

# R454b Refrigerant

# SUBMITTAL DATA SHEET



Series Name: Slim Duct Energy Star Series  
Model Number: MDLHU-H18B-2A/MO1E5-H18B-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)	600 / 559 / 500 / 441 / 441
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)	41 / 41 / 39 / 38 / 35
Indoor static pressure range (in.w.g.)	0-0.4
Dimension (W×D×H)	inch 34-5/8 x 26-1/2 x 8-1/4
	mm 880 × 674 × 210
Package (W×D×H)	inch 42-1/8 x 28-1/2 x 11
	mm 1070 × 725 × 280
Net/Gross Weight	lbs 54 / 66
	kg 24.7 / 30

### OUTDOOR SPECIFICATION

Compressor Type	ROTARY
Compressor Model	KSN140D58UFZ
Refrigerant	R454B
Refrigerant Oil Charge(mL)	440
Refrigerant Oil	7.2
Outdoor Air Flow (Max) (CFM)	1,766
Outdoor Noise Level (dBA)	59
Dimension (W×D×H)	inch 35 x 13-1/2 x 26-1/2
	mm 890 × 342 × 673
Package (W×D×H)	inch 39-1/8 x 15-5/8 x 29-1/8
	mm 995 × 398 × 740
Net/Gross Weight	lbs 93 / 100
	kg 42.0 / 45.5

### EFFICIENCY

Cooling		Heating	
SEER2	20.0	HSPF2-4	10.5
EER2	12.5	COP	3.47

### PERFORMANCE of Cooling

Cooling (Btu/hr)	
Rated Capacity	17,000
Min/Max Capacity	7,000~19,000
Moisture Removal(L/h)	1.46
Standard Operating Range(°F/°C)	-13~122 (-25 ~ 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	20,000
1. @ 47°F Min/Max Capacity	5,500~22,000
2. @ 17°F Rated	14,000
3. @ 5°F Rated: Capacity / COP	14,000/2.20
3. @ 5°F Max: Capacity	14,000
Standard Operating Range(°F/°C)	-13~75 (-25 ~ 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

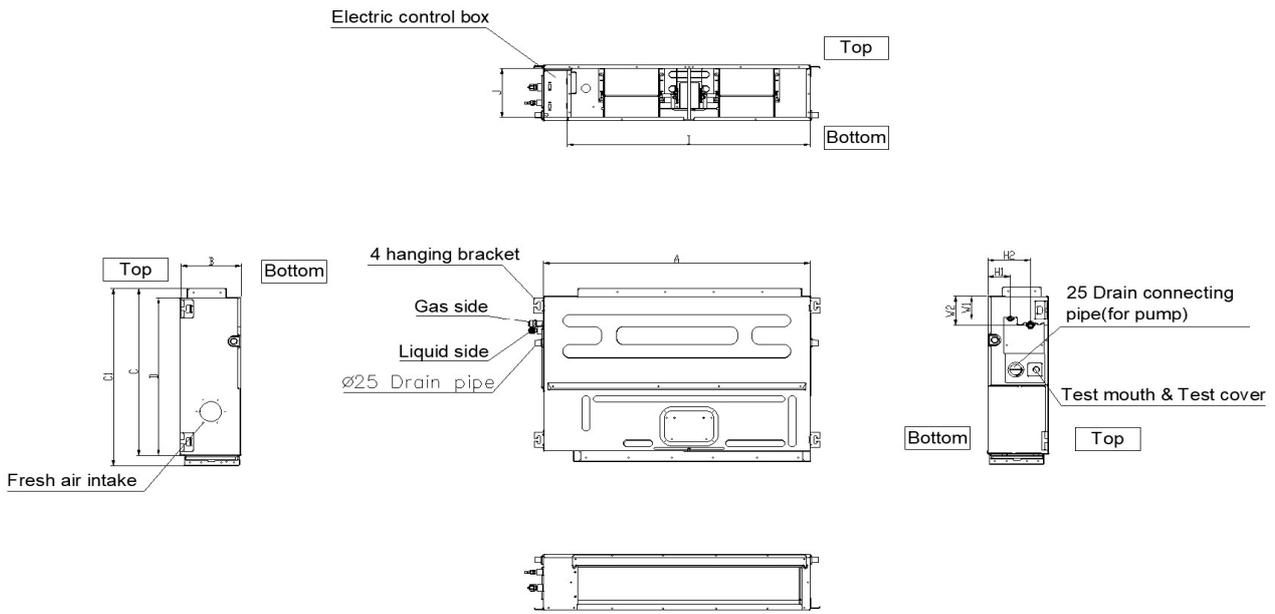
### ELECTRICAL

Power Supply	208/230V,60Hz,1Ph
System MCA	18.0
Connection Wiring	AWG 14/4
System MOCP	20.0
Compressor RLA	10.0
Outdoor Fan Motor RLA	0.9
Outdoor Fan Motor W	80
Indoor Fan Motor RLA	1.2
Indoor Fan Motor W	165
System Power Input @ Cooling (W)	1,445 (600 ~ 1,750)
System Power Input @ Heating (W)	1,690 (330 ~1,850)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

