



**CHAMPION® MOMENTUM™**  
**VARIABLE CAPACITY RESIDENTIAL SYSTEMS**

  
**CHAMPION®**  
HEATING AND COOLING

# BRING IT.

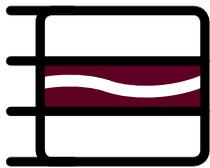
Sweltering heat. 90% humidity. Sub-zero wind chills. When the weather gets extreme, or your life becomes more mobile, it's "game on" with **Champion® Momentum™ Variable Capacity Residential Systems**. Home heating and air conditioning is now smarter, more connected, more efficient and more reliable than ever before. It's home comfort that operates at peak performance – and that keeps you in control – right when you need it. And it's a new way of thinking about home comfort that can only be found in these game-changing Champion® systems:

- Momentum™ Series AL21 air conditioner and HL20 heat pump
- Momentum™ Series TP9C and TPLC furnaces
- Momentum™ Series AVV and MVC air handlers with CM coils
- Momentum™ Hx™ Touch-screen Thermostat

Champion® Momentum™ Variable Capacity Residential Systems are designed for living. So when the weather gets extreme, you'll never need to compromise.







## PRECISE

### Variable Capacity for Consistent Comfort

Even, consistent comfort without the temperature swings associated with typical, staged heating and air conditioning systems. That's just one benefit of a Champion® Momentum™ Variable Capacity System. It dynamically controls the compressor, outdoor fan and indoor blower to maximize comfort while minimizing both power consumption and sound. The steady, near-silent operation of a Champion® Momentum™ system is so smart and makes you so comfortable, you may not even realize it's running.

## INTELLIGENT

### Self-Monitoring Is Standard

Champion® Momentum™ Variable Capacity Systems feature built-in *Charge Guard™* monitoring to provide your contractor with all the information they need to evaluate the system refrigerant charge without connecting gauges, sensors or accessories. The result is faster system setup, more efficient routine maintenance and maximized service life. This self-monitoring system also notifies you – and your servicing contractor, if desired – of any issue that may require attention and helps your contractor address them more quickly. Advanced monitoring that communicates – now that's smart *and* efficient.

## CONNECTED

### Control at Your Fingertips

As part of a complete Champion® Momentum™ system, our Wi-Fi®-enabled Momentum™ Hx™ Touch-screen Thermostat provides the ability to monitor and control system settings from anywhere in the world with internet access. It's a system so smart, it can notify you of an emerging issue before your comfort is interrupted. An easy-to-use interface available through your smart device gives total control over all this functionality. In addition, Momentum™ Series communicating outdoor units integrate with our Momentum™ Hx™ Touch-screen Thermostat and a communicating indoor unit to provide easier troubleshooting and superior performance. It's complete control at the touch of a finger.



## EFFICIENT

### Not Just Efficient – Certified Efficient

Thanks to inverter-driven, variable capacity technology and advanced system optimization, Champion® Momentum™ Series AL21 air conditioners and HL20 heat pumps are the most efficient in the entire Champion® product line-up: up to 20 SEER rated and ENERGY STAR® Most Efficient certified. That means you could cut energy costs as much as 50% versus older, 10 SEER units. And your new Champion® Momentum™ system may also qualify for a utility rebate worth hundreds of dollars. These systems are so advanced, they automatically adjust to precisely meet your exact comfort needs.

## WORRY-FREE

### Performance You Won't Have to Think About

Champion® Momentum™ systems have been subjected to over 20 years of accelerated operational testing for weather, humidity and temperatures down to -10 degrees. These industry-leading trials are backed by the same quality control processes used by Johnson Controls, an advanced manufacturing leader, to help ensure world-class quality and lasting performance. And with your permission, a dedicated app can even allow your dealer to monitor and diagnose your system remotely to provide additional peace-of-mind. It's advanced technology built with uncompromising Champion® quality you won't have to think about.

