PumpSmith

Drive Troubleshooting Form

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Date: **Jobsite:**

Job Number: **Contact:**

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VFD Make:

VFD Model:

VFD S/N:

POWER OFF DIODE CHECK

Power down and wait (15 minutes) for DC Bus to discharge

METER PROBE **-** to DC BUS **–**

METER PROBE **+** to:

L1=   **U**=

L2=   **V**=

L3=   **W**=

Capacitors should be open allowing a charging effect.

METER PROBE **+** to DC BUS **+**

METER PROBE **–** to:

L1=   **U**=

L2=   **V**=

L3=   **W**=

Capacitors should be open allowing a charging effect.

METER PROBE - to DC BUS +

METER PROBE **+** to:

L1=   **U**=

L2=   **V**=

L3=   **W**=

Readings should be .3 to .7 volts and match.

METER PROBE + to DC BUS -

METER PROBE **-** to:

L1=   **U**=

L2=   **V**=

L3=   **W**=

Readings should be .3 to .7 volts and match.

IGBT GATE TEST

With meter set to Ohm measure between the gate leads, there are two pairs for each IGBT. Readings should be between 2k and 8k. Readings should be consistent.

IGBT 1   **IGBT2**   **IGBT3**

1st Pair _____   **1st Pair** _____   **1st Pair** _____

2nd Pair _____   **2nd Pair** _____   **2nd Pair** _____

CONTROL CARD POWER

Power On

Measure DC voltage at terminals 12 and 20 then at 13 and 20. Should be 24V.

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Measure DC voltage at terminals 50 and 55 should be 10V

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DC BUS VOLTAGE TEST

Measure DC voltage at DC- and DC+. It should be at least 1.35 X the AC input voltage.

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