

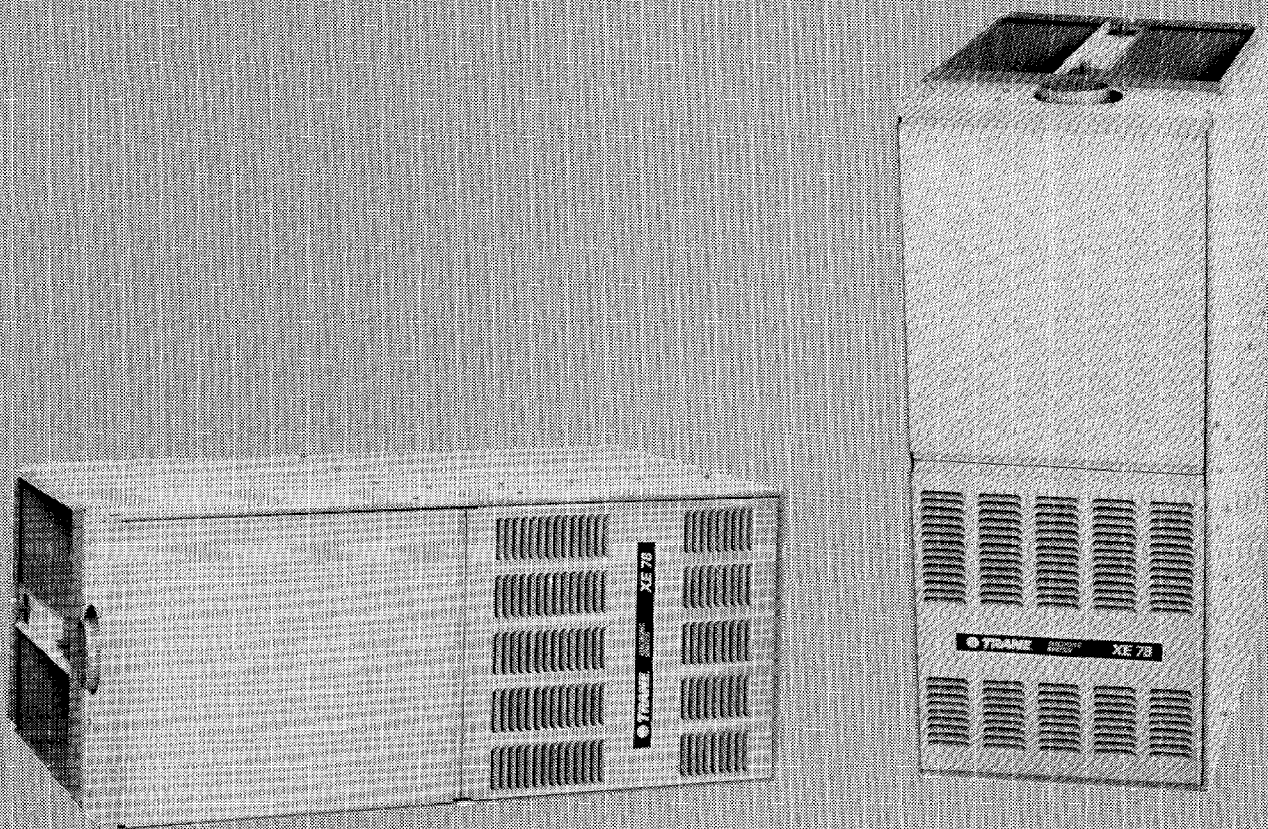


**TRANE™**

**TDD-D-1**

**XE 78  
Downflow  
Gas-Fired  
Furnace  
"Fan Assisted  
Combustion  
System"**

**Models  
TDD040, 060,  
080, 100, 120, 140C**



## XE 78 STANDARD EQUIPMENT

- |                                               |                                          |                                                               |
|-----------------------------------------------|------------------------------------------|---------------------------------------------------------------|
| • Power supply 115/1/60                       | • Complete front service access          | • Optional L.P. conversion kit                                |
| • Multi-port In-shot burners                  | • Alternate bottom/left/right return air | • Left/right gas connection                                   |
| • Integrated system control                   | • Slide out blower assembly              | • Common vent capability                                      |
| • Hot surface igniter                         | • Direct drive, 4-speed motors           | • <b>Non-prorated 15-year heat exchanger limited warranty</b> |
| • Heavy gauge, wrap-around steel cabinet      | • Air conditioning fan control provided  |                                                               |
| • Heavy gauge aluminized steel heat exchanger | • Blower door safety switch              |                                                               |
|                                               | • Adjustable fan & limit control         |                                                               |
|                                               | • Cleanable high velocity filters        |                                                               |

## OPTIONAL EQUIPMENT FOR HEATING UNITS

|                                                                               |                 |
|-------------------------------------------------------------------------------|-----------------|
| Thermostat, Mechanical Heating Only No Fan .....                              | BAYSTAT388 [ ]  |
| Thermostat, Mechanical Heating/Cooling Single Stage Mounts Horizontally ..... | AY28X092 [ ]    |
| Thermostat, Mechanical Heating Only With Fan Switch .....                     | BAYSTAT303 [ ]  |
| Thermostat, Mechanical Heating/Cooling Single Stage Mounts Vertically .....   | BAYSTAT305 [ ]  |
| Propane Conversion Kit .....                                                  | BAYLPKT210 [ ]  |
| Electronic Air Cleaner (TDD050, 060, 080C) .....                              | BEF140C100A [ ] |
| Electronic Air Cleaner (TDD100, 120C) .....                                   | BEF200C100A [ ] |
| Coil Enclosure (TDD040,060C) .....                                            | BAYCLE1400 [ ]  |
| Coil Enclosure (TDD080,100C) .....                                            | BAYCLE1700 [ ]  |
| Coil Enclosure (TDD100,120C) .....                                            | BAYCLE2100 [ ]  |
| Coil Enclosure (TDD100,120,140C960) .....                                     | BAYCLE2400 [ ]  |
| Downflow Subbase .....                                                        | BAYBASE205 [ ]  |
| Side Filter Rack .....                                                        | BAYFLTR200 [ ]  |
| High Altitude Switch .....                                                    | BAYHALT220 [ ]  |

## 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, allows common venting with hot water heater.

**BURNERS** — Multi-port In-shot burners will give years of quiet and efficient service. All models can be converted to **LP 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.

