

Parallel Sensorless pump controller

Display setup and operation

Operation, setup and alarm management displays

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1.0 INTRODUCTION

The Parallel Sensorless Pump Control display is divided into three sets of displays: operation, setup, and alarm management. The operational displays are used by operators to view and control the Design Envelope pumps. The setup screens are used to set, view, save, and restore the system specific settings (i.e. number of pumps, duty point, etc.). The alarm management screens are used to display the current alarms.

The list of displays in each set is as follow:

OPERATION DISPLAYS

- Main menu
- System overview
- Efficiency
- PLC diagnostic
- Variable speed pump overview
- Variable speed pump control
- Variable speed pump status
- PLC clock

ALARM MANAGEMENT DISPLAYS

- Alarm screens
- Pump run feedback alarm
- Pump no flow alarm
- Pump drive fault alarm
- Pump no communication alarm
- No more alarms

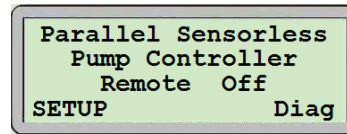
SETUP DISPLAYS

The Setup displays are divided in three levels with each level having the same number of displays with different level of access. Level 0 setup displays are for viewing only and no adjustments can be made. Level 1 setup displays can be used for changing the system setup and restoring the system factory defaults. Level 2 setup displays can be used for changing the system setup, and saving and restoring the system factory defaults. To access level 1 and 2 an operator needs to enter the proper password (Level 1 password is 9393, Level 2 password is 2323).

The list of Setup displays for every level is as follow:

- Main setup screen
- Pump setup
- Pump speed setup
- PLC clock setup
- PID setup
- Building Automation System (BAS) interface setup
- Sensorless setup
- Unit factor setup

2.0 HMI PANEL - DESCRIPTION OF BUTTONS FUNCTION



The display panel has six buttons:



The Alarm button

- Pressing the alarm button will call up the alarm display.



The Prg button

- Pressing the Prg button at any time will call up the main menu display.



The Esc button

- Pressing the Esc button will bring you back to the previous display level.
- For example pressing the Esc button from the pump status display will call up the pump overview display.



The Up and Down arrow button

- When the cursor is at the top left corner of the screen pressing the **Up** or **Down** arrow buttons will let you navigate between displays.
- When the cursor is over a digital value pressing the **Up** or **Down** arrow button will toggle the value.
- When the cursor is over an analog value pressing the **Up** or **Down** arrow button will increase or decrease its value respectively.

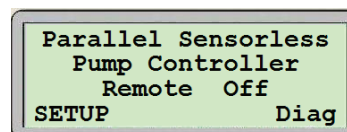


The Enter button

- Pressing the Enter button will move the cursor to the control values within a display from top to bottom, left to right.

3.0 OPERATION DISPLAYS

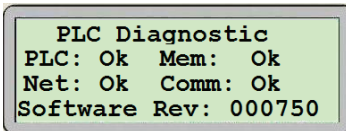
3.1 MAIN MENU



- This is the display for the Main Menu of the pspc.
- Pressing the **Prg** Button at any time will call up the Main Menu display.

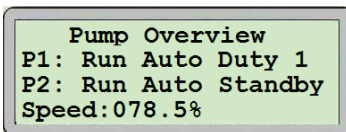
- When the cursor is at the top left corner of the screen, pressing the **UP** or **DOWN** arrow will navigate between the active operation displays: main menu, system overview, pressure overview, pump overview, and pump control.
- Pressing the **ENTER** key will move the cursor over the **R** of **REMOTE**, the **S** of **SETUP**, and the **D** of **Diag**.
- When the cursor is over **REMOTE** pressing the **UP** or **DOWN** arrow will toggle between Remote and Local control. The text will toggle between **REMOTE** and **LOCAL**.
- When the cursor is over **SETUP**, pressing the **UP** or **DOWN** arrow will call up the Main Setup Screen (Level 0).
- When the cursor is over **Diag** pressing the **UP** or **DOWN** arrow will call up the PLC Diagnostic screen.

