M1WD CASSETTE | One-Way

LENNOX Powered by **SAMSUNG**

Cassette Indoor Units | One-Way | R-32 | 60 Hz

**RESIDENTIAL / COMMERCIAL
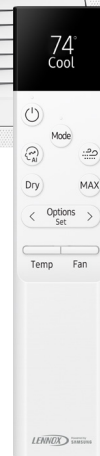PRODUCT SPECIFICATIONS (EHB)**

0.75 to 1.5 Tons

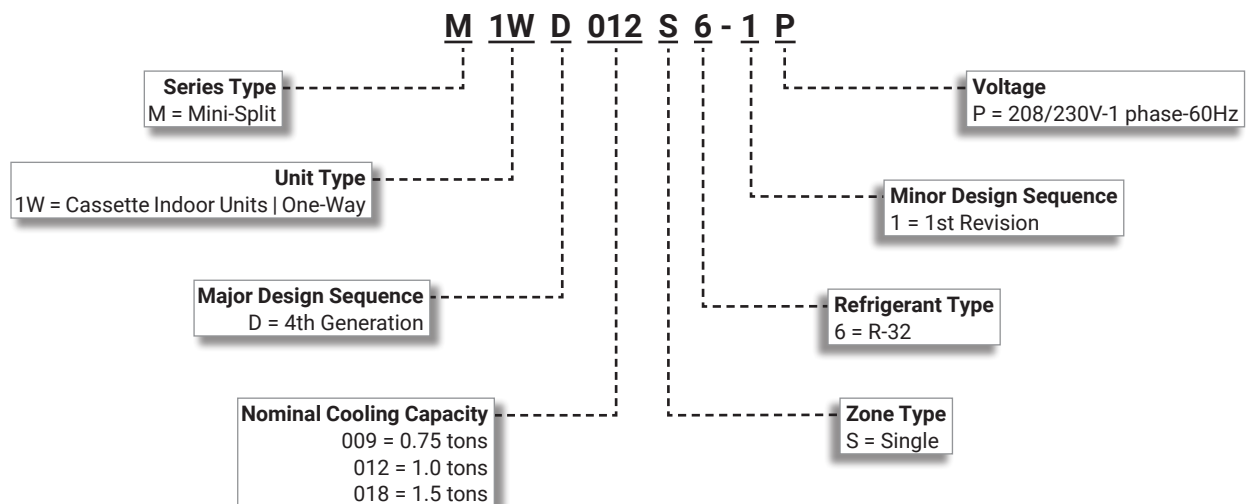M1WD One-Way Cassette Unit (shown with
Optional Wireless Remote Controller)

Works with
Samsung SmartThings

MODEL NUMBER IDENTIFICATION

M 1W D 012 S 6 - 1 P

Series Type
M = Mini-Split

Unit Type
1W = Cassette Indoor Units | One-Way

Major Design Sequence
D = 4th Generation

Nominal Cooling Capacity
009 = 0.75 tons
012 = 1.0 tons
018 = 1.5 tons

Voltage
P = 208/230V-1 phase-60Hz

Minor Design Sequence
1 = 1st Revision

Refrigerant Type
6 = R-32

Zone Type
S = Single

CONTENTS

APPROVALS AND WARRANTY

APPROVALS

• Indoor units and components ETL and CEC bonded for grounding to meet safety standards for servicing

WARRANTY

• All covered components
  • Limited five years in all applications
• Accessories and controls - Limited one year

NOTE - Refer to Lennox Basic Limited Warranty at www.Lennox.com for additional details.

FEATURES

• M1WD One-Way Cassette features low-sound and is encased in galvanized steel
• One-Way Air Distribution - Allows for even, wide-range cooling and heating
• Ideal for both residential and commercial applications

"Calm Air" Technology
• "Calm Air" cooling technology maintains the desired temperature and eliminates cold drafts by delivering air through thousands of micro holes on the unit's fascia panel when the louvers are closed, producing a dispersed and gentle flow of air
• ASHRAE defines "Calm Air" as an air velocity lower than 30 fpm.
• Occupants can not detect air velocity that low

Compact Design
• Allows accessible wiring and space-saving installation with reduced width and depth

Display Panel
• Mode indicator
  • Heating and cooling: Operation (Blue)
  • Defrost (Yellow)
• Timer indicator
• Fan indicator
• Filter cleaning indicator

Flare Connections
• Equipped with liquid and gas flare fittings for quick and secure piping connections

Cross-flow Fan With Backward Curved Blades
• Reduces sound levels and air resistance

Four Speed Fan
• Low, medium, high and turbo

Built-In Condensate Pump
• High lift capacity

Air Filter
• Built-in filter captures particulates as small as one micron
• Vacuum or washable reusable filter media

Electrical Connections
• Outdoor unit powers indoor unit

Serviceability
• Unit design incorporates more interlocking components in place of threaded fasteners to reduce the time and effort it takes to install and service a system

NOTE - The cassette panel must be ordered separately. See Specifications table for ordering information.

FEATURES

Built-in Wi-Fi
- Compatible with SmartThings app and Bixby 2.0
- Allows voice control and monitoring from anywhere with an Internet connection through the SmartThings app

Scenes
- Control multiple devices with a single tap or voice command through the SmartThings app
- A Scene can be used as a part of an Automation

Automations
- Control devices without manual intervention
- Automations can be set to run at certain times on certain days of the week or to trigger when another device reports a certain condition (such as detecting motion or a door or window opening)

Energy Monitoring
- View daily, weekly, and monthly energy consumption for the system (reference use only)

Geo-fencing
- Detects when a smartphone comes in and out of the range of the system
- Range is set on a map in the app, and then triggers different actions that are set (Example: turning system off when away, or on when arriving home)

AI Mode
- AI Auto Mode monitors indoor temperature, outdoor temperature, set temperature, and operating time to learn the home patterns and automatically adjust system operation to maximize comfort

NOTE - Requires Internet connection and the SmartThings app.

