## X-PLUS B Series Drives

## INTRODUCTION

- Stepping motor drives series with Step \& Direction interface and direct input from the main AC power supply (from $110 \mathrm{~V}_{\mathrm{AC}}$ to 230 $V_{A C}$ ).
- The drive is equipped with an internal rectifier able to transfer more than $330 \mathrm{~V}_{\mathrm{DC}}\left(230 \mathrm{~V}_{\mathrm{AC}}\right)$ to the motor, in order to ensure the maximum power for the application as well as a significant cost saving on transformer and rectifier, together with the related cabling.
- Target: advanced application requiring great dynamic performance, high reliability and semplified power supply.


## HIGHLIGHTS

- Microstepping function up to 4.000 step/rev.
- Connection directly to the main AC supply (110 to $230 \mathrm{~V}_{\mathrm{AC}}$ ) normally avoiding the need for a transformer.
- Electronic damping facility for further acoustic noise and mechanic vibrations reduction at low and medium speed.

■ External fans not needed: ideal both for mounting inside a metallic electrical cabinet and for stand-alone applications.

- Optoinsulated and differential input and output signals ease interfacing with the most commonly used control systems and ensure high noise immunity.
- Coupling with stepping motors rated for high voltage and equivalent or bigger than NEMA 34 is mandatory.


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

| Series | Model | $\mathrm{V}_{\mathrm{AC}}$ range | $\begin{aligned} & \mathrm{I}_{\mathrm{NN}} \mathrm{~min}_{\text {(Peak value) }} \end{aligned}$ | $\begin{aligned} & \mathrm{I}_{\mathrm{NP}} \text { max. } \\ & \text { (Peak value) } \end{aligned}$ | Dimensions |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (Volt) | (Amp) | (Amp) | (mm) |
| X-PLUS | B4 | 110 to $230+/-15 \%$ | 2.4 | 4.0 | $152 \times 129 \times 46$ |

## TECHNICAL FEATURES

- Range of operating voltages: $110-230 \mathrm{~V}_{\mathrm{AC}}$.

■ Range of current: 2.4-4.0 Amp. Setting up to 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.
- Protections:
-Protection against under-voltage and over-voltage.
-Protection against a short-circuit at motor outputs. -Overtemperature protection.
- Optoinsulated inputs compatible with differential control signals.
- Possibility to switch off motor current with an external logic signal.
- High efficiency CHOPPER with IGBT final stage output.
- Electronic resonance damping circuit to ensure acoustic noise and mechanic vibrations reduction at low and medium speed.
- Alarm memory by use of yellow blinking led.
- External fans not needed.
- Coupling with stepping motors rated for high voltage and equivalent or bigger than NEMA 34 is mandatory.
- Version: boxed, equipped with crimp-type connectors. Maximum compactness.
- Warranty: 24 months.



## POWER AND LOGIC CONNECTIONS



## MECHANICAL DIMENSIONS



