

SSI700 Inverter Mini Vector

SSI700

200V(Three-phase Power supply) 0.4~1.5KW

200V(Three-phase Power supply) 0.4~1.5KW

200V(Three-phase Power supply)0.75~2.2KW



MINI SIMPLE PRACTICAL

SIMPLE RELIABLE

BENEFIT MINIATURE

SSINVERTER
SSI700
MINI VECTOR



This Mini Vector SSI700,Only need simple operate,can realize adjustable speed of mini machinery,energy saving energy conservation.



Advanced drive controlling

New non-sense vector control performance

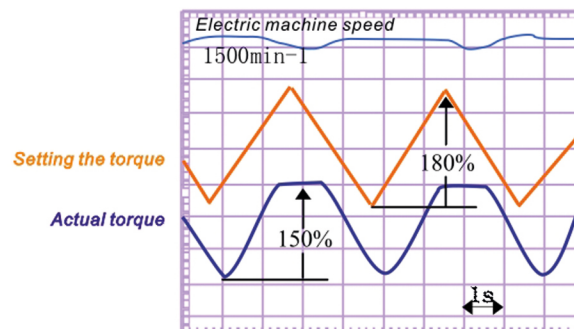
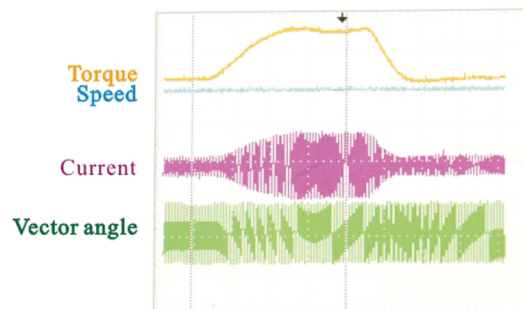
Occupational performance of non-sense vector control, timely lifting load torque response, to satisfy customers broad torque load demand, such as conveyor application and so on.

Instantaneous power-off then restart, with acceleration, deceleration setting, let you have a safe movement in the area of opening loop control.

Function of lean PID control, torque, slip compensation control, allowing you have a optimum performance when adjusting.

Swift variety

Non-sense vector control, torque variety < 20ms



The function of simple PLC

The function of simple PLC, can finish simple combination running of multiple section instruction

Advanced self-learning function

Dynamic and static self-learning function, can give full play to drive performance in either way

Perfect protection function

High accuracy current detection, can finish protecting function precisely and swiftly, complete overload protection (OL/OL1/OL2), over voltage/current stall prevention functional, short circuit to ground protection, abnormal rest, momentary outages tracking function, improve the operation continuity.

Environmental protection performance

Using SPW way, not only can suppress electromagnetic interference, also can reduce noise.

Restore user parameters

When debugging or misoperation resulting parameter confusion, can choose to restore default parameters, can also restore parameters that user conserve before, hard to cause the parameters of chaos

Restore users parameters

Restore default parameters

Ultra low noise

Overload frequency 1KHz~16KHz

Trait

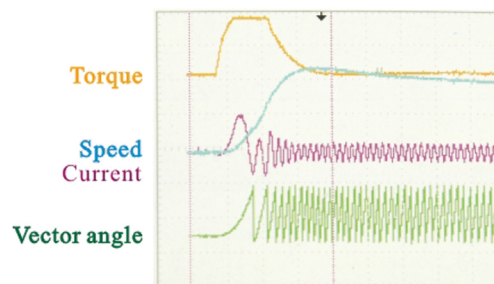
SSI700 Inverter Mini Vector

Provide support for stable operation

The superior torque characteristics

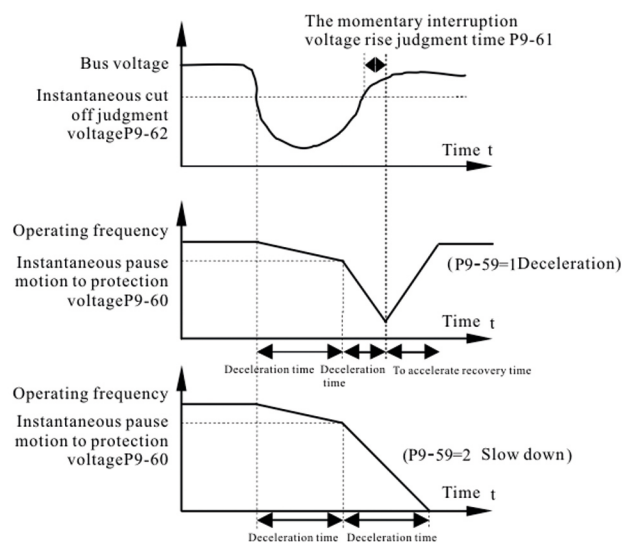
Standard with the current vector control which is the level of the first. High starting torque is achieved 150% /0.5Hz, can also limit torque. In order to maximize the capacity of the motor, is also equipped with a self learning function.

