



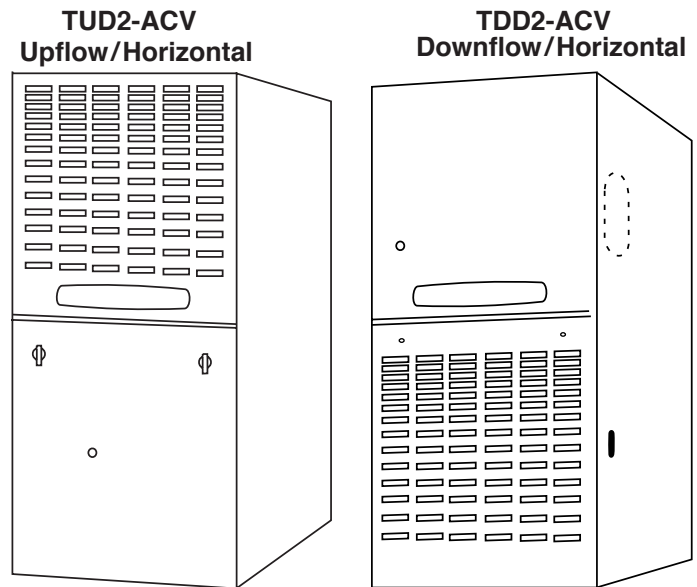
# Product Data

## Upflow/Horizontal 2-Stage, Communicating Variable Speed Gas Furnace

### XC80

- TUD2B060ACV32B
- TUD2B080ACV32B
- TUD2C080ACV42B
- TUD2B100ACV32B
- TUD2C100ACV52B
- TUD2D120ACV52B
- TUD2D140ACV52B
- TDD2B060ACV32B
- TDD2B080ACV32B
- TDD2C100ACV52B
- TDD2D120ACV52B

### Two-Stage Fan Assisted Combustion System



**Note:** "Graphics in this document are for representation only. Actual model may differ in appearance."



# General Features

## COMMUNICATING MODE

Furnace is shipped ready to be connected in communicating mode using three wire hook-up using TCONT900 comfort control.

## ALTERNATE 24V MODE

Furnace is field configurable to 24V non-communicating mode.

## COMFORT CONTROL

Comfortlink II™ Communicating furnace design, offers plug and play – walk away installation. Assures the entire heating and air conditioning system is set up in the proper modes to optimize the engineered performance of the matched system installed.

## 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 In-shot burners will give years of quiet and efficient service. All models can be converted to **L.P. gas**.

## 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 includes 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 XC 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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| TUD2B080ACV32B        |    |
| TUD2C080ACV42B        |    |
| TUD2B100ACV32B        |    |
| TUD2C100ACV52B        |    |
| TUD2D120ACV52B        |    |
| TUD2D140ACV52B        |    |
| TDD2B060ACV32B        |    |
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# Features and Benefits

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## XC 80 STANDARD EQUIPMENT

- **ComfortLink™ II** Communication or 24 Volt control
  - Factory default is communication mode
  - Field configurable to 24 volt non-communicating mode
  - Communication mode may be used with:
    - All communicating outdoor units
    - 24V Single stage cooling only units
  - 24 Volt non-communication mode may be used with:
    - 24V Single stage, two stage, or two speed outdoor units
  - Plug and play installation in communication mode with communicating Comfort Control
  - Three wire connections to Comfort Control when used with communicating Comfort Control (TCONT900AC43UA)
  - Two speed inducer motor
  - Stored fault code history in microprocessor non-volatile memory
  - Furnace certified to leak 2% or less of nominal air conditioning CFM delivered when pressurized to .5" water column with all inlets, outlets, and drains sealed.
  - Slide out blower assembly
  - Variable speed ECM blower motor with continuous **Comfort-R™**
  - Silicon Nitride hot surface igniter with adaptive heat up
  - Manual reset flame rollout switches
  - Power supply 115/1/60
  - Upflow models are convertible to Horizontal Left or Left airflow.
  - Downflow models are convertible to Horizontal Right or Left airflow.\*
  - 115 Volt EAC/Humidifier connections
  - 2-stage modulating gas valve
  - Accessory hook-up capability
  - Integrated solid state control with self-diagnostics
  - Improved **CleanEffects™** connections
  - Attractive color accents
  - Heavy gauge aluminized steel heat exchanger
  - Multi-port In-shot burners
  - Insulated blower door
  - Gasketed blower door
  - Complete front service access
  - Left/right gas connection
  - Optional L.P conversion kit
  - **Optional extended warranties**
- \* See Installer's Guide for venting applications.



# Features and Benefits

## XC80 OPTIONAL EQUIPMENT

|   |                    |
|---|--------------------|
| Comfort control, Electronic Programmable 4-Stage Heating/ 2-Stage Cooling① .....            | TCONT900AC43UA [ ] |
| Comfort Control, XL802, Programmable 7 Day, 3-Ht, 2-Cl.....                                 | TCONT802AS32DA [ ] |
| Comfort Control, XL803, Programmable 7 Day, 3-Ht, 2-Cl with dehumidification .....          | TCONT803AS32DA [ ] |
| Harness kit for 24V non-communicating connection .....                                      | BAYACHP024* [ ]    |
| Propane Conversion Kit.....   | BAYLPKT210B [ ]    |
| Propane Conversion Kit (with Stainless Steel Burners) .....                                 | BAYLPSS210B [ ]    |
| 5" Expandable High Efficiency Media Filter (17-1/2" Wide Gas Furnace) .....                 | TFM175B0FR0 [ ]    |
| 5" Expandable High Efficiency Media Filter (21" Wide Gas Furnace).....                      | TFM210B0FR0 [ ]    |
| 5" Expandable High Efficiency Media Filter (24-1/2" Wide Gas Furnace) .....                 | TFM245B0FR0 [ ]    |
| 5" Cartridge High Efficiency Media Filter (17-1/2" Wide Gas Furnace) .....                  | TFM175A0FR1 [ ]    |
| 5" Cartridge High Efficiency Media Filter (21" Wide Gas Furnace).....                       | TFM210A0FR1 [ ]    |
| 5" Cartridge High Efficiency Media Filter (24-1/2" Wide Gas Furnace) .....                  | TFM245A0FR1 [ ]    |
| 1" Medium Efficiency Pleated Filter (17 - 1/2" Wide Gas Furnace).....                       | TFP175A0FR1 [ ]    |
| 1" Medium Efficiency Pleated Filter (21" Wide Gas Furnace).....                             | TFP210A0FR1 [ ]    |
| 1" Medium Efficiency Pleated Filter (24-1/2" Wide Gas Furnace).....                         | TFP245A0FR1 [ ]    |
| Coil Enclosure (17-1/2" Wide Cabinets).....   | BAYCLE17A1722A [ ] |
| Coil Enclosure (21" Wide Cabinets).....   | BAYCLE21A2130A [ ] |
| Coil Enclosure (24-1/2" Wide Cabinets) .....  | BAYCLE24A2430A [ ] |
| High Altitude Switch.....   | BAYHALT249 [ ]     |
| Masonry Chimney Vent Kit (Upflow models only).....  | BAYVENT800B [ ]    |
| Filter Rack Kit ② .....   | BAYRACK960A [ ]    |
| Cleanable Filter (14.5"/17.5" wide Upflow models).....                                      | BAYFLTR317 [ ]     |
| Cleanable Filter (21" wide Upflow models) .....   | BAYFLTR321 [ ]     |
| Cleanable Filter (24.5" wide Upflow models) .....   | BAYFLTR324 [ ]     |
| CleanEffects™, Whole House Air Cleaner (Upflow 17-1/2" Wide Gas Furnace) .....              | TFD175CLFR000C [ ] |
| CleanEffects™, Whole House Air Cleaner (Upflow 21" Wide Gas Furnace) .....                  | TFD210CLFR000C [ ] |
| CleanEffects™, Whole House Air Cleaner (Upflow 24-1/2" Wide Gas Furnace) .....              | TFD245CLFR000C [ ] |
| CleanEffects™, Whole House Air Cleaner (Downflow 17-1/2" Wide Gas Furnace) .....            | TFD17DCLFR000C [ ] |
| CleanEffects™, Whole House Air Cleaner (Downflow 21" Wide Gas Furnace) .....                | TFD21DCLFR000C [ ] |
| CleanEffects™, Whole House Air Cleaner (Downflow 24-1/2" Wide Gas Furnace) .....            | TFD24DCLFR000C [ ] |
| CleanEffects™, Whole House Transformer Kit (120 to 24 Volt - all TFD Air Cleaners).....     | BAYTRANS12024 [ ]  |
| CleanEffects™ Connection Kit for Communicating Furnace (24 volt converted units only) ..... | BAYACCECOMM101 [ ] |

① TCONT900AC43UA must be used for communication.

② Available for models with 1800 CFM or greater which require an additional side return.



# General Data

## Product Specifications <sup>①</sup>

| MODEL                                      | *UD2B060ACV32B              | *UD2B080ACV32B              | *UD2C080ACV42B              |
|--|-----------------------------|-----------------------------|-----------------------------|
| TYPE                                       | Upflow/Horizontal           | Upflow/Horizontal           | Upflow/Horizontal           |
| <b>RATINGS</b> <sup>②</sup>                |                             |                             |                             |
| 1st Stage Input BTUH                       | 39,000                      | 52,000                      | 52,000                      |
| 1st Stage Capacity BTUH (ICS) <sup>③</sup> | 31,200                      | 41,600                      | 41,600                      |
| 2nd Stage Input BTUH                       | 60,000                      | 80,000                      | 80,000                      |
| 2nd Stage Capacity BTUH (ICS) <sup>③</sup> | 48,000                      | 64,000                      | 64,000                      |
| Temp. rise (Min.-Max.) °F.                 | 30 - 60                     | 30 - 60                     | 30 - 60                     |
| <b>BLOWER DRIVE</b> <sup>③⑥⑦</sup>         |                             |                             |                             |
|  | Direct                      | Direct                      | Direct                      |
| Diameter - Width (In.)                     | 10 x 7                      | 10 x 7                      | 10 x 10                     |
| No. Used                                   | 1                           | 1                           | 1                           |
| Speeds (No.)                               | Variable                    | Variable                    | Variable                    |
| CFM vs. in. w.g.                           | See Airflow Table           | See Airflow Table           | See Airflow Table           |
| Motor HP                                   | 1/2                         | 1/2                         | 3/4                         |
| R.P.M.                                     | Variable                    | Variable                    | Variable                    |
| Volts/Ph/Hz                                | 115/1/60                    | 115/1/60                    | 115/1/60                    |
| FLA  | 6.4                         | 6.4                         | 8.0                         |
| <b>COMBUSTION FAN — Type</b>               |                             |                             |                             |
|  | Centrifugal                 | Centrifugal                 | Centrifugal                 |
| Drive - No. Speeds                         | Direct - 2                  | Direct - 2                  | Direct - 2                  |
| Motor HP PSC [Shaded Pole] - RPM           | 1/100 / [1/145] - 2543/1727 | 1/100 / [1/145] - 2543/1727 | 1/100 / [1/145] - 2543/1727 |
| Volts/Ph/Hz                                | 115/1/60                    | 115/1/60                    | 115/1/60                    |
| FLA PSC [Shaded pole]                      | 0.70/0.40 / [0.23/0.20]     | 0.70/0.40 / [0.23/0.20]     | 0.70/0.40 / [0.23/0.20]     |
| <b>FILTER — Furnished?</b>                 |                             |                             |                             |
|  | Yes                         | Yes                         | Yes                         |
| Type Recommended                           | High Velocity               | High Velocity               | High Velocity               |
| Hi Vel. (No.-Size-Thk.)                    | 1 - 17x25 - 1in.            | 1 - 17x25 - 1in.            | 1 - 20x25 - 1in.            |
| <b>VENT — Size (In.)</b>                   |                             |                             |                             |
|  | 4 Round                     | 4 Round                     | 4 Round                     |
| <b>HEAT EXCHANGER</b>                      |                             |                             |                             |
| Type -Fired                                | Alum. Steel - Type 1        | Alum. Steel - Type 1        | Alum. Steel - Type 1        |
| -Unfired                                   |                             |                             |                             |
| Gauge (Fired)                              | 20                          | 20                          | 20                          |
| <b>ORIFICES — Main</b> <sup>⑤</sup>        |                             |                             |                             |
| Nat. Gas. Qty. — Drill Size                | 3 — 45                      | 4 — 45                      | 4 — 45                      |
| L.P. Gas Qty. — Drill Size                 | 3 — 56                      | 4 — 56                      | 4 — 56                      |
| <b>GAS VALVE</b>                           |                             |                             |                             |
|  | Redundant - Two Stage       | Redundant - Two Stage       | Redundant - Two Stage       |
| <b>PILOT SAFETY DEVICE</b>                 |                             |                             |                             |
| Type                                       | Hot Surface Ignition        | Hot Surface Ignition        | Hot Surface Ignition        |
| <b>BURNERS — Type</b>                      |                             |                             |                             |
|  | Multi-port In-shot          | Multi-port In-shot          | Multi-port In-shot          |
| Number                                     | 3                           | 4                           | 4                           |
| <b>POWER CONN. — V/Ph/Hz</b> <sup>④</sup>  |                             |                             |                             |
|  | 115/1/60                    | 115/1/60                    | 115/1/60                    |
| Ampacity (In Amps)                         | 8.4                         | 8.4                         | 10.4                        |
| Max. Overcurrent Protection (Amps)         | 15                          | 15                          | 15                          |
| <b>PIPE CONN. SIZE (In.)</b>               |                             |                             |                             |
|  | 1/2                         | 1/2                         | 1/2                         |
| <b>DIMENSIONS</b>                          |                             |                             |                             |
|  | 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 23 x 30-1/2        |
| <b>WEIGHT</b>                              |                             |                             |                             |
| Shipping (Lbs.)/Net (Lbs.)                 | 136 / 126                   | 142 / 132                   | 155 / 145                   |

① Central Furnace heating designs are certified by AGA and CSA.

② For U.S. applications, above input ratings (BTUH) are up to 2,000 feet, derate 4% per 1,000 feet for elevations above 2,000 feet above sea level.  
For Canadian applications, above input ratings (BTUH) are up to 4,500 feet, derate 4% per 1,000 feet for elevations above 4,500 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.

⑤ Furnace ships in natural gas configuration. The LP conversion kit used with the 2 stage furnace is BAYLPSS210B or BAYLPKT210B.

⑥ First stage output capacity is approximately equal to 65% of second stage capacity.

⑦ Direct drive variable speed blower motor is an ECM constant airflow blower motor.



## Product Specifications <sup>①</sup>

| MODEL                                      | *UD2B100ACV32B             | *UD2C100ACV52B             | *UD2D120ACV52B            | *UD2D140ACV52B           |
|--|----------------------------|----------------------------|---------------------------|--------------------------|
| TYPE                                       | Upflow/Horizontal          | Upflow/Horizontal          | Upflow/Horizontal         | Upflow/Horizontal        |
| <b>RATINGS <sup>②</sup></b>                |                            |                            |                           |                          |
| 1st Stage Input BTUH                       | 65,000                     | 65,000                     | 78,000                    | 91,000                   |
| 1st Stage Capacity BTUH (ICS) <sup>③</sup> | 52,000                     | 52,000                     | 62,400                    | 72,800                   |
| 2nd Stage Input BTUH                       | 100,000                    | 100,000                    | 120,000                   | 140,000                  |
| 2nd Stage Capacity BTUH (ICS) <sup>③</sup> | 80,000                     | 79,000                     | 97,000                    | 111,000                  |
| Temp. rise (Min.-Max.) °F.                 | 40 - 70                    | 35 - 65                    | 35 - 65                   | 40 - 70                  |
| <b>BLOWER DRIVE <sup>③⑥⑦</sup></b>         | Direct                     | Direct                     | Direct                    | Direct                   |
| Diameter - Width (In.)                     | 10 x 7                     | 10 x 10                    | 10 x 10                   | 10 x 10                  |
| No. Used                                   | 1                          | 1                          | 1                         | 1                        |
| Speeds (No.)                               | Variable                   | Variable                   | Variable                  | Variable                 |
| CFM vs. in. w.g.                           | See Airflow Table          | See Airflow Table          | See Airflow Table         | See Airflow Table        |
| Motor HP                                   | 1/2                        | 1                          | 1                         | 1                        |
| R. P.M.                                    | Variable                   | Variable                   | Variable                  | Variable                 |
| Volts/Ph/Hz                                | 115/1/60                   | 115/1/60                   | 115/1/60                  | 115/1/60                 |
| FLA  | 5.2                        | 10.0                       | 10.0                      | 10.0                     |
| <b>COMBUSTION FAN — Type</b>               | Centrifugal                | Centrifugal                | Centrifugal               | Centrifugal              |
| Drive - No. Speeds                         | Direct - 2                 | Direct - 2                 | Direct - 2                | Direct - 2               |
| Motor HP PSC [Shaded Pole] - RPM           | 1/75 / [1/145] - 2708/1868 | 1/75 / [1/145] - 2708/1868 | 1/60 / [1/85] - 3090/2225 | 1/60 - 3100/2350         |
| Volts/Ph/Hz                                | 115/1/60                   | 115/1/60                   | 115/1/60                  | 115/1/60                 |
| FLA PSC [Shaded pole]                      | 0.87/0.49 / [0.22/0.20]    | 0.87/0.49 / [0.22/0.20]    | 1.14/0.51 / [0.25/0.21]   | 1.16/0.54                |
| <b>FILTER — Furnished?</b>                 | Yes                        | Yes                        | Yes                       | Yes                      |
| Type Recommended                           | High Velocity              | High Velocity              | High Velocity             | High Velocity            |
| Hi Vel. (No.-Size-Thk.)                    | 1 - 17x25 - 1in.           | 1 - 20x25 - 1in.           | 1 - 24x25 - 1in.          | 1 - 24x25 - 1in.         |
| <b>VENT — Size (In.)</b>                   | 4 Round                    | 4 Round                    | 4 Round                   | 4 Round                  |
| <b>HEAT EXCHANGER</b>                      |                            |                            |                           |                          |
| Type-Fired                                 | Alum. Steel - Type 1       | Alum. Steel - Type 1       | Alum. Steel - Type 1      | Alum. Steel - Type 1     |
| -Unfired                                   |                            |                            |                           |                          |
| Gauge (Fired)                              | 20                         | 20                         | 20                        | 20                       |
| <b>ORIFICES — Main <sup>⑤</sup></b>        |                            |                            |                           |                          |
| Nat. Gas. Qty. — Drill Size                | 5 — 45                     | 5 — 45                     | 6 — 45                    | 7 — 45                   |
| L.P. Gas Qty. — Drill Size                 | 5 — 56                     | 5 — 56                     | 6 — 56                    | 7 — 56                   |
| <b>GAS VALVE</b>                           | Redundant - Two Stage      | Redundant - Two Stage      | Redundant - Two Stage     | Redundant - Two Stage    |
| <b>PILOT SAFETY DEVICE</b>                 |                            |                            |                           |                          |
| Type                                       | Hot Surface Ignition       | Hot Surface Ignition       | Hot Surface Ignition      | Hot Surface Ignition     |
| <b>BURNERS — Type</b>                      | Multi-port In-shot         | Multi-port In-shot         | Multi-port In-shot        | Multi-port In-shot       |
| Number                                     | 5                          | 5                          | 6                         | 7                        |
| <b>POWER CONN. — V/Ph/Hz <sup>④</sup></b>  | 115/1/60                   | 115/1/60                   | 115/1/60                  | 115/1/60                 |
| Ampacity (In Amps)                         | 8.1                        | 12.9                       | 12.9                      | 13.9                     |
| Max. Overcurrent Protection (Amps)         | 15                         | 15                         | 15                        | 15                       |
| <b>PIPE CONN. SIZE (In.)</b>               | 1/2                        | 1/2                        | 1/2                       | 1/2                      |
| <b>DIMENSIONS</b>                          |                            |                            |                           |                          |
|  | H x W x D                  | 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 23 x 30-1/2       | 41-3/4 x 26-1/2 x 30-1/2  | 41-3/4 x 26-1/2 x 30-1/2 |
| <b>WEIGHT</b>                              |                            |                            |                           |                          |
| Shipping (Lbs.)/Net (Lbs.)                 | 148 / 138                  | 175 / 165                  | 193 / 183                 | 197 / 187                |

① Central Furnace heating designs are certified by AGA and CSA.

