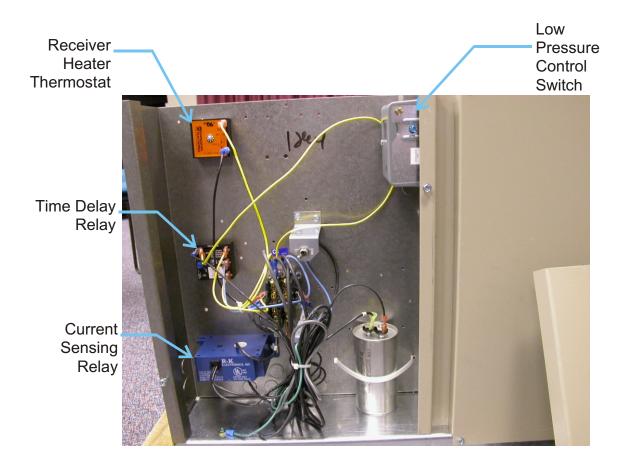


# **RHS / Bohn Condensing Unit**

### **RHS / Bohn Control Box**



### **Operation: Refer to the schematic diagram**

The ice machine and condensing unit are not connected electrically. When the ice machine needs to make more ice, it opens its Liquid Line Valve Solenoid and starts the auger drive motor. When the Liquid Line Solenoid Valve opens, refrigerant flows from the receiver in the condensing unit to the evaporator of the ice machine. After the refrigerant has flowed into the evaporator the low side pressure will increase and the Low Pressure Control Switch will close, starting the condensing unit. The compressor and fan motors start immediately. During the first few moments after start up, the Time Delay Relay by-passes the Low Pressure Control Switch to prevent short cycling of the compressor. After timing out, the C and NO contacts of the Time Delay Relay open.

If the high pressure or high temperature limits are exceeded, the compressor and fan motors of the condensing unit will stop. The ice machine will stay on, but will not make ice.

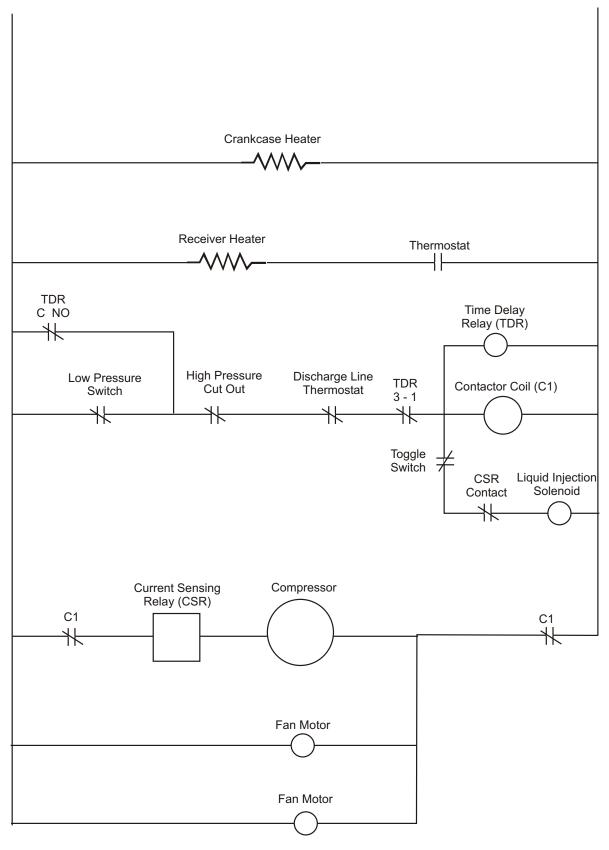
When the ice machine has filled the bin, it shuts the liquid line valve. This stops refrigerant flow, causing the condensing unit to force most of the system's refrigerant into the receiver. At the low pressure control's cut out point, the compressor and fan motor are shut off. The Time Delay Relay contact 3-1 open up after pump down and do not re-close until a few moments have passed. This prevents short cycling of the compressor after pump down.

The Current Sensing Relay keeps the Liquid Injection Solenoid from opening if the compressor is not operating.

The toggle switch should always be in the ON position, allowing the Liquid Injection Solenoid to open.

## **RHS / Bohn Schematic Diagram**

#### Shown at start up



Scotsman Model	Prior Bohn Model	Changed 5/17/06	Voltage	Refrigerant
FME2402-RHS-A/C	BZT-035L2B	obsolete	208-230/60/1	R22
FME2402-RHS-A/C	BZT-035L2C	obsolete	208-230/60/3	R22
FME2404-RHS-A/C	BZT-030L6B	obsolete	208-230/60/1	R404A
FME2404-RHS-A/C	BZT-030L6C	obsolete	208-230/60/3	R404A
FME3004-RHS-A/C	BZT-035L6B	obsolete	208-230/60/1	R404A
FME3004-RHS-A/C	BZT-035L6C	obsolete	208-230/60/3	R-404A
MAR1400-RHS-A/C	BZT-055L6C	no change	208-230/60/1	R-404A
MAR2000-RHS-A/C	BZT-060L6C	no change	208-230/60/3	R-404A
NME654-RHS-A/C	BHT-009X6B	BHT-008X6B	208-230/60/1	R-404A
NME954-RHS-A/C	BHT-015X6B	BHT-010X6B	208-230/60/1	R-404A
All include:				

Liquid line drier, sight glass, shut off valve

Suction line shut off

Suction accumulator

Pump down switch

Low ambient kit (heated & insulated receiver with time delay relay)