



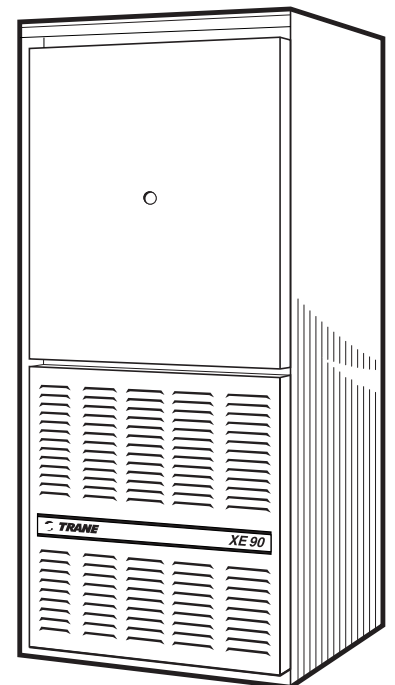
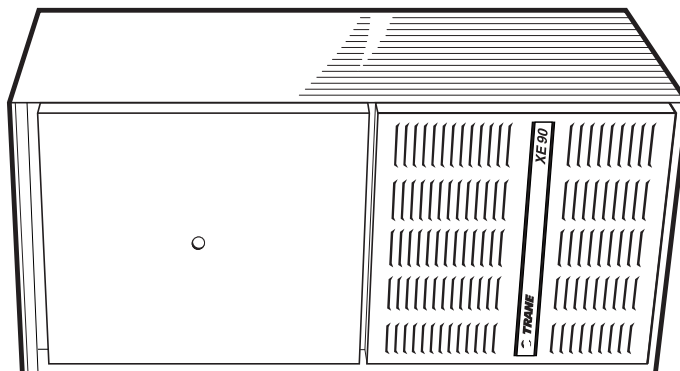
TRANE®

Downflow/Horizontal Condensing, Gas-Fired Furnace

XB 90

TDC1B040A9241A, TDC1B060A9361A
TDC1B080A9421A, TDC1C100A9481A
TDC1D120A9601A

**Single-Stage Fan Assisted
Combustion System**



PUB. NO. 22-1670-07



General Features

NATURAL GAS MODELS

Central Heating furnace designs are certified by the American Gas Association for both natural and L.P. gas. Limit setting and rating data were established and approved under standard rating conditions using American National Standards Institute standards.

SAFE OPERATION

The Integrated System Control has solid state devices, which continuously monitor for presence of flame, when the system is in the heating mode of operation. Dual solenoid combination gas valve and regulator provide extra safety.

QUICK HEATING

Durable, cycle tested, heavy gauge **aluminized steel heat exchanger** quickly transfers heat to provide warm conditioned air to the structure. **Low energy power vent blower**, to increase efficiency and provide a positive discharge of gas fumes to the outside.

BURNERS

Multiport Inshot burners will give years of quiet and efficient service. All models can be converted to **L.P. gas** without changing burners.

INTEGRATED SYSTEM CONTROL

Exclusively designed operational program provides total control of furnace limit sensors, blowers, gas valve, flame control and includes self diagnostics for ease of service. Also contains connection points for E.A.C./humidifier.

AIR DELIVERY

The variable speed, direct drive blower motor, has sufficient airflow for most heating and cooling requirements, will switch from heating to cooling speeds on demand from room thermostat. The blower door safety switch will prevent or terminate furnace operation when the blower door is removed.

STYLING

Heavy gauge steel and “wrap-around” cabinet construction is used in the cabinet with baked-on enamel finish for strength and beauty. The heat exchanger section of the cabinet is completely lined with foil faced fiberglass insulation. This results in quiet and efficient operation due to the excellent acoustical and insulating qualities of fiberglass. Built-in bottom pan and alternate bottom, left or right side return air connection provision.

FEATURES AND GENERAL OPERATION

The XV 80 High Efficiency Gas Furnaces employ a Hot Surface Ignition system, which eliminates the waste of a constant burning pilot. The integrated system control lights the main burners upon a demand for heat from the room thermostat. Complete front service access.

- a. Low energy power venter
- b. Vent proving pressure switch.

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| TDC1B060A9361A | |
| TDC1B080A9421A | |
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Features and Benefits

XB 90 STANDARD EQUIPMENT

- Downflow power supply 115/1/60
- Downflow convertible to horizontal on left side
- **Type 29-4C™** stainless steel secondary heat exchanger
- Inner blower doors
- Direct drive, 4-speed motor
- Hot surface igniter with adaptive heat up
- Accessory hook-up capability - Hum and EAC
- Quiet induced draft blower
- Blower door safety switch
- Dual solenoid combination gas valve & regulator
- PVC venting - 1 Pipe
- Left/right gas connection
- Selectable cooling fan off delay eliminates need for BAY24X045 time delay relay
- Integrated solid state control with self diagnostics
- 24 volt fuse
- Manual reset burner box limit
- **Optional extended warranties**



Features and Benefits

XB 90 OPTIONAL EQUIPMENT

| | |
|--|--------------------|
| Thermostat, Electronic, Non-programmable 1 Heating/1 Cool..... | TCONT200AN11AA [] |
| Thermostat, Electronic Programmable 1-Stage Heating/1-Stage Cooling | TCONT800AS11AA [] |
| Thermostat, Heating/Cooling Single Stage (Mounts Vertically)..... | BAYSTAT305 [] |
| Thermostat, Electronic Programmable 1-Stage Heating/1-Stage Cooling | BAYSTAT300 [] |
| Propane Conversion Kit..... | BAYLPKT210A [] |
| Electronic Air Filter, "Perfect Fit" High Efficiency (17-1/2" Wide Gas Furnace)..... | TFM175A9FR0 [] |
| Electronic Air Filter, "Perfect Fit" High Efficiency (21" Wide Gas Furnace)..... | TFM210A9FR0 [] |
| Electronic Air Filter, "Perfect Fit" High Efficiency (24-1/2" Wide Gas Furnace)..... | TFM245A9FR0 [] |
| Electronic Air Filter, "Perfect Fit" Standard Efficiency (17-1/2" Wide Gas Furnace)..... | TFP175A9FR0 [] |
| Electronic Air Filter, "Perfect Fit" Standard Efficiency (21" Wide Gas Furnace)..... | TFP210A9FR0 [] |
| Electronic Air Filter, "Perfect Fit" Standard Efficiency (24-1/2" Wide Gas Furnace)..... | TFP245A9FR0 [] |
| Coil Enclosure (17-1/2" Wide Cabinets) | BAYCLE17A1722A [] |
| Coil Enclosure (21" Wide Cabinets) | BAYCLE21A2130A [] |
| Coil Enclosure (24-1/2" Wide Cabinets) | BAYCLE24A2430A [] |
| Side Filter Rack | BAYFLTR200 [] |
| High Altitude Switch..... | BAYHALT239 [] |



