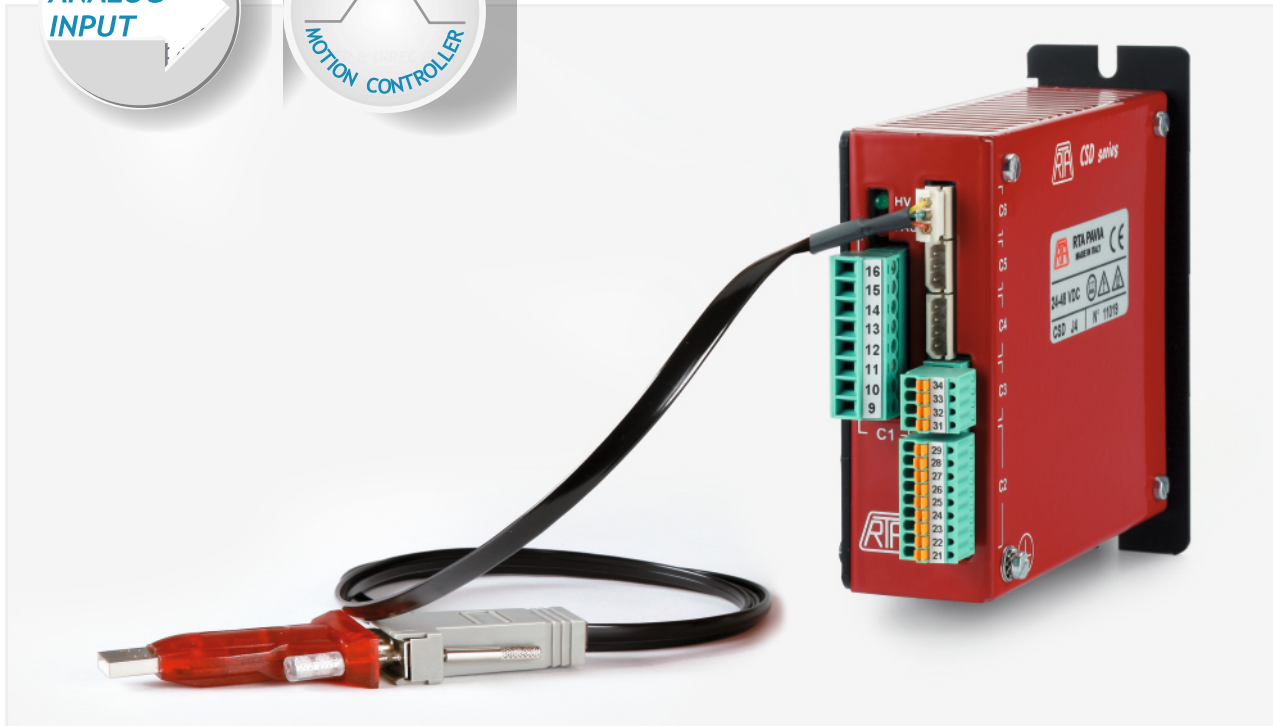


# CSD J Series Drives



## INTRODUCTION

- Series of ministep bipolar chopper drives with an on-board programmable motion controller that can be used:
  - for the interfacing, through RS485 serial line, with a central control system
  - as an independent unit.
- Presence of a dedicated analog input for the setting of motor target speed.
- Target: low-power applications needing a programmable motion controller with small size motors.

## HIGHLIGHTS

- Microstepping function up to 4.000 step/rev.
- Setting of the motor target speed sampled at the beginning of the motion sequence (before motor starts running).
- Programmable motion controller allowing the connection up to 48 drives on a single serial line.
- External fans not needed: ideal both for mounting inside a metallic electrical cabinet and for stand-alone applications.

Series	Model	V <sub>DC</sub> range (Volt)	I <sub>NP</sub> min. (Peak value) (Amp)	I <sub>NP</sub> max. (Peak value) (Amp)	Dimensions (mm)
CSD	J2	24 to 48	1.2	2.1	90x99x30
CSD	J4	24 to 48	2.6	4.4	90x99x30



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## TECHNICAL FEATURES

- Range of operating voltage: 24-48 V<sub>dc</sub>.
- Range of current: 1.2-4.4 A. Setting up to four possible values by means of a serial line.
- Microstepping: 400, 800, 1.600, 3.200 and 500, 1.000, 2.000, 4.000 steps/revolution. Setting by means of a serial line.
- Automatic current reduction at motor standstill.
- Protections:
  - Protection against under-voltage and over-voltage.
  - Protection against a short-circuit at motor outputs.
  - Overtemperature protection with thermal sensor.
- Electronic damping facility for further acoustic noise and mechanic vibrations reduction at low and medium speed.
- Optoinsulated inputs compatible with Pull-Up or Pull-Down command signals.
- Version: boxed, equipped with crimp-type connectors. Maximum compactness.
- Warranty: 24 months.

