

PLUS K Series Drives

PRELIMINARY

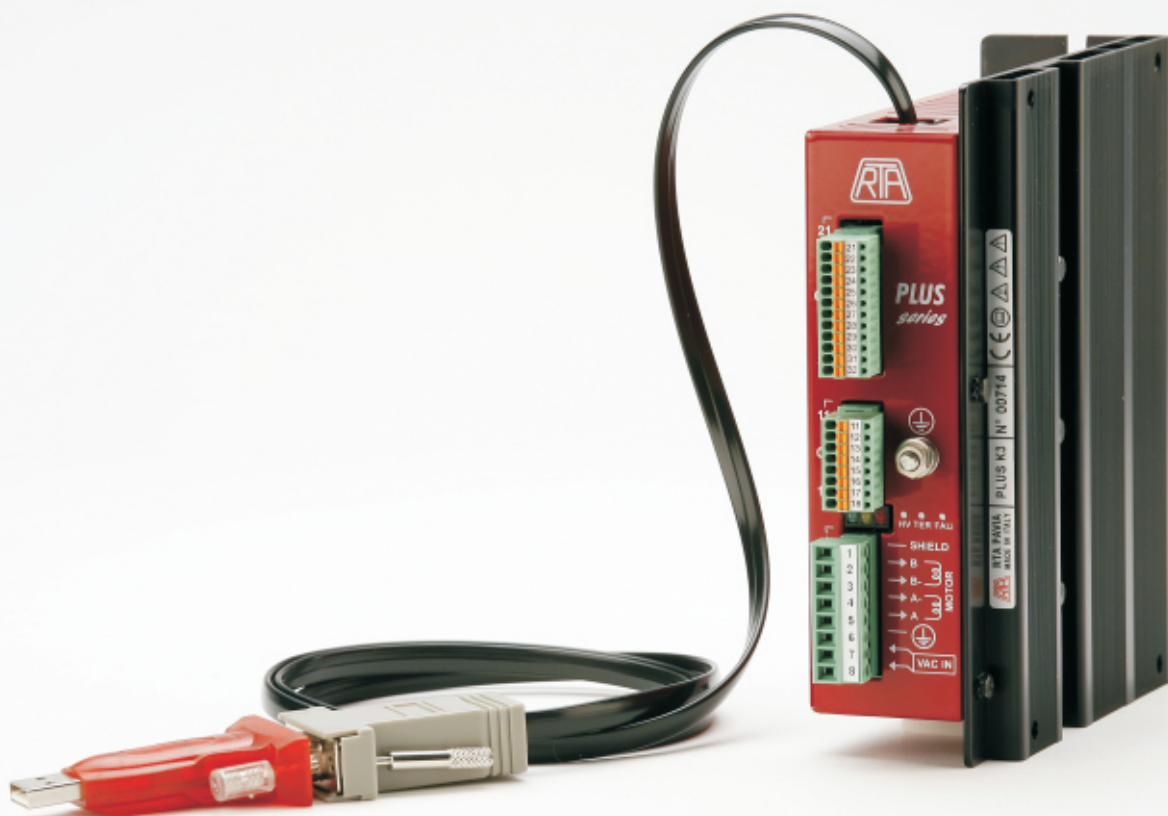
GENERAL DESCRIPTION

PLUS K is the name of a 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 or as an independent unit.

PLUS K series drives are housed in a metallic box, 152 x 129 x 46 mm format, suitable for wall mounting. They do not need external fans: accordingly, they are ideal both for mounting inside a metallic electrical cabinet and for stand-alone applications.

A broad range of available current/voltage values, specific instructions set and the availability of programmable inputs and outputs optimize the use of **PLUS K** series drives with a wide variety of stepping motors and in a large number of applications.

R.T.A. experience, together with a thorough design both of hardware and software, has led to a product offering high reliability, premium performances, great ease of use at competitive costs.



