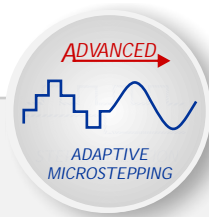


BSD Series Drives



INTRODUCTION

- New series of microstep stepping motor drives specifically developed for small and mid-size stepping motors.
- Ultra-compact and optimized design to reduce space and cost, combined with *Adaptive Microstepping* technology ensuring noise and vibration suppression.
- Target: simple and effective motion control solutions requiring low power, high precision, smoothness of movement and low acoustic noise.
- Ideal solution to replace integrated circuits and self-made, low power drives. The perfect choice for small routers, medical, 3D printers and all types of compact machines.

HIGHLIGHTS

- Full digital microstepping drive.
- Adaptive microstepping up to 3.200 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 of R.T.A. drives.

Series	Model	V _{DC} range (Volt)	I _{NP} min. (Peak value) (Amp)	I _{NP} max. (Peak value) (Amp)	Dimensions (mm)
BSD	02 - 02.V*	24 to 48	0.7	2.2	78x68x21

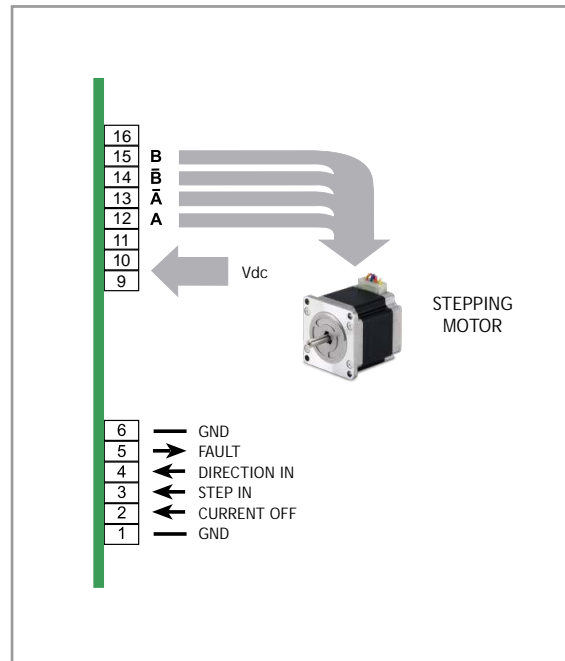
* BSD 02.V version is equipped with screw-type connectors.

