

GIDPC DOT

GIDPC DOT is a Digital Pump Controller for domestic application, which is easy to use programmable device for single phase pumps (mono-block or submersibles which require only running capacitor). It can be used to control the pumps up to 15 A.

APPLICATIONS

- GIDPC DOT is designed and built for managing and controlling residential water i.e. the water used for indoor and outdoor household purposes, such as water transfer, tank filling, tank emptying, drainage application or pressure boosting. It is an ideal choice in residential segments, where water and energy conservation are of utmost importance

FEATURES

- LCD screen displays pump running information
- Push button calibration
- Overload protection
- Motor stalled protection
- Dry run protection without installing a float switch
- Under voltage protection (Default settings can be changed)
- Over voltage protection (Default settings can be changed)
- Transient surge protection
- Memory function retention during power off & power recovery
- Visual & audio alarm for fault prompt
- DIP switch settings to make it suitable for different applications like water supply, drainage or pressure boosting
- Auto/Manual switch
- One set (03 nos.) of liquid level probes for clear water that comes along with the panel

CONTROLLER COMPONENTS

Dip switch settings

Item	Switch Position	Messages & In Voltage Displaying Area	Item
1		000	Applied for water supply by liquid level control through probe/float switch
2		222	Applied for water supply by pressure control through pressure switch & pressure tank
3		111	Applied for drainage by liquid level control through float switch



PARAMETER AND SPECIFICATIONS:

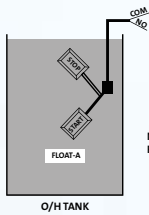
Main Technical Characteristics	
Control characteristic	Level control (with probes for clear water or with floats) Pressure control (with pressure switch)
Working modes	Manual/Auto
Main Technical Data	
Rated output current (amperes)	1.5 to 15 A
Rated input voltage	AC 220V / 50 HZ / Single Phase
Trip response time of over load	5sec - 5min
Trip response time short circuit	Less than 0.1 sec
Trip response time of under/over voltage	Less than 5 sec
Trip response time of dry run	6 sec
Recovery time of over load	30 min
Recovery time of under/over voltage	5 min
Recovery time of dry run	30 min (or this can be set manually)
Trip voltage of over voltage	253 Volts (or this can be set manually)
Trip voltage of under voltage	175 Volts (or this can be set manually)
PROTECTIONS COVERED	Dry run (without float/probe)
	Current Overload
	Transient surge
	Under voltage
	Over voltage
	Pump stalled

CAPACITOR

- Grundfos SmART Sub/Submersible Pumps does not require the starting capacitor. It only requires the running capacitor. The ratings of the capacitors are explained in the below table

Motor Type	Rating (HP/KW)	Running Capacitor (mfd)	Capacitor Make
Gylcol+Water Filled - Tesla	0.5 / 0.37	16	EPCOS
Gylcol+Water Filled - Tesla	0.75 / 0.55	20	EPCOS
Gylcol+Water Filled - Tesla	1 / 0.75	25	EPCOS
Gylcol+Water Filled - Tesla	1.5 / 1.1	35	EPCOS
Gylcol+Water Filled - Tesla	2 / 1.5	40	EPCOS
SmART Sub HOS1/037	0.5 / 0.37	20	EPCOS
SmART Sub HOS1/075	1 / 0.75	30	EPCOS
SmART Sub HOS2/075	1 / 0.75	30	EPCOS
SmART Sub HOSD1/110	1.5 / 1.1	45	EPCOS
SmART Sub HOSD1.5/150	2 / 1.5	60	EPCOS

DRAINAGE APPLICATION BY INSTALLING FLOAT SWITCH



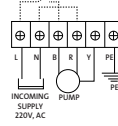
NOTE: NO CONTACT IN FLOAT DOWN POSITION

Start condition:
When the “Float switch A” reaches the up position, the controller will run the pump.

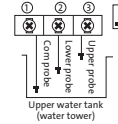
Stop condition:
When the “Float switch A” reaches the down position, the controller will stop the pump.

WORKING APPLICATIONS

Power terminals

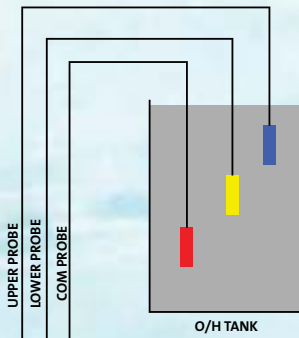


Control terminals

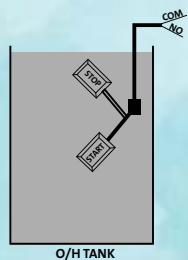


WORKING APPLICATIONS

Water supply/transfer by installing probes or Float switch



Application: Clear water supply - liquid level control (using probes)

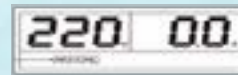


Application: Water supply - liquid level control (using float switch)

PARAMETER

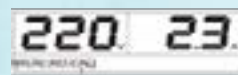
Please read this manual carefully before starting the installation and operation. Any damage to the equipment caused due to failure to comply with the descriptions in this manual in installation or operation will be beyond the scope of the company's quality guarantee.

Calibration:
Setting of parameters (calibration of unit according to the connected load):



Press the **MODE** key to switch to manual mode. Make sure the pump is not running and LCD screen looks as shown on the left

1



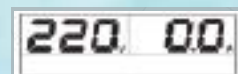
Press the **START** key to run the pump, confirm the pump is running OK and drawing rated current. Also confirm the mains supply is healthy and incoming voltage is normal, LCD screen will display voltage and current being drawn by pump

2



Again press **START** key approximately for 3 sec and release when the unit makes a “Beep” sound and a countdown timer starts on the screen. LCD screen display looks like the image on the left

3



Pump stops running and parameter calibration completes. LCD screen display looks like the image on the left

4

PRODUCT RANGE

Part Code	Model	Voltage	Current I (A)	Number of Pump	Dimensions			Panel Protection	Weight [kg]
					L	W	H		
99591666	CP 1 Pump 1 Phase 15A GIDPC DOT	1 X 220	Up to 15 AMPS	1 W	160	225	100	IP 54	1.5

For all pumps, electrical supply is 1 phase 220 Volts AC, 50 Hz