External Heat Function
- Operate third-party heat source if needed
  - Supplemental option
  - Emergency heat option
- Compressor lockout option to only operate external heat source when outside temp is <u>below</u> X°
- Option to lockout external heat operation when outside ambient is <u>above</u> X°
- Operates external heat during defrost option
- Support Auxiliary or Emergency heat operation status on wired controllers

OPTIONAL ACCESSORIES

Condensate Pumps
- Quietly and efficiently removes condensate
- See Optional Accessories Table for available pumps

Condensate Drain Line
- Non-kinking
- 160 ft. length
- UV stabilized low density white polyethylene

A/C Easy Tee® Condensate Cleanout
- Condensate drain service port
- Flexible and easy to use with nitrogen, water or shop vac
- Screw cap on top allows easy access to condensate drain line

Controllers
- Wireless Remote Controller, see page 4
- Touchscreen Wired Controller, see page 6
- Programmable Wired Controller, see page 9

Thermostat Adaptor
- Allows operation with any 24V thermostat

MOBILE APPS

- SmartThings is a free app that uses Wi-Fi to connect smart devices built on the Matter protocol, regardless of the company that makes them
- Users can remotely regulate temperature, adjust settings, receive real-time updates about system performance and energy usage, as well as troubleshoot solutions if service is needed
- Quickly and easily connect, automate and manage your smart home devices through SmartThings
- SmartThings is compatible with hundreds of smart home brands
- With SmartThings, you can connect, monitor and control multiple smart home devices quicker and easier
- Connect smart TVs, smart appliances, smart speakers and brands like Samsung, Ring, Nest and Philips Hue - all from one free app
- Control your smart devices using voice assistant skills including Alexa, Bixby and Google Assistant
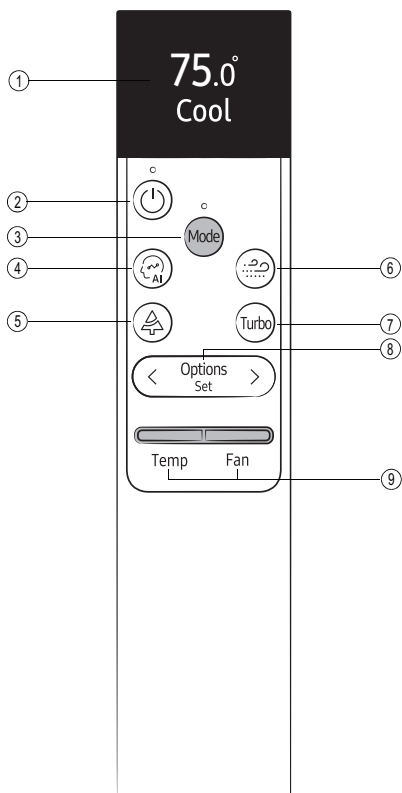
WIRELESS REMOTE CONTROLLER (VSTAT01P-1)

- Complete remote control of system
- Rechargeable - Two methods:
  - USB Type-C (5V/2A) (cable not furnished)
  - Solar panel on back of controller

NOTE - Features available depend on the type of indoor unit.

① 75.0° Cool

② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Mode / AI / Options Set / Temp Fan

① Display
- Shows current operation status and modes

② ON/OFF Button
- Turns system on and off

③ Mode Button
- Select system operation modes
- Auto, Cool, Dry, Fan, and Heat

④ AI Comfort Button
- Learns homeowner's use patterns and automatically adjusts temperature level while switching between Cool, Dry, Purify or "Calm Air" modes

NOTE - Only available on indoor models that support this feature.

⑤ Purify Button
- Creates a clean room climate by removing harmful substances from the air
- Can be used in air conditioner or fan only mode

⑥ "Calm Air" Button
- Operates during Cool, Dry, or Fan mode
- Closes the louvers and allows air through the holes in the panel
- When louvers are closed thousands of micro holes in panel provide a dispersed, gentle flow of air defined as "still air"

NOTE - Only for models equipped with louvers.

During the "Calm Air" Cooling operation, air flow blades may open to control indoor air currents smoothly, depending on the installation settings. As soon as the indoor temperature and humidity changes, the air flow blades will close and "Calm Air" Cooling operation resumes.

⑦ Turbo Button
- Enables rapid cooling or heating to increase or decrease temperature in the area

NOTE - After 30 minutes system returns to normal operating condition.

⑧ Options Button
- Press to select different functions (see page 5)
- Left and right arrows scroll through function selections

⑨ Temp/Fan Buttons
- Adjust the temperature or fan speed

  Temp Button
  - Push the button up or down to adjust the temperature
    - Auto/Cool/Dry mode - 65 to 86°F (1°F degree increments)
    - Fan mode - Disabled
    - Heat mode - 61 to 86°F (1°F degree increments)

  Fan Button
  - Push the button up or down to adjust the fan speed
    - Auto/Dry mode - Auto only
    - Cool/Heat mode - Auto/Low/Medium/High
    - Fan mode - Low/Medium/High

WIRELESS REMOTE CONTROLLER MENUS AND FUNCTIONS (VSTAT01P-1)

NOTE - Press the "Options" button to Start. The display changes to match the menu function selected. Left and right arrows scroll through function selections.
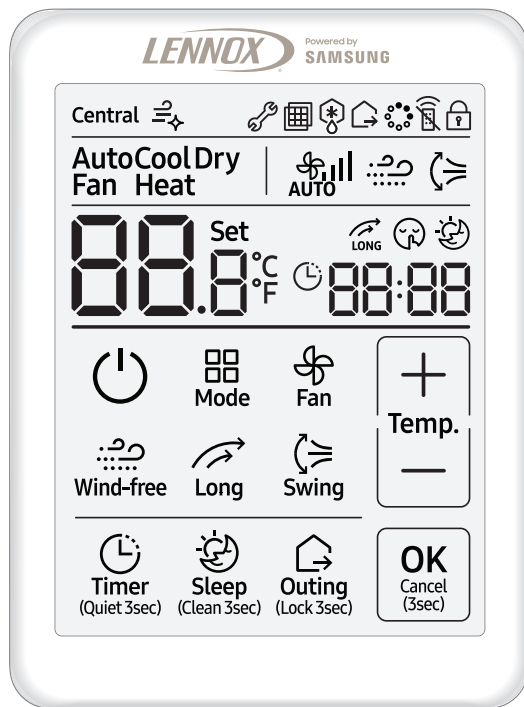
NOTE - Functions available depend on the type of indoor unit.

NOTE - Initial Settings for Indoor Unit - Options Button → Model Selection (set) → Standard (set) → Temp Unit → °F or °C (set)

Functions Available When Controller is "ON"		Functions Available When Controller is "OFF"	
Main Menu	**Sub-Menu**	**Main Menu**	**Sub-Menu**
← Back	- - -	← Back	- - -
Auto Clean	- - -	Auto Clean	- - -
Timer/Good Sleep →	← Back	Timer/Good Sleep →	← Back
	Timer Off		Timer Off
	Timer On		Timer On
	Good Sleep		Good Sleep
	Cancel		Cancel
Motion Detection →	← Back	Motion Detection →	← Back
	Air Direction		Air Direction
	Power Saving		Power Saving
Quiet	- - -	Freeze Wash	- - -
Long Wind	- - -	- - -	- - -
Direction →	← Back	- - -	- - -
	Fix	- - -	- - -
	Vertical	- - -	- - -
	Horizontal	- - -	- - -
	All	- - -	- - -
Blades →	← Back	- - -	- - -
	Blade 1	- - -	- - -
	Blade 2	- - -	- - -
	Blade 3	- - -	- - -
	Blade 4	- - -	- - -
Zones →	← Back	Zones →	← Back
	Zone 1		Zone 1
	Zone 2		Zone 2
	Zone 3		Zone 3
	Zone 4		Zone 4
Settings →	← Back	Settings →	← Back
	Beep		Beep
	Lighting		Lighting
	AI Diagnostics		AI Diagnostics
	Model Selection		Model Selection
	Filter Reset		Filter Reset
	Temp Unit		Temp Unit
	Heating Range		Heating Range
	Auto Mode		Auto Mode

NOTE - "Back" function returns to the previous function.

