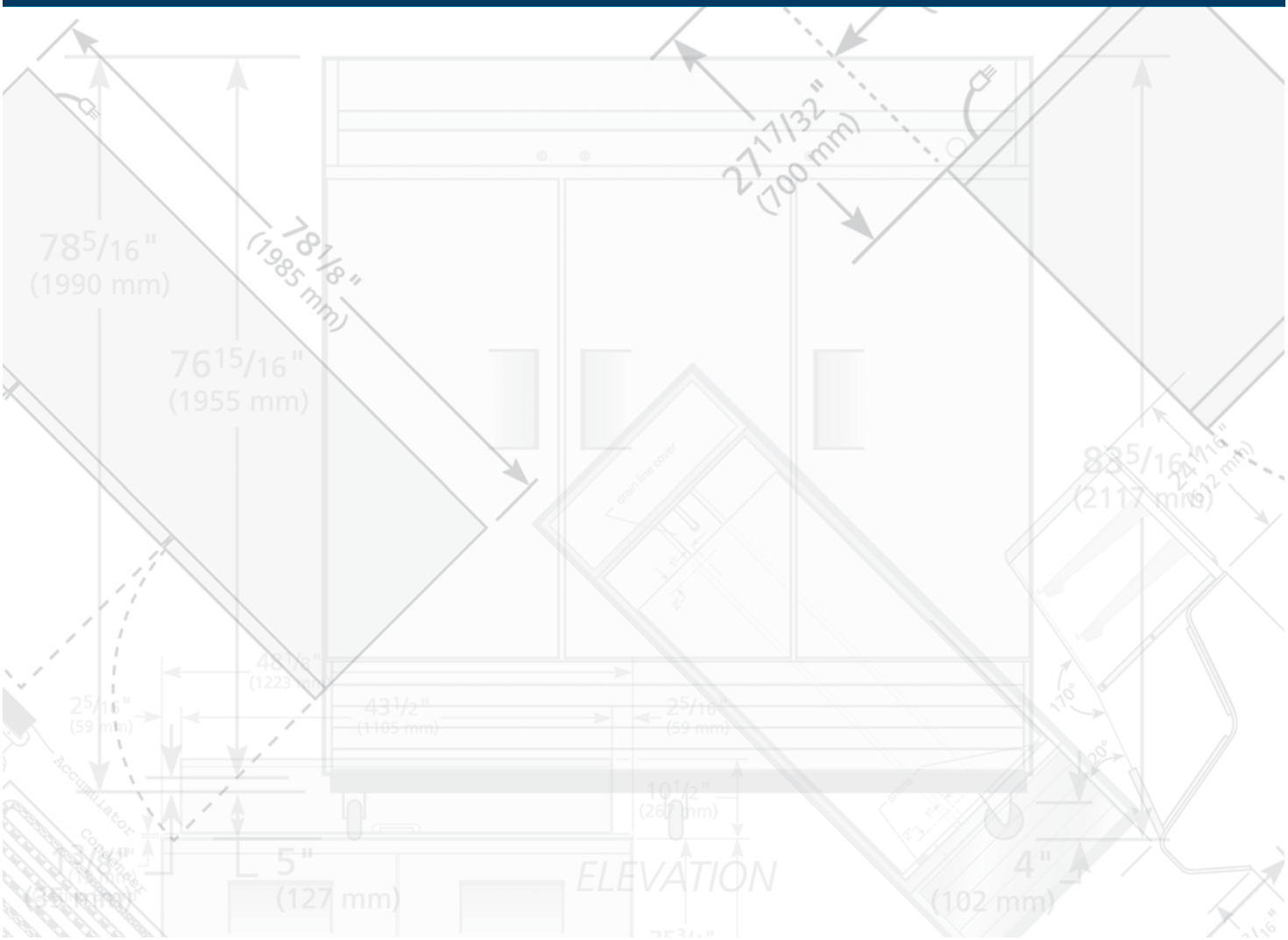
MODEL SPECIFIC INFORMATION



NOTES

MODEL SPECIFIC INFORMATION

TAC & THAC

TAC-30, TAC-36, TAC-48, TAC-48GS, TAC-72 SPECS

CABINET SPECS

TAC-14GS

- 115volt 60cycle

115/60/1
NEMA-5-20R

TAC-48

- 208/230volt 60cycle

208-230/60/1
NEMA-6-15R

208-230/60/1
NEMA-6-20R

TAC-30

- 115volt 60cycle

115/60/1
NEMA-5-20R

TAC-48GS

- 208/230volt 60cycle

208-230/60/1
NEMA-6-15R

208-230/60/1
NEMA-6-20R

TAC-36

- 208/230volt 60cycle

208-230/60/1
NEMA-6-15R

208-230/60/1
NEMA-6-20R

TAC-72

- 208/230volt 60cycle

208-230/60/1
NEMA-6-20R

THAC-36,THAC-48,THAC-60 SPECS

CABINET SPECS

THAC-36

- 115volt 60cycle

115/60/1
NEMA-5-15R

THAC-48

- 115volt 60cycle

115/60/1
NEMA-5-15R

THAC-60

- 115volt 60cycle

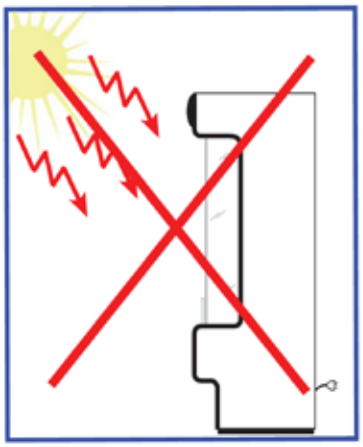
115/60/1
NEMA-5-20R

TAC Installation Tips

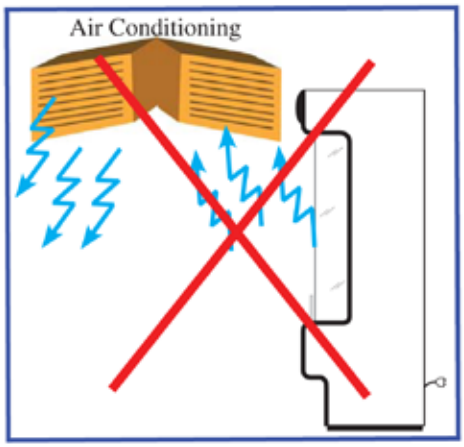
- Make sure the correct voltage and receptacle are present
  Check for correct voltage
- Maximum Ambient Condition 75 degrees 55% Relative Humidity
