

FRESH AIR & ECONOMIZER GUIDE

FRESH AIR CONFIGURATION

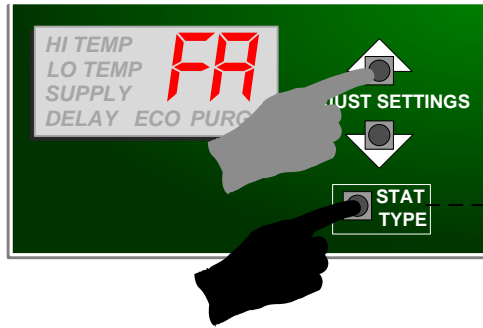
1. PRESS STAT TYPE BUTTON TO SELECT ZONE 4

2. PRESS UP ▲ BUTTON TO SELECT FA

3. PRESS STAT TYPE AGAIN

4. PRESS ▲▼ TO SELECT THE # OF MINUTES PER HOUR FOR FRESH AIR RUN TIME (IN 5 MINUTE INCREMENTS)

5. PRESS STAT TYPE AGAIN (OR WAIT 5 SECONDS) TO STORE SETTINGS

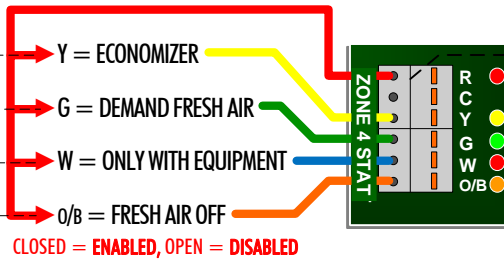
BASIC FRESH AIR OPERATION

SMARTZONE-4X WILL AUTOMATICALLY ENERGIZE FAN (G) AND OPEN THE FRESH AIR DAMPER (ZONE 4) FOR A CONFIGURABLE # MINUTES PER HOUR (FRESH AIR RUN TIME) FRESH AIR RUN-TIME IS ATTEMPTED DURING EQUIPMENT CALLS BUT WILL BE COMPLETED AT THE END OF THE HOUR AUTOMATICALLY TO SATISFY THE FRESH AIR RUN-TIME SET BY USER EVEN IF EQUIPMENT HAS NOT RUN

ADVANCED FRESH AIR

WHEN ZONE 4 IS CONFIGURED AS FRESH AIR, CONNECTING A SWITCH OR SENSOR (24VAC) TO THE ZONE 4 THERMOSTAT TERMINALS WILL ACTIVATE ADVANCED FRESH AIR FEATURES.

FOR BASIC FRESH AIR: DO NOT CONNECT THESE TERMINALS.



Y = ECONOMIZER / FREE COOLING
(SEE BACK OF PAGE FOR DETAILS)

G = DEMAND FRESH AIR / VENT
TURN ON FRESH AIR MANUALLY, EQUIPMENT G WILL
ENERGIZE AND FRESH AIR DAMPER WILL OPEN

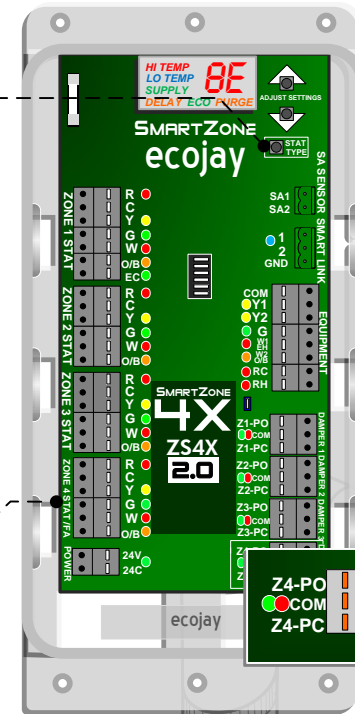
W = ONLY WITH EQUIPMENT
ENERGIZE THIS TERMINAL AND FRESH AIR WILL ONLY
RUN WITH EQUIPMENT RUN TIME (EVEN IF MORE MINUTES
HAVE BEEN SET FOR THE HOUR)

O/B = FRESH AIR OFF
FRESH AIR IS TOTALLY DISABLED, AUTOMATIC # MINUTES
PER HOUR RUN TIME, ECONOMIZER MODE, AND DEMAND
FRESH AIR ALL WILL NOT RUN.

