

YKD2608PR

- 32 bit DSP control technology, low noise/vibration with excellent stability and low cost
- Built-in single-axis controller and digital drive function, supporting position control, speed control and multi-position control mode
- RS-485 bus, support standard ModBus-RTU protocol, mounting 30 devices the most
- 16 constant-torque microstep settings, 200 microsteps the highest
- Excellent smoothness in low frequency high microstep applications
- Photoelectric isolated signal input/output, high anti-interference ability
- Drive current adjustable (under 6A)
- Input voltage range: DC24-80V
- Fault protection: over voltage protection, low voltage protection, etc.

Typical Application:

Widely used in textile machines, embroidery machines, security equipment, stage lighting, robots, medical equipment, laser equipment, marking machines, plotters and other automation equipments.

Product Details

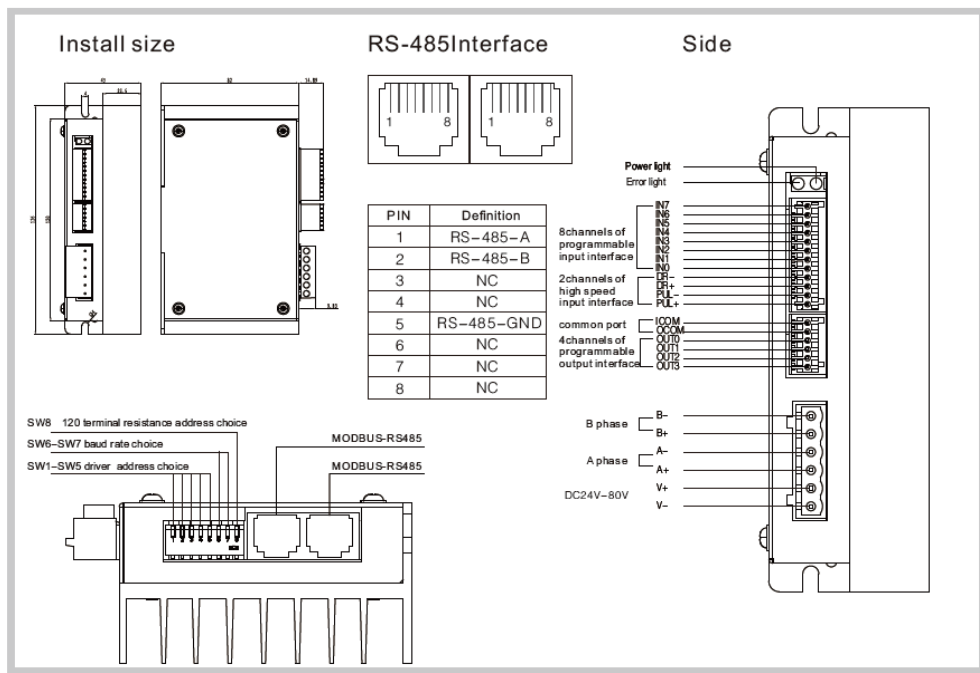
Description

YKD2608PR ModBus stepper drive is based on YKD2608MH. It has bus communication and uniaxial controller. YKD2608PR uses RS-485 interface, supporting standard ModBus-RTU protocol.

It has 2 photoelectric isolated programmable high-speed differential input terminals, 8 photoelectric isolated programmable input terminals and 4 photoelectric isolated output terminals. With those multiple input/output terminals, it's used to carry out current setting, position control, speed control, home position return and other uniaxial motion control.

YKD2608PR is particularly suitable for long distance, strong interference environment, and multiple motor control applications. Since it has uniaxial control function, users don't need to purchase controller anymore, thus greatly reduce costs.

Product Diagram



Description

Product Diagram

Baud Rate

Address Setting

Terminal Assignment

Interface		YKD2608PR	Function
Dip switch		SW1-8	SW1-5; set driver address
			SW6-7; baud set
			Sw8; 120terminal resistance
MODBUS communication port		RJ45-2	RS-485communication I/O port
PWR		power light	Lights on as power on.
ALARM		alarm light	Over-current, flash one time;Over-voltage, flash twice; Under-voltage, flash three times; EEPROMEEPROM error, flash four times;communication error, flash 5 times.
I/O	PUL+	differential input high speed digital signal input interface	1.(P/D mode) pulse signal(only suitable for high-speed differential port PUL)
	PUL-		2.(P/D mode) pulse signal(only suitable for high-speed differential port DIR)
	DIR+		3.home signal
	DIR-		4.positive limit signal
	IN7	Single input port low speed digital signal input interface	5.negative limit signal
	IN6		6.motor enable signal
	IN5		7.motor free signal
	IN4		8.alarm clear signal
	IN3		9.default signal
	IN2		10.stop signal
	IN1		11.scram signal
	IN0		12.move forward in position mode
			13.move backward in position mode
			14.move forward in speed mode
		15.move backward in speed mode	
		16.back home enable signal	
		17.PT enable signal	
		18.PIN0;	
		19.PIN1;	
		20.PIN2;	
		21.PIN3;	
		22.PIN4;	
	ICOM	common port of single input	accept common cathode and common anode connection modes
	OUT3	single output port low speed digital signal output interface	1.alarm signal
	OUT2		2.brake signal
	OUT1		3.back home finish signal
	OUT0		4.signal of motor running status
			5.POUT0;
			6.POUT1;
			7.POUT2;
			8.POUT3;
	OCOM	common port of single output	accept common cathode and common anode connection modes
Power Motor interface	A+	CN4	2 phase stepper motor connection port
	A-		
	B+		Voltage input DC24-80V
	B-		
	DC+		
	GND		

YKD2608PR supplies 8 channels of optical isolation programmable input interface, 2 channels of differential signal input. The 2 channels of differential signal can high speed optical isolate internally and match with external PUL+DIR control or match with general input ports. 8 Channels(IN7-IN0) of programmable input signal connect with external control interface through optical isolation. The driver has NPN and PNP two connection mode inside. In order to ensure the driver's internal optocoupler has a reliable conduction, the controller is required to provide drive current of at least 10a. The driver internally inserts current limiting resistor, if the input signal level is higher than +5V, it needs to connect with external resistor.