

# X-PLUS AS4 Series Drives

## INTRODUCTION

- X-Plus AS4 is a new model of RTA flagship high-power stepping motor drive with STEP&DIR, Analog Input ( $\pm 10$  Volt) and Modbus RTU RS-485 interface.
- Embedded Auto-Sync and Auto-Feed functions with absolute encoder, featuring a closed loop positioning and motor performance optimization.

## ABSOLUTE ENCODER MANAGEMENT

- The X-PLUS AS4 drive supports high-precision positioning with battery-less absolute encoders, enabling advanced motion control



BATTERY-LESS  
ABSOLUTE ENCODER

## 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



## HIGHLIGHTS

- 3 Current Control modes available: Open Loop, Auto-Sync and Auto-Feed.
- Configuration settings, diagnostics and setup via RTA STUDIO for Windows®.
- INPUT and OUTPUT configurable.
- Integrated system for back EMF energy dissipation with optional external resistor.
- Safe Torque Off (STO) function - **SIL3-Plc** Error Detection Monitor (EDM) output



## Motor coupling

- RM 3T1M-00HT
- RM 3T2M-00HT
- RM 3T3M-00HT



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

Series	Model	V <sub>AC</sub> range	I nom.	I boost	Dimensions
		(Volt)	(Amp)	(Amp)	(mm)
X-PLUS	AS4	110 to 230 +/- 15%	4.8	6.0	169x129x46

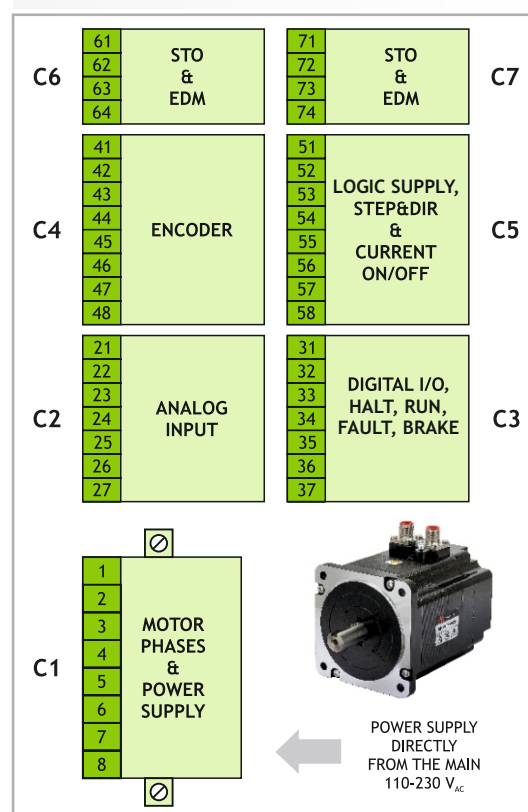


## TECHNICAL FEATURES

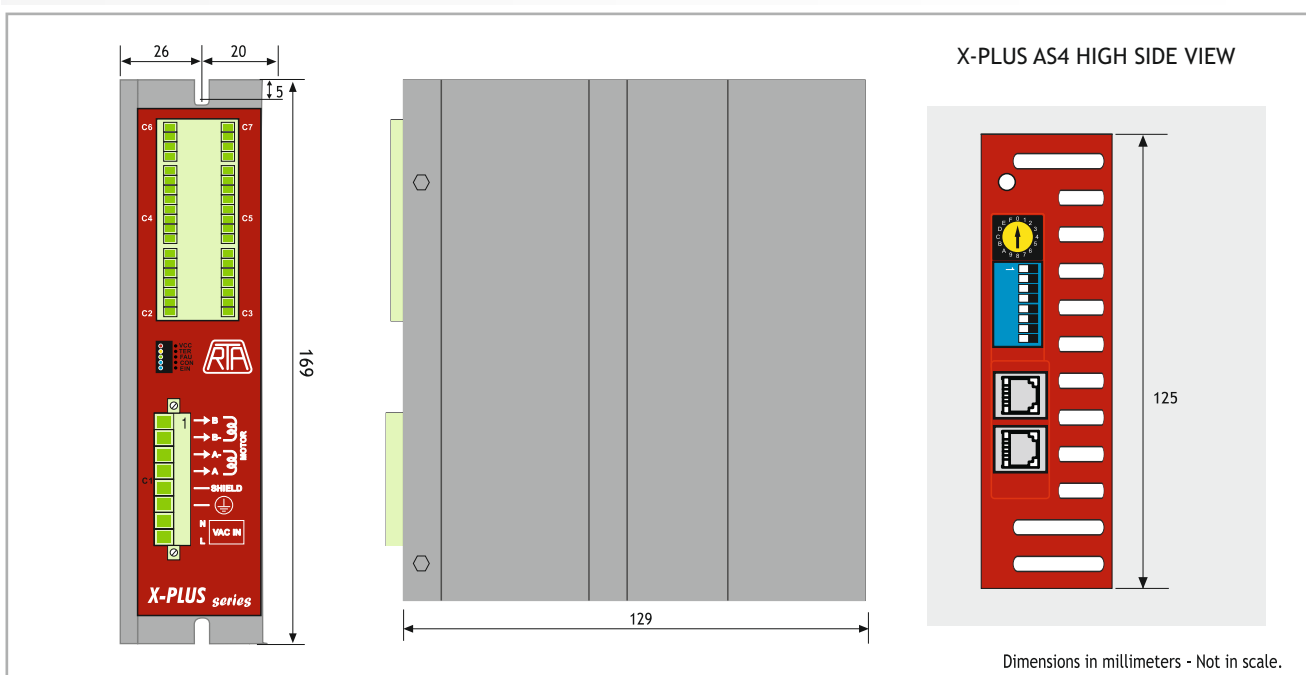
- Range of operating nominal voltage: 110-230 V<sub>AC</sub>.
- Up to 6.0 Amps motor current setting.
- RS-485 baud rate up to 256000.
- Microstepping: 2048, 4096, 16384 and 65536 steps/revolutions.
- Protections:
  - Protection against under-voltage and over-voltage
  - Protection against a short-circuit 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.  
RTA codes: RM 3TxM-00HT      x=1, 2, 3
- Warranty: 24 months.



## POWER AND LOGIC CONNECTIONS



## MECHANICAL DIMENSIONS



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