3.2 DIAGNOSTIC DISPLAY



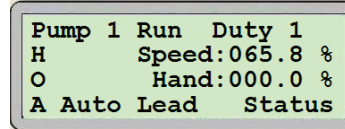
- Lines 2 and 3 indicate the PLC, Memory, Network, and Communication status.
- Pressing the **ESC** key will call up the main menu.

3.3 PUMP OVERVIEW DISPLAY



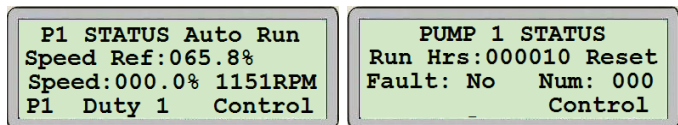
- This display is for viewing only.
- When the cursor is at the top left corner of the screen, pressing the **UP** or **DOWN** arrow will navigate between the active Operation displays.
- This screen will display for each pump: the run feedback **Off** or **Run**, and the mode **Hand-Off-Auto** or **H-O-A**.
- This screen will also display the speed of the pumps and which pump is the Duty pump.

3.4 VARIABLE SPEED PUMP CONTROL DISPLAY



- When the cursor is at the top left corner of the screen pressing the **UP** or **DOWN** arrow will navigate between all active operation displays.
- The following information is displayed for the corresponding pump:
 - The top line indicates the pump number, the pump running status (run, stop), and the pump parallel status (duty or standby).
 - Lines 2, 3, and 4 at the left of the screen are used to select the Pump Mode: Hand (H), Off (O), or Auto (A).
 - The Pump Mode is indicated on lines 2, 3, and 4 beside the H-O-A selector. The image above indicates the pump is in Auto mode.
 - Line 2 at the right of the screen indicates the pump speed.
 - Line 3 at the right of the screen is used to set the pump speed in Hand mode.
- Pressing the **ENTER** key will move the cursor as follows: H, O, Hand, A, Lead, Status, and back to the top left corner.
- When the cursor is over **H**, **O**, or **A** pressing the **UP** or **DOWN** key will change the pump mode to Hand, Off or Auto.
- When the cursor is over Hand, pressing the **UP** or **DOWN** arrow will increase or decrease the pump speed when the pump is in Hand mode. When the value for the Hand speed is set to the desired value you must press the **ENTER** key for the controller to use the new Hand Speed value.
- When the cursor is over Lead, pressing the **UP** or **DOWN** arrow will set the pump as lead pump. A pump can only be set as Lead pump if it is in Auto mode and it is not in alarm.
- When the cursor is over Status pressing the **UP** or **DOWN** arrow will call up the Pump Status Display.

3.5 VARIABLE SPEED PUMP STATUS DISPLAYS

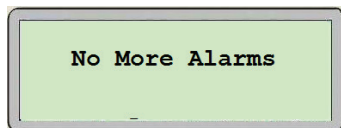


- When the cursor is at the top left corner of the screen pressing the **UP** or **DOWN** arrow will navigate between all active pump status displays.
- Display 1 Line 1 indicates the pump mode **Hand-Off-Auto**, and the run feedback **Off** or **Run**.
- Display 1 Line 2 indicates the speed reference.
- Display 1 Line 3 indicates the drive actual speed in percent and RPM.
- Display 1 Line 4 indicates the pump parallel status **Duty** or **Standby**.
- Display 2 Line 2 indicates the total number of running hours since the last reset.
- Display 2 Line 3 indicates if the drive is faulted and the fault number from the drive.
- Pressing the **ENTER** key on display 1 will move the cursor as follows: Control and back to the top left corner.
- Pressing the **ENTER** key on display 2 will move the cursor as follows: Reset, Control and back to the top left corner
- When the cursor is over Reset pressing the **UP** or **DOWN** arrow will reset the number of run hours to zero.
- When the cursor is over Control pressing the **UP** or **DOWN** arrow will switch to the Pump Control Display.
- Pressing the **ESC** button at anytime will call up the Pump Overview display.

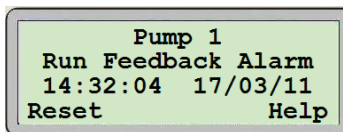
4.0 ALARM MANAGEMENT DISPLAYS

ALARM DISPLAYS

- If an alarm is generated, the display will automatically go to the Alarm screen.
- Also, if there is an alarm present, pressing the **ALARM** button will take you to the Alarm screen.
- If there is no active alarm, the **No More Alarms** display will appear.



