



Service Information

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| File In/With: – | S10362 |
| | New 1117 |
| Equipment Affected: | YK Style G and earlier chillers |
| V.28 02430 OptiView Chiller Control Panel Software | |

GENERAL

Beginning February 2016, enhanced software will be supplied in new production YK chillers and replacement microboard kit 331-02430-601. Version 28 is applicable to the 031-02430-000/001 microboards. This software is backward compatible to all previous YK chillers equipped with microboard 031-02430-000 or 031-02430-001. The enhancements are listed below.

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

031-02430-001/001 = C.OPT.01.28.308 (P/N 031-02474-001)

OIL RETURN SOLENOID CONTROL

YK chillers with P, Q, V, and H9 compressors presently have a feature to close the oil return solenoid when the oil temperature gets too low. This is to prevent the low oil temp differential start inhibit on a low water temperature cycling shutdown after running at low load for a while. This logic is needed to ensure that the Quick Start feature works. This software release adds that control feature to K compressor models too.

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 while 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 ≥ 59.9 Hz
- VSD Output Frequency ≥ 58.8 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.

For 50 Hz VSD:

- VSD Frequency Command ≥ 49.9 Hz
- VSD Output Frequency ≥ 49.00 Hz

FRICK I/O BOARD COMMUNICATIONS

In V.27 software the communications initialization was broken to the Frick board. This bug was fixed in this V.28 software release.