

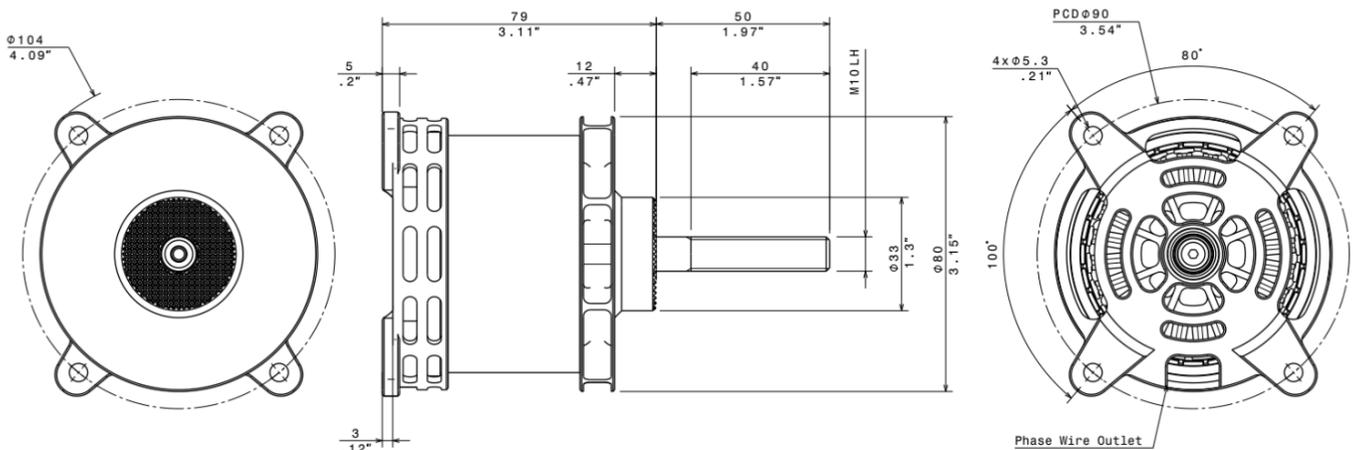
6040 PRO

160 KV

MOTOR SPECIFICATIONS

Kv (Motor Velocity Constant)	160 RPM/V
Kt (Motor Torque Constant)	0.0843 Nm/A @ 3918 RPM
Maximum Continuous Current*	52A (180s)
Maximum Continuous Power*	2391 W (180s)
Power Density	2.76 W/g (Rated), 5.76 W/g (Maximum)
Voltage Range	44V - 50V (12S LiPo)
I _o (48@V)	3.7A (48@V)
Inductance per phase (Winding Inductance)	0.027 [≈0.03] mH
R _{ph} (Wind Resistance per phase)	0.03 [≈0.03] Ω
Stator Poles	24S
Magnetic Poles	28P
Bearings	Triple (2 x 619/6-2Z Sealed , 1 x 628/8-2Z Sealed)
Stick Out Shaft Diameter	M 10 LH
Motor Diameter	∅ 80 mm
Motor Length	67 mm
Motor Weight	865 g ± 2 %
Mount Pattern @ 90 deg	4 X ∅ 5.3 @ PCD ∅ 90 mm ↓ THRU mm
Compatible Propeller Size	28 " inch to 30 " inch
Propeller Mount Pattern	M 10 LH

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]

6040 PRO 160 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.

Propeller	TM 26 x 8.5 CF_FX			Power Supply / Battery	2 x TB - 22000 mAh 12S	
ESC	TM 200A 12S - FLAME			Environmental Temp:	28 ° C	
Test Date:	16-11-2024	Humidity:	32 %	Cross-winds:	Mild	

PWM - Throttle%	Voltage	Current (A)	RPM	Thrust (g)	Torque (N*m)	Electrical Power (W)	Efficiency	Temp (Celcius)
1300 - 30	49.7	2	1710	958	0.32	99.4	9.6	46 ° C [@70% 10 min Constant]
1400 - 40	49.6	5	2469	2143	0.67	248.0	8.6	
1500 - 50	49.1	9.8	3170	3599	1.11	481.2	7.5	
1600 - 60	48.4	17.4	3884	5456	1.66	842.2	6.5	
1700 - 70	47.6	29.2	4599	7792	2.34	1389.9	5.6	
1800 - 80	46.7	41.3	5114	9821	2.92	1928.7	5.1	
1900 - 90	45.8	55.1	5611	11571	3.5	2523.6	4.6	49 ° C [Maximum]
1950 - 95	44.6	71.9	6046	13503	4.09	3206.7	4.2	
2000 - 100	44.6	71.9	6046	13503	4.09	3206.7	4.2	

Propeller	TM 28 x 8.4 CF_FX			Power Supply / Battery	2 x TB - 22000 mAh 12S	
ESC	TM 200A 12S - FLAME			Environmental Temp:	28 ° C	
Test Date:	16-11-2024	Humidity:	32 %	Cross-winds:	Mild	

PWM - Throttle%	Voltage	Current (A)	RPM	Thrust (g)	Torque (N*m)	Electrical Power (W)	Efficiency	Temp (Celcius)
1300 - 30	49.4	2.7	1725	1412	0.45	133.4	10.6	52 ° C [@70% 10 min Constant]
1400 - 40	49.2	6.2	2378	2797	0.88	305.0	9.2	
1500 - 50	48.9	12.3	3045	4584	1.46	601.5	7.6	
1600 - 60	48.2	23	3774	7057	2.25	1108.6	6.4	
1700 - 70	47.3	37.9	4393	9712	3.12	1792.7	5.4	
1800 - 80	46.2	54.1	4823	12077	3.91	2499.4	4.8	
1900 - 90	45.1	72.8	5258	14218	4.69	3283.3	4.3	58 ° C [Maximum]
1950 - 95	43.8	93.7	5573	16231	5.44	4104.1	4.0	
2000 - 100	43.8	93.7	5573	16231	5.44	4104.1	4.0	

Propeller	TM 30 x 10.5 CF_FX			Power Supply / Battery	2 x TB - 22000 mAh 12S	
ESC	TM 200A 12S - FLAME			Environmental Temp:	28 ° C	
Test Date:	16-11-2024	Humidity:	32 %	Cross-winds:	Mild	

PWM - Throttle%	Voltage	Current (A)	RPM	Thrust (g)	Torque (N*m)	Electrical Power (W)	Efficiency	Temp (Celcius)
1300 - 30	49.2	3.5	1593	1981	0.73	172.2	11.5	57 ° C [@70% 10 min Constant]
1400 - 40	49.1	9	2243	4011	1.45	441.9	9.1	
1500 - 50	48.4	17.2	2776	6198	2.22	832.5	7.4	
1600 - 60	47.2	34.5	3478	9746	3.49	1628.4	6.0	
1700 - 70	45.9	52.1	3918	12332	4.42	2391.4	5.2	
1800 - 80	44.3	74.1	4283	14808	5.4	3282.6	4.5	
1900 - 90	42.9	95.8	4576	16738	6.1	4109.8	4.1	63 ° C [Maximum]
1950 - 95	41.3	120.8	4809	18641	6.85	4989.0	3.7	
2000 - 100	41.3	120.8	4809	18641	6.85	4989.0	3.7	

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