

# R454b Refrigerant

# SUBMITTAL DATA SHEET



Series Name: Slim Duct Xtreme Heat Series  
 Model Number: MDLHU-H12B-2A/MO1HS-H12B-2A

### Slim Duct Heat Pump System

Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:



### INDOOR SPECIFICATION

Indoor Air Flow (Turbo/H/M/L/Si) (CFM)	400 / 324 / 265 / 177 / 118
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)	36 / 36 / 35 / 33 / 26
Indoor static pressure range	0-0.4
Dimension (W×D×H)	inch 27-1/2 x 20 x 7-7/8
	mm 700 × 506 × 200
Package (W×D×H)	inch 33-7/8 x 21-1/4 x 11-1/4
	mm 860 × 540 × 285
Net/Gross Weight	lbs 39 / 47
	kg 17.9 / 21.2

### OUTDOOR SPECIFICATION

Compressor Type	ROTARY
Compressor Model	KTN110D42UFZ
Refrigerant	R454B
Refrigerant Oil Charge(mL)	350
Refrigerant Oil	VG74
Outdoor Air Flow (Max) (CFM)	1,472
Outdoor Noise Level (dBA)	56
Dimension (W×D×H)	inch 31-3/4 x 13 x 21-3/4
	mm 805 × 330 × 554
Package (W×D×H)	inch 36 x 14-5/8 x 24-1/4
	mm 915 × 370 × 615
Net/Gross Weight	lbs 73 / 79
	kg 33 / 35.7

### EFFICIENCY

Cooling		Heating	
SEER2	20.0	HSPF2-4	10.0
EER2	12.0	COP	3.39

### PERFORMANCE of Cooling

Cooling (Btu/hr)	
Rated Capacity	12,000
Min/Max Capacity	3,400~13,500
Moisture Removal(L/h)	1.19
Standard Operating Range(°F/°C)	-22 ~ 122 (-30 ~ 50)
Conditions:	Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB

### PERFORMANCE of Heating

Heating (Btu/hr)	
1. @ 47°F Rated	12,500
1. @ 47°F Min/Max Capacity	3,800~16,200
2. @ 17°F Rated	9,600
3. @ 5°F Rated: Capacity / COP	11,800/1.90
3. @ 5°F Max: Capacity	11,800
Standard Operating Range(°F/°C)	-22 ~ 75 (-30 ~ 24)
1. Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 47°F DB/43°F WB
2. Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 17°F DB/15°F WB
3. Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 5°F DB/5°F WB