TECHNICAL FEATURES

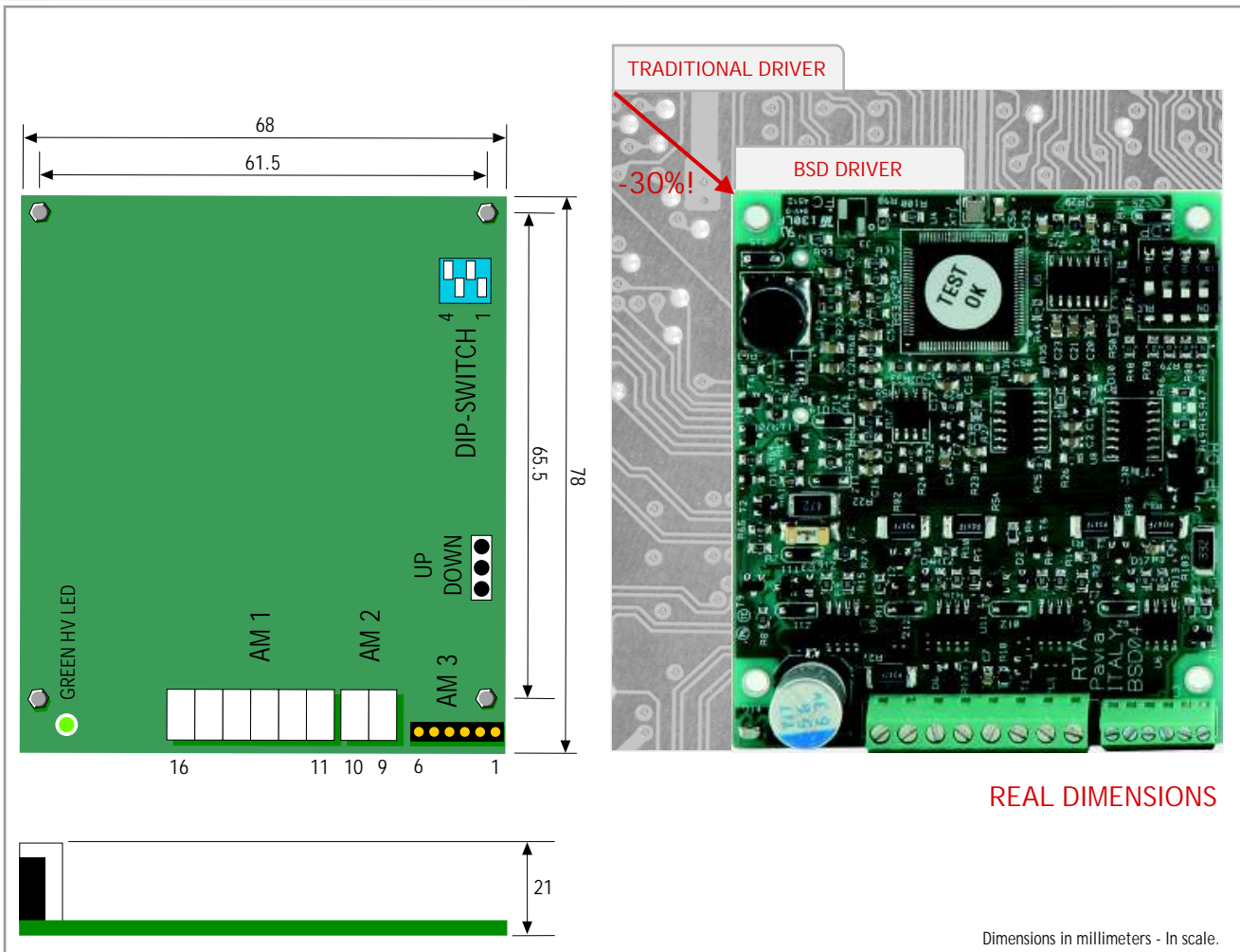
- Range of operating voltage: 24-48 V_{DC}.
- Range of current: 0.7-2.2 Amp. Setting up to four possible values by means of dip-switches.
- Microstepping: 400, 800, 1.600 and 3.200 steps/revolution. Setting by means of dip-switches.
- Automatic current reduction at motor standstill.
- Management of the current profile setting by means of a dip-switch.
- Protections:
 - Protection against under-voltage.
 - Protection against a short-circuit at motor outputs.
- Electronic damping facility for further acoustic noise and mechanic vibrations reduction.
- Available version: open frame, crimp-type/screw-type connectors. Maximum compactness.
- Warranty: 24 months.



POWER AND LOGIC CONNECTIONS



MECHANICAL DIMENSIONS



Dimensions in millimeters - In scale.

