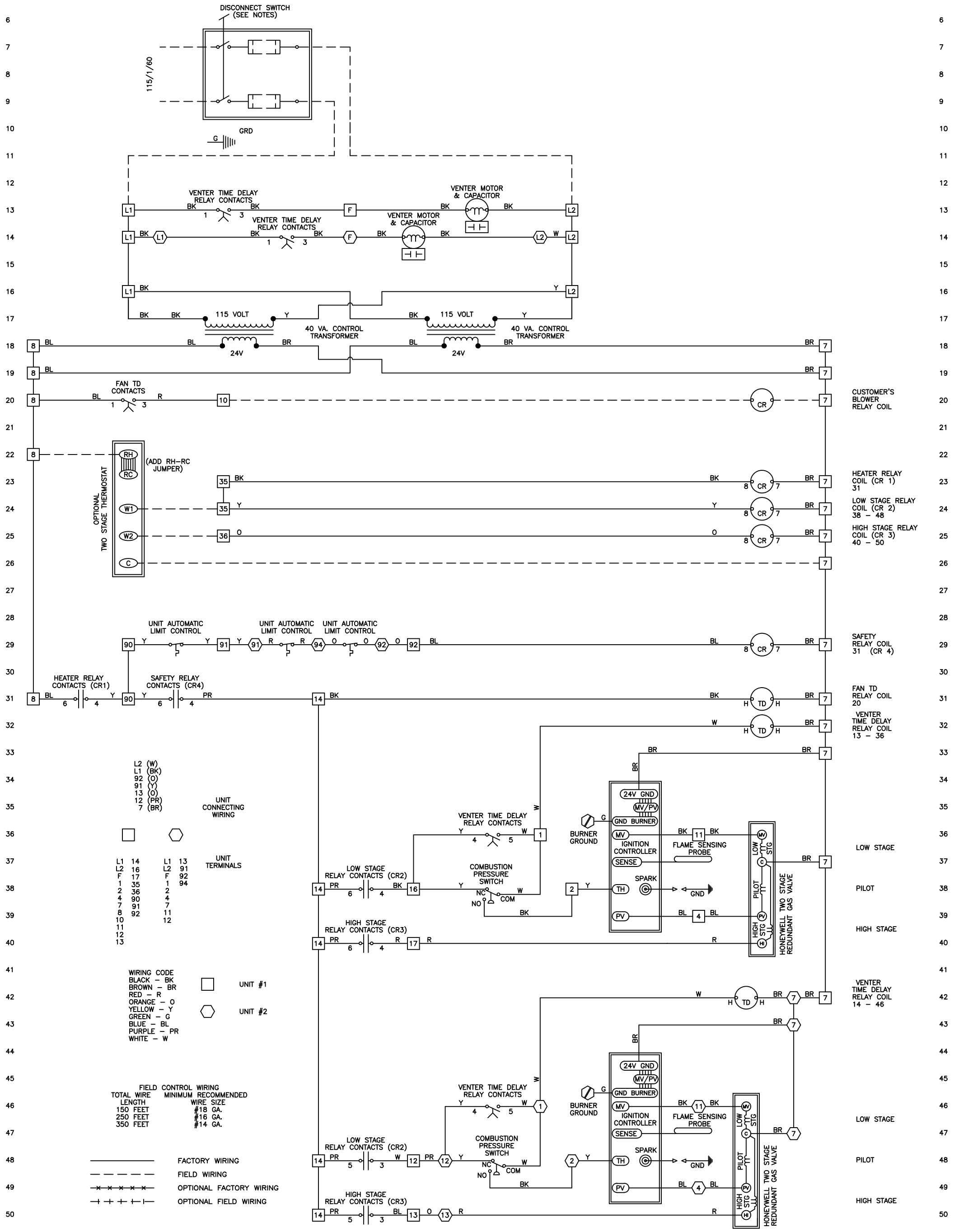
MODEL HRPD



OPERATING SEQUENCE

- SET THERMOSTAT SWITCH AT "OFF" POSITION.
- TURN ON POWER AND MANUAL GAS VALVE TO UNIT.
- SET THERMOSTAT SWITCH AT "AUTO" POSITION.
  - FIRING RATE IS CONTROLLED BY THE TWO STAGE THERMOSTAT.
  - ENERGIZING THE BLOWER MOTOR ON A CALL FOR HEAT.
- SET THERMOSTAT SWITCH AT "OFF" POSITION FOR SHUTDOWN.
  - BLOWER MOTOR REMAINS ON AS DETERMINED BY FAN TIME DELAY.

FIRING SEQUENCE: (OCCURS ON EACH UNIT ON A CALL FOR HEAT)

- ON A CALL FOR HEAT BY THE LOW STAGE OF THERMOSTAT.
  - THE VENTER MOTOR IS ENERGIZED AFTER A 15 SECOND (APPROX.) TIME DELAY.
- VENTER FLOW SWITCH SWITCHES FROM N.C. TO N.O. CONTACTS ENERGIZING THE PILOT GAS VALVE AND SPARK GAP TO PRODUCE A PILOT FLAME ON EACH OPERATING CYCLE. THE SENSING PROBE PROVES THE PRESENCE OF THE PILOT FLAME AND ENERGIZES THE SAFETY SWITCH PORTION OF THE CONTROL. THE SWITCH ACTION DE–ENERGIZES THE SPARK GAP AND ENERGIZES THE MAIN VALVE. THE MAIN GAS IGNITES AND UNIT FIRES AT LOW RATE.
- ON A CALL FOR HEAT BY THE HIGH STAGE OF THE THERMOSTAT THE UNIT FIRES AT FULL RATE.