General Data

PRODUCT SPECIFICATIONS ①

| MODEL | TDC1B040A9241A | TDC1B060A9361A | TDC1B080A9421A |
|-----------------------------------|---------------------------|---------------------------|---------------------------|
| TYPE | Downflow / Horizontal | Downflow / Horizontal | Downflow / Horizontal |
| RATINGS ② | | | |
| Input BTUH | 40,000 | 60,000 | 80,000 |
| Capacity BTUH (ICS) ③ | 38,000 | 56,000 | 74,000 |
| AFUE | 92.1 | 92.1 | 92.1 |
| Temp. rise (Min.-Max.) °F. | 30 - 60 | 35 - 65 | 35 - 65 |
| BLOWER DRIVE | DIRECT | DIRECT | DIRECT |
| Diameter - Width (In.) | 10 x 7 | 10 x 8 | 11 x 8 |
| No. Used | 1 | 1 | 1 |
| Speeds (No.) | 4 | 4 | 4 |
| CFM vs. in. w.g. | See Fan Performance Table | See Fan Performance Table | See Fan Performance Table |
| Motor HP | 1/5 | 1/3 | 1/2 |
| R.P.M. | 1080 | 1075 | 1075 |
| Volts/Ph/Hz | 115/1/60 | 115/1/60 | 115/1/60 |
| COMBUSTION FAN - Type | Centrifugal | Centrifugal | Centrifugal |
| Drive - No. Speeds | Direct - 1 | Direct - 1 | Direct - 1 |
| Motor HP - RPM | 1/55 - 3000 | 1/55 - 3000 | 1/25 - 3200 |
| Volts/Ph/Hz | 115/1/60 | 115/1/60 | 115/1/60 |
| FLA | 1.0 | 1.0 | 1.35 |
| FILTER — Furnished? | No | No | No |
| Type Recommended | High Velocity | High Velocity | High Velocity |
| Hi Vel. (No.-Size-Thk.) | 2 - 14x20 - 1in. | 2 - 14x20 - 1in. | 2 - 14x20 - 1in. |
| VENT — Size (in.) | 2 Round | 2 Round | 2 Round |
| HEAT EXCHANGER | | | |
| Type-Fired | Aluminized Steel - Type I | Aluminized Steel - Type I | Aluminized Steel - Type I |
| -Unfired | | | |
| Gauge (Fired) | 20 | 20 | 20 |
| ORIFICES — Main | | | |
| Nat. Gas. Qty. — Drill Size | 2 — 45 | 3 — 45 | 4 — 45 |
| L.P. Gas Qty. — Drill Size | 2 — 56 | 3 — 56 | 4 — 56 |
| GAS VALVE | Redundant - Single Stage | Redundant - Single Stage | Redundant - Single Stage |
| PILOT SAFETY DEVICE | | | |
| Type | Hot Surface Ignition | Hot Surface Ignition | Hot Surface Ignition |
| BURNERS — Type | Multiport Inshot | Multiport Inshot | Multiport Inshot |
| Number | 2 | 3 | 4 |
| POWER CONN. — V/Ph/Hz ④ | 115/1/60 | 115/1/60 | 115/1/60 |
| Ampacity (In Amps) | 4.7 | 9.1 | 11.4 |
| Max Overcurrent Protection (Amps) | 15 | 15 | 15 |
| PIPE CONN. SIZE (IN.) | 1/2 | 1/2 | 1/2 |
| DIMENSIONS | H x W x D | H x W x D | H x W x D |
| Crated (In.) | 41-3/4 x 19-1/2 x 30-1/2 | 41-3/4 x 19-1/2 x 30-1/2 | 41-3/4 x 19-1/2 x 30-1/2 |
| WEIGHT | | | |
| Shipping (Lbs.)/Net (Lbs) | 145 / 135 | 155 / 145 | 168 / 158 |

① Central Furnace heating designs are certified by ETL.

② Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet; Ratings should be reduced at the rate of 4% for each 1000 feet above sea level.

③ Based on U.S. government standard tests.

④ The above wiring specifications are in accordance with National Electrical Code; however, installations must comply with local codes.



