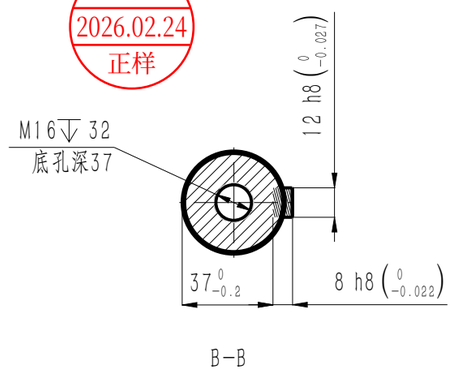
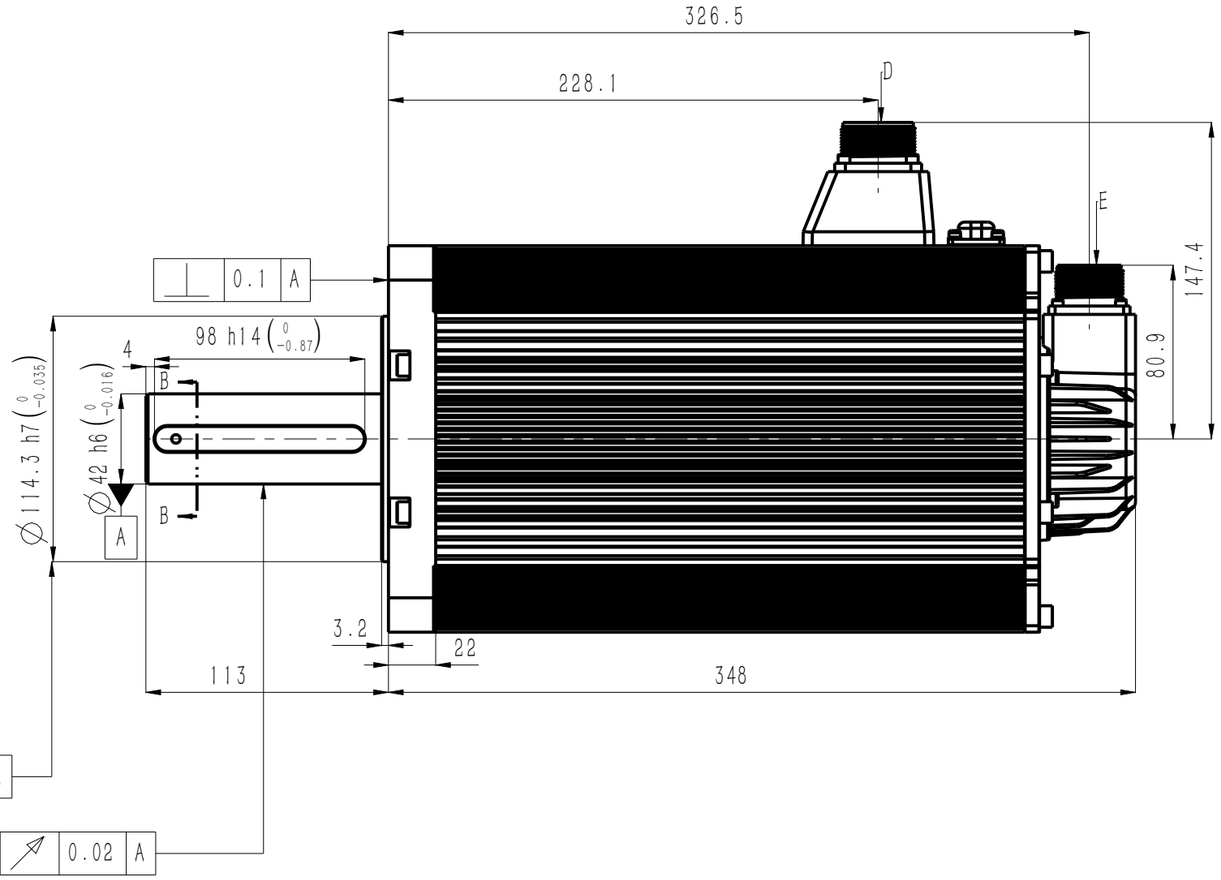
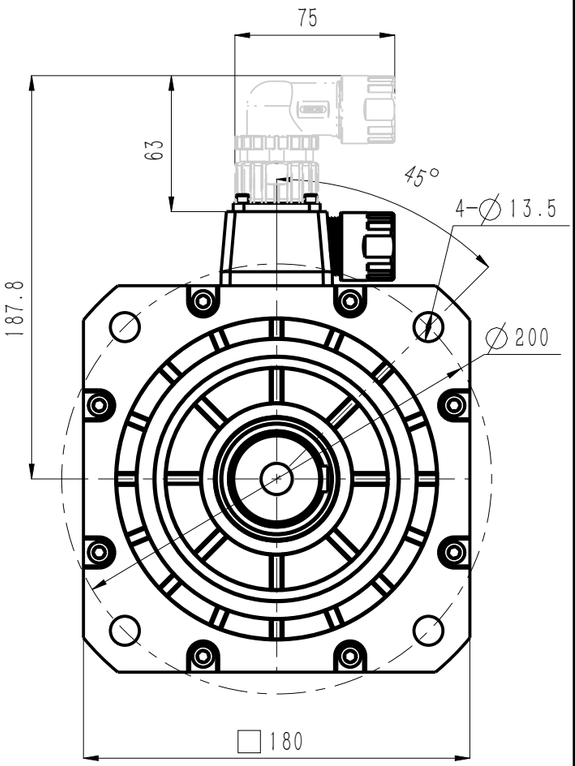
版 本 Edition	ECN	变更内容 Description of the change
B	/	外观尺寸图模版更新

