**Technical Specifications:**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model number</td>
<td>5800070600</td>
</tr>
<tr>
<td>Voltage</td>
<td>230V 50/60 HZ</td>
</tr>
<tr>
<td>Response time</td>
<td>3 Seconds</td>
</tr>
<tr>
<td>Sensitivity adjustment</td>
<td>+/- 20%</td>
</tr>
<tr>
<td>Over voltage trip</td>
<td>255 VAC</td>
</tr>
<tr>
<td>Under voltage trip</td>
<td>203 VAC</td>
</tr>
<tr>
<td>Reset time adjustment</td>
<td>2 min - 240 min</td>
</tr>
</tbody>
</table>

**Installation Instructions**

1. TURN OFF POWER AT SOURCE.
2. Remove cover from control box.
3. Unplug blue, yellow, and red wires from the L1, L2, and Start positions on the terminal strip.
4. Slide the tail of the QD Pumptec under the start capacitor and rock the terminal side down to meet the L1 and L2 terminals (see figure 1).
5. Make sure that the QD Pumptec mates firmly with the L1 and L2 terminals.
6. Connect the blue wire to the terminal marked L1 on the QD Pumptec.
7. Connect the yellow wire to the terminal marked L2 on the QD Pumptec.
8. Reconnect the red wire to its original position (START terminal) on the control box terminal strip.
9. Set the timeout knob (reset time after an underload trip) to the desired position (see figure 2).
10. Adjust sensitivity setting if desired. The “Factory Setting” position should be used for most applications. (see Calibration and Sensitivity Adjustment section and figure 3 for more information).
11. Replace cover on the control box.
12. Reconnect power.
13. Adhere the “Protected by Pumptec” label to the cover of the control box.

**Calibration and Sensitivity Adjustment**

**Factory Calibration Setting**

The QD Pumptec comes equipped with a calibration/sensitivity adjustment knob. The QD Pumptec is shipped from the factory with this adjustment pointed to the “Factory Setting” position. This setting is designed and calibrated expressly for Franklin Electric 230 V three-wire motors. The majority of applications require no change in this adjustment. The unit will detect a dry well and shut off the motor when the motor load drops to about 70% of motor Service Factor Load (SFL).

In some instances, you may wish to adjust the sensitivity of the QD Pumptec.

**Increasing Sensitivity**

The sensitivity adjustment knob pointer may be moved from the “Factory Setting” position to point at a positive percentage number. Turning the knob (figure 3) to +10% will make the unit more sensitive by moving the 70% factory underload setting up +10% to 80%. The QD Pumptec will now trip when the motor load drops to 80% of motor SFL.

**Decreasing Sensitivity**

The QD Pumptec may be made less sensitive by moving the sensitivity knob pointer to a negative percentage number. Turning the knob (Figure 4) to -10% will decrease the sensitivity by lowering the underload setting point to 60% of motor SFL (70% -10% = 60%). CAUTION: Decreasing the sensitivity may cause the QD Pumptec to fail to detect a dry well condition.

**Field Calibrate Setting**

The QD Pumptec may be calibrated to the load of a particular system. Moving the sensitivity knob pointer to the “Field Calibrate” position will initiate a field calibration “snap shot” the next time the system is powered. The first time power is applied, after selecting the “Field Calibrate” setting, the QD Pumptec will run for fifteen seconds and take a snap shot of the load and then shut off for ten seconds. The QD Pumptec will then restart and run normally within five seconds. When the motor load goes below 25% of the “snap shot” setting, the QD Pumptec will trip on the underload condition. The sensitivity of the field calibration may be adjusted by moving the sensitivity pointer.

**Troubleshooting**

- If the QD Pumptec trips in three seconds (shuts off motor) with water delivery, check the following:

**Match Motor and Pump**

Since the QD Pumptec measures load, the pump and motor must be matched. For example, if you use a 1/3 hp pump on a 1/2 hp motor, the unit will not operate correctly because the motor is not loaded sufficiently by the pump. The unit detects an underload condition while pumping water causing the QD Pumptec to shut off the motor.

**Insure Proper Line Voltage**

The QD Pumptec continuously monitors power line voltages. If the power line voltage exceeds 253 V or goes below 207 V, the QD Pumptec will shut off the motor for two minutes. If after two minutes, the line voltage becomes normal, the QD Pumptec will restart the motor.

**Current Too High**

The QD Pumptec continuously monitors motor current. If the motor current is excessively high (16 to 17 amps) for three seconds the QD Pumptec will shut off the motor. To verify this condition, remove power from the QD Pumptec for five seconds. Re-apply...
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Note: Although the QD Pumptec may detect a deadhead condition, it is not guaranteed. Not all pumps unload under deadhead conditions.

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