General Data

PRODUCT SPECIFICATIONS ①

| MODEL | *DC1C100A9481A | *DC1D120A9601A |
|-----------------------------------|---------------------------|---------------------------|
| TYPE | Downflow / Horizontal | Downflow / Horizontal |
| RATINGS ② | | |
| Input BTUH | 100,000 | 120,000 |
| Capacity BTUH (ICS) ③ | 93,000 | 112,000 |
| AFUE | 92.1 | 92.1 |
| Temp. rise (Min.-Max.) °F. | 35 - 65 | 40 - 70 |
| BLOWER DRIVE | DIRECT | DIRECT |
| Diameter - Width (In.) | 11 x 10 | 11 x 10 |
| No. Used | 1 | 1 |
| Speeds (No.) | 4 | 4 |
| CFM vs. in. w.g. | See Fan Performance Table | See Fan Performance Table |
| Motor HP | 1/2 | 1/2 |
| R.P.M. | 1075 | 1075 |
| Volts/Ph/Hz | 115/1/60 | 115/1/60 |
| COMBUSTION FAN - Type | Centrifugal | Centrifugal |
| Drive - No. Speeds | Direct - 1 | Direct - 1 |
| Motor HP - RPM | 1/20 - 3450 | 1/20 - 3450 |
| Volts/Ph/Hz | 115/1/60 | 115/1/60 |
| FLA | 0.71 | 0.71 |
| FILTER — Furnished? | No | No |
| Type Recommended | High Velocity | High Velocity |
| Hi Vel. (No.-Size-Thk.) | 2 - 16x20 - 1in. | 2 - 16x20 - 1in. |
| VENT — Size (in.) | 2 Round | 3 Round |
| HEAT EXCHANGER | | |
| Type-Fired | Aluminized Steel - Type I | Aluminized Steel - Type I |
| -Unfired | | |
| Gauge (Fired) | 20 | 20 |
| ORIFICES — Main | | |
| Nat. Gas. Qty. — Drill Size | 5 — 45 | 6 — 45 |
| L.P. Gas Qty. — Drill Size | 5 — 56 | 6 — 56 |
| GAS VALVE | Redundant - Single Stage | Redundant - Single Stage |
| PILOT SAFETY DEVICE | | |
| Type | Hot Surface Ignition | Hot Surface Ignition |
| BURNERS — Type | Multipoint Inshot | Multipoint Inshot |
| Number | 5 | 6 |
| POWER CONN. — V/Ph/Hz ④ | 115/1/60 | 115/1/60 |
| Ampacity (In Amps) | 12.5 | 12.9 |
| Max Overcurrent Protection (Amps) | 15 | 15 |
| PIPE CONN. SIZE (IN.) | 1/2 | 1/2 |
| DIMENSIONS | H x W x D | H x W x D |
| Crated (In.) | 41-3/4 x 23 x 30-1/2 | 41-3/4 x 26-1/2 x 30-1/2 |
| WEIGHT | | |
| Shipping (Lbs.)/Net (Lbs) | 185 / 175 | 206 / 196 |

① Central Furnace heating designs are certified by ETL.

② Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet; Ratings should be reduced at the rate of 4% for each 1000 feet above sea level.

③ Based on U.S. government standard tests.

④ The above wiring specifications are in accordance with National Electrical Code; however, installations must comply with local codes.