- This display will also appear when navigating through a number of Active Alarm displays to indicate when you reach the end of the list of active alarms.
- If there is one or more active alarms an alarm display similar to the one below will appear:

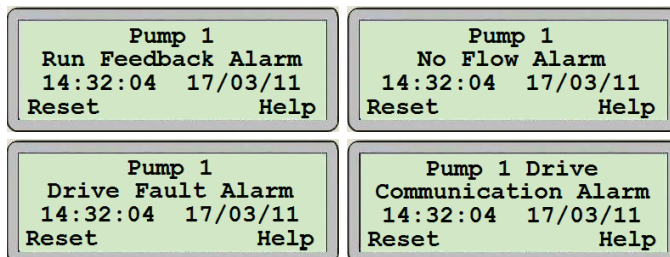


- If multiple alarms are present, the display will auto cycle through each alarm.
- Also, when the cursor is at the top left corner of the screen pressing the **UP** or **DOWN** arrow will navigate between the active alarm displays.
- When you reach the end of the alarm list the **No More Alarms** display will appear.
- The top two lines give a brief alarm description.
- The third line shows the time and date (HH:MM:SS DD:MM:YY) when the alarm occurred.
- Alarms are set as Auto-Reset. The alarm message will be removed once the problem is fixed.
- Also, when the cursor is above **RESET**, pressing the **UP** or **DOWN** arrow will reset all non-active alarms. It will also stop the **ALARM** button from flashing red. If there are no more active alarms the **ALARM** button will turn white.
- When the cursor is above **HELP**, pressing the **UP** or **DOWN** arrow will bring a help display with more information about the alarm such as possible causes and remedies.

ALARM DISPLAYS

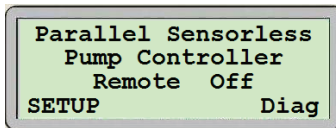
These are all the different Alarm Display in order they will appear when navigating through the active alarms. Only the displays associated with an active alarm will appear.

PUMP ALARMS



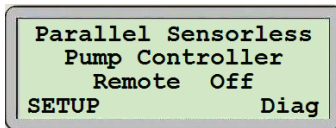
5.0 SYSTEM SETUP DISPLAYS

To go to the **Main Setup Screen** first go to the **Main Menu** by pressing the **Prg** button.

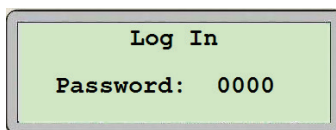


- Press the **ENTER** key to move the cursor over **SETUP**.
- When the cursor is over **SETUP** pressing the **UP** or **DOWN** arrow will call up the Main Setup Screen.

