Emerson Drive Solutions
Technical
CONTROL
TECHMMQUES

MOTION CONTROL

## The Technical Note is pertinent to the FXM5 Family

This technical note covers the specifications for the high current models of the FXM5 field current regulator. Included are field current programming tables and dimensional drawings not included in the standard user guide.

| Catalog Number | Current <br> $($ max. amps $)$ | Frequency <br> $(\mathrm{Hz})$ | Input Voltage <br> $(\mathrm{vac})$ | Output Voltage** <br> $(\mathrm{vdc})$ |
| :--- | :---: | :---: | :---: | :---: |
| $9500-9035$ | 20 | 50 | $220 / 380 / 440$ | $198 / 342 / 396$ |
|  |  | 60 | $240 / 480$ | $216 / 432$ |
| $9500-9032$ | 50 | 50 | $220 / 380 / 440$ | $198 / 342 / 396$ |
|  |  | 60 | $240 / 480$ | $216 / 432$ |
| $9500-9033$ | 90 | 50 | $220 / 380 / 440$ | $198 / 342 / 396$ |
|  |  | 60 | $240 / 480$ | $216 / 432$ |

** Maximum output voltage equals $90 \%$ of the input line voltage.
Field current is the controlled variable

## Refer the supplied User Guide typical Installation and setup information for all of the above listed models.

All of the FXM5 models may be operated in the analog, stand-alone mode, or the digital mode, controlled directly by the Quantum III / Mentor II DC Drive. The field current programming tables for the $10 / 20-\mathrm{amp}$ model (9500-9035) are covered in the standard User Guide. The field current programming tables for other models will be given in this document.

Analog Mode:

| Maximum <br> $9500-9032$ | Current (amps) <br> $9500-9033$ | Primary Turns | LK1 Position |
| :---: | :---: | :---: | :---: |
| 50 | 100 | 1 | 20 Np |
| 45 | 90 | 1 | 15 Np |

Potentiometer RV2, set max field, is used to set 0 to Max Current (in table above).

## Digital Mode:

| Maximum <br> $9500-9032$ | Current (amps) <br> $9500-9033$ | Primary Turns | LK1 Position | Parameter <br> $\# 6.11$ |
| :---: | :---: | :---: | :---: | :---: |
| 33 | 66 | 1 | 15 Np | 11 |
| 40 | 80 | 1 | 20 Np | 16 |
| 45 | 90 | 1 | 20 Np | 18 |
| 50 | 100 | 1 | 20 Np | 20 |

Parameter \#6.08, max field current, is used to set 0 to Max current (in table above).

## Dimensions:

9500-9035 Dimensions for this model available in FXM5 User Guide.

9500-9032/9033


All Dimensions are approximate, not for construction

Electrical Connections: Power


Note: If field supply is operated in the digital mode, L1 must be connected to L1 of the Quantum III / Mentor II and L2 must be connected to L3 of the Quantum III / Mentor II.


