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SMART DIGITAL CONTROL BOX

HS BY 9NHLPUMP

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HS SMART DIGITAL CONTROL BOX

Product data sheet

ACCESSORIES

Slave controller 	Power supply: AC220V/AC230V Connection with RS 485 communication port . Long distance monitoring Wire communication distance:<1200meters Achievement of all the functions of the master control panel except parameter Calibration and adjusting .
Level Transmitter 	Power supply:0-5V DC Output 0.5-4.5V Analog Signal Measurement:0-20Kpa The transmitting distance is 10 meters Pressure Port:G 1/2 Temperature Tolerance:-40℃/125℃
Pressure Transmitter 	Power supply:0-5V DC Output 0.5-4.5V Analog Signal Measurement:0-2.5Mpa The transmitting distance is 10 meters Pressure Port: G 1/2 Temperature Tolerance:-40℃/125℃
Level Sensor 	Detect the level of fluids

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Product data sheet

M521 / M531

SINGLE PUMP CONTROL PANEL
MODEL: M521 / M531

General details

Model	M521	M531
Main technical data		
• Start type	Direct on line	
• Qty of controlled pump	Single pump	
• Rated input voltage	AC220V/AC230V Single phase 50HZ/ 60HZ (For customization, please contact the manufacturer.)	AC380V /AC400V Three phase 50HZ/ 60HZ (For customization, please contact the manufacturer.)
• Capacitor	Reserved space for installing start capacitor	
• Rated output power	0.37kw-2.2kw (0.5hp-3hp)	0. 75kw-4kw (1 hp-5. 5hp) 5. 5kw-7.5kw (7. 5hp-10hp)

Max Motor Output at 220V 1Ph		Pump Max Rated Current(A)
HP	KW	
0.5	0.37	10A
0.75	0.55	
1.0	0.75	
1.5	1.1	
2.0	1.5	
3.0	2.2	

Max Motor Output at 380V 3Ph		Pump Max Rated Current(A)
HP	KW	
1.0	0.75	12A
1.5	1.1	
2.0	1.5	
3.0	2.2	
5.0	3.0	
5.5	4	
7.5	5.5	18A
10.0	7.5	

Protection function	Over load protection Pump stalled protection Dry run protection with sensor free Under voltage protection Over voltage protection	Over load protection Pump stalled protection Dry run protection with sensor free Under voltage protection Over voltage protection Open phase protection

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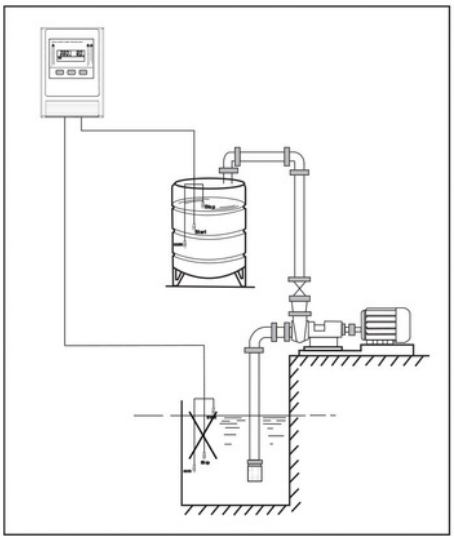
Product data sheet

M521 / M531

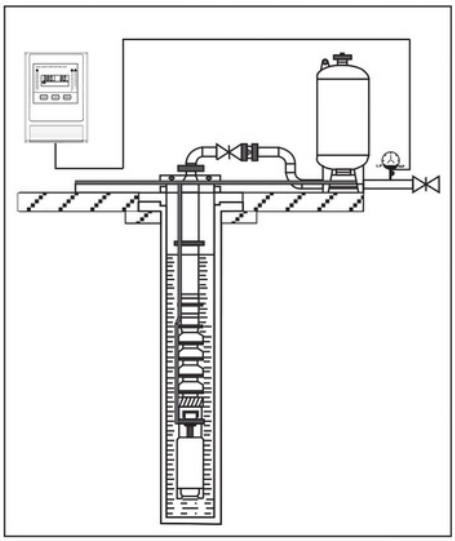
General details	
Application & Control characteristic	Control and protect universal pump Using liquid probe ,float switch or pressure switch to control pump start and stop Applied for water supply by liquid level control through float switch or liquid probe Applied for water supply by pressure control through pressure switch and pressure tank Applied for drainage by liquid level control through float switch or liquid probe
Other features	Push button calibration Memory function when power off & recovery Pump last five faults record displaying Pump accumulative running time displaying LCD screen displaying pump running status
Main installation data • Working temperature • Working humidity • Degree of protection • Install position • Unit dimension (L x W x H)	 -25℃-- +55℃ 20%--90%RH, no drips concreted IP22 Wall mounting 228× 160× 73mm