**AIR DELIVERY** — The multispeed, direct drive blower motor, with sufficient airflow range 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.

**FEATURES AND GENERAL OPERATION** — The XE 78 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.

- Low energy power venter.
- Vent proving differential switch.

**TDD-C PRODUCT SPECIFICATIONS<sup>①</sup>**

| MODEL                                    | TDD040C924A                   | TDD060C936A                   | TDD080C936A                   | TDD080C945A                   | TDD100C945A                   |
|------------------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| TYPE                                     | Hot Surface Ignition          | Hot Surface Ignition          | Hot Surface Ignition          | Hot Surface Ignition          | Hot Surface Ignition          |
| <b>RATINGS<sup>②</sup></b>               |                               |                               |                               |                               |                               |
| Input BTUH                               | 40,000                        | 60,000                        | 80,000                        | 80,000                        | 100,000                       |
| Output BTUH                              | 31,000                        | 47,100                        | 62,100                        | 62,000                        | 77,900                        |
| AFUE                                     | 78.7                          | 78.1                          | 78.3                          | 78.3                          | 78.0                          |
| Temp. Rise (Min.-Max.) °F.               | 30 — 60                       | 30 — 60                       | 35 — 65                       | 35 — 65                       | 40 — 70                       |
| <b>BLOWER DRIVE</b>                      | DIRECT                        | DIRECT                        | DIRECT                        | DIRECT                        | DIRECT                        |
| Diameter-Width (In.)                     | 10 x 6                        | 10 x 7                        | 10 x 7                        | 10 x 8                        | 10 x 8                        |
| No. Used                                 | 1                             | 1                             | 1                             | 1                             | 1                             |
| Speeds (No.)                             | 4                             | 4                             | 4                             | 4                             | 4                             |
| CFM vs. in. w.g.                         | See Fan Perf. Table           | See Fan Perf. Table           | See Fan Perf. Table           | See Fan Perf. Table           | See Fan Perf. Table           |
| Motor HP                                 | 1/5                           | 1/3                           | 1/3                           | 1/3                           | 1/3                           |
| R.P.M.                                   | 1075                          | 1075                          | 1075                          | 1075                          | 1075                          |
| Volts/Ph/Hz                              | 115/1/60                      | 115/1/60                      | 115/1/60                      | 115/1/60                      | 115/1/60                      |
| <b>FILTER — Furnished?</b>               | Yes                           | Yes                           | Yes                           | Yes                           | Yes                           |
| Type Recommended                         | —                             | —                             | —                             | —                             | —                             |
| Lo. Vel. (No.-Size-Thk.)                 | —                             | —                             | —                             | —                             | —                             |
| Hi Vel. (No.-Size-Thk.)                  | 2 - 14x20 - 1 in.             | 2 - 14x20 - 1 in.             | 2 - 14x20 - 1 in.             | 2 - 16x20 - 1 in.             | 2 - 16x20 - 1 in.             |
| <b>VENT COLLAR — Size (In.)</b>          | 4 Round                       | 4 Round                       | 4 Round                       | 4 Round                       | 4 Round                       |
| <b>HEAT EXCHANGER</b>                    |                               |                               |                               |                               |                               |
| Type-Fired                               | Alum. Steel                   | Alum. Steel                   | Alum. Steel                   | Alum. Steel                   | Alum. Steel                   |
| -Unfired                                 | —                             | —                             | —                             | —                             | —                             |
| Gauge (Fired)                            | 20                            | 20                            | 20                            | 20                            | 20                            |
| <b>ORIFICES — Main</b>                   |                               |                               |                               |                               |                               |
| Nat. Gas. Qty. — Drill Size              | 2 — 44                        | 3 — 44                        | 4 — 44                        | 4 — 44                        | 5 — 44                        |
| L.P. Gas Qty. — Drill Size               | 2 — 55                        | 3 — 55                        | 4 — 55                        | 4 — 55                        | 5 — 55                        |
| <b>GAS VALVE</b>                         | Redundant - Sgl. Stg.         | Redundant - Sgl. Stg.         | Redundant - Sgl. Stg.         | Redundant - Sgl. Stg.         | Redundant - Sgl. Stg.         |
| <b>PILOT SAFETY DEVICE</b>               |                               |                               |                               |                               |                               |
| Type                                     | Hot Surface Ignition          | Hot Surface Ignition          | Hot Surface Ignition          | Hot Surface Ignition          | Hot Surface Ignition          |
| <b>BURNERS — Type</b>                    | Multiport Inshot              | Multiport Inshot              | Multiport Inshot              | Multiport Inshot              | Multiport Inshot              |
| Number                                   | 2                             | 3                             | 4                             | 4                             | 5                             |
| <b>POWER CONN. — V/Ph/Hz<sup>③</sup></b> | 115/1/60                      | 115/1/60                      | 115/1/60                      | 115/1/60                      | 115/1/60                      |
| Ampacity (In Amps)                       | 5.2                           | 8.5                           | 8.5                           | 9.1                           | 9.1                           |
| Fuse Size — Max. (Amps)                  | 10                            | 10                            | 10                            | 10                            | 15                            |
| <b>PIPE CONN. SIZE (IN.)</b>             | 1/2                           | 1/2                           | 1/2                           | 1/2                           | 1/2                           |
| <b>DIMENSIONS</b>                        |                               |                               |                               |                               |                               |
| Uncrated (In.)                           | H x W x D<br>40 x 14-1/2 x 28 | H x W x D<br>40 x 14-1/2 x 28 | H x W x D<br>40 x 17-1/2 x 28 | H x W x D<br>40 x 17-1/2 x 28 | H x W x D<br>40 x 17-1/2 x 28 |
| <b>WEIGHT</b>                            |                               |                               |                               |                               |                               |
| Shipping (Lbs.)/Net (Lbs.)               | 119/109                       | 129/119                       | 146/135                       | 146/135                       | 156/145                       |