② For U.S. applications, above input ratings (BTUH) are up to 2,000 feet, derate 4% per 1,000 feet for elevations above 2,000 feet above sea level.

For Canadian applications, above input ratings (BTUH) are up to 4,500 feet, derate 4% per 1,000 feet for elevations above 4,500 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.

⑤ Furnace ships in natural gas configuration. The LP conversion kit used with the 2 stage furnace is BAYLPSS210B or BAYLPKT210B.

⑥ First stage output capacity is approximately equal to 65% of second stage capacity.

⑦ Direct drive variable speed blower motor is an ECM constant airflow blower motor.



## Product Specifications <sup>①</sup>

| MODEL                                      | *DD2B060ACV32B              | *DD2B080ACV32B              | *DD2C100ACV52B             | *DD2D120ACV52B            |
|--|-----------------------------|-----------------------------|----------------------------|---------------------------|
| TYPE                                       | Downflow/Horizontal         | Downflow/Horizontal         | Downflow/Horizontal        | Downflow/Horizontal       |
| <b>RATINGS</b> <sup>②</sup>                |                             |                             |                            |                           |
| 1st Stage Input BTUH                       | 39,000                      | 52,000                      | 65,000                     | 78,000                    |
| 1st Stage Capacity BTUH (ICS) <sup>③</sup> | 31,200                      | 41,600                      | 52,000                     | 62,400                    |
| 2nd Stage Input BTUH                       | 60,000                      | 80,000                      | 100,000                    | 120,000                   |
| 2nd Stage Capacity BTUH (ICS) <sup>③</sup> | 48,000                      | 63,000                      | 81,000                     | 95,000                    |
| Temp. rise (Min.-Max.) °F.                 | 35 - 65                     | 35 - 65                     | 35 - 65                    | 35 - 65                   |
| <b>BLOWER DRIVE</b> <sup>③⑥⑦</sup>         |                             |                             |                            |                           |
| Drive                                      | Direct                      | Direct                      | Direct                     | Direct                    |
| Diameter - Width (In.)                     | 10 x 7                      | 10 x 7                      | 11 x 10                    | 11 x 10                   |
| No. Used                                   | 1                           | 1                           | 1                          | 1                         |
| Speeds (No.)                               | Variable                    | Variable                    | Variable                   | Variable                  |
| CFM vs. in. w.g.                           | See Airflow Table           | See Airflow Table           | See Airflow Table          | See Airflow Table         |
| Motor HP                                   | 1/2                         | 1/2                         | 1                          | 1                         |
| R.P.M.                                     | Variable                    | Variable                    | Variable                   | Variable                  |
| Volts/Ph/Hz                                | 115/1/60                    | 115/1/60                    | 115/1/60                   | 115/1/60                  |
| FLA  | 6.4                         | 6.4                         | 10.0                       | 10.0                      |
| <b>COMBUSTION FAN — Type</b>               |                             |                             |                            |                           |
| Type                                       | Centrifugal                 | Centrifugal                 | Centrifugal                | Centrifugal               |
| Drive - No. Speeds                         | Direct - 2                  | Direct - 2                  | Direct - 2                 | Direct - 2                |
| Motor HP PSC [Shaded Pole] - RPM           | 1/100 / [1/145] - 2543/1727 | 1/100 / [1/145] - 2543/1727 | 1/75 / [1/145] - 2708/1868 | 1/60 / [1/85] - 3090/2225 |
| Volts/Ph/Hz                                | 115/1/60                    | 115/1/60                    | 115/1/60                   | 115/1/60                  |
| FLA PSC [Shaded pole]                      | 0.70/0.40 / [0.23/0.20]     | 0.70/0.40 / [0.23/0.20]     | 0.87/0.49 / [0.22/0.20]    | 1.14/0.51 / [0.25/0.21]   |
| <b>FILTER — Furnished?</b>                 |                             |                             |                            |                           |
| Yes/No                                     | Yes                         | Yes                         | Yes                        | Yes                       |
| Type Recommended                           | High Velocity               | High Velocity               | High Velocity              | High Velocity             |
| Hi Vel. (No.-Size-Thk.)                    | 2 - 14x20 - 1in.            | 2 - 14x20 - 1in.            | 2 - 16x20 - 1in.           | 2 - 16x20 - 1in.          |
| <b>VENT — Size (In.)</b>                   |                             |                             |                            |                           |
| Size                                       | 4 Round                     | 4 Round                     | 4 Round                    | 4 Round                   |
| <b>HEAT EXCHANGER</b>                      |                             |                             |                            |                           |
| Type-Fired                                 | Alum. Steel - Type 1        | Alum. Steel - Type 1        | Alum. Steel - Type 1       | Alum. Steel - Type 1      |
| -Unfired                                   |                             |                             |                            |                           |
| Gauge (Fired)                              | 20                          | 20                          | 20                         | 20                        |
| <b>ORIFICES — Main</b> <sup>⑤</sup>        |                             |                             |                            |                           |
| Nat. Gas Qty. — Drill Size                 | 3 — 45                      | 4 — 45                      | 5 — 45                     | 6 — 45                    |
| L.P. Gas Qty. — Drill Size                 | 3 — 56                      | 4 — 56                      | 5 — 56                     | 6 — 56                    |
| <b>GAS VALVE</b>                           |                             |                             |                            |                           |
| Type                                       | Redundant - Two Stage       | Redundant - Two Stage       | Redundant - Two Stage      | Redundant - Two Stage     |
| <b>PILOT SAFETY DEVICE</b>                 |                             |                             |                            |                           |
| Type                                       | Hot Surface Ignition        | Hot Surface Ignition        | Hot Surface Ignition       | Hot Surface Ignition      |
| <b>BURNERS — Type</b>                      |                             |                             |                            |                           |
| Type                                       | Multi-port In-shot          | Multi-port In-shot          | Multi-port In-shot         | Multi-port In-shot        |
| Number                                     | 3                           | 4                           | 5                          | 6                         |
| <b>POWER CONN. — V/Ph/Hz</b> <sup>④</sup>  |                             |                             |                            |                           |
| V/Ph/Hz                                    | 115/1/60                    | 115/1/60                    | 115/1/60                   | 115/1/60                  |
| Ampacity (In Amps)                         | 8.4                         | 8.4                         | 12.9                       | 12.9                      |
| Max. Overcurrent Protection (Amps)         | 15                          | 15                          | 15                         | 15                        |
| <b>PIPE CONN. SIZE (In.)</b>               |                             |                             |                            |                           |
| Size                                       | 1/2                         | 1/2                         | 1/2                        | 1/2                       |
| <b>DIMENSIONS</b>                          |                             |                             |                            |                           |
| Dimensions                                 | H x W x D                   | 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 23 x 30-1/2       | 41-3/4 x 26-1/2 x 30-1/2  |
| <b>WEIGHT</b>                              |                             |                             |                            |                           |
| Shipping (Lbs.)/Net (Lbs.)                 | 140 / 130                   | 146 / 136                   | 166 / 156                  | 197 / 187                 |

① Central Furnace heating designs are certified by AGA and CSA.

② For U.S. applications, above input ratings (BTUH) are up to 2,000 feet, derate 4% per 1,000 feet for elevations above 2,000 feet above sea level.  
For Canadian applications, above input ratings (BTUH) are up to 4,500 feet, derate 4% per 1,000 feet for elevations above 4,500 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.

⑤ Furnace ships in natural gas configuration. The LP conversion kit used with the 2 stage furnace is BAYLPSS210B or BAYLPKT210B.

⑥ First stage output capacity is approximately equal to 65% of second stage capacity.

⑦ Direct drive variable speed blower motor is an ECM constant airflow blower motor.



# Performance Data



| *UD2B060ACV32B Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure |      |           |      |      |      |      |      |
|---|------|-----------|------|------|------|------|------|
|   |      |           | 0.1  | 0.3  | 0.5  | 0.7  | 0.9  |
| HEATING<br>1ST<br>STAGE   | 533  | CFM       | 523  | 551  | 551  | 547  | 541  |
|   |      | TEMP RISE | 55   | 52   | 52   | 53   | 53   |
|   |      | WATTS     | 52   | 83   | 103  | 119  | 150  |
|   | 650  | CFM       | 651  | 674  | 673  | 667  | 657  |
|   |      | TEMP RISE | 44   | 43   | 43   | 43   | 44   |
|   |      | WATTS     | 76   | 110  | 129  | 145  | 184  |
|   | 689  | CFM       | 694  | 714  | 714  | 707  | 696  |
|   |      | TEMP RISE | 41   | 40   | 40   | 41   | 41   |
|   |      | WATTS     | 87   | 122  | 140  | 155  | 197  |
| HEATING<br>2ND<br>STAGE   | 820  | CFM       | 838  | 851  | 850  | 841  | 826  |
|   |      | TEMP RISE | 53   | 52   | 52   | 53   | 54   |
|   |      | WATTS     | 135  | 171  | 187  | 197  | 243  |
|   | 1000 | CFM       | 1035 | 1039 | 1038 | 1024 | 1006 |
|   |      | TEMP RISE | 43   | 43   | 43   | 43   | 44   |
|   |      | WATTS     | 227  | 263  | 277  | 271  | 318  |
|   | 1060 | CFM       | 1101 | 1102 | 1101 | 1086 | 1066 |
|   |      | TEMP RISE | 40   | 40   | 40   | 41   | 42   |
|   |      | WATTS     | 265  | 300  | 313  | 301  | 346  |

| *UD2B060ACV32B Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter |         |       |       |      |      |      |      |     |
|---|---------|-------|-------|------|------|------|------|-----|
| OD  | AIRFLOW |       | 0.1   | 0.3  | 0.5  | 0.7  | 0.9  |     |
| 1.5   | 290     | CFM   | 371   | 433  | 442  | 439  | 429  |     |
|   |         | WATTS | 28    | 57   | 84   | 110  | 137  |     |
|   | 350     | CFM   | 547   | 571  | 573  | 564  | 549  |     |
|   |         | WATTS | 40    | 68   | 96   | 125  | 152  |     |
|   | 400     | CFM   | 633   | 647  | 643  | 633  | 618  |     |
|   |         | WATTS | 52    | 83   | 111  | 141  | 171  |     |
|   | 450     | CFM   | 701   | 715  | 711  | 704  | 694  |     |
|   |         | WATTS | 64    | 97   | 128  | 160  | 193  |     |
|   | 2.0     | 290   | CFM   | 546  | 573  | 574  | 567  | 554 |
|   |         |       | WATTS | 49   | 80   | 108  | 139  | 168 |
|   |         | 350   | CFM   | 725  | 739  | 738  | 728  | 717 |
|   |         |       | WATTS | 70   | 104  | 137  | 166  | 201 |
| 400   |         | CFM   | 832   | 842  | 837  | 829  | 817  |     |
|   |         | WATTS | 94    | 131  | 166  | 201  | 237  |     |
| 450   |         | CFM   | 935   | 943  | 939  | 930  | 921  |     |
|   |         | WATTS | 122   | 163  | 202  | 239  | 278  |     |
| 2.5   |         | 290   | CFM   | 697  | 716  | 712  | 704  | 693 |
|   |         |       | WATTS | 74   | 110  | 145  | 177  | 211 |
|   | 350     | CFM   | 909   | 915  | 911  | 904  | 895  |     |
|   |         | WATTS | 116   | 155  | 193  | 230  | 266  |     |
|   | 400     | CFM   | 1040  | 1042 | 1043 | 1038 | 1027 |     |
|   |         | WATTS | 160   | 204  | 247  | 291  | 332  |     |
|   | 450     | CFM   | 1178  | 1176 | 1175 | 1169 | 1164 |     |
|   |         | WATTS | 220   | 270  | 318  | 365  | 413  |     |
| 3.0   | 290     | CFM   | 849   | 860  | 859  | 850  | 836  |     |
|   |         | WATTS | 114   | 155  | 196  | 230  | 268  |     |
|   | 350     | CFM   | 1099  | 1097 | 1097 | 1089 | 1082 |     |
|   |         | WATTS | 183   | 228  | 274  | 318  | 363  |     |
|   | 400     | CFM   | 1253  | 1250 | 1250 | 1243 | 1238 |     |
|   |         | WATTS | 258   | 312  | 364  | 415  | 466  |     |
|   | 450     | CFM   | 1406  | 1403 | 1405 | 1354 | 1281 |     |
|   |         | WATTS | 363   | 420  | 484  | 503  | 500  |     |

**NOTES:**

1. \*FIRST LETTER MAY BE "A" OR "T"
2. \*\*FACTORY SETTING
3. CONTINUOUS FAN SPEED SETTING: HEATING OR COOLING AIRFLOW IS APPROXIMATELY 50% OF SELECTED COOLING VALUE.
4. WITH VARIABLE SPEED OUTDOOR UNIT APPLICATION, THE LOW SPEED AIRFLOWS ARE APPROXIMATELY 30% OF LISTED VALUES.
5. LOW 350 CFM/TON IS RECOMMENDED FOR VARIABLE SPEED APPLICATIONS FOR COMFORT & HUMID CLIMATE SETTING: NORMAL IS 400 CFM/TON: HIGH 450 CFM/TON IS FOR DRY CLIMATE SETTING.
6. CONTINUOUS FAN MODE DURING COOLING OPERATION MAY NOT BE APPROPRIATE IN HUMID CLIMATES. IF THE INDOOR AIR EXCEEDS 60% RELATIVE HUMIDITY OR SIMPLY FEELS UNCOMFORTABLY HUMID, IT IS RECOMMENDED THAT THE FAN ONLY BE USED IN THE AUTO MODE.