- Do not place into direct sunlight
- Level Cabinet
- Place cabinet in an area that will not have any air drafts
  Accessive air flow around cabinet can effect interior cabinet airflow (air-curtain).
  No HVAC supply or return air vents pushing air into or pulling air out of cabinet.
  No doorways
  No ceiling fans
- Check for correct clearance space in back of cabinet and above
  A 4" clearance requirement for the rear of cabinet and 12" clearance above cabinet.
- Do not load product to where it would over hang the shelf

TAC RECOMMENDED COOLER PLACEMENT

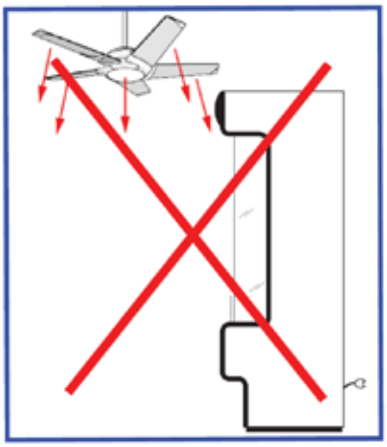
TAC (True Air Curtain) Recommended Operating Conditions



• Units should not be installed in direct sunlight.



• Units should not be installed near HVAC vents.



• Units should not be installed near fans.

• Units should not be installed near doorways.

• Level cabinet front to back and side to side.

• Check for proper clearance for air flow.

• Operating environment not to exceed 75˚F (23˚C) and 55% humidity.