## INTEGRATED

### Proof That Together Is Better

Champion® Momentum™ Variable Capacity Residential Systems bring together state-of-the-art technology with carefully matched equipment to deliver an unparalleled combination of precision and efficiency. Optional system-matched humidifiers, and dehumidifiers; germ-killing UVC lighting; and high-efficiency, MERV 16 rated filtration provides a superior level of air quality and freedom from airborne contaminants. Because true comfort is more than just temperature.



# Comfort Without Compromise.

## A Promise of Quality

Our promise of quality is uncompromising. That's why Champion® residential systems are designed, engineered and assembled in the United States. The Momentum™ Series TP9C gas furnace has been recognized as a *Consumers Digest* Best Buy. Champion® Momentum™ outdoor units are also backed by an unmatched, limited 1-year labor warranty, lifetime compressor and 10-year parts limited warranties on registered products. With a Champion® Momentum™ system, you're investing in performance, efficiency and reliability that raises the bar.

## Technology for Real Life

Imagine a system that comes with preconfigured operating profiles based on the climate where you live, giving the contractor the ability to quickly adjust the system for your specific needs. We call that innovative technology *Climate Mark™*, and it can only be found in new Champion® Momentum™ outdoor heat pump and

air conditioner units. Another feature that helps your installer tailor the system to your location is *EnviroTrak™*, which allows further fine-tuning of the blower operation for specific applications. And because we believe your new Champion® Momentum™ system should be felt, not heard, our *ShadowDrive™* suite of engineered sound-defeating technologies reduce outdoor operating sound levels to no more than a typical kitchen dishwasher. These are just a few of the ways the Champion® Momentum™ system has been designed to make your life more comfortable than ever.

The new Champion® Momentum™ Variable Capacity Residential Systems raise the bar in home comfort performance, control and quality. Because in our quest to make home comfort that delivers peak performance while keeping you in complete control, we examined every detail that matters to you. And the result is a home comfort system that changes the game: Champion® Momentum™ Variable Capacity Residential Systems. Game on.



## MOMENTUM™ SERIES AL21 AIR CONDITIONER AND HL20 HEAT PUMP

No-compromise home comfort through advanced technology.

- Advanced design dynamically adjusts capacity and airflow to precisely match changing comfort needs for maximum comfort and minimized power consumption. In fact, these ENERGY STAR® Most Efficient qualified models can cut energy costs by as much as 50% compared to older, 10 SEER units.
- An Innovative *ShadowDrive™* Sound Reduction system includes swept wing fan, composite base pan and sound containment cloak to reduce sound levels to no more than a typical kitchen dishwasher.
- Convenient *Climate Mark™* technology provides a selection of preconfigured operating profiles to optimize the system for operation in your specific climate.
- Advanced *Charge Guard™* charge monitoring provides a direct readout of the high and low system pressures and the suction and liquid line temperatures, while also calculating system superheat and system sub cooling. This helps ensure the system is properly optimized for faster installation and service, maximized service life and added peace of mind.
- AL21 and HL20 units feature an unmatched limited 1-year labor warranty, lifetime compressor and 10-year parts limited warranties on registered outdoor units.



## MOMENTUM™ SERIES AVV AND MVC AIR HANDLERS

Our most comfortable, most efficient air handlers.

- Variable-speed technology circulates air more quietly and more precisely, dynamically adjusting capacity and airflow to accurately match changing comfort needs for maximum comfort and minimized power consumption. They also happen to use up to 80% less electricity than the conventional PSC blowers typically found in base model air handling units.
- Exclusive MaxAlloy™ corrosion-resistant aluminum coils with a system-matched Electronic Expansion Valve (EEV) provide efficient airflow and heat exchange. In addition, they use low retention, corrosion-resistant drain pans to prevent the formation or collection of bacteria, mold or other airborne irritants.
- *EnviroTrak™* technology allows blower settings to be customized for different comfort needs.
- As part of a complete Momentum™ communicating system, performance and efficiency are optimized via an easy connection to our Champion® Momentum™ Hx™ Touch-screen Thermostat.
- Low-air leakage cabinets (less than 2.0% leakage when tested at 1.0" Esp.) minimize loss and infiltration compared to typical cabinet designs. These compact cabinets are only 20.5" deep, and feature an automotive-grade powder coat finish to ensure they'll look great for years.



## MOMENTUM™ SERIES TP9C AND TPLC FURNACES

Setting new standards for high efficiency.

- Modulating burner design and variable-speed ECM blower motor work in conjunction to provide more even, more efficient air circulation that is also quieter in operation.
- Installation-friendly features include a compact 33" height, reinforced cabinet doors, quarter-turn knobs and a rotatable inducer for top or side venting to accommodate optional air quality features.
- Model TP9C condensing-type gas furnace units are above 95% AFUE and up to 98% on modulating units. They have earned a *Consumers Digest* Best Buy recommendation.
- *EnviroTrak™* technology allows the blower operation to be fine-tuned for every installation, whether to compensate for arid environments or to maximize the use of additional air quality accessories.
- A patented, 3-way drain connection with built-in trap allows condensation to drain in horizontal, up- or down-flow applications without impeding access to the blower or restricting air flow through the filter.
- Robust, time-tested construction is backed by a 10-year Complete Assurance™ Warranty Pledge: With proper registration, if the heat exchanger fails within 10 years of installation, we provide optional furnace replacement in lieu of heat exchanger equipment.



## MOMENTUM™ Hx™ TOUCH-SCREEN THERMOSTAT

Complete control, even on the go.

- As part of a complete system, the Wi-Fi®-enabled Champion® Momentum™ Hx™ Touch-screen Thermostat provides precision comfort with ability to monitor and control the system using a smart device from anywhere in the world with internet access.
- Downloadable app with a proprietary interface provides intuitive, easy-to-use control.
- Over-the-air updates ensure the system is always up-to-date.
- Programmable reminders and selectable operating modes allows you to customize your system for more personalized comfort and maximized efficiency.
- A selectable auto-humidity feature sets itself based on variances between indoor and outdoor conditions.
- Optional alerts can notify you anytime an emerging or immediate service need is identified.
- With your permission, a dedicated app can allow your dealer to remotely monitor the system for alerts, view system diagnostics and even make any necessary operating adjustments – providing an all new level of personalized service and support.
- Engineered by the experts at Champion® to provide ENERGY STAR® Most Efficient performance when connected to a Champion® Momentum™ Variable Capacity Residential System.

### AL21-VARIABLE CAPACITY AIR CONDITIONER

MODEL	TONS	SEER	EER	H	W	D
AL2124B21SA	2.0	19.25	14.0	40-1/4	32	35-1/2
AL2136B21SA	3.0	17.25	12.75	40-1/4	32	35-1/2
AL2148B21SA	4.0	19.25	13.0	43-1/4	34-1/2	38-1/4
AL2160B21SA	5.0	19.5	12.75	46-1/2	34-1/2	38-1/4

### HL20-VARIABLE CAPACITY HEAT PUMP

MODEL	TONS	SEER	HSPF	H	W	D
HL2024B21SA	2.0	19.4	11.0	40-1/4	32	35-1/2
HL2036B21SA	3.0	20.0	11.0	40-1/4	32	35-1/2
HL2048B21SA	4.0	19.3	10.5	46-1/2	34-1/2	38-1/4
HL2060B21SA	5.0	18.8	10.5	46-1/2	34-1/2	38-1/4

### AVV-VARIABLE SPEED AIR HANDLER WITH FACTORY MOUNTED EEV

MODEL	TONS	NOMINAL CFM	H	W	D (CASING)	D (W/DOORS)
AVV25BE121	2.0	800	47-1/2	17-1/2	20-1/2	21-1/2
AVV37BE221	3.0	1,200	47-1/2	17-1/2	20-1/2	21-1/2
AVV37CE221	3.0	1,200	51-1/2	21	20-1/2	21-1/2
AVV38BE221	3.0	1,200	51-1/2	17-1/2	20-1/2	21-1/2
AVV38CE221	3.0	1,200	55-3/4	21	20-1/2	21-1/2
AVV49CE321	4.0	1,600	55-3/4	21	20-1/2	21-1/2
AVV49DE321	4.0	1,600	51-1/2	24-1/2	20-1/2	21-1/2
AVV50CE321	4.0	1,600	60	21	20-1/2	21-1/2
AVV50DE321	4.0	1,600	60	24-1/2	20-1/2	21-1/2
AVV61CE421	5.0	1,800	60	21	20-1/2	21-1/2
AVV61DE421	5.0	1,800	60	24-1/2	20-1/2	21-1/2

