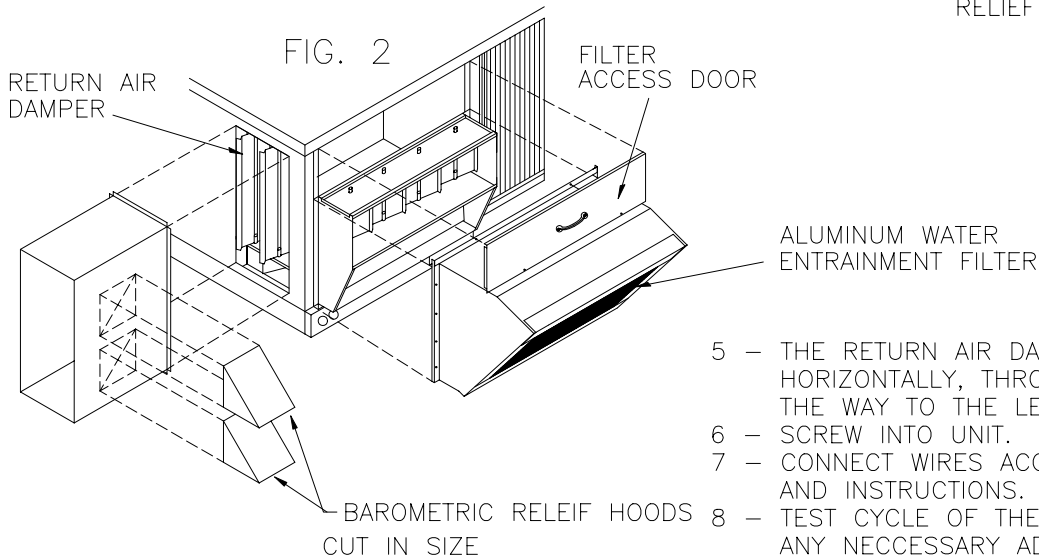
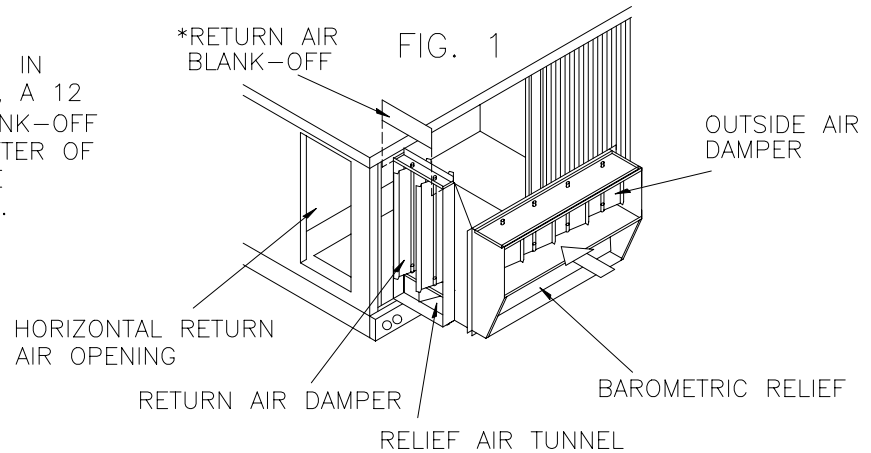


# 1105, 1107 & 1177-HEC

## 100% BAROMETRIC RELIEF SLIDE-IN HORIZONTAL ECONOMIZER INSTALLATION INSTRUCTIONS

- 1 - CAREFULLY REMOVE ECONOMIZER FROM BOX.
- 2 - REMOVE FILTER ACCESS PANEL WITH DOOR FROM UNIT.
- 3 - REMOVE FILTER(S) FROM UNIT.
- 4 - SLIDE ECONOMIZER INTO UNIT AS SHOWN IN FIGURE 1. \*FOR UNIT SIZES 012 & 014, A 12 5/8" X 2 3/4" 18 GA. GALVANIZED BLANK-OFF MUST BE SCREWED OVER THE TOP SPLITTER OF THE RETURN AIR DAMPER FRAME BEFORE SLIDING THE ECONOMIZER INTO THE UNIT. (USE 2 - 10 X 1/2" TEK SCREWS)



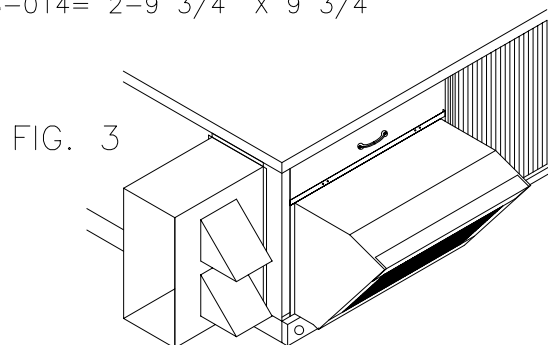
004-007= 2- 7 3/4" X 7 3/4"  
008-014= 2- 9 3/4" X 9 3/4"

