

PROCEDURE

Reference:	PR20220901-01				
Version:	01.0	Category:	E		

MODEL(S)	GOAL
ALL EVOLUTION PLUS MODELS	Quality improvement $$
	Performance √
	Upgrade √
PARTS INFO	Down time
EV48-400 CONTROLLER	Maintenance √
	Work around \checkmark
	Others:

VERSION CONTROL:			
Author:	Version:	Date:	Change/update:
Arvin	01.0	2022/09/01	

TITLE

HOW TO FIX THE ALARM " BUSBAR OVERVOLTAGE FAILURE"

DESCRIPTION / PURPOSE OF THIS PROCEDURE

The EVOLUTION controller always warns the "Bus overvoltage failure" or "Busbar overvoltage, brake ouput current red..." while driving.

TOOLS REQUIRED



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01.0

Version:

Category:

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HOW TO DO?

-Step 1. Download the data file "ACS1-20220822-1-DEL.fdev" from one drive link: https://1drv.ms/u/s!ApwLN64cwzfLhGuBeuiyRexfJdtg?e=H3tXT9



-Step 2. Replace the original data file "ACS1-20210427-1-E-C.fdev" with new file "ACS1-20220822-1-DEL.fdev" downloaded from One Drive. The data files is located in the installation folder in C:\Program Files (x86)\EVCTRL \EVProgrammer

← → × ↑ 📜 > This PC > Lo	cal Disk (C:) > Program Files (x86	5) > EVCTRL > EVProgrammer			
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-Step 3. Plug the "Data transfer cable" to controller and your laptop.



Data transfer cable



USB connector plugged to your laptop



4 Pin square connector plugged to vehicle programming interface on the wiring harness

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-Step 4. Turn on golf cart power supply (switch on key switch).



-Step 5. Open "EVOLUTION" the interface software .





Software interface

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-Step 6.Select Language options.



-Step 7.Load data file.

>Click on "Data file"Icon

>Select data file (data file is in the installation folder in C:\Program Files (x86)\EVCTRL \EVProgrammer) >Select file then Click on "Open"



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-Step 9. Enter into the "Calibration" menu, select "Traction motor", adjust the "The starting point of bus overvoltage torque limit (V)" set value to "58", click "set" button to activate the adjusting.

				1000	A V
● EV Programming tool v2.0.10 CyProgram Files (X86)/EVCTRLEVProgrammerACS1-20220822-1(中央文)-DEL(1):ReV				-	U X
Monitor Calibration Warning					
Battery External instrument Energy consumption Brake pedal Standard gear mode Zonal gear mode Temperature Traction motor Electromagnetic brake	Slope control Hig	h limit switch Re	mote control Slov	v mode	Accelerator
Maintenance System parameter Lithium battery CAN bus Version information Turn speed limit Timing, mileage Emergency reverse Cargo weight System	signal (Al) Speed	calibration Syste	m signal (DI) Sys	tem signal	(DO)
Braking torque					
		1			
Parameter Name	Min Value	Max Value	Value	Set Va	lue.
The starting point of bus overvoltage torque limit(V)	55.0	60.0	58.0	58.0	
* Prine ending pointroli bus tovervoltage torque innit(V)	60.0	63.0	60.0	N.0.0	
Slip coefficient	400	600	500	500	
Id maximum value(%)	60	80	80	80	
Creep speed ratio	10	100	30	30	
Creep speed(rpm)	100	2000	300	300	
Brake deceleration(rpm)	100	2000	800	800	
Commuting acceleration of travel(rpm/s)	0	32767	400	400	
Maximum speed of motor in case of system failure(rpm)	0	6000	800	800	
Motor acceleration coefficient(%)	1	200	100	100	
Motor deceleration coefficient(%)	1	200	100	100	
The vehicle follows the starting sequence enable	Disable	Limit anytime	Disable	Disable	e •
direction switch enable in self-check	OFF	ON	OFF	OFF	•
Speed of Walk-on braking enable(rpm)	0	6000	50	50	
Motor stall fault detection enable	OFF	ON	ON	ON	•
Motor encoder lines	1	2000	64	64	
AB direction of motor encoder	0	1	1	1	
Motor direction	0	1	1	1	
First acceleration enable	OFF	ON	ON	ON	
he first rotation corresponds to the acceleration(rpm/s)	100	2000	200	200	
The first speed(rpm)	0	4500	1200	1200	
ine titst speed(pm)					
			_	_	
	Set		Cancel		
	3		and the second sec		_
-Step 9. Turn the key off and turn the key on again to make the ad	justmer	пт таке (errect.		

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