

INOMAX

FREQUENCY INVERTER CATALOG

INOMAX

Build your trust of technology from China

SHENZHEN INOMAX TECHNOLOGY CO.LTD

Address: Ideal Science and Technology Park,
Guanlan Avenue, Longhua District, Shenzhen,
Guangdong, China

Tel: 0086-75521002258

Fax: 0086-75521002258

E-mail: info@inomaxtechnology.com

Website: www.inomaxtechnology.com



SHENZHEN INOMAX TECHNOLOGY CO.LTD

www.inomaxtechnology.com



Unparalleled Performance. Uncompromising Quality.

Power Range & Motor Type

- 1 phase 220V-240V 50/60HZ 0.75-2.2KW
- 3 phase 220V-240V 50/60HZ 0.75-250KW
- 3 phase 380V-480V 50/60HZ 0.75-630KW
- Induction motor
- Asynchronous motor
- PMSM motor

Terminals :

- 9 DI terminals (6 standard 3 optional)
- 2 Analog input & out put (support both 0-10v and 0-20mA)
- 2 Relay output (1 standard and 1 optional)
- 1 RJ 45 port for keypad remote control

Configuration:

- Integrated brake chopper (<30KW)
- Built in Modbus RTU/RS485
- Integrated C3 filter
- Virtual DI function
- Built in DC reactor for power above 200KW.
- Standar LED keypad (LCD keypad optional)
- Full power range IGBT module design
- Full power range keypad are removable

Key functions

- Available for both light duty and heavy duty application.
- Support speed control, torque and tension control.
- Sleeping, counting, PID, Multi-speed, time lock functions
- Energy saving functions
- Motor self-learning (static and dynamic)
- 2 motor parameters

Flexible communications

- Modbus RTU/RS485 built in
- Profibus DP card optional
- Onboard web-server for flexible setup and monitoring.

Optional parts

- Keypad bracket+extension cable
- 3 DI terminal & 1 output relay.
- Differential, incremental, resolver encoder are optional encoders.
- Canopen and Profibus-DP communication protocol.
- Reactor, EMC filter, Du/dt filter, sinewave filter, passive filters, braking chopper, braking resistors..



ADVANCED MOTOR CONTROL

MAX500 variable frequency drives provides ultimate control flexibility to satisfy the requirements of machine builders and general purpose industrial applications. Can replace below series:

- ABB ACS310 ACS480 ACS550
- Siemens V20, G120
- Schneider ATV320, ATV340, ATV61, ATV71
- Danfoss FC202, FC301/302, FC51




- Mitsubishi E700/800, F800
- Yaskawa E1000, GA500/700
- WEG CFW100/500/700, CFW11
- Delta VFDB, VFDM, MH300

MAX500 Voltage and Power Rating Data


Type Designation:

MAX500 – 7R5G/011PT4
 1 2 3 4 56

1&2- Product series
 3- Power for heavy duty
 4- Power for light duty
 5- T for 3 phase, S for 1 phase

Model	Input Current (A)	Output Current (A)	Adaptable Motor		Product Size (mm)	Product photos
			KW	HP		
Single-phase 220V, 50/60Hz						
MAX300-R75GS2	8.2	4	0.75	1	152*89*123	
MAX300-1R5GS2	14	7	1.5	2	152*89*123	
MAX300-2R2GS2	23	9.6	2.2	3	152*89*123	 
Three-phase 220V, 50/60Hz						
MAX500-0R4GT2	3.4	3.5	0.4	0.5	185*118*167	
MAX500-R75GT2	5	5	0.75	1	185*118*167	
MAX500-1R5GT2	5.8	7	1.5	2	185*118*167	
MAX500-2R2GT2	10.5	11	2.2	3	185*118*167	
MAX500-3R7GT2	14.6	17	3.7	5	185*118*187	
MAX500-5R5GT2	26	25	5.5	7.5	247*160*190	
MAX500-7R5GT2	35	32	7.5	10	320*220*205	
MAX500-011GT2	46.5	45	11	15	320*220*205	
MAX500-015GT2	62	60	15	20	432*255*235	
MAX500-018GT2	76	75	18.5	25	432*255*235	
MAX500-022GT2	92	91	22	30	432*255*235	
MAX500-030GT2	113	112	30	40	518*300*260	
MAX500-037GT2	157	150	37	50	518*300*260	
MAX500-045GT2	180	176	45	60	620*390*300	
MAX500-055GT2	214	210	55	75	620*390*300	
MAX500-075GT2	307	304	75	100	780*480*360	