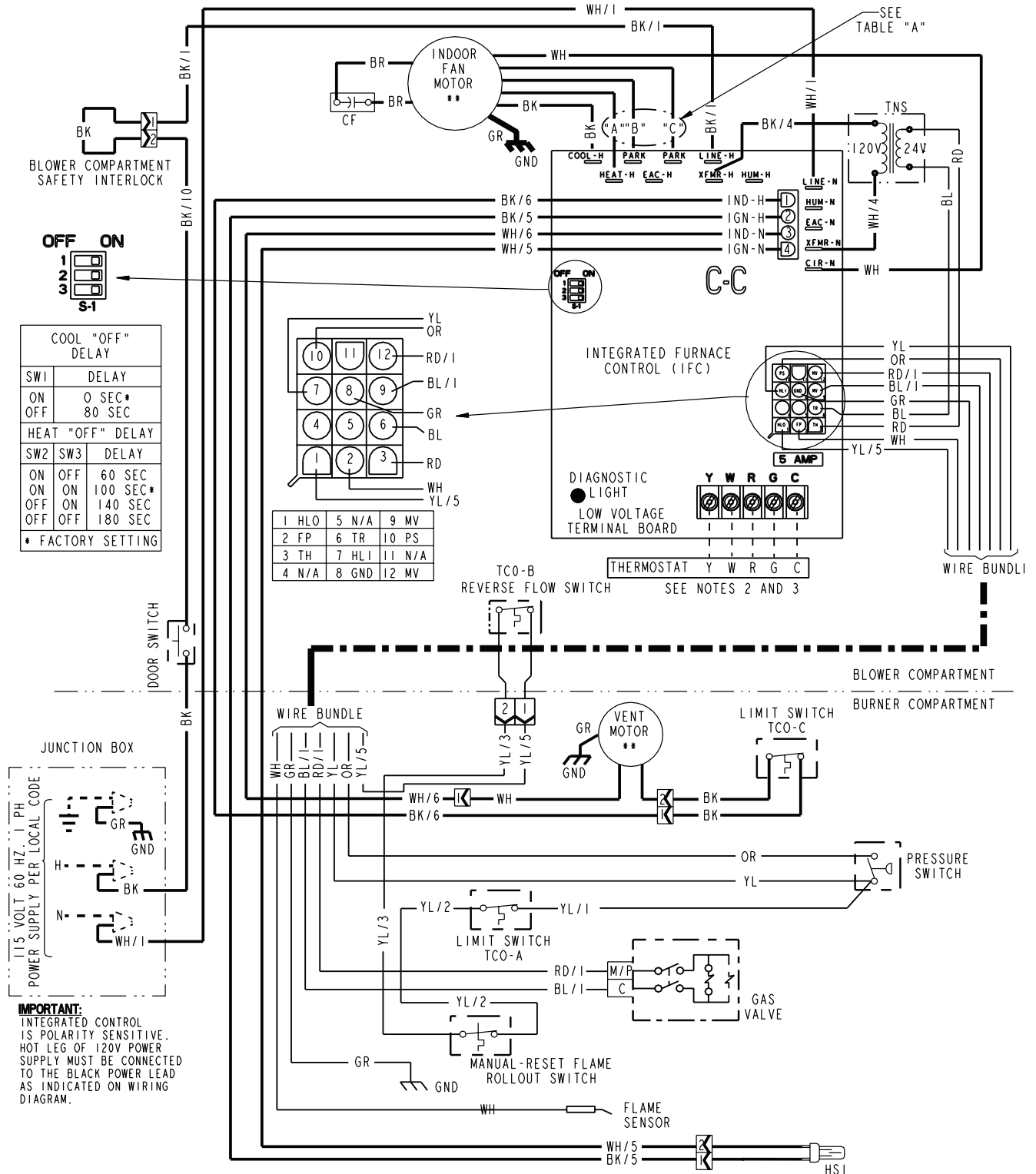
Performance Data

| FURNACE AIRFLOW (CFM) VS. EXTERNAL STATIC PRESSURE (in. w.c.) | | | | | | | | | | |
|---|-----------------------|------|------|------|------|------|------|------|------|------|
| MODEL | SPEED TAP | 0.10 | 0.20 | 0.30 | 0.40 | 0.50 | 0.60 | 0.70 | 0.80 | 0.90 |
| TDC1B040A9241A | 4 - HIGH - Black | 998 | 965 | 922 | 870 | 807 | 735 | 653 | 561 | 459 |
| | 3 - MED.-HIGH - Blue | 856 | 832 | 797 | 751 | 695 | 628 | 550 | 462 | 363 |
| | 2 - MED.-LOW - Yellow | 753 | 728 | 694 | 650 | 596 | 533 | 460 | 378 | 286 |
| | 1 - LOW - Red | 647 | 617 | 581 | 538 | 490 | 435 | 375 | 308 | 235 |
| TDC1B060A9361A | 4 - HIGH - Black | 1341 | 1285 | 1223 | 1156 | 1082 | 1004 | 919 | 829 | 734 |
| | 3 - MED.-HIGH - Blue | 1198 | 1161 | 1115 | 1060 | 996 | 923 | 842 | 751 | 652 |
| | 2 - MED.-LOW - Yellow | 1369 | 1232 | 1108 | 998 | 901 | 817 | 747 | 689 | 645 |
| | 1 - LOW - Red | 784 | 781 | 767 | 741 | 703 | 654 | 593 | 521 | 437 |
| TDC1B080A9421A | 4 - HIGH - Black | 1547 | 1498 | 1445 | 1386 | 1323 | 1254 | 1180 | 1101 | 1016 |
| | 3 - MED.-HIGH - Blue | 1487 | 1436 | 1382 | 1325 | 1265 | 1202 | 1137 | 1069 | 998 |
| | 2 - MED.-LOW - Yellow | 1388 | 1348 | 1302 | 1249 | 1191 | 1126 | 1056 | 979 | 896 |
| | 1 - LOW - Red | 1263 | 1234 | 1196 | 1150 | 1095 | 1032 | 960 | 879 | 790 |
| TDC1C100A9481A | 4 - HIGH - Black | 1892 | 1827 | 1762 | 1688 | 1614 | 1531 | 1448 | 1354 | 1260 |
| | 3 - MED.-HIGH - Blue | 1779 | 1726 | 1672 | 1605 | 1538 | 1460 | 1381 | 1291 | 1200 |
| | 2 - MED.-LOW - Yellow | 1630 | 1587 | 1544 | 1485 | 1426 | 1362 | 1297 | 1208 | 1119 |
| | 1 - LOW - Red | 1444 | 1416 | 1388 | 1348 | 1308 | 1246 | 1184 | 1108 | 1032 |
| TDC1D120A9601A | 4 - HIGH - Black | 2213 | 2138 | 2062 | 2001 | 1939 | 1863 | 1786 | 1706 | 1625 |
| | 3 - MED.-HIGH - Blue | 2057 | 2000 | 1943 | 1883 | 1822 | 1752 | 1681 | 1595 | 1508 |
| | 2 - MED.-LOW - Yellow | 1765 | 1733 | 1700 | 1652 | 1603 | 1552 | 1500 | 1424 | 1347 |
| | 1 - LOW - Red | 1468 | 1452 | 1435 | 1409 | 1382 | 1336 | 1290 | 1225 | 1159 |

| CFM VS. TEMPERATURE RISE | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|-----------------------------|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|
| MODEL | Cubic Feet Per Minute (CFM) | | | | | | | | | | | | | | | | | | | | |
| | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 | 2400 | | |
| TDC1B040A9241A | 56 | 48 | 42 | 37 | 34 | | | | | | | | | | | | | | | | |
| TDC1B060A9361A | | | 63 | 56 | 51 | 46 | 42 | 39 | 36 | 34 | | | | | | | | | | | |
| TDC1B080A9421A | | | | | 68 | 61 | 56 | 52 | 48 | 45 | 42 | 40 | | | | | | | | | |
| TDC1C100A9481A | | | | | | | | 65 | 60 | 56 | 53 | 50 | 47 | 44 | 42 | 40 | 38 | 37 | 35 | | |
| TDC1D120A9601A | | | | | | | | | | 67 | 63 | 59 | 56 | 53 | 51 | 48 | 46 | 44 | 42 | | |

