

Motor Specifications

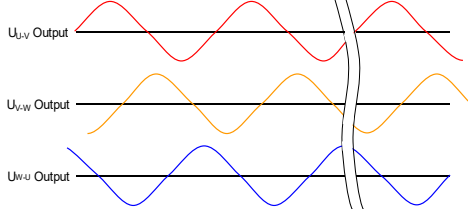
1	Typical Supply Voltages		
2	Basic DC Bus Voltage	V (DC)	48
3	Rated Output Power	Watts	1000
4	Rated Speed	rpm	2000
5	Max. Mechanical Speed	rpm	2500
6	Rated Torque	Nm	4.8
7	Continuous Stall Torque	Nm	4.8
8	Peak Torque	Nm	7.2
9	Rated Current	A (rms)	24.2
10	Continuous Stall Current	A (rms)	24.2
11	Peak Current	A (rms)	35.1
12	Voltage Constant $\pm 10\%$	V(rms)/K rpm	12.8
13	Torque Constant $\pm 10\%$	Nm/A(rms)	0.185
14	Winding Resistance(Line-Line) $\pm 10\%$	Ohm @20°C	0.07
15	Winding Inductance(Line-Line) $\pm 20\%$	mH (typ.)	0.3
16	Inertia -(with encoder)	kg m ²	0.00016
17	Thermal Resistance(mounted)	°C / W	0.65
18	Thermal Time Constant	Minutes	34
19	Heat Sink Size(Aluminum)	mm	300×300×12
20	Shaft Load - Axial	N (max.)	330N /74.1Lbf
21	Shaft Load - Radial(End of Shaft)	N (max.)	625N /140.3Lbf
22	Weight	kg	11.5kg / 25.3 Lb
23	Approvals	CE, RoHS	
24	Encoder	SL	
25	Insulation Class	F (155°C)	
26	IP rating	IP54	
27	Installation Location	Indoors, free from direct sunlight, corrosive gas, inflammable gas	
28	Ambient Temperature	Operating 0 to 40°C, Storage -20 to 80 °C	
29	Ambient Humidity (max.)	85% (free from condensing)	
30	Altitude (max.)	1000 m	
31	Vibration Resistance	49 m/s ²	
32	Rotor Poles	10	

Shaft Load: (L₁₀ life, 20,000 hours, 2,000 RPM)

