

# X-PLUS L Series Drives

## INTRODUCTION

- New series of compact bipolar microstep stepping motor drive with power input directly from the main AC supply (110 VAC to 230 VAC), specifically developed for Nema 23 and Nema 34 single stack motor coupling.
- The drive is equipped with an internal rectifier able to transfer more than 300 VDC (230 VAC) to the motor, in order to ensure the maximum power for the applications as well as a significant cost saving on transformer and rectifier, together with related cabling.
- Ten years after the development of X-PLUS B4 (230 VAC, 4 Amp) X-PLUS L2 features a more compact and economically competitive solution especially developed for small size motors.

## HIGHLIGHTS

- Full digital microstepping drive.
- Adaptive microstepping up to 4000 step/rev.
- Intelligent management of the current profile that achieves good results in terms of smoothness of movement, low noise and vibration control.
- A highly sophisticated control system, preserving anyhow the traditional ease of use R.T.A. drives.
- Mandatory coupling with stepper motors rated for high voltage (class F insulation), from NEMA 23 single stack up to, at max, NEMA 34 single stack.



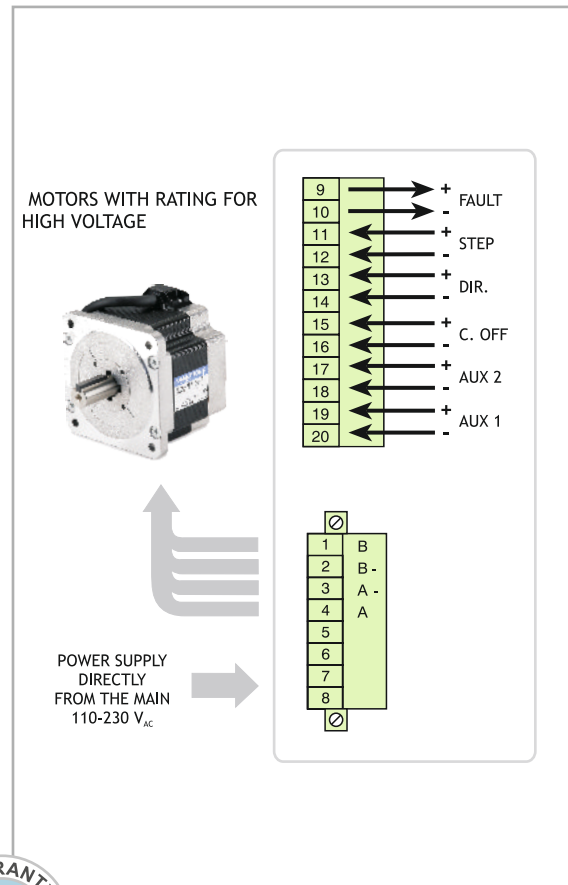
**ONE OF THE MOST COMPACT DRIVES WITH POWER INPUT DIRECTLY FROM THE MAIN AC SUPPLY (110 - 230 VAC)**

Series	Model	V <sub>AC</sub> range (Volt)	I <sub>NP</sub> min. (Peak value) (A)	I <sub>NP</sub> max. (Peak value) (A)	Dimensions (mm)
X-PLUS	L2	110 to 230 +/- 15%	1.4	2.5	152x129x30

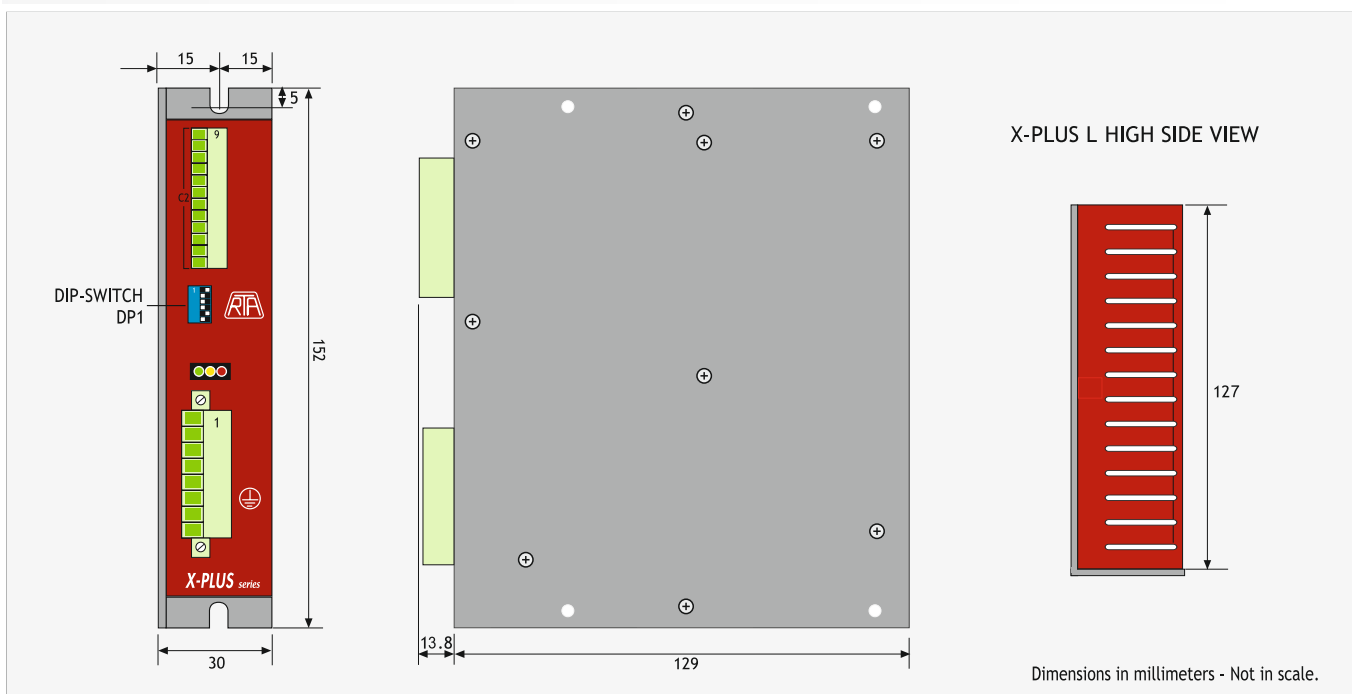
## TECHNICAL FEATURES

- Range of operating voltages: 110-230 VAC.
- Range of current: 1.4 - 2.5 A. Setting up four possible values by means of dip-switches.
- Microstepping: 400, 800, 1.600, 3.200 and 500, 1.000, 2.000, 4.000 steps/revolution. Setting by means of dip-switches.
- Automatic current reduction at motor standstill.
- Management of the current profile setting by means of a dip switch.
- Protections:
  - Protection against under-voltage and over voltage.
  - Protection against a short-circuit at motor outputs.
  - Overtemperature protection with thermal sensor.
- Optoinsulated inputs to ensure best EM noise immunity.
- Possibility to switch off motor current with an external logic signal.
- High efficiency CHOPPER.
- Electronic resonance damping circuit to ensure acoustic noise and mechanic vibrations reductions at low and medium speed.
- Alarm memory.
- External fans not needed.
- Coupling with stepping motors rated for high voltage.
- Warranty: 24 months.

## POWER AND LOGIC CONNECTIONS



## MECHANICAL DIMENSIONS



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