

water - for more than 10 seconds, a small relay of the electronic board, get energized, controlling - simultaneously the hot gas valve, the water drain valve and the harvest assist solenoid.

**NOTE:** in case of failure of ice level sensor, the P.C. Board turns - on automatically the unit into the defrost cycle when the freezing cycle reaches 30 or 40 minutes according to the operation of the fan motor during the freezing cycle.

At this point, the unit initiates the defrost cycle. The hot gas circulating into the evaporator serpentine causes a slight melting of ice cubes which get released from their molds. In the mean time the harvest assist solenoid is also energized pushing out the ice plate. Once entirely released the ice cubes drop simultaneously into the ice storage bin below; by doing so they move apart from the evaporator bottom end the plastic deflector.

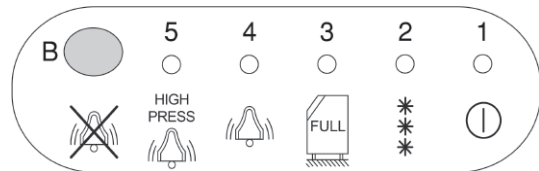
This plastic deflector has on its side a magnetic switch that on account of the deflector swinging motion, caused by the ice while dropping in the bin, opens and closes their contacts.

This will, in turn, deactivate the relay contacts that controls the hot gas, harvest assist solenoid and water drain valve which get deenergized allowing the unit to start a new freezing cycle.

When the ice bin is full of ice, the last batch of ice cubes released from the evaporator accumulates to keep the bottom end of the plastic deflector in open position; with the magnetic switch contacts open for longer than 30" the entire unit stops with the glowing of the corresponding LED.

The machine will restart when the ice deflector will be back in its normal vertical position provided that 3' are elapsed from unit stop. If not the machine will delay its restart till 3' are elapsed with the blinking of the green LED.

## ALARM CONDITIONS



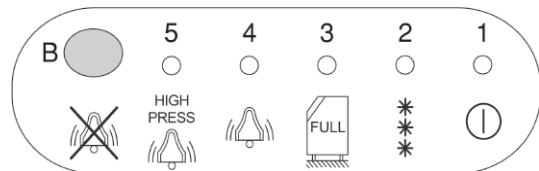
Both the last two **Red LED** are **ON STEADY**:  
**Condenser Sensor OUT OF ORDER.**

Both the last two **Red LED** are **BLINKING SLOW**:  
**WATER ERROR**

Water level inside the water sump too low after 3' from the activation of the Water Inlet Valve.

Both the last two **Red LED** are **BLINKING FAST**:

**RESET MODE:** Charging water through the Water inlet Solenoid Valve after the tripping OFF on **WATER ERROR**

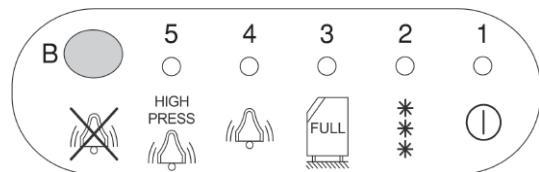


The fourth **Red LED** is **ON STEADY**: **Harvest Cycle longer then 3' 30"**

The fourth **Red LED** is **BLINKING SLOW**: **TOO HI CONDENSING TEMPERATURE.** The condenser sensor detected a temperature **> 65°C**

The fourth **Red LED** is **BLINKING FAST**:

**RESET MODE:** Condenser Sensor **< 50°C** Fan motor in operation for 3' then back on Start Up Cycle Mode



The fifth **Red LED** is **ON STEADY**: **TOO HI DISCHARGE PRESSURE > 33 bar (460 PSI)**

The fifth **Red LED** is **BLINKING FAST**:

**RESET MODE:** After pushing the Reset Button of the Pressure Control the fan motor starts up first for 3' then the machine enters on the Start Up Cycle Mode.

The PC Board is also checking the maximum time of the freezing cycle that changes according to the operation of the fan motor during the freezing cycle (room temperature):

- **Fan motor in ON-OFF mode:** **Max. freezing cycle length equal to 30'**
- **Fan motor ON All the time:** **Max. freezing cycle length equal to 40'**

Whenever the machine remains in the Freezing Cycle for the Maximum time (30 or 40 minutes), the PC Board moves the unit directly into the Harvest Cycle.