

Shared-bus Connector Kits

Catalog Numbers 2198-TCON-24VDCIN36, 2198-H040-xxx-xx, 2198-H070-xxx-xx, 2198-S160-P-T, 2198-S312-P-T, 2198T-W25K-P-IN, 2198T-W25K-P-T, 2198-BARCON-55DCAC100, 2198-BARCON-85DCAC100, 2198-BARCON-100DCAC100

The Kinetix® 5700 and Kinetix 5500 servo drive families, and the ArmorKinetix™ system power interface module (PIM) use the shared-bus connection system to extend AC input power, 24V control power, and DC-bus power from drive-to-drive in shared-bus multi-axis configurations.

These publications contain additional information concerning drive system installation.

Resource	Description
Kinetix 5500 Servo Drives User Manual, publication 2198-UM001	Provides detailed information on wiring, applying power, troubleshooting, and integration with Logix 5000™ controllers.
Kinetix 5700 Servo Drives User Manual, publication 2198-UM002	
ArmorKinetix System User Manual, publication 2198-UM006	
iTRAK® System User Manual, publication 2198T-UM001	

Summary of Changes

Topic	Page
Added shared-bus connector kit for catalog number 2198-PIM070.	1

Kinetix 5700 Servo Drives

These shared-bus connector kits apply to Kinetix 5700 multi-axis servo drive systems.

Shared-bus Connector Kit Cat. No.	Drive Module Cat. No.	Application	Description
2198-TCON-24VDCIN36	2198-P031, 2198-P070, 2198-P141, 2198-P208, 2198-RP088, ⁽¹⁾ 2198-RP200, 2198-CAPMOD-2240, 2198-DCBUSCOND-RP312	24V DC input power to control bus	24V DC input wiring connector
2198T-W25K-P-IN	2198T-W25K-ER, 2198-RP263, 2198-RP312		
2198-H040-D-T	2198-PIM070	Control power sharing	Control power T-connector
2198-H040-P-T	2198-D006-ERSx, 2198-D012-ERSx, 2198-D020-ERSx, 2198-D032-ERSx, 2198-CAPMOD-2240, 2198-DCBUSCOND-RP312	Control power sharing	Control power T-connector with bus bars, 55 mm
2198-H070-P-T	2198-D057-ERSx, 2198-S086-ERSx, 2198-S130-ERSx	Control power sharing	Control power T-connector with bus bars, 85 mm
2198-S160-P-T	2198-S160-ERSx	Control power sharing	Control power T-connector with bus bars, 100 mm
2198T-W25K-P-T	2198T-W25K-ER		
2198-S312-P-T	2198-S263-ERSx, 2198-S312-ERSx	Control power sharing	Control power T-connector with bus bars, 220 mm

(1) The input wiring connector can be inserted into any drive module (mid-stream in the drive system) to begin a new 24V control bus when the maximum current value is reached. See the Kinetix 5700 Servo Drives User Manual, publication [2198-UM002](#).

Kinetix 5500 Servo Drives

These shared-bus connector kits apply to Kinetix 5500 multi-axis servo drive systems.

