Brushless DC Motor

33BL SERIES

INDICATIONS OF THE MODELS

33 BL 38 - 24V - 30 07 A

| Single shaft (B:double shaft)
Output power: 07W
Rated speed/100:3000rpm
Rated voltage:24VDC

Body length 38mm

Brushless motor

Motor frame size: Metric (mm) 33mm



GENERAL SPECIFICATIONS

Winding type	Star		
Hall effect angle	120 degree electrical angle		
Shaft run out	0.025mm		
Radial play	0.02mm@450g		
End play	0.08mm@450g		
Max. radial force	10N @ 10mm from the flange		
Max. axial force	2N		
Insulation class	Class B		
Dielectric strength	500VAC @ 1min.		
Insulation resistance	stance 100M Ω Min., 500VDC		

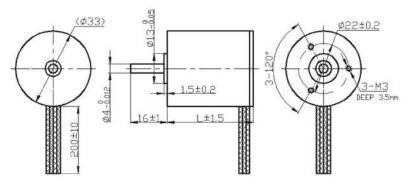
ELECTRIC CONNECTION

Lead No.	Lead Color	Lead Gauge	FUNCTION	DESCRIPTION
1	Yellow	UL1007 26AWG	Vcc	Power supply positive of Hall:+5VDC+24VDC
2	Blue		Hall A	
3	Orange		Hall B	
4	Brown		Hall C	
5	White		GND	Power supply negative of Hall
6	Green		Phase U	
7	Red		Phase V	
8	Black	1	Phase W	

ELECTRICAL SPECIFICATIONS

Model		33BL38-24V-3007A	33BL80-xxV-xxxxA	
Number of poles Number of phase		4	4 3	
		3		
Rated voltage	VDC	24	48	24
Rated speed	RPM	3000	10000	7800
Continuous stall torque	mN.m	26	48	60
Rated torque	mN.m	22	40	50
Rated power	W	7	40	40
Peak torque	mN.m	66	120	120
Peak current	Α	1.7	3.2	4.8
Resistance	Ohms	14.2	2.3	0.86
Inductance	mH	7	1.45	0.55
Torque constant	mNm/A	46.3	41.8	27
Rotor inertia	g.cm²	7.95	23.55	23.55
Back EMF	Vrms/Krpm	3.43	3.1	2.0
Body length	mm	38	80	80
Mass	Kg	0.085	0.2	0.2

DIMENSIONS



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