TOUCHSCREEN WIRED CONTROLLER (VSTAT02P-1)

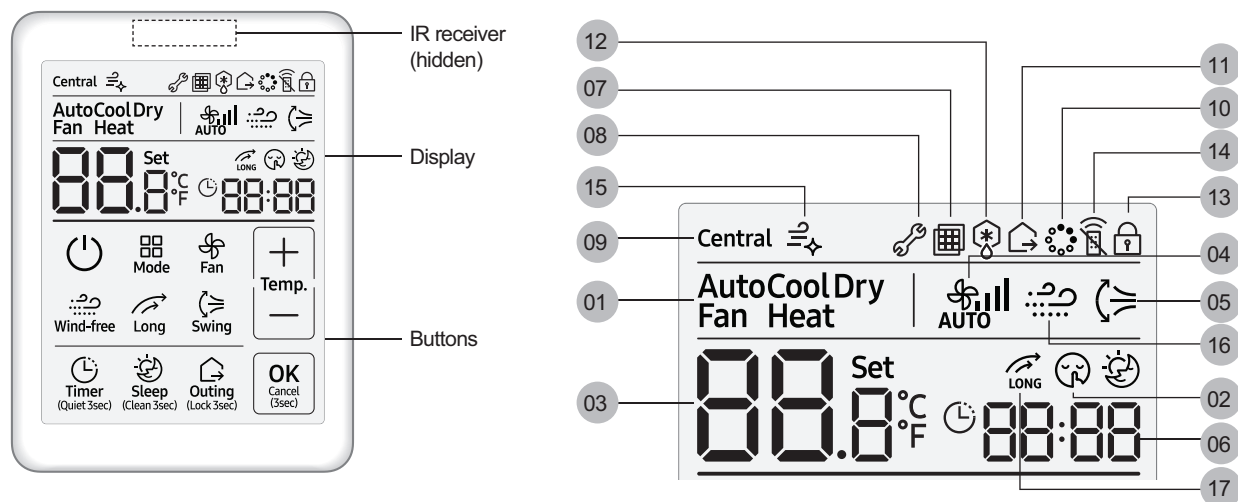**NOTE - Features available depend on the type of indoor unit.**

Features

- Backlight

- Built-in infrared receiver to allow control of indoor unit wirelessly with a wireless controller

- Indoor unit operation ON/OFF, operation mode, set temperature, louver position (cassette, ceiling, wall units), calm air, long reach, and fan speed settings

- Error display

- Filter replacement alarm display and reset

- All button lock (option)

- Partial controller button lock (ON/OFF, temperature setting, fan speed, timer function, louver swing, sleep function, quiet function, outing function, and operation mode buttons)

- Upper and lower temperature setting restriction

- Heat, cool, dry, fan, and auto mode skip options (skips specified mode on wired controller)

- Restrict wireless controller signal (optional)

- Single event timer function (ON/OFF control, 30 minutes – 24 hours timer setting options)

- System/indoor unit function and operation indication (defrost, error, restricted controller, central control, and PM filter status)

- Service mode for connected indoor unit operation monitoring, addressing, and setup

- Can be used to specify "Mode Master" while connected to a single indoor unit when used with heat pump systems to control system mode (heating or cooling)

- Outing function to keep a minimum heating (61 to 72°F) and cooling (77 to 86°F) temperature while away
  - When Outing mode is activated, the unit will operate at the specified Outing temperature. If indoor temperature is 9°F different from desired Outing temperature, the indoor unit will turn on
  - If indoor temperature is the same as desired Outing temperature, the indoor unit will turn off automatically
  - This is repeated depending on indoor temperature for 12 hours. After 12 hours, Outing mode is released/canceled

- Supports enabling indoor unit AP mode for connecting integral indoor unit Wi-Fi adapter to SmartThings, and turning indoor unit Wi-Fi connection ON/ OFF, indoor unit Wi-Fi information reset, and Wi-Fi adapter reset

SPECIFICATIONS

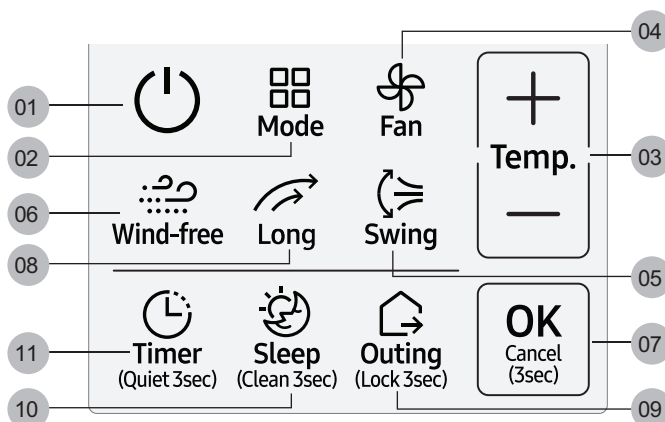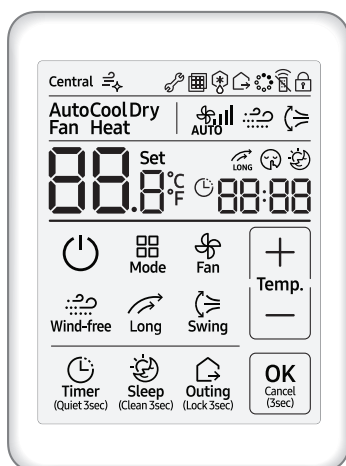| Power Supply	12VDC
Power consumption	1.5W
Operating temperature range	32 to104°F
Operating humidity range	30 to 90% RH
Communication	2-wire PLC
Maximum wire length	328 ft. (100 m)
Dimensions (H x W x D)	4-3/4 x 3-5/8 x 3/4 in. (121 x 92 x 19 mm)

TOUCHSCREEN WIRED CONTROLLER FUNCTIONS (VSTAT02P-1)

NOTE - Functions available depend on the type of indoor unit.

