

Stepper Motors

Driver

Driver

Overview

Motor &
Driver

5-Phase
RKII

Driver

Motor

2-Phase
PKP

5-Phase
PKP

Page

Bipolar Driver for 2-Phase Stepper Motors Driver for 5-Phase Stepper Motors

● For detailed information about regulations and standards, please refer to the Oriental Motor website.



This is a DC power supply input driver for stepper motors. A bipolar driver for 2-phase stepper motors and a driver for 5-phase stepper motors are available. Using this microstepping driver reduces vibration and noise.



See Full Product Details Online
www.orientalmotor.com

● Manual

● Specifications

● Dimensions





● CAD

● Characteristics

● Connection and Operation

Features and Types

● Bipolar Driver for 2-Phase Stepper Motors Driver for 5-Phase Stepper Motors

Driver Type		External View	Introduction	Driver Installation Direction
<div><div><div>● Bipolar Driver for 2-Phase Stepper Motors</div><div>● Driver for 5-Phase Stepper Motors</div></div><div><div><div>52.5 mm (2.07 in.)</div></div><div><div>24.5 mm (0.96 in.)</div><div>85 mm (3.35 in.)</div></div></div><div><div>• Mass 20 g (0.71 oz.)~70 g (2.47 oz.) (The value differs according to the driver type.)</div><div>● The driver cannot be shared by both a 2-Phase stepper motors and 5-Phase stepper motors. Each must use its respective dedicated driver.</div></div></div>	<div>Right Angle Type with Installation Plate</div>	<div>The connector points outward.</div> <div></div>	<div><div>• Compact and lightweight driver with full-time microstepping.</div><div>• Using the smooth drive function reduces the vibration and noise more than conventional products.</div></div>	<div><div>• Horizontal installation</div><div>• Vertical installation</div></div>
	<div>Without Installation Plate</div>	<div>The connector points upward.</div> <div></div>	<div><div>• The driver is equipped with a protective function that enables you to find driver errors early.</div><div>• Run current can be easily set with the digital switch.</div></div>	

● Additional Product Line

◇ Bipolar Driver S Type for 2-Phase/5-Phase Stepper Motors



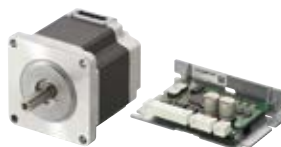
This is a compact board mounting type driver. For details, please contact the nearest Oriental Motor sales office.

◇ CVK Series SC Type Driver

This driver allows the stepper motors to operate like a speed control motor.

It can be operated easily by using the forward and reverse inputs only.

- No Pulse Generator Required
- Available for Setting in Two Speeds
- Compact and High-Torque
- Enhanced Repeatability of the Stop Position
- Possible to Hold the Load at Standstill



For details, please contact the nearest Oriental Motor sales office.

Bipolar Driver for 2-Phase Stepper Motors

Driver for 5-Phase Stepper Motors

Product Number

CVD 2 23 F B R - K

① ② ③ ④ ⑤ ⑥ ⑦

①	Driver Type
②	2 : 2-Phase 5 : 5-Phase
③	Rated Current
④	Driver Identification
⑤	Driver Shape B : With Installation Plate Blank: Without Installation Plate
⑥	Connector Shape R : Right Angle
⑦	Power Supply Input K : DC Power Supply

Product Line

We have prepared a connection cable set (sold separately) consisting of motor, power supply, and I/O signal cables. The connectors are already crimped, which makes them easy to wire without crimp tools.

