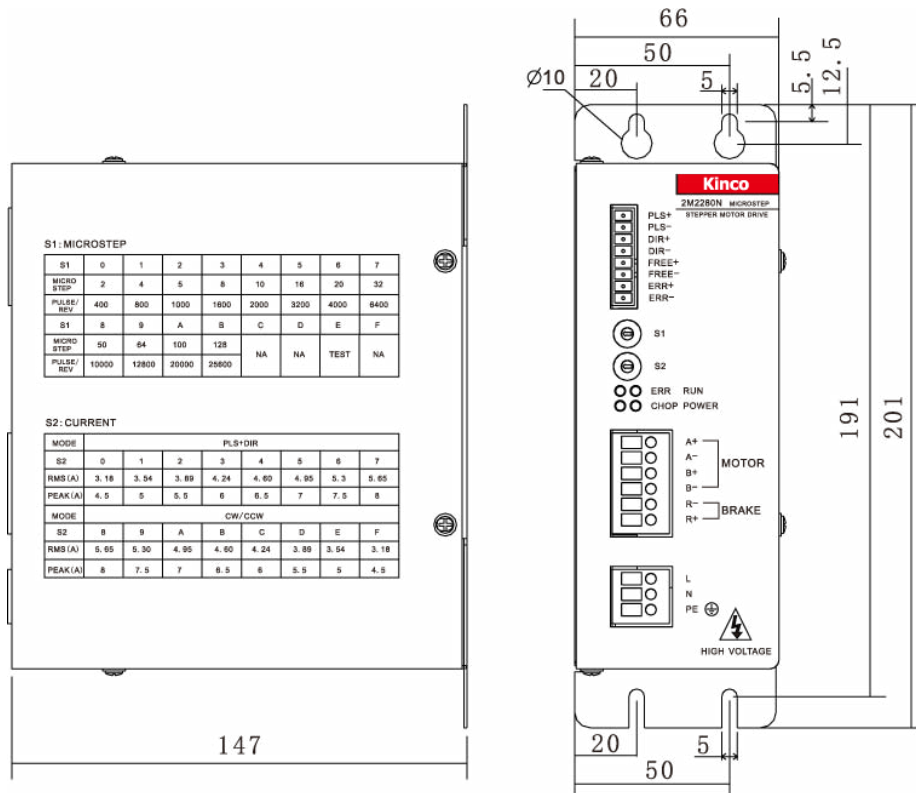


- **Input Voltage 77~123VAC, (50Hz/60Hz)**
- **Over-Voltage Protection 187VDC**
- **Under-Voltage Protection 90VDC**
- **Cooling Method (Fan Cooling)**
- **Operating Temperature - 0° C~ +40° C**
- **Operating Humidity 85%, RH (Non-Condensing or Water Drops)**
- **Weight 1.5Kg**
- **Operation Temperature 0° C ~ +40° C**
- **Storage Temperature -20° C ~ +70° C**
- **Ingress Protection IP20**

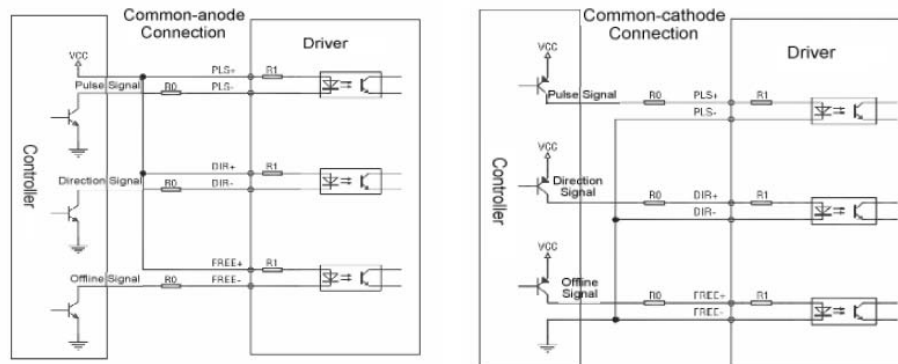


The 2M1180N Series Stepper Driver provides improved dynamic drive performance. This Series drive accepts 77~123VAC input, with up to 8 Amps per phase, and provides users with a step resolution of up to 25,600 steps per revolution. As an additional feature, this drive provides users with the ability to select an auto reduce current setting which helps reduce power consumption and motor heat, while improving motor lifetime. Also, the isolation inputs help minimize interference from external electrical equipment as well as improving performance.



(Units Are In mm)

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Technical Specifications	
Parameter	Value
Input Voltage	77 to 123VAC, (50Hz)
Overvoltage Protection	187VDC
Undervoltage Protection	90VDC
Output Current (Peak, Unit:A)	4.5A - 8A Total 8 Setting Values
Micro Step	2 to 128 Total 12 Subdivisions
Adaptable Motor	56, 86 and 110 Series Two-Phase Bipolar Hybrid Stepper Motor
Input Signal	PLS(CW), DIR(CCW), A/B, FREE; Current Range: 6-16mA
Output Signal	ERR, Open Collector Output, Maximum Current: 20mA
Control Signal Mode	PLS+DIR; CW/CCW, A+B
Automatic Half Current	The Driver Will Reduce Phase Current of the Motor by A Half in 1.5 Seconds
Operation Indication	Combination of Run and Error LED
Protection	Over-Voltage, Under-Voltage, Short Circuit and Heat Protection
Dynamic Braking Circuit	Absorb Regenerated Energy of Motor by Connecting to Power Resistor, Custom Function
Technical Specifications (Environment)	
Cooling Method	Fan Cooling
Operation Environment	Avoid the Environment with Great Amount of Metallic Powder, Oil Mist, or Erosive Gases
Operation Humidity	<85%, RH (Non-Condensing or Water Drops)
Operation Temperature	0° C - +40° C
Storage Temperature	-20° C- +70° C
Weight (Net)	1.5Kg
Dimensions	201 x 147 x 66 mm
Ingress Protection	IP20

L011314

S1, Micro-Step: Switch for Subdivision and Test Running Function

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	A	B	C	D	E	F
Microstep	50	64	100	128	NA	NA	TEST	NA
Pulse/Rev	10000	12800	20000	25600				

S2, Current: Switch for Current and PLS/DIR, CW/CCW Setting

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	A	B	C	D	E	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

Mode	S1	S2	Method
Auto Run	E	0~F	Set S1=E, S2=0~F When Driver is Powered Off, Then Power on the Driver, The Motor Will Run at 60RPM Automatically.
PLS+DIR	0~B	0~7	Set S1=0-B, S2=0~7 When Driver is Powered Off, Then Power on the Driver, the Motor Will Run in PLS+DIR Mode.
CW/CCW	0~B	0~7	Set S1=0-B, S2=8-F When Driver is Powered Off, Then Power on the Driver, the Motor Will Run in CW/CCW Mode
Half Current	F	C	Set S1 and S2 as the "MODE Settings (as the Left Table)" When Driver is Powered Off. Then Power On the Driver, the 4 LED's Will Run as: RUN LED Blinks, POWER LED is Green, ERR LED is Red, CHOP LED is Off. It Means the Mode Setting is Succeed, then Restart the driver, the driver will work in setting mode.
Full Current	F	D	
Step Smooth Filter Enable	F	F	
Step Smooth Filter Disable	F	E	