


USER MANUAL

Comply with the standards: IEC61800-5-1:2007

EN 61800-5-1:2007 Baico pump s.l.

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1. Safety and Notes

1.1 Notice for use

Inverter is a high-precision electronic and electrical products, To ensure the safety of your life and property, this manual has **【Danger】** , **【Notice】** and so forth words, When you are handling, installing, using and checking inverter, please observe these security issues.



Danger

- | |
|--|
| 1. Cover the panel before switch on the power, otherwise there is danger of electric shock and explosion. |
| 2. Don't confuse the input terminals and output terminals, otherwise there is danger of explosion and damage property. |
| 3. Storage for more than 2 years of the inverter, please use the voltage regulator to rise voltage gradually, otherwise there is danger of electric shock and explosion. |
| 4. When the power is connected, please don't touch the inverter terminals, otherwise there is danger of electric shock. |
| 5. Maintenance operation after cutting off the power 5 minutes later, All lights will be extinguished, at this time. otherwise there is danger of electric shock. |
| 6. Don't use wet hand to manipulate inverter. otherwise there is danger of electric shock. |
| 7. Parts must be replaced by professionals, Prohibited the thread or metal left in the product, otherwise there is danger of fire. |

1. Safety and Notes



Notice

1. Installation and maintenance only can be operated by professionals.
2. Verify the voltage inverter and AC power supply voltage level must be consistent. otherwise, Easily lead to personal injury or fire.
3. Don't connect the AC main circuit power supply and output terminals U, V and W. If connect, it will damage the inverter and the warranty service failure
4. Connect input power after installing the panel, when the power is connected, don't remove the panel, otherwise, it will lead to electric shock easily.
5. Don't touch the high voltage terminal of the inverter, otherwise, it will be electric shocked easily.
6. When the power is connected, don't connect or disconnect wires and connectors. otherwise, Easily lead to personal injury or fire.
7. CMOS devices easily damaged by static electricity, don't touch the CMOS components.
8. The inverter can not do the Dielectric Voltage Withstand Test. This can cause internal damage to the semiconductor devices of inverter.

1.2 Product checking

Each inverter must be finished all the functions detection, After customers receive the converter and open the packing, please check the following information:

1. Safety and Notes

(1)Is the inverter that you need?the model?

(2)Whether the inverter be damaged for the transport.if it be damaged,please don't connect the power.

1.3 Notes on use of the environment

The installation environment has a direct impact on the normal function and life of inverter.therefore,the installation must meet the following conditions:

※Environment tempertaure::-10℃~+40℃

※Prevent dust, cotton and metal fine into crumbs

※Prevent corrosive liquids

※Far from radioactive substances and fuel

※Prevent rain drops or wet conditions

※Prevent oil mist, salt corrosion

※Avoid direct sunlight

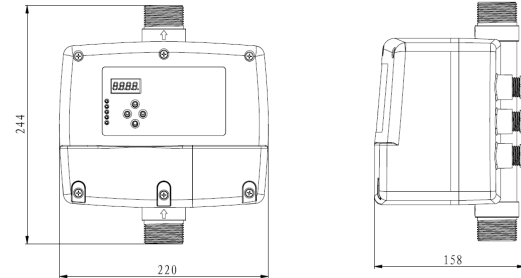
※Prevent electromagnetic interference

2. Product dimensions and technical datas

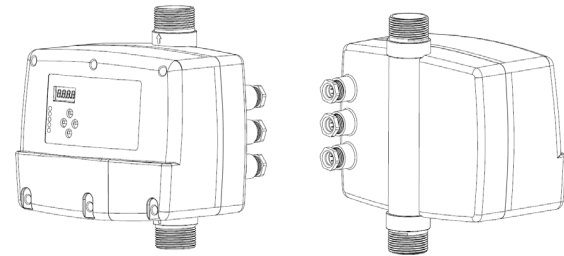
2.1 Product dimensions and technical datas

