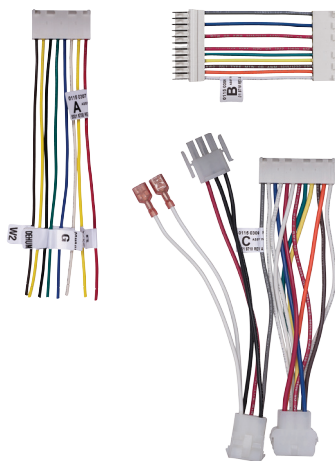


**21V51D-751**



**21V51D-751 CARRIER TWO-STAGE INTEGRATED  
HSI FURNACE CONTROL KIT**

**FEATURES**

- Two-stage applications
- PSC/VS or ECMx blower motors
- 120V HSI ignition
- Tri-color diagnostics LED
- Flame current test pads
- Push button self-test
- Dipswitch fan only speed set up

**SPECIFICATIONS**

**ELECTRICAL RATINGS:**

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

**Relay Contact Ratings**

Gas Valve 1st Stage ..... 1.5 A 0.6 PF @ 30 VAC  
 Gas Valve 2nd Stage ..... 0.5 A @ 30 VAC  
 Ignitor Relay ..... 2.0 A @ 120 VAC  
 Inducer Relay ..... 2.2 A FLA @ 120 VAC  
 Inducer Relay ..... 3.5 A LRA @ 120 VAC  
 PSC Circulator Relay ..... 14.5 A FLA @ 120 VAC  
 PSC Circulator Relay ..... 25 A LRA @ 120 VAC  
 ECMx Circulator Relay ..... 4.0 mA RMS @ 18 VAC  
 ECMx Circulator Relay ..... 12.0 mA RMS @ 30 VAC  
 Humidifier Load ..... 1.0 A @ 120 VAC  
 Electronic Air Cleaner ..... 1.0 A @ 120 VAC

**Flame Current Requirements:**

Min current to insure flame detection ..... 0.25 µA DC\*  
 Max current for non-detection..... 0.1 µA DC  
 Max allowable leakage resistance..... 150 M ohms

\* Measuring with a DC voltmeter (1VDC = 1 µA)

**Operating Temperature Range:**

-40° to 175°F (-40° to 80°C)

**HUMIDITY RANGE:**

5 to 95% relative humidity (non-condensing)



**TECHNICAL HELP**

Model Number	Pre-Purge Time	Ignitor Warm-Up	Retries	Heat Delay-To-Fan-On (Low Heat)	Heat Delay-To-Fan-Off	Cool Delay-To-Fan-On	Cool Delay-To-Fan-Off	Auto Reset Time	Post Purge
21V51D-751	15 sec	17-19	3 times	45	90/*120/150/180	3	5	60 min	15 sec

\*default

**CROSS REFERENCE**

Carrier ECMx	ICM PSC/VS	ICP ECMx	White-Rodgers
CEPL130948-01	ICM2807	1184408	21V51D-751
CEPL130948-02		CEPL131043-01	50V51-751
HK42FZ028		HK42FZ041	
HK42FZ040		<b>ICP PSC only</b>	
<b>Carrier PSC/VS</b>		1172551	
325879-751		1172809	
CEPL130455-01		CEPL130591-01	
HK42FZ005		CEPL130591-41	
HK42FZ010		HK42FZ019	
HK42FZ015		HK42FZ020	
HK42FZ017			