MAX500 Voltage and Power Rating Data

Model	Input Current (A)	Output Current (A)	Adaptable Motor		Product Size (mm)	Product photos
			KW	HP		
3phase input & output 380V-480V, 50/60Hz						
MAX500S-R75GT4	3.4	2.1	0.75	1	152*89*123	
MAX500S-1R5GT4	5	3.8	1.5	2	152*89*123	
MAX500S-2R2GT4	5.8	5.1	2.2	3	152*89*123	
MAX500S-3R7GT4	10.5	9	3.7	5	152*89*123	
MAX500-R75GT4	3.4	2.1	0.75	1	185*118*167	
MAX500-1R5GT4	5	3.8	1.5	2	185*118*167	
MAX500-2R2GT4	5.8	5.1	2.2	3	185*118*167	
MAX500-3R7G/5R5PT4	10.5	9	3.7	5	185*118*167	
MAX500-5R5G/7R5PT4	14.6	13	5.5	7.5	185*118*187	
MAX500-7R5G/011PT4	20.5	17	7.5	10	247*160*190	
MAX500-011G/015PT4	26	25	11	15	247*160*190	
MAX500-015G/018PT4	35	32	15	20	320*220*205	
MAX500-018G/022PT4	38.5	37	18.5	25	320*220*205	
MAX500-022/030PGT4	46.5	45	22	30	320*220*205	
MAX500-030G/037PT4	62	60	30	40	432*255*235	
MAX500-037G/045PT4	76	75	37	50	432*255*235	
MAX500-045G/055PT4	92	91	45	60	432*255*235	
MAX500-055G/075PT4	113	112	55	75	518*300*260	
MAX500-075G/090PT4	157	150	75	100	518*300*260	
MAX500-090G/110PT4	180	176	90	125	620*390*300	
MAX500-110G/132PT4	214	210	110	150	620*390*300	
MAX500-132G/160PT4	256	253	132	175	620*390*300	
MAX500-160G/185PT4	307	304	160	210	780*480*360	
MAX500-185G/200PT4	340	335	185	250	780*480*360	
MAX500-200G/220PT4	385	377	200	260	1274*480*361	
MAX500-220G/250PT4	430	426	220	300	1274*480*361	
MAX500-250G/280PT4	468	465	250	350	1274*480*361	
MAX500-280G/315PT4	525	520	280	370	1320*650*418	
MAX500-315G/355PT4	590	585	315	420	1320*650*418	
MAX500-355G/400PT4	665	650	355	470	1720*800*490	
MAX500-400G/450PT4	785	725	400	530	1720*800*490	
MAX500-450G/500PT4	883	820	450	600	1720*800*490	
MAX500-500G/560PT4	1000	930	500	660	1720*800*490	
MAX500-560G/630PT4	1100	1080	560	750	1850*1060*500	
MAX500-630G/710PT4	1200	1120	630	850	1850*1060*500	


MAX520 Voltage and Power Rating Data

MAX520 is customized 220V single phase input and 380V-480V 3 phase output. It special drive for the application which the motor is 380V-480V but only have 220V power. Except the difference of input voltage phase and voltage ,the rest are the same as general purpose frequency inverter MAX500.