5.1 MAIN SETUP DISPLAY (LEVEL 0)

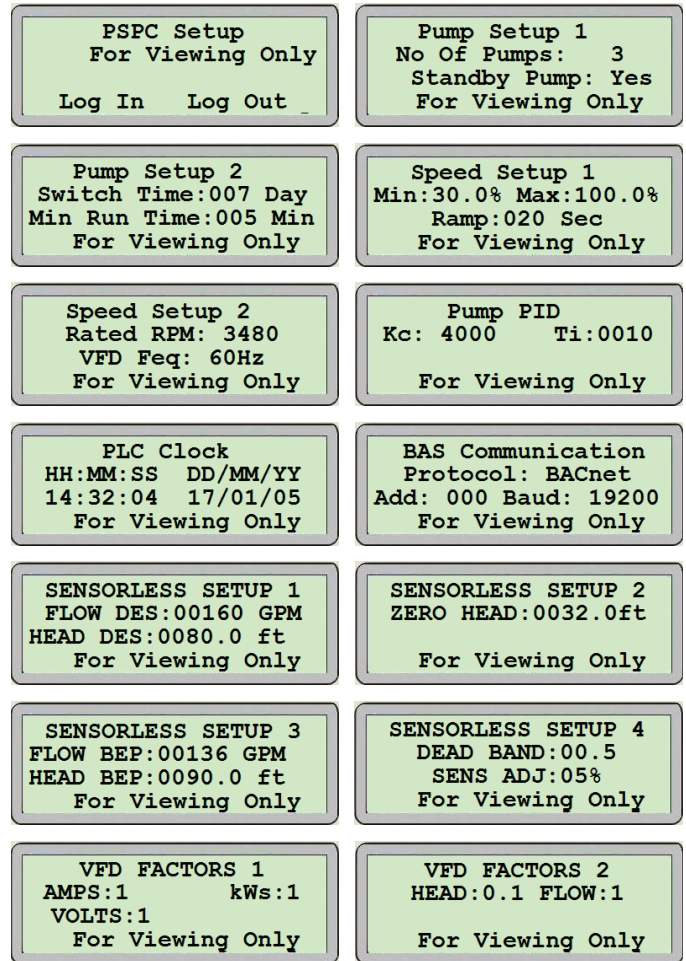


- This display is for viewing only. Level 0 setup display.
- The Setup Displays are divided in three levels with each level having the same number of displays with different level of access. Level 0 setup displays are for viewing only and no adjustment can be made. Level 1 setup displays can be used for changing the system setup and restoring the system factory defaults. Level 2 setup displays can be used for changing the system setup, and saving and restoring the system defaults.
- To access Levels 1 and 2 an operator needs to enter the proper password: Level 1 password is 9393, Level 2 password is 2323.
- Pressing the **ENTER** key will move the cursor over **LOG IN** and **LOG OUT**.
- When the cursor is over **LOG IN** pressing the **UP** or **DOWN** arrow will call up the **LOG IN** display.



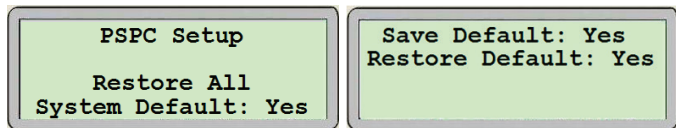
- Pressing the **ENTER** key will move the cursor above the number area.
- When the cursor is over the number area, pressing the **UP** or **DOWN** arrow will increase or decrease the password number.

- When you reach the value you want **9393** for level 1, or **2323** for level 2, press the **ENTER** key. This will call up the Main Setup Display for the password you selected.
 - If you enter a wrong password value nothing will happen.
 - After a password is entered, it will log out automatically after 5 minutes.
- When the cursor is over **LOG OUT** pressing the **UP** or **DOWN** arrow will clear the password and take away the access to Levels 1 and 2 setup screen.
- When the cursor is at the top left corner of the screen pressing the **UP** or **DOWN** arrow will navigate between the Level 0 setup displays.
- These displays will provide a quick look at the system setup.
- The following are all the level 0 setup displays:



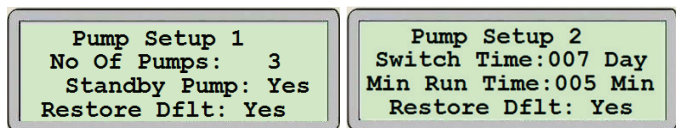
5.2 SETUP DISPLAYS – LEVEL 1 AND LEVEL 2

5.2.1 MAIN SETUP DISPLAYS



- These are the first displays to appear when entering the Log In password for Level 1 and 2 respectively.
- When the cursor is at the top left corner of the screen, pressing the **UP** or **DOWN** arrow will navigate between the active setup screens of the respective Level.
- On the Level 1 display pressing the **ENTER** key will move the cursor over **YES**.
- When the cursor is over **YES** pressing the **UP** or **DOWN** arrow will **Restore the default settings for all the values in all the setup displays**. This is indicated by the text changing from **YES** to **DONE** for a few seconds.
- On the Level 2 display pressing the **ENTER** key will move the cursor over **YES** beside **SAVE DEFAULT**, and **RESTORE DEFAULT**.
- When the cursor is over **YES** beside **SAVE DEFAULT** pressing the **UP** or **DOWN** arrow will **Save the Setup Values in all Setup Displays as Default Values**. The text will change between **YES** to **OK** for a few seconds.
- When the cursor is over **YES** beside **RESTORE DEFAULT** pressing the **UP** or **DOWN** arrow will **restore the default settings for all the values in all the setup displays**. The text will change between **YES** to **OK** for a few seconds.