## ANALOG INPUT TO CONTROL MOTOR SPEED

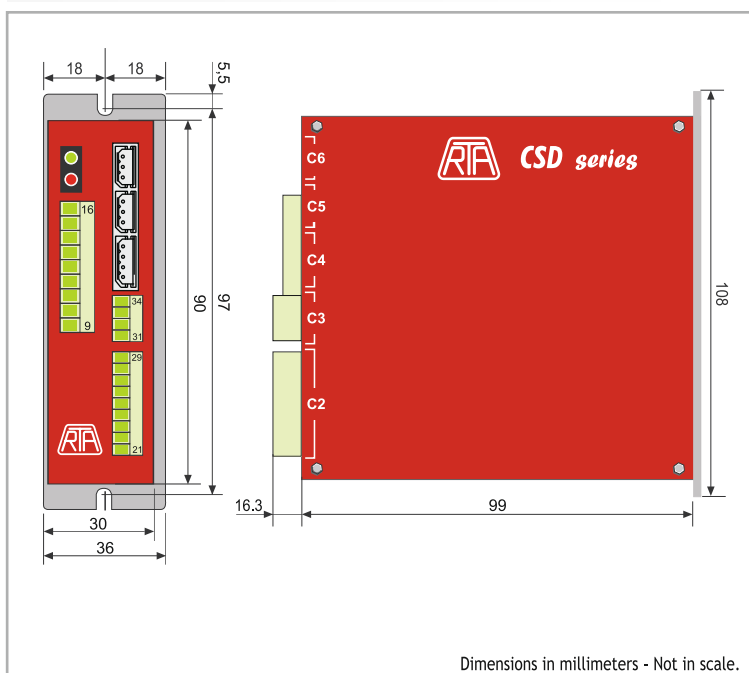
- Target speed setting by means of analog input (sampled at the beginning of the motion sequence (before motor starts running)).
- Input setting: 0-5 V<sub>dc</sub> or 0-10 V<sub>dc</sub>
- Frequency range:
  - 3000 Hz- 48000 Hz (with ramp)
  - 0 Hz-4100 Hz or 0 Hz-510 Hz (without ramp)
- Possibility of matching with potentiometers of 2.2 KOhm.

## PROGRAMMABLE MOTION CONTROLLER

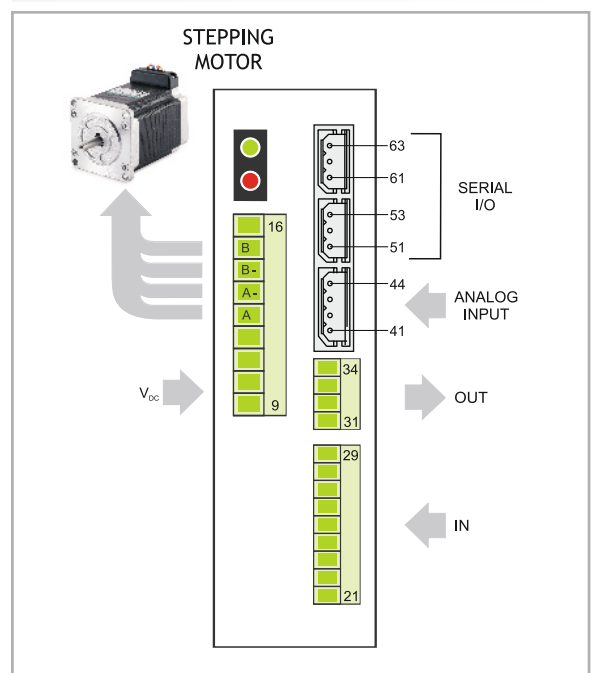
- Communication through RS485 serial line; up to 48 drives can be connected on a single serial line. One instruction can be broadcasted to all drives.
- Various types of available instructions, as for example: indexed run with ramp, free run with ramp, indexed run without ramp, run with a programmable braking distance, zero research. Space can be programmed in relative or absolute mode (linear or circular).
- Number of steps for indexed ramp up to  $\pm 8.338.607$  in relative or absolute mode, speed from 1 to 24.000 Hz in standard resolution and from 1 to 48.000 Hz in high resolution, ramp times from 16 to 1440 msec.
- Availability of instructions to develop motion programs as, for example: conditional jump, time delay, program block and recovery, I/O management, FOR NEXT loop.
- Possibility to control the execution of 8 previously stored motion programs through hardware inputs. Accordingly, the drive can be used in stand-alone applications, without serial connection.
- 8 inputs and 3 outputs, all optically insulated. Among them 1 input and 1 output are freely programmable.
- Memory of 128 instructions kept also at drive switched-off and three run time instructions.
- A utility working in Windows<sup>®</sup> is available in order to ease motion programs development by the user.



## MECHANICAL DIMENSIONS



## POWER AND LOGIC CONNECTIONS



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