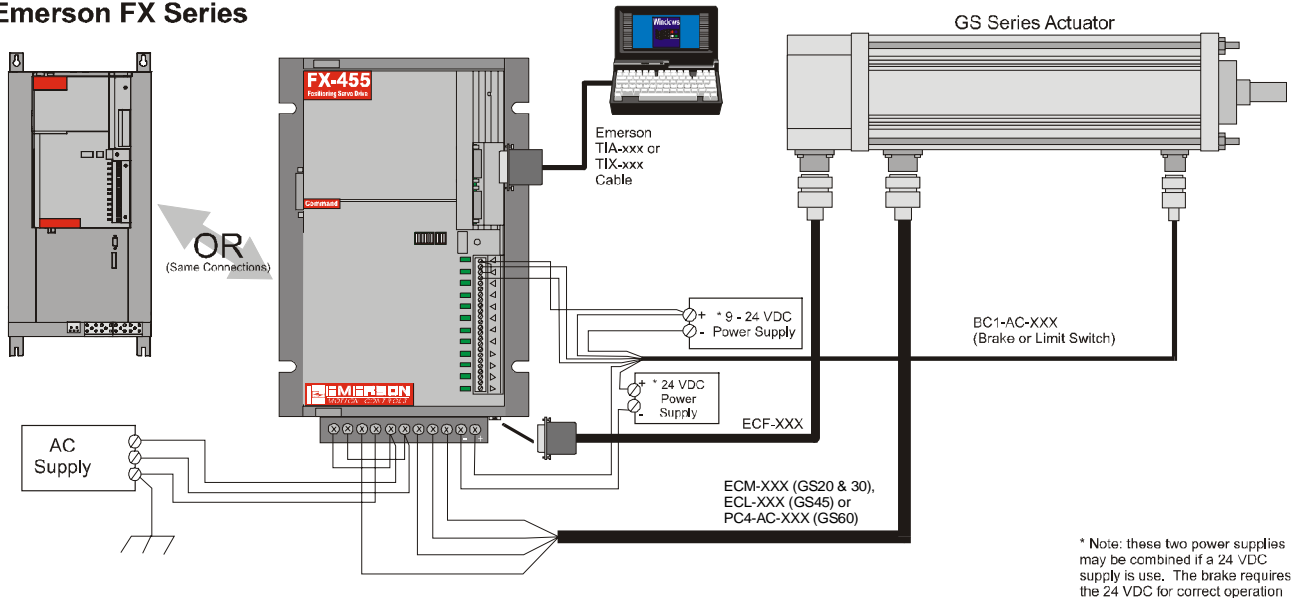


## 7.3 Emerson FX Drive with Exlar GS Actuator (M Option Connectors)

### Emerson FX Series



**Note:** Dangerous voltages exist, so use extreme caution when operating this equipment. Sufficient energy remains in the FX Series drive to cause motion even with the power removed. At start-up, it is recommended to reduce current limits in order to lower maximum acceleration until the cables and control interface is verified.

### SETTING UP THE EMERSON FX DRIVE TO RUN THE GS SERIES ACTUATOR

The FX drive should be set up using the PCX software supplied by Emerson Motion Control. The steps for changing the maximum current are as follows:

1. Run the PCX software.
2. Select On-line operations for the appropriate COM port of the personal computer.
3. Select drive setup.
4. Select drive configuration.
5. Select limits.
6. Set maximum torque output to the value shown in the table below for the appropriate drive/actuator combination.

| Maximum Torque Settings for Emerson FX Drives (Notes 1, 2) |                            |         |         |         |         |
|--|----------------------------|---------|---------|---------|---------|
| Drive Model  | Drive Cont. Current Rating | GS20 MV | GS30 MV | GS45 MV | GS60 HV |
| FX-208   | 3                          | 180     | 190     |         |         |
| FX-316   | 4                          | 135     | 143     |         |         |
| FX-340   | 6.5                        | 83      | 88      | 200     |         |
| FX-455   | 8                          |         |         | 200     |         |
| FX-490   | 14                         |         |         | 114     |         |
| FX-6210  | 13.6                       |         |         |         | 200     |
| FX-6310  | 15                         |         |         |         | 200     |

(1) Setting the maximum torque in the drive configuration does not protect the actuators from exceeding the continuous ratings. Proper connection of the "Therm Sw" wires to the FX drive will help prevent overheating of the actuator. (2) FX drives do not operate with 8 pole motors such as GS40.

## CABLES FOR EMERSON FX DRIVE AND GS 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 actuators; Emerson Motion Control does not offer a version of this cable. An Exlar motor power cable is required for the GS60.

| <b>Emerson FX Series Cable Part Numbers (-XXX denotes cable length)</b> |                          |
|---|--------------------------|
| <b>GS20 / GS30</b>  |                          |
| Feedback  | ECF-XXX                  |
| Motor Power   | ECM-XXX                  |
| Brake/Limit Switch  | BC1-AC-XXX (Exlar Cable) |
| <b>GS45</b>   |                          |
| Feedback  | ECF-XXX                  |
| Motor Power   | ECL-XXX                  |
| Brake/Limit Switch  | BC1-AC-XXX (Exlar Cable) |
| <b>GS60</b>   |                          |
| Feedback  | ECF-XXX                  |
| Motor Power   | PC4-AC-XXX (Exlar Cable) |
| Brake/Limit Switch  | BC1-AC-XXX (Exlar Cable) |

