



# Service Information

File In/With:

SI0371

New

1117

Equipment Affected: Screw and Scroll Chillers

SC-EQ Firmware 3.0.0.1114

## OVERVIEW

This new release provides the following:

1. Adds new equipment model YGWH/YVWH (Modbus)
2. Adds new equipment model YMAA (Modbus)
3. Provides Verasys integration for (YMAA, YLAA/YLPA, YVAA/YVFA)
4. Adds capability to interface to non-standard Modbus BAS communication configurations. Now supports 9600 or 19200 Baud, Even, Odd or None Parity and 1 or 2 Stop Bits.
5. Fixed Modbus issues that prevented an interface to the LYS chiller.
6. Provides BAS system writable configuration points eliminating the need for an SC-AP to set these parameters in the field.

In order to update an SC-EQ with this latest release, you must first install the 3.0.0.1114SCCUSB\_Firmware.pkg. After the Firmware.pkg is installed, you should then install the 3.0.0.1114.SCCUSB.pkg. Both firmware packages may be found in the SC-EQ Software Patches folder of the Chiller Integration site on the Portal.

POINT NAME	BACNET	MODBUS	N2	DESCRIPTION
BACnet Instance ID Mode	BV65000	N/A	N/A	0 = Auto 1 = Manual
BACnet Instance ID	AV65000	N/A	N/A	Write desired value with Mode set to Manual
BACnet Encoding Type	MV65003	N/A	N/A	0 = ISO(UCS-2), 1 = ASCII
BACnet Device Name	SV65000	N/A	N/A	Write value desired for BAS system
Units	MV65001	65001	ADI 201	0 = Imperial, 1 = Metric
Manual Select Chiller Model (YT2 only)	MV65002	65002	ADI 202	See Table 1 below

Note: Modbus addresses 65001 and 65002 are Scaled X1 and Unsigned

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.

Product Technical Support

**TABLE 1 - MANUAL SELECT CHILLER MODELS (YORKTALK 2 ONLY)**

None (Disables Manual Select)	0		YLPA (IP)	233
Generic	200		YLPA (SI)	234
YVAA Micro Channel (IP)	201		YCWL (IP)	235
YVAA Micro Channel (SI)	202		YCWL (SI)	236
YVAA Round Tube (IP)	203		YSAA One Compressor (IP)	245
YVAA Round Tube (SI)	204		YSAA One Compressor (SI)	246
YVFA Micro Channel (IP)	205		YSAA Two Compressor (IP)	247
YVFA Micro Channel (SI)	206		YSAA Two Compressor (SI)	248
YVFA Round Tube (IP)	207		YCAS/YCWS/YCRS (IP)	327
YVFA Round Tube (SI)	208		YCAS/YCWS/YCRS (SI)	328
YVWA Two Compressor (IP)	213		Millenium YG/YB (IP)	329
YVWA Two Compressor (SI)	214		Millenium YG/YB (SI)	330
YVWA One Compressor (IP)	215		Millenium YIA (IP)	331
YVWA One Compressor (SI)	216		Millenium YIA (SI)	332
YCAV/YCIV Two Compressor (IP)	219		Millenium YK (IP)	333
YCAV/YCIV Two Compressor (SI)	220		Millenium YK (SI)	334
YCAV/YCIV Three Compressor (IP)	221		Millenium YPC (IP)	335
YCAV/YCIV Three Compressor (SI)	222		Millenium YPC (SI)	336
YCAV/YCIV Four Compressor (IP)	223		Millenium YS (IP)	337
YCAV/YCIV Four Compressor (SI)	224		Millenium YS (SI)	338
YCAL, YCUL, YCRL, YLAA, YLAE, YLUA (IP)	231		Millenium YT (IP)	339
YCAL, YCUL, YCRL, YLAA, YLAE, YLUA (SI)	232		Millenium YT (SI)	340

**TO UPDATE THE FIRMWARE:**

1. Copy the firmware update file onto an empty USB thumbdrive.
2. If the chiller is running, put it into Local mode so that the SC-EQ will not affect chiller operation during the firmware update.
3. Insert the USB thumbdrive in to the USB port J3 on the SC-EQ. The firmware update will start automatically and the Fault LED will flash quickly during the update process. If it does not start automatically, cycle power to the SC-EQ by removing and re-connecting the power plug on the SC-EQ.
4. When the firmware update is completed, the SC-EQ will reboot (all of the lights will go out then on again). A typical update takes 5+ minutes.
5. Once the SC-EQ Fault LED is off for 30 seconds, the firmware upgrade is complete and the USB thumbdrive may be removed.



***If you pull the thumbdrive too early you can corrupt the SC-EQ.***