

开环驱动器规格书 (暂定)  
 MICROSTEP DRIVER SPECIFICATION (TENTATIVE)  
 驱动器型号 MOTOR DRIVER MODEL XNFDR6  
 顾客型号 CUSTOMER MODEL

1、电气特性 ELECTRICAL CHARACTERISTICS

项目/ITEM	内容/SPECIFICATION	备注/DESCRIPTION
电源电压/POWER VOLTAGE	DC 20-50V	驱动电压 DRIVER POWER SUPPLY
额定电流/RATED CURRENT	单相峰值电流最大5.6A 5.6A (PEAK) PHASE MAX.	
细分/MICROSTEP	0/2/4/8/16/32/64/128/5/10/20/25/40/50/100/200	
适用电机/SUITED MOTOR	□42 □59 □60 步进电机/STEP MOTOR	

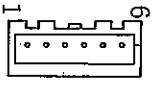
2、环境特性 ENVIRONMENT CHARACTERISTICS

使用温度范围 OPERATION AMBIENT TEMPERATURE	0℃~+50℃
使用湿度范围 OPERATION AMBIENT HUMIDITY	40%RH ~ 90%RH
保存温度范围 STORAGE AMBIENT TEMPERATURE	-20℃~+65℃

3、LED指示灯状态 INDICATOR STATUS

颜色/COLOR	名称/NAME	功能/FUNCTION
绿色/GREEN	电源指示灯/ POWER INDICATOR LAMP	通电时, 绿色指示灯亮 THE POWER IS ON, THE GREEN INDICATOR LIGHTS UP
红色/RED	报警指示灯/ ALARM INDICATOR LAMP	过流时, 指示灯按一次循环闪烁 WHEN THE CURRENT IS OVER THE INDICATOR LIGHTS FLICKER IN ONE CYCLE 过压时, 指示灯按两次循环闪烁 WHEN THE VOLTAGE IS OVER THE INDICATOR LIGHTS FLICKER IN TWO CYCLE 欠压时, 指示灯按三次循环闪烁 WHEN THE VOLTAGE IS UNDER THE INDICATOR LIGHTS FLICKER IN THREE CYCLE

4、控制信号输入 (JST S06B-XASK-1) CONTROL SIGNAL INPUT PORT

端口/ PORT	引脚/ PIN NO	符号/ SYMBOL	名称/ NAME	功能/FUNCTION
 SIGNAL	6	PU+	输入信号光电隔离正端 INPUT SIGNAL PHOTO ELECTRIC ISOLATION POSITIVE END	接信号电源, +5V~+24V均可驱动, 高于+5V需在PU-端接限流电阻 SIGNAL POWER SUPPLY, +5~+24V CAN BE DRIVEN HIGHER THAN 5V THE PU-TERMINAL MUST BE CONNECTED WITH CURRENT LIMITING RESISTOR
	5	PU-	SW1=OFF时为步进脉冲信号 SW1=ON 时为正向步进脉冲信号 SW1=ON FORWARD STEP PULSE SIGNAL	下降沿有效, 每当脉冲由高变低时, 电机走一步, 输入电阻220Ω 要求: 低电平0-0.5V, 高电平4-5V, 脉冲宽度>2.5us THE FALLING EDGE IS FINITE AND WHEN THE PULSE CHANGES FROM HIGH TO LOW THE MOTOR TAKES ONE STEP INPUT RESISTANCE 220Ω REQUIREMENTS LOW LEVEL 0-0.5V HIGH LEVEL 4-5V, PULSE WIDTH 2.5us MIN
	4	DR+	输入信号光电隔离正端 INPUT SIGNAL PHOTO ELECTRIC ISOLATION POSITIVE END	接信号电源, +5V~+24V均可驱动, 高于+5V需在PU-端接限流电阻 SIGNAL POWER SUPPLY, +5~+24V CAN BE DRIVEN HIGHER THAN 5V THE PU-TERMINAL MUST BE CONNECTED WITH CURRENT LIMITING RESISTOR
	3	DR-	SW1=OFF时为方向控制信号 SW1=ON 时为反向步进脉冲信号 SW1=ON BACKWARD STEPPING PULSE SIGNAL	下降沿有效, 每当脉冲由高变低时, 电机走一步, 输入电阻220Ω 要求: 低电平0-0.5V, 高电平4-5V, 脉冲宽度>2.5us THE FALLING EDGE IS FINITE AND WHEN THE PULSE CHANGES FROM HIGH TO LOW THE MOTOR TAKES ONE STEP INPUT RESISTANCE 220Ω REQUIREMENTS LOW LEVEL 0-0.5V HIGH LEVEL 4-5V, PULSE WIDTH 2.5us MIN
	2	MR+	输入信号光电隔离正端 INPUT SIGNAL PHOTO ELECTRIC ISOLATION POSITIVE END	接+5V供电电源+5V~+24V均可驱动, 高于+5V需接限流电阻 +5V POWER SUPPLY CAN BE DRIVEN BY +5V~+24V AND CURRENT LIMITING RESISTOR IS HIGHER THAN +5V
	1	MR-	电机释放信号/报警清除信号 MOTOR RELEASE SIGNAL ALARM CLEARING SIGNAL	有效 (低电平) 关断电机线圈电流, 电机处于自由状态同时报警信号清除 EFFECTIVE (LOW LEVEL) TURN OFF THE MOTOR COIL CURRENT THE MOTOR IS IN FREE STATE WHILE THE ALARM SIGNAL IS CLEARED