| MODEL                                    | TDD100C948A               | TDD100C960A               | TDD120C960A                   | TDD140C960A                   |
|------------------------------------------|---------------------------|---------------------------|-------------------------------|-------------------------------|
| TYPE                                     | Hot Surface Ignition      | Hot Surface Ignition      | Hot Surface Ignition          | Hot Surface Ignition          |
| <b>RATINGS<sup>②</sup></b>               |                           |                           |                               |                               |
| Input BTUH                               | 100,000                   | 100,000                   | 120,000                       | 140,000                       |
| Output BTUH                              | 78,500                    | 78,600                    | 95,300                        | 110,700                       |
| AFUE                                     | 78.2                      | 78.7                      | 78.5                          | 78.7                          |
| Temp. Rise (Min.-Max.) °F.               | 35 — 65                   | 35 — 65                   | 35 — 65                       | 45 — 75                       |
| <b>BLOWER DRIVE</b>                      | DIRECT                    | DIRECT                    | DIRECT                        | DIRECT                        |
| Diameter-Width (In.)                     | 10 x 8                    | 11 x 10                   | 11 x 10                       | 11 x 10                       |
| No. Used                                 | 1                         | 1                         | 1                             | 1                             |
| Speeds (No.)                             | 4                         | 4                         | 4                             | 4                             |
| CFM vs. in. w.g.                         | See Fan Perf. Table       | See Fan Perf. Table       | See Fan Perf. Table           | See Fan Perf. Table           |
| Motor HP                                 | 1/2                       | 3/4                       | 3/4                           | 3/4                           |
| R.P.M.                                   | 1075                      | 1075                      | 1075                          | 1075                          |
| Volts/Ph/Hz                              | 115/1/60                  | 115/1/60                  | 115/1/60                      | 115/1/60                      |
| <b>FILTER — Furnished?</b>               | Yes                       | Yes                       | Yes                           | Yes                           |
| Type Recommended                         | —                         | —                         | —                             | —                             |
| Lo. Vel. (No.-Size-Thk.)                 | —                         | —                         | —                             | —                             |
| Hi Vel. (No.-Size-Thk.)                  | 2 - 16x20 - 1 in.         | 2 - 16x20 - 1 in.         | 2 - 16x20 - 1 in.             | 2 - 16x20 - 1 in.             |
| <b>VENT COLLAR — Size (In.)</b>          | 4 Round                   | 4 Round                   | 4 Round                       | 4 Round                       |
| <b>HEAT EXCHANGER</b>                    |                           |                           |                               |                               |
| Type-Fired                               | Alum. Steel               | Alum. Steel               | Alum. Steel                   | Alum. Steel                   |
| -Unfired                                 | —                         | —                         | —                             | —                             |
| Gauge (Fired)                            | 20                        | 20                        | 20                            | 20                            |
| <b>ORIFICES — Main</b>                   |                           |                           |                               |                               |
| Nat. Gas. Qty. — Drill Size              | 5 — 44                    | 5 — 44                    | 6 — 44                        | 7 — 44                        |
| L.P. Gas Qty. — Drill Size               | 5 — 55                    | 5 — 55                    | 6 — 55                        | 7 — 55                        |
| <b>GAS VALVE</b>                         | Redundant - Sgl. Stg.     | Redundant - Sgl. Stg.     | Redundant - Sgl. Stg.         | Redundant - Sgl. Stg.         |
| <b>PILOT SAFETY DEVICE</b>               |                           |                           |                               |                               |
| Type                                     | Hot Surface Ignition      | Hot Surface Ignition      | Hot Surface Ignition          | Hot Surface Ignition          |
| <b>BURNERS — Type</b>                    | Multiport Inshot          | Multiport Inshot          | Multiport Inshot              | Multiport Inshot              |
| Number                                   | 5                         | 5                         | 6                             | 7                             |
| <b>POWER CONN. — V/Ph/Hz<sup>③</sup></b> | 115/1/60                  | 115/1/60                  | 115/1/60                      | 115/1/60                      |
| Ampacity (In Amps)                       | 14.2                      | 14.2                      | 14.2                          | 11.5                          |
| Fuse Size — Max. (Amps)                  | 15                        | 15                        | 15                            | 15                            |
| <b>PIPE CONN. SIZE (IN.)</b>             | 1/2                       | 1/2                       | 1/2                           | 1/2                           |
| <b>DIMENSIONS</b>                        |                           |                           |                               |                               |
| Uncrated (In.)                           | H x W x D<br>40 x 21 x 28 | H x W x D<br>40 x 21 x 28 | H x W x D<br>40 x 24-1/2 x 28 | H x W x D<br>40 x 24-1/2 x 28 |
| <b>WEIGHT</b>                            |                           |                           |                               |                               |
| Shipping (Lbs.)/Net (Lbs.)               | 166/154                   | 167/155                   | 189/176                       | 196/183                       |

① Central Furnace heating designs are certified by the American Gas Association Inc. Laboratories.

