

INSTALLATION INSTRUCTIONS SERIES 8500-CONVECTOR

BASE UNIT MODEL DESIGNATION:

85	1	5	125	H	B	DST1
1	2	3	4	5	6	7

DIGIT 1. SERIES, ALWAYS 85

DIGIT 2. FRAME SIZE (INCHES) DEPTH X HEIGHT

1= 3" X 10"

2= 5" X 14"

3= 5" X 20"

DIGIT 3. LENGTH IN FEET (2 THRU 10)

2= 2 FEET

0= 10 FEET

DIGIT 4. WATTS PER FOOT (WATTAGE PER LINEAR FOOT) MULTIPLY THIS VALUE BY UNIT LENGTH FOR TOTAL WATTS.

MAY BE ANY VALUE BASED UPON CROSS SECTIONAL SIZE AS INDICATED BELOW.

1= 100 THRU 250

2= 100 THRU 500

3= 100 THRU 750

DIGIT 5. RATED VOLTAGE (ALL UNITS ARE SINGLE PHASE)

E= 120V

F= 208V

H= 240V

G= 277V

DIGIT 6. AIR FLOW

B= BOTTOM IN - TOP OUT

F= FRONT IN - TOP OUT

DIGIT 7. FACTORY INSTALLED INTEGRAL OPTIONS

R1= SINGLE POLE (SP) SILENT THERMAL RELAY WITH 120VAC CONTROL.

R2= SINGLE POLE (SP) SILENT THERMAL RELAY WITH 24VAC CONTROL.

DS= DOUBLE POLE DISCONNECT SWITCH.

T1= SINGLE POLE (SP) THERMOSTAT.

T2= DOUBLE POLE (DP) THERMOSTAT.

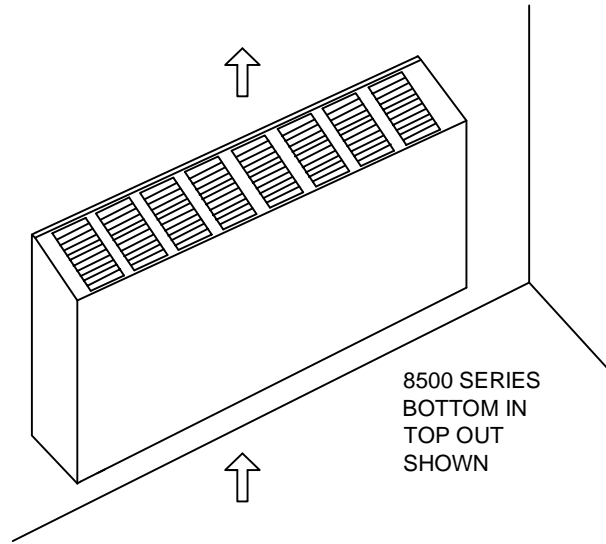
*ONLY T1 OR T2 OPTION AVAILABLE ON SIZE 1 (3 X 10) UNITS. ON SIZE 2 AND 3 UNITS, UNIT MAY HAVE ANY COMBINATION OF 2 EACH OF RELAY, DISCONNECT SWITCH AND OR THERMOSTAT.

WARNING: DO NOT INSTALL HEATER BELOW AN ELECTRICAL CONVENIENCE OUTLET. DO NOT INSTALL HEATER AGAINST PAPERBOARD OR LOW DENSITY FIBERBOARD SURFACES.

CAUTION: DO NOT OPERATE HEATER WITH FRONT COVER REMOVED. THIS HEATER GENERATES HIGH TEMPERATURES. KEEP ELECTRICAL CORDS, DRAPES AND OTHER FURNISHINGS AWAY FROM HEATER.

CAUTION: PLEASE READ THROUGH THESE INSTRUCTIONS CAREFULLY BEFORE YOU BEGIN THE INSTALLATION AND FAMILIARIZE YOURSELF WITH THEM.

