# **Kinco 2M2280N Stepper Motor Drive**

(Two-phase Bipolar Micro Step)



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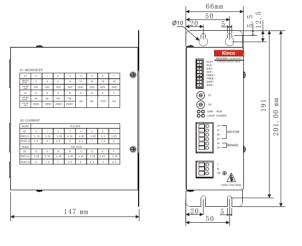


- High-performance, low prices;
- · The input voltage of 2M2280N is 187VAC~253VAC (single-phase), help you to reduce the cost of transformer;
- Automatic parameter adjustable regulation;
- 2M2280N apply the test running function;
- $\cdot \ \, \text{Phase memory technology: the driver will record } \ \, \text{the phase position of the motor when the motor stopped}$
- when re-power the driver, the motor won't shake anymore;
- · PLS+DIR and CW/CCW control signal available;
- · Optocoupler isolated output signal ERR;
- · Automatic semi-current locking, reduce the motor's heat drastically;
- · Optocoupler isolated signal input circuit;
- · 12 micro-step value, the maximum micro-step value is 128;
- $\cdot \ \ \text{With the protection function of overvoltage, undervoltage, short circuit and heat protection.}$

#### **Technical Specifications:**

Parameter Value		Value					
Input v	oltage	220V AC +	/-15% (50/60Hz)				
Outpu	t current	4.5A, 5A,	5.5A, 6A, 6.5A, 7A, 7.5A, 8A				
Micro	step	2/4/5/8/10	/16/20/32/50/64/100/128				
Input signal PLS, DIR,		PLS, DIR,	FREE (current limit: 6~16 mA)				
Control signal mode PLS+DIR,		PLS+DIR	, CW/CCW				
Output signal Port: ERR		Port: ERR	(maximum current: 10mA)				
Protection Overvoltage		Overvoltaç	ge, undervoltage, short circuit and heat protection.				
Brake	Brake mode * Available		to connect the chop resister. Need custom.				
Coolin	g way		Fan cooling				
m	Operation en	vironment	Avoid the environment with great amount of				
n ≚.			metallic powder, oil mist, or erosive gases.				
Environment	Operation hu	midity	<85%, RH				
mer	Operation ten	nperature	0℃~+40℃				
≠	Storage temperature		-20℃~+70℃				
Weight			1.5Kg				
Dimen	sions		201mm×147mm×66mm				
Ingres	s protection	·	IP20				

## **Mechanical Dimensions (Unit:mm)**



#### ${}^{*}\mbox{If you want to use the brake mode driver, please }$ contact us first for the right type.

#### Function of Rotary Switch

S1, Micro-ste	p:							
S1	0	1	2	3	4	5	6	7
Microstep	2	4	5	8	10	16	20	32
Pulse/rev	400	800	1000	1600	2000	3200	4000	6400
S1	8	9	А	В	С	D	E	F
Microstep	50	64	100	128	NA	NA	TEST	NA
Pulse/rev	10000	12800	20000	25600				

S2, Current	t:										
Mode		PLS+DIR									
S2	0	1	2	3	4	5	6	7			
Rms(A)	3.18	3.54	3.89	4.24	4.60	4.95	5.30	5.65			
Peak(A)	4.5	5	5.5	6	6.5	7	7.5	8			
Mode				CW/	CCW			•			
S2	8	9	А	В	С	D	Е	F			
Rms(A)	5.65	5.30	4.95	4.60	4.24	3.89	3.54	3.18			
Peak(A)	8	7.5	7	6.5	6	5.5	5	4.5			



#### Kinco Automation (Shanghai) Ltd.



# **N Series Stepper Drive**

- 17 years design experience, reliable quality
- Microchip DSP core MCU, multifunction drive
- Smooth and quiet drive technology, the motor run smooth and quiet
- Manifold protection, LED light will show the Protection
- CE passed product
- Suitable to drive large range of 2 phase Stepping Motors

As a global leading industrial automation products and solution provider, Kinco has always been concentrating on the research and innovation of new products.

As the effort from Chinese and German technology, the design of Kinco stepper drive inherits German professional manufacturing concept. Its features inculde high-quality, high performance, high stability and high cost-effective.



## **Kinco 2M880N Stepper Motor Drive**

(Two-phase Bipolar Micro Step)



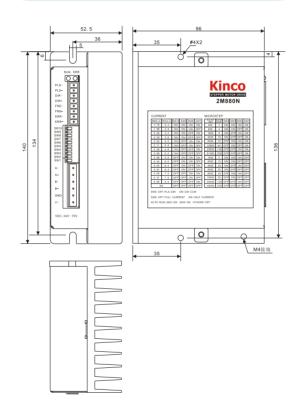


- High-performance, low prices:
- Automatic parameter adjustable regulation;
- · Phase memory technology: the driver will record the phase position of the motor when the motor stopped,
- when re-power the driver, the motor won't shake anymore;
- PLS+DIR and CW/CCW control signal available;
- Optocoupler isolated output signal ERR;
- · Automatic semi-current locking, reduce the motor's heat drastically;
- Optocoupler isolated signal input circuit;
- · With the protection function of overvoltage, undervoltage, short circuit and heat protection.

