MINI SPLIT COST BREAKDOWN

Electrical
Provide and install:
30a 240v OCPD in existing house panel
30a 10/2 romex feeder from house panel to exterior location
Remove and reinstall drywall
$2,539.45

HVAC
Single
Install outside unit with wall mount bracket
Install line set to interior head unit
Install head unit
Remove and reinstall drywall
$6,823.55

Double
Install outside unit with wall mount bracket
Install line sets to interior head units (2)
Install head unit (2)
Remove and reinstall drywall
$12,701.70

SAMSUNG

SUBMITTAL AR18CSFCMWKNCV (RNS18CMC) For Multi-Zone Systems

Samsung WindFree™* 3.0e, wall mounted evaporator

Job Name _____ Location _____

Purchaser _____ Engineer _____

Submitted to _____ Reference ☐ Approval ☐ Construction ☐

Unit Designation _____ Schedule # _____

Specifications

Model	US Code		RNS18CMC
	Model Number		AR18CSFCMWKNCV
Performance	Nominal Capacity	Cooling (Btu/h)	18,000
		Heating (Btu/h)	21,000
Power	Voltage	ø / V / Hz	1 / 208-230 / 60
	Operating Current (Max.)	Cooling (A)	0.5
		Heating (A)	0.5
Evaporator Fan	Type		BLDC motor with cross-flow fan
	Consumption	Watts	27
	FLA	Amps	0.12
Airflow	Air Volume (L/M/H/Turbo)	Cooling (CFM)	445 / 494 / 540 / 586
		Heating (CFM)	445 / 494 / 540 / 586
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
Pipe Connections	Indoor & Outdoor	High side (flare)	1/4"
		Low side (flare)	1/2"
	Condensate Connection		11/16" OD
Dimensions	W X H X D (in.)	Indoor Unit	41-9/16 x 11-3/4 x 8-7/16
	Weight (lbs.)	Indoor Unit	25.4
Sound Pressure Level	Low / High	dB(A)	41 / 27
Accessories	Wired Controllers	Advanced	☐ MWR-WG00UN
		Simple Touch	☐ MWR-SH11UN
	Wired Controller Sub-PCB		☐ MIM-A00UN
	24VAC Thermostat Adapter		☐ MIM-A60UN
	Condensate Pump	Aspen Mini Orange	☐ ASP-MO-UNIV 110-250
		Blue Diamond	☐ BD-BLUE-230
	External Temperature Sensor		☐ MRW-TA
	External Contact Control Card Interface		☐ MIM-B14
	Line Sets - insulated and flared; interconnect cables included		☐ 25' - ILS2507
			☐ 50' - ILS5007
Safety	Certifications		UL 60335-2-40

*The WindFree™ unit delivers an air current that is under 0.15 m/s while in WindFree™ mode. Air velocity that is below 0.15 m/s is considered "still air" as defined by ASHRAE (American Society of Heating, Refrigeranting, and Air Conditioning Engineers).

**For reference only; not revenue grade.

[1]Sub-PCB model MIM-A00UN is required when connecting optional wired controllers or MIM-A60UM 24VAC thermostat adapter.

[2]When applying MIM-B14 external contact control interface module, MIM-A00UN wired controller sub-PCB is required.

Samsung HVAC maintains a policy of ongoing development. Specifications are subject to change without notice. Refer to www.AHRIdirectory.org for current reference numbers.

General Information
- The indoor unit shall feature WindFree™* mode. In cooling mode, as room temperature nears set temperature, the unit will close its louver and will disperse air into the space through thousands of micro-holes on the front of the indoor unit preventing cold air drafts on occupants.
- The indoor unit shall have Wi-Fi capability as standard.
- The indoor unit shall be powered by the outdoor unit.

Construction
- Indoor unit chassis shall be UL94 V0 with a galvanized steel mounting bracket
- The indoor unit shall have easy-access to wire, pipe, and drain connections via access panel on the bottom of the unit for simple installation and service

Heat Exchanger
- The heat exchanger shall be mechanically bonded fin to copper tube

Indoor Fan
- The indoor fan shall be a single, antibacterial cross-flow type
- Three fan speed settings and auto setting
- Automatic (motorized) vertical swing (up/down) and horizontal swing (left/right) louvers

Controls
- The system shall have a built in Wi-Fi adapter as standard to allow control and monitoring using the Samsung SmartThings app (Android, iOS)
- Dual set temperature support when connected to MWR-WG00UN Advanced Wired Controller.
- The indoor unit shall have a simple connection for overflow detection devices or any other normally closed contact for simple unit shutdown
- The indoor unit shall ship with a wireless controller, holder, and batteries
- Wired controller options available
- Interconnect control wire between outdoor and indoor unit shall be 16AWG X 2

Convenience
- System energy consumption can be viewed using the Samsung SmartThings mobile app or on the indoor unit display using the included wireless controller**
- Auto Clean Function
- 7-segment digital display on front of unit to display temperature and unit status
- Auto changeover
- Good Sleep mode
- Quiet mode
- Dry mode
- Simple ON/OFF time function – Using the wireless controller specify the ON and/or OFF times
- Electro-static, washable, main filter as standard accessible from the top of unit
- Filter cleaning reminder

Compatibility
- Refer to the FJM outdoor unit submittal data or technical data book for complete compatibility listings.