1. WHENEVER INSTALLING OR SERVICING THIS EQUIPMENT, BE SURE THE POWER IS OFF AT THE MAIN BREAKER OR SWITCH.
2. ALL WIRING MUST CONFORM TO LOCAL AND NATIONAL CODES.
3. DO NOT INSTALL A HEATER NEAR WATER OR IN A CORROSIVE OR EXPLOSIVE ATMOSPHERE, NOR ON OR NEAR HIGHLY FLAMMABLE MATERIAL SUCH AS PAPER OR FIBER BOARD INSULATION TYPE PRODUCTS.
4. HIGH TEMPERATURE: KEEP ELECTRICAL CORDS, FURNITURE, DRAPERIES OR ANY OTHER BLOCKING MATERIAL AT LEAST 4 INCHES AWAY FROM THE TOP OR FRONT OF THE HEATER.
5. BE SURE THE SUPPLY VOLTAGE IS THE SAME AS WHAT IS LISTED ON THE HEATER NAMEPLATE.
6. DO NOT INSTALL THE HEATER BELOW AN ELECTRICAL CONVENIENCE RECEPTACLE.



STEP 1: CONCEALED DAMAGE:

THE EQUIPMENT IS IN GOOD CONDITION WHEN IT LEAVES THE FACTORY. BE SURE TO INSPECT THE CARTONS CAREFULLY FOR CONCEALED DAMAGE AND REPORT IT TO THE CARRIER IMMEDIATELY.

STEP 2: SELECT LOCATION:

SELECT MOUNTING LOCATION WHICH ALLOWS A 6 INCH MINIMUM AIR INTAKE SPACE IN FRONT OF A FRONT-IN (FIGURE 1) UNIT, OR A 4 INCH MINIMUM AIR INTAKE SPACE BELOW A BOTTOM-IN UNIT (FIGURE 2). NO RESTRICTIONS ARE ALLOWED ABOVE EITHER TYPE OF HEATER.

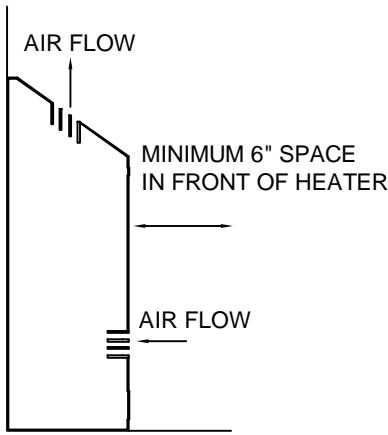


FIGURE 1

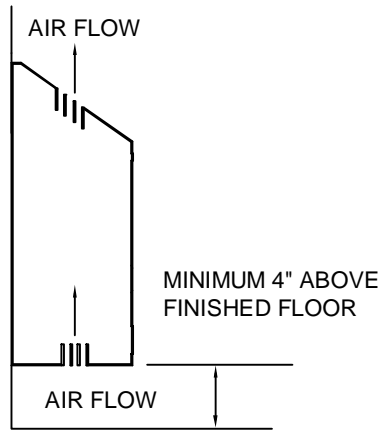
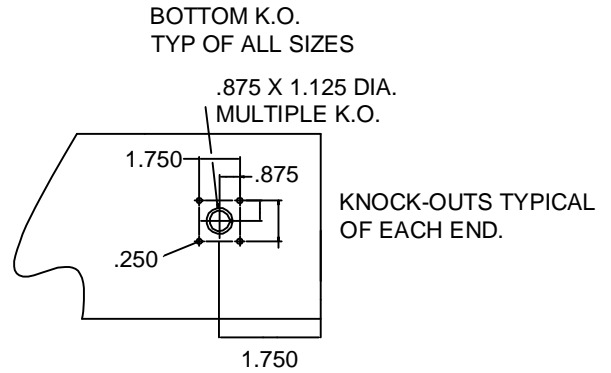


FIGURE 2



HEATER END SECTION

STEP 3: REMOVE FRONT COVER:

REMOVE FRONT COVER BY LOCATING AND REMOVING SCREWS IN OUTLET LOUVER OPENINGS. PULL COVER AT UPPER CORNER UNTIL CLEAR. PULL UPWARDS TO CLEAR PINS AT BOTTOM OF HEATER.