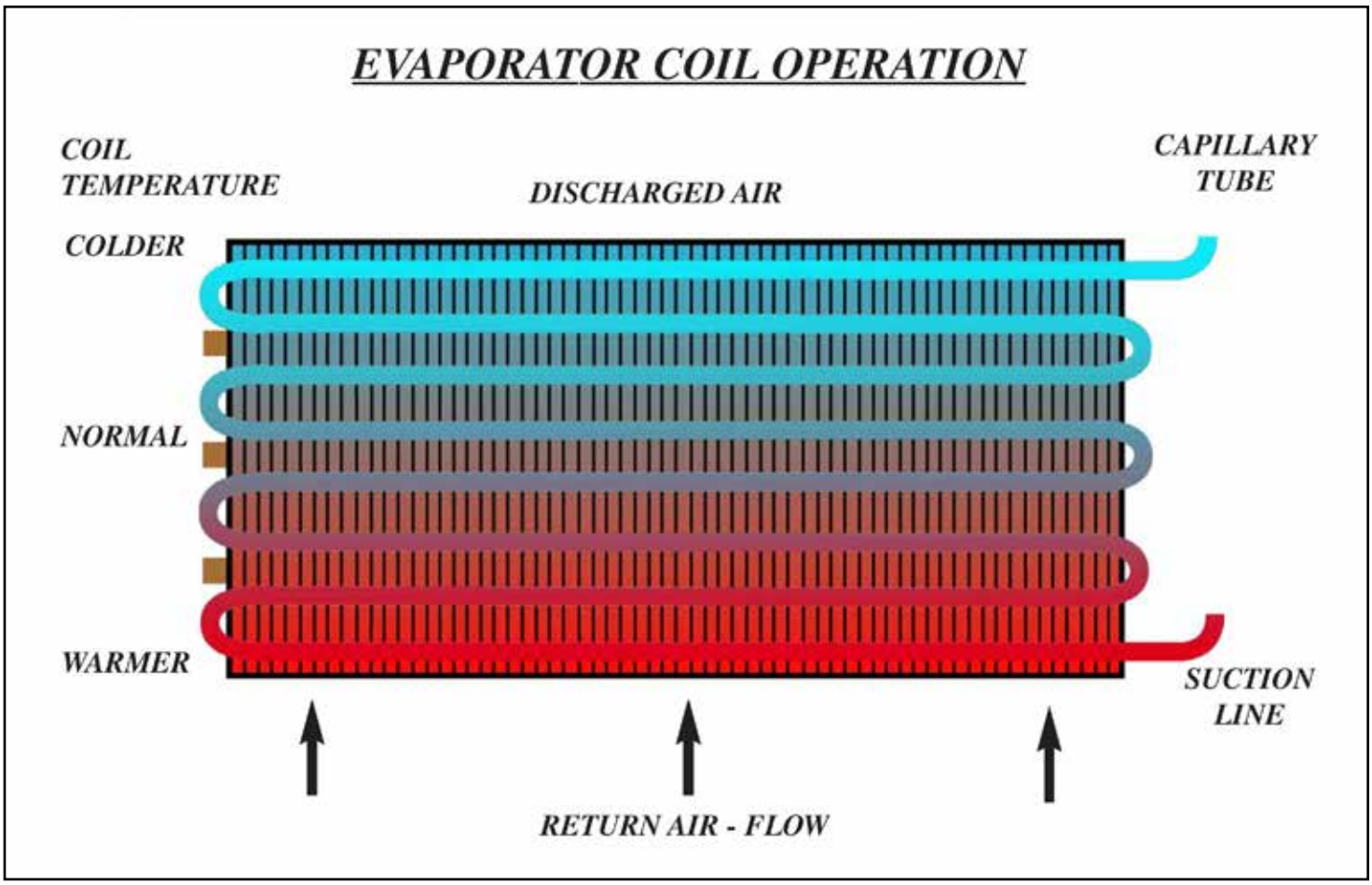
COMPONENT LOCATION WITH MECHANICAL TEMPERATURE CONTROL

TAC-48 SEQUENCE OF OPERATION WITH A MECHANICAL TEMPERATURE CONTROL

SEQUENCE OF OPERATION

When the cabinet is plugged in the evaporator fans will come on, the condenser fans will come on, and if the light switch is in the on position the lights will come on. If the temperature control is calling for cooling voltage will flow through the temperature control to the low-pressure switch. If the pressure switch is closed voltage will flow through it to the temperature control relay. The relay will close and supply voltage to the compressor.

