AELTA Delta

SLC08C22A synchronous controller
manual

Safety instructions

Under any circumstances, such as operation, cleaning or maintenance, please be sure to abide by the safety rules stipulated below. Our company will not be responsible for any violation that causes safety concerns beyond the original design and manufacturing. If there are other local safety regulations, please comply with them. ,

!!Warning: Please use this device under the operating and storage environmental conditions allowed.

- Under any circumstances, do not disassemble or touch internal parts without professional guidance;

- When servicing equipment, it is strictly prohibited to operate with power on;

- Do not let metal, liquid and other foreign objects fall into the device to avoid damage to the device;

- Install the equipment as far away from interference sources as possible (for example: contactors, frequency converters, etc.) or take

   corresponding shielding measures;

- It is best to route signal lines and power lines separately to avoid interference;

- This device and the contactor cannot share the same power supply, otherwise interference will occur;

- This equipment is specially designed for use with the VFD series inverters produced by our company, so

   that it can exert its best performance, but it cannot guarantee matching with other brands of inverters.

store

This product must be placed in its packaging box before installation. If the machine is not used temporarily, in order to ensure that the product is within the warranty scope of the company and can be maintained in the future, be sure to pay attention to the following matters when storing:

* Must be placed in a dust-free, dry location.

* The ambient temperature of the storage location must be within the range of 0°C to +65°C.

* The relative humidity in the storage location must be within the range of 5% to 95% and free of condensation.

* Avoid storage in environments with corrosive gases and liquids.

* Best packaged appropriately and stored on a shelf or countertop. operating

environment

*The ambient temperature is 0°C~+50°C. If the ambient temperature exceeds 40°C, please place it in a well-ventilated place.

*Relative humidity 15%~+95%RH. Avoid installing in any location where condensation, freezing, or contact with any liquid will occur.
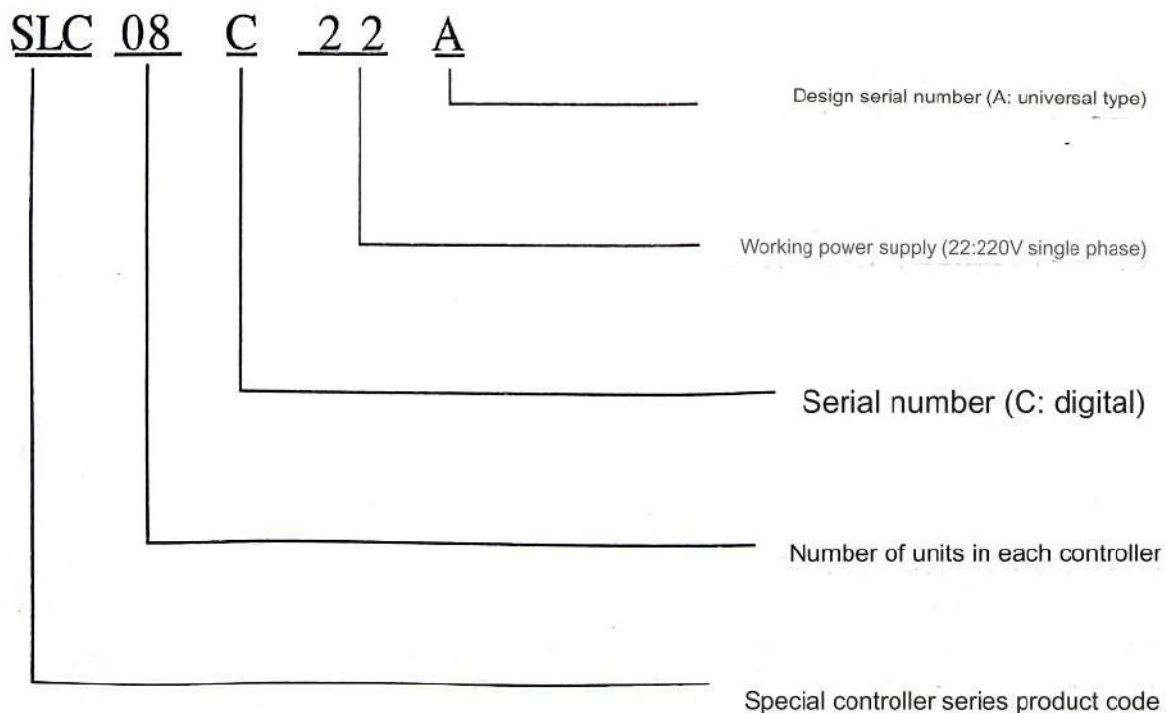
* Do not install in any place with the following conditions: direct sunlight, heavy dust, corrosive gas or oil mist, flammable gas, or liquid.

* Vibration less than 5.9 meters/second (0.6g)

NOTE The controller's ambient temperature will affect its durability and reliability. Do not place   the controller in a place where the ambient temperature is not suitable.