Type Designation:


MAX 520 - 7R5G S 4
 1 2 3 4 5 6

- 1&2- Product series
- 3-Inverter power,7R5=7.5KW
- 4-Power for normal duty
- 5-S for single phase,T for 3 phase
- 6-voltage,4 for 380V-480V,2 for 220V-240V

Model	Input Current	Output Current	Adaptable Motor		Product Size	Product photos
	(A)	(A)	KW	HP	H*W*D (mm)	
single phase 220V input,380V-480V 3 phase output						
MAX520-R75GS4	5	2.1	0.75	1	185*118*167	
MAX520-1R5GS4	5.8	3.8	1.5	2	185*118*167	
MAX520-2R2GS4	10.5	5.1	2.2	3	185*118*167	
MAX520-3R7GS4	14.6	9	3.7	5	185*118*187	
MAX520-5R5GS4	26	13	5.5	7.5	247*160*190	
MAX520-7R5GS4	35	17	7.5	10	320*220*205	
MAX520-011GS4	46.5	25	11	15	320*220*205	
MAX520-015GS4	62	32	15	20	432*255*235	
MAX520-018GS4	76	38	18.5	25	432*255*235	
MAX520-022GS4	92	45	22	30	432*255*235	
MAX520-030GS4	113	60	30	40	518*300*260	
MAX520-037GS4	157	75	37	50	518*300*260	
MAX520-045GS4	180	90	45	60	620*390*300	
MAX520-055GS4	214	110	55	75	620*390*300	
MAX520-075GS4	307	150	75	100	780*480*360	