### PIPING

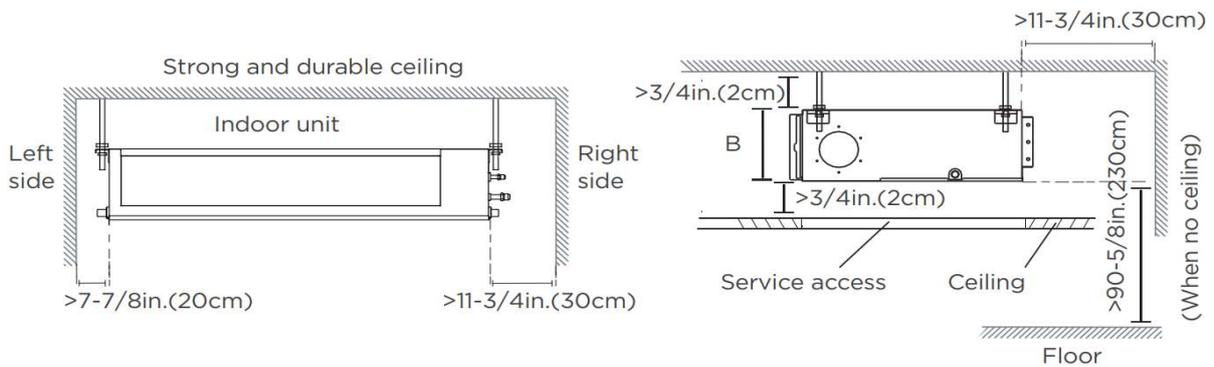
Throttle type(Indoor)	N/A
Throttle type(Outdoor)	EXV+Throttle valve
Liquid Size	3/8" (9.52mm)
Gas Size	5/8" (15.9mm)
Max. Piping Length(ft/m)	98 (30)
Max. Height Difference(ft/m)	66 (20)
Max. Pre-charged Length(ft/m)	25 (7.5)
Refrigerant Pre-charged Amount(oz/kg)	48 (1.36)
Additional Charge of Refrigerant((oz/ft)/(g/m)	0.16 (15)
Connection Method	Flared

### Indoor Unit Dimension



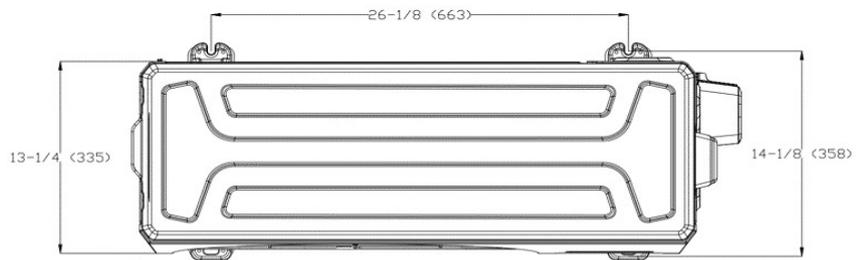
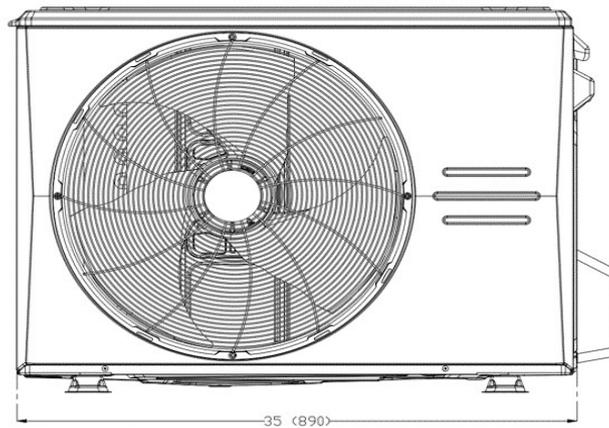
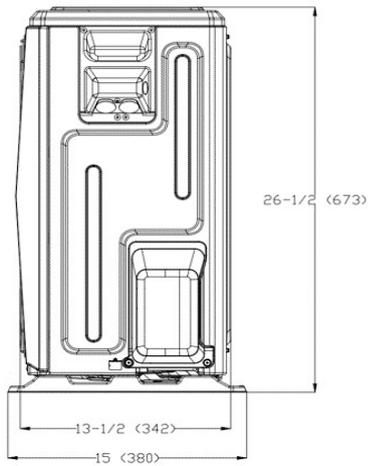
Model(kBtu/h)	unit	A	B	C	C1	D
	6 -12	mm	700	200	470	506
in		27-1/2	7-7/8	18-1/2	20	17-3/4
18	mm	880	210	634	674	600
	in	34-5/8	8-1/4	25	26-1/2	23-5/8

