



50C51-707

50C51-707 GOODMAN TWO-STAGE INTEGRATED HSI FURNACE CONTROL

FEATURES

- Two-stage applications
- Variable speed blower motor
- 120V HSI ignition
- Communicating or legacy 24V systems
- 7 segment system diagnostics LED

SPECIFICATIONS

Operating Temperature.	-40° to 175°F (-40° to 80°C)
Humidity Range	5% to 95% RH
Electrical Ratings @ 77°F (25°C)	
Input Voltage.	24 VAC, 60 Hz
Maximum Input Current @ 25 VAC	800 amp + MV
Relay Load Ratings	
Gas Valve Relay	1.5 amp @ 24 VAC 60 Hz 0.6 pf
Ignitor Relay	4.0 amp @ 120 VAC 60 Hz
Inducer Relay	2.2 FLA – 3.5 LRA @ 120 VAC
Circulator Relay(s) – PSC	13 FLA-25.0 LRA @ 120 VAC
Humidifier Load	1.0 amp max. @ 120 VAC
Electronic Air Cleaner.	1.0 amp max. @ 120 VAC
Flame Current Requirements	
Minimum current to insure flame detection.	0.3 µA DC*
Maximum current for non-detection	0.1 µA DC*
Maximum allowable leakage resistance.	100 M ohms
Timing Spec (@ 60 Hz)	maximum
Flame establishing time	0.8 sec
Flame failure response time	2.0 seconds

NOTE: At 50 Hz, all timing specifications should be increased by 20%.

*Measured with a DC microammeter in the flame probe lead.



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
50C51-707	15 sec	17 (adaptive)	Infinite	30	90/120/ *150/180	5	45	60 min	15 sec

*default

CROSS REFERENCE

Goodman	White-Rodgers
PCBKF101	50C51-289-01
PCBKF101S	50C51-289-02
PCBKF102	50C51-289-90
PCBKF102S	50C51-290
PCBKF103	50C51-290-01
PCBKF103S	50C51-290-02
PCBKF104	50C51-290-03
PCBKF104S	
PCBKF105	
PCBKF105S	