### MVC-VARIABLE SPEED MODULAR AIR HANDLER

MODEL	TONS	NOMINAL CFM	H	W	D (CASING)	D (W/DOORS)
MVC08BN21	2.0	800	21-1/2	17-1/2	20-1/2	21-1/2
MVC12BN21	3.0	1,200	21-1/2	17-1/2	20-1/2	21-1/2
MVC14DN21	3.5	1,400	22-1/2	24-1/2	20-1/2	21-1/2
MVC16CN21	4.0	1,600	22-1/2	21	20-1/2	21-1/2
MVC20DN21	5.0	1,800	22-1/2	24-1/2	20-1/2	21-1/2

Momentum™ Series Variable Capacity Systems require a CM coil match with MVC Air Handler.

### TP9C-UP TO 98% AFUE MODULATING GAS FURNACE

MODEL	INPUT MBH HIGH	OUTPUT MBH HIGH	AFUE %	CFM	H	W	D
TP9C060B12MP12C	60	58	97.5	1,200	33	17-1/2	30-1/4
TP9C080B12MP12C	80	77	97.5	1,200	33	17-1/2	30-1/4
TP9C080C16MP12C	80	78	97.7	1,600	33	21	30-1/4
TP9C100C16MP12C	100	97	97.7	1,600	33	21	30-1/4
TP9C100C20MP12C	100	97	97.7	2,000	33	21	30-1/4
TP9C120D20MP12C	120	116	98.0	2,000	33	24-1/2	30-1/4

Momentum™ Series Variable Capacity Systems require a CM coil match with TP9C Furnace.

### TPLC-80% AFUE MODULATING GAS FURNACE

MODEL	INPUT MBH HIGH	OUTPUT MBH HIGH	AFUE %	CFM	H	W	D
TPLC060A12MP12C	60	47	80	1,200	33	14-1/2	30-1/4
TPLC080B12MP12C	80	62	80	1,200	33	17-1/2	30-1/4
TPLC080C16MP12C	80	62	80	1,600	33	21	30-1/4
TPLC100C16MP12C	100	78	80	1,600	33	21	30-1/4
TPLC100C20MP12C	100	78	80	2,000	33	21	30-1/4
TPLC120C20MP12C	120	95	80	2,000	33	21	30-1/4

Momentum™ Series Variable Capacity Systems require a CM coil match with TPLC Furnace.

### CM-MULTI-POSITION CASED COILS WITH FACTORY MOUNTED EEV

MODEL	TONS	H	W	D
CM25BE1A1	2.0	25-5/8	17-1/2	20-1/2
CM37BE2A1	3.0	25-5/8	17-1/2	20-1/2
CM37CE2A1	3.0	25	21	20-1/2
CM38BE2A1	3.0	25-5/8	17-1/2	20-1/2
CM49CE3A1	4.0	33	21	20-1/2
CM49DE3A1	4.0	32-3/4	24-1/2	20-1/2
CM50CE3A1	4.0	37-1/4	21	20-1/2
CM50DE3A1	4.0	37-1/4	24-1/2	20-1/2
CM61CE4A1	5.0	37-1/4	21	20-1/2
CM61DE4A1	5.0	37-1/4	24-1/2	20-1/2



The Champion® Momentum™ Series TP9C modulating gas furnace received the Consumers Digest Best Buy Award.

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HIGH  
EFFICIENCY  
COMFORT SYSTEM



**CHAMPION**<sup>®</sup>

HEATING AND COOLING

Visit [ChampionHomeComfort.com](http://ChampionHomeComfort.com) to learn more about how  
Champion<sup>®</sup> Momentum<sup>™</sup> Variable Capacity Residential Systems  
are the no-compromise solution to your home comfort.

