

# S676-300U-01

140 to 525 Watt Alternator

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## Featuring:

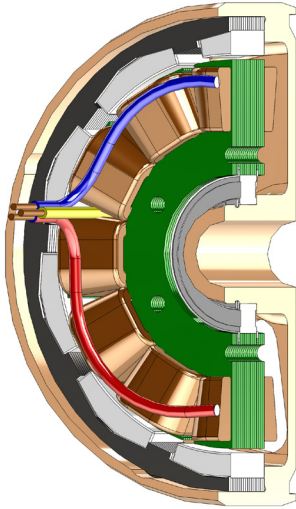
- 3 Phase brushless design
  - Designed for direct drive on engine crankshaft
  - Only one moving part, an optional sealed ball bearing, which can be eliminated when rigidly mounted
  - NdFeB magnets
  - Humidity and moisture-resistant
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## Specifications



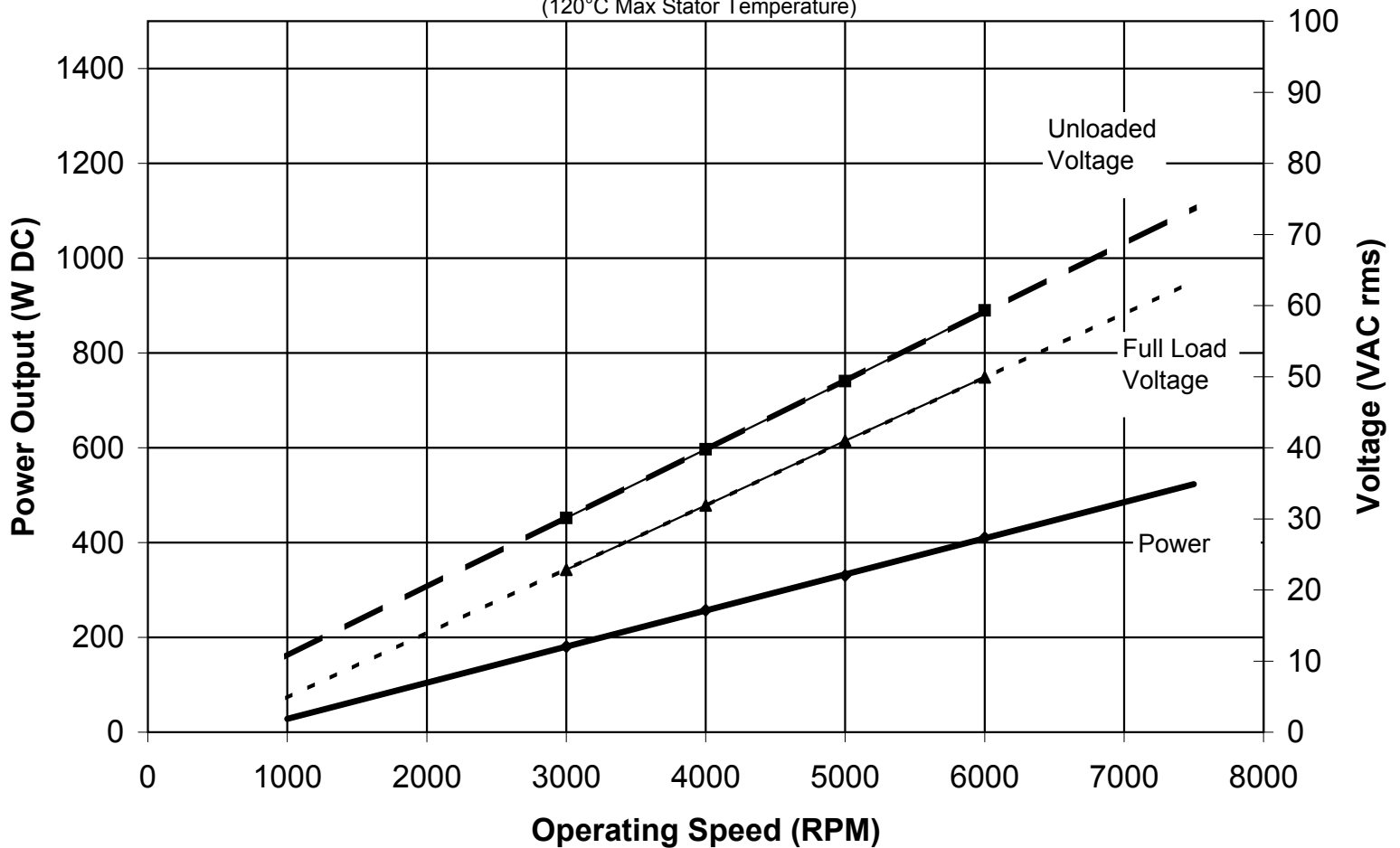
<b>Model number:</b>	<b>S676-300U-01</b>
Alternator diameter:	76mm
Alternator thickness:	24mm
Alternator weight:	360g
Engines:	Most engines 10cc to 50cc
Rated power at 2500 RPM:	140W
Rated power at 7500 RPM:	525W
Standard wind type:	Three phase
No-load voltage constant:	6.5 VAC/1000 RPM (rms voltage, line to line)
Thermal: (Rotor)	Continuous Operation* 85°C Absolute Maximum* 120°C *Higher temperature available but maximum power will be reduced
Thermal: (Stator)	Continuous Operation 120°C Absolute Maximum 200°C
Options:	Special winding Modified shell machining

