

Water Pump Inverter

Xentra VFD



Model:
0.75K-3.7K
5.5K-22K



Easy-to-install



Reliable



User-Friendly

- V/F Control, Sensor-less Vector Control (SVC) and Feedback Vector Control (FVC) selectable
- Automatic torque boost and slip compensation
- Fast acceleration and deceleration performance
- 150% torque at 0.5Hz
- Provide precise speed control <0.5%
- Acceptable wide input voltage from 300V to 480V
- Conformal coating to withstand harsh environment
- Built-in RS-485 MODBUS communication
- In-Built dynamic braking unit
- Simplified parameter setting for easy startup
- Standard potentiometer and support external keypad
- Flexible programmable I/O connection
- Control motor to deceleration to stop while sudden power failure to prevent damage

Technical Data Sheet

Model	0.75K-3.7K	5.5K-22K
INPUT		
Input Voltage	AC,1PH,220V(-15%)-240V(+10%) AC,3PH,380V(-15%)-440V(+10%)	AC, 3PH, 380V(-15%) ~ 480V(+10%)
Rated Frequency	50/60 Hz	
Frequency Range	±5% (47.5 ~ 63Hz)	
OUTPUT		
Output Voltage	0- Input Voltage	
Maximum Output Frequency	0.1 ~ 500HZ	
Output Power	Please refer to Rated Parameter table	
Output Current	Please refer to Rated Parameter table	
BASIC PARAMETERS		
Highest frequency	Vector control: 0 ~ 500Hz	Vector control: 0 ~ 320Hz
	Vector control: 0 ~ 500Hz	
Carrier frequency	0.8KHz-8KHz (Support up to 16KHz carrier frequency)	0.8KHz-16KHz
	Adjusted automatically according to the load characteristics	
Input frequency resolution	Digital setting: 0.01Hz	
	Analog setting: Highest frequency×0.025%	
Control mode	Open-loop vector control (SVC) V/F control	Close-loop vector control (FVC) Open-loop vector control (SVC), V/F control
Starting torque	0.5Hz/150% (SVC)	0.5Hz/150% (SVC) ; 0Hz / 180% (FVC)
Adjustable speed ratio	1:100 (SVC)	1:100 (SVC) ; 1:1000 (FVC)
Speed control accuracy	±0.5% (SVC)	±0.5% (SVC) ; ±0.02% (FVC)
Overload capability	150% of rated current: 60 seconds 170% of rated current: 12 seconds 190% of rated current: 1.5 seconds	150% of rated current: 60 seconds 220% of rated current: 1 second
Torque boost	Auto torque boost; Range of manual torque boost 0.1%-30.0%	
V/F curve	Three types: Linear, Multi-point, square curve	
	(1.2 power, 1.4 power, 1.6 power, 1.8 power, 2 power)	
V/F separation	Full separation, Half separation	
Acceleration and deceleration time	Linear and S-curve acceleration and deceleration modes available. The range of acceleration and deceleration time is 0.0-6500.0s.	Linear and S-curve acceleration and deceleration modes available. Four kinds of acceleration and deceleration time,The range of acceleration and deceleration time is 0.0-6500.0s.
DISPLAY BUTTONS		
Keypad	0.75K-3.7K model: standard keypad (Optional detachable keypad can be purchased seperately)	
	5.5K-22K model: standard detachable keypad	
Copy parameters (Only for 5.5-22K model)	Parameters can be copied through the standard external keyboard	
LED display	Display parameters	
Key lock and function selections	It allows users to partially or fully lock the keys or define operated range for partial keys to prevent misoperation	
Protective function	Motor short-circuit detection at power-on, output phase loss protection, over-current protection, over-voltage protection, under-voltage protection, overheat protection, overload protection and etc.	
ENVIRONMENT		
Storage temperature	-20°C ~ 60°C	
Operation temperature	-10°C ~ 50°C (If temperarture is higher than 40°C, the output capacity will be derated 1% per 1°C increase)	
Storage humidity	< 90%RH	
Operation humidity	< 90%RH	
Noise Level	50dBA max.	
STANDARD		
EMC	Standards:IEC 61800-3, C3	
Safety	Standards:IEC 61800-5-1	
INTERACE		
Communication Port	RS-485	