

Adjusting Procedure

Date : August 13, 2020
Document : 7-850395-A
Subject : Adjusting Settings Frequency Controller V1.5
Author : Hans van den Broeck & August Tromp

Machine type:
ZEVAv 6848

Abstract:

This procedure described the settings of several frequency inverter Altivar 12 0.55KW Schneider Electric ATV12H055M2 - Item 7-46506 options used in the ZEVAv machine

V11	Bottom side Forced Convection Fan Station 2	Optional
V12	Topside Forced Convection Fan Station 2	Optional
V13	Solder pump Multiwave Solder Area 1	Standard
V21	Bottom side Forced Convection Fan Station 3	Optional
V22	Topside Forced Convection Fan Station 3	Optional
V23	Solder pump Multiwave ^Selectwave Solder Area 2	Optional
V31	Outfeed Conveyor	Optional
V32	Outfeed Conveyor at Infeed side	Optional
V33	Solder pump Multiwave ^Selectwave Solder Area 3	Optional

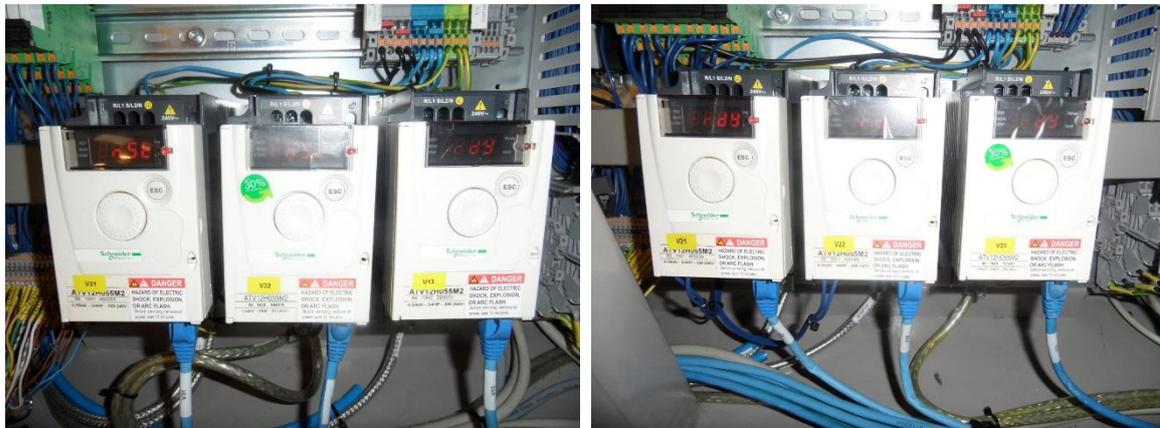


Figure 1: Item 7-46506 Frequency Controller ZEVAv

Important: Before start changing the Frequency Controller setting:

1. Make E-stop, wait until all displays are dark and reset E-stop'.
2. Do NOT bring the status to run mode!
3. For changes to the frequency controllers from the forced convection, wait until the temperatures are below 50 degrees

Change a setting:

4. Start situation display shows “rdY” or nSt.
5. Push turn button
6. Turn button until display shows “COnF”.
7. Push turn button.
8. Turn button until display shows “FULL”.
9. Push turn button
10. Turn button until display shows the value in the “Full” column from the desired parameter.
11. Push turn button
12. Turn button until display shows the value in the “Parameter” column from the desired parameter.
13. Push turn button.
14. Display will show the current parameter value.
15. Turn button until display shows the desired setting.
16. Push turn button.
17. The display returns to the parameter name.
18. To go back to the previous step press ESC.
19. When ready press ESC button several times until display shows “rdY” or nSt.
20. When done press E-stop, wait until all displays are dark and reset E-stop again