- 5 - THE RETURN AIR DAMPER WILL SLIDE HORIZONTALLY, THROUGH THE OPENING AND ALL THE WAY TO THE LEFT.
- 6 - SCREW INTO UNIT.
- 7 - CONNECT WIRES ACCORDING TO THE DIAGRAMS AND INSTRUCTIONS.
- 8 - TEST CYCLE OF THE ECONOMIZER AND MAKE ANY NECESSARY ADJUSTMENT.
- 9 - HORIZONTALLY INSTALL THE FIELD SUPPLIED DUCT OVER THE OPENING. SCREW IN PLACE AND SEAL.
- 10 - CUT OPENINGS IN THE RETURN DUCT FOR THE TWO BAROMETRIC RELIEF HOODS. FASTEN THE HOODS TO THE DUCT AS REQUIRED. (SEE FIGURE 2)

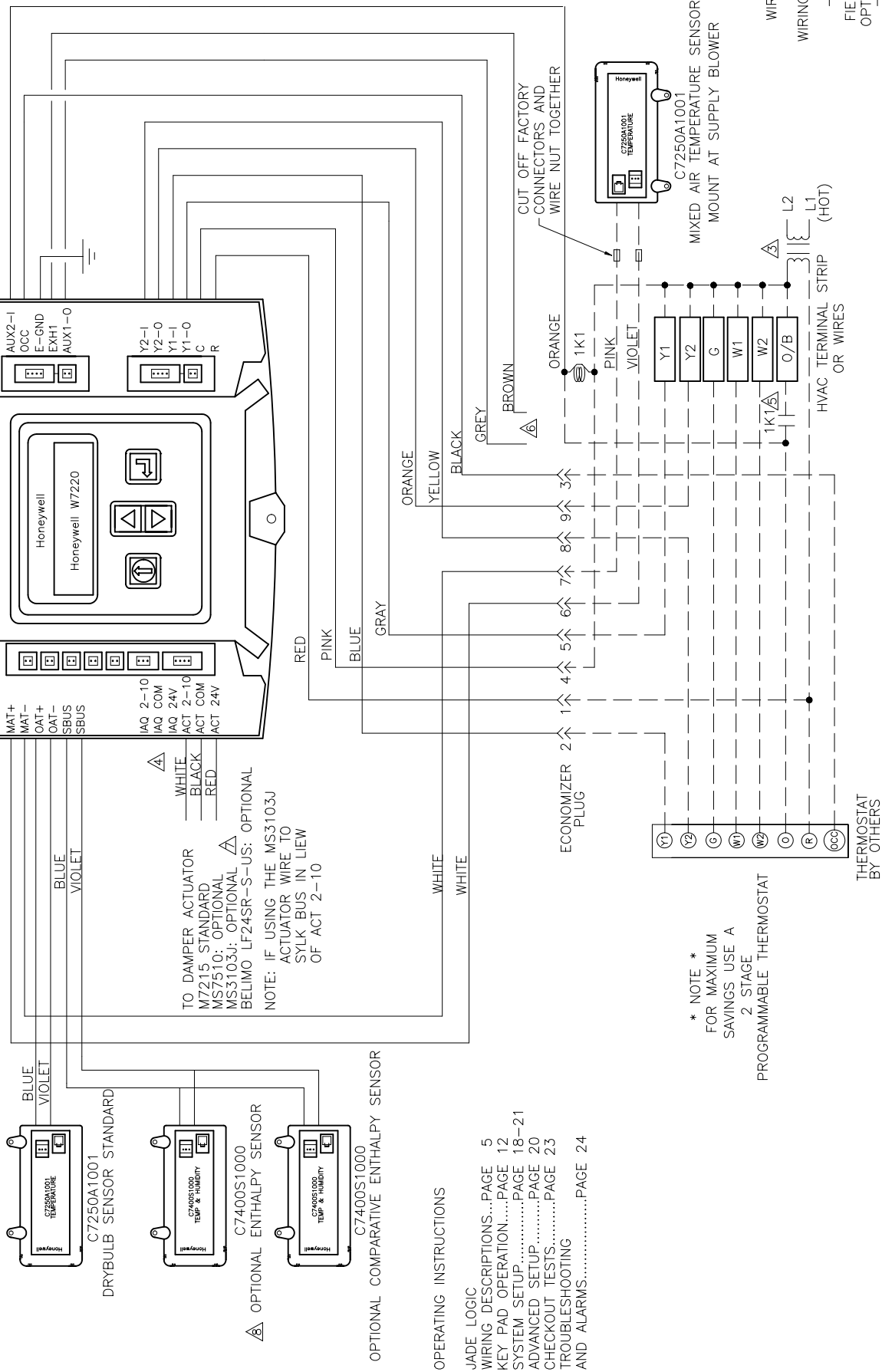
#### OPENING SIZES

004-007= 2-7 3/4" X 7 3/4"  
008-014= 2-9 3/4" X 9 3/4"