Typical Application Example

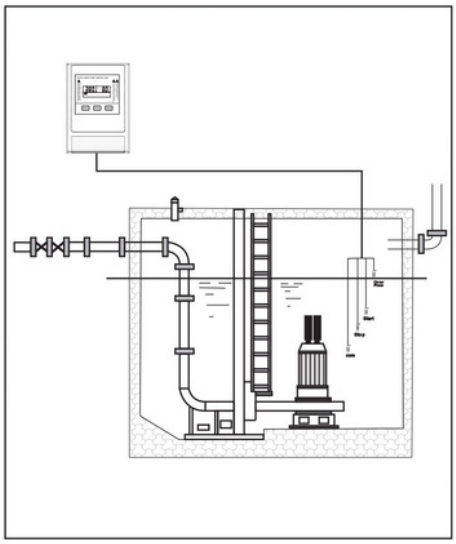
Water Supply



Booster



Drainage



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Product data sheet

M921 / M931

SINGLE PUMP CONTROL PANEL
MODEL: M921 / M931

General details

Model	M921	M931
Main technical data		
• Start type	Direct on line	
• Qty of controlled pump	Single pump	
• Protection method	Real motor output power (watts) by power factor	Real motor running ampere
• Rated input voltage	AC220V/AC230V Single phase 50HZ/ 60HZ (For customization, please contact the manufacturer.)	AC380V/AC400V Three phase 50HZ/ 60HZ (For customization, please contact the manufacturer.)
• Capacitor	Reserved space for installing start capacitor	
• Rated output power	0.37kw-2.2kw (0.5hp-3hp)	0. 75kw-4kw (1 hp-5. 5hp) 5. 5kw-11kw (7. 5hp-15hp) 15kw (20hp)

Max Motor Output at 220V 1Ph		Pump Max Rated Current(A)
HP	KW	
0.5	0.37	10A
0.75	0.55	
1.0	0.75	
1.5	1.1	
2.0	1.5	
3.0	2.2	

Max Motor Output at 380V 3Ph		Pump Max Rated Current(A)
HP	KW	
1.0	0.75	12A
1.5	1.1	
2.0	1.5	
3.0	2.2	
5.0	3.0	
5.5	4	
7.5	5.5	25A
10.0	7.5	
15.0	11	
20.0	15	32A

Protection function		
	Over load protection Pump stalled protection Dry run protection with sensor free Under voltage protection Over voltage protection Repeat start protection Over temperature protection	Over load protection Pump stalled protection Dry run protection with sensor free Under voltage protection Over voltage protection Repeat start protection Phase unbalance protection Phase reversal protection Open phase protection Over temperature protection