Number	Description
1	Displays system mode of operation
2	Displays quiet operation
3	Displays Indoor temperature/Set temperature
4	Displays indoor unit fan speed
5	Displays air swing (Up/Down)
6	Displays ON/OFF time (scheduled time)
7	Displays filter cleaning (filter cleaning period)
8	Displays error
9	Displays centralized control
10	Displays S-Plasma Ion operation
11	Displays outing (away) mode
12	Displays defrost operation
13	Displays partial locking/all locking/invalid operation
14	Displays IR receiver for wireless remote controller (Default - off)
15	Displays Clean operation
16	Displays Calm Air (Wind-Free) Cooling operation
17	Displays Long reach operation

NOTE - Functions available depend on the type of indoor unit.

Number	Description	
1	Operation on/off button	Turn the system power on/off
2	Mode button	Select a desired system operation
3	Temperature setting button	Set a desired temperature and adjust the time
4	Fan speed button	Change the indoor unit fan speed
5	Air swing button	Select the air flow direction of the indoor unit
6	Calm Air (Wind-Free) button	Select Calm Air (Wind-Free) Cooling operation
7	OK/Cancel button	Confirm or cancel (by pressing and holding the button for 3 seconds)
8	Long button	Select Long reach function
9	Outing/Lock button	Select outing operation for the indoor unit/Lock the wired remote controller
10	Sleep/Clean button	Select Sleep/Clean operation for the indoor unit
11	Timer/Quiet button	Select the timer function/quiet operation for the indoor unit

PROGRAMMABLE WIRED CONTROLLER (VSTAT04P-1)

NOTE - Features available depend on the type of indoor unit.

Indoor Unit Control

- Air handler operation ON/OFF
- Air handler operation mode, set temperature, air flow direction, fan speed
- Discharge air temperature setting (for supported indoor unit models)
- Filter replacement alarm display and reset
- Time synchronization with supported Samsung central controllers
- Dual Set Temperature (for supported indoor unit models)
- Advanced HP auto changeover control and configuration
- Quiet and sleep modes
- Freeze Wash activation
- Error display (up to 10 error codes with descriptions)
- Supports enabling indoor unit AP mode for connecting integral indoor unit
  - Wi-Fi adapter to SmartThings, and turning indoor unit Wi-Fi connection ON/OFF, indoor unit Wi-Fi information reset, and Wi-Fi adapter reset

Energy Saving Operation

- Upper/lower temperature restriction setting
- Occupied/unoccupied settings
- Setback function
- Energy saving operation mode
- Energy consumption monitoring and daily, weekly, monthly, and yearly energy consumption trending (for supported systems)
- Maximum current control (for supported outdoor unit models)

Weekly Operating Schedule

- Weekly operating schedule
- Set desired A/C operation mode, setting temperature and fan speed to operate based on weekly schedules
- Schedule exception day option

Additional Features

- Emergency heat/auxiliary heat operation indication on display (for supported outdoor unit models)
- Color display screen
- Different button permission levels
- Supports multiple languages
- Partial button lock options (operation on/off, heat mode, cool mode, fan mode, dry mode, auto mode, set temperature, fan speed, scheduling, calm air, Long-wind, quiet mode, and sleep mode buttons can be locked individually)
- Daylight savings clock advance option
- Temperature limit setting option
- Real-time clock function
- Built-in IR receiver for indoor unit control using a wireless controller and integral room temperature sensor
- Indoor unit operation state display
- Indoor unit service mode support
- Micro SD card slot for simple firmware updating
- Independent louver control for cassette units
- Airflow direction control for 360° Cassette indoor units
- Adjustable heating temperature compensation values
- Calm Air (Wind Free) Control
- MDS (Motion Detection Sensor) Indirect/Direct Control (for supported indoor units, accessory may be required)
- Long Reach Function (for supported indoor unit models)
- Automatic air volume enable and status viewing (for supported indoor unit models)

SPECIFICATIONS

Power supply	12VDC
Power consumption	2W
Operating temperature range	32 to104°F
Operating humidity range	30 to 90% RH
Communication	2-wire PLC
Maximum wire length	328 ft. (100 m)
Dimensions (H x W x D)	4-3/4 x 4-3/4 x 3/4 in. (121 x 121 x 19 mm)

Thermostat Adaptor

NOTE - Features available depend on the type of indoor unit.

Features
- Allows control of Lennox mini-split systems with a standard 24VAC thermostat
- One adaptor per indoor unit connected to the F3-F4 communication line
- Basic control:
  - Power: ON/OFF
  - Mode: Heat, Cool, Fan (auto, low, medium, high)
- Supports 1 or 2 stages cooling inputs, 1 or 2 stages heating inputs
- Can be configured to operate the indoor unit as primary heating source, secondary heating source, or cooling only with heat from an external source only
- External contact input to disable the unit when contact is opened

Option Settings
- Single fan input or 3 speed input for Low, Medium, and High
- Heat staging options:
  - Stage 1 and 2: Indoor unit operates in heat mode
  - Stage 1: Indoor unit operates in fan mode
    Stage 2: Indoor unit operates in heat mode
  - Stage 1: Indoor unit OFF
    Stage 2: Indoor indoor unit operates in heat mode
  - Stage 1: Indoor unit OFF. Stage 2: Indoor unit OFF (heating is only provided by external source that does not require fan operation from the Indoor unit)
- "Emergency Heat" output enable
- Stage 1 and stage 2 heating and cooling set temperature

SPECIFICATIONS

Power Supply	24VAC (field supplied transformer required)
Installation temperature range	32 to122°F
Installation humidity range	10 to 85% RH
Maximum wire length	328 ft. (100 m)
Dimensions (H x W x D)	5-1/8 x 5 x 1-1/2 in. (130 x 127 x 38 mm)

SPECIFICATIONS

Model		M1WD009S6	M1WD012S6	M1WD018S6
Tons		0.75	1.0	1.5
Line voltage data (Volts-Phase-Hz)		208/230-1-60	208/230-1-60	208/230-1-60
Connections	Liquid (flare) - in.	1/4	1/4	1/4
	Gas (flare) - in.	3/8	3/8	1/2
	Condensate drain OD - in.	1	1	1
Fan	Air Volume - cfm (High/Medium/Low)	258 / 230 / 205	318 / 290 / 255	565 / 495 / 442
	Output (W)	27	27	65
Drain Pump (furnished)	US gallons per hour	6.34	6.34	6.34
	Lift - ft.	30	30	30
Filter		Washable	Washable	Washable
Sound Data (dBA)	Low / Medium / High / Turbo	25 / 26 / 29 / 32	28 / 29 / 32 / 35	31 / 37 / 40 / 43
Weight Data	Net	43	43	43
	Shipping	50	50	50

