

42RBL Series Round Type 42mm

FT AUTOMATION

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General specification

Item	Specification
Winding type	Delta
Hall effect angle	120degree electrical angle
Shaft run out	0.025mm
Radial play	0.02mm@450g
End play	0.08mm@450g
Max.radial force	15N@10mm from the flange
Max.axial force	10N
Insulation class	Class B
Dielectric Strength	500VDC for one minute
Insulation resistance	100MΩ Min.500VDC



Electric connection

Lead NO.	Lead Color	Lead Gauge	Function	DESCRIPTION
1	Red	UL1007/26AWG	VCC	SUPPLY VOLTAGE FOR HALL SENSORS
2	Black		GND	GROUND FOR HALL SENSORS
3	Yellow		HALL A	
4	Green		HALL B	
5	Blue	UL1007/22AWG	HALL C	
6	Yellow		PHASE U	
7	Green		PHASE V	
8	Blue		PHASE W	

Technique Specification

Model		42RBL01	42RBL02	42RBL03	42RBL04
Number of poles		8			
Number of phase		3			
Rated voltage	V	24	36	24	24
Rated speed	Rpm	3500	4000	4000	6300
Rated torque	mN.m	18	80	150	115
Rated power	W	6.5	32	62	76
Peak torque	mN.m	60	240	450	500
Peak current	A	1.5	5	7.5	10
Line to line resistance	Ohms	9.8	1.6	0.71	0.325
Line to line inductance	mH	7.5	1.94	0.86	0.36
Torque constant	mNm/A	48.7	38.5	38.6	28.7
Rotor inertia	g.cm ²	24	48	84	94
Body length	Mm	30	60	85	93
Weight	kg	0.25	0.4	0.7	0.8

Drawing

