

	Form Number: 160.81-M1 (LS03)	407
	Supersedes: None	
LITERATURE SUPPLEMENT	File with: 160.81-M1 (307), 160.81-O1 (106)	
Subject: YR Chiller Software Enhancements Effective May 2007		

GENERAL

Beginning May 2007, enhanced software will be available from the Baltimore Parts Distribution Center. It is compatible to microboard 031-01730-000 only. The enhancements are listed below.

The versions and part numbers for 031-01730-000 microboards:

- NEMA 1-4 chillers C.MLM.05.07.105 (p/n 031-02068-001)
- CE chillers C.MLM.05.07.205 (p/n 031-02068-002)

New Adjustable Motor Overload Setpoint

In previous software versions, the motor current overload function (105% of Chiller Full Load Amps) was performed solely by the motor controller device (CM-2 board, Solid State Starter). This version provides an adjustable software overload function, in addition to that provided by the motor controller devices.

New setpoint 105% MOTOR CURRENT TIME (located on the SETPOINTS Screen) allows the software overload timer to be adjusted over the range of 12 (default) to 40 seconds (in 1 second increments). It should not be set to a value other than the default value unless advised by the YORK factory. Operator (or higher) access level is required.

In operation, when the motor current has exceeded 105% of Chiller FLA for the programmed time period, a safety shutdown is performed and “105% Motor Current Overload” is displayed on the System Details Line of the Display. The chiller can be restarted after the Compressor switch is placed in the Stop-reset (O) position.

New Current limit Response

To prevent motor current swings resulting from overshoot and undershoot of the current limit setpoint, proportional slide valve loading/unloading is applied within a band around the Current Limit Setpoint (Local or Remote).

The proportional load limiting band will begin at 93% of motor current limit setpoint and end at 100% of the motor current limit setpoint. While in this band, the load pulses will be proportionally decreased as the motor current increases from 93% to 100% of the motor current limit setpoint, and proportionally increased as the motor current decreases from 100% to 93% of the motor current limit setpoint.

At 100% of the motor current limit setpoint, no loading or unloading occurs.

The proportional unloading band begins above 100% of the motor current limit setpoint and ends at 104% of motor current limit setpoint. While in this band, the unload pulses will proportionally decreased as the motor current decreases from 104% to 100% of the current limit setpoint and proportionally increased as the motor current increases from 100% to 104% of the current limit setpoint.

Above 104% of the motor current limit setpoint, the load output is continuously energized.

Incorrect “Remote Temperature Setpoint Range” Setpoint Defaulting

In previous software versions, this setpoint reverts to the default value (10.0 °F) during power failures. In this version, the setpoint remains at its programmed value during power failures.

