

CARRIER FURNACE CONTROLS OF PAST, PRESENT AND FUTURE.



BENEFITS OF CARRIER GAS FURNACE CONTROLS DEALER FEATURE SUMMARY

CARRIER SYSTEMS

Humidifier

As part of a total indoor comfort system, a Carrier humidifier replenishes moisture to dry, indoor air.

Evaporator Coil

A Carrier evaporator coil is matched with the proper outdoor unit to provide top cooling efficiency and years of reliable service. If replacing your outdoor unit, Carrier recommends the replacement of the indoor unit as well, to ensure peak performance and reliability.

Furnace

Carrier offers a complete line of top-quality, high efficiency gas furnaces. Ask your Carrier dealer which one is right for you.

Air Cleaner

Carrier air cleaners can substantially improve your indoor comfort by removing harmful and irritating airborne pollutants from your home.

Air Conditioner

The complete line of Carrier air conditioners provides reliable, high efficiency cooling for long-lasting comfort and energy savings. Ask your Carrier dealer about environmentally sound Carrier air conditioners with Puron® refrigerant.

Ultraviolet Germicidal Light

reduces the amount of pollutants, such as mold, bacteria, fungi and viruses, leaving your home with cleaner, fresher indoor air.

Zoning
Comfort zoning allows you to set different temperatures for different areas of your home. Enjoy greater comfort and added energy savings with room-to-room temperature control.

Comfort Ventilator

A Carrier comfort ventilator adds a breath of fresh air to today's tightly constructed home. It combines fresh outdoor air with conditioned indoor air for improved air and energy exchanges.

Thermidistat™ Control

A Carrier Thermidistat Control is your command center. Precise temperature control and programmable features keep you in touch with your comfort.



MATCHING COMPONENTS PROVIDE OPTIMUM EFFICIENCY AND SYSTEM PERFORMANCE.

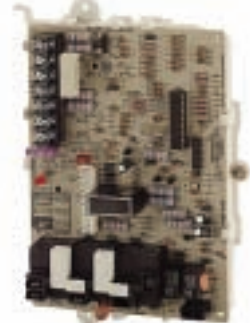
- Forced-air systems are usually built around an indoor unit, such as a furnace or a fan coil.
- The outdoor unit will be an air conditioner or heat pump combined with a furnace or fan coil for year-round comfort.
- Air quality is greatly improved with the addition of an air cleaner, UV light, humidifier and a ventilator.
- Precise temperature control comes from a Carrier thermostat matched to your indoor comfort system.
- Zoning provides the ultimate in control over your indoor comfort system.



HK42FZ022
Variable-Speed



HK42FZ017
Two-Stage



HK42FZ014
Single-Stage Deluxe



HK42FZ013
Single-Stage Standard



www.carrier.com

A member of the United Technologies Corporation family.
Stock Symbol UTX.

© Carrier Corporation 2003

858-428

Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice or without incurring obligations.



BUILT-IN COMFORT, INSTALLATION AND SERVICE ADVANTAGES

CARRIER CONTROLS PUT THE HEAT ON THE COMPETITION.

VARIETY



Carrier 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.

- ▶ **DEHUMIDIFICATION CONTROL** has never been easier or better. Nearly all of our new furnace controls offer improved dehumidification. And you can experience IdealHumidity™ with our variable-speed furnace control featuring Super Dehumidification. In conjunction with the Thermidistat™ Control or Comfort Zone II, this function greatly reduces and modulates the fan speed for increased humidity removal. The IdealHumidity™ System will dehumidify even with no call for cooling.
- ▶ **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 five minutes during periods of high humidity, when used with the Thermidistat™ Control or Comfort Zone II. This function allows condensate on the coil to drain off instead of re-evaporating and being recycled through your home. The result is economical cooling plus humidity control. This function can reduce indoor humidity levels by up to 10%.

- ▶ **ADJUSTABLE CONTINUOUS FAN AT THE THERMOSTAT**, a feature we call ComfortFan™, lets the homeowner enjoy the benefits of continuous fan operation by providing the ability to adjust the fan speed from the Carrier thermostat, based on changing indoor comfort needs, such as entertaining or the change in seasons.
- ▶ **COMMUNICATION PORT** on the variable-speed furnace controls is already programmed as the key to connection with future thermostats and data-collection devices. This port and similar ports in older variable-speed 90% furnaces also allows for reading non-volatile memory with a laptop or personal digital assistant (Palm Pilot, etc.) when used with the Advanced Product Monitor kit. (Part Number: KGAFP0201APM.)
- ▶ **SERVICE CONNECTION** is provided on current deluxe and two-stage boards for use with future diagnostic tools.
- ▶ **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.
- ▶ **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.

- ▶ **EAC TERMINALS** on all of our controls allow for easy and convenient connection of 115vac accessories such as Electronic Air Cleaners (EACs). EAC terminals are powered at the same time as the blower motor.
- ▶ **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.
- ▶ **TWO-SPEED AC/HP COMPATIBLE** allows separate connections for high and low air conditioner or heat pump fan speeds. Please note that Carrier recommends installing a variable-speed indoor unit to maximize the performance available with a two-speed outdoor unit.
- ▶ **INTELLIGENT HEAT STAGING** allows you to use a two-stage furnace when a single-stage thermostat is the only control option available. Adjusts to high heat based on “time and

- temp demand” while working to maintain an efficient heating cycle. For the best year-round comfort, use the Thermidistat™ Control when using a two-stage furnace.
- ▶ **INTELLIGENT COOL STAGING** allows you to use a two-speed air conditioner or heat pump when a single-stage thermostat is the only control option available. Adjusts to high cool based on “time and temp demand” while working to maintain an efficient cooling cycle. For the best year-round comfort, use the Thermidistat™ Control when using a two-speed AC or HP.
- ▶ **SERVICE INFORMATION STORAGE** is non-volatile (recoverable) memory that stores status codes and cycle counts for quick, easy troubleshooting even if power is interrupted. Recent status codes can be read from LEDs or full details can be accessed through the service connection or communication port.



DETAILS

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.

	Variable-Speed 58MVP, 58CVA/CVX (HK42FZ022)	Two-Stage 58MTA, 58CTA/CTX (HK42FZ017)	Deluxe 58MXA, 58DLA/DLX (HK42FZ014)	Standard 58MCA, 58MSA, 58STA/STX (HK42FZ013)
Dehumidification Control	■	■	■	
Super Dehumidification	■			
Smart Cooling Blower Off Delay (SmartEvap™)	■	■	■	
Adjustable Con. Fan at Stat (ComfortFan™)	■	■	■	
Communication Port	□			
Service Connection	□	□	□	
Low Continuous Fan Speed	■	■	■	
Very Low Continuous Fan	■			
Adjustable Blower Off Delay	■	■	■	■
EAC Terminals	□	□	□	□
Humidifier Terminal	□	□	□	□
Two-Speed AC/HP Compatible	Best □	Better □	Good □	
Intelligent Heat Staging	■	■		
Intelligent Cool Staging	■	■		
Service Information Storage	□	□	□	

■ Deluxe/Premium Consumer Feature □ Dealer Feature