Dehumidification Control

Dehumidification Control has never been easier or better. Nearly all of our new furnace controls offer improved dehumidification. And, you can experience Perfect Humidity™ with our variable speed furnace control featuring Super Dehumidification. In conjunction with the Evolution™ Control, Thermidistat™ Control or Zone Perfect Plus™, this function greatly reduces and modulates the fan speed for increased humidity removal. The Perfect Humidity™ system will dehumidify even with no call for cooling.

Ease of Installation

Bryant offers the most complete furnace lineup in the industry. At the same time, we’ve done our best to reduce the total number of control boards needed to deliver the widest level of performance benefits. This handy reference brochure provides descriptions of the many features offered with our four furnace controls. Also included is a chart showing which furnaces offer each feature.

Our new furnace controls are designed for backward compatibility so in most cases, they can also be used as replacements in older furnace models. No matter how the control is applied, in a new furnace or as a replacement, you will need to carefully follow the installation instructions to ensure proper operation and maximum performance. Using the feature summaries and the included chart, you should be able to provide your customers with the furnace-based indoor comfort system that best meets their individual comfort needs.

SmartEvap™

SMART COOLING BLOWER OFF DELAY, or SmartEvap™, overrides the standard 90-second cooling blower off delay, and holds the continuous fan off for a full 5 minutes during periods of high humidity, when used with the Evolution™ Control, Thermidistat™ Control or Zone Perfect Plus™. This function allows condensate on the coil to drain off instead of re-evaporating and being re-cycled through your home. The result is economical cooling plus humidity control. This function can reduce humidity levels by up to 10%.

Fan On Plus™

ADJUSTABLE CONTINUOUS FAN AT THE THERMOSTAT, a feature we call Fan On Plus™, lets the homeowner enjoy the benefits of continuous fan operation by providing the ability to adjust the fan speed from the Bryant thermostat, based on changing indoor comfort needs, such as entertaining or the change in seasons.
## EAC TERMINALS
on all of our controls allow for easy and convenient connection of 115vac accessories such as The Perfect Air™ Purifier or Electronic Air Cleaners (EACs). EAC terminals are powered at the same time as the blower motor.

## APM Port
**ADVANCED PRODUCT MONITOR (APM) COMMUNICATION PORT** and similar ports in older variable speed 90% furnaces allow for reading non-volatile memory with a laptop or personal digital assistant (Palm Pilot, etc.) when used with the APM kit. (Part Number: KGAFP021APM) Helpful data, such as all previous status codes, cycle times, and the like can greatly assist service technicians.

## Blower Off Delay
**ADJUSTABLE BLOWER OFF DELAY** controls the amount of time the blower runs after a completed heating cycle. The longer delay allows more heat to be extracted from the heat exchangers after the burners have shut down, which increases efficiency. However, making the delay too long can also increase energy usage and may cause “cold blow” after the heating cycle. This gives you the flexibility to set the delay appropriately for each individual application.

## Two-Speed Compatible
**TWO-SPEED AC/HP COMPATIBLE** allows separate connections for high and low air conditioner or heat pump fan speeds. Please note that Bryant recommends installing a variable speed indoor unit to maximize the performance available with a two-speed outdoor unit.

## Fan Speeds
**LOW CONTINUOUS FAN SPEED** is available on most furnace controls to allow added efficiency and comfort during continuous fan operation. Two-stage controls use the low heat speed for continuous fan, while other models use a separate relay for continuous fan operation. **VERY LOW CONTINUOUS FAN** is offered with our variable speed furnace controls, providing even quieter, more efficient comfort.

## EAC Connection
**EAC TERMINALS** on all of our controls allow for easy and convenient connection of 115vac accessories such as The Perfect Air™ Purifier or Electronic Air Cleaners (EACs). EAC terminals are powered at the same time as the blower motor.

## Heat Control
**ADAPTIVE CONTROL HEAT STAGING** responds to the needs of the home and current weather conditions to provide quite operation and smooth, even heating cycles. For the best year-round comfort, use the Evolution™ Control or Thermidistat™ Control when using a two-stage furnace.

## Info Control
**SERVICE INFORMATION STORAGE** is non-volatile (recoverable) memory that stores status codes and cycle counts for quick, easy troubleshooting. Recent status codes can be read from LEDs or full details can be accessed through the APM for the Plus 80v™, Plus 95i™ or Plus 90i™.

## Humidifier Connection
**HUMIDIFIER TERMINAL** allows easy connection of 24vac accessories such as humidifiers. The humidifier terminal is activated with the gas valve, the inducer fan, or the blower motor.

## Cool Staging
**ADAPTIVE CONTROL COOL STAGING** responds to the needs of the home and current weather conditions to provide exceptional humidity and temperature control. For the best year-round comfort, use the Evolution™ Control or Thermidistat™ Control when using a two-speed AC or HP.

## Gas Furnace Models

- **Models 355BAV / 355AAV**
  - The Plus 95i / The Plus 90i

- **Model 315**
  - The Plus 80v

- **Model 352AAV**
  - The Plus 90t

- **Model 312**
  - The Plus 80t
## Bryant Furnace Controls Provide Maximum Features with Minimum SKUs

<table>
<thead>
<tr>
<th>Features</th>
<th>Variable Speed</th>
<th>Two Stage</th>
<th>Deluxe</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>315AAV/JAV</td>
<td>312AAV/JAV</td>
<td>311AAV/JAV</td>
<td>310AAV/JAV</td>
</tr>
<tr>
<td></td>
<td>355BAV/355AAV</td>
<td>352AAV</td>
<td>350AAV</td>
<td>340AAV</td>
</tr>
<tr>
<td></td>
<td>HK42FZ022</td>
<td>HK42FZ017</td>
<td>HK42FZ014</td>
<td>HK42FZ013</td>
</tr>
<tr>
<td>Evolution™ Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dehumidification Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Super Dehumidification Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SmartEvap™</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fan On Plus™</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evolution System APM Port</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Continuous Fan Speed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Low Continuous Fan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjustable Blower Off Delay</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EAC Terminals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humidifier Terminal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two-Speed AC Compatible</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adaptive Control Heat Staging</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adaptive Control Cool Staging</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Information Storage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Deluxe/Premium Consumer Feature
- Dealer Feature

**HK42FZ022**  
Variable Speed

**HK42FZ017**  
Two Stage

**HK42FZ014**  
Single Stage Deluxe

**HK42FZ013**  
Single Stage Standard

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**Before purchasing this appliance, please read the important energy cost and efficiency information available from your dealer. Manufacturer reserves the right to discontinue, or change, at any time, specifications or designs without notice and without incurring obligations.**

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