# Performance Data

| *UD2B080ACV32B Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure |       |           |      |      |      |      |      |
|---|-------|-----------|------|------|------|------|------|
|   |       |           | 0.1  | 0.3  | 0.5  | 0.7  | 0.9  |
| HEATING<br>1ST<br>STAGE   | 780   | CFM       | 804  | 833  | 849  | 863  | 873  |
|   |       | TEMP RISE | 48   | 46   | 45   | 44   | 44   |
|   |       | WATTS     | 66   | 110  | 190  | 229  | 278  |
|   | 897   | CFM       | 930  | 950  | 958  | 960  | 958  |
|   |       | TEMP RISE | 41   | 40   | 40   | 40   | 40   |
|   |       | WATTS     | 102  | 153  | 250  | 283  | 328  |
|   | 955.5 | CFM       | 993  | 1009 | 1012 | 1008 | 1001 |
|   |       | TEMP RISE | 39   | 38   | 38   | 38   | 38   |
|   |       | WATTS     | 124  | 176  | 279  | 308  | 350  |
| HEATING<br>2ND<br>STAGE   | 1200  | CFM       | 1258 | 1255 | 1239 | 1210 | 1179 |
|   |       | TEMP RISE | 47   | 47   | 48   | 49   | 50   |
|   |       | WATTS     | 241  | 279  | 395  | 396  | 423  |
|   | 1380  | CFM       | 1453 | 1436 | 1407 | 1359 | 1310 |
|   |       | TEMP RISE | 41   | 41   | 42   | 43   | 45   |
|   |       | WATTS     | 354  | 362  | 475  | 446  | 457  |
|   | 1470  | CFM       | 1550 | 1526 | 1490 | 1433 | 1375 |
|   |       | TEMP RISE | 38   | 39   | 40   | 41   | 43   |
|   |       | WATTS     | 419  | 407  | 513  | 465  | 467  |

| *UD2B080ACV32B Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter |         |       |      |      |      |      |      |
|---|---------|-------|------|------|------|------|------|
| OD  | AIRFLOW |       | 0.1  | 0.3  | 0.5  | 0.7  | 0.9  |
| 2.5   | 290     | CFM   | 709  | 736  | 734  | 727  | 716  |
|   |         | WATTS | 74   | 115  | 148  | 183  | 218  |
|   | 350     | CFM   | 916  | 937  | 939  | 936  | 929  |
|   |         | WATTS | 109  | 154  | 193  | 233  | 272  |
|   | 400     | CFM   | 1060 | 1071 | 1073 | 1072 | 1067 |
|   |         | WATTS | 156  | 204  | 250  | 295  | 340  |
|   | 450     | CFM   | 1199 | 1208 | 1207 | 1209 | 1209 |
|   |         | WATTS | 216  | 269  | 322  | 374  | 428  |
| 3**   | 290     | CFM   | 878  | 891  | 897  | 886  | 875  |
|   |         | WATTS | 117  | 158  | 200  | 238  | 276  |
|   | 350     | CFM   | 1110 | 1124 | 1125 | 1125 | 1121 |
|   |         | WATTS | 178  | 227  | 275  | 323  | 369  |
|   | 400**   | CFM   | 1277 | 1281 | 1282 | 1289 | 1291 |
|   |         | WATTS | 263  | 318  | 375  | 434  | 493  |
|   | 450     | CFM   | 1445 | 1444 | 1445 | 1375 | 1300 |
|   |         | WATTS | 370  | 433  | 498  | 503  | 502  |
| 3.5   | 290     | CFM   | 1040 | 1044 | 1049 | 1042 | 1034 |
|   |         | WATTS | 172  | 220  | 269  | 315  | 359  |
|   | 350     | CFM   | 1303 | 1302 | 1300 | 1299 | 1296 |
|   |         | WATTS | 281  | 335  | 390  | 444  | 498  |
|   | 400     | CFM   | 1485 | 1496 | 1453 | 1374 | 1298 |
|   |         | WATTS | 415  | 477  | 507  | 503  | 500  |
|   | 450     | CFM   | 1603 | 1530 | 1450 | 1369 | 1288 |
|   |         | WATTS | 514  | 510  | 505  | 501  | 498  |

NOTES:

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4. WITH VARIABLE SPEED OUTDOOR UNIT APPLICATION, THE LOW SPEED AIRFLOWS ARE APPROXIMATELY 30% OF LISTED VALUES.
5. LOW 350 CFM/TON IS RECOMMENDED FOR VARIABLE SPEED APPLICATIONS FOR COMFORT & HUMID CLIMATE SETTING: NORMAL IS 400 CFM/TON: HIGH 450 CFM/TON IS FOR DRY CLIMATE SETTING.
6. CONTINUOUS FAN MODE DURING COOLING OPERATION MAY NOT BE APPROPRIATE IN HUMID CLIMATES. IF THE INDOOR AIR EXCEEDS 60% RELATIVE HUMIDITY OR SIMPLY FEELS UNCOMFORTABLY HUMID, IT IS RECOMMENDED THAT THE FAN ONLY BE USED IN THE AUTO MODE.

# Performance Data



| *UD2C080ACV42B Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure |      |           |      |      |      |      |      |
|---|------|-----------|------|------|------|------|------|
|   |      |           | 0.1  | 0.3  | 0.5  | 0.7  | 0.9  |
| HEATING<br>1ST<br>STAGE   | 722  | CFM       | 760  | 776  | 774  | 768  | 764  |
|   |      | TEMP RISE | 50   | 49   | 50   | 50   | 50   |
|   |      | WATTS     | 86   | 126  | 191  | 188  | 231  |
|   | 819  | CFM       | 844  | 859  | 858  | 851  | 846  |
|   |      | TEMP RISE | 45   | 45   | 45   | 45   | 45   |
|   |      | WATTS     | 88   | 133  | 207  | 200  | 253  |
|   | 897  | CFM       | 911  | 926  | 924  | 917  | 911  |
|   |      | TEMP RISE | 42   | 41   | 41   | 42   | 42   |
|   |      | WATTS     | 93   | 142  | 224  | 211  | 273  |
| HEATING<br>2ND<br>STAGE   | 1110 | CFM       | 1094 | 1108 | 1107 | 1099 | 1088 |
|   |      | TEMP RISE | 54   | 53   | 53   | 54   | 54   |
|   |      | WATTS     | 124  | 183  | 287  | 258  | 337  |
|   | 1260 | CFM       | 1222 | 1236 | 1236 | 1226 | 1213 |
|   |      | TEMP RISE | 48   | 48   | 48   | 48   | 49   |
|   |      | WATTS     | 160  | 224  | 347  | 302  | 389  |
|   | 1380 | CFM       | 1325 | 1338 | 1338 | 1329 | 1313 |
|   |      | TEMP RISE | 45   | 44   | 44   | 44   | 45   |
|   |      | WATTS     | 197  | 266  | 405  | 344  | 435  |

| *UD2C080ACV42B Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter |         |       |       |      |      |      |      |      |
|---|---------|-------|-------|------|------|------|------|------|
| OD  | AIRFLOW |       | 0.1   | 0.3  | 0.5  | 0.7  | 0.9  |      |
| 2.5   | 290     | CFM   | 732   | 758  | 759  | 744  | 728  |      |
|   |         | WATTS | 61    | 100  | 137  | 171  | 207  |      |
|   | 350     | CFM   | 893   | 905  | 905  | 892  | 874  |      |
|   |         | WATTS | 90    | 130  | 172  | 214  | 253  |      |
|   | 400     | CFM   | 1014  | 1024 | 1019 | 1013 | 995  |      |
|   |         | WATTS | 117   | 163  | 206  | 251  | 294  |      |
|   | 450     | CFM   | 1091  | 1107 | 1110 | 1104 | 1101 |      |
|   |         | WATTS | 137   | 188  | 237  | 284  | 337  |      |
|   | 3.0     | 290   | CFM   | 888  | 900  | 897  | 889  | 876  |
|   |         |       | WATTS | 86   | 130  | 170  | 212  | 253  |
|   |         | 350   | CFM   | 1069 | 1081 | 1081 | 1068 | 1063 |
|   |         |       | WATTS | 121  | 179  | 226  | 270  | 321  |
| 400   |         | CFM   | 1202  | 1216 | 1211 | 1202 | 1190 |      |
|   |         | WATTS | 175   | 231  | 281  | 329  | 380  |      |
| 450   |         | CFM   | 1307  | 1323 | 1328 | 1325 | 1322 |      |
|   |         | WATTS | 202   | 277  | 338  | 392  | 453  |      |
| 3.5   | 290     | CFM   | 1034  | 1050 | 1043 | 1034 | 1024 |      |
|   |         | WATTS | 112   | 170  | 213  | 257  | 305  |      |
|   | 350     | CFM   | 1190  | 1208 | 1212 | 1206 | 1203 |      |
|   |         | WATTS | 156   | 223  | 279  | 329  | 383  |      |
|   | 400     | CFM   | 1363  | 1370 | 1378 | 1377 | 1370 |      |
|   |         | WATTS | 240   | 301  | 364  | 425  | 481  |      |
|   | 450     | CFM   | 1565  | 1572 | 1575 | 1558 | 1516 |      |
|   |         | WATTS | 371   | 436  | 510  | 565  | 595  |      |
| 4.0   | 290     | CFM   | 1150  | 1154 | 1147 | 1142 | 1132 |      |
|   |         | WATTS | 178   | 231  | 276  | 330  | 374  |      |
|   | 350     | CFM   | 1363  | 1370 | 1378 | 1377 | 1370 |      |
|   |         | WATTS | 240   | 301  | 364  | 425  | 481  |      |
|   | 400     | CFM   | 1594  | 1601 | 1603 | 1584 | 1536 |      |
|   |         | WATTS | 390   | 456  | 531  | 585  | 611  |      |
|   | 450     | CFM   | 1824  | 1832 | 1829 | 1791 | 1703 |      |
|   |         | WATTS | 539   | 610  | 697  | 746  | 742  |      |

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# Performance Data

| *UD2B100ACV32B Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure |      |           |      |      |      |      |      |
|---|------|-----------|------|------|------|------|------|
|   |      |           | 0.1  | 0.3  | 0.5  | 0.7  | 0.9  |
| HEATING<br>1ST<br>STAGE   | 839  | CFM       | 842  | 848  | 841  | 828  | 812  |
|   |      | TEMP RISE | 57   | 57   | 57   | 58   | 59   |
|   |      | WATTS     | 79   | 178  | 188  | 204  | 236  |
|   | 904  | CFM       | 907  | 912  | 906  | 893  | 875  |
|   |      | TEMP RISE | 53   | 53   | 53   | 54   | 55   |
|   |      | WATTS     | 97   | 207  | 217  | 231  | 262  |
|   | 969  | CFM       | 973  | 976  | 971  | 958  | 939  |
|   |      | TEMP RISE | 49   | 49   | 49   | 50   | 51   |
|   |      | WATTS     | 118  | 240  | 249  | 261  | 291  |
| HEATING<br>2ND<br>STAGE   | 1290 | CFM       | 1298 | 1295 | 1293 | 1278 | 1253 |
|   |      | TEMP RISE | 57   | 57   | 57   | 58   | 59   |
|   |      | WATTS     | 258  | 451  | 456  | 452  | 459  |
|   | 1390 | CFM       | 1399 | 1394 | 1393 | 1378 | 1351 |
|   |      | TEMP RISE | 53   | 53   | 53   | 54   | 55   |
|   |      | WATTS     | 315  | 533  | 537  | 527  | 521  |
|   | 1490 | CFM       | 1500 | 1493 | 1493 | 1478 | 1448 |
|   |      | TEMP RISE | 49   | 49   | 49   | 50   | 51   |
|   |      | WATTS     | 378  | 623  | 627  | 608  | 588  |

| *UD2B100ACV32B Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter |         |       |      |      |      |      |      |
|---|---------|-------|------|------|------|------|------|
| OD  | AIRFLOW |       | 0.1  | 0.3  | 0.5  | 0.7  | 0.9  |
| 1.5   | 290     | CFM   | 424  | 442  | 438  | 424  | 412  |
|   |         | WATTS | 25   | 53   | 78   | 102  | 127  |
|   | 350     | CFM   | 514  | 533  | 526  | 512  | 493  |
|   |         | WATTS | 33   | 65   | 91   | 118  | 143  |
|   | 400     | CFM   | 603  | 615  | 606  | 592  | 576  |
|   |         | WATTS | 44   | 79   | 107  | 135  | 164  |
|   | 450     | CFM   | 686  | 691  | 676  | 667  | 652  |
|   |         | WATTS | 65   | 95   | 125  | 154  | 186  |
| 2.0   | 290     | CFM   | 575  | 588  | 582  | 569  | 552  |
|   |         | WATTS | 40   | 75   | 101  | 130  | 158  |
|   | 350     | CFM   | 712  | 716  | 703  | 691  | 677  |
|   |         | WATTS | 70   | 101  | 130  | 159  | 193  |
|   | 400     | CFM   | 801  | 806  | 800  | 783  | 772  |
|   |         | WATTS | 84   | 127  | 160  | 192  | 227  |
|   | 450     | CFM   | 908  | 910  | 905  | 895  | 879  |
|   |         | WATTS | 112  | 161  | 197  | 232  | 267  |
| 2.5   | 290     | CFM   | 732  | 738  | 729  | 716  | 700  |
|   |         | WATTS | 67   | 107  | 136  | 168  | 200  |
|   | 350     | CFM   | 884  | 884  | 880  | 867  | 851  |
|   |         | WATTS | 104  | 151  | 186  | 220  | 256  |
|   | 400     | CFM   | 999  | 1004 | 1001 | 990  | 978  |
|   |         | WATTS | 146  | 199  | 239  | 279  | 318  |
|   | 450     | CFM   | 1132 | 1134 | 1131 | 1123 | 1114 |
|   |         | WATTS | 204  | 262  | 310  | 354  | 399  |
| 3.0   | 290     | CFM   | 878  | 882  | 875  | 859  | 844  |
|   |         | WATTS | 104  | 150  | 185  | 220  | 254  |
|   | 350     | CFM   | 1055 | 1057 | 1054 | 1042 | 1036 |
|   |         | WATTS | 178  | 224  | 266  | 307  | 350  |
|   | 400     | CFM   | 1205 | 1202 | 1200 | 1195 | 1190 |
|   |         | WATTS | 239  | 305  | 353  | 402  | 451  |
|   | 450     | CFM   | 1351 | 1354 | 1351 | 1323 | 1253 |
|   |         | WATTS | 337  | 409  | 469  | 503  | 500  |

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2. \*\*FACTORY SETTING
3. CONTINUOUS FAN SPEED SETTING: HEATING OR COOLING AIRFLOW IS APPROXIMATELY 50% OF SELECTED COOLING VALUE.
4. WITH VARIABLE SPEED OUTDOOR UNIT APPLICATION, THE LOW SPEED AIRFLOWS ARE APPROXIMATELY 30% OF LISTED VALUES.
5. LOW 350 CFM/TON IS RECOMMENDED FOR VARIABLE SPEED APPLICATIONS FOR COMFORT & HUMID CLIMATE SETTING: NORMAL IS 400 CFM/TON: HIGH 450 CFM/TON IS FOR DRY CLIMATE SETTING.
6. CONTINUOUS FAN MODE DURING COOLING OPERATION MAY NOT BE APPROPRIATE IN HUMID CLIMATES. IF THE INDOOR AIR EXCEEDS 60% RELATIVE HUMIDITY OR SIMPLY FEELS UNCOMFORTABLY HUMID, IT IS RECOMMENDED THAT THE FAN ONLY BE USED IN THE AUTO MODE.

# Performance Data



| *UD2C100ACV52B Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure |      |           |      |      |      |      |      |
|---|------|-----------|------|------|------|------|------|
|   |      |           | 0.1  | 0.3  | 0.5  | 0.7  | 0.9  |
| HEATING<br>1ST<br>STAGE   | 845  | CFM       | 738  | 806  | 847  | 881  | 908  |
|   |      | TEMP RISE | 65   | 59   | 57   | 54   | 53   |
|   |      | WATTS     | 59   | 84   | 128  | 170  | 222  |
|   | 1001 | CFM       | 915  | 971  | 1003 | 1028 | 1046 |
|   |      | TEMP RISE | 52   | 49   | 48   | 47   | 46   |
|   |      | WATTS     | 70   | 129  | 197  | 250  | 315  |
|   | 1073 | CFM       | 996  | 1047 | 1074 | 1095 | 1109 |
|   |      | TEMP RISE | 48   | 46   | 45   | 44   | 43   |
|   |      | WATTS     | 84   | 155  | 232  | 288  | 357  |
| HEATING<br>2ND<br>STAGE   | 1300 | CFM       | 1254 | 1288 | 1302 | 1310 | 1310 |
|   |      | TEMP RISE | 59   | 57   | 57   | 56   | 56   |
|   |      | WATTS     | 162  | 261  | 357  | 413  | 489  |
|   | 1540 | CFM       | 1526 | 1543 | 1543 | 1536 | 1523 |
|   |      | TEMP RISE | 48   | 48   | 48   | 48   | 48   |
|   |      | WATTS     | 303  | 411  | 512  | 553  | 623  |
|   | 1650 | CFM       | 1650 | 1659 | 1653 | 1640 | 1620 |
|   |      | TEMP RISE | 45   | 44   | 45   | 45   | 46   |
|   |      | WATTS     | 387  | 493  | 590  | 620  | 683  |

| *UD2C100ACV52B Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter |         |       |       |      |      |      |      |      |
|---|---------|-------|-------|------|------|------|------|------|
| OD  | AIRFLOW |       | 0.1   | 0.3  | 0.5  | 0.7  | 0.9  |      |
| 3.0   | 290     | CFM   | 753   | 817  | 844  | 848  | 851  |      |
|   |         | WATTS | 69    | 115  | 161  | 206  | 253  |      |
|   | 350     | CFM   | 972   | 1030 | 1057 | 1071 | 1067 |      |
|   |         | WATTS | 105   | 165  | 218  | 271  | 321  |      |
|   | 400     | CFM   | 1140  | 1176 | 1193 | 1210 | 1214 |      |
|   |         | WATTS | 153   | 214  | 273  | 333  | 392  |      |
|   | 450     | CFM   | 1284  | 1306 | 1314 | 1325 | 1337 |      |
|   |         | WATTS | 212   | 276  | 337  | 406  | 474  |      |
|   | 3.5     | 290   | CFM   | 939  | 984  | 1009 | 1017 | 1015 |
|   |         |       | WATTS | 97   | 150  | 198  | 254  | 302  |
|   |         | 350   | CFM   | 1141 | 1168 | 1181 | 1204 | 1203 |
|   |         |       | WATTS | 153  | 208  | 265  | 330  | 386  |
| 400   |         | CFM   | 1415  | 1455 | 1473 | 1486 | 1500 |      |
|   |         | WATTS | 246   | 324  | 395  | 467  | 543  |      |
| 450   |         | CFM   | 1543  | 1569 | 1567 | 1564 | 1574 |      |
|   |         | WATTS | 337   | 413  | 482  | 552  | 638  |      |
| 4.0   |         | 290   | CFM   | 1083 | 1115 | 1129 | 1149 | 1147 |
|   |         |       | WATTS | 137  | 195  | 249  | 311  | 366  |
|   |         | 350   | CFM   | 1415 | 1455 | 1473 | 1486 | 1500 |
|   |         |       | WATTS | 246  | 324  | 395  | 467  | 543  |
|   | 400     | CFM   | 1619  | 1640 | 1650 | 1653 | 1654 |      |
|   |         | WATTS | 364   | 447  | 525  | 601  | 678  |      |
|   | 450     | CFM   | 1855  | 1869 | 1874 | 1873 | 1867 |      |
|   |         | WATTS | 526   | 614  | 699  | 784  | 866  |      |
|   | 5.0     | 290   | CFM   | 1390 | 1412 | 1417 | 1413 | 1426 |
|   |         |       | WATTS | 257  | 327  | 395  | 457  | 532  |
|   |         | 350   | CFM   | 1740 | 1752 | 1755 | 1756 | 1749 |
|   |         |       | WATTS | 468  | 557  | 629  | 718  | 796  |
| 400   |         | CFM   | 2095  | 2102 | 2086 | 2027 | 1941 |      |
|   |         | WATTS | 758   | 860  | 937  | 959  | 959  |      |
| 450   |         | CFM   | 2277  | 2197 | 2112 | 2035 | 1950 |      |
|   |         | WATTS | 972   | 973  | 963  | 970  | 969  |      |

NOTES:

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6. CONTINUOUS FAN MODE DURING COOLING OPERATION MAY NOT BE APPROPRIATE IN HUMID CLIMATES. IF THE INDOOR AIR EXCEEDS 60% RELATIVE HUMIDITY OR SIMPLY FEELS UNCOMFORTABLY HUMID, IT IS RECOMMENDED THAT THE FAN ONLY BE USED IN THE AUTO MODE.