The SLC series synchronous controller is a series of synchronous control devices launched by our company on the basis of a single model originally produced. It adopts a fully digital design with a computer as the core. Each controller can control the operation of four or eight motors at the same time. Very flexible and easy. The SLC series synchronous controller has complete functions, is at the leading domestic level in technology, and is comparable to similar foreign products in performance. It is widely used in various mechanical equipment composed of multiple speed control systems, such as electric power, steel, papermaking, textile, printing and dyeing, cables, optical fibers, plastics and other industries. It can control linear speed, displacement, tension, distance, etc., making it the best choice for machinery and equipment.

1. Model description

SLC 08   C   2 2   A

Design serial number (A: universal type)

Working power supply (22:220V single phase)

Serial number (C: digital)

Number of units in each controller

Special controller series product code

1. Main features

A. Digitization

The SLC series controller is controlled by a single-chip computer. It can set various parameters of the controller and display them digitally when setting the parameters. There is a memory in this controller, which can automatically retain the parameters set by the user after power failure.

B. Practical and powerful functions

1) Each SLC08C22A controller has three given input modes;

A) Internal given (can be adjusted through UP and DOWN terminals);

B) External voltage given;

C) External current given (can only be connected to the external main given G1, and then set the given mode selection parameter F33 to 1 to select the current given).

2) Each SLC08C22A controller can control four independent units, each unit has eight outputs

(V01~V08)

3) The output of each control unit can be used as the input of another control unit (units can be used in series or parallel). One controller can be used as two or three independent controllers.

4) It has slow start and stop functions: the time can be set separately (0~130 seconds).

5) It has fault alarm and starting signal relay output, and its driving capacity reaches 5A.

C. High precision

The input and output analog signals of this series of controllers use high-resolution A/D and D/A converters, with a resolution of up to 0.1%.

D. Versatility

The external given input adopts standard 0~10V or 4~20mA, and the control output is 0~10V, which can be matched with various speed controllers.

E. Easy to use

1) The user can modify the control parameters when the controller is started, which is convenient for the user to debug the equipment.

2) It has the function of locking the set parameters to avoid misoperation by other personnel.

3) Few external connections simplify user design and equipment debugging work, saving a lot of user manpower, material resources, and financial resources.

F. Reliable work

The SLC series synchronous controller is carefully designed and manufactured, and its internal working power supply adopts switching power supply. It has strong anti-interference ability and wide working voltage range, which can ensure normal operation in places with large fluctuation range of grid voltage. Its working voltage is 150~300VAC.

2. Main technical indicators

A. Control voltage output

•Output voltage resolution 0.01V Output voltage driving capability ≤5mA

·Output voltage stability ≤0.2%

B. Given and feedback signal input

·Input resolution of given and feedback voltage is 0.01V

• External given voltage input accuracy <0.8%

• Feedback voltage input range ≤5±0.01V

C. Internal power supply output load capacity

•+24V power supply maximum output power ≤200mA

•+10V power supply maximum output power ≤10mA

•Maximum output current of 5V power supply ≤100 mA

3. Conditions of use

Working voltage (AC): 220V±30% 50-60HZ

Working environment temperature: 0~50

Relative ambient humidity: <90% no condensation

Altitude:<1000m

There is no corrosion, dust gas and flammable and explosive dangerous goods around.

2. Main functions of SLC08C22A synchronizer

Practical functions, strong anti-interference ability, stable and reliable. It has the following characteristics:

The device consists of eight units, one internal main given, two external main given, eight external feedback given, and the feedback adopts ±5 internal power supply.

*The internal main given GO can be adjusted using the UP and DOWN keys.

*This device provides an independent +24V/0.2A DC power supply.

The system consists of the following parts:

1. Power supply part

Convert 220V AC power into the following DC power supply:

±5V/200mA: +10V/mA: +24v/0.5A. Among them, +24 and ±5V power

source isolation

2. Main given part

controller is equipped with three independent main given sources, and the user can select any

Select. This

Internal main given G0: The range of internal main given GO is 0.00~10.00V, and the resolution is 0.01V. When the synchronous controller is powered on, the value of function code F34 is assigned to G0, or the initial power-on value of GO is equal to F34. After adjusting G0 using the UP and DOWN terminals, GO changes. The changed G0 will be temporarily memorized in the default mode (F34 is 0), that is, it can be maintained without power interruption: when F34 is 1, the system will assign the value of F34 to G0 when shutting down, and change F34. The only way is to modify it in the parameter settings.

External given - G1: The external given is input by terminals 9# and 8#. There are two given input modes: 0~10VDC and 4~20mA: these two given modes can be selected through function code F33: 0 is current input, 1 is voltage input, and the default is voltage input.

External given two G2: External given two is input by terminals 10# and 11#. It is a 0~10VDC signal and cannot be used as current input.

3. Main given upper and lower limit processing (cloth guide speed function):

Gi' =G lower limit when $\quad$ Gi<G lower limit

Gi' =Gi when $\quad$ G lower limit<Gi<G upper limit

Gi' =G upper limit when $\quad$ Gi>G upper limit

processing the main given upper and lower limits, Gi is subject to the given lower limit and the given upper limit.

limit. After

4. Speed rise and fall time processing:

After the speed rise and fall time processing, the change slope of Gi' is limited by the speed up slope (10.00/Tup) and the speed down slope (10.00/Tdown)

5. Unit part

This controller contains eight independent units. Its function description is as follows:

$$Vi = Si*KSi + Fl*KFi$$

In the formula:

1) Vi is the output of the i-th unit, range: 0~10V.

2) Si is the unit given for the i-th unit, and the input source is selected by the function code.

3) KSi is the given proportion of unit i, set by the function code (range: 0.00~15.00).

4) When the given Si of this channel is 0, the output of this channel is zero; that is, when the given Si is 0,

the feedback input has no effect.

3. Terminal description

+10V ground ± 1#:		+24V ground (this "ground" is independently isolated from GS 5V ground).
2#:	R/S	Start the console.
3#:	+24V	+24v independent power supply.
4#:	ERR	External fault chain input terminal.
5#:	GS	Same as 1#.
6#:	UP	Speed up terminal. (works when given internally)
7#:	+10V	External main given power supply.
8#:	GND	The external master is given 1 land.
9#:	G1	External main setting 1 input terminal (there are two setting modes: voltage and current).
10#:	G2	External main setting 2 input terminal (only voltage setting mode).
11#:	GND	The external master is given 2 lands.
12#:	+10V	External main given power supply,
13#:	DOWN	Reduction terminal. (works when given internally)
14#:	GND	Feedback given 8 places,
15#:	GF8	Feedback given 8 input terminal (-5V~+5V)
16#:	GND	Feedback given 7 places,
17#:	GF7	Feedback given 7 input terminal (-5V~+5V)
18#:	GND	Feedback given 6 places
19#:	GF6	Feedback given 6 input terminal (-5V~+5V)
20#:	GND	Feedback is given 5 places.

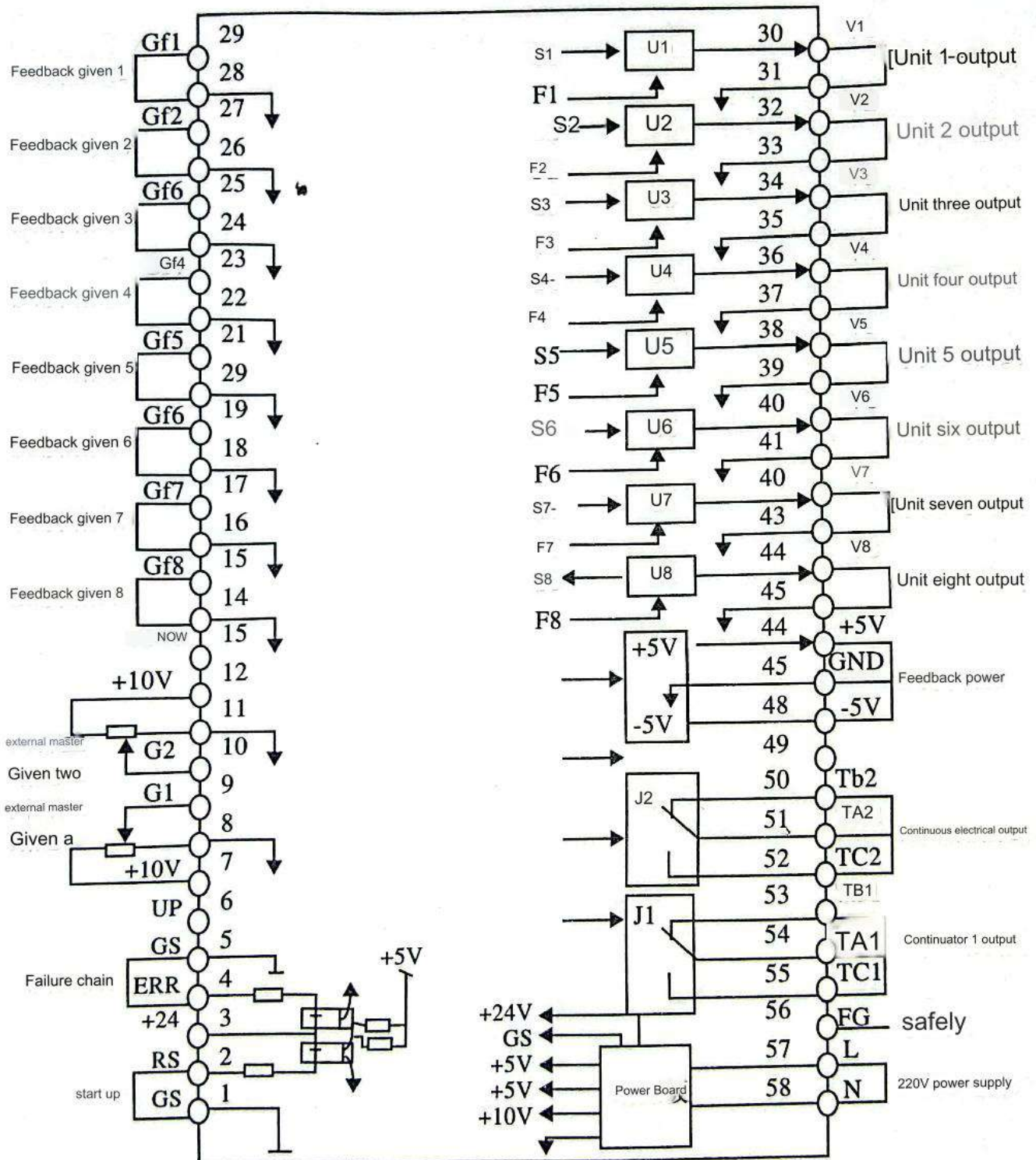|		
21#:	GF5	Feedback given 5 input terminal (-5V~+5V)
22#:	GND	Feedback given 4 places
23#:	GF4	Feedback given 4 input terminal (-5V~+5V)
24#:	GND	Feedback given 3 places.
25#:	GF3	Feedback given 3 input terminal (-5V~+5V)
26#:	GND	Feedback given 2 places.
27#:	GF2	Feedback given 2 input terminal (-5V~+5V)
28#:	GND	Feedback given ground.
29#:	GF1	Feedback given 1 input terminal (-5V~+5V)
30#:	V1	The first unit output terminal (0~10V).
31#:	GND	First unit land.
32#:	V2	The second unit input terminal (0~10V).
33#:	GND	Second unit land.
34#:	V3	The third unit output terminal (0~10V).
35#:	GND	Unit 3 land.
36#:	V4	The fourth unit output terminal (0~10V).
37#:	GND	Unit 4.
38#:	V5	The fifth unit output terminal (0~10V).
39#:	GND	Unit 5 land.
40#:	V6	The output terminal of the sixth unit (0~10V).
41#:	GND	Unit 6 Land.
42#:	V7	The seventh unit output terminal (0~10V).
43#:	GND	Unit 7 Land.
44#:	V8	The eighth unit output terminal (0~10V).
45#:	GND	Unit 8 Land.
46#:	+5V	
47#:	GND	Provides external feedback power.
48#:	-5V	
49#:	NC	null.
50#:	TB2	The output normally closed contact of relay J2.
51#:	TA2	The output common terminal of relay J2.
52#:	TC2	The output normally open contact of relay J2.
53#:	TB1	The output normally closed contact of relay J2.
54#:	TA1	The output common terminal of relay J2.
55#:	TC1	The output normally open contact of relay J2.

