

# SUBMITTAL DATA SHEET



**ECHOLON™ SERIES VARIABLE CAPACITY  
SPLIT SYSTEM HEAT PUMPS  
20 SEER – R-410A – 1 PHASE – 2 THRU 5 NOMINAL TONS  
MODELS: HC20B24 THRU 60**

JOB NAME:		LOCATION:		
PURCHASER:		ORDER NO.:		
ENGINEER:				
SUBMITTED TO:	FOR:	REF:	APPROVAL:	CONSTRUCTION:
SUBMITTED BY:		DATE:		
UNIT DESIGNATION:		SCHEDULE NO.	MODEL NO.	

## PRODUCT DATA

**Cooling Performance**

Total Capacity \_\_\_\_\_ MBH

Outdoor Design Temp \_\_\_\_\_ °F

**Heating Performance**

Total Capacity \_\_\_\_\_ MBH

Outdoor Design Temp \_\_\_\_\_ °F

**Electrical Data**

Power Supply \_\_\_\_/\_\_\_\_/\_\_\_\_

Compressor Ampacity \_\_\_\_\_ AMPs

Total Unit Ampacity \_\_\_\_\_ AMPs

Power Input Req \_\_\_\_\_ KW

Minimum Wire Size \_\_\_\_\_ AWG

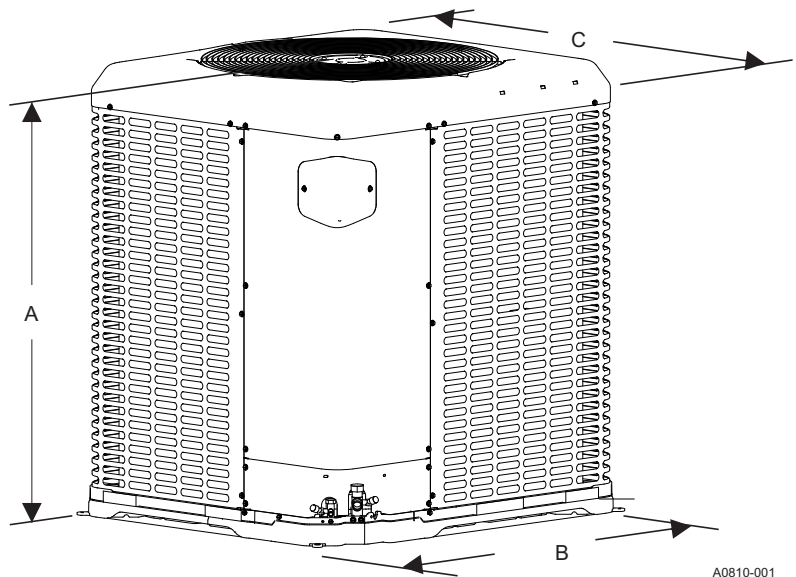
Maximum Overcurrent Device

Fuses    Circuit Breaker

**Unit Weight**

Unit Weight \_\_\_\_\_ LBS

## DIMENSIONS - INCHES



A0810-001

## DIMENSIONS

Unit Model	Dimensions (Inches)			Refrigerant Connection Service Valve Size	
	A	B	C	Liquid	Vapor
HC20B2421S	40-1/4	35-1/2	32	3/8	3/4
HC20B3621S	40-1/4	35-1/2	32		7/8
HC20B4821S	46-1/2	38-1/4	34-1/2		7/8**‡
HC20B6021S	46-1/2	38-1/4	34-1/2		

\*\* 7/8" lineset required if line is over 25' or if there is any vertical rise.

‡ Adapter fitting must be field installed for a 1-1/8" line set.

All dimensions are in inches and are subject to change without notice.

Overall height is from bottom of base pan to top of fan guard.

Overall length and width include screw heads.

## WARRANTY SUMMARY\*

Extended 10-Years limited parts warranty.

Extended Lifetime limited compressor warranty.

**Extended parts and compressor warranties** require online registration within 90 days of purchase for replacement or closing for new home construction.

\*Does not apply to R-22 models, 3-Phase models, or Internet sales.

See Limited Warranty certificate in User's Information Manual for details.



