

V/f: *Results*

Lab 2: ECE432 – Variable Speed Drives

Lab Report

Name	Student ID	CCID	Lab Section

The following is what you are expected to hand-in one week (by 4:00pm) after completion of the lab. You only have to hand-in one copy per group. There is an assignment box in the ETLIC atrium marked ECE432 lab. Please, staple everything together in this order:

- Use this page as your cover sheet. Make sure your names, student ID's, CCID's and lab section are visible in the table above. You need to obtain the signatures below after completing the laboratory exercises.
- Include the results sheet that you made all of your measurements on.
- The calculations showing your work for only one setpoint.
- The four required graphs.
- The answers to the post lab questions.

Lab 2 Results Sign-off

Instructor or TA signature_____

Clean-up

Instructor or TA signature_____

DC Machine – Open Circuit Test

Volts per RPM								
Measurement	Units	Command Frequency (Hz)						
		70	60	45	30	15	10	5
Pocket-tach	Speed	(rpm)						
Fluke 43B	V_{ARM}^{DC}	(V)						

AC Machine – Volts per Hertz

Setting		Powerflex – Monitor File				Pocket-tach	Fluke 43B – Scope	
Approx. Load	Command Freq	Output Current	Output Voltage	Output Power	Output Powr Fctr	Speed	V_{ARM}^{DC}	I_{ARM}^{DC}
	(Hz)	(A)	(V)	(kW)	(-)	(rpm)	(V_{DC})	(A_{DC})
No	70							
Full	60							
1/2	60							
No	60							
Full	45							
1/2	45							
No	45							
Full	30							
1/2	30							
No	30							
Full	15							
1/2	15							
No	15							
Full	10							
1/2	10							
No	10							
Full	5							
1/2	5							
No	5							