C ETL LISTED US Intertek

SAMSUNG

SUBMITTAL AR18TSFABWKNCV / AR18TSFACWKXCV

Samsung "Max Heat 2.0", wall mounted evaporator, split system

Job Name _____ Location _____

Purchaser _____ Engineer _____

Submitted to _____ Reference ☑ Approval ☐ Construction ☐

Unit Designation _____ Schedule # _____

		Specifications	
Model	US Code	Indoor Unit	RNS18ABT
		Outdoor Unit	RXS18ACT
	Model Number	Indoor Unit	AR18TSFABWKNCV
		Outdoor Unit	AR18TSFACWKXCV
	Nominal Capacity [1]	Cooling / Heating (Btu/h)	18,000 / 20,600
	Capacity Range	Cooling (Btu/h)	7,500 - 23,884
		Heating (Btu/h)	7,000 - 37,000
Performance	SEER / EER		21 / 13
	COP	Nominal Heating	3.7
	HSPF		10
	AHRI Reference Number		205132635
Power	Voltage	Ø / V / Hz	1 / 208-230 / 60
	Working Voltage Range (VAC)		176 - 254
	Operating Current (Min./Std./Max.)	Cooling (A)	2.5 / 6.2 / 11.2
		Heating (A)	2.3 / 7.3 / 17.1
	Max. Breaker	Amps	30
	Min. Circuit Ampacity (A)		20
Dimensions	W X H X D (in.)	Indoor Unit	41 17/32 X 11 3/4 X 8 7/16
		Outdoor Unit	34 5/8 X 31 7/16 X 12 3/16
	Weight (lbs.)	Indoor Unit	27.6
		Outdoor Unit	122.6
	Condensate Connection		11/16" OD
Sound Pressure Level	Indoor Unit	Low / High (dB)	25 / 42
	Outdoor Unit	High (dB)	51
Operating Temperatures	Outdoor	Cooling	0° ~ 115°F (-17.7° ~ 46.1°C)
		Heating	-13° ~ 75°F (-25° ~ 23.9°C)
	Indoor	Cooling	61° ~ 90°F (16° ~ 32°C)
		Heating	81°F (27°C) or less
Pipe Connections	Indoor & Outdoor	High side (flare)	1/4"
		Low side (flare)	1/2"
	Maximum / Minimum Line Set Length (ft.)		98 / 9.8
	Maximum Vertical Separation (ft.)		66
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
	Factory Charge	oz.	63.5
	Charged for		25 feet
	Additional Refrigerant		0.16 oz. / ft. over 25 ft.
Compressor	Manufacturer		Samsung
	Type		BLDC Rotary
	RLA	A	15.2
Evaporator Fan	Type		BLDC motor with cross-flow fan
	Air Volume (L/M/H/Turbo)	Cooling (CFM)	399 / 466 / 533 / 579
		Heating (CFM)	424 / 491 / 554 / 600
	Consumption	Watts	27 X 1
	FLA	Amps	0.12
Condenser Fan	Motor		BLDC motor with axial fan (1)
	Output	Watts	125
	FLA	Amps	0.48
	Air Volume	CFM (max.)	2,225
Safety	Certifications		ETL (UL 1995)
	Devices		PCB fuses, indoor unit terminal block thermal fuse, current transformer, over-voltage protection, crankcase heating, temperature limit protection logic, compressor overload sensing

[1] Certified in accordance with the AHRI Unitary Small Air-Source Heat Pumps (USHP) Certification Program which is based on the latest edition of AHRI Standard 210/240.

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 for details or visit www.energystar.gov.

*The Wind-Free™ unit delivers an air current that is under 0.15 m/s while in Wind-Free™ mode. Air velocity that is below 0.15 m/s is considered "still air" as defined by ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers).

Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice. Refer to www.AHRIdirectory.org for current reference numbers.