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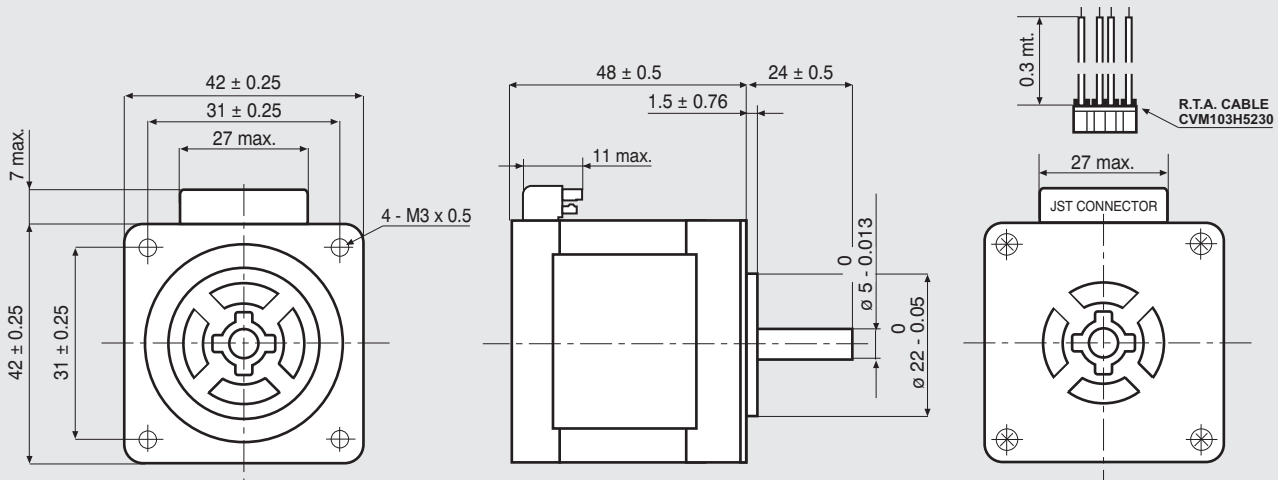
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103-H5210-4240

SANYO DENKI
SANMOTION

Dimensions (Unit:mm)

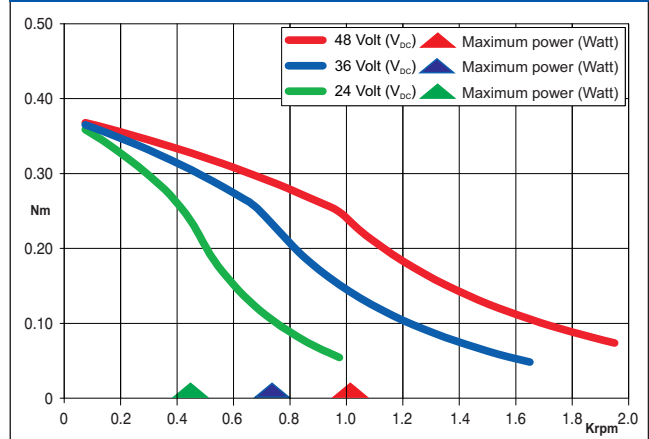


MOTOR CONNECTOR IS JST mod. B6B-EH K 6 POLES MALE.
FOR CONNECTION USE JST mod. EHR-6 FEMALE CONNECTOR AND
mod. SEH-001 T-P0.6 CONTACTS.
NOTE: 103-H5210-4240 MOTORS NEED CVM103H5230 R.T.A. CABLES.
CONTACT R.T.A. FOR FURTHER DETAILS.

FEATURES

MODEL	103-H5210-4240
BASIC STEP ANGLE	$1.8^\circ \pm 0.09^\circ$
BIPOLAR CURRENT (Amp)	1.0
UNIPOLAR CURRENT (Amp)	
RESISTANCE (Ohm)	4.8
INDUCTANCE (mH)	9.5
BIPOLAR HOLDING TORQUE (Ncm)	51
UNIPOLAR HOLDING TORQUE (Ncm)	
ROTOR INERTIA ($\text{Kg} \cdot \text{m}^2 \times 10^{-7}$)	74
THEORETICAL ACCELERATION ($\text{rad} \times \text{sec}^{-2}$)	69000
BACK E.M.F. (V/Krpm)	14
MASS (Kg)	0.35
LEADS CODE	V

TORQUE/SPEED CURVE



R.T.A. s.r.l. PAVIA (ITALY) SANYO DENKI CO., Ltd (JAPAN)



EMC - 10 - 14

Suggested R.T.A. driver: BSD Series, CSD/A-CSD Series, NDC/A-NDC Series, ADW Series, HGD Series.



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