The superior torque characteristics



Even if the load or power fluctuations and even the momentary interruption will continue to run

With perfect of prevention stall function, can effectively prevent the motor stall. Without depending speed sensor can make the motor running state freely and Motor start easily, speed the search function and transient keep running function, can prevent the inverter from transient abnormal trip



Environmental design

With three-paint treatment process about dust-proof, moisture-proof, anti-mildew

Design of wide voltage range

The whole series of independent design

Trait

SSI700 Inverter Mini Vector

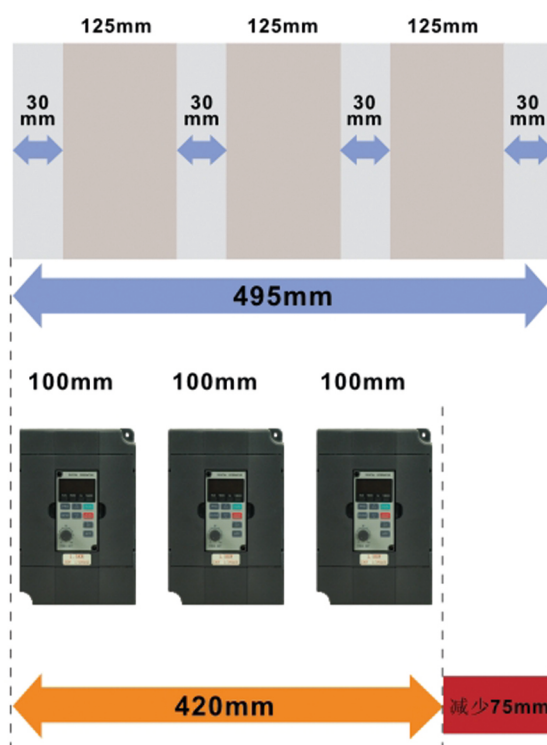
Provide support for stable operation

Mini design

Through parameters simple setting, to meet the customer demand for machinery, ultra small volume can make the control cabinet design compact

The sample set of parallel installation saving space (compared with A900 200V,0.0.75KW)

The 200V 0.775KW exmple



*:On the wall installation requires 30mm space

Frequency setting potentiometer

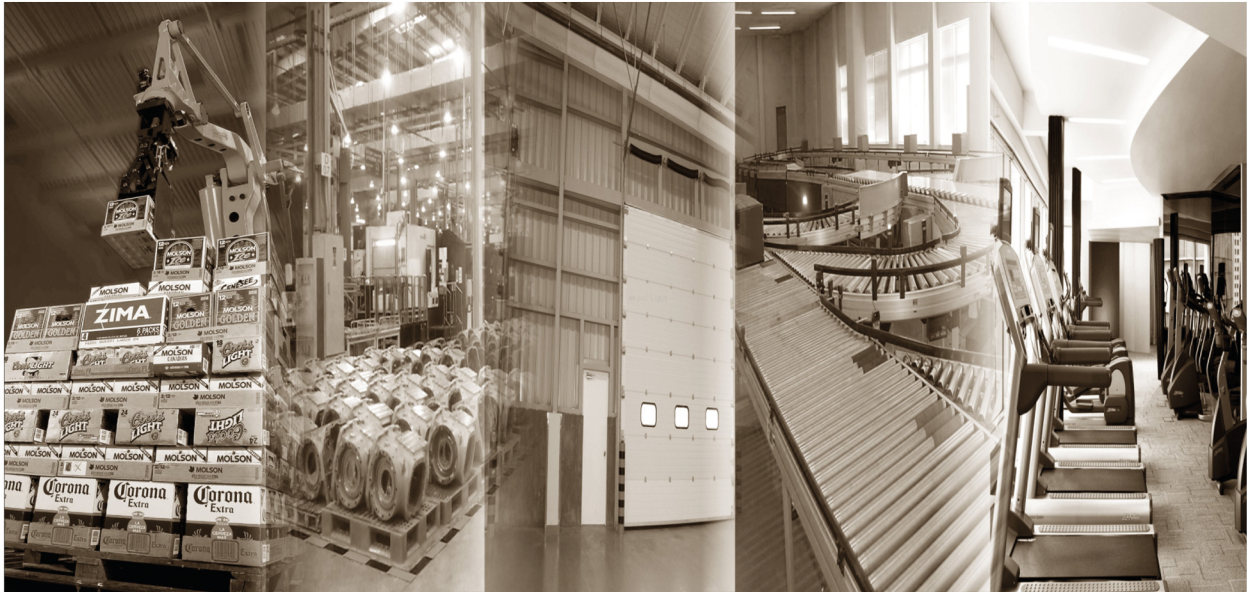
With frequency setting potentiometer: The operating frequency can be adjusted through the potentiometers, so the scene is very convenient to adjust frequency

