



Application:



wire-electrode cutting machine



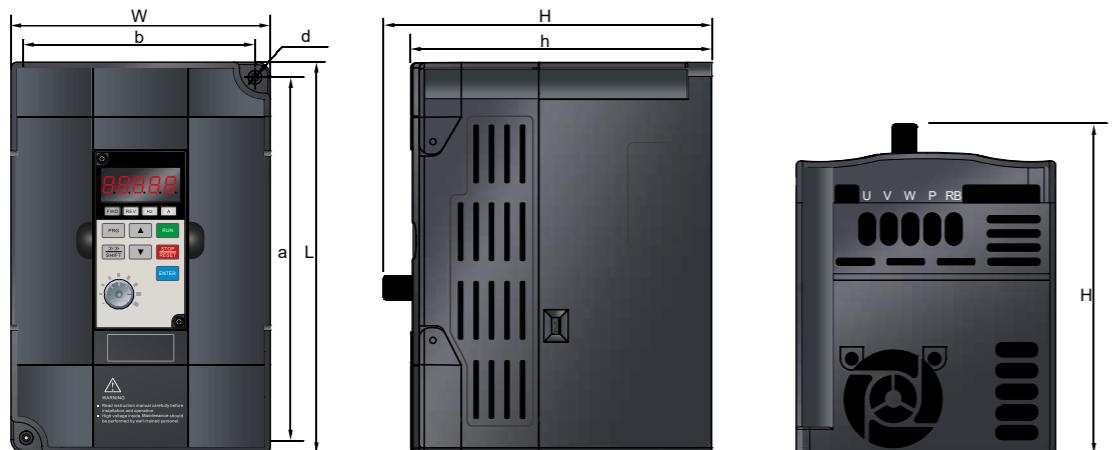
mini-machine tool



agriculture irrigation equipment

Application: wire-electrode cutting machine, mini-machine tool, small assembly equipment, agriculture irrigation equipment and many more.

Specification and size: (1M2 - 1M3)



Model	Voltage (V)	Power (kW)	Input current (A)	Output current (A)	Dimension(mm)				Installation size (mm)			Base		
					L	W	H	h	a	b	d			
JI160-0R4G1(Z)	single phase 220V ±10%	0.4	5.4	2.5	142	85	122.8	112	130	73	Ø5.3	1M2		
JI160-0R7G1(Z)		0.75	8.2	4.0										
JI160-1R5G1(Z)		1.5	14.0	7.0		101	127.5	116.6	139.7	88.7				
JI160-2R2G1(Z)		2.2	23.0	10.0										
JI160-0R4G2(Z)	three phase 220V ±10%	0.4	4.1	2.5	142	85	122.8	112	130	73	Ø5.3	1M2		
JI160-0R7G2(Z)		0.75	5.3	4.0										
JI160-1R5G2(Z)		1.5	8.0	7.0	152	101	127.5	116.6	139.7	88.7				
JI160-2R2G2Z)		2.2	11.8	10.0										
JI160-0R4G3Z	three phase 380V ±10%	0.4	2.0	1.2	152	101	127.5	116.6	139.7	88.7	Ø5.3	1M3		
JI160-0R7G3Z		0.75	4.3	2.5										
JI160-1R5G3Z		1.5	5.0	3.8										
JI160-2R2G3Z		2.2	5.8	5.1										
JI160-3R7G3Z		3.7	10.0	8.5										



JI160 series

High-performance economical vector control inverter



Range of capacity:

Power range: 0.4 - 3.7kW

Rated frequency: 50Hz / 60Hz

Voltage level: 1-phase 220V

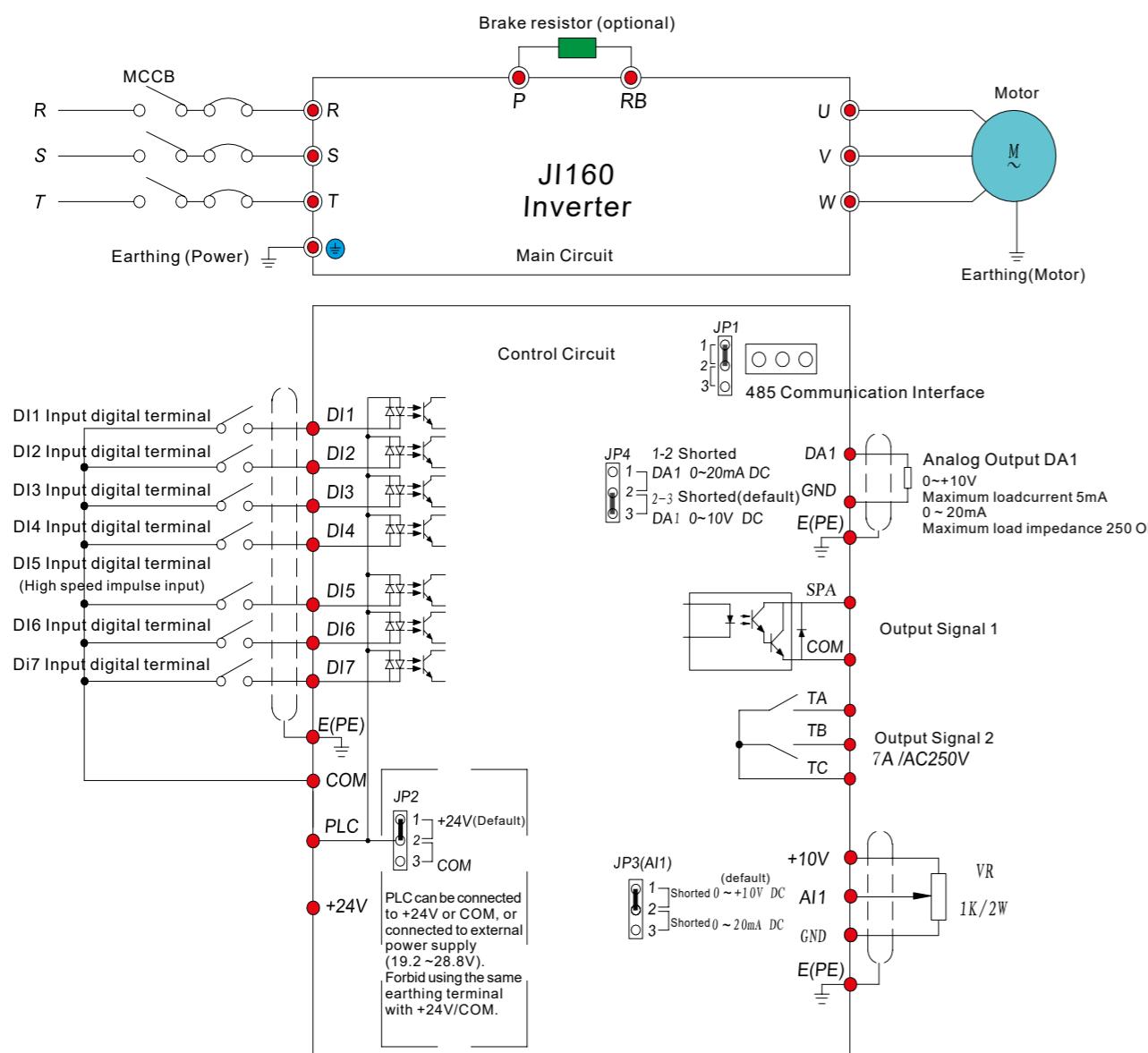
3-phase 220V

3-phase 380V

Product orientation:

JI160 series frequency inverters are designed based on a new software and hardware platform. Which is a type of high performance, compact size, attractively priced and durable economic vector control frequency inverter. Including low-speed and high-torque, perfect protective functions, which is especially used for mini-machines, small automatic production lines and so on.