#### **Technical Specifications:**

Param	Parameter Description		on				
Input v	roltage	24~70V D	OC .				
Output current 2.4; 2.8; 3.		2.4; 2.8; 3	3.2; 3.6; 4.0; 4.4; 4.8; 5.2; 5.6; 6.0; 6.4;				
(peak,	(peak, Unit: A) 6.8; 7.2; 7.		7.6; 8				
Micro s	Micro step 2/4/5/8/10/		0/16/20/25/32/40/50/64/100/128/200/256				
Input s	Input signal PLS(CW),		, DIR(CCW), FREE;				
	Current ra		ange: 6 ~16 mA				
Contro	l mode	PLS+DIR	, CW/CCW				
Output	Output signal ERR, ope		n collector output, maximum current: 20mA				
Protec	Protection Over-volta		age, under-voltage, short circuit, overheat				
Cooling	g method		Nature air cooling				
	Operation en	vironment	Avoid the environment with great amount of				
Env			metallic powder, oil mist, or erosive gases.				
ironi	Operation hu	midity	<85%, RH (non-condensing or water drops)				
ment	Operation ter	nperature	0℃~+40℃				
_	Storage temp	erature	-20℃~+70℃				
Weight	Weight (net)		0.71Kg				
Dimen	Dimensions		140×96×52.5mm				
Ingress	s protection		IP20				
Dimen	Operation ten Storage temp t (net) sions	nperature	<85%, RH (non-condensing or water dr 0°C~+40°C -20°C~+70°C 0.71Kg 140×96×52.5mm				

#### **Mechanical Dimensions (Unit:mm)**



#### **Function of dip switch**

Micro-	Micro-step setting					Current setting, unit A(Peak)					
SW2	SW3	SW4	SW1=ON	SW1=OFF	SW7	SW8	SW9	SW10=ON	SW10=OFF		
On	On	On	2	5	On	On	On	2.4	5.6		
Off	On	On	4	10	Off	On	On	2.8	6.0		
On	Off	On	8	20	On	Off	On	3.2	6.4		
Off	Off	On	16	25	Off	Off	On	3.6	6.8		
On	On	Off	32	40	On	On	Off	4.0	7.2		
Off	On	Off	64	50	Off	On	Off	4.4	7.6		
On	Off	Off	128	100	On	Off	Off	4.8	8		
Off	Off	Off	256	200	Off	Off	Off	5.2	NA		

# **Kinco 2M1180N Stepper Motor Drive**

(Two-phase Bipolar Micro Step)



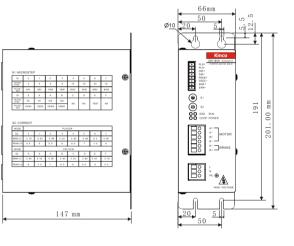
- · High-performance, low prices:
- The input voltage of 2M1180N is 77VAC~123VAC (single-phase);
- Automatic parameter adjustable regulation;
- · Phase memory technology: the driver will record the phase position of the motor when the motor stopped,
- when re-power the driver, the motor won't shake anymore;
- PLS+DIR and CW/CCW control signal available;
- · Optocoupler isolated output signal ERR;
- Automatic semi-current locking, reduce the motor's heat drastically;
- · Optocoupler isolated signal input circuit;
- · 12 micro-step value, the maximum micro-step value is 128;
- · With the protection function of overvoltage, undervoltage, short circuit and heat protection.

#### **Technical Specifications:**

Param	eter	Value				
Input voltage 77VAC~12		77VAC~1	23VAC, (50/60Hz)			
Output	Output current 4.5A, 5A, 5		5.5A, 6A, 6.5A, 7A, 7.5A, 8A			
Micro	step	2/4/5/8/10	//16/20/32/50/64/100/128			
Input s	signal	PLS, DIR,	, FREE (current limit: 6~16 mA)			
Contro	l signal mode	PLS+DIR	, CW/CCW			
Output signal Port: ERR		Port: ERR	(maximum current: 10mA)			
Protec	Protection Overvoltage		ge, undervoltage, short circuit and heat protection.			
Brake	Brake mode * Available		to connect the chop resister. Need custom.			
Coolin	g way		Fan cooling			
	Operation en	vironment	Avoid the environment with great amount of			
Env			metallic powder, oil mist, or erosive gases.			
Environment	Operation hu	midity	<85%, RH			
ment	Operation ten	nperature	0℃~+40℃			
_	Storage temperature		-20℃~+70℃			
Weigh	Weight		1.5Kg			
Dimen	Dimensions		201mm×147mm×66mm			
Ingres	s protection		IP20			
*If you	want to use the	hrake mode	driver please contact us first for the right type			

#### \*If you want to use the brake mode driver, please contact us first for the right type.

#### **Mechanical Dimensions (Unit:mm)**



### **Function of Rotary Switch**

S1, Micro-step	:							
S1	0	1	2	3	4	5	6	7
Microstep	2	4	5	8	10	16	20	32
Pulse/rev	400	800	1000	1600	2000	3200	4000	6400
S1	8	9	Α	В	С	D	E	F
Microstep	50	64	100	128	NA	NA	TEST	NA
Pulse/rev	10000	12800	20000	25600				

S2, Current	:									
Mode		PLS+DIR								
S2	0	1	2	3	4	5	6	7		
Rms(A)	3.18	3.54	3.89	4.24	4.60	4.95	5.30	5.65		
Peak(A)	4.5	5	5.5	6	6.5	7	7.5	8		
Mode				CW/	CCW					
S2	8	9	А	В	С	D	Е	F		
Rms(A)	5.65	5.30	4.95	4.60	4.24	3.89	3.54	3.18		
Peak(A)	8	7.5	7	6.5	6	5.5	5	4.5		