56#:	FG	safely
57#:	L	Working power input terminal: AC220V.
58#:	N	Working power input terminal: AC220V.

4. Terminal diagram

Feedback given 1	Gf1	29		S1 →	U1	30	V1	[Unit 1-output
		28				31		
Feedback given 2	Gf2	27		F1		32	V2	
		26		S2 →	U2	33		Unit 2 output
Feedback given 3	Gf6	25		F2		34	V3	
		24		S3 →	U3	35		Unit three output
Feedback given 4	Gf4	23		F3		36	V4	
		22		S4- →	U4	37		Unit four output
Feedback given 5	Gf5	21		F4		38	V5	
		29		S5 →	U5	39		Unit 5 output
Feedback given 6	Gf6	19		F5		40	V6	
		18		S6 →	U6	41		Unit six output
Feedback given 7	Gf7	17		F6		40	V7	
		16		S7- →	U7	43		[Unit seven output
Feedback given 8	Gf8	15		F7		44	V8	
		14		S8 ←	U8	45		Unit eight output
	NOW	15		F8		44	+5V	
+10V		12		+5V		45	GND	Feedback power
external master		11		-5V		48	-5V	
Given two	G2	10				49		
external master	G1	9		J2		50	Tb2	
Given a		8				51	TA2	Continuous electrical output
+10V		7				52	TC2	
UP		6		J1		53	TB1	
GS		5				54	TA1	Continuator 1 output
Failure chain	ERR	4	+5V	+24V ←		55	TC1	
+24		3		GS ←		56	FG	safely
RS		2		+5V ←		57	L	220V power supply
start up	GS	1		+5V ← Power Board		58	N	
				+10V ←				

Terminal diagram

5. Panel and operation

Indicator light H1.
Indicator light H2
monitor

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

-Switch key
Increase and decrease keys
Function keys

58 57 56 55 54 53 52 51 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 32 31 30
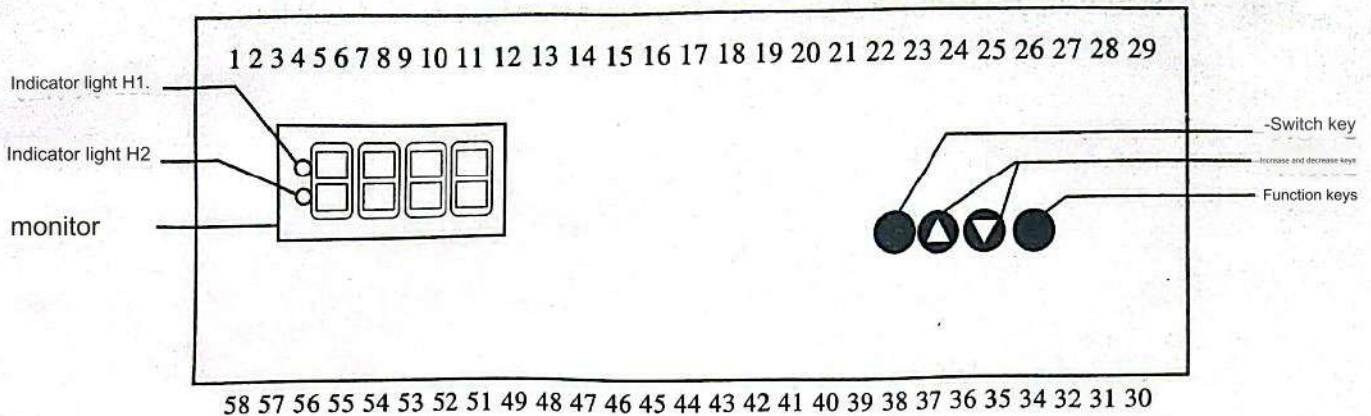
1. Operation panel description

a) Function key (ENTER): This key can be used to read and write the parameters corresponding to each function code.

value.

b) Increase and decrease keys: (▲▼): These two keys are used to increase and decrease the size of function codes and

parameter values when setting functions.

c) Switch key (RESET): This chain can make the system return to the previous step from the parameter setting

state or achieve error reset.

d) Display: The output value of each unit can be displayed during operation; the function code and

parameter value can be displayed in function setting state.

e) Indicator light H1: When   the light goes off, the system is in shutdown state;

When the light is on, the system is in parking state;

e) Indicator light H2:   when the light is off, the system is in running state;

When the light is on, the system is in parking state;

2. Typical operation examples

Example 1: Change the internal given voltage value F34 (change from the set value 5.00V to 1.00V)

a) Press ENTER to   display F00;

b) Button release   the ▲ key when F34 is displayed;

c) Press ENTER again to display   the voltage value 5.00;

d) Press the key or ▲   key until it displays 1.00;

e) Press ENTER   to display F34;

If the parameter is write-protected, Frr will be displayed, and F34 will be displayed after pressing the ENT key again. At this time,

F34 remains unchanged at the original value of 5.00.

f) Press the RESET key to return to normal display: 0.00 。

6. Parameter table

Function and parameter table

FXX	Function	Set range	Factory settings
00	Exit function setting state		
01	First unit given source	0: The given source is the internal main given	09
02	Second unit given source		09
03	Unit 3 given source	1-8: The given source is the output of units 1~8 (except this unit)	09
04	Unit 4 given source		09
05	Unit 5 given source	9: The given source is an external main given one	09
06	Unit 6 Given Source	10: The given source is the external main given two	09
07	Unit 7 Given Source	F: The unit is not used and the unit output	09
08	Unit 8 Given Source	is zero.	09
09	Unit 1 Feedback Source		F
10	Second unit feedback source		02
11	Unit 3 Feedback Source	1-8: Feedback source w is external feedback	03
12	Unit 4 Feedback Sources		04
13	Unit 5 Feedback Sources	Given 1-8	05
14	Unit 6 Feedback Sources		06
15	Unit 7 Feedback Sources	F: There is no feedback input on this channel	07
16	Unit 8 Feedback Sources		08
17	The first unit gives the proportion		1.00
18	Second unit given proportion		1.00
19	The third unit gives the proportion		1.00
20	Unit 4 Given Proportions	Ratio range: 0.00-15.00	1.00
21	Unit 5 Given Proportions		1.00
22	Unit 6 Given Proportions	(Accurate to two decimal places)	1.00
23	Unit 7 Given Proportions		1.00
24	Unit 8 Given Proportions		1.00
25	First unit feedback ratio	Ratio range: 0.00-15.00	0.20
26	Second unit feedback ratio		0.20
27	Unit 3 feedback ratio	(Accurate to two decimal places)	0.20
28	Unit 4 Feedback Ratio		0.20
29	Unit 5 Feedback Ratio		0.20
30	Unit 6 Feedback Ratio		0.20

31	Unit 7 Feedback Ratio		0.20
32	Unit 8 Feedback Ratio		0.20
33	External main given input mode selection	0: Current input 1:Voltage input	1
34	Internal main setpoint	Range: 0.00~10.00(volt) (If the input is greater than 10V, the input will be treated as OV)	5.00
35	speed rise time	Range: 0.00~130 (seconds) (If the input is greater than 130 seconds, it will be processed as 130 seconds)	010
36	Speed drop time		010
37	Display scale factor	Range:0.01~15.00	1.00
38	Normal status display Content selection	00: When running, run is displayed. When stopped, SLC is displayed. 01-08: Display the output value of units 1-8 09-16: Display the input value of units 1-8	09
39	Initialization operation	1. Factory value initialization	
40	Parameter lock	0: Parameters can be modified 1: Parameter lock (parameter modification is not allowed)	0
41	given upper limit	Range:0.00~10.00	10.00
42	Given lower limit	Range:0.00~10.00	0.00
43	given memory settings	Range: 0.1 See parameter details	0
44	Internal given rise and fall step size adjustment	Range:0.01~4.00	0.20

7. Detailed description of parameters

1. FOO enters and exits the function setting state

    Under working status: Press the "ENTER" key, the display will display 'FOO',

Enter parameter setting state. When the parameter number is displayed: When 'F00' is displayed, press the 'ENTER' key to

return to the working state. When the parameter number is not F00, press the RESRT key to return to the working state.