REQUIRED COMPONENTS - ORDERED SEPARATELY

Cassette Panel		37P70	37P70	37P71
	Shipping Data - Net	10	10	11
	Shipping	14	14	16

OPTIONAL ACCESSORIES - ORDER SEPARATELY

Description		Order Number	Size 009	Size 012	Size 018
INDOOR UNIT					
Diversitech Condensate Pumps with Reservoir	Mini-Split Pump - 4 US gallons per hour, 20 ft. lift - 230V	Y7949	•	•	•
	ClearVue Mini™ - 8 US gallons per hour, 35 ft. lift - 120-240V	Y5170	•	•	•
Blue Diamond® Condensate Pumps with Reservoir	MicroBlue® - 1.3 US gallons per hour, 6 ft. lift - 110-230V	14T74	•	•	•
	MaxiBlue® - 3.7 US gallons per hour, 16.5 ft. lift - 208/230V	14T69	•	•	•
	MultiTank Kit - 0.4 US gallon	14T75	•	•	•
	Sensor Cable Extension - 16 ft.	14T76	•	•	•
Little Giant Condensate Pump Kit with Reservoir	Mini-Split Pump Kit - 2.5 US gallons per hour, 3 ft. lift - 100-240V (includes pump, reservoir, multi-size hose drain adaptor, 7 ft. detachable power cord, pump enclosure/cover, line set cover and mounting trim brackets)	Y8794	•	•	•
Condensate Drain Line	5/8 in. ID - 160 ft. - white	Y3401	•	•	•
A/C Easy Tee® Condensate Cleanout		Y7947	•	•	•
CONTROLS					
Wireless Remote Controller	VSTAT01P-1	37Y73	•	•	•
Touchscreen Wired Controller	VSTAT02P-1	37P79	•	•	•
Programmable Wired Controller	VSTAT04P-1	37Y74	•	•	•
Thermostat Adaptor (24V)	VSTAT09P-1	37Y96	•	•	•

Sound Pressure level

1-Way Cassette

Unit: dB(A)
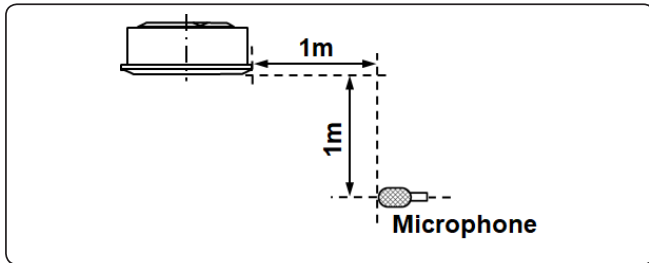
Model	High	Mid	Low
M1WD009S6-1P	32	29	26
M1WD012S6-1P	35	32	29

• NC Curve

1) M1WD009S6-1P
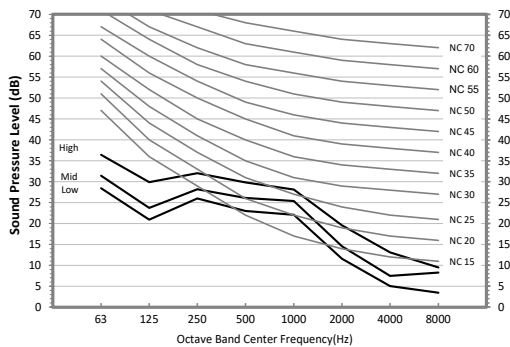
2) M1WD012S6-1P
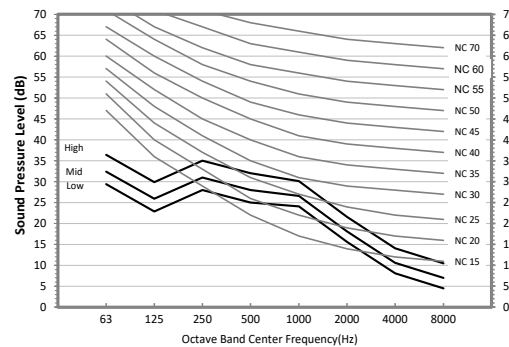
* The WindFree™ unit delivers an air current that is under 0.15 m/s while in WindFree mode.
  Air velocity that is below 0.15 m/s is considered "still air" as defined by ASHRAE 55-2013 (American Society of Heating, Refrigerating, and Air-Conditioning Engineers).

📄 NOTE

• Specifications may be subject to change without prior notice.
  - Sound pressure level is obtained in an anechoic room.
  - Sound pressure level is a relative value, depending on the distance and acoustic environment.
  - Sound pressure level may differ depending on operation condition.
  - dBA = A weighted sound pressure level
  - Reference acoustic pressure 0 dB = 20μPa
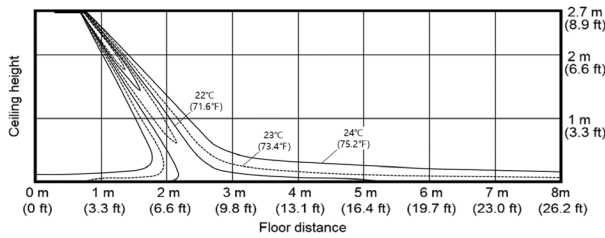
M1WD009S6-1P