Technical Data Sheet			
Model	Iskut WC 8,5 ST	Iskut WC 8,5 SS	
Item			
Power	Single-phase AC		
Input voltage	230V		
Input frequency	50/60Hz		
Output voltage	3~230V	1~230V	
The motor type	Three-phase	Single-phase	
Auxiliary pump motor type	Single-phase		
Maximum motor power	1500W		
Output frequency	20~50Hz or 20~60Hz		
Joint crew	G1¼" or NPT1¼" male		
Max pressure	12bar		
Pressure setting range	1~9bar		
Self-starting pressure	Less than 0.5bar		

Dimensions figure



Shape figure

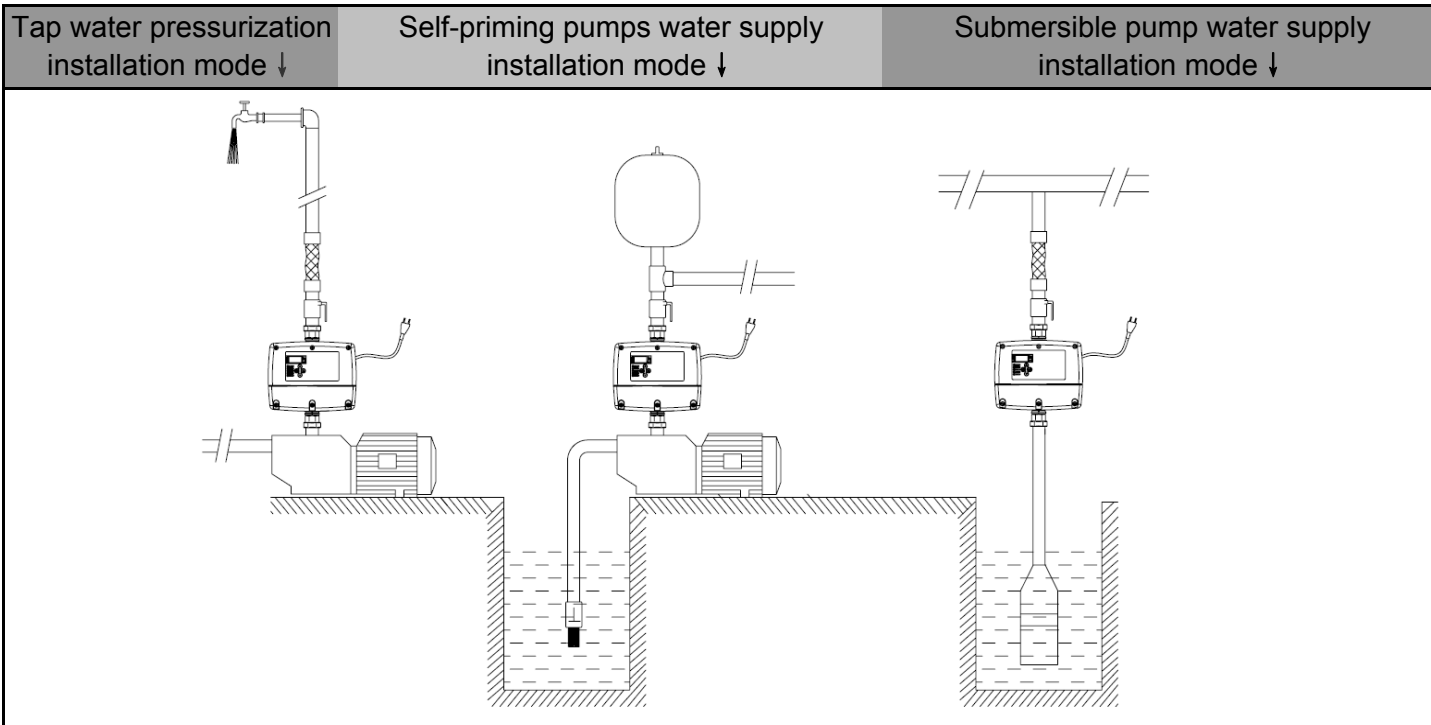


3. Installation and operation of the inverter

3.1 Installation

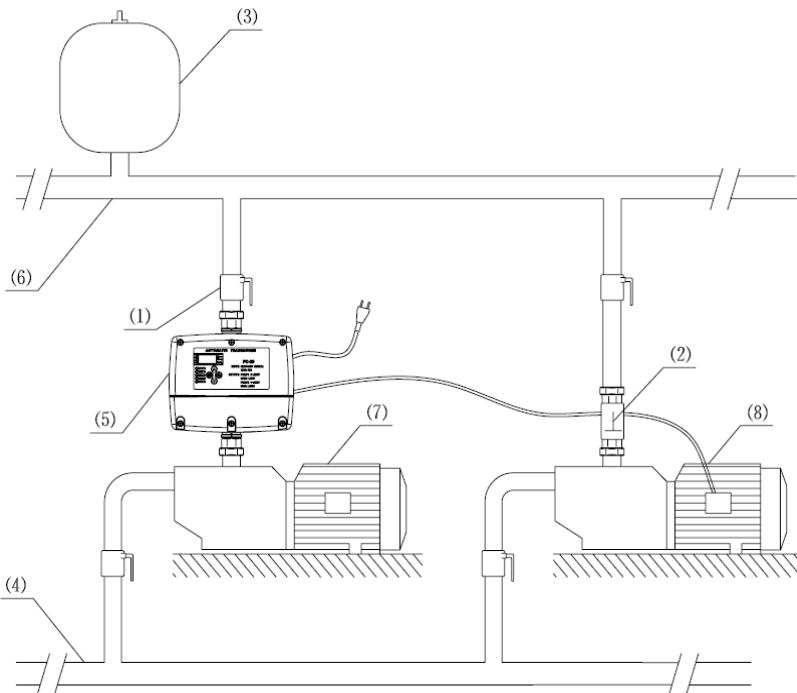
3.1.1 Installation diagram

(1) Single pump work mode



3. Installation and operation of the inverter

(2) Pump group work mode



Parts instructions	
NO.	Name
(1)	Ball valve
(2)	Check valve
(3)	Pressure tank
(4)	Inlet pipe
(5)	Inverter
(6)	Outlet pipe
(7)	Main pump
(8)	Auxiliary pump

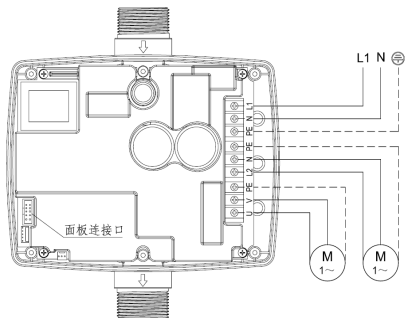
3. Installation and operation of the inverter

3.1.2 Installation instruction

- (1) Inverter must be installed vertically, installation direction cannot be reversed.
- (2) In order to make supply water system long-time and stable operation, we suggest the user had better add a tank more than 8L.
- (3) When installing the inverter, the user had better use the hose to connect the pipe.

3.2 Wiring

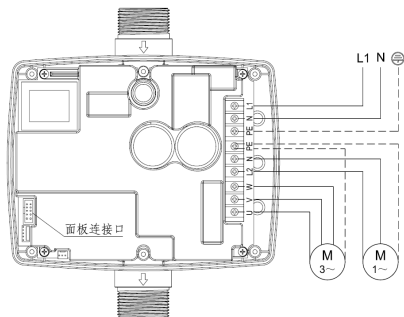
3.2.1 Single-phase inverter wiring diagram and instructions



- (1) Don't connect the AC main circuit power supply and output terminals U, V .
- (2) Wiring after the power cut off.
- (3) To verify the inverter rated voltage and the input supply voltage are consistent.
- (4) The inverter can't be done the Dielectric Voltage Withstand Test.
- (5) Terminal screw tightening torque 1.7N.m.
- (6) Make sure the Ground terminal is connected before wiring the main circuit terminals.
- (7) Must use more than 1.5mm² cross-section, not less than 8mm diameter cables.
- (8) Connect the input power after installing the panel, when the power is connected , don't remove the panel.