STEP 4: ROUGH IN WIRING:

DETERMINE LOCATION OF SUPPLY WIRING KNOCK-OUT TO BE USED BEFORE INSTALLING ROUGH IN WIRING. SEE FIGURE 3. RUN BRANCH CIRCUIT WIRE OF PROPER SIZE AND VOLTAGE TO EITHER JUNCTION BOX. HEATERS, UP TO 32 AMPS TOTAL, MAY BE CONNECTED IN PARALLEL ON THE SAME BRANCH CIRCUIT. IF FIRST HEATER HAS AN INTEGRAL THERMOSTAT, HEATERS WITH A TOTAL AMPERAGE OF 25 AMPS MAY BE PARALLEL CONNECTED ON THE SAME BRANCH CIRCUIT. SEE FIGURE 4.

STEP 5: REMOVE COMPARTMENT COVER:

REMOVE WIRING COMPARTMENT COVER ON END OF HEATER, AS DETERMINED IN STEP 4 ABOVE, FOR ACCESS TO KNOCK-OUT AND SUPPLY CONNECTION POINT. PROVISION FOR SUPPLY WIRING CONNECTION HAS BEEN MADE AT EITHER END OF HEATER. THE LEAD WIRES AT EITHER END ARE FACTORY SPLICED WITH WIRE NUTS. SEPARATE THE WIRES AT THE END TO BE CONNECTED. NO CHANGE IN WIRING IS REQUIRED IN THE OPPOSITE WIRING BOX.

STEP 6: REMOVE KNOCK-OUTS:

REMOVE SELECTED WIRING KNOCK-OUT. PUNCH OUT SELECTED MOUNTING KNOCK-OUTS LOCATED IN REAR HEATER WALL.

STEP 7: MOUNT HEATER:

START SUPPLY WIRES THROUGH WIRING KNOCK-OUT AND SECURE WITH APPROVED CONNECTOR. POSITION HEATER ON WALL AND SECURE WITH SCREWS OR STUDS AND BOLTS.

STEP 8: COMPLETE WIRING:

CONNECT SUPPLY WIRES AS SHOWN IN DIAGRAM. WHEN CONNECTING TO PIGTAIL LEADS, USE WIRE NUTS OR CONNECTORS PROPERLY SIZED FOR THE WIRE SIZES INVOLVED. REPLACE WIRING COMPARTMENT COVER.

STEP 9: COMPLETE INSTALLATION:

SET THERMOSTAT CONTROL (IF SUPPLIED) TO DESIRED POSITION. REPLACE FRONT COVER.

FIGURE 3

VAR P/N	MODEL / END	DIM 'A'	DIM 'B'	DIM 'C'	DIM 'D'	DIM 'E'
-001	8500 -1 RIGHT END CAP	9.906	8.188	2.832	7.470	2.220
-002	8500 -1 LEFT END CAP	9.906	8.188	2.832	7.470	2.220
-003	8500 -2 RIGHT END CAP	13.812	10.750	4.832	11.344	3.037
-004	8500 -2 LEFT END CAP	13.812	10.750	4.832	11.344	3.037
-005	8500 -3 RIGHT END CAP	19.812	16.765	4.832	17.353	3.037
-006	8500 -3 LEFT END CAP	19.812	16.765	4.832	17.353	3.037

