

## ■ USE-2A

### Small and Lightweight Analog DC Servo Driver

■ With Three Control Modes: Speed Control Mode/ Torque Control Mode/ Voltage Control Mode



#### ■ Features

- Since the input power source voltage is wide input from +12V to +50V, you can select a coreless motor from a wide range. And since it is a single power source, you do not need to prepare a complicated control power source.
- Tachometer Generator Feedback or Encoder Feedback can be selected during speed control mode.
- Because it equips a high-speed F/V converter, it is possible to use a motor with encoder and it responds up to 500kHz in maximum frequency of encoder. (The maximum frequency is the frequency of Phase A or Phase B. The inside operates at 4x / 2MHz).
- Since output stage choke coil is installed as standard, it can be used with many different coreless motors.
- Encoder disconnection detection function can prevent motor to run out of control in speed control mode.
- Because IR correction is applied in the voltage control mode, speed fluctuations due to load fluctuations can be reduced.

#### ■ Specifications

Items		Remarks
Control Mode	Speed/ Control/ Voltage	Switchable by jumper
Drive System	PWM (over 40kHz)	Frequency of driver output
Power Source Voltage	+ 12V~+ 50V±10%	Single power source
Continuous Rated Output Current	±2Arms	
Maximum Output Current	±5A (— 0%~+ 5%)	When IaFs is at maximum volume
Maximum Output Voltage	±20V DC	When power source: 24V and output: 2A
Speed Feedback Voltage	±6V~±50V DC	Voltage of Tachometer Generator at rated speed
Command Input	0~±10V	
Command Input Impedance	200KΩ	
Speed Resolution	Over 5,000:1	At Speed Control Mode, When Using a Tachometer Generator
Speed Stability Level 1	Below ± 0.5 % (load: 0 - 100%)	At Speed Control Mode
Speed Stability Level 2	Below ± 0.5 % (load: 0 - +50 C)	When using an encoder
Current Response Speed	Below 200 μsec	
Maximum Response Frequency of Encoder	500kHz (The inside operates at 4x)	Frequency of Phase A or Phase B
Input Signal	Servo ON, Alarm Reset, P Control	
Alarm Output	Loop Error, Overheat, Encoder Disconnection	Output is High when alarm
Adjust Function	OffSet Speed, Full-Scale Speed, Proportional Gain, Full-Scale Current, Speed Loop Gain, IR Correction Gain	ZERO, SPD, GAIN, IaFs, LOOP, IRC
Display Function	Power Indicator, Loop Error, Overheat, Encoder Disconnection	PWR, LE, OH, EE
Check Terminal	Motor Speed, Motor Amateur Current	TG, IM
Operating Ambient Temperature	0~50°C / 35 ~ 80% RH without condensation	
Storage Ambient Temperature	- 20~+ 85°C / 35 ~ 80% RH without condensation	
Outer Dimension	W105×D73.5×H28	
Weight	210g	

