

1. VSP scheduling at three preconfigured speeds:
  - a. priming (Speed1 = 2200 rpm)
  - b. cleaning (Speed2 = 1800 rpm)
  - c. chlorinating (Speed3 = 1600 rpm)
2. SWCG scheduling.
3. Polaris pump scheduling.
4. Allowing the user to manually start/stop the VSP (for any of the preconfigured speeds), Polaris pump and SWCG.
5. Monitoring the VSP speed with a current transducer.
6. Preventing the user and the scheduler from starting the Polaris pump when the VSP current transducer doesn't report Speed2.
7. Automatic stopping of the Polaris pump if the VSP current transducer stops reporting Speed2.
8. Preventing the user and the scheduler from starting SWCG if the VSP current transducer doesn't report any speed (reports just a 140mA standby current).
9. Automatic stopping of SWCG when the VSP current transducer stops reporting any speed (reports just a 140mA standby current).
10. Measuring pool water temperature.
11. Measuring enclosure temperature.
12. On-off controlling, with temperature hysteresis, of the enclosure fan.
13. Charting temperatures of water, controller enclosure and Raspberry Pi CPU for the last 12 hours.
14. Sending an email alarm when the VSP current exceeds expected values, indicating, for example, an obstruction in water flow.
15. Sending an email alarm when the VSP current is close to 0, which may indicate a tripped circuit breaker.
16. Sending an "alarm cleared" email when the VSP current returns to normal levels.