Electrical Data

SCHEMATIC DIAGRAMS FOR GAS FURNACES





Electrical Data

SCHEMATIC DIAGRAMS FOR GAS FURNACES

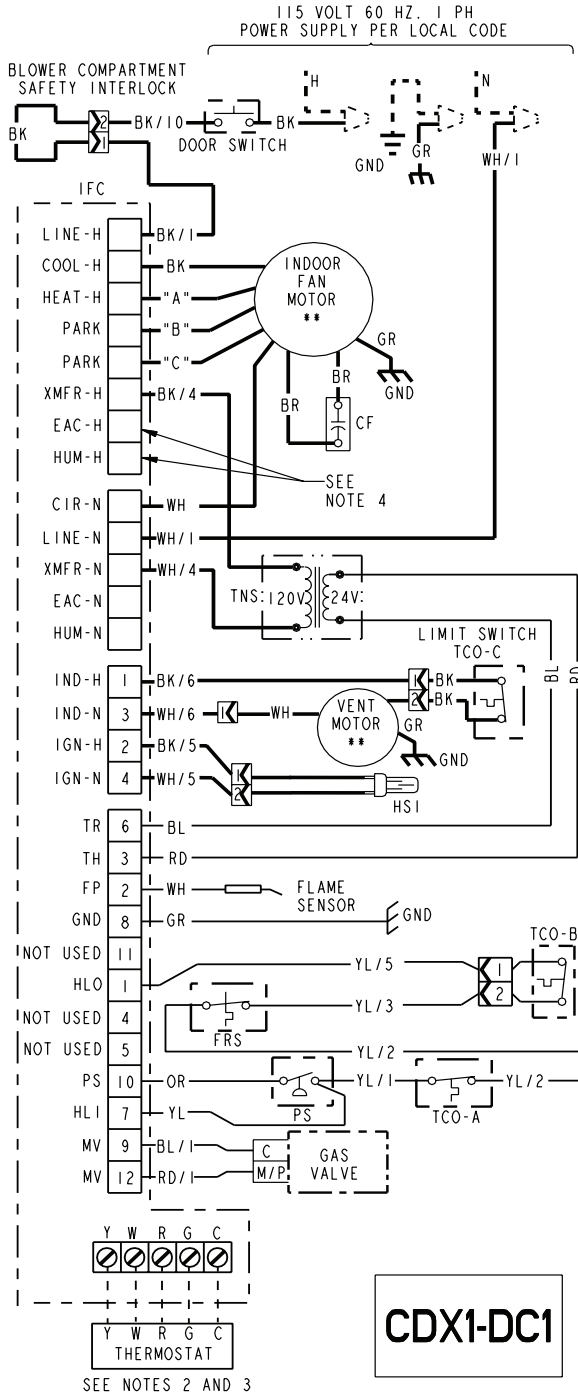


TABLE "A"
SPEED TAPS FOR I.D. FAN MOTOR

| MODEL | HEAT "A" | PARK "B" | PARK "C" |
|------------------------------------|----------|----------|----------|
| CDX1B040A9241A* #DC1B040A9241A* | YL | RD | BL |
| CDX1B060A9361A* #DC1B060A9361A* | YL | RD | BL |
| CDX1B080A9421A* #DC1B080A9421A* | BL | RD | YL |
| CDX1C100A9481A* #DC1C100A9481A* | BL | RD | YL |
| CDX1D120A9601A* #DC1D120A9601A* | BL | RD | YL |

RD = LOW BL = MED. HIGH
YL = MED. LOW BK = HIGH
- MAY BE "T" or "A"
* - MAY BE A THROUGH Z

WARNING
HAZARDOUS VOLTAGE:
DISCONNECT ALL ELECTRICAL POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING.
FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH.

CAUTION
USE COPPER CONDUCTORS ONLY!
UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.
FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.

INTEGRATED FURNACE CONTROL
REPLACE WITH PART CNT02891 OR CNT 02183 OR EQUIVALENT
INPUT: 25 VAC, 60 HZ.
XFMR SEC. CURRENT: 450 MA.
MV OUTPUT: 1.5 A @ 24 VAC
IND OUTPUT: 2.2 FLA, 3.5 LRA @ 120 VAC
CIRC. BLOWER OUTPUT: 14.5 FLA, 26 LRA @ 120 VAC
HUMIDIFIER & AIR CLEANER
MAX. LOAD: 1.0 A @ 120 VAC
IGNITER OUTPUT: 6.0 A @ 120 VAC

DIAGNOSTIC CODES
FLASHING SLOW: NORMAL - NO CALL FOR HEAT
FLASHING FAST: NORMAL - CALL FOR HEAT
CONTINUOUS ON: REPLACE IFC
CONTINUOUS OFF: CHECK POWER
2 FLASHES: EXTERNAL LOCKOUT (RETRIES OR RECYCLES EXCEEDED)
3 FLASHES: PRESSURE SWITCH ERROR
4 FLASHES: OPEN LIMIT DEVICE
5 FLASHES: FLAME SENSED WHEN NO FLAME SHOULD BE PRESENT
6 FLASHES: 115 VAC POWER REVERSED POLARITY OR POOR GROUNDING
7 FLASHES: GAS VALVE CIRCUIT ERROR
8 FLASHES: LOW FLAME SENSE SIGNAL

| | | | | | | | | | | | | | | | | |
|-----------------------|--------------------------|--|---------------------------------|---|----------|-----------------|-----------|--------------------|------------|-------------------|------------|-----------------|-----------------------|--|----------------------|--|
| | TCO THERMAL CUT OUT | | LINE } FACTORY 24 V } WIRING | <table border="1"> <tr> <td>BK BLACK</td> <td>GR GREEN</td> </tr> <tr> <td>WH WHITE</td> <td>BR BROWN</td> </tr> <tr> <td>YL YELLOW</td> <td>RD RED</td> </tr> <tr> <td>OR ORANGE</td> <td>BL BLUE</td> </tr> </table> | BK BLACK | GR GREEN | WH WHITE | BR BROWN | YL YELLOW | RD RED | OR ORANGE | BL BLUE | | | | |
| BK BLACK | GR GREEN | | | | | | | | | | | | | | | |
| WH WHITE | BR BROWN | | | | | | | | | | | | | | | |
| YL YELLOW | RD RED | | | | | | | | | | | | | | | |
| OR ORANGE | BL BLUE | | | | | | | | | | | | | | | |
| | PS PRESSURE SWITCH | | LINE } FIELD 24 V } WIRING | | | | | | | | | | | | | |
| | FRS FLAME ROLLOUT SWITCH | | ** INTERNAL THERMAL PROTECTION | <p>WIRE COLOR</p> <p>BK/1 NUMBER ID (IF ANY)</p> <table border="1"> <tr> <td>L LINE</td> <td>TH 24 VAC (HOT)</td> </tr> <tr> <td>N NEUTRAL</td> <td>TR 24 VAC (COMMON)</td> </tr> <tr> <td>GND GROUND</td> <td>MV MAIN GAS VALVE</td> </tr> <tr> <td>B/C COMMON</td> <td>TNS TRANSFORMER</td> </tr> <tr> <td>HLO HIGH LIMIT OUTPUT</td> <td></td> </tr> <tr> <td>HLI HIGH LIMIT INPUT</td> <td></td> </tr> </table> | L LINE | TH 24 VAC (HOT) | N NEUTRAL | TR 24 VAC (COMMON) | GND GROUND | MV MAIN GAS VALVE | B/C COMMON | TNS TRANSFORMER | HLO HIGH LIMIT OUTPUT | | HLI HIGH LIMIT INPUT | |
| L LINE | TH 24 VAC (HOT) | | | | | | | | | | | | | | | |
| N NEUTRAL | TR 24 VAC (COMMON) | | | | | | | | | | | | | | | |
| GND GROUND | MV MAIN GAS VALVE | | | | | | | | | | | | | | | |
| B/C COMMON | TNS TRANSFORMER | | | | | | | | | | | | | | | |
| HLO HIGH LIMIT OUTPUT | | | | | | | | | | | | | | | | |
| HLI HIGH LIMIT INPUT | | | | | | | | | | | | | | | | |
| | FP FLAME SENSOR | | CF CAPACITOR | | | | | | | | | | | | | |
| | CHASSIS GROUND | | COIL | | | | | | | | | | | | | |
| | HSI HOT SURFACE IGNITER | | | | | | | | | | | | | | | |
| | DOOR SWITCH | | | | | | | | | | | | | | | |