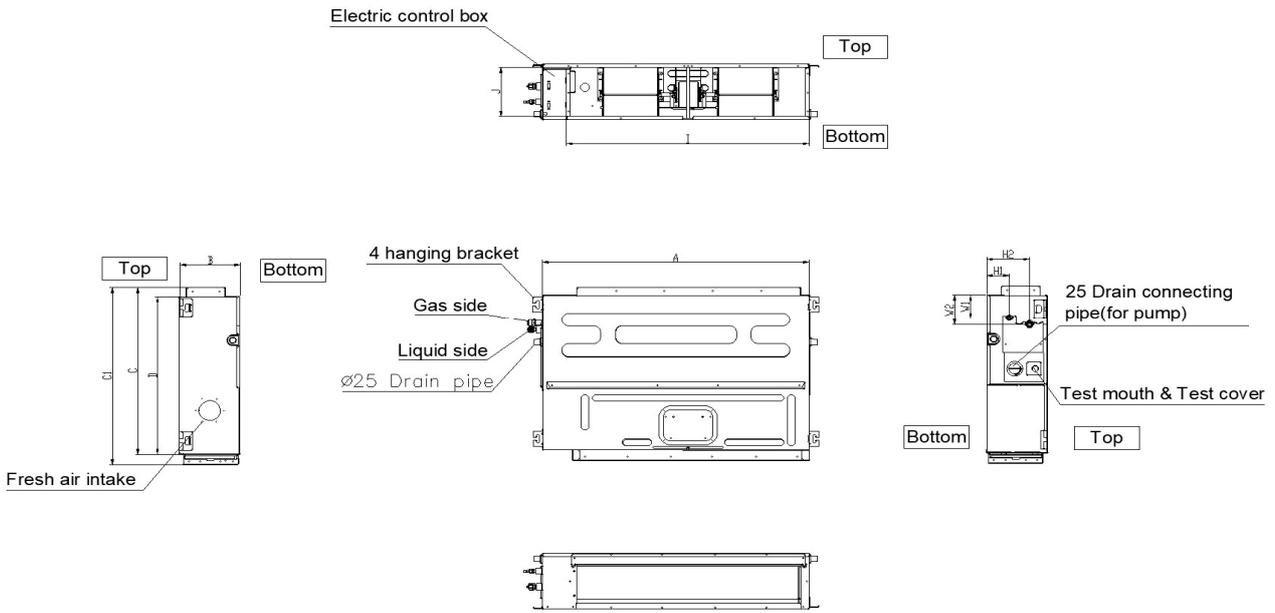
### ELECTRICAL

Power Supply	208/230V,60Hz,1Ph
System MCA	15.0
Connection Wiring	AWG 14/4
System MOCP	15.0
Compressor RLA	11.6
Outdoor Fan Motor RLA	0.5
Outdoor Fan Motor W	34
Indoor Fan Motor RLA	1.2
Indoor Fan Motor W	81
System Power Input @ Cooling (W)	1,000 (145 ~ 1,200)
System Power Input @ Heating (W)	1,080 (260 ~ 1,450)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

### PIPING

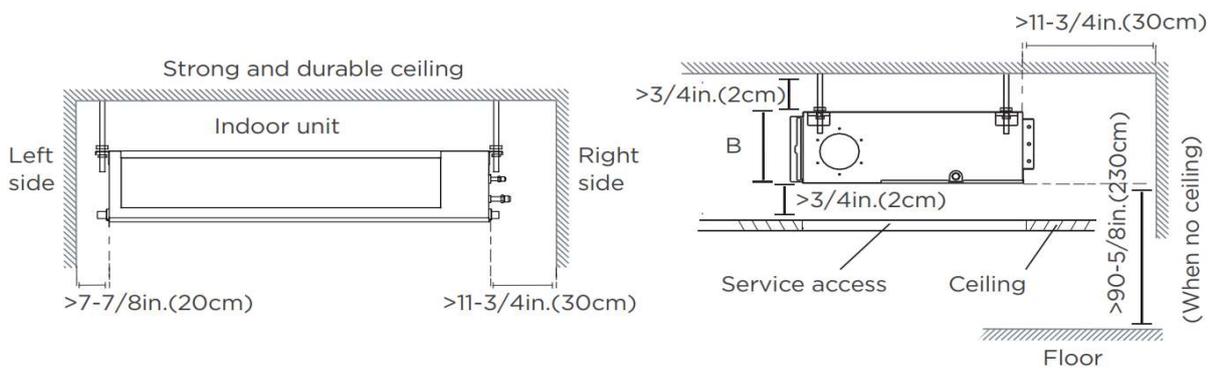
Throttle type(Indoor)	N/A
Throttle type(Outdoor)	EXV
Liquid Size	1/4" (6.35 mm)
Gas Size	3/8" (9.52 mm)
Max. Piping Length(ft/m)	82 (25)
Max. Height Difference(ft/m)	33 (10)
Max. Pre-charged Length(ft/m)	25 (7.5)
Refrigerant Pre-charged Amount(oz/kg)	35 (1.00)
Additional Charge of Refrigerant((oz/ft)/(g/m)	0.16 (15)
Connection Method	Flared

