PSDL Series Servo Drive

Product Features

■ **High Efficiency**

- Built-in gantry control synchronization algorithm
- Automatic determination of load inertial mechanical properties, setting optimal gain and shortening system commissioning time
- Powerful internal location control mode, 32 sets of location data path planning. This feature not only saves the user PLC costs, but also allows for more efficient control

■ **High Accuracy**

- Bus synchronization accuracy <0.1us: multi-axis synchronization algorithm at current loop level

■ **Stable**

- Mechanical resonance frequency analysis, configured with two sets of trap filters, adjustable frequency (50 ~ 5000Hz) and trap depth effectively overcome low frequency resonance and mechanical end vibration, vibration frequency (1 ~ 100Hz) and vibration damping can be set
- Frictional torque compensation reduces the effect of static friction during mechanical commutation and improves command following performance at low speeds

■ **Easy to Operate**

- Support for debugging software, mechanical characteristics analysis, parameter setting, monitoring and other functions, intuitive and simple operation

Specifications

Model

PSDLAD08□□	PSDLAD15□□
0.75KW	1.5KW

Input Power

Control Mode	Three-phase PWM converter sine wave drive
Main Power	Single-phase / three-phase 220V AC （-15~+10%， 50~60Hz）
Control Power	Single-phase 220V AC （-15~+10%， 50~60Hz）
Rated Current	220V: 0.75kW/5.5A, 1.5kW/10A
Encoder Feedback	ABZ incremental encoder/absolute encoder

Environment

Working Temperature	0~45°C
Storage Temperature	-20~65°C
Working Humidity	20~85%RH or less (non condensing)
Storage Humidity	20~85%RH or less (non condensing)
Working And Storage air	Indoor (no direct sunlight), non-corrosive gases, flammable gases, oil mist, dust
Altitude	Below 1000m
Vibration	5.8m/s² (0.6G) below 10~60Hz (Cannot be used continuously at resonant frequency)
Insulation And Pressure Resistance	Primary- between F and G, 1 minute under AC1500V

Functions

IO Input	6-channel (DC24V opto-coupler isolation) Input function can be selected according to parameters below: Servo on, P action positive rotation inhibit, negative rotation inhibit, alarm reset,positive torque limit, negative torque limit, error clear
IO Output	4-channel opto-coupler isolated output; the following output function can be selected according to parameters: Alarm output, position proximity, velocity consistent detection output, motor rotation detection, servo ready, torque limit, brake release
Pulse Input	Differential input: 500K; open collector: 200K Pulse + direction, AB orthogonal pulse, CW+CCW pulse
Pulse Output	Phase A, phase B: differential output. Phase Z: differential output or open collector output
Internal Speed Command	Three-speed distribution via input terminals
Overload Capacity	Max. 3 times torque
Analog Input	2-channel differential input ±10V, 1-channel single-ended 0-10V; switch according to control mode
Communication	Modbus; Customized CAN
Control Modes	12 control modes: position control, speed control, torque control, inner speed, position/speed control, position/torque control, speed/torque control, inner speed/position, inner speed/speed, inner speed/torque, speed/zero clamp, position control/command inhibit
Regenerative Resistance	400W: without external regenerative resistance; over 750W: with