

SAMSUNG

Hylex™

An HVAC game changer.

The Hylex™ unit is a universal, inverter-driven heat pump that serves as a direct replacement for a traditional cooling-only or heat pump unitary outdoor unit. In other words, the game is about to change for residential HVAC.

Now available with environmentally friendly, low-GWP R-454B refrigerant 



Product Registration Required
Conditions Apply



WORKS WITH
SmartThings



Overview

The Hylex™ from Samsung is compatible with both air handlers and coil-furnace combinations, supporting a wide range of applications for new construction and replacement projects. Designed with installation efficiency in mind, many existing line sets, piping, wiring, and insulation can often be reused, helping reduce labor, minimize disruption, and accelerate project timelines. When paired with the Hylex™ MPAH or A-Coil, the system can be configured as a fully matched solution or matched with AHRI-listed combinations with major manufacturers for added flexibility.

Engineered for dependable performance across varying climates, Hylex™ supports dual-fuel operation, allowing the heat pump to manage everyday heating while a secondary fuel source provides backup during extreme conditions. The system delivers high heating capacity at -4°F (-20°C) and maintains strong operation down to -13°F (-25°C), offering enhanced comfort and runtime compared to traditional unitary systems. Three indoor unit fan speed control further improves efficiency, optimizes dehumidification, and helps reduce sound levels.

With electrification influencing today's HVAC decisions, Hylex™ units are built to perform in environments ranging from mild to harsh conditions. Integrated controls allow compatibility with popular third-party thermostats while enabling SmartThings functionality for monitoring, error notifications, and outdoor unit energy data. When paired with a Samsung communicating thermostat, the system unlocks expanded features such as AI-driven optimization, geofencing, and detailed system insights.

To streamline setup, Samsung provides a web-based configuration tool that guides installers through system setup and generates a summarized settings report — eliminating the need for specialized programming tools or computers. Together, these features deliver a flexible, high-performance solution designed to simplify installation, improve usability, and provide reliable comfort.

Key Features

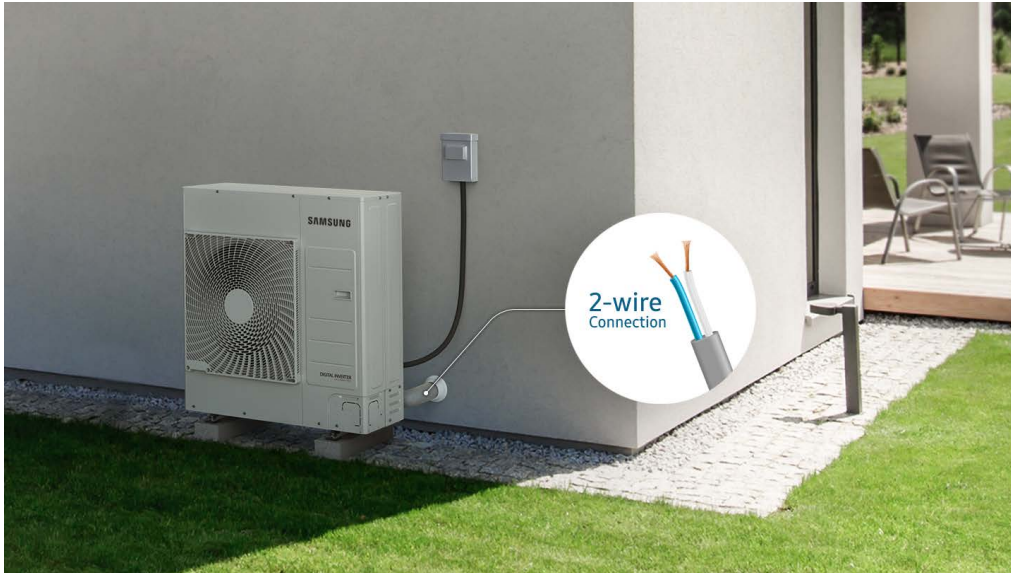
- Dual-fuel capable for optimized comfort and extended system runtime
- High heating capacity at -4°F with dependable low-ambient operation
- Flexible system design compatible with multiple indoor configurations
- Installation-friendly platform that supports reuse of existing infrastructure
- Advanced controls with optional AI-driven optimization and connectivity
- Web-based configuration tool for faster, simplified system setup



