

# Emerson Blue™ Series 6" Thermostats

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# Business and Product Overview

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# Introduction

Emerson Blue™ Series 6" Thermostats include the Easy Reader™ with super-large numbers and letters, and easy to use features.

- **Large Display Size**
  - Blue backlight
  - Large characters
- **Selectable Programming**
  - Choice of 7 Day, or Non-Programmable on Easy Reader, other models include 5+1+1 Day
- **Dual Fuel (HP/Gas Furnace) Control**
  - No sensor needed for EZ Reader and outdoor remote sensor options for the other models
- **Advanced Features (vary by model)**
  - Auto-Changeover
  - Keypad Lockout / Temperature Limit Options
  - Programmable Fan
  - Cool Savings
  - Multiple Power Methods
  - Simple set-up Menu



1F95EZ-0671 Easy Reader™ Universal



1F95-0671 Universal



1F95-0680 Universal Commercial

# Why Convert from the Competition?

- Professional grade residential and commercial thermostats.
- Large display push button thermostats are easy to see, read, and understand.
- Models with the features customers want.
- Competitively priced.
- Easy install/configuration.
- Remote sensor options for indoor averaging or outdoor heat pump and aux lockout control.



## Quality & Precision Control



## Support When & Where You Need It



# Emerson Blue™ Series 6" Thermostats At A Glance



1F95EZ-0671



1F95-0671



1F95-0680

Special Features	1F95EZ-0671 Easy Reader™ Universal	1F95-0671 Universal	1F95-0680 Universal Commercial with Economizer, Occupancy Pre-Purge, or Occupied Damper Control
Max. Stages (H/C)	4H / 2C	4H / 2C	4H / 2C
Selectable Program	7 or None	7, 5-1-1 or None	7, 5-1-1 or None
Program Periods	4 or 2 or No Pgm	4 or 2 or No Pgm	4 or 2 or No Pgm

## Special features (vary by model):

- Keypad Lockout and Temperature Limits
- Indoor or Outdoor Remote Sensor Option
- Dual Fuel - Logic or Outdoor Remote Sensor options
- Automatic Changeover Heat/Cool



**TECH TIP:** Universal Thermostats configure for Single Stage, Multi-Stage and Heat Pump Systems.

# Matching Emerson Blue™ Series 6" Thermostats to the Application

Selection is easy - All you need to know is:

<b>1F95EZ-0671</b>	Easy Reader™ Universal Staging (Single Stage, Multi-Stage, Heat Pump)
<b>1F95-0671</b>	Universal Staging (Single Stage, Multi-Stage, Heat Pump)
<b>1F95-0680</b>	Universal Commercial with Economizer control or Pre-Occupancy Pre-Purge and Occupied Damper control (Single Stage, Multi-Stage, Heat Pump)



**1F95EZ-0671**

# Optional Remote Sensors for 1F95-0671 and 1F95-0680 Commercial Thermostats

## Indoor Remote Sensor - F145-1328 Options

- Displays indoor temperature on thermostat.
- Controls to remote sensor temp only or controls to average of remote and thermostat temp.
- Assigns priority to sensor (High, Med, Low) by program period and controls to weighted average of remote and thermostat temp.

## Outdoor Remote Sensor - F145-1378 Options

- Displays outdoor temperature on thermostat.
- Heat Pump Compressor Off feature with an outdoor setpoint range from 5° (Off) to 50° F locks out the heat pump and uses only Auxiliary Heat (Dual Fuel Gas or Electric Heat).
- Heat Pump Auxiliary Off feature with an outdoor setpoint range from 80° (Off) to 35° F locks out auxiliary heat and uses only the heat pump.



*Indoor*  
**F145-1328**



*Outdoor*  
**F145-1378**


# Quick Reference Guide

Be sure to check out our Quick Reference guide with all our thermostats, available on our Wholesale Resource Center:

<https://climate.emerson.com/documents/wr-0889-visorcard-divide-en-3599656.pdf>

The White-Rodgers Quick Reference Guide includes specs and features on all Blue Series thermostats including:

- 1 System type
- 2 Features
- 3 Terminals

		PROGRAMMING OPTIONS		SYSTEM COVERAGE		MAX STAGES HEAT/COOL		MODEL	APPLICATIONS			POWER SOURCE		PERFORMANCE FEATURES					COMFORT & CONVENIENCE FEATURES				TERMINALS								
		Programmable (P) and/or Non-Programmable (NP)	Program Options	Periods Per Day	Single Stage Multi-Stage Heat Pump Universal <sup>1</sup>	Conventional Single Stage	Conventional Multi-Stage	Heat Pump		Gas/Oil/Electric	3-Wire Zone	Milivolt Compatible	Battery	Hardwired (24V)	Power Stealing	Auto Changeover	Programmable Fan	Comfort Circulating Fan	Temperature Setpoint Limits	Keypad Lockout	Dual Fuel Control (L)Logic, (O) Outdoor	Aux. Heat Lockout with Outdoor Sensor <sup>#</sup>	Remote Sensor	Filter Change Reminder	Auto DST Adjust	Continuous Backlight w/Common Wire	Permanent Memory	Display Size	Terminals		
	P, NP	7, NP	4, 2, 0	Universal Easy Reader™	1/1	2/2	4/2	1F95EZ-0671	●	●	●	●	●	●					●		L			●	●	●	●	6"	RC, RH, C, W/E, W2, Y, Y2, O/B, G, L, 6		
		7, NP	4, 2, 0	Universal Wireless <sup>3</sup> Easy Install™	1/1	2/2	4/2	1F98EZ-1621	●				●			●	● <sup>5</sup>			●	●	L, O <sup>4</sup>	●	4 <sup>7</sup>	●		●	●	6"	RC, RH, C, W/E, W2, Y, Y2, O/B, G, L, DHM, DHM2, HM, HM2	
		7, 5+1+1, NP	4, 2, 0	Universal	1/1	2/2	4/2	1F95-0671	●	●	●	●	●	●	●	●	●	●			●	●	O <sup>4</sup>	●	1 <sup>5</sup>	●	●	●	●	6"	RC, RH, C, W/E, W2, Y, Y2, O/B, G, L, 6, +, 5, -
		7, 5+1+1, NP	4, 2, 0	Universal Commercial <sup>6</sup>	1/1	2/2	4/2	1F95-0680	●	●	●	●	●	●	●	●	●	●			●	●	O <sup>4</sup>	●	1 <sup>5</sup>	●	●	●	●	6"	RC, RH, C, W/E, W2, Y, Y2, O/B, G, L, 6, +, 5, -, A1



# WR Mobile App



## Your resource for:

- Product information and spec sheets
- Complete Cross Reference
- OEM compatibility
- Installation information and videos
- Wiring diagrams

