无刷直流电机系列 BLDC MOTOR



无刷直流电机由电动机主体和驱动器组成,是一种典型的机电一体化产品,其以体积小、噪音低、效率高、调速范围广、稳态转速误差小等 特点,越来越被市场所推崇。中大电机致力于无刷直流电机+驱动器+齿轮减速器一整套的转动解决方案,产品目前已广范应用于工业传动设 备、纺织机械、医疗器械等领域,中大电机本着质量第一,信誉至上的原则,竭诚为您打造更合理的机电一体化产品解决方案!

Brushless DC motor (BLDC) is made up of motor and driver, which is a kind of typical product of mechanical and electrical integration. It is high regarded by market as its small volume, low noise, high efficiency, wide range of speed control and steady working state with less inaccuracy. ZD-motor factory applies itself to the complete set of transmission solutions including motor, gearbox and driver. And the product is widely used in transmission equipment, textile machinery and medical devices, etc. ZD-motor factory takes Quality and Reputation first as its principle, and it tries its best to make a more reasonable transmission program for all customers.

■直流电机的一般规格General specification of DC motor

项目Items				
绝缘电阻 Insulation resistance	在常温、常湿度下,运转电机后,以DC500V电阻表测量线圈、外壳间时,测量值为20MΩ以上。 In the circumstance of normal ambient temperature and humidity, the resistance can be up to 20MΩ or more when 500VDC megge is applied between the windings and the frame after rated motor operations.			
绝缘电压	在常温、常湿度下电动机额定运行后,在线圈、外壳间施加一分钟50Hz、1.5kV(三相400V为2kV)的电压,亦无异常。			
Insulation voltage	In the circumstance of normal ambient temperature and humidity, there will be no problem to withstand 1.5kV (three phase400v: 2kV) at 50hz between the windings and the frame for 1 minute after rated motor operation.			
温度上升 Temperature rise	运转电机后,用电阻法来测量时,线圈绕组温度的上升数值在80℃以下。 The temperature rise should be lower than 80℃ measured by resistance method when the motor is working.			
绝缘等级	B级(130 °C)			
Insulation class	Class B (130 °C)			
使用温度	-10°C~+40°C (无冰冻)			
Using temperature	-10°C~+40°C (No freeze)			
使用湿度	85%以下(没有结露的场所)			
Using humidity	≤85% (Place without dew)			

型号的阅读方法 PRODUCT CODE

■无刷直流电动机 Brushless DC Motor

Z	5	BLD(P)	40 -	220	GN -	305
	(1)	(2)	(3)	(4)	(5)	(6)

1	型号尺寸 (Model&Dimension)						
	座机号Code	2	3	4	5	6	
	电机安装法兰Mounting Flange mm	□60	□70	□80	□90	□104	
2	电机型式:	BLD: 无刷直流电机配方式减速器 BLD: brushless motor with square gearbox					
	Motor type	BLDP: 无刷直流电机配行星减速器 BLDP: motor matched with planetary gearbox					
3	输出功率Output Power	(例)40:	(例) 40: 40W				
4	电源电压Voltage	(例) 220: 220V					
	电机轴形状Shape of Motor Shaft	GN: 普通型斜齿轴 GN: General Helival Gear A1: 铣键槽 A1: Milling Keyway					
5		GU: 加强型	型斜齿轴 GN: Rei	ar A: 铣	扁 A: Flat type		
6	电机转速Motor Speed	(例)308	6: 3000RPM				

[●] 如果电机需配刹车器可在型号最后增加-M符号,如Z4BLD40-220GN-30S-M,刹车器电压与电机额定电压相同;型号中电机可解读为方型80mm、GN型、额定电压220VAC、额定功率40W、额定转速3000RPM、配220VAC刹车器。

■减速器 Gearbox

5	GN	50	K
1	2	3	4

1	型号尺寸Model & Dimension	2: 60mm 、3: 70mm 、4: 80mm 、5: 90mm 、	6: 104mm	
2	齿轮种类Gear Type	GN: 普通型斜齿轴	GN: Common Helical Gear	
		GU: 加强型斜齿轴	GU: Reinforced Helical Gear	
③ 减速比Reduction Ratio	は声 Paduation Patio	50: 减速比为1: 50	50: Reduction Ratio 1: 50	
	NG EL PERCUCION NAIIO	10X仅限减速比1:10的中间减速比	10X denotes the mid-gearbox ratio 1:10	
4	轴承种类Bearing Type	K: 滚珠轴承(对GU型方箱体标注为KB)		
		K: Ball Bearing (Mark KB for Type GU square case)		

[●]注: 非标准分体式的编号为: 在电动型号或减速器型号前加"v"(请在定货时写明具体参数)

■控制器 Controller

Z <u>BLD•CON</u> - $\frac{220}{2}$ A $\frac{10}{4}$ - $\frac{V1}{6}$

			(5)	V1: 驱动器特性 Feature of driver		
1	BLD.CON: 无刷直流驱动器	BLDC driver	2000	注Note:		
2	电压: 220V	Vol	VI: 驱动器具有一般过压、欠压、过流保护功能,具有软起动、调速、工 使用功能。V2: 驱动器增加其它功能 VI: Generally, driver has function of over voltage, under voltage and current protect			
3	A: AC 无A时: DC	DC: Without A				
4	功率: 10W	Power	can start softly, adjust speed and run in both CW and CCW. V2: Other functions.			

[●]说明,如ZBLD.CON-48200表示中大电机生产的,48VDC, 200W无刷直流驱动器 2、此驱动器表示型号适用于光轴和齿轴电机

[•] Note: we use M to symbolise the brake, such as Z4BLD25-220GN-30S-M, the brake voltage is the same as the rated voltage of the motor; Type of motor can be interpreted as a case diameter of 80mm, GN type, rated voltage 220VAC, rated power25W, rated speed of 3000RPM, with brake-220VAC.

Note: The code of the non-standard split type is to add "V" before the model number of the motor or reducer(Please specify the detailed parameter requirement in the purchase order)

For example ZBLD.CON-48200 means driver of 48V.200W. 2. This driver can be used for round shaft and gear shoft motor.