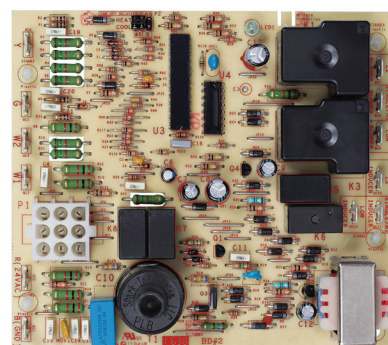


**50N02A-820**



**50N02B-820**

**50N02A-820 & 50N02B-820 TRANE TWO-STAGE  
INTEGRATED DSI FURNACE CONTROLS—  
COMMERCIAL ROOFTOP APPLICATIONS**



**FEATURES**

**50N02A-820**

- Single or two-stage application
- Direct spark ignition
- 80s cool off delay
- For packaged units
- Green diagnostic LED

**50N02B-820**

- Single or two-stage application
- Direct spark ignition
- 45s cool off delay
- For packaged units
- Green diagnostic LED

**SPECIFICATIONS**

Operating Temperature . . . . .	-40° to 175°F (-40° to 80°C)
Humidity Range . . . . .	10% to 95% RH
Mounting . . . . .	Standoffs/Adapter board
Electrical Ratings @ 77°F (25°C)	
Input Voltage . . . . .	24 VAC, 50 / 60 Hz
Maximum Input Current @ 25 VAC . . . . .	350 amp + MV
Relay Load Ratings	
Gas Valve Relay . . . . .	1.5 amp @ 30 VAC 0.6 pf
Inducer Relay . . . . .	.75 FLA, 1.5 LRA, max @ 240 VAC
Circulator Relay(s) – PSC . . . . .	10 FLA - 30 LRA max. @ 240 VAC
Spark Rate . . . . .	50 / 60 Hz
Spark Energy . . . . .	10mJ @ 18 VAC / 13mJ @ 24 VAC
Flame Current Requirements	
Minimum current to insure flame detection. . . . .	1.2 µA DC*
Nominal current . . . . .	4.5 µA DC*
Timing Spec (@ 60 Hz)	
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	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
50N02A-820	20 sec	2	45	60/*90	0	0/*80	60 min	5 sec
50N02B-820	20 sec	2	45	60/*90	0	0/*45	60 min	5 sec

\*default

**CROSS REFERENCE**

**50N02A-820**

Trane	White-Rodgers
CNT03456	50N02A-820
CNT03457	50N02-495-02
X13650874-01	50N02-495-01
X13650873-01	
CNT01634 w/ F50N02-820	
CNT01669 w/ F50N02-820	
CNT02216 w/ F50N02-820	
CNT02217 w/ F50N02-820	

**50N02B-820**

Trane	White-Rodgers
CNT05135	50N02B-820
CNT03458	
D674713P01	
X13650875-01	
CNT02219 w/ F50N02-820	
CNT04912	