2iB ELECTRONICS

PUMP SNORE CONTROLLER (SCIO)

ADVANCED SAFETY & CONTROL

- DESIGNED TO MAXIMISE OPERATOR SAFETY
- PUMP CURRENT REFERENCE DISPLAY
- ANALOGUE INPUT SCALING INPUT VIA DIP SWITCHES
- QUICK PUSH BUTTON SET POINT SETTING
- MULTIPLE INPUT CONTROL OPTIONS
- LOCAL AND REMOTE STOP AND START CAPABLE
- MULTIPLE ALARM OUTPUT SELECTION
- MULTIPLE CONTROL OPTIONS

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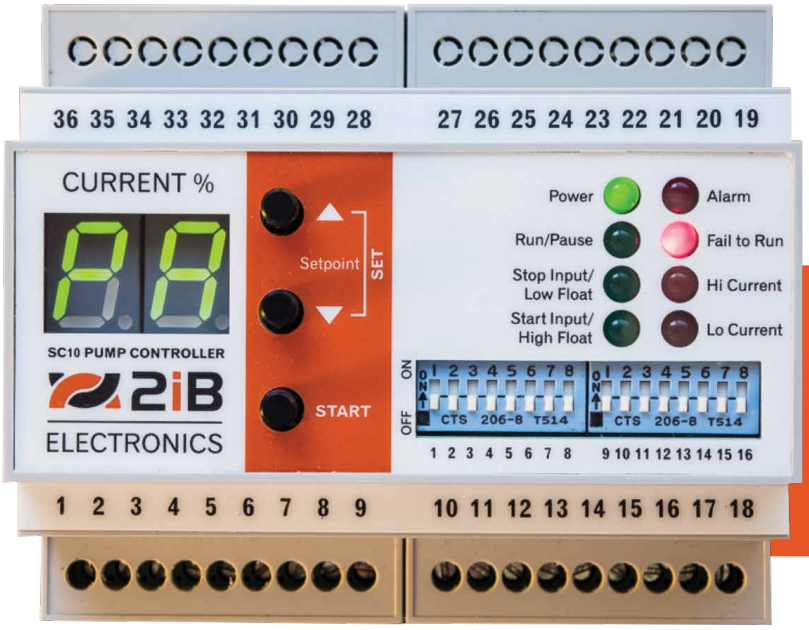
ADVANCED SAFETY & CONTROL

Dewatering pumps in mines and construction sites are critical to achieving production and project schedules. Pumps can also cost a significant amount of money to maintain if not effectively managed. The SC10 Auto Pump Controller provides safe and effective control of pumps ensuring that they operate when required and as efficient as possible.

ENHANCED USER INTERFACE

All 2iB products have the user experience at the forefront of our designs. The SC10 user interface is designed so users can setup the unit up with ease and information provided for easy trouble shooting. The user has current input display and multiple status feedback LEDs to achieve this.

The SC10 built in diagnostics ensuring that the critical 4-20 mA current input is functioning correctly, if the unit malfunctions an alarm is provided to alert users before water begins overflowing.



THE SAFEST SNORE CONTROL RELAY ON THE MARKET TODAY

LEADING SAFETY FEATURES

The SC10 Pump Snore Controller is designed to maximise operator safety, configuration of set points and relay options requires no tooling and is completed by simultaneously pushing the set point buttons. Competitor products require a licensed electrician to do this within live electrical panels with tools increasing the risk that they may come into contact with live parts. Additional safety is achieved with digital inputs provided to connect external set point buttons entirely removing the risk of working within a live electrical panel.

FLOAT SWITCH ENABLED

The SC10 has optional digital inputs for connection of high and low level switches should your application require them. The standard operating mode of the SC10 starts the pump based on the timer and stops when the pump snores.

