# Trane Commercial Package Units HSI/DSI Controls

50E70-820 & 50N02B-820



Fast and Easy OEM Direct Replacement for Single and Two-Stage Applications



### **Source with other HVAC Controls**

Save time by finding these boards at your local HVAC distributor



### Easy to Install

50N02A and B adapter kit sold separately to save you money on parts you may not need 50E70 kit includes everything needed for an easy and fast replacement



### **OEM Direct Replacement Control**

Fast drop-in OEM mounting on Trane Packaged Units



### **Complete Cross Reference**

Extensive and up-to-date cross reference by OEM model number



### Support

Customer and technical support is available seven days a week at 888-725-9797



50N02B-820

**1-Year Limited Warranty** 

### **DID YOU KNOW?**

Industry first OEM direct replacement boards for Trane Packaged Units













# Specifications

|   | l                          | l                           | l                           |  |
|---|----------------------------|-----------------------------|-----------------------------|--|
|   | Non-integrated<br>HSI      | Integrated<br>Two-Stage DSI | Integrated<br>Two-Stage DSI |  |
|   | 50E70-820                  | 50N02A-820                  | 50N02B-820                  |  |
| Specifications                            |                            |                             |                             |  |
| Operating Temperature                     | -40° to 158°F              | -40° to 175°F               | -40° to 175°F               |  |
| Humidity Range                            | 10% to 95% RH              | 10% to 95% RH               | 10% to 95% RH               |  |
| Mounting                                  | Stand-Offs / Adapter Board | Stand-Offs                  | Stand-Offs                  |  |
| Electrical Ratings @ 77°F (25°C)          |                            |                             |                             |  |
| Input Voltage                             | 24 VAC, 50/60 Hz           | 24 VAC, 50/60 Hz            | 24 VAC, 50/60 Hz            |  |
| Maximum Input Current @ 25 VAC            |                            | 350 mA + MV                 | 350 mA + MV                 |  |
| Flame Current Requirements                |                            |                             |                             |  |
| Minimum current to insure flame detection | 1 μA DC*                   | 1.2 μA DC*                  | 1.2 μA DC*                  |  |
| Nominal current                           |                            | 4.5 μA DC*                  | 4.5 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                    | 0.8 sec                     | 0.8 sec                     |  |
| Flame failure response time               | 2.0 sec                    | 2.0 sec                     | 2.0 sec                     |  |
| Technical Help                            |                            |                             |                             |  |
| Pre-Purge                                 | 0                          | 20                          | 20                          |  |
| Ignitor Warm-Up                           | 45                         |                             |                             |  |
| Retries                                   |                            | 2                           | 2                           |  |
| Heat ON delay (Low Heat)                  |                            | 45                          | 45                          |  |
| Heat OFF delay                            |                            | 60/90                       | 60/90                       |  |
| Cool ON delay                             |                            | 0                           | 0                           |  |
| Cool OFF delay                            |                            | 0/80                        | 0/45                        |  |
| Automatic Reset Time                      | 60 min                     | 60 min                      | 60 min                      |  |
| Post Purge                                | 0                          | 5                           | 5                           |  |







**F50N02-820 Furnace Adapter Board**Used with 50N02A or B Controls
Only required for first time board
replacements or older kits

## Cross Reference

| Trane Commercial<br>Packaged Unit<br>Controls | Suggested Direct<br>Replacement |  |
|---|---------------------------------|--|
| 21D02-475-01                                  | F50N02-820                      |  |
| 21D70-495-01                                  | 50E70-820                       |  |
| 21D70-495-02                                  | 50E70-820                       |  |
| 3HS-1   | 50E70-820                       |  |
| 3HS-2 Rev A                                   | 50E70-820                       |  |
| 3HS-2 Rev D                                   | 50E70-820                       |  |
| 3SV-2   | 50E70-820                       |  |
| 50E70-820                                     | 50E70-820                       |  |
| 50N02-495-01                                  | 50N02A-820                      |  |
| 50N02-495-02                                  | 50N02A-820                      |  |
| 50N02A-820                                    | 50N02A-820                      |  |
| 50N02B-820                                    | 50N02B-820                      |  |
| CNT01634                                      | 50N02A-820                      |  |
| CNT01669                                      | 50N02A-820                      |  |
| CNT02216                                      | 50N02A-820                      |  |
| CNT02217                                      | 50N02A-820                      |  |
| CNT02219                                      | 50N02B-820                      |  |
| CNT03456                                      | 50N02A-820                      |  |
| CNT03457                                      | 50N02A-820                      |  |
| CNT03458                                      | 50N02B-820                      |  |
| CNT04912                                      | 50N02B-820                      |  |
| CNT05135                                      | 50N02B-820                      |  |
| D674713P01                                    | 50N02B-820                      |  |
| F50N02-820                                    | F50N02-820                      |  |
| KIT03308                                      | 50E70-820                       |  |
| KIT05137                                      | 50E70-820                       |  |
| KIT06839                                      | F50N02-820                      |  |
| KIT08282                                      | 50E70-820                       |  |
| KIT17852                                      | 50E70-820                       |  |
| X13120662010                                  | F50N02-820                      |  |
| X13130449-01                                  | 50E70-820                       |  |
| X13130453-01                                  | 50E70-820                       |  |
| X13130454-01                                  | 50E70-820                       |  |
| X13130454-02                                  | 50E70-820                       |  |
| X13650873-01                                  | 50N02A-820                      |  |
| X13650874-01                                  | 50N02A-820                      |  |
| X13650875-01                                  | 50N02B-820                      |  |

### The White-Rodgers Mobile App:

- Cross referencing
- Product information
- Product selection