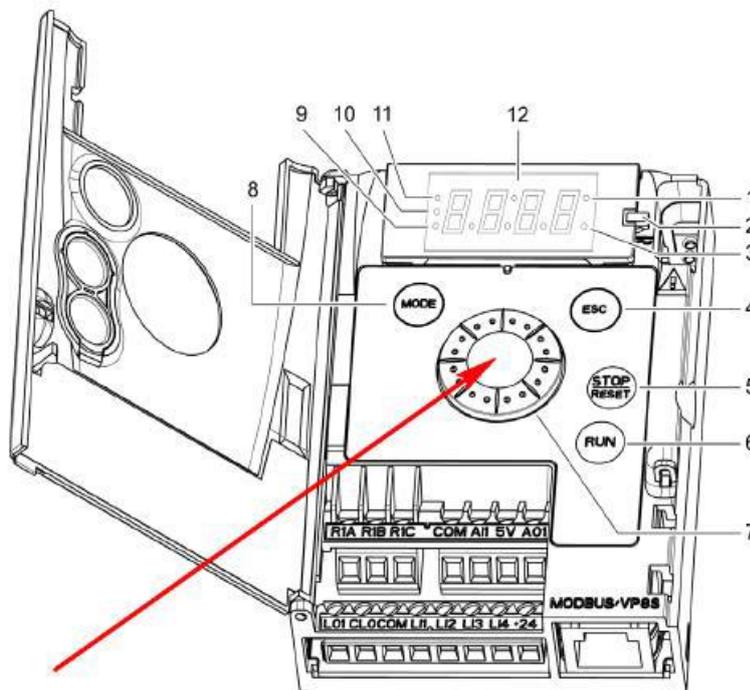


Figure 2: Frequency Controller front side

Parameter table:

21. Changes from factory default settings. When there is doubt if all parameter is at factory default settings bring it to factory default with the procedure on next page

Remarks

22. To change the OPL parameter, turn the button to the left
23. When no value is given the setting is the factory default setting

			Bottom side Forced Convection Fan Station 2	Topside Forced Convection Fan Station 2	Solder pump Multiwave Solder Area 1	Bottom side Forced Convection Fan Station 3	Topside Forced Convection Fan Station 2	Solder pump Multiwave Solder Area 2	Solder pump Selectwave Solder Area 2	Outfeed Conveyor	Outfeed Conveyor at Infeed side	Solder pump Multiwave Solder Area 3	Solder pump Selectwave Solder Area 3
Full	Parameter	Description	V11	V12	V13	V21	V22	V23	V23	V31	V32	V33	V33
I_O-	r1	Relay output 1 assignment	rUn	rUn	rUn	rUn	rUn	rUn	rUn	rUn	rUn	rUn	rUn
drC-	nPr	Rated motor power	0.3	0.3	0.1	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1
drC-	UnS	Nominal motor voltage			230				230	230		230	230
drC-	nCr	Nominal motor current	1.3	1.3	0.8	1.3	1.3	0.8	0.8	0.8	0.8	0.8	0.8
drC-	FrS	Nominal motor frequency			47			47	47			47	47
drC-	NSP	Nominal motor speed	2700	2700		2700	2700						
drC-	SFr	Drive switching frequency	16	16	10	16	16	10	10	16	16	10	10
Cr-L	Fr1	Configuration reference	Ndb	Ndb	Ndb	Ndb	Ndb	Ndb	Ndb	Ndb	Ndb	Ndb	Ndb
Flt-	OPL	Output phase lost			nO			nO	nO			nO	nO
CON_	Add	Drive modbus address	3	4	9	5	6	10	10	7	8	11	11
CON_	ttO	Modbus time out	30	30	30	30	30	30	30	30	30	30	30

Factory default:

24. To return to the factory default settings:
25. Start situation display shows “rdY” or nSt.
26. Push turn button.
27. Turn button until display shows “CO nF”.
28. Push turn button.
29. Turn button until display shows “FCS”.
30. Push turn button.
31. Turn button until display shows the value “InI”.
32. Push turn button for at least 2 seconds.
33. When ready press ESC button several times until display shows “rdY” or nSt.

Change history:

Version	Description	Initial
V1.1	First release.	JHB
V1.2	Added warning for forced convection	JHB
V1.3	Nominal motor frequency for SA1 was missing	JHB
	Motor control type from PErF to Std, the factory default. Parameters factory loop stability (StA) and frequency loop gain (FLG) are not needed and removed Nominal motor voltage increased from 200V to 260V	JHB
	Some textual changes	JHB
V1.4	Nominal voltage for Selectwave reduced from 260V to 230V.	JHB
V1.5	Nominal voltage from both selectwave and multiwave to 230V to prevent them from overheating	JHB
	Update document into ITW EAE document 7-850395 and released	ACT

Important: More information, please contact local service agent or ITW EAE helpdesk

- E-mail help desk NL > helpdesk.nl@itweae.com
- E-mail help desk USA > vsustsc@itweae.com
- E-mail help desk Asia > aphelpdesk@itweae.com