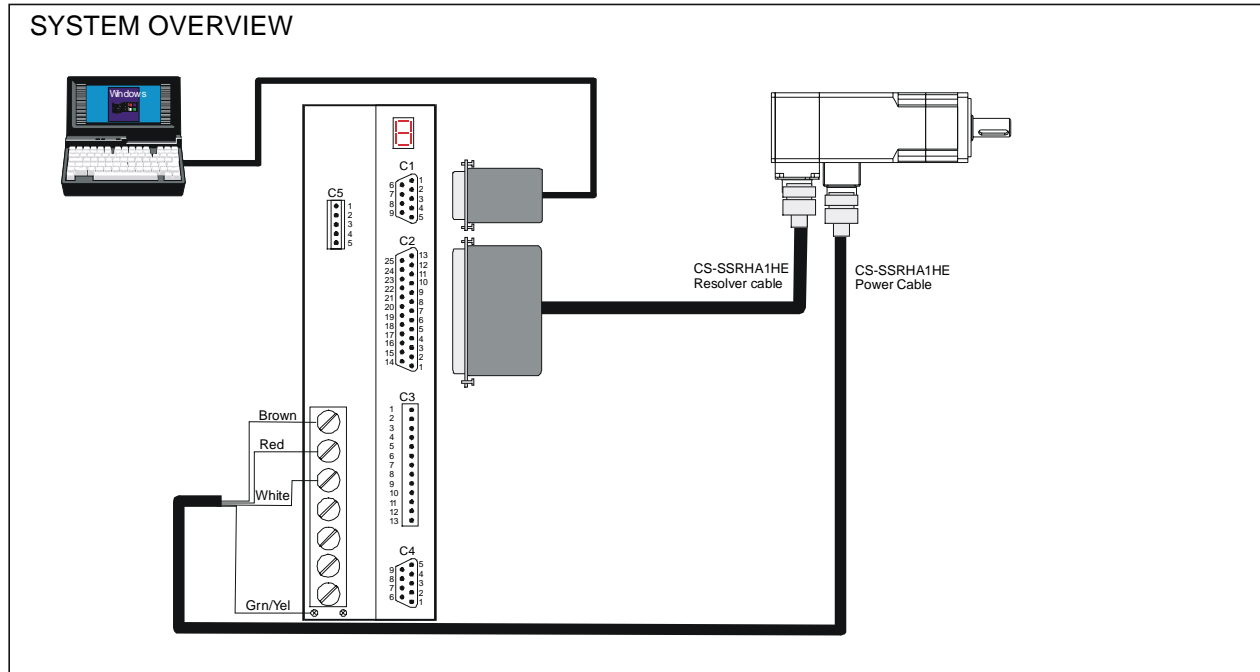


6.5 Kollmorgen SERVOSTAR Drive with PSA Series Actuators (M Connector Option)



Dangerous voltages exist so use extreme caution when operating this equipment. Sufficient energy remains in the SERVOSTAR to cause motion even with the power removed. To verify that the equipment is safe, insure that the voltage across the DC+ and DC- terminals is at 0VDC. At startup, reduce the current to below the rated current, such that accelerating torque is limited, until proper control is verified.

