ion GENESIS™

USER-PROGRAMMABLE SMART SENSING CONTROLLER

- **Programmable Controller keeps user in control of all operations**
- **Dual Level Sensors Digitally communicate with Controller**
- **Microprocessor Computer Technology Controls Pumping**
- **Smart Pump Sensing Technology replaces mechanical operations**
- **For both simplex and duplex pump applications**
- **Optional dialer available to connect remote alarm contacts**

THE SWITCH IS ON AT WWW.IONNATION.US

THE INTRODUCTION

The Ion Genesis is the first-of-a-kind smart controller that comes complete with dual digital level sensors serving as the eyes in your sump pit that continuously monitor, diagnose and report to the controller, or the brains, of the system's real-time critical pumping information. This technology replaces system controllers that use mechanically controlled float switches that will fail due to the wear and tear of sump pit environments.

THE CONTROLLER

- Will detect whether to operate one pump or two pumps during startup of the unit based on connected pumps
- Allows user to adjust pump turn-on in increments of 1/2" without entering sump
- Continuously monitors and diagnoses pump operation with included sensors
- Simplifies installation by eliminating the need for additional branch circuit feeder for second pump
- Efficiently cycles pumps and minimizes pump turn-on cycles

THE CONTROLLER

For the first time, users are in control of all aspects of pumping with the ability to set and adjust pump turn on level. Benefits of this include the ability to use the unit effectively in small volume sump pits as well as large volume pits. Finally, sump pumps can be efficiently cycled within their working environment by effortlessly selecting the appropriate turn on height without having to enter the sump pit. This minimizes pump turn-on cycles extending the life of the pumps while conserving energy.

Another unique aspect is the "one controller fits all," design. The Ion Genesis controller has the ability to determine whether there is one pump or two pumps connected. This feature can be especially useful if one is attempting to add an extra pump or remove an existing pump from the Ion Genesis pump controller system. When paired with either one or two sump pumps, the Ion Genesis monitors the water levels within the sump pit and activates the appropriate pump accordingly. The product allows for up to 2 pumps to be operated individually, one at a time, from a single residential wiring circuit. This creates pumping redundancy should one of the pumps happen to fail and simplifies the installation by eliminating the necessity for an additional branch circuit feeder for the additional pump.

THE SWITCH IS ON AT

THE SENSORS

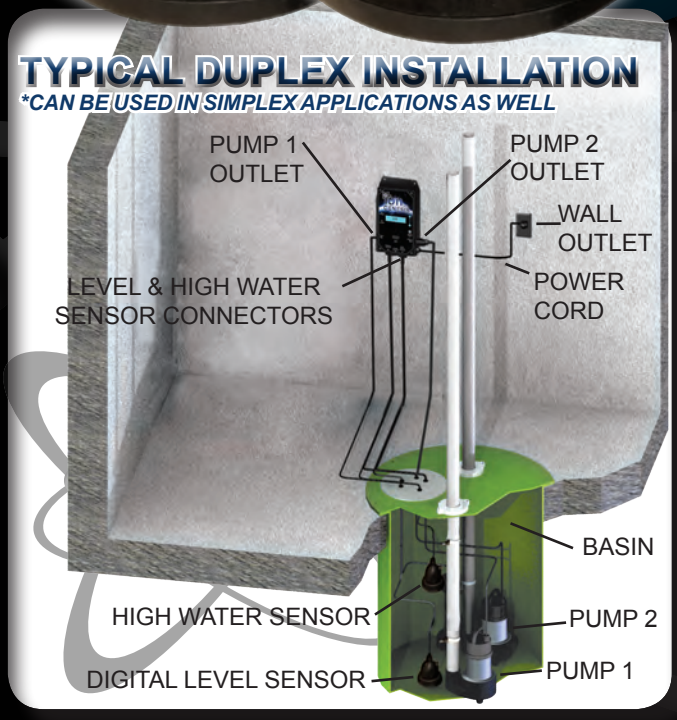
- Allow user to adjust turn-on height with use of controller without entering sump pit (especially useful for radon or sealed pits)
- Can determine if a pump malfunctions by trending water levels in sump pit
- Can detect a broken or stalled pump impeller
- Can detect an obstruction in the pump's discharge pipe
- Will detect pump failure and if in duplex mode will run the other pump
- Will detect excessive water flow and will determine if it exceeds pump discharge capacity level
- Will alert user to a high water situations and compensate by overriding the primary sensor and continue to run pumps
- Will sound an alarm for any of the above conditions

THE SENSORS

In order for the Ion Genesis controller to accurately determine the height of the water within a given sump application, it relies on information acquired from the two digital level sensors. The digital level sensors accurately measure the height of the water within the sump pit and digitally communicate those values to the host controller by means of a proprietary serial communications protocol.

By allowing the water level sensing to be performed digitally within each float sensor, the Ion Genesis can accurately transfer the digital water height information from the level sensors to the control unit and compensate as needed.

The proprietary software feature, encoded within every digital level sensor and Ion Genesis host microprocessor allows for robust data delivery by means of cyclical redundancy checks as well as timer based fault exceptions. This means users have the ability to receive and analyze pumping data never before possible with mechanical switch control systems!



OTHER IONNATION PRODUCTS

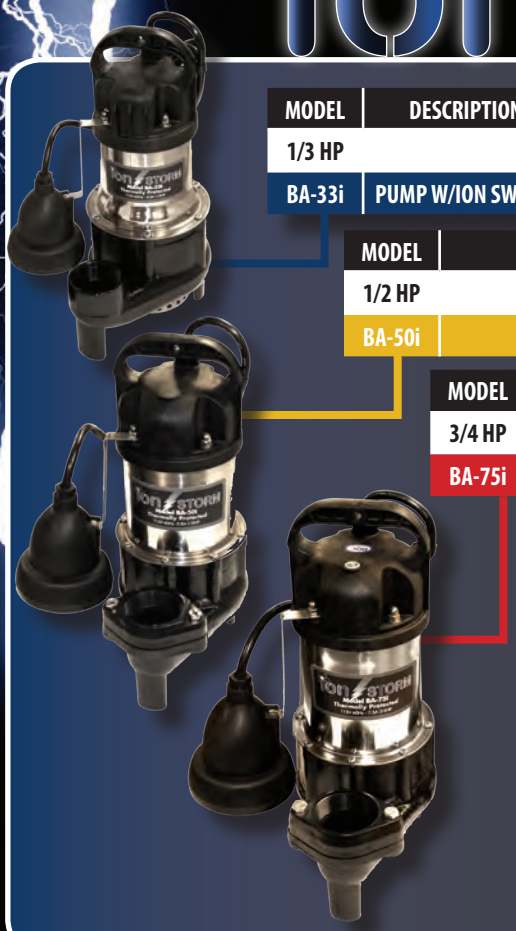
ion STORM™

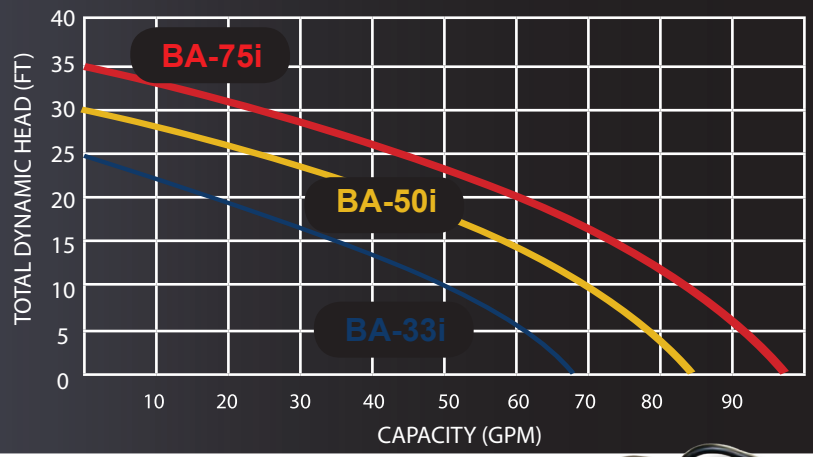
SUMP & EFFLUENT PUMPS

MODEL	DESCRIPTION	SPECIFICATIONS				
1/3 HP		H.P.	DISCH.	VOLT	AMP	GPM @ 10FT
BA-33i	PUMP W/ION SWITCH	1/3HP	1-1/2″	115V	4.5A	50

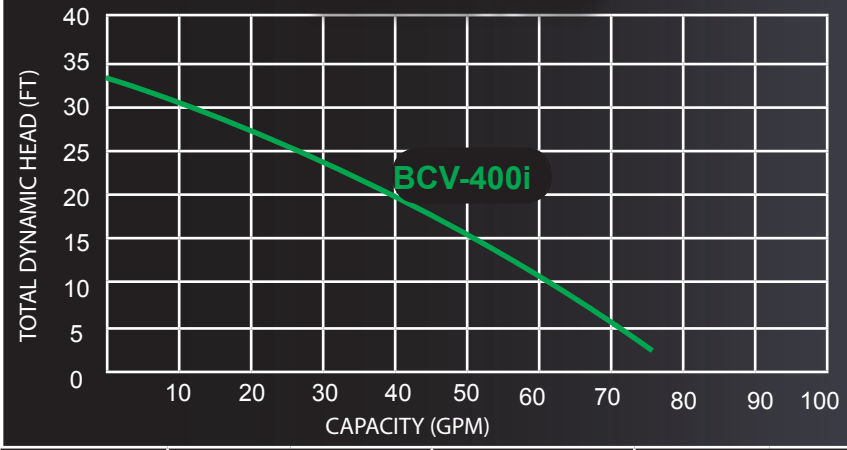
MODEL	DESCRIPTION	SPECIFICATIONS				
1/2 HP		H.P.	DISCH.	VOLT	AMP	GPM @ 10FT
BA-50i	PUMP W/ION SWITCH	1/2HP	2″	115V	5.8A	70

MODEL	DESCRIPTION	SPECIFICATIONS				
3/4 HP		H.P.	DISCH.	VOLT	AMP	GPM @ 10FT
BA-75i	PUMP W/ION SWITCH	3/4HP	2″	115V	7.5A	84





SEWAGE PUMP



MODEL	OUTPUT		OUTLET	RATED		MAXIMUM		PASS SOLID
1/2 HP	H.P.	AMP	INCH	HEAD (FT)	FLOW (GPM)	HEAD(FT)	FLOW (GPM)	DIA (INCH)
BCV-400i	1/2 HP	7	2″	10′	60 GPM	30′	87 GPM	2″

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ion™