5.2.2 PUMP SETUP 1 DISPLAYS



- When the cursor is at the top left corner of the screen, pressing the **UP** or **DOWN** arrow will navigate between the active setup screens of the respective Level.
- Pressing the **ENTER** key will move the cursor over the adjustable fields, over **YES** beside Save and Restore and back at the top left corner.
- When the cursor is over the value beside **NO OF PUMPS**, press the **UP** or **DOWN** key to select the number of pumps.

- When the cursor is over the value beside **STANDBY PUMP**, press the **UP** or **DOWN** key to select **YES** or **NO**.
- When the cursor is over **YES** beside **SAVE** pressing the **UP** or **DOWN** arrow will **Save the settings on this screen as Default Values**. The text will change between **YES** to **OK** for a few seconds.
- When the cursor is over **YES** beside **RESTORE DFLT** or **RESTORE** pressing the **UP** or **DOWN** arrow will **Restore the Default Settings for the settings on this screen**. The text will change between **YES** to **OK** for a few seconds.

5.2.3 LEAD PUMP SWITCH TIME SETUP DISPLAYS



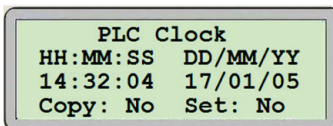
- When the cursor is at the top left corner of the screen, pressing the **UP** or **DOWN** arrow will navigate between the active setup screens of the respective Level.
- Pressing the **ENTER** key will move the cursor over the value beside **SWITCH TIME**, over **YES** beside Save and Restore, and back at the top left corner.
- When the cursor is over the value beside **SWITCH TIME**, pressing the **UP** or **DOWN** key will set the Duty Pump Run Hours Set-point to the desired value. The Standby pump will become the Duty pump after the Duty pump runs for the set amount of time.
- When the cursor is over **YES** beside **SAVE** pressing the **UP** or **DOWN** arrow will **save the settings on this screen as default values**. The text will change between **YES** to **OK** for a few seconds.
- When the cursor is over **YES** beside **RESTORE DFLT** or **RESTORE** pressing the **UP** or **DOWN** arrow will **restore the default settings for the settings on this screen**. The text will change between **YES** to **OK** for a few seconds.

5.2.4 SPEED SETUP DISPLAYS 1



- When the cursor is at the top left corner of the screen, pressing the **UP** or **DOWN** arrow will navigate between the active setup screens of the respective Level.
- Pressing the **ENTER** key will move the cursor over the value beside **MIN**, over the value beside **MAX**, over the value beside **RAMP**, over **YES** beside **SAVE** and **RESTORE**, and back to the top left corner.
- When the cursor is over the value beside **MIN**, pressing the **UP** or **DOWN** key will set the minimum pump speed set-point to the desired value.
- When the cursor is over the value beside **MAX**, pressing the **UP** or **DOWN** key will set the maximum pump speed set-point to the desired value.
- When the cursor is over the value beside **RAMP**, pressing the **UP** or **DOWN** key will set the pump ramping speed set-point to the desired value. This is the minimum time the pump will take to go from 0% to 100% speed.
- When the cursor is over **YES** beside **SAVE** pressing the **UP** or **DOWN** arrow will **save the settings on this screen as default values**. The text will change between **YES** to **OK** for a few seconds.
- When the cursor is over **YES** beside **RESTORE DFLT** or **RESTORE** pressing the **UP** or **DOWN** arrow will **Restore the Default Settings for the settings on this screen**. The text will change between **YES** to **OK** for a few seconds.

5.2.5 PLC CLOCK SETUP DISPLAY



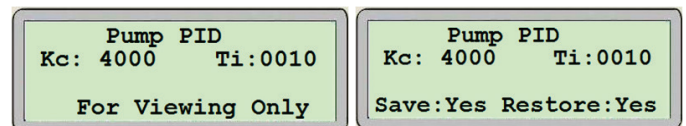
- When the cursor is at the top left corner of the screen, pressing the **UP** or **DOWN** arrow will navigate between the active setup screens of the respective Level.
- Pressing the **ENTER** key will move the cursor below the Time expressed in Hours (HH), Minutes (MM) and Seconds (SS), **HH:MM:SS**, below the Date expressed in Day (DD), Month

(MM) and Year (YY), **DD/MM/YY**, over **YES** beside Save and Restore, and back at the top left corner.