Frequency setting potentiometer



Trait

Typical applications



Small machinery

Conveyor belt equipment

Application of Multi-speed--provide multi-speed setting to meet the needs of the conveyor belt equipme

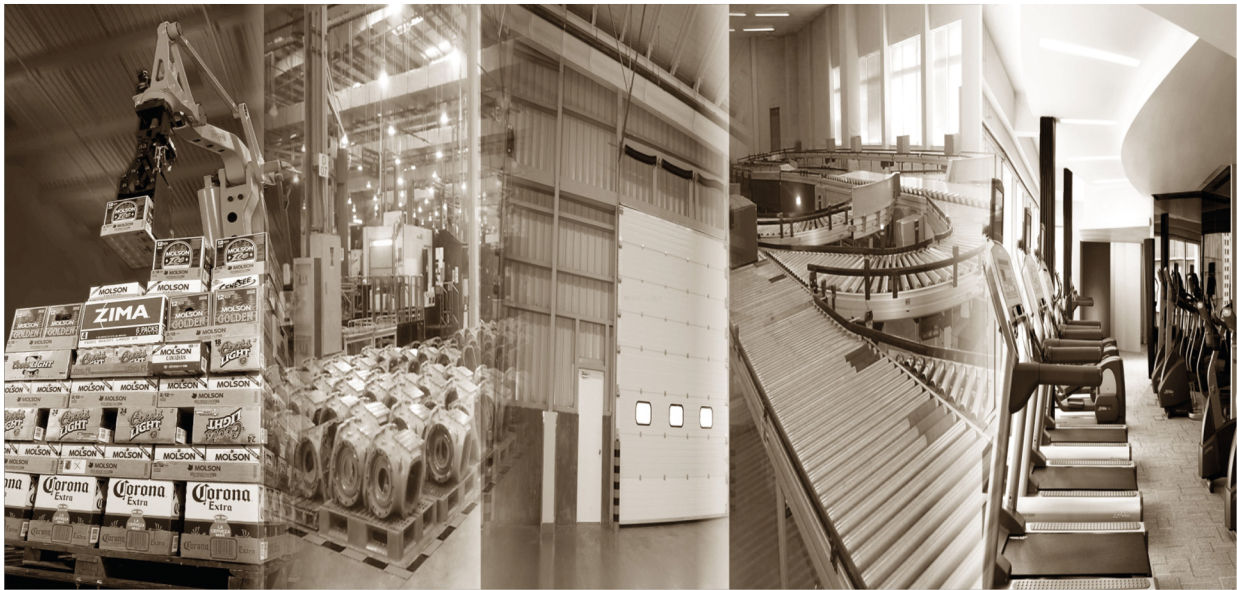


Winding machine

Can use excellent of the automatic acceleration and deceleration function to achieve rapid starting and stopping, increase output and speed



