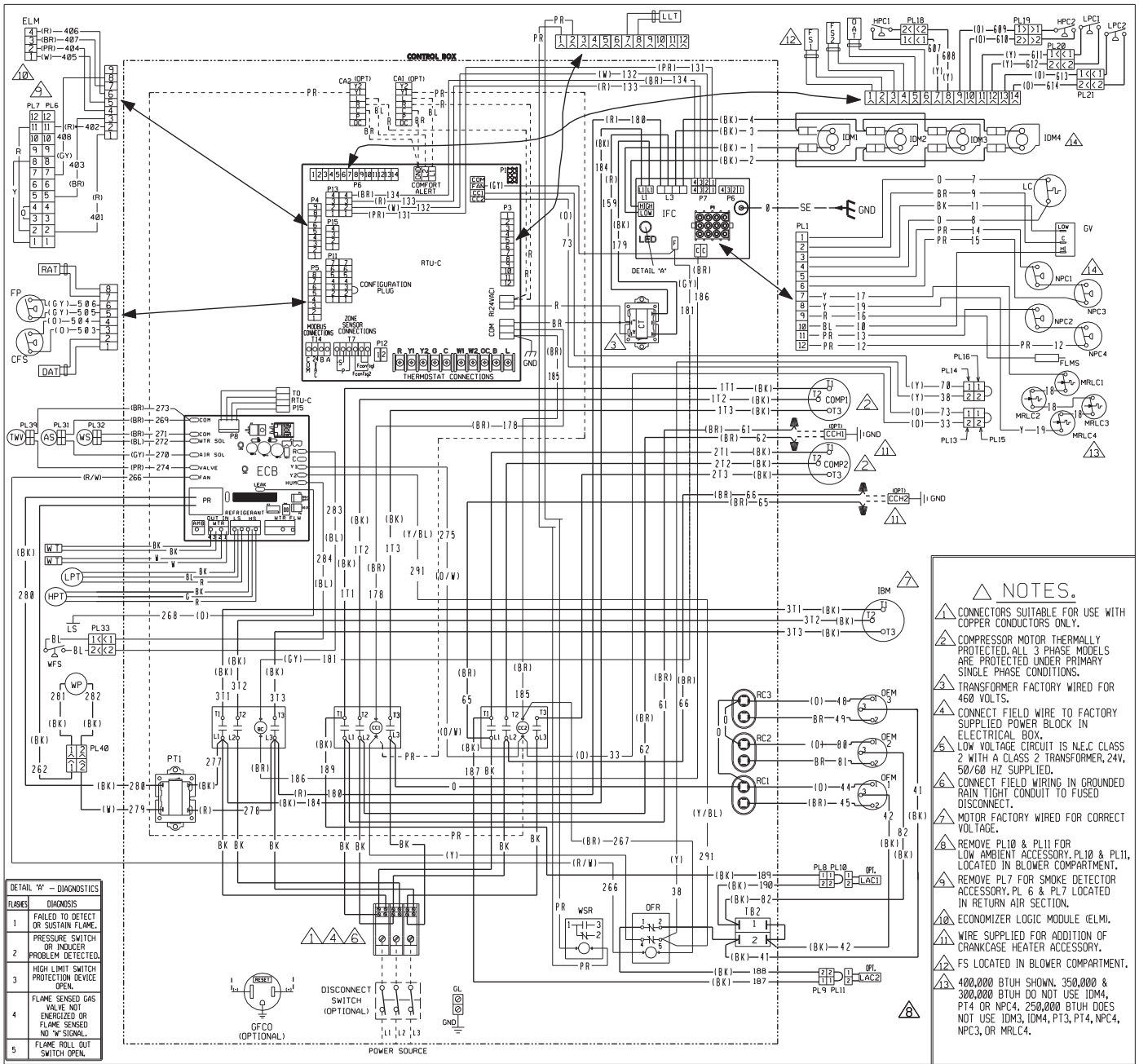



## NOTES.

1. CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY.
2. COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS ARE PROTECTED UNDER PRIMARY SINGLE PHASE CONDITIONS.
3. TRANSFORMER FACTORY WIRED FOR 460 VOLTS.
4. CONNECT FIELD WIRE TO FACTORY SUPPLIED POWER BLOCK IN ELECTRICAL BOX.
5. LOW VOLTAGE CIRCUIT IS N.E.C CLASS 2 WITH A CLASS 2 TRANSFORMER, 24V, 50/60 HZ SUPPLIED.
6. CONNECT FIELD WIRING IN GROUNDED RAIN TIGHT CONDUIT TO FUSED DISCONNECT.
7. MOTOR FACTORY WIRED FOR CORRECT VOLTAGE.
8. REMOVE PL10 & PL11 FOR LOW AMBIENT ACCESSORY. PL10 & PL11, LOCATED IN BLOWER COMPARTMENT.
9. REMOVE PL7 FOR SMOKE DETECTOR ACCESSORY. PL 6 & PL7 LOCATED IN RETURN AIR SECTION.
10. ECONOMIZER LOGIC MODULE (ELM).
11. WIRE SUPPLIED FOR ADDITION OF CRANKCASE HEATER ACCESSORY.
12. FS LOCATED IN BLOWER COMPARTMENT.
13. 400,000 BTUH SHOWN. 350,000 & 300,000 BTUH DO NOT USE IDM4, PT4 OR NPC4. 250,000 BTUH DOES NOT USE IDM3, IDM4, PT3, PT4, NPC4, NPC3, OR MRLC4.