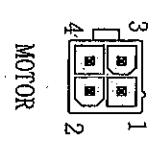
材质 MATERIAL		表面处理 FINISH	
制图 DRAWN	设计 DESIGNED	检查 CHECKED	审核 APPROVED
18-09-28	18-09-28	18-10-09	2018-11-15
胡金平	胡金平	胡金平	胡金平
比例 SCALE	00初版	变更 REVISIONS	设计 DESIGN
	胡金平		胡金平
品名 TITLE	驱动器规格书 (暂定) MOTOR DRIVER SPECIFICATION (TENTATIVE)	图号 DWG. NO.	Y-18-1771-0
		备注 NOTE	三角法 THIRD ANGLE PROJECTION
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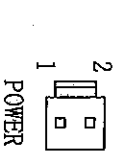
5、拨码开关/DIAL SWITCH

端口/ PORT	引脚/ PIN NO	符号/ SYMBOL	名称/ NAME	功能/FUNCTION
P&C SETTING	1	SW1	拨码开关/DIAL SWITCH	SW1-SW3: 电流设置/ CURRENT SETTING TABLE
	2	SW2		
	3	SW3		
	4	SW4		
	5	SW5	SW4: 锁机 电流选择/ LOCK CURRENT FLOW SELECTION	
	6	SW6		
	7	SW7		
	8	SW8		

6、电机输入端口 (MOLEX 5569-04)/MOTOR INPUT PORT

端口/ PORT	管脚/ PIN NO	符号/ SYMBOL	名称/ NAME	功能/FUNCTION
 MOTOR	1	A-	电机接口/ MOTOR CONNECTION	两相步进电机接线口/ TWO STEPPER MOTOR CONNECTION PORTS
	2	A+		
	3	B-		
	4	B+		

7、电源输入端口 (JST B2PS-VH)/MOTOR INPUT PORT

端口/ PORT	引脚/ PIN NO	符号/ SYMBOL	名称/ NAME	功能/FUNCTION
 POWER	1	V-	电源接口/ POWER CONNECTION	DC 20-50V
	2	V+		

8、拨码开关电流设定 SWITCH CURRENT SET  
3位拨码开关, 8种电流选择。/3 DIAL SWITCHES, 8 CURRENT SUBDIVISION OPTIONS

Peak	RMS	SW1	SW2	SW3
1.7A	1.2A	OFF	OFF	OFF
2.1A	1.5A	ON	OFF	OFF
2.7A	1.9A	OFF	ON	OFF
3.2A	2.3A	ON	ON	OFF
3.8A	2.7A	OFF	OFF	ON
4.3A	3.1A	ON	OFF	ON
4.9A	3.5A	OFF	ON	ON
5.6A	4.0A	ON	ON	ON

9、拨码开关锁机 电流选择 / LOCK CURRENT FLOW SELECTION  
SW4: OFF=HALF CURRENT ON=FULL CURRENT

10、拨码开关细分设定 SWITCH EXCITING SET  
4位拨码开关, 16种细分选择。/4 DIAL SWITCHES, 16 PULSE SUBDIVISION OPTIONS