Cooling Air Velocity distribution   Discharge angle : 60˚
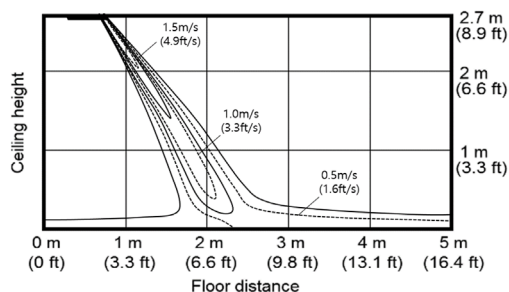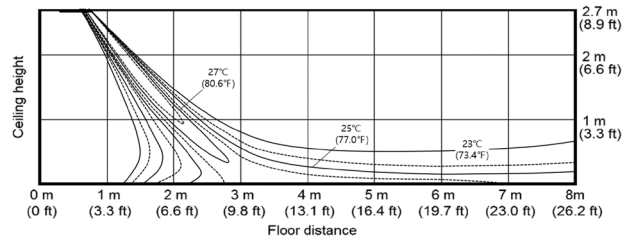
Heating Air Velocity distribution   Discharge angle : 60˚
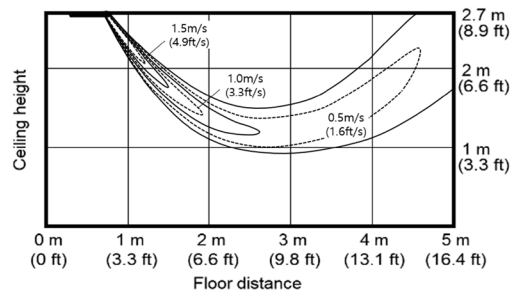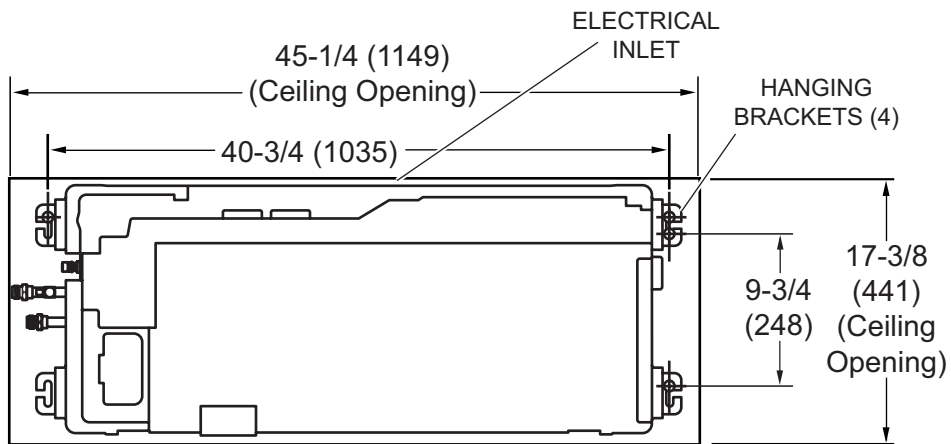
Cooling temperature distribution   Discharge angle : 60˚
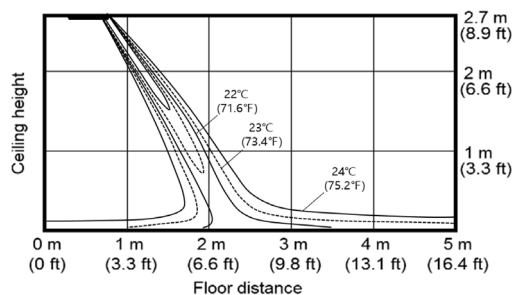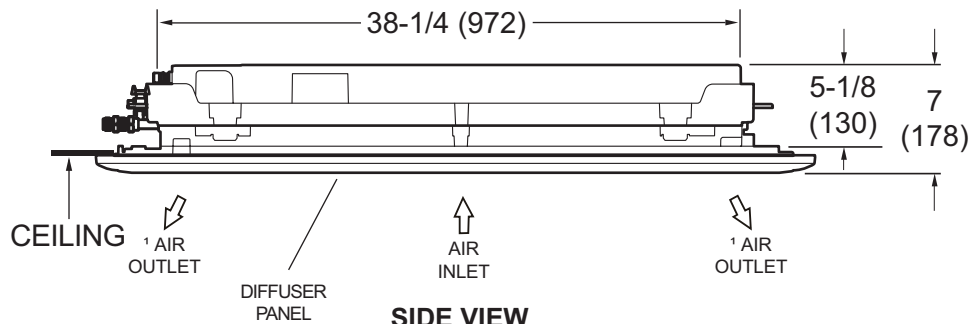
Heating temperature distribution   Discharge angle : 60˚
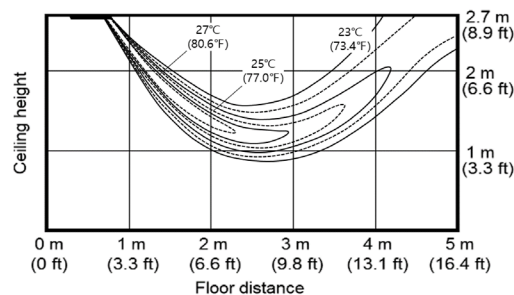
M1WD012S6-1P

Cooling Air Velocity distribution   Discharge angle : 60˚
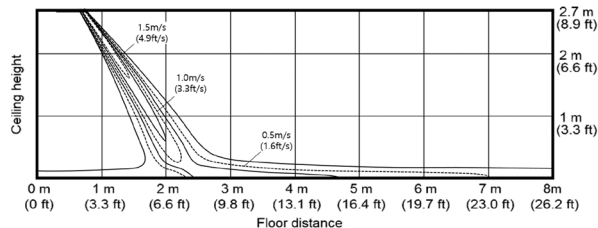
Heating Air Velocity distribution   Discharge angle : 60˚
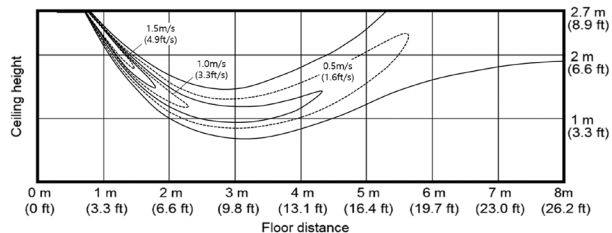
Cooling temperature distribution   Discharge angle : 60˚
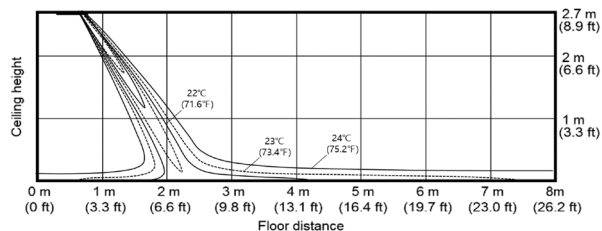
Heating temperature distribution   Discharge angle : 60˚
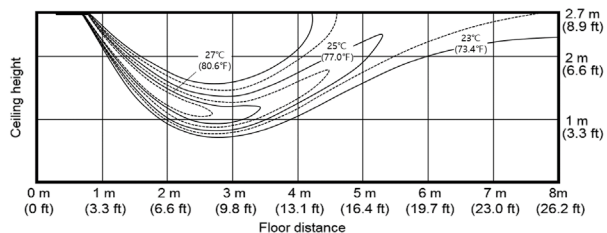
M1WS018S6-1P