- When the cursor is over the number below **HH:MM:SS**, pressing the **UP** or **DOWN** keys will set the Hour (HH), the Minute (MM) and the Second (SS) to the desired values.
- When the cursor is over the number below **DD/MM/YY**, pressing the **UP** or **DOWN** keys will set the Day (DD), the Month (MM) and the Year (YY) to the desired values.
- When the cursor is over **COPY**, pressing the **UP** or **DOWN** keys will copy the current time and date from the PLC to the display. This will overwrite any values previously entered.
- When the cursor is over **SET**, pressing the **UP** or **DOWN** keys will set the entered time and date to the PLC.
- When the cursor is over **YES** beside **SAVE** pressing the **UP** or **DOWN** arrow will **save the settings on this screen as default values**. The text will change between **YES** to **OK** for a few seconds.

When the cursor is over **YES** beside **RESTORE DFLT** or **RESTORE** pressing the **UP** or **DOWN** arrow will **restore the default settings for the settings on this screen**. The text will change between **YES** to **OK** for a few seconds.

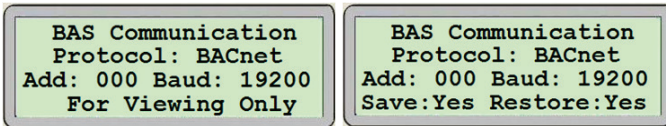
5.2.6 PUMP PID SETUP DISPLAYS



- When the cursor is at the top left corner of the screen, pressing the **UP** or **DOWN** arrow will navigate between the active setup screens of the respective Level.
- Pressing the **ENTER** key will move the cursor over the adjustable fields, over **YES** beside **SAVE** and **RESTORE**, and back at the top left corner.
- When the cursor is over the value beside **Kc**, pressing the **UP** or **DOWN** key will set the PID proportional constant Kc to the desired value.
- When the cursor is over the value beside **Ti**, pressing the **UP** or **DOWN** key will set the PID integral time constant Ti to the desired value.
- When the cursor is over **YES** beside **SAVE** pressing the **UP** or **DOWN** arrow will **save the settings on this screen as default values**. The text will change between **YES** to **OK** for a few seconds.

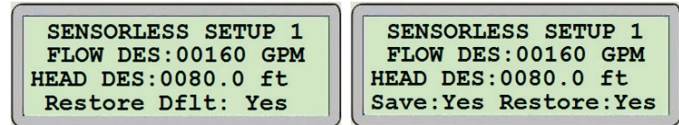
- When the cursor is over **YES** beside **RESTORE DFLT** or **RESTORE** pressing the **UP** or **DOWN** arrow will **restore the default settings for the settings on this screen**. The text will change between **YES** to **OK** for a few seconds.
- In level 1 this screen is for viewing only.