### DETAIL "A" – DIAGNOSTICS

| FLASHES | DIAGNOSIS |
|---|---|
| 1 | FAILED TO DETECT OR SUSTAIN FLAME. |
| 2 | PRESSURE SWITCH OR INDUCER PROBLEM DETECTED. |
| 3 | HIGH LIMIT SWITCH PROTECTION DEVICE OPEN. |
| 4 | FLAME SENSED GAS VALVE NOT ENERGIZED OR FLAME SENSED NO "W" SIGNAL. |
| 5 | FLAME ROLL OUT SWITCH OPEN. |

## COMPONENT CODE

| | | | | | |
|---|---|---|---|---|---|
| AS | AIR SOLENOID | HPT | HIGH PRESSURE TRANSDUCER | RC | RUN CAPACITOR |
| BC | BLOWER CONTACTOR | IBM | INDOOR BLOWER MOTOR BELT DRIVE | RTU-C | ROOFTOP UNIT CONTROL |
| CA | COMFORT ALERT MODULE | IDM | INDUCED DRAFT MOTOR | SE | SPARK ELECTRODE |
| CC | COMPRESSOR CONTACTOR | IFC | INTEGRATED FURNACE CONTROL | TB | TERMINAL BLOCK |
| CCH | CRANKCASE HEATER | LAC | LOW AMBIENT COOLING CONTROL | TWV | THREE-WAY VALVE |
| CFS | CLOGGED FILTER SWITCH | LC | LIMIT CONTROL | WFS | WATER FLOW SWITCH |
| COMP | COMPRESSOR | LLT | LIQUID LINE TEMPERATURE | WP | WATER PUMP |
| CT | CONTROL TRANSFORMER | LPC | LOW PRESSURE CONTROL | WS | WATER SOLENOID |
| DAT | DISCHARGE AIR SENSOR | LPT | LOW PRESSURE TRANSDUCER | WSR | WATER SHUTOFF RELAY |
| DISC | DISCONNECT SWITCH | LS | LEAK SENSOR | WT | WATER TEMPERATURE SENSER |
| ECB | ESYNC CONTROL BOARD | MRLC | MANUAL RESET LIMIT CONTROL | | WIRE NUT |
| FLMS | FLAME SENSOR | NPC | NEGATIVE PRESSURE CONTROL | | |
| FP | FAN PROVING | OAT | OUTSIDE AIR SENSOR | | |
| FS | FREEZE SENSOR | OFM | OUTDOOR FAN MOTOR | | |
| GFCO | GROUND FAULT CONVENIENCE OUTLET | OFR | OUTDOOR FAN RELAY | | |
| GL | GROUND LUG | PL | PLUG | | |
| GND | GROUND | PR | PUMP RELAY | | |
| GV | GAS VALVE | PT | POWER TRANSFORMER | | |
| HPC | HIGH PRESSURE CONTROL | RAT | RETURN AIR SENSOR | | |

## WIRING INFORMATION

LINE VOLTAGE
- -FACTORY STANDARD
- -FACTORY OPTION
- -FIELD INSTALLED

LOW VOLTAGE
- -FACTORY STANDARD
- -FACTORY OPTION
- -FIELD INSTALLED

REPLACEMENT WIRE
- -MUST BE THE SAME SIZE AND TYPE OF INSULATION AS ORIGINAL (105° C MIN.)

WARNING
- -CABINET MUST BE PERMANENTLY GROUNDED AND CONFORM TO I.E.C., N.E.C., C.E.C., AND LOCAL CODES AS APPLICABLE.

## WIRE COLOR CODE

| | | | |
|---|---|---|---|
| BK | BLACK | O | ORANGE |
| BR | BROWN | PR | PURPLE |
| BL | BLUE | R | RED |
| G | GREEN | W | WHITE |
| GY | GRAY | Y | YELLOW |

# WIRING DIAGRAM

## RKHL-D180

460V 3 PH, 60 HZ.

ROOFTOP W/RTU-C

| DR. BY | APP. BY | DATE | DWG. NO. | REV |
|---|---|---|---|---|
| MGR | | 1-3-13 | 90-104652-02 | 00 |