

4-Phase Hybrid Stepping Driver

P302

Specifications

- DC input 18V – 48V
- Max output current 3.5A / phase
- PWM constant current bipolar drive
- 14 options for microstepping function
- Opto-isolated digital signal inputs
- Short-circuit protection function for motors
- Offline free function
- Low vibrations, low noise, excellent design



Technical Data

Driver Model	P302		
Applicable Motors	Applicable with up to 3.5A / phase for 2 or 4-phase stepping system		
Supply Voltage	18-48V DC		
Output Current	0.5A – 3.5A / phase		
Drive Mode	Full Bridge Bipolar PWM MOSFET drive		
Input Signals	Pulse Signal	Photo coupler input voltage H = 3.5 to 5.5V, L = 0 to 0.5V Input impedance: 330Ω	
	Enable		
	Direction Signal		
Dimensions	144 X 52 X 108 mm		
Weight	695g		
Operating Ambient	Humidity	40-85%RH	
	Temperature	-10°C ~ 45°C	
	Heat Dissipation	In high ambient temperature ensure air circulation around unit	

Microstepping Resolution Selection

Div Sel Signal	Switch Position			DIV
	1	2	3	
Disconnected	ON	ON	ON	2
	ON	ON	OFF	4
	ON	OFF	ON	8
	ON	OFF	OFF	16
	OFF	ON	ON	32
	OFF	ON	OFF	64
	OFF	OFF	ON	128
	OFF	OFF	OFF	256

Div Sel Signal	Switch Position			DIV
	1	2	3	
Connected	ON	ON	ON	5
	ON	ON	OFF	10
	ON	OFF	ON	25
	ON	OFF	OFF	50
	OFF	ON	ON	125
	OFF	ON	OFF	250
	OFF	OFF	ON	***
	OFF	OFF	OFF	***

Current Selection

Switch Position			I _r (A)
4	5	6	
ON	ON	ON	0
ON	ON	OFF	0.5
ON	OFF	ON	1
ON	OFF	OFF	1.5
OFF	ON	ON	2
OFF	ON	OFF	2.5
OFF	OFF	ON	3
OFF	OFF	OFF	3.5

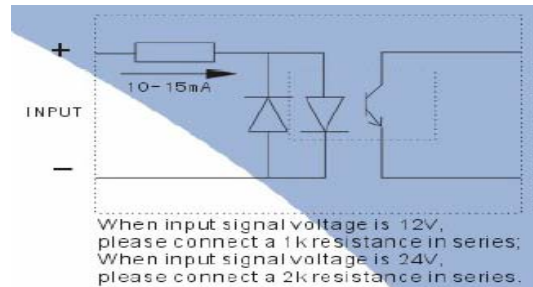
4-Phase Hybrid Stepping Driver

P302

Power Inputs

This driver is supplied by direct current with dc input voltage of 18-48V. An unregulated, smoothed, rectified ac transformer output can also be used as the supply. In this case, the rectified ac peak voltage must be less than 48V and the transformer secondary ac output should be less than 32V. When connecting driver, ensure correct input voltage polarity!!

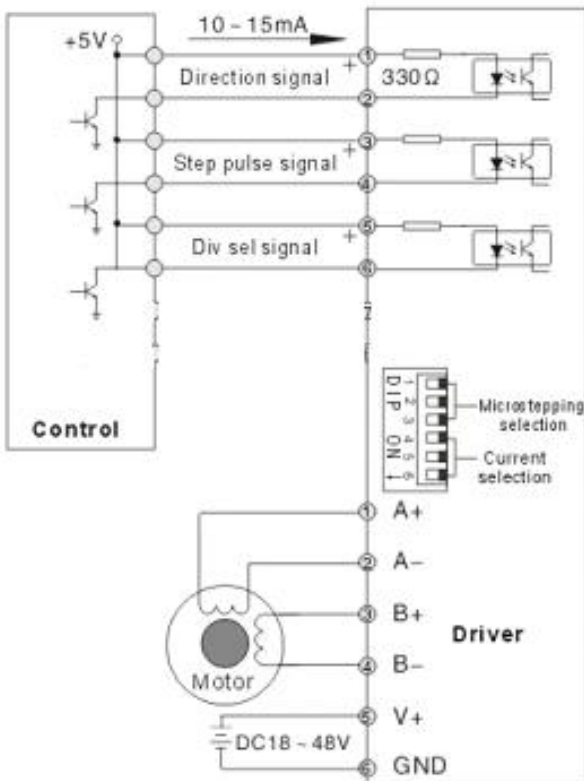
Input Interface



Reverse Polarity Protection

Incorrect driver/motor connections may result in damage. This driver is fitted with a reverse polarity protection function, which will prevent damage if the motor is momentarily connected incorrectly. If this occurs, the driver should be switched off and the fault rectified immediately.

Connection Diagram



Mechanical Dimensions [mm]