5.2.7 BUILDING AUTOMATION SYSTEM (BAS) INTERFACE SETUP DISPLAYS (IF AVAILABLE)

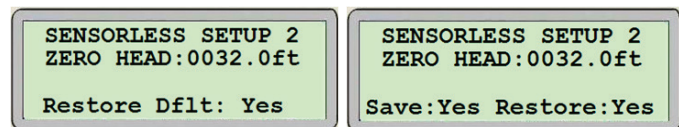


- When the cursor is at the top left corner of the screen, pressing the **UP** or **DOWN** arrow will navigate between the active setup screens of the respective Level.
- Pressing the **ENTER** key will move the cursor over the text beside **PROTOCOL**, the value beside **ADD**, the value beside **BAUD**, over **YES** beside **SAVE** and **RESTORE**, and back at the top left corner.
- When the cursor is over the value beside **PROTOCOL**, pressing the **UP** or **DOWN** key will set the protocol to the desired type. The choices are: Modbus, BACnet and LonWorks.
- When the cursor is over the value beside **ADD**, pressing the **UP** or **DOWN** key will set the node address to the desired value.
- When the cursor is over the value beside **BAUD**, pressing the **UP** or **DOWN** key will set the baud rate to the desired value.
- When the cursor is over **YES** beside **SAVE** pressing the **UP** or **DOWN** arrow will **save the settings on this screen as default values**. The text will change between **YES** to **OK** for a few seconds.
- When the cursor is over **YES** beside **RESTORE DFLT** or **RESTORE** pressing the **UP** or **DOWN** arrow will **restore the default settings for the settings on this screen**. The text will change between **YES** to **OK** for a few seconds.
- In level 1 this screen is for viewing only.

5.2.8 SYSTEM SENSORLESS SETUP DISPLAYS

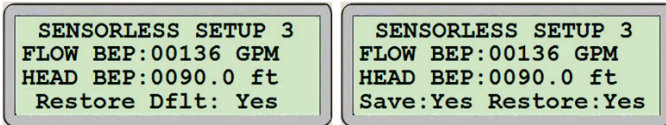


- When the cursor is at the top left corner of the screen, pressing the **UP** or **DOWN** arrow will navigate between the active setup screens of the respective Level.
- Pressing the **ENTER** key will move the cursor over the text beside **FLOW DES**, the flow unit, the value beside **HEAD DES**, the head unit, over **YES** beside **SAVE** and **RESTORE**, and back at the top left corner.
- When the cursor is over the value beside **FLOW DES**, pressing the **UP** or **DOWN** key will set the flow design to the desired value.
- When the cursor is over the flow unit, pressing the **UP** or **DOWN** key will set the flow unit. The choices are: **GPM**, **m³/H**, and **LPS**.
- When the cursor is over the value beside **HEAD DES**, pressing the **UP** or **DOWN** key will set the head design to the desired value.
- When the cursor is over the head unit, pressing the **UP** or **DOWN** key will set the head unit. The choices are: **ft**, **bar**, **KPa**, and **psi**.
- When the cursor is over **YES** beside **SAVE** pressing the **UP** or **DOWN** arrow will **save the settings on this screen as default values**. The text will change between **YES** to **OK** for a few seconds.
- When the cursor is over **YES** beside **RESTORE DFLT** or **RESTORE** pressing the **UP** or **DOWN** arrow will **restore the default settings for the settings on this screen**. The text will change between **YES** to **OK** for a few seconds.

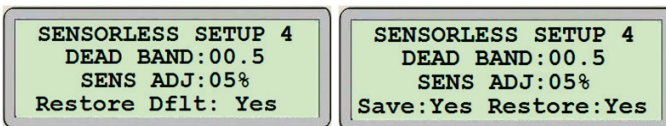


- When the cursor is at the top left corner of the screen, pressing the **UP** or **DOWN** arrow will navigate between the active setup screens of the respective Level.
- Pressing the **ENTER** key will move the cursor over the text beside **ZERO HEAD**, over **YES** beside **SAVE** and **RESTORE**, and back to the top left corner.

- When the cursor is over the value beside **ZERO HEAD**, pressing the **UP** or **DOWN** key will set the zero head to the desired value.
- When the cursor is over **YES** beside **SAVE** pressing the **UP** or **DOWN** arrow will **save the settings on this screen as default values**. The text will change between **YES** to **OK** for a few seconds.
- When the cursor is over **YES** beside **RESTORE DFLT** or **RESTORE** pressing the **UP** or **DOWN** arrow will **restore the default settings for the settings on this screen**. The text will change between **YES** to **OK** for a few seconds.



