Enhanced Arcoflex Controller Dashboard Cards

1. Controllers

The "controller" is now a 3-way virtual switch for automation control. You can now use a single sensor card to force something on, force it off or leave it in default automation mode. The card images will either be lights, buzzers or the cross/tick scenario as below. The picture below shows the three states now available on the one sensor:



What is this sensor good for?

- Enabling or disabling your buzzer or lights and conducting a test
- Managing your grow-lights: force on, use a schedule or cancel the schedule
- Managing evaporators: force on, force or leave in auto
- Managing water valves: force open, force close or leave on local control
- Put a cool room condenser controller into automatic or local
- 2. Running Time

This sensor continusouly records some event but is manually reset (press the button) or auto reset (daily, weekly, monthly). The value will turn up on your daily reports or can be used to generate alerts. They can be based on minutes, hours or seconds. You get to choose a logical maximum for the display. Here is the dashboard card:



What is this sensor good for?

- Maintenance reminder: generator running hours, fridges, pumps, etc
- Running time for critical equipment
- Comparing execution times from day to day or week to week
- Net hours in a day the door is left open
- Net hours in a week that plants were being watered
- Net hours a conveyor was operating for
- Time to replace the water filter

This is quite useful when put in conjunction alerts looking for some net value exceeded. The value of these sensors can be displayed on any other sensor for easy reference. For example, the generator running hours can display on the generator's dashbaard card for convenience. Thus the running time sensor can be hidden, reducing dashboard complexity.

3. Stopwatch Timer

This guy is the manual version of a scheduled relay. As you know, the scheduled relay can have up to four on/off periods in a day, controlling lights, watering, cooling or heating. But what if you want a manually triggered time event. During that event you may turn equipment on or open. Hence this is also an automation control sensor. You can count up or down, pause the timer and even set your own duration time. Again, you can count by seconds, minutes or hours. Here is its card:



This sensor is really good for the following things:

- Set a light on your hot house to warn of chemical spray
- A run-on timer for evap fans in cool rooms
- Pump run-on time for irrigation setups
- Deliberate lock-outs on doors
- Automated security lighting but also cognisant of actual light levels
- Disabling alerts for a specific period of time
- Lights on tennis courts or stadiums that have a purchase period of use
- Driveway lighting that was sensor activated
- Schedules that need to be manually started, not full automated
- 4. Duration Timer

Unlike the Running Time sensor, which continually aggregates until reset, the Duration Sensor records the tme for which a specific event takes place: doors opened, lights turned on, motors running, conveyors conveying... This records the duration of each event and resets itself. The biggest uses are for alerts, automation triggers and non-compliance (or compliance) records:



Some of the typical uses include:

- Recording the duration of all door-open events
- How long watering or feeding events take
- Watching compressor cycles to look for equipment faults
- Generator duration events (how much diesel was used?)
- Milking duration or vat wash duration
- The time some process takes to complete
- The length of non-compliance events (over temp, pressure or gases)