### Installation Instruction

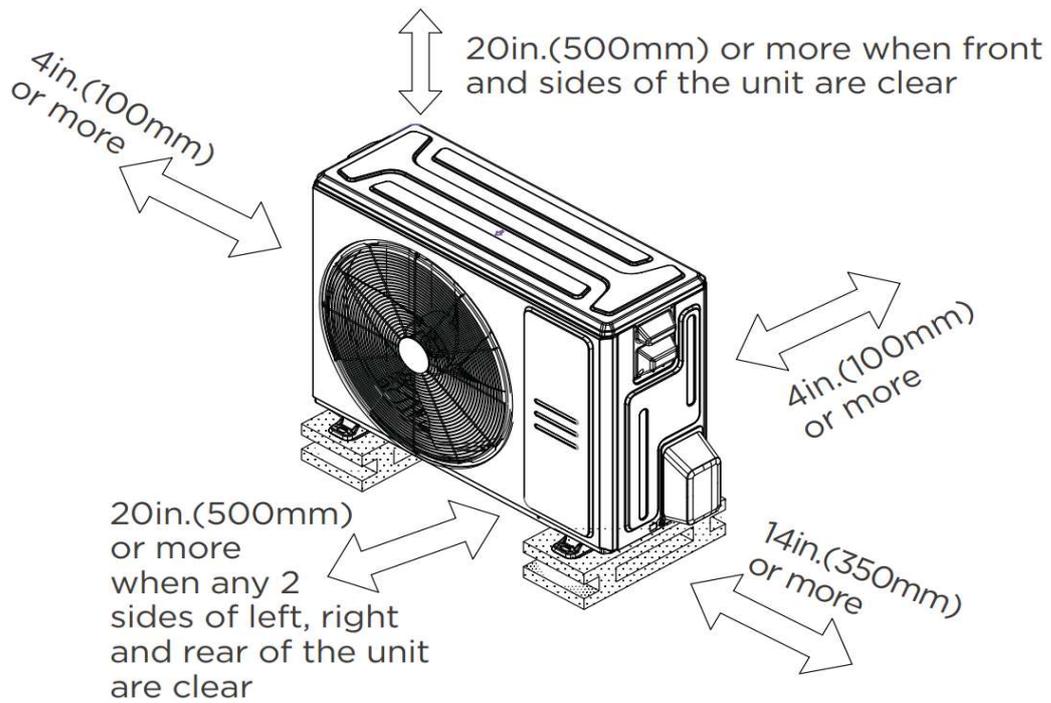


Outdoor Unit Dimension

Unit: inch (mm)

