

# 1814ZWW

## Outer Rotor Without Sensor

Applications: UAV, Aeromodelling, etc.

### Characteristics

			-2-6.4	-3-6.4
1	Voltage	V	6.4	6.4
2	Terminal resistance	$\Omega$	0.21	0.32
3	No-load speed	rpm	22000	18500
4	No-load current	A	0.35	0.27
5	Nominal torque	mNm	16	16
6	Nominal speed	rpm	17500	14000
7	Nominal current	A	6.2	5.2
8	Max. output power	W	48	31
9	Max. efficiency	%	80	78
10	Back-EMF constant	mV/rpm	0.29	0.34
11	Torque constant	mNm/A	2.7	3.3
12	KV Value	rpm/V	3440	2900
13	Speed/torque gradient	rpm/mNm	266	288
14	Rotor inertia	gcm <sup>2</sup>	290	290
15	Weight	g	10	10
16	Thermal resistance housing-ambient	K/W	7	7
17	Thermal resistance winding-housing	K/W	10	10
18	Thermal time constant motor	s	250	250
19	Thermal time constant winding	s	6	6
20	Operating temperature range	$^{\circ}\text{C}$	-40~+100	-40~+100
21	Max. winding temperature	$^{\circ}\text{C}$	155	155
22	Axial play	mm	0.012	0.012
23	Radial play	mm	0.008	0.008
24	Axial load dynamic	N	1.5	1.5
25	Axial load static	N	37	37
26	Radial load at 3 mm from mounting face	N	12	12
27	No. of pole pairs		6	6
28	Bearings		2 ball bearings	
29	Commutation		Sensorless	
30	Protection class		IP 20	

### Options

- Lead wires length
- Shaft length
- Special coils
- Gearheads
- Bearing type
- Encoder
- Driver

### Outline Drawing

