



## Knapsack pump inverter

### Product features

- ◆ With pump motor protection, such as: phase loss, overload, overvoltage, undervoltage ;
- ◆ Mounted on the motor directly, big savings on installation ;
- ◆ Automatic restart, when Power supply or water supply ;
- ◆ Intelligent antifreeze and rust protection ;
- ◆ Automatic stop, when water shortage, pipe bursting ;
- ◆ IP54 protection, waterproof and dustproof ;
- ◆ Main and auxiliary multi-pump online system .

### Product Dimensions



Input voltage	Model	Power	Dimensions(mm)			Pore size
			H	W	D	
220V	YX9600-2S0007G	0.75KW	210	157	109	Φ4
	YX9600-2S0015G	1.5KW				
	YX9600-2S0022G	2.2KW				
380V	YX9600-4T0007G	0.75KW	210	157	109	Φ4
	YX9600-4T0015G	1.5KW				
	YX9600-4T0022G	2.2KW				
	YX9600-4T0037G	3.7KW	298	218	162	Φ4
	YX9600-4T0055G	5.5KW				
	YX9600-4T0075G	7.5KW				

## Specifications

Items		Specifications
Input	Rated Voltage	200V/220V/380V;50Hz/60Hz
	Tolerance	Voltage: $\pm 20\%$ voltage unbalance rate: $<3\%$ ; frequency: $\pm 5\%$
Output	Rated voltage	0 ~ 200V/220V/380V
	Frequency range	0Hz ~ 500Hz
	Frequency resolution	0.01Hz
Control function	Overload capability	150% rated current for 1 minute, 180% rated current for 3 seconds
	Modulation modes	Optimized space voltage vector SVPWM modulation
	Control mode	Sensorless vector control (with optimal low frequency compensation)
	Frequency Accuracy	Digital setting: The highest frequency $\times\pm 0.01\%$ Analog setting: The highest frequency $\times\pm 0.2\%$
	Frequency resolution	Digital setting: 0.01Hz; Analog setting: The highest frequency $\times 0.1\%$
	Start frequency	0.40Hz ~ 20.00Hz
	Torque boost	Auto torque boost, manual torque boost 0.1%~30.0%
	V/F curve	Five ways: constant torque V/F curve, 1 kind of user defined V/F curve ,3 kinds of down torque curve (2.0/1.7/1.2times the power)
	Acc./Dec. curve	Two ways: linear Acc./Dec.,S-curveAcc./Dec.;7 kinds of Acc./Dec. time, Time unit(minute/second) optional, max. time: 6000 minutes.
	DC braking	DC braking start frequency: 0 ~ 15.00Hz braking time: 0 ~ 60.0s braking current: 0 ~ 80%
	Energy consuming braking	Below 22KW drive built-in energy consuming braking unit, external braking resistor is optional.
	Jog running	Jog frequency range:0.1Hz~50.00Hz, JOG Acc./Dec. time: 0.1~60.0s
	PI built-in	Easily constitute a close loop control system
	Multi-stage speed running	Multi-stage speed running available through built-in PLC or control terminals
	Textile swing frequency	Swing frequency available with preset and central frequency adjustable
	Auto voltage regulation	Keep a stable voltage automatically when the grid voltage transients
	Auto energy saving running	Saving energy by auto optimizing V/F curve according to the load
	Auto current limiting	Auto current limiting to prevent frequent over current fault trip
	Multi pumps control	With water supply kit, it can implement multi pumps constant pressure water supply
	Communication	Support: Modbus, Profibus, CANlink, CANopen
Running function	Running command channel	Keypad , Control terminal , Serial port , Above 3 channels are switchable
	Frequency setting channel	Keypad potentiometer setting: ▲、▼ control panel keys setting; Function code setting: Serial port setting; Terminal up/down setting: Input Analog voltage setting: Input Analog current setting: Input pulse setting; Combination ways setting: Above ways are switchable.
	Switch input channel	FWD/REV command: 8channels programmable switch inputs, 35kinds of function can be set separately
	Analog input channel	4~20mA: 0-10V: 2 optional analog inputs
	Analog output channel	4~20mA or 0~10V optional, setting frequency and output frequency ,etc feature output
	Switch/pulse output channel	Programmable open collector output: relay output :0~20KHz pulse output:
Control panel	LEDdigital display	Display setting frequency, output voltage, output current, etc.
	External meter display	Display output frequency, output current, output voltage, etc.
	Key lock	All the keys can be locked
	Parameter copy	Function code parameters can be copied between inverters when use remote control panel.
Protection function		Overcurrentprotection:overvoltageprotection:undervoltageprotection:overheating protection: overload protection, etc.
Optional parts		Braking unit: remote control panel: cable: panel mounting feet, etc.
Environment	Environment	Indoors, avoid from direct sunlight, dust, corrosive gas, oil mist, steam, water dropper salt, etc
	Altitude	Lower than 1000m (derating is necessary above 1000m)
	Ambient temperature	- 10℃ ~ + 40℃
	Humidity	<90%RH, no condensation
	Vibration	Lower than 5.9m/s (0.6g)
	Storage temperature	- 20℃ ~ + 60℃
Protection level	Protection level	IP54 (In the selection of state display unit or the keyboard state)
	Cooling	Forced air cooling
Installation		Wall mounted; Floor mounted