SSInverter
Mini Vector



Small machinery

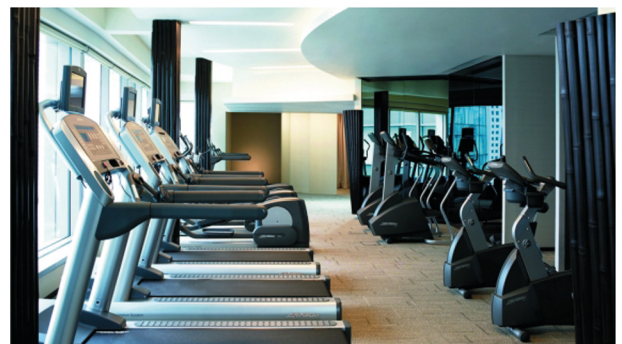
Food machinery



Agricultural machinery



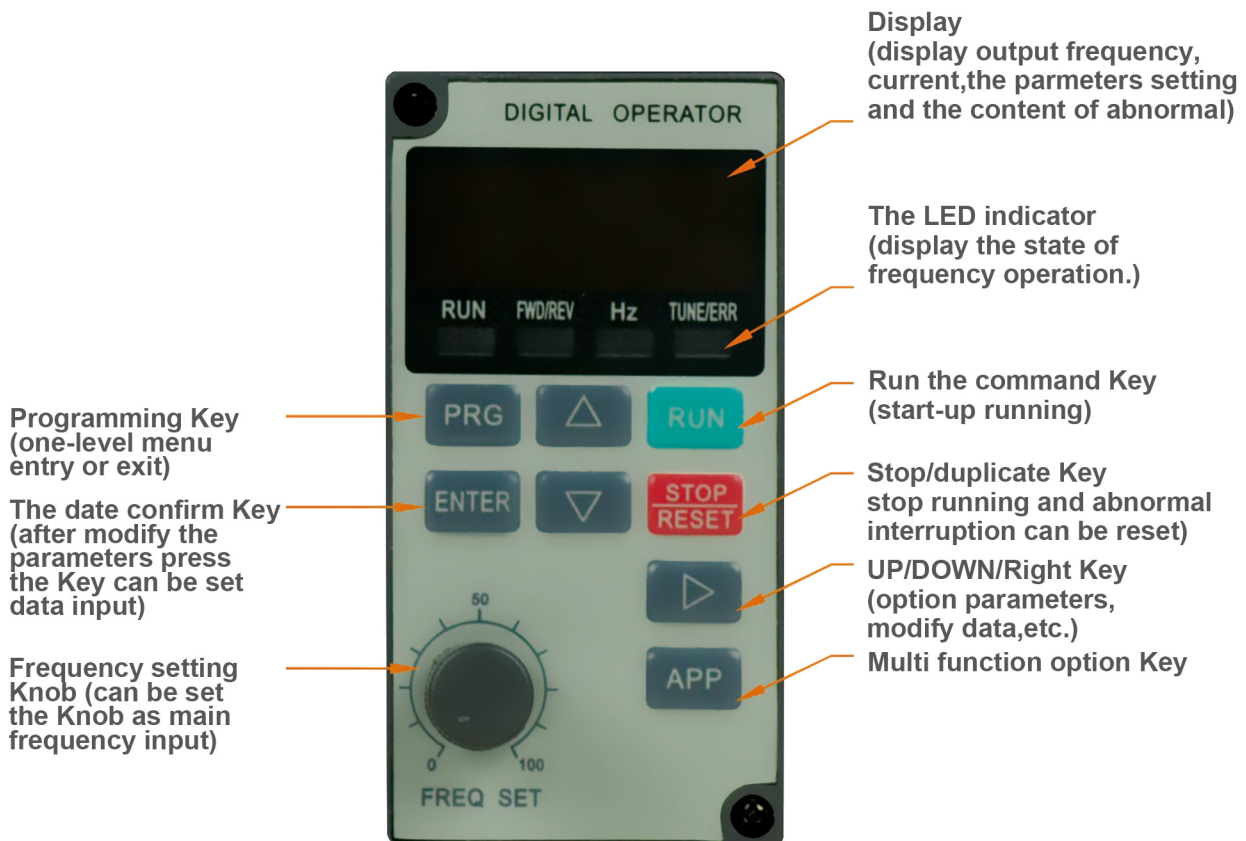
Gymnastical equipment



Method of operation

Excellent of operating performance
Fast setting

All parts of name and function



LED instructions:

Indicator light	Light	Flashing	Put out
Run	Red light indicates running is executed	-	-
FWD/REV	The red light indicates the reverse operation	-	-
Hz	a unit of frequency	-	-
TUNE/ERR	light indicates in a torque control mode	Slow flash means in the tuned), (quick flash means in a fault condition	