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

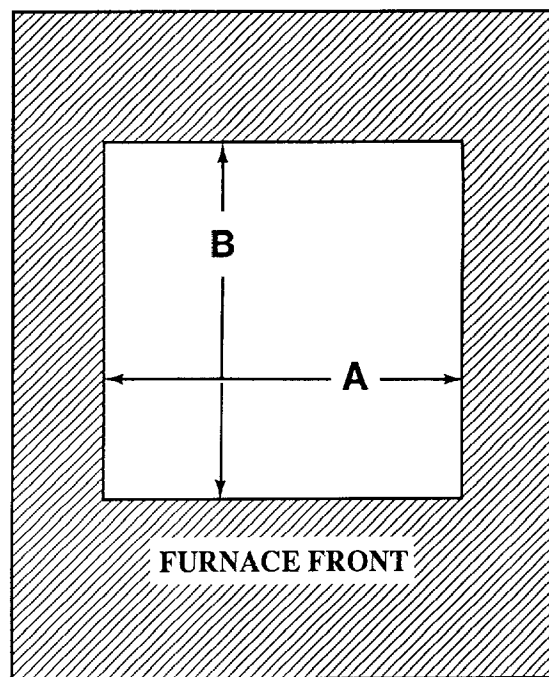
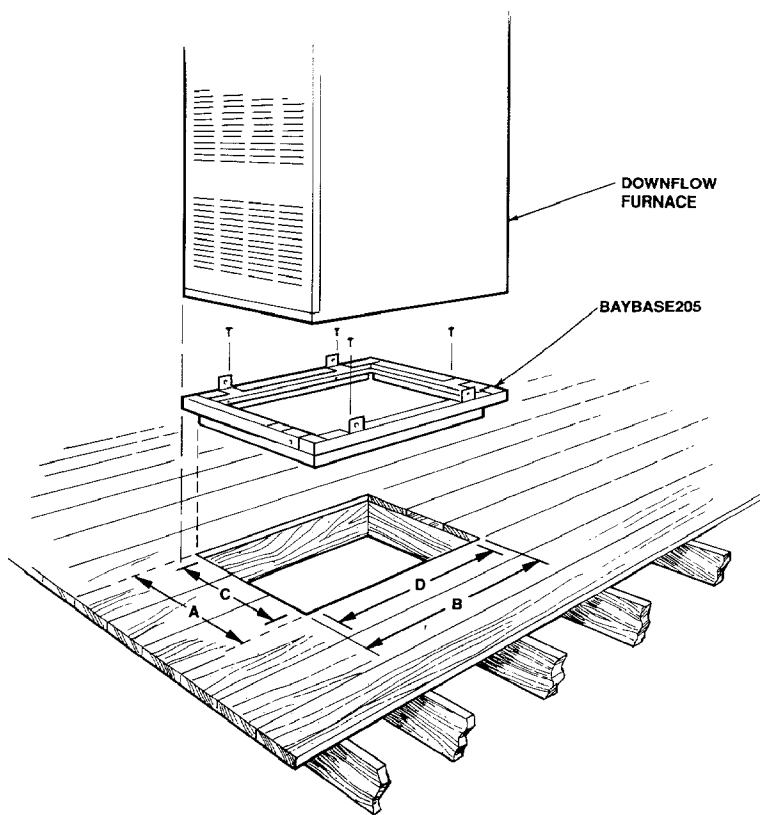
**TDD-C**  
**FURNACE AIRFLOW (CFM) VS. EXTERNAL STATIC PRESSURE (ins. w.g.)**

| MODEL       | SPEED<br>TAP | 0.10 | 0.20 | 0.30 | 0.40 | 0.50 | 0.60 | 0.70 | 0.80 | 0.90 |
|-------------|--------------|------|------|------|------|------|------|------|------|------|
| TDD040C924A | 4            | 1070 | 1033 | 1000 | 960  | 920  | 860  | 810  | 740  | -    |
|             | 3            | 870  | 850  | 823  | 790  | 753  | 813  | 667  | 613  | 490  |
|             | 2            | 740  | 720  | 690  | 663  | 627  | 588  | 547  | 483  | -    |
|             | 1            | 633  | 600  | 577  | 543  | 507  | 463  | 420  | 360  | -    |
| TDD060C936A | 4            | -    | 1429 | 1376 | 1318 | 1282 | 1188 | 1112 | 1029 | -    |
|             | 3            | 1302 | 1276 | 1229 | 1188 | 1141 | 1088 | 1024 | 953  | -    |
|             | 2            | 1115 | 1100 | 1070 | 1035 | 1000 | 965  | 918  | 859  | -    |
|             | 1            | 956  | 947  | 918  | 888  | 859  | 824  | 788  | 741  | 682  |
| TDD080C936A | 4            | 1523 | 1496 | 1463 | 1420 | 1369 | 1310 | 1243 | 1172 | 1100 |
|             | 3            | 1317 | 1307 | 1261 | 1260 | 1223 | 1175 | 1122 | 1060 | 1000 |
|             | 2            | 1123 | 1119 | 1106 | 1082 | 1056 | 1016 | 976  | 930  | 880  |
|             | 1            | 942  | 943  | 931  | 920  | 898  | 818  | 833  | 795  | 760  |
| TDD080C945A | 4            | 1798 | 1750 | 1692 | 1642 | 1575 | 1500 | 1425 | 1325 | 1225 |
|             | 3            | 1384 | 1367 | 1333 | 1300 | 1275 | 1233 | 1192 | 1142 | 1083 |
|             | 2            | -    | -    | 1108 | 1075 | 1042 | 1008 | 967  | 925  | 867  |
|             | 1            | -    | -    | 808  | 775  | 767  | 733  | 700  | 675  | 617  |
| TDD100C945A | 4            | 1767 | 1731 | 1669 | 1615 | 1546 | 1469 | 1392 | 1300 | 1146 |
|             | 3            | 1382 | 1354 | 1323 | 1292 | 1254 | 1207 | 1177 | 1108 | 1038 |
|             | 2            | 1130 | 1138 | 1115 | 1085 | 1054 | 1015 | 977  | 938  | 877  |
|             | 1            | 840  | 831  | 815  | 792  | 762  | 731  | 700  | 654  | -    |
| TDD100C948A | 4            | 1965 | 1915 | 1865 | 1805 | 1740 | 1670 | 1587 | 1500 | 1370 |
|             | 3            | 1645 | 1627 | 1605 | 1575 | 1535 | 1482 | 1421 | 1330 | 1220 |
|             | 2            | 1407 | 1398 | 1387 | 1375 | 1347 | 1318 | 1275 | 1190 | 1095 |
|             | 1            | 1202 | 1208 | 1205 | 1195 | 1166 | 1140 | 1105 | 1045 | 970  |
| TDD100C960A | 4            | 2236 | 2190 | 2136 | 2080 | 2015 | 1967 | 1899 | 1830 | 1760 |
|             | 3            | 1936 | 1915 | 1885 | 1853 | 1813 | 1768 | 1719 | 1668 | 1610 |
|             | 2            | 1577 | 1582 | 1567 | 1557 | 1529 | 1490 | 1442 | 1386 | 1324 |
|             | 1            | 1304 | 1312 | 1313 | 1300 | 1269 | 1250 | 1216 | 1170 | 1125 |
| TDD120C960A | 4            | 2290 | 2265 | 2250 | 2195 | 2145 | 1995 | 2030 | 1960 | 1860 |
|             | 3            | 1890 | 1900 | 1910 | 1896 | 1880 | 1850 | 1810 | 1740 | 1630 |
|             | 2            | 1480 | 1500 | 1520 | 1520 | 1525 | 1515 | 1490 | 1445 | 1370 |
|             | 1            | 1250 | 1270 | 1285 | 1280 | 1270 | 1255 | 1230 | 1295 | 1140 |
| TDD140C960A | 4            | 2189 | 2111 | 2032 | 1950 | 1881 | 1778 | 1675 | 1584 | 1492 |
|             | 3            | 1990 | 1933 | 1875 | 1812 | 1764 | 1675 | 1585 | 1505 | 1425 |
|             | 2            | 1757 | 1719 | 1680 | 1638 | 1598 | 1522 | 1446 | 1369 | 1291 |
|             | 1            | 1464 | 1451 | 1438 | 1410 | 1356 | 1301 | 1246 | 1204 | 1161 |

