

Goodman Communicating Controls
48C21-707 AH, 49S25-707 AC/HP,
50C51-707 IFC
2017 Launch

6/23/2017



The Target Market

Why We Are Launching Goodman Comm. Products

- Daikin/Goodman/Amana is ~ 21% Market, the #2 Brand
- Two-Stage Furnaces are now ~ 30% of the Annual Units Produced
 - Until Last Year, the IFC in this launch was Goodman's only Two-Stage Furnace Board
(They Have Since released a Two-Stage ECMx design)
- Specialized Controls only available through OEM today
- We Have the Products as an OEM Supplier



Defining Legacy Versus Communicating The Goodman Boards Can Do Both

Legacy System
Complexity Increases with Features

T-Stat to Furnace	8 Wires
OD Unit to Furnace	6/7 Wires
Dip Switch Settings	Up to 20

Only senior techs can do wiring and set up

Traditional 24VAC Control Wiring

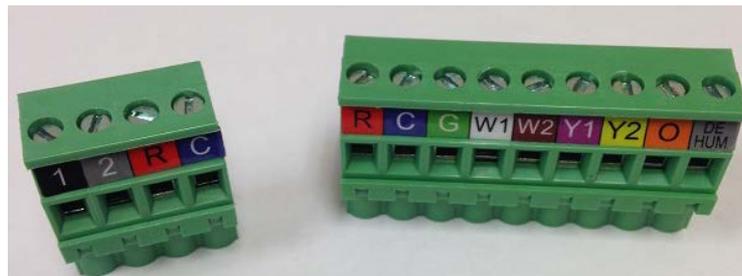
Communicating System
Installation the Same for All Systems

T-Stat to Furnace	4 Wires
OD Unit to Furnace	2 or 4 Wires
Dip Switch Settings	None

Auto-configures so all techs can be successful

R,C, Data 1, Data 2 Wiring

Thermostat kits ship with Comm. Tstat connector



Control boards ship with Legacy Tstat connector

Goodman ComfortNet™ Communicating Controls



July 2017 First Launch



49S25-707



50C51-707



48C21-707



Overview

- OEM Direct Replacement Boards for Goodman/Amana/Daikin Units from the Original OEM Supplier
- 49S25 2-stage Heat Pump / AC Control
- 50C51 2-stage Furnace Control
- 48C21 Air Handler Control
- Legacy 24V or 4-wire Communicating System Capable
- Thousands Installed Since Late 2000's

Features

- Easy to Install
- Full Color Boxes
- Complete Cross Reference on Box
- Instruction Sheet
- Updated Fault Code Label

Competition

W-R	ICM	HON
✓	X	X



48C21-707 Air Handler Control



Cross Reference Replacement / Tableau de renvoi des remplacements

Goodman	White-Rodgers
PCBJA101	48C21-289
PCBJA101S	48C21-290-01
PCBJA102	48C21-290-02
PCBJA102S	48C21-290-04
PCBJA103	
PCBJA103S	
PCBJA104	
PCBJA104S	

White-Rodgers™

Air Handler Control

48C21-707 | Goodman

Two-Stage Electric Heat

Variable Speed Blower Motor

Communicating or
Legacy 24V Systems



Trusted by PROs

1-Year Limited Warranty

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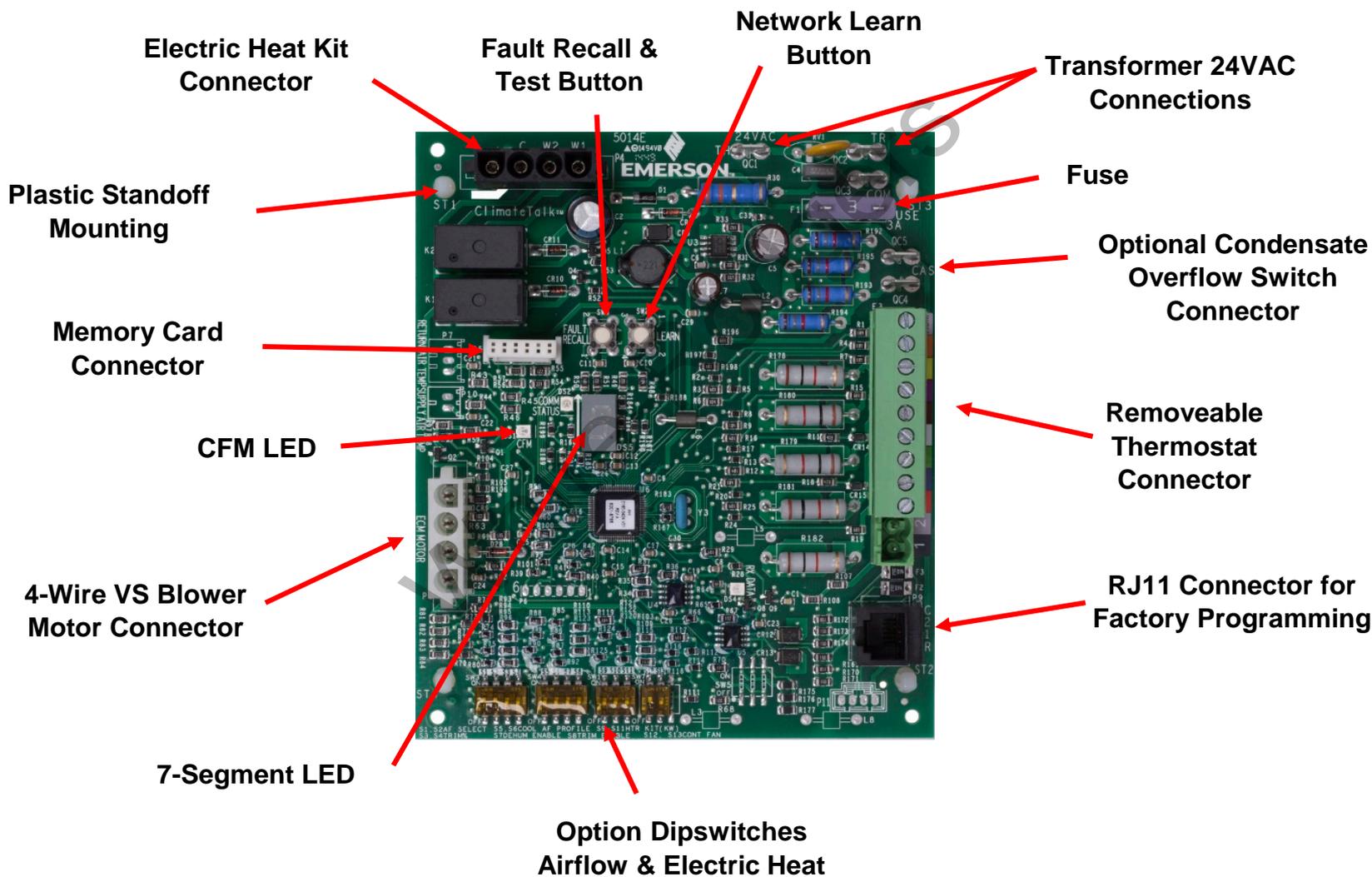


- Drop-in OEM Direct Replacement
- Backwards compatible with all previous versions
- No adapter harnesses or other wiring changes required
- First Launch had blink LED, then upgraded to 7-segment
 - New fault code label for 7-segment displays included
- Used on Goodman, Amana, and Daikin Products:
AVPTC, MBVC, DVPTC



48C21-707 Air Handler Board Layout

Some Key Parts to be Familiar With



49S25-707 AC or Heat Pump Control (Also Called UC Board or “Unitary Control”)

Cross Reference Replacement / Tableau de renvoi des remplacements

Goodman	White-Rodgers
PCBGR102	49B22-289
PCBGR102S	49C25-289-01
PCBGR103	49J22-289
PCBGR103S	49J22-289-02
PCBHR102	49K25-289-01
PCBHR102S	
PCBHR103	
PCBHR103S	
PCBHR104	
PCBHR104S	

White-Rodgers:
AC or Heat Pump Control
49S25-707 | Goodman

Two-Stage Applications
PSC or ECM Outdoor Fan Motor
Cutttable Jumper Configuration
Communicating or Legacy 24V Systems

Trusted by PROs

1-Year Limited Warranty



OEM Direct

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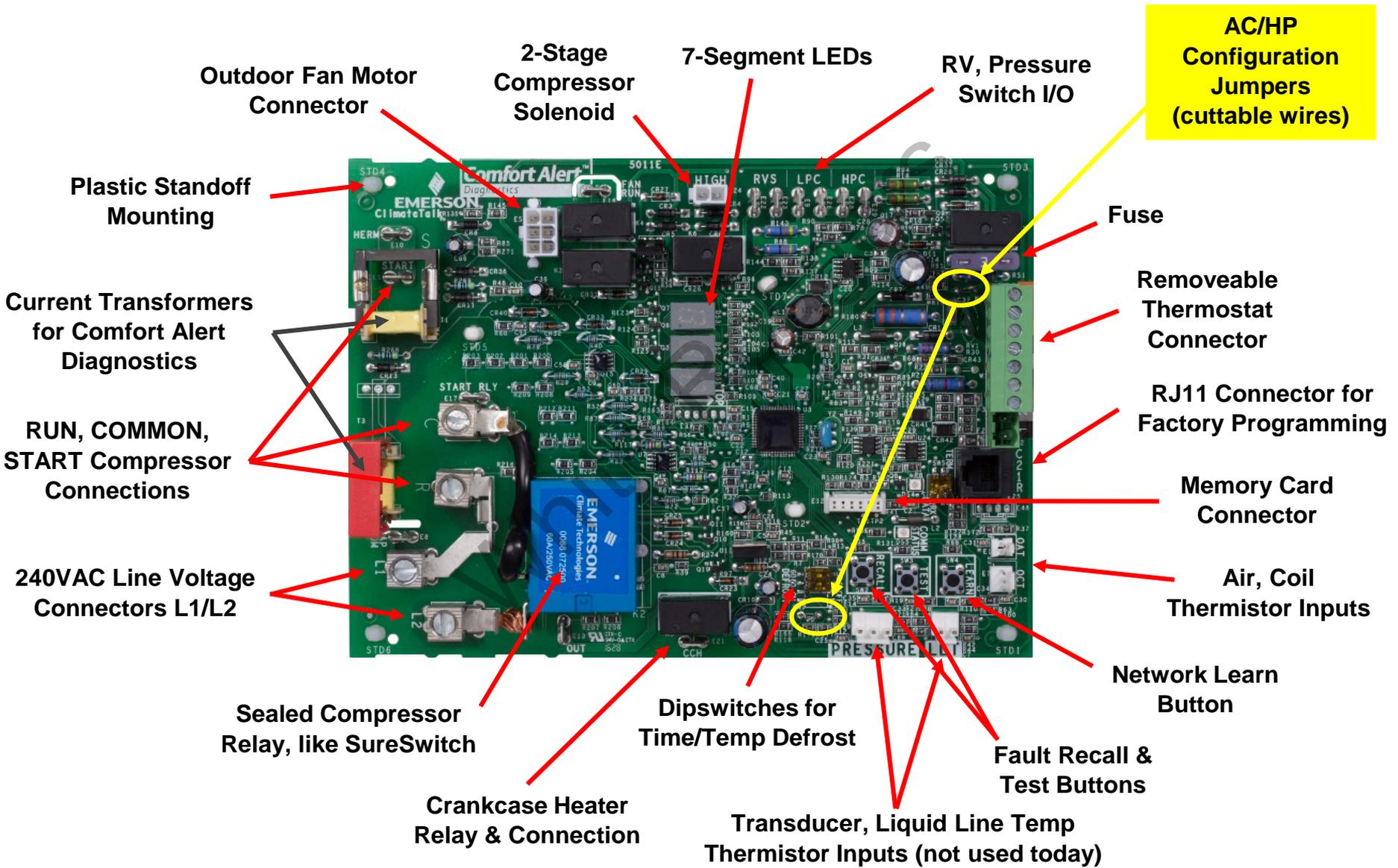
- Drop-in OEM Direct Replacement
- Backwards compatible with all previous versions
- No adapter harnesses or other wiring changes required
- First Launch had blink LEDs, then upgraded to 7-segment
 - New fault code label for 7-segment displays included
- Jumpers for AC or HP application
- Used on Goodman, Amana, and Daikin Products:
ASZC, DSZC, ASXC, DSXC, DZTC, DXTC 16 & 18 SEER

**Goodman offers two SKU's: AC or Heat Pump
W-R is offering a single, configurable SKU**



49S25-707 AC/HP Board Layout

Some Key Parts to be Familiar With



50C51-707 Two-Stage Hot Surface IFC

Cross Reference Replacement / Tableau de renvoi des remplacements

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	50C51-707
PCBKF105	
PCBKF105S	

White-Rodgers™

Integrated Furnace Control

50C51-707 | Goodman

Two-Stage Applications

Variable Speed Blower Motor

120V HSI Ignition

Communicating or
Legacy 24V Systems

Trusted by PROs

1-Year Limited Warranty



D
OEM Direct

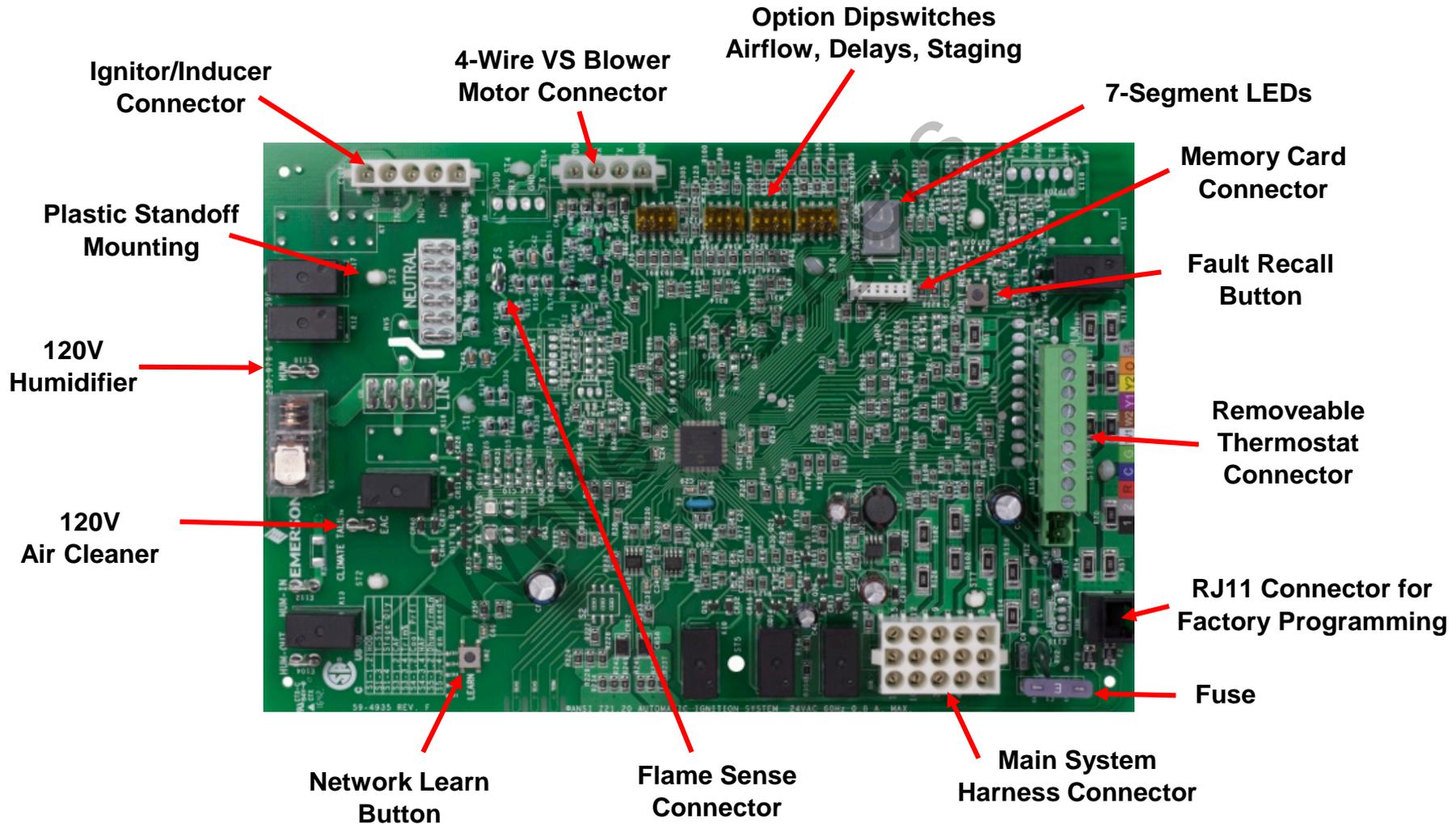
EMERSON

- Drop-in OEM Direct Replacement
- Backwards compatible with all previous versions
- No adapter harnesses or other wiring changes required
- Has always had 7-segment LEDs
- Used on Goodman, Amana, and Daikin Products:
GMVC, GCVC, AMVC, ACVC,
DM96VC, DC96VC



50C51-707 IFC Board Layout

Some Key Parts to be Familiar With



Goodman Communicating Controls In Summary

- #2 Market Share Equipment OEM
- A Solid, and Still Growing Installed Base Since 2010
- Direct Replacement Controls from the OEM Supplier
- ICM and Honeywell do not Offer

White-Rodgers