

MVP-DAX PT RO CS Operation



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Oreco's Most Versatile Panel (MVP) line of control panels includes an easy-to-use programmable logic unit that incorporates many timing and logic functions. The units have built in screens which show the time and date, digital input status, digital output status, analog input status (3 screens), analog output status, memory flag status and an ESC + Cursor key status. (The analog input status, analog output status, memory flag status and ESC + Cursor key status screens are not used in this application.) Additionally, the following system data screens have been included in your panel:

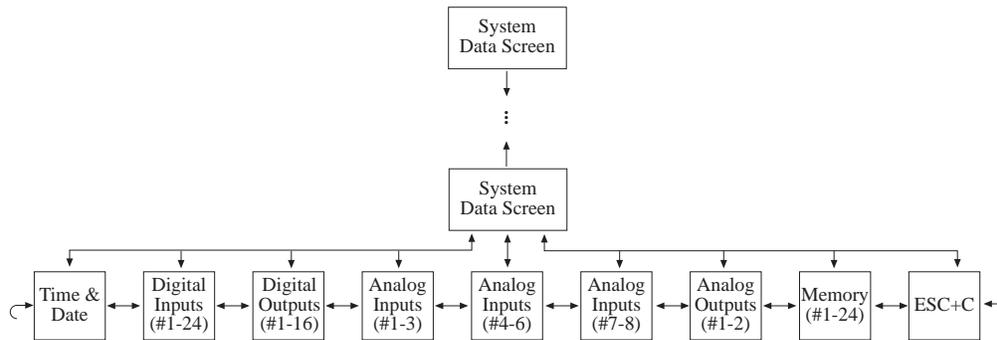
System Data Screens:

1. Pump 1 CT & ETM
2. Pump 2 CT & ETM
3. OVR 1 CT & OVR 2 CT
4. High Lvl CT
5. Power Faults & Operating Hr

Description:

- Pump 1 cycle counter at top of screen and pump run time in minutes beneath
 Pump 2 cycle counter at top of screen and pump run time in minutes beneath
 Pump 1 override counter at top and pump 2 override counter beneath
 High level alarm counter at top of screen
 Power fault counter at top of screen and operating hours beneath

To move between screens, use the four arrow keys. The screens are accessed as shown below:



Digital Input and Digital Output Screens: The unit will activate various inputs and outputs as it operates (please refer to the Liquid Crystal Display screens shown below). Knowing what conditions cause the inputs and outputs to activate can be a helpful installation and troubleshooting tool. The following inputs and outputs have been used with your control panel:

Input Functions:

1. Redundant Off & Low Level Alarm Float
2. Timer On & Off Float
3. Override Timer On & Off Float
4. Lag Enable Float
5. High Level Alarm Float
6. Current Sensor
7. Push To Reset
8. Push To Silence

Activation Conditions:

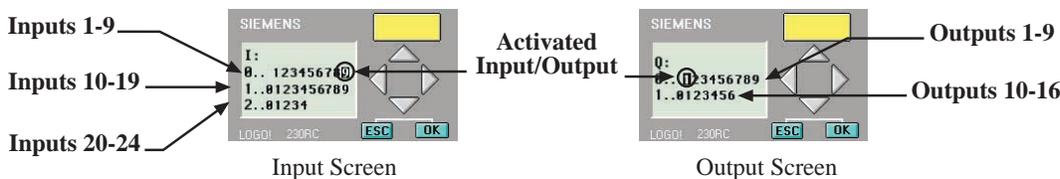
- Float in up position
- Pump is activated
- Pushbutton is pressed
- Pushbutton is pressed

Output Functions:

1. Pump #1
2. Pump #2
3. Level Alarm Light
4. Pump Fail Light
5. Audible Alarm

Activation Conditions:

- Pump #1 is activated
- Pump #2 is activated
- Level alarm condition exists
- Pump fail condition exists
- Audible Alarm is activated



Your control panel can perform the float functions listed below. Depending on the number of floats for your application, some functions may be omitted or combined.

High Level Alarm: This float activates the alarm light (steady) and audible alarm when lifted for longer than the high level alarm delay. The audible alarm may be silenced by pressing the illuminated PUSH TO SILENCE button on the front of the control panel. The alarm light (steady) will remain on until the float is lowered, and the audible alarm will reactivate in 12 hours if condition is not corrected.

Lag Pump Enable: This float will activate both pumps when the timer function enters the on cycle. Both pumps will continue to run together until the lag pump enable float lowers.

Override Timer On & Off: This float activates the override timer function when lifted for more than two seconds. This timer function controls the pump cycles during high flow conditions. The override timer function will remain active until at least the set minimum number of override cycles have been completed and the float has lowered. When the override timer function has been completed, normal timer operation will resume.

Timer On & Off: This float activates the timer function when lifted. The timer will be activated while the float is up and will be deactivated 30 seconds after the float is lowered. This timer function controls the pump cycles during normal flow conditions. Note: The timer will start with its off cycle.

Redundant Off & Low Level Alarm: This float turns off the pumps when lowered for more than two seconds. This float is a secondary off float which will operate if the Timer On & Off float fails. Pumping will be disabled in both the automatic and manual modes. This float also activates the alarm light (flashing) and audible alarm. The audible alarm may be silenced by pressing the illuminated PUSH TO SILENCE button on the front of the control panel. The alarm light will remain flashing until the float is lifted, and the audible alarm will reactivate in 12 hours if condition is not corrected.

Current Sensor: The current sensor is activated when the lead pump is called on to run. If the pump does not become activated in 2 seconds a pump failure will occur, which will activate the pump fail alarm light and audible alarm. The audible alarm may be silenced by pressing the illuminated PUSH TO SILENCE button on the front of the control panel. The pump fail light may be reset by pushing the PUSH TO RESET button, on the front of the control panel, after the pump fail condition has been corrected. If the alarm condition is not corrected in 12 hours, the audible alarm will be reactivated.

This panel supports four different modes of operation relating to the pump alternation which are based on selected parameter settings. Additionally, the panel can be set to alternate in the event of a pump failure. See the setting page for this panel for information on how to adjust these parameters.

Alternating (default): Parameters “Pmp1Lead” and “Pmp2Lead” set to “Off”
The lead and lag pumps will alternate and for each cycle. This mode provides equal wear on each pump and is recommended for most applications.

Pump 1 Lead: Parameter “Pmp1Lead” set to “On” and parameter “Pmp2Lead” set to “Off”
The lead pump is locked to pump #1 and the lag pump is locked to pump #2. No alternation will occur. Pump #1 will be the primary pump for the system. Pump #2 will only be used during high flow conditions.

Pump 2 Lead: Parameter “Pmp1Lead” set to “Off” and parameter “Pmp2Lead” set to “On”
The lead pump is locked to pump #2 and the lag pump is locked to pump #1. No alternation will occur. Pump #2 will be the primary pump for the system. Pump #1 will only be used during high flow conditions.

Both Pumps: Parameters “Pmp1Lead” and “Pmp2Lead” set to “On”
Both pumps will run together for every cycle.

Pump Failure Alternation: If the “PFailAlt” parameter in the logic unit is set to “On” (default is “Off”), the panel will immediately switch to the other pump, in the event of a pump failure.