3. Installation and operation of the inverter

3.2.2 Three-phase inverter wiring diagram and instructions



- (1) Don't connect the AC main circuit power supply and output terminals U、V、W .
- (2) Wiring after the power cut off.
- (3) To verify the inverter rated voltage and the input supply voltage are consistent
- (4) The inverter can't be done the Dielectric Voltage Withstand Test.
- (5) Terminal screw tightening torque 1.7N.m.
- (6) Make sure the Ground terminal is connected before wiring the main circuit terminals.
- (7) Must use more than 1.5mm² cross-section, not less than 8mm diameter cables.
- (8) Connect the input power after installing the panel,when the power is connected , don't remove the panel

3.3 Operation





3.3.1 Checking before operation

- (1)Check whether the installation and wiring are correct.
- (2)Are there any Thread or metal left in the inverter.
- (3)Are the Screws firmly tightened.
- (4)whether terminals on the bare wire is exposed to other terminals.

3. Installation and operation of the inverter

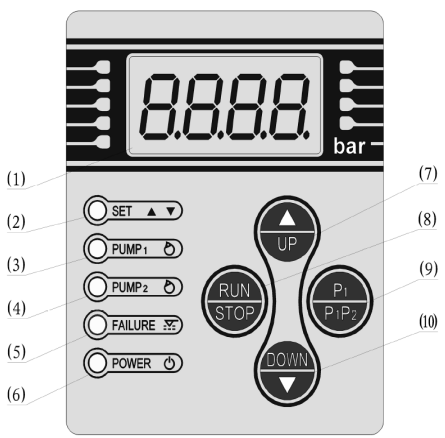

- (5) Connect the input power after installing the panel, when the power is connected, don't remove the panel.
- (6) Must install a separate set of devices for circuit protection.
- (7) Confirm whether the input frequency conforms to power line frequency factory setting, if not, please pull switch on the frequency conversion.

3.3.2 Operation and manipulate

- (1) Make sure the connection is correct, the machine runs empty, observe the three-phase pump motor running direction is correct. If the motor reversal, please reverse UV、WV or WU S-Video or reverse on the DIP switch adjustment.
- (2) Use a wrench to tighten the cable after confirming everything is correct.
- (3) When the power is connected, the pressure indicator is 00.00 bar and only the power indicator light.
- (4) Open outlet valve, press the  button to start pump.
- (5) Press the  button, setting the pressure to 09.00 bar. Operation of the pump frequency, close the valve, make the pipe pressure rise to maximum, ensure the long-term and stable operation of the system, the pressure setting must be less than the maximum pressure 1 bar.
- (6) Press  and  button to set your pressure. We suggest the pressure you setting more than 1 bar.
- (7) After setting pressure, turn on the tap, the inverter do the frequency control of water pump according to the water using conditions, observe whether the water pump is functioning properly? whether the pressure display shows the value of the pressure is constant? if so, then complete the installation, if not, please contrast of the relevant contents of this manual to remedy of the trouble, then readjust.

4. Button and functional instructions

4.1 Operation

	NO.	Name or Function	Instruction
	(1)	pressure display	display the real-time pressure or setting pressure (factory pressure setting is 2.5bar)
	(2)	Pressure setting indicator	LED flashes when the set pressure, (1) zone display the set pressure .when Indicator is off, (1) zone display real-time pressure
	(3)	Main Pump indicator	when the main pump speed operating state or standby state,the indicator flash quickly.when the main pump at the constant speed (constant pressure) work state, the indicator flash slowly.when the indicator is off, the main pump stop working.
	(4)	Auxiliary pump	when the auxiliary pump work,the indicator flash. the indicator long-time on,it is stand state.when the indicator is off,the auxiliary pump stop working.
	(5)	water shortage indicator	when the indicator flash,the pipe is short of water. when it is on the normal work state,the indicator is off. the main pump restart two times after water shortage.if fail,please cut off the power and restart the pump or press (8) manual start.
	(6)	Power light	Indicator lights up when power is connected.
	(7)	Rise the pressure setting	press one time,the pressure rise 0.1bar.press long time ,the pressure will rise quickly.
	(8)	Start/stop	Start or stop the pump master switch
	(9)	Work mode switch	Single pump work mode or pump group work mode switch.the factory set is the single-pump work mode If need to enter pump group to work mode switch, pump group work mode (4) light up.
	(10)	Reduce the pressure setting	press one time,the pressure reduce 0.1bar.press long, the pressure will reduce quickly.
	Slide Switch introduction		Frequency conversion button
		Reverse switch key	Switch to "ON" position,that set the frequency of 50Hz Three-phase motor reverses,from the "O" at the pull to "1"