

DUPLEX PUMP CONTROL PANEL
MODEL: PCH12 / PCH12 Plus



General details																												
Model	PCH12	PCH12 Plus																										
Main introduction	Model PCH12 is an easy to use, simple and reliable smart single-phase duplex 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 PCH12 Plus is the upgraded version, except all the features of model PCH12, model PCH12 Plus has more unique function/features.																										
Main technical data	<p>DOL (Direct on line) Duplex pump control AC220V-AC240V Single phase 50HZ/60HZ <i>* (Customization input voltage, please contact the manufacturer)</i></p> <p>0.37-2.2kw (0.5-3hp) 3-4kw (4-5.5hp)</p> <table border="1"> <thead> <tr> <th colspan="2">Max Motor Output at AC220V / 1Phase</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>0.5</td> <td>0.37</td> <td rowspan="5">18A</td> <td rowspan="5">90A</td> </tr> <tr> <td>0.75</td> <td>0.55</td> </tr> <tr> <td>1</td> <td>0.75</td> </tr> <tr> <td>1.5</td> <td>1.1</td> </tr> <tr> <td>2</td> <td>1.5</td> </tr> <tr> <td>3</td> <td>2.2</td> <td rowspan="3">32A</td> <td rowspan="3">160A</td> </tr> <tr> <td>4</td> <td>3</td> </tr> <tr> <td>5.5</td> <td>4</td> </tr> </tbody> </table> <p><i>* customization input voltage, please contact the manufacturer</i></p>		Max Motor Output at AC220V / 1Phase		Full Load Ampere (A)	Max Starting Ampere (A)	HP	KW	0.5	0.37	18A	90A	0.75	0.55	1	0.75	1.5	1.1	2	1.5	3	2.2	32A	160A	4	3	5.5	4
Max Motor Output at AC220V / 1Phase		Full Load Ampere (A)	Max Starting Ampere (A)																									
HP	KW																											
0.5	0.37	18A	90A																									
0.75	0.55																											
1	0.75																											
1.5	1.1																											
2	1.5																											
3	2.2	32A	160A																									
4	3																											
5.5	4																											
<ul style="list-style-type: none"> Start type Qty of controlled pump Rated input voltage 																												
<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 PCH12 support to subsequent extensions)</i> 4-20mA Level transmitter / Pressure transmitter <i>(model PCH12 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	<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> 	
control characteristic	<ul style="list-style-type: none"> . Auto/Manual mode mixing or Auto mode only . Main pump/standby pump automatically alternating . Main pump/standby pump overtime alternating . Main pump/standby pump overtime automatically switch against malfunction . Standby pump participates running if required 	
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 . 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 12 Plus only)</i> . Over temperature protection (it requires pump with built in over temperature sensor) <i>(model PCH12 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 enable & disable function to maintain the whole pumping system workable when one pump failure 	

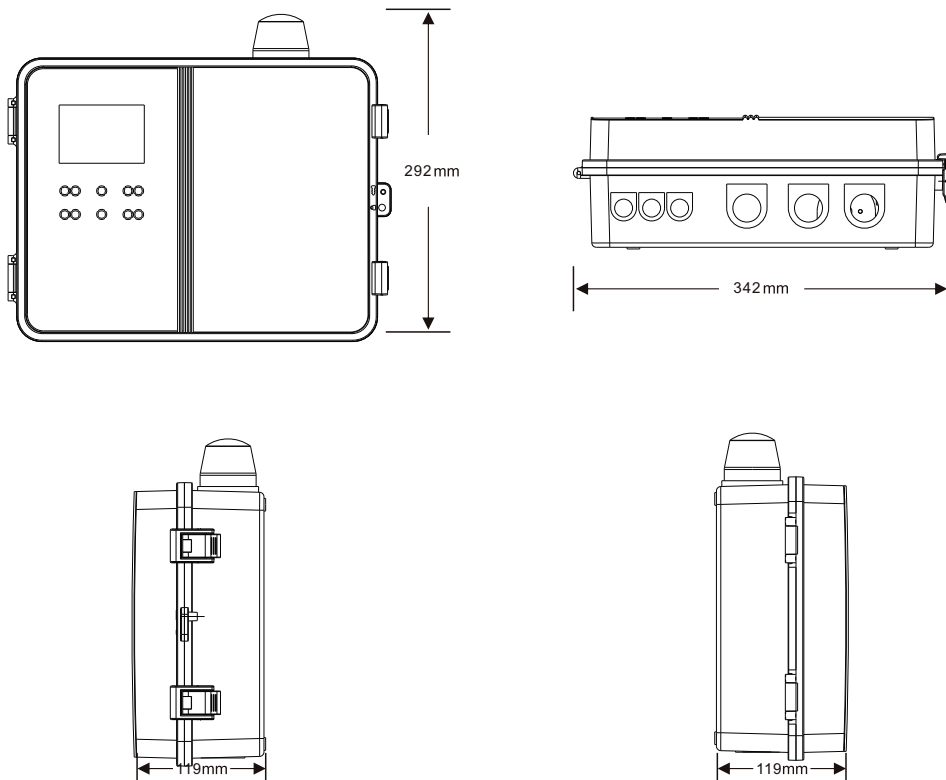
General details

Other features

- . Pump accumulative running time displaying
- . Dynamic LCD displays pump running information
- . DIP function switch for different application choosing
- . 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 PCH12 Plus only)*
- . USB port available *(model PCH12 Plus only)*
- . Wide global input voltage design AC90V-AC440V *(model PCH12 Plus only)*

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 |



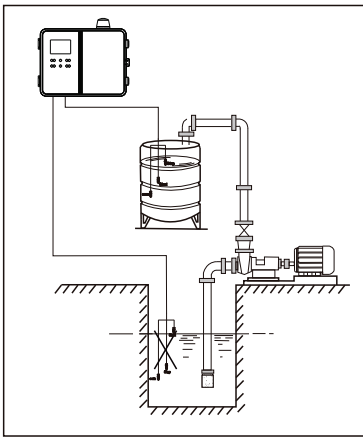
General details

Package data

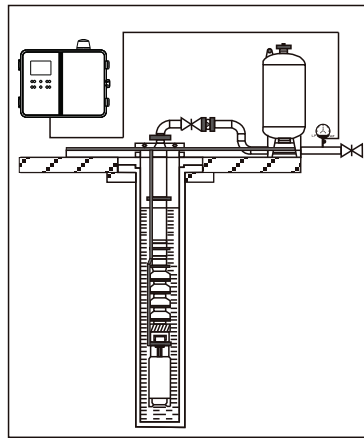
. Net weight	2.44kg/set (approximate)
. Gross weight	2.84kg/set (approximate)
. Packing quantity	4sets in 1carton box, Carton size: 60x35x33cm

Typical Application Example

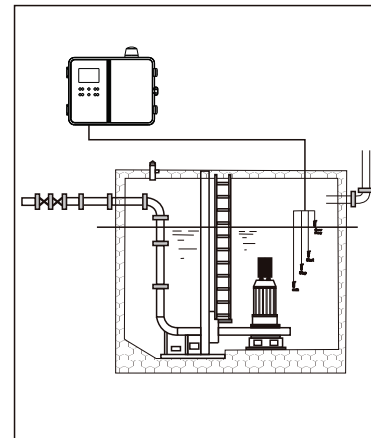
Feed water / Water transfer



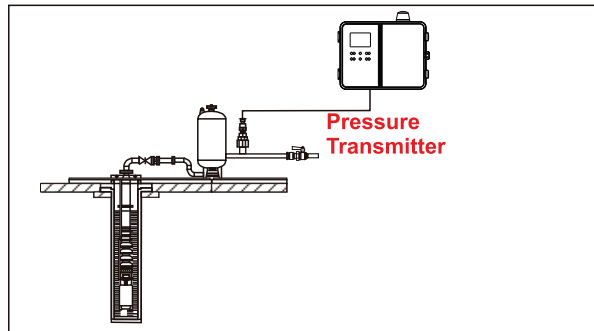
Pressure boosting



Drainage / Sewage



Pressure boosting by pressure transmitter



Drainage / Sewage by level transmitter