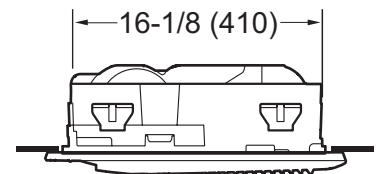### Cooling Air Velocity distribution   Discharge angle : 60˚
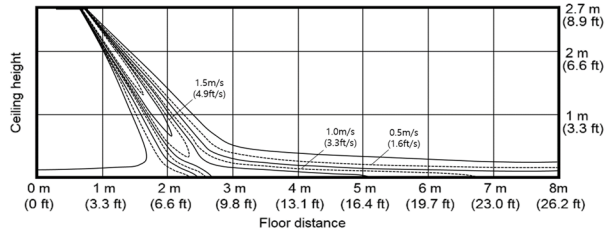
Heating Air Velocity distribution   Discharge angle : 60˚
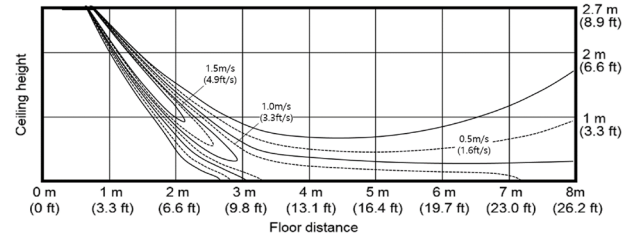
Cooling temperature distribution   Discharge angle : 60˚

Heating temperature distribution   Discharge angle : 60˚
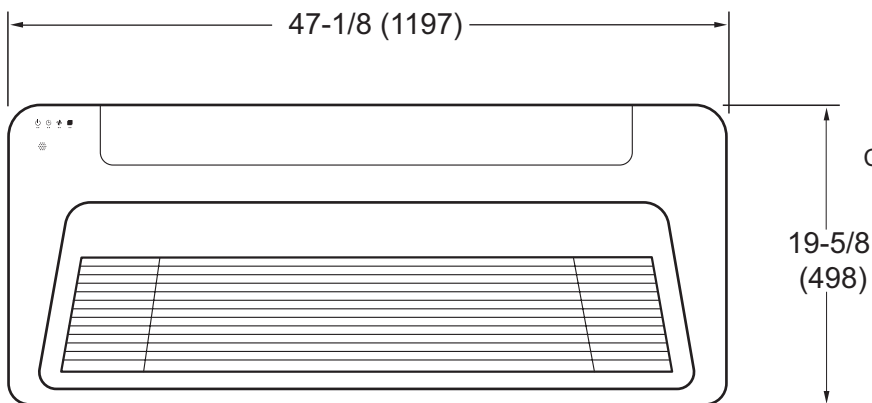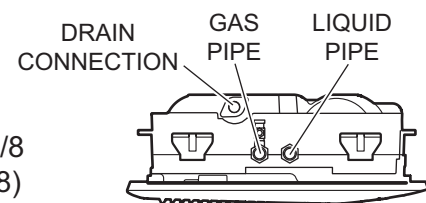
DIMENSIONS

M1WD009S6 | M1WD012S6

ELECTRICAL INLET

45-1/4 (1149) (Ceiling Opening)

40-3/4 (1035)

HANGING BRACKETS (4)

17-3/8 (441) (Ceiling Opening)

9-3/4 (248)

TOP VIEW

38-1/4 (972)

5-1/8 (130)

7 (178)

CEILING

¹ AIR OUTLET

AIR INLET

¹ AIR OUTLET

DIFFUSER PANEL

SIDE VIEW

¹ Depending on operation, Air Outlet will either be through the louver or the "Still Air" micro holes in the panel.
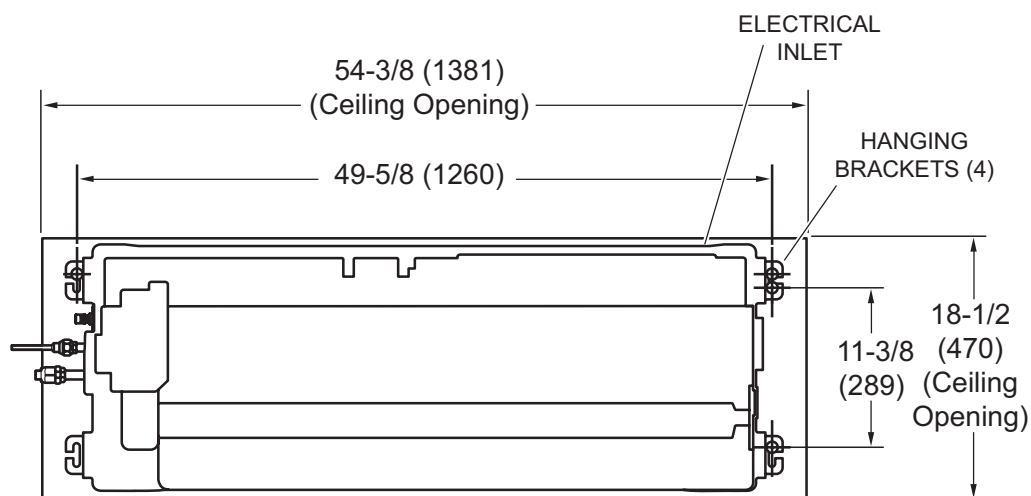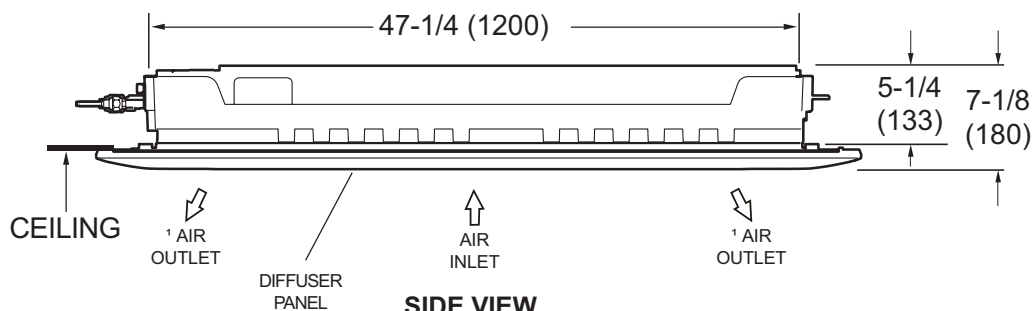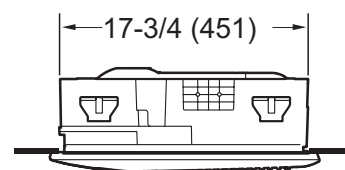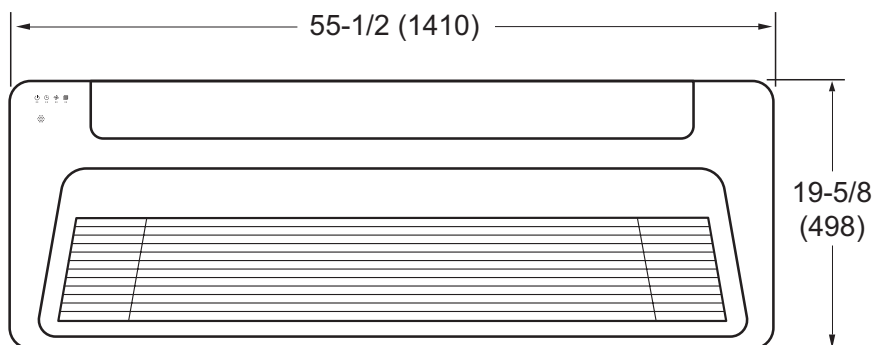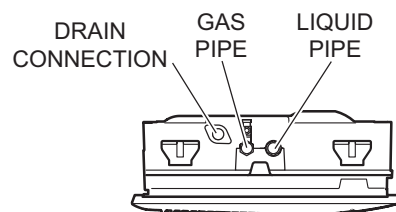
16-1/8 (410)

