

SINGLE PUMP CONTROL PANEL
MODEL: PCH31 / PCH31 Plus



General details																																									
Model	PCH31	PCH31 Plus																																							
Main introduction	Model PCH31 is an easy to use, simple and reliable smart three-phase pump control and protection device, which can be widely used to control and protect deep well pump, sewage pump, self-priming pump, centrifugal pump, pipeline pump etc.		Model PCH31 Plus is the upgraded version, except all the features of model PCH31, model PCH31 Plus has more unique function/features.																																						
Main technical data	<p>DOL (Direct on line) Single pump control AC380V-AC400V Three phase 50HZ/60HZ <i>* (Customization input voltage, please contact the manufacturer)</i></p>																																								
<ul style="list-style-type: none"> Start type Qty of controlled pump Rated input voltage 	<p>0.75-4kw (1-5.5hp) 5.5-11kw (7.5-15hp) 15kw (20hp) 18.5kw (25hp)</p> <table border="1"> <thead> <tr> <th colspan="2">Max Motor Output at AC380V / 3Phase</th> <th rowspan="2">Full Load Ampere (A)</th> <th rowspan="2">Max Starting Ampere (A)</th> </tr> <tr> <th>HP</th> <th>KW</th> </tr> </thead> <tbody> <tr><td>1.0</td><td>0.75</td><td rowspan="5">12A</td><td rowspan="5">60A</td></tr> <tr><td>1.5</td><td>1.1</td></tr> <tr><td>2.0</td><td>1.5</td></tr> <tr><td>3.0</td><td>2.2</td></tr> <tr><td>4.0</td><td>3.0</td></tr> <tr><td>5.5</td><td>4.0</td><td rowspan="5">25A</td><td rowspan="5">125A</td></tr> <tr><td>7.5</td><td>5.5</td></tr> <tr><td>10</td><td>7.5</td></tr> <tr><td>15</td><td>11</td></tr> <tr><td>20</td><td>15</td></tr> <tr><td>25</td><td>18.5</td><td>32A</td><td>160A</td></tr> <tr><td></td><td></td><td>38A</td><td>200A</td></tr> </tbody> </table> <p><i>* customization input voltage, please contact the manufacturer</i></p>			Max Motor Output at AC380V / 3Phase		Full Load Ampere (A)	Max Starting Ampere (A)	HP	KW	1.0	0.75	12A	60A	1.5	1.1	2.0	1.5	3.0	2.2	4.0	3.0	5.5	4.0	25A	125A	7.5	5.5	10	7.5	15	11	20	15	25	18.5	32A	160A			38A	200A
Max Motor Output at AC380V / 3Phase		Full Load Ampere (A)	Max Starting Ampere (A)																																						
HP	KW																																								
1.0	0.75	12A	60A																																						
1.5	1.1																																								
2.0	1.5																																								
3.0	2.2																																								
4.0	3.0																																								
5.5	4.0	25A	125A																																						
7.5	5.5																																								
10	7.5																																								
15	11																																								
20	15																																								
25	18.5	32A	160A																																						
		38A	200A																																						
<ul style="list-style-type: none"> Rated output power 																																									
<ul style="list-style-type: none"> Qty of passive dry contact point(BA port) 	No passive dry contact point available <i>(support to subsequent extensions)</i>		Two passive dry contact point available																																						



General details		
• Qty of USB port	No USB port available	One USB port available
• Supported external sensing device	0.5-4.5V Level transmitter / Pressure transmitter <i>(model PCH31 support to subsequent extensions)</i> 4-20mA Level transmitter / Pressure transmitter <i>(model PCH31 Plus only)</i> Float switch (ON/OFF signal) Pressure switch (ON/OFF signal) Liquid probe PT100 temperature sensor <i>(separate PT100 temperature sensor expansion module required)</i> MEMS air pressure transmitter <i>(separate MEMS air pressure transmitter required)</i>	
• Signal transmitting distance	1000meters max	
• Alarm volume	75db	
Application & control characteristic	<ul style="list-style-type: none"> . Applied for water transfer from low tank to upper tank by liquid probe or float switch . Applied for booster by pressure switch & pressure tank. . Applied for sewage lifting by liquid probe or float switch . Applied for drainage pump with piggy-back float switch . Applied for water transfer from low tank to upper tank by level transmitter . Applied for booster by pressure transmitter . Applied for sewage lifting by level transmitter . Applied for pure cycle timer control <i>(no any logic control characteristic)</i> . Applied for temperature control by PT100 temperature sensor <i>(separate PT100 temperature sensor expansion module required)</i> 	
Protection function	<ul style="list-style-type: none"> . Dry run protection with sensor free . Pump stalled protection . Over load protection . Under voltage protection . Over voltage protection . Pump repeat start protection . Open phase protection for input & output power . Phase reversal protection for input power . Phase unbalance protection for input power . Over temperature protection (it requires pump with built in over temperature sensor or PTC sensor) . Pump shaft anti-rust protection . Pump leakage protection (it requires pump with leakage sensor)<i>(model PCH 31Plus only)</i> . Over temperature protection (it requires pump with built in over temperature sensor) <i>(model PCH31 Plus only)</i> 	
Other features	<ul style="list-style-type: none"> . Push button calibration . Pure cycle timer control . Pump stop timer under manual control state . Pump last five fault record displaying . Pump accumulative running time displaying . Dynamic LCD displays pump running information . DIP function switch for different application choosing 	

