

**ARCMING**

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# About Us

ARCMING has been committed to the R&D and expansion of brushless dc motor and control system the core components of new energy equipment since 2008. After so many years of hard work in engineering machinery, new energy equipment, water pumps, industrial robots, medical equipment, garden tools and other industries applications, ARCMING has accumulated rich technical experience and a strong core technical team.

In addition to the field of new energy power applications, ARCMING is also committed to investing our advantages in photovoltaic and AC/DC energy water supply systems directly, providing the solar water pumps and power supply management system with cost-effective, efficient, long-lived and reliable products, saving a lot of energy funds for users, and providing more efficient and scientific water services for water-stressed areas.

Welcome friends from all over the world to negotiate cooperation. Our tenet is integrity, technology, innovation, quality and customer satisfaction. And welcome the orders for various types of ODM and OEM. We look forward to working with you.



FREQUENCY CONVERTERS ARE USED TO CONTROL THE SPEED AND TORQUE OF AC MOTORS. IT CAN CONVERT FIXED FREQUENCY AC POWER INTO ADJUSTABLE FREQUENCY AC POWER, THEREBY ACHIEVING CONTROL OF MOTOR SPEED. FREQUENCY CONVERTERS ARE WIDELY USED IN VARIOUS MACHINES AND EQUIPMENT IN INDUSTRIAL PRODUCTION, SUCH AS FANS, WATER PUMPS, COMPRESSORS, ETC. IT HAS THE ADVANTAGES OF ENERGY CONSERVATION, REDUCING MECHANICAL LOSSES, AND IMPROVING PRODUCTION EFFICIENCY.



**G30-30KW380V-CT/37KW380V-MT**



**G38-0.75KW220V-CS**



**P60-0.75KW220V-S**

**FREQUENCY CONVERTER  
G30**

**G30** SERIES FREQUENCY INVERTER HAS THE GOOD EFFECT ENERGY CONSERVATION.FINE SPEED ADJUSTMENT PERFORMANCE, STABLE OPERATION, ELECTRICAL MACHINERY SOFT START, PROTECT FUNCTION AND SELF DIAGNOSTICS FAULT AND OTHER ADVANTAGES.



## G30 UNIVERSAL FREQUENCY CONVERTER

### ◆MAIN FEATURES

G30 Series frequency inverter are high performance open loop vector inverters for controlling asynchronous AC induction motors.

1. Output frequency :0-600Hz.
2. Multiple password protection mode.
3. Remote control operation keypad, convenient for remote control.
4. V/F curve & multi-inflexion point setting, flexible configuration.
5. Keyboard parameter copy function, easy to set the parameters for multi-inverters
6. Wide industry application to expand special function according to different industries.
7. Multiple hardware and software protection, and optimized hardware for anti-interference technology.
8. Multi-step speed and wobble frequency running (external terminal 15 steps speed control).
9. Unique adaptive control technology. Auto current limiting and voltage limiting and under-voltage restrain.
10. Optimized external installation and internal structure and independent air flue design, fully enclosed electrical space design.
11. Output automatic voltage regulation function (AVR), automatically adjust the output pulse width to eliminate the influence of the grid change on load.
12. Built-in PID regulation function to facilitate the realization of closed loop control of the temperature, pressure and flow, and reduce the cost of the control system.
13. Standard MODBUS communication protocol, Easy to achieve the communication between PLC/IPC and other industrial equipments.

### ◆APPLICATION RANG

1. Handing machinery, conveyor.
2. Wire drawing machines, industrial washing machines, sports machines.
3. Fluid machinery: Fan, water pump, blower, music fountain.
4. Public mechanical equipment: high precision CNC machine tools, CNC machine.
5. Metal processing, wire drawing machine and other mechanical equipment.
6. Paper-making equipment, chemical industry, pharmaceutical industry, textile industry, etc.

### ◆DEMONSTRATION OF THE MODEL

#### **G30-0.75KW220V-CS**

C: Constant torque  
M: Variable torque  
S: Single-phase  
T: Three-phase

Power and Voltage Range:  
220V : 0.75-3.7KW  
380V : 0.75-110KW

G30: Series No  
Universal, integrated with  
constant torque and variable torque

### ◆EXTERNAL DIMENSIONS AND INSTALLATION DIMENSIONS

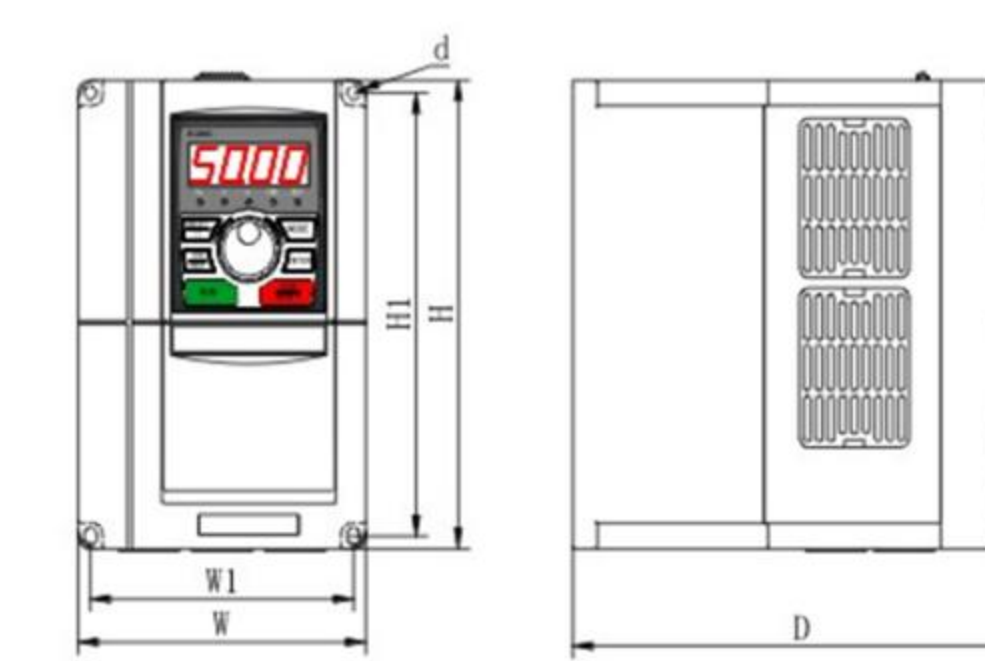


Fig. 1

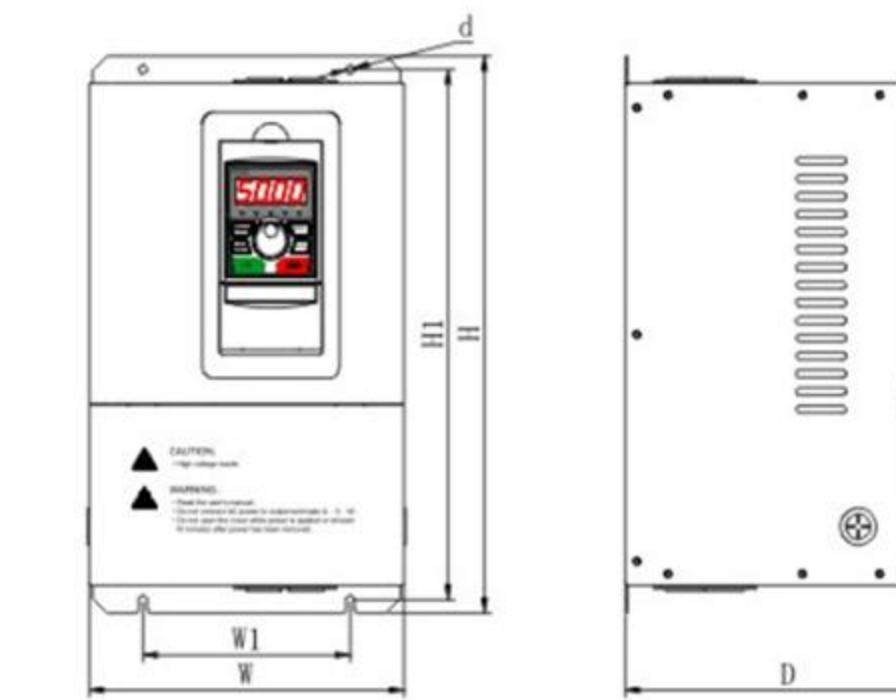


Fig. 2



### ◆G30 HIGH PERFORMANCE FREQUENCY INVERTER

Inverter Model	Power (KW)	Current (A)	Dimension mm						Features	Figure
			H	H1	W	W1	D	d		
G30-0.75KW220V-CS	0.75	4.5	185	175	118	108	170	5	Discrete module	1
G30-1.5KW220V-CS	1.5	7	185	175	118	108	190	5		
G30-2.2KW220V-CS	2.2	10	215	205	145	135	193	5		
G30-3.7KW220V-CS	3.7	16	215	205	145	135	193	5		
G30-0.75KW380V-CT	0.75	2.5	185	175	118	108	170	5		
G30-1.5KW380V-CT	1.5	3.7	185	175	118	108	170	5		
G30-2.2KW380V-CT	2.2	5.0	215	205	145	135	193	5	Integrated module Internal brake unit	2
G30-3KW380V-CT/4KW380V-MT	3.0/4.0	6.8/9.0	185	175	118	108	190	5		
G30-4KW380V-CT/5.5KW380V-MT	4.0/5.5	9.0/13	215	205	145	135	193	5		
G30-5.5KW380V-CT/7.5KW380V-MT	5.5/7.5	13/17	215	205	145	135	193	5		
G30-7.5KW380V-CT/11KW380V-MT	7.5/11	17/25	265	235	185	174	215	6		
G30-11KW380V-CT/15KW380V-MT	11/15	25/32	265	235	185	174	215	6		
G30-15KW380V-CT/18.5KW380V-MT	15/18.5	32/37	385	370	220	150	210	7	Integrated module	2
G30-18.5KW380V-CT/22KW380V-MT	18.5/22	37/45	385	370	220	150	210	7		
G30-22KW380V-CT/30KW380V-MT	22/30	45/60	450	432	260	180	225	7		
G30-30KW380V-CT/37KW380V-MT	30/37	60/75	450	432	260	180	225	7		
G30-37KW380V-CT/45KW380V-MT	37/45	75/90	510	490	320	220	275	9		
G30-45KW380V-CT/55KW380V-MT	45/55	90/110	510	490	320	220	275	9		
G30-55KW380V-CT/75KW380V-MT	55/75	110/150	570	550	380	260	320	9	Integrated module	2
G30-75KW380V-CT/90KW380V-MT	75/90	150/176	570	550	380	260	320	9		
G30-90KW380V-CT/110KW380V-MT	90/110	176/210	570	550	380	260	320	9		

