

MPE SC100 Station Controller Specification

The controller shall be UL approved, be powered by 120VAC, and shall perform both pump down and pump up functions. All electrical connections shall be made by quick disconnect, phoenix style connectors.

The Controller shall be UL listed as Industrial Control Equipment, UL 508.

The controller shall be a duplex controller with an analog input for level control. The controller shall contain four 8A rated output relays, for the functions Pump1, Pump 2, High level alarm, and Low level alarm.

The Controller shall not require an external power supply or any external I/O modules to be a fully functioning unit. An analog input (4-20mA) with zero and span adjustments shall be provided for the scaling of the wet-well level input.

The controller shall contain a regulated, 24VDC power supply for powering the level transducer input.

The Controller shall accept an input signal in the following forms: a 4-20 mA analog signal.

All connections to the Controller shall be made to removable, "Phoenix" style combination connector/plugs.

The Controller shall control up to two pumps to perform liquid level control. The Controller shall be capable of alternating the pumps, and shall provide lag pump delays and high and low level alarms, and shall perform both pump-down and pump-up operation.

The Controller shall be standard "off the shelf" equipment with published literature and fully tested hardware and operating program. The Controller must be field configurable from the front of the unit, and require no special tools or software to set-up or operate.

The Controller shall be a microcontroller-based device and not require a battery to maintain the operating program. All set-up values shall be stored in non-volatile memory.

The controller shall contain a 10 second power-up delay, and a 5 second lag pump delay, to prevent the turning on of one or both pumps immediately after a power interruption.

In the Level Simulation mode, the controller shall energize the low and high alarms and pump calls as the level is simulated by selecting the Simulation pushbutton, and using the up and down arrow pushbuttons.

If left in the Level Simulation mode, the controller shall automatically return to monitoring the wetwell level after sixty seconds.

A numerical level display shall be provided on the front of the unit. It shall have a 3 digit, 7 segment LED display and show levels in feet and tenths of feet. All setup parameter values shall be viewed or changed from the front of the Controller.

The Controller shall remember which pump was in the lead position during a power outage.

The Controller shall have adjustable lag pump delay.

The Controller shall have a parameter setting to select the number of pumps to control.

The Controller shall contain a parameter setting to allow the disabling of the automatic alternation.

The Controller shall contain a parameter to allow the Controller to be used in either a Pump Up or a Pump Down configuration.

The Controller shall have parameters for calibrating the zero and span of the level input signal.

The Controller shall be able to force lead pump position by parameter selection.

The Controller shall contain registers for quick verification of the firmware revision level.

SC100 Part Number Information:

SC100

The SC100 Controller shall be manufactured by Motor Protection Electronics of Apopka, Florida, (407) 299-3825.