## Download:

- Go to your app store
- Type in **WR Mobile**
- Install the app



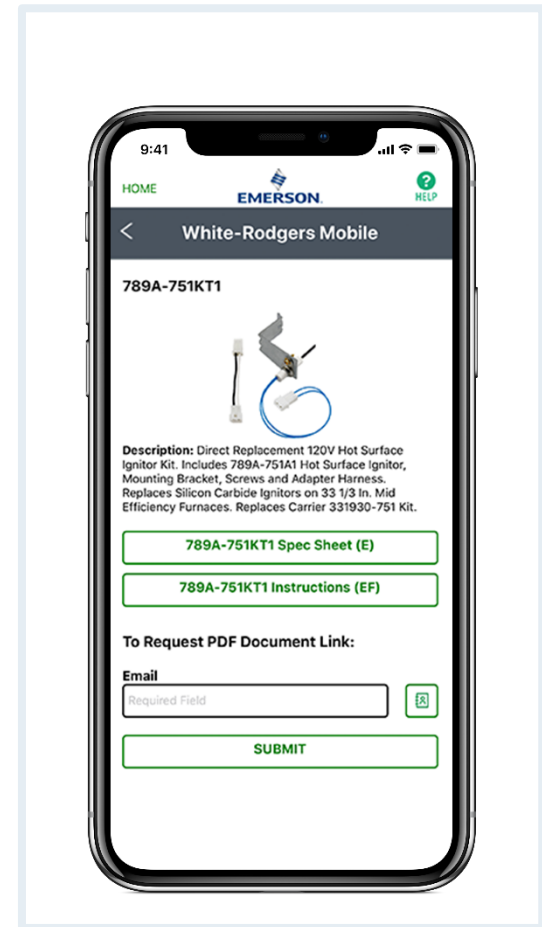
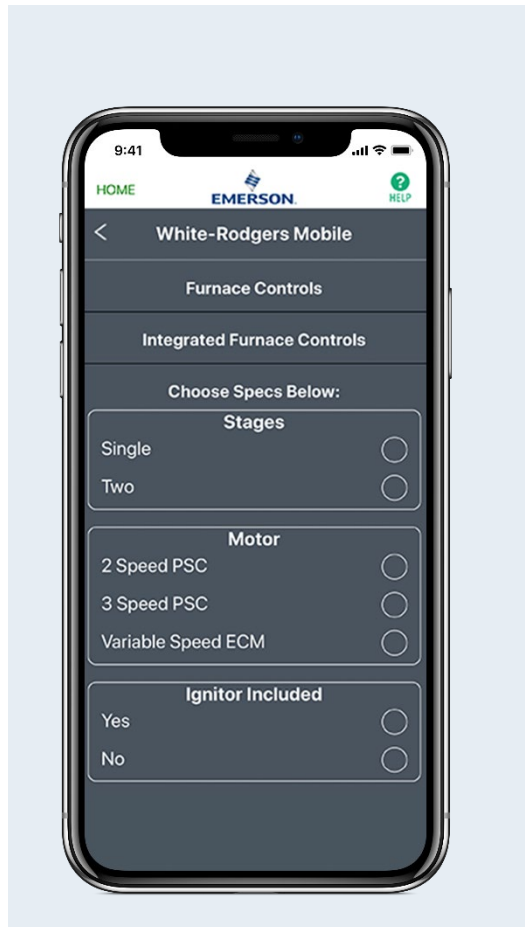
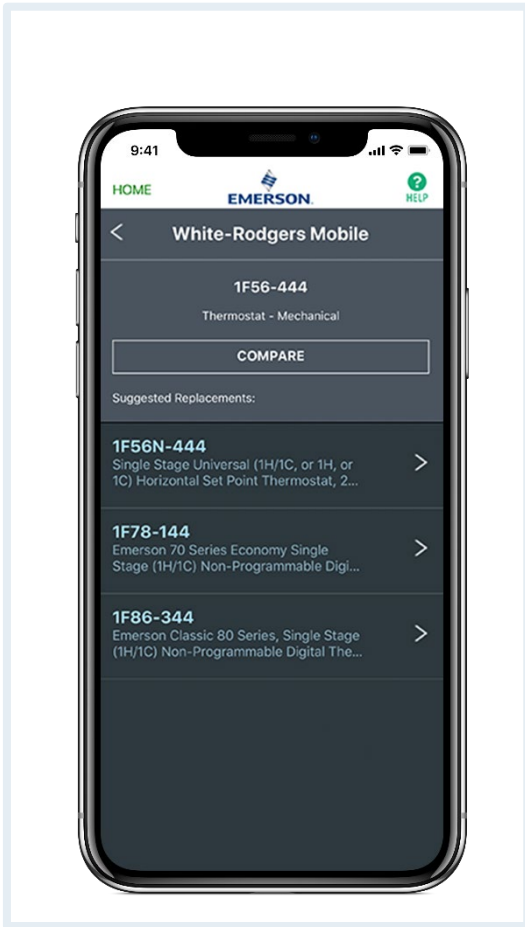
## OR

- Open your camera
- Hold it over the QR code
- Tap “Open” on the pop-down
- Install the app



# WR Mobile App

Search by OEM, Competitive, or White-Rodgers Model Number



Blue™ Series 6" Touchscreen Thermostat

# White-Rodgers Cross Reference

Go to: [www.whiterodgers.com](http://www.whiterodgers.com)

- Hover over Tools & Resources
- Click on: White-Rodgers Cross Reference/Product Information
- Enter the Model Number or click on: Search Replacement Heating Controls by Major OEM Brand

The screenshot shows the Emerson website's navigation bar and a dropdown menu. The navigation bar includes links for Emerson.com, About Us, Investors, Careers, Contact Us, News & Events, Sign In, and United States (English). Below the navigation bar, the 'CLIMATE TECHNOLOGIES' section is visible, with 'Tools & Resources' highlighted. The dropdown menu lists various resources, including 'White-Rodgers Cross Reference/Product Information', which is pointed to by a green arrow.

Emerson.com About Us Investors Careers Contact Us News & Events Sign In United States (English)

CLIMATE TECHNOLOGIES

EMERSON Products Industries Training & Support **Tools & Resources** Expertise

Search Q

Transforming How People and Work

Drawing on our expertise and global perspective, we combine technology to develop HVACR and infrastructure solutions for our customers.

TOOLS & RESOURCES

- Air Conditioning Webinars
- Application Engineering Knowledge Center
- Copeland Online Product Information
- E360
- Ebooks
- HVAC On Air Podcasts
- HVACR Calculators
- Mobile Apps
- The Helix
- Where To Buy
- [White-Rodgers Cross Reference/Product Information](#)
- Product Selection Software

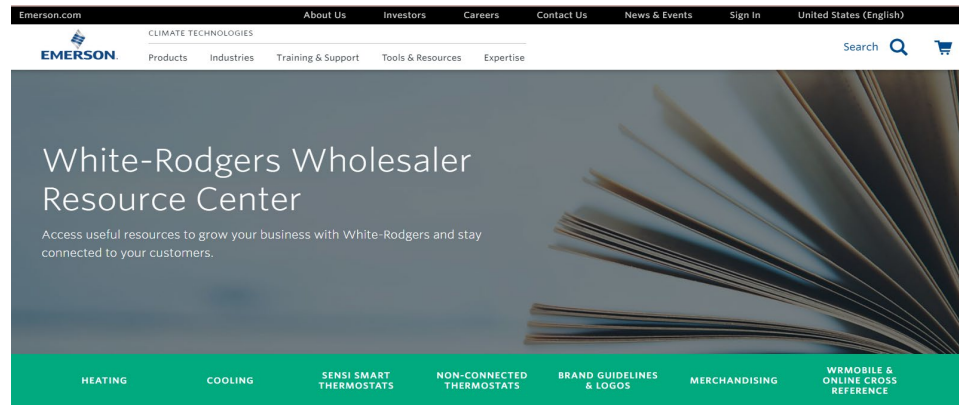
# Wholesale Resource Site

Access useful resources to grow your business.

Visit: <https://climate.emerson.com/en-us/brands/white-rodgers/white-rodgers-wholesaler-resource-center>

You'll find videos, stocking lists and product launch information for the following product families:

- Heating Controls
- Cooling Controls
- Sensi Smart Thermostats
- Traditional Thermostats
- Contractor Rewards
- Product Merchandising



The comfort in knowing Emerson is there.

Confidence comes from knowing your reputation is in good hands; that you have the stability of an industry leader by your side; that they've been in the game for 125 years and they'll be around for a whole lot longer. That's the comfort you feel when you recommend Emerson, because you know you're working with the best for your customers and your business.

