

# 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.



Product Registration Required  
Conditions Apply





# Lineup



- Capacities from 2-5 tons; single and double fan options for 3 ton unit
  - Single fan option when compact installations are needed, two-fan option for maximum efficiency
- SEER2 up to 18.5
- HSPF2 up to 9.0
- Connects to any coil with TXV (conditions apply)
- Can be used with a furnace or A-coil for dual fuel applications<sup>1</sup>
- Configure as heat pump or cooling-only
- Compatible with virtually any 24VAC thermostat
- Features full variable speed compressor with wide modulation
- Base pan heater as standard
- Operating range:
  - Cooling: -4°F (-20°C) ~ 126°F (52.2°C)
  - Heating: Down to -13°F (-25°C)
    - 100% rated heating capacity at 5°F (-15°C) outside temperature<sup>2</sup>

## Overview

The Hylex™ from Samsung is compatible with virtually any existing HVAC system out there. Even better, there's practically no additional equipment needed - no new wires, lines sets or piping when replacing a traditional cooling-only or heat pump unitary outdoor unit. This also makes for much faster and easier installation.

Samsung's innovative design also provides three fan speed control of the indoor unit which increases efficiency, optimizes dehumidification, and reduces sound.

With electrification initiatives driving the consumer decision making process, Hylex™ units were designed for mild to the harshest climates where heat pumps are being installed in place of fossil fuel systems. To promote optimal water drainage during defrost cycles, each unit is equipped with a base pan heater as standard. To ensure the system is configured properly, Samsung has created a web-based tool that asks the installer general system questions and provides a summarized settings report. No special programming tools or computers are required to configure the system.



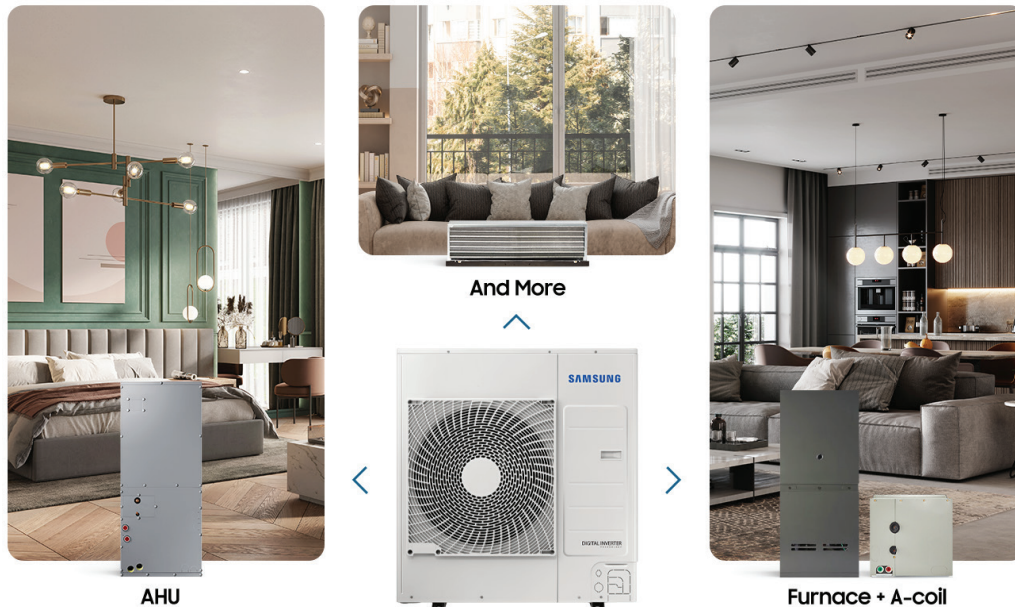
[samsunghvac.com/unitary-settings](https://samsunghvac.com/unitary-settings)

<sup>1</sup>Requires a thermostat that supports this capability

<sup>2</sup>Refer to capacity tables in outdoor unit technical data book for full capacity details

# Connect to Air Handling Units and Coils with TXV Refrigerant Control

Hylex™ 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.



## Reuse Existing Controls Wiring

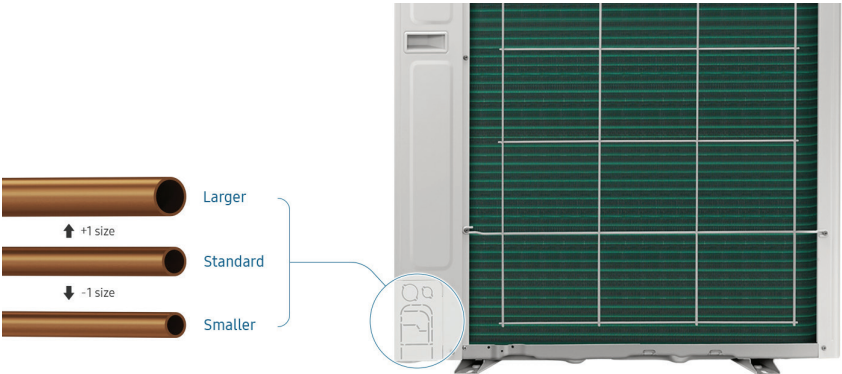
Whether the system is configured as a cooling-only or heat pump, only 2 wires are required between indoor and outdoor sections. In addition, the Hylex™ unit is compatible with virtually an 24VAC thermostat and can use standard solid-core 18 AWG control wire from the outdoor unit to the indoor section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

