

VECTOR TECHNICS

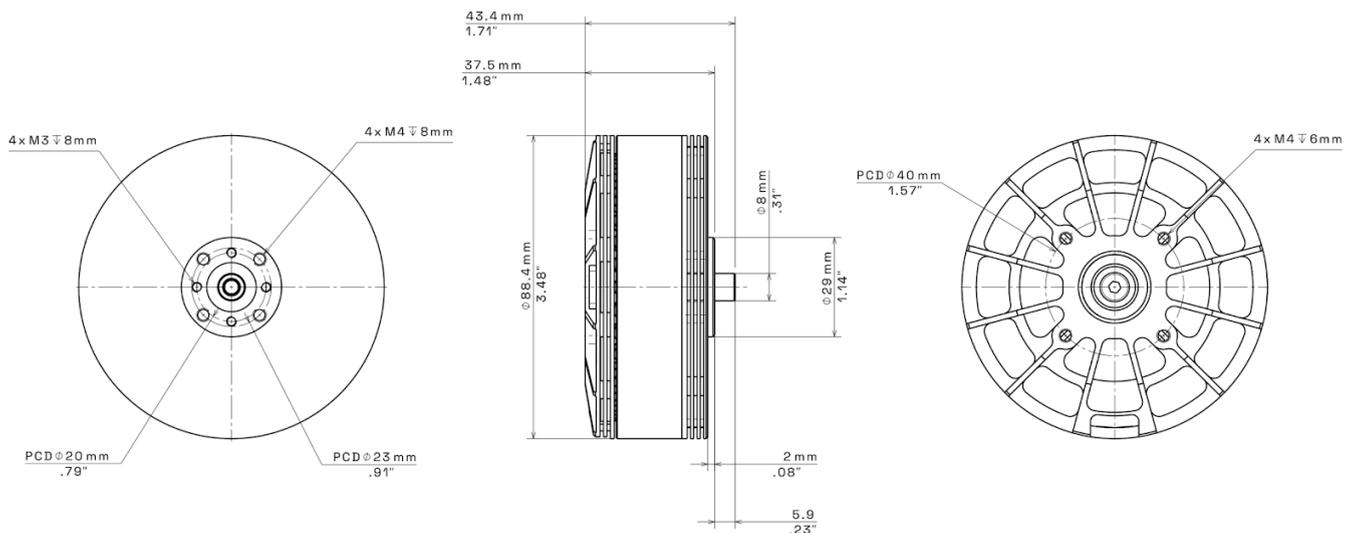
# 8015 PRO

## 100 KV

### MOTOR SPECIFICATIONS

Kv (Motor Velocity Constant)	100 RPM/V
Kt (Motor Torque Constant)	0.1245 Nm/A @ 2995 RPM
Maximum Continuous Current*	40A (180s)
Maximum Continuous Power*	1495W (180s)
Power Density	4.5 W/g (Rated), 6.4 W/g (Maximum)
Voltage Range	44V - 50V ( 12S LiPo)
I <sub>o</sub> (48@V)	1.64A (48@V)
Inductance per phase (Winding Inductance)	0.069 [ ≈0.03] mH
R <sub>ph</sub> (Wind Resistance per phase)	0.07 [ ≈0.03] Ω
Stator Poles	36S
Magnetic Poles	42P
Bearings	Dual 689 Sealed
Stick Out Shaft Diameter	∅ 5.9 mm
Motor Diameter	∅ 88.4 mm
Motor Length	37.5 mm
Motor Weight	450 g ± 5 g
Mount Pattern @ 90 deg	4 X M4 @ PCD ∅ 40 mm ↓ 6 mm
Compatible Propeller Size	28 " inch to 30 " inch
Propeller Mount Pattern	4 X M3 @ PCD ∅ 20 mm ↓ 8 mm, 4 X M4 @ PCD ∅ 23 mm ↓ 8 mm

### 2D CAD



Note: Specifications and drawings may be revised without notice. Vector Technics assumes no liability for reliance on unverified data. All Dimensions in millimeters [mm]

## 8015 PRO 100 KV - TEST DATA

**Note:** The test data provided below is subject to environmental and testing conditions, including but not limited to temperature, humidity, altitude, and the equipment used. Results may vary depending on specific testing parameters and conditions.

<b>Propeller</b>	VT 3010 CFRP_FP			<b>Power Supply / Battery</b>	2 X TB - 22000 mAh 12S	
<b>ESC</b>	TM 80A 12S			<b>Environmental Temp:</b>	35 ° C	<b>Cross-winds:</b> Mild
<b>Test Date:</b>	03-05-2024	<b>Humidity:</b>	36 %			

PWM - Throttle%	Voltage	Current (A)	RPM	Thrust (g)	Torque (N*m)	Electrical Power (W)	Efficiency	Temp (Celcius)
1300 - 30	49.8	1.9	1163	1346	0.62	94.6	14.2	71 ° C [@70% 10 min Constant]
1400 - 40	49.6	4.7	1570	2588	1.15	233.1	11.1	
1500 - 50	49.2	11.1	2099	4881	2.06	546.1	8.9	
1600 - 60	48.9	19.1	2505	6919	2.89	934.0	7.4	
1700 - 70	48.4	28.7	2885	8919	3.67	1389.1	6.4	
1800 - 80	47.9	40.1	3207	10806	4.43	1920.8	5.6	78 ° C [Maximum]
1900 - 90	47.4	53.3	3528	12622	5.1	2526.4	5.0	
1950 - 95	47.1	59	3619	13391	5.42	2778.9	4.8	
2000 - 100	47.2	57.8	3648	13277	5.33	2728.2	4.9	

<b>Propeller</b>	TM 30 x 10.5 CF_FX			<b>Power Supply / Battery</b>	2 X TB - 22000 mAh 12S	
<b>ESC</b>	TM 80A 12S			<b>Environmental Temp:</b>	35 ° C	<b>Cross-winds:</b> Mild
<b>Test Date:</b>	03-05-2024	<b>Humidity:</b>	36 %			

PWM - Throttle%	Voltage	Current (A)	RPM	Thrust (g)	Torque (N*m)	Electrical Power (W)	Efficiency	Temp (Celcius)
1300 - 30	49.9	2.3	1428	1296.4	0.6	114.8	11.3	70 ° C [@70% 10 min Constant]
1400 - 40	49.7	5.1	1907	2528.5	1	253.5	10.0	
1500 - 50	49.5	9.7	2383	4146.6	1.6	480.2	8.6	
1600 - 60	49.2	15.7	2781	5777	2.2	772.4	7.5	
1700 - 70	48.8	22.3	3117	7385.5	2.7	1088.2	6.8	
1800 - 80	48.4	30.7	3450	9236.8	3.3	1485.9	6.2	76 ° C [Maximum]
1900 - 90	47.9	40.9	3748	11085.7	4	1959.1	5.7	
1950 - 95	47.5	49.4	3955	12704.2	4.5	2346.5	5.4	
2000 - 100	47.5	49.3	3944	12654.9	4.5	2341.8	5.4	

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