Wiring diagram:



Description of control circuit terminals:

Category	Symbol	Name	Function
Power supply	+10V-DND +24V-COM PLC	External+10V power supply External+24V power supply External power input terminal	Output +10V power supply, maximum output current: 10mA Generally it is used as power supply for an external potentiometer, potentiometer resistance range: 1kΩ to 5kΩ Output +24V power supply, is generally used as power supply of digital input and output terminals and external sensor. Maximum output current: 200mA When external signal is used to drive, please unplug JP2 jumpers, PLC must be connected to external power supply, and to +24V (default)
Analog input	AI1-DND	Analog input terminal 1	1. Input range: (DC 0V to 10V/0~20mA), depends on the selected J3 jumper on control panel 2. Input impedance: 20kΩ with voltage input, 500Ω with current input
Digital input	DI1 DI2 DI3 DI4 DI5 DI6 DI7	Digital input 1 Digital input 2 Digital input 3 Digital input 4 Digital input 5 Digital input 6 Digital input 7	1. Opto-coupler isolation, compatible with bipolar input 2. Input impedance: 3.3kΩ 3. Voltage range with level input: 24V±20% 4. DI1 to DI7 drive manner is controlled by JP2, when external power supply is used to drive, please unplug JP2 jumpers forward order Except terminal function DI1~DI4.DI6, can also be used as high-speed pulse input channels. Maximum input frequency: 100kHz
Analog output	DI1-DND	Analog output 1	The selected JP4 jumper on control panel determines voltage or current output Output voltage range: 0V to 10V, output current range: 0mA to 20mA
Digital Output	SPA-COM	Digital Output 1	PTO-coupler isolation, bipolar open collector output Output voltage range: 0V to 24V, output current range: 0mA to 50mA
Relay output	TA-TA TB-TB	Normally open terminal Normally closed terminal	Relay output: normal-opened contact TA; normal-closed contact TB; TC common terminal. Output function is set by F2.03. Contact capacity: 7A/AC250V
Internal Rs485	485+ 485-	Differential signal positive terminal Differential signal negative terminal	485 communication interface, differential signal port 485 communication interface, 485 communication interface standard use twisted pair or shielded wire JP1 jumper to decide whether to connect terminal resistance

Technical features:

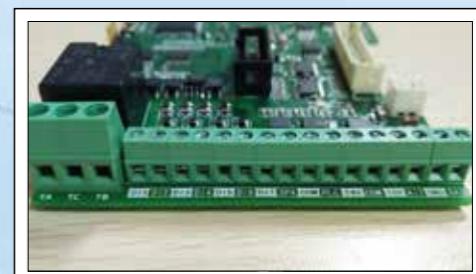
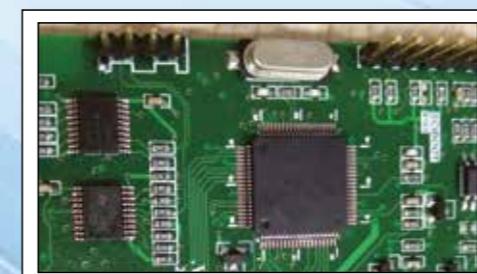
Control system: DSP core processor of high performance vector control, power IC MITSUBISHI IPM module and INFINEON PIM integration module;

Control terminal configuration: 7 ports digital input or input pulse, 2 ports digital output (SPA and a relay), one analog input, one analog output; Standard RS485 communication terminal, for PC and Internet communication;

Output signal: 42 kinds of signals are available;

Frequency set: 8 kinds of frequency set way, including DC ~ 10V, 0-20mA, mA range can be adjusted;

Protection function: over-voltage protection, under-voltage protection, over current protection, overload protection, overheating protection, over-volt speed loss protection, external fault protection, communication error, PID feedback signal abnormal protection.



Terminals description:

