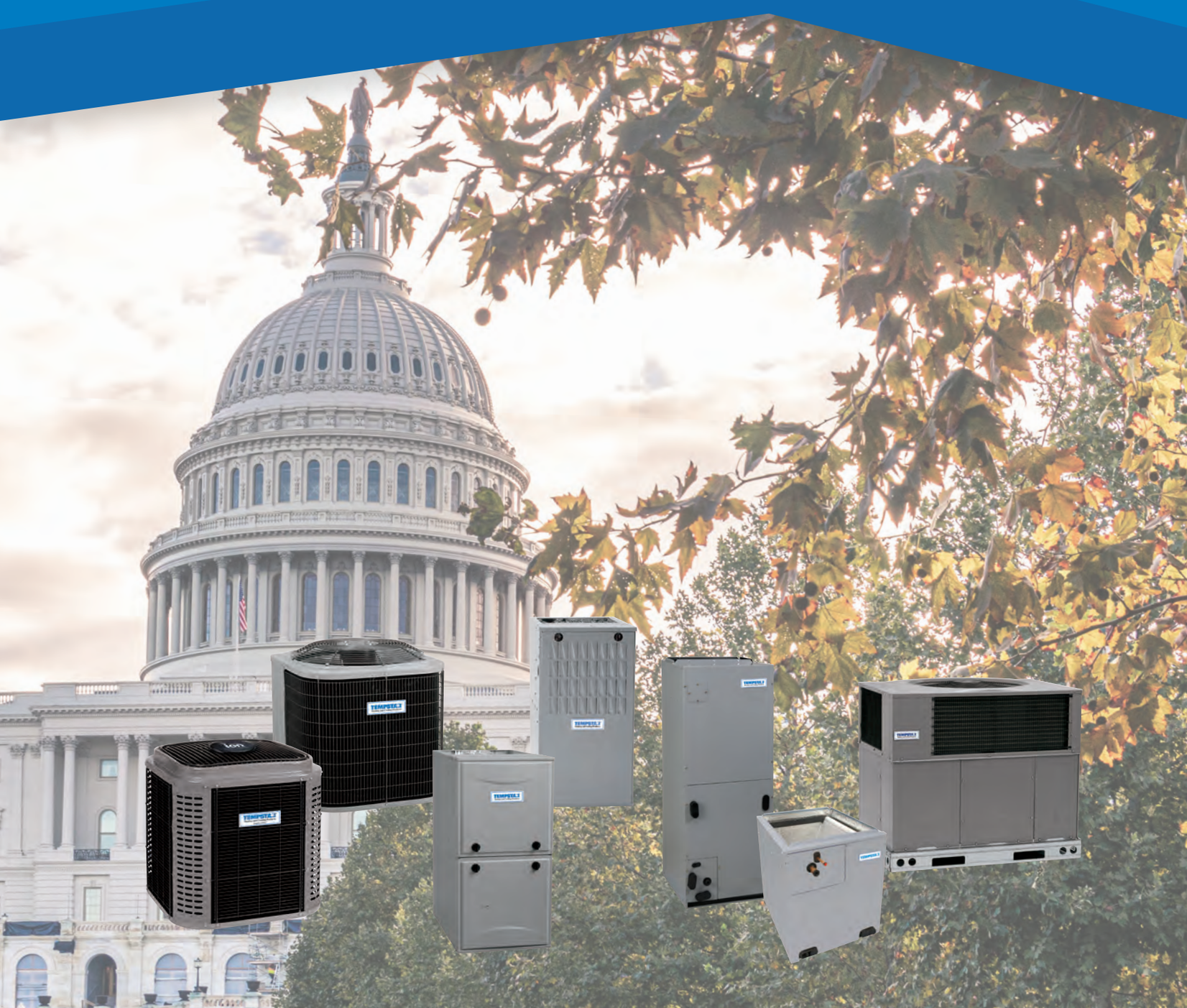
TEMPSTAR®
Heating and Cooling Products

2023 REGULATORY REQUIREMENTS & PRODUCT OVERVIEW



Contents

TEMPSTAR®
Heating and Cooling Products

March 2022

Dear Tempstar Customer:

#2023Ready: New standards, new products and new technologies.

By now you've heard about the new efficiency standards for 2023. We've been gearing up for years and are excited to tell you that we are ready with new product lineups, including residential split-system products featuring welded aluminum coil technology and new indoor coils with Power-V Technology.

Our new V-shaped evaporator coils with Power-V Technology are reshaping the future of indoor comfort with enhanced performance, improved corrosion protection and better condensate management, along with easier installation and servicing.

In addition, most of our new split-system air conditioners and heat pumps will include our exceptionally durable, corrosion-resistant, and energy-efficient welded aluminum coils. As a proud member of the Carrier family, we are the only manufacturer expected to offer this groundbreaking coil technology in residential outdoor products.

To help you prepare for these significant changes, our latest 2023 Regulatory Launch Kit includes:

- New product lineups and nomenclatures
- New product features
- Power-V Technology overview
- Welded aluminum coil overview
- New entry-tier gas furnace features
- Readiness planning
- Frequently asked questions

We are #2023Ready and we want you to be too! As your trusted HVAC manufacturer, we will continue to update our 2023 readiness resources as new information becomes available, so be sure to continue visiting HVACpartners for the most current marketing resources.

Thank you for your support!

Braden Cook
Director,
Product Management,
Heating & Cooling

Heidi Gehring
Associate Director,
Cooling Product
Management

Brooke Greenwood
Associate Director,
Heating Product
Management

2023 Regulatory Overview

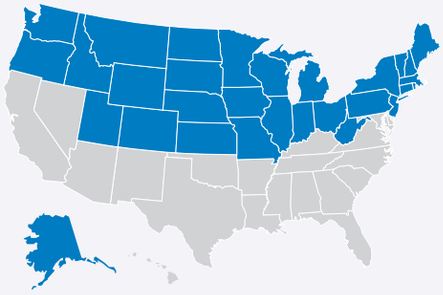
New Minimum Efficiency

CHANGE IS NEAR. WILL YOU BE READY?

- Beginning January 1, 2023, the DOE is increasing the minimum efficiencies for central air conditioners and heat pumps. The testing procedures for determining those efficiencies are changing as well.
  - For air conditioners in the North, the minimum efficiency will increase from 13.0 to 14.0 SEER and in the South from 14.0 to 15.0 SEER† under today's test procedure.
  - The national heat pump minimum efficiency will increase from 14.0 to 15.0 SEER.
- Tempstar will be required to comply with a new M1* testing procedure for developing efficiency ratings. Compared to today's M** test procedure, the external static pressure used when testing will be increased by up to 5X to better reflect field conditions.
- In 2023, there will be new metrics and nomenclature – SEER2, EER2 and HSPF2.
  - The new SEER2 ratings will be lower, and the minimum efficiencies will be reduced to account for the more difficult test procedures.
  - The new test procedure will also drive changes to the airflow set point on indoor blowers (fan coils and furnaces).

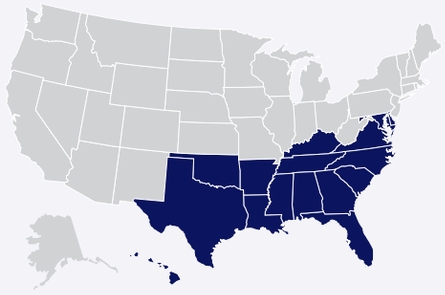
* DOE Appendix M1 Ratings
** DOE Appendix M Ratings

North Region



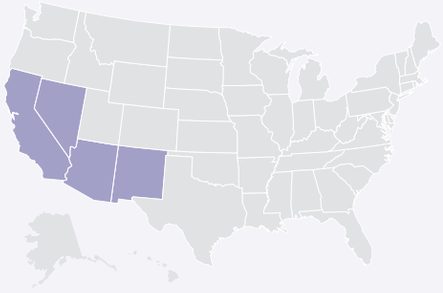
2023 Minimum Efficiencies			
System Type	Current Minimum	New Minimum with M Ratings	New Minimum with M1 Ratings
Split System AC	13.0 SEER	14.0 SEER	13.4 SEER2

Southeast Region



2023 Minimum Efficiencies			
System Type	Current Minimum	New Minimum with M Ratings	New Minimum with M1 Ratings
Split System AC (AC < 45k Btu/h)	14.0 SEER	15.0 SEER	14.3 SEER2
Split System AC (AC ≥ 45k Btu/h)	14.0 SEER	14.5 SEER	13.8 SEER2

Southwest Region



2023 Minimum Efficiencies			
System Type	Current Minimum	New Minimum with M Ratings	New Minimum with M1 Ratings
Split System AC (AC < 45k Btu/h)	14.0 SEER	15.0 SEER	14.3 SEER2
	12.2 EER	12.2 EER*	11.7 EER2**
Split System AC (AC ≥ 45k Btu/h)	14.0 SEER	14.5 SEER	13.8 SEER2
	11.7 EER	11.7 EER*	11.2 EER2**

* 10.2 EER if equipment is at or above 16.0 SEER
** 9.8 EER2 if equipment is at or above 15.2 SEER2

National

2023 Minimum Efficiencies			
System Type	Current Minimum	New Minimum with M Ratings	New Minimum with M1 Ratings
Split System HP	14.0 SEER	15.0 SEER	14.3 SEER2
	8.2 HSPF	8.8 HSPF	7.5 HSPF2
SPP AC and Gas Electric (EER applies to SW only)	14.0 SEER	14.0 SEER	13.4 SEER2
	11.0 EER	11.0 EER	10.6 EER2
SPP HP and Dual-Fuel HP	14.0 SEER	14.0 SEER	13.4 SEER2
	8.0 HSPF	8.0 HSPF	6.7 HSPF2

2023 Regulatory Overview

AIR CONDITIONER RATINGS

The new 2023 minimum efficiency standards for air conditioners continue to follow the regional borders established in 2015: North, Southeast and Southwest. Additionally, the Southwest includes an EER/EER2 requirement. SEER and EER are ratings tested under the pre-2023 test procedure while SEER2 and EER2 are tested under the 2023 test procedure with higher external static pressures as detailed below.

Split System Air Conditioners – 2023 Regional Standards†

System Type	North Region		Southeast Region		Southwest Region	
	New SEER	**New SEER2**	New SEER	**New SEER2**	New SEER	**New SEER2**
Split System ACs (AC < 45K Btu/h)	14.0 SEER	**13.4 SEER2**	15.0 SEER	**14.3 SEER2**	15.0 SEER and 12.2 EER*	**14.3 SEER2 and 11.7 EER2****
Split System ACs (AC ≥ 45K Btu/h)	14.0 SEER	**13.4 SEER2**	14.5 SEER	**13.8 SEER2**	14.5 SEER and 11.7 EER*	**13.8 SEER2 and 11.2 EER2****

* 10.2 EER if SEER ≥ 16.0 SEER ** 9.8 EER2 if SEER2 ≥ 15.2 SEER2

Sell-Through Deadlines
For the North Region, any 13.0 SEER AC built before January 1, 2023, ***can still be installed*** on or after January 1, 2023.
For the Southeast and Southwest Regions, any AC that does not meet the above requirements ***cannot be installed*** on or after January 1, 2023.

HEAT PUMP RATINGS

Heat pump minimum efficiency requirements follow national standards. In 2023, the new minimum efficiency standards for heat pumps will increase by 1.0 SEER to 15.0 SEER. Split-system heat pumps must also achieve a minimum of 8.8 HSPF.

Split System Heat Pump – 2023 National Standards†

System Type	National Efficiency Standard	
	New SEER & HSPF	**New SEER2 & HSPF2**
Split System HPs	15.0 SEER & 8.8 HSPF	**14.3 SEER2 & 7.5 HSPF2**

Sell-Through Deadline
Any 14.0 SEER heat pump built before January 1, 2023, ***can still be installed*** on or after January 1, 2023.

SMALL PACKAGED PRODUCT RATINGS

Small Packaged Products will not increase in minimum efficiency from 14.0 SEER and 8.0 HSPF, but will be required to comply with the new test procedure.

Packaged Systems – 2023 National Standards†

System Type	National Efficiency Standard		Southwest Region	
	New SEER & HSPF	**New SEER2 & HSPF2**	New EER	**New EER2**
Packaged ACs & Gas/Electric ACs	14.0 SEER	**13.4 SEER2**	11.0 EER	**10.6 EER2**
Heat Pumps & Dual-Fuel HPs	14.0 SEER & 8.0 HSPF	**13.4 SEER2 & 6.7 HSPF2**	N/A	**N/A**

Sell-Through Deadline
Any 14.0 SEER SPP unit built before January 1, 2023, ***can still be installed*** on or after January 1, 2023.

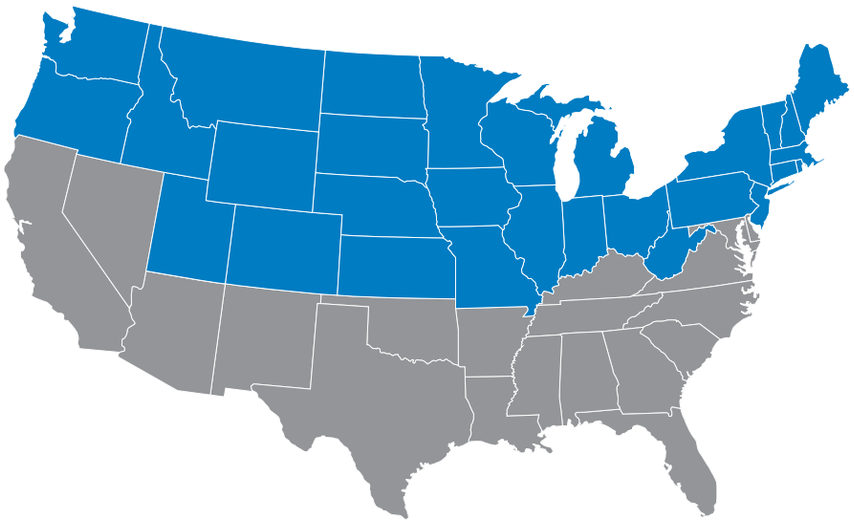
† SEER, EER, and HSPF values shown are based on the current test procedure and are for reference only. Beginning January 2023, products must comply with the SEER2, EER2 and HSPF2 values developed using the 2023 test procedure.

Sell Through & EnergyGuide Information

2023 Sell Through Requirements

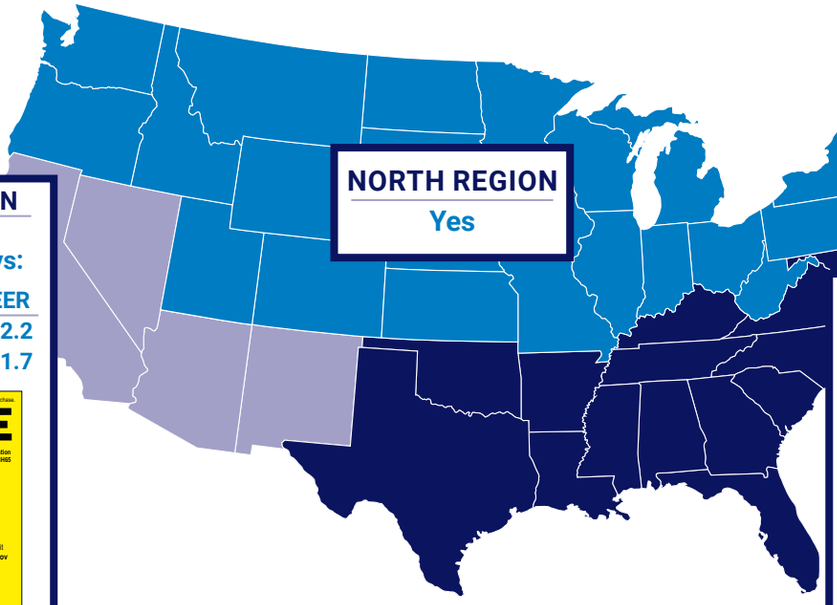
For the North region, any 13.0 SEER AC built before January 1, 2023 can still be installed on or after January 1, 2023. For the Southeast and Southwest regions, any AC that does not meet the above requirements CANNOT be installed on or after January 1, 2023. All Split System Heat Pumps and Small Package Product built before January 1, 2023 can still be installed on or after January 1, 2023.