SETTING UP THE SERVOSTAR DRIVE TO RUN EXLAR PSA SERIES ACTUATORS

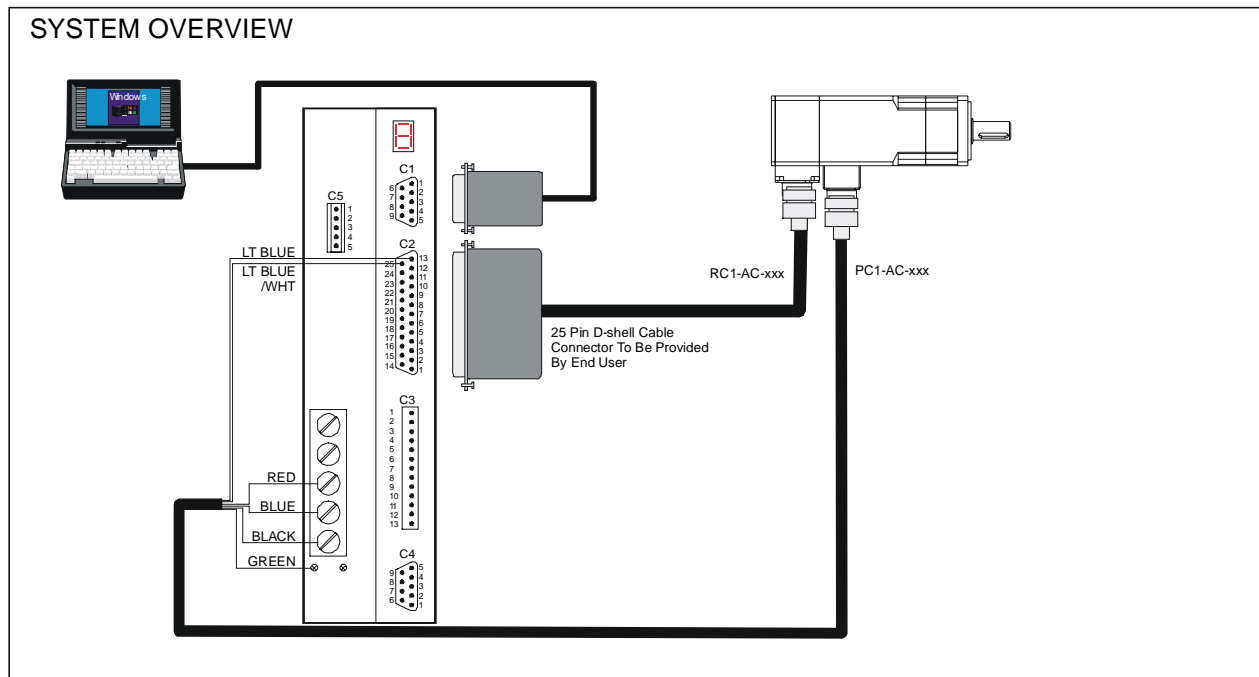
In order to program the drive to run the Exlar actuators, the motor parameter file provided by Exlar must be loaded into the Servostar directory, which by default is named “c:\Program files\KMTG Motion Suite\user.m03”. Once the motor file is loaded, the following steps will enable the SERVOSTAR drive to run the Exlar actuators.

1. Connect the serial cable from the PC to C1 of the SERVOSTAR drive.
2. With the motor power cable disconnected from the motor, apply power to the drive.
3. Double click on the SERVOSTAR icon to start the program.
4. Click OK to continue from the About MotionLink page.
5. Click on Com Setup and enter the communication parameters for the computer and click on OK.
6. Click on the Scan For Drives button to initiate communication with the drive.
7. Click on Start to begin the drive initialization process.
8. From the New Amplifier Startup Screen, click Start.
9. Select the bus voltage and drive configuration switch settings, then click Exit.
10. Under Motor Description, select the appropriate Exlar actuator.
11. Click on the “To Drive” icon to download the motor data to the drive. Then click on Exit.
12. Continue on through the Startup process by running the “Opmode” “Tune”, and “Backup” steps.

Basic PSA Series Parameter Settings for Kollmorgen SERVOSTAR CD Drives (1)					
		PSA60	PSA90	PSA115	PSA142
Maximum Speed	RPM	5000	3000	3000	2400
Back EMF Compensation	%	50	50	50	50
Motor Inertia	Kg-m ²	See Inertia Table in section 6.0			
Motor Poles		6	6	8	6
AGain @ Peak Current	%	40	40	40	40
AGain @ Cont. Current	%	70	70	70	70
AGain@ Zero Current	%	100	100	100	100
Torque Advance P	Elec. Degrees	23	23	23	23
Torque Advance C	Elec. Degrees	10	10	10	10
Speed Advance V	Elec. Degrees	25	25	25	25
Speed Advance ½ V	Elec. Degrees	15	15	15	15

Note 1 Appropriate motor files may be obtained from Exlar and downloaded to SERVOSTAR CD drives. Use user.m03 file found on www.exlar.com

6.5a Kollmorgen SERVOSTAR Drive with PSA Series Actuator (O Connector Option)



Motor Cable PC1-AC-XXX			
Exlar Connector	Wire Color	Function	SERVOSTAR Connector
A	Red	Phase A	Ma
B	Black	Phase C	Mc
C	Blue	Phase B	Mb
D	Green	GND	⊕
E			
F	Blue/White	Therm Lo	C2, 25
G	Blue	Therm Hi	C2, 13

Resolver Cable RC1-AC-XXX			
Exlar Connector	Wire Color	Function	C2 Connector
G	Black	Sine Lo (S3)	1
S	Red	Sine Hi (S1)	2
D	Bare	Shield	3
H	Yellow	Cos Hi (S2)	4
F	Blue	Cos Lo (S4)	5
D	Bare	Shield	6
D	Bare	Shield	14
R	Yellow/White	Ref Hi Out (R2)	15
E	Red/White	Ref Lo Out (R1)	16