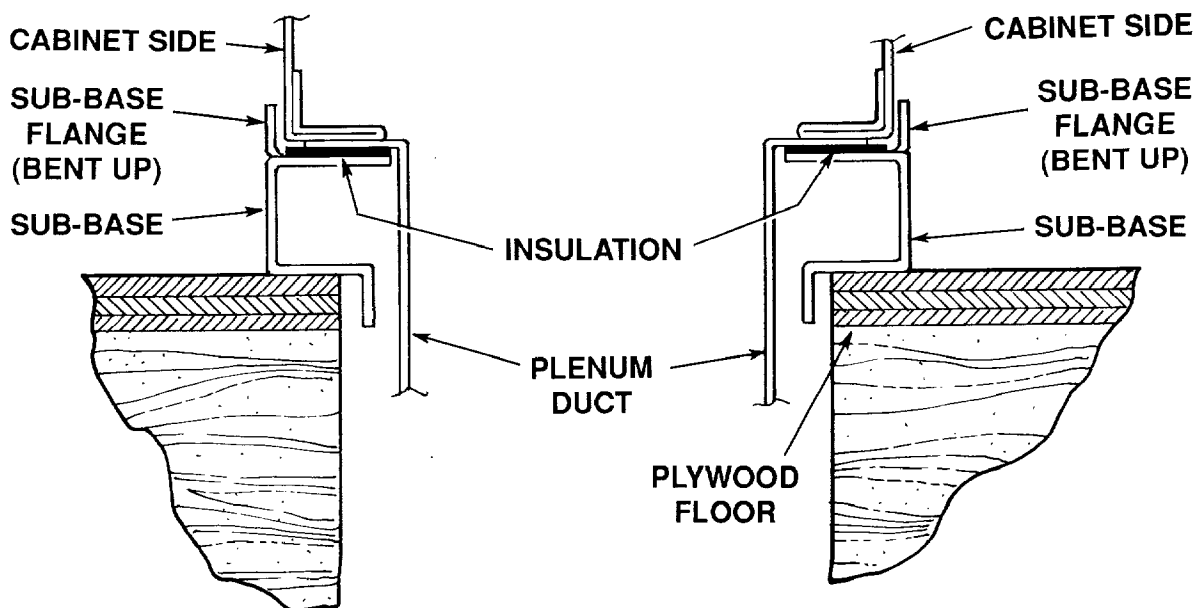
From Dwg. 21C330448 Rev. 0

**CFM VS. TEMPERATURE RISE**

| MODEL       | CFM (CUBIC FEET PER MINUTE) |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|-----------------------------|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             | 500                         | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 | 2400 |
| TDD040C924A | 59                          | 49  | 42  | 37  | 33  | 29   | 27   | 24   | 23   | 21   | 20   | 18   | 17   | 16   | 15   | 15   | 14   | 14   | 13   | 13   |
| TDD060C936A | 87                          | 73  | 62  | 55  | 49  | 44   | 40   | 36   | 34   | 31   | 29   | 27   | 26   | 24   | 23   | 22   | 21   | 20   | 19   | 18   |
| TDD080C936A | 115                         | 96  | 82  | 72  | 64  | 58   | 52   | 48   | 44   | 41   | 38   | 36   | 34   | 32   | 30   | 29   | 27   | 26   | 25   | 24   |
| TDD080C945A | 114                         | 95  | 82  | 72  | 64  | 57   | 52   | 48   | 44   | 41   | 38   | 36   | 34   | 32   | 30   | 29   | 27   | 26   | 25   | 24   |
| TDD100C945A | 144                         | 120 | 103 | 90  | 80  | 72   | 66   | 60   | 56   | 52   | 48   | 45   | 43   | 40   | 38   | 36   | 34   | 33   | 31   | 30   |
| TDD100C948A | 146                         | 121 | 104 | 91  | 81  | 73   | 66   | 61   | 56   | 52   | 49   | 46   | 43   | 40   | 38   | 36   | 35   | 33   | 32   | 30   |
| TDD100C960A | 146                         | 122 | 104 | 91  | 81  | 73   | 66   | 61   | 56   | 52   | 49   | 46   | 43   | 41   | 38   | 37   | 35   | 33   | 32   | 30   |
| TDD120C960A | 177                         | 147 | 126 | 110 | 98  | 88   | 80   | 74   | 68   | 63   | 59   | 55   | 52   | 49   | 47   | 44   | 42   | 40   | 38   | 37   |
| TDD140C960A | 205                         | 171 | 147 | 128 | 114 | 103  | 93   | 86   | 79   | 73   | 68   | 64   | 60   | 57   | 54   | 51   | 49   | 47   | 45   | 43   |