## ◆ SPECIFICATION AND TECHNICAL INDICATIONS

Specification and Technical Indications			
Item	Item Description		
Input	Rated voltage& Frequency	Single /Three phase 200-240VAC.Three phase 360-440VAC. 50Hz/60Hz	
	Allowable Voltage range	Voltage fluctuate range: $\pm 10\%$ Voltage unbalance rate: $<3\%$ ; Frequency fluctuation: $<\pm$	
Output	Rated voltage	Three phase 0~ input AC voltage	
	Frequency	0.00-500.00Hz	
Overload capacity		Type G:150% 1minute, 180% 3 seconds, 200% transient protection Type P:120% 1minute, 150% 3 seconds,180% transient protection	
Control Function	Modulation mode	Optimal space voltage vector PWM modulation	
	Control mode	open loop control (SVC), V/F control	
	Frequency resolution	Digital setting :0.01HZ; Analog setting :Max. Frequency x 0.1%.	
	Starting torque	Type G:0.5Hz/150%(SVC); Type P:0.5Hz/100%	
	Speed range	1:100 (SVC)	
	Steady velocity precision	$\pm 0.5\%$ (SVC)	
	Torque boost	Automatic torque boost,automatically boost torque according to output current. Manual torqueboost,range:0.1~30.0%	
	V/F curve	3 ways:linear curve; Multi-point Curve: Nth power V/F curve (1.2th power,1.4th power,1.6th power,1.8th power,2th power.)	
	V/F separation	2 ways:full separation,half separation	
	Acceleration and deceleration curve	Linear or S-curve acceleration/deceleration mode. 4 acceleration and deceleration time, the range of acceleration and deceleration time is 0.0-	
	Carrier frequency	1.0~15.0KHz	
	Jog function	Jog frequency range: 0.01 - 50.00Hz, jog acceleration and deceleration time0.1 - 6500.0 can be	
	Simple PLC multi-speed operation	Realize up to 16-speed operation through built-in PLC or control terminal.	
	Automatic voltage regulator(AVR)	When the grid voltage changes, it can automatically adjust the PWM output to keep the output voltage constant.	
	Built-in PID	This can form a convenient closed-loop control system (CLCS)and is applicable to pressure control. flow control and other process control.	
	Over-voltage Over-current stall control	Automatically limit the current and voltage during operation to prevent frequent over-current and over-voltage trips.	
	Rapid current limit function	Minimize over-current faults and protect the inverter from normal operation.	
	Torque limit and control	The "shovel" feature automatically limits the torque during operation to prevent frequent over-current trips; closed-loop vector mode can realize torque control.	
	Special feature	Outstanding performance	Realize asynchronous motor control with high-performance current vector control technology
		Power dip ride through	When instantaneous power failure occurs, the load feedback energy is used to compensate for the voltage drop, and maintain the inverter to continue running for a short time.
Rapid current limit		Avoid frequent over-current faults of the inverter.	
Virtual I/O		5 groups of virtual DIDO, can realize simple logic control.	
Timing control		Timing control function: set time range 0.0Min -6500.0Min.	
Multi-motor switch over		Two motors can be switched over via two groups of motor parameters.	
Main line bus support	Support for fieldbus: Modbus		

Control Function	Operation instruction	Operation panel control, external terminal control, serial communication control. Can be switched in a variety ways.
	Frequency setting	Frequency sources: digital setting, analog voltage setting, analog current setting. Pulse setting, serial port setting.Can be switched in a variety ways.
	Auxiliary frequency source	10 kinds of auxiliary frequency sources. Flexible realization of auxiliary frequency fine-tuning and frequency synthesis.
	Input terminal	Standard: 6 digital input terminals, one of which supports high-speed pulse input up to 100kHz. 2 analog input terminals, 1 only supports 0 - 10V voltage input. Input terminal 1 supports 0 ~10V and -10V ~ 10V voltage input or 0 - 20mA and -20A ~ 20A current input. Support PT100/PT1000.
Braking function	Output terminal	Standard: 1 high-speed pulse output terminal (open collector type is optional). Support 0-100kHz square wave signal output. 1 digital output terminal 2 analog output terminals, support 0-20mA current output or 0~10V voltage output.
	Dynamic braking	External braking resistor, maximum braking torque 100%.
LED display	DC braking	It can be selected separately when starting and stopping, the action frequency is 0 - 600Hz, the action current level is 0 - 150%, the action time is 0 - 50 seconds, continuous can be set.
	Other functions	Real-time display of the inverter's operating status, monitoring parameters, function parameters,fault codes and other information.
Protection function	Other functions	Jump frequency, counter, speed tracking, restart after instantaneous power failure, upper and lower limit of frequency, adjustable acceleration and deceleration mode, two-wire/three-wire control, swing frequency control, automatic fault reset, frequency arrival output, cooling fan control.multi-function buttons custom settings,etc.
	Optional accessories	Power-on motor short-circuit detection, input and output phase loss protection, over current protection, over voltage protection, under voltage protection, overheat protection, overload protection, over current protection, under voltage protection, overheat protection, overload
Environment	Optional accessories	Braking component, remote operation panel and connecting cable, communication board.
	Place to be used	Indoors, free from direct sunlight, free of dust, corrosive gas, flammable and explosive gas, oil mist, water vapor, dripping water or salt.
	Altitude	Less than 1000 meters.
	Ambient temperature	10~+45C[The bareis:-10~+50C]
	Humidity	20~90%RH, No dew condensation.
	Vibration	<0.5G
Structure	Storage temperature	-20~+60C
	Protection level	IP20
	Cooling method	Forced air cooling
Installation method	Wall-mounted floor-standing electric control cabinet	

## G30- THREE-PHASE 220V FREQUENCY CONVERTER

### ◆MAIN FEATURES

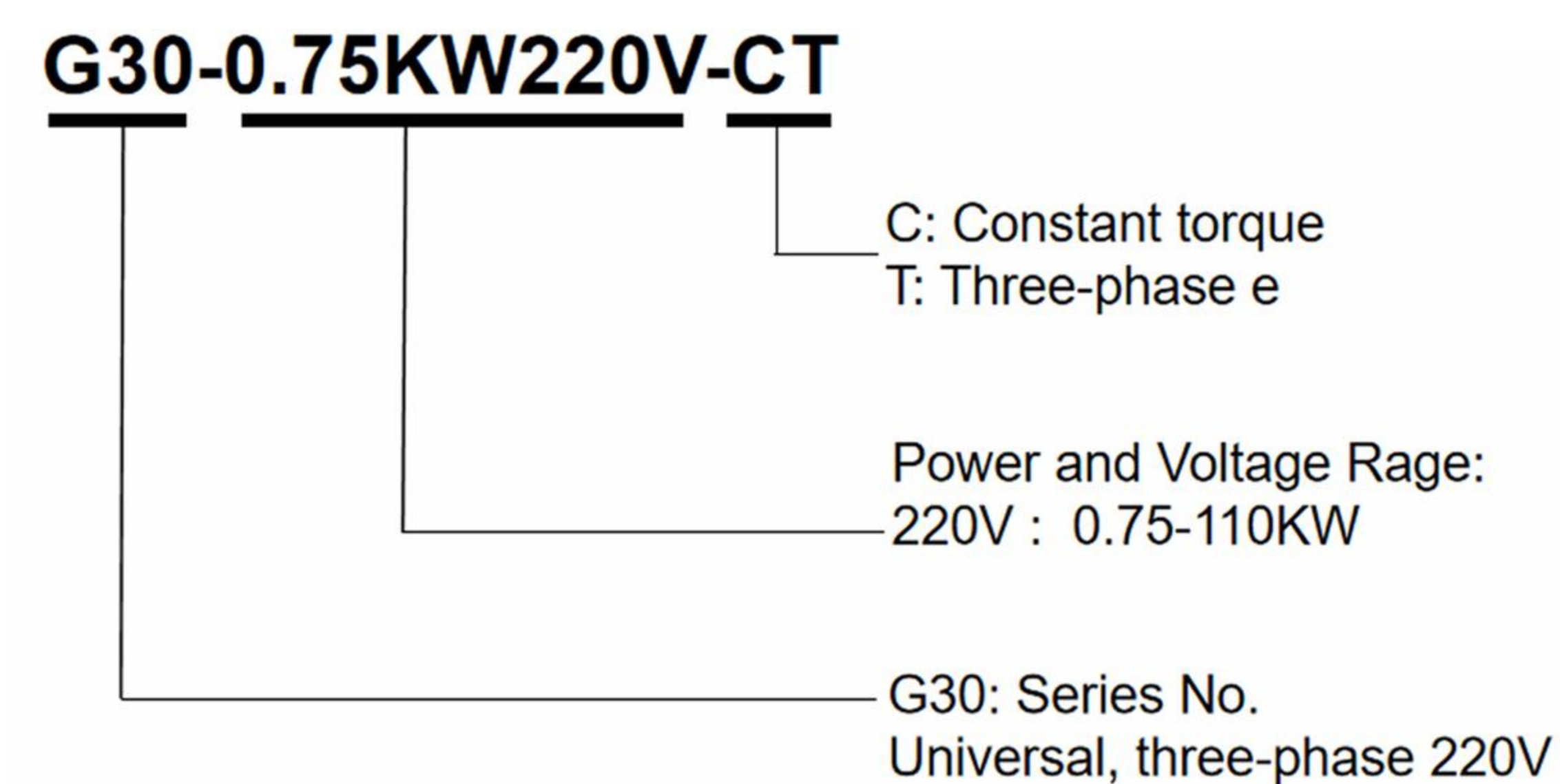
G30 Series frequency inverter are high performance open loop vector inverters for controlling asynchronous AC induction motors.

- 1.Output frequency :0-600Hz.
- 2.Multiple password protection mode.
- 3.Remote control operation keypad, convenient for remote control.
- 4.V/F curve & multi-inflection point setting, flexible configuration.
- 5.Keyboard parameter copy function, easy to set the parameters for multi-inverters
- 6.Wide industry application to expand special function according to different industries.
- 7.Multiple hardware and software protection, and optimized hardware for anti-interference technology.
- 8.Multi-step speed and wobble frequency running (external terminal 15 steps speed control).
- 9.Unique adaptive control technology. Auto current limiting and voltage limiting and under-voltage restrain.
- 10.Optimized external installation and internal structure and independent air flue design, fully enclosed electrical space design.
- 11.Output automatic voltage regulation function (AVR),automatically adjust the output pulse width to eliminate the influence of the grid change on load.
- 12.Built-in PID regulation function to facilitate the realization of closed loop control of the temperature, pressure and flow, and reduce the cost of the control system.
- 13.Standard MODBUS communication protocol, Easy to achieve the communication between PLCIPC and other industrial equipments.

### ◆APPLICATION RANGE

G30 T2 Series frequency drive is suitable for all kind of mechanical devices such as metallurgy, plastic, textile, food, chemical industry, paper making, drug manufacture. Printing construction materials and hoisting for driving and speeding control of AC asynchronous motor.

### ◆DEMONSTRATION OF THE MODEL



### ◆G30 THREE-PHASE 220V FREQUENCY CONVERTER

Inverter Model	Power (KW)	Current (A)	Dimension mm						Features	Figure
			H	H1	W	W1	D	d		
G30-0.75KW220V-CT	0.75	4.5	185	175	118	108	170	5	Integrated module Internal brake unit	1
G30-1.5KW220V-CT	1.5	7	185	175	118	108	190	5		
G30-2.2KW220V-CT	2.2	10								
G30-3.7KW220V-CT	3.7	16								
G30-5.5KW220V-CT	5.5	20	265	253	185	174	215	6	Integrated module	2
G30-7.5KW220V-CT	7.5	30	380	360	220	145	230	6		
G30-11KW220V-CT	11	42	460	443	260	177	268	7		
G30-15KW220V-CT	15	55								
G30-18.5KW220V-CT	18.5	70	620	603	265	182	300	9		
G30-22KW220V-CT	22	80								
G30-30KW220V-CT	30	110								
G30-37KW220V-CT	37	130	720	702	365	240	360	9		
G30-45KW220V-CT	45	160								
G30-55KW220V-CT	55	200								
G30-75KW220V-CT	75	270	1190		493		390	12		
G30-90KW220V-CT	90	320								
G30-110KW220V-CT	110	380	1430		660		415	12	3	

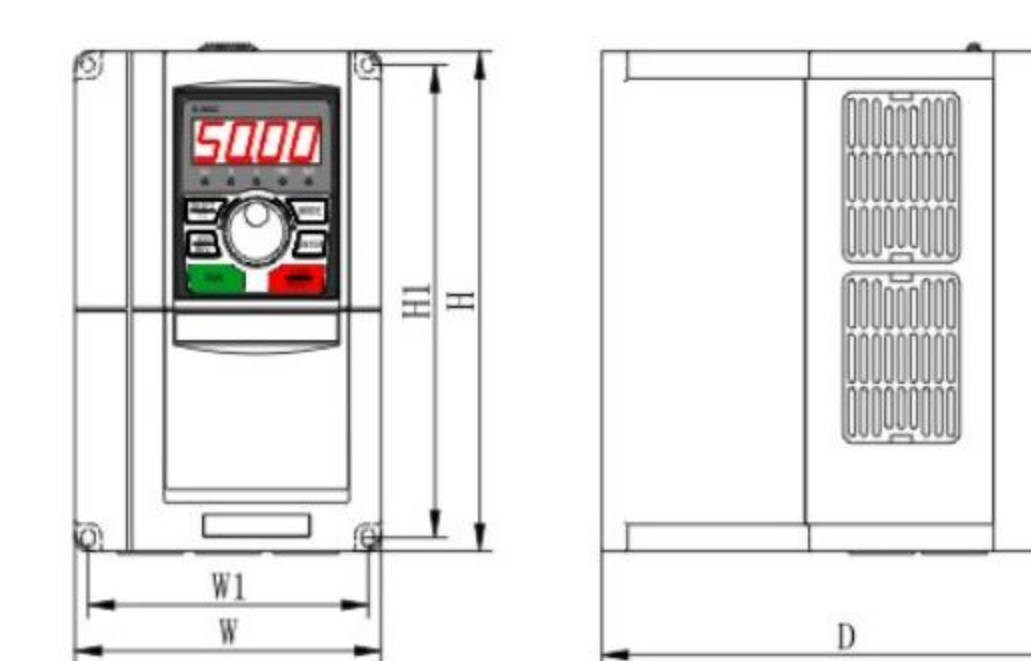


Fig.1

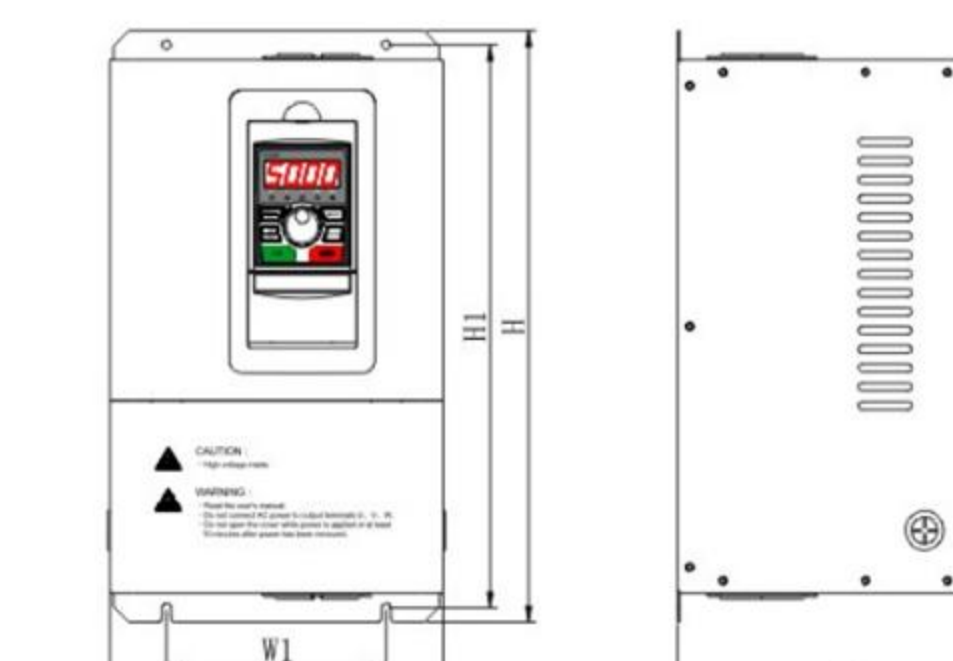


Fig.2

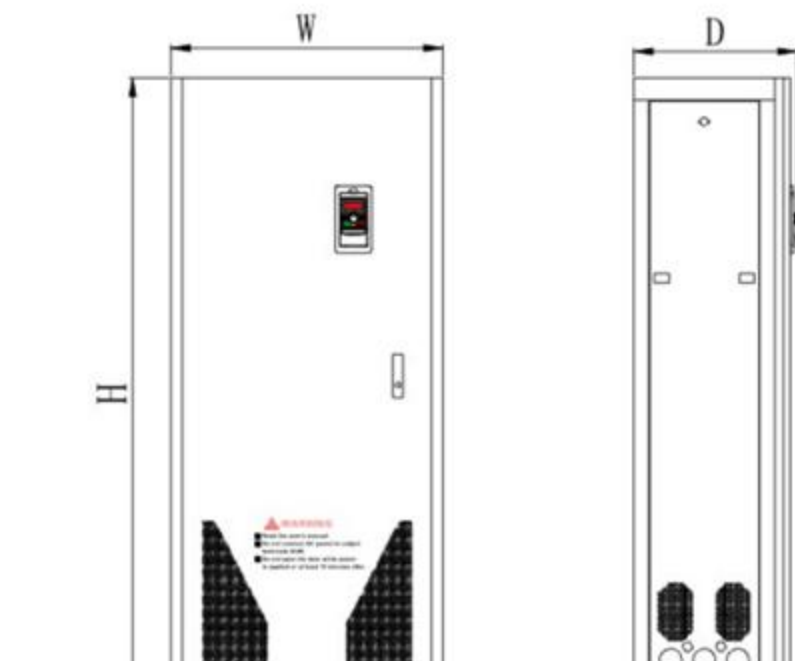


Fig.3

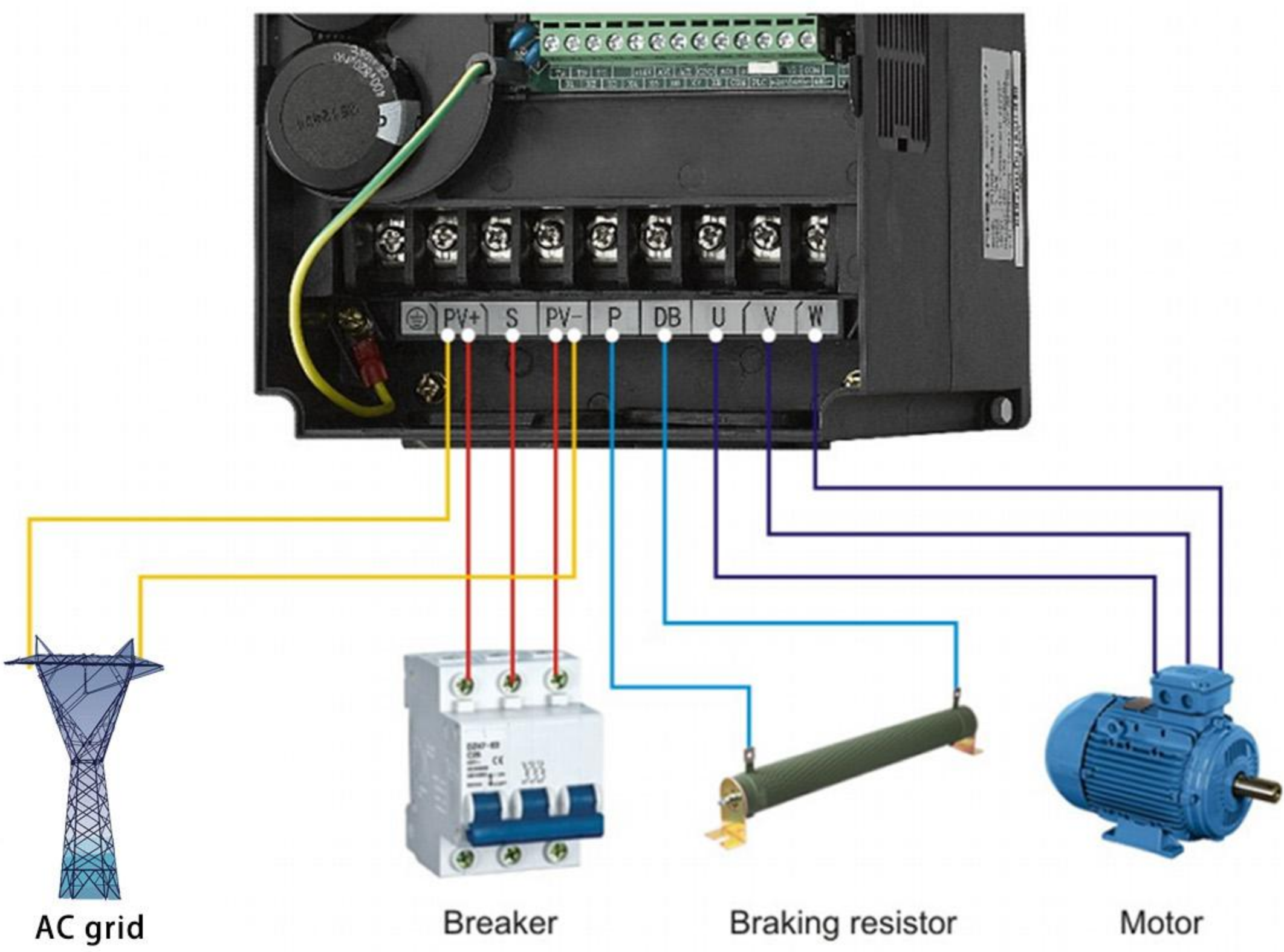
### ◆ SPECIFICATION AND TECHNICAL INDICATIONS

Specification and Technical Indications		
Item		Item Description
Input	Rated voltage & Frequency	Single /Three phase 200-240VAC. Three phase 360-440VAC. 50Hz/60Hz
	Allowable Voltage range	Voltage fluctuate range: 10% Voltage unbalance rate: <3%; Frequency fluctuation: <5%
Output	Rated voltage	Three phase 0~ input AC voltage
	Frequency	0.00-600.00Hz
Overload capacity		Type G:150% 1minute, 180% 1 second, 200% transient protection Type P:120% 1minute, 150% 1 second, 180% transient protection
Control Function	Modulation mode	Optimal space voltage vector PWM modulation
	Control mode	Sensorless vector control(SVC), V/F control, Torque control
	Frequency accuracy	Digital setting:Max. Frequency x0.01% Analog setting: Max.Frequency x+0.2%
	Frequency resolution	Digital setting :0.01HZ; Analog setting :Max. Frequency x 0.1%.
	Starting frequency	0.00-50.00Hz
	Torque lift	Automatic torque lift: to lift the torque automatically according to the output current. Manual torque lift, Range:0.1-30.0%
	Slip compensation	Setting range: 0~100%,The inverter output frequency can be auto-regulated within this range according to the motor load, so as to reduce the speed variation of the motor due to load fluctuation.
	Acceleration/deceleration time	Minutes/Seconds can be selected as time unit.0.1-3600S can be set in sequence.
	Carrier frequency	1.0~15.0KHz
	Jog function	Jog frequency range: 0.01-600.00Hz; Jog acceleration /deceleration time 0.1-3600.0S can be set
	V/F curve	1: linear curve; 2: quadratic; 3: user defined V/F curve
	Automatic energy-saving operation	Auto optimize V/F curve according to the load changes to realize the energy saving operation.
	Auto voltage regulation (AVR)	When the network voltage changes, it can regulate PWM output automatically to maintain constant voltage.
Built-in PID	This can form a convenient closed-loop control system (CLCS)and is applicable to pressure control. flow control and other process control.	