# Performance Data

| *UD2D120ACV52B Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure |      |           |      |      |      |      |      |
|---|------|-----------|------|------|------|------|------|
|   |      |           | 0.1  | 0.3  | 0.5  | 0.7  | 0.9  |
| HEATING<br>1ST<br>STAGE   | 845  | CFM       | 844  | 869  | 894  | 915  | 940  |
|   |      | TEMP RISE | 68   | 66   | 64   | 63   | 61   |
|   |      | WATTS     | 87   | 132  | 146  | 185  | 220  |
|   | 1073 | CFM       | 1071 | 1090 | 1105 | 1116 | 1128 |
|   |      | TEMP RISE | 54   | 53   | 52   | 52   | 51   |
|   |      | WATTS     | 126  | 186  | 227  | 296  | 345  |
|   | 1235 | CFM       | 1233 | 1248 | 1255 | 1259 | 1262 |
|   |      | TEMP RISE | 47   | 46   | 46   | 46   | 46   |
|   |      | WATTS     | 175  | 244  | 297  | 380  | 432  |
| HEATING<br>2ND<br>STAGE   | 1300 | CFM       | 1298 | 1311 | 1316 | 1317 | 1316 |
|   |      | TEMP RISE | 68   | 67   | 67   | 67   | 67   |
|   |      | WATTS     | 200  | 272  | 327  | 415  | 467  |
|   | 1650 | CFM       | 1647 | 1651 | 1640 | 1626 | 1606 |
|   |      | TEMP RISE | 54   | 54   | 54   | 54   | 55   |
|   |      | WATTS     | 385  | 469  | 514  | 611  | 647  |
|   | 1900 | CFM       | 1897 | 1894 | 1872 | 1846 | 1812 |
|   |      | TEMP RISE | 47   | 47   | 47   | 48   | 49   |
|   |      | WATTS     | 569  | 657  | 674  | 762  | 770  |

| *UD2D120ACV52B Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter |         |       |      |      |      |      |      |
|---|---------|-------|------|------|------|------|------|
| OD  | AIRFLOW |       | 0.1  | 0.3  | 0.5  | 0.7  | 0.9  |
| 3.5   | 290     | CFM   | 1010 | 1036 | 1038 | 1039 | 1033 |
|   |         | WATTS | 118  | 168  | 216  | 266  | 315  |
|   | 350     | CFM   | 1212 | 1228 | 1230 | 1228 | 1223 |
|   |         | WATTS | 167  | 237  | 291  | 345  | 403  |
|   | 400     | CFM   | 1407 | 1420 | 1417 | 1416 | 1416 |
|   |         | WATTS | 240  | 318  | 380  | 441  | 508  |
| 450   | CFM     | 1580  | 1584 | 1584 | 1581 | 1580 |      |
|   | WATTS   | 342   | 415  | 484  | 553  | 624  |      |
| 4.0   | 290     | CFM   | 1141 | 1159 | 1165 | 1164 | 1157 |
|   |         | WATTS | 157  | 211  | 263  | 316  | 373  |
|   | 350     | CFM   | 1407 | 1420 | 1417 | 1416 | 1416 |
|   |         | WATTS | 240  | 318  | 380  | 441  | 508  |
|   | 400     | CFM   | 1595 | 1609 | 1610 | 1604 | 1600 |
|   |         | WATTS | 356  | 428  | 500  | 571  | 639  |
| 450   | CFM     | 1814  | 1817 | 1813 | 1801 | 1788 |      |
|   | WATTS   | 505   | 582  | 655  | 729  | 803  |      |
| 5.0   | 290     | CFM   | 1441 | 1417 | 1425 | 1421 | 1422 |
|   |         | WATTS | 267  | 322  | 386  | 447  | 512  |
|   | 350     | CFM   | 1765 | 1773 | 1771 | 1768 | 1762 |
|   |         | WATTS | 457  | 550  | 627  | 705  | 780  |
|   | 400     | CFM   | 2014 | 2011 | 2004 | 1992 | 1945 |
|   |         | WATTS | 662  | 768  | 849  | 932  | 974  |
| 450   | CFM     | 2210  | 2193 | 2116 | 2038 | 1954 |      |
|   | WATTS   | 902   | 990  | 989  | 984  | 979  |      |

NOTES:

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5. LOW 350 CFM/TON IS RECOMMENDED FOR VARIABLE SPEED APPLICATIONS FOR COMFORT & HUMID CLIMATE SETTING: NORMAL IS 400 CFM/TON: HIGH 450 CFM/TON IS FOR DRY CLIMATE SETTING.
6. CONTINUOUS FAN MODE DURING COOLING OPERATION MAY NOT BE APPROPRIATE IN HUMID CLIMATES. IF THE INDOOR AIR EXCEEDS 60% RELATIVE HUMIDITY OR SIMPLY FEELS UNCOMFORTABLY HUMID, IT IS RECOMMENDED THAT THE FAN ONLY BE USED IN THE AUTO MODE.

# Performance Data



| *UD2D140ACV52B Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure |      |           |      |      |      |      |      |
|---|------|-----------|------|------|------|------|------|
|   |      |           | 0.1  | 0.3  | 0.5  | 0.7  | 0.9  |
| HEATING<br>1ST<br>STAGE   | 1047 | CFM       | 1012 | 1048 | 1068 | 1079 | 1095 |
|   |      | TEMP RISE | 66   | 64   | 63   | 62   | 61   |
|   |      | WATTS     | 99   | 162  | 211  | 269  | 372  |
|   | 1248 | CFM       | 1217 | 1240 | 1250 | 1251 | 1255 |
|   |      | TEMP RISE | 55   | 54   | 54   | 54   | 53   |
|   |      | WATTS     | 170  | 251  | 320  | 383  | 502  |
|   | 1320 | CFM       | 1290 | 1308 | 1314 | 1312 | 1311 |
|   |      | TEMP RISE | 52   | 51   | 51   | 51   | 51   |
|   |      | WATTS     | 203  | 288  | 360  | 423  | 546  |
| HEATING<br>2ND<br>STAGE   | 1610 | CFM       | 1587 | 1584 | 1577 | 1560 | 1541 |
|   |      | TEMP RISE | 65   | 65   | 65   | 66   | 67   |
|   |      | WATTS     | 378  | 458  | 531  | 587  | 721  |
|   | 1920 | CFM       | 1903 | 1879 | 1857 | 1825 | 1787 |
|   |      | TEMP RISE | 54   | 55   | 56   | 57   | 58   |
|   |      | WATTS     | 637  | 682  | 729  | 763  | 895  |
|   | 2030 | CFM       | 2015 | 1984 | 1956 | 1919 | 1874 |
|   |      | TEMP RISE | 51   | 52   | 53   | 54   | 55   |
|   |      | WATTS     | 746  | 771  | 803  | 825  | 955  |

| *UD2D120ACV52B Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter |         |       |      |      |      |      |      |
|---|---------|-------|------|------|------|------|------|
| OD  | AIRFLOW |       | 0.1  | 0.3  | 0.5  | 0.7  | 0.9  |
| 3.5   | 290     | CFM   | 1010 | 1036 | 1038 | 1039 | 1033 |
|   |         | WATTS | 118  | 168  | 216  | 266  | 315  |
|   | 350     | CFM   | 1212 | 1228 | 1230 | 1228 | 1223 |
|   |         | WATTS | 167  | 237  | 291  | 345  | 403  |
|   | 400     | CFM   | 1407 | 1420 | 1417 | 1416 | 1416 |
|   |         | WATTS | 240  | 318  | 380  | 441  | 508  |
| 450   | CFM     | 1580  | 1584 | 1584 | 1581 | 1580 |      |
|   | WATTS   | 342   | 415  | 484  | 553  | 624  |      |
| 4.0   | 290     | CFM   | 1141 | 1159 | 1165 | 1164 | 1157 |
|   |         | WATTS | 157  | 211  | 263  | 316  | 373  |
|   | 350     | CFM   | 1407 | 1420 | 1417 | 1416 | 1416 |
|   |         | WATTS | 240  | 318  | 380  | 441  | 508  |
|   | 400     | CFM   | 1595 | 1609 | 1610 | 1604 | 1600 |
|   |         | WATTS | 356  | 428  | 500  | 571  | 639  |
| 450   | CFM     | 1814  | 1817 | 1813 | 1801 | 1788 |      |
|   | WATTS   | 505   | 582  | 655  | 729  | 803  |      |
| 5.0   | 290     | CFM   | 1441 | 1417 | 1425 | 1421 | 1422 |
|   |         | WATTS | 267  | 322  | 386  | 447  | 512  |
|   | 350     | CFM   | 1765 | 1773 | 1771 | 1768 | 1762 |
|   |         | WATTS | 457  | 550  | 627  | 705  | 780  |
|   | 400     | CFM   | 2014 | 2011 | 2004 | 1992 | 1945 |
|   |         | WATTS | 662  | 768  | 849  | 932  | 974  |
| 450   | CFM     | 2210  | 2193 | 2116 | 2038 | 1954 |      |
|   | WATTS   | 902   | 990  | 989  | 984  | 979  |      |

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# Performance Data

| *DD2B060ACV32B Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure |      |           |      |      |      |      |      |
|---|------|-----------|------|------|------|------|------|
|   |      |           | 0.1  | 0.3  | 0.5  | 0.7  | 0.9  |
| HEATING<br>1ST<br>STAGE   | 559  | CFM       | 554  | 585  | 587  | 579  | 571  |
|   |      | TEMP RISE | 52   | 49   | 49   | 50   | 50   |
|   |      | WATTS     | 50   | 73   | 85   | 124  | 171  |
|   | 624  | CFM       | 622  | 652  | 655  | 648  | 637  |
|   |      | TEMP RISE | 46   | 44   | 44   | 44   | 45   |
|   |      | WATTS     | 62   | 86   | 96   | 141  | 192  |
|   | 689  | CFM       | 690  | 719  | 723  | 716  | 704  |
|   |      | TEMP RISE | 42   | 40   | 40   | 40   | 41   |
|   |      | WATTS     | 78   | 102  | 110  | 160  | 216  |
| HEATING<br>2ND<br>STAGE   | 860  | CFM       | 869  | 896  | 902  | 896  | 879  |
|   |      | TEMP RISE | 51   | 49   | 49   | 49   | 50   |
|   |      | WATTS     | 132  | 157  | 165  | 223  | 292  |
|   | 960  | CFM       | 974  | 999  | 1006 | 1001 | 981  |
|   |      | TEMP RISE | 45   | 44   | 44   | 44   | 45   |
|   |      | WATTS     | 173  | 198  | 210  | 269  | 345  |
|   | 1060 | CFM       | 1078 | 1102 | 1111 | 1107 | 1083 |
|   |      | TEMP RISE | 41   | 40   | 40   | 40   | 41   |
|   |      | WATTS     | 220  | 246  | 263  | 322  | 405  |

| *DD2B060ACV32B Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter |         |       |       |      |      |      |      |     |
|---|---------|-------|-------|------|------|------|------|-----|
| OD  | AIRFLOW |       | 0.1   | 0.3  | 0.5  | 0.7  | 0.9  |     |
| 1.5   | 290     | CFM   | 422   | 465  | 473  | 462  | 449  |     |
|   |         | WATTS | 26    | 49   | 67   | 106  | 131  |     |
|   | 350     | CFM   | 518   | 550  | 562  | 554  | 535  |     |
|   |         | WATTS | 34    | 60   | 75   | 122  | 149  |     |
|   | 400     | CFM   | 606   | 631  | 633  | 631  | 612  |     |
|   |         | WATTS | 43    | 74   | 102  | 134  | 165  |     |
|   | 450     | CFM   | 683   | 705  | 705  | 699  | 687  |     |
|   |         | WATTS | 59    | 88   | 99   | 163  | 190  |     |
|   | 2.0     | 290   | CFM   | 583  | 609  | 614  | 610  | 591 |
|   |         |       | WATTS | 42   | 68   | 82   | 135  | 162 |
|   |         | 350   | CFM   | 708  | 730  | 729  | 722  | 712 |
|   |         |       | WATTS | 57   | 91   | 122  | 155  | 190 |
| 400   |         | CFM   | 805   | 837  | 830  | 823  | 817  |     |
|   |         | WATTS | 75    | 114  | 150  | 183  | 220  |     |
| 450   |         | CFM   | 896   | 926  | 930  | 921  | 911  |     |
|   |         | WATTS | 98    | 142  | 182  | 220  | 256  |     |
| 2.5   | 290     | CFM   | 732   | 757  | 754  | 747  | 738  |     |
|   |         | WATTS | 70    | 100  | 110  | 180  | 206  |     |
|   | 350     | CFM   | 873   | 904  | 905  | 896  | 887  |     |
|   |         | WATTS | 112   | 146  | 152  | 245  | 265  |     |
|   | 400     | CFM   | 1000  | 1030 | 1034 | 1029 | 1026 |     |
|   |         | WATTS | 126   | 176  | 222  | 264  | 308  |     |
|   | 450     | CFM   | 1144  | 1169 | 1178 | 1174 | 1146 |     |
|   |         | WATTS | 213   | 253  | 252  | 392  | 394  |     |
| 3.0   | 290     | CFM   | 883   | 909  | 918  | 913  | 893  |     |
|   |         | WATTS | 111   | 144  | 151  | 242  | 263  |     |
|   | 350     | CFM   | 1056  | 1083 | 1091 | 1086 | 1083 |     |
|   |         | WATTS | 179   | 217  | 218  | 343  | 351  |     |
|   | 400     | CFM   | 1223  | 1243 | 1260 | 1257 | 1252 |     |
|   |         | WATTS | 210   | 271  | 329  | 384  | 436  |     |
|   | 450     | CFM   | 1404  | 1421 | 1442 | 1444 | 1362 |     |
|   |         | WATTS | 301   | 367  | 439  | 505  | 504  |     |

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# Performance Data



| *DD2B080ACV32B Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure |      |           |      |      |      |      |      |
|---|------|-----------|------|------|------|------|------|
|   |      |           | 0.1  | 0.3  | 0.5  | 0.7  | 0.9  |
| HEATING<br>1ST<br>STAGE   | 650  | CFM       | 644  | 680  | 695  | 703  | 717  |
|   |      | TEMP RISE | 60   | 56   | 55   | 55   | 53   |
|   |      | WATTS     | 66   | 91   | 108  | 129  | 167  |
|   | 728  | CFM       | 723  | 754  | 766  | 770  | 778  |
|   |      | TEMP RISE | 53   | 51   | 50   | 50   | 49   |
|   |      | WATTS     | 70   | 106  | 134  | 164  | 203  |
|   | 819  | CFM       | 816  | 841  | 849  | 848  | 849  |
|   |      | TEMP RISE | 47   | 46   | 45   | 45   | 45   |
|   |      | WATTS     | 82   | 127  | 167  | 205  | 244  |
| HEATING<br>2ND<br>STAGE   | 1000 | CFM       | 1001 | 1013 | 1014 | 1005 | 990  |
|   |      | TEMP RISE | 59   | 58   | 58   | 59   | 60   |
|   |      | WATTS     | 131  | 186  | 237  | 284  | 319  |
|   | 1120 | CFM       | 1123 | 1128 | 1123 | 1108 | 1083 |
|   |      | TEMP RISE | 53   | 52   | 53   | 53   | 54   |
|   |      | WATTS     | 181  | 236  | 288  | 335  | 365  |
|   | 1260 | CFM       | 1266 | 1261 | 1250 | 1229 | 1192 |
|   |      | TEMP RISE | 47   | 47   | 47   | 48   | 49   |
|   |      | WATTS     | 256  | 306  | 351  | 394  | 413  |

| *DD2B080ACV32B Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter |         |       |      |      |      |      |      |
|---|---------|-------|------|------|------|------|------|
| OD  | AIRFLOW |       | 0.1  | 0.3  | 0.5  | 0.7  | 0.9  |
| 2.5   | 290     | CFM   | 723  | 742  | 738  | 726  | 715  |
|   |         | WATTS | 63   | 98   | 130  | 162  | 196  |
|   | 350     | CFM   | 871  | 891  | 891  | 881  | 868  |
|   |         | WATTS | 94   | 138  | 176  | 210  | 247  |
|   | 400     | CFM   | 1006 | 1019 | 1022 | 1013 | 1000 |
|   |         | WATTS | 134  | 182  | 224  | 265  | 307  |
| 450   | CFM     | 1123  | 1131 | 1129 | 1120 | 1108 |      |
|   | WATTS   | 182   | 235  | 282  | 326  | 367  |      |
| 3.0   | 290     | CFM   | 868  | 891  | 884  | 877  | 866  |
|   |         | WATTS | 95   | 137  | 176  | 208  | 245  |
|   | 350     | CFM   | 1055 | 1059 | 1063 | 1052 | 1045 |
|   |         | WATTS | 155  | 199  | 246  | 288  | 329  |
|   | 400     | CFM   | 1193 | 1192 | 1202 | 1200 | 1193 |
|   |         | WATTS | 216  | 266  | 320  | 372  | 422  |
| 450   | CFM     | 1355  | 1359 | 1359 | 1356 | 1300 |      |
|   | WATTS   | 308   | 368  | 427  | 484  | 500  |      |
| 3.5   | 290     | CFM   | 1026 | 1039 | 1040 | 1029 | 1017 |
|   |         | WATTS | 142  | 188  | 232  | 272  | 311  |
|   | 350     | CFM   | 1225 | 1231 | 1239 | 1235 | 1231 |
|   |         | WATTS | 224  | 281  | 336  | 386  | 437  |
|   | 400     | CFM   | 1412 | 1408 | 1410 | 1397 | 1319 |
|   |         | WATTS | 333  | 390  | 462  | 509  | 504  |
| 450   | CFM     | 1596  | 1544 | 1469 | 1387 | 1315 |      |
|   | WATTS   | 492   | 516  | 512  | 509  | 508  |      |

**NOTES:**

1. \*FIRST LETTER MAY BE "A" OR "T"
2. \*\*FACTORY SETTING
3. CONTINUOUS FAN SPEED SETTING: HEATING OR COOLING AIRFLOW IS APPROXIMATELY 50% OF SELECTED COOLING VALUE.
4. WITH VARIABLE SPEED OUTDOOR UNIT APPLICATION, THE LOW SPEED AIRFLOWS ARE APPROXIMATELY 30% OF LISTED VALUES.
5. LOW 350 CFM/TON IS RECOMMENDED FOR VARIABLE SPEED APPLICATIONS FOR COMFORT & HUMID CLIMATE SETTING: NORMAL IS 400 CFM/TON: HIGH 450 CFM/TON IS FOR DRY CLIMATE SETTING.
6. CONTINUOUS FAN MODE DURING COOLING OPERATION MAY NOT BE APPROPRIATE IN HUMID CLIMATES. IF THE INDOOR AIR EXCEEDS 60% RELATIVE HUMIDITY OR SIMPLY FEELS UNCOMFORTABLY HUMID, IT IS RECOMMENDED THAT THE FAN ONLY BE USED IN THE AUTO MODE.



