copley of controls

AN145

## 16-131132rev00

# Transferring Configuration Data Between Divergent Drives

#### Introduction

The purpose of this app-note is to guide users through the process of manually transferring configuration data between divergent drives. Example: Moving data from Copley Accelus ASC to Accelent ADP. CME may not support copying over files between divergent drive models as they may have a different set-up, phasing, and tuning requirements.

Users will see how Copley motor file .ccm can be used to speed up the transfer of motor data including the feedback and phase information. Users will also observe basic set-up configuration and other key configuration data from the original working drive that needs to be configured in the new drive. Users will then calculate initial tuning values, phase the motor, and then tune the system.

### **Transferring Configuration Data Procedure**

- CME V8.0 (ASP-090-36 01265-9303-00 V1.0)  $\times$ File Amplifier Tools Help 🕸 🕥 💮 📰 🕅 ley Neighb Copley Nei Virtu сома Input / Output Analog Command V Loop + I Loop Axis A Configure Faults 🔿 Axis B Axis C Axis D E12 To Dis
- 1. Connect to the old ASC drive or old .ccx file, and open CME.



|--|

Use Motor Plate Data	Manufacturer:	Parker	Units
Use Specification Data	Model:	CBLE343GE-001	O Metric  English
	Number of Po	les: 4	Torque Constant:
	Inertia:		40 oznin/Apk ~
	0.004	192 ozrinisec² v	Back emf Constant:
	Peak Torque:		29.54 V/krpm ~
	86	j4 oz⁼in ∨	Resistance: 1.74 ohms
	Continuous Tr	orque:	Inductance: 6.3 mH
	Vala site ( lanta	4500	
		····	

Make sure to give the file a relevant and descriptive name, and then click the **Save** button.

Save Motor	Data to Disk				
Save in	MotorDat	a	~	1 📂 🛄 -	
(Cha	AC-Indu	ction_550W_156V			
	Aerotech	1_BLMC-92_50nm			
Recent Items	Aerotech	n_BLMUC-79_1um			
	Aerotech	n_BLMUC-95-Cust+RGH24X			
Desktop					
Decumente					
Documents					
This PC					
	<				
	-	Parker CBI 343GE-001		ī	Save
<b></b>	File name:	Tarker CBESTSUE 001			

3. The Setup screen displays important information related to the drive.

etup		×
Settings		
Motor Family: Motor Type: Commutation: Hall Type: Hall Phase Correction: Motor Feedback: Operating Mode:	Brushless Rotary Sinusoidal Digital On Primary Incremental Current, Analog Input	

4. Take note of the important details that need to be copied over.

Motor Feedback	
1000 lines = 4000 counts	

5. On the main CME make note of all other important configuration details, such as scaling, limits, and I/O.

Scaling	17.85 4 - 10	,				
Dead Band:	60 mV	, 				
Invert Com	and					
			Peak Current Limit:	17.85 A	Cp: 2100	
Analog Input	Filter		I <sup>2</sup> T Time Limit:	1000 ms	Ci: 300	
Offset	2 2 -		Continuous Current Limit:	8 A		
Measure	C	mV	Current Loop Offset:	0 A	Auto Tune	Bandwidth
	Offset: 0	mV				
-						

- 6. Connect CME to the new divergent drive like ADP. Ensure that the Setup screen is correct, and then go to the Motor Data screen and open the file.
- 7. Calculate, phase, and tune the drive as normal and then save to flash. Make sure to name the new .ccx file appropriately.

#### **Revision History**

Date	Version	Revision
4/27/2021	Rev 00	Initial release