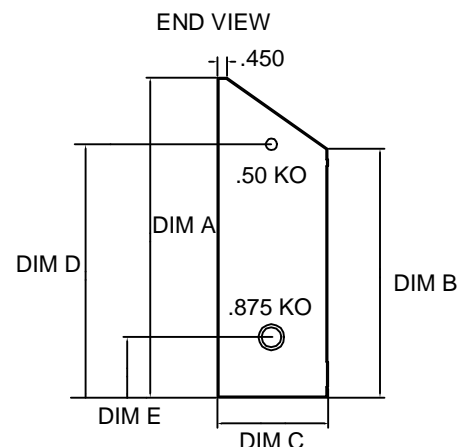
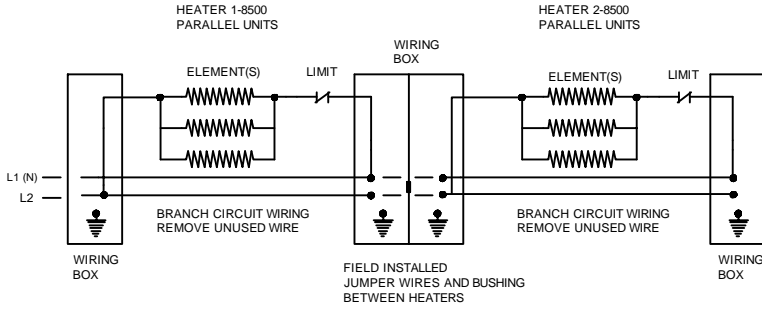
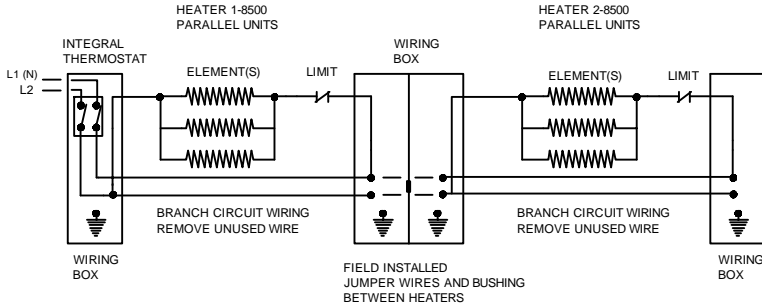


FIGURE 4:

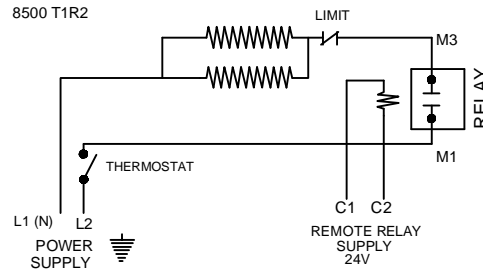
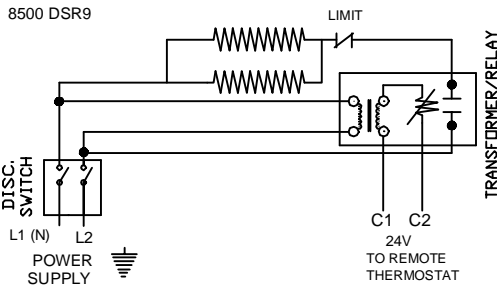
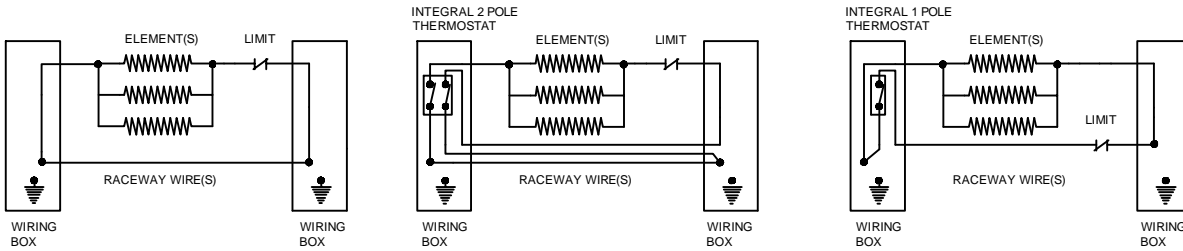


8500 SERIES HEATERS CONNECTED IN PARALLEL.
(HEATER REQUIRING UP TO 32 AMPS MAY BE CONNECTED ON THE SAME BRANCH CIRCUIT).



8500 SERIES HEATERS CONNECTED IN PARALLEL.
(FIRST HEATER WITH INTEGRAL THERMOSTAT- UP TO 25 AMPS MAY BE CONNECTED).

TYPICAL WIRING DIAGRAMS:



WIRING OF HEATERS: CONTROL OPTIONS NOT SHOWN:

