

PDH30

DRIVES FOR CONSTANT PRESSURE WATER SUPPLY



Power Range
 Single Phase 220V: 2.2kW
 Three Phase 380V: 0.75-18.5kW

Safety and Reliability

- Constant pressure for water supply
- IP54 for waterproof and dust-proof
- Motor output short circuit protection
- Overvoltage, overcurrent, over-heating, short circuit protection

Smart Control

- Wide power ranges
- Steady output with low noise
- Advanced PID algorithms
- Integrated control for both PM and Asynchronous pumps/motors

Flexible compatibility

- 2 way communication protocol: RS485+CAN
- Abundant interface, including 2 analog input
- 3 power supply for sensors
- Available for both local networking and host computer control

Humanized Design

- Backpack installation
- Wide control panel for clear display and easy setting
- Cable box type design for fast connection

SPECIFICATION

Technical Specification		
Control Feature	Control Mode	V/F Control
	Starting Torque	1Hz 100%
	Speed Ratio	1:20
	Speed Accuracy	±1.0%
	Carrier Frequency	0.5kHz ~ 16kHz
	Overload	120% rated current 60s, 150% rated current 1s
Running Control	Input Voltage	· AC 1PH 220V (±15%) · AC 3PH 380V (±15%)
	Input Frequency	50 or 60Hz (±5%)
	Output Voltage	0-Input voltage, Tolerance < 5%
	Output Frequency	V/F: 0-100Hz
	3 Command Channels	· Operation panel setting · Control terminal setting · Serial interface setting Shifting between setting combinations and channels are available
	Frequency Source	Data Setting/Panel pulse potentiometer/Analog voltage/Analog current/Serial communication etc. Shifting between different sources are available
	Analog Output	3 Channels: 0~5V, 0~10V, 0~24V, suitable for most sensors
Input Channel		· 3 Digital input channels · 2 Analog input channels · 2 communication channels: RS485+CAN
	Output Channel	· 1 digital output channel · 1 group of relay output channels
Control Feature	Built-in PID	To achieve closed-loop control
	AVR function	Automatically keep the output voltage constant in case of voltage fluctuation
	Over voltage/Over current stall	Automatically limit current and voltage in running, to prevent frequent overcurrent and overvoltage tripping
	Fast current limiting function	Prevent faults of overcurrent and improve system stability
	Safety self-check for power-on external device	To achieve safety detection of external devices, such as grounding, short circuit, etc.
	Auto-start function	· Automatically start when power-on · Adjustable start-up delay
	Energy Saving Method	Automatically reduce output voltage in condition of light loading for energy saving
	Constant Pressure Control function	PID control, PID disconnection check, PID on & off
	Connected Method	Devices can be connected and communicated with each other to achieve control of multi-pumps
	Host computer communication	Remote equipment maintenance can be achieved through an external GPRS monitoring module
	Antifreeze function	The frequency, time and cycle can be set for 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 ect.
	Parameter Lock function	To define the lock of parameters in the running or stopping state, in case of misoperation
Environment	Place	Indoor, no direct sunlight/dust/corrosive gas/flammable gas/oil mist/water vapor/dripping water/salt etc.
	Altitude	· < 1000m; · if >1000m, please derate 1% by every 100m rising
	Ambient temperature	· -10°C ~ 40°C; · if exceeding 40°C, please derate 1% by every 1°C increasing · Maximum ambient temperature is 50°C
	Humidity	≤95%RH, to avoid condensation
	Vibration	Vibration acceleration is less than 0.6g
Storage Temperature	-25°C ~ +60°C	

SELECTION GUIDE

PDH30 – 4 T 1R5

Series: PDH30

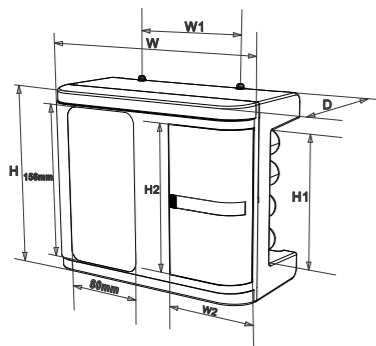
Applicable Motor Power: 1R5=1.5kW

Voltage: 2: 220V , 4:380V

Phase: S=Single Phase ,T= Three Phases

Item Code	Rated Power (kW)	Power Capacity (kVA)	Input Current (A)	Output Current (A)	Applicable Motor Power G/P	
					kW	HP
PDH30-2S2R2	2.2	4	23	9.6	2.2	3
PDH30-4TR75	0.75	1.5	3.4	2.1	0.75	1
PDH30-4T1R5	1.5	3	5	3.8	1.5	2
PDH30-4T2R2	2.2	4	5.8	5.1	2.2	3
PDH30-4T004	4	5.9	10.5	9	4	5.5
PDH30-4T5R5	5.5	8.9	14.6	13	5.5	7.5
PDH30-4T7R5	7.5	11	20.5	17	7.5	10
PDH30-4T011	11	17	26	25	11	15
PDH30-4T015	15	21	35	32	15	20
PDH30-4T18R5	18.5	24	38.5	37	18.5	25

DIMENSION



Model	Dimension				Flange Mounting		
	H	H1	H2	W	W2	D	W1
PDH30-2S2R2	187.5	127.5	144	225	76.5	114	120
PDH30-4TR75							
PDH30-4T1R5							
PDH30-4T2R2							
PDH30-4T004	212	135	156.5	257	90.5	124	159.5
PDH30-4T5R5							
PDH30-4T7R5							
PDH30-4T011	276	169	191	312	121.5	146.5	140
PDH30-4T015							
PDH30-4T18R5							

PDH30 APPLICATION



School water supply



Water supply to shopping malls



Water supply for domestic dwellings