



FridgeTek

REFRIGERATION & AIRCONDITIONING

Work Report.

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Date:
To:
Att:
From: Steve Orlando.
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Chiller Mod: YK HCDGHY65CRES Ser: GGJM018929
SSS Mod: 26LK Ser: EIR 509

Our engineer attended the above site last week to diagnose why 2 Off SSS units failed. The initial tracing of wiring led us to discover an additional 110Vac Control Transformer located in the Variable Speed Pump Enclosure feeding the Control Panel. The normal 110Vac Control Transformer was still located on the side of the SSS Panel.

The output from each transformer showed that they were out of phase by 180 deg, giving a potential difference of 250Vac RMS. Figure 01 shows an Oscilloscope Log of the phases.

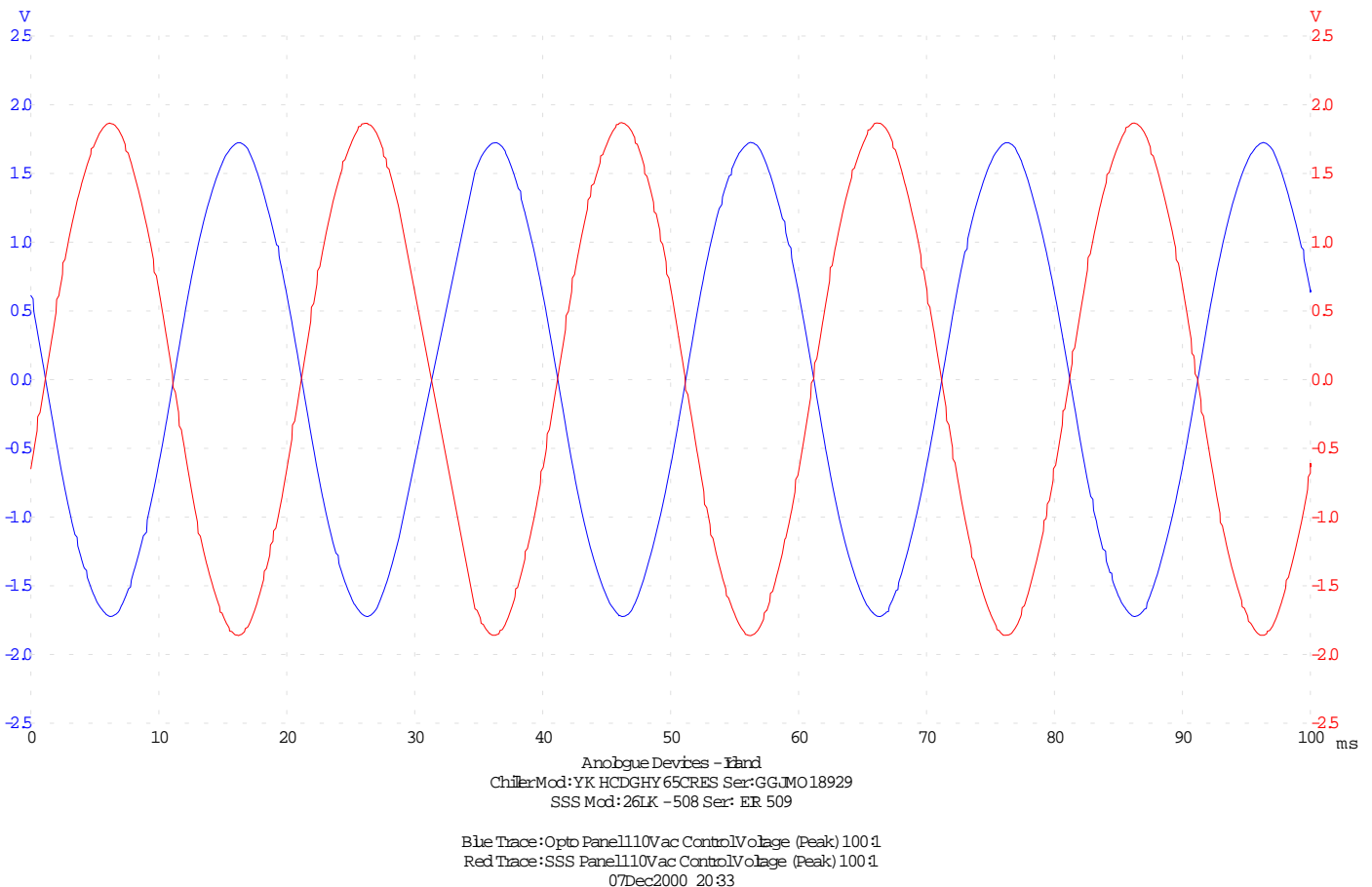


Figure 01.