### Indoor Unit Dimension



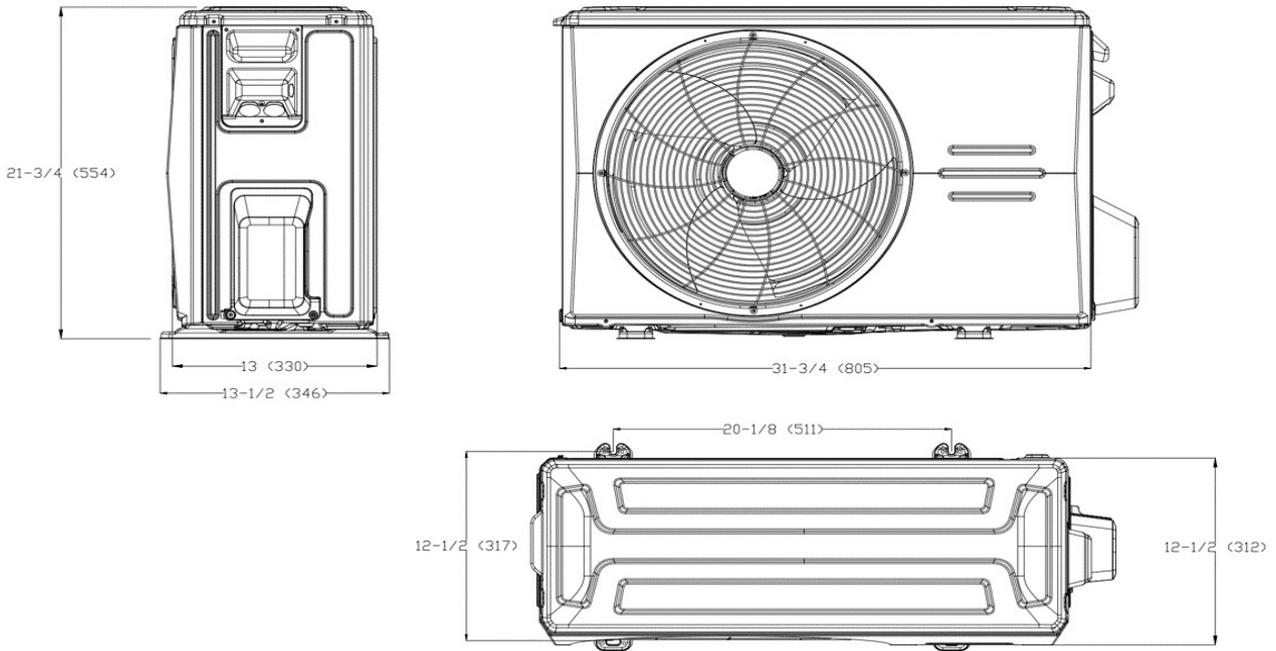
Model(kBtu/h)	unit	A	B	C	C1	D
	6 -12	mm	700	200	470	506
in		27-1/2	7-7/8	18-1/2	20	17-3/4
18	mm	880	210	634	674	600
	in	34-5/8	8-1/4	25	26-1/2	23-5/8