RIGHT SIDE VIEW

47-1/8 (1197)

19-5/8 (498)

BOTTOM VIEW (Panel)

DRAIN CONNECTION

GAS PIPE

LIQUID PIPE

LEFT SIDE VIEW

M1WD018S6

54-3/8 (1381)
(Ceiling Opening)

ELECTRICAL
INLET

49-5/8 (1260)

HANGING
BRACKETS (4)

18-1/2
(470)
(Ceiling
Opening)

11-3/8
(289)

TOP VIEW

47-1/4 (1200)

5-1/4
(133)

7-1/8
(180)

17-3/4 (451)

CEILING

¹ AIR
OUTLET

DIFFUSER
PANEL

AIR
INLET

¹ AIR
OUTLET

SIDE VIEW

RIGHT SIDE VIEW

¹ Depending on operation, Air Outlet will either be through
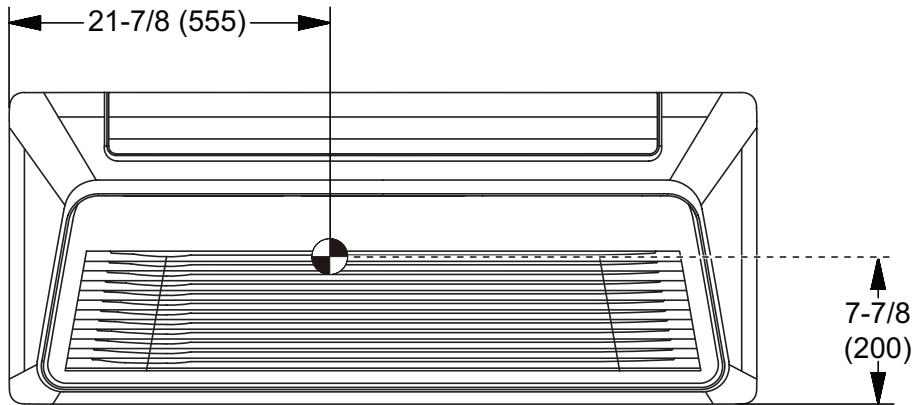the louver or the "Still Air" micro holes in the panel.

55-1/2 (1410)

DRAIN
CONNECTION

GAS
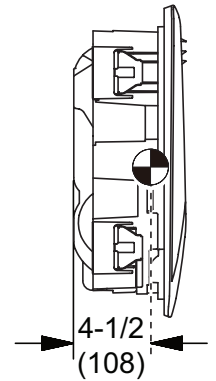PIPE

LIQUID
PIPE

19-5/8
(498)

BOTTOM VIEW (Panel)

LEFT SIDE VIEW

CENTER OF GRAVITY

21-7/8 (555)

7-7/8
(200)

BOTTOM VIEW (Panel)

4-1/2
(108)

SIDE VIEW

INSTALLATION CLEARANCES

6 (152)
Minimum

59 (1499)
Minimum

6 (152)
Minimum

6 (152)
Minimum
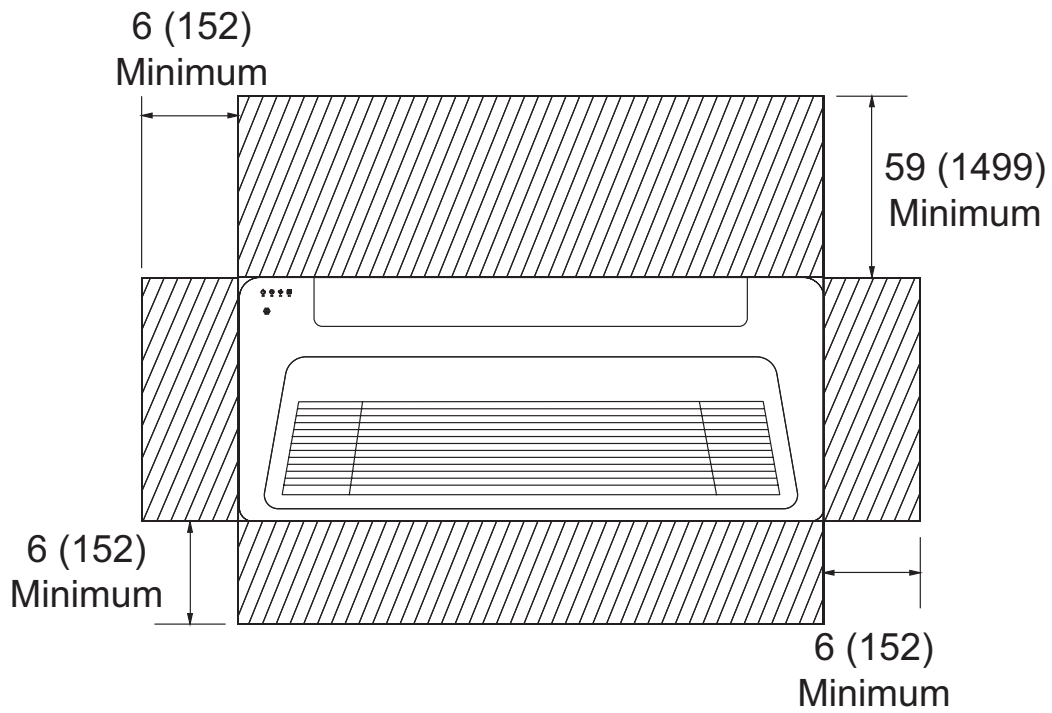
REVISIONS

Sections	Description of Change
Optional Accessories	Updated available accessories.

AHRI CERTIFIED™
www.ahridirectory.org
C
Unitary Small HP
AHRI Standard 210/240
Certification applies only when the complete system is listed with AHRI.

HRAI
✓MEMBER COMPANY

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LISTED
CM
Intertek

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