We decided to change the additional transformers primary tap-in's to bring both control transformers secondary outputs in phase. This was successful but there was still a potential difference of around 11 Vac RMS between the outputs. Refer to Figure 02.

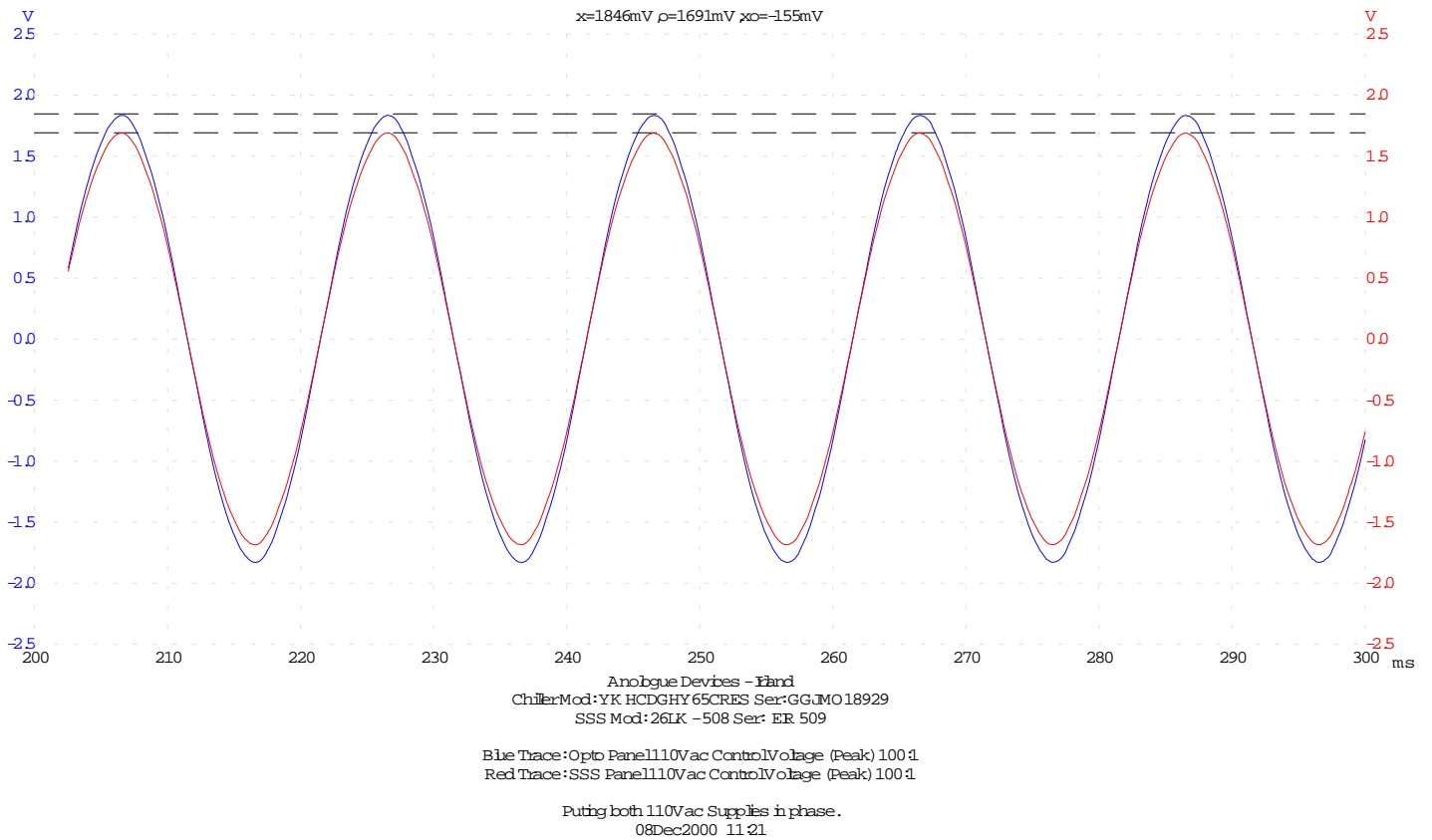


Figure 02.

A decision was made to decommission the additional 110Vac Control Supply in the Oil Pump Control Panel and to tie into the standard 110Vac Control Supply from the SSS Transformer. This proved successful over 10 consecutive starts.

