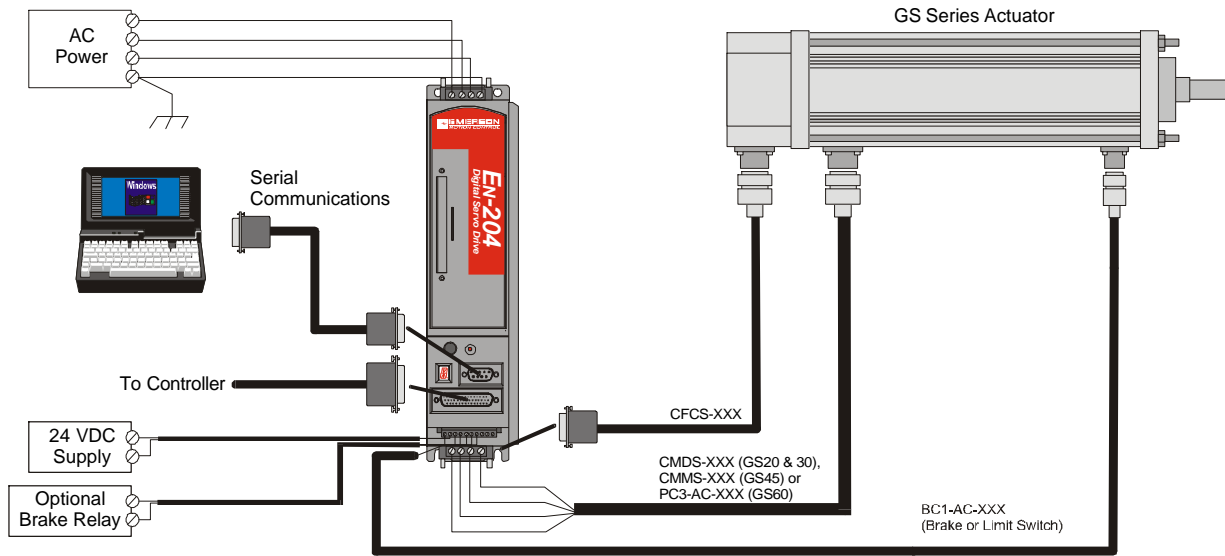


7.2 Emerson EN Series Drive with GS/X Series Actuator (M Connector Option)

Emerson EN Series



Note: Dangerous voltages exist, so 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 GS/X 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 GS/X 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 GS/X 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 GS/X Series Parameter Settings for Emerson EN-XXX Drives ¹							
		GS20	GS30	GS40	GS45	GSX50	GS/X60
Number of Poles		GS-6 GSX-8	GS-6 GSX-8	GS-8 GSX-8	GS-6	8	GS-6 GSX-8
Maximum Speed	RPM	5000	3000	3000	2400	2400	2400
J _m	Lb-in-s ²	See Inertia Table in section 7.0					
Encoder Size	Lines	2048	2048	2048	2048	2048	2048
Index Offset	Degrees	330	330	330	330	330	330
Hall Offset	Degrees	330	330	330	330	330	330

¹ Appropriate motor files may be obtained from Exlar and downloaded to EN-XXX drives.

CABLES FOR EMERSON EN SERIES WITH GS/X 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.

An Exlar cable must be used for the limit switch option on the GS/X actuators; Emerson Motion Control does not offer a version of this cable. An Exlar motor power cable is required for the GS60.

Emerson EN Series Cable Part Numbers (-xxx denotes cable length)	
GS/X20, GS/X30	
Feedback	CFCS-XXX
Motor Power	CMDS-XXX
Brake/Limit Switch	BC1-AC-XXX (Exlar Cable)
GS/X40, GSX50, GS45	
Feedback	CFCS-XXX
Motor Power	CMMS-XXX
Brake/Limit Switch	BC1-AC-XXX
GS60	
Feedback	CFCS-XXX
Motor Power	PC3-AC-XXX (Exlar Cable)
Brake/Limit Switch	BC1-AC-XXX (Exlar Cable)

