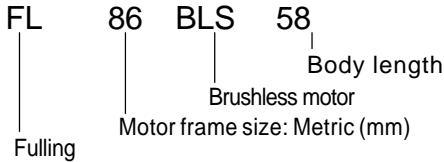


Brushless DC Motor

FL86BLS SERIES

◆ INDICATIONS OF THE MODELS



◆ GENERAL SPECIFICATIONS

Winding type	Star
Hall effect angle	120 degree electrical angle
Shaft run out	0.05mm
Radial play	0.02mm@450g
End play	0.08mm@450g
Max. radial force	220N @ 20mm from the flange
Max. axial force	60N
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	UL1007 26AWG	Vcc	SUPPLY VOLTAGE FOR HALL SENEORS
2	Blue		HALL A	
3	Green		HALL B	
4	White		HALL C	
5	Black		GND	GROUND FOR HALL SENEORS
6	Yel & Yel / Wht	UL3266 AWG20#	PHASE U	
7	Red & Red / Wht		PHASE V	
8	Blk & Blk / Wht		PHASE W	

◆ ELECTRICAL SPECIFICATIONS

Model	FL86BLS58	FL86BLS71	FL86BLS98	FL86BLS125
Number of poles	8			
Number of phase	3			
Rated voltage	VDC 48			
Rated speed	RPM 3000			
Rated torque	N.m 0.35	0.7	1.4	2.1
Rotor power	W 110	220	440	660
Peak torque	N.m 1.05	2.1	4.2	6.3
Peak current	A 11	19	33	55
Line to line resistance	ohms 1.05	0.36	0.2	0.16
Line to line inductance	mH 2.2	1.05	0.48	0.3
Torque constant	Nm/A 0.10	0.11	0.13	0.11
Back E.M.F	V/KRPM 10.5	11.5	13.5	11.5
Rotor inertia	g.cm ² 400	800	1600	2400
Body length	mm 58	71	98	125
Mass	Kg 1.5	1.85	2.6	4

◆ DIMENSIONS