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Product data sheet

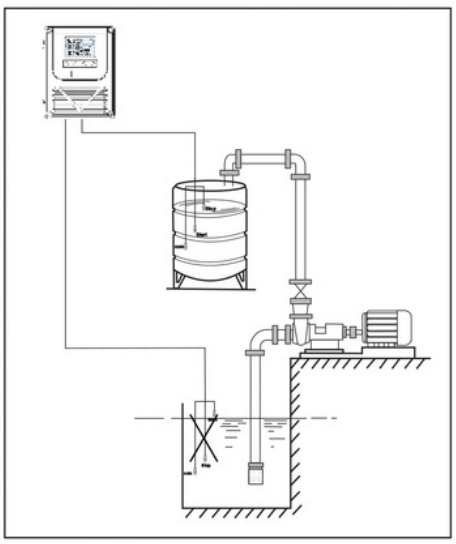
M921 / M931

General details

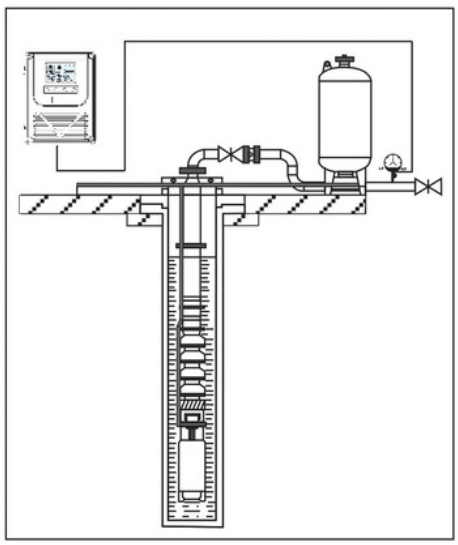
Application & Control characteristic	Control and protect universal pump Using liquid probe ,float switch or pressure switch or level/pressure transmitter to control pump start and stop Applied for water supply by liquid level control through float switch or liquid probe Applied for water supply by pressure control through pressure switch and pressure tank Applied for drainage by liquid level control through float switch or liquid probe Applied for drainage by level transmitter Applied for water supply by pressure transmitter Applied for water supply by level transmitter
Other features	Pump last five faults record displaying Pump accumulative running time displaying Pump shaft anti-rust LCD screen locked function under auto state Present RS485 port LCD screen displaying pump running status
Main installation data • Working temperature • Working humidity • Degree of protection • Install position • Unit dimension (L x W x H)	 -25℃-- +55℃ 20%--90%RH, no drips concreted IP54 Wall mounting 250× 197× 114mm

Typical Application Example

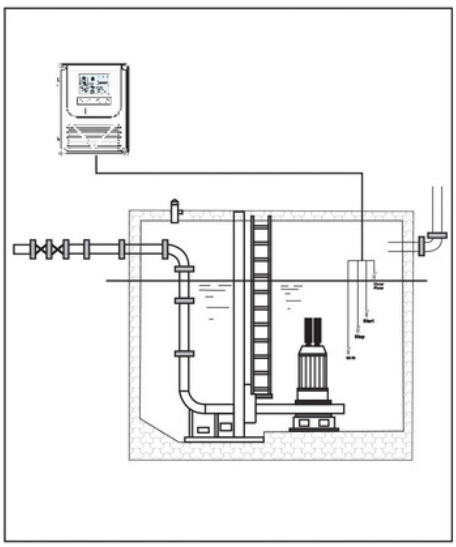
Water Supply



Booster



Drainage



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Product data sheet

L921 / L931

SINGLE PUMP CONTROL PANEL
MODEL: L921 / L931

General details

Model	L921	L931
Main technical data		
• Start type	Direct on line	
• Qty of controlled pump	Single pump	
• Rated input voltage	AC220V/AC230V Single phase 50HZ/ 60HZ (For customization, please contact the manufacturer.)	AC380V/AC400 Three phase 50HZ/ 60HZ (For customization, please contact the manufacturer.)
• Capacitor	Reserved space for installing start capacitor	
• Rated output power	0.37kw-2.2kw (0.5hp-3hp) 3-4kw(4hp-5.5hp)	0. 75kw-4kw (1 hp-5. 5hp) 5. 5kw-11kw (7. 5hp-15hp) 15kw (20hp)

Max Motor Output at 220V 1Ph		Pump Max Rated Current(A)
HP	KW	
0.5	0.37	18A
0.75	0.55	
1.0	0.75	
1.5	1.1	
2.0	1.5	
3.0	2.2	
4.0	3.0	25A
5.5	4.0	

Max Motor Output at 380V 3Ph		Pump Max Rated Current(A)
HP	KW	
1.0	0.75	12A
1.5	1.1	
2.0	1.5	
3.0	2.2	
5.0	3.0	
5.5	4	
7.5	5.5	25A
10.0	7.5	
15.0	11	
20.0	15	32A

Protection function		
	Over load protection Pump stalled protection Dry run protection with sensor free Under voltage protection Over voltage protection Repeat start protection Over temperature protection	Over load protection Pump stalled protection Dry run protection with sensor free Under voltage protection Over voltage protection Repeat start protection Phase unbalance protection Phase reversal protection Open phase protection Over temperature protection