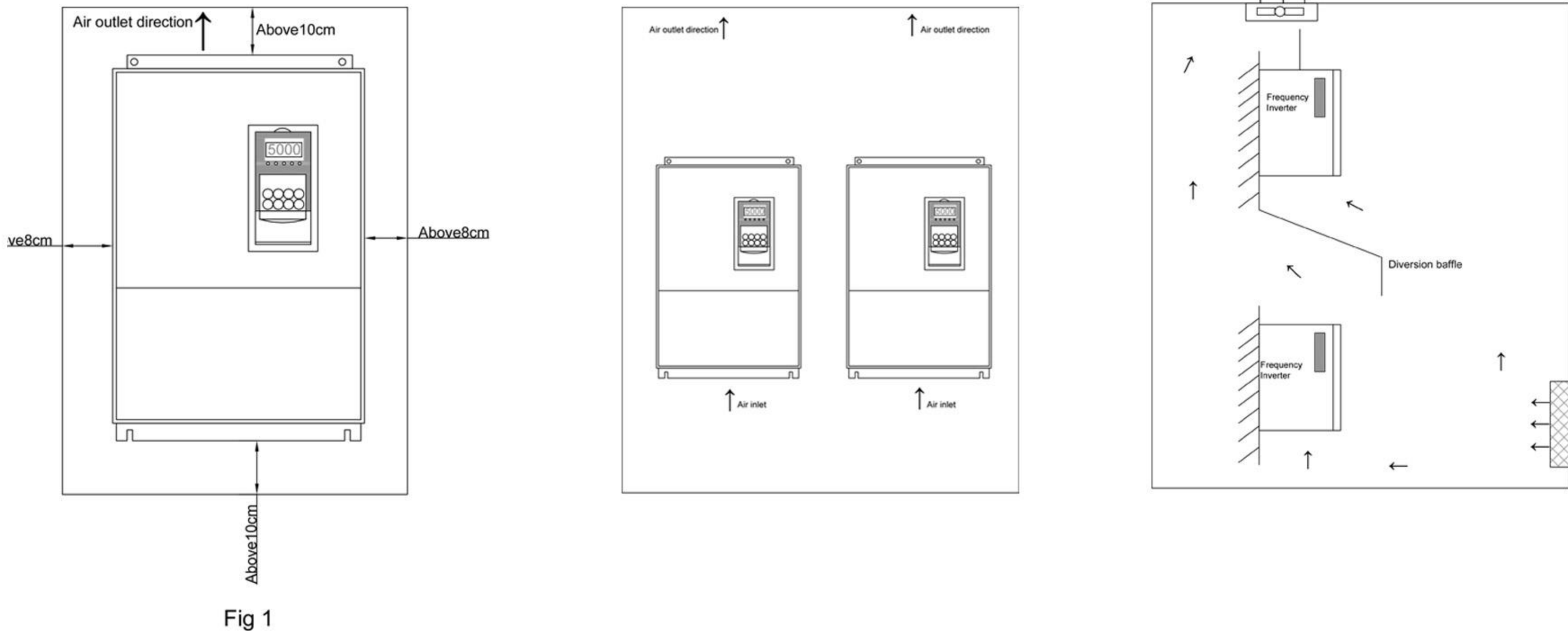
Operation Function	Operating command	Operation panel control, external terminal control and COM control
	Frequency setting	Keypad potentiometer setting, operation panel setting, external terminal ▲▼ setting, analog voltage signal or external potentiometer setting, analog current signal setting, terminal combination setting, 485 COM setting and so on.
	Input Signal	Forward/Reverse signal, multi-speed signal, fault signal, reset signal. etc.
	Output signal	Programmable relay, open collector output, Fault signal output.
Braking Function	Multi-function analog and digital output terminal	This can realize the output frequency output current and other physical quantity by output 0-10V or-20mA DC signal and 0-10kHz digital signal output.
	Dynamic braking	With an external braking resistor, the maximum braking torque may reach 100%.
Other Function	DC Braking	This can be selected when the motor starts or stops with the action frequency of 0-600Hz, action current level of 0-150% and actuation time of 0-50sec, which can be set in sequence.
	Other Function	Skip frequency, Jog function, Counter, Rotation speed tracking, Momentary power loss restart, Frequency upper/lower limiting, Acceleration/ Deceleration mode can be adjusted. Frequency meter and Voltmeter output, Multi-speed/ program running, Two wire mode/ three wire mode control, Wobble frequency control, Multi-function input terminal selection, Fault auto reset, RS485 serial communication.
Protection Function	Protection Function	Input phase loss protection, Over current protection, Overload protection, Over voltage protection, Under voltage protection, Over heat protection etc.
LED display	LED display	Can display the real time running status of the inverter, monitor parameter, function parameter and fault code and other information of the inverter.
Matching parts	Matching parts	Braking assembly, remote keypads and wire connection, communication panel.
Ambient	Place to be used	Indoor location free from direct exposure to sun light, high humidity or dew condensation, high levels of dust, corrosive gas, explosive gas, inflammable gas, oil mist, salt and etc.
	Altitude	Below 1000M
	Ambient Temperature	-10C to +45C (Bare Machine: -10C to +50C)
	Humidity	20%-90%RH, without dew condensation
	Vibration	<0.5G
	Storage temperature	-20~+60C
Structure	Protection class	IP20
	Cooling mode	Forced air cooling
	Installation mode	Wall mounted or floor-type cabinet



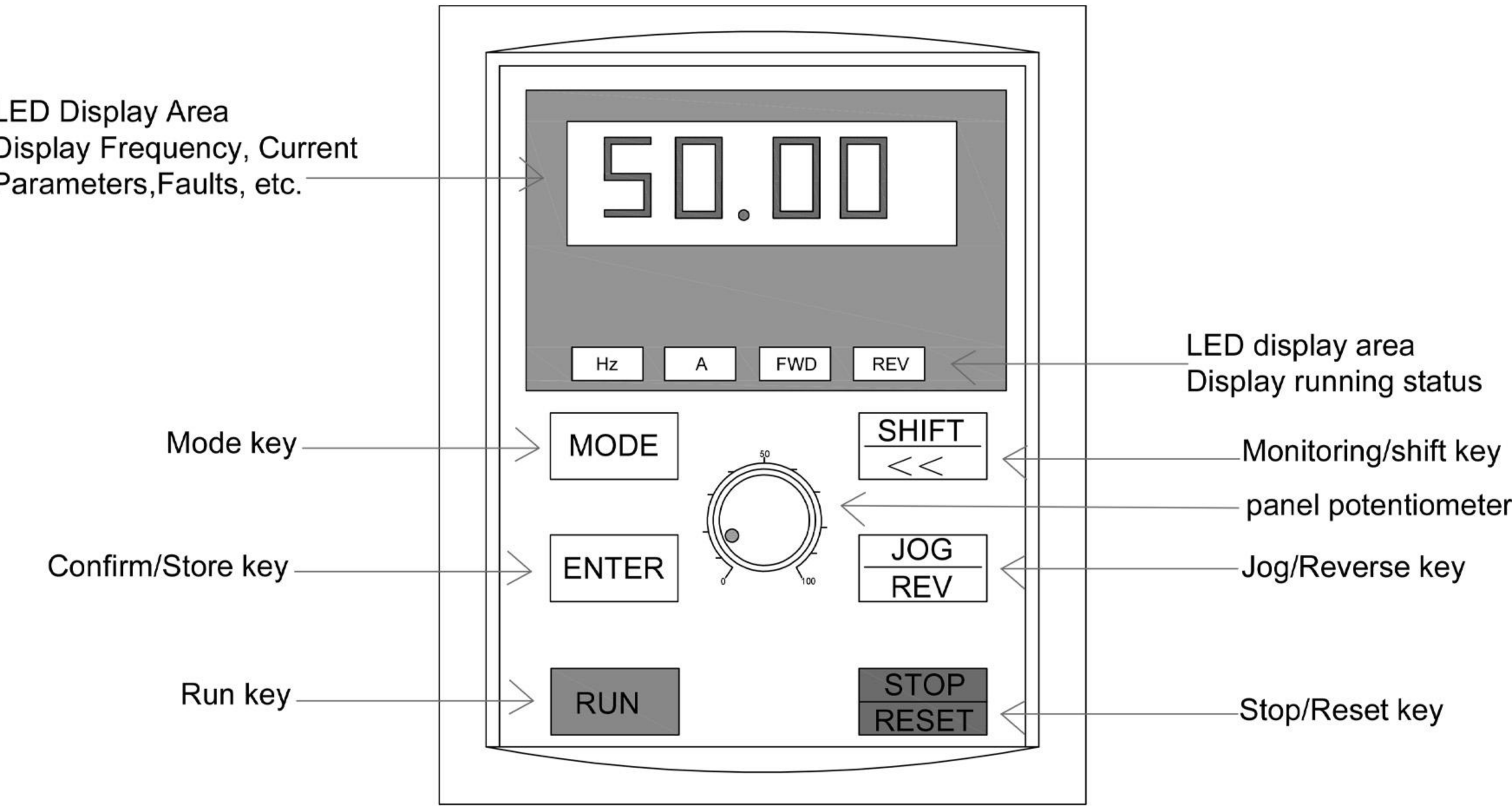
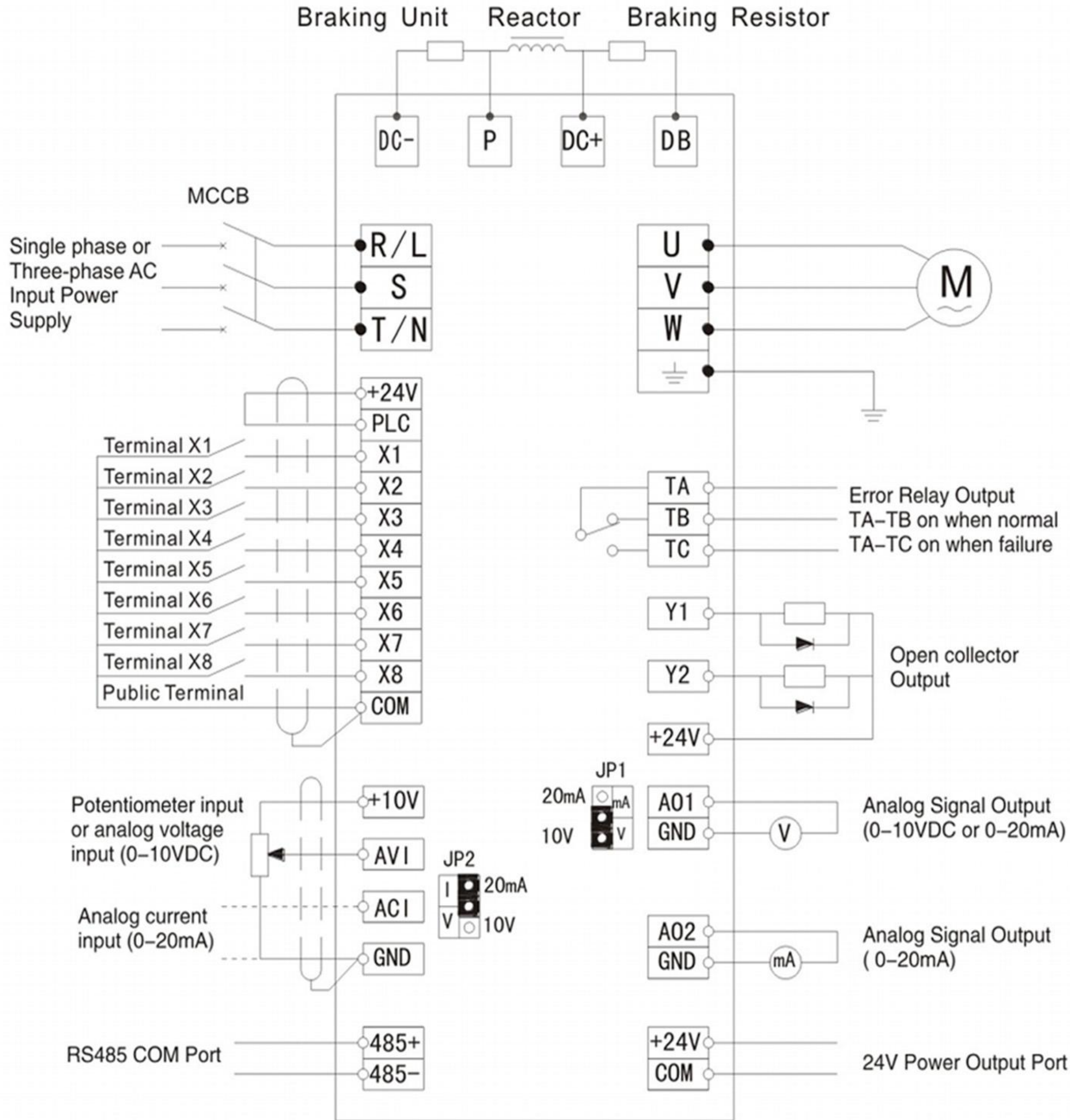
◆ **WIRING DIAGRAM**



