Direct OEM Replacement is Fast and Easy. First of its kind to replace both PSC/VS and ECMx applications.



# Carrier Two-Stage HSI Integrated Furnace Control Kits



### **Direct OEM Replacement Controls**

Fast drop-in OEM mounting Includes all required harnesses 120 VAC ignitor output Confirms installation with pushbutton self-test routine



**Reduces stocking SKUs** One SKU replaces several OEM and competitive models



### Advance Diagnostics for Servicing

Tri-color LED shows operational status and fault codes – Simple pushbutton to retrieve fault codes



### Premium Home Comfort

Continuous low-speed fan option for better temperature balance and full-time air cleaning - easy dipswitch setup



Flame Current Test Pads Easy on-board checkout



**Two-Stage 21V51D-751** Replaces Carrier/ICP equipment brands Blower Motor Types – PSC, Variable Speed and ECMx with 120V Ignition

# **DID YOU KNOW?**

This kit includes an additional harness to replace ICP Two-Stage applications

See back for cross reference



1-Year Limited Warranty

### White-Rodgers<sup>®</sup>

### EMERSON. CONSIDER IT SOLVED

# 21V51D-751 Two-Stage

## **Cross Reference**

White-Rodgers 21V51D-751 50V51-751

Carrier PSC / VS	
325879-751 CEPL130455-01 HK42FZ005	HK42FZ010 HK42FZ015 HK42FZ017
Carrier ECMx	
CEPL130948-01 CEPL130948-02	HK42FZ028 HK42FZ040
ICP PSC Only	
1172551 1172809 HK42FZ019	HK42FZ020 CEPL130591-01 CEPL130591-41
ICP ECMx	
1184408 CEPL131043-01 HK42FZ041	
ICM PSC/VS	
ICM2807	

### Specifications Electrical Ratings

Input Voltage: 18 to 30 VAC, 60 Hz Current: 0.8 amp @ 25 VAC

#### Flame Current Requirements:

Min current to insure flame detection:  $0.25 \ \mu A DC^*$ Max current for non-detection:  $0.1 \ \mu A DC$ Max allowable leakage resistance:  $150 \ M$  ohms \* Measuring with a DC voltmeter ( $1VDC = 1 \ \mu A$ )

### **Operating Temperature Range:**

-40° to 175°F (-40° to 80°C)

**Mounting** Plastic tray

Humidity Range:

5 to 95% relative humidity (non-condensing)

### Gases Approved:

Natural, Manufactured, Mixed, Liquefied Petroleum and LP Gas Air Mixtures are all approved for use.

# Timing Specifications

(All times are in seconds unless noted otherwise)

Pre-purge	Ignitor warm-up	Retries	Post-purge	Lockout time	Heat ON delay Low heat/ High heat	Heat OFF delay	Cool ON delay	Cool OFF delay	Auto reset
15	17	3 times	15	240	45/25	90/120*/150/180	3	3/90*	60 mins
*default			-		-				

#### \*default

# 50M56U-751 Single Stage



*Replaces Carrier 325828-751 Fixed Speed Furnace Kit* 

## **Cross Reference**



# Specifications

Electrical Ratings [@ 77°F (25°C)] Input Voltage: 25 VAC 50/60 Hz Max. Input Current @ 25 VAC: 0.45 amp

#### Flame Current Requirements

Minimum current to insure flame detection: 1 µa DC\* Maximum current for non-detection: 0.1 µa DC\* Maximum allowable leakage resistance: 100 M ohms \*Measured with a DC microammeter in the flame probe lead

**Operating Temperature Range** -40° to 175°F (-40° to 80°C)

#### Mounting

Plastic covers with screws

#### Humidity Range:

5 to 95% relative humidity (non-condensing)

#### Gases Approved:

Natural, Manufactured, Mixed, Liquefied Petroleum and LP Gas Air Mixtures are all approved for use.

# **Timing Specifications**

(All times are in seconds unless noted otherwise)

Pre-purge	Ignitor warm-up	Retries	Post-purge	Lockout time	Heat ON delay	Heat OFF delay	Cool ON delay	Cool OFF delay	Auto reset
30	17	2 times	25	275	25/60*	90/120*	2	5/90*	60 mins

\*default



White-Rodgers



R-4612

emerson.com/white-rodgers

Emerson is a trademark of Emerson Electric Co. ©2017 Emerson Electric Co. All rights reserved.