

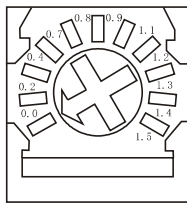
# YKA2204MA Driver with microstep



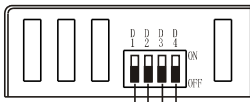
## Feature:

- High performance, low prices
- Provides 10 kinds of microstep selection
- Special control circuit, greatly amounts to 200Kpps.
- Upmost response frequency amounts to 200Kpps
- Once the pulse stops for 100ms, phase current automatically cut by half.
- Bipolar constant current chopper control
- photocoupler isolated input/output
- Drive current from 0.0A/phase to 1.5A/phase
- Single power input, voltage range from DC12-40V
- Protection circuit
  - Overheat protection
  - Overcurrent, under voltage protection
- Small Size  
YKA2204MA is an economic, compact driver, its dimension is only 96x56.5x21(mm<sup>3</sup>), Net weight : 0.13kg

### Running current setting

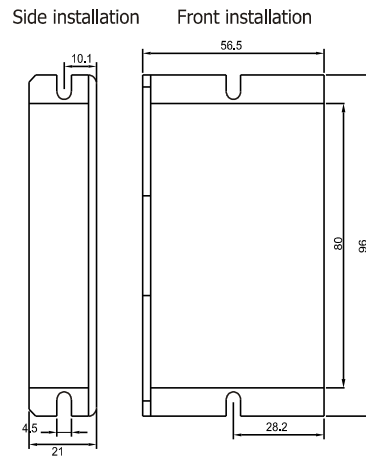


### Microstep Setting

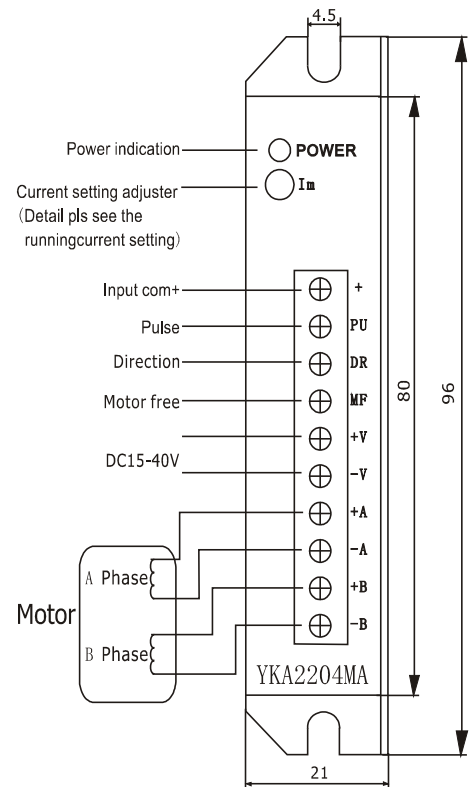


Microstep setting  
(Details pls see the microstep setting setting)

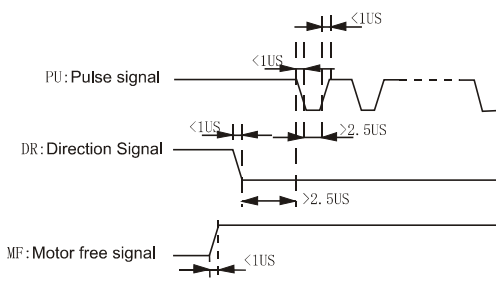
### Installation dimensions(Unit:mm)



### Diver connection



### Input signal timing diagram



## YKA2204MA Microstep setting List

Microstep	5	10	20	40	40	40	40	40	2	4	8	16	32	64	64	64
D4	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON
D3	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON
D2	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON
D1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	ON

## Terminal assignment

MARK	Function	Remark
POWER	Origin indication	When power on,indicator light turns on.
Im	Current setting adjuster	when adjust anticlockwise,current turns down.
+	Input signal positive side	It can connect +5V or +24V, but +24V should add an extra resistor
PU	Pulse signal	Effects on falling edge ,the motor goes one step as the pulse input change from "high"to "low".Input resistance is 220Ω. Requirement:input low: 0~0.5V, input high:4~5V, pulse width>2.5μs
DR	Direction control signal	Use to change the direction. Input resistance is 220Ω. Requirement: input low: 0~0.5V, input high:4~5V, pulse width>2.5μs
MF	Motor free signal	Once effects, it will cut off the motor current, the driver stops working and sets the motor free
+V	Power +	DC15-40V
-V	Power -	
+A,-A	Connect to the motor	
+B,-B		

## Caution

1. Do not reverse the power input,input voltage should not exceed DC40V.
2. Input logic should be 5V, otherwise it should connect a resistor
- 3.Once the driver temperature exceeds 70°C,the current will be cut off automatically and the driver will resume working till the temperature drops to 50°C. If this happens,please install ventilation equipment.
6. PWR is power indicator, it lights when power on.