- NOTES:**
- IF ANY OF THE ORIGINAL WIRING AS SUPPLIED WITH THIS FURNACE MUST BE REPLACED, IT MUST BE WITH WIRE HAVING A TEMPERATURE RATING OF AT LEAST 105 C.
 - THERMOSTAT HEAT ANTICIPATOR SETTING: .38 AMPS
 - FOR PROPER OPERATION OF COOLING SPEED, "Y" TERMINAL MUST BE CONNECTED TO THE ROOM THERMOSTAT.
 - THESE TERMINALS PROVIDE 120V POWER CONNECTIONS FOR ELECTRONIC AIR CLEANER (EAC) AND HUMIDIFIER (HUM). MAX. LOAD: 1.0 AMPS EACH.

CDX1-DC1

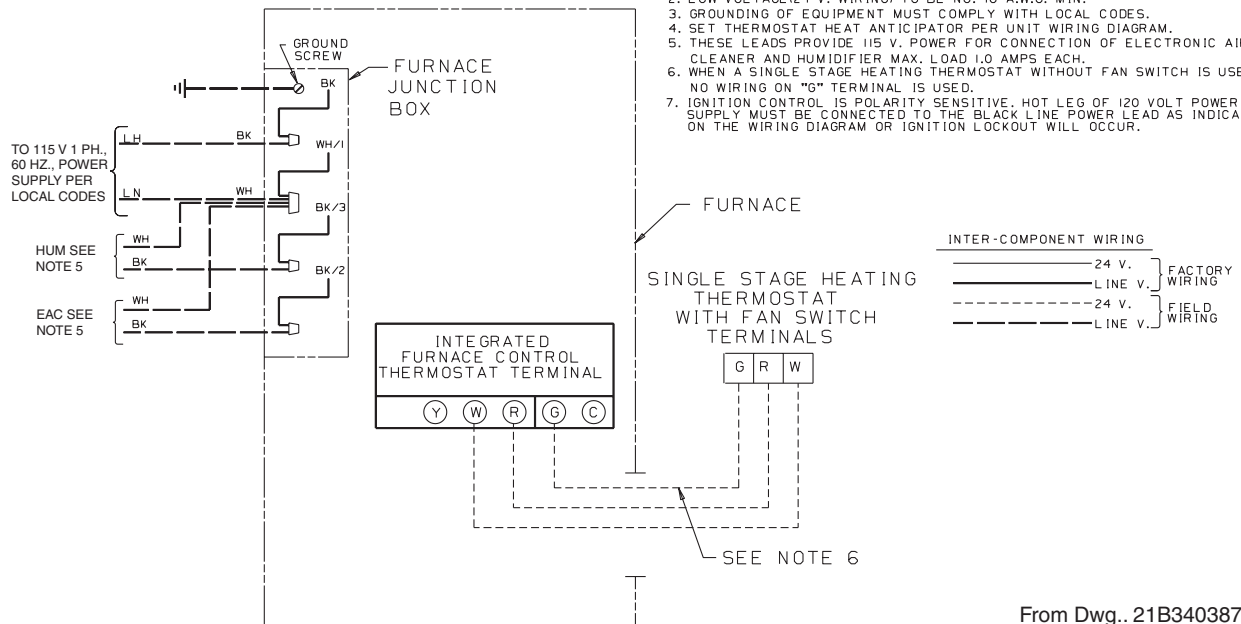
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SEE NOTES 2 AND 3

Field Wiring

FIELD WIRING DIAGRAM FOR HEATING ONLY

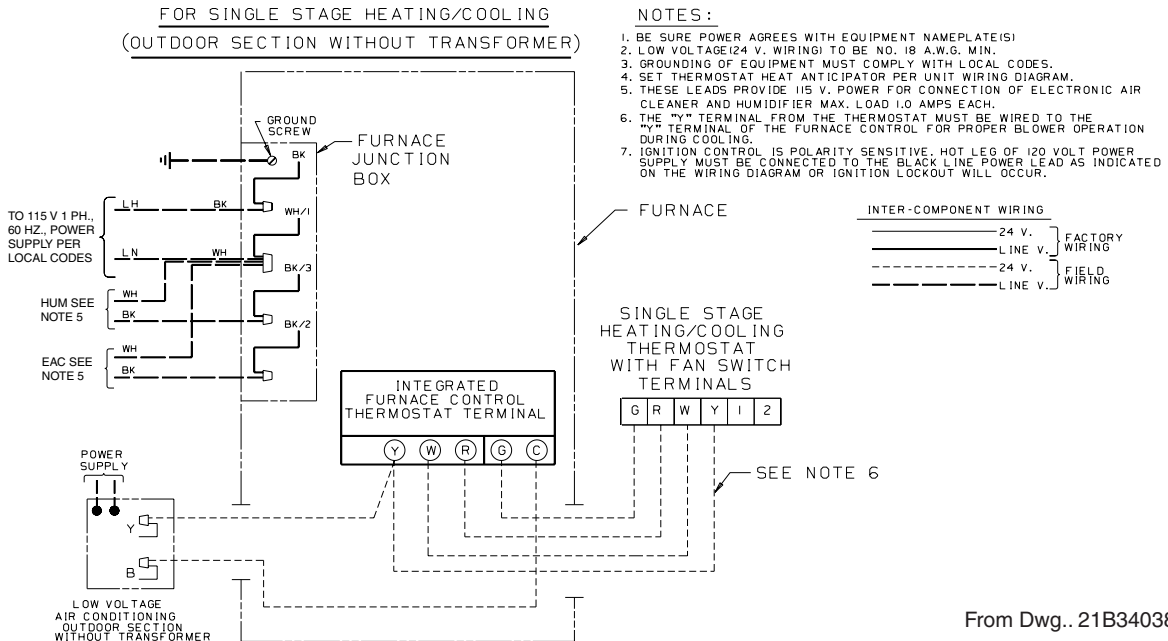
FIELD WIRING DIAGRAM FOR SINGLE STAGE HEATING



