



SINBAD EC MOTOR

电机参数 Motor Data 电机型号 Motor Model

额定电压参数值 Value at rated voltage			XBD2864-42H12085 WG-0420	XBD2864-42H24032 WG-0420	XBD2864-42H36234 WG-0420
额定点 At Nominal	1 额定电压 Nominal voltage	V/DC	12	24	36
	2 额定转速 Nominal speed	rpm	6848	2560	18720
	3 额定电流 Nominal current	A	1.7	0.5	10.6
	4 额定转矩 Nominal torque	mNm	20.9	26.8	151.3
空载点 Free Load	5 空载转速 No-load speed	rpm	8560	3200	23400
	6 空载电流 No-load current	mA	92.0	65.0	259.0
最大效率点 At Max. Efficiency	7 最大效率 Max. efficiency	%	79.7	67.2	86.4
	8 转速 Speed	rpm	7747	2704	21879
	9 电流 Current	A	0.8	0.4	3.6
最大输出功率点 At max. Output power	10 转矩 Torque	mNm	9.9	20.8	49.2
	11 最大功率 Max. output power	W	23.5	11.2	463.3
	12 转速 Speed	rpm	4280	1600	11700
堵转点 At Stall	13 电流 Current	A	4.0	1.0	26.1
	14 转矩 Torque	mNm	52.3	67.0	378.2
堵转点 At Stall	15 堵转电流 Stall current	A	8.0	2.0	52.0
	16 堵转转矩 Stall torque	mNm	104.6	134.1	756.4

电机常数 Motor Constants		
17 电机阻抗 Terminal resistance	Ω	1.50
18 电机感抗 Terminal inductance	mH	0.25
19 转矩常数 Torque constant	mNm/A	13.23
20 转速常数 Speed constant	rpm/V	713.3
21 转数/转矩常数 Speed/torque constant	rpm/mNm	81.8
22 机械时间常数 Mechanical time constant	ms	11.5
23 转子惯量 Rotor inertia	gcm ²	13.4

电机特性曲线 (Motor Characteristics Curve)		
24 极对数 Number of pole pairs		1
25 相数 Number of phase		3
26 重量 Weight of motor	g	156
27 噪音 Typical noise level	dB	≤45

电机端子定义 Motor terminal definition		
Red	P1 V hall+5 VDC	PVC
White	P2 Hall sensor A	PVC
Yellow	P3 Hall sensor B	PVC
Blue	P4 Hall sensor C	PVC
Black	P5 GND	PVC
Black	P6 Motor winding A	PVC
White	P7 Motor winding B	PVC
Red	P8 Motor winding C	PVC