samsunghvac.com/unitary-settings

Reuse Existing Controls Wiring

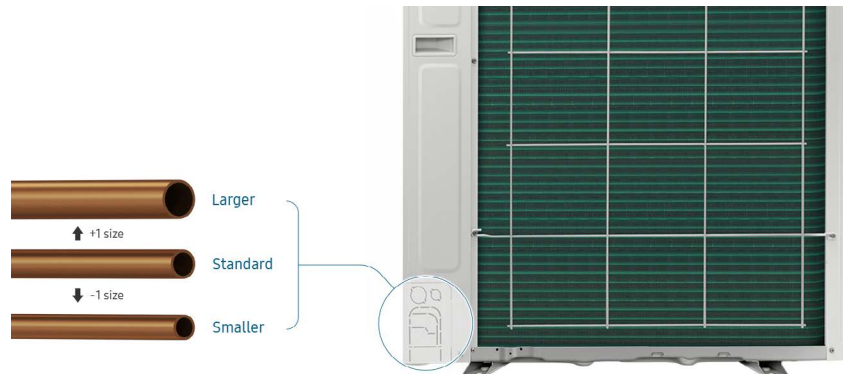
Whether the system is configured as a cooling-only or heat pump, only 2 wires are required between indoor and outdoor sections. In addition, the Hylex™ unit is compatible with virtually any 24VAC thermostat and can use standard solid-core 18 AWG control wire from the outdoor unit to the indoor section and to the thermostat.



Reuse Existing Refrigerant Piping

The Hylex™ unit uses traditional unitary line sets where the liquid pipe does not require insulation and provides three suction pipe diameter options for even greater installation flexibility for replacement applications. The maximum pipe length for all Hylex™ models is 164 ft. with maximum 98 ft. vertical separation, providing even more installation flexibility.

Tier	Capacity (tons)	Suction Pipe			
		5/8"	3/4"	7/8"	1 1/8"
AC0**FCUDCG/AA	2	✓	✓ (Standard)	✓	
	3	✓	✓ (Standard)	✓	
	4		✓	✓ (Standard)	✓
	5		✓	✓ (Standard)	✓
AC0**FCUPCG/AA	2	✓		✓ (Standard)	
	3		✓	✓ (Standard)	✓
	4		✓	✓ (Standard)	✓
	5		✓	✓ (Standard)	✓



Reduced Sound

Variable speed fan motors, specially engineered fan blades, and acoustically designed compressors reduce sound levels as low as 50 dB(A), compared to 68 dB(A) or more for traditional unitary equipment. This makes the Hylex™ unit ideal for zero-lot-line, sound sensitive applications.

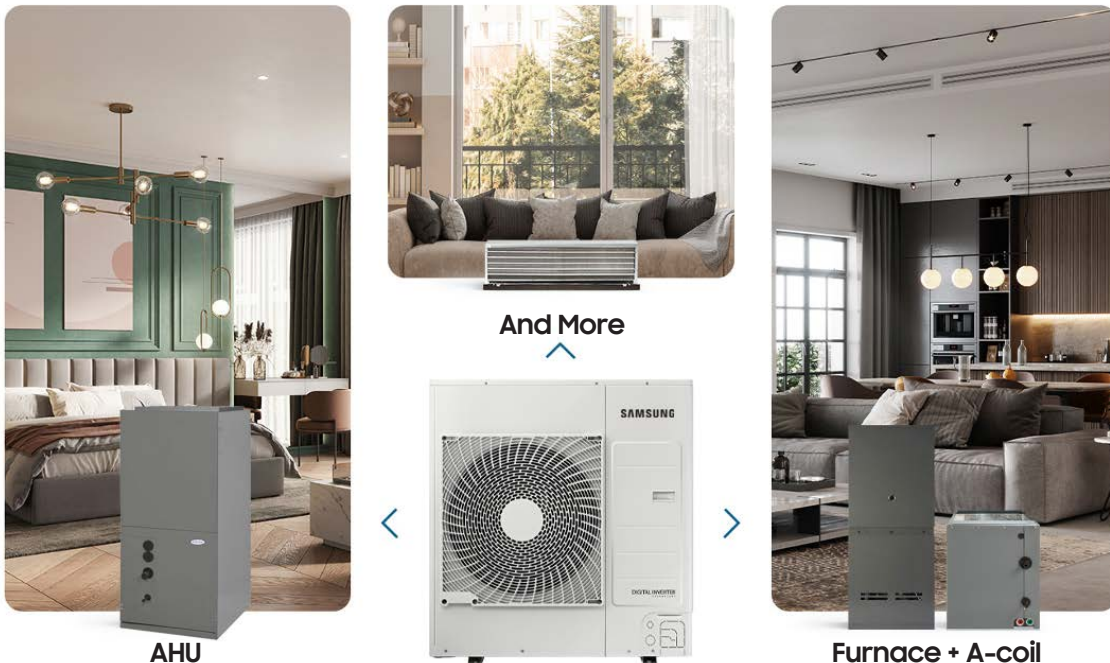
Compact Size

The Hylex™ unit has a smaller footprint compared to a traditional unitary (cube) unit, making it easier to move using a dolly, easier to get through gates and requires less space on the installers truck. In addition, its compact size makes it an ideal solution for new residential zero-lot-line properties.