Pulse/rev	SW5	SW6	SW7	SW8
200	ON	ON	ON	ON
400	OFF	ON	ON	ON
800	ON	OFF	ON	ON
1600	OFF	OFF	ON	ON
3200	ON	ON	OFF	ON
6400	OFF	ON	OFF	ON
12800	ON	OFF	OFF	ON
25600	OFF	OFF	OFF	ON
1000	ON	ON	ON	OFF
2000	OFF	ON	ON	OFF
4000	ON	OFF	ON	OFF
5000	OFF	OFF	ON	OFF
8000	ON	ON	OFF	OFF
10000	OFF	ON	OFF	OFF
20000	ON	OFF	OFF	OFF
40000	OFF	OFF	OFF	OFF

11、注意/NOTES:

A、不要将电源接反; 输入电压不要超过DC 50V  
DO NOT CONNECT THE POWER SUPPLY IN REVERSE, THE INPUT VOLTAGE SHALL NOT EXCEED DC50V.

B、输入控制信号为5V, 当高于5V时需要接限流电阻。  
THE AVERAGE INPUT CONTROL SIGNAL IS 5V, AND THE CURRENT LIMITING RESISTANCE IS REQUIRED WHEN HIGHER THAN 5V.

C、故障指示ALARM灯亮, 请断电后检查, 供电电压是否低于20V或高于50V, 电机接线及其他短路故障排除后重新上电  
THE FAULT INDICATOR ALARM IS ON, PLEASE CHECK AFTER THE POWER IS OFF, WHETHER THE SUPPLY VOLTAGE IS LOWER THAN 20V OR HIGHER THAN 50V, REPOWER THE MOTOR AFTER TROUBLESHOOTING AND OTHER SHORT CIRCUIT FAULTS.

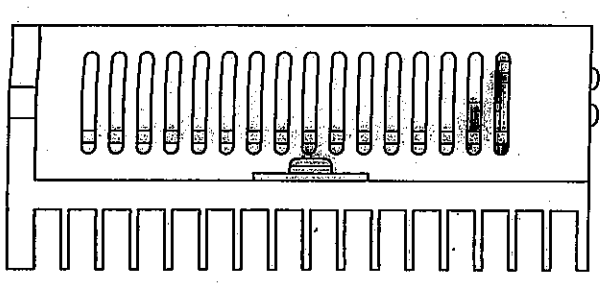
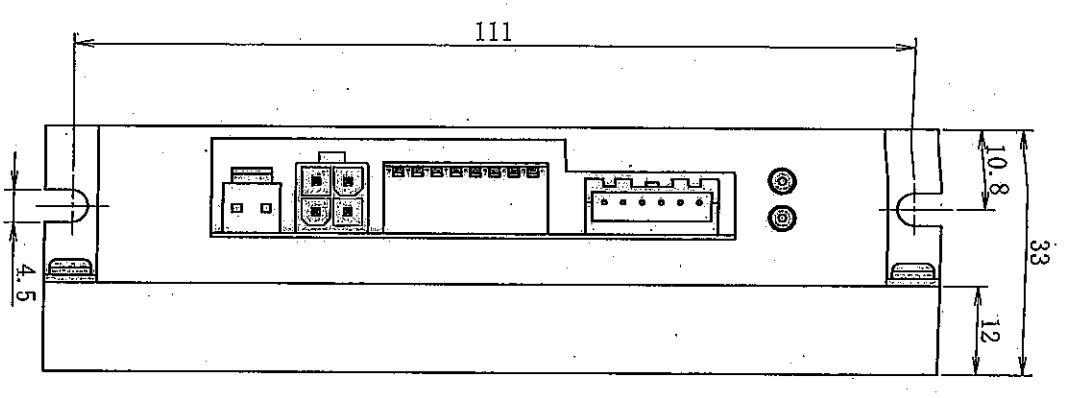
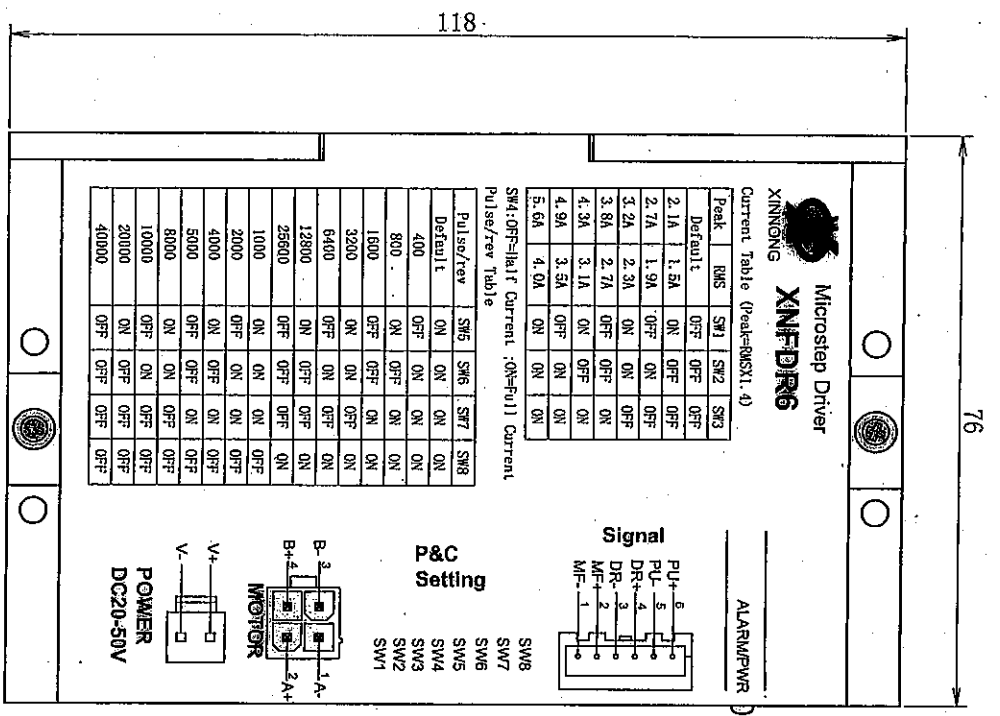
D、驱动器通电时绿色指示灯PWR亮/THE GREEN LIGHT PWR IS ON WHEN THE DRIVE IS ENERGIZED

