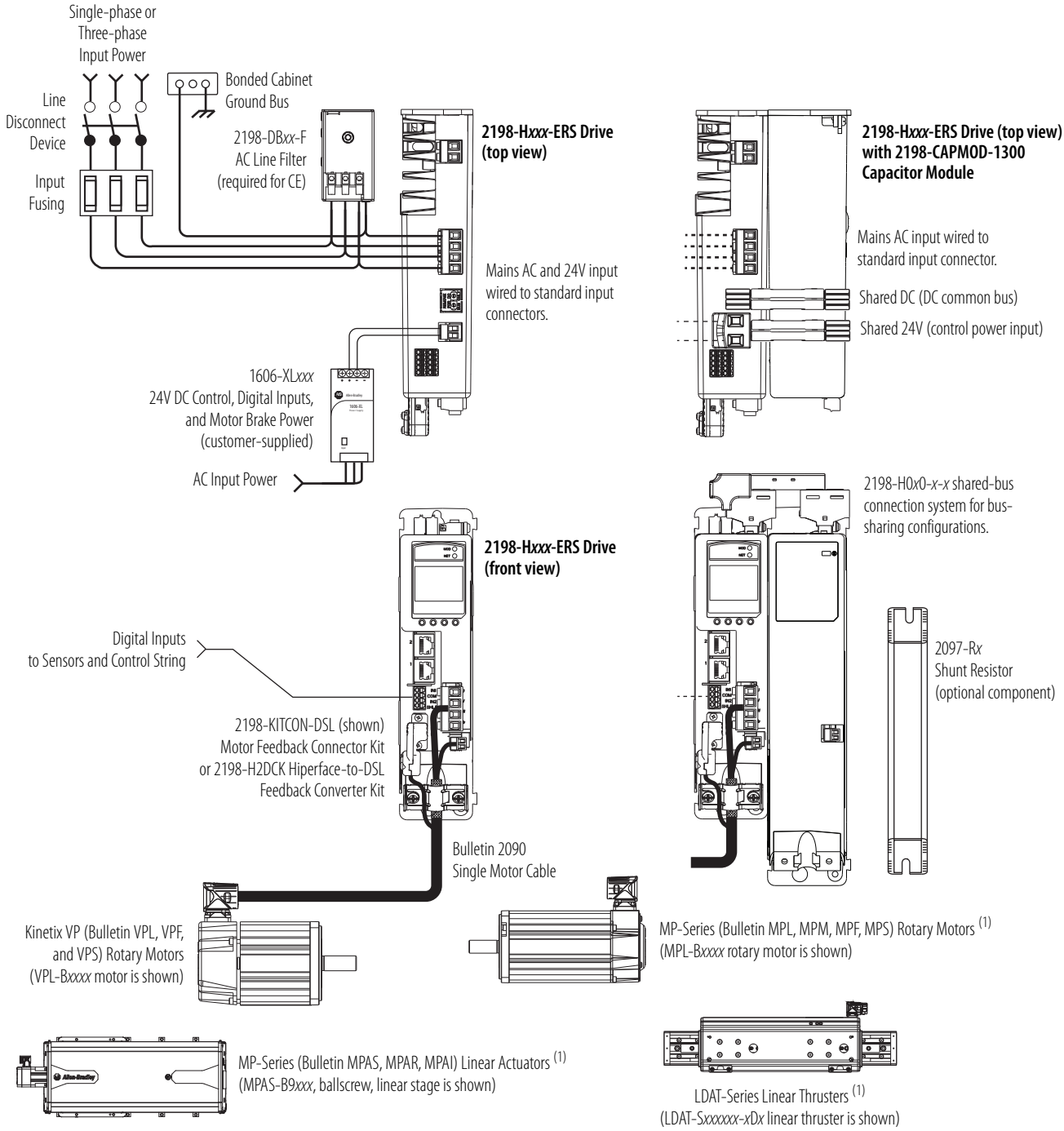
For Kinetix 5500 drive module specifications not included in this publication, refer to the Kinetix Servo Drives Technical Data, publication GMC-TD003.

Typical Hardware Configurations

These typical hardware configurations illustrate the use of servo drives, motors, and motion accessories available for Kinetix 5500 drive systems.

Standalone Configurations

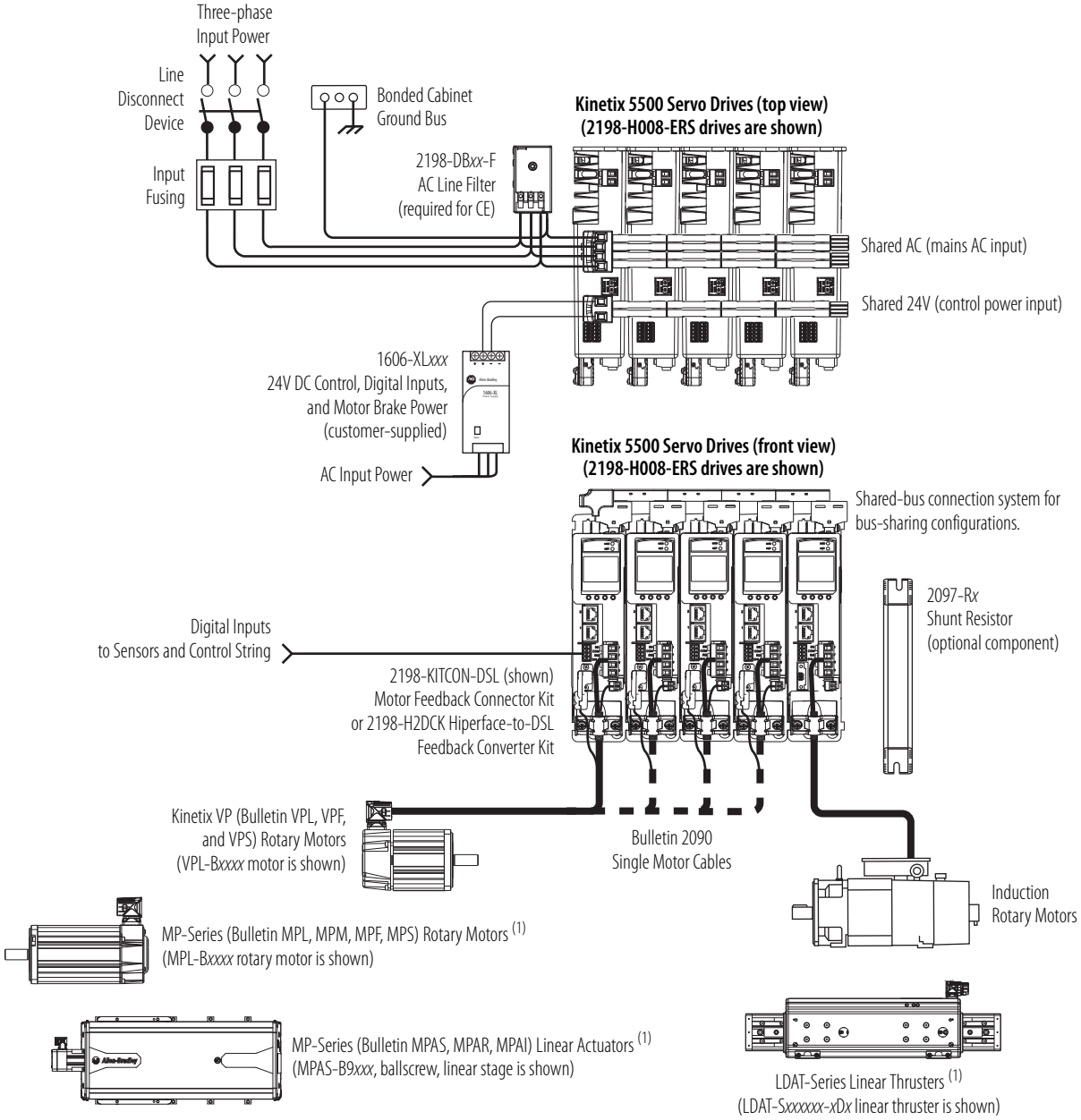
In these examples, a single standalone drive is shown with and without the Bulletin 2198 capacitor module.



(1) Requires the 2198-H2DCK Hiperface-to-DSL feedback converter kit. LDAT-Series linear thrusters and MP-Series (200V-class) motors and actuators require the 2198-H2DCK (series B or later) converter kit.

Shared AC Configurations

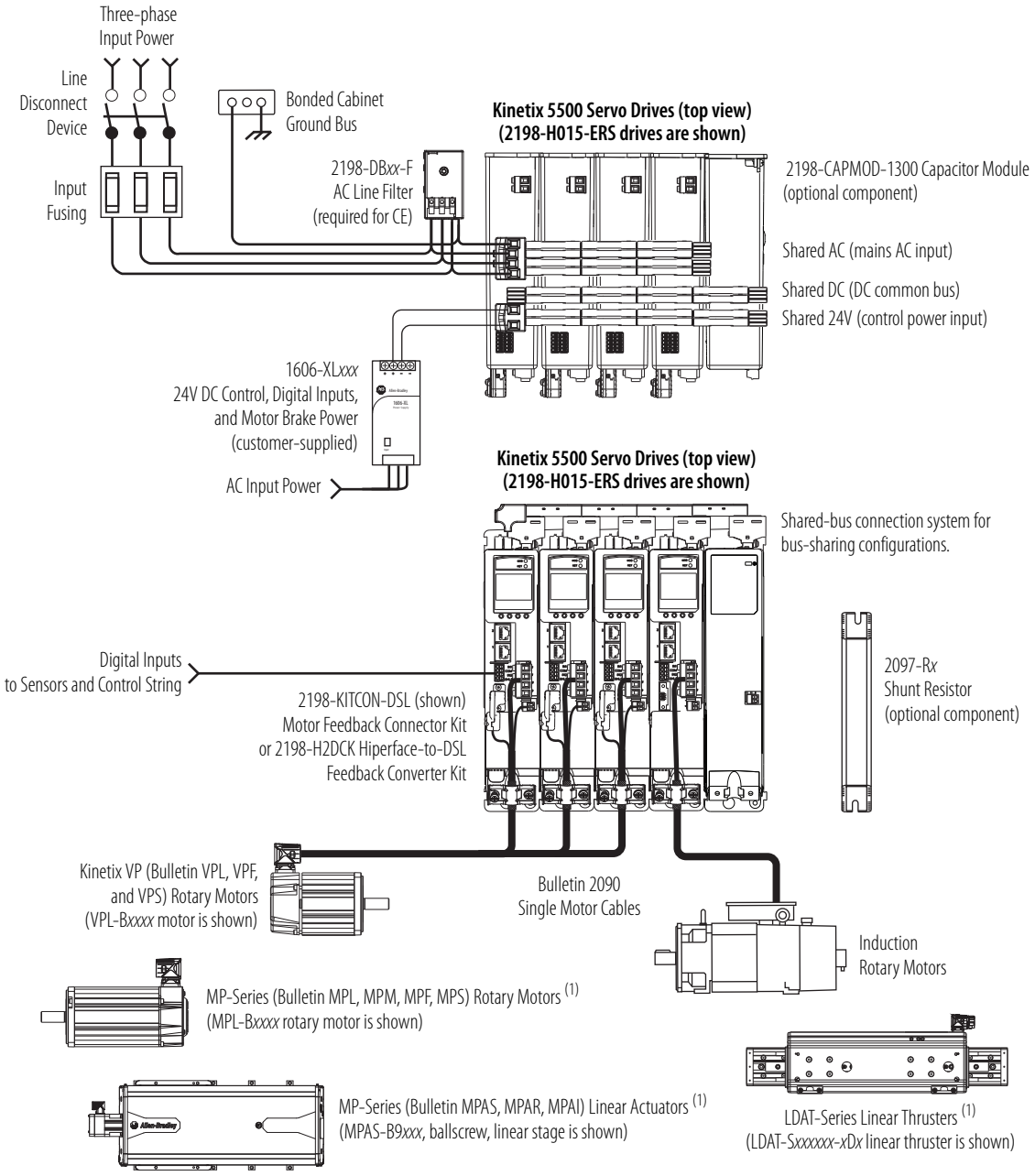
In this example, three-phase AC power and 24V control power is shared in a multi-axis configuration. All drives must have the same power rating (catalog number). Capacitor modules are not supported.



(1) Requires the 2198-H2DCK Hiperface-to-DSL feedback converter kit. LDAT-Series linear thrusters and MP-Series (200V-class) motors and actuators require the 2198-H2DCK (series B or later) converter kit.

Shared AC/DC Configurations

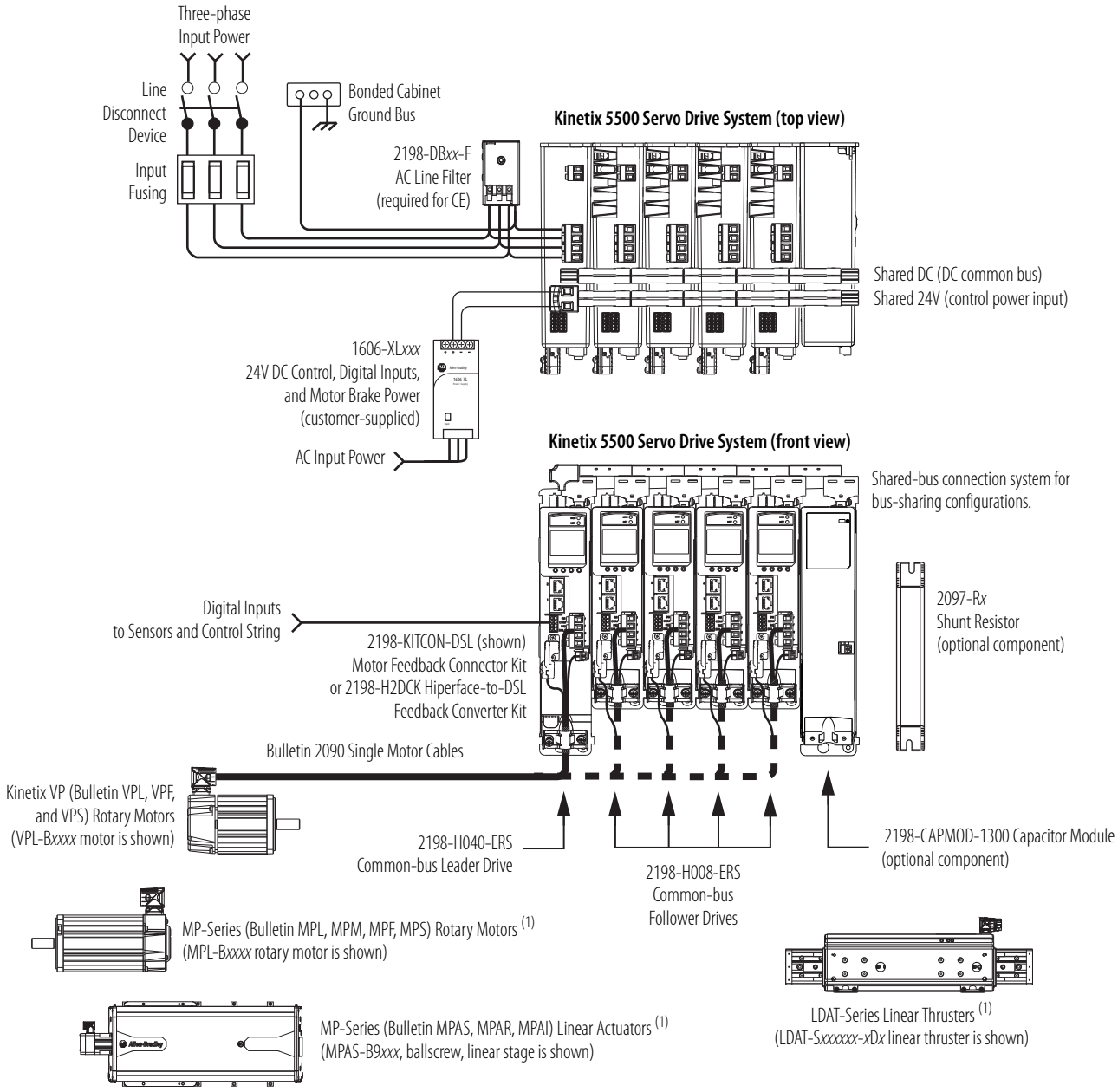
In this example, three-phase AC input power, 24V control power, and DC bus power are shared in a multi-axis configuration. All drives must be the same power rating (catalog number).



(1) Requires the 2198-H2DCK Hiperface-to-DSL feedback converter kit. LDAT-Series linear thrusters and MP-Series (200V-class) motors and actuators require the 2198-H2DCK (series B or later) converter kit.