● Bipolar Driver for 2-Phase Stepper Motors

◇ Right Angle Type with Installation Plate

Product Name	List Price
CVD205BR-K	\$135.00
CVD206BR-K	
CVD215BR-K	
CVD223BR-K	
CVD223FBR-K	
CVD228BR-K	\$150.00
CVD242BR-K	
CVD245BR-K	

◇ Without Installation Plate

Product Name	List Price
CVD205-K	\$130.00
CVD206-K	
CVD215-K	
CVD223-K	
CVD223F-K	
CVD228-K	

● Driver for 5-Phase Stepper Motors

◇ Right Angle Type with Installation Plate

Product Name	List Price
CVD503BR-K	\$145.00
CVD507BR-K	
CVD512BR-K	
CVD514BR-K	
CVD518BR-K	
CVD524BR-K	
CVD528BR-K	\$160.00
CVD538BR-K	

◇ Without Installation Plate

Product Name	List Price
CVD503-K	\$140.00
CVD507-K	
CVD512-K	
CVD514-K	
CVD518-K	
CVD524-K	

Included

Type	Connector for Driver Connection	Operating Manual
Common to All Types	CN1 Connector (1 pc.), CN2 Connector (1 pc.), CN3 Connector (1 pc.)	1 Copy

Overview

Motor &
Driver5-Phase
RKII

Driver

Motor

2-Phase
PKP5-Phase
PKP

Specifications

Bipolar Driver for 2-Phase Stepper Motors



Product Name		CVD205□□-K	CVD206□□-K	CVD215□□-K	CVD223□□-K CVD223F□□-K	CVD228□□-K	CVD242B□□-K	CVD245B□□-K
Driving Method		Microstep Drive, Bipolar, Constant Current Drive Method						
Motor Driving Current (Factory Setting)		0.5 A/Phase	0.6 A/Phase	1.5 A/Phase	2.3 A/Phase	2.8 A/Phase	4.2 A/Phase	4.5 A/Phase
Power Supply Voltage		24 VDC±10%						
Input Current		A 0.5	0.5	1.3	2.0	3.0	3.6	3.9
Max. Input Pulse Frequency		Line driver output by programmable controller: 1 MHz (When the pulse duty is 50%) Open-collector output by programmable controller: 250 kHz (When the pulse duty is 50%) Negative Logic Pulse Input						
Operating Environment (In operation)	Ambient Temperature	0 to +50°C (+32 to +122°F) (Non-freezing)						
	Ambient Humidity	85% or less (Non-condensing)						
	Surrounding Atmosphere	No corrosive gas or dust. No water or oil.						

● For the right angle type with an installation plate, the box □ in the product name indicates the driver shape **B** (with installation plate), the box □ indicates the connector shape **R** (right angle).

Driver for 5-Phase Stepper Motors



Product Name		CVD503□□-K	CVD507□□-K	CVD512□□-K	CVD514□□-K	CVD518□□-K	CVD524B□□-K	CVD528B□□-K	CVD538B□□-K
Driving Method		Microstep Drive, Bipolar, Constant Current Drive Method							
Motor Driving Current (Factory Setting)		0.35 A/Phase	0.75 A/Phase	1.2 A/Phase	1.4 A/Phase	1.8 A/Phase	2.4 A/Phase	2.8 A/Phase	3.8 A/Phase
Power Supply Voltage		24 VDC±10%							
Input Current		A 0.6	1.4	1.7	1.8	2.8	3.0	4.8	4.8
Max. Input Pulse Frequency		Line driver output by programmable controller: 1 MHz (When the pulse duty is 50%) Open-collector output by programmable controller: 250 kHz (When the pulse duty is 50%) Negative Logic Pulse Input							
Operating Environment (In operation)	Ambient Temperature	0 to +50°C (+32 to +122°F) (Non-freezing)							
	Ambient Humidity	85% or less (Non-condensing)							
	Surrounding Atmosphere	No corrosive gas or dust. No water or oil.							

● For the right angle type with an installation plate, the box □ in the product name indicates the driver shape **B** (with installation plate), the box □ indicates the connector shape **R** (right angle).

For details (specifications, characteristics, dimensions and more) on these products, please either refer to our website or contact technical support or your nearest Oriental Motor sales office.

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