- IF THE FLAME IS EXTINGUISHED DURING MAIN BURNER OPERATION, THE SAFETY SWITCH CLOSES THE MAIN VALVE AND RECYCLES THE SPARK GAP. ON UNIT EQUIPPED WITH G770NGC–4 LOCKOUT CONTROL, IF PILOT IS NOT ESTABLISHED WITHIN 120 SECONDS (APPROX.), UNIT LOCKS OUT AND MUST BE RESET BY INTERRUPTING POWER TO CONTROL CIRCUIT (SEE LIGHTING INSTRUCTIONS).

NOTE

- THE FOLLOWING CONTROLS ARE SUPPLIED BY REZNOR FOR FIELD INSTALLATION: NONE
- THE FOLLOWING CONTROLS ARE SUPPLIED AS OPTIONAL EQUIPMENT: THERMOSTAT
- DOTTED WIRING AND THE FOLLOWING CONTROLS ARE SUPPLIED AND INSTALLED BY OTHERS: BLOWER RELAY
- CAUTION: IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE APPLIANCE MUST BE REPLACED, IT MUST BE REPLACED WITH WIRING MATERIAL HAVING A TEMPERATURE RATING OF AT LEAST 105 DEGREES C., EXCEPT FOR ENERGY CUTOFF OR SENSOR LEAD WIRE WHICH MUST BE 150 DEGREES C.
- LINE AND BLOWER MOTOR BRANCH CIRCUIT WIRE SIZE SHOULD BE OF A SIZE TO PREVENT VOLTAGE DROP BEYOND FIVE PERCENT OF SUPPLY LINE VOLTAGE.
- USE #14 GA. WIRE FOR LINE AND MOTOR WIRING ON UNIT.
- USE #18 GA. WIRE FOR 24 VOLT CONTROL WIRING ON UNIT.
- WHEN PROVIDING OR REPLACING FUSES IN THE FUSIBLE DISCONNECT SWITCH USE DUAL ELEMENTS TIME DELAY FUSES AND SIZE ACCORDING TO 1.25 TIMES THE MAXIMUM TOTAL INPUT AMPS.
- DISCONNECT SWITCH IS FIELD FURNISHED OR AVAILABLE FROM FACTORY AS AN OPTION.