From Dwg.. 21B340387 Rev. 1

FIELD WIRING DIAGRAM FOR SINGLE STAGE HEATING/COOLING (OUTDOOR SECTION WITHOUT TRANSFORMER)

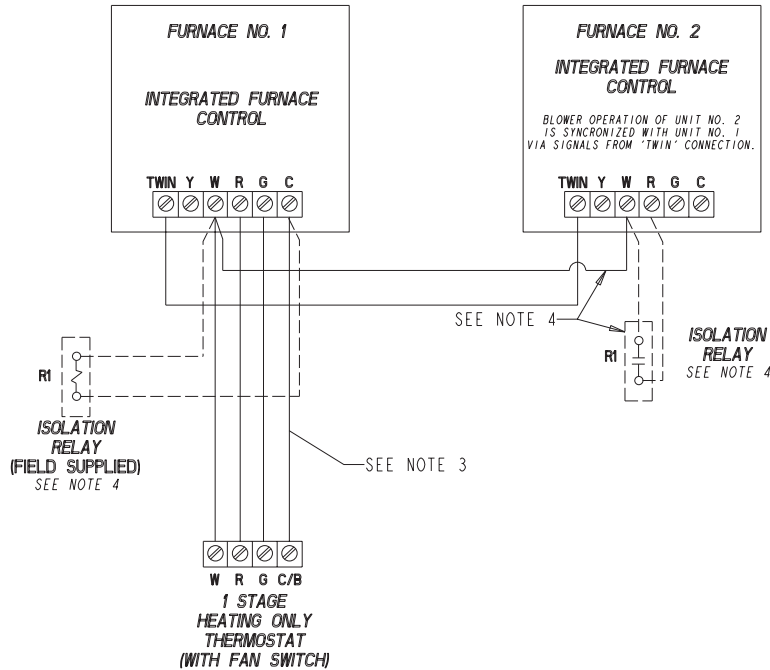
FIELD WIRING DIAGRAM FOR SINGLE STAGE HEATING/COOLING (OUTDOOR SECTION WITHOUT TRANSFORMER)



From Dwg.. 21B340388 Rev. 1

Field Wiring

TWINNING CONNECTION DIAGRAM
FOR TWINNING 1 STAGE FURNACES WITH SINGLE WIRE TWINNING FEATURE
1 STAGE HEATING ONLY THERMOSTAT

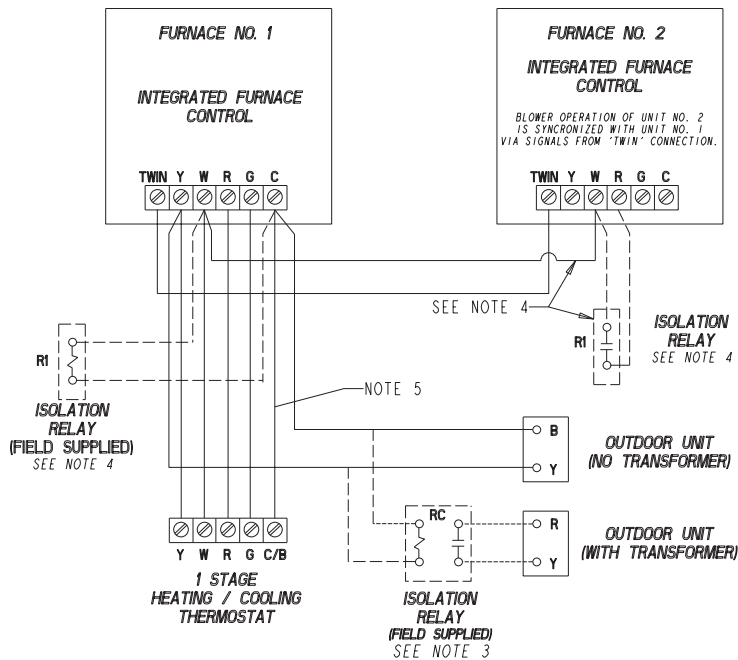


NOTES:

1. BOTH FURNACES MUST BE POWERED FROM THE SAME 115V. LEG OF CIRCUIT PANEL.
2. INSURE 24V. FURNACE TRANSFORMERS ARE IN PHASE. PRIOR TO COMPLETING CONNECTIONS, CHECK VOLTAGE BETWEEN "R" TERMINALS OF EACH FURNACE. IF VOLTAGE IS GREATER THAN 10V., REVERSE THE BL AND RD SECONDARY LEADS ON ONE OF THE FURNACE TRANSFORMERS.
3. CONNECTION MAY BE REQUIRED FOR ELECTRONIC THERMOSTAT.
4. IF CURRENT EXCEEDS THERMOSTAT CURRENT RATING, USE ISOLATION RELAYS ("R1") AS SHOWN. (DO NOT CONNECT W TO W). ISOLATION RELAY NOT NEEDED IF THE THERMOSTAT CONTACTS ARE RATED AT 1.0A. OR ABOVE.

