

K1 Series Servo Drives

Modbus CAN 自定义



Product Features

Intelligent

- Powerful internal position mode allows for continuous multi-path planning for rich motion control; supports up to 32 data sets for planning, each set of data can be set to the number of pulses or angle required, and internal position mode can be set for speed, acceleration, deceleration and emergency deceleration
- Automatic determination of load inertial mechanical properties, setting optimal gain and shortening system commissioning time

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

Recommended Pairings

- M4 Series Servo Motors (Details are at P19)

Specifications

Modes	K1AS02□□ 0.2kW K1AS04□□ 0.4kW K1AS08□□ 0.75kW K1AS15□□ 1.5kW K1AS22□□ 2.2kW K1AS30□□ 3kW K1AS50□□ 5kW
Input power	K1BS15□□ 1.8kW K1BS25□□ 3kW K1BS35□□ 3.8kW K1BS55□□ 5.5kW K1BS75□□ 7.5kW
Control mode	Three-phase PWM converter sine wave drive
Main power	220V: Single-phase / three-phase 220V AC (-15~+10%, 50~60Hz) 380V: Three-phase 380V AC (-15~+10%, 50~60Hz)
Control power	220V: Single-phase 220V AC (-15~+10%, 50~60Hz)
Rated current	220V: 0.2kW/2A, 0.4kW/2.8A, 0.75kW/5.5A, 1.5kW/10A, 2.2kW/12A, 3kW/16A, 5kW/25A 380V: 1.8kW/5A, 3kW/8A, 3.8kW/12A, 5.5kW/16A, 7.5kW/20A
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/s ² (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	4-channel (DC24V optocoupler 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	3-channel optocoupler 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

Applications

LED banding machine, CNC polishing machine, tongue and groove machine, computerized quilting machine and other CNC, woodworking and textile industry equipment