# Performance

Rated Power vs RPM

S676-300U-01

(120°C Max Stator Temperature)



**Sullivan UV**

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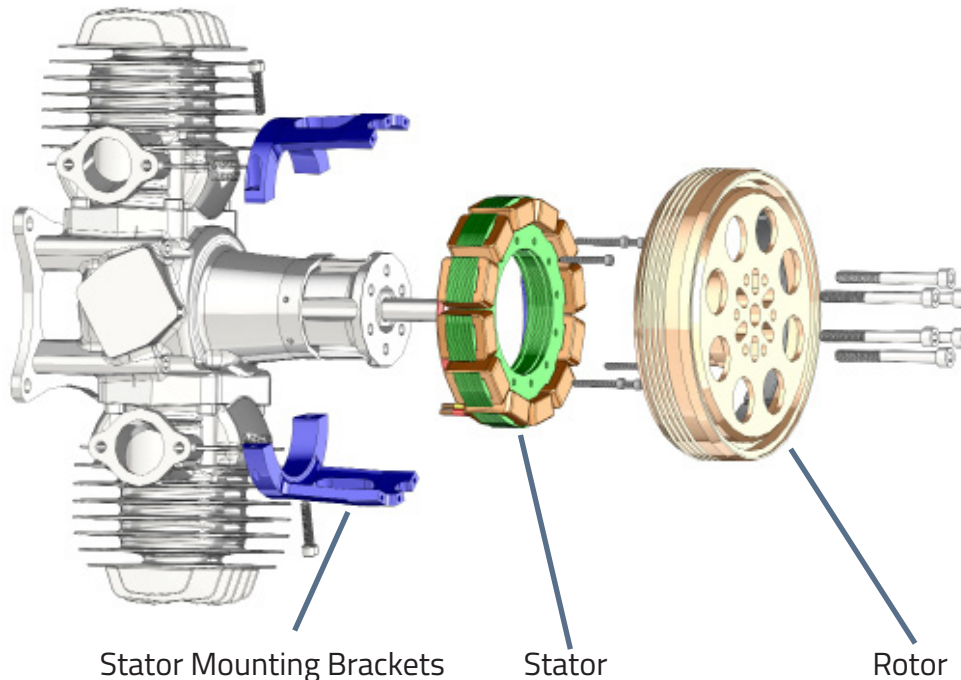
Sullivan UV is a Baltimore, Maryland-based manufacturer of custom crafted starters, alternators and control hardware.

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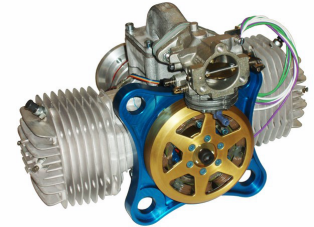
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## Mounting



3W-28i with S676-300F-01



3W-342 with rear mounted  
S676-500



3W-200 with S675-500

Sullivan Pancake Alternators are typically designed to be directly driven by the engine crankshaft. They consist of three main parts, Rotor, Stator, and the Stator Support Bracket. The Rotor and Stator are common for most installations, while the Stator Support Brackets are specific to each engine and alternator combination.

The **Rotor** is affixed directly to the crankshaft and is supported by the crankshaft bearings. Placement can be on the front shaft between the Propeller Hub and Propeller, or on the rear shaft when available. Other installation configurations can also be accommodated.