| Unit                    | Suction Pipe |              |              |       | Pipe Limitations (ft.) |                     |
|-------------------------|--------------|--------------|--------------|-------|------------------------|---------------------|
|                         | 5/8          | 3/4          | 7/8          | 1 1/8 | Length                 | Vertical Separation |
| 2 ton                   | ✓            | ✓ (Standard) | ✓            |       | 100                    | 65                  |
| 3 ton (standard)        | ✓            | ✓ (Standard) | ✓            |       | 164                    | 100                 |
| 3 ton (high efficiency) |              | ✓            | ✓ (Standard) | ✓     | 164                    | 100                 |
| 4 ton                   |              | ✓            | ✓ (Standard) | ✓     | 164                    | 100                 |
| 5 ton                   |              | ✓            | ✓ (Standard) | ✓     | 100                    | 65                  |








## 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.



| MODEL                    | US CODE  |                         | CXH24UPB  | CXH36UDB  | CXH36UPB   | CXH48UPB  | CXH60UPB  |
|--------------------------|--|-------------------------|---|---|--|---|---|
|                          | MODEL NUMBER   |                         | AC024BXUPCH/AA  | AC036BXUDCH/AA  | AC036BXUPCH/AA   | AC048BXUPCH/AA  | AC060BXUPCH/AA  |
| PERFORMANCE <sup>1</sup> | CAPACITY   | COOLING                 | 24,000 Btu/h  | 36,000 Btu/h  | 36,000 Btu/h   | 48,000 Btu/h  | 57,000 Btu/h  |
|                          |  | HEATING                 | 26,000 Btu/h  | 34,600 Btu/h  | 34,600 Btu/h   | 44,000 Btu/h  | 53,000 Btu/h  |
|                          | CAPACITY RANGE   | COOLING                 | 11,000 - 30,000 Btu/h   | 16,500 - 40,000 Btu/h   | 16,500 - 45,000 Btu/h  | 17,500 - 55,000 Btu/h   | 17,700 - 59,000 Btu/h   |
|                          |  | HEATING                 | 7,500 - 35,000 Btu/h  | 10,500 - 37,000 Btu/h   | 13,000 - 50,000 Btu/h  | 13,800 - 62,000 Btu/h   | 14,000 - 65,000 Btu/h   |
|                          | SEER2  |                         | 16.5  | 17.0  | 18.5   | 17.0  | 17.5  |
|                          | EER2   |                         | 10.1  | 9.0   | 10.5   | 8.6   | 8.5   |
|                          | HSPF2(REGION IV)                                       |                         | 8.10  | 8.10  | 8.40   | 8.50  | 9.00  |
| POWER                    | COP2   |                         | 3.12  | 3.18  | 3.02   | 2.58  | 2.64  |
|                          | VOLTAGE  | ø / V / Hz              | 1/208-230 / 60  | 1/208-230 / 60  | 1/208-230 / 60   | 1/208-230 / 60  | 1/208-230 / 60  |
|                          | MAX. BREAKER   |                         | 30 A  | 35 A  | 35 A   | 40  | 40  |
| UNIT DIMENSIONS          | MIN. CIRCUIT AMPACITY                                  |                         | 24.1 A  | 24.4  | 25.6   | 32.7  | 33.2  |
|                          | W X H X D  |                         | 37 X 39 5/16 X 13 in.   | 37 X 39 5/16 X 13 in.   | 37 x 47 5/8 x 13   | 37 x 47 5/8 x 13  | 37 x 55 7/8 x 13  |
|                          | WEIGHT   |                         | 163 lbs.  | 172 lbs.  | 196 lbs.   | 223 lbs.  | 223 lbs.  |
| SOUND LEVEL              | OUTDOOR  | COOLING / HEATING(HIGH) | 50 / 52 dB(A)   | 53 / 53 dB(A)   | 52 / 54 dB(A)  | 55 / 57 dB(A)   | 56 / 58 dB(A)   |
| OPERATING TEMPERATURE    | OUTDOOR  | COOLING*                | -4 - 125°F<br>-20 - 52°C  | -4 - 125°F<br>-20 - 52°C  | -4 - 125°F<br>-20 - 52°C   | -4 - 125°F<br>-20 - 52°C  | -4 - 125°F<br>-20 - 52°C  |
|                          |  | HEATING                 | -13 - 75°F<br>-25 - 24°C  | -13 - 75°F<br>-25 - 24°C  | -13 - 75°F<br>-25 - 24°C   | -13 - 75°F<br>-25 - 24°C  | -4 - 75°F<br>-20 - 24°C   |
|                          |  |                         |   |   |  |   |   |
