

86 SERIES BLDC Motor



GENERAL SPECIFICATION

Winding type: Star
Hall effect angle: 120 degree electrical angle
Shaft run out: 0.025mm
Insulation Class: Class B
Dielectric strength: 500VDC for one minute
Ambient temperature: -20—+40℃

WIRE DIAGRAM

Lead No.	Lead Color	Lead Gauge	Function
1	RED	14AWG UL1569	Phase U
2	YEL		Phase V
3	BLA		Phase W
4	RED	26AWG UL1569	+5V
5	BLU		Hall A
5	GRE		Hall B
7	WHI		Hall C
8	BLA		GND

ELECTRICAL SPECIFICATION

Model		86DM70-4830	86DM80-4830	86DM90-4830	86DM105-4830	86DM130-4830
Voltage	V	48				
Number of poles		8				
Rated power	W	200	300	400	550	780
No load speed	rpm	3500	3500	3500	3500	3500
Rated torque	Nm	0.67	1.0	1.3	1.8	2.5
Rated Speed	rpm	3000	3000	3000	3000	3000
Rated Current	A	5.5	8.6	11	14.8	20
Torque(max)	Nm	2	3.0	4	5.4	7.5
Back-EMF constant	V/Krpm	9.8	9.8	9.8	9.8	10
Torque Constant	Nm/A	0.13	0.13	0.13	0.13	0.14
Resistance	ohm	0.43	0.32	0.21	0.15	0.1
Weight	Kg	1.8	2.2	2.8	3.2	4.2
Length	mm	70	80	90	105	130

DIMENSIONS

