AircoSaverTM (A.S.) Installation for PACKAGE UNITS AND/OR R.T.U.'S

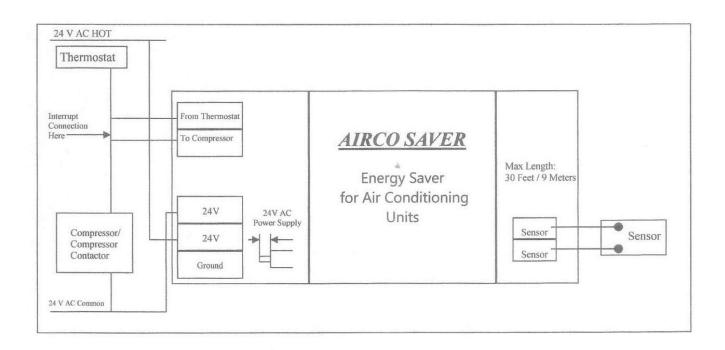
(Single or Dual Circuits)

- 1. Make sure unit is mechanically sound and operating properly.
- 2. Locate the control board (circuit board) inside the unit.
- 3. Mount the AircoSaverTM (A.S.) in close proximity to control board inside the unit's control panel. The A.S. must be protected from the weather and moisture from the plenum. Never install the A.S. in the return or supply air stream.
- 4. Connect 24 Volt power to the Aircosaver using standard thermostat wire.
- 5. Locate the thermostat wire that controls the primary circuit (AKA Y1) from the thermostat to the compressor.
- 6. Connect the Y1 wire coming from the thermostat to the input side of the A.S. and connect the output side from the A.S. to the wire going to the compressor.

 NOTE: You are simply installing the A.S. in the Y1 signal from the thermostat to the compressor of the primary circuit. The signal now travels from Thermostat to A.S. to Compressor. This can be done either before or after the control board in most cases. However, some systems have factory delays at start up, or special signals from the control board to the secondary circuit that depends on what the primary circuit is doing.
- 7. Connect the temperature sensor from the A.S. in the coldest spot of the supply air (plenum) or directly on the coldest spot on the evaporator away from any fresh air intake. On multi stage units make sure that you locate the sensor on the correct evaporator.
 8. After you have installed the AircoSaverTM watch it go through a couple of cycles before
- 8. After you have installed the AircoSaver^{1M} watch it go through a couple of cycles before you close up the unit. For dual compressor systems, make sure that the 2nd compressor is running while watching the A.S. go through its cycles. Confirm that condenser fan for the 2nd compressor is running when the A.S. turns off the primary compressor when in Phase 5/6.

<u>AircoSaver</u>TM <u>Installation for Split Systems:</u> Evaporator inside, condenser/compressor outside

- 1. Make sure unit is in good mechanical condition and working properly.
- 2. Locate 24 volt power supply and Y1 control signal inside the air handler.
- 3. Mount the AircoSaverTM in close proximity to the control board (exterior wall of air handler is a good location).
- 4. Connect 24 volt power to the AircoSaverTM.
- 5. Connect the Y1 wire coming from the thermostat to the input side of the A.S. and connect the output side from the A.S. to the wire going to the compressor. You can either, cut the wire and run it into and out of the AircoSaverTM or remove the Y1 wire from the control board/terminal strip and connect it to the AircoSaverTM and back to the control board/terminal strip.
- 6. Connect the temperature sensor from the A.S. in the coldest spot of the supply air (plenum) or directly on the coldest spot on the evaporator
- 7. Watch the A.S. go through a cycle or two to make sure everything is working properly.



STATUS AND ERROR CODES

Check if the Green AircoSaver LED is flashing. Flash rate indicates status/error code (1 flash = status 1, 2 flashes = 2 etc.)

Please note that the AircoSaver control cycle always begins with an OFF-Period of the compressor to allow calibration and to prevent short-cycling.

1	Power cut protection (compressor off)	(1 minute)
2	Standby and sensing for cooling (relay closed)	(2 minutes)
3	Efficiency Sensing (compressor on)	(approx. 2.5 - 9 minutes)
4	Dynamic Learning (compressor on)	(3 - 15 minutes)
5	Anti short cycle time (compressor off)	(3 minutes
6	Temperature sensing (compressor off)	(0 - 6 minutes)
7	Sensor Error: shorted/open/out of range (relay closed)	