

Date	RPM	Revs/sec	Ft/sec	Grams	Force (lbs)	Energy ft-lbs/sec	HP	Watts	Volts	Amps	Power	Eff %	Notes
Series Coil													
11/28/2017	4605	76.75	10.05	110	0.242	2.43	0.004426	3.30	24	0.53	12.72	25.9	Same
	4212	70.20	9.19	185	0.407	3.74	0.006808	5.07	24	0.63	15.12	33.5	Big A
	3818	63.63	8.33	265	0.584	4.86	0.00884	6.59	24	0.77	18.48	35.6	AC am
	3490	58.17	7.61	365	0.804	6.12	0.01113	8.29	24	0.94	22.56	36.8	
	5100	85.00	11.13	0	0.000	0.00	0	0.00	24	0.43	10.32	0.0	No Lo

8/15/2018	53	9395	156.58	20.50	0	0.00	0.00	0.000	0.00	24	0.88	21.12	0.00	Bifilar Coi
BiFilar Coil		8390	139.83	18.30	110	0.06	4.43	0.008	6.01	24.01	1.12	26.89	22.34	Rotor2.5.
		7541	125.68	16.45	185	0.10	6.70	0.012	9.08	24.1	1.33	32.05	28.33	Small TR
		6795	113.25	14.82	265	0.15	8.65	0.016	11.72	24	1.58	37.92	30.91	Big Reeds
		5572	92.87	12.16	365	0.20	9.77	0.018	13.24	24.03	1.93	46.38	28.54	
		9399	156.65	20.51	0	0.00	0.00	0.000	0.00	24.05	0.9	21.65	0.00	

This set of experiment data demonstrates, for comparison purposes, the changes effected by the Bifilar wiring configuration. Each of the original ZFM coils is a 4 strand AWG#20 wire with a total series resistance of about 2.9 ohms, with a total series resistance of 5.8 ohms for both. The bifilar mode takes the individual coil's 4 strand series wiring set and splits it into two strand sets wired in parallel for each coil – the effective measured resistance is just under 1.7 Ohms for both bifilar coils when they are wired in series. This experimental demonstration is instructive! YIS 8/15/18