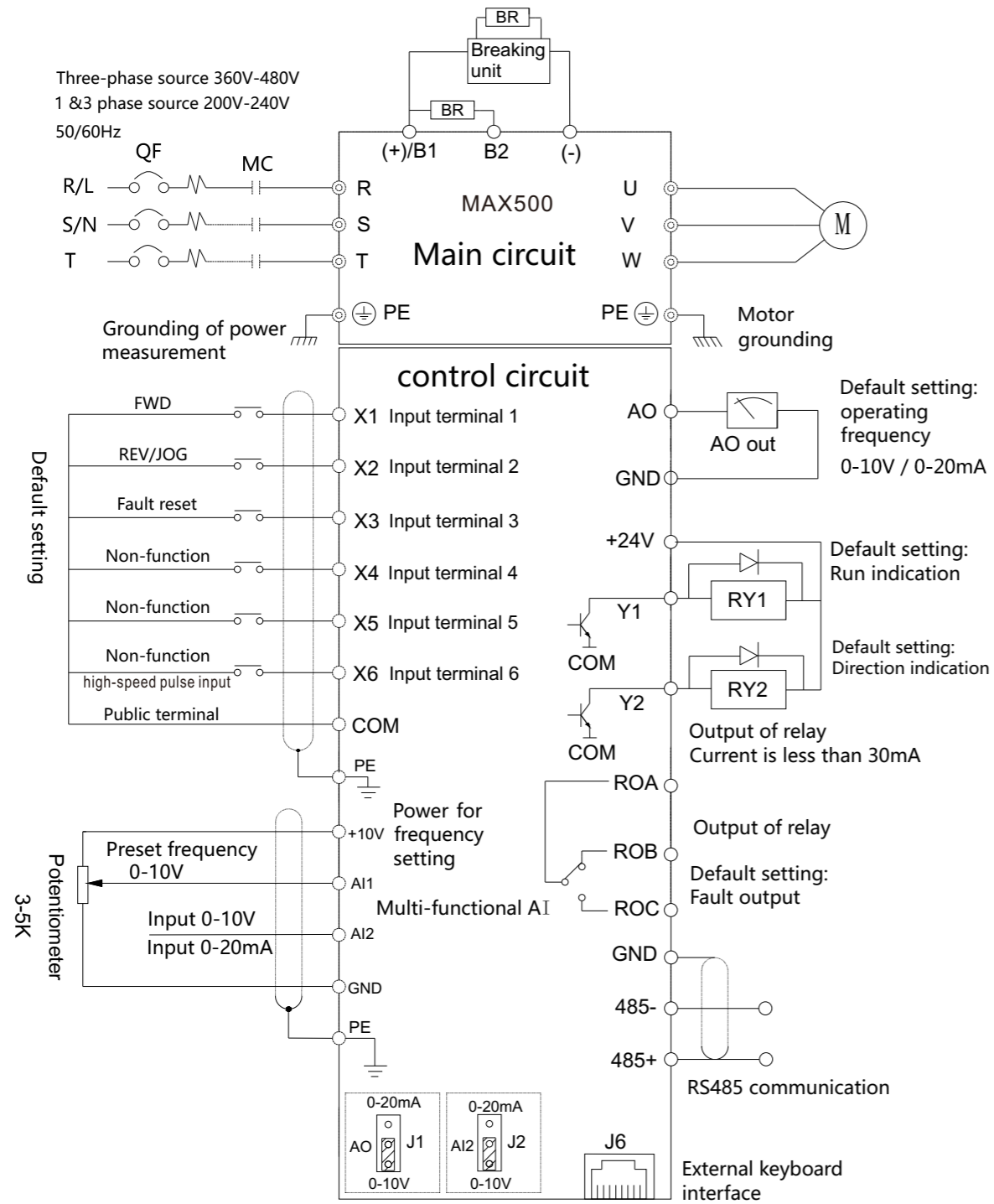
MAX550 Voltage and Power Rating Data

MAX550 is frequency inverter for PMSM motor and synchronous motor.

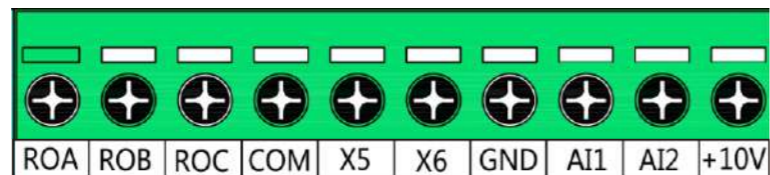
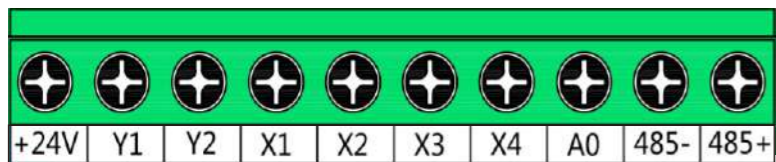
Model	Input Current	Output Current	Adaptable Motor		Product Size	Product photos
	(A)	(A)	KW	HP	(mm)	
3phase input & output 380V-480V , 50/60Hz						
MAX550-R75GT4	3.4	2.1	0.75	1	185*118*167	
MAX550-1R5GT4	5	3.8	1.5	2	185*118*167	
MAX550-2R2GT4	5.8	5.1	2.2	3	185*118*167	
MAX550-3R7G/5R5PT4	10.5	9	3.7	5	185*118*167	
MAX550-5R5G/7R5PT4	14.6	13	5.5	7.5	185*118*187	
MAX550-7R5G/011PT4	20.5	17	7.5	10	247*160*190	
MAX550-011G/015PT4	26	25	11	15	247*160*190	
MAX550-015G/018PT4	35	32	15	20	320*220*205	
MAX550-018G/022PT4	38.5	37	18.5	25	320*220*205	
MAX550-022/030PGT4	46.5	45	22	30	320*220*205	
MAX550-030G/037PT4	62	60	30	40	432*255*235	
MAX550-037G/045PT4	76	75	37	50	432*255*235	
MAX550-045G/055PT4	92	91	45	60	432*255*235	
MAX550-055G/075PT4	113	112	55	75	518*300*260	
MAX550-075G/090PT4	157	150	75	100	518*300*260	
MAX550-090G/110PT4	180	176	90	125	620*390*300	
MAX550-110G/132PT4	214	210	110	150	620*390*300	
MAX550-132G/160PT4	256	253	132	175	620*390*300	
MAX550-160G/185PT4	307	304	160	210	780*480*360	
MAX550-185G/200PT4	340	335	185	250	780*480*360	
MAX550-200G/220PT4	385	377	200	260	1274*480*361	
MAX550-220G/250PT4	430	426	220	300	1274*480*361	
MAX550-250G/280PT4	468	465	250	350	1274*480*361	
MAX550-280G/315PT4	525	520	280	370	1320*650*418	
MAX550-315G/355PT4	590	585	315	420	1320*650*418	
MAX550-355G/400PT4	665	650	355	470	1720*800*490	
MAX550-400G/450PT4	785	725	400	530	1720*800*490	
MAX550-450G/500PT4	883	820	450	600	1720*800*490	
MAX550-500G/560PT4	1000	930	500	660	1720*800*490	
MAX550-560G/630PT4	1100	1080	560	750	1850*1060*500	
MAX550-630G/710PT4	1200	1120	630	850	1850*1060*500	