	North	South
Air Conditioner	Date of Manufacture	Date of Install
Heat Pump	Date of Manufacture	Date of Manufacture
SPP	Date of Manufacture	Date of Manufacture



Inventory Management of Pre-2023 Units

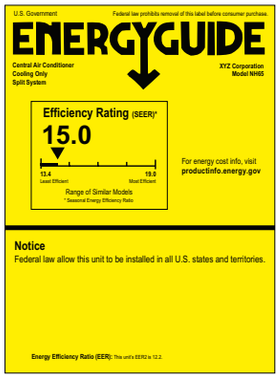
In order to be certain you understand the Sell Through deadlines, ask yourself the question *Can I install an air conditioner that was manufactured before 2023 after the January 1, 2023, deadline?* The chart below will help you get your answer depending on the region where your business is located. Be sure to check the EnergyGuide labels on your current air conditioner inventory against this chart as you begin your phase in/phase out process.



SOUTHWEST REGION

No, unless EnergyGuide label says:

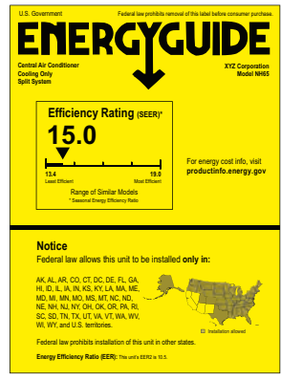
AC	SEER	EER
Split < 45k BTU	15.0	12.2
Split ≥ 45k BTU	14.5	11.7



SOUTHEAST REGION

No, unless EnergyGuide label says:

AC	SEER
Split < 45k BTU	15.0
Split ≥ 45k BTU	14.5

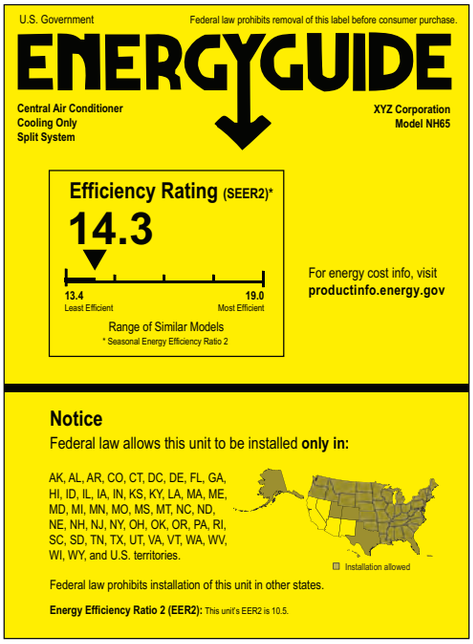


Sell Through & EnergyGuide Information

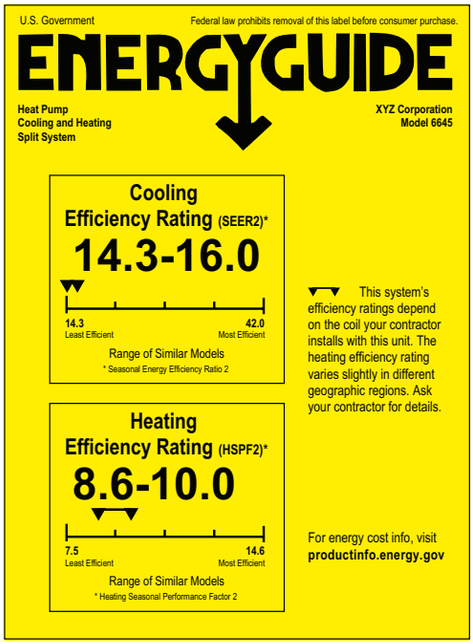
New 2023 EnergyGuide Label Samples

The Federal Trade Commission requires energy labeling for major home appliances and other consumer products to help consumers compare the energy usage and costs of competing models. As a result of the DOE's new minimum efficiencies and testing requirements, the FTC published rule amendments updating the EnergyGuide labels with new descriptors – specifically the SEER2, EER2 and HSPF2 ratings.

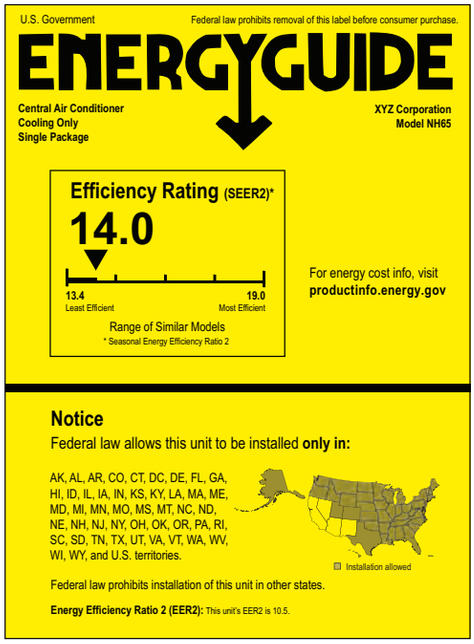
Consequently, all 2023-compliant products will include a new EnergyGuide label with the SEER2, EER2 and HSPF2 ratings clearly noted as applicable. Examples of what the new Split System Air Conditioner, Split System Heat Pump, and Small Package Product labels will look like can be found below. 2023-compliant products that begin shipping in calendar year 2022 will have these new labels.



Split System Air Conditioner Sample Label



Split System Heat Pump Sample Label



Small Packaged Product Sample Label

DOE Enforcement

THE COSTS – AND CONSEQUENCES – OF NON-COMPLIANCE

As with the 2015 standards, we anticipate penalties for non-compliance in 2023 as well. The DOE has been aggressively enforcing efficiency standards in a number of industries, including HVAC, and violations can be costly.

- Dealers and contractors caught installing non-compliant equipment will be forced to replace the equipment at their cost. Repeat violators can be put on a national do-not-sell list.
- Distributors are subject to the same do-not-sell penalty if they knowingly and repeatedly supply non-compliant equipment to contractors who install that equipment in violation of the regional minimum.
- Any distributor or contractor identified as a routine violator will be prohibited from purchasing any of the seven classes of products identified in the Code of Federal Regulations, 10-CFR-430.32.
- Manufacturers knowingly selling non-compliant equipment will also face stiff fines.

We anticipate the DOE will allow easy and confidential reporting of suspected violations, and will make every effort to investigate credible complaints. In addition, manufacturers will be obligated to report any potential violations we identify or become aware of to the DOE within 15 days of discovery.

In 2015, the DOE cracked down with big fines for violators, including a $1.2 million fine to HVAC manufacturers.

Protect Your Business

TRAINING

So how can you prepare to safeguard your business? The first step is training. As 2023 draws nearer, the 2023 minimum efficiency standards will be easily accessible on the Internet, including the DOE web site. Tempstar will also be creating training materials and continually communicating with you as we get closer to the deadline. We will make every effort to ensure that you are being supplied with region-appropriate products that meet all efficiency requirements for your area. However, it is important for you to protect your business by learning the efficiency standards for your region and placing product orders accordingly.

Visit *MLCtraining.com* today and search 2023 in the online course catalog and video section to access available training.

FUTURE RECORD KEEPING

Beginning in 2023, be prepared for record keeping. Dealer/contractors, distributors, and manufacturers will all be required to track the model and serial numbers of equipment sold, delivered and installed, as well as delivery addresses and installation locations. This includes cash sales. These records will protect you in the event of a DOE investigation. If 2015 is any indication for 2023, they will need to be kept for up to 60 months, depending on the type of business:

- 48 months for dealers / contractors
- 54 months for distributors
- 60 months for manufacturers

In summary, treat this information like you would treat your tax records, just to be safe.

MAKE THE COMMITMENT

Remember, we ALL have a stake in this. As your trusted supplier, we will invest the time and resources to make compliance as easy as possible. That includes training, updated product labeling, and continued communications about this topic.

In the end, we encourage you to make the commitment as well. Start preparing now by getting up to speed on the upcoming 2023 regulations and taking advantage of your resources. Visit *HVACpartners.com* for the very latest on the 2023 regulatory requirements and product information.

Key Messaging

New government regulations will be changing products throughout the entire HVAC industry, affecting manufacturers of residential cooling and heating products. Here's a brief outline of what's happening:

Dealer Messaging

- Every six years the U.S. Department of Energy (DOE) reanalyzes the effect of energy usage, sets minimum efficiency requirements and manages the testing standards by which those efficiencies are measured. For 2023, the DOE is increasing the minimum efficiencies for central air conditioners and heat pumps. The testing procedures for determining those efficiencies will change as well.
- The DOE's new minimum efficiency standards and testing procedures will be enforced for all HVAC manufacturers starting on January 1, 2023.
- To meet these new standards, 100% of current products across all tiers will need to be re-rated using the new test procedures.
- The majority of product tiers and tonnages will be available on or before January 1, 2023.
- We are instituting a phased roll out, with products launching ahead of deadline starting early 2022, to ensure readiness before January 1, 2023.
- In addition, our regulatory-ready products are being redesigned with an expected change in refrigerant to minimize future product transitions. We expect the new refrigerant requirements to take effect in 2025.

Consumer Messaging

- Dependent on what area of the country a homeowner lives determines what air conditioners they can buy. That's because the DOE has put in place new minimum efficiency standards by region.
  - The DOE regional breakdown by state:
    - **Southwest**: Arizona, California, Nevada, and New Mexico
    - **South**: Alabama, Arkansas, Delaware, Florida, Georgia, Hawaii, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, the District of Columbia, and the U.S. territories
    - **North**: The remainder of the United States
- Homeowners buying new Tempstar 2023-compliant systems will benefit from:
  - A higher energy-efficient system leading to potentially reduced monthly utility bills.
  - Enhanced comfort benefits such as more consistent indoor temperatures and improved humidity control.

Introduction of Product Lineups

Air Conditioner Product Lineups

Pre-2023							2023					
Tier	Model Family	Stage	Region	Coastal Option	Grille	Tonnage Range	Model Family	Stage	Region	Coastal Option	Grille	Tonnage Range
Ion™ System	TVA9	5	SW/SE	No	Posts	2 - 5	TVA9	5	SW	No	Posts	2 - 5
	TCA7	2	SW	No	Posts	2 - 5	T4A7T	2	SW	No	Posts	2 - 5
	TSA6	1	SE	No	Posts	1.5 - 5	T4A6S	1	SW	No	Posts	1.5 - 5
	TSA5	1	SW	Yes	Posts	1.5 - 5						
Performance Series	N4A7	2	SW	No	Dense	2 - 5	N4A7T	2	SW	Yes	Dense	2 - 5
	NH4A4	1	SW	No	Horizontal	1.5 - 5	S4A5S	1	SW	No	Horizontal	1.5 - 5
	N4A6	1	SW	No	Dense	1.5 - 5	N4A5S	1	SW	Yes	Dense	1.5 - 5
	NXA6	1	SE	No	Dense	1.5 - 5						
	N4A5	1	SW	No	Dense	1.5 - 5						
	N4A4	1	SE	Yes	Dense	1.5 - 5						
	NXA4	1	SE	No	Dense	1.5 - 5						
	N4A3	1	N	Yes	Dense Op	1.5 - 5	N4A4S	1	N	No	Dense	1.5 - 5
R-Series	R4A5	1	SW	No	Dense Op	1.5 - 5	R4A5S	1	SW	No	Dense	1.5 - 5
	R4A4	1	SE	No	Dense Op	1.5 - 5						
	R4A3	1	N	No	Dense Op	1.5 - 5	R4A4S	1	N	No	Dense	1.5 - 5

Note: There will be no changes to three-phase product.

2023 Region Key
SW = Compliant in all regions
SE = Compliant in Southeast and North
N = Compliant in North only

Air Conditioner Nomenclatures

As part of the 2023 Regulatory project, we took this opportunity to update our nomenclatures. This change provides added identifiers for airflow type and updated efficiency levels. Refer to *HVACpartners.com* for the 2023 Regulatory Look-Up Tool to help you learn these new model numbers. And for an added challenge, go to My Learning Center to try out the Model Number Challenge Game.

New 2023 Air Conditioners

	1	2	3	4	5	6 7	8	9	10	11	12
Title	Brand & Airflow Type	Refrigerant Type	OD Type	Efficiency	Design Type	Nominal Cooling Capacity	Feature	Voltage	Special Feature	Region	Major Series
Product #/Letter	**N**	**4**	**A**	**4**	**S**	**18**	**A**	**K**	**A**	**N**	**A**
Descriptions	N = Non-Brand Specific Vertical S = Horizontal Discharge T = Ion System R = R-Series	4 = R-410A	A = AC	4 = North Compliant 5 = Southwest Compliant 6 = 16 SEER2 7 = 17 SEER2 8 = 18 SEER2 9 = 19 SEER2	S = Single-Stage T = Two-Stage V = Variable-Speed	18 = 1.5 tons 24/25 = 2 tons 30 = 2.5 tons 36/37 = 3 tons 42/43 = 3.5 tons 48/49 = 4 tons 60/61 = 5 tons	A = Standard C = Coastal	K = 208-230-1 or 208/230-1 H = 208-230-3 or 208/230-3 L = 460-3 S = 575-3 W = 230-1-50	A = Standard	N = Standard North AC W= Standard Southeast and Southwest AC	A - Z

Note: Ion System TVA9 follows the pre-2023 nomenclature and meets the 2023 regulatory requirements.

Heat Pump Product Lineups

Pre-2023						2023				
Tier	Model Family	Stage	Coastal Option	Grille	Tonnage Range	Model Family	Stage	Coastal Option	Grille	Tonnage Range
Ion System	TVH8	5	No	Posts	2 - 5	TVH8	5	No	Posts	2 - 5
	TCH6	2	No	Posts	2 - 5	T4H7T	2	No	Posts	2 - 5
	TSH6	1	No	Posts	1.5 - 5	T4H5S	1	No	Posts	1.5 - 5
	TSH4	1	No	Posts	1.5 - 5					
Performance Series	N4H6	2	No	Dense	2 - 5	N4H7T	2	Yes	Dense	1.5 - 5
	NH4H4	1	No	Horizontal	1.5 - 5	DLCURA	1	No	Horizontal	1.5 - 5
	NXH6	1	No	Dense	1.5 - 5	N4H5S	1	Yes	Dense	1.5 - 5
	NXH5	1	No	Dense	1.5 - 5					
	N4H4	1	No	Dense	1.5 - 5					
R-Series	R4H4	1	No	Dense Op	1.5 - 5	R4H5S	1	No	Dense	1.5 - 5

Note: There will be no changes to three-phase product.

Heat Pump Nomenclatures

As part of the 2023 Regulatory project, we took this opportunity to update our nomenclatures. This change provides added identifiers for airflow type and future refrigerant change. Refer to *HVACpartners.com* for the 2023 Regulatory Look-up Tool to help you learn these new model numbers. And for an added challenge, go to My Learning Center to try out the Model Number Challenge Game.

New 2023 Heat Pumps

	1	2	3	4	5	6 7	8	9	10	11	12
Title	Brand & Airflow Type	Refrigerant Type	OD Type	Efficiency	Design Type	Nominal Cooling Capacity	Feature	Voltage	Special Feature	Region	Major Series
Product #/Letter	**N**	**4**	**H**	**5**	**S**	**18**	**A**	**K**	**A**	**A**	**A**
Descriptions	N = Non-Brand Specific Vertical T = Ion System R = R-Series	4 = R-410A	H = HP	5 = National Compliant 6 = 16 SEER2 7 = 17 SEER2 8 = 18 SEER2 9 = 19 SEER2	S = Single-Stage T = Two-Stage V = Variable-Speed	18 = 1.5 tons 24/25 = 2 tons 30 = 2.5 tons 36/37 = 3 tons 42/43 = 3.5 tons 48/49 = 4 tons 60/61 = 5 tons	A = Standard C = Coastal	K = 208-230-1 or 208/230-1 H = 208-230-3 or 208/230-3 L = 460-3 S = 575-3 W = 230-1-50	A = Standard	A = HP	A - Z

Note: Ion System TVH8 follows the pre-2023 nomenclature and meets the 2023 regulatory requirements.

Furnace Coil Product Lineups

Pre-2023			
Tier	Model Family	Orientation	Cased
A-Coil	EAM4X/ EDM4X	Multi-Poise	Yes
	EAA4X	Vertical	No
N-Coil	END4X	Vertical	Yes
	ENW4X	Transition	Yes
	ENA4X	Vertical	No
	ENH4X	Horizontal	Yes
Slab Coil	EHD4X	Horizontal	Yes

2023		
Model Family	Orientation	Cased
EAM4X	Multi-Poise	Yes
EAA4X	Vertical	No
V-Coil EVD4X	Vertical	Yes
EVM4X	Multi-Poise	Yes
EHD4X	Horizontal	Yes

Get to know our new Post-2023 furnace coil lineup below.

	Performance Series				
Model	EAM4X	EAA4X	EVD4X	EVM4X	EHD4X
Cased	Yes	No	Yes	Yes	Yes
Orientation	Multi-Poise A-Coil	Uncased Vertical A-Coil	Vertical V-Coil	Multi-Poise V-Coil	Horizontal Slab Coil
Factory-Installed TXV	Yes	Yes	Yes	Yes	Yes
Special Features	-	-	Power-V Technology	Power-V Technology	-

Furnace Coil Nomenclature

POWER-V TECHNOLOGY

Current Furnace Coils (A-Coil and Slab)

	1	2	3	4	5	6-7	8-9	10	11
Title	Component	Coil Type	Coil Configuration	Refrigerant Type	Metering Devices	Unit Capacity	Tubing Design	Cabinet Width	Major Series
Product #/Letter	**E**	**A**	**D**	**4**	**X**	**18**	**L**	**17**	**A**
Descriptions	E = Furnace Coil	A = A-Coil H = Slab	A = Uncased D = Vertical (UPF/DNF) M = Multi-Poise H = Horizontal	4 = R-410A	P = Piston X = TXV	18/19 = 18k BTU 24/25 = 24k BTU 30/31 = 30k BTU 36/37 = 36k BTU 42/43 = 42k BTU 48/49 = 48k BTU 60/61 = 60k BTU	L = Aluminum	14 = 14.2" wide 17 = 17.5" wide 21 = 21" wide 24 = 24.5" wide	A = Revision

New Furnace Coils with Power-V Technology (V-Coil and Slope)

	1	2	3	4	5	6-7	8-9	10	11
Title	Component	Coil Type	Coil Configuration	Refrigerant Type	Metering Devices	Unit Capacity	Tubing Design	Cabinet Width	Major Series
Product #/Letter	**E**	**V**	**D**	**4**	**X**	**36**	**M**	**17**	**A**
Descriptions	E = Furnace Coil	V = V-Coil S = Slope	D = Vertical M = Multi-Poise R = Replacement H = Horizontal	4 = R-410A	P = Piston X = TXV E = EXV	18/19 = 1.5 tons 24/25/26 = 2 tons 30/31 = 2.5 tons 36/37/38 = 3 tons 42/43 = 3.5 tons 48/49/50 = 4 tons 60/61 = 5 tons	M = Power-V	14 = 14.2" wide 17 = 17.5" wide 21 = 21" wide 24 = 24.5" wide	A = Revision

Fan Coil Product Lineups

Pre-2023

Tier	Model Family	Motor	Stage	Dehum	Blower Insulation
Deluxe	FCM	VCA	VS	Yes	Yes
Mid	FVM	VCA	2	Yes	Yes
Entry	FXM4X	FCT-5	1	No	Yes
	FEM4X	FCT-5	1	No	Yes
	FEM4P	FCT-5	1	No	Yes
Multifamily	FMA4X	FCT-5	1	No	Yes
	FMA4P	PSC	1	No	Yes
	FMC/U4Z	FCT-5	1	No	No
	FMC/U4X	PSC	1	No	No

2023

Model Family	Motor	Stage	Modular Cabinet Option	Dehum	Blower Insulation
FCM	VCA	VS	Yes	Yes	Yes
FVM	VCA	2	Yes	Yes	Yes
FJM	FCT-5	1	Yes	No	Yes
FMA4X	FCT-5	1	No	No	Yes
FMA4P	PSC	1	No	No	Yes
FMC/U4Z	FCT-5	1	No	No	No
FMC/U4X	PSC	1	No	No	No

Motor Key

VCA = Variable-Speed Constant Airflow Motor
FCT = Fixed-Speed Constant Torque Motor
PSC = Permanent Split Capacitor

Fan Coil Nomenclature

New 2023 Fan Coils

	1	2	3	4	5	6 7	8	9	10	11	12
Title	Unit	Type	Position	Major Series	Refrigerant Type	Metering Device	Nominal Cooling Capacity	Coil Type	Feature	Cabinet Width	Sales Code
Product #/Letter	**F**	**V**	**M**	**A**	**4**	**X**	**24**	**L**	**0**	**B**	**A**
Descriptions	F = Fan Coil	V = Variable-Speed C = Communicating ECM J = ECM Five-Speed	U = Upflow M = Multi-Poise	A - Z	4 = R-410A	X = TXV	18/19 = 18,000 24/25 = 24,000 30/31 = 30,000 36/37 = 36,000 42/43 = 42,000 48/49 = 48,000 60/61 = 60,000	L = Aluminum	0	A = 14” B = 17” C = 21” D = 24”	A

New 2023 Multifamily Fan Coils

	1	2	3	4	5	6 7 8 9	10	11
Title	Unit	Type	Installation Type	Refrigerant Type	Metering Device	Nominal Cooling Capacity	Revision	Sales Code/ Features
Product #/Letter	**F**	**M**	**U**	**4**	**Z**	**2400**	**A**	**L**
Descriptions	F = Fan Coil	M = Multifamily	U = Uncased C = Cased A = Aparment	4 = R-410A	X = TXV & PSC Motor Z = TXV & ECM Motor	1800 = 18,000 = 1.5 tons 2400 = 24,000 = 2 tons 3000 = 30,000 = 2.5 tons 3600 = 36,000 = 3 tons	A = Marketing Revision	L = Aluminum Coils

90% Gas Furnace Lineups

Standard Pre-2023

Tier	Family	Motor	Htg	Cool	Dehum	Blr Ins	AFUE (up to)	SKUs
Ion System	F97CMN	VCA	Mod	VS	Y	Y	98.0	6
	F96CTN	VCA	2	VS	Y	Y	96.7	5
QuietComfort	F96VTN	VCT	2	2	Y	Y	96.0	9
Performance	N96VSN	VCT	1	2	Y	Y	96.0	8
	N95ESN	FCT-5	1	1	N	N	96.0	11
	N92ESN	FCT-5	1	1	N	N	92.1	9
R-Series	R95ESN	FCT-5	1	1	N	N	96.0	10
	R92ESN	FCT-5	1	1	N	N	92.1	8

Standard 2023

Family	Motor	Htg	Cool	Dehum	Blr Ins	AFUE (up to)	SKUs	Timing
F97CMN	VCA	Mod	VS	Y	Y	98.0	6	Q4 2023
F96CTN	VCA	2	VS	Y	Y	96.7	6	
F96VTN	VCT	2	2	Y	Y	96.5	9	Q3 2023
N96VSN	VCT	1	2	Y	Y	96.5	8	Q3 2023
N96MSN	MCT-18	1	1	N	N	96.5	11	Q4 2022
N92MSN	MCT-18	1	1	N	N	92.1	9	
R95MSN	MCT-18	1	1	N	N	96.0	7	Q4 2022
R92MSN	MCT-18	1	1	N	N	92.1	4	

Ultra-Low NOx Pre-2023

Tier	Model Family	Motor	Htg	Cool	Dehum	Blr Ins	AFUE (up to)	SKUs
Ion System	F95CSU	VCA	1	VS	Y	Y	95.0	3
Performance	N95ESU	FCT-5	1	1	N	Y	95.0	5
R-Series	R95ESU	FCT-5	1	1	N	Y	95.0	4

Ultra-Low NOx 2023

Model Family	Motor	Htg	Cool	Dehum	Blr Ins	AFUE (up to)	SKUs	Timing
F95CSU	VCA	1	VS	Y	Y	95.0	3	Q4 2023
N95MSU	MCT-18	1	2	N	Y	95.0	5	Q4 2022
R95MSU	MCT-18	1	2	N	Y	95.0	4	Q4 2022

90% Gas Furnace Nomenclature

90% Gas Furnaces

	1	2 3	4	5	6	7 8 9	10 11	12 13	14
Title	Brand Identifier	Product Efficiency Level	Motor	Heating Stages	Feature	Heating Input (BTU/H)	Width	Cooling CFM (100s)	Major Series
Product #/Letter	**F**	**97**	**C**	**M**	**N**	**060**	**14**	**08**	**A**
Descriptions	F = Deluxe N = Entry/ Generic R = R-Series	92 = 92% AFUE 95 = 95% AFUE 96 = 96% AFUE 97 = 97% AFUE	C = Comm. VS Constant Airflow (VCA) ECM M = Multi 18-Speed Constant Torque (MCT) ECM V = VS Constant Torque (VCT) ECM	M = Modulating T = Two-Stage S = Single-Stage	N = Standard NOx L = Low NOx U = Ultra-Low NOx	026 = 26,000 * 040 = 40,000 * 060 = 60,000 * 080 = 80,000 * 100 = 100,000 * 120 = 120,000 140 = 140,000	14 = 14.2” 17 = 17.5” 21 = 21.0” 24 = 24.5”	08 = 800 10 = 1000 12 = 1200 14 = 1400 16 = 1600 20 = 2000 22 = 2200	A B C D

* ULN Models Available

Motor Summary	
Fixed-Speeds Constant Torque (FCT) ECM (Phase-out Q4 2022)	• Five speeds, installer-selected by connecting motor wires to control board speed taps (example – one each for heating, cooling, constant fan) • Non-communicating control, single-stage heating
Multi 18-Speed Constant Torque (MCT) ECM (Phase-in Q4 2022)	• NEW - Control board controls the motor at 18 speeds (torques) • NEW - speeds are installer-selected by utilizing the control board’s Near Field Communication (NFC) connectivity via the app or seven segment LED display with two push buttons • Single-stage heating and cooling capable
Variable-Speed Constant Torque (VCT) ECM (Relaunching with new features in Q3 2023)	• Control board controls the variable-speed motor at various torques • NEW - Speeds are installer-selected by utilizing the control board’s Near Field Communication (NFC) connectivity via the app or seven segment LED display with two push buttons • NEW - RPM feedback from motor for advanced diagnostics • Offered in single-stage or two-stage heating configurations with two-stage cooling capability • The variable-speed motor reduces the cooling airflow when call for dehumidification
Variable-Speed Constant Airflow (VCA) ECM (Relaunching with new features in Q4 2023)	• Provides constant airflow regardless of external static pressure changes based on user specified CFM requirement • Fully communicating capability allows for self-configuring airflows through the wall control • NEW - Seven segment LED display and app capability for added diagnostic capability • Features our best humidity control when used with a communicating system (including wall control) • Offered in two-stage or modulating heat configurations • Compatible with single-, two- and variable-speed outdoor products

80% Gas Furnace Lineups

Standard/Low NOx Pre-2023

Tier	Family	Motor	Htg	Cool	Dehum	Blr Ins	NOx	SKUs
Ion System	F80CTL	VCA	2	VS	Y	Y	Low	8
QuietComfort	F80VTL	VCT	2	2	Y	Y	Low	4
Performance Series	N80VSL	VCT	1	2	Y	Y	Low	7
	N80ESN	FCT-5	1	1	N	N	Std	14
	N80ESL	FCT-5	1	1	N	N	Low	14
R-Series	R80ESN	FCT-5	1	1	N	N	Std	13
	R80ESL	FCT-5	1	1	N	N	Low	13

Standard/Low NOx 2023

Family	Motor	Htg	Cool	Dehum	Blr Ins	NOx	SKUs	Timing
F80CTL	VCA	2	VS	Y	Y	Low	8	Q4 2023
F80VTL	VCT	2	2	Y	Y	Low	4	Q3 2023
N80VSL	VCT	1	2	Y	Y	Low	7	Q4 2022
N80MSN	MCT-18	1	1	N	N	Std	14	
N80MSL	MCT-18	1	1	N	N	Low	13	
R80MSN	MCT-18	1	1	N	N	Std	6	Q4 2022
R80MSL	MCT-18	1	1	N	N	Low	5	

Ultra-Low NOx Pre-2023

Tier	Family	Motor	Htg	Cool	Dehum	Blr Ins	NOx	SKUs
Ion System	F80CSU	VCA	1	VS	Y	Y	ULN	4
Performance	N80ESU	FCT-5	1	1	N	Y	ULN	4
R-Series	R80ESU	FCT-5	1	1	N	Y	ULN	4

Ultra-Low NOx 2023

Family	Motor	Htg	Cool	Dehum	Blr Ins	NOx	SKUs	Timing
F80CTU*	VCA	2	VS	Y	Y	ULN	4	Q4 2023
N80MSU	MCT-18	1	2	N	Y	ULN	4	Q4 2022
R80MSU	MCT-18	1	2	N	Y	ULN	4	Q4 2022

* Releasing with launch of deluxe product.

