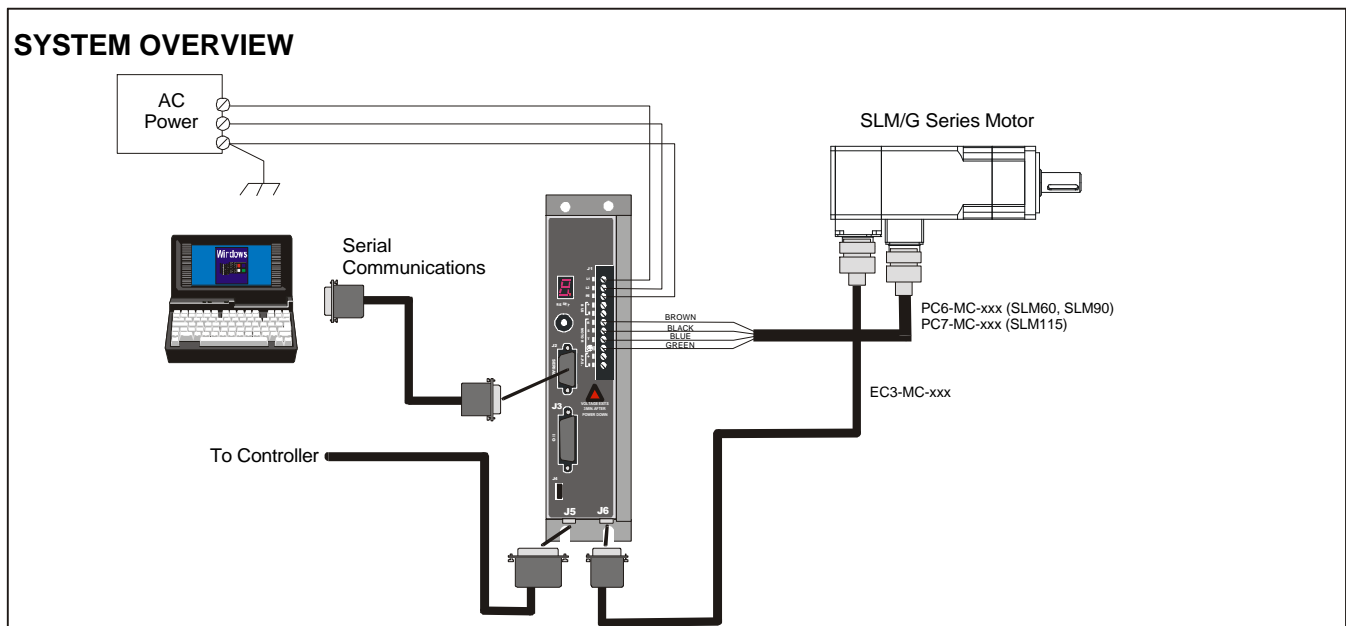


## 6.1 Emerson Epsilon Drive with SLM/G Series Motor (C/P Connector Option)



**Note:** Dangerous voltages exist, so use extreme caution when operating this equipment. Sufficient energy remains in the Epsilon 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 EPSILON SERIES DRIVE TO RUN SLM SERIES MOTORS

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 motor can be selected from the motor list and downloaded to the Epsilon 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 Epsilon Series drive type.
6. At this point, if it asks you to enter a motor, then from the pull down menu, select the appropriate SLM motor.
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 SLM Series motors 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 Epsilon Series drive by clicking on Device – Download from the menu items.

		SLM060	SLM090	SLM115
Number of Poles		8	8	8
Maximum Speed	RPM	5000	4000	3000
$J_m$	Lb-in-s <sup>2</sup>	See Inertia Table in Section 4.2		
Encoder Size	Lines	2048	2048	2048
Index Offset	Degrees	330	330	330
Hall Offset	Degrees	330	330	330

<sup>1</sup> Appropriate motor files may be obtained from Exlar or [www.exlar.com](http://www.exlar.com) and downloaded to Epsilon-XXX drives.

## CABLES FOR EMERSON EPSILON SERIES DRIVE WITH SLM SERIES MOTOR (C/P CONNECTOR OPTION)

Motor Power Cable (PC6-MC-XXX 060,090, no brake lead) (PC7-MC-XXX size 115, no brake lead) (PC1-AC-XXX 060, 090, with brake lead) (PC7-AC-XXX size 115 with brake lead)			
Exlar Connector	Wire Color	Function	Epsilon-XXX Connector
A	Brown	R Phase	R
B	Black	S Phase	S
C	Blue	T Phase	T
D	Green	GND	⊕
F	Blue/White	Brake -	
G	Blue	Brake +	

Encoder Cable (EC3/4-MC-XXX)			
Exlar Connector	Wire Color	Function of Epsilon Drive	J6 Connector
A	Red/Green	Motor Overtemp	9
B	Blue	A+	1
C	Orange	A-	10
D		Overtemp GND	17
E	White/Brown	U+	4
F	White/Gray	V+	5
G	Red/Orange	W+	6
H	Orange/Red	W-	15
J			16
K	Red/Blue	+5 VDC	7
L		+5 VDC	N/C
M	Black	Z+	3
N	Green	B+	2
P	Brown	B-	11
R	Brown/White	U-	13
S	Gray/White	V-	14
T	Blue/Red	GND	17
U	Yellow	Z-	12
V			N/C
W			N/C
X			N/C
Y			N/C
Z	Shield		N/C