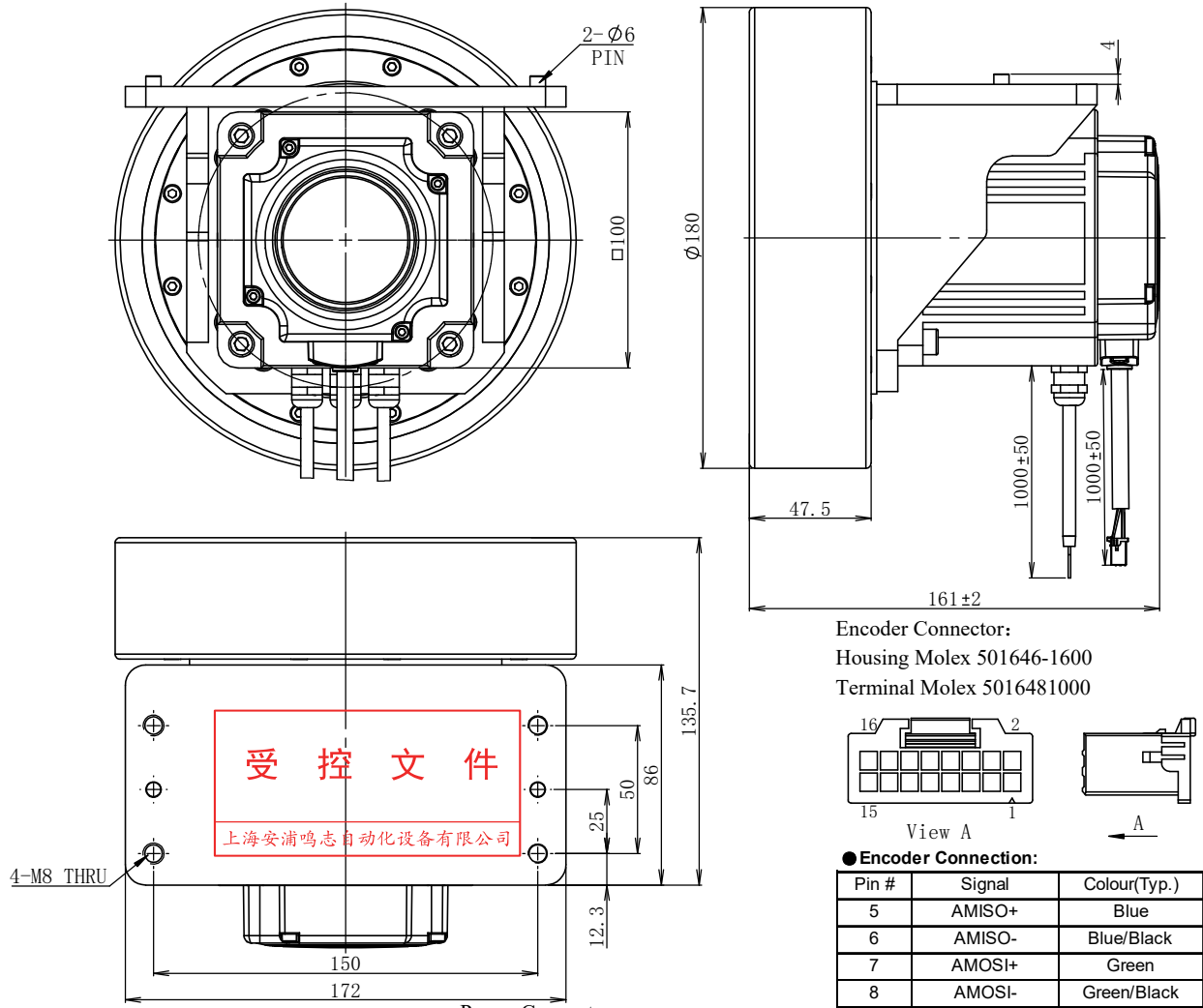
Gear Specification

Ratio i	10	Shaft Load-Axial	3300N
Rated Torque	95Nm	Noise	60db
Peak Torque	152Nm	IP rating	IP54
Input Speed	2000rpm	L10 Life	20000h
Max Input Speed	6000rpm	Full Load Efficiency	94%
Shaft Load-Radial	6250N	Return Clearance	15arcmin

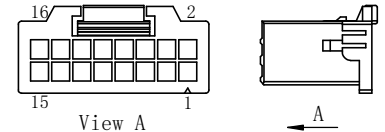
Motor Phases



All the timing logics are obtained in CCW rotation as viewed from front shaft.



Encoder Connector:
Housing Molex 501646-1600
Terminal Molex 5016481000



Encoder Connection:

Pin #	Signal	Colour(Typ.)
5	AMISO+	Blue
6	AMISO-	Blue/Black
7	AMOSI+	Green
8	AMOSI-	Green/Black
9	ASCK+	Yellow
10	ASCK-	Yellow/Black
11	ACS+	Brown
12	ACS-	Brown/Black
13	5V	Red
14	DGND	Black
16	Shield	Shield

Power Connector:

Y Type terminal SV3.5-4

Motor Power Connection:

NO	Signal	Colour(Typ.)
1	Phase U	Yellow
2	Phase V	Blue
3	Phase W	Red

允许的公差值范围						MSD180-10-100-20GSL-N			4611170005803		
小 数: MM		A1		2	AEC024-0019PM						
X.XXX=±0.01		AO			首次归档	2023.10.31					
X.XX =±0.10		版本	标记	数量	更改单号	日 期		出图阶段		质量	比例
X.X =±0.20		设计		杨成坤		工 艺		D			1:2
		标准化				审 核		第 1 张		共 1 张	
视 图		校 核				批 准		上海安浦鸣志自动化设备有限公司			
		市场部				日 期					