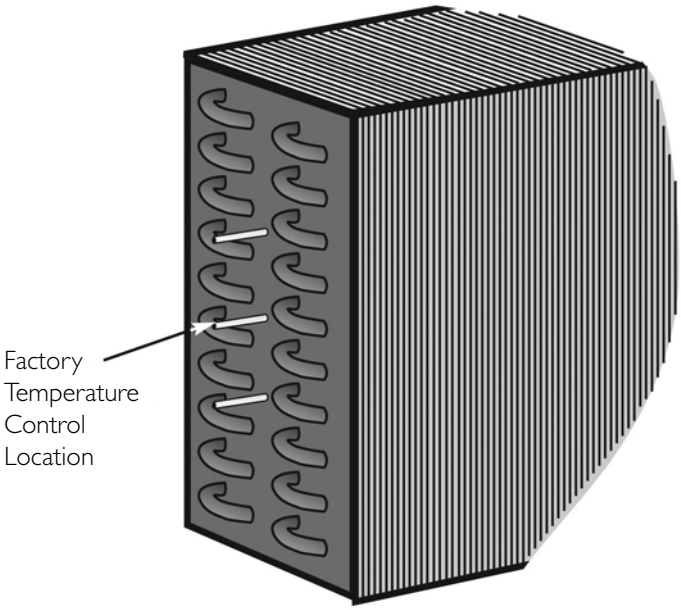
The compressor will continue to cycle off of the temperature control until the defrost timer initiates defrost. The timer is set to go into defrost 3 times a day (every 8 hours) for 30 minutes. During this time the electrical circuit going to the temperature control will open so the compressor will not operate. The evaporator fans will continue to run and the timer will switch power to the reverse windings in the condenser fan motors to make the motors run in the opposite (reverse) direction. After the 30 minutes are up the timer will then supply voltage back to the temperature control and also switch the condenser fans to normal rotation.



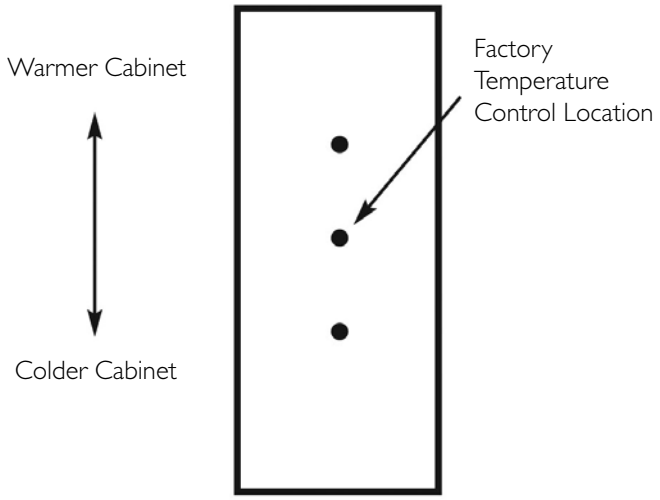
TAC MECHANICAL TEMPERATURE CONTROL ADJUSTMENT

SEQUENCE OF OPERATION

End view - left end of the evaporator coil



End view - left end of the evaporator coil



An air curtain type of merchandiser is affected by the temperature and relative humidity of the surrounding ambient.

A. The adjustment knob and body of the temperature control is mounted to the left interior back panel of the cabinet, about six inches off of the "floor" of the cabinet, in a recessed area, near the evaporator coil.

- To raise the product temperature (warm up the cabinet), turn the control knob counterclockwise.
- To lower the product temperature (cool down the cabinet), turn the control knob clockwise.