◆ **FREQUENCY CONVERTER INSTALLATION**



◆ **OPERATION PANEL AND INSTRUCTIONS**



**FREQUENCY CONVERTER  
G38**

**G38** SERIES FREQUENCY INVERTER HAS THE GOOD EFFECT ENERGY CONSERVATION.FINE SPEED ADJUSTMENT PERFORMANCE, STABLE OPERATION, ELECTRICAL MACHINERY SOFT START, PROTECT FUNCTION AND SELF DIAGNOSTICS FAULT AND OTHER ADVANTAGES.



## G38 HIGH-PERFORMANCE FREQUENCY CONVERTER

### ◆MAIN FEATURES

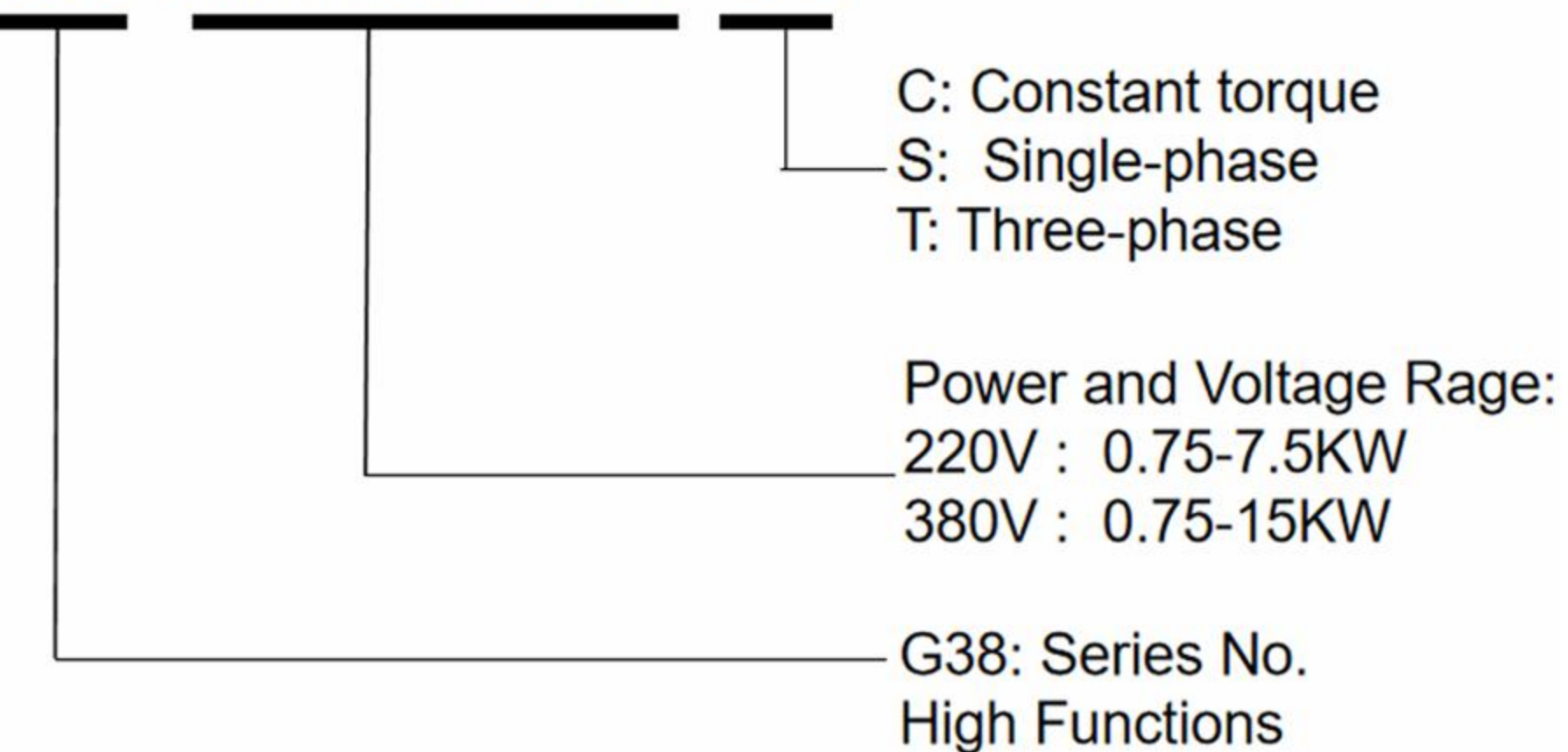
1. Advanced vector control algorithm, adaptive to parameter changes caused by motor changes improve the tolerance of system control.
2. No PG vector control (SVC), PG vector control (VC), V/F control, torque control and other control methods can be selected.
3. Auto tuning of static and dynamic motor parameters can be realized, so that the inverter can be automatically adjusted to the best operating state.
4. NPN and PNP two modes of multi-function input terminals, can provide compatible switch signal with any external equipment.
5. Built-in PLC function, which can realize operation modes such as stopping after a single cycle, maintaining the final value after a single cycle, and continuous cycle etc.
6. Rich combination of frequency sources, more flexible to use.
7. Special functions such as swing frequency, fixed length and counting can be realized.
8. Realize the delay function of programmable relay and open collector output
9. Droop control function realizes automatic load balance.
10. High-speed pulse input and output function.
11. Built-in PID function to realize closed-loop control of flow, temperature and pressure.
12. Standard MODBUS communication protocol, easy to realize the communication with PLC industrial computer and other industrial control equipment.
13. Multiple password protection to protect user rights.
14. Compact structure, independent air duct design, greatly improve power density, and effectively reduce user installation volume requirements.
15. Wide grid voltage design, especially suitable for domestic low-voltage special occasions.
16. Wide industry applications, special function modules can be expanded according to different industries.

### ◆APPLICATION RANG

1. Handing machinery, conveyor.
2. Wire drawing machines, industrial washing machines, sports machines.
3. Fluid machinery: Fan, water pump, blower, music fountain.
4. Public mechanical equipment: high precision CNC machine tools, CNC machine.
5. Metal processing, wire drawing machine and other mechanical equipment.
6. Paper-making equipment, chemical industry, pharmaceutical industry, textile industry, etc.

### ◆DEMONSTRATION OF THE MODEL

#### G38-0.75KW220V-CS



### ◆EXTERNAL DIMENSIONS AND INSTALLATION DIMENSIONS



Fig.1

### ◆G38 HIGH-PERFORMANCE VECTOR FREQUENCY CONVERTER

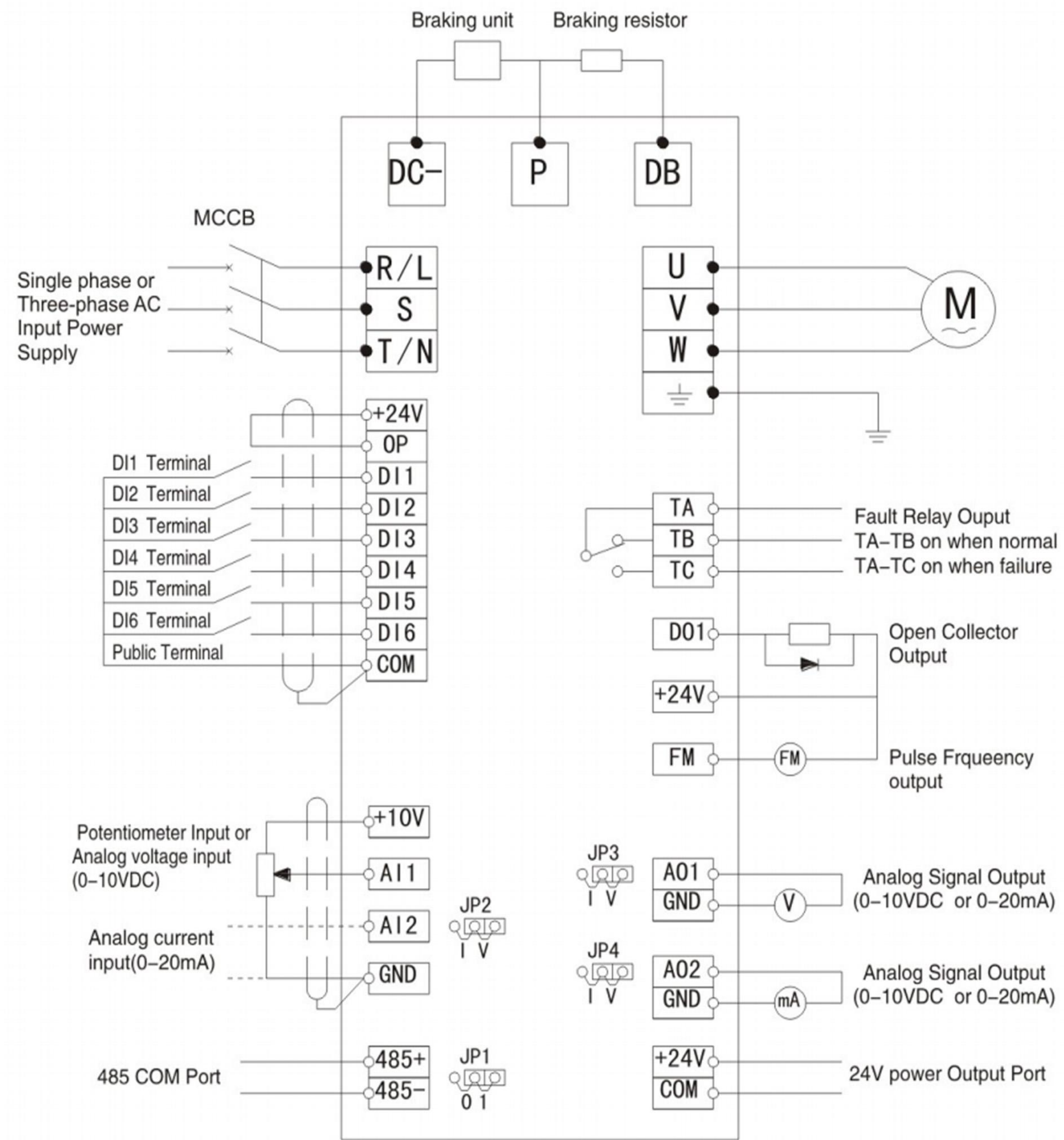
Inverter Model	Power (KW)	Current (A)	Dimension mm						Features	Figure
			H	H1	W	W1	D	d		
G38-0.75KW220V-CS	0.75	4	186	172	125	113	180	5	Integrated module Internal brake unit	1
G38-1.5KW220V-CS	1.5	7								
G38-2.2KW220V-CS	2.2	9.6								
G38-3.7KW220V-CS	3.7	17								
G38-5.5KW220V-CT	5.5	25								
G38-7.5KW220V-CT	7.5	32								
G38-0.75KW380V-CT	0.75	2.1								
G38-1.5KW380V-CT	1.5	3.8	249	236	160	147	197			
G38-2.2KW380V-CT	2.2	5.1								
G38-3KW380V-CT	3	6.8								
G38-4KW380V-CT	4	9.0	322	304	208	194	204			
G38-5.5KW380V-CT	5.5	13								
G38-7.5KW380V-CT	7.5	17								
G38-11KW380V-CT	11	25								
G38-15KW380V-CT	15	32								

## ◆ SPECIFICATION AND TECHNICAL INDICATIONS

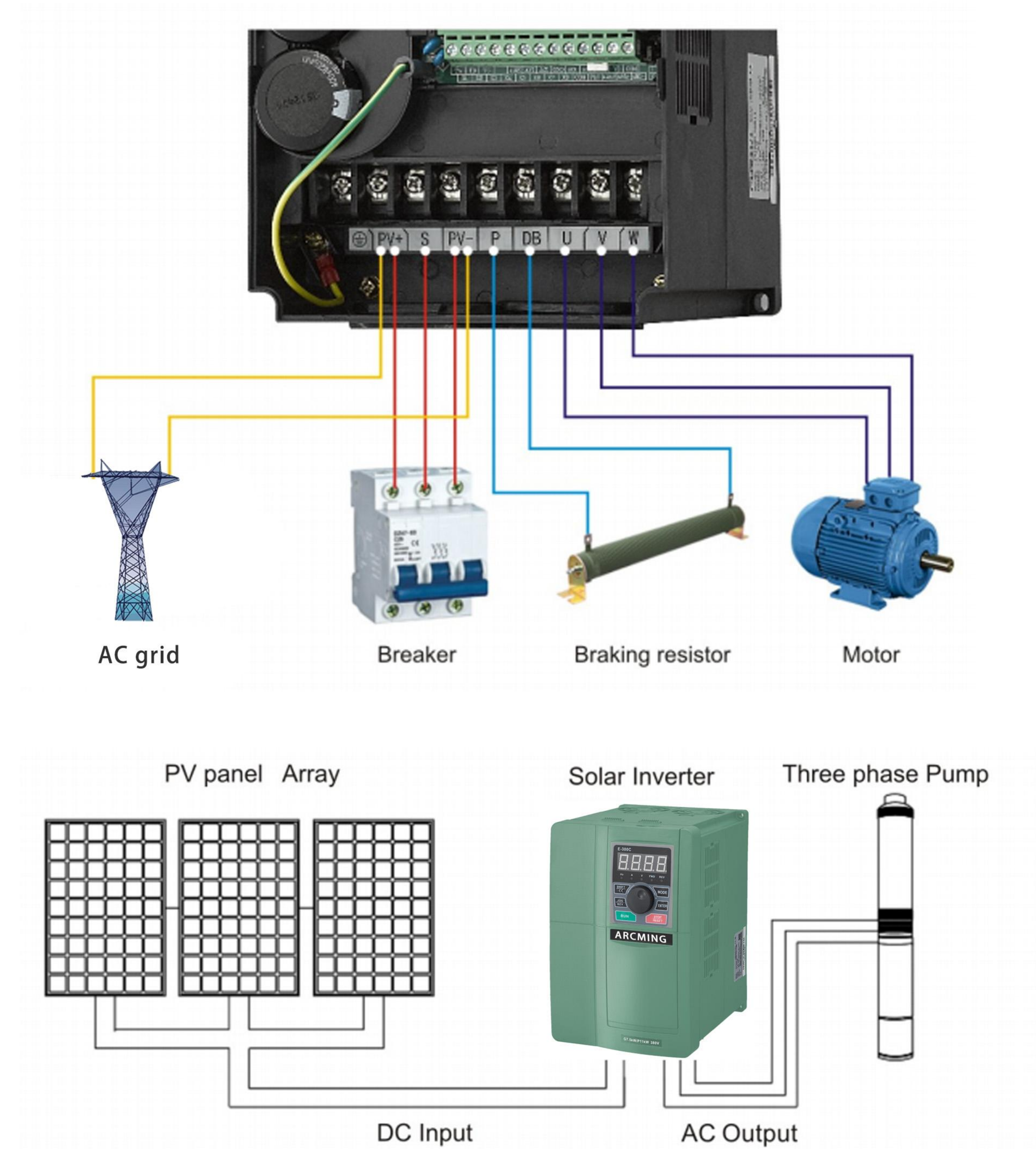
Specification and Technical Indications		
Item	Item Description	
Input	Rated voltage& Frequency	Single /Three phase 200-240VAC.Three phase 360-440VAC. 50Hz/60Hz
	Allowable Voltage range	Voltage fluctuate range: 10%Voltage unbalance rate: <3%;Frequency fluctuation: <5%
Output	Rated voltage	Three phase 0~ input AC voltage
	Frequency	0.00-500.00Hz
Overload capacity		Type G:150% 1minute, 180% 3 seconds, 200% transient protection Type P:120% 1minute, 150% 3 seconds,180% transient protection
Control Function	Modulation mode	Optimal space voltage vector PWM modulation
	Control mode	Closed loop control (FVC), open loop control (SVC), V/F control
	Frequency resolution	Digital setting:0.01Hz; Analog setting: Max frequency x0.1%
	Starting torque	Type G:0.5Hz/150%(SVC); 0Hz/180%(FVC); Type P:0.5Hz/100%
	Speed range	1:100 (SVC) 1:1000 (FVC)
	Steady velocity precision	±0.5%(SVC) ±0.02% (FVC)
	Torque control precision	±5%(FVC)
	Torque boost	Automatic torque boost,automatically boost torque according to output current. Manual torqueboost,range:0.1~30.0%
	V/F curve	3 ways:linear curve; Multi-point Curve: Nth power V/F curve (1.2th power,1.4th power,1.6th power,1.8th power,2th power.)
	V/F separation	2 ways:full separation,half separation
	Acceleration and deceleration curve	Linear or S-curve acceleration/deceleration mode. 4 acceleration and deceleration time, the range of acceleration and deceleration time is 0.0-6500.0s
	Carrier frequency	1.0~15.0KHz
	Jog function	Jog frequency range: 0.01 - 50.00Hz, jog acceleration and deceleration time0.1 - 6500.0 can be set.
	Simple PLC multi-speed operation	Realize up to 16-speed operation through built-in PLC or control terminal.
	Automatic voltage regulator(AVR)	When the grid voltage changes, it can automatically adjust the PWM output to keep the output voltage constant.
	Built-in PID	Conveniently form a closed-loop control system, suitable for process control such as pressure control and flow control.
	Over-voltage Over-current stall control	Automatically limit the current and voltage during operation to prevent frequent over-current and over-voltage trips.
	Rapid current limit function	Minimize over-current faults and protect the inverter from normal operation.
	Torque limit and control	The "shovel" feature automatically limits the torque during operation to prevent frequent over-current trips; closed-loop vector mode can realize torque control.
	Special feature	Outstanding performance
Power dip ride through		When instantaneous power failure occurs, the load feedback energy is used to compensate for the voltage drop, and maintain the inverter to continue running for a short time.
Rapid current limit		Avoid frequent over-current faults of the inverter.
Virtual I/O		5 groups of virtual DIDO, can realize simple logic control.
Timing control		Timing control function: set time range 0.0Min -6500.0Min.
Multi-motor switch over		Two motors can be switched over via two groups of motor parameters.
Multi-threaded bus support		Support 4 field buses: Modbus,Profibus-DP CANlink, CANopen.
Multi-encoder support		Support differential, open collector, UVW, resolver, sine and cosine encoders.

Operation function	Operation instruction	Operation panel control, external terminal control, serial communication control. Can be switched in a variety ways.
	Frequency setting	10 kinds of frequency sources: digital setting, analog voltage setting, analog current setting. Pulse setting, serial port setting.Can be switched in a variety ways.
	Auxiliary frequency source	10 kinds of auxiliary frequency sources. Flexible realization of auxiliary frequency fine-tuning and frequency synthesis.
	Input terminal	Standard: 6 digital input terminals, one of which supports high-speed pulse input up to 100kHz. 2 analog input terminals, 1 only supports 0 - 10V voltage input. Input terminal 1 supports 0 ~10V voltage input or 0 - 20mA current input. Expansion capacity: 5 digitalinput terminals. 1 analog input terminal, support -10V ~ 10V voltage input, and support PT100/PT1000.
Braking function	Output terminal	Standard: 1 high-speed pulse output terminal (open collector type is optional). Support 0-100kHz square wave signal output. 1 digital output terminal, 1 relay output terminal. 2 analog output terminals, support 0-20mA current output or 0~10V voltage output. Expansion capacity: 1 digital output terminal, 1 relay output terminal. 1 analog output terminal, support 0-20mA current output or 0-10V voltage output.
	Dynamic braking	External braking resistor, maximum braking torque 100%.
Other functions	DC braking	It can be selected separately when starting and stopping, the action frequency is 0 - 600Hz, the action current level is 0 - 150%, the action time is 0 - 50 seconds, continuous can be set.
	LED display	Real-time display of the inverter's operating status, monitoring parameters, function parameters,fault codes and other information.
Protection function	Other functions	Jump frequency, counter, speed tracking, restart after instantaneous power failure, upper and lower limit of frequency, adjustable acceleration and deceleration mode, two-wire/three-wire control, swing frequency control, automatic fault reset, frequency arrival output, cooling fan control.multi-function buttons custom settings,etc.
	Optional accessories	Braking component, remote operation panel and connecting cable, communication board.
Environment	Place to be used	Indoors, free from direct sunlight, free of dust, corrosive gas, flammable and explosive gas, oil mist, water vapor, dripping water or salt.
	Altitude	Less than 1000 meters.
	Ambient temperature	10~+45C[The bareis:-10~+50C]
	Humidity	20~90%RH, No dew condensation.
	Vibration	<0.5G
Structure	Storage temperature	-20~+60C
	Protection level	IP20
	Cooling method	Forced air cooling
	Installation method	Wall-mounted floor-standing electric control cabinet

## ◆ WIRING DIAGRAM



## ◆ INSTALLATION METHOD



# FREQUENCY CONVERTER P60

**P60**SERIES FREQUENCY INVERTER HAS THE GOOD EFFECT ENERGY CONSERVATION.FINE SPEED ADJUSTMENT PERFORMANCE, STABLE OPERATION, ELECTRICAL MACHINERY SOFT START, PROTECT FUNCTION AND SELF DIAGNOSTICS FAULT AND OTHER ADVANTAGES.



## P60 WATER PUMP DEDICATED FREQUENCY CONVERTER

### ◆MAIN FEATURES

P60 series pump control inverter is the company's own research and development of high degree protection pump inverter, the shell is dust proof and splash water, can be installed different brand water pump motor junction box. Adapt to a variety of sensor signals, simple operation, high reliability, low noise, can be individually controlled a pump and can also be more on-line operation.

1. High Protection IP54, All-round Anti-corrosion Anti-splash Water.
2. High Performance VF And Vector Control.
3. Pump Special Design, Water Shortage Protection, Water Coming Start Automatically.
4. Single Pump Constant Pressure, Main And Auxiliary Pump Single-line Networking, Automatic Control.
5. Antifreeze, Rust-proof Function, More Humane Protection For Protecting Pump.
6. One-button Pressure Setting, Quick Parameter View.
7. Dedicated Pump Function And Fault Protection Function.
8. Professional Heat-resistant Design, Small Power, Without Fan Can Be More Reliable.
9. Directly Installed On The Motor, No Need For The Cabinet, Simple And Convenient To Operate.

### ◆APPLICATION RANG

Constant pump, Fire fighting apparatus, Environmental protection equipment, Environmental engineering, water treatment equipment and etc.

### ◆DEMONSTRATION OF THE MODEL

#### G60-0.75KW220V-S

S: Single-phase  
T: Three-phase

Power and Voltage Range:  
220V : 0.75-3.7KW  
380V : 0.75-7.5KW

G60: Series No  
High IP grade

### ◆EXTERNAL DIMENSIONS AND INSTALLATION DIMENSIONS

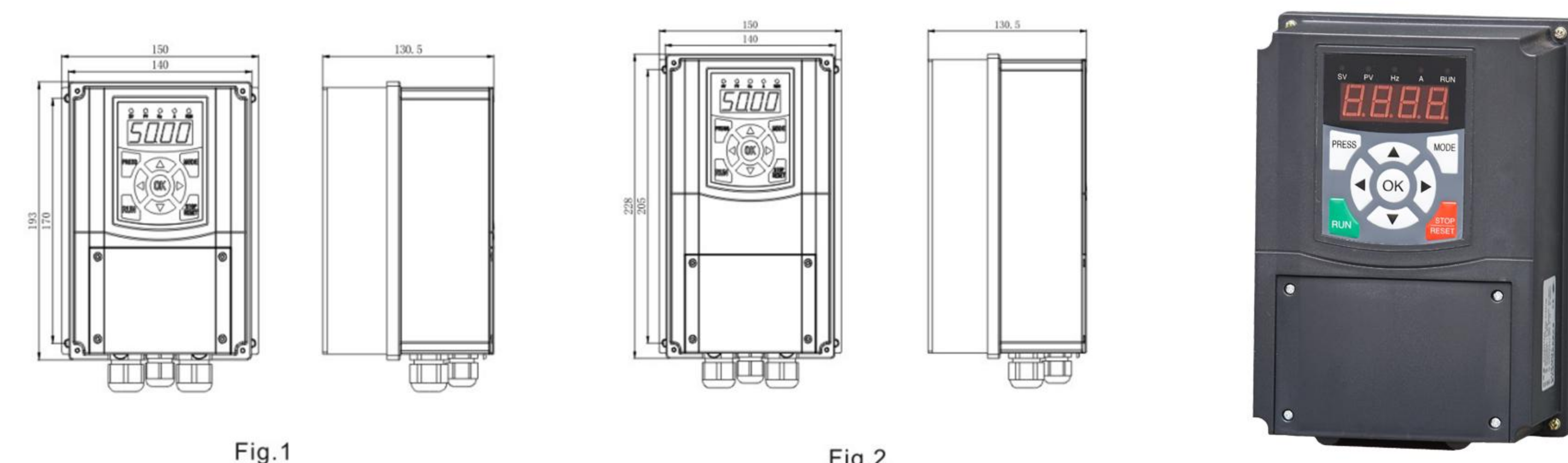


Fig.1

Fig.2

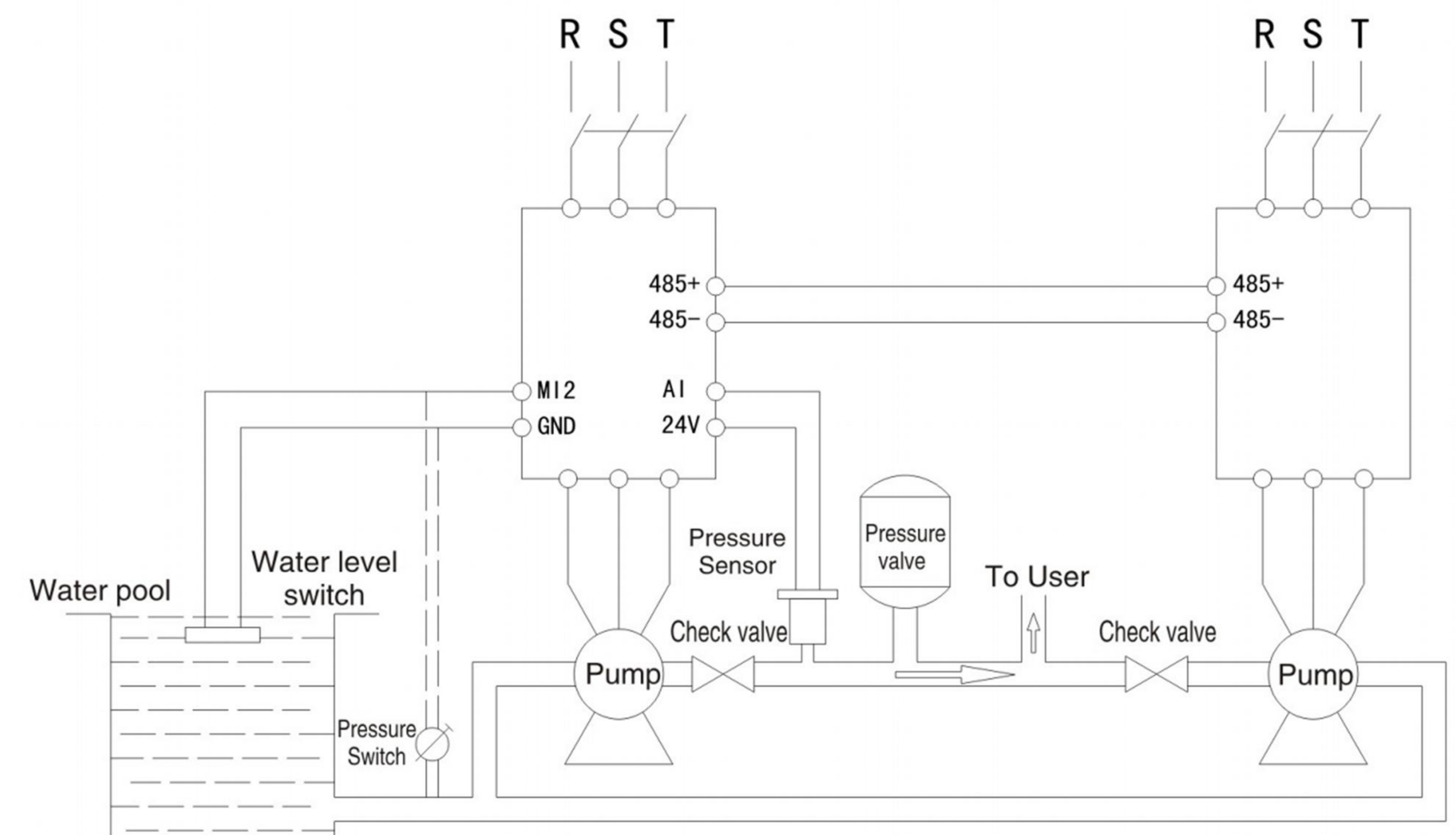
### ◆P60 HIGH-PERFORMANCE VECTOR FREQUENCY CONVERTER

Inverter Model	Power (KW)	Current (A)	Dimension mm						Features	Figure
			H	H1	W	W1	D	d		
P60-0.75KW220V-S	0.75	4.5	193	170	150	140	131	4.5	Integrated module	1
P60-1.5KW220V-S	1.5	7								
P60-2.2KW220V-S	2.2	10								
P60-3.7KW220V-S	3.7	16	228	205	150	140	131	4.5		2
P60-0.75KW380V-T	0.75	2.5	193	170	150	140	131	4.5		1
P60-1.5KW380V-T	1.5	3.7								
P60-2.2KW380V-T	2.2	5								
P60-3KW380V-T	3	6.8	228	205	150	140	131	4.5		2
P60-4KW380V-T	4	9								
P60-5.5KW380V-T	5.5	13								
P60-7.5KW380V-T	7.5	17								

◆SPECIFICATION AND TECHNICAL INDICATIONS

Specification and Technical Indications		
Item	Item Description	
Input	Rated voltage& Frequency	Single /Three phase 220AC.Three phase 380VAC. 50Hz/60Hz
	Allowable Voltage range	Voltage fluctuate range: -20%~+20%; Voltage unbalance rate: <3%;Frequency fluctuation: 5%
Output	Rated voltage	Three phase 0~ input AC voltage
	Frequency	0.00-600.00Hz
Basic Function	Frequency accuracy	Digital setting: Max. Frequency x+0.01% Analog setting: Max.Frequency x±0.2%
	Frequency resolution	Digital setting :0.01HZ; Analog setting :Max.Frequency x0.1%
	Starting frequency	0.00-50.00Hz
	Acceleration/deceleration	0.1-3600 can be set in sequence.
	Carrier frequency	1.0~15.0KHz
	V/F curve	1: linear curve; 2: quadratic; 3: user defined V/F curve.
	Automatic energy-saving operation	Auto optimize V/F curve according to the load changes to realize the energy saving operation.
	Built-in PID	This can form a convenient closed-loop control system (CLCS)and is applicable to pressure control,flow control and other process control .
	Operating command	Operation panel control,external terminal control and COM control.
	Frequency setting	Keypad potentiometer setting, operation panel ▲▼setting. analog voltage signal or external potentiometer setting, analog current signal setting,terminal combination
	Input Signal	Forward/Reverse signal, multi-speed signal, fault signal, reset signal etc.
	Output signal	Programmable relay.
	Other Function	Over voltage alarm, Rotation speed tracking, Momentary power loss restart, Frequency upper/lower limiting, Acceleration/ Deceleration mode can be adjusted, Multi-speed/ program running, Fault auto reset, RS485 serial communication.
	Protection Function	Input phase loss protection, Over current protection, Overload protection, Over voltage protection, Under voltage protection, Over heat protection etc.
LED Display	Can display the real time running status of the inverter, monitor parameter,function parameter and fault code and other information of the inverter.	
Ambient	Place to be used	Indoor location free from direct exposure to sun light, high humidity or dew condensation, high levels of dust, corrosive gas, explosive gas, inflammable gas, oil
	Altitude	Below 1000M
	Ambient Temperature	-10C to +45C(Bare Machine: -10C to+50C)
	Humidity	20%-90%RH, without dew condensation
	Vibration	<0.5G
Storage temperature	-20~+60C	

◆FREQUENCY INVERTER'S WIRING DIAGRAM





## P60 WATER PUMP DEDICATED FREQUENCY CONVERTER

### ◆MAIN FEATURES

G60 series IP54 general inverter is the company's own research and development of high degree protection pump inverter, the shell is dust proof and splash water, can be installed different brand water pump motor junction box. Adapt to a variety of sensor signals, simple operation, high reliability, low noise, can be individually controlled a pump and can also be more on-line operation.

