

AQUAVAR® IPC VARIABLE FREQUENCY DRIVES

START-UP REPORT

* This form is to be used by authorized personnel to verify proper application and installation of VFD

Jobsite name: _____ Address: _____

Goulds Water Technology Distributor Name: _____

Contact/Phone: _____ Date: _____

- **Drive Information:**

IPC P/N:

IPC S/N:

Software Version (Parameter 15-43):

Config. File Name (Parameter 15-54):

SW ID Control Card (Parameter 15-49):

System Control: ☐ Pressure ☐ Speed ☐ Flow ☐ BMS ☐ Level ☐ Sensor less

- **Motor Information:**

Manufacturer:

P/N:

S/N:

HP:

Full Load Amps:

SF Amps:

Voltage:

RPM:

PF:

Motor Type: ☐ Submersible ☐ Surface

- **Pump Information:**

Manufacturer:

P/N:

S/N:

Duty Point (GPM@PSI):

- **Electrical Information:**

Transformer: ☐ Wye ☐ Floating Delta ☐ Corner Ground Delta ☐ Delta with Wild Leg ☐ Open Delta

Transformer KVAs:

VFD Input Wire Gauge (AWG):

VFD Input Wire Gauge (AWG):

VFD to Motor Wire Length (ft):

AC Input Voltage:

L1-L2:

L2-L3:

L3-L1:

Output Current:

L1 (U):

L2 (V):

L3 (W):

By-pass Current:

L1 (U):

L2 (V):

L3 (W):

Display Current at 60Hz:

- **Programing Information (Genie Parameters):**

Motor:

Power:

Voltage:

Frequency:

Speed:

Current:

Current Limit:

Pump Application Type: ☐ Booster

Operating Mode: ☐ Single Pump Control ☐ Multi-Pump Control ☐ Speed Control

Application Type: ☐ Constant Pressure ☐ Flow Control ☐ Level Control ☐ N/A

Multipump Type: ☐ Multimaster Synchronous ☐ Multimaster MultiControl ☐ Fixed Master Synchronous
☐ Fixed Master MultiControl

Control Feedback Sources: ☐ 1 ☐ 2 ☐ 3 ☐ N/A

Feedback Sources: ☐ AI53 ☐ AI54 ☐ Bus Feedback 1 ☐ Bus Feedback 2 ☐ Bus Feedback 3

Low Feedback 1 Value: High Feedback 1 Value:

➤ For Sensorless Mode:

Sensorless enabled: ☐ YES ☐ NO

Speed at no flow: Pressure at no flow speed: Speed at design point:

Setpoint 1: ID Sensorless:

➤ If "Speed Control" Mode:

Speed Reference Source: ☐ AI53 ☐ AI54 ☐ No Function ☐ N/A

*Terminal 53/54 Low Ref./F: *Terminal 53/54 High Ref./F:

*Min Speed Reference: (Hz) *Max Speed Reference: (Hz)

➤ If Single/Multi-Pump:

Ramp Time: ☐ Fast ☐ Medium ☐ Slow

Dual Setpoint: ☐ Enable ☐ Disable Setpoint 1: Setpoint 2:

Sleep Mode: ☐ Enable ☐ Disable Minimum/Sleep Frequency: (Hz); Sleep Delay: (s)

Restart Difference 1: (%) Restart Difference 2: (%)

Minimum Run Time: (s) Minimum Sleep Time: (s) Flow Check Window: (units)

Did you Run the No Flow Power Calibration Setup?: ☐ YES (Enable) ☐ NO (Off)

No Water/Loss of Prime Fault: ☐ Enable ☐ Disable

No Water/Loss of Prime Limit: (hp)

Under Pressure Function: ☐ Off ☐ Man. Reset Alarm ☐ Alarm ☐ Warning

Under Pressure Delay: (s) Under Pressure Diff: (%)

➤ If Duplex:

Duty Stand-By: ☐ Enable ☐ Disable Alternation: ☐ Enable ☐ Disable Alternation Time: (Hrs)

Lag pump start frequency: (Hz); Lag pump stop frequency: (Hz)

Number of Pumps: ☐ 2 ☐ 3 ☐ 4 Run Time Equalization: ☐ Enable ☐ Disable

Staging Bandwidth: (%) SBW Staging Delay: (s) SBW Destaging Delay: (s)

• **Installation Check List:**

Is the VFD is properly fused per IOM? Yes ☐ No ☐ Fuses Size (amps):

Is the VFD is properly mounted as IOM? Yes ☐ No ☐ Motor Rotation Checked? Yes ☐ No ☐

Are all hardware, control/power cables and mechanical connections properly tight? Yes ☐ No ☐

Checked the pump shaft is moving freely by hand: Yes ☐ No ☐

➤ Constant Pressure Mode:

1. Does system reach setpoint? Yes ☐ No ☐

2. Does drive shut down at sleep speed (test with discharge closed) Yes ☐ No ☐

3. Does drive fault for "Sensor Fault" (test by un-plugging sensor) Yes ☐ No ☐

4. Does drive fault for "Under Pressure" (Run at full flow, below setpoint) Yes ☐ No ☐

5. Does drive fault for "no water/loss of prime" (run without water on suction side) Yes ☐ No ☐

➤ Speed Control:

1. Send 4mA or 0V, does drive run at minimum frequency? Yes ☐ No ☐

2. Send 20mA or 10V, does drive run at maximum frequency? Yes ☐ No ☐

➤ Duplex operation

1. Test constant pressure settings:

2. Does lag drive (#2) wake up when Lead Drive (#1) reaches 59 hz? Yes ☐ No ☐

3. Does lag drive (#2) wake up and run when fault detected or power removed from lead drive?
Yes ☐ No ☐

*I certified this start-up for VFD has been accomplished according with Goulds Water Technology IOM

Start-up Performed By:

Date:



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