# Performance Data

| *DD2C100ACV52B Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure |      |           | 0.1  | 0.3  | 0.5  | 0.7  | 0.9  |
|---|------|-----------|------|------|------|------|------|
| HEATING<br>1ST<br>STAGE   | 819  | CFM       | 834  | 845  | 853  | 862  | 870  |
|   |      | TEMP RISE | 57   | 57   | 56   | 56   | 55   |
|   |      | WATTS     | 71   | 138  | 155  | 178  | 225  |
|   | 891  | CFM       | 904  | 913  | 919  | 925  | 930  |
|   |      | TEMP RISE | 53   | 52   | 52   | 52   | 52   |
|   |      | WATTS     | 78   | 157  | 178  | 206  | 258  |
|   | 1001 | CFM       | 1012 | 1019 | 1021 | 1023 | 1023 |
|   |      | TEMP RISE | 47   | 47   | 47   | 47   | 47   |
|   |      | WATTS     | 95   | 192  | 216  | 250  | 310  |
| HEATING<br>2ND<br>STAGE   | 1260 | CFM       | 1266 | 1268 | 1260 | 1252 | 1241 |
|   |      | TEMP RISE | 58   | 58   | 59   | 59   | 59   |
|   |      | WATTS     | 162  | 300  | 323  | 361  | 432  |
|   | 1370 | CFM       | 1374 | 1373 | 1361 | 1350 | 1333 |
|   |      | TEMP RISE | 54   | 54   | 54   | 55   | 55   |
|   |      | WATTS     | 202  | 357  | 375  | 411  | 485  |
|   | 1540 | CFM       | 1540 | 1536 | 1518 | 1500 | 1476 |
|   |      | TEMP RISE | 48   | 48   | 49   | 49   | 50   |
|   |      | WATTS     | 278  | 459  | 464  | 492  | 567  |

| *DD2C100ACV52B Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter |         |       | 0.1   | 0.3  | 0.5  | 0.7  | 0.9  |      |
|---|---------|-------|-------|------|------|------|------|------|
| OD  | AIRFLOW |       |       |      |      |      |      |      |
| 3.0   | 290     | CFM   | 888   | 890  | 887  | 879  | 866  |      |
|   |         | WATTS | 90    | 134  | 175  | 217  | 260  |      |
|   | 350     | CFM   | 1066  | 1065 | 1058 | 1052 | 1042 |      |
|   |         | WATTS | 137   | 184  | 229  | 277  | 325  |      |
|   | 400     | CFM   | 1193  | 1196 | 1187 | 1182 | 1173 |      |
|   |         | WATTS | 183   | 236  | 287  | 338  | 393  |      |
|   | 450     | CFM   | 1346  | 1349 | 1339 | 1334 | 1323 |      |
|   |         | WATTS | 240   | 297  | 353  | 409  | 465  |      |
|   | 3.5     | 290   | CFM   | 1035 | 1042 | 1031 | 1025 | 1015 |
|   |         |       | WATTS | 123  | 172  | 217  | 264  | 311  |
|   |         | 350   | CFM   | 1212 | 1210 | 1207 | 1197 | 1187 |
|   |         |       | WATTS | 190  | 242  | 294  | 346  | 399  |
| 400   |         | CFM   | 1403  | 1404 | 1396 | 1384 | 1378 |      |
|   |         | WATTS | 256   | 319  | 378  | 432  | 492  |      |
| 450   |         | CFM   | 1573  | 1578 | 1566 | 1555 | 1542 |      |
|   |         | WATTS | 358   | 427  | 486  | 550  | 612  |      |
| 4.0   | 290     | CFM   | 1169  | 1166 | 1160 | 1153 | 1144 |      |
|   |         | WATTS | 170   | 219  | 269  | 320  | 371  |      |
|   | 350     | CFM   | 1403  | 1404 | 1396 | 1384 | 1378 |      |
|   |         | WATTS | 256   | 319  | 378  | 432  | 492  |      |
|   | 400     | CFM   | 1593  | 1597 | 1593 | 1583 | 1573 |      |
|   |         | WATTS | 369   | 439  | 505  | 573  | 636  |      |
|   | 450     | CFM   | 1806  | 1805 | 1800 | 1795 | 1764 |      |
|   |         | WATTS | 511   | 586  | 662  | 735  | 787  |      |
| 5.0   | 290     | CFM   | 1454  | 1448 | 1438 | 1434 | 1413 |      |
|   |         | WATTS | 292   | 351  | 409  | 469  | 522  |      |
|   | 350     | CFM   | 1765  | 1778 | 1734 | 1726 | 1717 |      |
|   |         | WATTS | 488   | 575  | 612  | 685  | 760  |      |
|   | 400     | CFM   | 2011  | 2006 | 1988 | 1951 | 1891 |      |
|   |         | WATTS | 697   | 779  | 848  | 900  | 920  |      |
|   | 450     | CFM   | 2212  | 2159 | 2081 | 1998 | 1917 |      |
|   |         | WATTS | 912   | 956  | 953  | 951  | 947  |      |

NOTES:

1. \*FIRST LETTER MAY BE "A" OR "T"
2. \*\*FACTORY SETTING
3. CONTINUOUS FAN SPEED SETTING: HEATING OR COOLING AIRFLOW IS APPROXIMATELY 50% OF SELECTED COOLING VALUE.
4. WITH VARIABLE SPEED OUTDOOR UNIT APPLICATION, THE LOW SPEED AIRFLOWS ARE APPROXIMATELY 30% OF LISTED VALUES.
5. LOW 350 CFM/TON IS RECOMMENDED FOR VARIABLE SPEED APPLICATIONS FOR COMFORT & HUMID CLIMATE SETTING: NORMAL IS 400 CFM/TON: HIGH 450 CFM/TON IS FOR DRY CLIMATE SETTING.
6. CONTINUOUS FAN MODE DURING COOLING OPERATION MAY NOT BE APPROPRIATE IN HUMID CLIMATES. IF THE INDOOR AIR EXCEEDS 60% RELATIVE HUMIDITY OR SIMPLY FEELS UNCOMFORTABLY HUMID, IT IS RECOMMENDED THAT THE FAN ONLY BE USED IN THE AUTO MODE.

# Performance Data



| *DD2D120ACV52B Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure |      |           |      |      |      |      |      |
|---|------|-----------|------|------|------|------|------|
|   |      |           | 0.1  | 0.3  | 0.5  | 0.7  | 0.9  |
| HEATING<br>1ST<br>STAGE   | 1040 | CFM       | 1041 | 1045 | 1040 | 1010 | 1042 |
|   |      | TEMP RISE | 55   | 55   | 55   | 57   | 55   |
|   |      | WATTS     | 128  | 173  | 196  | 231  | 269  |
|   | 1183 | CFM       | 1178 | 1181 | 1176 | 1147 | 1170 |
|   |      | TEMP RISE | 49   | 49   | 49   | 50   | 49   |
|   |      | WATTS     | 169  | 218  | 241  | 284  | 334  |
|   | 1300 | CFM       | 1290 | 1292 | 1286 | 1259 | 1275 |
|   |      | TEMP RISE | 45   | 45   | 45   | 46   | 45   |
|   |      | WATTS     | 211  | 264  | 286  | 333  | 390  |
| HEATING<br>2ND<br>STAGE   | 1600 | CFM       | 1578 | 1578 | 1570 | 1547 | 1543 |
|   |      | TEMP RISE | 56   | 56   | 56   | 57   | 57   |
|   |      | WATTS     | 352  | 414  | 433  | 482  | 543  |
|   | 1820 | CFM       | 1789 | 1788 | 1778 | 1757 | 1739 |
|   |      | TEMP RISE | 49   | 49   | 50   | 50   | 51   |
|   |      | WATTS     | 487  | 555  | 568  | 613  | 665  |
|   | 2000 | CFM       | 1962 | 1959 | 1949 | 1930 | 1900 |
|   |      | TEMP RISE | 45   | 45   | 45   | 46   | 47   |
|   |      | WATTS     | 618  | 690  | 697  | 734  | 771  |

| *DD2D120ACV52B Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter |         |       |      |      |      |      |      |
|---|---------|-------|------|------|------|------|------|
| OD  | AIRFLOW |       | 0.1  | 0.3  | 0.5  | 0.7  | 0.9  |
| 3.5   | 290     | CFM   | 1013 | 1020 | 1014 | 1004 | 993  |
|   |         | WATTS | 100  | 153  | 192  | 238  | 283  |
|   | 350     | CFM   | 1216 | 1208 | 1210 | 1201 | 1187 |
|   |         | WATTS | 155  | 213  | 259  | 304  | 358  |
|   | 400     | CFM   | 1380 | 1385 | 1377 | 1367 | 1362 |
|   |         | WATTS | 217  | 287  | 339  | 387  | 439  |
| 450   | CFM     | 1557  | 1561 | 1556 | 1544 | 1539 |      |
|   | WATTS   | 312   | 377  | 434  | 490  | 550  |      |
| 4.0   | 290     | CFM   | 1155 | 1158 | 1148 | 1000 | 1131 |
|   |         | WATTS | 149  | 193  | 236  | 322  | 336  |
|   | 350     | CFM   | 1380 | 1385 | 1377 | 1367 | 1362 |
|   |         | WATTS | 217  | 287  | 339  | 387  | 439  |
|   | 400     | CFM   | 1579 | 1583 | 1580 | 1570 | 1559 |
|   |         | WATTS | 310  | 388  | 447  | 507  | 564  |
| 450   | CFM     | 1788  | 1783 | 1759 | 1774 | 1769 |      |
|   | WATTS   | 437   | 522  | 661  | 659  | 728  |      |
| 5.0   | 290     | CFM   | 1430 | 1431 | 1424 | 1416 | 1406 |
|   |         | WATTS | 247  | 311  | 363  | 415  | 468  |
|   | 350     | CFM   | 1730 | 1732 | 1728 | 1719 | 1714 |
|   |         | WATTS | 398  | 487  | 552  | 618  | 682  |
|   | 400     | CFM   | 1980 | 1973 | 1967 | 1963 | 1966 |
|   |         | WATTS | 586  | 676  | 750  | 832  | 922  |
| 450   | CFM     | 2175  | 2172 | 2157 | 2082 | 2009 |      |
|   | WATTS   | 777   | 886  | 959  | 962  | 968  |      |

NOTES:

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2. \*\*FACTORY SETTING
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4. WITH VARIABLE SPEED OUTDOOR UNIT APPLICATION, THE LOW SPEED AIRFLOWS ARE APPROXIMATELY 30% OF LISTED VALUES.
5. LOW 350 CFM/TON IS RECOMMENDED FOR VARIABLE SPEED APPLICATIONS FOR COMFORT & HUMID CLIMATE SETTING: NORMAL IS 400 CFM/TON: HIGH 450 CFM/TON IS FOR DRY CLIMATE SETTING.
6. CONTINUOUS FAN MODE DURING COOLING OPERATION MAY NOT BE APPROPRIATE IN HUMID CLIMATES. IF THE INDOOR AIR EXCEEDS 60% RELATIVE HUMIDITY OR SIMPLY FEELS UNCOMFORTABLY HUMID, IT IS RECOMMENDED THAT THE FAN ONLY BE USED IN THE AUTO MODE.

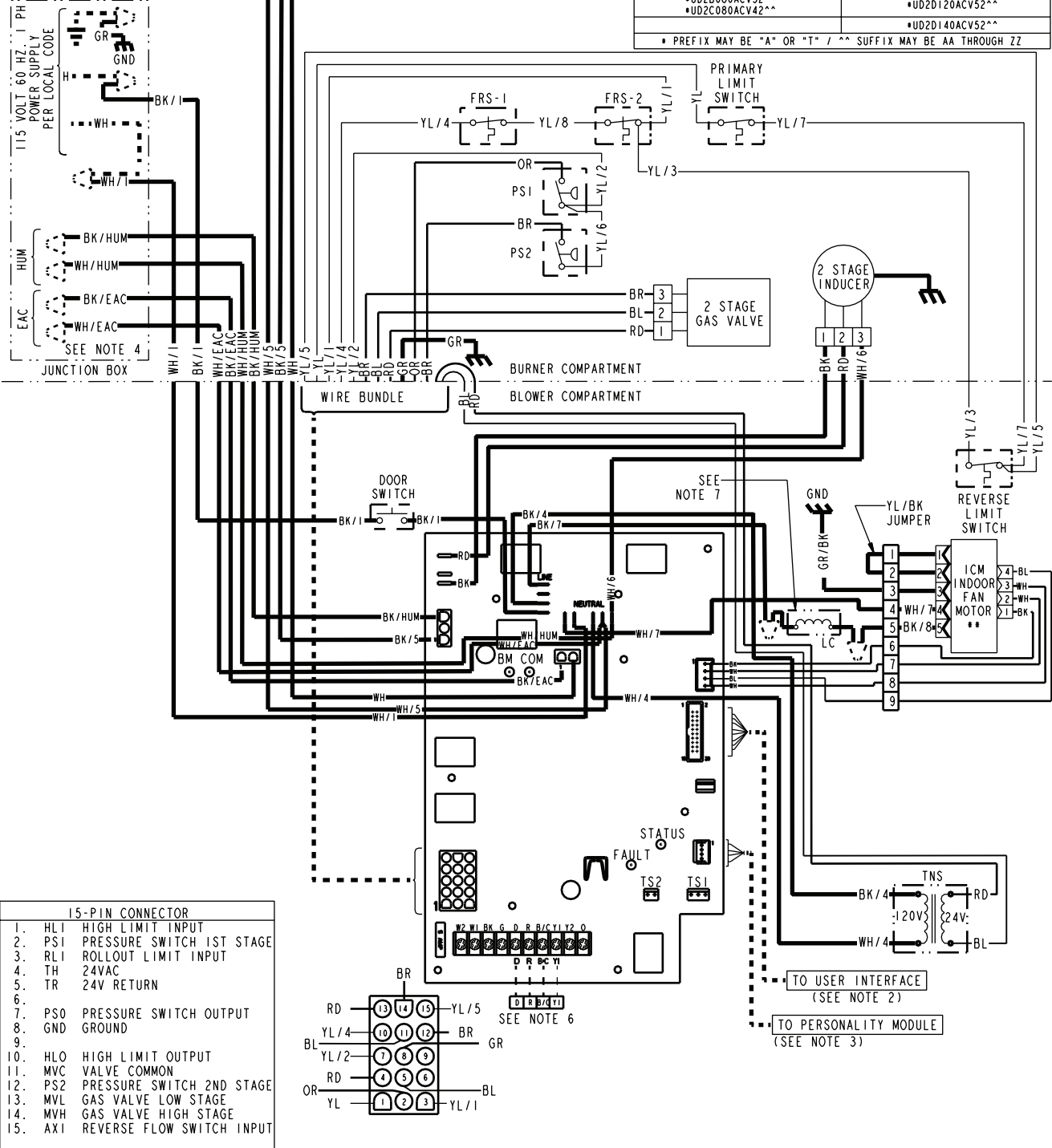


# Electrical Data

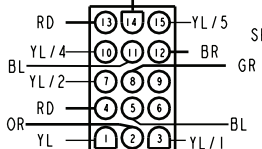
## Wiring Diagram

**IMPORTANT:**  
INTEGRATED CONTROL IS POLARITY SENSITIVE.  
HOT LEG OF 120V POWER SUPPLY MUST BE  
CONNECTED TO THE BLACK POWER LEAD AS  
INDICATED ON WIRING DIAGRAM.

| TABLE "A"   |                 |
|---|-----------------|
| MODELS  |                 |
| •UD2B060ACV32^^   | •UD2B100ACV32^^ |
| •UD2B080ACV32^^   | •UD2C100ACV52^^ |
| •UD2C080ACV42^^   | •UD2D120ACV52^^ |
|   | •UD2D140ACV52^^ |
| * PREFIX MAY BE "A" OR "T" / ^^ SUFFIX MAY BE AA THROUGH ZZ |                 |



| 15-PIN CONNECTOR |                               |
|------------------|-------------------------------|
| 1.               | HLI HIGH LIMIT INPUT          |
| 2.               | PS1 PRESSURE SWITCH 1ST STAGE |
| 3.               | RLI ROLLOUT LIMIT INPUT       |
| 4.               | TH 24VAC                      |
| 5.               | TR 24V RETURN                 |
| 6.               |                               |
| 7.               | PS0 PRESSURE SWITCH OUTPUT    |
| 8.               | GND GROUND                    |
| 9.               |                               |
| 10.              | HLO HIGH LIMIT OUTPUT         |
| 11.              | MVC VALVE COMMON              |
| 12.              | PS2 PRESSURE SWITCH 2ND STAGE |
| 13.              | MVL GAS VALVE LOW STAGE       |
| 14.              | MVH GAS VALVE HIGH STAGE      |
| 15.              | AXI REVERSE FLOW SWITCH INPUT |



### ⚠ CAUTION

Label all wires prior to disconnection when servicing controls.  
Wiring errors can cause improper and dangerous operation.  
Verify proper operation after servicing.