B
2026.02.24
正样



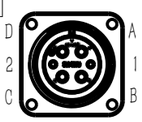




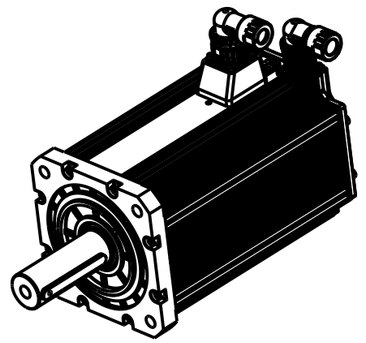
抱闸参数 Brake parameters		
额定电压 Rated voltage	24±10%	V DC
额定功率 Rated power	36	W
电阻(20℃) Resistance	16±7%	Ω
额定扭矩 Rated torque	≥48	N · m
释放电压 Release voltage	>1.2	V
吸引电压 Pickup voltage	≤18	V
吸合时间 Pickup time	<150	ms
释放时间 Release time	<40	ms
回转间隙 Rotational Clearance	<1° (20%额定扭矩) (20%Rated torque)	

电机技术参数 Motor parameters		
额定电压 Rated voltage	380	V AC
额定功率 Rated power	7.5	kW
额定扭矩 Rated torque	47.8	N · m
峰值扭矩 Peak torque	119.5	N · m
额定电流 Rated current	20.9	Arms
峰值电流 Peak current	46.4	Arms
额定转速 Rated speed	1500	rpm
峰值转速 Maximum speed	4500	rpm
扭矩系数 Torque constant	2.45	N.m/Arms
反电势常数 Back EMF constant	137.2	V/krpm
线电阻 line resistance	0.33	Ω
线电感 line inductance	4.2	mH
转动惯量 Moment of inertia	111.1±10%	kg · cm2
轴向允许载荷 Axial allowable load	490	N
径向允许载荷 Radial allowable load	1470	N
极对数 Number of pole pairs	4	对
IP防护等级 Ingress Protection Rating	IP67	
绝缘等级 Insulation class	F	
绝缘电阻 Insulation resistance	>100MΩ DC500V	
电机重量 Motor weight	34.7	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)	

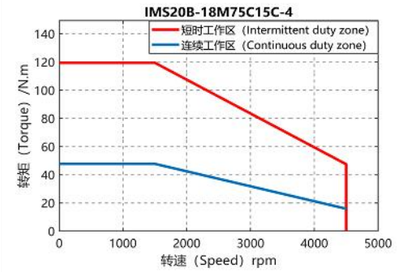
动力航插规格 Power connector	引线定义 Wiring definition					
D CMS3102A22-A6P	A	B	C	D	1	2
	W	V	U	PE	24V DC	0V



信号航插规格 Encoder connector	编码器规格 Connector specifications	引线定义 Wiring definition						
E CMS3102A20-29P	17-bit magnetic encoder 23-bit optical encoder	A	B	E	F	G	H	J
		SD+ (蓝)	SD- (黄)	BAT+ (棕)	BAT- (白)	+5V (红)	0V (黑)	PE (绿)



Speed–torque characteristic curve



SN	料号 P/N	整机型号 Model and Specification	编码器 Encoder
1	11101-01396	IMS20B-18M75C15C-4-M44-AUL	17位多圈磁编
2	11101-01397	IMS20B-18M75C15C-4-P94-AUL	23位多圈光编

版本	更改方式	更改人	日期
B	替 换	/	20260209
A	新归档	/	20250827

深圳市英威腾电气股份有限公司
Shenzhen INVT Electric Co., Ltd.

设计	/	名称	电机外形图 Motor outline dimension drawing		
校核	/	料号	/	材质	/
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