[BROCHURE](#)

# Why Contractors Trust White-Rodgers

## Industry Leading Products

- Used by more OEM's
- Offering the widest range of Universal Replacement Controls

## Ease of Installation

- Simple, easy to understand instructions

## Product Reliability

- Quality Control assures reliable products

## Affordable

- Competitive pricing

## Supported by Knowledgeable Representatives

- Contractor direct phone support



# Technical

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# Introduction

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- **Large Display Size**
  - Blue backlight
  - Large characters
- **Selectable Programming**
  - Choice of 7 Day, or Non-Programmable on Easy Reader, other models include 5+1+1 Day
- **Dual Fuel (HP/Gas Furnace) Control**
  - No sensor needed for EZ Reader and outdoor remote sensor options for the other models
- **Advanced Features (vary by model)**
  - Auto-Changeover
  - Keypad Lockout / Temperature Limit Options
  - Programmable Fan
  - Cool Savings
  - Multiple Power Methods
  - Simple set-up Menu



1F95EZ-0671 Easy Reader™ Universal



1F95-0671 Universal



1F95-0680 Universal Commercial

# Matching Emerson Blue™ Series 6" Thermostats to the Application

Selection is Easy - All You Need to Know Is:

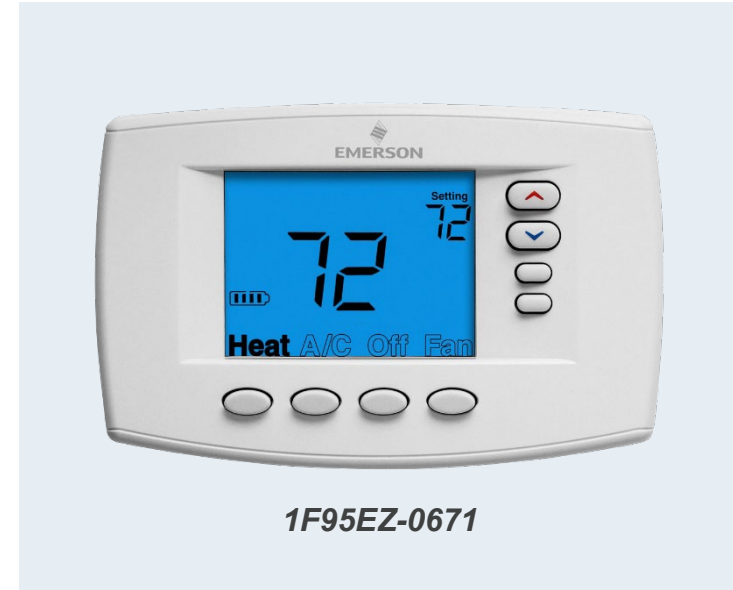
## 1F95EZ-0671 Easy Reader™ Universal





## 1F95-0671 Universal



## 1F95-1280: Universal Commercial



 **TECH TIP:** O and B are combined into a single O/B terminal.

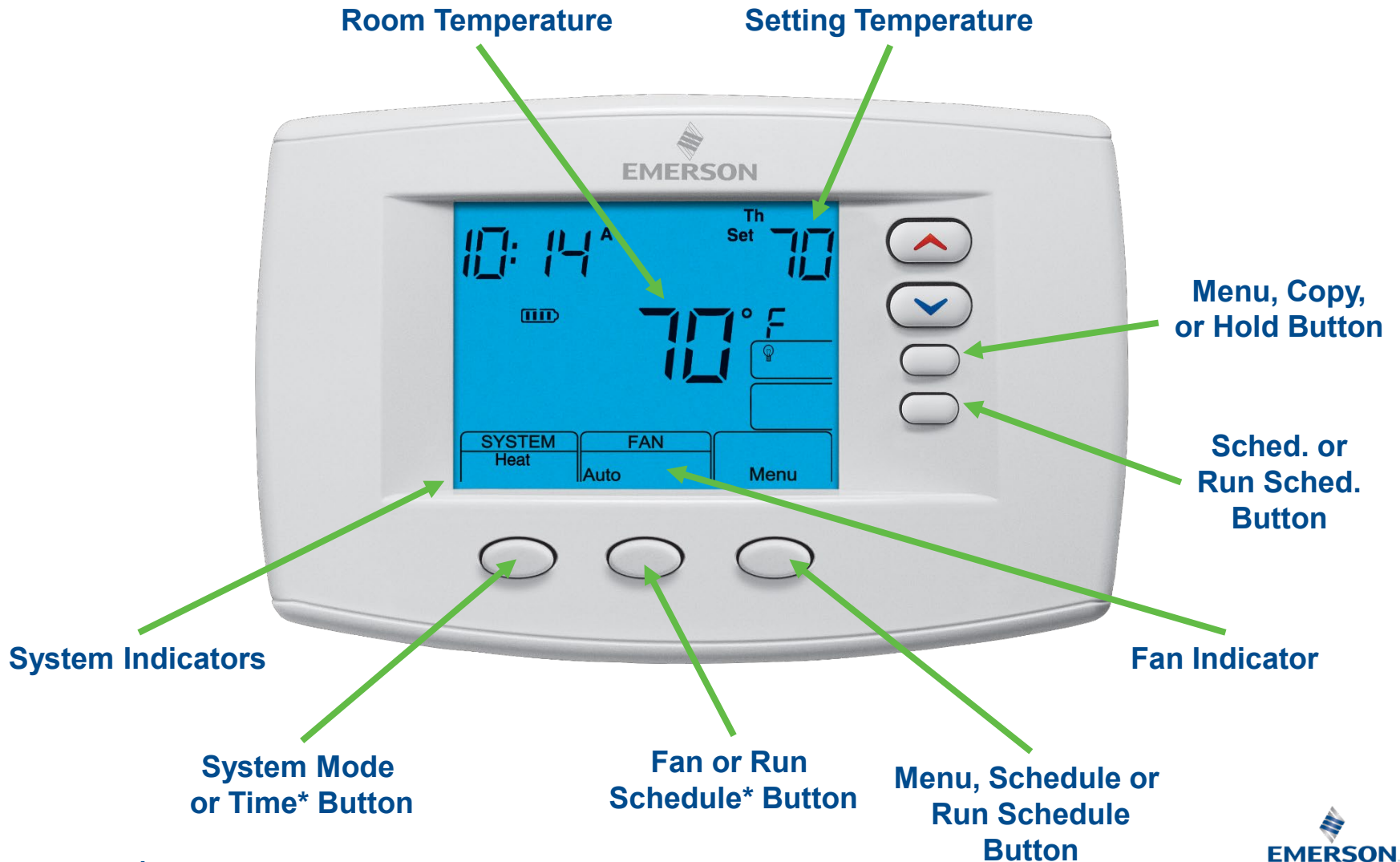
 **TECH TIP:** +, S, -, terminals are for Indoor or outdoor remote sense connection



# Emerson Blue™ Series 6" Thermostat Connections

Easy Reader Universal 1F95EZ-0671	Universal 1F95-0671	Commercial 1F95-0680	Terminal Functions
<b>RC</b>	<b>RC</b>	<b>RC</b>	24V Power for Cooling
<b>RH</b>	<b>RH</b>	<b>RH</b>	24V Power for Heating
<b>C</b>	<b>C</b>	<b>C</b>	24V Common
<b>W/E</b>	<b>W/E</b>	<b>W/E</b>	1st Stage Heat or Heat Pump Aux/Emergency Heat
<b>W2</b>	<b>W2</b>	<b>W2</b>	2nd Stage Heat or Heat Pump Aux 2/Emergency Heat 2
<b>Y</b>	<b>Y</b>	<b>Y</b>	1st Stage Cooling or Heat Pump
<b>Y2</b>	<b>Y2</b>	<b>Y2</b>	2nd Stage Cooling or Heat Pump
<b>O/B</b>	<b>O/B</b>	<b>O/B</b>	O or B Changeover
<b>G</b>	<b>G</b>	<b>G</b>	Indoor Fan
<b>L</b>	<b>L</b>	<b>L</b>	Heat Pump Malfunction Indicator
<b>6</b>	<b>6</b>	<b>6</b>	3-Wire Zone Connection (Powers Closed)
	<b>+</b>	<b>+</b>	Remote Sensor +
	<b>S</b>	<b>S</b>	Remote Sensor Signal
	<b>—</b>	<b>—</b>	Remote Sensor -
		<b>A1</b>	Economizer or Occupancy Pre-purge, Damper