### Installation Instruction

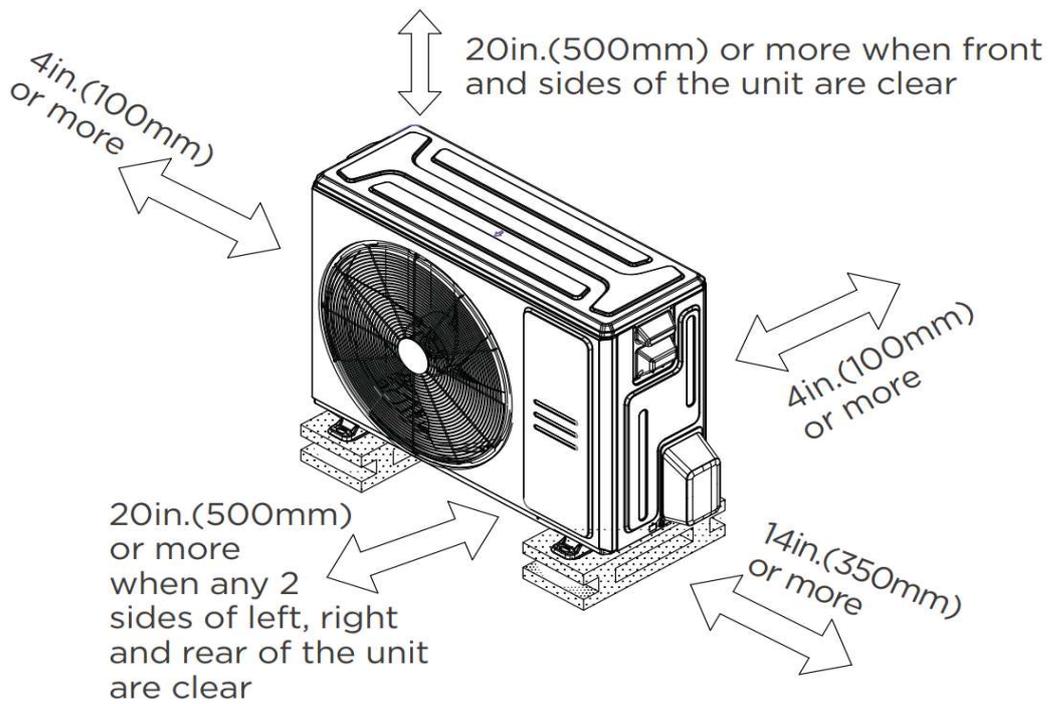


### Outdoor Unit Dimension

Unit: inch (mm)

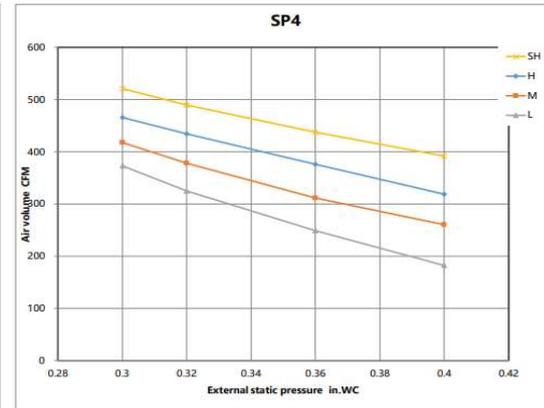
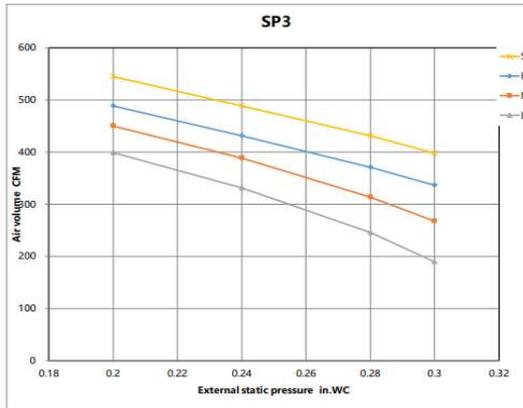
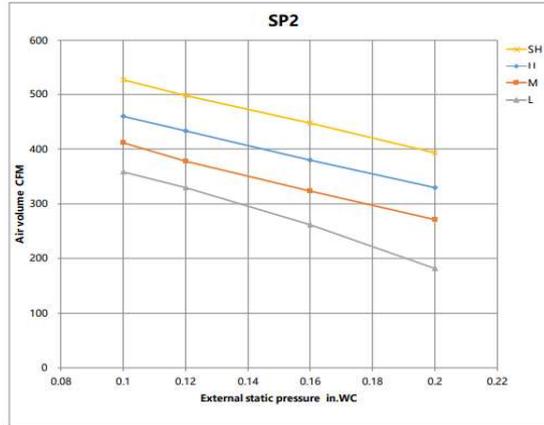
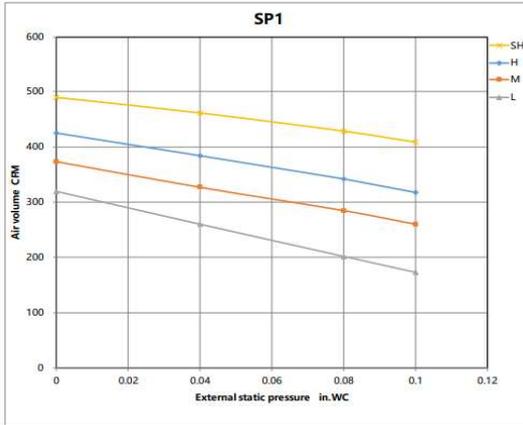


