

# INSTALLATION INSTRUCTIONS

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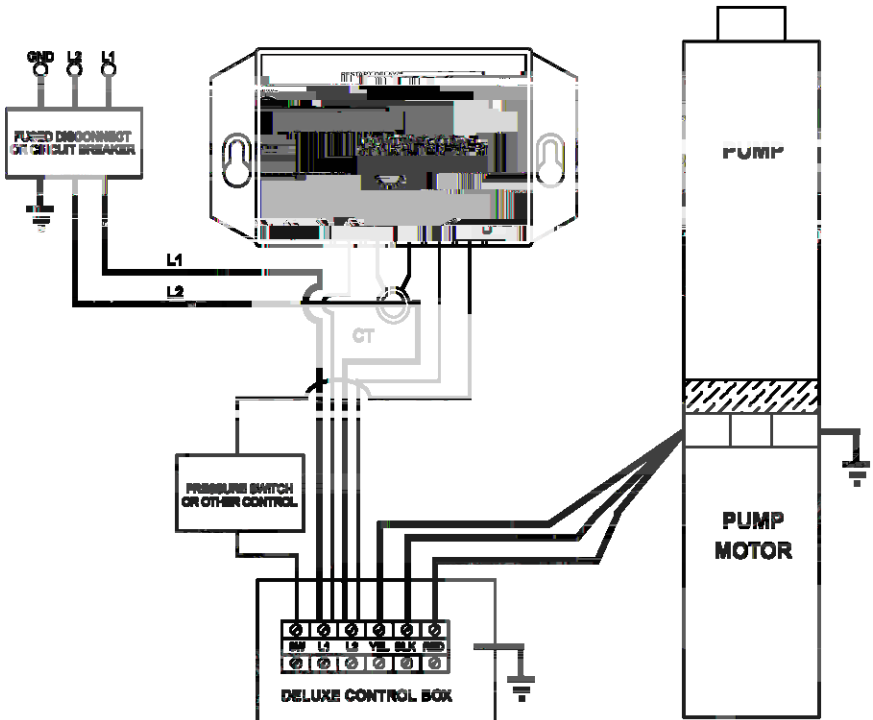
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**BE SURE POWER IS DISCONNECTED PRIOR TO INSTALLATION!  
FOLLOW NATIONAL, STATE AND LOCAL CODES.  
READ THESE INSTRUCTIONS ENTIRELY BEFORE INSTALLATION.**

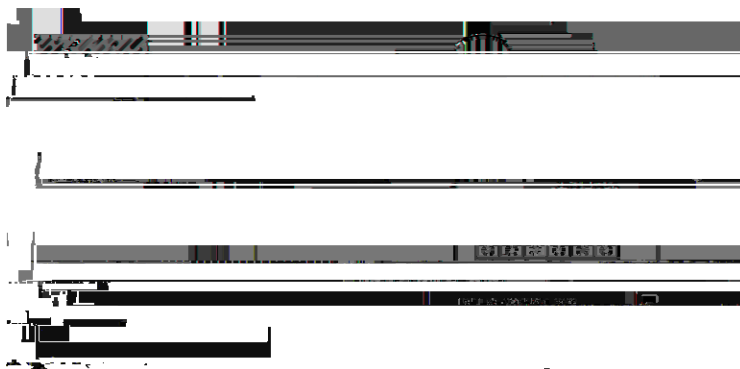
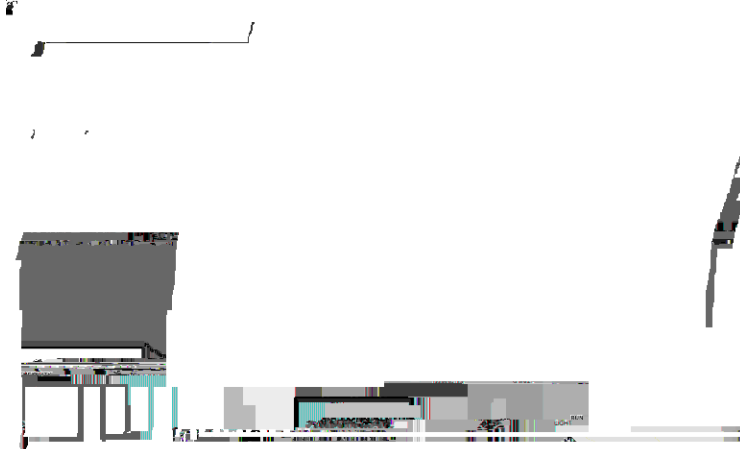
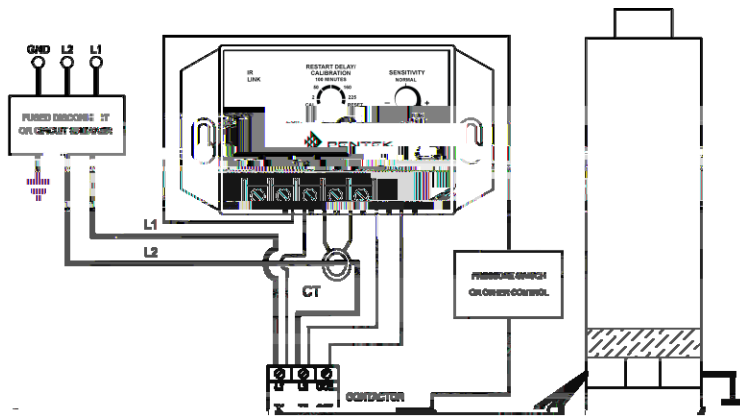
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| Size     | Current     | CT    |
|----------|-------------|-------|
| 5-7 ½ HP | 27.5 – 42.1 | 50:5  |
| 10 HP    | 51          | 75:5  |
| 15 HP    | 75          | 100:5 |