Control Circuit and Main Circuit Wiring

Control Circuit terminal



Type	Terminal	Terminal Name	Description and default
Multi-input terminal	X1	Multi-function input terminal 1	Default: forward
	X2	Multi-function input terminal 2	Default: reverse
	X3	Multi-function input terminal 3	Default: No function
	X4	Multi-function input terminal 4	Default: No function
	X5	Multi-function input terminal 5	Default: No function
	X6	Multi-function input terminal 6	Default: No function, can be used as high-speed pulse input
Analog input	COM	Common terminal	Multi-function input common terminal, +24V power reference ground
	AI1	Analog input 1	0~ 10V input
	AI2	Analog input 2	0~ 10V/0~ 20mA input (J2 jumper is optional)
	+10V	Power supply for analog quantity setting	+10V DC 10mA (potentiometer 3~ 5K)
	GND	Analog reference ground	Analog input and output reference ground
Multi-function output	Y1	Multi-function output terminal 1	Default: running status
	Y2	Multi-function output terminal 2	Default: no output, can be used as high-speed pulse output
	ROA	Relay output	Default: inverter fault output
	ROB	ROA-ROB normally closed	
Analog output	ROC	ROA-ROC normally open	
	AO	Analog output terminal	0~ 10V/0~ 20mA output (J1 jumper is optional)
Input	+24V		GND is the reference ground
	485+	Analog output terminal	+24V DC 100mA COM is the power ground.
Communication	485-	+24V power supply	



MAX300 series small power drives

SMART

S Simple **M** Maintenance friendly **A** Affordable **R** Robust **T** Time to market

Product positioning

MAX300 series inverter is economical inverter specially for small scale processing and manufacturing automation control

Performance introduction

MAX300 series inverter is a high-quality and simple VF control inverter. It can run a wide range of speed in high precision by decoupling control of motor magnetic flux current and torque current torque: fast and accurately, High end hardware platforms, scientific production technology and complete testing equipment make the product more stable and reliable.

Capacity range

Power range: 0.4-3.7kw power range

Frequency range: 0.00-400.00Hz

Voltage level: 1 & 3 phase 220V, 3 phase 380V-480V

Model and data of MAX300

Model	Power Capacity (KVA)	Input Current (A)	Output Current (A)	Adaptable Motor	
				KW	HP
Single-phase 200V-240V, 50/60Hz					
MAX300-0R4GS2	1	5.4	2.3	0.4	0.5
MAX300-R75GS2	1.5	8.2	4	0.75	1
MAX300-1R5GS2	3	14	7	1.5	2
MAX300-2R2GS2	4	23	9.6	2.2	3
Three-phase 380V-480V, 50/60Hz					
MAX300-R75GT4	1.5	3.4	2.1	0.75	1
MAX300-1R5GT4	3	5	3.8	1.5	2
MAX300-2R2GT4	4	5.8	5.1	2.2	3
MAX300-3R7GT4	5.9	10.5	9	3.7	5