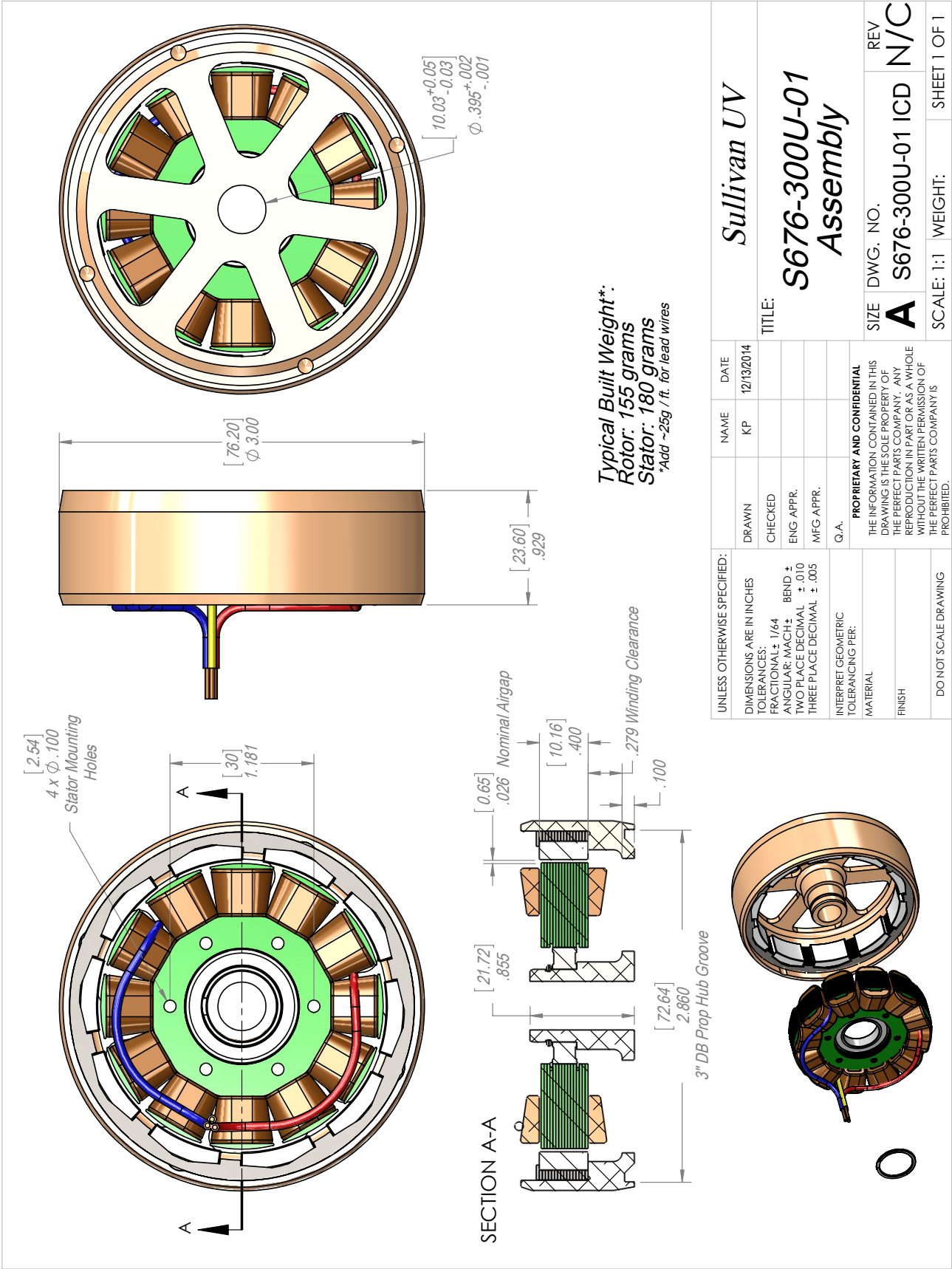
The **Stator** is mounted to the engine crankcase via the Stator Mounting Bracket. The Stator is held rigidly in place concentric to the Rotor, with the windings and magnets aligned axially. An optional thin section bearing can be included that provides the proper alignment between the Rotor and Stator if needed.

The **Stator Mounting Brackets** are typically CNC machined from Billet Aluminum. They attach to the engine by either clamping to existing features or bolting directly to the crankcase. In some cases it is necessary to drill and tap the crankcase to create mounting points. The Stator is then bolted to the Mounting Bracket to complete the installation. Installation guides can be downloaded at [www.SullivanUV.com](http://www.SullivanUV.com)

For advanced systems, stator mounting features can be incorporated into the crankcase design which eliminate the need for the bearing and brackets. This approach saves considerable weight and cost but requires control over the engine manufacturing process. If this option is available please contact Sullivan Sales and Engineering, [Sales@SullivanUV.com](mailto:Sales@SullivanUV.com), to discuss the details.

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Typical Built Weight\*:  
Rotor: 155 grams  
Stator: 180 grams  
\*Add ~25g / ft. for lead wires

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Sullivan UV	
DIMENSIONS ARE IN INCHES		KP	12/13/2014	TITLE:	
TOLERANCES:				S676-300U-01	
FRACTIONAL: 1/64				Assembly	
ANGULAR: MACH: BEND ±				SIZE	
TWO PLACE DECIMAL ± .010				A S676-300U-01 ICD	
THREE PLACE DECIMAL ± .005				REV	
INTERPRET GEOMETRIC TOLERANCING PER:				N/C	
MATERIAL		PROPRIETARY AND CONFIDENTIAL		SCALE: 1:1	
FINISH		THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SULLIVAN UNMANNED VEHICLE. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF SULLIVAN UNMANNED VEHICLE IS PROHIBITED.		WEIGHT:	
DO NOT SCALE DRAWING		2		SHEET 1 OF 1	