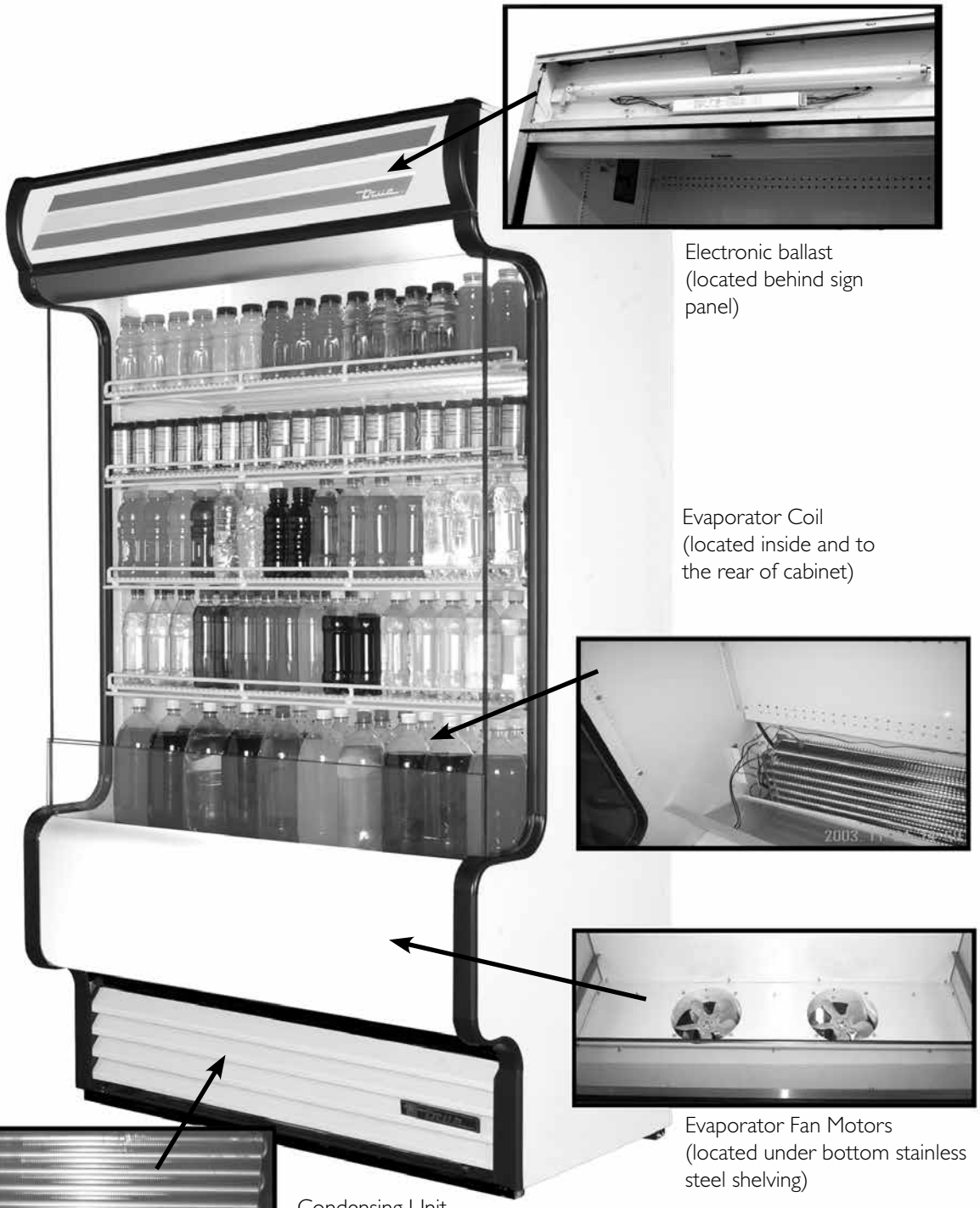
B. If the above does not give desirable results, further adjustments are possible in the field. Disconnect power to the cabinet. Remove the full length back panel and the temperature control is mounted to: (See illustration 1 & 2)

The temperature probe is inserted in the left end of the evaporator coil.

- To raise the product temperature (warm up the cabinet), relocate the temperature control probe in the top tube well location in the end of the coil.
- To lower the product temperature (cool down the cabinet), relocate the temperature control probe in the bottom tube well location in the end of the coil.

NOTE: The sensor end of the temperature control should be inserted in the tube well until it stops (bottom out). Reassemble the lower back panel, restart the unit and set the control to midpoint "5", for further temperature adjustment.

COMPONENT LOCATION WITH DIXELL TEMPERATURE CONTROL

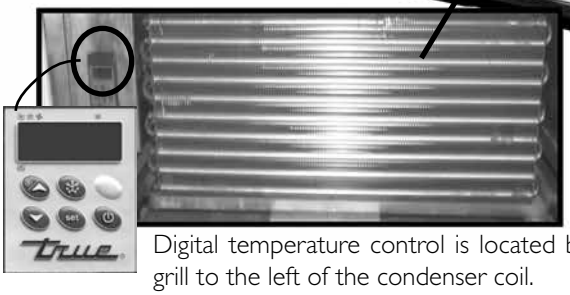


Electronic ballast (located behind sign panel)

Evaporator Coil (located inside and to the rear of cabinet)

Evaporator Fan Motors (located under bottom stainless steel shelving)

Condensing Unit (located behind louvered grill)



Digital temperature control is located behind the louvered grill to the left of the condenser coil.