Structure description

Shuttle keypad

- Shuttle keypad-high precision rotary encoder
- Spin around increasing and decreasing by degrees
- Highlight LED display information

Remote control interface

- Support Remote control within 100m
- Support standard Rs485 communication

Independent air duct structure

- Separating the radiator and the drive control module
- Capacitance isolation is installed on the duct
- Forced air cooling

Wire-in terminal entry

- Cover removable
- Wiring is simple, top down out
- Enhanced ABS flame retardant material

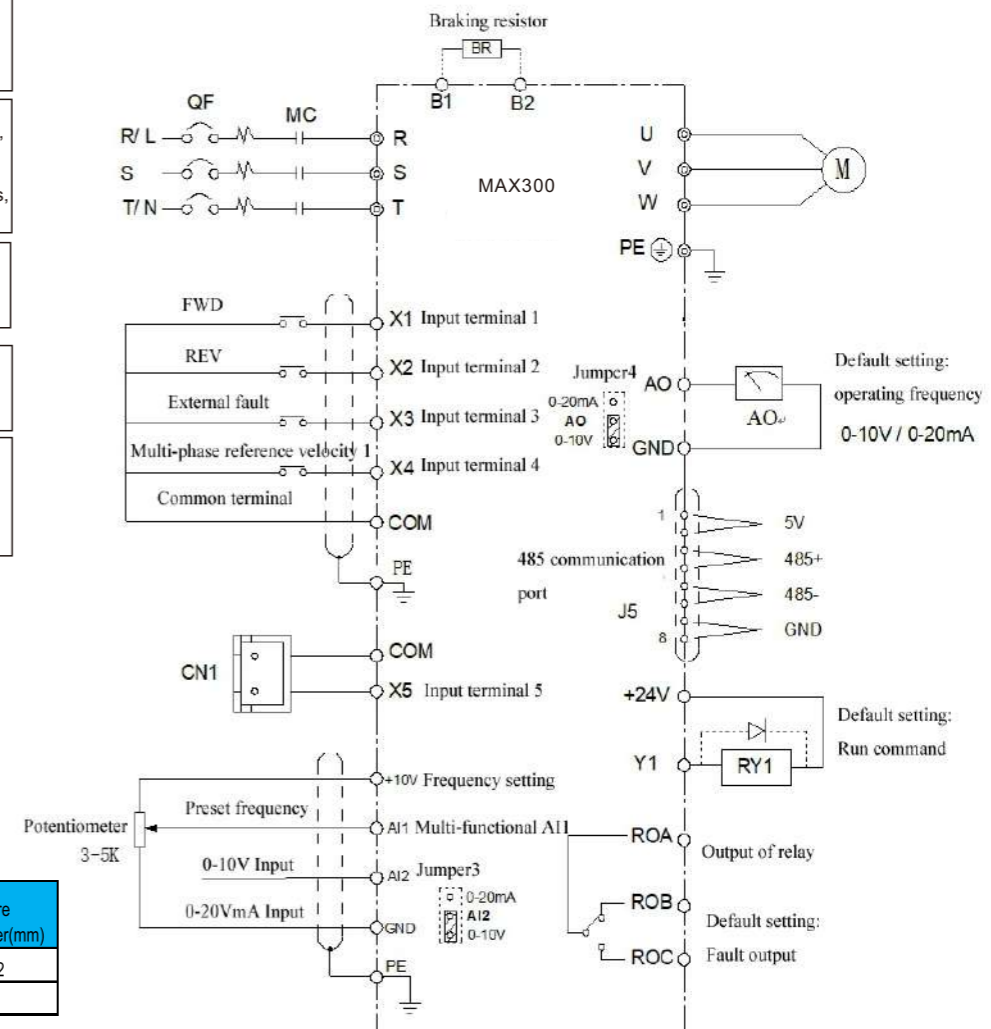
Control cable entry

- Compliance with the safety standards of mechanical equipment and electrical facility standard
- Connecting the main loop terminal and controlling circuit terminal
- Shorten the cable connection and installation time

