

PDH30

C&I Backpack-type Pump Controller

PDH30 Integrated backpack-type design and hidden wiring to ensure the integrity of the appearance, the product is based on high reliability algorithm to support small and medium power household/commercial water pump equipment drive is often used for multi-stage pump pump group on-line control.



Safe and reliable

- Comprehensive protection function to ensure long term operation of equipment
- IP54 high protection level, more safe to use

Interface richness

- Standard dual-channel communication, support multiple on-line, suitable for function terminals
- Three independent internal power supplies, supporting multiple types of sensors

Expansion and flexibility

- Standard RS485 interface, flexible communication
- Can achieve multiple on-line

Easy to use

- Hidden junction box design, easy connection
- Knapsack design, no need for power distribution cabinet, more flexible installation

1PH 200-240VAC 2.2kW

Compatible with the control of water pumps with a power of 2.2kW and below

3PH 380-460VAC 0.75-18.5kW

Product model	PDH30
Basic parameter performance	
Input voltage	1PH 200-240VAC, 3PH 380-460VAC, fluctuation range: -15%~+10%
Input frequency	50/60Hz±5%
Output voltage	00-Input voltage, Tolerance < 5%
Output frequency	0-50/60Hz (Max.320Hz)
Control characteristic parameter	
Control mode	V/F mode
Starting torque	1Hz 100%
Speed range	1:20
Speed stability accuracy	±1.0%
Carrier frequency	0.5kHz-16kHz
Overload capacity	120% rated current 60s, 150% rated current 1s
Control configuration parameter	
Run command channel	Three kinds of channels: 1. Operation keyboard 2. Control terminal 3. Serial communication port, switchable by many ways
Frequency source	Data setting / Panel pulse potentiometer / Analog voltage / Analog current/Serial communication etc. Shifting between different sources are available
I/O terminal	
Input terminal	DI*3 AI*2
Output terminal	5V*1 10V*1 24V*1 DO*1 Relay * 1
Others	RS485 *1 CAN *1
Basic function of product	
Build-in PID	To achieve closed-loop control
AVR function	When the grid voltage changes, it can automatically keep the output voltage constant
Over pressure over loss rate	Automatic current and voltage limit during operation to prevent frequent over voltage trip
Fast current limiting function	Minimize over current faults and improve system stability
Power-on safety self-check	Realize the safety detection of peripheral devices such as grounding and short circuit
Power on the automatic start	Optional automatic startup and adjustable startup delay
Automatic energy-saving	Under light load, the output voltage is automatically reduced to achieve energy-saving effect
Constant pressure control	PID adjustment, PiD feedback break check, PiD sleep and wake up
Multi-online working mode	Multi-pump mode can be realized through multi-pump terminal
Host computer communication	Remote equipment maintenance can be carried out through the external GPRS monitoring module
Antifreezing function	The frequency, time and period can be set to control the antifreeze function
Leakage detection	To improve the standby method by detection of leakage factor
Display & keyboard	
LED display	Including data of feedback pressure, target pressure, operating frequency, operating current, and etc.
Parameter Lock function	To define the lock of parameters in the running or stopping state, in case of misoperation
Environment	
Place of use	Indoor and outdoor can be, to prevent rain directly, no corrosive/flammable gas, and etc.
Altitude	<1000m if>1000m, please derate 1% by every 100m rising
Ambient temperature	-10°C~40°C (MAX 50°C) if exceeding 40°C, please derate 1% by every 1°C increasing
Humidity	≤95%RH, to avoid condensation
Vibration	Vibration acceleration is less than 0.6g
Storage Temperature	-25°C~+60°C

Model Description

PDH30 – 4 T 1R5 – E	
Product series: PDH30	E: English standard
Voltage level: 2: 220V; 4: 380V	Suitable motor power: R is the decimal point; For example 1R5 stands for 1.5kW
Phase: S : Single phase; T : Three phase	



Selection List

Product model	Rated power (kW)	Power capacity (kVA)	Input current (A)	Output current (A)	Suitable motor B/P	
					kW	HP
PDH30-2S2R2-E	2.2	4	23	9.6	2.2	3
PDH30-4TR75-E	0.75	1.5	3.4	2.1	0.75	1
PDH30-4T1R5-E	1.5	3	5	3.8	1.5	2
PDH30-4T2R2-E	2.2	4	5.8	5.1	2.2	3
PDH30-4T004-E	4	5.9	10.5	9	4	5.5
PDH30-4T5R5-E	5.5	8.9	14.6	13	5.5	7.5
PDH30-4T7R5-E	7.5	11	20.5	17	7.5	10
PDH30-4T011-E	11	17	26	25	11	15
PDH30-4T015-E	15	21	35	32	15	20
PDH30-4T018R5-E	18.5	24	38.5	37	18.5	25

Size Specification (mm)

Product model	Dimensions				Mounting dimension		
	H	H1	H2	W	W2	D	W1
PDH30-2S2R2-E							
PDH30-4TR75-E	187.5	127.5	144	225	76.5	114	120
PDH30-4T1R5-E							
PDH30-4T2R2-E							
PDH30-4T004-E							
PDH30-4T5R5-E	212	135	156.5	257	90.5	124	159.5
PDH30-4T7R5-E							
PDH30-4T011-E							
PDH30-4T015-E	276	169	191	312	121.5	146.5	140
PDH30-4T018R5-E							