(actual equipment appearance may vary)

General Information
- The Samsung Max Heat system shall provide 100% heating capacity at 5°F outdoor temperature and high heating capacity at -13°F outdoor temperature.
- The outdoor unit shall have a base pan heater as standard to ensure optimal defrost cycle water drainage.
- The indoor unit shall feature "Wind-Free™" mode*. In cooling mode, as room temperature nears set temperature, the unit will close its louver and will disperse air into the space through thousands of micro-holes on the front of the indoor unit preventing cold air drafts on occupants.
- The indoor unit shall have Wi-Fi capability as standard
- Outdoor unit shall provide 208/230V power to indoor unit via 14 AWG X 3 interconnect power cable

Construction
- Indoor unit chassis shall be UL94 V0 with a galvanized steel mounting bracket
- The indoor unit shall have easy-access to wire, pipe, and drain connections via access panel on the bottom of the unit for simple installation and service
- The outdoor unit shall be galvanized steel with a baked on powder coated finish for durability

Heat Exchanger
- The heat exchangers shall be mechanically bonded fin to copper tube

Refrigerant System
- The compressor shall be hermetically sealed, inverter controlled, BLDC Rotary
- Refrigerant flow shall be controlled by an electronic expansion valve at the outdoor unit

Indoor Fan
- The indoor fan shall be a single, antibacterial cross-flow type
- Three fan speed settings and auto setting
- Automatic (motorized) vertical swing (up/down) and horizontal swing (left/right) louvers

Controls
- The system shall have a built in Wi-Fi adapter as standard to allow control and monitoring using the Samsung SmartThings app (Android, iOS)
- Dual set temperature support when connected to MWR-WG00UN Advanced Wired Controller.
- The indoor unit shall have a simple connection for overflow detection devices or any other normally closed contact for simple unit shutdown
- The indoor unit shall ship with a wireless controller, holder, and batteries
- Wired controller options available
- Samsung central control compatible (MIM-R10UN accessory required)
- Interconnect control wire between outdoor and indoor unit shall be 16AWG X 2

Convenience
- System energy consumption can be viewed using the Samsung SmartThings mobile app or on the indoor unit display using the included wireless controller**
- AI (artificial intelligence) Auto Mode technology monitors factors such as indoor temperature, outdoor temperature, set temperature, and operating time to learn the patterns within your home to automatically adjust system operation to maximize occupant comfort and efficiency (Wi-Fi connection required)
- Eco Mode to reduce energy consumption during low demand operation
- Smart install mode - startup system diagnostics operation to ensure system readiness during initial operation
- Auto restart
- Auto Clean Function
- 7-segment digital display on front of unit to display temperature and unit status
- "Fast" mode to quickly reach set temperature
- Auto changeover
- Good sleep mode
- Quiet mode
- Dry mode
- Simple ON/OFF time function – Using the wireless controller specify the ON and/or OFF times
- Electro-static, washable, main filter as standard accessible from the top of unit
- Filter cleaning reminder

SAMSUNG

SUBMITTAL AJ036BXS4CH/AA (JXH36S4B)

Samsung "Max Heat" FJM Series, 4 Port Condensing Unit

Job Name _____ Location _____

Purchaser _____ Engineer _____

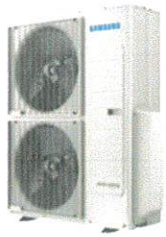
Submitted to _____ Reference ☑ Approval ☐ Construction ☐