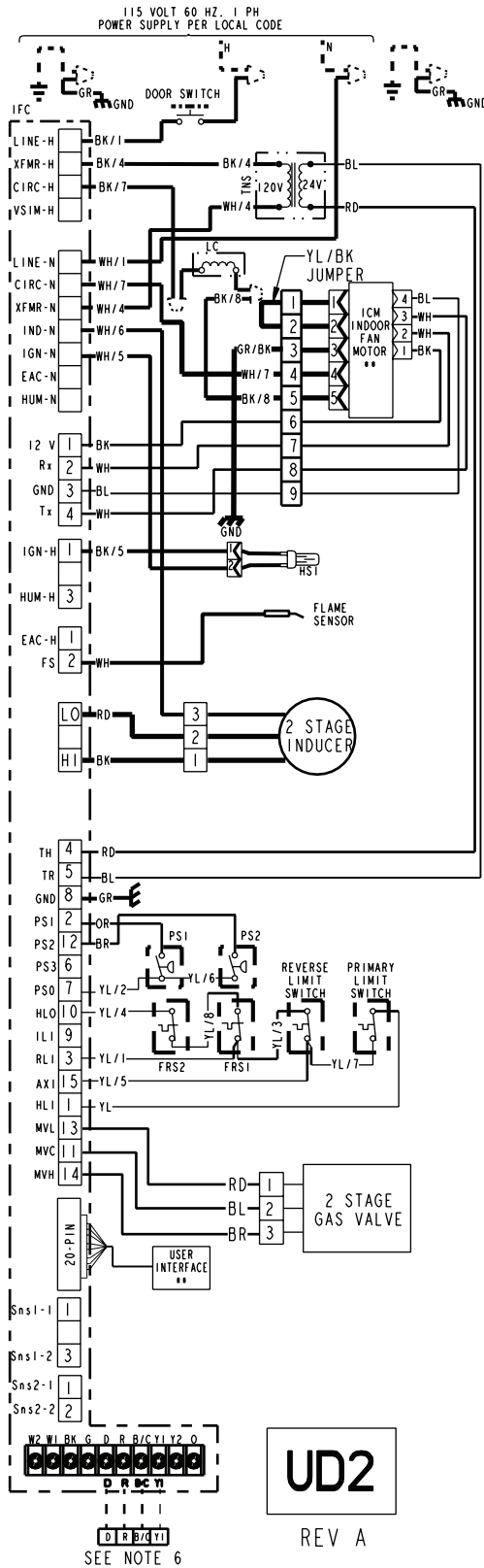
(continued on next page)

From Dwg. D343534P01

# Electrical Data



## Schematic Diagram



| DIAGNOSTIC CODES   |   |
|--|---|
| RED LED - FAULT Data - 1 Flash every 20 seconds              |   |
| 2 FLASHES - SYSTEM LOCKOUT RETRIES OR RECYCLES EXCEEDED      | 6 FLASHES - 115 VOLT AC POWER REVERSED OR IGNITER FAULT |
| 3 FLASHES - PRESSURE SWITCH FAULT                            | 7 FLASHES - GAS VALVE CIRCUIT ERROR                     |
| 4 FLASHES - OPEN LIMIT SWITCH                                | 8 FLASHES - LOW FLAME SENSE SIGNAL                      |
| 5 FLASHES - FLAME SENSED WHEN NO FLAME SHOULD BE PRESENT     | 9 FLASHES - OPEN INDUCER LIMIT                          |
|  | 10 FLASHES - COMMUNICATION FAULT                        |
|  | CONTINUOUS ON - INTERNAL CONTROL FAILURE                |
| GREEN LED - STATUS   |   |
| SLOW FLASH - NORMAL, NO CALL FOR HEAT                        |   |
| FAST FLASH - NORMAL, CALL FOR HEAT PRESENT                   |   |
| GREEN AND RED LED'S ON CONTINUOUS - INTERNAL CONTROL FAILURE |   |
| GREEN AND RED LED'S OFF CONTINUOUS - FUSE OPEN               |   |

| WARNING  | CAUTION  |
|--|--|
| HAZARDOUS VOLTAGE<br>DISCONNECT ALL ELECTRICAL POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING.<br>FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH. | USE COPPER CONDUCTORS ONLY!<br>UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.<br>FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT. |

**INTEGRATED FURNACE CONTROL**

REPLACE WITH PART CNT 07081 OR EQUIVALENT  
ELECTRICAL RATING  
INPUT: 25 V.A.C., 60 HZ.  
XFMR SEC. CURRENT: 450 MA. + MV LOAD  
MV OUTPUT: 1.5 A @ 24 V.A.C.  
IND OUTPUT: 3 PHASE OUTPUT  
IGN OUTPUT: 2.0 A @ 120V.A.C.  
CIRC. BLOWER OUTPUT: 14.5 FLA, 25 LRA @ 120 VAC  
HUMIDIFIER & AIR CLEANER  
MAX. LOAD: 1.0 A @ 120 VAC

TIMINGS  
PREPURGE: 0 SEC.; INTERPURGE: 60 SEC.  
POST PURGE: 5 SECONDS  
IGNITOR WARMUP: 20 SECONDS  
IAP: 3; TFI: 5 SECONDS  
RETRIES: 2; RECYCLES: 10  
HEAT ON DELAY: 45 SECONDS  
COOL ON DELAY: 0 SECONDS  
AUTO RESTART: 60 MINUTES  
AUTO RESTART PURGE: 15 SECONDS

TCO THERMAL CUT OUT  
 PS PRESSURE SWITCH  
 FRS FLAME ROLLOUT SWITCH  
 FP FLAME SENSOR  
 CHASSIS GROUND  
 HSI HOT SURFACE IGNITER  
 DOOR SWITCH  
 FUSE  
 LC LINE CHOKE

LINE } FACTORY WIRING  
 24 V } FACTORY WIRING  
 LINE } FIELD WIRING  
 -24 V } FIELD WIRING

**WIRE COLOR**  
 BK BLACK GR GREEN  
 WH WHITE BR BROWN  
 YL YELLOW RD RED  
 OR ORANGE BL BLUE

\*\* INTERNAL THERMAL PROTECTION  
 WIRE COLOR BK/1 NUMBER ID (IF ANY)

|                       |                                |
|-----------------------|--------------------------------|
| 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 | IL1 INDUCER LIMIT INPUT        |
| HLI HIGH LIMIT INPUT  | IFC INTEGRATED FURNACE CONTROL |

- 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.
  - USER INTERFACE MUST BE INSTALLED FOR PROPER FURNACE INSTALLATION & SET-UP.
  - CORRECT PERSONALITY MODULE IS REQUIRED FOR PROPER FURNACE OPERATION. PERSONALITY MODULE IS SPECIFIC TO EACH MODEL & SERIAL NUMBER, AND IS TO REMAIN WITHIN IT'S ORIGINAL UNIT.
  - THESE LEADS PROVIDE 120V POWER CONNECTIONS FOR ELECTRONIC AIR CLEANER (EAC) AND HUMIDIFIER (HUM). MAX. LOAD: 1.0 AMPS EACH.
  - ON POWER-UP, LAST FOUR FAULTS, IF ANY, WILL BE FLASHED ON RED LED. GREEN LED WILL BE SOLID ON DURING LAST FAULT RECOVERY.
  - YL1 IS AN OUTPUT ONLY WHEN USED WITH A NON-COMMUNICATING, A/C ONLY, OUTDOOR UNIT.
  - LINE CHOKE (LC) NOT USED ON ALL MODELS.
  - IN 24 VOLT MODE, AN OPTIONAL HUMIDISTAT CAN BE CONNECTED BETWEEN THE "R" AND "BK" TERMINALS. FACTORY INSTALLED "BK JUMPER" ON THE CIRCUIT BOARD MUST BE CUT. SEE FURNACE INSTALLERS GUIDE FOR DETAILS.

From Dwg. D343534P01

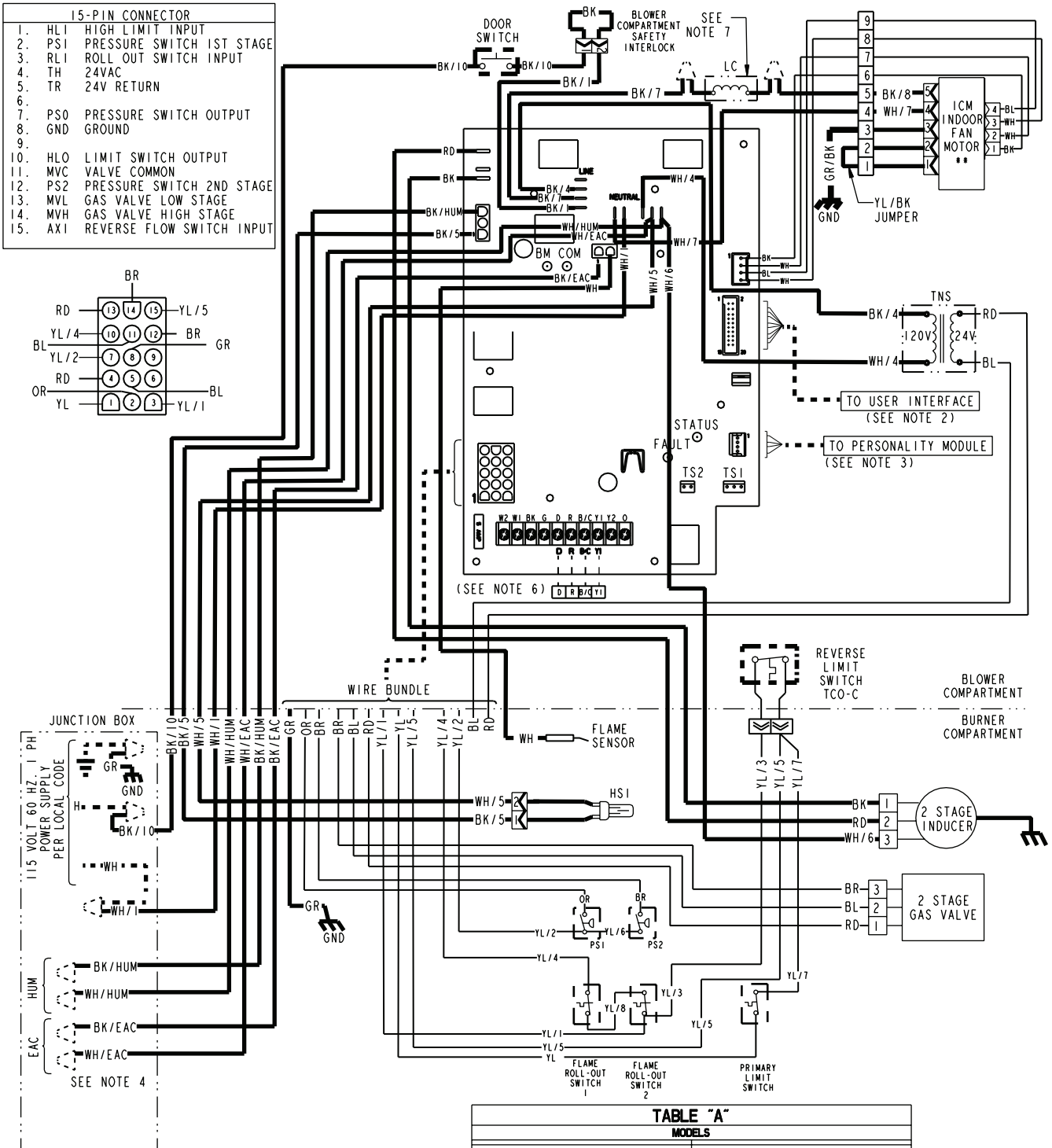
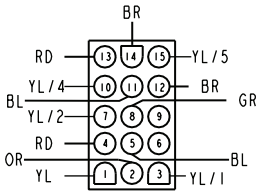
### CAUTION

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

# Electrical Data

## Wiring Diagram

| 15-PIN CONNECTOR |     |                           |
|------------------|-----|---------------------------|
| 1.               | H/L | HIGH LIMIT INPUT          |
| 2.               | PS1 | PRESSURE SWITCH 1ST STAGE |
| 3.               | RL1 | ROLL OUT SWITCH INPUT     |
| 4.               | TH  | 24VAC                     |
| 5.               | TR  | 24V RETURN                |
| 6.               |     |                           |
| 7.               | PSO | PRESSURE SWITCH OUTPUT    |
| 8.               | GND | GROUND                    |
| 9.               |     |                           |
| 10.              | HLO | LIMIT SWITCH OUTPUT       |
| 11.              | MVC | VALVE COMMON              |
| 12.              | PS2 | PRESSURE SWITCH 2ND STAGE |
| 13.              | MVL | GAS VALVE LOW STAGE       |
| 14.              | MVH | GAS VALVE HIGH STAGE      |
| 15.              | AX1 | REVERSE FLOW SWITCH INPUT |



**IMPORTANT:**  
 INTEGRATED CONTROL IS POLARITY SENSITIVE.  
 HOT LEG OF 120V POWER SUPPLY MUST BE CONNECTED  
 TO THE BLACK POWER LEAD AS INDICATED ON WIRING DIAGRAM.

| TABLE "A"   |                 |
|---|-----------------|
| MODELS  |                 |
| *DD2B060ACV32^^   | *DD2C100ACV52^^ |
| *DD2B080ACV32^^   | *DD2D120ACV52^^ |
| * PREFIX MAY BE "A" OR "T" / ^^ SUFFIX MAY BE AA THROUGH ZZ |                 |

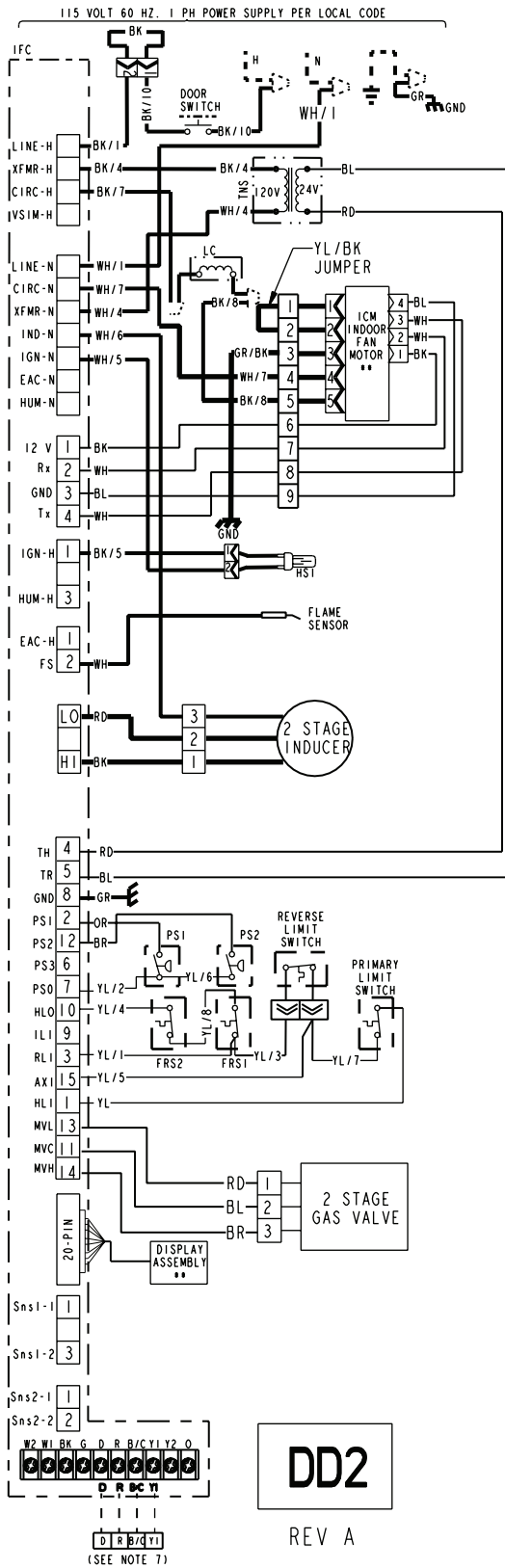
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 Wiring errors can cause improper and dangerous operation.  
 Verify proper operation after servicing.

From Dwg. D343535P01  
 (continued on next page)

# Electrical Data



## Schematic Diagram



| DIAGNOSTIC CODES   |  |
|--|--|
| RED LED - FAULT Data - 1 Flash every 20 seconds              |  |
| 2 FLASHES - SYSTEM LOCKOUT<br>RETRIES OR RECYCLES EXCEEDED   | 6 FLASHES - 115 VOLT AC<br>POWER REVERSED OR IGNITER FAULT |
| 3 FLASHES - PRESSURE SWITCH FAULT                            | 7 FLASHES - GAS VALVE CIRCUIT ERROR                        |
| 4 FLASHES - OPEN LIMIT SWITCH                                | 8 FLASHES - LOW FLAME SENSE SIGNAL                         |
| 5 FLASHES - FLAME SENSED WHEN<br>NO FLAME SHOULD BE PRESENT  | 9 FLASHES - OPEN INDUCER LIMIT                             |
|  | 10 FLASHES - COMMUNICATION FAULT                           |
|  | CONTINUOUS ON - INTERNAL CONTROL FAILURE                   |
| GREEN LED - STATUS   |  |
| SLOW FLASH - NORMAL, NO CALL FOR HEAT                        |  |
| FAST FLASH - NORMAL, CALL FOR HEAT PRESENT                   |  |
| GREEN AND RED LED'S ON CONTINUOUS - INTERNAL CONTROL FAILURE |  |
| GREEN AND RED LED'S OFF CONTINUOUS - FUSE OPEN               |  |

| WARNING  | CAUTION  |
|--|--|
| HAZARDOUS VOLTAGE<br><br>DISCONNECT ALL ELECTRICAL POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING.<br><br>FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH. | USE COPPER CONDUCTORS ONLY!<br><br>UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.<br><br>FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT. |

**INTEGRATED FURNACE CONTROL**

REPLACE WITH PART CNT 07081 OR EQUIVALENT  
ELECTRICAL RATING  
INPUT: 25 V.A.C., 60 HZ.  
XFMR SEC. CURRENT: 450 MA. + MV LOAD  
MV OUTPUT: 1.5 A @ 24 V.A.C.  
IND OUTPUT: 3 PHASE OUTPUT  
IGN OUTPUT: 2.0 A @ 120V.A.C.  
CIRC. BLOWER OUTPUT: 14.5 FLA,  
25 LRA @ 120 VAC  
HUMIDIFIER & AIR CLEANER  
MAX. LOAD: 1.0 A @ 120 VAC

**TIMINGS**  
PREPURGE: 0 SEC.; INTERPURGE: 60 SEC.  
POST PURGE: 5 SECONDS  
IGNITOR WARMUP: 20 SECONDS  
IAP: 3; TFI: 5 SECONDS  
RETRIES: 2; RECYCLES: 10  
HEAT ON DELAY: 45 SECONDS  
COOL ON DELAY: 0 SECONDS  
AUTO RESTART: 60 MINUTES  
AUTO RESTART PURGE: 15 SECONDS

|                     |                    |                          |                 |                |                         |             |      |               |
|---------------------|--------------------|--------------------------|-----------------|----------------|-------------------------|-------------|------|---------------|
| TCO THERMAL CUT OUT | PS PRESSURE SWITCH | FRS FLAME ROLLOUT SWITCH | FP FLAME SENSOR | CHASSIS GROUND | HSI HOT SURFACE IGNITER | DOOR SWITCH | FUSE | LC LINE CHOKE |
| CF CAPACITOR        | COIL               |                          |                 |                |                         |             |      |               |

**WIRING**  
 — LINE  
 — 24 V  
 - - - FIELD LINE  
 - - - 24 V  
 \*\* INTERNAL THERMAL PROTECTION

|    |        |    |       |
|----|--------|----|-------|
| BK | BLACK  | GR | GREEN |
| WH | WHITE  | BR | BROWN |
| YL | YELLOW | RD | RED   |
| OR | ORANGE | BL | BLUE  |

**WIRE COLOR**  
 BK/1 — NUMBER ID (IF ANY)

|     |                   |     |                            |
|-----|-------------------|-----|----------------------------|
| 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 | IL1 | INDUCER LIMIT INPUT        |
| HL1 | HIGH LIMIT INPUT  | IFC | INTEGRATED FURNACE CONTROL |

- 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.
  - USER INTERFACE MUST BE INSTALLED FOR PROPER FURNACE INSTALLATION & SET-UP.
  - CORRECT PERSONALITY MODULE IS REQUIRED FOR PROPER FURNACE OPERATION. PERSONALITY MODULE IS SPECIFIC TO EACH MODEL & SERIAL NUMBER, AND IS TO REMAIN WITHIN IT'S ORIGINAL UNIT.
  - THESE LEADS PROVIDE 120V POWER CONNECTIONS FOR ELECTRONIC AIR CLEANER (EAC) AND HUMIDIFIER (HUM). MAX. LOAD: 1.0 AMPS EACH.
  - ON POWER-UP, LAST FOUR FAULTS, IF ANY, WILL BE FLASHED ON RED LED. GREEN LED WILL BE SOLID ON DURING LAST FAULT RECOVERY.
  - Y1 IS AN OUTPUT ONLY WHEN USED WITH A NON-COMMUNICATING, A/C ONLY, OUTDOOR UNIT.
  - LINE CHOKE (LC) NOT USED ON ALL MODELS.
  - IN 24 VOLT MODE, AN OPTIONAL HUMIDISTAT CAN BE CONNECTED BETWEEN THE "R" AND "BK" TERMINALS. FACTORY INSTALLED "BK JUMPER" ON THE CIRCUIT BOARD MUST BE CUT. SEE FURNACE INSTALLERS GUIDE FOR DETAILS.

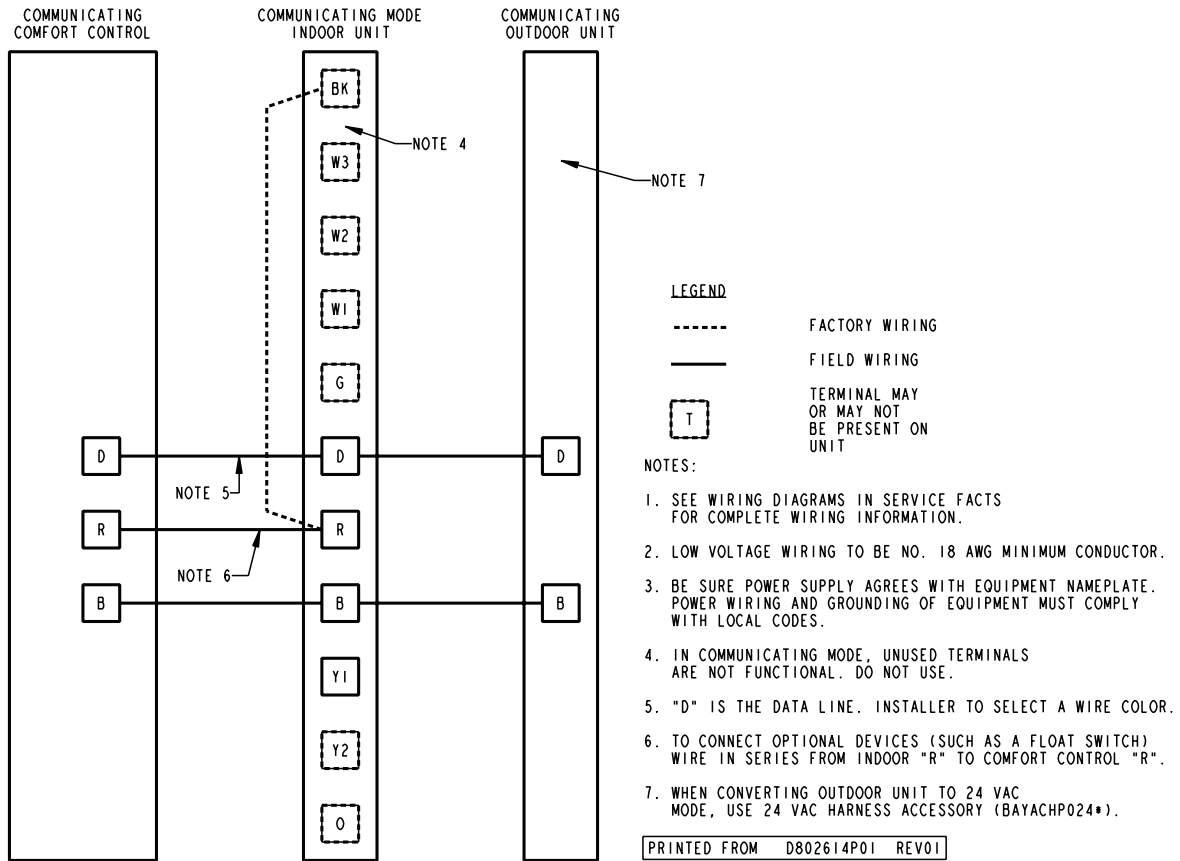
From Dwg. D343535P01

**CAUTION**

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

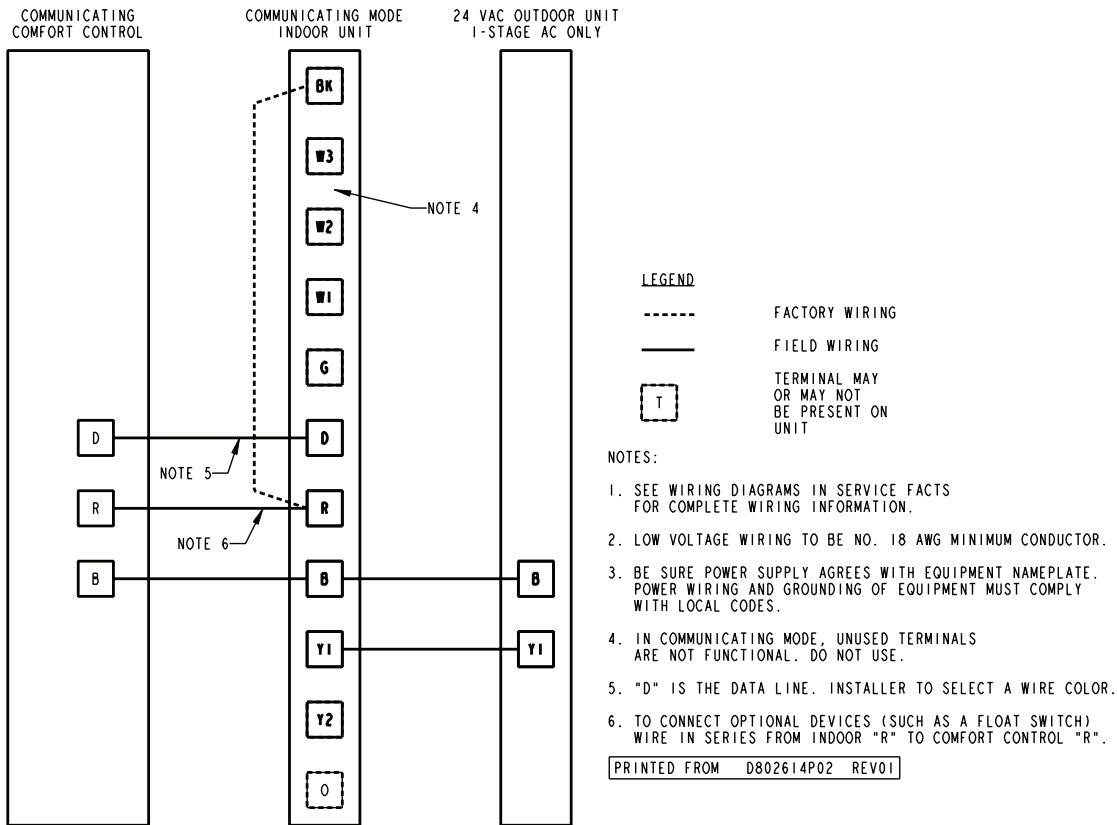
# Field Wiring

## Communicating Indoor Unit with Communicating Comfort Control and Communicating Outdoor Unit

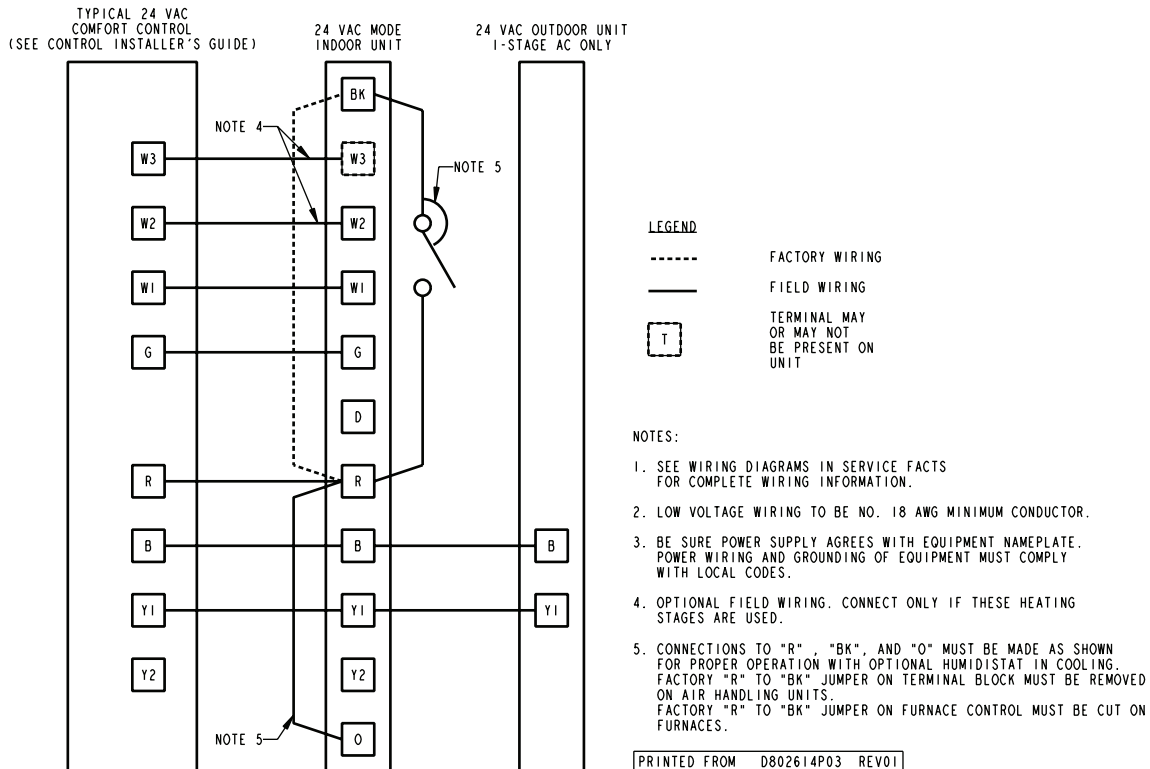




# Communicating Indoor Unit with Communicating Comfort Control and 24VAC Single Stage Cooling

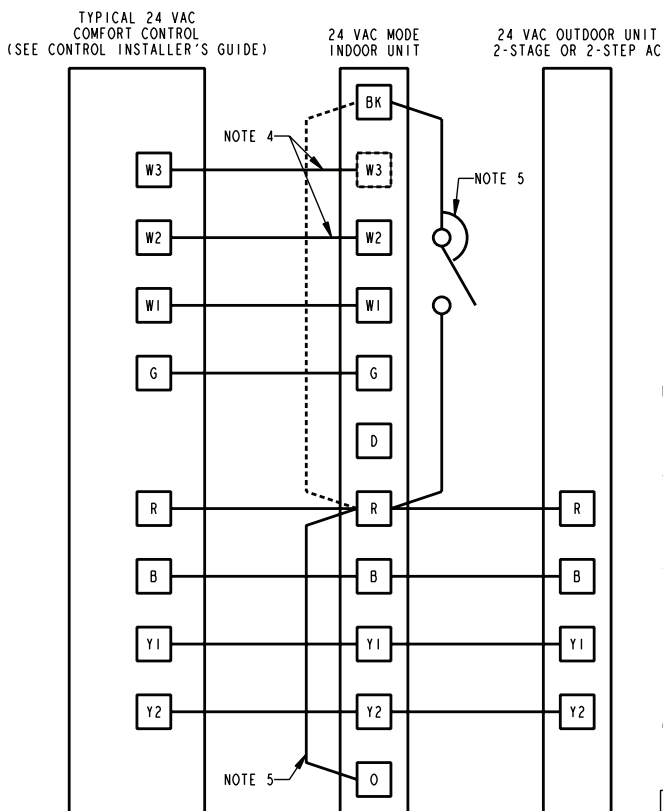


# 24VAC Mode Indoor Unit with 24VAC Comfort Control and 24VAC Single Stage Cooling



**NOTE:**  
To locate the BK to R jumper on the IFC board, see page 28.

## 24VAC Mode Indoor Unit with 24VAC Comfort Control and 24VAC 2-Stage or 2-Step Cooling



### LEGEND

- FACTORY WIRING
- FIELD WIRING
- [ T ] TERMINAL MAY OR MAY NOT BE PRESENT ON UNIT

### NOTES:

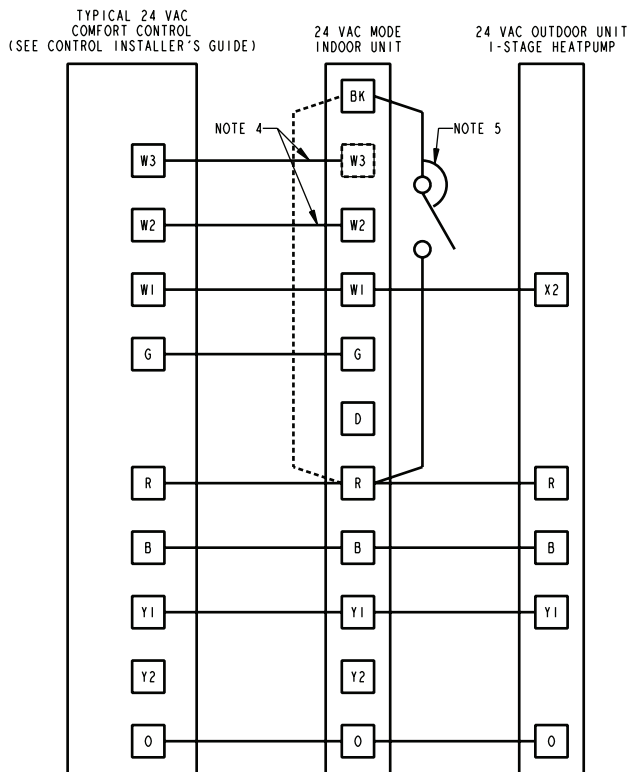
1. SEE WIRING DIAGRAMS IN SERVICE FACTS FOR COMPLETE WIRING INFORMATION.
2. LOW VOLTAGE WIRING TO BE NO. 18 AWG MINIMUM CONDUCTOR.
3. BE SURE POWER SUPPLY AGREES WITH EQUIPMENT NAMEPLATE. POWER WIRING AND GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL CODES.
4. OPTIONAL FIELD WIRING. CONNECT ONLY IF THESE HEATING STAGES ARE USED.
5. CONNECTIONS TO "R", "BK", AND "O" MUST BE MADE AS SHOWN FOR PROPER OPERATION WITH OPTIONAL HUMIDISTAT IN COOLING. FACTORY "R" TO "BK" JUMPER ON TERMINAL BLOCK MUST BE REMOVED ON AIR HANDLING UNITS. FACTORY "R" TO "BK" JUMPER ON FURNACE CONTROL MUST BE CUT ON FURNACES.
6. SEE USER INTERFACE 24 VAC MODE SETUP MENU FOR 1ST STAGE CFM OPTIONS.  
2-STAGE = 39-64%  
2-STEP = 65-80%

PRINTED FROM D802614P04 REV01

### NOTE:

To locate the BK to R jumper on the IFC board, see page 28.

