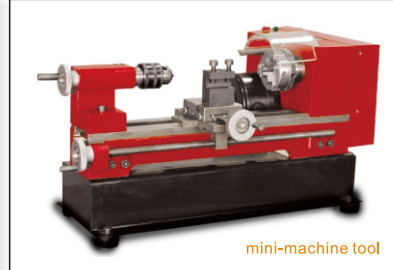
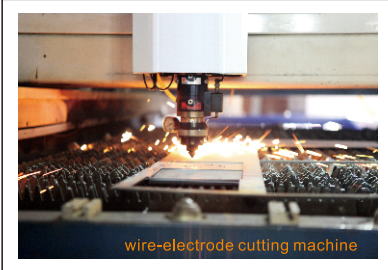


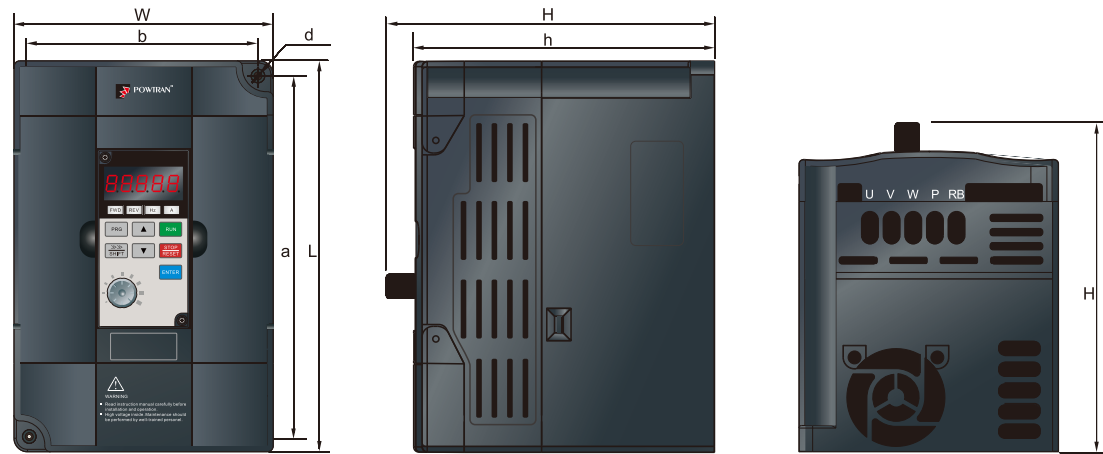


Application:



Application: wire-electrode cutting machine, mini-machine tool, small assembly equipment, agriculture irrigation equipment

Specification and size: (1M2 - 1M3)



Model	Voltage (V)	Power (KW)	Input current (A)	Output current (A)	Dimension(mm)				Instationsize(mm)			Base
					L	W	H	h	a	b	d	
PI160-0R4G1(Z)	single phase 220V ±10%	0.4	5.4	2.5	142	85	122.8	112	130	73	Ø5.3	1M2
PI160-0R7G1(Z)		0.75	8.2	4.0								
PI160-1R5G1(Z)		1.5	14.0	7.0								
PI160-2R2G1(Z)		2.2	23.0	10								
PI160-0R4G2(Z)	three phase 220V ±10%	0.4	4.1	2.5	142	85	122.8	112	130	73	Ø5.3	1M2
PI160-0R7G2(Z)		0.75	5.3	4.0								
PI160-1R5G2(Z)		1.5	8.0	7.0								
PI160-2R2G2(Z)		2.2	11.8	10.0								
PI160-0R4G3Z	three phase 380V ±10%	0.4	2.0	1.2	152	101	127.5	116.6	139.7	88.7	Ø5.3	1M3
PI160-0R7G3Z		0.75	4.3	2.5								
PI160-1R5G3Z		1.5	5.0	3.8								
PI160-2R2G3Z		2.2	5.8	5.1								
PI160-3R7G3Z		3.7	10	8.5								

Hotline: 0086-0755-29630738

201604EV1.0



PI160 series

Economical vector control inverter

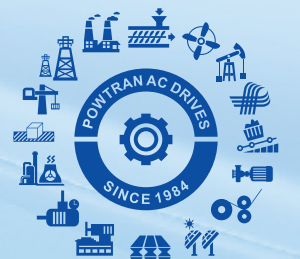


Range of capacity:

Power range:0.4-3.7KW
 Maximum frequency:3200HZ
 Voltage level:single phase 220V
 three phase 220V
 three phase 380V

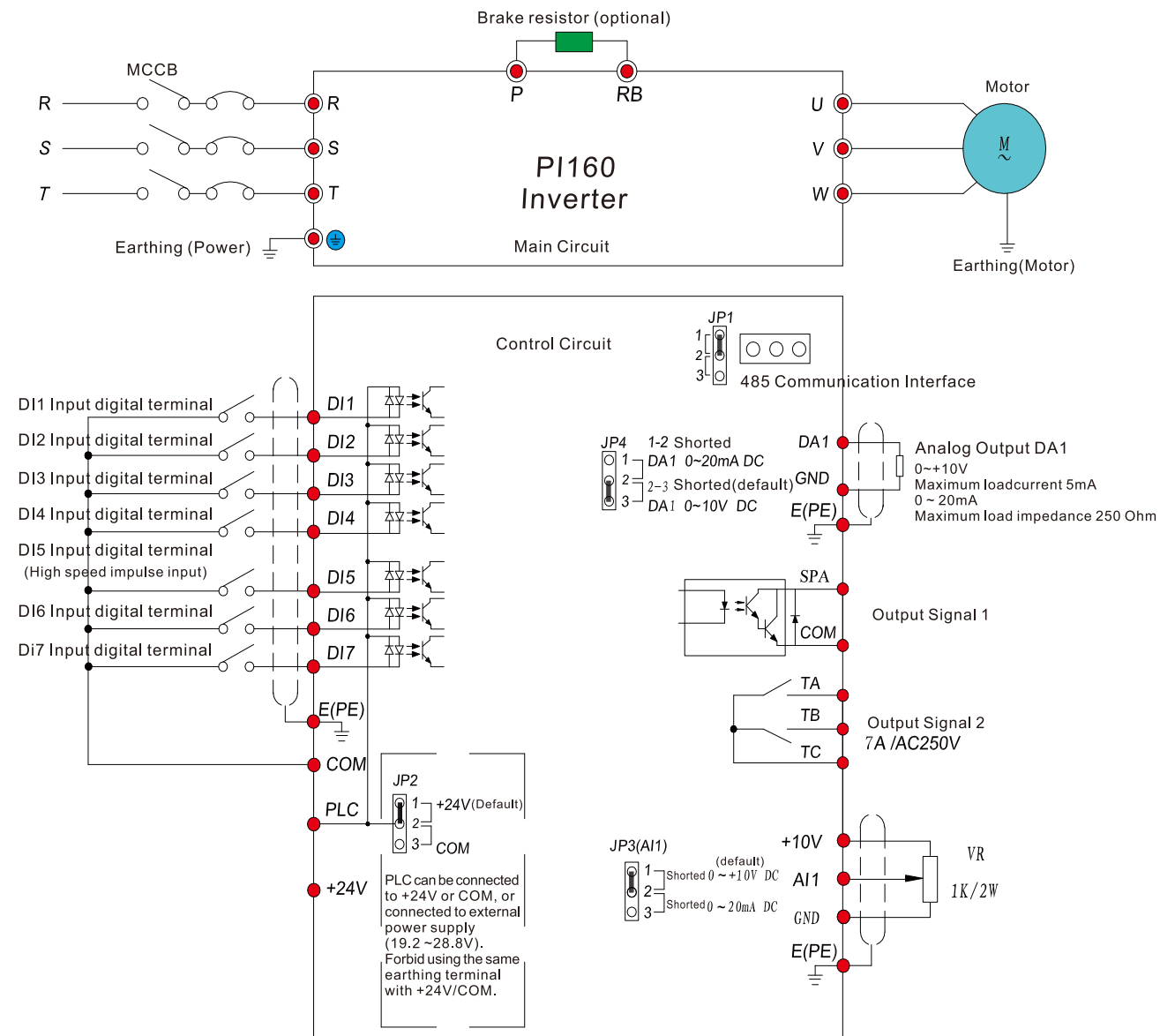
Product orientation:

PI160 series frequency inverters were designed base on new software and hardware platform by POWTRAN, which is a type of high performance, compact size, attractive and durable economic vector control frequency inverter, with low-speed and high-torque, perfect protective functions, especially used for mini-machines, small automatic production lines and so on.



www.powtran.com
 Email:info@powtran.com

Wiring diagram:



Description of control circuit terminals:

Category	Symbol	Name	Function
Power supply	+10V-DND	External +10V power supply	Output +10V power supply, maximum output current: 10mA Generally it is used as power supply of external potentiometer, potentiometer resistance range: 1kΩ to 5kΩ
	+24V-COM	External+24V power supply	Output +24V power supply, generally it is used as power supply of digital input and output terminals and external sensor. Maximum output current: 200mA
	PLC	External power input terminal	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	Digital input 1	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
	DI2	Digital input 2	
	DI3	Digital input 3	
	DI4	Digital input 4	
	DI6	Digital input 6	forward order
DI7	Digital input 7	High-speed pulse input terminals	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-TC	Normally open 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
	TB-TC	Normally closed terminal	
Internal Rs485	485+	Differential signal positive 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
	485-	Differential signal negative terminal	

Technical features:

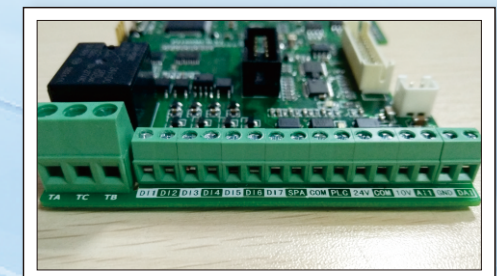
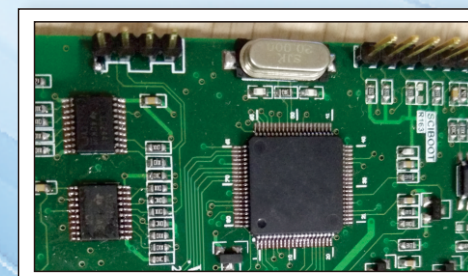
Control system: adopt DSP core processor of high performance vector control, power IC use MITSUBISHI IPM module and INFINEON PIM integration module ;

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, realize the PC and Internet communication;

The 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:

