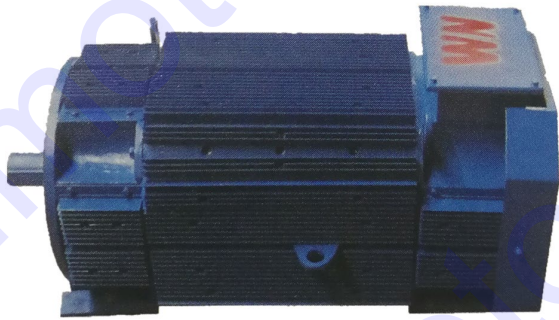


ZSL4 Series DC Motors



- Frame sizes: 112-160
- Insulation class: F
- Excitation mode: Separate excitation
- Ration speed: 3000,1500,1000,750r/min
- Rated output: 1.1-18.5kW
- Duty cycle: S1
- Voltage: 440V / 160V

Application: ZSL4 mainly used for mechanical transmission where space is limited and by which narrow range of low speed is needed.

Features: Steady and good speed regulation system; reduce speed by lowering the armature voltage with constant torque or raise speed by reducing excitation field current with constant power; large output power; great overload capacity, self-cooled; cooling method IC01; step less speed regulation from 300r/min to maximum speed.

Designation of Type



1、 Protection degree and mounting type

- Protection degree IP23S.
- Frame with feet, and the installation type are IMB3、IMB35、IMB5、IMV1、IMV15.

2、 Terminal box is at the right side of the frame from the view of DE

- Cooling method: Open type, cooling method being IC01, the motor can reach step less speed regulation from min speed 300r/min (constant torque) to max speed (constant output power)

Performance Data

Type	Rated Output POW kW	Rated Speed			Speed with Weakened Field r/min	Arm. Current A	Field POW W	Eff. %	Moment of Inertia GD ² kg·m ²	Weight 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	1.5			990	2000	4.77	430	63.2	0.124	111
	3	1450			3000	24.8		66.8		
	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		
ZSL4-112/4-2	1.4		860		2000	5.1	570	60.3	0.156	109
	1.5			990	2000	4.77		63.2		
	5.5	2940			3500	42.5		73		
	5		2660		3500	15.7		74.3		
ZSL4-132-1	5.5			2980	3500	15.4	650	75.7	0.32	130
	6.7		2660		3500	20.6		76.8		
	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		
ZSL4-132-2	2.2			750	1500	7.1	730	63.5	0.4	150
	5.5	1520			3000	42.5		73		
	5		1340		3000	16.1		71.1		
	5.5			1480	3000	15.7		71.9		
	3	745			1500	24.8		66.8		
	2.6		675		1500	9		65.1		
3			750	1500	9.1	67.3				

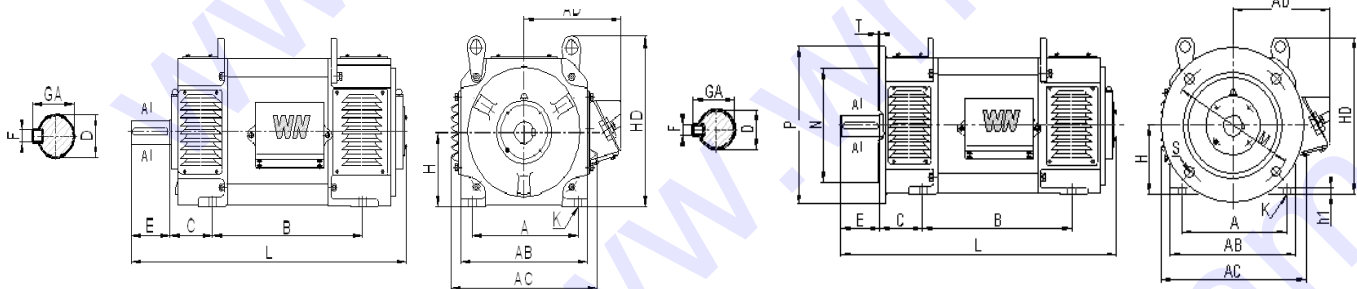
Performance Data

Type	Rated Output POW	Rated Speed			Speed with Weakened Field	Arm. Current	Field POW	Eff.	Moment of Inertia GD ²	Weight
		160V	400V	440V						
		r/min								
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		

Note: When start-up, the excitation voltage of the motor must be raised to rated value before connected to armature loop; when stop, cut off the armature circuit and magnetic field circuit successively, which will avoid over speed caused by start and stop.

Dimensions

mm



Horizontal and Foot mounted

Horizontal and Foot mounted with flange

1. Horizontal and Foot mounted

Type	Mounting Dimensions									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

2. Horizontal and Foot mounted with flange

Type	Mounting Dimensions														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	

Dimensions here are indicative only. Actual product may differ. Data above may be changed without prior notice.

❖ Order Description

1. Specify the motor type, power, voltage, rotation speed, exciting voltage, cooling method, shaft quantity, terminal box position etc.
2. Specify the auxiliary device type, specification, quantity etc.
3. If the motor on the sample book can't meet clients' requirement, various motor of other technical requirement are also available. Contact the producer directly.