TAC CABINETS WITH DIXELL CONTROL

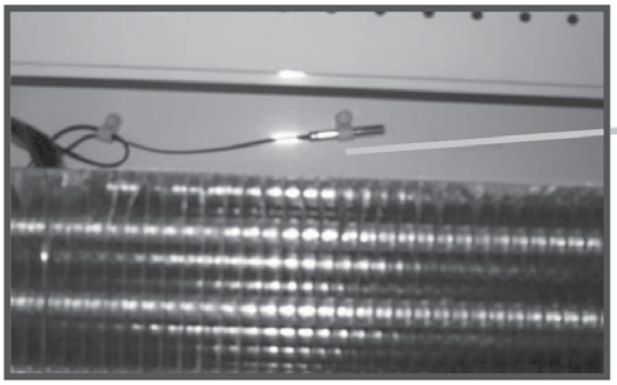
SEQUENCE OF OPERATION

Dixell control operates similar to a mechanical control that we use. When adjusting the set point to change cabinet temperature you will be adjusting the controls cut out. The control will cut back in automatically when the temperature rises to meet to preprogrammed differential.

XW60VS

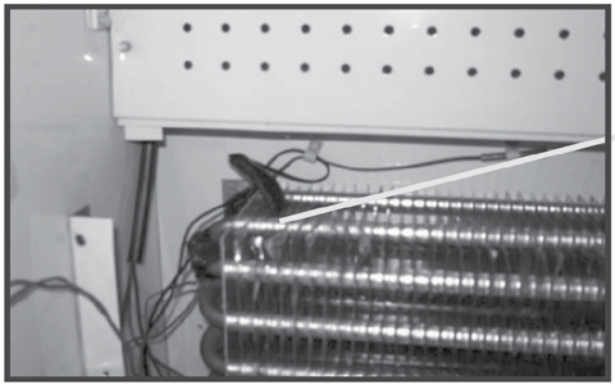
The following turn of events will occur in the TAC cabinets equipped with Dixell controls:

When the cabinet is plugged in, the lights, the evaporator and the condenser fan motors will come on. The temperature control delays the operation of the compressor for 3 minutes. After 3 minutes if the temperature control is closed the compressor will turn on. When the temperature in the cabinet goes down to set point the control cuts the compressor off, leaving the evaporator and condenser fan motors operating, and re-starts it again. The temperature control probe (P1) is located right above the evaporator coil.



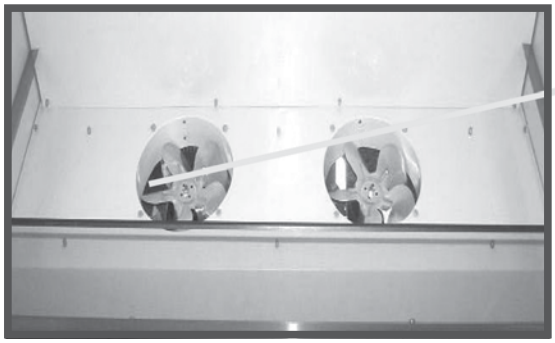
Thermostat/Display Probe P1

Every 8 hours, the temperature control will initiate the defrost cycle (Off cycle) which will last for 30 minutes. During the defrost cycle, the evaporator fan motors will operate continuously and the condenser fan motors will reverse. The sensor probe (P2) for the defrost termination is located in between the fins of the evaporator coil. Note: This probe (P2) might not be active. For further details, please contact True's Technical Service Department.



Defrost sensing Probe P2

The sensor probe (P3) for the display is located in the return air on the evaporator fan motor bracket.



The temperature control is also a safety that will delay the operation of the compressor; in case there a electrical condition, which will make it, short cycle such as power surges or voltage fluctuations. This delay will be for 3 to 4 minutes

All models includes a pressure control that will shut the compressor off if the refrigerant pressure goes down to 15 PSIG, to minimize icing of the evaporator coil and will reset when the refrigerant pressure goes up to 80 PSIG. It will work as safety if the refrigerant pressure is lost (refrigerant leak, low ambient conditions, etc) minimizing possible damage to the compressor due to contamination or oil migration. The TAC-14GS pressure control settings will be 40 PSIG cut in and 0 PSIG cut-out.

NOTES