

X-Plus MS4 & X-Plus MS4.P

Series Drives

INTRODUCTION

- X-Plus MS4 is a new model of RTA flagship high-power stepping motor drive with STEP&DIR, Analog Input and Modbus RTU RS-485 interface.
- Embedded Auto-Sync and Auto-Feed functions with encoder, featuring a closed loop positioning and motor performance optimization.

AUTO-FEED

AUTO-FEED is a closed loop function with:

- Very simple tuning
- Lower power consumption and heating



MODBUS RTU MAIN FUNCTIONS

- Homing, Position and Velocity mode
- Registers for diagnostics



X-Plus MS4.P programmable version

- For simple, single-axis applications
- Possibility to load and execute a single-task program



HIGHLIGHTS

- 3 Current Control modes available: Open Loop, Auto-Sync and Auto-Feed.
- Configuration settings, diagnostics and setup via RTA STUDIO for Windows®.
- Extended interfaces: STEP&DIR, Analog Input velocity setpoint (± 10 Volt) and Modbus RTU.
- Integrated system for back EMF energy dissipation with optional external resistor.
- Zero index, Proximity Switch and Hard Stop searching function.
- Replied encoder signal output.



STO FUNCTION FEATURES

- Safe Torque Off (STO) function - **SIL3-PlE**
- Error Detection Monitor (EDM) output

SIL3
SAFE TORQUE
OFF (STO)

ONE OF THE MOST COMPACT DRIVES WITH POWER INPUT DIRECTLY FROM THE MAIN AC SUPPLY (110 - 230 VAC)

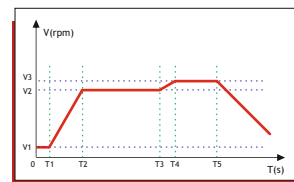
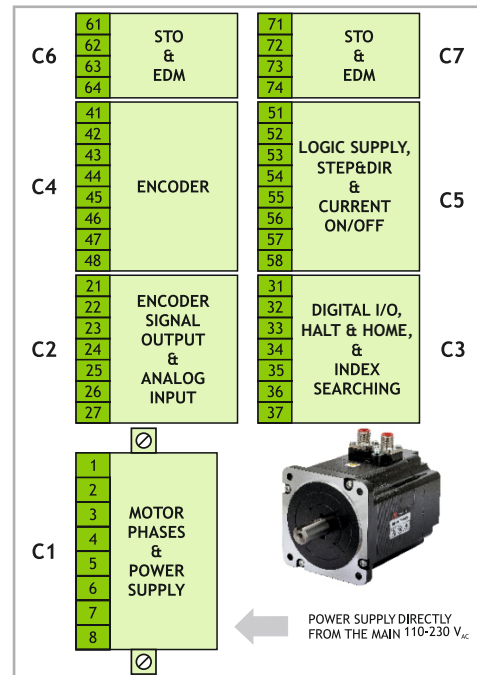
Series	Model	V _{AC} range (Volt)	I nom. (Amp)	I boost (Amp)	Dimensions (mm)
X-PLUS	MS4 / MS4.P	110 to 230 +/- 15%	4.8	6.0	169x129x46

TECHNICAL FEATURES

- Range of operating nominal voltage: 110-230 V_{AC}.
- Up to 6.0 Amps motor current setting.
- RS-485 baud rate up to 256000.
- Microstepping: 400, 800, 1600, 3200, 6400 and 12800 steps/revolutions.
- Various encoder resolution available.
- INPUT and OUTPUT configurable.
- Protections:
 - Protection against under-voltage and over-voltage
 - Protection against a short-circuit at motor outputs
 - Overtemperature protection with thermal sensor
 - Open motor/encoder phase.
- Automatic current reduction at motor standstill.
- Electronic damping facility for further acoustic noise and mechanic vibrations reduction.
- Easy wiring with plug-in connectors. Maximum compactness.
- Optoinsulated digital I/O to ensure best EM noise immunity.
- Coupling with stepping motors rated for high insulation is mandatory.
- Warranty: 24 months.

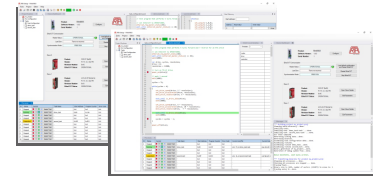


POWER AND LOGIC CONNECTIONS

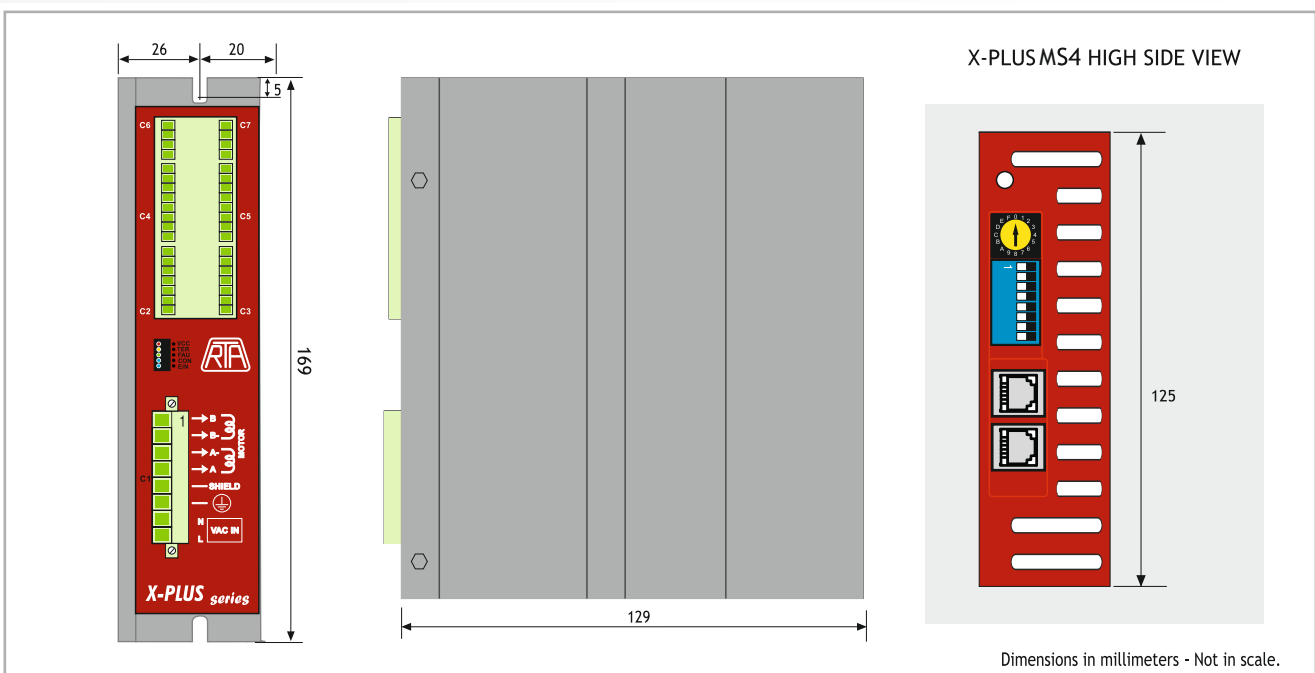


.P drives Motion Profile example

Programmable through
RTA Studio IDE



MECHANICAL DIMENSIONS



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