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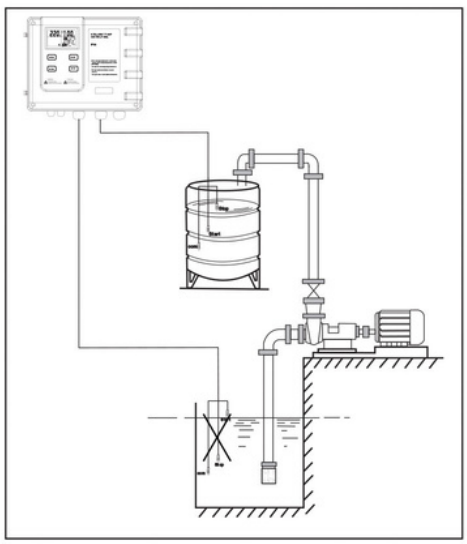
Product data sheet L921 / L931

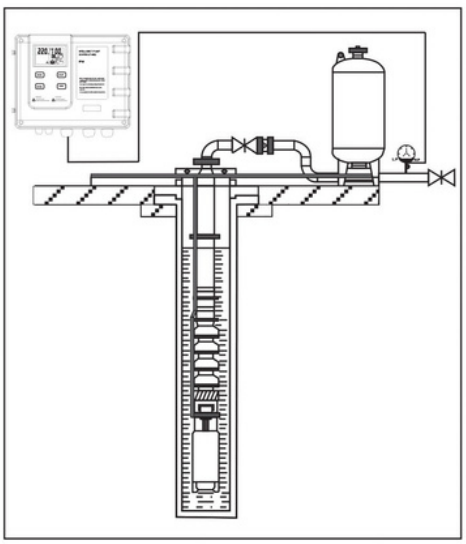
General details	
Application& Control characteristic	Control and protect universal pump Using liquid probe, float switch or pressure switch to control pump start and stop .Applied for water supply by liquid level control through float switch or liquid probe .Applied for water supply by pressure control through pressure switch and pressure tank .Applied for drainage by liquid level control through float switch or liquid probe
Other features	Pump last five faults record displaying Pump accumulative running time displaying Pump shaft anti-rust Present one dry contact point (BA port) Present RS485 port Present user remote monitor LCD screen locked function under auto state LCD screen displaying pump running status Push button calibration
Main installation data	
• Working temperature	-25℃-- +55℃
• Working humidity	20%--90%RH, no drips concreted
• Degree of protection	IP54
• Install position	Wall mounting
• Unit dimension (L x W x H)	310× 220× 120mm

Typical Application Example

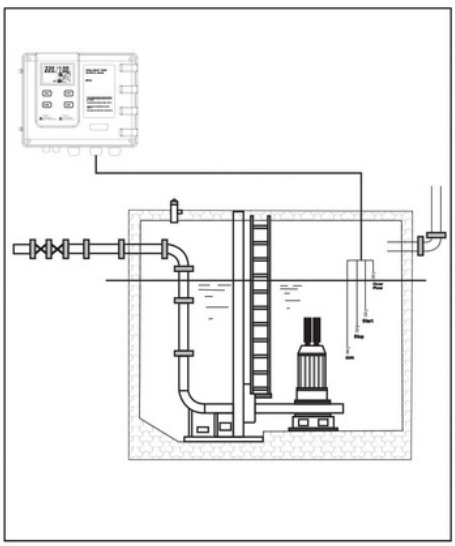
Water Supply



Booster



Drainage



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Product data sheet

L922 / L932

DUPLEX PUMP CONTROL PANEL
MODEL: L922 / L932

General details

Model	L922	L932
Main technical data		
• Start type	Direct on line	
• Qty of controlled pump	Duplex pump	
• Rated input voltage	AC220V/AC230V Single phase 50HZ/ 60HZ (For customization, please contact the manufacturer.)	AC380V/AC400 Three phase 50HZ/ 60HZ (For customization, please contact the manufacturer.)
• Rated output power	0.37kw-2.2kw (0.5hp-3hp) 3-4kw(4-5.5hp)	0. 75kw-4kw (1 hp-5. 5hp) 5. 5kw-11kw (7. 5hp-15hp) 15kw(20hp)

Max Motor Output at 220V 1Ph		Pump Max Rated Current(A)
HP	KW	
0.5	0.37	18A
0.75	0.55	
1.0	0.75	
1.5	1.1	
2.0	1.5	
3.0	2.2	
4.0	3.0	25A
5.5	4.0	

Max Motor Output at 380V 3Ph		Pump Max Rated Current(A)
HP	KW	
1.0	0.75	12A
1.5	1.1	
2.0	1.5	
3.0	2.2	
5.0	3.0	
5.5	4	
7.5	5.5	25A
10.0	7.5	
15.0	11	
20.0	15	32A

Protection function	Over load protection Pump stalled protection Dry run protection with sensor free Under voltage protection Over voltage protection Repeat start protection Over temperature protection	Over load protection Pump stalled protection Dry run protection with sensor free Under voltage protection Over voltage protection Repeat start protection Open phase protection Phase reversal protection Three phase unbalance protection Over temperature protection

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Product data sheet L922 / L932

General details	
Application	Control and protect universal pump Using liquid probe ,float switch or pressure switch to control pump start and stop Applied for water supply by liquid level control through float switch or liquid probe Applied for water supply by pressure control through pressure switch and pressure tank Applied for drainage by liquid level control through float switch or liquid probe
Control characteristic	Duplex pump control Built- in function switch for water transfer ,booster and sewage lifting (drainage) .Main pump / standby pump automatically alternate .Main pump / standby pump automatically switch against malfunction .Standby pump participates running if required
Other features	Pump last five faults record displaying Pump accumulative running time displaying Pump shaft anti-rust Present one dry contact point (BA port) Present RS485 port Present user remote monitor LCD screen locked function under auto state Push button calibration LCD screen displaying pump running status
Main installation data	
• Working temperature	-25℃-- +55℃
• Working humidity	20%--90%RH, no drips concreted
• Degree of protection	IP54
• Install position	Wall mounting
• Unit dimension (L x W x H)	310× 220× 120mm

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Product data sheet

L921-B / L931-B

PRESSURE BOOSTING TYPE OF PUMP CONTROL PANEL
MODEL: L921-B / L931-B

General details

Application	Control & protect booster pump only	
Model	L921-B	L931-B
Main technical data		
• Start type	Direct on line	
• Qty of controlled pump	Single pump	
• Rated input voltage	AC220V/AC230V Single phase 50HZ/ 60HZ (For customization, please contact the manufacturer.)	AC380V/AC400V Three phase 50HZ/ 60HZ (For customization, please contact the manufacturer.)
• Rated output power	0.37kw-2.2kw (0.5hp-3hp) 3-4kw(4-5.5hp)	0. 75kw-4kw (1 hp-5. 5hp) 5. 5kw-11kw (7. 5hp-15hp) 15kw(20hp)

Max Motor Output at 220V 1Ph		Pump Max Rated Current(A)
HP	KW	
0.5	0.37	18A
0.75	0.55	
1.0	0.75	
1.5	1.1	
2.0	1.5	
3.0	2.2	
4.0	3.0	25A
5.5	4.0	

Max Motor Output at 380V 3Ph		Pump Max Rated Current(A)
HP	KW	
1.0	0.75	12A
1.5	1.1	
2.0	1.5	
3.0	2.2	
5.0	3.0	
5.5	4	
7.5	5.5	25A
10.0	7.5	
15.0	11	
20.0	15	32A

Protection function	Over load protection Pump stalled protection Dry run protection with sensor free Under voltage protection Over voltage protection Repeat start protection	Over load protection Pump stalled protection Dry run protection with sensor free Under voltage protection Over voltage protection Repeat start protection Phase unbalance protection Phase reversal protection Open phase protection

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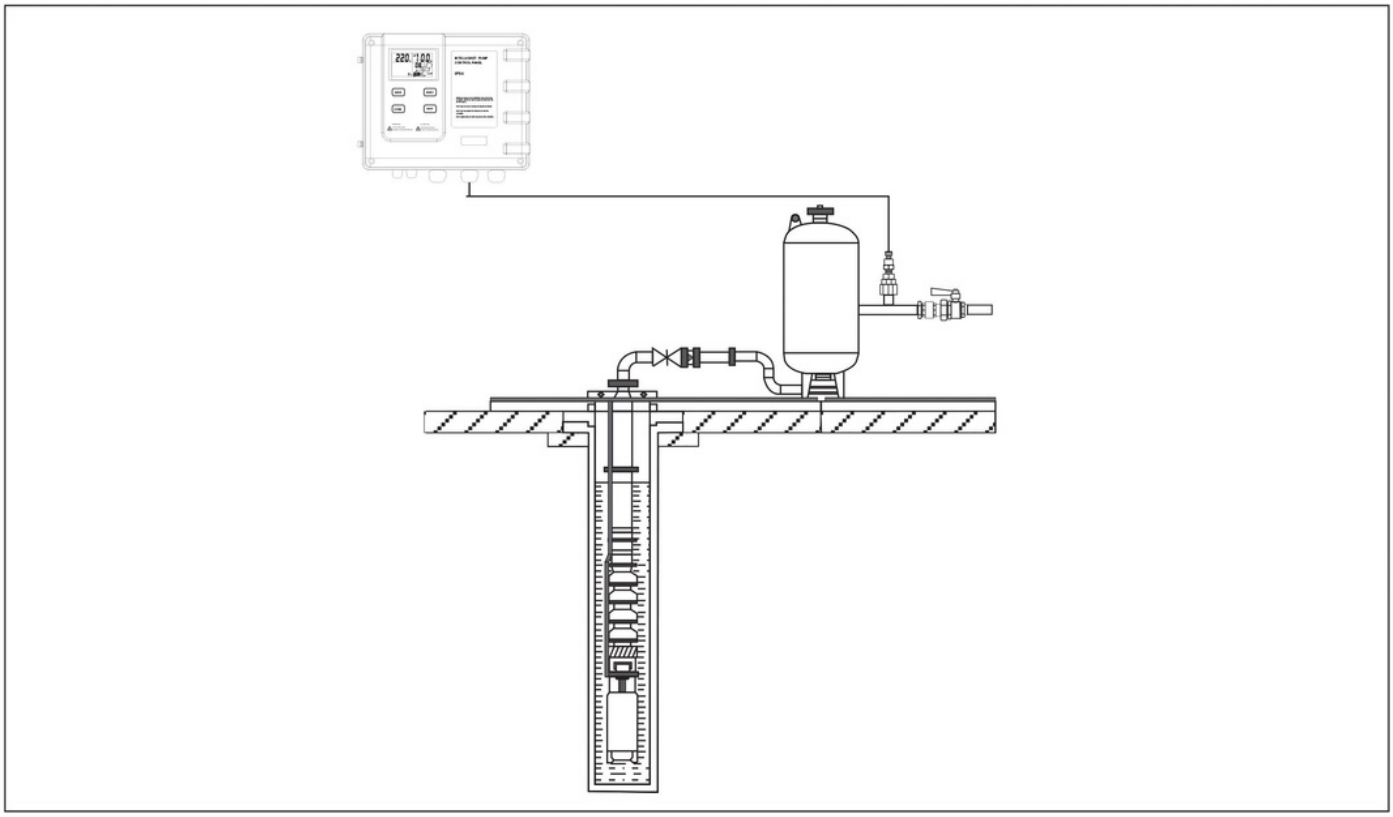
Product data sheet — L921-B / L931-B

General details	
Application& Control characteristic	Connecting 0.5-4.5V pressure transmitter to replace pressure switch Pump start and stop according to different pressure value setting
Other features	LCD screen displaying dynamic real time pressure value Pump start and stop pressure value can be easily set on the LCD screen Pump accumulative running time displaying Pump last five faults record displaying Present one dry contact point (BA port) Present RS485 port Present user remote monitor LCD screen locked function under auto state Push button calibration LCD screen displaying pump running status
Main installation data	
• Working temperature	-25℃-- +55℃
• Working humidity	20%--90%RH, no drips concreted
• Degree of protection	IP54
• Install position	Wall mounting
• Unit dimension (L x W x H)	310× 220× 120mm



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Product data sheet

L922-B / L932-B

DUPLEX PUMP CONTROL PANEL
MODEL: L922-B / L932-B

Eliminate the need for at least 2 pressure switches or pressure gauges. Thus significant cost-savings result from dramatically reduced purchasing and clearing of pressure switch or pressure gauge.

More secure because it uses pressure transmitter, whereas pressure switch or pressure gauge often fails because of mechanical failure.

Different pressure value for starting or stopping the pumps can be set via LCD screen directly and real time pressure value displaying.

General details

Application

Control & protect booster pump only

Model

L922-B | L932-B

Main technical data

- Start type: Direct on line
- Qty of controlled pump: Duplex pump
- Rated input voltage
- Rated output power

L922-B

AC220V/AC230V Single phase 50HZ/ 60HZ
(For customization, please contact the manufacturer.)

0.37kw-2.2kw (0.5hp-3hp)

3-4kw(4-5.5hp)

Max Motor Output at 220V 1Ph		Pump Max Rated Current(A)
HP	KW	
0.5	0.37	18A
0.75	0.55	
1.0	0.75	
1.5	1.1	
2.0	1.5	
3.0	2.2	
4.0	3.0	25A
5.5	4.0	

L932-B

AC380V /AC400V Three phase 50HZ/ 60HZ
(For customization, please contact the manufacturer.)

0. 75kw-4kw (1 hp-5. 5hp)

5. 5kw-11kw (7. 5hp-15hp) 15kw(20hp)

Max Motor Output at 380V 3Ph		Pump Max Rated Current(A)
HP	KW	
1.0	0.75	12A
1.5	1.1	
2.0	1.5	
3.0	2.2	
5.0	3.0	
5.5	4	
7.5	5.5	25A
10.0	7.5	
15.0	11	
20.0	15	32A

Protection function

L922-B

Over load protection
Pump stalled protection
Dry run protection with sensor free
Under voltage protection
Over voltage protection
Repeat start protection

L932-B

Over load protection
Pump stalled protection
Dry run protection with sensor free
Under voltage protection
Over voltage protection
Repeat start protection
Phase unbalance protection
Phase reversal protection
Open phase protection

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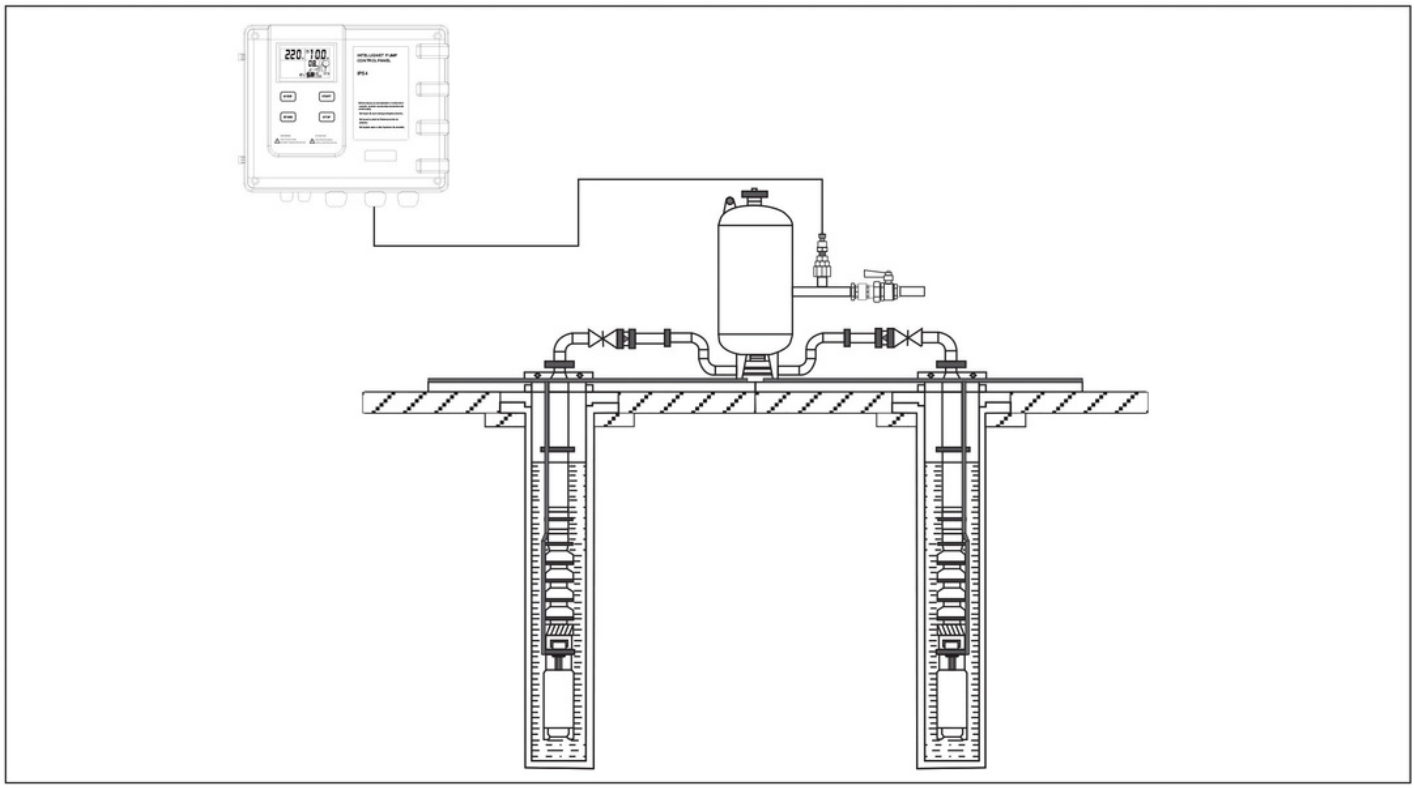
Product data sheet

L922-B / L932-B

General details	
Control characteristic	Connecting 0.5-4.5V pressure transmitter to replace pressure switch Duplex pump control .Main pump / standby pump automatically alternate .Main pump / standby pump automatically switch against malfunction .Standby pump participates running if required
Other features	LCD screen displaying dynamic real time pressure value & pump running status Pump accumulative running time displaying Pump last five faults record displaying Present one dry contact point (BA port) Present RS485 port Present user remote monitor LCD screen locked function under auto state Push button calibration LCD screen displaying pump running status
Main installation data	
• Working temperature	-25℃-- +55℃
• Working humidity	20%--90%RH, no drips concreted
• Degree of protection	IP54
• Install position	Wall mounting
• Unit dimension (L x W x H)	310× 220× 120mm



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HS SMART DIGITAL CONTROL BOX

Product data sheet

L922-S / L932-S

DUPLEX PUMP CONTROL PANEL
MODEL: L922-S / L932-S

Eliminate the need for at least 5 water level sensors or 3 float switches: stop-level, normal- level for one pump, high-level for two pumps, overflow-alarm level. Thus significant cost-savings result from dramatically reduced purchasing and clearing of sensor or float switch.

More secure because it uses level transmitter, whereas sensors or float switch often fails because of the effect of sludge.

Different water levels (depth) for starting or stopping the pumps can be set via LCD screen directly and real time depth value displaying.

General details

Application

Control & protect sewage / drainage pump only

Model

L922-S | L932-S

Main technical data

- Start type: Direct on line
- Qty of controlled pump: Duplex pump
- Rated input voltage:
  - L922-S: AC220V/AC230V Single phase 50HZ/ 60HZ (For customization, please contact the manufacturer.)
  - L932-S: AC380V/AC400 Three phase 50HZ/ 60HZ (For customization, please contact the manufacturer.)
- Rated output power:
  - L922-S: 0.37kw-2.2kw (0.5hp-3hp); 3-4kw(4-5.5hp)

Max Motor Output at 220V 1Ph		Pump Max Rated Current(A)
HP	KW	
0.5	0.37	18A
0.75	0.55	
1.0	0.75	
1.5	1.1	
2.0	1.5	
3.0	2.2	
4.0	3.0	25A
5.5	4.0	

  - L932-S: 0. 75kw-4kw (1 hp-5. 5hp); 5. 5kw-11kw (7. 5hp-15hp) 15kw(20hp)

Max Motor Output at 380V 3Ph		Pump Max Rated Current(A)
HP	KW	
1.0	0.75	12A
1.5	1.1	
2.0	1.5	
3.0	2.2	
5.0	3.0	
5.5	4	
7.5	5.5	25A
10.0	7.5	
15.0	11	
20.0	15	32A

Protection function

L922-S:
- Over load protection
- Pump stalled protection
- Dry run protection with sensor free
- Under /Over voltage protection
- Repeat start protection

L932-S:
- Over load protection
- Pump stalled protection
- Dry run protection with sensor free
- Under /Over voltage protection
- Repeat start protection
- Phase unbalance protection
- Phase reversal protection
- Open phase protection

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HS SMART DIGITAL CONTROL BOX

Product data sheet

L922-S / L932-S

General details	
Control characteristic	Connecting 0.5-4.5V level transmitter to replace float switch or level probe Duplex pump control .Main pump / standby pump automatically alternate .Main pump / standby pump automatically switch against malfunction .Standby pump participates running if required
Other features	LCD screen displaying dynamic real time depth & pump running status Pump shaft anti-rust Pump accumulative running time displaying Pump last five faults recording displaying Present one dry contact point (BA port) Present RS485 port Present user remote monitor LCD screen locked function under auto state Push button calibration LCD screen displaying pump running status
Main installation data	
• Working temperature	-25℃-- +55℃
• Working humidity	20%--90%RH, no drips concreted
• Degree of protection	IP54
• Install position	Wall mounting
• Unit dimension (L x W x H)	310× 220× 120mm