AN-105

Upgrading 7xx5AC UV Analog Amplifiers to Xenus Plus

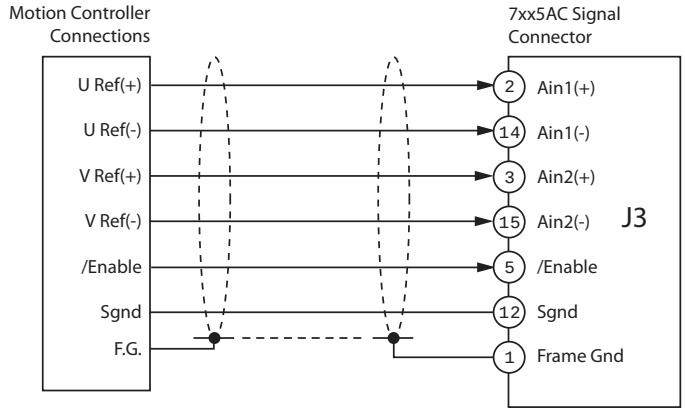
7XX5AC TO XENUS PLUS

The Xenus Plus XEL and XPL models are digital servo drives with dual analog inputs that can be configured for UV current control as an upgrade from the analog 7225AC and 7425AC models. CME2 software replaces resistors and capacitors for tuning the current loop and setting peak and continuous currents. Xenus Plus models also have STO (Safe Torque Off), are RoHS, and have CE and UL conformance not available with the analog amplifiers. UV current mode is fully supported in the next release of CME2. This application note shows how the ASCII Command Line tool in CME2 can be used to enable this mode now.

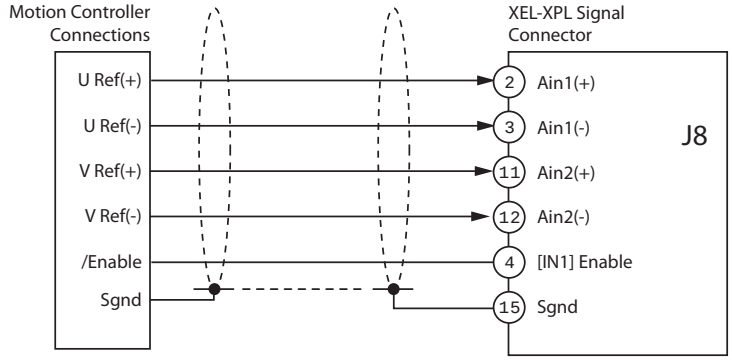
CONNECTIONS

The diagrams below show the different control signal connections for the different drive types.
Signals not shown are not related to the UV command signal functions and can be connected in a standard way.

7XX5AC CONNECTIONS



XEL-XPL CONNECTIONS



XEL-XPL CONFIGURATION

These settings are made using the ASCII Command Line in CME2.
Save to flash by entering a string like this: **`s f0x180 0x1001 <enter>`**
Decimal values can be entered like this: **`s f0xa9 2000 <enter>`**
After these are made, the current loops can be tuned using CME2 for the desired bandwidth, and current limits can be set, too.

VAR	Hex Value	Dec Value	Remarks
0x24	0x05	5	UV current mode, input configured by 0x180
0x180	0x10001	65537	UV from 2 analog ref, Hall offset 0x4F added to UV angle
0xA9	0x7D0	2000	UV input scaling, amps/100 at Vin = 11.5V
0x4E	0x01	1	Motor wiring: 0 = standard, 1 = swap UV outputs
0x4F	0x1E	30	Hall offset (degrees)

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