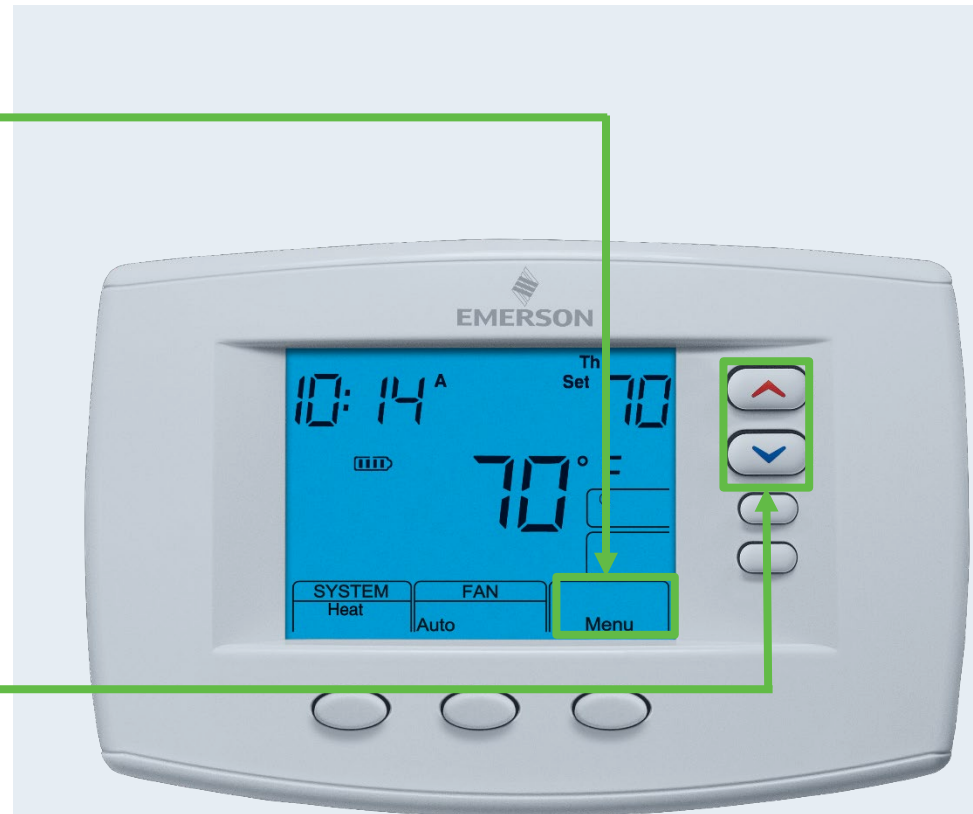
# Thermostat Navigation



\* In menu mode

# System Configuration - Menu

1. With Heat or A/C selected, press and hold the Menu button for at least 5 seconds.
2. The display will show item #1 in the configuration menu. Press Menu to advance to the next menu item.
3. Press the UP or DOWN buttons to change a menu item option.



1F95-0671



**TECH TIP:** Most technical service calls are the result of improper system configuration.

# Configuration Options Summary

1F95-0671 Configuration Options Summary	
System Type	Heat Pump or Conventional, Heat/Cool Stages
Fuel Type	Gas/Electric
Cool Savings	Offsets Room Temp lower with long compressor runs, On/Off
Energy Management Recovery	Early Start Program
Cycle Rate	Heat, Cool, Aux, Fast/Slow
Compressor Lockout	5 Minute compressor cycle time delay, On/Off
System Modes	Heat, Cool, Auto Heat/Cool, Emergency Heat
Display Light	Continuous Backlight, On/Off
Temperature Display Adjustment	Display Temperature Offset, 4° Lo to 4° High
Temperature Format	°F or °C
Audible Input	Beep, On/Off when changing settings
Program Schedule	7 Day, 5-1-1, Non-Programmable
Programs Per Day	4, 2, 0
Auto Schedule	Automatic Heat/Cool Comfort and Economy Settings, On/Off
Fast Second Stage	Fast Staging for Comfort, On/Off
Remote Temperature Sensor Options	Remote Sensor, Indoor or Outdoor On/Off
Daylight Savings Time	Daylight Savings Time On or Off
Keypad Lockout	Total or Partial Keypad Lockout

# Configuration Options Summary Continued

<b>1F95-0671 Configuration Options Summary</b>	
Setpoint Temperature Limits	Heat and Cool, Selectable Temperature Ranges
Outdoor Temperature Setting, Compressor Off	Turns off compressor, switches to Dual Fuel or Electric Heat Aux.
Compressor Delay (Dual Fuel)	Heat Pump to Furnace switchover timing, 0-99 Sec.
Outdoor Temperature Setting, Auxiliary Lockout	Locks out Aux until outdoor temperature drops to selected setting
Air Filter Change	Adjustable, On/Off/Run Time Hours
UV Light Change	Adjustable, On/Off/25 Day Increments
Heat Pump Reversing Valve	O/B
<b>Additional Standard Options</b>	
Factory Pre-Program	Preset Time and Temperature Settings, Adopt or Customize
Program Fan	Program Fan by Program Period(s), Selectable
Program Override	Bypass Program, Manual/Temporary
Program Copy	Copy/Paste, Individual/Group Program settings
Comfort Alert Active Protection	Compatible with Comfort Alert modules

# Configuration Options

## Additional Special Features

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1F95-0680 Commercial Thermostat - Additional Special Features	
System Type	Heat Pump or Conventional, Heat/Cool Stages
Economizer Option	Operates Economizer as first stage Cooling, Selectable or Occupied Damper Option
Pre-Occupancy Purge	Opens Fresh Air Damper 1-3 hours before Occupied period, Selectable
Occupied Damper Option	Opens Fresh Air Damper During Occupied Periods, Selectable or Economizer

# Optional Remote Sensors for 1F95-0671 and 1F95-0680 Commercial

## Indoor Remote Sensor - F145-1328 Options

- Displays indoor temperature on thermostat.
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## Outdoor Remote Sensor - F145-1378 Options

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*Indoor*  
**F145-1328**



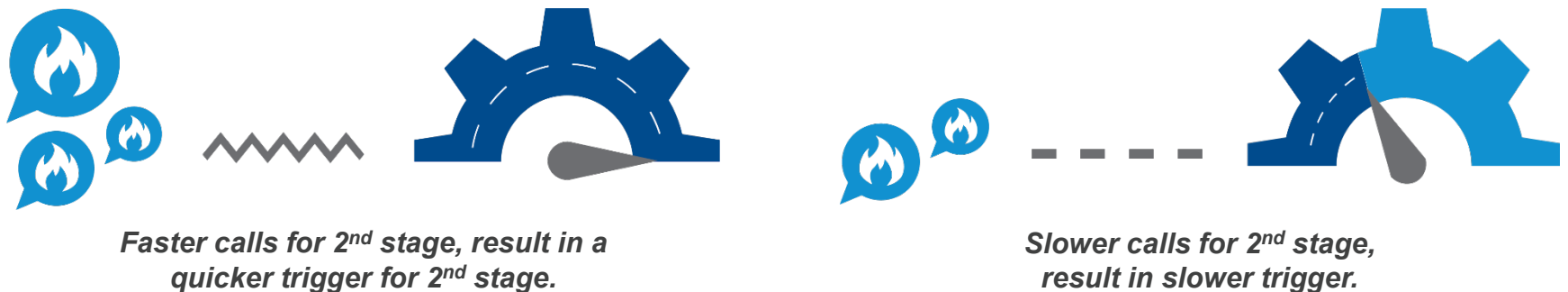
*Outdoor*  
**F145-1378**

# Staging

Emerson multi-stage thermostats are equipped with a microprocessor that uses an algorithm to make decisions about bringing on an additional stage of heat or cool. The algorithm focuses on system performance, rather than only time or temperature, to determine when to engage 2<sup>nd</sup> stage.

More frequent calls, when the temperature exceeds the first stage differential, increasingly drive faster engagement of 2<sup>nd</sup> stage. Less frequent time outside the differential will delay calls for additional stages.

This is accomplished by microprocessor capture of the rolling average of room temperature, allowing the optimum staging point in time to be calculated.



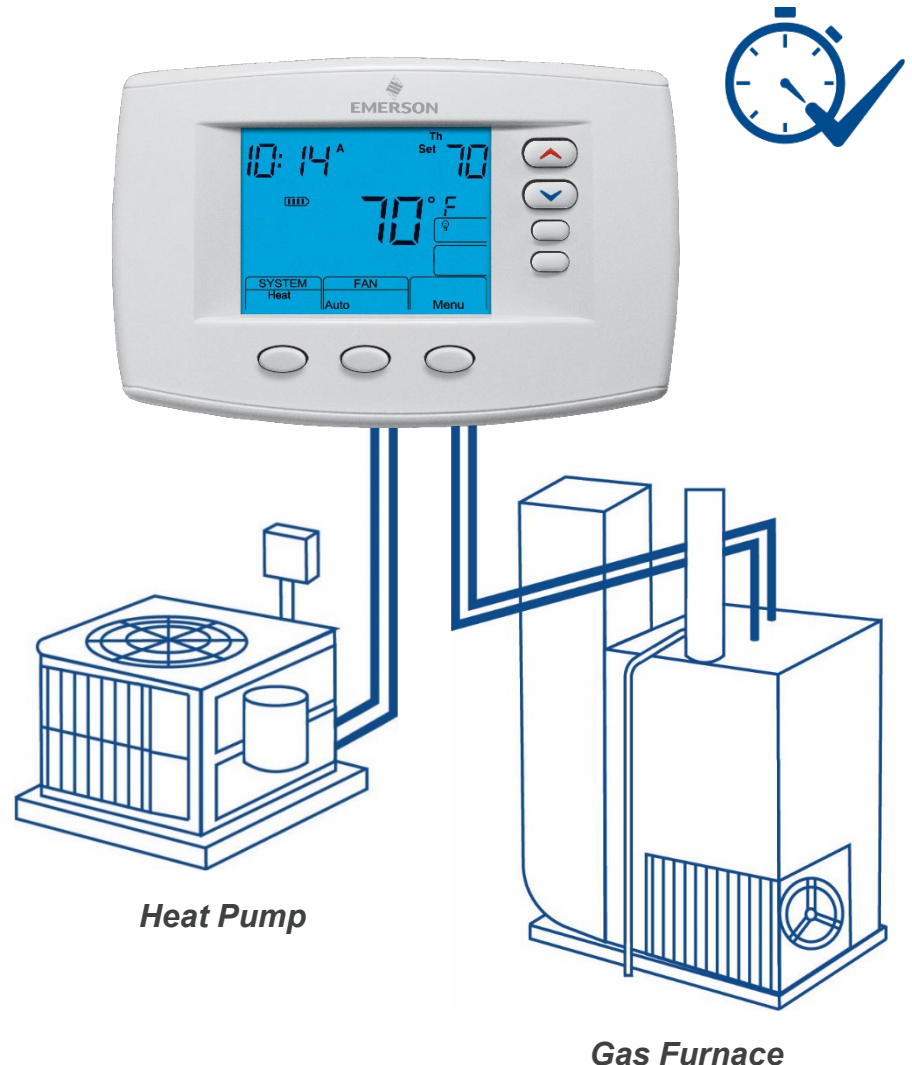


# Dual Fuel

Dual Fuel systems combine a heat pump and gas furnace.

The Easy Reader Dual Fuel logic option allow the staging algorithm to determine the optimum time to stage to gas. They also allow the furnace time to complete the ignition sequence before switching off the pump to prevent cold air from being blown out the vents.

This algorithm doesn't require an outdoor sensor because it tracks and monitors system performance, and then determines the optimal time to stage to the gas furnace.



# Install

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  - Large characters
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1F95EZ-0671 Easy Reader™ Universal



1F95-0671 Universal



1F95-0680 Universal Commercial

# Matching Emerson Blue™ Series 6" Thermostats to the Application

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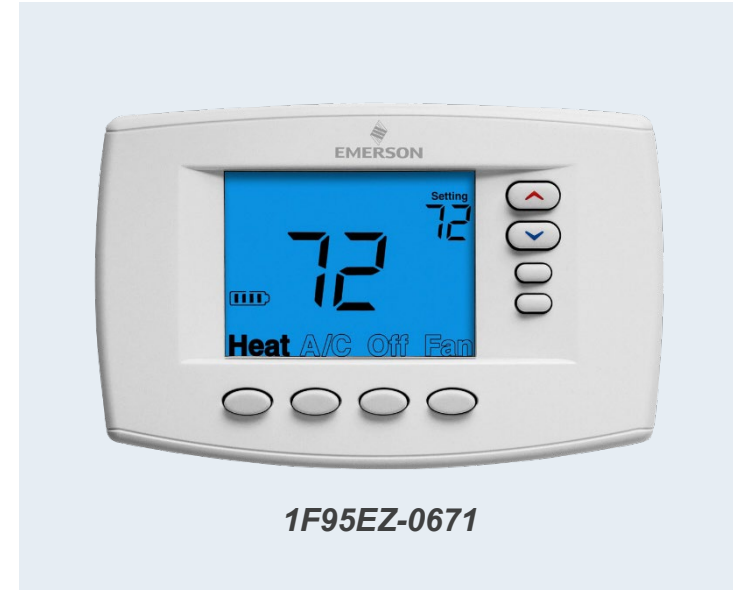
## 1F95EZ-0671 Easy Reader™ Universal





## 1F95-0671 Universal



## 1F95-1280: Universal Commercial



 **TECH TIP:** O and B are combined into a single O/B terminal.

 **TECH TIP:** +, S, -, terminals are for Indoor or outdoor remote sense connection

# Instruction Sheets

**White-Rodgers**

Save these instructions for future use!

**FAILURE TO READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY BEFORE INSTALLING OR OPERATING THIS CONTROL COULD CAUSE PERSONAL INJURY AND/OR PROPERTY DAMAGE.**

**APPLICATIONS**

**THERMOSTAT APPLICATION GUIDE**

Thermostat Configuration Options	Thermostat Applications	Maximum Stages Heat/Cool
Single Stage 1 No Heat Pump (S&H)	Gas, Oil, Electric, Heat Only, Cool Only or Heat/Cool Systems, 2 or 3 wire Hydronic Zone (Hot Water or Steam)	1/1
Multi Stage 2 No Heat Pump (MS2)	Systems, 24 Volt or Millivolt	2/2
Heat Pump 1 Single Stage Compressor Heat Pump Systems - up to 2 Stages Aux./Emergency Heat		3/1
Heat Pump 2 Two Stage or Two Compressor Heat Pump (HP2)	Heat Pump Systems - up to 2 Stages Aux./Emergency Heat	4/2

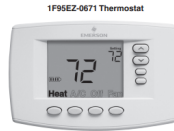
**SPECIFICATIONS**

Electrical Rating: Battery Power . . . . . mV to 30 VAC, NEC Class II, 50/60 Hz or DC  
 Input-Hardwire . . . . . 20 to 30 VAC  
 Terminal Load . . . . . 1.5A per terminal, 2.5A maximum all terminals combined  
 Setpoint Range . . . . . 45 to 99°F (7 to 32°C)  
 Rated Differentials: Fast Med. Slow  
 Heat (Single Stage/Multi Stage) . . . . . 0.4°F 0.6°F 1.7°F  
 Cool (Single Stage/Multi Stage) . . . . . 0.9°F 1.2°F 1.7°F  
 Heat Pump . . . . . 0.9°F 1.2°F 1.7°F  
 Aux. Heat . . . . . 0.6°F - 1.7°F  
 Operating Ambient . . . . . 32°F to +105°F (0 to +41°C)  
 Operating Humidity . . . . . 90% non-condensing max.  
 Shipping Temperature Range . . . . . -40 to +150°F (-40 to +65°C)  
 Dimensions Thermostat . . . . . 4.3"16¼" x 6-1/2"W x 1.58"D

**Blue Easy Reader Thermostat**

Single Stage, Multi-Stage, Heat Pump Installation Instructions for Model:

Model	Programming Choices
1F95E-0671	Non-Programmable 7 Day



**1F95E-0671 Thermostat**

**EMERSON**  
Climate Technologies

www.white-rodgers.com  
www.emersonclimate.com

PART NO. 37-6986C  
Replaces 37-6986B  
1407

**White-Rodgers**

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**APPLICATIONS**

**THERMOSTAT APPLICATION GUIDE**

Description	Yes
Heat Pump (No Aux. or Emergency Heat)	Yes
Heat Pump (with Aux. or Emergency Heat)	Yes
Systems with up to 4 Stages Heat, 2 Stages Cool	Yes
Heat Only Systems	Yes
Millivolt Heat Only Systems - Floor or Wall Furnaces	Yes
Cool Only Systems	Yes
Gas or Oil Heat	Yes
Electric Furnace	Yes
Hydronic (Hot Water) Zone Heat - 2 Wires	Yes
Hydronic (Hot Water) Zone Heat - 3 Wires	Yes
Wired Remote Temperature Sensor (Indoor or Outdoor)	Yes
Dual Fan Feature (Heat Pump Mode, Outdoor Remote Required)	Yes


**SPECIFICATIONS**

Electrical Rating: Battery Power . . . . . mV to 30 VAC, NEC Class II, 50/60 Hz or DC  
 Input-Hardwire . . . . . 20 to 30 VAC  
 Terminal Load . . . . . 1.5A per terminal, 2.5A maximum all terminals combined  
 Setpoint Range . . . . . 45 to 99°F (7 to 32°C)  
 Differential (Single Stage) . . . . . Heat 0.6°F; Cool 1.2°F  
 Differential (Multi-Stage) . . . . . Heat 0.6°F; Cool 1.2°F  
 Differential (Heat Pump) . . . . . Heat 1.2°F; Cool 1.2°F  
 Operating Ambient . . . . . 32°F to +105°F (0 to +41°C)  
 Operating Humidity . . . . . 90% non-condensing max.  
 Shipping Temperature Range . . . . . -40 to +150°F (-40 to +65°C)  
 Dimensions Thermostat . . . . . 4.2"H x 6.4"W x 1.7"D

**Blue Universal Thermostat with Automatic Heat/Cool Changeover Option**

Single Stage, Multi-Stage, Heat Pump Installation and Operating Instructions for Model:

Model	Programming Choices
1F95-0671	7 Day 5/1/1 Day Non-Programmable



**1F95-0671 Universal Thermostat**

**EMERSON**  
Climate Technologies

www.white-rodgers.com  
www.emersonclimate.com

PART NO. 37-6979B  
Replaces 37-6979A  
1345

**White-Rodgers**

Save these instructions for future use!

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**APPLICATIONS**

**THERMOSTAT APPLICATION GUIDE**

Description	Yes
Heat Pump (No Aux. or Emergency Heat)	Yes
Heat Pump (with Aux. or Emergency Heat)	Yes
Systems with up to 4 Stages Heat, 2 Stages Cool	Yes
Heat Only Systems	Yes
Millivolt Heat Only Systems - Floor or Wall Furnaces	Yes
Cool Only Systems	Yes
Gas or Oil Heat	Yes
Electric Furnace	Yes
Hydronic (Hot Water) Zone Heat - 2 Wires	Yes
Hydronic (Hot Water) Zone Heat - 3 Wires	Yes
Wired Remote Temperature Sensor (Indoor or Outdoor)	Yes
Dual Fan Feature (Heat Pump Mode, Outdoor Remote Required) or Damper Control Feature	Yes


**SPECIFICATIONS**

Electrical Rating: Battery Power . . . . . mV to 30 VAC, NEC Class II, 50/60 Hz or DC  
 Input-Hardwire . . . . . 20 to 30 VAC  
 Terminal Load . . . . . 1.5A per terminal, 2.5A maximum all terminals combined  
 Setpoint Range . . . . . 45 to 99°F (7 to 32°C)  
 Differential (Single Stage) . . . . . Heat 0.6°F; Cool 1.2°F  
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 Differential (Heat Pump) . . . . . Heat 1.2°F; Cool 1.2°F  
 Operating Ambient . . . . . 32°F to +105°F (0 to +41°C)  
 Operating Humidity . . . . . 90% non-condensing max.  
 Shipping Temperature Range . . . . . -40 to +150°F (-40 to +65°C)  
 Dimensions Thermostat . . . . . 4.2"H x 6.4"W x 1.7"D

**Blue Commercial Thermostat with Automatic Heat/Cool Changeover Option and Damper Control**

Single Stage, Multi-Stage, Heat Pump Installation and Operating Instructions for Model:

Model	Programming Choices
1F95-0680	7 Day 5/1/1 Day Non-Programmable



**1F95-0680 Commercial Thermostat**

**EMERSON**  
Climate Technologies

www.white-rodgers.com  
www.emersonclimate.com

PART NO. 37-6819B  
Replaces 37-6819A  
1345

**1F95EZ-0671 Easy Reader™ Universal**

**1F95-0671 Universal**

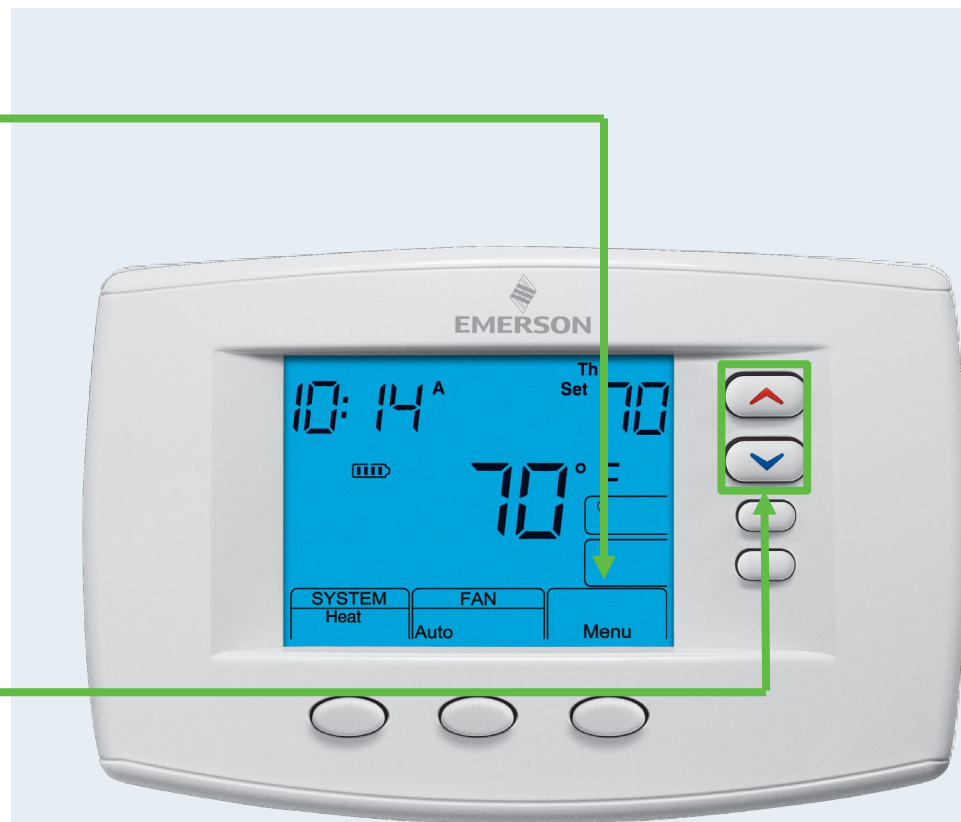
**1F95-0680 Universal Commercial**

# Make the system connections to the thermostat

Easy Reader Universal 1F95EZ-0671	Universal 1F95-0671	Commercial 1F95-0680	Terminal Functions
<b>RC</b>	<b>RC</b>	<b>RC</b>	24V Power for Cooling
<b>RH</b>	<b>RH</b>	<b>RH</b>	24V Power for Heating
<b>C</b>	<b>C</b>	<b>C</b>	24V Common
<b>W/E</b>	<b>W/E</b>	<b>W/E</b>	1st Stage Heat or Heat Pump Aux/Emergency Heat
<b>W2</b>	<b>W2</b>	<b>W2</b>	2nd Stage Heat or Heat Pump Aux 2/Emergency Heat 2
<b>Y</b>	<b>Y</b>	<b>Y</b>	1st Stage Cooling or Heat Pump
<b>Y2</b>	<b>Y2</b>	<b>Y2</b>	2nd Stage Cooling or Heat Pump
<b>O/B</b>	<b>O/B</b>	<b>O/B</b>	O or B Changeover
<b>G</b>	<b>G</b>	<b>G</b>	Indoor Fan
<b>L</b>	<b>L</b>	<b>L</b>	Heat Pump Malfunction Indicator
<b>6</b>	<b>6</b>	<b>6</b>	3-Wire Zone Connection (Powers Closed)
	<b>+</b>	<b>+</b>	Remote Sensor +
	<b>S</b>	<b>S</b>	Remote Sensor Signal
	<b>—</b>	<b>—</b>	Remote Sensor -
		<b>A1</b>	Economizer or Occupancy Pre-purge, Damper

# System Configuration - Menu

1. With Heat or A/C selected, press and hold the Menu button for at least 5 seconds.
2. The display will show item #1 in the configuration menu. Press Menu to advance to the next menu item.
3. Press the UP or DOWN buttons to change a menu item option.



1F95-0671



**TECH TIP:** Most technical service calls are the result of improper system configuration.

# Configuration Options Summary

## 1F95-0671 Configuration Options Summary

System Type	Heat Pump or Conventional, Heat/Cool Stages
Fuel Type	Gas/Electric
Cool Savings	Offsets Room Temp lower with long compressor runs, On/Off
Energy Management Recovery	Early Start Program
Cycle Rate	Heat, Cool, Aux, Fast/Slow
Compressor Lockout	5 Minute compressor cycle time delay, On/Off
System Modes	Heat, Cool, Auto Heat/Cool, Emergency Heat
Display Light	Continuous Backlight, On/Off
Temperature Display Adjustment	Display Temperature Offset, 4° Lo to 4° High
Temperature Format	°F or °C
Audible Input	Beep, On/Off when changing settings
Program Schedule	7 Day, 5-1-1, Non-Programmable
Programs Per Day	4, 2, 0
Auto Schedule	Automatic Heat/Cool Comfort and Economy Settings, On/Off
Fast Second Stage	Fast Staging for Comfort, On/Off
Remote Temperature Sensor Options	Remote Sensor, Indoor or Outdoor On/Off
Daylight Savings Time	Daylight Savings Time On or Off
Keypad Lockout	Total or Partial Keypad Lockout



# Configuration Options Summary Continued

<b>1F95-0671 Configuration Options Summary</b>	
Setpoint Temperature Limits	Heat and Cool, Selectable Temperature Ranges
Outdoor Temperature Setting, Compressor Off	Turns off compressor, switches to Dual Fuel or Electric Heat Aux.
Compressor Delay (Dual Fuel)	Heat Pump to Furnace switchover timing, 0-99 Sec.
Outdoor Temperature Setting, Auxiliary Lockout	Locks out Aux until outdoor temperature drops to selected setting
Air Filter Change	Adjustable, On/Off/Run Time Hours
UV Light Change	Adjustable, On/Off/25 Day Increments
Heat Pump Reversing Valve	O/B
<b>Additional Standard Options</b>	
Factory Pre-Program	Preset Time and Temperature Settings, Adopt or Customize
Program Fan	Program Fan by Program Period(s), Selectable
Comfort Circulating Fan	Independent of Program or Heat or Cool Cycling, On/Off
Program Override	Bypass Program, Manual/Temporary
Program Copy	Copy/Paste, Individual/Group Program settings
Comfort Alert Active Protection	Compatible with Comfort Alert modules

# Configuration Options

## Additional Special Features

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### 1F95-0680 Commercial Thermostat - Additional Special Features

System Type	Heat Pump or Conventional, Heat/Cool Stages
Economizer Option	Operates Economizer as first stage Cooling, Selectable or Occupied Damper Option
Pre-Occupancy Purge	Opens Fresh Air Damper 1-3 hours before Occupied period, Selectable
Occupied Damper Option	Opens Fresh Air Damper During Occupied Periods, Selectable or Economizer

# Programming

## Energy Saving Factory Pre-Program

The 1F95-0671 and 1F95-0680 thermostats are shipped pre-programmed with energy saving factory settings. If the program suits your needs, simply set the thermostat clock and press RunSched.

	*Wake UP (Morning)		Leave for Work (Day)		*Return Home (Evening)		Go to Bed (Night)	
<b>Heating Program</b>	6:00 AM	70°F	8:00 AM	62°F	5:00 PM	70°F	10:00 PM	62°F
<b>Cooling Program</b>	6:00 AM	75°F	8:00 AM	83°F	5:00 PM	75°F	10:00 PM	78°F

\* You can eliminate these two program periods in the configuration menu if the building is occupied all day. Day period will change to 6:00 AM and 70° and can be programmed as required.

# Programming

Each package includes a programming worksheet.

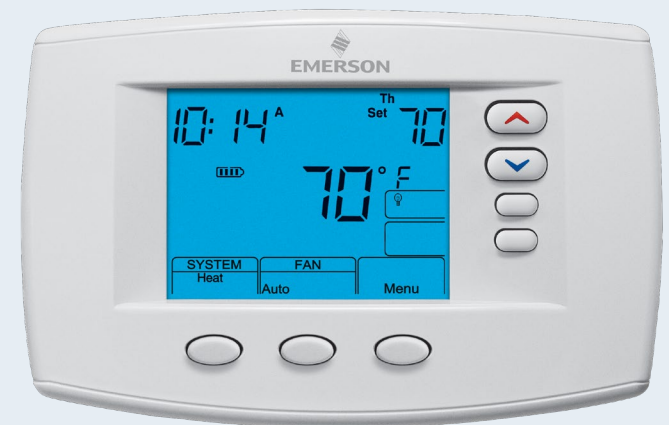
Heating Program	Wake Up (Morning)			Leave for Work (Day)			Return Home (Evening)			Go to Bed (Night)		
			FAN			FAN			FAN			FAN
MON	6:00 AM	70°F	Auto	8:00 AM	62°F	Auto	5:00 PM	70°F	Auto	10:00 PM	62°F	Auto
TUE												
WED												
THU												
FRI												
SAT	6:00 AM	70°F	Auto	8:00 AM	62°F	Auto	5:00 PM	70°F	Auto	10:00 PM	62°F	Auto
SUN	6:00 AM	70°F	Auto	8:00 AM	62°F	Auto	5:00 PM	70°F	Auto	10:00 PM	62°F	Auto
Cooling Program	Wake Up (Morning)			Leave for Work (Day)			Return Home (Evening)			Go to Bed (Night)		
			FAN			FAN			FAN			FAN
MON	6:00 AM	75°F	Auto	8:00 AM	83°F	Auto	5:00 PM	75°F	Auto	10:00 PM	78°F	Auto
TUE												
WED												
THU												
FRI												
SAT	6:00 AM	75°F	Auto	8:00 AM	83°F	Auto	5:00 PM	75°F	Auto	10:00 PM	78°F	Auto
SUN	6:00 AM	75°F	Auto	8:00 AM	83°F	Auto	5:00 PM	75°F	Auto	10:00 PM	78°F	Auto



**TECH TIP:** Filling out the blank schedule in the instructions makes it easy to program and reduces the need for Technical Help.

# System Checkout- Heat

1. Press the SYSTEM button to select Heat. If the auxiliary heating system has a standing pilot, be sure to light it.
2. Press the UP button to adjust thermostat setting to 1° above room temperature. The heat pump system should begin to operate. The display should show “System On”. However, if the system configuration is set to HP1 or HP2 and setpoint temperature display is flashing, the 5 minute compressor lockout feature is operating.
3. Adjust temperature setting to 3° above room temperature. If your system configuration is set at MS2, HP2 or HP1, the auxiliary heat system should begin to operate and the display will show “System On +2”.
4. Press the DOWN button to adjust the thermostat below room temperature. The heating system should stop operating.