**TABLE 1: Current Transformer Selection**



**FIGURE NO.1: Typical Wiring Diagram**





## **RUN HOURS / FAULT HISTORY**

The Submersible Pump Protector records pump run hours and the last 20 faults. These values can be displayed by an Informer (see **USING AN INFORMER**). Run hours and fault history can be cleared on the Submersible Pump Protector. Read the following instructions fully before performing the procedure.

**NOTE: Turn the SENSITIVITY knob completely to the left (counter-clockwise) or completely to the right (clockwise) when directed. The knob must be turned in quick succession.**

### **To Reset Run Hours and Clear Fault History:**

1. Remove power to the Submersible Pump Protector.
2. Set the **RESTART DELAY/ CALIBRATION** knob to **RESET** and the **SENSITIVITY** knob to the middle (12:00) position.
3. Apply power to the Submersible Pump Protector—the **CAL. LIGHT** will turn on.
4. Turn the **SENSITIVITY** knob to the **right**—the **CAL. LIGHT** will turn off and the **RUN LIGHT** will turn on.
5. Turn the **SENSITIVITY** knob to the **left**—both lights will turn on.
6. Turn the **SENSITIVITY** knob to the **right**.
7. After 10 seconds, the **CAL.** and **RUN LIGHTS** will blink twice indicating the run hours and fault history have successfully been cleared.

## **RAPID CYCLING**

Rapid cycling is defined as more than 4 restarts in a 60-second period. The Submersible Pump Protector is capable of detecting a rapid-cycle condition whether a control device, such as a pressure switch, is installed before\* or after it. Upon detecting either form of rapid cycling, the Submersible Pump Protector will lock-out, preventing damage to the pump. To reset the Submersible Pump Protector, remove and re-apply power.

### **RAPID CYCLING (Line-Side / Upstream)**

Rapid cycling of the line side of the Submersible Pump Protector may be caused by several naturally occurring conditions which are indistinguishable from true rapid cycling. For this reason, once tripped, the Submersible Pump Protector will wait 30 minutes and restart. If the restart is successful (the pump runs for more than one minute), the rapid cycle counter will reset to zero. If the Submersible Pump Protector encounters rapid cycle 4 times without a successful restart, it will lock-out and require a manual reset. To reset the Submersible Pump Protector, remove and re-apply power.

\*Protection against rapid cycling of a control device installed **before** the Submersible Pump Protector is disabled by default. Read the following instructions fully before performing the procedure to enable his feature.

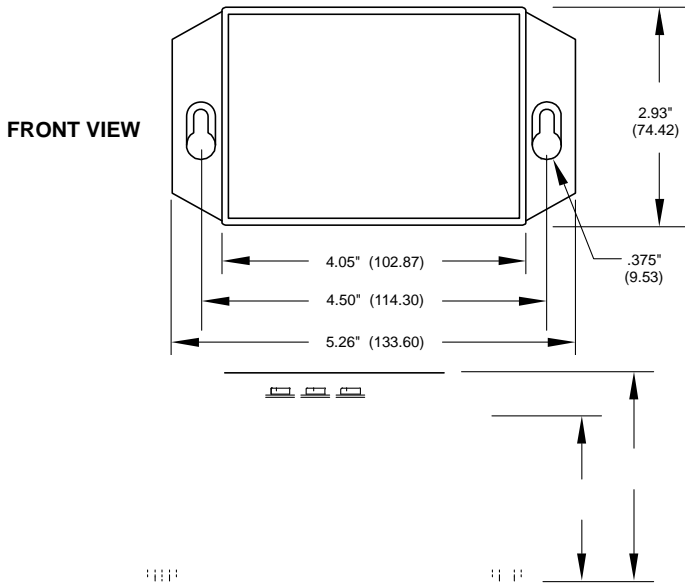
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## TROUBLESHOOTING



**PHYSICAL DIMENSIONS**



**SPECIFICATIONS**

**NOTES**

## **LIMITED WARRANTY**

Goods manufactured/sold by Pentek are subject to the following Limited Warranty, which is in lieu of, and excludes all other warranties, guarantees and conditions expressed or implied, unless stated otherwise.

Goods are warranted to be free from defects in workmanship or material for a period of 5 years from the date of manufacture provided such goods have not been subjected to misapplication, misuse, negligence or repairs by unauthorized persons.

This Warranty does not apply to any faulty performance caused by improper voltage supply or improper product selection. Any faulty performance, actual or perceived, caused by improper product selection, incorrect installation, changes in water supply or any factor beyond the manufacturer's control, are not covered by this warranty.

Pentek shall not be liable for any consequential, incidental, or contingent damages whatsoever.



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