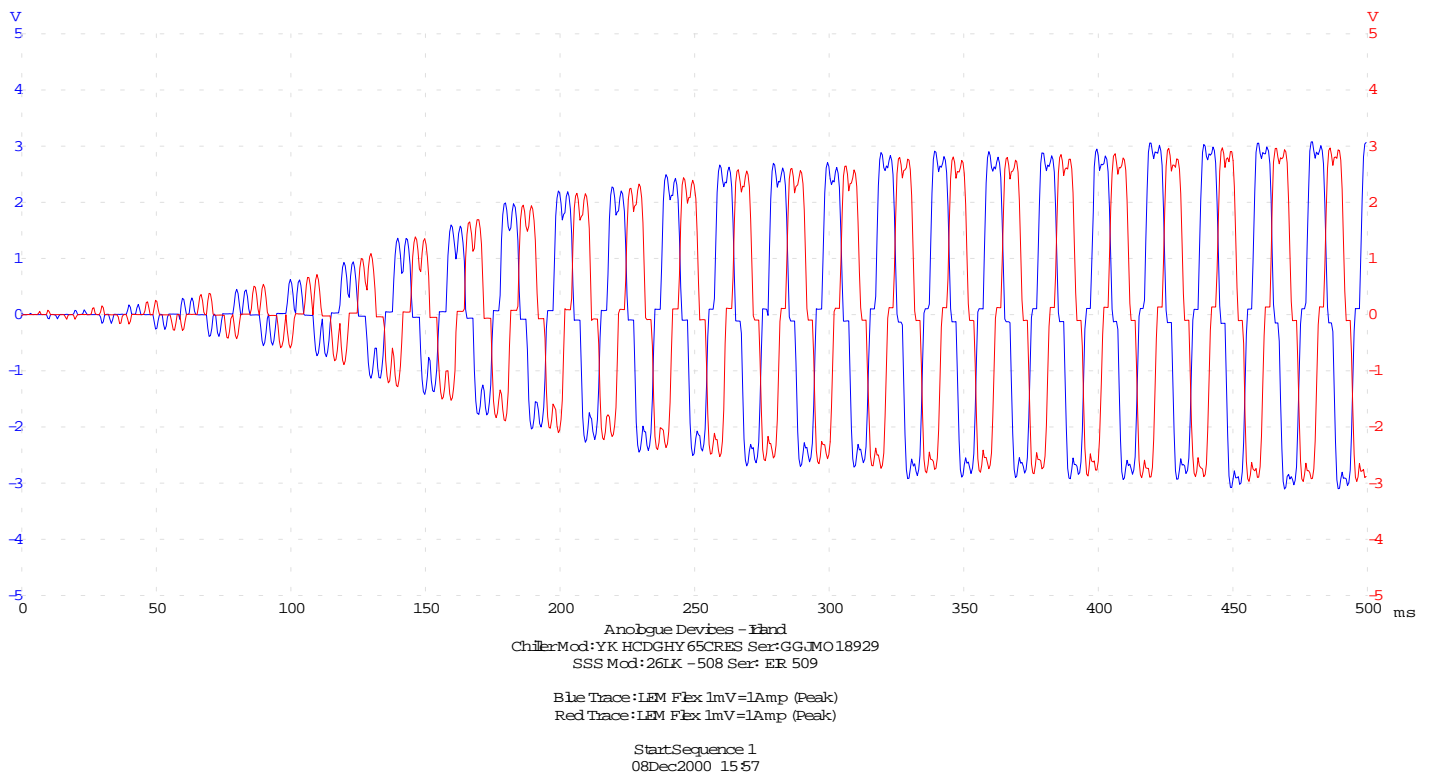


Figure 03.

It seems the confusion has arisen from is the drawing issue delivered with the Chiller.

Drawing Details:

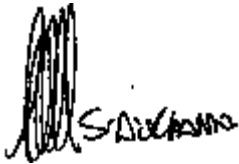
Drawing No. 077-06833-000 7 Sheets.
Cage No. 66935
Drawn. K.B. Stoner 11 May 00
Approved. D.L. Shaffer 26 May 00

Drawings 1 of 7 and 2 of 7 show a 3 phase field supply required to be terminated in the Oil Pump Housing. This field supply is used for the 3 Phase Oil Heater and to supply the additional 110Vac Control Transformer. No designation of phase rotation is noted.

The site was left with the above Chiller being modified from factory specification as detailed previously and left available. The second Chiller was left isolated awaiting parts with the above modifications to be carried out.

Assuring you of our closest attention at all times.

Regards

A handwritten signature in black ink, appearing to read "Steve Orlando". The signature is stylized and somewhat cursive.

Steve Orlando
Partner