Trane Commercial Controls

F50N02-820, 50N02A & B-820, 50E70-820

2017 Launch

6/23/2017
The Target Market
Why We Are Launching Trane Commercial Products

- Trane Has a Large Installed Base
  - Produced Units with *Electromechanical* Control Boards Since 1990
  - Produced Units with *Communicating* Control Boards Since ~2002
- We Have the Products as an OEM Supplier
  - Started with Fenwall, Texas Instruments
  - Moved to majority W-R, one UTEC SKU
- Expands W-R Presence Outside of Residential Split System Market
Trane Commercial Basics
Three Product Platforms, Two Ignition Types

- **Impack™**: 1.5-5 TON
  - YCY, YCC, YCZ, DCY, DCZ
  * Note: This is also a residential product where package units are prevalent

- **Precedent™**: 3-10 TON
  - YSC, YHC

- **Voyager™**: 12.5-25 TON
  - YCD

- **Voyager™**: 27.5-50 TON
  - YCD

Ignition Types:
- Spark Ignition
- HSI
Trane Commercial Has Two Families Of Controls Electromechanical And ReliaTel™ Communicating

- The W-R Controls Being Released For 2017 Are All Electromechanical Family
- Plan Is To Follow-up With Communicating Boards in 2018 To Complete The Offering

2017 Launch

- HSI & Spark
- 4-pin and 9-pin connectors

Future Launch

- HSI & Spark
- All Comm boards have 12-pin connectors
Overview
- OEM Direct Replacement Boards for Trane Commercial Units from the Original OEM Supplier
- 50E70 Hot Surface Ignition
- 50N02A,B Direct Spark Ignition. Different Cooling Off Delay Timings
- F50N02 Accessory Adaptor Board and Harnesses for Spark Controls
- Thousands Installed Since Early 1990’s

Features
- Easy to Install
- Full Color Boxes
- Complete Cross Reference on Box
- Instruction Sheet
- Fault Code Label, Accessory Parts to Meet or Exceed OEM Offering
- New Box Artwork to Communicate Product Positioning

Competition

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50N02A-820 & 50N02B-820 Spark Ignition Controls
Impack™ and Precedent™ Product Lines

• Current W-R Production Control

• Current UTEC Production Control

Drop-in OEM Direct Replacement Boards
F50N02-820 Spark Ignition Adapter Board Accessory Replaces Trane’s Service KIT06839

- Initial production used a Texas Instruments Spark Module with mounting screws.
- The adapter mounts to the existing screw holes and converts to plastic stand-off mounting.
- Newer and already converted units will not need the adapter. We DO NOT include with the control boards because Trane doesn't.
- Wiring harnesses adapt old system wiring to new control board pinouts.
**50E70-820 Hot Surface Ignition Module**

**Voyager™ Product Line**

**Heating Details**
- Premix "Power" Burner, Not Forced or Induced Draft
- Negative Pressure Gas Valve
- Drum & Tube Heat Exchanger
- 120VAC Hot Surface Ignitor

Typical RTU with multiple boards. We are only supplying the ignition piece.
**50E70-820** Hot Surface Ignition Module
Replaces Trane’s Service KIT17852 For Voyager™

- Initial production used a Fenwall HSI Module with mounting screws. It then went to a Texas Instruments standoff mount control.
- The included adapter mounts to the existing screw holes and converts to plastic stand-off mounting
- Newer and already converted units will not need the adapter. We include because Trane still does.
- Wiring adapter connects control to 24VAC transformer when needed

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**Flame Sense Test Header**

**Drop-in OEM Direct Replacement Board**
Two Excellent Training Videos On Voyager Show & Explain Burner System and Controls Location

• Both Videos Credit David Harty

1. https://youtu.be/90bz5EhoHqA
   – Or Google “Trane Premix Burner Heat Exchanger Tips”

   – Or Google “Trane Voyager Premix Burner Part 2”
Trane Commercial Controls

In Summary

• #2 Market Share Commercial Equipment OEM
• A Large, and Still Growing Installed Base Since 1990’s
• Opportunity to Enter Commercial Market
• Direct Replacement Controls from the OEM Supplier
• ICM and Honeywell do not Offer