



# Service Information

File In/With: –	S10363
	New 1117
Equipment Affected:	YK Style G and earlier chillers
V.00C 03630 OptiView Chiller Control Panel Software	

## GENERAL

Beginning August 2017, enhanced software will be supplied in new production YK chillers and replacement microboard kit 331-02430-601. Version 00C is applicable to the 031-03630-001 microboard for YK Style G and earlier YK chillers. The enhancements are listed below. NOTE: The features of version V.00B are contained in the V.00C release. Version 00B was never released.

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

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

## LCSSS AND MVSSS OIL PUMP CONTROL

A critical bug was found that caused the oil pump to be turned off during coastdown when a SSS High Heatsink Temperature trip occurred. The compressor oil reservoir still provided lubrication during the coastdown so no damage should have occurred to any compressors. This fix eliminates that bug and keeps the oil pump on during the full coastdown period.

## R-513A REFRIGERANT

Added support for R-513A refrigerant.

## NOVRAM BUS SPEED

It was found that when some of the memory components were on the low end of their speed rating, that setpoints and sales order date were not being saved during a power cycle. In this software release the memory BUS was slowed down to work properly with memory chips that were on the low end of the speed specification.

**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.

## DATALOGGING

This software release provides the ability to datalog all of the chiller operating parameters to an SD card in an Excel compatible .csv format. This eliminates the need to use a printer or a laptop for datalogging.

There is no limit on the SD card size. An 8 GB card will log well over a month's worth of data.

To set Datalogging on, from the Home Screen press SETPOINTS>SETUP>DIAGNOSTICS>SERIAL/SD and the following screen will be displayed:



LD23126

The Data Logging button may be used to select the mode of Data Logging: Disabled, Serial (to a printer or laptop PC), SD (SD card) or, Serial and SD. If "SD" or "Serial and SD" is selected, the chiller operating data shall be recorded at the Data Logging Interval into the SD card. The Data logging interval can be set on the Serial/SD Screen.

The data is stored in a folder named OOOO\_SSSS where OOOO is the York Order Number and SSSS is the Chiller Serial Number.

The panel software will create a file for each day within this folder with the name YK\_YYYYMMDD.csv where DD equals the day of the month in addition to the Y Year and M Month fields. The format of the csv file is the same as the previous data log Hyper Terminal file format. A new YK\_YYYYMMDD.csv file is created at midnight.

If the SD Logging Overwrite is enabled, the SD card data logging will overwrite the oldest day csv file with a new day csv file when the SD is full. If the SD Logging Overwrite is disabled, SD card data logging will stop when the SD card is full.

Before removing the SD card the user should stop datalogging and then press the Eject SD Card button. This stops the system from writing data to the SD card. Failure to do this before removing the SD card could corrupt the data file.

The datalog day file can be read in to Excel. The file may also be emailed to others for their review. The data headers are included. Below is a small sample of some of the points logged in a YK chiller.

Date	Time	Elapsed Time	ECHLT	LCHLT	LCHLT Setp	ECLT	LCLT	Heating Setp	Evap Press	Cond Press	Delta P	Delta P/P	Motor Curr	Motor Curr Setp	Load Limit	CC State	PRV Cmd	PRV Pos
11/12/2016	00:00.0	474341.5	56.6	45.2	45	76	86.9	95	40.8	99.9	59.1	1.45	67.6	100	1	1	100	0
11/13/2016	00:00.1	474341.6	56.6	45.2	45	76	86.9	95	40.8	99.9	59.1	1.45	67.6	100	1	1	100	0
11/13/2016	00:00.3	474341.7	56.6	45.2	45	76	86.9	95	40.8	99.9	59.1	1.45	67.6	100	1	1	100	0
11/13/2016	00:00.3	474341.8	56.6	45.2	45	76	86.9	95	40.8	99.9	59.1	1.45	67.6	100	1	1	100	0
11/13/2016	00:00.4	474341.9	56.6	45.2	45	76	86.9	95	40.8	99.9	59.1	1.45	67.6	100	1	1	100	0
11/13/2016	00:00.5	474342	56.6	45.2	45	76	86.9	95	40.8	99.9	59.1	1.45	67.6	100	1	1	100	0
11/13/2016	00:00.6	474342.1	56.6	45.2	45	76	86.9	95	40.8	100	59.1	1.45	67.7	100	1	1	100	0
11/13/2016	00:00.7	474342.2	56.6	45.2	45	76	86.9	95	40.8	100	59.2	1.45	67.7	100	1	1	100	0
11/13/2016	00:00.8	474342.3	56.6	45.2	45	76	86.9	95	40.8	100	59.2	1.45	67.7	100	1	1	100	0
11/13/2016	00:00.9	474342.4	56.6	45.2	45	76	86.9	95	40.8	100	59.2	1.45	67.7	100	1	1	100	0
11/13/2016	00:01.0	474342.5	56.6	45.2	45	75.9	86.9	95	40.8	100	59.2	1.45	67.7	100	1	1	100	0

## SYSTEM BACKUP AND RESTORE

This software release also provides the ability to save all of the Sales Order, Configuration and Setpoints to the SD card and transfer that information to another 03630 microboard if the original board fails. This is the equivalent of all the information which was previously stored in the BRAM chip in the 02430 microboard. Setpoints, Configuration, Sales Order etc. are all saved to the SD card.

A certain amount of space on the SD card is designated for System backup only, and will not be used for data logging. The remaining space on the SD card can be used for Datalogging so, one SD card can do both. The System backup includes all data on NOVRAM and time/date when backup is performed. The backup file is named OOOO\_SSSS.ovb, where OOOO is the York Order Number and SSSS is the chiller serial number. Only one file will be created on the SD card. If the York Order Number or Chiller Serial Number is changed on the panel, the old backup file is deleted and a new backup file with changed order number and chiller serial number is created.

The panel software will backup NOVRAM data to SD card automatically each night at midnight or, the user may manually save the data by pressing the “System Backup” button on the Serial/SD. The System Backup and System Restore buttons are only displayed when Data Logging is Disabled. When the manual backup is initiated, a security log entry is generated.

System Restore will restore the NOVRAM data from the SD card. Only one backup file will be on the SD card from the backup process. If there are multiple backup files on a SD card from copying files on a computer, the software will always use the file with the latest date and time. After the restore operation has completed, a security log entry will again be generated.