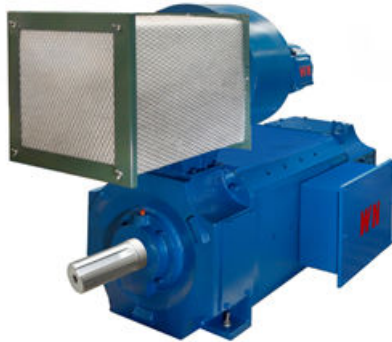


ZSL4 系列 直 流 电 动 机

ZSL4 Series DC Motors



机座号：112~160 功 率：1.1~18.5 kW

工作制：S1 绝缘等级：F 级

额定电压：440V，160V 励磁方式：他励

额定转速：3000、1500、1000、750r/min

适用于：ZSL4 系列主要用于低速范围小，设备安装空间狭小的各种机械传动；防护等级 IP23S，冷却方式 IC01，可实现最低 300r/min 至最高转速间平滑调速。

特点：稳定、良好的调速性能，可实现降低电枢电压恒转矩向下调速或减小励磁电流恒功率向上调速，输出功率大，过载能力强，电机无需冷却风机。

1. Motor enclosure protection level and installation structure type

a. The enclosure protection level is IP23S.

b. The motors are all equipped with feet, and the installation methods include IMB3, IMB35, IMB5, IMV1, IMV15, etc.

2. The position of the outlet box, when viewed from the drive side, is on the right side of the motor.

3. Cooling method: The entire series of motors adopts an open structure, with the cooling method being IC01; it can achieve smooth speed regulation from a minimum of 300r/min (constant torque) to the maximum speed (constant power).

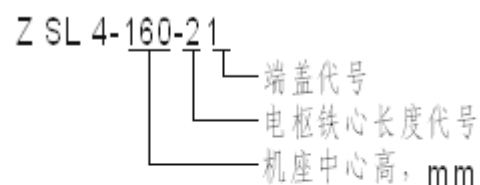
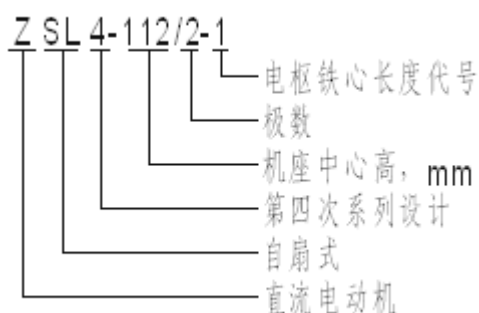
4. Ordering instructions for electric motors

a. When ordering, please specify the detailed information such as the motor model, power, voltage, speed, excitation voltage, outlet box position, and number of output shafts.

b. When placing an order, please specify the detailed information such as the model, specifications, and quantity of the accessories required to be installed on the motor.

c. If there are discrepancies between the required specifications and technical requirements and this sample, please contact our company immediately, put forward specific and clear requirements in advance, and sign a technical agreement after agreement or indicate them in the order contract.

5. Meaning of motor model



性能数据 Performance Data

型号 Type	额定功率 Rated Output P_N kW	额定转速 Rated Speed r/min			弱磁转速 Speed with Field Weakened n_F r/min	电枢电流 Arm. Curr. I_N A	励磁功率 Field Power P_F W	效率 Eff. %	惯量矩 Moment of Inertia GD^2 kg·m ²	重量 Wt. kg
		160V	400V	440V						
ZSL4-112/2-2	3	2970			3500	24	350	69.1	0.088	102
	2.8		2680		3500	9.1		71.2		
	3			2950	3500	8.6		72.8		
	1.1	750			1500	9.3		66.8		
ZSL4-112/2-3	4	2980			3500	31.3	380	72.6	0.112	109
	3.7		2680		3500	11.7		74.1		
	4			2950	3500	11.2		76		
	2.2	1510			3000	17.9		67.8		
	1.9		1310		3000	6.3		68.4		
	2.2			1480	3000	6.5		70.6		
	1.5	1000			2000	13.3		58.5		
	1.4		860		2000	5.1		60.3		
ZSL4-112/2-4	3	1450			3000	24.8	430	66.8	0.124	111
	2.6		1320		3000	9		65.1		
	3			1500	3000	9.1		67.3		
	2.2	1510			3000	19.6		62.1		
	1.9		1310		3000	6.9		61.1		
	2.2			1480	3000	7.1		63.5		
	1.5	1000			2000	13.3		58.5		
	1.4		860		2000	5.1		60.3		
ZSL4-112/4-2	5.5	2940			3500	42.5	570	73	0.156	109
	5		2660		3500	15.7		74.3		
	5.5			2980	3500	15.4		75.7		
ZSL4-132-1	6.7		2660		3500	20.6	650	76.8	0.32	130
	7.5			2980	3500	20.6		78.4		
	4	1480			3000	33.7		64.9		
	3.7		1320		3000	13		65.2		
	4			1500	3000	12.2		68.7		
	3	980			2000	24.8		66.8		
	2.6		895		2000	9		65.1		
	3			1010	2000	9.1		67.3		
	2.2	740			1500	19.6		62.1		
	1.9		670		1500	6.9		61.1		
	2.2			750	1500	7.1		63.5		
ZSL4-132-2	5.5	1520			3000	42.5	730	73	0.4	150
	5		1340		3000	16.1		71.1		
	5.5			1480	3000	15.7		71.9		

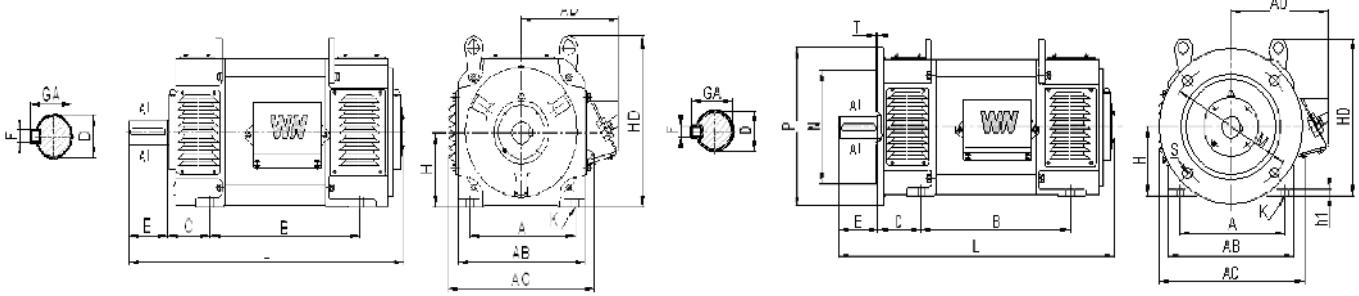
性能数据 Performance Data

型号 Type	额定功率 Rated Output P_N	额定转速 Rated Speed			弱磁转速 Speed with Field Weakened n_F	电枢电流 Arm. Curr. I_N	励磁功率 Field Power P_F	效率 Eff.	惯量矩 Moment of Inertia GD^2	重量 Wt.
		160V	400V	440V						
		r/min								
ZSL4-132-2	3	745			1500	24.8	730	66.8	0.4	150
	2.6		675		1500	9		65.1		
	3			750	1500	9.1		67.3		
ZSL4-132-3	10		2680		3500	29	800	82.7	0.48	170
	11			2950	3500	28.8		83.3		
	4	975			2000	31.3		72.6		
	3.7		890		2000	11.7		74.1		
	4			1010	2000	11.2		76		
ZSL4-160-11	7		1330		3000	20.4	820	82.4	0.64	205
	7.5			1480	3000	19.7		83.5		
	5.5	1020			2000	42.5		73		
	5		955		2000	15.7		74.3		
	5.5			1025	2000	15.4		75.7		
ZSL4-160-21	13		2740		3500	37	920	84.4	0.76	225
	15			3010	3500	38.6		85.4		
	4	750			1500	33.7		64.9		
	3.7		670		1500	13		65.2		
	4			750	1500	12.2		68.7		
ZSL4-160-31	16.5		2610		3500	51.4	1050	75.5	0.88	253
	18.5			2850	3500	51.4		78.1		
	10		1330		2500	29		82.7		
	11			1480	2500	28.8		83.3		
	7		865		1600	20.4		82.4		
	7.5			975	1600	19.7		83.5		
	5.5	750			1500	42.5		73		
	5		670		1500	15.7		74.3		
	5.5			750	1500	15.4		75.7		

备注：他励电动机启动时，必须先将励磁电压升至额定电压，然后接通电枢回路。停车时，先切断电枢回路，然后断开磁场电路，避免在启动和停车时因弱磁引起过速。

外形及安装尺寸 Dimensions

mm



卧式、机座带底脚

卧式、机座带底脚，端盖带凸缘

卧式、机座带底脚

型号 Type	安装尺寸 Mounting Dimensions									外形尺寸 Outline Dimensions				
	A	B	C	D	E	F	GA	H	K	AB	AC	AD	HD	L
ZSL4-112/2-2	190	367.5	70	28	60	8	31	112	12	225	260	202	285	585
ZSL4-112/2-3		407.5												625
ZSL4-112/2-4		477.5												695
ZSL4-112/4-2		387.5												32
ZSL4-132-1	216	355	89	38	80	10	41	132	12	260	295	240	325	630
ZSL4-132-2		405												680
ZSL4-132-3		465												740
ZSL4-160-11	254	411	108	48	110	14	51.5	160	15	320	355	283	385	755
ZSL4-160-21		451												795
ZSL4-160-31		501												845

卧式、机座带底脚，端盖带凸缘

型号 Type	安装尺寸 Mounting Dimensions														外形尺寸 Outline Dimensions						
	A	B	C	D	E	F	GA	H	K	M	N	S	Holes	T	P	AB	AC	AD	HD	L	h1
ZSL4-112/2-2	190	367.5	70	28	60	8	31	112	12	215	180	15	4	4	250	225	260	202	285	585	10
ZSL4-112/2-3		407.5																		625	
ZSL4-112/2-4		477.5																		695	
ZSL4-112/4-2		387.5																		32	
ZSL4-132-1	316	355	89	38	80	10	41	132	12	265	230	15	4	4	300	260	295	240	325	630	12
ZSL4-132-2		405																		680	
ZSL4-132-3		465																		740	
ZSL4-160-11	254	411	108	48	110	14	51.5	160	15	300	250	19	4	5	350	320	355	283	385	755	14
ZSL4-160-21		451																		795	
ZSL4-160-31		501																		845	

表中外形尺寸为参考值，实际情况以实物为准。

表中数据若有改动，恕不另行通知。