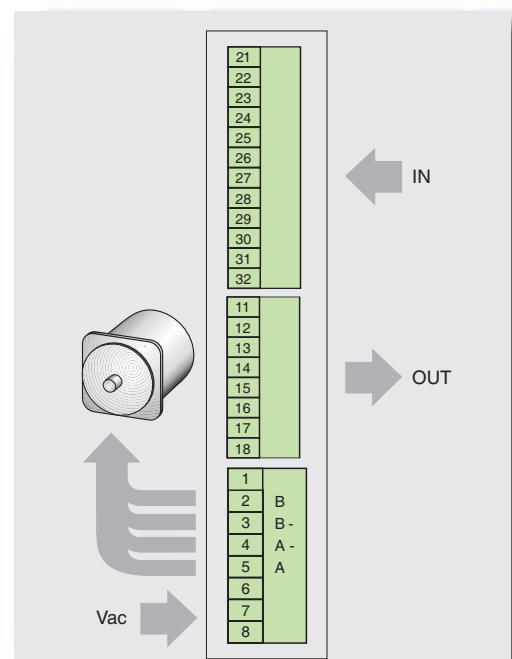
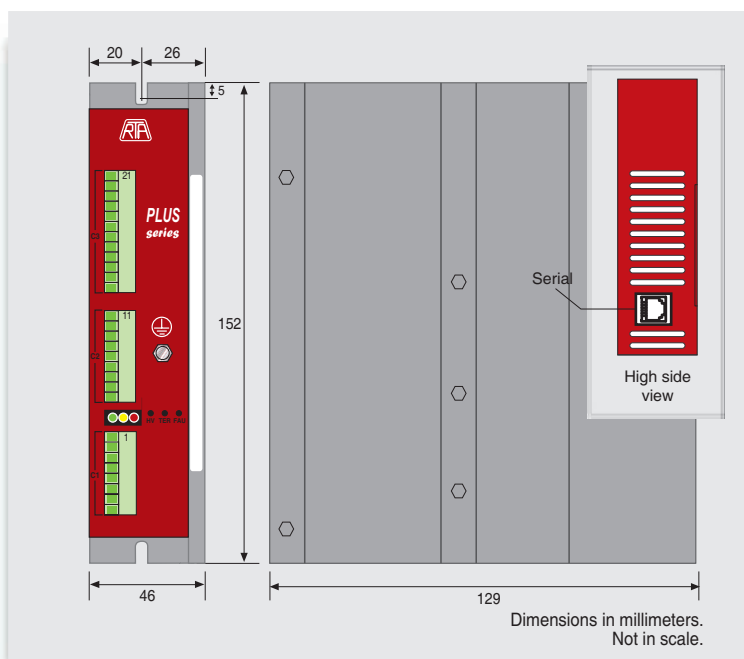
Motion Control Systems

PRELIMINARY

TECHNICAL FEATURES

- ▶ Operation at 400, 800, 1600, 3200 and 500, 1000, 2000, 4000 steps/revolution set by means of serial line.
- ▶ Electronic resonance damping circuit to ensure acoustic noise and mechanical vibrations reduction at low and medium speed.
- ▶ Wide range of operating voltages and motor phase current setting. Up to 4 possible equidistant values, between I_{NF} min. and I_{NF} max., can be set by means of a serial line.
- ▶ 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 and increased 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 16 previously stored motion programs through hardware inputs. Accordingly, the drive can be used in stand-alone applications, without serial connection.
- ▶ Possibility to control all programs previously stored or single instructions through the serial line.
- ▶ 11 inputs and 6 outputs, all optically insulated. Among them 3 inputs and 4 outputs are freely programmable.
- ▶ Memory of 128 instructions kept also at drive switched-off and three run time instructions.
- ▶ A utility working in Windows® is available in order to ease motion programs development by the user.
- ▶ Alarm memory by use of yellow blinking led.

Models	V _{AC} range	I _{NF} min.	I _{NF} max.	Dimensions	Notes
	(VOLT)	(AMP)	(AMP)	(mm.)	
PLUS K3	28 to 62	3.4	6	152x129x46	AVAILABLE
PLUS K4	55 to 100	3.4	6	152x129x46	UNDER PRELIMINARY STUDY



R.T.A. s.r.l.
Via E. Mattei - Fraz. Divisa
27020 Marcignago (PV) ITALY
Tel. +39.0382.929.855 - Fax +39.0382.929.150
www.rta.it

R.T.A. Deutschland GmbH
Bublitzer Straße, 34
40599 DÜSSELDORF (Germany)
Tel. +49.211.749.668.60 - Fax +49.211.749.668.66
www.rta-deutschland.de

R.T.A. IBERICA-Motion Control Systems S.L.
C/Generalitat 22, 1º 3º
08850 GAVA - BARCELONA (Spain)
Tel. +34.936.388.805 - Fax +34.936.334.595
www.rta-iberica.es