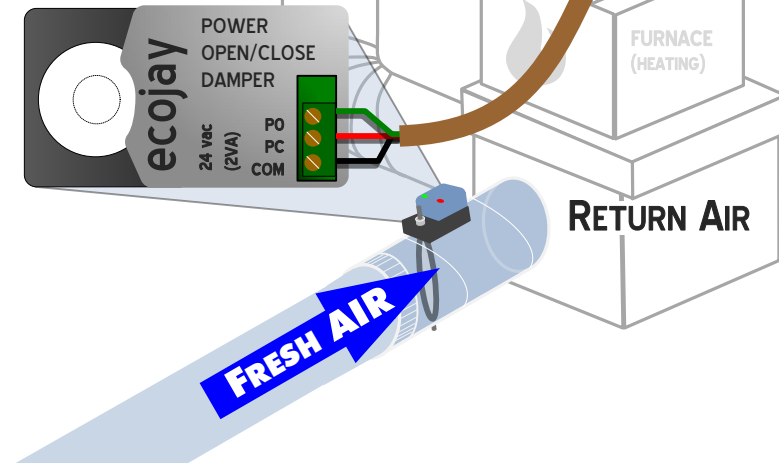
USING OUTSIDE
AIR TEMPERATURE,
THE FRESH AIR
THERMOSTAT
WILL ENABLE
ECONOMIZER ON
SMARTZONE-4X



NOTE: A HUMIDITY OR ENTHALPY
SENSOR COULD ALSO BE USED
TO ENABLE ECONOMIZER.



TAKE ADVANTAGE OF
CAPABILITIES BUILT-IN
SMARTZONE-4X WITH A
FRESH AIR DAMPER AND
ECONOMIZER "FRESH AIR"
THERMOSTAT.
BY AUTOMATICALLY
UTILIZING OUTSIDE AIR
INSTEAD OF
COMPRESSOR WHEN
ECONOMIZER INPUT IS
ENABLED, SAVE
EQUIPMENT RUN TIME
AND ENERGY.



FOR MORE INFORMATION
ABOUT FRESH AIR SETUP SEE
"SMARTZONE INSTALL GUIDE"
AVAILABLE AT ECOJAY.COM



SMARTZONE ECONOMIZER OPERATION

WHEN THE Y TERMINAL ON ZONE 4 IS ENERGIZED BY AN OUTDOOR SENSOR, A COOLING CALL FROM ANY OTHER THERMOSTAT (ZONE 1 – 3) WILL ACTIVATE ECONOMIZER MODE.

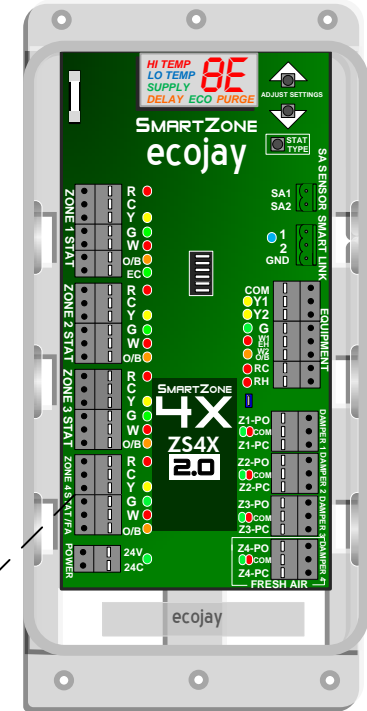
1. FRESH AIR DAMPER (Z-4) WILL OPEN
2. EQUIPMENT FAN (G) WILL ENERGIZE
3. ZONE DAMPERS CALLING FOR COOLING WILL OPEN
4. EQUIPMENT COMPRESSOR (Y1) WILL NOT ENERGIZE INITIALLY
5. IF THE SUPPLY TEMPERATURE DROPS BELOW THE LOW TEMP LIMIT**, THE FRESH AIR DAMPER WILL CLOSE BUT G WILL CONTINUE TO RUN UNTIL THE SUPPLY TEMPERATURE RISES BACK ABOVE LOW TEMP LIMIT
6. ECONOMIZER MODE WILL STOP (FA DAMPER CLOSES) AND NORMAL COOLING (Y1) WILL START IF THE SUPPLY TEMPERATURE RISES ABOVE THE ECONOMIZER HI TEMP LIMIT FOR 3 MINUTES. (SEE RIGHT TO SET THE ECONOMIZER HI TEMP LIMIT)

