



# Service Information

File In/With:

SI0364

New 1117

Equipment Affected: YK Style G and earlier chillers

V.00A 03630 OptiView Chiller Control Panel Software Update

## GENERAL

Beginning April 2016, enhanced software will be supplied in new production YK chillers and replacement microboard kit 331-02430-601. Software version 00A is applicable to the 031-03630-001 microboard for YK Style G and earlier YK chillers. The enhancements are listed below.

The microboard, software version and program card part number are:

031-03630-001 = Y.OPT.01.00A.308 (P/N 031-03601-001)

## MAXIMUM MVVSD OUTPUT FREQUENCY DETECTION

Hot gas bypass control was found to be working incorrectly on a customer brine chiller. This unit had a MVVSD where the VSD was indicating several tenths of a Hz below maximum frequency when being commanded to max frequency while the chiller was surging. The hot gas bypass was not opening because the VSD was not indicating full speed, as required by the control logic. This was due to the VSD reporting the motor frequency rather than replying with the inverter frequency. The logic in OptiView has been changed to lower the threshold that indicates maximum VSD speed.

For 60 Hz VSD:

- VSD Frequency Command  $\geq$  59.9 Hz
- VSD Output Frequency  $\geq$  58.8 Hz

For 50 Hz VSD:

- VSD Frequency Command  $\geq$  49.9 Hz
- VSD Output Frequency  $\geq$  49.00 Hz

Work on this equipment should only be done by properly trained personnel who are qualified to work on this type of equipment. Failure to comply with this requirement could expose the worker, the equipment and the building and its inhabitants to the risk of injury or property damage.

The instructions on this service bulletin are written assuming the individual who will perform this work is a fully trained HVAC & R journeyman or equivalent, certified in refrigerant handling and recovery techniques, and knowledgeable with regard to electrical lock out/tag out procedures. The individual performing this work should be aware of and comply with all Johnson Controls, national, state and local safety and environmental regulations while carrying out this work. Before attempting to work on any equipment, the individual should be thoroughly familiar with the equipment by reading and understanding the associated service literature applicable to the equipment. If you do not have this literature, you may obtain it by contacting a Johnson Controls Service Office.

Should there be any question concerning any aspect of the tasks outlined in this bulletin, please consult a Johnson Controls Service Office prior to attempting the work. Please be aware that this information may be time sensitive and that Johnson Controls reserves the right to revise this information at any time. Be certain you are working with the latest information.

## **FRICK I/O BOARD COMMUNICATIONS**

In software version 00 the communications initialization to the Frick board was broken. This was fixed in this V00A software release.

## **BOOT CHECKSUM TEST**

In the 02430 microboard the capability was added to skip the boot up checksum test except the first time that a new version of software is loaded. This allowed the microboard to boot up quicker. The 03630 microboard is much faster and therefore the need to skip the boot up checksum test is not needed. This Boot Checksum Test enable/disable button was removed from the Diagnostics screen in this software release.

## **CLOCK ENABLE/DISABLE**

In the 03630 microboard, the clock cannot be enabled or disabled through software. This setting was removed from the Setup screen. The 03630 microboard battery will last about 10 years even without disabling the clock.