From Dwg.. 21B341422 Rev.1

TWINNING CONNECTION DIAGRAM
FOR TWINNING 1 STAGE FURNACES WITH SINGLE WIRE TWINNING FEATURE
1 STAGE HEAT / 1 STAGE COOLING THERMOSTAT



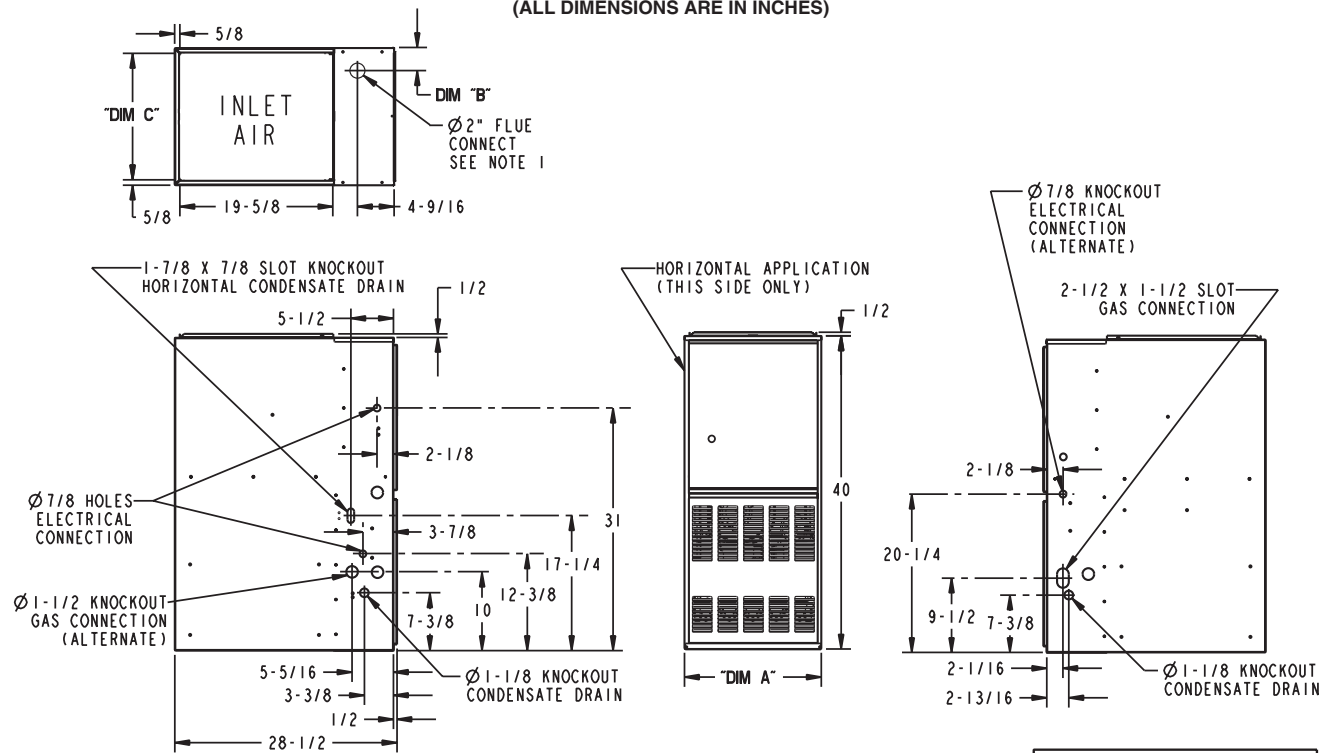
NOTES:

1. BOTH FURNACES MUST BE POWERED FROM THE SAME 115V. LEG OF CIRCUIT PANEL.
2. INSURE 24V. FURNACE TRANSFORMERS ARE IN PHASE. PRIOR TO COMPLETING CONNECTIONS, CHECK VOLTAGE BETWEEN "R" TERMINALS OF EACH FURNACE. IF VOLTAGE IS GREATER THAN 10V., REVERSE THE BL AND RD SECONDARY LEADS ON ONE OF THE FURNACE TRANSFORMERS.
3. IF OUTDOOR UNIT HAS A 24V. TRANSFORMER, AN ISOLATION RELAY MUST BE INSTALLED. (FIELD SUPPLIED - USE PILOT DUTY RELAY ("RC"), SUCH AS RLY0975.) SEE ALT. CONNECTION.
4. IF CURRENT EXCEEDS THERMOSTAT CURRENT RATING, USE ISOLATION RELAYS ("R1") AS SHOWN. (DO NOT CONNECT W TO W). ISOLATION RELAY NOT NEEDED IF THE THERMOSTAT CONTACTS ARE RATED AT 1.0A. OR ABOVE.
5. CONNECTION MAY BE REQUIRED FOR ELECTRONIC THERMOSTATS.

From Dwg.. 21B341423 Rev.1

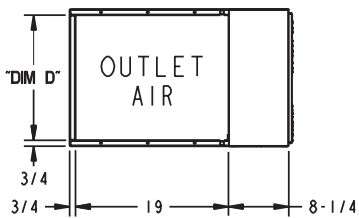
Dimensions

TDC1 OUTLINE DRAWING (ALL DIMENSIONS ARE IN INCHES)



NOTES:

1. DC100 AND DC120 REQUIRE 2-1/2" OR 3" DIAMETER VENT PIPE.



| MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS DOWNFLOW | |
|---|-----|
| SIDES | 0" |
| REAR | 0" |
| FRONT | 3" |
| TOP | 1" |
| FLUE | 0" |
| HORIZONTAL (FLUE DISCHARGE RIGHT SIDE ONLY) | |
| ALCOVE SIDES | |
| RIGHT | 0" |
| LEFT | 0" |
| REAR | 0" |
| FRONT | 18" |
| TOP | 1" |
| FLUE | 0" |
| CLOSET SIDES | |
| RIGHT | 1" |
| LEFT | 1" |
| REAR | 3" |
| FRONT | 3" |
| TOP | 1" |
| FLUE | 0" |

| MODEL | A | B | C | D |
|----------------|---------|----------|---------|---------|
| TDC1B040A9241A | | | | |
| TDC1B060A9361A | 17-1/2" | 2-1/4" | 16-1/4" | 16" |
| TDC1B080A9421A | | | | |
| TDC1C100A9481A | 21" | 2-1/2" | 19-3/4" | 19-1/2" |
| TDC1D120A9601A | 24-1/2" | 2-15/16" | 23-1/4" | 23" |

From Dwg. 21C340462 Rev. 6



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Since **Trane** has a policy of continuous product and product data improvement, it reserves the right to change design and specifications without notice.