SSInverter

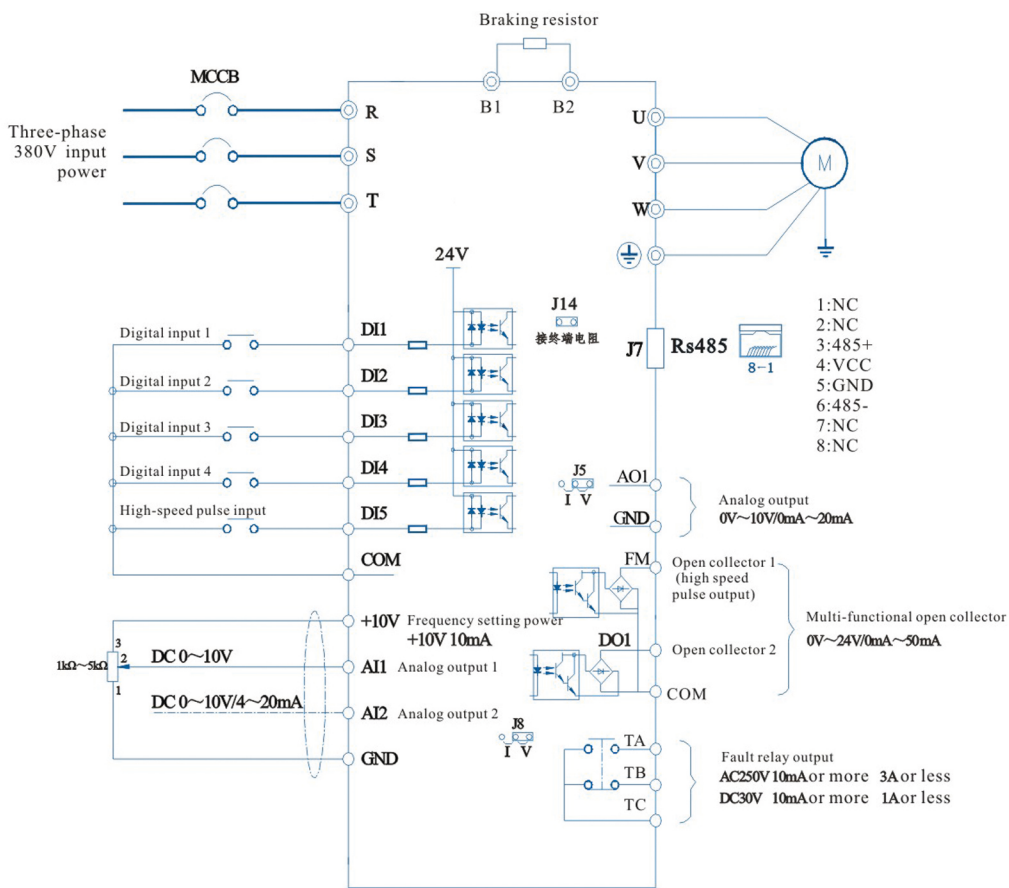
Mini vector

Standard wiring diagram

Part of Inverter wiring part, divided into the main circuit and control circuit. The user can be output / input terminal of the lid opened, this time can see the main circuit terminal and the control circuit terminal, the user must follow the wiring circuit is connected.

The chart below is standard wiring diagram of the SSI700 factory inverter. If only digital control panel operation, only the main circuit terminal wiring .

Example: the input power of three-phase 380V




Note:

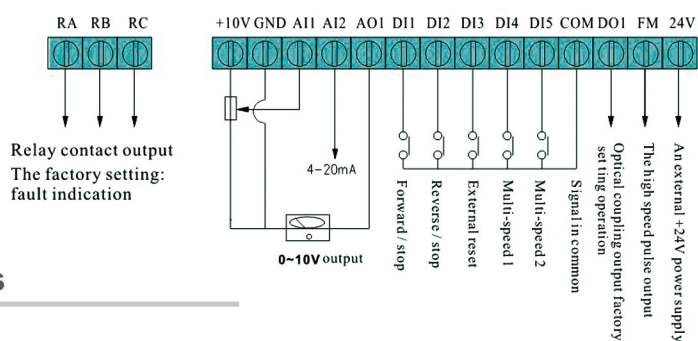
1. Terminal \odot means main circuit terminal, \circ means control circuit terminal
2. Braking resistor according to the needs of users, detail see the braking resistor selection guide.
3. Signal and power lines must separate the line, if the control cable and power cable cross, should as for as possible to make them at an angle of 90 degrees cross. Analog signal lines the best selection of shielded twisted pair, the power cable select the shielding of three core cable (the specification than cable of common motor in bigger)

Terminal wiring diagram

Main circuit terminal marking instructions

	Terminal function description (terminal specification for M3.0)
R/L1,S/L2,T/L3	Main circuit AC power terminal
U/T1,V/T2,,W/T3	Connected to the motor
B1,B2	Brake resistor(optional)connection terminal
	Grounding (avoid high-voltage surge impact and interference)

Control terminal wiring diagram(factory setting)