2. F01~F08 sets the reference sources of the first to eighth

    units. Setting range: 0~10, F

    F01 sets the given source of the first unit, F02 sets the given source of the second unit... F08 sets the given source

of the eighth unit. There are a total of 10 input sources, namely three main given sources and the other seven except this unit.

11

The output of the unit. Each unit can be combined into any series or parallel connection through parameter setting.

0: Set the given source of this unit to the internal given GO, and the GO range is 0.00-10.00:

1~8 Set the given source of this unit to the outputs V1~V8 of the first to eighth units, and the Vi range is 0.00~10.00V: Please do not use the output of this unit as the input of this unit, otherwise the output will be locked. Phenomenon, that is, the output of this unit remains unchanged and will no longer change with the main given. Example: F01 is set to 1, that is, the given source-G1 of the first unit is the output V1 of the first unit, and the output value of the first unit is locked unchanged.

9: Set the given source of this unit to the external main given -GI, and the range of GI is 0.00~10.00V:

10: Set the given source of this unit to the external given two G2, and the range of G2 is 0.00~10.00V:

F: This unit is not used, and the unit output is 0.

3. F09~F16 sets the feedback sources of the first to eighth units...

Setting range: 1-8, F

F09 sets the feedback source of the first unit, F10 sets the feedback source of the second unit...F16 sets the feedback source of the eighth unit. The feedback source has 8 channels GF1-GF8.

1~8: Set the feedback source of this unit to the external feedback given GFI ~ GF8, and the GFi range is -5.00V~+5.00V;

F: Set this unit not to use feedback.

Example: F09 is set to 2, that is, the feedback source of the first unit is the external feedback given GF2.

Note: When multiple synchronous controllers are cascaded, feedback cannot be used for the unit serving as the main given point of the next level.

4. F17~F24 set the given examples of units 1 to 8

Setting range: 0.00-15.00

F17 sets the given proportion of the first unit KSI, F18 sets the given proportion of the second unit KS2...

F24 sets the eighth unit given proportion KS8.

Example: F17 is set to 2.00, that is, the given proportion of the first unit is KS1=2.00.

Note: When multiple synchronous controllers are cascaded, the unit given ratio as the next level's main given should be set to 1.

5 F25~F32 Set the feedback ratio of the first to eighth units. The setting range is 0.00 ~ 15.00.

F25 sets the feedback ratio of the first unit KF1, F26 sets the feedback ratio of the second unit KF2, and F32 sets the feedback ratio of the eighth unit KF8.

Example: F25 is set to 2.00, which means the feedback ratio of the first unit is KF1=2.00.

6. F33 External main reference input mode selection

Setting range: 0.1

0: The input of the external main reference GD1 is in current mode, and the range is 4-20mA:

1: The input of the external main reference GDI is in voltage mode, and the range is 0.00-10.00V.

7. F34 Internal main given initial value Setting range: 0.00 ~ 10.00 - The internal given initial value is in the range of 0.00-10.00. If the input is greater than 10.00, press

Input is processed for 10.00.

F34 assigns F to GO in two situations: 1) When the synchronous controller is powered on:

2) After the F34 parameter is modified successfully.

8.F35, F36 set the speed up and down time

Setting range: 0~130 seconds

F35: The rise setting is the time required for the main given value to rise from 0.00V to 10.00V;

F36: The drop setting is the time required for the main reference to drop from 10.00V to 0.00V;

The parameters take effect during starting, stopping and speed regulation. In addition, the user is required to set the starting and stopping time before starting and stopping. If the time is changed during the slow starting or stopping process, it will have no impact on the ongoing start and stop. The newly set time will only be used during the next start and stop. It just works.

Note: When using cascade connection, in order to maintain synchronization during dynamic speed up and down, the rise and fall of each synchronous controller must be the same.

9. F37 sets the display ratio. Setting range: 0.00~15.00 Set the display ratio to make the display have physical meaning. If this function is not used, set it to 1.00. Display

value = actual value * display ratio (F37)

10.F38 Set display content

Setting range: 0~16

0: Display system status, display run when running;

Display SLC when parking;

1: Set to display the first unit output;

2: Set to display the second unit output;

3~8: Set to display the output of the third to eighth units;

9: Set to display the first unit reference;

10: Set to display the second unit given;

11~16: Set to display the third to eighth unit givens.

11. F39 restores all parameters to factory values. In the parameter setting state, set the parameter number to F39 and press the ENTER key to complete the factory reset.

Tip: Parameters cannot be reset in parameter protection status.