Unit Designation _____ Schedule # _____

Model	US Code		JXH36S4B
	Model Number		AJ036BXS4CH/AA
Performance	Capacity (min. / standard / max.)	Cooling (Btu/h)	6,500 / 34,000 / 39,600
		Heating (Btu/h)	7,500 / 36,600 / 36,600
	Heating Capacity at 5°F OA, 70°F Indoor DB (Btu/h)		36,600
	Heating Capacity at -13°F OA, 70°F Indoor DB (Btu/h)		25,590
	SEER (Ducted / Mixed / Non-ducted)[1]		18.0 / 19.0 / 20.0
	EER (Ducted / Mixed / Non-ducted)[1]		11.0 / 11.75 / 12.5
	HSPF (Ducted / Mixed / Non-ducted)[1]		9.1 / 9.8 / 10.5
	SEER2 (Ducted / Mixed / Non-ducted)[2]		18.5 / 20.0 / 21.5
	EER2 (Ducted / Mixed / Non-ducted)[2]		11.0 / 11.75 / 12.5
	HSPF2 (Ducted / Mixed / Non-ducted)[2]		8.3 / 8.8 / 9.3
Power	Voltage	(ø/V/Hz)	1 / 208-230 / 60
	Nominal Current[3]	Cooling (A)	13.0
		Heating (A)	12.2
	Max. Breaker	Amps	40
	Minimum Circuit Ampacity (A)		36.5
Dimensions	W X H X D	Inches	37 x 47 5/8 x 13
	Weight	lbs.	192.9
Noise Level	Cooling	dB (A)	52
	Heating	dB (A)	55
Operating Temperatures	Cooling		14 ~ 114.8°F (-5 ~ 46.0°C)
	Heating		-13 ~75°F (-25 ~ 24.0°C)
Pipe Connections	High Side		1/4" X 4
	Low Side (suction)		3/8" X 2 + 1/2" X 2
	Maximum Individual Line Set Length		82 ft
	Maximum Line Set Length (total)		230 ft
	Maximum Vertical Separation	Outdoor to Indoor	49 ft
		Highest to lowest indoor	25 ft
	Included Pipe Adapters		2 - 1/2" X 3/8", 2 - 1/2" X 5/8"
Condenser Fan	Motor		BLDC With Propeller Fan (2)
	Output	Watts / FLA	125 X 2 / 1.28 X 2
		CFM	3,885
Compressor	Type		Twin BLDC Rotary Inverter
	RLA	Amps	25.6
Heat Exchanger	Type		Aluminum Fin - Copper Tube
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
	Factory Charge		127 oz
	Charged for		164 ft
	Additional Refrigerant		0.22 oz/ft over 164 ft
Accessories	Wall Bracket		☑ CKN-250
	Wind Baffle	Front	☐ WBF-1M2
		Back	☐ WBB-2M-B
Certifications	Safety		ETL (UL 60335-2-40)
	ENERGY STAR® Certification		Applies to AHRI non ducted listing
Warranty	10 Years compressor, 10 year parts, 1 year limited labor (registration required)		

[1]Performance data certified by AHRI to AHRI 210-240 (2017) with Addendum 1.
[2]Performance data certified by AHRI to AHRI 210-240 (2023). Effective January 1st, 2023.
[3]Rated current based on highest combination ratio of non-ducted indoor units.

This publication reflects both the 1987 Appendix M metric (SEER) and the 2023 Appendix M1 metric (SEER2). Efficiency requirements are published at 10 C.F.R. 430.32(c). Please refer to www.AHRInet.org for more information about energy metrics.



General Information

- The Samsung Max Heat system shall provide high heating capacity at -13°F outside temperature
- The outdoor unit shall supply power individually to the indoor units via 14 AWG X 3 power wire
- The outdoor unit shall have a base pan heater as standard to ensure optimal defrost cycle water drainage
- Auto-restart after power loss
- Available maximum current setting option to reduce operating current.
- System energy consumption can be viewed using Samsung SmartThings mobile app (not revenue grade, for reference only).
- Soft-start to reduce current demand during compressor start
- Auto or manual addressing of indoor units

Construction

- The outdoor unit shall be galvanized steel with a baked on powder coated finish for durability

Heat Exchanger

- The heat exchanger shall be mechanically bonded fin to copper tube

Controls

- Control signal shall be a DDC type signal
- Interconnect control wire between outdoor and indoor units shall be 16AWG X 2
- Controls shall integrate with a BMS system
- The system shall integrate with the Samsung Controls solution

Refrigerant System

- The refrigerant shall be R410A
- The compressor shall be hermetically sealed, inverter controlled, Twin BLDC Rotary
- Refrigerant flow shall be controlled by 4 separate electronic expansion valves at outdoor unit

Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and (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.

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888-699-6067
www.SamsungHVAC.com

PLEASE READ THE ATTACHED DOCUMENT IN ITS ENTIRETY AND FOLLOW ALL DIRECTIONS CAREFULLY!!

Clearcut needs a definitive answer of owners who would like to have an A/C unit installed. Please fill out the below survey to indicate you want a mini split installed in your unit *if you currently do not have one.*

First and Second Floor: The price for a single head is $9,363.00

The price for two heads is $15,241.15

Third floor: If you do not have an a/c unit mounted on the roof: please email info@clearcututah.com. Clearcut must meet with owners individually to confirm the possibility of adding one and the costs associated.

FIRST AND SECOND FLOOR ONLY (circle one)

I do not have a mini split and would like one installed

I do not want a mini split installed

I would like a single head installed ($9,363.00)

I would like a two head installed ($15,241.15)

THIRD FLOOR

I do not have a/c and would like to add a/c.

I do not want a/c installed.

Name: _____

Bldg/Unit #: _____

Phone Number: _____

Email: _____

I acknowledge that upon filling out this survey, an ordered will be placed for my unit. I acknowledge that I am responsible for paying ASHM the associated cost of the unit.

_____ _____

Signature Date