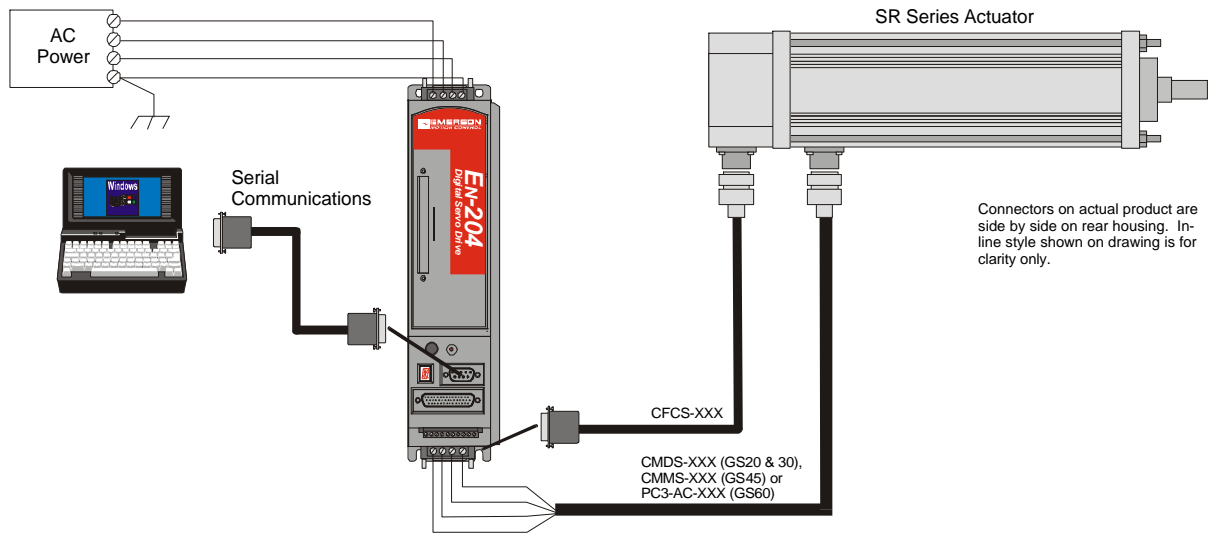


7.2 Emerson EN Series Drive with SR Series Actuator (M Connector Option)

Emerson EN Series



Note: Dangerous voltages exist. Use extreme caution when operating this equipment. Sufficient energy remains in the EN Series drive to cause motion even with the power removed. Wait for the 7-segment display to dim to off when powering down the drive. At start-up, be sure to have the proper motor file selected and limit the maximum acceleration until proper operation is verified.

SETTING UP THE EMERSON EN SERIES DRIVE TO RUN THE SR SERIES ACTUATOR

The quick touch setup cannot be used to select the Exlar actuator. The motor file containing the Exlar actuators is supplied by Exlar and must be saved as the motor.ddf file in the Power Tools main directory of the personal computer. When running PTOOLS, the actuator can be selected from the motor list and downloaded to the EN Series drive by following these steps:

1. Click on the PowerTools Icon.
2. From the menu bar, select File-New.
3. Select Predefined Setup Selection appropriate for the application.
4. Enter the appropriate ID name, drive address, line voltage, and operating mode.
5. Enter the EN Series drive type.
6. At this point, if it asks you to enter a motor, then from the pull down menu, select the appropriate SR Series actuator.
7. Click on the Inputs, then Outputs tabs and configure the I/O, as required.
8. Click on the Position, Velocity, and Torque tabs and configure the I/O, as required.
9. Click on the Motor tab, then the drop-down Motor Type. The Exlar SR Series actuators should be included in the list. If they are not, the motor.ddf file from Exlar must be loaded into the Power Tools directory.
10. Download to the EN Series drive by clicking on Device – Download from the menu items.

Basic SR Series Parameter Settings for Emerson EN-XXX Drives*			
		SR21	SR31, 41
Number of Poles		8	8
Maximum Speed	RPM	5000	3000
J_m	Lb-in-s ²	**	**
Encoder Size	Lines	2048	2048
Index Offset	Degrees	330	330
Hall Offset	Degrees	330	330

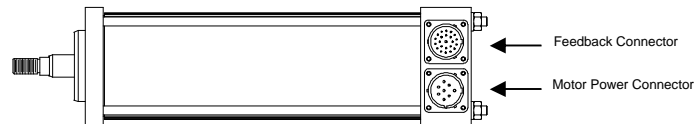
* Appropriate motor files may be obtained from Exlar and downloaded to EN-XXX drives.

** See Inertia Table in Section 7.0

CABLES FOR EMERSON EN SERIES WITH SR SERIES ACTUATOR (M CONNECTOR OPTION)

Refer to the diagram at the beginning of Section 7.2. The required cables are identified in the table below.

Emerson EN Series Cable Part Numbers (-xxx denotes cable length)	
SR21, 31, and 41 Feedback	CFCS-XXX
Motor Power SR21/31	CMD5-XXX / SR21 with Brake - Exlar PC1-AC-xxx
Motor Power SR41	CMMS-XXX



SR21, SR31 - EM2-M			
Exlar Connector Pin Number	Drive Connection	Mating Cable PC6 No Brake	Alternate PC1 With Brake
A	R	Brown	Red
B	S	Black	Black
C	T	Blue	Blue
D	GND	Green/Yellow	Green
E			
F	Brake -		Blue/White
G	Brake +		Blue
H			
J			

SR41 - EM2-M			
Exlar Connector Pin Number	Drive Connection	Mating Cable PC7-MC No Brake	Alternate PC7-AC With Brake
A	R	Brown	Red
B	S	Black	Black
C	T	Blue	Blue
D	GND	Green/Yellow	Green
E			
F	Brake -		Blue/White
G	Brake +		Blue
H			
J			