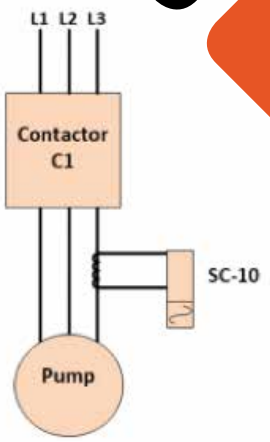
Using DIP Switches you can configure the unit for different start and stop modes. This is useful for critical applications where specific start and stop levels are essential.

REDUCE PANEL BUILD COSTS WITH THE SCIO

Installing the SC10 Pump Controller reduces manufacturing costs of pump control panels. The microprocessor relay has multiple inputs and outputs for control removing the need for manual-auto switches, alarm relays, float control circuits or start relays. Removing additional switches and relays means less parts and labour cost to install them. Simply more control options, less cost providing greater value.

REDUCE PUMP MAINTENANCE COSTS

Many competitor controllers require an auto manual mode so the pump can be started when in sleep mode, often pumps are left in manual causing pumps to run dry/snore for extended periods increasing maintenance costs. The SC10 does not require the auto manual function as the pump can be started at any time and the pump will simply run until it snores and the adaptive control will automatically adjust to the start and stop data measured.



CONTROLLER OPERATION

The SC10 Snore Controller monitors the electrical motor current via a 4-20mA output current transformer (CT), The loop powered CT is connected to an analogue input on the relay. Monitoring the centrifugal pump current detects when no load electrical current is present which indicates that there is no or minimal fluid is being discharged and switches the pump into pause mode. The duration of pump run and pause time is automatically calculated using our adaptive control algorithm which increases and decreases run and pause duration based on operational run and pause history.

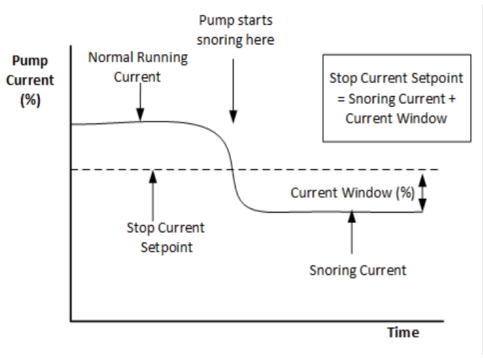
Addition external control input switches can be also for additional control options, a start input is also available which when activated will start the pump at any point of the pause cycle which will start and run the pump until no load current is detected again (snoring) or the low level input switch activates.

SPECIFICATIONS

Supply voltage	24 VAC/DC
Frequency	45–65 Hz
Power consumption	<10VA
Motor current sensor	4-20mA input CT. Range to suit attached load. SC10 provides 24VDC drive for CT.
Operating temp	0-55 Degrees Celsius
Run relay contact rating	5 A, 48 VAC Resistive, 1.5 A 48 VAC Pilot duty / AC12
Alarm contact rating	5 A, 48 VAC Resistive, 1.5 A 48 VAC Pilot duty / AC12
Dimensions	W 106.25mm x H 90.20mm x D 59mm
Material	PC/ABS
Mounting	35mm din rail mounted
Weight	300 g
Certification	EN 61000-6-3:2007 +A1+AC FCC Part 15B

WHAT IS PUMP SNORING?

Pump Snore is a condition that occurs when a pump begins drawing in liquid and air causing a snoring sound, some dewatering pumps are capable of running dry for short periods but extended snoring conditions will cause damage and increase maintenance costs. When a pump snores the pump load current (Amps) decreases and the drop in current is detected by the SC10 pump controller and stops the pump which prevents damage saving money and premature failures.



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MULTIPLE CONTROL OPTIONS

TIMER START, SNORE STOP

HIGH LEVEL START, SNORE STOP

HIGH LEVEL START, LOW LEVEL STOP

PUSH BUTTON START, SNORE STOP

PUSH BUTTON START, LOW LEVEL STOP

PUSH BUTTON STOP, TIMER START

PUSH BUTTON STOP, HIGH LEVEL START