Note: After factory reset, all parameters set by the customer will be lost. If there are any important parameters, please copy them first.

12. .F40 sets parameter lock setting range: 0~1

0: Parameters can be modified:

1: After setting to 1, the user cannot modify the parameters (parameters are locked, except for this parameter), If you need to modify it, please set this parameter to 0 first.

13. F41 sets the main given upper limit setting range: 0.00~10.0 l0 V

F42 sets the main setting lower limit setting range: 0.00~10.00 V

F41 is the given upper limit, F42 is the given lower limit, and the functions are as follows. (figure 1)

$$\begin{cases} \text{F41 when Gi>F41} \\ \text{Gi=Gi when F42}\leq\text{G}\leq\text{F30 F32} \\ \text{when G<F42} \end{cases}$$

In the formula: Gi is the main given GD, GD1, GD2 of the synchronous controller. Gi is the value

constrained by the given upper and lower limits; F41 is the upper

limit of the main given; F42 is the lower limit of the main given.
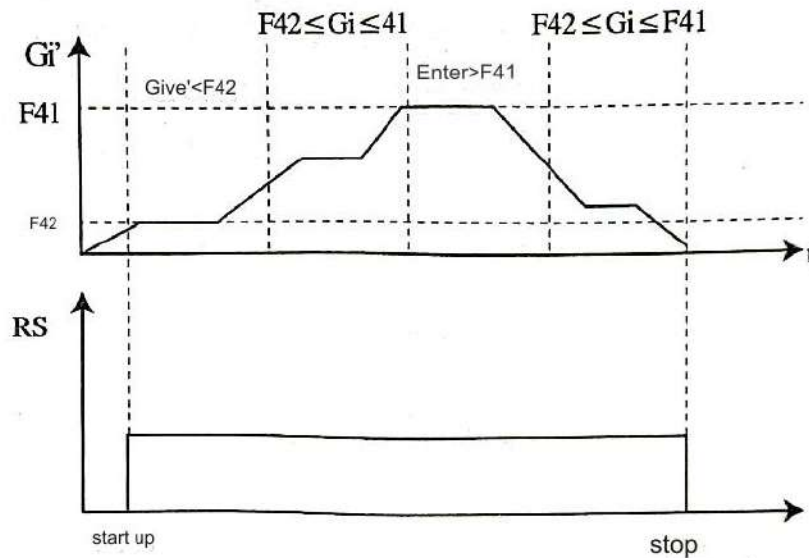
figure 1

14.F43 given memory setting (in internal given mode):

0: means there is a given memory 1: means there is no given memory

Note: It has an effect when the start control terminal R/S is short-circuited or disconnected from the +24V ground GS. Power outage does not save.

15.F44 button step size (sensitivity setting parameter) setting range: 0.01~4.00 When using external buttons

to increase or decrease the speed, it is used to adjust the sensitivity of the buttons and the system increase or decrease

speed. The default parameter is 0.20, which is equivalent to 10 seconds. When the sensitivity adjustment range is greater than

the deceleration adjustment speed, it will be adjusted according to the up and down time. If the sensitivity parameter is less than

the deceleration time, adjust it according to the sensitivity parameter.

8. Connection and precautions for multiple synchronous controllers

When the user uses the SLC08C22A type to control more than 8 synchronous motors, the

Connect multiple synchronous controllers. Such as using N controllers. Call them No. 1-N in turn.

step controller. The output of each unit of each controller in the SLC series is exactly the same, therefore,

You can select any unit of the No. 1 controller to control the main motor and use the output of the unit as

It is the main given of the No. 2 controller and is connected to the external given one or the external given two of the No. 2 controller.

At this time, the proportional coefficient of the unit must be set to 1.00 and the unit must have no feedback.

illustrate:

This example uses SLC08C22A2 controllers to connect. This connection can control the operation of up to 11

motors. One SLC08C22A model is called controller No. 1, and another SLC08C22A model is called controller

No. 2. The output of the first unit of No. 1 is used to control the main motor. At the same time, the output

of this unit is used as the input of the external given one of the lower-level motor synchronous controller. The input

source of the first unit of the No. 1 controller is set to 9 (external reference one), and the output proportional coefficient

needs to be 1.00, so that the voltage of the external reference input of the No. 1 controller can be transmitted unchanged

to the No. 2 control The controller is used as the external reference of the No. 2 controller. By analogy,