ISO 9001  
Certified Quality  
Management System



## FEATURES

- **Superior Coil Protection** – An easily removable two-piece steel extruded louver coil guard protects the tube-in-fin coil from debris and physical damage while making access for coil cleaning quick and simple.
- **Environmentally Friendly Refrigerant** – The next generation refrigerant R-410A delivers environmentally friendly performance with zero ozone depletion.
- **Durable Finish** – A high quality powder paint finish rated at 1000 hrs. salt spray provides the ultimate protection from corrosion and harmful UV rays, ensuring a long-lasting, high quality appearance.
- **Charge View™** – A built-in touch screen instantly displays the system conditions, including the system pressures and refrigerant charge without the need to attach additional gauges or sensors.
- **WhisperDrive™ System** – Features a combination of engineered, sound-neutralizing attributes such as a swept-wing fan blade, composite base pan, multi-density compressor cloak and variable capacity operation to reduce sound levels to that of a mere conversation.
- **ECM Fan Motor** – Dynamically adjusts speed in sync with the compressor demand to keep heat exchange in balance while minimizing power consumption and sound.
- **Swept Wing Fan** – A design adapted from aerospace engineering provides whisper-quiet operation by allowing air to flow smoothly and efficiently across the fan surface and edges.
- **Composite Base Pan** – The strong and durable composite base pan is corrosion resistant while adding strength, absorbing sound, and reducing vibration.
- **High-Efficiency Outdoor Coil** – An aluminum fin and copper tube outdoor coil provide easy cleaning, low restriction to airflow and efficient heat exchange.
- **Factory Installed Filter-Drier** – A corrosion resistant, powder painted, stainless steel, solid core, bi-directional liquid line filter-drier removes debris and moisture which can be harmful to the system.
- **Climate Connect™** – provides pre-configured operating profiles the installing contractor can select during set-up to fine tune the system's operation for either Humid, Dry, or Normal climates. Additional fine-tune adjustments are always available to provide a custom comfort solution.
- **Easy Service Access** – A large electrical box cover, independent Charge View access, and a swing open electrical box provide superior full corner access to the inside of the unit for maintenance or service.
- **Dual Fuel Ready** – Using the Echelon Hx™ thermostat, the HC20 will work seamlessly with an communicating 80 or 90% gas furnace to provide the ultimate year round dual fuel comfort solution.
- **System Protection** – All HC20 heat pumps have a factory installed suction accumulator to protect the system from anomalous occurrences. Each system contains high and low pressure transducers which constantly monitor system performance and can alert the consumer or contractor system concerns or alerts.
- **EEV Controls** – All indoor coils, whether in the cased CM coil or in the AVV air handler, have factory installed EEVs (Electronic Expansion Valves). The HC20 outdoor units also employ an EEV to precisely control refrigerant flow, optimizing capacity and efficiency.

- **Communications Capable** – Requiring only 3 thermostat wires between the outdoor and indoor units, the communicating system provides self-commissioning on start-up as well as the ability to check system status at the outdoor unit, thermostat, or remotely using the designated App.
- **Advanced System Control** – The proprietary Wi-Fi Hx™ thermostat interface is an integral part of this innovative system design. Using the Consumer App, consumers can monitor and adjust their system from anywhere in the world using a smart device. Contractors can use the Service App (with homeowner permission), to monitor the system remotely and make adjustments as needed. The system can be configured to provide alerts for emerging issues as well as items that require immediate attention.
- **Variable Capacity Inverter Controlled Scroll Compressor** – Constantly monitors and dynamically adjusts system capacity in precise increments as necessary to closely meet the comfort demands of the conditioned space.
- **Premium System Warranty\*** – Limited lifetime compressor warranty when registered online within 90 days of installation.
- **Agency Listed** – Safety certified by CSA to UL 1995 / CSA 22.2. Performance certified to ANSI/AHRI Standard 210/240 in accordance with the Unitary Small Equipment certification program.

## TYPICAL CLEARANCES

The minimum clearances for a typical installation are shown below. See the Technical Guide for alternate installations.

- 10" Clearance Coil Area
- 48" Overhead Clearance
- 18" Minimum Service Panel Access
- 24" Minimum Unit to Unit Distance

## MATCHING AIR SIDE EQUIPMENT

Model No.  \_\_\_\_\_  
Submittal Form No.  \_\_\_\_\_

## FIELD INSTALLED ACCESSORIES

OD Thermostat for Electrical Heat Staging S1-37327982001  
Support Feet (S1-HPRKIT-\_\_\_\_\_) \*  
Anchor Bracket Kit (S1-1HK0401)  
Wall Mount Kit (S1-ACB-\_\_\_\_\_) \*  
Touch-up Paint (S1-5130153\_\_\_\_\_)

**Thermostat** - These advanced, communicating, variable capacity designs require the Coleman Hx™ Touchscreen Thermostat (S1-THXU280) available through Source1. For more information, see the thermostat section of the Product Equipment Catalog.

\* See price pages for accessory information.

*Refer to Technical Guide for detailed specifications on the unit and its accessories.*

*Verify the actual ratings for each specific match-up in the online AHRI directory at [www.ahridirectory.org](http://www.ahridirectory.org) at the time of bid or sale. It is also recommended to print the rating certificate, if needed, at the time of bid or sale.*