| PIPE CONNECTIONS         | LIQUID (BRAZE)   |                         | 3/8 in.   | 3/8 in.   | 3/8 in.  | 3/8 in.   | 3/8 in.   |
|                          | SUCTION (BRAZE)  | MINIMUM                 | 5/8 in.   | 5/8 in.   | 3/4 in.  | 3/4 in.   | 3/4 in.   |
|                          |  | STANDARD                | 3/4 in.   | 3/4 in.   | 7/8 in.  | 7/8 in.   | 7/8 in.   |
|                          |  | MAXIMUM                 | 7/8 in.   | 7/8 in.   | 1 1/8 in.  | 1 1/8 in.   | 1 1/8 in.   |
|                          | MAX. LINE SET LENGTH                                   |                         | 98 ft   | 164 ft  | 164 ft   | 164 ft  | 98 ft   |
| REFRIGERANT              | MAX. VERTICAL SEPARATION                               |                         | 49 ft   | 98 ft   | 98 ft  | 98 ft   | 49 ft   |
|                          | TYPE   |                         | R410A   | R410A   | R410A  | R410A   | R410A   |
|                          | FACTORY CHARGE   |                         | 7.06 lbs.   | 7.93 lbs.   | 9.26 lbs.  | 9.26 lbs.   | 10.58 lbs.  |
| COMPRESSOR               | CHARGED FOR  |                         | 24.6 ft   | 24.6 ft   | 24.6 ft  | 24.6 ft   | 24.6 ft   |
|                          | TYPE   |                         | Inverter Driven, Twin BLDC Rotary   | Inverter Driven, Twin BLDC Rotary   | Inverter Driven, Twin BLDC Rotary  | Inverter Driven, Twin BLDC Rotary   | Inverter Driven, Twin BLDC Rotary   |
| CONDENSER FAN            | MOTOR  |                         | BLDC With Axial Type Fan (1)  | BLDC With Axial Type Fan (1)  | BLDC With Axial Type Fan (2)   | BLDC With Axial Type Fan (2)  | BLDC With Axial Type Fan (2)  |
|                          | CFM (MAX.)   |                         | 2,684   | 2,684   | 3,531  | 3,531   | 4,414   |
| ACCESSORIES              | ACU(AHU CONTROL KIT) - MANDATORY                       |                         | MXD-U000XN  | MXD-U000XN  | MXD-U000XN   | MXD-U000XN  | MXD-U000XN  |
|                          | 3 SPEED INDOOR FAN RELAY KIT (FOR USE WITH PSC MOTORS) |                         | URK-3A  | URK-3A  | URK-3A   | URK-3A  | URK-3A  |
|                          | WIND BAFFLE  | FRONT                   | WBF-2M-B  | WBF-2M-B  | WBF-1M2  | WBF-1M2   | WBF-6M  |
|                          |  | BACK                    | WBB-3M  | WBB-3M  | WBB-2M-B   | WBB-2M-B  | WBB-4M  |
|                          | HAIL GUARD   |                         | HGK-3   | HGK-3   | HGK-4  | HGK-4   | HGK-5   |
|                          | EXTERNAL CONTACT CONTROL (FOR MANUAL NIGHT QUIET MODE) |                         | MIM-B14   | MIM-B14   | MIM-B14  | MIM-B14   | MIM-B14   |
|                          | WALL BRACKET (FOR OUTDOOR UNIT)                        |                         | CKN-250   | CKN-250   | CKN-250  | CKN-250   | CKN-250   |
| CERTIFICATIONS           | ENERGY STAR® V6.1 COLD CLIMATE CERTIFIED <sup>2</sup>  |                         |  |  |  |  |  |



Product Registration Required.  
Conditions Apply.

The Hylex™ heat pump requires an ACU (AHU Control Unit; MXD-U000XN) 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-U000XN 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](http://www.ahridirectory.org).

<sup>1</sup>Performance data certified by AHRI to AHRI 210-240 (2023). Effective January 1st, 2023.

<sup>2</sup>Based on connection to specific air handling unit models. Connection to different air handling units or A-coils will result in different capacity and efficiency ratings. Refer to [AHRIdirectory.org](http://AHRIdirectory.org) for a complete list of AHRI listed system combinations.

\*With Wind Baffles



Intertek

Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice.

Select models are Energy Star® labeled. Proper sizing and installation of equipment is critical to achieve 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 for details or visit [www.energystar.gov](http://www.energystar.gov).

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