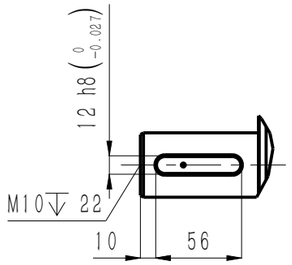
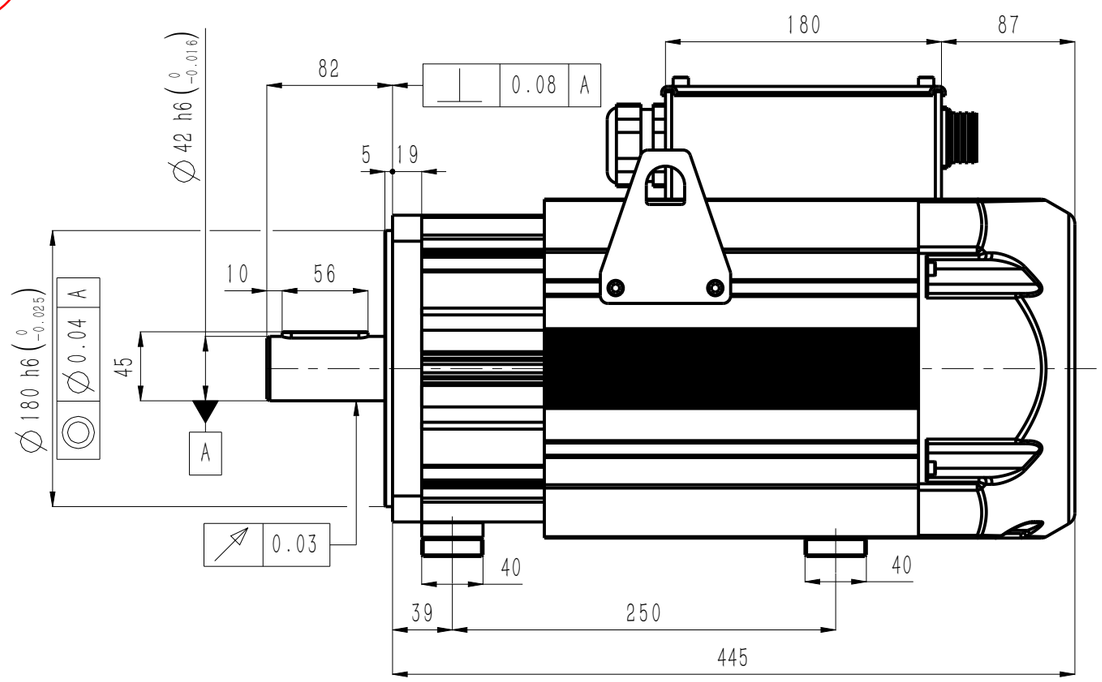
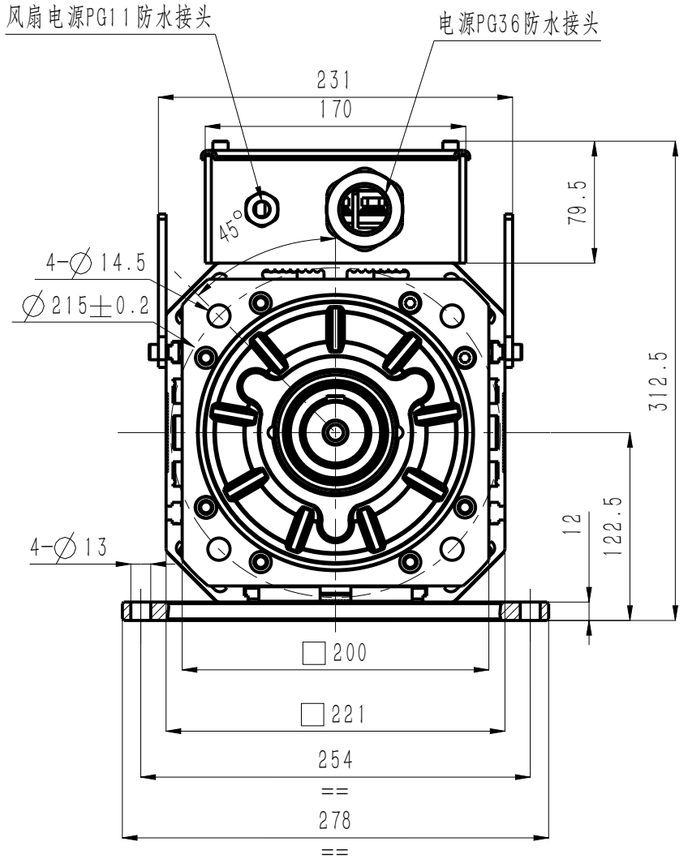
版 本 Edition	变更内容 Description of the change

正样
2026.03.09
A



标配： A型圆头普通平键
A12X8X56(GB/T1096)