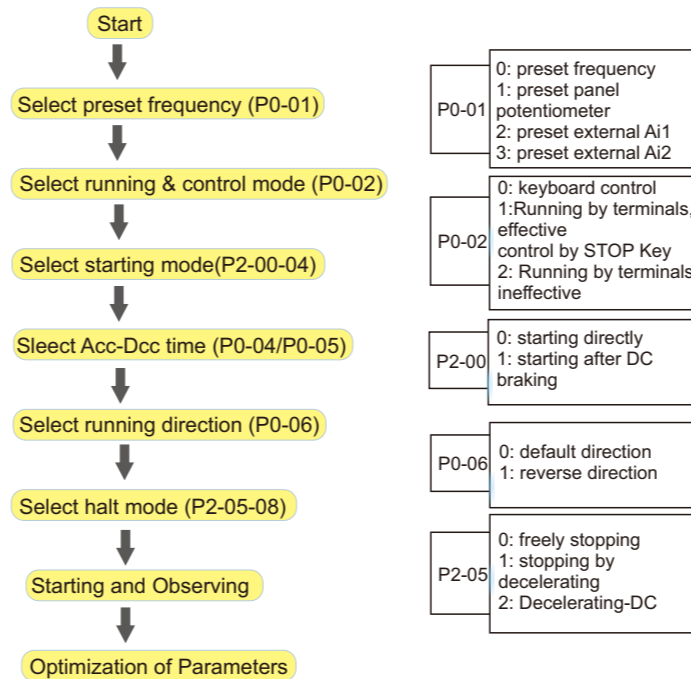
Capacitance isolation installation area

- Enhanced ABS flame retardant material
- Separating the capacitance from the other control panels
- Natural air cooling in air duct

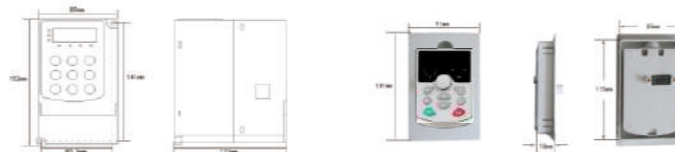
Control Circuit and Main Circuit Wiring



Quick Debugging/Quick set up instructions



Demension



Model	Mounting Dimension		Dimension			Pore Diameter(mm)
	length(mm)	wide(mm)	length(mm)	wide(mm)	high(mm)	
0.75kw-3.7kw	141	80.5	152	89	123	5.2
0.75kw-3.7kw keyboard installation dimension: length=115mm width=115mm						

Applications of Typical Industries



Electric Vehicle Drive

- Prominent structure design of high protection level, simple and convenient wiring
- Accurate torque control perfectly matches with engine working
- Energy saving mode, super battery endurance
- Professional built-in CAN-BUS adapter card of cars



Ceramics Machinery

- Strong adaptability of environmental temperature
- Professional solutions for anti-interference and lightning protection
- Reliable and stable operation, corrosion prevention
- Non-trip, reliable control and protection for power modules

Oil Field



- Special inverter for pumping unit, do not need energy feedback or dynamic braking
- Higher power saving effect, less harmonic and reactive current
- Select high quality Outdoor Control Cabinet Box products constant temperature control box can be long-term working reliably in the field of high and low temperature
- Rich and flexible monitoring function can wirelessly transmit inverter data or record data through relevant storage medium



Explosion-proof Products

- Passed National Detection and Testing Certificate
- Various voltage levels of products 200/400/690/1140V
- Wide operating voltage, continuously operating in low voltage and interference electricity, strong environmental adaptability
- Supporting automatic restart when power resume normal