Shared-bus Connector Kit Cat. No. (1)	Frame Size and Cat. No. (2)	Application	Description
2198-H040-ADP-IN	Frame 1 or 2	First drive	<ul style="list-style-type: none"> Mains AC input wiring connector 24V DC input wiring connector DC bus T-connector
2198-H040-A-T	Next drive is... Frame 1 drives: <ul style="list-style-type: none"> 2198-H003-ERSx 2198-H008-ERSx Frame 2 drives: <ul style="list-style-type: none"> 2198-H015-ERSx 2198-H025-ERSx 2198-H040-ERSx 	AC sharing only	AC bus T-connector
2198-H040-D-T		Control power sharing only	Control power T-connector
2198-H040-P-T		Control power sharing only	Control power T-connector
2198-H040-AD-T		AC and DC bus sharing	AC and DC bus T-connectors
2198-H040-AP-T		AC and control power sharing	AC and control power T-connectors
2198-H040-DP-T		DC and control power sharing	DC and control power T-connectors
2198-H040-ADP-T		AC, DC, and control power sharing	AC, DC, and control power T-connectors
2198-H070-ADP-IN		Frame 3 drive: 2198-H070-ERSx	First drive
2198-H070-A-T	Next drive is... Frame 3 drives: 2198-H070-ERSx	AC sharing only	AC bus T-connector
2198-H070-D-T		DC sharing only	DC bus T-connector
2198-H070-P-T		Control power sharing only	Control power T-connector
2198-H070-AD-T		AC and DC bus sharing	AC and DC bus T-connectors
2198-H070-AP-T		AC and control power sharing	AC and control power T-connectors
2198-H070-DP-T		DC and control power sharing	DC and control power T-connectors
2198-H070-ADP-T		AC, DC, and control power sharing	AC, DC, and control power T-connectors

(1) Catalog numbers 2198-H040-xxx-T include 55 mm bus bars. Catalog numbers 2198-H070-xxx-T include 85 mm bus bars.

(2) When the Kinetix 5500 inverter catalog number ends in -ERSx, for example 2198-H070-ERSx, the variable (x) indicates that the inverter catalog number (using this example) can be 2198-H070-ERS or 2198-H070-ERS2.

Replacement Bus-bar Connectors

Bus-bar Cat. No.	Replacement Bus-bar Connectors (quantity 8)	Module Width	Drive Family
2198-BARCON-55DCAC100	AC and DC-bus sharing	55 mm	Kinetix 5500
	24V DC control power sharing		Kinetix 5500 and Kinetix 5700
2198-BARCON-85DCAC100	AC and DC-bus sharing	85 mm	Kinetix 5500
	24V DC control power sharing		Kinetix 5500 and Kinetix 5700
2198-BARCON-100DC100	24V DC control power sharing	100 mm	Kinetix 5700

Install the Connector Kits

The connection system for both drive families is comprised of three components.



SHOCK HAZARD: To avoid hazard of electrical shock, perform all mounting and wiring of the servo drives and shared-bus connector kits before applying power. Once power is applied, connector terminals can have voltage present even when not in use.

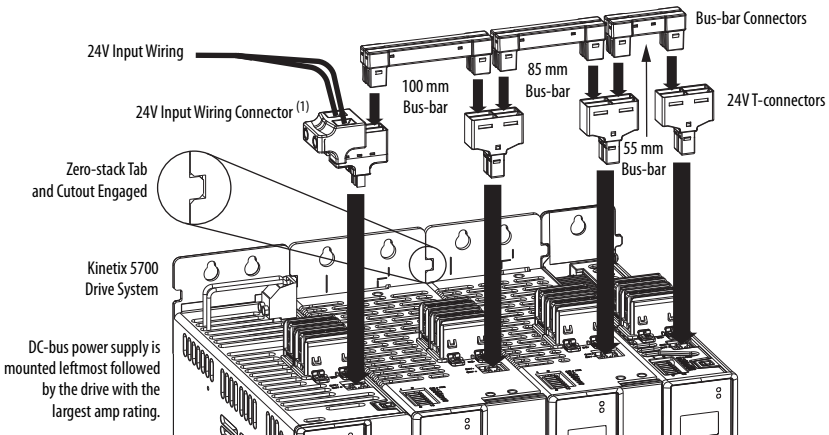
SHOCK HAZARD: DANGER D'ÉLECTROCUTION: Pour éviter le risque d'électrocution, procéder à l'installation et au câblage des servovariateurs et des connecteurs du bus partagé avant de mettre sous tension. Lorsque l'alimentation est raccordée, les bornes du connecteur peuvent être sous tension même lorsqu'elles ne sont pas utilisées.

