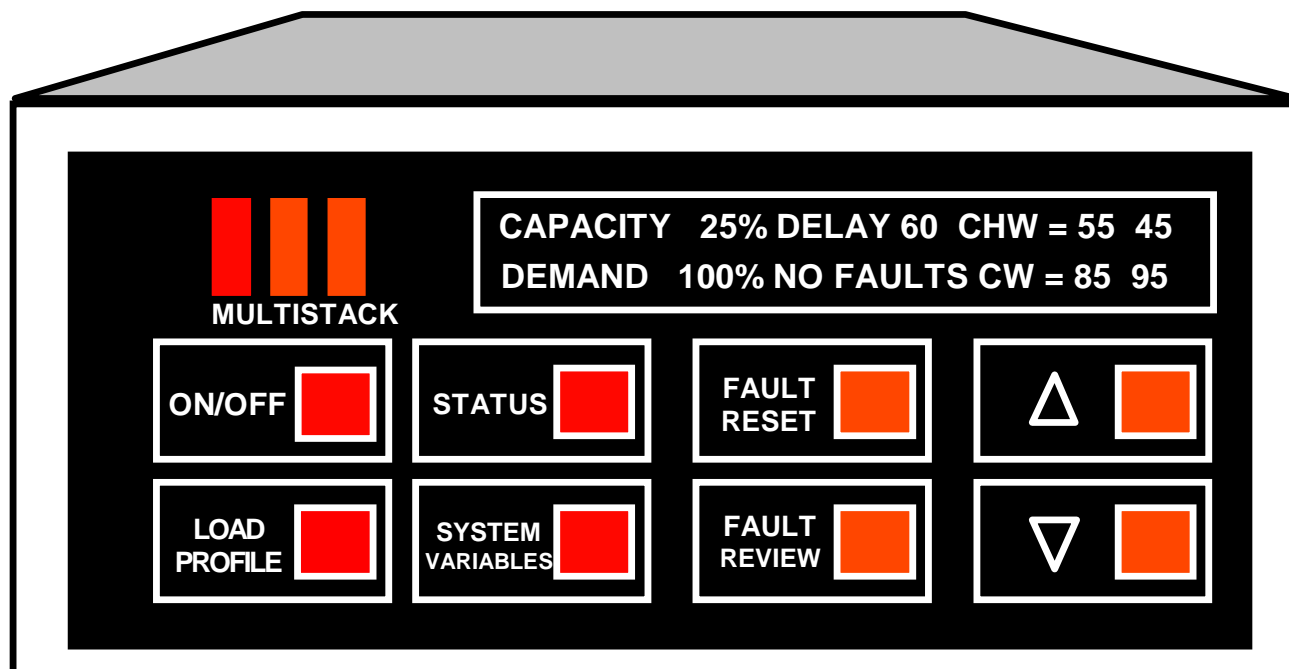


# MULTISTACK

The Modular Water Chiller

## HEAT RECOVERY MASTERCONTROL USER MANUAL addendum



## COMPUT 25HR

VER. 3.0

MULTISTACK  
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### **1.3 SYSTEM VARIABLES (Additional Features)**

- A. HEAT OVERRIDE: Select this mode to run the chiller for heating control
- B. COOL OVERRIDE: Select this mode to run the chiller for cooling control
- C. AUTO CONTROL: Select this mode to run the chiller for automatic control

In cooling mode if the ECW rises above the no load point (default 120 deg F) of the heating mode the controls will do an auto changeover to heating control. This will cause all of the compressors to turn off and start a 30 second countdown to start. The control will now display Heating Mode info

In heating mode if the ECHW drops below the no load point (default 50 deg F) of the cooling mode the controls will do an auto change over to cooling control. This will cause all of the compressors to turn off and start a 30 second countdown to start. The control will now display Cooling Mode info.

In the case that the ECW is above the no load point of the Heating Mode, and the ECHW is below the no load point of the Cooling Mode everything should be OFF and the controller would be in cooling Mode.

### **1.4 CUSTOMER CONNECTIONS FOR OUTPUTS (Changed Features)**

#### OUTPUTS

CPR Condenser Pump Relay. This output will now be energized as soon as EX2 closes or anytime the chiller is commanded on.

### **2.6 FAULTS (Added Features)**

#### SYSTEM FAULTS

HIGH ECW TEMP: This fault will occur if the entering condenser water temp reaches 150 deg F

#### **OTHER MODIFICATIONS**

Special ECW, LCW temperature sensors for reading up to 150 deg F

High Pressure switch settings will now be 365 psig for R22 and 385 psig for R407C.

The setting range and default values for the SYSTEM VARIABLES are as follows:

### COOLING MODE

<u>ITEM</u>	<u>DEFAULT</u>	<u>RANGE</u>
UPSETPT (°F)	55	45 - 80
LOSETPT (°F)	45	35 - 70
VSP VALUE (%)	50	0 - 80
LOAD LIMIT (%)	100	0 - 100
TDIFF (SEC)	90	15 - 200
FAIL INDIC (%)	0	0 - 90
LEAD COMPRESSOR	1	1 TO 24
SEQUENCING	STANDARD	STANDARD OR ODD/EVEN
INDEXING	ENABLED	ENABLED OR DISABLED
FLUSH TIME	12:00 PM	ANY HOUR 12 AM TO 12 PM
FLUSH DURATION	20 SECS	10 - 60 SECS

### HEATING MODE

<u>ITEM</u>	<u>DEFAULT</u>	<u>RANGE</u>
UPSETPT (°F)	125	110-140
LOSETPT (°F)	115	100 - 130
VSP VALUE (%)	50	0 - 80
LOAD LIMIT (%)	100	0 - 100
TDIFF (SEC)	90	15 - 200
FAIL INDIC (%)	0	0 - 90
LEAD COMPRESSOR	1	1 TO 24
SEQUENCING	STANDARD	STANDARD OR ODD/EVEN
INDEXING	ENABLED	ENABLED OR DISABLED
FLUSH TIME	12:00 PM	ANY HOUR 12 AM TO 12 PM
FLUSH DURATION	20 SECS	10 - 60 SECS

Once these values have been set, they are put in permanent memory and will remain even when all power is removed from the computer.

#### \*\*SPECIAL LO TEMP APPLICATION:

#### Cooling Mode\*\*

<u>ITEM</u>	<u>DEFAULT</u>	<u>RANGE</u>
UPSETPT (°F)	55	25 - 60
LOSETPT (°F)	45	20 - 55