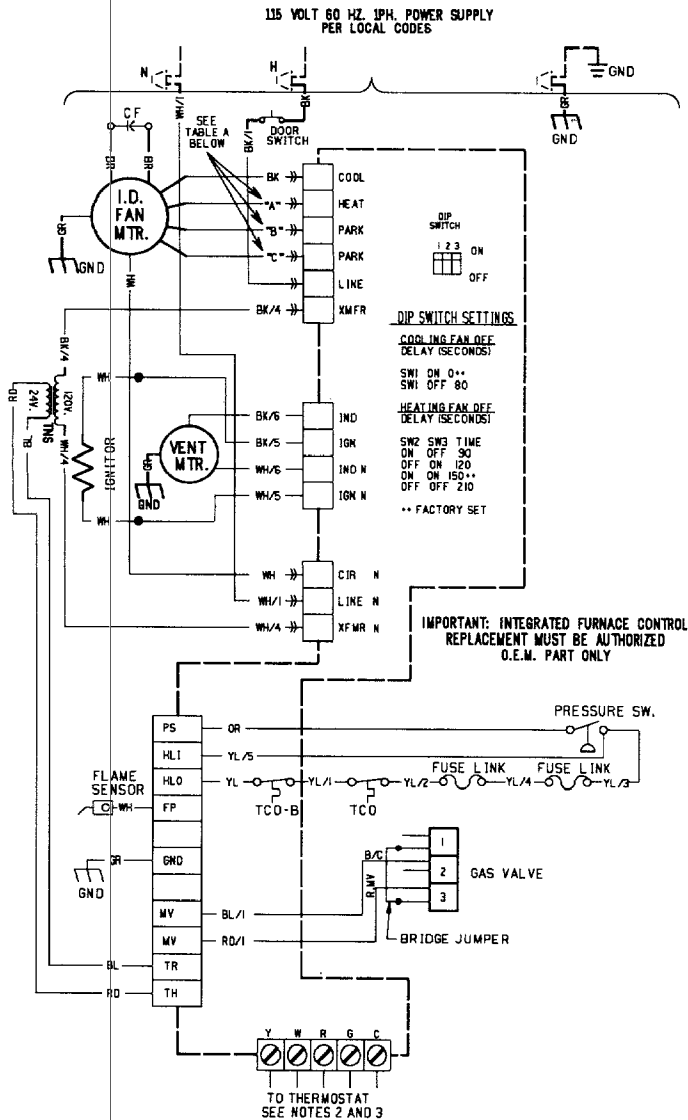


| CABINET WIDTH | RETURN DUCT WIDTH | FLOOR OPENING |         | PLENUM OPENING |         |
|---------------|-------------------|---------------|---------|----------------|---------|
|               |                   | "A"           | "B"     | "C"            | "D"     |
| 14-1/2"       | 13-1/4"           | 13-5/8"       | 20-1/8" | 12-5/8"        | 19-3/8" |
| 17-1/2"       | 16-1/4"           | 16-5/8"       | 20-1/8" | 15-5/8"        | 19-3/8" |
| 21"           | 19-3/4"           | 20-1/8"       | 20-1/8" | 19-1/8"        | 19-3/8" |
| 24-1/2"       | 23-1/4"           | 23-5/8"       | 20-1/8" | 22-5/8"        | 19-3/8" |



# SCHEMATIC DIAGRAMS FOR GAS FURNACES

## TDD040,060,080,100,120,140C



### LEGEND

- 24 V. } FACTORY WIRING
- LINE V. }
- - - 24 V. } FIELD WIRING
- - - LINE V. }
- ⊥ EARTH GROUND
- ⊥ CHASSIS GROUND
- JUNCTION
- WIRE NUT OR CONNECTOR
- ⊥ COIL
- ⊥ CAPACITOR
- ⊥ TRANSFORMER
- ⊥ CONNECTOR
- ⊥ TEMP. ACTUATED SWITCH
- ⊥ PRESS. ACTUATED SWITCH
- ⊥ DOOR SWITCH
- ⊥ FUSIBLE LINK
- TERMINAL
- TERMINAL BOARD

- COLOR OF WIRE
- BLACK WIRE WITH BLUE MARKER
- COLOR OF MARKER
- BK BLACK OR ORANGE YL YELLOW
- BL BLUE RD RED GR GREEN
- BR BROWN WH WHITE PR PURPLE

- GV GAS VALVE
- CF FAN CAPACITOR
- GND GROUND
- L LINE
- LVTB LOW VOLTAGE TERMINAL BOARD
- MTR MOTOR
- N NEUTRAL
- TCO HIGH TEMPERATURE LIMIT SWITCH
- TNS TRANSFORMER
- B/C COMMON
- PS PRES. SWITCH INPUT
- HLI HIGH LIMIT INPUT
- HLO HIGH LIMIT OUTPUT
- FP FLAME SENSOR PROBE
- MV GAS VALVE
- TR 24V AC TRANS. COMMON SIDE
- TH 24V AC TRANS. HOT SIDE
- R REDUNDANT

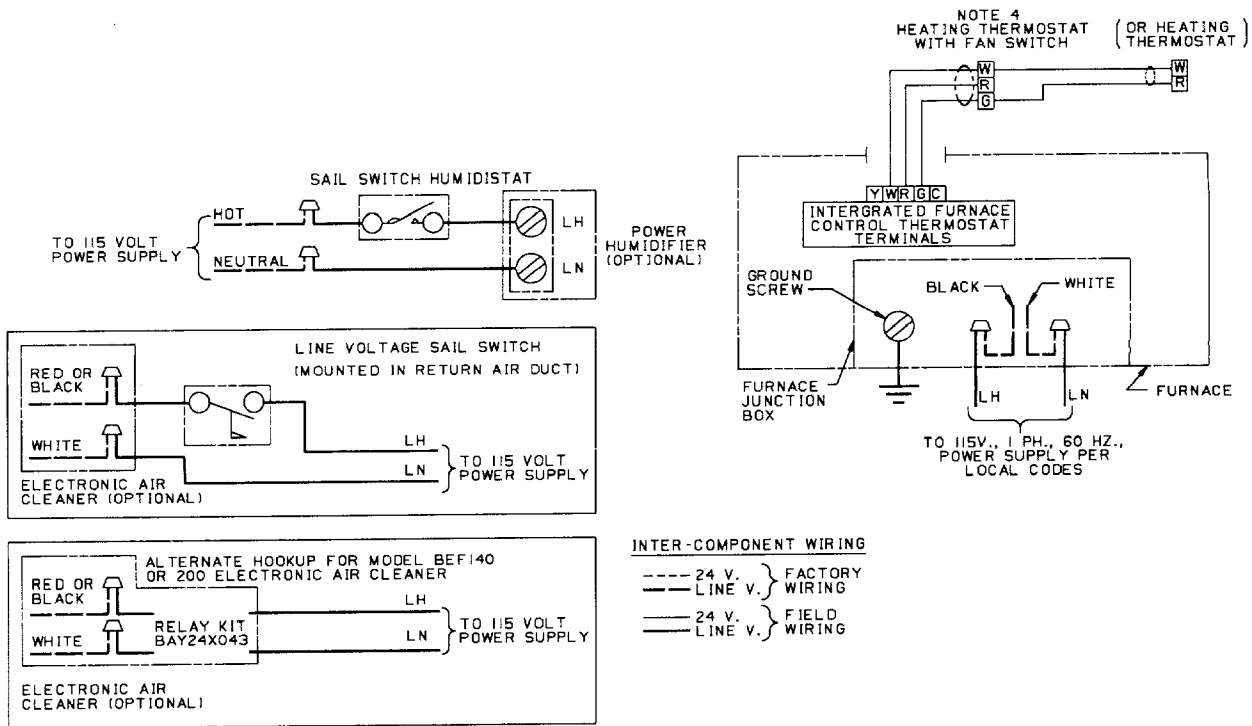
FAN SPEED SELECTION TABLE

| TABLE A     |          |          |          |
|-------------|----------|----------|----------|
| MODELS      | HEAT "A" | PARK "B" | PARK "C" |
| TDD040C924A | YL       | BL       | RD       |
| TDD060C936A | YL       | BL       | RD       |
| TDD080C936A | BL       | YL       | RD       |
| TDD080C945A | BL       | YL       | RD       |
| TDD100C945A | BL       | YL       | RD       |
| TDD100C948A | BL       | YL       | RD       |
| TDD100C960A | YL       | BL       | RD       |
| TDD120C960A | BL       | YL       | RD       |
| TDD140C960A | BL       | YL       | RD       |

#### NOTES:

- IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE FURNACE MUST BE REPLACED, IT MUST BE REPLACED WITH WIRING MATERIAL HAVING A TEMPERATURE RATING OF AT LEAST 105°C.
- THERMOSTAT HEAT ANTICIPATOR SETTING: .38 AMPS.
- FOR PROPER OPERATION OF COOLING FAN SPEED, "Y" TERMINAL MUST BE CONNECTED TO ROOM THERMOSTAT.

## FIELD WIRING DIAGRAM FOR HEATING ONLY

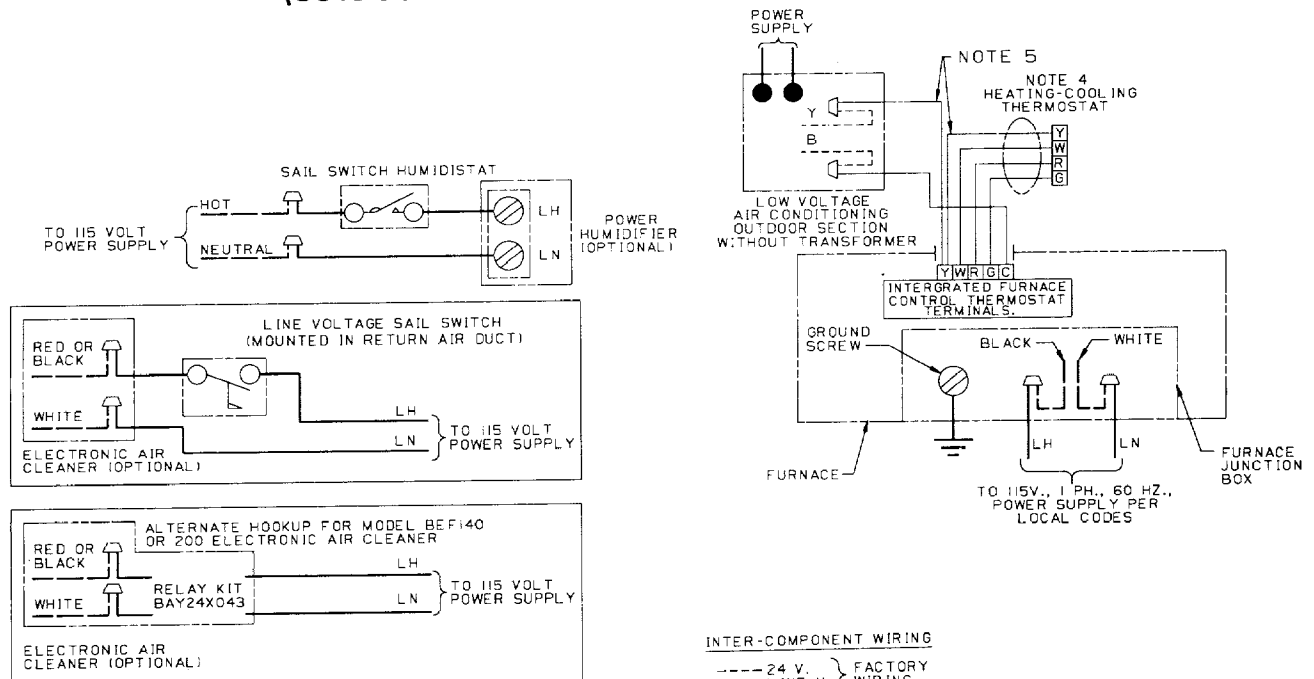


### NOTES:

1. BE SURE POWER SUPPLY AGREES WITH EQUIPMENT NAMEPLATE(S).
2. LOW VOLTAGE (24 V.) WIRING TO BE NO. 18 A.W.G. MIN.
3. GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL CODES.
4. SET THERMOSTAT HEAT ANTICIPATOR PER UNIT WIRING DIAGRAM.