High protection IP54, all-round anti-corrosion anti-splash water

High performance V / F and vector control Professional heat-resistant design, small power, without fan can be more reliable Directly installed on the motor, no need for the cabinet, simple and convenient to operate. The function and software is same as ZVF300H series, can be used for water supply system and general purpose.

### ◆APPLICATION RANG

Water pump industry, all kinds of fans and pumping load, digital machine tool, transfer machine, textile industry, medicine industry, paper making equipment, blower, music fountain etc.

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P60: Series No  
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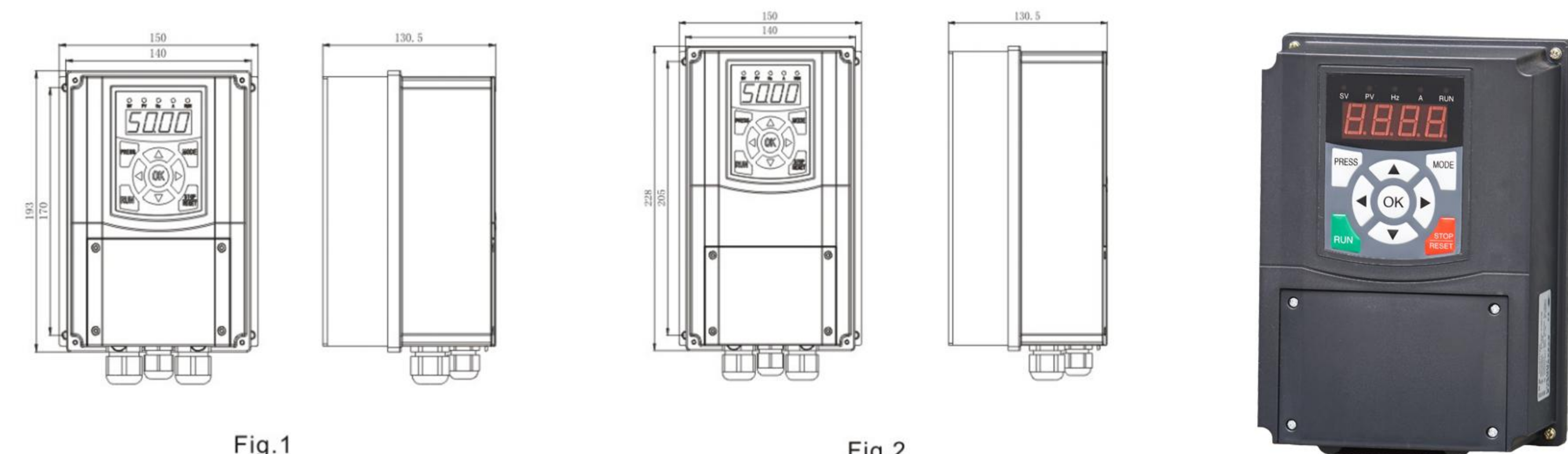


Fig.1

Fig.2

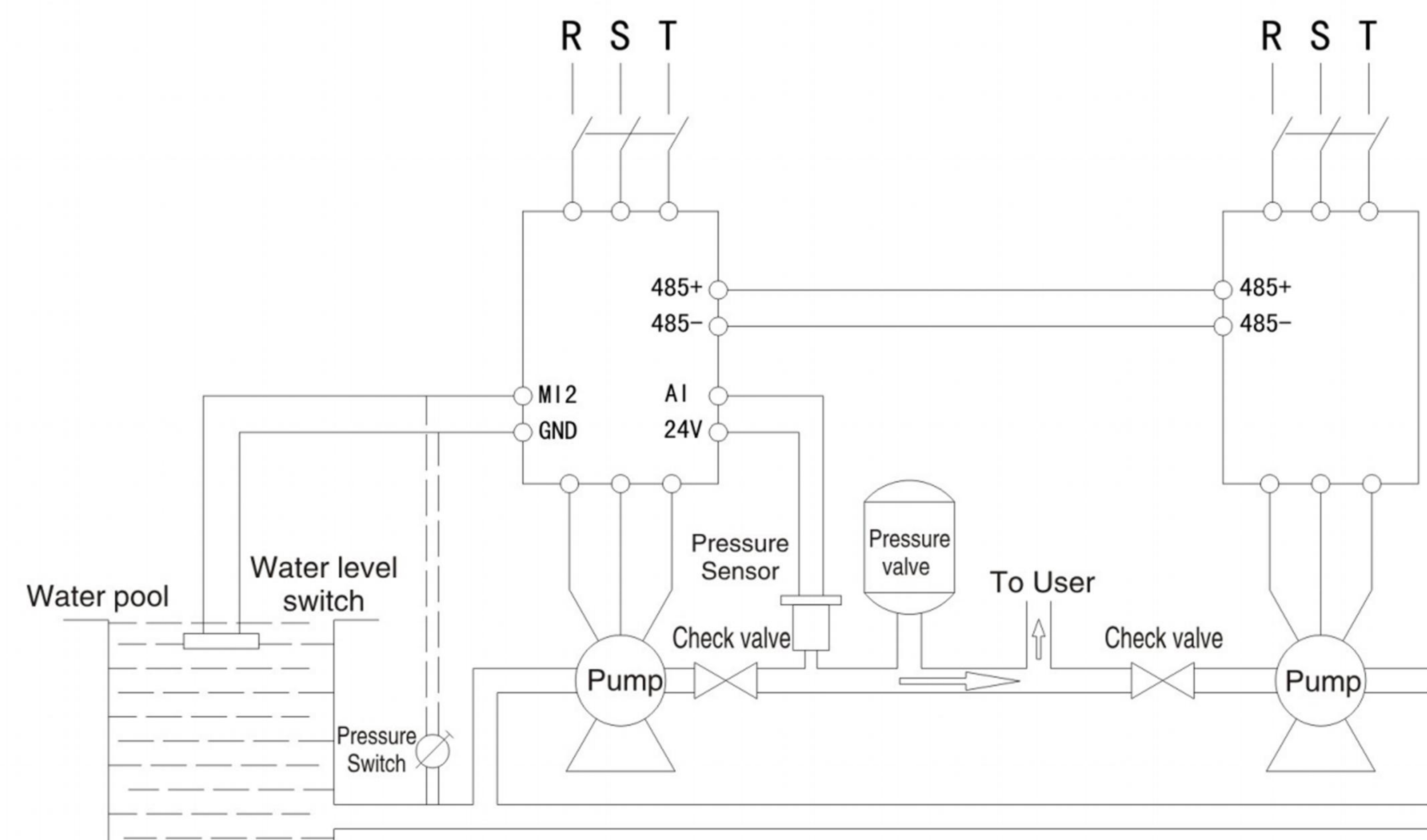
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	Ambient Temperature	-10C to +45C(Bare Machine:-10C to+50C)
	Humidity	20%-90%RH, without dew condensation
	Vibration	<0.5G
	Storage temperature	-20~+60C

## ◆ FREQUENCY INVERTER'S WIRING DIAGRAM



# CERTIFICATES

# APPLICATION



Power distribution management



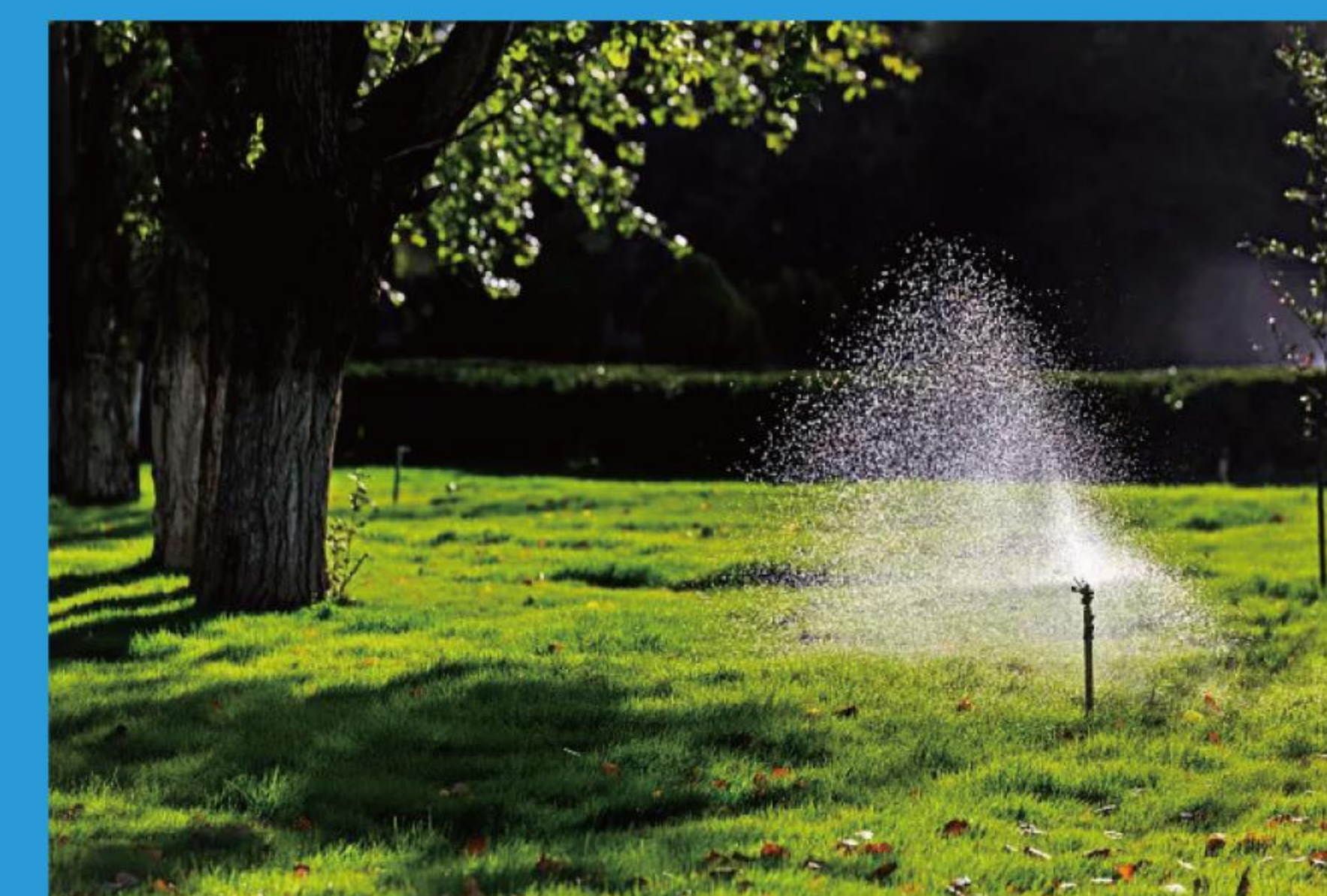
Agricultural Irrigation



Home Pool



Power distribution management



Garden Irrigation



Fishing Ground