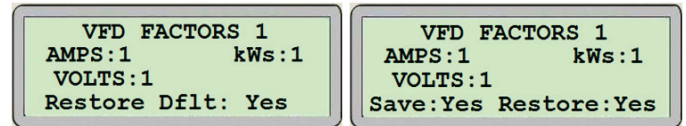
- When the cursor is at the top left corner of the screen, pressing the **UP** or **DOWN** arrow will navigate between the active setup screens of the respective Level.
- Pressing the **ENTER** key will move the cursor over the text beside **FLOW BEP**, the value beside **HEAD BEP**, over **YES** beside **SAVE** and **RESTORE**, and back to the top left corner.
- When the cursor is over the value beside **FLOW BEP**, pressing the **UP** or **DOWN** key will set the flow best efficiency point to the desired value.
- When the cursor is over the value beside **HEAD BEP**, pressing the **UP** or **DOWN** key will set the head best efficiency point to the desired value.
- When the cursor is over **YES** beside **SAVE** pressing the **UP** or **DOWN** arrow will **save the settings on this screen as default values**. The text will change between **YES** to **OK** for a few seconds.
- When the cursor is over **YES** beside **RESTORE DFLT** or **RESTORE** pressing the **UP** or **DOWN** arrow will **restore the default settings for the settings on this screen**. The text will change between **YES** to **OK** for a few seconds.



- When the cursor is at the top left corner of the screen, pressing the **UP** or **DOWN** arrow will navigate between the active setup screens of the respective Level.
- Pressing the **ENTER** key will move the cursor over the text beside **DEAD BAND**, the value beside **SENS ADJ**, over **YES** beside **SAVE** and **RESTORE**, and back to the top left corner.

- When the cursor is over the value beside **DEAD BAND**, pressing the **UP** or **DOWN** key will set the dead band (no stage zone around the **BEP**) to the desired value.
- When the cursor is over the value beside **SENS ADJ**, pressing the **UP** or **DOWN** key will set the sensorless adjustment (compensation when outside sensorless map range) to the desired value.
- When the cursor is over **YES** beside **SAVE** pressing the **UP** or **DOWN** arrow will **save the settings on this screen as default values**. The text will change between **YES** to **OK** for a few seconds.
- When the cursor is over **YES** beside **RESTORE DFLT** or **RESTORE** pressing the **UP** or **DOWN** arrow will **restore the default settings for the settings on this screen**. The text will change between **YES** to **OK** for a few seconds.

5.2.9 SYSTEM SENSORLESS SETUP DISPLAYS



- When the cursor is at the top left corner of the screen, pressing the **UP** or **DOWN** arrow will navigate between the active setup screens of the respective Level.
- Pressing the **ENTER** key will move the cursor over the text beside **AMPS**, the value beside **kWs**, the value beside **VOLTS**, over **YES** beside **SAVE** and **RESTORE**, and back to the top left corner.
- When the cursor is over the value beside **AMPS**, pressing the **UP** or **DOWN** key will set the multiplication factor to display the correct amperage from the drive.
- When the cursor is over the value beside **kWs**, pressing the **UP** or **DOWN** key will set the multiplication factor to display the correct kilo-watts from the drive.
- When the cursor is over the value beside **VOLTS**, pressing the **UP** or **DOWN** key will set the multiplication factor to display the correct voltage from the drive.
- When the cursor is over **YES** beside **SAVE** pressing the **UP** or **DOWN** arrow will **save the settings on this screen as default values**. The text will change between **YES** to **OK** for a few seconds.
- When the cursor is over **YES** beside **RESTORE DFLT** or **RESTORE** pressing the **UP** or **DOWN** arrow will **restore the default settings for the settings on this screen**. The text will change between **YES** to **OK** for a few seconds.



- When the cursor is at the top left corner of the screen, pressing the **UP** or **DOWN** arrow will navigate between the active setup screens of the respective Level.
- Pressing the **ENTER** key will move the cursor over the text beside **HEAD**, the value beside **FLOW**, over **YES** beside **SAVE** and **RESTORE**, and back at the top left corner.
- When the cursor is over the value beside **HEAD**, pressing the **UP** or **DOWN** key will set the multiplication factor to display the correct head from the drive.
- When the cursor is over the value beside **FLOW**, pressing the **UP** or **DOWN** key will set the multiplication factor to display the correct flow from the drive.
- When the cursor is over **YES** beside **SAVE** pressing the **UP** or **DOWN** arrow will **save the settings on this screen as default values**. The text will change between **YES** to **OK** for a few seconds.
- When the cursor is over **YES** beside **RESTORE DFLT** or **RESTORE** pressing the **UP** or **DOWN** arrow will **restore the default settings for the settings on this screen**. The text will change between **YES** to **OK** for a few seconds.

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