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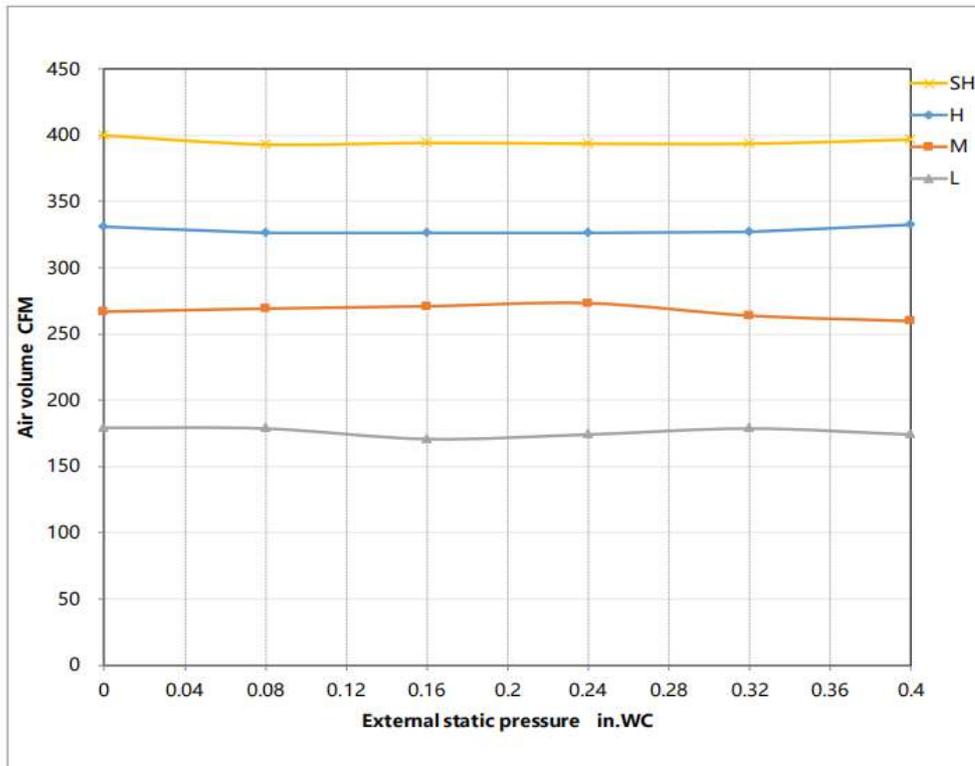


## Fan performance

The default setting is SP1, which can be changed to SP2,3,4, using the wired controller.



## Constant airflow



## FEATURES

- Compatible with both horizontal and vertical installation(Optional)
- Static pressure setting stages: 4
- Refrigerant leakage detection sensor
- Constant airflow
- Built-in pump
- i-clean
- Fan speed stages: 1~100%
- WiFi capability: Wired controller with built-in WiFi
- OTA(by using wired controller 120N(X6W))
- 2-pin connector(HA/HB) for programmable wired controller
- Multiple control options available:
  - Two way communication wired controller with built-in WiFi:120N(X6W)
  - Wireless remote controller
  - Third-Party 24V Thermostat\*

\*24V interface is required.