



ESG Service Information

File In/With: (Behind General Tab)	SJ4		SI0008	
	New	6-01		
Equipment Affected:	YT Chillers Using Optiview Control Center			
Software Enhancements Effective May 2001				

General

Beginning May 2001, an enhanced Flash Memory Card will be supplied with new production Nema 1-4 and CE chillers. New features are outlined below and are also included in YORK Operation Manual 160.55-O1 and Service Manual 160.55-M1.

Flash Memory Card versions and part numbers are applied as follows:

- Nema 1-4 Chillers C.MLM.02.02A.102 (031-02004-001)
- CE Chillers C.MLM.02.02A.201 (031-02004-002)

The enhanced flash cards are also available from the Baltimore Parts Distribution Center for retrofit to existing chillers.

Surge Protection

The Surge protection feature detects surge events and provides a running count of the events that occur over the lifetime of the chiller. An excess surge threshold can be programmed to detect excessive surging. If excess surging is detected, it can be configured to shutdown the chiller or initiate a special surge correction/avoidance mode or simply display a warning message. A Surge Protection display Screen displays all parameters relevant to this feature.

Trend Screen – Triggered Chart

A “TRIGGERED” chart can now be created. This is in addition to the ONE SCREEN and CONTINUOUS chart types that can be created in previous Flash Memory Card versions. With the TRIGGERED chart type, data collection can be set to START or STOP based upon the status of up to two Operator selected conditions (TRIGGERS) and a selected TRIGGER DELAY. If START is selected, data collection will not begin until all triggers have been satisfied and any selected TRIGGER DELAY has elapsed. Data collection will stop at the completion of one screen of data. If STOP is selected, data collection will begin when manually initiated, and will stop when all triggers have been satisfied and any selected TRIGGER DELAY has elapsed.

This feature is a valuable troubleshooting tool for Service technicians. It allows an event that occurs during unattended hours to be captured for viewing at a later time. The trigger event results in a screen of frozen trend data that will remain on the screen until manually cleared.

Display of Service Phone Numbers

Two service phone numbers (Regional and Local), with labels, can be displayed on the OPERATIONS Screen. The Default value for the Regional number is the North American Toll Free number. However, the label and number can be changed to any desired value. The Local label and number can also be entered.

Hot Gas Bypass Enhancement

In previous Flash Memory Card versions, when the Leaving Chilled Liquid Temperature decreased to the “Minimum Load” setpoint, the Hot Gas Valve was opened to the 100% position. In this version, the valve will be opened to the position programmed as the “Maximum Open” setpoint (25% to 100%). This allows for better control of the minimum load conditions. After the Minimum Load operation is activated, the valve will be closed proportionately as the Leaving Chilled Liquid Temperature increases to the Leaving Chilled Liquid Temperature Setpoint.

“Evaporator-Transducer or Temperature Sensor” Safety Shutdown

In Previous Flash Memory Card versions, the conditions for this safety shutdown were checked after the first 10 minutes of chiller run. Under certain operating conditions this would result in unnecessary shutdowns. In this version, in addition to the previous criteria, the shutdown conditions are not checked unless Smart Freeze is enabled and the Evaporator Refrigerant Temperature RT7 (if enabled) or Evaporator Saturation Temperature (derived from the evaporator pressure transducer) is $< 32^{\circ}$ F.

Purge Canister Full Alarm

The new optional Lower Emissions Purge System consists of two 5-lbs capacity canisters piped in series between the Purge Tank outlet and the purge vent line. Refrigerant is collected in the canisters as the non-condensables pass through to the purge vent line. Canister number 1 is equipped with an alarm that signals the Optiview Control Center when it is full and requires replacement. This Flash Memory Card version reads this signal and displays the message “Warning-Purge-Canister #1 Full”.

Compressor Motor Variable Speed Drive

1. The compressor motor VSD phase A, B and C output current to the motor is now displayed on the VSD Tuning Screen.
2. The new 351HP VSD is supported. In this model, the three Inverter Assemblies are mounted on a single Baseplate instead of three individual Heatsink Assemblies, as in other models. Therefore, the VSD Details Screen and the Harmonic Filter Details Screen display a single Baseplate Temperature instead of the Phase A, B and C Temperatures displayed on other models.