From Dwg. 21B330199 Rev. 1

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



### NOTES:

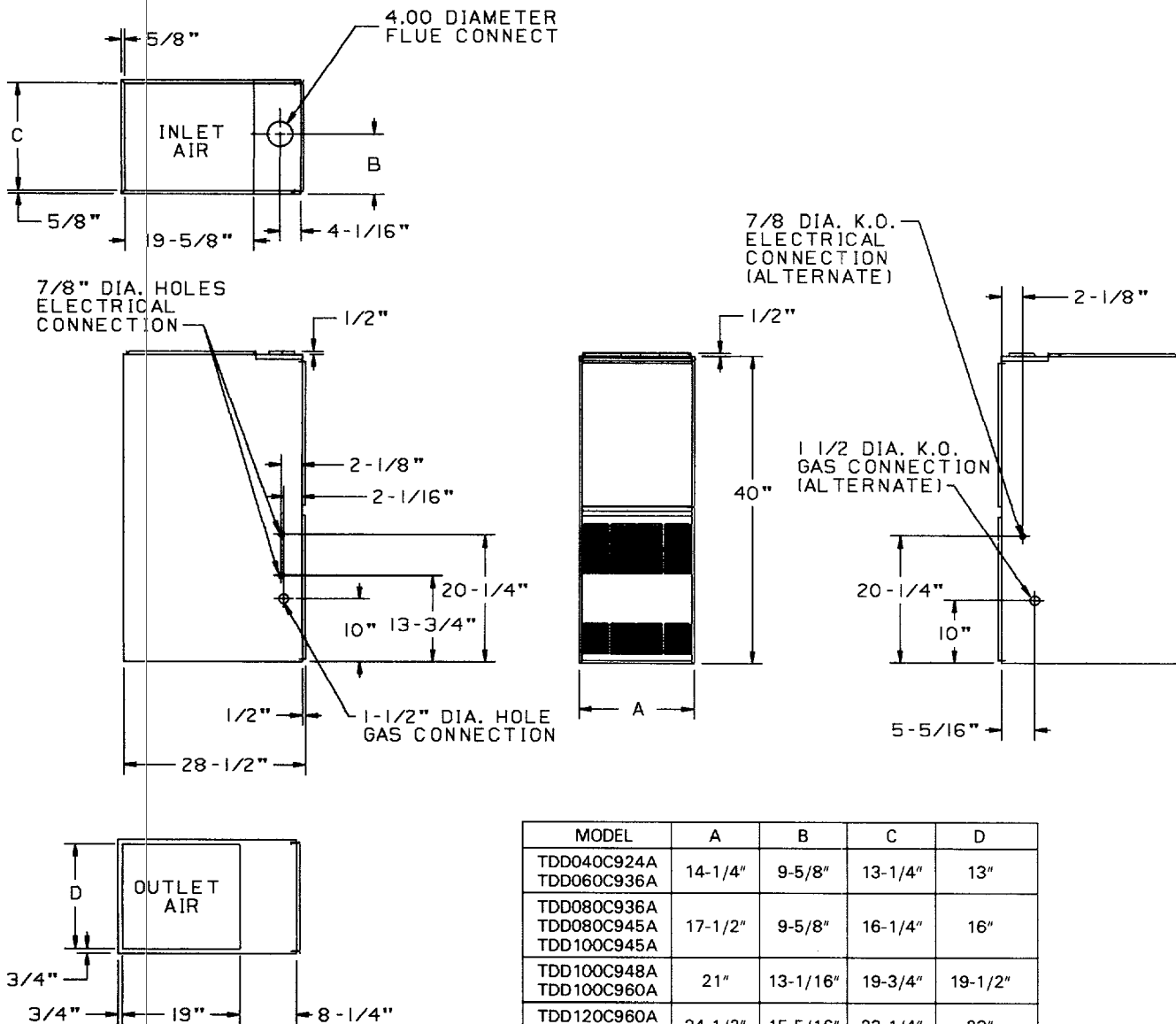
1. BE SURE POWER SUPPLY AGREES WITH EQUIPMENT NAMEPLATE(S).
2. LOW VOLTAGE (24 V.) WIRING TO BE NO. 18 A.W.G. MIN.
3. GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL CODES.
4. SET THERMOSTAT HEAT ANTICIPATOR PER UNIT WIRING DIAGRAM.
5. THE "Y" TERMINAL FROM THE THERMOSTAT MUST BE WIRED TO THE "Y" TERMINAL OF THE FURNACE CONTROL FOR PROPER BLOWER OPERATION DURING COOLING.

FROM DWG. 21B330200

From Dwg. 21B330200 Rev. 1

# TDD-C OUTLINE DRAWING

(ALL DIMENSIONS ARE IN INCHES)



| MODEL                                     | A       | B        | C       | D       |
|-------------------------------------------|---------|----------|---------|---------|
| TDD040C924A<br>TDD060C936A                | 14-1/4" | 9-5/8"   | 13-1/4" | 13"     |
| TDD080C936A<br>TDD080C945A<br>TDD100C945A | 17-1/2" | 9-5/8"   | 16-1/4" | 16"     |
| TDD100C948A<br>TDD100C960A                | 21"     | 13-1/16" | 19-3/4" | 19-1/2" |
| TDD120C960A<br>TDD140C960A                | 24-1/2" | 15-5/16" | 23-1/4" | 23"     |

From Dwg. 21C340155 Rev. 2

|                 |                         |
|-----------------|-------------------------|
| Library         | Product Literature      |
| Product Section | Unitary                 |
| Product         | Furnaces                |
| Model           | TDD                     |
| Literature Type | Data Catalog            |
| Sequence        | 1                       |
| Date            | May 1992                |
| File No.        | PL-UN-FURN-TDD-D-1 5/92 |
| Supersedes      | New                     |
| Ordering No.    | TDD-D-1                 |

**The Trane Company**  
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An American-Standard Company