Control terminal marking instructions

Terminal mark	Terminal name	Function description
DI1	Digital input 1	1: Optocoupler isolation 2: Input impedance
DI2	Digital input 2	
DI3	Digital input 3	
DI4	Digital input 4	
DI5	Digital input 5 (High-speed pulse input terminal)	In addition to a DI1~DI4 function, can also be used as a high-speed pulse input, the maximum input frequency
COM	Digital input common port	The DI1~DI5 digital input common part
+10V-GND	External power supply +10	The external power +10V, the maximum output current: 10mA, generally used for external potentiometer power, potentiometer resistance range: 1KΩ~5KΩ
A11-GND	Analog input terminal 1	1. Input voltage range: DC0~10V, 2 input impedance: 22K
A12-GND	Analog input terminal 2	1. The external power DC0~+10V and control board j8 jumper selection 2. input impedance: input voltage 22KΩ, input current: 500μA
AO1-COM	Digital output terminal	Selected by the control board 15 jumpers, output voltage range :0~10V output current range :0~20mA
DO1-COM	Analog input terminals	Multi-functional digital output terminal, optocoupler isolation bipolar open-collector outputs
FM-COM	High pulse output	By the P5-00 choice of parameters, as the high speed pulse output, the highest frequency to 100KHz when used as open-collector output and same to DO1 function
24V-COM	External power supply +24	External power supply +10V, the maximum output current 20mA
TA-TC	Normally open terminal	Contact driving ability: AC 250V, 3A COSφ=0.4。 DC 30V, 1A
TB-TC	Normally closed terminal	