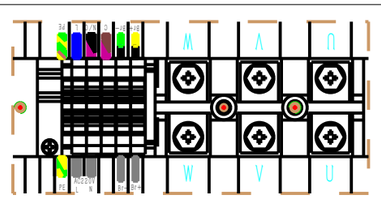


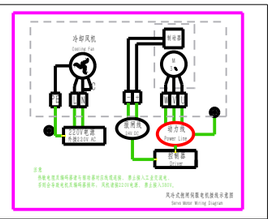


抱闸参数 Brake parameters		
额定电压 Rated voltage	24	V DC
额定功率 Rated power	55	W
电阻(20℃) Resistance	10.5± 7%	Ω
额定扭矩 Rated torque	≥150	N · m
释放电压 Release voltage	≥1.2	V
吸引电压 Pickup voltage	≤18	V
吸合时间 Pickup time	≤350	ms
释放时间 Release time	≤80	ms
回转间隙 Rotational Clearance	≤1° (20%额定扭矩) (20%Rated torque)	

电机技术参数 Motor parameters		
额定电压 Rated voltage	380	V AC
额定功率 Rated power	12.1	kW
额定扭矩 Rated torque	58	N · m
额定电流 Rated current	20.7	Arms
峰值扭矩(1000rpm) Peak torque	145	N · m
峰值电流(1000rpm) Peak current	54.4	Arms
峰值扭矩(2000rpm) Peak torque	124	N · m
峰值电流(2000rpm) Peak current	58.7	Arms
峰值扭矩(3000rpm) Peak torque	77	N · m
峰值电流(3000rpm) Peak current	47.5	Arms
额定转速 Rated speed	2000	rpm
峰值转速 Maximum speed	3000	rpm
扭矩系数 Torque constant	2.8	N.m/Arms
反电势常数 Back EMF constant	181.4	V/krpm
线电阻 line resistance	0.67	Ω
线电感 line inductance	12.65	mH
转动惯量 Moment of inertia	85±10%	kg · cm2
轴向允许载荷 Axial allowable load	/	N
径向允许载荷 Radial allowable load	/	N
极对数 Number of pole pairs	4	对
IP防护等级 Ingress Protection Rating	IP54	
绝缘等级 Insulation class	F	
绝缘电阻 Insulation resistance	＞100MΩ DC500V	
电机重量 Motor weight	52.8	kg
工作温度 Operating temperature	-20℃~40℃	
工作湿度 Operating humidity	20%~80% (不结露 Non-dewfall)	
推荐安装海拔 Recommend installing altitude	＜1000m(1km以上降额使用) (Derate for use above 1km)	

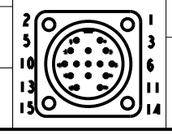
引线定义
Wiring definition



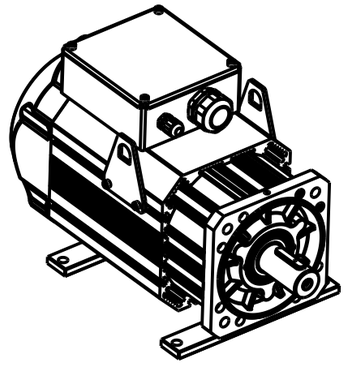


信号航插规格
Encoder connector

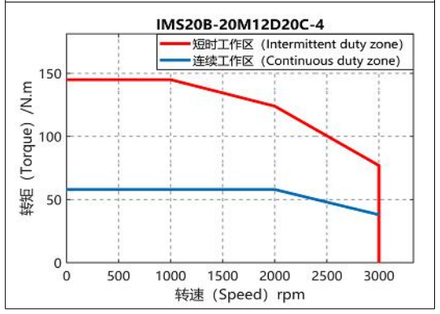
YD28J15Z



编码器规格 Connector specifications	引线定义 Wiring definition								
	1	2	3	4	5	6	7	8	9
23-bit optical encoder	PE (屏蔽)	SD+ (蓝)	SD- (黄)	+5V (红)	0V (黑)	BAT+ (棕)	BAT- (白)	KTY84-130+ (黄)	KTY84-130- (绿)
12-bit Resolver encoder	PE (屏蔽)	Ref+ (红白)	Ref- (黄白)	Cos- (黑)	Cos+ (红)	Sin+ (黄)	Sin- (蓝)	KTY84-130+ (黄)	KTY84-130- (绿)



Speed-torque characteristic curve



SN	料号 P/N	整机型号 Model and Specification	编码器 Encoder
	11101-01440	IMS20B-20M12D20C-4-P94F-A	23位多圈光编

				深圳市英威腾电气股份有限公司 Shenzhen INVT Electric Co., Ltd.			
A	新归档	/	26-2-9	名 称	电机外形图 Motor outline dimension drawing		
版 本	更改方式	更改人	日期				
设 计	/			料 号	/	材 质	/
校 核	/						
工 艺	/			图 号	/	投影标识	
审 核	/						
标准化	/			重 量	/	比 例	1:1
批 准	/					第 1 页	共 1 页