

PC30 Multifunctional Pump VFD

The PC30 series of dedicated frequency converters for water pumps is positioned as a high-performance and high-protection backpack installation product. The product has a high-end and grand appearance, and its structural details are innovative. Adopting the latest software architecture, it leads in performance and has comprehensive functions. The hardware is diverse and can meet the certification requirements of different countries and regions. Provide efficient water supply solutions for architectural scenarios.



High efficiency performance

- It can support AC asynchronous, permanent magnet synchronous and reluctance motors
- The entire series is equipped with the logic of all functional requirements of the secondary water supply standard
- It is equipped with standard clock hardware and supports time-sharing water supply logic
- The low-noise algorithm solution enables the pump set to operate quietly and efficiently

Reliable hardware

- Wide voltage 380-480VAC design, suitable for use in multiple countries
- A new motor temperature sensing interface has been added, which can achieve temperature control protection
- Optional built-in EMC solution, compliant with overseas safety regulations for application
- The 220VAC platform is equipped with a PFC power factor optimization circuit

Innovative structure

- Innovative appearance design, with a bold color-matching design for the upper and lower shells.
- Illustrated large-screen display, full-screen high-end effect
- IP65 protection design, dust-proof and water-proof, safe and reliable.



1PH 200-240VAC 2.2kW
3PH 380-480VAC 0.75-22kW

Model	PC30
Basic parameter performance	
Input voltage	200-240VAC/380-480VAC
Input frequency	50/60Hz±5%
Output voltage	0- Input voltage, error less than 5%
Output frequency	0-500Hz/ Default 50Hz
Control characteristic parameters	
Motor type	AC asynchronous, permanent magnet synchronous, reluctance motors
Starting torque	1Hz 100%
Speed regulation range	1:20
Speed stability accuracy	±1.0%
Carrier frequency	0.5kHz ~ 16kHz
Overload capacity	150% rated current for 60s, 180% rated current for 2s
Control configuration parameters	
Run the command channel	Three channels: given by the operation panel, given by the control terminal, and given by the serial communication port. They can be switched in multiple ways
Frequency source	Analog voltage setting, analog current setting, serial communication setting, etc., can be switched in multiple ways
Product input and output terminal configuration	
Run the command channel	DI*3 AI*2 PT*1
Run the command channel	One set of 5V*1, 10V*1, 24V*1 and AO*1 relays
Other terminals	One RS485 group and one CAN group
Basic functions of the product	
Built-in PID	A closed-loop control system can be conveniently realized
AVR function	When the grid voltage changes, it can automatically maintain a constant output voltage
Overpressure and overflow rate	Automatically limit the current and voltage during operation to prevent frequent overcurrent and overvoltage tripping
Fast rate limiting function	Minimize overcurrent faults to the greatest extent and improve system stability
Self-check the safety of peripheral devices upon power-on	It can be powered on to conduct safety checks on peripheral devices such as grounding and short circuits
Automatic startup function upon power-on	Power-on automatic startup is optional and the startup delay is adjustable
Automatic energy-saving operation	Under light load conditions, the output voltage is automatically reduced to achieve energy-saving effects
Constant pressure control function	PID regulation, PID feedback disconnection check, PID sleep and wake-up
Multi-online working mode	Multiple units can be connected through the connection terminal to achieve a multi-pump connection mode
Upper computer communication function	Remote equipment maintenance can be carried out through an external GPRS monitoring module
Anti-freezing function	The anti-freezing function can be controlled by setting the frequency, time and cycle
Water leakage detection	Optimize the sleep control through the leakage detection coefficient
Display and keyboard operation	
LED display	It can display data such as feedback pressure, target pressure, operating frequency and operating current
Parameter locking function	Define whether the parameters are locked in the running or shutdown state to prevent misoperation
Use environmental information	
Place of use	It can be used both indoors and outdoors, preventing direct rain. The on-site environment should be free of corrosive gases, flammable gases, etc
Altitude	1000-2000 meters When the distance exceeds 1000m, the derating capacity should be reduced. For every 100m increase, the derating capacity needs to be reduced by 1%
Ambient temperature	The temperature range is -10 °C to 40°C. When the temperature exceeds 40°C, the rated capacity should be reduced. For every 1°C increase in ambient temperature, the rated capacity should be reduced. The maximum operating ambient temperature is 50°C
Humidity	≤95%RH, to prevent condensation
Vibration	The vibration acceleration is less than 0.6g
Storage temperature	- 40°C ~ +70°C

Model Description

PC30 – 4 T 1R5 LN C – E

Product series: PC30

Voltage level: 2: 220V; 4: 380V

Phase: S : Single phase; T : Three phase

E: English version

C: Optional EMC hardware

LN: Configure the input and output lines

Suitable motor power: R is the decimal point; For example 5R5 stands for 5.5kW

PC30
MULTIFUNCTIONAL
PUMP VFD



Selection List

Product model	Rated power (kW)	Power capacity (kVA)	Input current (A)	Output current (A)	Suitable motor B/P	
					kW	HP
PC30-2S2R2LN	2.2	4	23	9.6	2.2	3
PC30-4TR75LN	0.75	1.5	3.4	2.1	0.75	1
PC30-4T1R5LN	1.5	3	5	3.8	1.5	2
PC30-4T2R2LN	2.2	4	5.8	5.1	2.2	3
PC30-4T004LN	4	5.9	10.5	9	4	5.5
PC30-4T5R5LN	5.5	8.9	14.6	13	5.5	7.5
PC30-4T7R5LN	7.5	11	20.5	17	7.5	10
PC30-4T011LN	11	17	26	25	11	15
PC30-4T015LN	15	21	35	32	15	20
PC30-4T018R5LN	18.5	24	38.5	37	18.5	25
PC30-4T022	22	30	46.0	45	22	30

Size Specification (mm)

Product model	Dimensions			Bottom plate siz	
	H	W	D	H	W
PC30-2S2R2LN	250	177	114	195	161
PC30-4TR75LN					
PC30-4T1R5LN					
PC30-4T2R2LN					
PC30-4T004LN	277	197	128	215	180
PC30-4T5R5LN					
PC30-4T7R5LN					
PC30-4T011LN					
PC30-4T015LN	330	235	148	262	216
PC30-4T018R5LN					
PC30-4T022					