- 11 - INSTALL THE OUTSIDE AIR HOOD OVER THE OUTSIDE AIR DAMPER OPENING. ALIGN THE PRE PUNCHED HOLES TO THE ONES ON THE UNIT AND SCREW IN PLACE.
- 12 - REPLACE THE OUTSIDE AIR FILTER(S) IN THE UNIT.
- 13 - INSTALL FILTER ACCESS DOOR UP AND UNDER THE TOP OF THE UNIT AND OVER THE TOP OF FLANGE OF THE OUTSIDE AIR HOOD AND SECURE. TWO FILTER ACCESS DOORS ARE SUPPLIED TO ACCOMODATE DIFFERENT UNIT HEIGHTS. DISCARD THE UNUSED DOOR. (SEE FIGURE 3)



**JADE MODULATING ECONOMIZER CONTROLS  
CARRIER GAS ELECTRIC, COOLING ONLY & HEAT PUMP UNITS**



FOR: Carrier 3 Thru 27.5 Ton Commercial Units  
 JADE Economizer Controls

PART NO:

PROJECT:  
 DISTRIBUTOR:

ENGINEER:  
 DRAWING NO: 12100co SW 3.04.13

DATE:

APPROVED BY: / /



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FOR: JADE ECONOMIZERS

PART NO:

## MODULATING ECONOMIZER CONTROLS GAS ELECTRICS, COOLING ONLY AND HEAT PUMP UNITS PAGE 2

- ① POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.
- ② MOTOR SPRING—RETURNS CLOSED WHEN UNIT IS NOT RUNNING.
- ③ ENSURE THAT EQUIPMENT TRANSFORMER IS SIZED TO HANDLE THE EXTRA LOAD OF THE ECONOMIZER AND ACTUATOR.
- ④ OPTIONAL DEMAND CONTROL VENTILATION (DCV) CO2 SENSOR WITH 2-10VDC OUTPUT. WIRE HARNESS EXTENSION PROVIDED WITH THE CO2 SENSOR.
- ⑤ WHEN USING A HEATPUMP WITH DEFROST FEEDBACK, ADD AN ISOLATION RELAY BETWEEN O AND C. (FIELD PROVIDED AND INSTALLED).
- ⑥ 24 VAC OUTPUT WHEN PROGRAMMED CAP OFF IF NOT USED (SEE PAGE 6 FOR ACTUATOR WIRING OPTIONS). NOTE: ON/OFF ACTUATORS CAN BE USED ON THE EXH1 OR AUX1-O TERMINALS WITH GROUND TO THE C TERMINAL. WHEN PROGRAMMING THE EXH1 OR AUX1-O, THE % IS THE PERCENT OPEN POSITION OF THE OUTDOOR AIR DAMPER WHEN THE EXH1 OR AUX1-O TERMINAL IS ENERGIZED AND THE 2-POS DAMPER OPENS 100%. IF USING THE AUX1-O TERMINAL PROGRAM AUX1-O FOR EXH2.
- ⑦ OPTIONAL MS3103J COMMUNICATING ACTUATOR AVAILABLE (SPECIAL ORDER CONTACT FACTORY).
- ⑧ WHEN USING THE SYLKBUS SENSORS THERE WILL BE A SLIGHT DELAY WHILE THE JADE CONTROLLER AND THE SENSOR/S COMMUNICATE. ANALOG SENSORS DO NOT COMMUNICATE ON THE SYLKBUS AND OUTPUT A 20k OHM SIGNAL TO THE JADE CONTROLLER SO THE RESPONSE TIME IS INSTANTANEOUS.

NOTE: JADE WILL BE IN "SET UP" MODE FOR THE FIRST 60 MINUTES AFTER POWER UP. IF A SENSORS FOR THE OA OR SYLKBUS DEVICE (SENSOR, ACTUATOR) IS DISCONNECTED DURING THE SET UP MODE, THE JADE WILL NOT ALARM THE FAILURE. THE MA SENSOR IS A SYSTEM "CRITICAL" SENSOR, IF THE MA SENSOR IS REMOVED DURING THE SET UP MODE, THE JADE WILL ALARM. AFTER 60 MINUTES THE JADE CONTROLLER WILL CHANGE TO OPERATION MODE AND ALL COMPONENTS REMOVED OR FAILED WILL ALARM.

PROJECT:

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DRAWING NUMBER: 12100CO.DWG

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3.04.13