multiple synchronous controllers can be connected in this way.
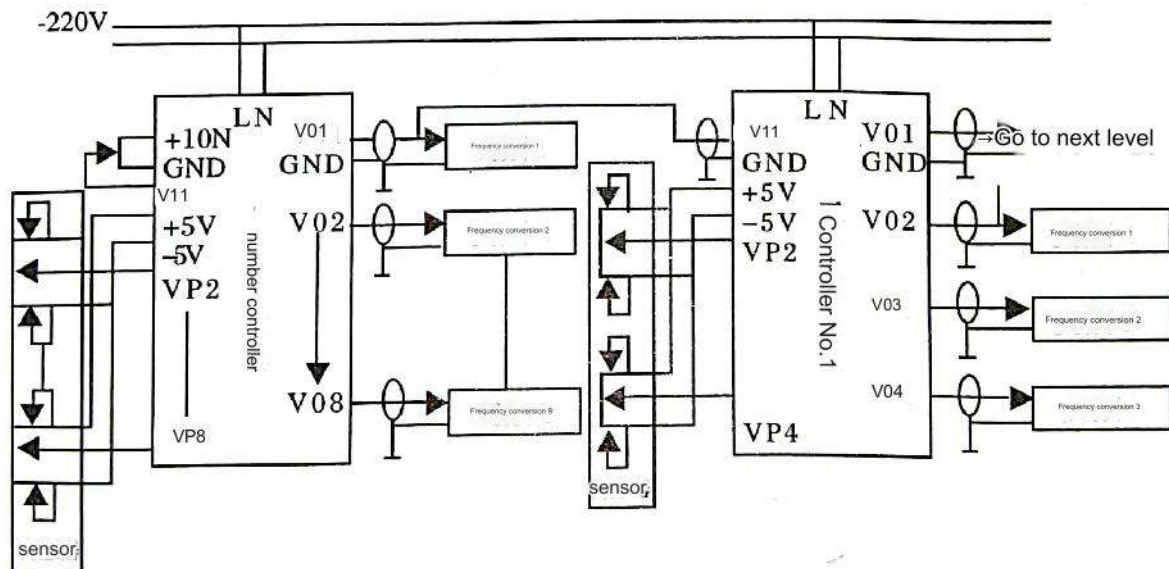
Precautions:

Except for the first unit output of the No. 1 controller, which is used to control the main motor, the first units of the other

controllers are generally not used to control the motor. Otherwise, the input voltage of the controlled motor will always be the same as that of

the host machine, and its speed will also remain the same as that of the host machine. consistent.

Please do not power on again within three minutes after power off to avoid machine abnormality due to the internal

capacitor storing a certain amount of electrical energy.

9. Troubleshooting and maintenance

Users must operate the SLC series controller in accordance with the usage conditions and usage methods specified in this manual. The controller has a one-year warranty from the date of purchase by the user.

If an abnormality occurs in the controller during normal use, please refer to the following table to determine the cause of the fault and eliminate it. If the fault cannot be eliminated according to the table below, please contact our dealer.

Fault phenomenon	reason	Solution
Show Errl	There is an external fault signal input (ERR and GS terminals are short-circuited)	Please check the cause of external failure
Display Err2	Control unit has no input source	Please reset the corresponding parameters and check and modify the contents of each input source VI.
Display Err3	Controller memory error	Restore factory settings
The output of a certain unit is abnormal	There is no start signal input terminal (GS terminal in R/S diagram has no link)	Please check the external start signal
	The input source for this unit is incorrect	Check and modify the contents of each input source VI
	The unit's output scaling factor is incorrect	Check and modify the content of each output proportional coefficient Ki
	The external input is not correct,	Please check the input value of V11.VI2 terminal
	Internal given value error	Check the internal voltage reference value
Feedback from a certain unit is abnormal	The unit's feedback setting is incorrect	Check the feedback corresponding to each output source vf
	The feedback proportional coefficient of this unit is set incorrectly	Check and modify the feedback proportional coefficient Kfl of each channel
	Feedback signal input is incorrect	Please check the feedback signal size and feedback connection at the feedback input terminal.

10. Appearance, structure and dimensions of synchronous controller
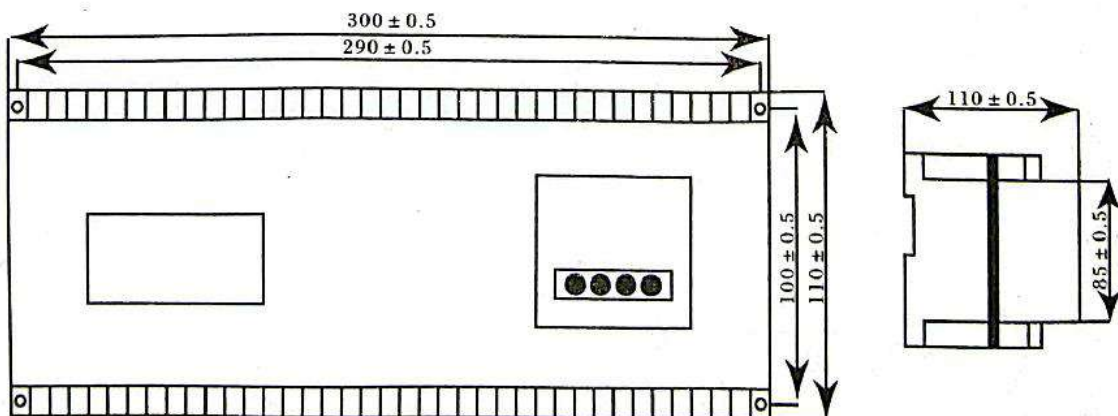
300X110X110

Thank you for choosing our company's synchronization controller and reading this manual!