Shared DC (common-bus) Configurations

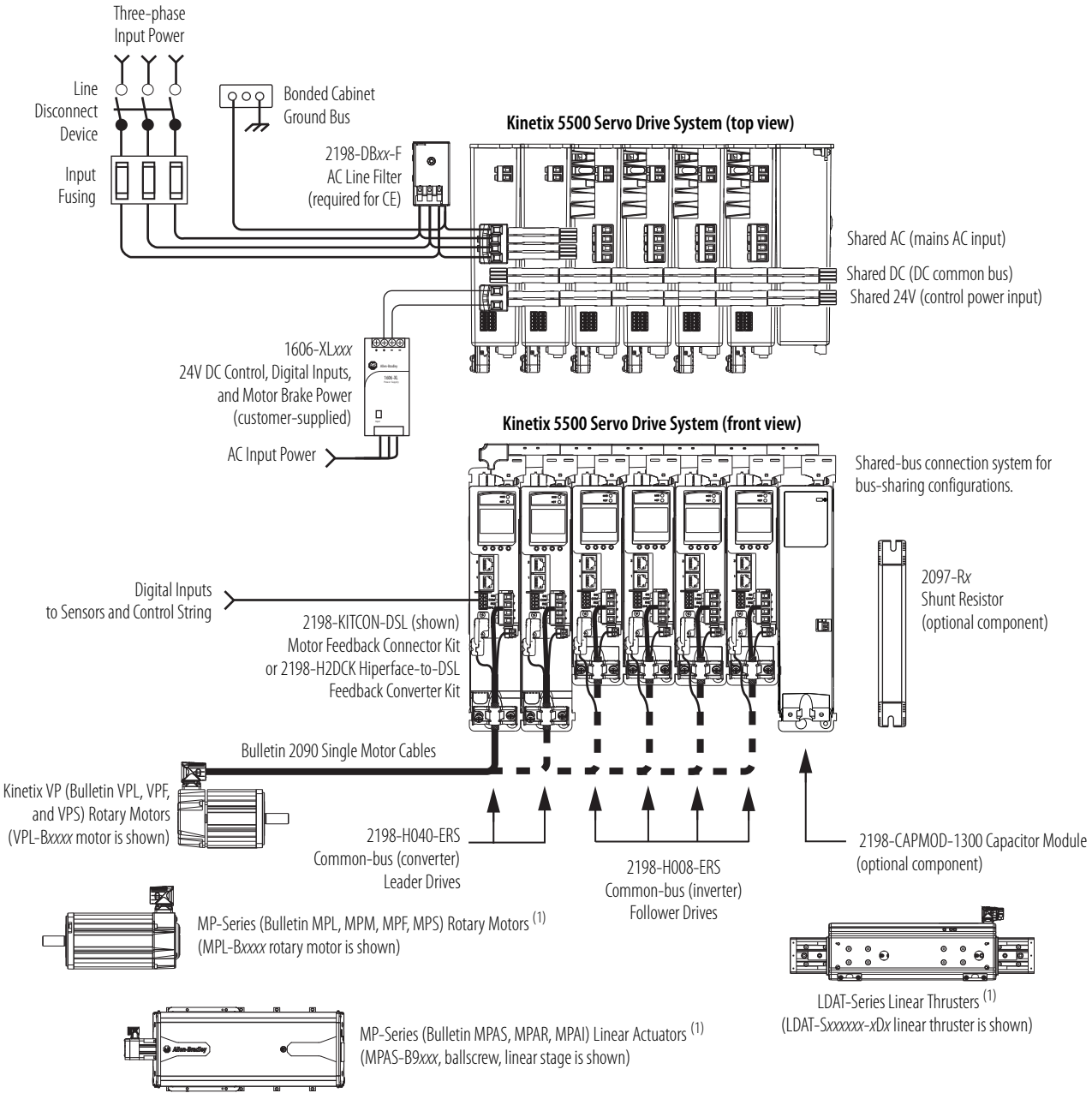
In this multi-axis example, the common-bus leader (sourcing) drive receives three-phase AC input power and supplies DC power to common-bus follower (sinking) drives. The common-bus leader drive power rating is greater than or equal to the power rating of each follower drive.



(1) Requires the 2198-H2DCK Hiperface-to-DSL feedback converter kit. LDAT-Series linear thrusters and MP-Series (200V-class) motors and actuators require the 2198-H2DCK (series B or later) converter kit.

Shared AC/DC Hybrid Configuration

In this multi-axis example, three-phase AC input power is supplied to two converter drives. The converter drive ratings must be the same, and greater than or equal to the power ratings of the inverter drives. This parallel converter configuration increases the DC power supplied to the inverter drives.



(1) Requires the 2198-H2DCK Hiperface-to-DSL feedback converter kit. LDAT-Series linear thrusters and MP-Series (200V-class) motors and actuators require the 2198-H2DCK (series B or later) converter kit.