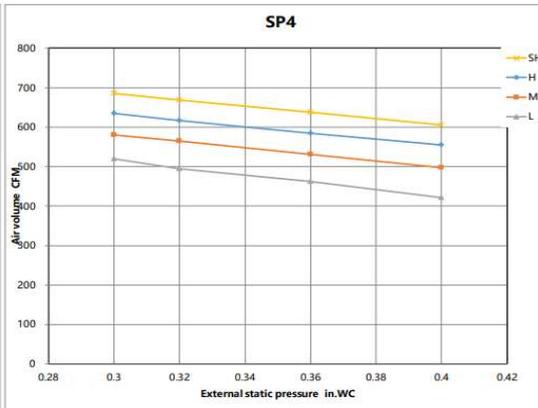
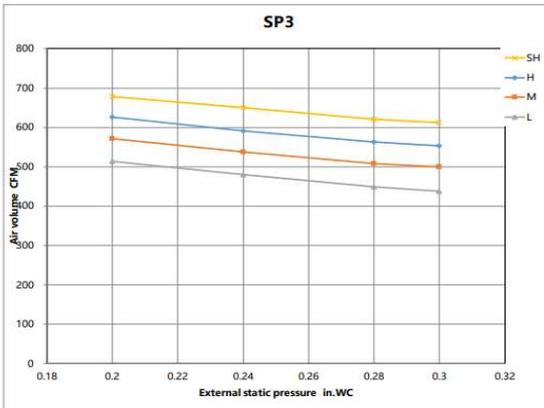
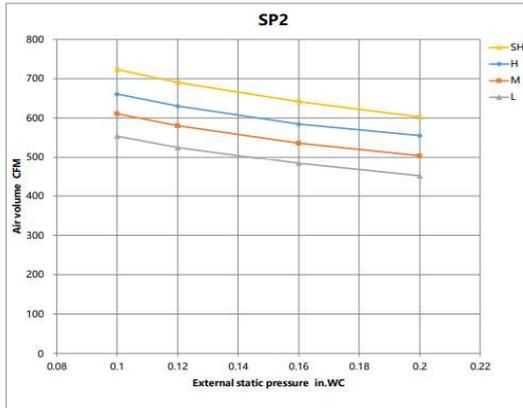
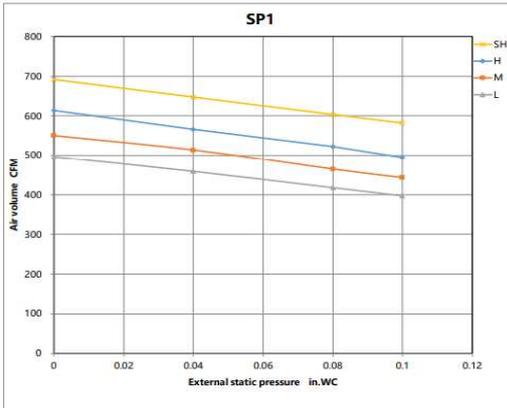


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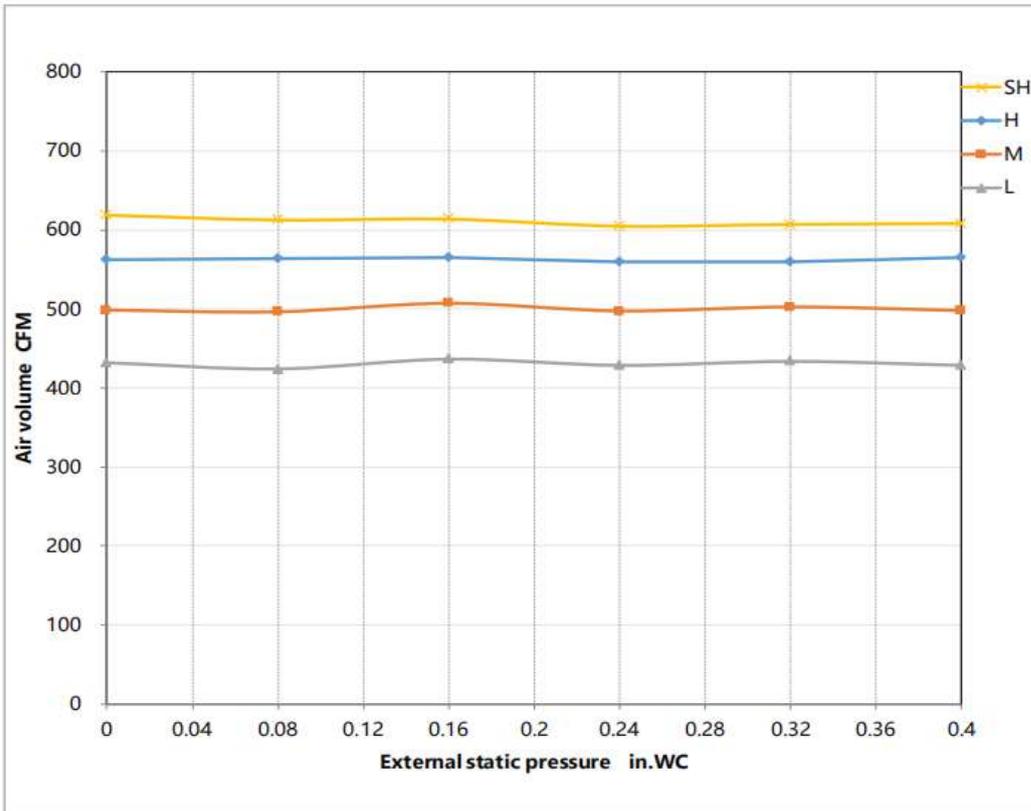


## Fan performance

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.