ECONOMIZER HI TEMP SETTING

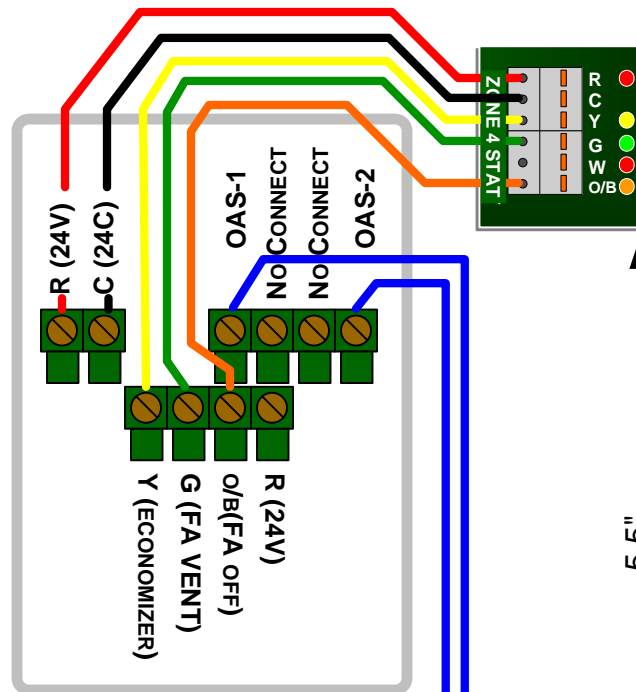
TO SET THE ECONOMIZER HI TEMP LIMIT:

1. MAKE SURE ZONE 4 IS SET FOR "FA" (SEE OTHER SIDE)
2. HOLD THE DOWN ▼ BUTTON FOR 6 SECONDS AND RELEASE
3. "ECO AND HI TEMP" SHOULD FLASH ON THE DISPLAY, THEN USE THE ▲ ▼ BUTTONS TO SET (DEFAULT = 60, RANGE = 58 – 68)

**NOTE: THE LOW TEMP LIMIT FOR ECONOMIZER IS THE SAME AS THE "LO TEMP" LIMIT FOR EQUIPMENT CUT-OUT.



FRESH AIR (ECONOMIZER) THERMOSTAT PART # AFET



WIRING

OUTSIDE AIR
SENSOR (OAS)



BUTTONS: OUTDOOR TEMP SETPOINT

USE THE UP AND DOWN ARROW BUTTONS TO ADJUST THE "OUTDOOR TEMPERATURE SETPOINT" WHEN OUTSIDE AIR TEMPERATURE IS BELOW THIS SETPOINT, THE SMARTZONE CONTROLLER WILL BE SET TO "ECONOMIZER MODE" (SEE BELOW)

ECONOMIZER – OFF/AUTO

PRESS THE "FREE COOL" BUTTON TO CHANGE FROM OFF TO AUTO.

OFF = OUTSIDE TEMPERATURE IS IGNORED AND THE ECONOMIZER OUTPUT (Y) IS OFF REGARDLESS OF OUTSIDE TEMPERATURE.

AUTO = WHEN OUTSIDE TEMPERATURE IS BELOW OUTDOOR TEMP SETPOINT THE ECONOMIZER OUTPUT (Y) WILL BE ENERGIZED. WHEN OUTSIDE TEMPERATURE IS ABOVE "OUTDOOR TEMP SETPOINT" THE ECONOMIZER OUTPUT (Y) IS OFF.

VENT (FRESH AIR) – ON/OFF

PRESS THE "VENT" BUTTON TO TURN ON OR OFF FRESH AIR. THIS WILL MAKE A DEMAND CALL TO THE SMARTZONE CONTROLLER TO MANUALLY BRING ON FRESH AIR.