80% Gas Furnace Nomenclature

80% Gas Furnaces

	1	2 - 3	4	5	6	7 - 8 - 9	10 - 11	12 - 13	14
Title	Brand Identifier	Product Efficiency Level	Motor	Heating Stages	Feature	Heating Input (BTU/H)	Width	Cooling CFM (100s)	Major Series
Product #/Letter	**F**	**80**	**C**	**T**	**L**	**060**	**14**	**08**	**A**
Descriptions	F = Deluxe N = Entry/ Generic R = R-Series	80 = 80% AFUE	C = Comm. VS Constant Airflow (VCA) ECM M = Multi 18-Speed Constant Torque (MCT) ECM V = VS Constant Torque (VCT) ECM	M = Modulating T = Two-Stage S = Single-Stage	N = Standard NOx L = Low NOx U = Ultra-Low NOx	040 = 40,000 * 045 = 45,000 060 = 60,000 * 070 = 70,000 080 = 80,000 * 090 = 90,000 100 = 100,000 * 110 = 110,000 135 = 135,000 155 = 155,000 * ULN Models Only	14 = 14.2” 17 = 17.5” 21 = 21.0” 24 = 24.5”	08 = 800 10 = 1000 12 = 1200 14 = 1400 16 = 1600 20 = 2000 22 = 2200	A B C D

Motor Summary	
Fixed-Speeds Constant Torque (FCT) ECM (Phase-out Q4 2022)	• Five speeds, installer-selected by connecting motor wires to control board speed taps (example – one each for heating, cooling, constant fan) • Non-communicating control, single-stage heating
Multi 18-Speed Constant Torque (MCT) ECM (Phase-in Q4 2022)	• NEW - control board controls the motor at 18 speeds (torques) • NEW - speeds are installer-selected by utilizing the control board’s Near Field Communication (NFC) connectivity via the app or seven segment LED display with two push buttons • Single-stage heating and cooling capable
Variable-Speed Constant Torque (VCT) ECM (Relaunching with new features in Q3 2023)	• Control board controls the variable-speed motor at various torques • NEW - Speeds are installer-selected by utilizing the control board’s Near Field Communication (NFC) connectivity via the app or seven segment LED display with two push buttons • NEW - RPM feedback from motor for advanced diagnostics • Offered in single-stage or two-stage heating configurations with two-stage cooling capability • The variable-speed motor reduces the cooling airflow when call for dehumidification
Variable-Speed Constant Airflow (VCA) ECM (Relaunching with new features in Q4 2023)	• Provides constant airflow regardless of external static pressure changes based on user specified CFM requirement • Fully communicating capability allows for self-configuring airflows through the wall control • NEW - Seven segment LED display and app capability for added diagnostic capability • Features our best humidity control when used with a communicating system (including wall control) • Offered in two-stage or modulating heat configurations • Compatible with single-, two- and variable-speed outdoor products

Small Packaged Products Lineup

Standard Pre-2023

Tier	Family	Type	Cool Stage	Heat Stage	Standard HX	Std Indoor Coil	Grille	SKUs
QuietComfort	PGR5	YAC	2	2	Stainless	Tin-Plated Copper	Dense Wire	38
	PAR5	PAC	2	2	N/A	Tin-Plated Copper	Dense Wire	21
	PHR5	PHP	2	2	N/A	Tin-Plated Copper	Dense Wire	27
	PGS4	YAC	1	1	Stainless	Tin-Plated Copper	Dense Wire	68
	PDS4	YAC	1	1	Stainless	Tin-Plated Copper	Dense Wire	48
Performance	PGD4	YAC	1	1	Aluminized	Copper	Standard Wire	82
	PAD4	PAC	1	1	N/A	Copper	Standard Wire	34
	PDD4	DF	1	1	Aluminized	Copper	Standard Wire	24
	PHD4	PHP	1	1	N/A	Copper	Standard Wire	34
MH	PAJ4	PAC	1	1	N/A	Tin-Plated Copper	Louver	6
	PHJ4	PHP	1	1	N/A	Tin-Plated Copper	Louver	6

Standard 2023

Family	Type	Cool Stage	Heat Stage	Standard HX	Std Indoor Coil*	Grille	SKUs
PGR5	YAC	2	2	Stainless	Tin-Plated Copper	Louver	38
PAR5	PAC	2	2	N/A	Tin-Plated Copper	Louver	21
PHR5	DF	2	2	N/A	Tin-Plated Copper	Louver	27
PGD4	YAC	1	1	Stainless	Aluminum	Dense Wire	68
PAD4	PAC	1	1	N/A	Aluminum	Dense Wire	28
PDD4	DF	1	1	Stainless	Aluminum	Dense Wire	16
PHD4	PHP	1	1	N/A	Aluminum	Dense Wire	28
PAJ4	PAC	1	1	N/A	Aluminum	Louver	6
PHJ4	PHP	1	1	N/A	Aluminum	Louver	6

Low-NOx Pre-2023

Tier	Family	Type	Cool Stage	Heat Stage	Standard HX	Std Indoor Coil	Grille	SKUs
QuietComfort	PGR5	YAC	2	2	Stainless	Tin-Plated Copper	Dense Wire	26
	PGS4	YAC	1	1	Stainless	Tin-Plated Copper	Dense Wire	68
	PDS4	DF	1	1	Stainless	Tin-Plated Copper	Dense Wire	48
Performance	PGD4	YAC	1	1	Aluminized	Copper	Standard Wire	82
	PDD4	DF	1	1	Aluminized	Copper	Standard Wire	24

Low-NOx 2023

Family	Type	Cool Stage	Heat Stage	Standard HX	Std Indoor Coil*	Grille	SKUs
PGR5	YAC	2	2	Stainless	Tin-Plated Copper	Louver	26
PGD4	YAC	1	1	Stainless	Aluminum	Dense Wire	68
PDD4	DF	1	1	Stainless	Aluminum	Dense Wire	16

Ultra-Low NOx Pre-2023

Tier	Family	Type	Cool Stage	Heat Stage	Standard HX	Std Indoor Coil	Grille	SKUs
QuietComfort	PGR5	YAC	2	1	Stainless	Tin-Plated Copper	Dense Wire	16
	PGS4	YAC	1	1	Stainless	Tin-Plated Copper	Dense Wire	14
Performance	PGD4	YAC	1	1	Aluminized	Copper	Standard Wire	23

Ultra-Low NOx 2023

Family	Type	Cool Stage	Heat Stage	Standard HX	Std Indoor Coil*	Grille	SKUs
PGR5	YAC	2	1	Stainless	Tin-Plated Copper	Louver	16
PGD4	YAC	1	1	Stainless	Aluminum	Dense Wire	14

* Aluminum coil dependent on material availability.

SPP Unit Type Key:
PAC = Packaged Air Conditioner | PHP = Packaged Heat Pump | YAC = Year-Round Air Conditioner (Gas/Electric AC) | DF = Dual Fuel (Gas/Electric HP)

Small Packaged Products Nomenclature

Small Packaged Products

	1	2	3	4	5 6	7 8 9	10	11 12	13	14
Title	Unit	Type	Tier	SEER	Cooling BTU	Heating BTU	Voltage	Factory Installed Option	Feature Code	Major Series
Product #/Letter	**P**	**A**	**D**	**4**	**24**	**060**	**K**	**00**	**0**	**K**
Descriptions	P = Package	A = AC H = HP D = Dual Fuel G = Gas/Electric	D = Standard J = Dedicated Horizontal R = Mainline Up to 16 SEER	4 = 14 5 = 15	24 = 24K/2 Tons 30 = 30K/2.5 Tons 36 = 36K/3 Tons 42 = 42K/3.5 Tons 48 = 48K/4 Tons 60 = 60K/5 Tons	000 = N/A 040 = 40K 060 = 60K 090 = 90K 115 = 115K 120 = 120K 130 = 127 to 130K	K = 208/230-1-60 H = 208/230-3-60 L = 460-3-60	00 = No Options GC = Low Cab Air Leakage + Tin-Plated Cu Evap Tubes TP = Tin-Plated Evap Tubes LW = Low Cabinet Air Leakage	0 = Standard 1 = Low NOx 2 = Ultra-Low NOx	K

New Product Technologies

Welded Aluminum Technology

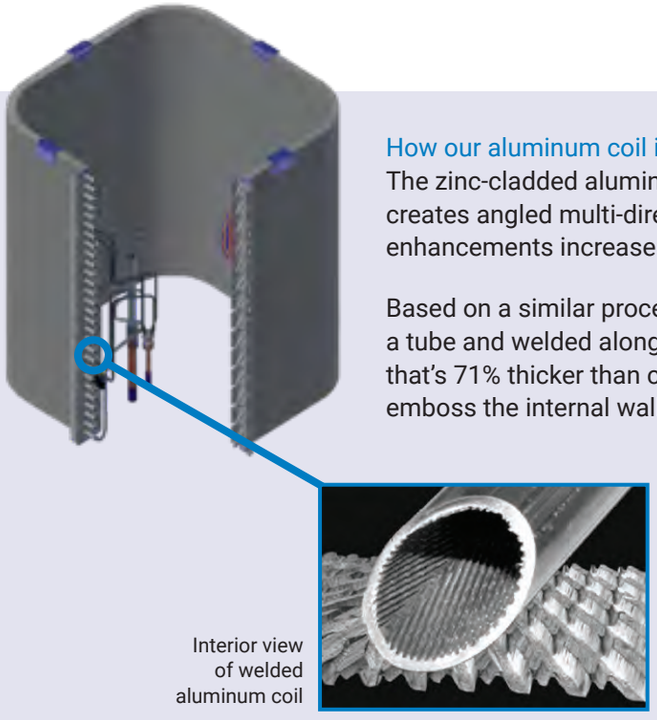
NEW OUTDOOR UNITS WITH WELDED ALUMINUM OUTDOOR COIL TECHNOLOGY

Another exciting product improvement rolling out by 2023 will be our unique and innovative welded aluminum outdoor coils. Building upon years of experience with indoor aluminum coil technology, we have been developing a new line of outdoor condensing units around our patent-pending, welded aluminum coil technology.

These new welded aluminum coils will deliver improved corrosion resistance while satisfying future performance requirements. As the HVAC industry leader, we are the only manufacturer currently offering this groundbreaking coil technology in residential outdoor products.

How is our aluminum coil technology better than our competitors?

Our coil tubing starts out as a flat sheet of aluminum. Zinc cladding is applied in a process known as roll bonding. The aluminum and zinc alloys are hot rolled together, reheated, and put through a series of sealing passes to create a metallurgical bond. A single composite material with significantly enhanced corrosion resistance is the result.

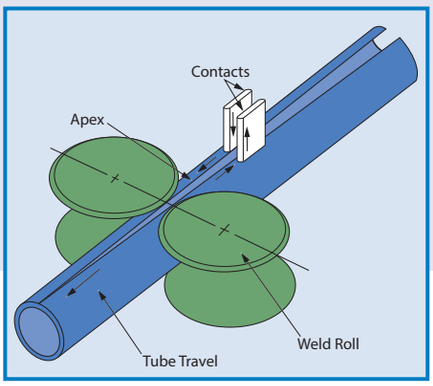


How our aluminum coil is made

The zinc-cladded aluminum sheeting is then embossed with a herringbone pattern which creates angled multi-directional channels on the inside of the tubing. These angled enhancements increase turbulent refrigerant flow to improve heat transfer efficiency.

Based on a similar process we use today on our copper tubing, the aluminum is shaped into a tube and welded along one edge. This entire process creates aluminum tubing with a wall that's 71% thicker than current copper tubing for exceptional strength. It also allows us to emboss the internal wall of the tube as noted above.

Interior view of welded aluminum coil



The welding process

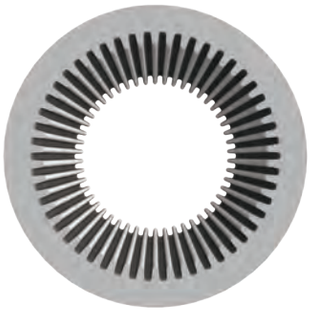
Our aluminum tube coils are unlike any other in the industry.

We are not the first manufacturer to hit the market with aluminum outdoor coils, but we may be the only one offering coils of this unique design. Rather than designing the units using dissimilar metals, ours include high-strength, zinc-coated aluminum parts to complement our zinc-cladded welded aluminum tubing. These products will experience significantly reduced galvanic corrosion and the resulting fin degradation.

Welded Aluminum Technology

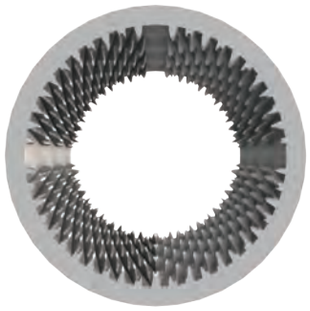
WELDED VS. EXTRUDED ALUMINUM TUBING

While many of our competitors are offering aluminum outdoor coil products, many of their models use extruded aluminum which has limited and less effective internal wall enhancements, higher pressure drop, and is not capable of zinc cladding.



Extruded Aluminum Tube from Competitors

- Limited internal wall enhancements
- Higher pressure drop
- No zinc cladding



Welded Aluminum Tube from Tempstar

- Multi-directional internal enhancements
- Less sensitive to pressure drop
- Zinc cladding for corrosion protection

ARE THERE OTHER ENHANCEMENTS TO THE NEW OUTDOOR UNITS?

Additional improvements to our welded aluminum coil air conditioners and heat pumps include:

- New fin material
- Top isolators
- Aluminum liquid distributor and vapor header with copper stubs
- Aluminum tube sheets, hairpins, return bends, crossovers and defrost switch

Many of the aluminum components are sprayed with a zinc coating, and any copper-to-aluminum joints on the unit are protected with a special heat shrink wrap. The entire package has been designed for enhanced performance, lasting corrosion resistance, reduced unit weight, and an easier transition for installers and service technicians.

LET'S TALK ABOUT INSTALLATION

We do our best to re-design products with our technicians in mind. When transitioning from traditional copper coil units to the new aluminum coil models, technicians will appreciate the many similarities to current installation processes. For example:

We have maintained the same or similar footprint on most units, so there will be minimal need to replace the pad.

Because our aluminum coil is 50% lighter than copper coils, the new models will be easier to handle and transport.

There is no copper-to-aluminum brazing required in the field – aluminum to copper brazing takes place in our factory and these connections are treated with a protective heat shrink wrap.

WELDED ALUMINUM: BUILDING ON EXPERIENCE

Our outdoor products with welded aluminum coil technology are the next step in delivering outstanding quality, reliability and efficient indoor home comfort. They are a big part of how aluminum is reshaping our product lineup, and another reason why we say we are all in on aluminum.

Power-V Technology

INTRODUCING THE TEMPSTAR® V-COIL WITH POWER-V TECHNOLOGY

Tempstar V-shaped evaporator coils are 2023-ready with increased equipment efficiency and reduced weight of equipment.

WHY DO WE NEED A NEW COIL DESIGN?

Our commitment to excellence continues to be driven by meeting the needs of our distributors and dealers; satisfying homeowners who depend upon our products for comfort; and, offering products that satisfy an evolving list of regulatory requirements.

Our current coil technology has served us well for decades. As we continue looking for measured improvements in the efficiency and performance of our cooling systems, continuing with the current coil design creates a number of challenges. These challenges include:

POWER-V TECHNOLOGY

- Increased cabinet heights due to an increase in refrigerant circuit sizes
- Larger coils leading to increased pressure drop from the same airflow velocity
- Difficulties meeting the SEER2 ratings using M1 testing procedures
- Extensive ductwork modifications to accommodate larger cabinet sizes

The V-coil with Power-V Technology addresses each of these challenges plus offers additional benefits in the area of installation and service.

NEW DESIGN = NEW BENEFITS

Our V-coil, with sixteen patents pending, is packed with innovative design features that increase efficiency, extend coil life, enhance corrosion resistance, and deliver many other advantages.

