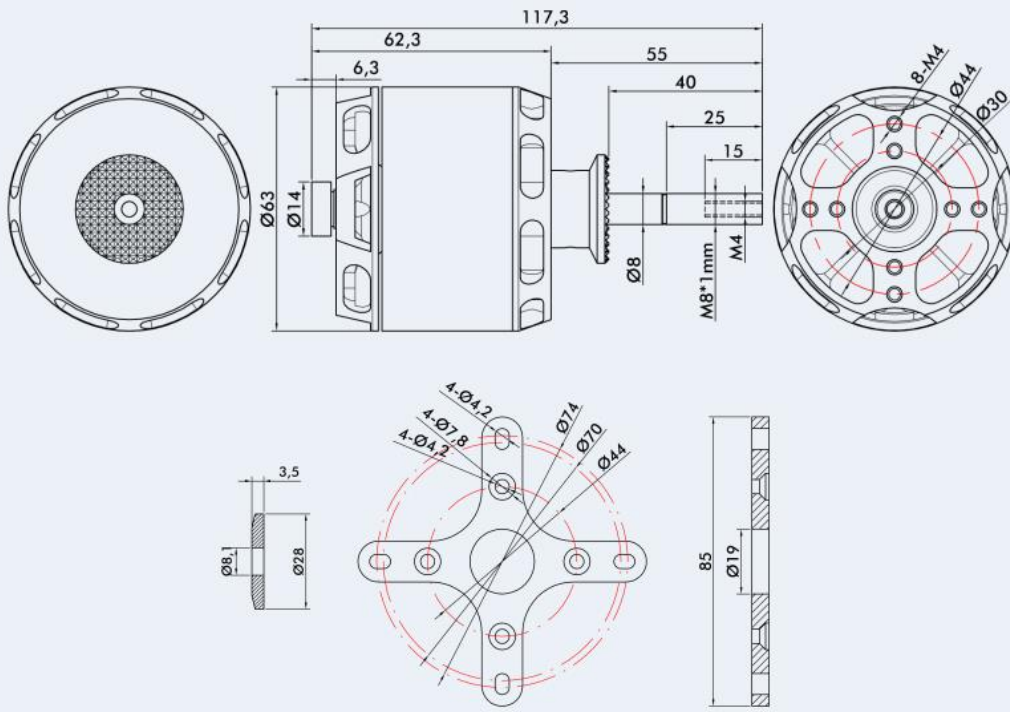


# T-Motor AT5330 30cc

## Product Drawing



## Specifications

|  |   |                                       |                            |
|--|---|---------------------------------------|----------------------------|
| Model No./ Kv                                | AT5330 KV220  |                                       |                            |
| Motor Size (mm)                              | Ø63*117.3   |                                       |                            |
| Stator Technology                            | Anti-rust treatment;<br>180°C high temperature-resisting coatings |                                       |                            |
| Configuration                                | 12N14P  |                                       |                            |
| Shaft Diameter (mm)                          | IN:10 OUT:8   |                                       |                            |
| Bearing                                      | Imported 6800/6900ZZ  |                                       |                            |
| Magnet Temperature Resistance Grade          | 150°C   |                                       |                            |
| Lead (mm)                                    | Enameled Wire 100   |                                       |                            |
| Enamelled Wires Temperature Resistance Grade | Class C 220°C   |                                       |                            |
| Coil Withdraw Voltage                        | 1000V/5s  |                                       |                            |
| Rotor Dynamic Balance Standard               | ≤5mg  |                                       |                            |
| IP   | IP35  |                                       |                            |
| KV Value                                     | KV220   | Battery (lipo)/Voltage Recommendation | 12S ( 4.2V/SI ) /42-52V    |
| Idle Current (18V)                           | 3.0A  | ESC Recommendation                    | AT115A (6-12S)             |
| Peak Current (A)                             | 75A/Continuous180s  | Propeller Recommendation              | 18-20吋                     |
| Max. Power (W)                               | 3600W/Continuous 180s   | Motor Weight (g)                      | Weight (incl. cables) 685g |
| In ternal Resistance (mΩ)                    | 24  | Package Weight (g)                    | 900g                       |
| Stern thrust motor                           | AT5330 KV220  | VTOL Motor                            | V605 KV210                 |
| Stern thrust propeller recommendation        | 18-20吋  | VTOL Prop                             | V22*7.4                    |
| Stern thrust ESC recommendation              | AT115A ( 6-12S )  | VTOL ESC                              | FLAME 80A HV               |

Continued below

|   |                         |                              |                         |
|---|-------------------------|------------------------------|-------------------------|
| Stern thrust battery (Lipo)/ voltage recommendation | 12S ( 4.2V/SI ) /42-52V | VTOL Battery (Lipo)/ Voltage | 12S ( 4.2V/SI ) /42-52V |
| Stern thrust pull recommendation(kg)                | 4-6                     | VTOL Thrust per Motor        | 4.5-6                   |
| MTOW (Quad) (kg)                                    | 18-24                   |                              |                         |

### Test Report

| Item No.        | Prop  | Throttle | Voltage (V) | Thrust (g) | Torque (N*m) | Current (A) | RPM     | Inputpower (W) | Efficiency (g/W) | Operating Temperature (°C) |
|-----------------|-------|----------|-------------|------------|--------------|-------------|---------|----------------|------------------|----------------------------|
| AT5330<br>KV220 | 18*10 | 40%      | 44.20       | 1665       | 0.41         | 5.44        | 3555    | 240.50         | 6.92             | 77°C                       |
|                 |       | 45%      | 44.17       | 2066       | 0.51         | 7.04        | 3949    | 310.84         | 6.65             |                            |
|                 |       | 50%      | 44.11       | 2568       | 0.62         | 9.44        | 4390    | 416.30         | 6.17             |                            |
|                 |       | 55%      | 44.03       | 3202       | 0.78         | 13.06       | 4885    | 574.96         | 5.57             |                            |
|                 |       | 60%      | 43.98       | 3754       | 0.93         | 16.21       | 5277    | 712.74         | 5.27             |                            |
|                 |       | 65%      | 43.92       | 4285       | 1.07         | 19.45       | 5642    | 854.21         | 5.02             |                            |
|                 |       | 70%      | 43.82       | 4763       | 1.29         | 24.48       | 6040    | 1072.85        | 4.44             |                            |
|                 |       | 75%      | 43.73       | 5409       | 1.49         | 29.84       | 6448    | 1304.90        | 4.15             |                            |
|                 |       | 80%      | 43.62       | 6067       | 1.68         | 35.33       | 6803    | 1540.79        | 3.94             |                            |
|                 |       | 90%      | 43.40       | 7404       | 2.08         | 47.89       | 7488    | 2078.38        | 3.56             |                            |
|                 | 100%  | 43.07    | 8276        | 2.61       | 65.34        | 8075        | 2814.25 | 2.94           |                  |                            |
|                 | 19*10 | 40%      | 44.18       | 1936       | 0.48         | 6.20        | 3509    | 273.70         | 7.08             | 91°C                       |
|                 |       | 45%      | 44.13       | 2403       | 0.59         | 8.01        | 3899    | 353.38         | 6.80             |                            |
|                 |       | 50%      | 44.04       | 2967       | 0.73         | 10.86       | 4324    | 478.30         | 6.20             |                            |
|                 |       | 55%      | 43.74       | 3702       | 0.92         | 15.10       | 4807    | 660.32         | 5.61             |                            |
|                 |       | 60%      | 43.65       | 4324       | 1.07         | 18.49       | 5185    | 806.94         | 5.36             |                            |
|                 |       | 65%      | 43.61       | 4958       | 1.22         | 21.93       | 5538    | 956.50         | 5.18             |                            |
|                 |       | 70%      | 43.52       | 5729       | 1.41         | 27.05       | 5934    | 1177.09        | 4.87             |                            |
|                 |       | 75%      | 43.43       | 6581       | 1.63         | 32.99       | 6340    | 1433.07        | 4.59             |                            |
|                 |       | 80%      | 43.31       | 7329       | 1.82         | 38.51       | 6664    | 1668.08        | 4.39             |                            |
|                 |       | 90%      | 43.06       | 8964       | 2.25         | 52.12       | 7313    | 2244.06        | 3.99             |                            |
|                 | 100%  | 42.76    | 10518       | 2.73       | 68.92        | 7898        | 2947.27 | 3.57           |                  |                            |
|                 | 20*10 | 40%      | 44.06       | 2201       | 0.54         | 6.71        | 3471    | 295.50         | 7.45             | 102°C                      |
|                 |       | 45%      | 43.94       | 2733       | 0.67         | 8.96        | 3852    | 393.75         | 6.94             |                            |
|                 |       | 50%      | 43.86       | 3371       | 0.83         | 11.91       | 4267    | 522.49         | 6.45             |                            |
|                 |       | 55%      | 43.66       | 4156       | 1.02         | 16.38       | 4728    | 715.04         | 5.81             |                            |
|                 |       | 60%      | 43.55       | 4883       | 1.20         | 20.41       | 5115    | 888.92         | 5.49             |                            |
|                 |       | 65%      | 43.51       | 5591       | 1.37         | 24.49       | 5465    | 1065.78        | 5.25             |                            |
|                 |       | 70%      | 43.44       | 6444       | 1.59         | 29.82       | 5842    | 1295.52        | 4.97             |                            |
|                 |       | 75%      | 43.28       | 7399       | 1.82         | 36.33       | 6223    | 1572.19        | 4.71             |                            |
| 80%             |       | 43.17    | 8248        | 2.04       | 42.50        | 6544        | 1834.72 | 4.50           |                  |                            |
| 90%             |       | 43.00    | 10062       | 2.51       | 57.58        | 7189        | 2475.76 | 4.06           |                  |                            |
| 100%            | 42.68 | 11913    | 3.00        | 75.34      | 7756         | 3215.34     | 3.70    |                |                  |                            |

Notes: Motor temperature is the motor surface temperature aftering running on 100% for 3 mins.  
(Based on T-MOTOR test bench(es), all data are for reference only. T-MOTOR reserves the right of final interpretation.)

### Contents



Motor x 1



Parts Bag x 1

Please check that your package contains all the above items before use, If something is missing, please contact online customer service or leave message to [onsales@tmotor.com](mailto:onsales@tmotor.com)