Mine Winch

- Abundant experience in the renovation of winch, providing different types of winch renovation solutions
- Vector technology platform providing excellent control performance for the winch
- A variety of protection functions to ensure more secure and reliable system
- Intelligent fault diagnosis to reduce maintenance and repair work

Industry EPS



- Adopting digital control technology of DSP and CPLD and high efficiency technology of IGBT, higher reliability, lower loss
- Superior load characteristic, tracking synchronously, sinusoidal output, switching on line
- Man-machine interface of LCD, perfect function of protection, convenient to use
- Dynamic characteristics of high performance and the shortest switching time is less than 3ms



Textile industry

- Reducing the rate of breakage and improving the efficiency of production
- Specially made external heat radiator, cotton easy clean
- Unique function of swing frequency is suitable for equipment of yarn winding
- Rich indication signals: full indication, broken wire indication, power failure indication, etc.

Injection molding industry

- There are 2 ways of solutions to be chosen: Integrated Energy-Saving Control Cabinet or specific inverter for Plastic Machine
- The motor drive solution can be chosen as optional: asynchronous servomotor solution or synchronous servomotor solution with double closed-loop control
- No high-pressure throttle and loss of overflowed energy, energy-saving rate can reach to 25%~70%
- Design of independent duct makes rear parts and top fan can be convenient to disassemble and easy to maintain; it has strong environmental adaptability and high protection level as well

Air Compressor Industry

- High precision vector frequency conversion; Closed-loop constant pressure control; Multi-machine networking control
- Energy saving rate can reach to 20%~50%; Intelligent sleeping and low voltage awakening
- Standard inverter solution, specific converter solution for air compressor, integrated cabinet solution for air compressor energy saving are optional



Machine Tool Industry

- Supporting 1000Kbps high-speed communication
- Drive spindle 180 thousand rpm successfully to operate
- For the spindle closed-loop control: the inverter with orientation servo features
- For the spindle open-loop control: diversified vector control methods to adapt to various machine tools



Printing And Packaging Industry

- High performance vector control and torque control technology can achieve the constant linear speed control and constant tension control
- Applicable for devices of cutting machine, coating machine, paper-made machine, printing machine, compound machine, rolling dyeing machine, etc.
- Torque control without encoder speed feedback and it can replace torque motor widely



Municipal Engineering

- Central air conditioning/refrigeration house: for constant temperature control, high efficiency of energy-saving, and low noise
- Centralized water supply in constant pressure: Built-in one-for-all expansion card for water supply, multi-period water supply in constant pressure with timing loop, solving the phenomena of overflowing and water hammer in the switching process
- Sewage treatment: Built-in adaptive torque control in the main and auxiliary drive of centrifugal equipment for quick acceleration and deceleration, suitable for harsh environment
- Various fan drives: Designed for the fan, high efficiency of energy-saving, noise optimization, built-in automatic speed tracking function, maximum power up to 800kW



Crane

- Excellent torque control, reliable brake control sequence;
- Professional crane control functions: speed monitoring, torque monitoring, torque verification, power optimization, position processing, intelligent deceleration, etc.
- Extensively apply to: port, shipping, ocean engineering, mine, architecture, metallurgy, factory and various kinds of industries' lifting machines.



Stone Processing

- Simple and convenient operation, less connection line
- Smooth running curve to reduce the board damage rate, smooth starting to reduce mechanical damage and maintenance costs
- Providing the constant tension control for broken rope, main and auxiliary functions for frequency operation, safe stopping function, and alarm prompt function



Wood Processing

- Built-in technology algorithm of rotary cutting machine, rolling machine, peeling machine
- Wide voltage range, particularly suitable for harsh conditions in the rural power grid
- High precision and fast rotary cutting to increase the yield under the premise of keeping the uniformity of thickness for the wood veneer
- Stable and reliable work makes customers enjoy quality green power