Connect to Air Handling Units and Coils with TXV Refrigerant Control


Hylex™ Multi-position Air Handling (MPAH) units and A-coils are available for connection to Hylex™ heat pump outdoor units. If your project requires a different indoor unit, Hylex™ outdoor units are universal, inverter driven heat pumps that can connect to any coil with a TXV (conditions apply) that can be applied to full (new system) or partial (replacement) applications where the existing furnace remains in place.



R-454B Hylex™ Standard Lineup

- Capacities from 2-5 tons
- SEER2 up to 15.2
- EER2 up to 11
- HSPF2 up to 8.2
- Connects to any coil with TXV (conditions apply)
- Can be used with a furnace or A-coil for dual fuel applications¹
- Configure as heat pump or cooling-only
- Compatible with virtually any 24VAC thermostat or Samsung communicating controllers
- Features full variable speed compressor with wide modulation
- Base pan heater as standard
- Wi-Fi connectivity for control and monitoring from Samsung's SmartThings home automation platform
- Operating range:
 - » Cooling: -4°F (-20°C) ~ 122°F (50°C)
 - » Heating: Down to -13°F (-25°C)
 - * 2, 3 and 4 ton Models : 100% rated heating capacity at 14°F (-10°C) outside temperature²



Model	AC024FCUDCG/AA	AC036FCUDCH/AA	AC048FCUDCG/AA	AC060FCUDCG/AA
US Model Code	CCG24UDF	CCG36UDF	CCG48UDF	CCG60UDF
Main Benefit	Flexible, inverter driven system capable of cooling, heat pump heating, or dual fuel heating operation (when connected to a furnace) ¹ . Reuse existing line sets and existing wiring simplifies replacement of existing systems..			
Nominal Cooling Capacity	24,000 Btu/h	34,000 Btu/h	46,000 Btu/h	54,000 Btu/h
Nominal Heating Capacity	25,000 Btu/h	36,000 Btu/h	48,000 Btu/h	56,000 Btu/h
SEER2 Rating	up to 15.2	up to 14.6	up to 14.3	up to 14.3
HSPF2 Rating	up to 8.1	up to 8.2	up to 8.0	up to 8.0
Energy Star	No	No	No	No
Energy Star Cold Climate	No	No	No	No
Specifications				

¹Requires a Samsung communicating wired controller or a 24VAC thermostat that supports this capability.

²Refer to capacity tables in outdoor unit technical data book for full capacity details



The Hylex™ heat pump requires an ACU (AHU Control Unit; MXD-U001XN) that installs in between the heat pump outdoor unit, thermostat, and AHU/furnace. In addition to facilitating communication between the Hylex™ outdoor unit and the indoor unit, the ACU provides the installer the option to allow the Hylex™ to fully control the indoor unit fan for improved performance. MXD-U001XN is mandatory and must be purchased separately.




The AHRI Certified® mark indicates Samsung's participation in the AHRI Certification program. For verification of individual certified products, go to www.ahridirectory.org. Performance data certified by AHRI to AHRI 210-240 (2023). Effective January 1st, 2023.



R-454B Hylex™ Premium Lineup

- Capacities from 2-5 tons
- SEER2 up to 17.5
- EER2 up to 12
- HSPF2 up to 9
- Connects to any coil with TXV (conditions apply)
- Can be used with a furnace or A-coil for dual fuel applications¹
- Configure as heat pump or cooling-only
- Compatible with virtually any 24VAC thermostat or Samsung communicating controllers
- Features full variable speed compressor with wide modulation
- Base pan heater as standard
- Wi-Fi connectivity for control and monitoring from Samsung's SmartThings home automation platform
- Operating range:
 - » Cooling
 - ▶ 2 and 3 Ton models: -4°F (-20°C) ~ 126°F (52°C)
 - ▶ 4 and 5 Ton models: -4°F (-20°C) ~ 122°F (50°C)
 - » Heating: Down to -13°F (-25°C)
 - ▶ 2 and 3 Ton models - 100% Rated heating capacity at -4°F (-20°C) outside temperature ²
 - ▶ 4 and 5 Ton models - 100% Rated heating capacity at 14°F (-10°C) outside temperature ²



Model	AC024FCUPCG/AA	AC036FCUPCG/AA	AC048FCUPCG/AA	AC060FCUPCG/AA
US Model Code	CCG24UPF	CCG36UPF	CCG48UPF	CCG60UPF
Main Benefit	Flexible, inverter driven system capable of cooling, heat pump heating, or dual fuel heating operation (when connected to a furnace) ¹ . Reuse existing line sets and existing wiring simplifies replacement of existing systems.			
Nominal Cooling Capacity	24,000	36,000	47,000	55,000
Nominal Heating Capacity	25,000	36,000	48,000	56,000
SEER2 Rating	Up to 17.5*	Up to 17.5*	Up to 17*	Up to 17*
HSPF2 Rating	Up to 8.5*	Up to 8.5*	Up to 8.5*	Up to 9*
Energy Star*	Yes	Yes	Yes	Yes
Energy Star Cold Climate*	Yes	Yes	Yes	Yes
Specifications				

¹Requires a Samsung communicating wired controller or a 24VAC thermostat that supports this capability.