Improved Airflow

The V-coil configuration provides for more uniform airflow over coil, resulting in:

- Improved heat transfer
- Less pressure drop
- Increased system efficiency

Corrosion Resistance

The V-coil with Power-V Technology was designed to have improved corrosion resistance so as to extend the life of the coil:

- Aluminum coil to reduce corrosion
- V-shape better manages condensate runoff, channeling water away from superheated top of coil
- Reduced number of manually brazed joints from 13 down to just three

Ease of Install and Service

The V-coil was designed to make install and service easier for service technicians:

- Can be used in vertical up/down flow applications and horizontal multi-poise applications
- Coils slide in/out on easy access rail system
- Easily replace the TXV without removing the coil itself
- Up to 46% lighter than A-coils, up to 37% lighter than N-coils

Legacy Design Elements

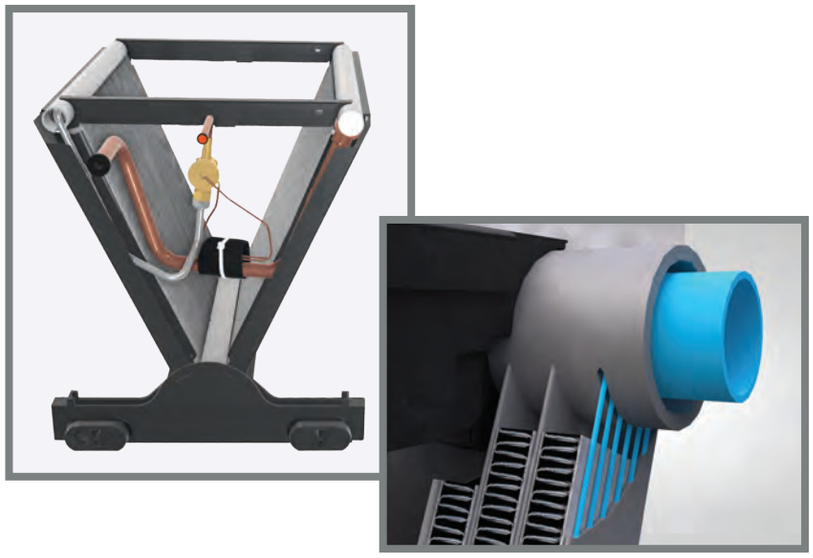
The V-coil maintains some of the legacy coil design elements for consistency in installation:

- System charging the same
- TXV install the same
- 3/8” liquid line inlet the same
- Line-set connections the same

Power-V Technology

WHAT DOES THE NEW COIL LOOK LIKE?

The new evaporator coil incorporates flat, aluminum refrigerant channels with brazed-on ridged aluminum fins. It is configured in a “V” shape with the header tubes positioned at top. The resulting geometry provides improved heat transfer, more uniform and controlled airflow over the coil, and a lighter, corrosion-resistant coil.



WHY SHOULD I BE CONFIDENT IN THE V-COIL WITH POWER-V TECHNOLOGY?

Our engineers designed and tested these new coils specifically to address coil leakage concerns and enhance condensate management.

Addressing leakage, the #1 issue with cooling coils

The new V-coil design reduces the number of manually brazed joints from thirteen down to just three - reducing the areas of potential leakage.

The V-shaped design also relocates tube-to-header joints to the top of the coil. In an “A” configuration, these joints would be sitting in the condensate, making them more susceptible to corrosion. Moving these joints to the top of the V-coil and out of the condensate improves the life of the coil.

Enhanced condensate management

Condensate on the V-coil flows against the refrigerant dry-out side of the coil. Water is channeled away from the superheated top region of the coil, eliminating the occurrence of condensate blow-off. The ‘V’ orientation also reduces the amount of internal cabinet surface area exposed to conditioned air, presenting less potential for sweating.

EASY, FLEXIBLE INSTALLATION & SERVICE

Upgrading to a new V-coil with Power-V Technology will be just as easy as replacing one of our current coils, and servicing them got that much easier as well.

What’s staying the same:

- Footprint of coil
- 3/8” liquid inlet
- Current line set connections
- Set TXV
- System charging
- Packaging

What’s being improved:

- Condensate drain options on both sides of the coil
- Up to 37% lighter than current N-coils and up to 46% lighter than current A-coils
- Easy to install UV light via front panel

What about service?

- Open access to both sides of the coil to inspect and clean
- Coil slides in/out on an easy-to-access rail system
- Replace TXV without removing coil

Entry Tier Furnace Enhancements

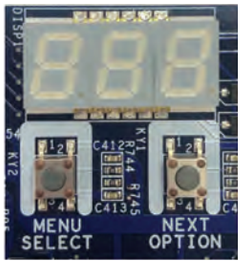
OPTIMIZING FOR 2023 SYSTEM RATINGS

The new 2023 Entry Tier furnaces will be optimized for the new testing procedures required for developing efficiency ratings. The new models will have airflows optimized for BOTH current and 2023 ratings requirements – so you can stock and sell this new product now to ensure a smooth transition prior to January 1, 2023.

One key change to help meet the M1 ratings is the increased number of airflow settings. Using a MCT blower motor, our new entry tier offering will have increased speed options – eighteen speeds in fact! This market-leading product feature makes it easier to right-size a system to a home's needs and results in improved application flexibility.

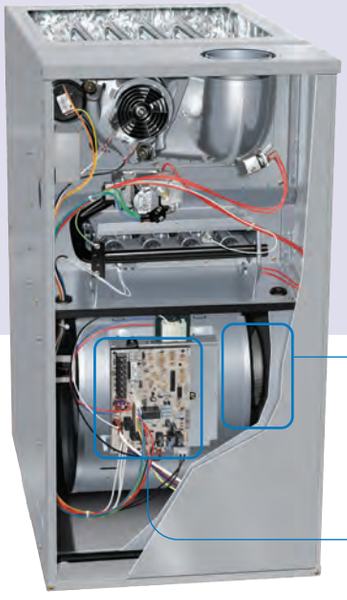
INDUSTRY LEADING IMPROVEMENTS FOR ENTRY TIER FURNACES

In addition to being 2023-Ready, we have made a series of product improvements that are sure to be well-received in the field.



New Control Board

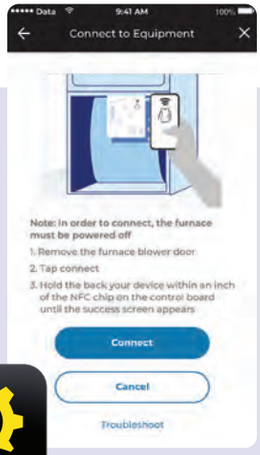
– Installers and Service Technicians will enjoy a redesigned control board in our entry tier products. We have incorporated a 7-segment display for easier installation. And we have created more and clearer fault codes to help technicians more accurately diagnose and resolve issues effecting the system.



Industry-leading FAST OEM Mobile Tech app with Patent-Pending Near Field Communication Capability

– Use the improved FAST OEM Mobile Tech app featuring Near Field Communication (NFC) technology to help save time on installation and service calls. NFC allows for airflow and other control parameters to be setup through your mobile device while at the job site or at the warehouse utilizing the RNC Saved Favorites option. During service calls, technicians can use both the 7-segment display and the app to access system diagnostics, including: fault codes, run time, cycle data and more.

Coming soon: Check HVACpartners soon for a "How To" video on NFC and the FAST OEM Mobile Tech app.



Improved Serviceability

– Tempstar has streamlined their blower motor offering by using a multi-speed motor resulting in a 70% reduction of blower motor service parts. The airflow settings for the unit are now programmed in the control board, not the motor, so servicing is simplified.

#2023READY

Get the FAST OEM Mobile Tech app today. These QR codes will take you to the app store where you will be able to download the *Tempstar FAST OEM Mobile Tech* app to your smartphone.

Apple App Store

Google Play Store

2023 Readiness Planning & FAQs

2023 Readiness Planning

PLANNING FOR SUCCESS: REGULATORY READINESS FOR 2023

2023 regulatory changes will be upon the HVAC industry soon, and we want you to be ready. The best way to maintain your competitive edge is to start planning for success today. Below are some tips to help guide you as you prepare your business for 2023.

EDUCATE

The more you know, the better equipped you'll be when regulations change. Start the process now by:

- Studying the 2023 Regulatory Readiness Launch kit and other readiness materials found on *HVACpartners.com*
- Reviewing 2023 regulatory content on the Department of Energy website
- Familiarizing yourself with new product ratings as outlined by AHRI
- Continue tracking 2023 updates on *HVACpartners.com* to learn about new product offerings and model number nomenclatures
- Familiarize yourself with the new 2023 product ratings

RECOMMENDED TIMELINE:

- Now and ongoing: Start to educate yourself today and continue up to and beyond January 1, 2023
- Q1 2022: Look for the new AHRI product ratings to start to be posted

PRE-PLAN

The scope of changes to product lines is significant. Start your pre-planning soon by:

- Learning the phase-in/phase-out schedules for new and current products and watch for detailed bulletins with each launch.
- Beginning to forecast inventory needs
- Identifying warehouse space issues and manpower needed to manage the transition
- Developing advertising and other marketing and communication plans to move old inventory out and get new inventory selling

RECOMMENDED TIMELINE:

- Q1 and Q2 2022: Establish phase-in/phase out, inventory forecasts, and warehouse and manpower needs
- Q2 2022: Create advertising, marketing and communications plan

TRAIN

Preparation is the name of the game, and everybody should be in the loop. So plan to make training a top priority.

- Your sales team will need to be aware of the regulatory changes, new model information and how to best position the new products
- Service technicians will need to learn any new installation/service details and if any additional or new tools are required
- Your full team will need to become familiar with the new technologies and product features that will be introduced with these regulatory and testing changes

RECOMMENDED TIMELINE:

- Now and ongoing: new product features and technologies
- Q2 through Q4 2022: Sales and technician training

IMPLEMENT

With your plan in place, it's time to put it in motion.

- Start by selling through current minimum efficiency inventory and/or transitioning to sales of the new 2023-compliant products
- Advertise and market the new products following your communications plan
- Keep records of all transactions to create a paper trail of your compliance

RECOMMENDED TIMELINE:

- Now and ongoing: Sell-through current product inventory, begin selling new models and keep records of all transactions
- Q3/Q4 2022: Begin advertising/marketing new products

Frequently Asked Questions

2023 REGULATORY & GENERAL PRODUCT QUESTIONS

1. What are the 2023 Regulatory changes?
   The Department of Energy (DOE) is increasing the minimum efficiency requirements on all central air conditioners and heat pumps. They are also requiring HVAC manufacturers to comply with new testing procedures for developing efficiency ratings.
2. What are the new efficiency minimums under the current M test procedures?
   For air conditioners in the North, the minimum efficiency will increase from 13.0 SEER to 14.0 SEER and in the South from 14.0 SEER to 15.0 SEER under today's M test procedure (Note: for units at or above 45k BTU's the minimum will be 14.5 SEER). The national heat pump minimum efficiency will increase from 14.0 SEER to 15.0 SEER. While SPP has no new minimum efficiency requirements, this product line will be impacted by the new test procedures.
3. What will the new efficiency minimums be under the new M1 testing procedures?
   For air conditioners in the North, the minimum efficiency will increase from 13.0 SEER to 13.4 SEER2 and in the South from 14.0 SEER to 14.3 SEER2 under the new M1 test procedure (Note: for units at or above 45k BTU's the minimum will be 13.8 SEER2). The national heat pump minimum efficiency will increase from 14.0 SEER to 14.3 SEER2.
4. What is the timing?
   These changes will go into effect on January 1, 2023.
5. How will I know if a model is 2023-compliant?
   All 2023-compliant products will carry a SEER2 rating. This new nomenclature refers to the new testing procedures required for 2023. Additionally, you can check the AHRI system rating to confirm if the system meets the new 2023 requirements.
6. Can I install current products after January 1, 2023?
   Yes, however it depends on where you are located in the country. For the North region, any 13.0 SEER AC built before January 1, 2023 can still be installed on or after January 1, 2023. For the South and Southwest regions, any air conditioner that does not meet the new minimum efficiencies cannot be installed on or after January 1, 2023. For heat pumps, any 14.0 SEER unit built before January 1, 2023 can be installed on or after January 1, 2023.
7. What is the difference between "date of manufacture" and "date of installation"?
   "Date of manufacture" refers to when the product was produced, and that date therefore determines if a product can be installed after the deadline or not. "Date of installation" refers to only the deadline date as a qualifier on whether a product can be installed or not.
8. How will I know if a product was produced before January 1, 2023?
   The unit serial number denotes the week and year it was built.
9. Do I have to comply?
   Yes. The 2023 minimum efficiency standards are a US Federal law. To avoid costly penalties for non-compliance, it is in your best interest to comply with these changes. The DOE has been aggressively enforcing efficiency standards in several industries, including HVAC.
10. How will the DOE enforce compliance?
    We anticipate enforcement will follow a similar pattern to the 2015 standards change – relying on easy and confidential reporting of suspected violations. Also, manufacturers will be obligated to report any potential violations.
11. Which manufacturers are impacted?
    All HVAC manufacturers must comply with these new requirements and test procedures.
12. If the Regulatory changes are for minimum efficiency, why are there changes to higher efficiency indoor and outdoor equipment?
    All components in the HVAC system impact the ratings because ratings are system combinations. Additionally, this change includes new testing procedures requiring a higher external static pressure and changes to the airflow set point on the indoor blower motor. Finally, improving pressure drop over the furnace coils will help achieve ratings.
13. When will ratings be available for 2023-compliant models?
    Ratings for 2023-compliant models should be available approximately two months prior to first ship and will be posted to *ICPeqp.com/AHRIratings/ratings.aspx*. Be sure to also check the AHRI database frequently for the most current information.
14. What are SEER2, EER2 and HSPF2?
    These represent the new nomenclature associated with products that have been rated using the new M1 testing procedures.
15. What is an M1 rating?
    M1 is the new DOE testing procedure under Appendix M1. An M1 rating has been developed under the new test procedure and will include SEER2, EER2, and HSPF2. The pre-2023 test procedure is M under Appendix M.
16. Will the products be labeled for SEER and SEER2?
    No. The EnergyGuide label can only include SEER or SEER2 values. All new 2023 products will be launched with SEER2 EnergyGuide labels. Existing products that meet the 2023 requirements will have their EnergyGuide label updated to SEER2 in 2022. For the same system, SEER and SEER2 ratings will be available in AHRI and on *ICPeqp.com/AHRIratings/ratings.aspx* in 2022.
17. Why is the SEER2 rating lower than the SEER rating for the same product?
    In most cases, the new SEER2 ratings will be lower, and the minimum efficiencies will be reduced to account for the more difficult test procedures, compared to the SEER

ratings on the same system. The new M1 tests require an increased external static pressure of up to 5x, which increases the blower motor watts and in turn reduces the efficiency rating.

18. How does ENERGY STAR® 6.0 effect current products certified under ENERGY STAR 5.0?
All new products released going forward are required to meet ENERGY STAR 6.0 (or 6.1 when released). Existing products certified to ENERGY STAR 5.0 remain ENERGY STAR certified.

19. How does this benefit me (distributor/dealer)?
You can be confident that Tempstar is supporting the DOE's initiative to reduce overall energy consumption in the U.S. by producing compliant products that meet these new minimum efficiencies. And with these changes you will benefit from an overall product SKU reduction which will help you in your inventory management.

20. How does this benefit the homeowner?
Homeowners can be confident that Tempstar is supporting the DOE's initiative to reduce overall energy consumption in the U.S. by producing compliant products that meet these new minimum efficiencies. Homeowners will enjoy more efficient products that are less harmful to the environment.

21. Are there new model numbers and if so, where can I find them?
Yes. Most of the product categories will experience updates to the model number nomenclature. Look to this launch kit as well as the Nomenclature/Product Lookup Tool on HVACpartners for more detailed information.

22. Will the new models be larger in size than the old ones?
This depends on the specific model and size. We have worked tirelessly to minimize any significant changes in product sizing, knowing that retrofitting is critical to your success. Reference launch materials and product specifications for new products to verify unit size.

23. Should I be concerned with servicing these new models?
No. There are few to no new installation or service practices required with the 2023-compliant models. We've worked to make things easier with improvements such as longer service valves that will work with mechanical fittings on select 2023 ACs and HPs, lighter weight furnace coils, easier UV light installation and mechanical TXVs on the Fan Coils.

24. Will the 2023-compliant products still qualify for financing programs?
Yes. The 2023-compliant products will follow similar financing qualification as pre-2023 products. Reference the specific programs as they are updated within the new models.

25. Will the current accessory kits still work with the new models?
Accessory kits will largely remain the same. Revisions will be made to update accessory kits with instruction sheets and labels which include model numbers.

26. Will these changes affect the ductless product offering?
The majority of ductless products have efficiency levels well above the new minimum requirements. However, these products will be impacted by the new test procedures. Look for new SEER2 ratings on ductless products in late 2022.

27. Do these changes affect products sold in Canada?
The Canadian government is in the process of developing their own rules for new minimum efficiency and testing procedure requirements. Although these regulations are not finalized, they are proposing similar requirements to the northern region of the United States.

28. Will there be new training available for the 2023 Regulatory changes?
Yes. Go to *MLCTraining.com* to access the 2023 Regulatory training materials, including:

- 2023 Regulatory video overview
- 2023 Regulatory overview and new technology eLearning course
- 2023 Regulatory overview and new technology course material for distributor hosted training
- Model number nomenclature training
- Product specific training with product rollout

29. Where can I find support materials for 2023 products?
There are multiple places for you to go to get more information:

- 2023 Regulatory Readiness Launch Kit – Please see the complete launch kit sent to all Territory Managers and Sales Managers.
- 2023 Regulatory Readiness USB – Please review to the USB enclosed in the launch kit for more information.
- HVACpartners – go to *HVACpartners > Marketing Tools > Sales Tools > Marketing Launch Kits* to find all the launch kit contents posted online.

30. How can I continue to receive 2023 product information in the future?
Be sure to "opt-in" to receiving email communications on your HVACpartners account. Tempstar sends bi-monthly email communications to help keep you up to date on product improvements, enhancements, and new product launches as well as information about programs and upcoming events.

31. Who should I contact for more information?
Please contact your local Territory Manager or Regional Business Manager for additional information.

Frequently Asked Questions

AIR CONDITIONER, HEAT PUMP & WELDED ALUMINUM PRODUCT QUESTIONS

32. Will there be significant changes to the installation process on these new AC/HP products?
No. There are few to no new installation or service practices required with the 2023-compliant models. However, you will want to consult the installation instructions before installing any new product.

33. Is every model converting to AL? If not, then why?
In light of global supply chain challenges and in order to ensure supply chain success, there will be a staggered roll out of products with aluminum outdoor coils. Some products will not convert until after 2023.

34. Living in a northern climate – how does this aluminum coil help me?
While corrosion may not be as critical of an issue in the northern markets, there is still a corrosion resistance benefit no matter where the product is installed. You will also benefit from the lighter weight of the unit with aluminum coil – making transport easier.

35. Should I be concerned with servicing these new models?
No. You will service these units much the same way you do today.

36. Will I have to braze copper to AL on the job site?
No. There is no cooper-to-aluminum brazing required in the field.

37. Will there still be coastal models offered in 2023?
We will still offer specific coastal models with all corrosion resistant features built in.

38. Will these new products work with mechanical fittings?
Our new Mainline AC and HP products will work with mechanical fittings. Be sure to reference the individual product literature to learn the details of each new product.

39. Can I use a standard sized filter with the new fan coils?
Yes, new fan coils will work with filters that you can find at most retailers.

40. Will the 2023-compliant products be converted over to the new refrigerant in 2025?
No, the new 2023-compliant products will not be compatible with the new 2025 refrigerants. All split system air conditioners and heat pumps will need to be redesigned and relaunched to be compatible with the 2025 refrigerant, R-454B. Additionally, we will release new R-454B compatible furnace coil and fan coil models for 2025.

41. What if an air conditioner unit fails after January 1, 2023, and needs to be replaced, will the furnace coil also need to be replaced?
Yes, it is necessary to replace both the outdoor AC or HP unit and furnace coil with 2023-compliant products. The furnace will not need to be changed unless it is a variable-speed system.

42. Can I install an air conditioner, manufactured before January 1, 2023, if the SEER2 rating on the EnergyGuide label is less than the region's new requirement?
Yes in the North. No, in the Southeast and Southwest regions.

Frequently Asked Questions

V-COIL – POWER-V TECHNOLOGY QUESTIONS

43. How is this technology different from the competitive micro-channel products?
Competitors in the past have used this technology in both the condensing outdoor unit and furnace coils. Competitor furnace coils using this technology are shaped so that the condensate flows over the header into the condensate drain pan making them more susceptible to corrosion. When using this in outdoor units, the system becomes sensitive to charge imbalance. By only having microchannel on the furnace coil and still using round tube plate fin on the outdoor unit, we limit issues with charge imbalance. And our V-shaped coil with the header at the top of the coil uniquely minimizes corrosion.

44. How do we know it is better?
- With our unique V-shaped coil and the reduction of brazed joints and fewer dissimilar metals, we have reduced the susceptibility of formicary corrosion.
- Achieving higher efficiency would require a size expansion of our indoor coil and these V-coils helped limit the overall refrigerant circuit growth.
- Testing has shown reduced pressure drop over the V-coil which is vital to maintaining SEER ratings – especially considering the increase in the DOE's external static pressure testing requirements. And it helps to reduce limit trips on the furnace.

45. Is there anything new or different in the installation process that I need to be prepared for?
No. There are few to no new installation or service practices required with the 2023-compliant models. However, you will want to consult the installation instructions before installing the new V-coil with Power-V Technology.

46. Should I be concerned with servicing these new models?
No. For the most part installation remains very similar to current coil models. However, it is always good to review the Installation Instructions for a new product to become familiar with any nuances. Additionally, the rails and open coil design will make it easier to inspect and clean these new models.

47. Is there concern with a level installation now that the drain can be connected on the left or right side?
It is always important for the installer to level the coil/furnace – regardless of coil design. Good practice is to level the furnace coil or very slightly lean the unit towards the drain ports. The drain pan has an internal slope from back to front to aid in this.

48. Will I see excess contaminate buildup at the bottom/apex of the V-coil?
Most of the buildup of contaminate is a result of not cleaning the coil after the construction process and/or poor yearly inspection/cleaning. The new V-coil design does help in this respect allowing easy access to both sides of the coil for cleaning. Further, we have designed a 7-10 mm gap from the bottom of the V-coil apex to the drain pan to help avoid build-up.

49. What about a buildup of condensate freeze at the bottom/apex of the V-coil?
If the system is sized, installed, and setup correctly, (i.e. charge and airflow) then the coil will not freeze. The V-coil is less vulnerable to freezing due to its reduced pressure drop characteristics and airflow diverting.

50. I use the horizontal installation today – but there doesn't seem to be that option going forward. What product should I use?
We are in the process of developing a multi-poise coil which will take the place of the older horizontal coil design. The EVM5X model will be a multi-poise coil that will replace today's ENH4X.

51. Will I be able to order an "uncased" V-coil in the future for replacement purposes?
Currently, the V-coil will not be offered as uncased.

52. What is Tempstar's stance on making repairs to the V-coil itself?
We do not recommend that any repairs be attempted on the V-coil. We use high-strength, corrosion and galvanic corrosion resistant materials that will minimize risks of any leaks. It is recommended that the unit be replaced completely in the event of coil issues. We offer a full five-year warranty on any coil, 10 years when properly registered.

53. Can the V-coil be used as a warranty/repair replacement for the A- and N-Coil families?
Yes, the new V-coils will eventually be a direct replacement for all A- and N-coils used in cooling once the transition from legacy units to new V-coils is complete. V-coils are ramping up in production and not all sizes and configurations are available yet. We will be introducing the full line throughout the year and expect to have all sizes available by Q4, 2022.

54. Can I simply replace an A- or N-coil with a new V-coil?
When replacing an A- or N-coil with a V-coil it is necessary to ensure the size is the same. All V-coils will maintain the same footprint as the A- and N-coils it is replacing, but in some instances, the V-coils are taller by no more than 2.5" and will not fit in the same space as an existing N- or A-coil casing. If the V-coil is taller in height, then rework of the adjoining duct work will be necessary.

55. Did you change how we replace the TXV with this new design?
No, this process remains the same. In fact, this new design makes it even easier to replace this part without having to remove the coil itself.

56. By removing the delta plate – is the performance effected at all?
    No. The design includes channels that seal against the front door panel minimizing the air leakage and pressure drop.
57. Will the new coils work with BOTH AC and HP?
    No. At this time, the new V-coils will only work with split system air conditioners and are not approved for use with heat pumps.
58. Are these V-coils larger than current N-coils?
    The size of the coil depends on the particular model. Some are the same height and others are taller, but by no more than 2 ½". Additionally, we will have new width options such as a 14" 3T, a 17" 4T and a 21" 5T.
59. How best do we clean these new coils?
    We recommend using light soap and water and avoid using brushes and harsh cleaning solvents.
60. Will you be posting AHRI ratings for new 2023 AC SKU's matching up with legacy A- and N-coils?
    Yes, since the new 2023 AC/HP SKU's will be released before most V-coils are available, all legacy A- and N-coils will be rated for use with these products.
61. Will we be rating legacy AC SKU's with the new V-coils?
    Yes, the V-coil with Power-V Technology will be rated with current legacy AC SKU's though some AHRI combinations may not be available.
62. Will we be rating new 2023 Fan Coils with legacy AC/HP SKU's?
    Yes, the new FJM fan coil will be rated to work with legacy AC/HP SKU's to assist with the phase-in phase-out process.
63. If an N-coil fails in a customer's home after January 1, 2023, can the dealer replace it with a legacy N-coil if they still have inventory?
    Yes, the installer can replace the N-coil with the same N-coil that was previously installed as it is considered a replacement component.

GAS FURNACE PRODUCT QUESTIONS

64. Do these new models work with pre-2023 and 2023 equipment?
    Yes, you can use these new 2023-compliant models with any compatible equipment. Note that the new furnaces will be rated with existing and 2023-compliant air conditioner and heat pump products. Check *ICPeqp.com/AHRIratings/ratings.aspx* or AHRI for the most current list of compatible equipment.
65. What is the benefit of having 18 speeds on the new entry tier products?
    This new feature makes it easier to right-size a system to a home's need and allows for improved application flexibility. It also allows us to optimize system ratings for pre-2023 and the new 2023 outdoor models.
66. Will the old blinking light display for fault codes go away?
    No. The blinking light display will remain on this product at least through 2023.
67. How can I access the list of new fault codes that this new control board will display?
    Refer to the installation instructions and the service label or booklet in the furnace for a complete list of codes.
68. Will I be able to see the new seven-segment display from the outside of the unit?
    We plan to add a viewing window to the unit door in the future. However, for the initial launch you will have to remove the door to access the display. Note that you will still be able to see the blinking light from outside the unit, as you can today.
69. What is the biggest benefit of the NFC capability – or is it a gimmick?
    NFC capability is definitely NOT a gimmick. This feature will save you time by allowing you to perform initial set up of a unit and provide diagnostic information at your fingertips through an app.
70. What else can the FAST OEM Mobile Tech app do?
    The Tempstar FAST OEM Mobile Tech app will also benefit the RNC business by allowing contractors to save unit setup parameters by floor plan as a favorite. A saved favorite can then be applied to multiple units designated to the same floor plans at your warehouse. This saves installation time at the job site and provides confidence that the unit will operate as required upon startup.
71. How close do I need to be to the equipment with the app to ensure the NFC connects and works?
    You must be within 1" of the equipment with the phone/app to avoid any interference. You will need to remove the furnace door to ensure this closeness.
72. When will *all* gas furnace models get NFC capability?
    We are looking to add this feature on future launches of the Mid and Deluxe tier models when relaunched for 2023.
73. What devices work with the NFC feature of the new furnaces?
    Your device must be NFC capable and have the current version of the app downloaded. Most smartphones have NFC capability - i.e. if your device has "tap to pay" then it has this functionality. NFC is supported on Apple® iPhone® 7 or newer and iOS 13 at a minimum.
74. How is NFC different from Bluetooth®?
    NFC is a different connection method than Bluetooth. NFC does not pair two devices, but rather makes a communication connection within a small range up to 1-inch. A device that has Bluetooth is not guaranteed to have NFC.
75. Do I need cellular service to use the Service Tech App?
    If you already have the app downloaded on your device, you will not need cellular service to utilize most functions on the app. Specifically, to change "Installer Setup" parameters and to pull diagnostic information off the furnace control board, neither cellular nor internet service is needed.

Frequently Asked Questions

76. Can I use my tablet with the app?
    If your tablet has NFC functionality, you can download the app and utilize the tablet. At this time, the Apple iPad® is not NFC capable. We have found that the Samsung Galaxy Tab® Active3 is NFC capable and does work with our furnace NFC chip and technician app.
77. Can I still program airflow units on site – and do I have to learn a new process to do so?
    Yes, you can still program new units on the job site through either the control board pushbuttons or through your compatible smartphone and the app. This process is not changing.
78. Should I be concerned with servicing these new models?
    No. The general servicing of these units remains the same. If anything, the use of the diagnostic feature in the app or the seven-segment display will help you to service them more quickly and accurately.
79. What is the Super Model Plug?
    This is like a "master programmer" should you choose NOT to use the app when replacing the control board in the field. All model programs are loaded on the plug, so you just need to take it with you to the next job site.
80. Why would I want to use the app to program a unit versus the seven-segment display on the unit for setup?
    With the FAST OEM Mobile Tech app, you can easily modify all setup parameters on your smartphone, then push those parameters to the control board, saving on installation time.
81. Why is there a QR code on the rating plate?
    This QR code links to important product information including: a training video on NFC and the seven-segment display, other product info, etc.
82. Do I need power to utilize the NFC feature?
    No. NFC draws power from your device to create a connection to the control board. In fact, the board must be powered off when using NFC.

SPP PRODUCT QUESTIONS

83. Why are there changes to SPP products if the minimum efficiency is not changing?
    The SPP product line up must comply with the new testing procedures. All SPP products must go through new certification testing and modifications will be made to the product to optimize around the new test procedure, such as airflow changes.
84. Are all models getting aluminum coils?
    At this time, we are converting all minimum efficiency products over to aluminum coils. Other SPP products will be converted over time in the future.
85. Why are you changing to stainless steel heat exchangers?
    Stainless steel is an option today, but by making it a standard feature going forward we will reduce SKUs and manufacturing complexity while improving the robustness of our standard product.

Where To Go For More Information

HVAC PARTNERS

HVAC PARTNERS

Visit *HVACpartners.com* for access to the 2023 Regulatory launch kit page. Visit often, as we will be adding new product information and regulatory details to the site as they become available.

Go to: *HVACpartners > Marketing > Sales Tools > Marketing Launch Kits > 2023 Regulatory*

CONTENT INCLUDES:

- Resource Documents
  - 2023 Regulatory Resource Guide
  - Power-V Technology Technical Resource Guide
  - Welded Aluminum Outdoor Coil Technical Resource Guide
- Presentations
  - Product Presentations
  - 2023 Regulatory Readiness Sales PPT
- Videos
  - Welded AL Outdoor Coil Video
  - Power-V Technology Video
  - NFC & FAST OEM Mobile Tech App Video

MY Learning Center

TRAINING

Visit *MLCtraining.com* and search 2023 in the online course catalog and video section to access available training!

- 2023 Regulatory Overview (Online Course and Video with downloadable presentation)
- 2023 Regulatory Product Presentation (Online Course and Downloadable video with presentation)
- AC/HP Nomenclature (Online Course and Downloadable Guide)
- Entry Tier Furnace, 3D simulation Course – Coming Soon

OTHER RESOURCES

U.S. Department of Energy – ***Energy.gov***

EPA and DOE Energy Efficiency – ***Energystar.gov***

U.S. Environmental Protection Agency – ***Epa.gov***

U.S. Government's national archives – ***Federalregister.gov***

Notes

TEMPSTAR®
Heating and Cooling Products

PO Box 128
Lewisburg, TN 37091

AP-004-TS-00
Printed 8/18/2022

A Proud Member of the Carrier Family

TEMPSTAR®
Heating and Cooling Products

Air Conditioner Roadmap

Pre-2023	2023
TVA9 Up to 19.0 SEER Five-Stage	**TVA9** Up to 19.0 SEER2* Five-Stage
TCA7 Up to 17.0 SEER Two-Stage	**T4A7T** Up to 17.0 SEER2 Two-Stage
TSA6 Up to 16.0 SEER Single-Stage	**T4A6S** Up to 16.5 SEER2 Single-Stage
TSA5 Up to 15.5 SEER Single-Stage	

Ion™ System

* Based on preliminary ratings - subject to change.

N4A7 Up to 17.5 SEER Two-Stage	**N4A7T** Up to 17.0 SEER2 Two-Stage Includes Coastal Model
N4A6 15.0 - 17.0 SEER Single-Stage	
NXA6 15.0 - 17.0 SEER Single-Stage	
N4A5 14.0 - 15.0 SEER Single-Stage	**N4A5S** Up to 16.5 SEER2 Single-Stage Includes Coastal Model
NXA4 14.0 - 15.0 SEER Single-Stage	
N4A4 Coastal Model Single-Stage	
N4A3 13.0 - 14.0 SEER Single-Stage	**N4A4S** Up to 16.5 SEER2 Single-Stage
NH4A4 14.0 - 15.0 SEER Single-Stage, Horizontal Discharge	**S4A5S** Up to 16.5 SEER2 Single-Stage, Horizontal Discharge

Performance Series

R4A5 Up to 17.0 SEER Single-Stage	**R4A5S** Up to 16.5 SEER2 Single-Stage
R4A4 Up to 16.0 SEER Single-Stage	
R4A3 13.0-15.0 SEER Single-Stage	**R4A4S** Up to 16.0 SEER2 Single-Stage

R-Series

Note: There will be no changes to the three-phase products.

Air Conditioner	1	2	3	4	5	6 7	8	9	10	11	12
Title	Brand & Airflow Type	Refrigerant Type	OD Type	Efficiency	Design Type	Nominal Cooling Capacity	Feature	Voltage	Special Feature	Region	Major Series
Product #/Letter	N	4	A	4	S	18	A	K	A	N	A
Descriptions	N = Non-Brand Specific Vertical S = Horizontal Discharge T = Ion System R = R-Series	4 = R-410A	A = AC	4 = North Compliant 5 = Southwest Compliant 6 = 16 SEER2 7 = 17 SEER2 8 = 18 SEER2 9 = 19 SEER2	S = Single-Stage T = Two-Stage V = Variable-Speed	18 = 1.5 tons 24/25 = 2 tons 30 = 2.5 tons 36/37 = 3 tons 42/43 = 3.5 tons 48/49 = 4 tons 60/61 = 5 tons	A = Standard C = Coastal	K = 208-230-1 or 208/230-1 H = 208-230-3 or 208/230-3 L = 460-3 S = 575-3 W = 230-1-50	A = Standard	N = Standard North AC W= Standard Southeast and Southwest AC	A - Z

Note: Ion™ System TVA9 follows the pre-2023 nomenclature and meets the 2023 regulatory requirements.

AP-006-TS-00

TEMPSTAR®
Heating and Cooling Products

Heat Pump Roadmap

Pre-2023	2023
TVH8 Up to 18.0 SEER Five-Stage	**TVH8** Up to 18.0 SEER2* Five-Stage
TCH6 Up to 18.0 SEER Two-Stage	**T4H7T** Up to 17.0 SEER2 Two-Stage
TSH6 Up to 17.0 SEER Single-Stage	**T4H6S** Up to 15.2 SEER2* Single-Stage
TSH4 15.0 - 16.0 SEER Single-Stage	

Ion™ System

Pre-2023	2023
NH4H4 14.0 - 15.0 SEER Single-Stage Horizontal Discharge	**DLCURA** Up to 18.0 SEER2* Variable-Speed
N4H6 Up to 17.5 SEER Two-Stage	**N4H7T** Up to 17.0 SEER2 Two-Stage Includes Coastal Model
NXH6 Up to 16.0 SEER Single-Stage	
NXH5 Up to 16.0 SEER Single-Stage	**N4H5S** At 14.3 SEER2 Single-Stage Includes Coastal Model
N4H4 Up to 15.0 SEER Single-Stage Coastal Model Available	

Performance Series

Pre-2023	2023
R4H4 Up to 15.0 SEER Single-Stage	**R4H5S** At 14.3 SEER2 Single-Stage

R-Series

Note: There will be no changes to three-phase product

* Based on preliminary ratings - subject to change.

Heat Pumps	1	2	3	4	5	6 7	8	9	10	11	12
Title	Brand & Airflow Type	Refrigerant Type	OD Type	Efficiency	Design Type	Nominal Cooling Capacity	Feature	Voltage	Special Feature	Region	Major Series
Product #/Letter	**N**	**4**	**H**	**5**	**S**	**18**	**A**	**K**	**A**	**A**	**A**
Descriptions	N = Non-Brand Specific Vertical T = Ion System R = R-Series	4 = R-410A	H = HP	5 = National Compliant 6 = 16 SEER2 7 = 17 SEER2 8 = 18 SEER2 9 = 19 SEER2	S = Single-Stage T = Two-Stage V = Variable-Speed	18 = 1.5 tons 24/25 = 2 tons 30 = 2.5 tons 36/37 = 3 tons 42/43 = 3.5 tons 48/49 = 4 tons 60/61 = 5 tons	A = Standard C = Coastal	K = 208-230-1 or 208/230-1 H = 208-230-3 or 208/230-3 L = 460-3 S = 575-3 W = 230-1-50	A = Standard	A = HP	A - Z

Note: Ion™ System TVH8 follows the pre-2023 nomenclature and meets the 2023 regulatory requirements.

TEMPSTAR®
Heating and Cooling Products

Furnace Coil Roadmap

Pre-2023		2023
A-Coils		
		
EAM4X, EDM4X Cased Multi-Poise		**EAM4X** Cased Multi-Poise
EAD4X Cased Vertical		
EAA4X Uncased Vertical	No Change	**EAA4X** Uncased Vertical
N-Coils		**V-Coils**
		
END4X Cased Vertical		**EVD4X** Cased Vertical Power-V Technology
ENW4X Cased Transition		
ENA4X /EMA4X Uncased Vertical		
ENH4X Cased Horizontal	A/C ONLY	**EVM4X** Cased Multi-Poise Power-V Technology
Slab Coil		
		
EHD4X Cased Horizontal	No Change	**EHD4X** Cased Horizontal

A-Coil & Slab

Furnace Coils	1	2	3	4	5	6-7	8-9	10	11
Title	Component	Coil Type	Coil Configuration	Refrigerant Type	Metering Devices	Unit Capacity	Tubing Design	Cabinet Width	Major Series
Product #/Letter	**E**	**A**	**D**	**4**	**X**	**18**	**L**	**17**	**A**
Descriptions	E = Furnace Coil	A = A-Coil H = Slab	A = Uncased D = Vertical (UPF/DNF) M = Multi-Poise H = Horizontal	4 = R-410A	P = Piston X = TXV	18/19 = 18k BTU 24/25 = 24k BTU 30/31 = 30k BTU 36/37 = 36k BTU 42/43 = 42k BTU 48/49 = 48k BTU 60/61 = 60k BTU	L = Aluminum	14 = 14.2" wide 17 = 17.5" wide 21 = 21" wide 24 = 24.5" wide	A = Revision

V-Coil & Slope

Power-V Coils	1	2	3	4	5	6-7	8-9	10	11
Title	Component	Coil Type	Coil Configuration	Refrigerant Type	Metering Devices	Unit Capacity	Tubing Design	Cabinet Width	Major Series
Product #/Letter	**E**	**V**	**D**	**4**	**X**	**36**	**M**	**17**	**A**
Descriptions	E = Furnace Coil	V = V-Coil S = Slope	D = Vertical M = Multi-Poise R = Replacement H = Horizontal	4 = R-410A	P = Piston X = TXV E = EXV	18/19 = 1.5 tons 24/25/26 = 2 tons 30/31 = 2.5 tons 36/37/38 = 3 tons 42/43 = 3.5 tons 48/49/50 = 4 tons 60/61 = 5 tons	M = Power-V	14 = 14.2" wide 17 = 17.5" wide 21 = 21" wide 24 = 24.5" wide	A = Revision

TEMPSTAR®
Heating and Cooling Products

Fan Coil Roadmap

Pre-2023	2023
Deluxe	
	
FCM Variable-Speed VCA Motor	**FCM** Variable-Speed VCA Motor
Mid-Tier	
	
FVM Two-Stage VCA Motor	**FVM** Two-Stage VCA Motor
Entry	
	
FXM4X Single-Stage FCT-5 Motor **FEM4X** Single-Stage FCT-5 Motor **FEM4P** Single-Stage FCT-5 Motor	**FJM** Single-Stage FCT-5 Motor

Fan Coils	1	2	3	4	5	6 7	8	9	10	11	12
Title	Unit	Type	Position	Major Series	Refrigerant Type	Metering Device	Nominal Cooling Capacity	Coil Type	Feature	Cabinet Width	Sales Code
Product #/Letter	**F**	**V**	**M**	**A**	**4**	**X**	**24**	**L**	**0**	**B**	**A**
Descriptions	F = Fan Coil	V = Variable-Speed C = Communicating ECM J = ECM Five-Speed	U = Upflow M = Multi-Poise	A - Z	4 = R-410A	X = TXV	18/19 = 18,000 24/25 = 24,000 30/31 = 30,000 36/37 = 36,000 42/43 = 42,000 48/49 = 48,000 60/61 = 60,000	L = Aluminum	0	A = 14” B = 17” C = 21” D = 24”	A

Motor Key: VCA = Variable-Speed Constant Airflow Motor | FCT = Fixed-Speed Constant Torque Motor

TEMPSTAR®
Heating and Cooling Products

Fan Coil Roadmap
- Multifamily -

Pre-2023		2023
Multifamily		
FMA4X Single-Stage FCT-5 Motor	No Change	**FMA4X** Single-Stage FCT-5 Motor
FMA4P Single-Stage PSC Motor	No Change	**FMA4P** Single-Stage PSC Motor
FMC/U4Z Single-Stage FCT-5 Motor	No Change	**FMC/U4Z** Single-Stage FCT-5 Motor
FMC/U4X Single-Stage PSC Motor	No Change	**FMC/U4X** Single-Stage PSC Motor

Multifamily Fan Coils	**1**	**2**	**3**	**4**	**5**	**6 7 8 9**	**10**	**11**
Title	Unit	Type	Installation Type	Refrigerant Type	Metering Device	Nominal Cooling Capacity	Revision	Sales Code/ Features
Product #/Letter	**F**	**M**	**U**	**4**	**Z**	**2400**	**A**	**L**
Descriptions	F = Fan Coil	M = Multifamily	U = Uncased C = Cased A = Aparment	4 = R-410A	X = TXV & PSC Motor Z = TXV & ECM Motor	1800 = 18,000 = 1.5 tons 2400 = 24,000 = 2 tons 3000 = 30,000 = 2.5 tons 3600 = 36,000 = 3 tons	A = Marketing Revision	L = Aluminum Coils

Motor Key: VCA = Variable-Speed Constant Airflow Motor | FCT = Fixed-Speed Constant Torque Motor | PSC = Permanent Split Capacitor

TEMPSTAR®
Heating and Cooling Products

90% Gas Furnace Roadmap

Pre-2023		2023
F97CMN		**F97CMN**
Up to 98% AFUE		Up to 98% AFUE
Modulating Heating		Modulating Heating
Variable-Speed Cooling		Variable-Speed Cooling
VCA ECM Motor		VCA ECM Motor
F96CTN		**F96CTN**
Up to 96.7% AFUE		Up to 96.7% AFUE
Two-Stage Heating		Two-Stage Heating
Variable-Speed Cooling		Variable-Speed Cooling
VCA ECM Motor		VCA ECM Motor
F95CSU	Ultra-Low NOx	**F95CSU**
Up to 95% AFUE		Up to 95% AFUE
Single-Stage Heating		Single-Stage Heating
Variable-Speed Cooling		Variable-Speed Cooling
VCA ECM Motor		VCA ECM Motor

Ion™ System

QuietComfort® Series

F96VTN		**F96VTN**
Up to 96% AFUE		Up to 96.5% AFUE
Two-Stage Operation		Two-Stage Operation
VCT ECM Motor		VCT ECM Motor

Performance Series

N96VSN		**N96VSN**
Up to 96% AFUE		Up to 96.5% AFUE
Single-Stage Heating		Single-Stage Heating
Two-Stage Cooling		Two-Stage Cooling
VCT ECM Motor		VCT ECM Motor
N95ESN		**N96MSN**
Up to 96% AFUE		Up to 96.5% AFUE
Single-Stage Operation		Single-Stage Operation
FCT-5 ECM Motor		MCT-18 ECM Motor
N92ESN		**N92MSN**
Up to 92.1% AFUE		Up to 92.1% AFUE
Single-Stage Operation		Single-Stage Operation
FCT-5 ECM Motor		MCT-18 ECM Motor
N95ESU	Ultra-Low NOx	**N95MSU**
Up to 95% AFUE		Up to 95% AFUE
Single-Stage Operation		Single-Stage Heating
FCT-5 ECM Motor		Two-Stage Cooling
		MCT-18 ECM Motor

R-Series

R95ESN		**R95MSN**
Up to 96% AFUE		Up to 96% AFUE
Single-Stage Operation		Single-Stage Operation
FCT-5 ECM Motor		MCT-18 ECM Motor
R92ESN		**R92MSN**
Up to 92.1% AFUE		Up to 92.1% AFUE
Single-Stage Operation		Single-Stage Operation
FCT-5 ECM Motor		MCT-18 ECM Motor
R95ESU	Ultra-Low NOx	**R95MSU**
Up to 95% AFUE		Up to 95% AFUE
Single-Stage Operation		Single-Stage Heating
FCT-5 ECM Motor		Two-Stage Cooling
		MCT-18 ECM Motor

90% Gas Furnaces	**1**	**2 3**	**4**	**5**	**6**	**7 8 9**	**10 11**	**12 13**	**14**
Title	Brand Identifier	Product Efficiency Level	Motor	Heating Stages	Feature	Heating Input (BTU/H)	Width	Cooling CFM (100s)	Major Series
Product #/Letter	**F**	**97**	**C**	**M**	**N**	**060**	**14**	**08**	**A**
Descriptions	F = Deluxe N = Entry/ Generic R = R-Series	92 = 92% AFUE 95 = 95% AFUE 96 = 96% AFUE 97 = 97% AFUE	C = Comm. VS Constant Airflow (VCA) ECM M = Multi 18-Speed Constant Torque (MCT) ECM V = VS Constant Torque (VCT) ECM	M = Modulating T = Two-Stage S = Single-Stage	N = Standard NOx L = Low NOx U = Ultra-Low NOx	026 = 26,000 * 040 = 40,000 * 060 = 60,000 * 080 = 80,000 * 100 = 100,000 * 120 = 120,000 140 = 140,000	14 = 14.2” 17 = 17.5” 21 = 21.0” 24 = 24.5”	08 = 800 10 = 1000 12 = 1200 14 = 1400 16 = 1600 20 = 2000 22 = 2200	A B C D

* ULN Models Available

TEMPSTAR®
Heating and Cooling Products

80% Gas Furnace Roadmap

Pre-2023	2023
F80CTL 80% AFUE Two-Stage Heating Variable-Speed Cooling VCA ECM Motor	**F80CTL** 80% AFUE Two-Stage Heating Variable-Speed Cooling VCA ECM Motor
F80CS/F80TU* — Ultra-Low NOx 80% AFUE Single-/Two-Stage Heating Variable-Speed Cooling VCA ECM Motor	**F80CTU** 80% AFUE Two-Stage Heating Variable-Speed Cooling VCA ECM Motor
* Two-stage communicating model to launch late 2023.	

Ion System

QuietComfort Series

F80VTL 80% AFUE Two-Stage Operation VCT ECM Motor	**F80VTL** 80% AFUE Two-Stage Operation VCT ECM Motor

Performance Series

N80VSL 80% AFUE Single-Stage Heating Two-Stage Cooling VCT ECM Motor	**N80VSL** 80% AFUE Single-Stage Heating Two-Stage Cooling VCT ECM Motor
N80ESN 80% AFUE Single-Stage Operation FCT-5 ECM Motor	**N80MSN** 80% AFUE Single-Stage Operation MCT-18 ECM Motor
N80ESL 80% AFUE Single-Stage Operation FCT-5 ECM Motor	**N80MSL** 80% AFUE Single-Stage Operation MCT-18 ECM Motor
N80ESU — Ultra-Low NOx 80% AFUE Single-Stage Operation FCT-5 ECM Motor	**N80MSU** 80% AFUE Single-Stage Heating Two-Stage Cooling MCT-18 ECM Motor

R-Series

R80ESN 80% AFUE Single-Stage Operation FCT-5 ECM Motor	**R80MSN** 80% AFUE Single-Stage Operation MCT-18 ECM Motor
R80ESL 80% AFUE Single-Stage Operation FCT-5 ECM Motor	**R80MSL** 80% AFUE Single-Stage Operation MCT-18 ECM Motor
R80ESU — Ultra-Low NOx 80% AFUE Single-Stage Operation FCT-5 ECM Motor	**R80MSU** 80% AFUE Single-Stage Heating Two-Stage Cooling MCT-18 ECM Motor

80% Gas Furnaces	1	2 - 3	4	5	6	7 - 8 - 9	10 - 11	12 - 13	14
Title	Brand Identifier	Product Efficiency Level	Motor	Heating Stages	Feature	Heating Input (BTU/H)	Width	Cooling CFM (100s)	Major Series
Product #/Letter	**F**	**80**	**C**	**T**	**L**	**060**	**14**	**08**	**A**
Descriptions	F = Deluxe N = Entry/ Generic R = R-Series	80 = 80% AFUE	C = Comm. VS Constant Airflow (VCA) ECM M = Multi 18-Speed Constant Torque (MCT) ECM V = VS Constant Torque (VCT) ECM	M = Modulating T = Two-Stage S = Single-Stage	N = Standard NOx L = Low NOx U = Ultra-Low NOx	040 = 40,000 * 045 = 45,000 060 = 60,000 * 070 = 70,000 080 = 80,000 * 090 = 90,000 100 = 100,000 * 110 = 110,000 135 = 135,000 155 = 155,000 * ULN Models Only	14 = 14.2” 17 = 17.5” 21 = 21.0” 24 = 24.5”	08 = 800 10 = 1000 12 = 1200 14 = 1400 16 = 1600 20 = 2000 22 = 2200	A B C D

TEMPSTAR®
Heating and Cooling Products

Small Packaged Product Roadmap

Pre-2023	2023
PGR5 Year-Round Air Conditioner, Up to 16.0 SEER, Two-Stage Operation	**PGR5** Year-Round Air Conditioner, Up to 16.0 SEER, Stainless Steel Heat Exchanger, Two-Stage Operation
PAR5 Packaged Air Conditioner, Up to 16.0 SEER, Two-Stage Operation	**PAR5** Packaged Air Conditioner, Up to 16.0 SEER, Two-Stage Operation
PHR5 Packaged Heat Pump, Up to 16.0 SEER, Two-Stage Operation	**PHR5** Packaged Heat Pump, Up to 16.0 SEER, Two-Stage Operation
PGS4 Year-Round Air Conditioner, Single-Stage Operation	**Obsolete**
PDS4 Dual-Fuel, Single-Stage Operation	**Obsolete**

QuietComfort® Series

Note: All QuietComfort models at 15.2 SEER2 based on preliminary ratings - subject to change.

PGD4 Year-Round Air Conditioner, Single-Stage Operation	**PGD4*** Year-Round Air Conditioner, Stainless Steel Heat Exchanger, Single-Stage Operation
PAD4 Packaged Air Conditioner, Single-Stage Operation	**PAD4*** Packaged Air Conditioner, Single-Stage Operation
PDD4 Dual-Fuel, Single-Stage Operation	**PDD4*** Dual-Fuel, Stainless Steel Heat Exchanger, Single-Stage Operation
PHD4 Packaged Heat Pump, Single-Stage Operation	**PHD4*** Packaged Heat Pump, Single-Stage Operation

Performance Series

Note: All Performance models at 13.4 SEER2 based on preliminary ratings - subject to change.

PAJ4 Packaged Air Conditioner, Single-Stage Operation	**PAJ4*** Packaged Air Conditioner, Single-Stage Operation
PHJ4 Packaged Heat Pump, Single-Stage Operation	**PHJ4*** Packaged Heat Pump, Single-Stage Operation

Manufactured Housing

* Aluminum standard indoor coil

Small Packaged Products	1	2	3	4	5 6	7 8 9	10	11 12	13	14
Title	Unit	Type	Tier	SEER	Cooling BTU	Heating BTU	Voltage	Factory Installed Option	Feature Code	Major Series
Product #/Letter	**P**	**A**	**D**	**4**	**24**	**060**	**K**	**00**	**0**	**K**
Descriptions	P = Package	A = AC H = HP D = Dual Fuel G = Gas/Electric	D = Standard J = Dedicated Horizontal R = Mainline Up to 16 SEER	4 = 14 5 = 15	24 = 24K/2 Tons 30 = 30K/2.5 Tons 36 = 36K/3 Tons 42 = 42K/3.5 Tons 48 = 48K/4 Tons 60 = 60K/5 Tons	000 = N/A 040 = 40K 060 = 60K 090 = 90K 115 = 115K 120 = 120K 130 = 127 to 130K	K = 208/230-1-60 H = 208/230-3-60 L = 460-3-60	00 = No Options GC = Low Cab Air Leakage + Tin-Plated Cu Evap Tubes TP = Tin-Plated Evap Tubes LW = Low Cabinet Air Leakage	0 = Standard 1 = Low NOx 2 = Ultra-Low NOx	K

TEMPSTAR®
Heating and Cooling Products

Small Packaged Product Roadmap
- Low NOx and Ultra-Low NOx -

Pre-2023	2023

Low NOx

QuietComfort Series

PGR5 ..... **PGR5**
Year-Round Air Conditoner
Two-Stage Operation
Year-Round Air Conditoner
Stainless Steel Heat Exchanger
Two-Stage Operation

PGS4 ..... **Obsolete**
Year-Round Air Conditoner
Single-Stage Operation

PDS4 ..... **Obsolete**
Dual-Fuel
Sngle-Stage Operation

Performance Series

PGD4 ..... **PGD4***
Year-Round Air Conditoner
Single-Stage Operation
Year-Round Air Conditoner
Stainless Steel Heat Exchanger
Single-Stage Operation

PDD4 ..... **PDD4***
Dual-Fuel
Single-Stage Operation
Dual-Fuel
Stainless Steel Heat Exchanger
Single-Stage Operation

Ultra-Low NOx

QuietComfort Series

PGR5 ..... **PGR5**
Year-Round Air Conditoner
Two-Stage Cooling
Single-Stage Heating
Year-Round Air Conditoner
Stainless Steel Heat Exchanger
Two-Stage Cooling
Single-Stage Heating

PGS4 ..... **Obsolete**
Year-Round Air Conditoner
Two-Stage Cooling
Single-Stage Heating

Performance Series

PGD4 ..... **PGD4***
Year-Round Air Conditoner
Single-Stage Operation
Year-Round Air Conditoner
Stainless Steel Heat Exchanger
Single-Stage Operation

* Aluminum standard indoor coil

TEMPSTAR®
Heating and Cooling Products

Notes

TEMPSTAR®
Heating and Cooling Products

Notes

TEMPSTAR®
Heating and Cooling Products

A Proud Member of the Carrier Family

Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice or without incurring obligations.

AP-006-TS-00

TEMPSTAR®
Heating and Cooling Products

2023 SPLIT SYSTEM COMPLIANCE FOR EXISTING INVENTORY

New DOE Minimum Efficiency Requirements

Beginning January 1, 2023, the DOE is increasing the minimum efficiencies for central air conditioners and heat pumps.

- For air conditioners in the North, the minimum efficiency will increase from 13.0 to 14.0 SEER under today's M test procedure
- For air conditioners in the South, the minimum efficiency will increase from 14.0 to 15.0 SEER under today's M test procedure
- The national heat pump minimum efficiency will increase from 14.0 to 15.0 SEER under today's M test procedure

Compliance for Existing Split System AC Inventory

Split system AC equipment manufactured prior to December 31,2022, ***can be installed*** in the South or Southwest Regions after January 1, 2023, if the units meet the following requirements:

1 If the model is discontinued by Tempstar, the least efficient coil-only SEER rating, as listed on the EnergyGuide label, must be greater than or equal to the following:

< 45,000 Btu	≥ 45,000 Btu
15.0 SEER	14.5 SEER
If the EnergyGuide label includes a range for the least efficient SEER rating, the lower SEER rating should be used	
SEER ratings sourced from Federal Register Vol. 82, No. 4, page 1615	

2 If the model will continue to be sold by Tempstar after January 1, 2023, existing inventory can be sold if its EnergyGuide label shows a least efficient SEER rating that meets the requirements in the table above and the active published SEER2 rating exceeds 14.3.

Note: Tempstar is updating EnergyGuide labels on these products before the compliance date to minimize the amount of inventory that carries over into 2023 with Appendix M EnergyGuide labels.

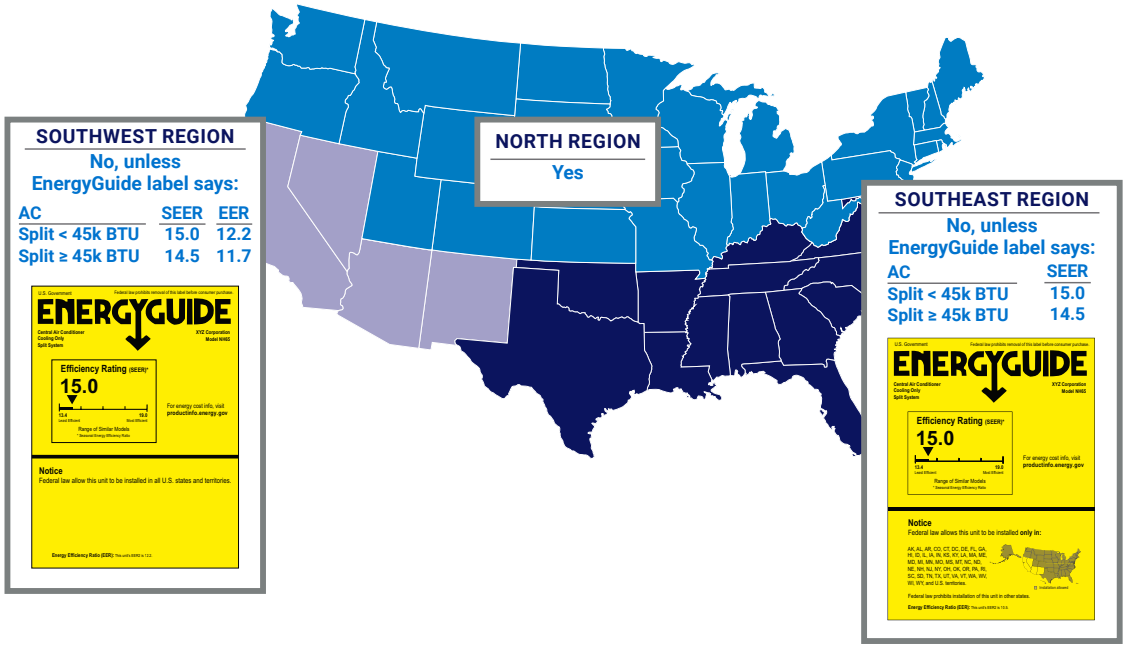
3 In the Southwest region, the equipment must also meet the following EER requirements:

> 15.0 but < 16.0 SEER		≥ 16.0 SEER
< 45,000 Btu 12.2 EER	≥ 45,000 Btu 11.7 EER	10.2 EER

Note: For additional information, visit https://www.energy.gov/gc/legal-resources/office-assistant-general-counsel-enforcement/regional-standards-enforcement

Can I install an air conditioner that was manufactured before 2023 after the January 1, 2023, deadline?

The chart below will help you get your answer depending on the region where your business is located. Check the EnergyGuide labels on your current air conditioner inventory against this chart and be sure to look for the lowest coil-only SEER rating on the label.



Existing Model Sell Through Eligibility in the South

	Pre-2023 Model	Installation After January 1, 2023		
	Tempstar	Southeast	Southwest	North
Deluxe	TVA9**	Yes*	Yes*	Yes
Deluxe	TCA7	No	No	Yes
Deluxe	TSA6	No	No	Yes
Deluxe	TSA5	No	No	Yes
Mid	N4A7	No	No	Yes
Mid	NH4A4	No	No	Yes
Mid	N4A6	No	No	Yes
Mid	NXA6	No	No	Yes
Mid	N4A5	No	No	Yes
Mid	N4A4	No	No	Yes
Mid	NXA4	No	No	Yes
Mid	N4A3	No	No	Yes
R-Series	R4A5	No	No	Yes
R-Series	R4A4	No	No	Yes
R-Series	R4A3	No	No	Yes

* Note: Tempstar is updating EnergyGuide labels on these products before the compliance date to minimize the amount of inventory that carries into 2023 with Appendix M EnergyGuide labels.

** Odd sizes qualify for the SW; Even sizes qualify for the SE and N.

We are **#2023READY** and we want you to be too.
Visit *HVACpartners.com* or contact your Tempstar sales representative for the very latest information.

AP-005-TS-00
9/2022