IMPORTANT When the shared-bus connection system is used, the zero-stack tab and cutout must be engaged between adjacent drives.

Kinetix 5700 Connection System

- The 24V input-wiring connector that plugs into the DC-bus power supply, regenerative bus supply, or accessory module (typically) and receives input wiring for 24V DC.
- 24V DC T-connectors that plug into the drives downstream from the power supply where the 24V control power is shared.
- Bus bars that connect between drives to extend the 24V control power from drive to drive.

This example illustrates the 24V input wiring connector inserting into the DC-bus power supply along with downstream T-connectors and bus-bar connectors. For information on installing the DC-bus link kits, refer to the Kinetix 5700 DC-bus Link Kits Installation Instructions, publication [2198-IN007](#).

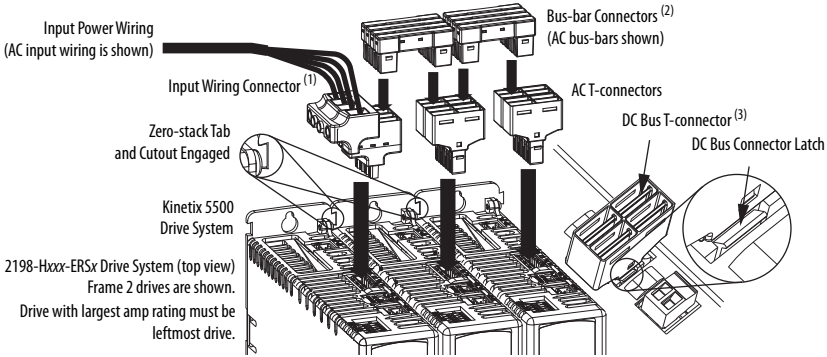


- (1) The iTRAK power supply (catalog number 2198T-W25K-ER) and regenerative bus supply (catalog numbers 2198-RP263 and 2198-RP312) input wiring connector (catalog number 2198T-W25K-P-IN) is slightly larger than the input wiring connector for the remaining Kinetix 5700 drive modules (catalog number 2198-TCON-24VDCIN36).

Kinetix 5500 Connection System

- Input-power wiring connectors plug into the leftmost drive and receive input wiring for AC input power and 24V DC input power.
- AC bus, DC bus, and 24V DC T-connectors plug into the drives downstream from the first drive where AC, DC, and/or 24V control power is shared. DC bus T-connectors also plug into the first drive where DC bus power is shared.
- Bus bars connect between drives to extend the AC input bus, DC bus, and 24V DC control power from drive to drive.

This example illustrates the AC input power wiring connector, T-connectors, and bus-bar connectors. The 24V bus and DC bus systems connect in a similar way.



- (1) Due to the higher amp rating of frame 3 drives, the input wiring connector for frame 3 drives (catalog number 2198-H070-ADP-IN) is slightly larger than the wiring connector for frame 1 and 2 drives (catalog number 2198-H040-ADP-IN).
- (2) Due to the extra width of frame 3 drives, bus-bar connectors between frame 3 drives are slightly longer (85 mm) than connectors between frame 2 and frame 1 drives (55 mm).
- (3) DC bus T-connectors latch on both sides when inserted into the drive. To remove the DC bus T-connector, at least one latch must be pried away with a non-conductive probe.

Power Ratings

Attribute	Value	Drive Family
AC input current, max	52 A	Kinetix 5500
Bus-bar current, max	70 A	

Attribute	Value	Drive Family
24V control power current, max	40 A	Kinetix 5500 Kinetix 5700





The Kinetix 5500 and Kinetix 5700 servo drive families are rated for use on a circuit capable of delivering up to 200,000 A (fuses) and 65,000 A (circuit breakers) when used with fuses and circuit breakers specified in the Kinetix 5700, 5500, 5300, and 5100 Servo Drives Specifications Technical Data, publication [KNX-TD003](#).

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