

**BL63125DS****Report for Brushless Motor Testing Data Sheet****Series No: BL63125DS- - - P 2**

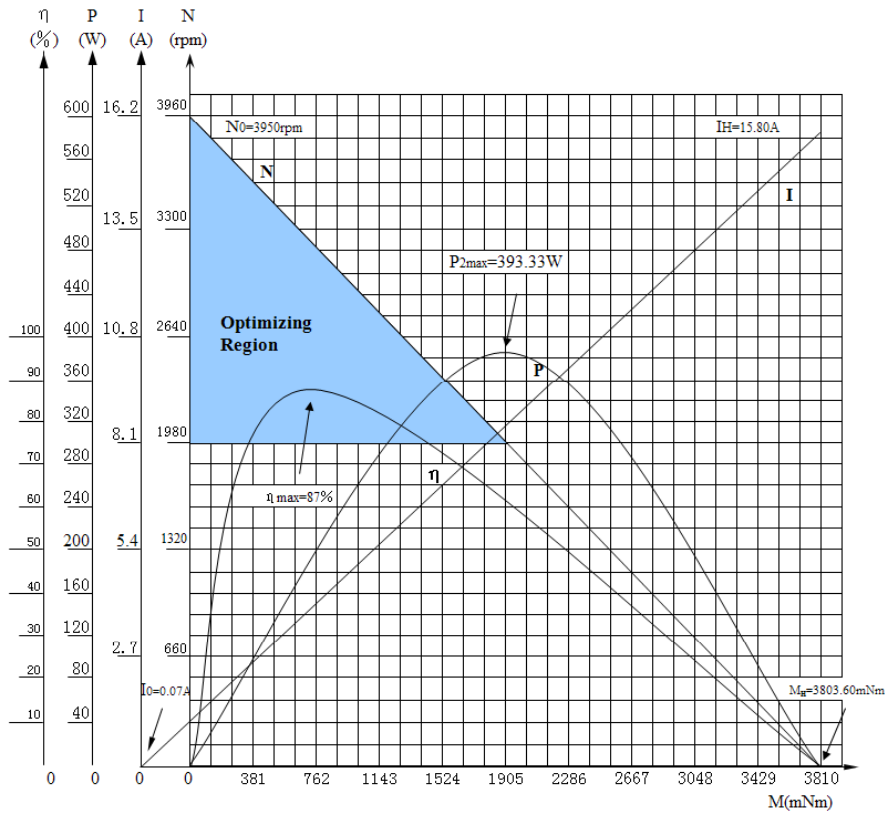
No.	Testing Item		Tested Values				Unit
1	Nominal voltage	U_N	100				V
2	Terminal resistance, phase to phase	R	6.3				Ω
3	Output power	P_{2max}	393.33				W
4	Efficiency	η_{max}	87				%
5	No-load speed	n_o	3950				rpm
6	No-load current	I_o	0.07				A
7	Stall torque	M_H	3803.60				mNm
8	Friction torque	MF	16.85				mNm
9	Speed constant	k_n	39.67				rpm/V
10	Back-EMF constant	k_E	25.20				mV/rpm
11	Torque constant	k_M	240.69				mNm/A
12	Current constant	k_I	0.00				A/mNm
13	Slope of n-M curve	$\Delta n/\Delta M$	1.04				rpm/mNm
14	Mechanical time constant	τ_m	2.44				ms
15	Rotor inertia	J	224.00				gcm ²
16	Angular acceleration	α_{max}	169.80				10 ³ rad/s ²
17	Sensor		Hall Sensor				
18	Driver		DR3006				
19	Weight		1100				g
20	Operating temperature range		-30~+85				
21	Commutation		Electronically commutation				
22	Ball Bearing		EZO & NMB				
23	Housing material		Aluminum, black anodized				
24	Magnet material		Sintered Nd-Fe-B				
25	Direction of rotation		Electronically reversible				
The Operating Data For η_{max} of Customer's Specifications							
26	Output Power	P_{2opt}	91.67				W
27	Efficiency	η_{opt}	87				%
28	Speed	n_{opt}	3460				rpm
29	Load Current	I_{opt}	1.05				A
30	Operating Torque	M_{opt}	253.15				mNm

Note:The I_o is pure current of motor in this data sheet that means it not included the driver's current.



BL63125DS

Operating Curve



Note:(1)The I_0 is pure current of motor in this curve drawing that means it not included the driver's current.

(2)We have suggested there has a optimizing region for this motor's operating as hatched in drawing.

Drawing