E、有脉冲输入时, TM指示灯闪烁; 无脉冲输入时, TM指示灯常亮/WHEN THERE IS PULSE INPUT, TM INDICATOR LIGHTS FLASH; WHEN THERE IS NO PULSE INPUT, THE TM INDICATOR LIGHT IS ALWAYS ON.

材质 MATERIAL	表面处理 FINISH	制图 DRAWN	设计 DESIGNED	检图 CHECKED	检印 CHECKED	比例 SCALE	品名 TITLE	图号 DWG. NO.	备注 NOTE
		东莞信泰 18-09-28	东莞信泰 18-09-28	东莞信泰 2018-10-09	东莞信泰 2018-10-09		驱动器规格书(暂定) MOTOR DRIVER SPECIFICATION(TBRATIVE)	Y-18-1771-0	三角注 THIRD ANGLE PROJECTION
表面处理		日期		日期		变更单号		设计	
		18-09-28		2018-10-09		00初版		胡金平	
		DATE		DATE		REVISION NO.		DESIGNER	
		18-09-28		2018-10-09		00初版		胡金平	
		DATE		DATE		REVISION NO.		DESIGNER	
		18-09-28		2018-10-09		00初版		胡金平	
		DATE		DATE		REVISION NO.		DESIGNER	

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★印部是顾客使用部(安装部 动力传输部 电源部)  
PORTIONS MARKED BY ★ ARE USED BY CUSTOMER (MOUNTING POWER TRANSMISSION POWER SUPPLY)

材 质		MATERIAL	
表面处理		FINISH	
制 图	设计	检 图	检 印
DRAWN	DESIGNED	CHECKED	CHECKED
18-09-28	18-09-28	2018-10-06	2018-10-09
胡金平	胡金平	胡金平	胡金平
比例		SCALE	
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品 名		变 更 项 目	
TITILE		REVISIONS	
MOTOR DRIVER SPECIFICATION (暂定)		00初版	
图 号		图 号	
DWG. NO.		DWG. NO.	
Y-18-1771-0		Y-18-1771-0	
备 注		备 注	
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NOTE		NOTE	
三角法 THIRD ANGLE PROJECTION		3/3	

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