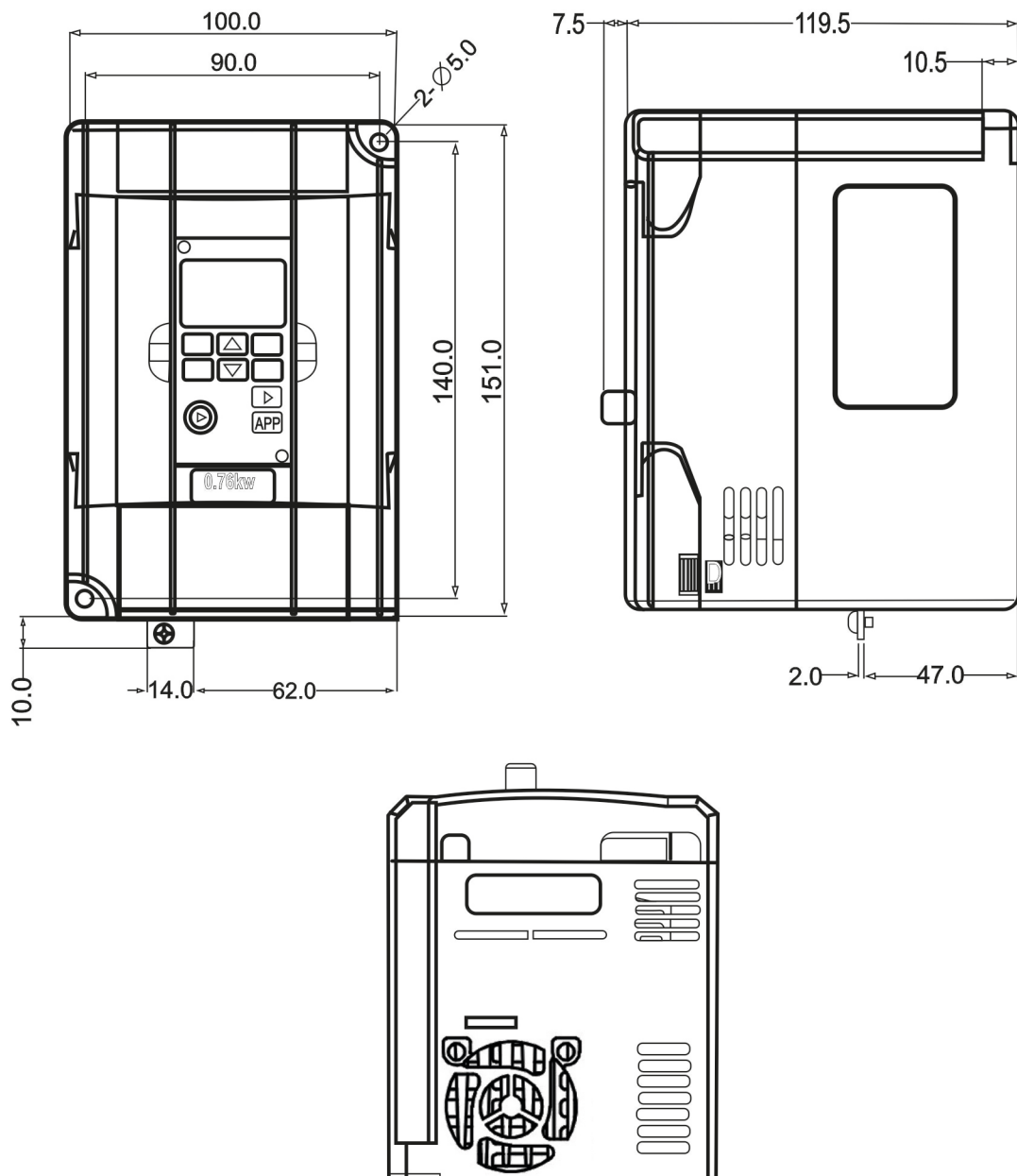
Terminal wiring diagram

Main circuit terminal marking instructions

Voltage class		200VAC			400VAC			
A700		0R4	0R7	1R5	0R7	1R7	2R2	
Motor output rated power(KW)		0.4	0.75	1.5	0.75	1.5	2.2	
电机输出额定功率 (HP)		0.5	1.0	2.0	1.0	2.0	3.0	
Output	Rated output capacity(KVA)	1.5	3.0	4.0	1.5	3.0	4.0	
	Rated output current(A)	2.1	3.8	5.1	2.1	3.8	5.1	
	The maximum output voltage (V)	Corresponding input voltage						
The highest frequency		V/F control :0~3200Hz ,vector control:0~320Hz						
Carrier frequency		0.5KHz~16KHz;according to the load characteristics,can be adjusted carrier frequency automatically.						
The input frequency resolution		Digital setting:0.01Hz;simulation setting:the highest frequency*0.025%						
Control mode		Open loop vector control(SVC),V/F control						
Starting torque		0.5Hz/150% (SVC)						
Speed range		1:100 (SVC)						
The steady speed precision		+/-0.5%(SVC)						
Overload capacity		150%rated current 60s;180% rated current 3s;						
Torque boost		Automatic torque boost>manual torque boost0.1%~30.0%						
V/F curve		In three ways:straight,multi-point type ,square type,						
Personalized function	Acceleration and deceleration curve	linear or S cure acceleration and deceleration mode: four Kinds of acceleration and deceleration time; acceleration and deceleration time range 0.0~6500.0s						
	DC brake	DC braking frequency:0.00Hz~the maximum frequency;the braking time :0.0s~36.0s, braking action current value:0.0%~100.0%						
	Motor-driven control	Dynamic frequency range:0.00Hz~50.00Hz;motor-driven acceleration and deceleration time:0.0s~6500.0s						
	Simple PLC,multi-speed operation	Through the built-in PLC or control terminal to achieve 16 speed at most						
	Built-in PID	Can be convenient to realize closed-loop control of process control system)						
	Automatic voltage regulator(AVR)	When the power voltage changes,automatically keep the output voltage constant						
	Overvoltage and overcurrent stall control	Current and voltage automatically limit during the operation,prevent frequent over-voltage and over-current trip						
	Fast current Limiting function	Maximum limit reduce overcurrent faults,protect the inverter operation						
	Torque limit and control	`excavator` characteristic,the automatic torque limit during the operation,pravent frequency over-current trip						
	Power on peripheral equipment safety self-inspection	can be realized on the peripheral devices safety inspection,such as grounding,short						
	Common DC bus function	can realized multiple inverters of common DC bus function						
	Textile swing frequency control	multiple delta frequency control						
	Timing control	timing control function:set the time range 0h~65535h						
	Run the command channel	three channels:Operation panel given,control terminal given,seial communication port terminals are given. Through a variety of mode switching						
	The frequency of the source	total of 10 Kinds of frequency source:given digital,analog voltage given,analog current given,pulse given, serial port given.through a variety of mode switching)						
	Auxiliary frequency source	10kind of auxiliary frequency source.Flexible to realize the frequency tuning,frequency synthesis						
	The input terminal	five digital input,one may make the high speed pulse input,up to a maximum of 100KHz; two analog input terminals,one can only be used as voltage input,another can be used as a voltage or current input						
	The output terminal	a high-speed pulse output terminal (optional for open collector type), 0KHz~100KHz square wave signal output, can realiz output frequency setting,the output frequency and other physical quantity ; an analog output terminals,respectively; the optional 0.4mA~20m Ahuo 0/2V~10V,the output can be set frequency, the output frequency and other physical quantity,						
	Environment	The use of occasions	indoor,not direct sunlight,no dust , corrosive gas,flammable gas,oil mist,water vapor,water or salt etc.					
		Altitude	below 1000m					
The environment temperature		-10C~+40C(The environment temperature At 40C~50C ambient tempera,amunt to use)						
Humidity		below 95%RH,no beads of condensation						
Vibration		below 5.9m/s2(0.6g)						
Storage temperature	-20C~+60C							

