

# servSD Single-Axis Servo Drive

## servSD SD01 – Ordering Information

		SD01	-	030	1D	AB	CA	-	000
<b>servSD Single-Axis Servo Drive</b>									
<b>Rating – Cont. Current, Peak Current</b>									
<b>025</b>	25, 80 Arms @ 48 VDC								
<b>030</b>	30, 100 Arms @ 24 VDC								
<b>xxx</b>	Custom								
<b>Power</b>									
<b>1D</b>	Bus 20-60 VDC, Logic 24 VDC optional								
<b>xx</b>	Custom								
<b>Feedback</b>									
<b>AB</b>	Incremental AB quad, index, Halls								
<b>AS</b>	Incremental AB quad, Halls, 12 bit RS422, and SSI ( <i>upcoming</i> )								
<b>xx</b>	Custom								
<b>Communication</b>									
<b>CA</b>	CANopen								
<b>xx</b>	Custom								
<b>Options</b>									
<b>000</b>	Standard								
<b>001</b>	Mating connector (P1, P2 , P3, P4, C1)								
<b>xxx</b>	Custom								

## Safety

Only qualified personnel may perform installation, operation, service and maintenance procedures. These persons must have sufficient technical training and knowledge to foresee and recognize potential hazards that may occur when using the product, modifying settings, and operating the mechanical, electrical and electronic components of the entire machine system.

All persons working on and with the product must be fully familiar with all applicable standards, directives, and accident prevention regulations when performing such work.

The servSD servo drive is intended for use as a component within a machine system.

The machine builder and integrator must ensure the protection of both personnel and the complete machine system.

The machine builder and/or integrator must perform a risk assessment in view of using the servSD drive in the intended application. Based on the results, the appropriate safety measures must be implemented.

The servSD drive must be used in compliance with all applicable safety regulations and directives, and all technical specifications and requirements.

Before installing the servSD, be sure to review the safety instructions in the product documentation. Failure to follow the safety instructions may result in personal injury or equipment damage.



The servSD drive utilizes hazardous voltages. It must be properly grounded.



The machine builder and the machine owner are responsible for the safety of the machine operators.



The machine owner and the machine operator are responsible for ensuring personnel cannot enter the hazard zone while the machine is energized unless adequate functional safety mechanisms are in place.

## Installation Overview

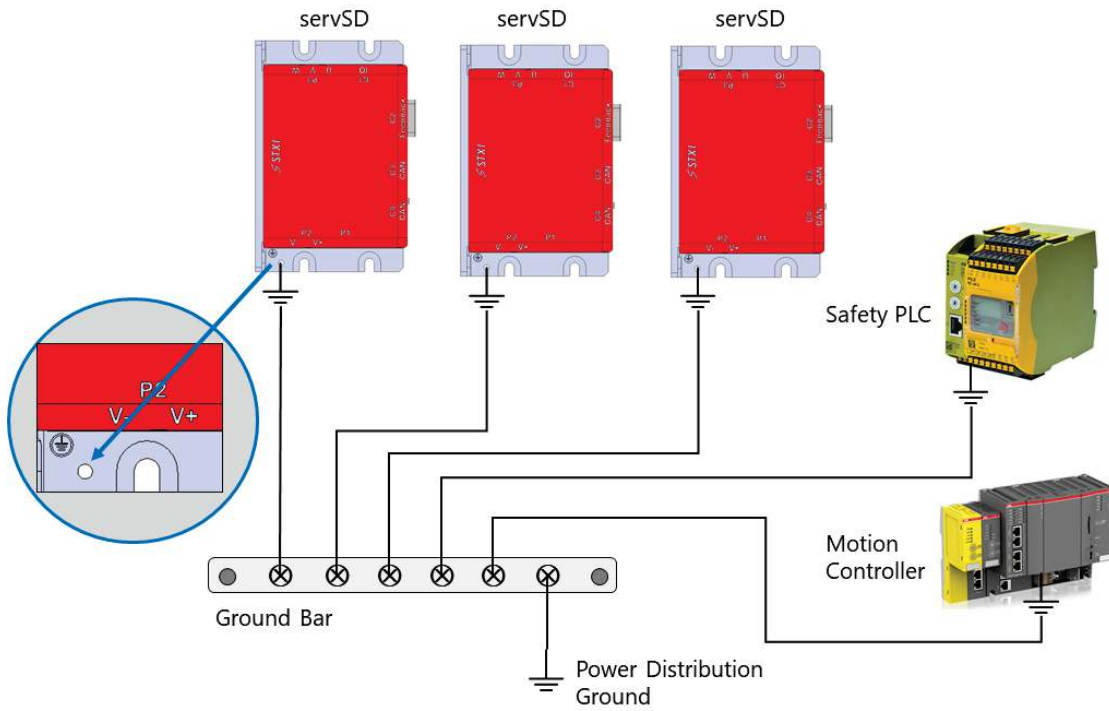
1. Mount the servSD.
2. Make all wiring and cable connections, as required by your application:
  - I/Os (C1 connector)
  - Motor feedback (C2 connector)
  - CANopen fieldbus devices (C3 or C4 connector)  
CANopen network: set 120Ω termination resistor on a CAN dongle cable
  - Safe torque off (STO) (P4 connector)
  - Motor U-V-W (P3 connector)
  - Motor brake (P1 connector)
  - Logic power (P1 connector)
  - Motor power (P2 connector)
3. Connect the drive to the host computer.
4. Power up the drive and the host computer.
5. Install software on the host computer for setup and tuning

## Grounding

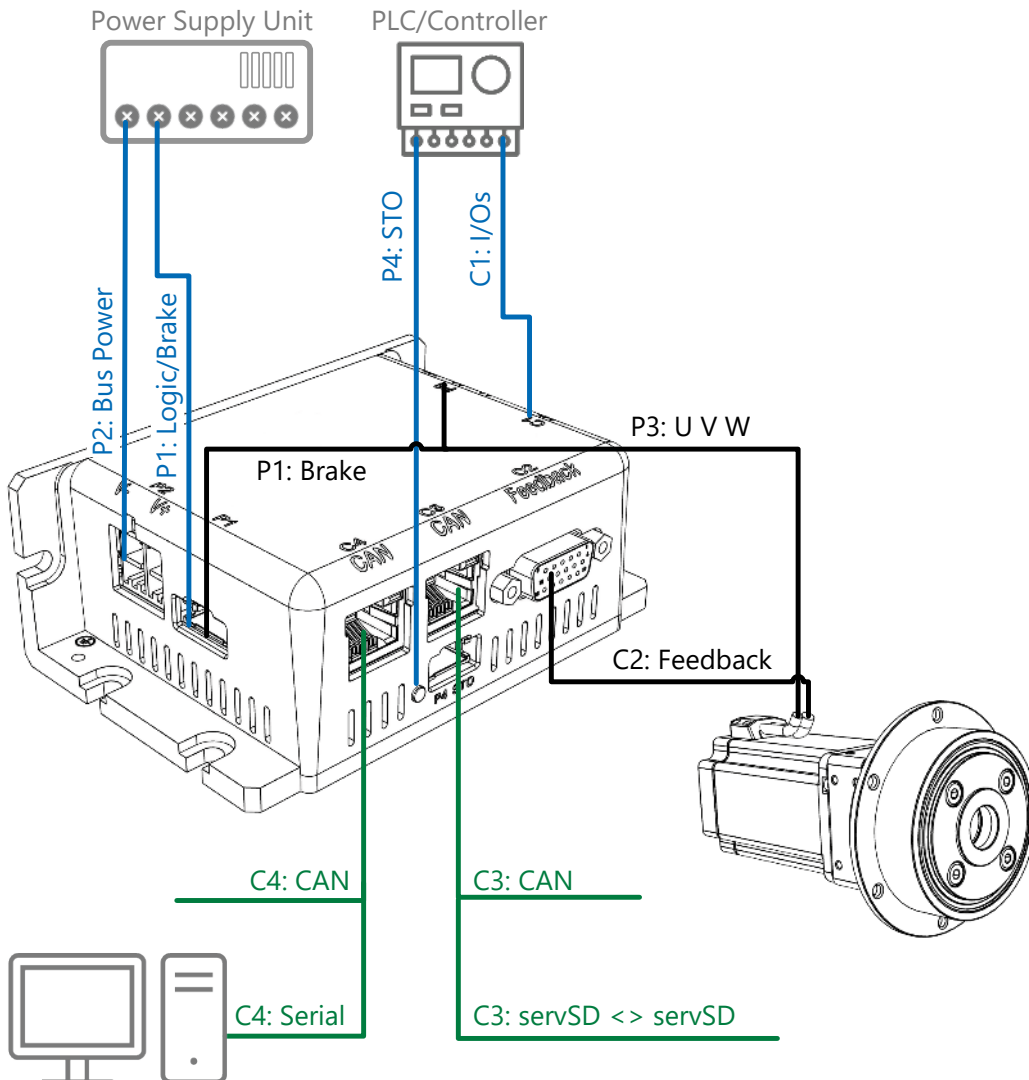


When connecting the servSD to other control equipment, be sure to follow two basic guidelines to prevent damage to the drive:

- The servSD must be grounded to the chassis of the machine.
- Any motion controller, PLC, or PC that is connected to the servSD must be grounded to the same earth ground as the servSD.



# System Wiring



- Notes**
- C3 and C4:** A 120 Ω termination resistor is required at both ends of the CAN bus network between CAN\_L and CAN\_H. This is the responsibility of the user. Wiring requires Cat 5e cable.
  - C4:** Can be used for connection to PC using USB to RS232 adapter cable