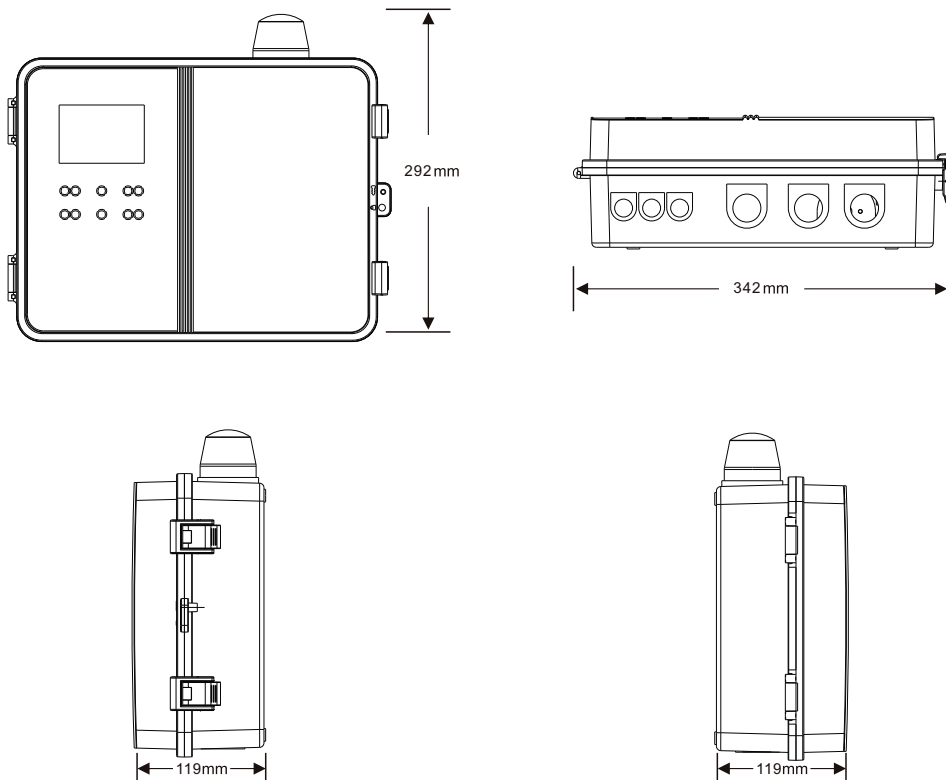
General details

- . Memory Function when Power Off & Power Recovery
- . Optional function expansion module available: PT100 temperature sensor expansion module
- . A friendly human-machine interface is provided by LCD module
- . All electronic components with good stability, product quality is stable and reliable
- . Different housing color available: black / white
- . Overflow alarm for sewage lifting/drainage application
- . RS485 communication protocol
- . Reserved space to install MEMS air pressure transmitter, which can be used for sewage lifting system
- . DC24V audible & visual alarm
- . Two passive dry contact point available *(model PCH31 Plus only)*
- . USB port available *(model PCH31 Plus only)*
- . Wide global input voltage design AC90V-AC440V *(model PCH31 Plus only)*

Other features

Main installation data

- | | |
|-----------------------------|--------------------------|
| . Working temperature: | -25°C -- 55°C |
| . Working humidity: | 20%-90%RH, no condensing |
| . Degree of protection: | IP67 |
| . Mounting type: | Wall mounting |
| . Unit dimension(L * W * H) | 342*292*119mm |



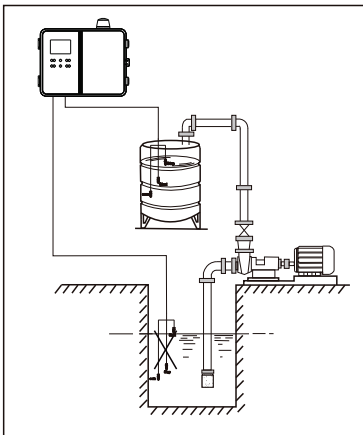
General details

Package data

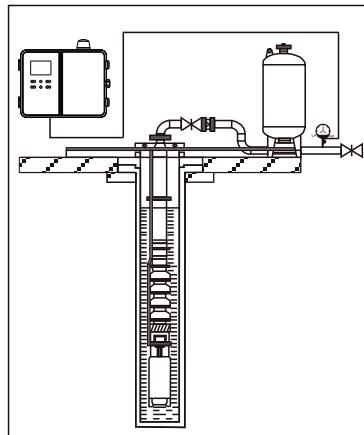
. Net weight	2.44kg/set (approximate)
. Gross weight	2.84kg/set (approximate)
. Packing quantity	4sets in 1carton box, Carton size: 60x35x33cm

Typical Application Example

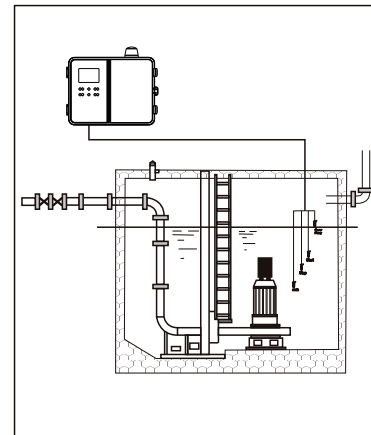
Feed water / Water transfer



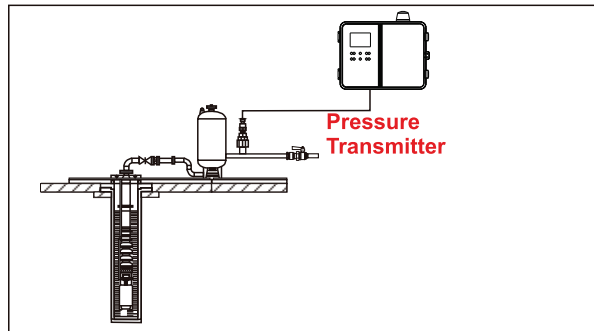
Pressure boosting



Drainage / Sewage



Pressure boosting by pressure transmitter



Drainage / Sewage by level transmitter