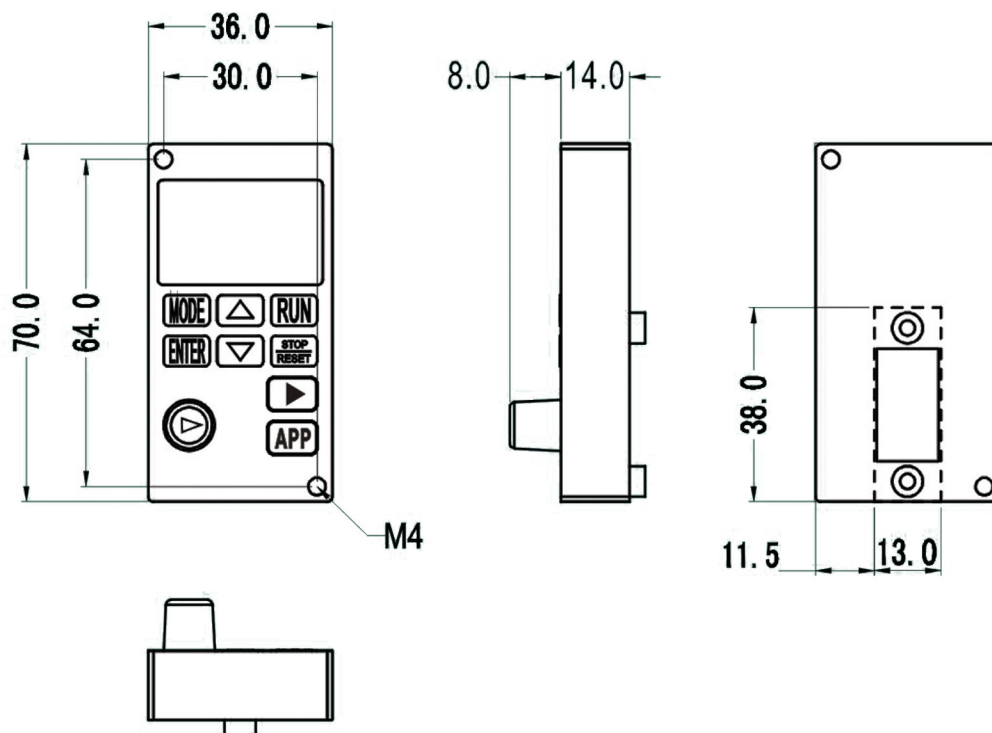
Outline dimension

Machine outline and installation (unit:mm)



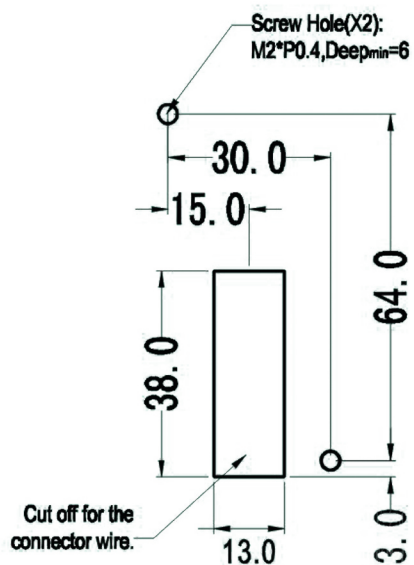
SSInverter Mini vector

Operating apparatus outline dimension(unit:mm)



* Operating apparatus -pulling out instructions A

Mounting Panel A



Product assurance

Warranty

Solemn promise:

Starting from the date of the users to purchase the products of our company (vendor), Customer can enjoy the following after sale service:

1. Starting from the date of the users to purchase the products of our company, customer can enjoy one year of free equipment warranty(except exports sold abroad and nonstandard product)
2. Starting from the date of the users to purchase the products of our company, if any quality problems in one months, we promise returned or replacement,repair Kits
3. Starting from the date of the users to purchase the products of our company, if any quality problems in three months,we promise replacement,repair Kits
4. Starting from the date of the users to purchase the products of our company,customer can enjoy a pay-needed maintenance service for life
5. Escape clause:product failures due to the following causes are of range of free equipment warranty (one year):
 - 1) The breakdown caused by the manipulation that has not follow the request of product manual
 - 2) Failures caused by repair the product and modify the product without authorization
 - 3) Failures caused by using beyond the stand range
 - 4) Failures cause by bad environment conditions
 - 5) Failures caused by earthquake,fire hazard,lightning stroke,other natural disasters.
 - 6) Failures damaged in the course of transportation(transportation selection by the customer,our company can provide the service of transportation)
6. In the following situations,our company have the right to provide support services:
 - 1) The trademark damaged or cannot be recognized
 - 2) Failed to meet the payment requirement
 - 3) Failures caused by repair the product and modify the product without authorization

Beyond the Line of Duty

Because of the fault of the company`s products, bring your company or the customer of your company the opportunity loss,
and the damage cause by your company`s products, whether in the guarantee period, are not belong to scope.
of the guarantee



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