1.1.1 F0 Parameter Group

Parameter	Description	Minimum Value	Default Value	Maximum Value	Unit	Change Permission
F0-00	Motor Rated Power	0.1	Depends on model	999.9	Kw	Read only
	This parameter is set to the rated power of the motor (nameplate).					
F0-01	Motor Rated Voltage	1	Depends on mode	500	V	Read only
	This parameter is set to the rated voltage of the motor (nameplate).					
F0-02	Motor Rated Current	0.01	Depends on mode	99.99	A	Read only
	This parameter is set to the rated current of the motor (nameplate).					
F0-03	Motor Rated Frequency	0	50.0	500.0	Hz	Read only
	This parameter is set to the rated frequency of the motor (nameplate).					
F0-04	Motor Rated Speed	1	1460	9999	Rpm	Read only
	This parameter is set to the rated speed of the motor (nameplate).					
F0-05	Back EMF Coefficient for PM Motor	0	Depends on mode	999.9	V	Read only
	This parameter is set as the back EMF coefficient of synchronous machine.					
F0-06	Motor Parameter Autotune	0	0	3	-	Read only
	0: No operation. 1: Static parameter identification; 2: Dynamic parameter identification;					
F0-16	Torque upper limit	-200.0	100.0	+200.0	%	Read/write
F0-17	Dead zone compensation	0	1	1	-	Read/write
	0：Disable 1：Enable					
F0-18	Voltage feedback	0	1	1	-	Read/write
	0：Disable 1：Enable					
F0-19	Command Source Selection	0	0	3	-	Read/write
	0: Panel control. Press the RUN key of the inverter to run and press the STOP key to stop. 1: Terminal control. It is directly controlled by the inverter control terminal. By default, DI1 controls forward rotation and DI2 controls reverse rotation. 2. Reserved 3：The system starts automatically after power-on. Use F2-22 to set the delay time.					
F0-20	Main Frequency Source Selection	0	1	9	-	Read only
	0: function code setting, power-off memory 1: panel potentiometer 2：AI1 3~9：reserved					
F0-21	Stop Mode	0	0	1	-	Read/write
	0: Ramp to stop. After the shutdown command is effective, the inverter reduces the output frequency according to the deceleration time and stops after the frequency drops to 0. 1: Coast to stop. After the shutdown command is effective, the inverter immediately stops the output, and the motor stops freely according to the mechanical inertia.					
F0-23	Acceleration Time	0.1	Depends on model	500.0	s	Read/write
	The acceleration time required for the inverter to accelerate from 0 Hz to the upper limit frequency (F0-33).					
F0-24	Deceleration Time	0.1	Depends on model	500.0	s	Read/write

	The deceleration time required for the inverter to decelerate from the upper limit frequency (F0-33) to 0 Hz.					
F0-25	Synchronous Motor Initial Position Detection Mode	0	1	1	-	Read/write
	0: Check before each run. 1: No detection					
F0-26	Synchronous Motor Initial Position Identification Current Initial Value	5	120	180	%	Read only
F0-27	Main Menu Display Auto Switching	0	1	1	-	Read/write
	0: Switching is prohibited. When the display is switched from the frequency interface to other interfaces, it is forbidden to automatically switch back to the frequency interface. 1: Automatic switching. When the display is switched from the frequency interface to other interfaces, it will automatically switch back to the frequency interface after 10 seconds.					
F0-28	Parameter modification attribute	0	0	1	-	Read/write
	0: Allow modification. 1. No modification is allowed. When this parameter is set to 1, the inverter is forbidden to modify the parameter, and it must be set to 0 before it can be changed.					
F0-29	User password	0	0	9999	-	Read/write
	The inverter provides the user password protection function. When F6-03 is SET to non-zero, it is the user password. The password protection will take effect after exiting the function code editing state. Press the SET key again, "-------" will be displayed. You must input the user password correctly to enter the parameter interface.					
F0-30	Reserved					
F0-31	Reset to Factory Parameters	0	0	9999	-	Read only
	1: Reset the factory settings.					
F0-32	Load speed display coefficient			9.999	-	
F0-33	Frequency Upper limit	F0-34	50.0	500.0	Hz	Read/write
	Inverter maximum output frequency					
F0-34	Frequency Lower limit	0.0	0.0	F0-33	Hz	Read/write
	Inverter minimum output frequency					
F0-35	Plugging current value	0	100	200	A	Read/write
F0-36	Lock-turn judgment time	0.0	3.0	999.9	0.1s	Read/write

1.1.2 F2 Parameter Group

Parameter	Description	Minimum Value	Default Value	Maximum Value	Unit	Change Permission
F2-00	DI1 Terminal Function Selection	0	1	31	-	Read only
	0: No function 1: Forward running FWD 2: Reverse running REV 3: Three-wire mode running control 4: Two-wire/three-wire switching 5: Forward jog 6: Reverse jog 7: Fault reset					

	8: Multi-segment command terminal 1 9: Multi-segment command terminal 2 10: Multi-segment command terminal 3 11: External stop terminal, which is only valid for panel control. 12: Coast stop, that is, blocking PWM output. 13: External terminal shutdown (deceleration time 2, which is valid at any time) 14: Emergency stop 15: DC braking 16: Deceleration DC braking 17: External fault input (normally open) 18: External fault normally closed input 19: Running Command switch terminal 1 F0-19=1 or 2 is effective. 20: Command source switching terminal 2 Used for switching between external terminal control and communication command control; If the current state is set to external terminal control, when this terminal is valid, switch to communication command control and vice versa. 21: Terminal UP 22: Terminal DOWN 23: UP/DOWN setting is cleared. 24: Frequency source switching 25: Switch between the main frequency source and the preset frequency. 26: Switch between auxiliary frequency source and preset frequency. 27: Effective terminal for frequency setting. 28: Acceleration and deceleration are prohibited. 29: Acceleration and deceleration time selection terminal 1 30: PLC status reset. 31: Speed control/torque control switching.					
F2-02	AI 1 Gain	0	1.00	20.00	-	Read only
	Analog input AI1 signal gain multiple, maximum gain up to 20 times. For example, using AI1 as the target frequency setting, F0-07=0: 0-10V,this parameter is set to 2.00; Then a 5V input signal allows the converter to operate at its maximum frequency.					
F2-03	AI 1 Offset	-10.0	0	10.0	V	Read only
	Analog input 1 signal offset value, the maximum offset can be +/-10V.For example, if AI1 is set as the target frequency, F0-07=0: 0-10V,this parameter is set to 2.00; Then the 8V input signal can enable the frequency converter to operate at the maximum frequency.When F0-07 is set to 1:0-20mA, 10.0V of this parameter indicates a bias of 20mA, and the rest correspond linearly. When F0-07 is set to 2:4-20mA, 10.0V of this parameter indicates a bias of 16mA, and the rest correspond linearly. Internal calculated value of AI1 = actual input *F1-24+F1-25					
F2-04	Preset frequency	0.0	50.0	F0-09	Hz	Read/write
	When the target frequency setting mode is selected as "Digital Setting", this parameter sets the initial value for the target frequency of the inverter. After the target frequency is modified by the "Up/Down" key, this parameter will become invalid temporarily, unless this parameter is modified again.					
F2-05	Frequency Running action below the lower limit frequency	0	0	2	-	Read/write
	0：Run at the lower limit frequency 1：Stop 2：Zero speed operation					

	When the set frequency is lower than the lower limit frequency, the running state of the converter can be selected by this parameter.					
F2-06	Jump frequency 1	0.0	0.0	F0-33	Hz	Read/write
	When the target frequency is set within the range of jump frequency, the final operating frequency of the converter will avoid the range and run stably with the boundary value outside the range. The frequency resonance point can be used to avoid mechanical equipment. This parameter is the reference value of the jump frequency. The range is set by F2-07.					
F2-07	Jump frequency amplitude	0.0	0.0	F0-33	Hz	Read/write
	Combined with F2-06, set specific jump frequency range (F2-06-F2-07) ~ (F2-06+ F2-07). After this range is enabled, the actual operating frequency of the converter is a hysteresis curve: when the frequency rises from low to within the range, the frequency remains at the low frequency boundary; When the frequency decreases from high to within the range, the frequency is maintained at the high frequency boundary;					
F2-08	Reserved					
F2-09	Set the cumulative power-on arrival time	0	0	9999	H	Read/write
	When the accumulated power-on time of the frequency converter exceeds this value, the frequency converter reports Err20 as a fault. This parameter is invalid when set to 0.					
F2-10	The carrier frequency is adjusted with temperature	0	1	1	-	Read/write
	When the frequency converter detects that the heat sink temperature is high, it automatically reduces the carrier frequency to reduce the temperature rise of the frequency converter. When the heat sink temperature is low, the carrier frequency gradually returns to the set value. If the value is set to 0, this parameter is disabled.					
F2-11	Carrier frequency adjusts the starting temperature	0	70	150	℃	Read/write
	When the frequency converter detects that the temperature of the radiator exceeds the set value of this parameter, the F2-10 function is effective and the carrier frequency is adjusted with the temperature.					
F2-12	Carrier frequency adjustment time	0.1	20.0	50.0	s	Read/write
	When the frequency converter detects that the heat sink temperature exceeds the set value of F2-11 parameter, the carrier frequency starts to adjust after the set time of F2-12.					
F2-14	Fault enable select	0000	1111	1111	-	Read/write
	0：Prohibited protection 1：Enable protection One bit: overload protection selection of motor Tens place: output phase protection selection Hundred bit: input phase protection selection 1000 bit: Short circuit protection on the ground during power-on.					
F2-15	Number of automatic fault resets	0	0	20	time s	Read/write
	Number of times the frequency converter can automatically reset after fault alarm. After this number is exceeded, the frequency converter remains in the fault state. If the value is set to 0, the automatic reset function is not enabled.					
F2-16	Interval between automatic fault reset	0.1	1.0	100.0	s	Read/write
	The waiting time between the frequency converter fault alarm and the automatic fault reset enabled.					
F2-22	Automatic start delay time	0	150	3600	s	Read/write
F2-23	Heat dissipation fan running mode	0	1	1	-	Read/write
	0: The fan runs when the temperature is higher than 45 ° C. 1: The inverter runs and the fan starts immediately.					

F2-24	DI2 Terminal function Select	0	2	35	-	Read only
	Same as DI1（F2-00）					

1.1.3 F3 Parameter Group

Parameter	Description	Minimum Value	Default Value	Maximum Value	Unit	Change Permission
F3-00	Motor control mode	0	0	2	-	Read only
	0：V/F control 1：Reserved 2: synchronous motor without speed sensor vector control (FMSVC). After SVC control is selected, F8-07 parameters need to be identified.					
F3-01	Torque Boost	0	Depends on model	30.0	%	Read/write
	Under the V/F control mode, the output torque of the motor is relatively low in low frequency operation, which can increase the value of this parameter; However, the torque boost setting is too large, the motor is easy to overheat, and the inverter is easy to overcurrent. When the load is heavy and the starting torque of the motor is insufficient, it is recommended to increase this parameter. When the load is light, the torque can be reduced.					
F3-02	Torque Boost Cut-off Frequency	0.0	50.0	F0-33	Hz	Read only
	Below this frequency, the torque boost is effective, and beyond this set frequency, the torque boost fails.					
F3-03	VF Over-current Stall Action Current	50	150	200	%	Read only
F3-04	VF Overvoltage Stall Action Voltage	200.0	Depends on model	2000.0	V	Read only
	VF overvoltage stall running voltage.					
F3-05	Speed Tracking Start	0	0	1	-	Read only
	0: Direct startup 1: Speed tracking starts When the inverter starts, there is a short time delay to detect the motor speed and control it from the current motor speed.					
F3-06	Speed Tracking Current Loop Kp	0	Depends on model	1000	-	Read/write
	F3-06-F3-09 parameters need not be set by users.					
F3-07	Speed Tracking Current Loop ki	0	Depends on model	1000	-	Read/write
F3-08	Speed Tracking Current Value	30	Depends on model	200	%	Read only
F3-09	Speed Tracking Current Lower Limit	5	30	100	%	Read only

2.1 Monitoring Parameter

The monitoring parameters of the inverter can only be read and cannot be modified.

Parameter	Description	Unit	Communication Address	Parameter Attribute
U0-00	Inverter Running State 1: forward 2: reverse 3: stop	-	1000H	Read only
U0-01	Fault Code	-	1001H	Read only
U0-02	Set Frequency	0.1Hz	1002H	Read only
U0-03	Running Frequency	0.1Hz	1003H	Read only
U0-04	Running Speed	Rpm	1004H	Read only
U0-05	Output Voltage	V	1005H	Read only
U0-06	Output Current	0.1A	1006H	Read only
U0-07	Output Power	0.1KW	1007H	Read only
U0-08	DC Bus Voltage	V	1008H	Read only
U0-09	Output Torque	0.1Nm	1009H	Read only

3.1 Faults and Solutions

Fault Name	Display	Possible Causes	Solutions
Inverter Unit Protection	Err01	1. The output circuit is grounded or short circuited. 2. The connecting cable of the motor is too long 3. The inverter module is faulty	1. Eliminate external faults. 2. Install a reactor or an output filter 3. Contact for technical support
Overcurrent During Acceleration	Err02	1. The control method is vector and no parameter identification. 2. The acceleration time is too short 3. Manual torque boost or V/F curve is not appropriate 4. The inverter model is of too small power class.	1. Perform the motor auto-tuning. 2. Increase the acceleration time. 3. Adjust the manual torque boost or V/F curve. 4. Select higher power rating inverter
Overcurrent at Constant Speed	Err04	1. The output circuit is grounded or short circuited. 2. The inverter model is of too small power class.	1. Eliminate external faults. 2. Select higher power rating inverter
Overvoltage During Acceleration	Err05	1. The input voltage is too high. 2. The acceleration time is too short.	1. Adjust the voltage to normal range. 2. Increase the acceleration time.

Fault Name	Display	Possible Causes	Solutions
Overvoltage at Constant Speed	Err07	1. The input voltage is too high. 2. An external force drives the motor during running	1. Adjust the voltage to normal range. 2. Cancel the external force or install a braking resistor
Inverter Overload	Err10	1. The load is too heavy or locked rotor occurs on the motor. 2. The inverter model is of too small power class.	1. Reduce the load and check the motor and mechanical condition. 2. Select an inverter of higher power class.
Power Output Phase Loss	Err13	The module is faulty	Contact for Technical support
Module Overheat	Err14	1. The ambient temperature is too high. 2. The air filter is blocked. 3. The fan is damaged	1. Lower the ambient temperature. 2. Clean the air filter. 3. Replace the damaged fan.

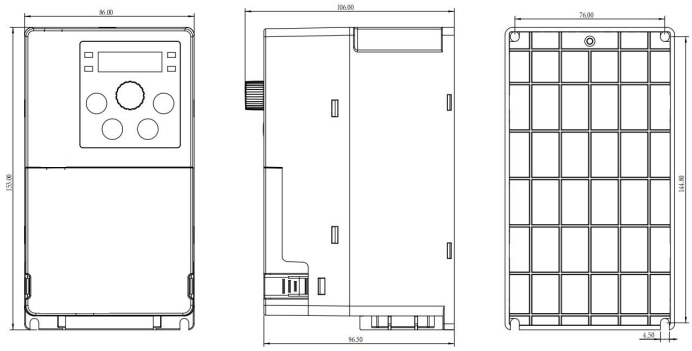
Warranty Card

Customer Information	Address:	
	Name:	Contact:
	Postal code:	Tel:
Product Information	Product model:	
	Fuselage Bar code (posted here):	
	Agent name:	
Fault Information		

Certificate

This product has gone through rigorous quality control tests at factory.

Inspector	
Approval Mark	



Type	Terminal	Terminal Name	Function Description
Power Output	+10V-GND	Terminal of 10V power output	Provide +10V power supply for external units, with maximum output current of 10mA. It is generally used as the operating power supply for the external potentiometer. The potentiometer resistance range is 1-5kΩ.
Analog Input	AI1-GND	Analog input terminal 1	1. Input voltage range： DC 0-10V 2. Input impedance： 22kΩ
Digital Input	DI1-COM	Digital Input 1	1. Optical coupling isolation，bipolar input. 2. Input impedance：2.4kΩ.
	DI2-COM	Digital Input 2	

RUN/STOP	Start in keyboard mode Stop in keyboard mode	▲	Increase the data or the funtiion codeparameter the upper and lower keys at the same time to shift
PRGM	Enter or exit the menu Enter the menu to confirm the parameter settings parameter settings press 3 seconds to enter parameter setting	▼	decrease the data or the function codepress the upper and lower keys at the same time to shift