## 24VAC Mode Indoor Unit with 24VAC Comfort Control and 24VAC Single Stage Heat Pump



### LEGEND

- FACTORY WIRING
- FIELD WIRING
- [ T ] TERMINAL MAY OR MAY NOT BE PRESENT ON UNIT

### NOTES:

1. SEE WIRING DIAGRAMS IN SERVICE FACTS FOR COMPLETE WIRING INFORMATION.
2. LOW VOLTAGE WIRING TO BE NO. 18 AWG MINIMUM CONDUCTOR.
3. BE SURE POWER SUPPLY AGREES WITH EQUIPMENT NAMEPLATE. POWER WIRING AND GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL CODES.
4. OPTIONAL FIELD WIRING. CONNECT ONLY IF THESE HEATING STAGES ARE USED.
5. CONNECTIONS TO "R", "BK", AND "O" MUST BE MADE AS SHOWN FOR PROPER OPERATION WITH OPTIONAL HUMIDISTAT IN COOLING. FACTORY "R" TO "BK" JUMPER ON TERMINAL BLOCK MUST BE REMOVED ON AIR HANDLING UNITS. FACTORY "R" TO "BK" JUMPER ON FURNACE CONTROL MUST BE CUT ON FURNACES.
6. ON FURNACE APPLICATIONS, COMFORT CONTROL MUST BE DUAL FUEL COMPATIBLE (SEE CONTROL INSTALLER'S GUIDE) OR MUST USE TAYPLUS103.

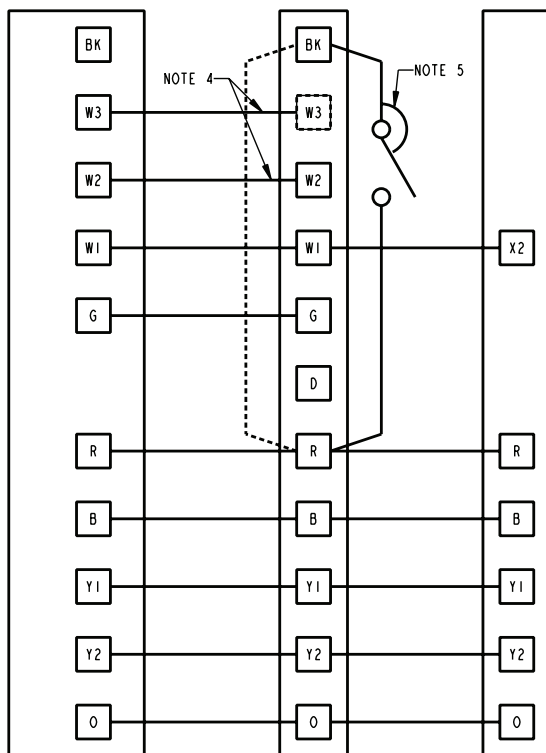
PRINTED FROM D802614P05 REV01

### NOTE:

To locate the BK to R jumper on the IFC board, see page 28.

# 24VAC Mode Indoor Unit with 24VAC Comfort Control and 24VAC 2-Stage or 2-Step Heat Pump

TYPICAL 24 VAC COMFORT CONTROL (SEE CONTROL INSTALLER'S GUIDE)      24 VAC MODE INDOOR UNIT      24 VAC OUTDOOR UNIT 2-STAGE OR 2-STEP HP



**LEGEND**

- FACTORY WIRING
- FIELD WIRING
- T TERMINAL MAY OR MAY NOT BE PRESENT ON UNIT

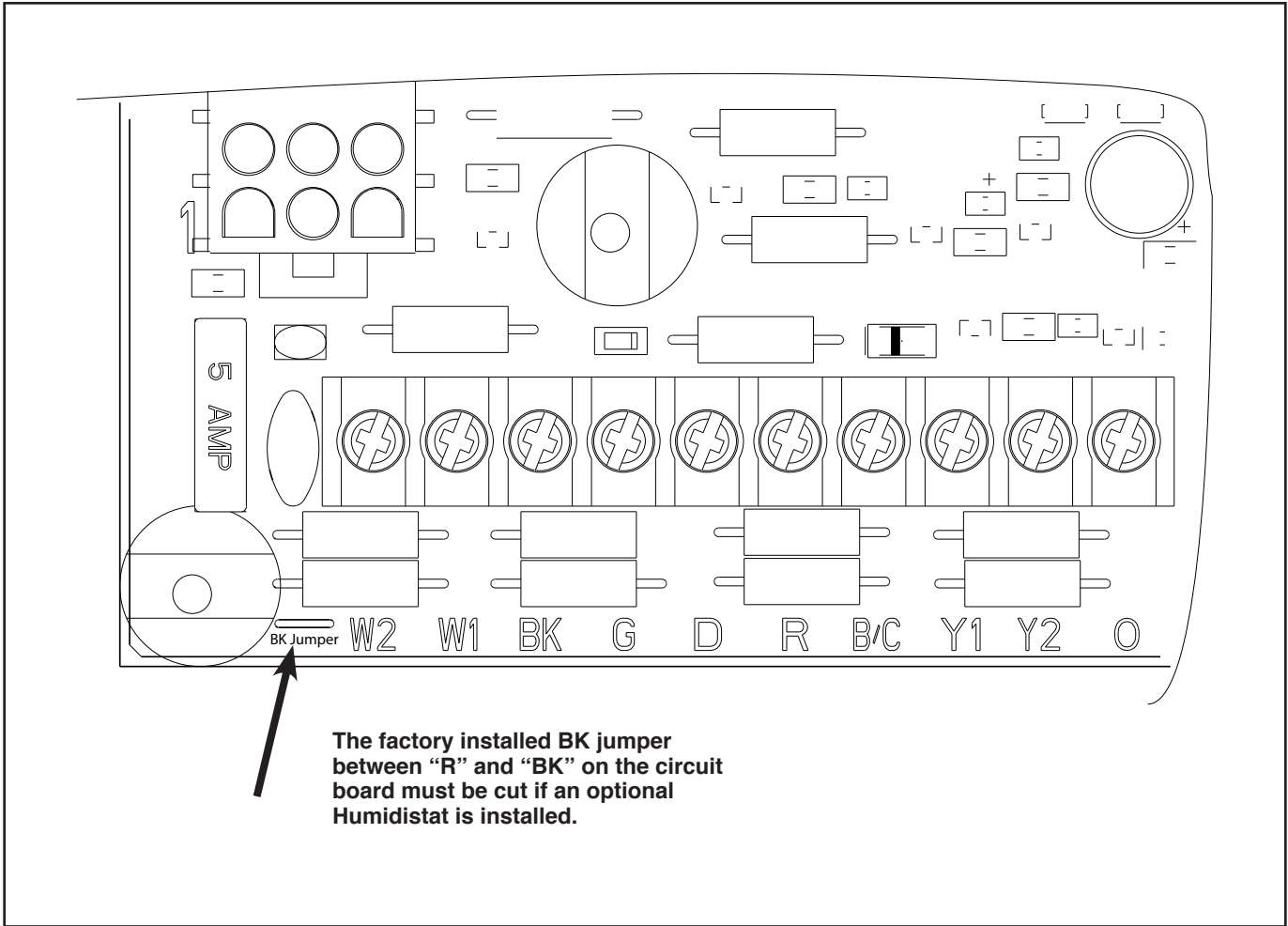
**NOTES:**

1. SEE WIRING DIAGRAMS IN SERVICE FACTS FOR COMPLETE WIRING INFORMATION.
2. LOW VOLTAGE WIRING TO BE NO. 18 AWG MINIMUM CONDUCTOR.
3. BE SURE POWER SUPPLY AGREES WITH EQUIPMENT NAMEPLATE. POWER WIRING AND GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL CODES.
4. OPTIONAL FIELD WIRING. CONNECT ONLY IF THESE HEATING STAGES ARE USED.
5. CONNECTIONS TO "R", "BK", AND "O" MUST BE MADE AS SHOWN FOR PROPER OPERATION WITH OPTIONAL HUMIDISTAT IN COOLING. FACTORY "R" TO "BK" JUMPER ON TERMINAL BLOCK MUST BE REMOVED ON AIR HANDLING UNITS. FACTORY "R" TO "BK" JUMPER ON FURNACE CONTROL MUST BE CUT ON FURNACES.
6. ON FURNACE APPLICATIONS, COMFORT CONTROL MUST BE DUAL FUEL COMPATIBLE (SEE CONTROL INSTALLERS GUIDE) OR MUST USE TAYPLUS103.
7. SEE USER INTERFACE 24 VAC MODE SETUP MENU FOR 1ST STAGE CFM OPTIONS.  
 2-STAGE = 39-64%  
 2-STEP = 65-80%

PRINTED FROM D802614P06 REV01

**NOTE:**  
To locate the BK to R jumper on the IFC board, see page 28.

**Wiring Notes:**



#### HUMIDISTAT HOOKUP - 24 V Mode ONLY

If an optional humidistat for humidity control in cooling is used, the factory installed “BK Jumper” must be cut.

The BK Jumper must also be cut if a multi-zone controller is connected or \*CONT402 is installed and using the BK enabled feature.

See the 24VAC field hookup wiring diagrams for more information.

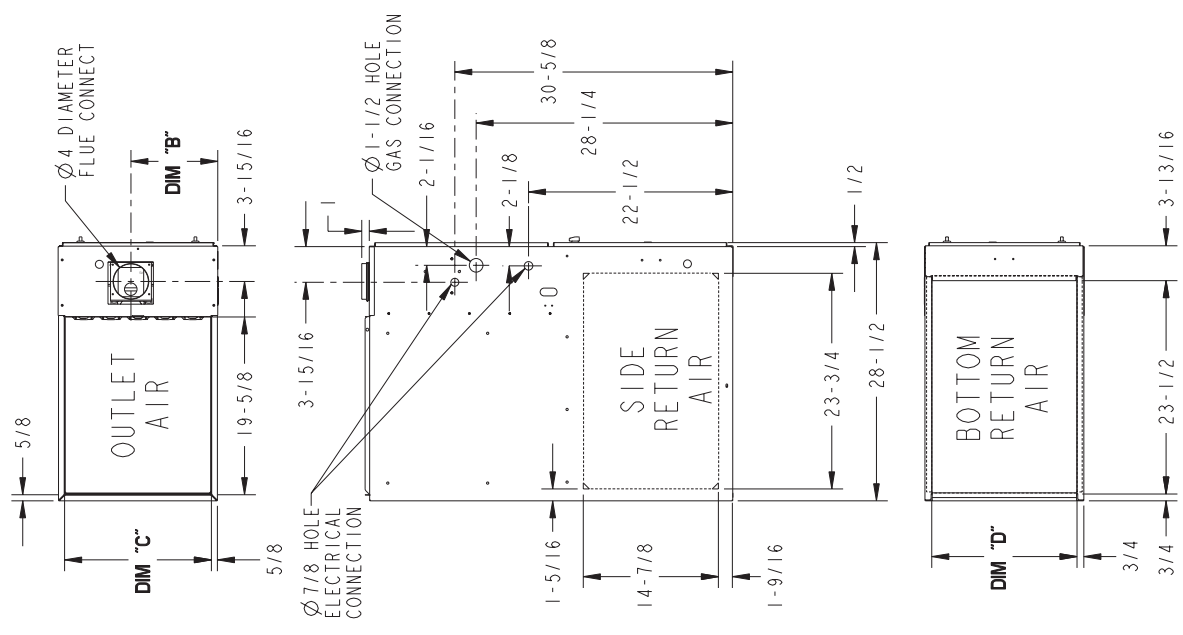
# \*UD-ACV Outline Drawing

(ALL DIMENSIONS ARE IN INCHES)

| MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS |        |       |       |
|--|--------|-------|-------|
| UPFLOW CLOSET                              |        |       |       |
| LEFT SIDE                                  | 0 IN.  | FRONT | 3 IN. |
| RIGHT SIDE                                 | 0 IN.  | BACK  | 0 IN. |
| FLUE                                       | #6 IN. | TOP   | 1 IN. |
| HORIZONTAL CLOSET (SEE NOTE 1)             |        |       |       |
| TOP  | 2 IN.  | BACK  | 3 IN. |
| FLUE                                       | #6 IN. | SIDES | 1 IN. |
| FRONT                                      | 18 IN. |       |       |
| HORIZONTAL ALCOVE (SEE NOTE 1)             |        |       |       |
| TOP  | 1 IN.  | BACK  | 0 IN. |
| FLUE                                       | #6 IN. | SIDES | 0 IN. |
| FRONT                                      | 18 IN. |       |       |
| # - MAY BE 1" WHEN TYPE B-1 VENT IS USED   |        |       |       |

**NOTES:**

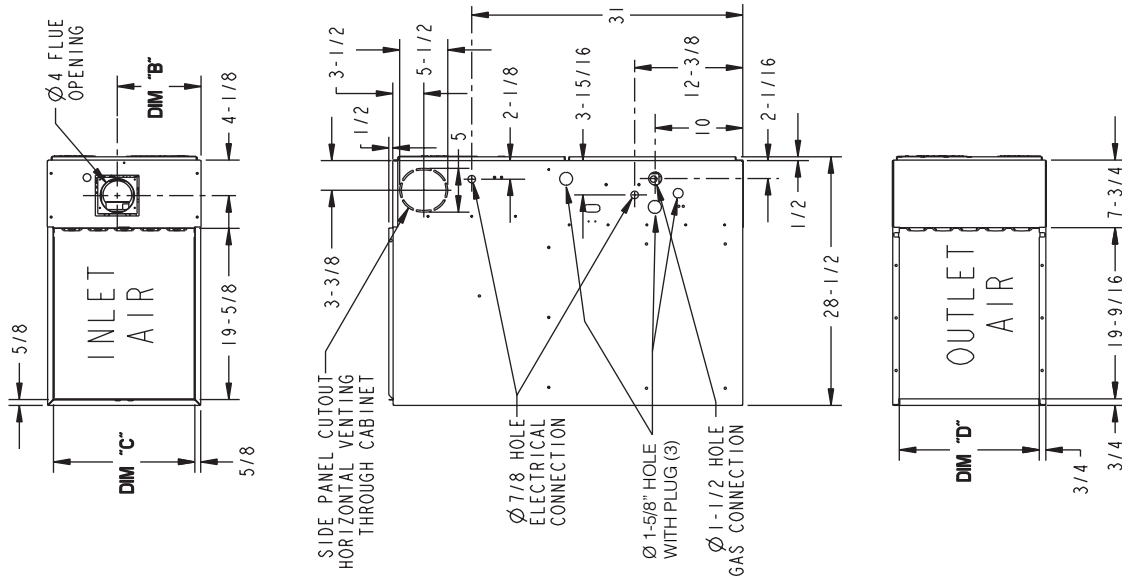
1) MAY BE INSTALLED ON COMBUSTIBLE FLOOR WHEN TYPE B-1 VENT IS USED.



| MODEL          | A       | B        | C       | D       |
|----------------|---------|----------|---------|---------|
| *UD2B060ACV32B | 17-1/2" | 9-5/8"   | 16-1/4" | 16"     |
| *UD2B080ACV32B | 17-1/2" | 9-5/8"   | 16-1/4" | 16"     |
| *UD2B100ACV32B | 17-1/2" | 9-5/8"   | 16-1/4" | 16"     |
| *UD2C080ACV42B | 21"     | 13-1/16" | 19-3/4" | 19-1/2" |
| *UD2C100ACV52B | 21"     | 13-1/16" | 19-3/4" | 19-1/2" |
| *UD2D120ACV52B | 24-1/2" | 15-5/16" | 23-1/4" | 23"     |
| *UD2D140ACV52B | 24-1/2" | 15-5/16" | 23-1/4" | 23"     |

\* - The First Letter May Be "A" or "T"

**\*DD2-ACV OUTLINE DRAWING**  
(ALL DIMENSIONS ARE IN INCHES)



**MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS**

| DOWNFLOW CLOSET   |  |
|---|--|
| SIDES   | 0 IN. W/SINGLE WALL VENT - 0 IN. W/TYPE B-1 VENT |
| FRONT   | 6 IN. W/SINGLE WALL VENT - 1 IN. W/TYPE B-1 VENT |
| BACK  | 1 IN.  |
| HORIZONTAL CLOSET (FLUE DISCHARGE LEFT)   |  |
| TOP   | 2 IN. W/SINGLE WALL VENT - 2 IN. W/TYPE B-1 VENT |
| FRONT   | 6 IN. W/SINGLE WALL VENT - 1 IN. W/TYPE B-1 VENT |
| BACK  | 3 IN. SIDES 1 IN.                                |
| HORIZONTAL CLOSET (FLUE DISCHARGE RIGHT)  |  |
| TOP   | 2 IN. W/SINGLE WALL VENT - 1 IN. W/TYPE B-1 VENT |
| FRONT   | 6 IN. W/SINGLE WALL VENT - 3 IN. SIDES 1 IN.     |
| BACK  | 3 IN.  |
| - FOR INSTALLATION ON COMBUSTIBLE FLOORING ONLY -<br>WHEN B-1 VENT CONNECTOR IS USED. |  |
| HORIZONTAL ALCOVE (FLUE DISCHARGE LEFT)   |  |
| TOP   | 1 IN. W/SINGLE WALL VENT - 1 IN. W/TYPE B-1 VENT |
| FRONT   | 6 IN. W/SINGLE WALL VENT - 1 IN. W/TYPE B-1 VENT |
| BACK  | 0 IN. SIDES 0 IN.                                |
| HORIZONTAL ALCOVE (FLUE DISCHARGE RIGHT)  |  |
| TOP   | 1 IN. W/SINGLE WALL VENT - 1 IN. W/TYPE B-1 VENT |
| FRONT   | 6 IN. W/SINGLE WALL VENT - 1 IN. W/TYPE B-1 VENT |
| BACK  | 0 IN. SIDES 0 IN.                                |

| MODEL          | A       | B        | C       | D       |
|----------------|---------|----------|---------|---------|
| *DD2B060ACV32B | 17-1/2" | 9-5/8"   | 16-1/4" | 16"     |
| *DD2B080ACV32B | 21"     | 13-1/16" | 19-3/4" | 19-1/2" |
| *DD2C100ACV52B | 24-1/2" | 15-5/16" | 23-1/4" | 23"     |

\* - The First Letter May Be "A" or "I"





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