Brushless DC Motor

57BLB SERIES

• INDICATIONS OF THE MODELS

57 BLB 40

Stack length:40mm Brushless motor B series(high torque)

Frame size: 57mm



GENERAL SPECIFICATIONS

Winding type	Star		
Hall effect angle	120 degree electrical angle		
Shaft run out	0.025mm		
Radial play	0.025mm@460g		
End play	0.025mm@4000g		
Max. radial force	115N@20mm from the flange		
Max. axial force	45N		
Insulation class	Class B		
Dielectric strength	500VDC for one minute		
Insulation resistance	100M Ω Min., 500VDC		

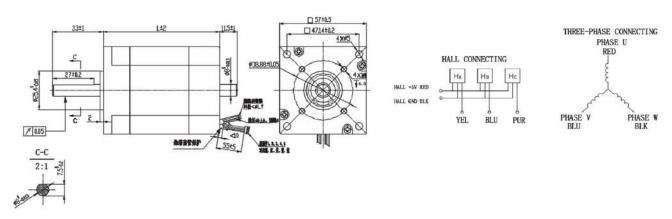
ELECTRIC CONNECTION

Lead No.	Lead Color	Lead Gauge	Function	Description
1	Red	UL3265 AWG28	Vcc	Power supply positive of hall +5VDC-+24VDC
2	Yellow		Hall A	
3	Blue		Hall B	
4	Purple		Hall C	
5	Black		GND	POWER SUPPLY NEGATIVE OF HALL
6	Red	UL1430 AWG18	Phase A	
7	Blue		Phase B	
8	Black		Phase C	

ELECTRICAL SPECIFICATIONS

Model	Unit	Tolerance	57BLB40	57BLB60	57BLB80	
Number of poles			8			
Number of phase			3			
Rated voltage	VDC		36			
Rated speed	RPM	± 10%	3000			
Rated torque	N.m		0.3	0.45	0.6	
Rated power	W		94	141	188	
Peak torque	N.m		0.9	1.35	1.8	
Peak current	A		12.3	18.2	23.8	
Line to line resistance	ohms@20℃	± 10%	1.2	0.8	0.5	
Line to line inductance	mH	± 20%	1.2	0.8	0.6	
Torque constant	Nm/A	± 10%	0.076	0.076	0.077	
Back E.M.F	Vrms/KRPM	± 10%	5.6	5.6	5.7	
Rotor inertia	g.cm²		210	320	430	
Body length(L)	mm		76	96	116	
Weight	Kg		0.8	1.0	1.2	

DIMENSIONS



^{*}This motor can be designed & manufactured with customized request.