²Refer to capacity tables in outdoor unit technical data book for full capacity details



Product Registration Required.
Conditions Apply.

The Hylex™ heat pump requires an ACU (AHU Control Unit; MXD-U001XN) that installs in between the heat pump outdoor unit, thermostat, and AHU/furnace. In addition to facilitating communication between the Hylex™ outdoor unit and the indoor unit, the ACU provides the installer the option to allow the Hylex™ to fully control the indoor unit fan for improved performance. MXD-U001XN is mandatory and must be purchased separately.



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*Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps (excluding ductless systems) must be matched with appropriate coil components to meet ENERGY STAR criteria. Ask your contractor or visit www.energystar.gov.



R-454B Hylex™ Indoor Unit Lineup

Multi Position Air Handler (MPAH)

- Compatible with R-454B Samsung Hylex™ heat pump outdoor units and ACU
- Simplified low-voltage wiring for ACU-to-AHU connection
- Multi-position installation: upflow, horizontal, or downflow (requires downflow accessory)
- Integrated R-454B leak detection and mitigation
- Low profile chassis for easier installation
- Integral filter rack (filter not included)
- 5-speed high-efficiency ECM motor with optional automatic fan speed control
- Slide-out blower and coil assemblies for easier service
- Heavy-gauge galvanized steel cabinet with foil-faced insulation
- <2% cabinet air leakage for improved efficiency
- Aluminum fin coil with copper connections for field brazing
- Non-bleed R-454B TXV refrigerant control
- Supports 24VAC thermostats or Samsung communicating wired controllers
- Configurable auxiliary heat with ambient lockout
- Optional Wi-Fi control and monitoring via SmartThings®



MPAH Model Number			HH24MCAC11H1	HH24MABC11H1	HH36MCBC11H1	HH36MACC11H1	HH48MCCC11H1	HH60MBCC11H1	HH60MACC11H1
Compatible with	Hylex™ Standard	Tons	2		3		4	5	
	Hylex™ Premium	Tons		2		3		4	5
Electric Heat Kits w/ Breaker	HA05E0CH1	5 kW	✓	✓	✓	✓	✓		
	HA07E0CH1	7.5 kW	✓	✓	✓	✓	✓	✓	✓
	HA10E0CH1	10 kW*	✓	✓	✓	✓	✓	✓	✓
	HA15E0CH1	15 kW			✓	✓	✓	✓	✓
	HA20E0CH1	20 kW					✓	✓	✓
Downflow Kit	HA00DA0H1		✓						
	HA00DB0H1			✓	✓				
	HA00DC0H1					✓	✓	✓	✓

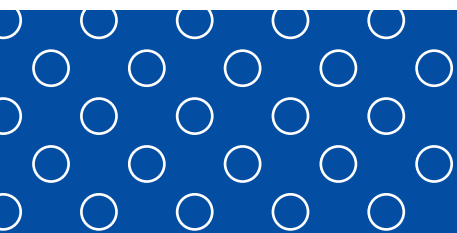
*10kW Electric heat kits cannot be used when applying a downflow conversion kit to 24K Btu/h units.

A-Coil

- Compatible with R-454B Samsung Hylex™ heat pump outdoor units and ACU
- Multi-position installation: vertical or horizontal
- Compact cabinet with factory-installed R-454B leak detector
- Galvanized steel cabinet with foil-faced insulation
- <1% cabinet air leakage for improved efficiency
- Non-bleed R-454B TXV refrigerant control
- Bonded aluminum fin coil with copper connections for field brazing
- Supports 24VAC thermostats or Samsung communicating wired controllers
- Configurable dual fuel and external heat operation
- Adjustable compressor lockout and system changeover settings
- Optional Wi-Fi control and monitoring via SmartThings®
- Antimicrobial-treated, high-temperature polymer drain pan



A-Coil Model Number			HC24MCB021H1	HC36MBB021H1	HC36MCC021H1	HC48MBC021H1	HC60MCD021H1	HC60MBC021H1	HC60MAD021H1
Width (in.)			17.5	17.5	21	21	24.5	21	24.5
Compatible with	Hylex™ Standard	Tons	2	3	3	4 and 5	5		
	Hylex™ Premium	Tons		2		3		4 and 5	5



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