# System Checkout - Cool

1. Press SYSTEM button to select Cool.
2. Press the DOWN button to adjust thermostat setting below room temperature. The blower should come on immediately on high speed, followed by cold air circulation. The display should show “System On”. If the setpoint temperature display is flashing, the compressor lockout feature is operating.
3. Adjust temperature setting to 3° below room temperature. The second stage cooling should begin to operate and the display should show “System On +2”.
4. Press the UP button to adjust the temperature setting above room temperature. The cooling system should stop operating.

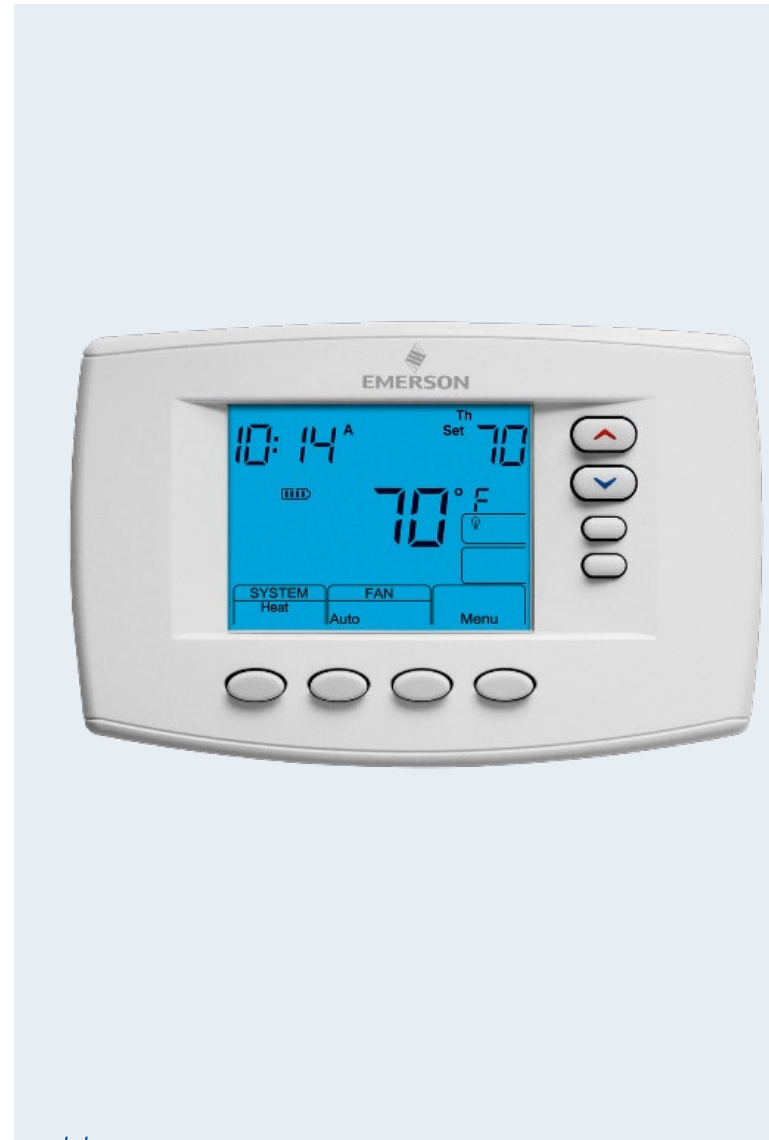


# Setting Time and Day

Go the extra mile for your customer by setting the time and date for them.

Follow these steps to set the current time, day, month, year, and date:

1. Press the Menu button to enter installer menu. Press the Time button once to indicate hour & AM or PM designation in clock display.
2. Press and hold either the UP or DOWN buttons until you reach the correct hour and AM or PM designation.
3. Continue pressing Menu/Time along with UP or DOWN buttons to set the correct minutes, year, month, and date.
4. Press the RunSched. button once; now the display will show the correct time and room temperature.



# Troubleshooting

Symptom	Possible Cause	Corrective Action
No Heat/No Cool/No Fan (common problems)	<ol style="list-style-type: none"> <li>1. Blown fuse or tripped circuit breaker.</li> <li>2. Furnace power switch to OFF.</li> <li>3. Furnace blower compartment door or panel loose or not properly installed.</li> <li>4. Loose connection to thermostat or system.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace fuse or reset breaker.</li> <li>2. Turn switch to ON.</li> <li>3. Replace door panel in proper position to engage safety interlock or door switch.</li> <li>4. Tighten connections.</li> </ol>
No Heat	<ol style="list-style-type: none"> <li>1. Pilot light not lit.</li> <li>2. Furnace Lock-Out Condition. Heat may also be intermittent.</li> <li>3. Heating system requires service or thermostat requires replacement.</li> </ol>	<ol style="list-style-type: none"> <li>1. Re-light pilot.</li> <li>2. Many furnaces have safety devices that shut down when a lock-out condition occurs. If the heat works intermittently contact the furnace manufacturer or local HVAC service person for assistance.</li> </ol> <p><b>Diagnostic:</b> Set SYSTEM Switch to HEAT and raise the setpoint above room temperature. Within a few seconds the thermostat should make a soft click sound. This sound usually indicates the thermostat is operating properly. If the thermostat does not click, try the reset operation listed above. If the thermostat does not click after being reset contact your heating and cooling service person or place of purchase for a replacement. If the thermostat clicks, contact the furnace manufacturer or a HVAC service person to verify the heating is operating correctly.</p>



# Troubleshooting

Symptom	Possible Cause	Corrective Action
No Cool	<ol style="list-style-type: none"> <li>1. Cooling system requires service or thermostat requires replacement.</li> </ol>	Same as diagnostic for No Heat condition except set the thermostat to COOL and lower the setpoint below the room temperature. There may be up to a five minute delay before the thermostat clicks in Cooling.
Heat, Cool or Fan Runs Constantly	<ol style="list-style-type: none"> <li>1. Possible short in wiring.</li> <li>2. Possible short in thermostat.</li> <li>3. Possible short in heat/cool/fan system.</li> <li>4. FAN Switch set to Fan ON</li> </ol>	Check each wire connection to verify they are not shorted or touching together. No bare wire should stick out from under terminal block. Try resetting the thermostat as described above. If the condition persists the manufacturer of your system or service person can instruct you on how to test the Heat/Cool system for correct operation. If the system operates correctly, replace the thermostat.
Thermostat Setting & Thermostat Thermometer Disagree	<ol style="list-style-type: none"> <li>1. Thermostat thermometer setting requires adjustment.</li> </ol>	The thermometer can be adjusted +/- 4 degrees. See Temperature Display Adjustment in the Configuration Menu section.

# Troubleshooting

Symptom	Possible Cause	Corrective Action
Furnace (Air Conditioner) Cycles Too Fast or Too Slow (narrow or wide temperature swing)	1. The location of the thermostat and/or the size of the Heating System may be influencing the cycle rate.	Digital thermostats provide precise control and cycle faster than older mechanical models. The system turns on and off more frequently but runs for a shorter time so there is no increase in energy use. If you would like an increased cycle time, choose SL for slow cycle in the Configuration menu, step 7 (heat) or 8 (cool). If an acceptable cycle rate is not achieved, contact a local HVAC service person for additional suggestions.
Forgot Keypad Lockout Code		Press the menu button (button will disappear) and hold in for 20 seconds. This unlocks the thermostat.

Note: When thermostat is reset, installer configuration menu settings and programming will reset to factory settings. If a voltage spike or static discharge blanks out the display or causes erratic thermostat operation, you can reset the thermostat by removing the wires from terminals R and C (do not short them together) and removing batteries for 2 minutes. After resetting the thermostat, replace the wires and batteries. If the thermostat has been reset and still does not function correctly contact your heating/cooling service person or place of purchase.

Note: Be sure to review the installer configuration menu settings.

To reset the programming, clock and configuration settings, press the or and SYSTEM button simultaneously. The thermostat should go blank and then all segments will be displayed momentarily.

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